



Rail Fleet Services Monthly Report July 2014



Metro

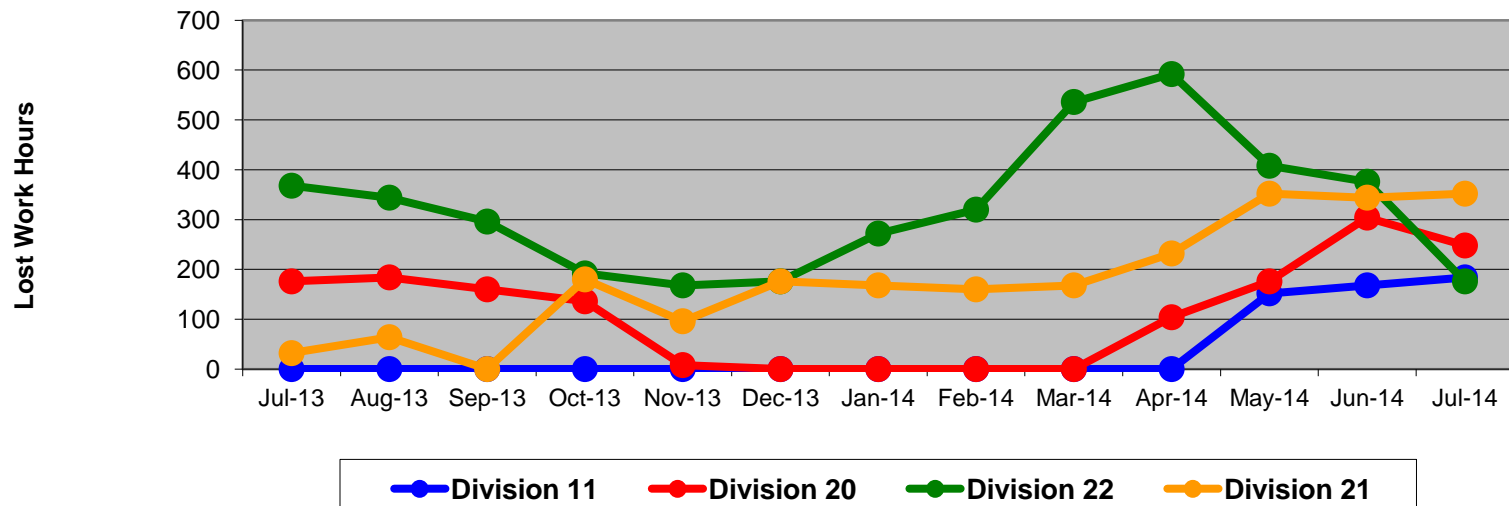
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Industrial Injuries – Lost Work Hours July 2014

	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	13-Month Period
Division 11	0	0	0	0	0	0	0	0	0	0	152	168	184	504
Division 20	176	184	160	136	8	0	0	0	0	104	176	304	248	1,496
Division 22	368	344	296	192	168	176	272	320	536	592	408	376	176	4,224
Division 21	32	64	0	180	96	176	168	160	168	232	352	344	352	2,324
Totals	576	592	456	508	272	352	440	480	704	928	1,088	1,192	960	8,548

Industrial Injuries (lost work hours)



Rail Vehicle Accidents & Major Incidents

July 2014

Repair Costs	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	13-Month Period
Blue/Expo Line	\$14,951	\$2,338	\$3,700	\$11,475	\$13,838	\$0	\$8,370	\$15,618	\$13,690	\$72,961	\$9,463	\$9,964	\$1,528	\$177,896
Red/Purple Line	\$0	\$1,358	\$0	\$0	\$0	\$0	\$0	\$0	\$356	\$0	\$0	\$0	\$0	\$1,714
Green Line	\$0	\$0	\$0	\$0	\$0	\$1,008	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,008
Gold Line	\$0	\$537	\$0	\$0	\$0	\$0	\$0	\$0	\$714	\$0	\$0	\$5,860	\$50,059	\$57,170
Totals	\$14,951	\$4,233	\$3,700	\$11,475	\$13,838	\$1,008	\$8,370	\$15,618	\$14,760	\$72,961	\$9,463	\$15,824	\$51,587	\$237,788

Rail Vehicle Accident Costs - July 2014				
Date	Incident #	Problem Code	Incident Description	Repair Cost
Metro Blue/Expo Line				
7/14/14	2481880	Train vs. Vehicle	A 10-73 was reported at Washington and San Pedro Street, Track #2.	\$ 1,528
Total				\$ 1,528
Metro Gold Line				
7/3/14	2475743	Train vs. Vehicle	A 10-73 was reported at 3rd and Beverly, Track # 1 Southbound.	\$ 5,924
7/15/14	2482322	Train vs. Vehicle	A 10-73 was reported at 1st and Mission.	\$ 7,625
7/18/14	2483632	Train vs. Object	A 10-71 was reported, a motorcycle made contact with the train in South Pasadena near Hope Street crossing, Track # 2 Southbound.	\$ 24,204
7/25/14	2486194	Train vs. Vehicle	A 10-73 was reported at 3rd and Arizona, Track # 2 Eastbound.	\$ 11,874
7/29/14	2487361	Derailment	A 10-75 was reported, hi-rail vehicle is involved in a derailment of transfer track 3 at switch 7B.	\$ 432
Total				\$ 50,059
Grand Total				\$ 51,587
(10-71) = Train vs. Object, (10-72) = Train vs. Pedestrian, (10-73) = Train vs. Vehicle (10-74) = Train vs. MTA Vehicle, (10-75) = Derailment				

Note: Repair costs are only the expenses captured during the time period of the report. Actual costs may be significantly higher, if repairs are spread out over several months.



Metro

Service Delivery July 2014

July 2014 - Service Delivery

Blue/Expo Line Fleet Size: 92

<u>Pull Out</u>	<u>Vehicles Required</u>	<u>Average Available</u>	<u>% Up (Down)</u>
Weekday:	78	79	101%
Weekend:	60	64	107%
Late Pullouts: 0*			
Monthly Mileage:	654,327		

Red/Purple Line Fleet Size: 104

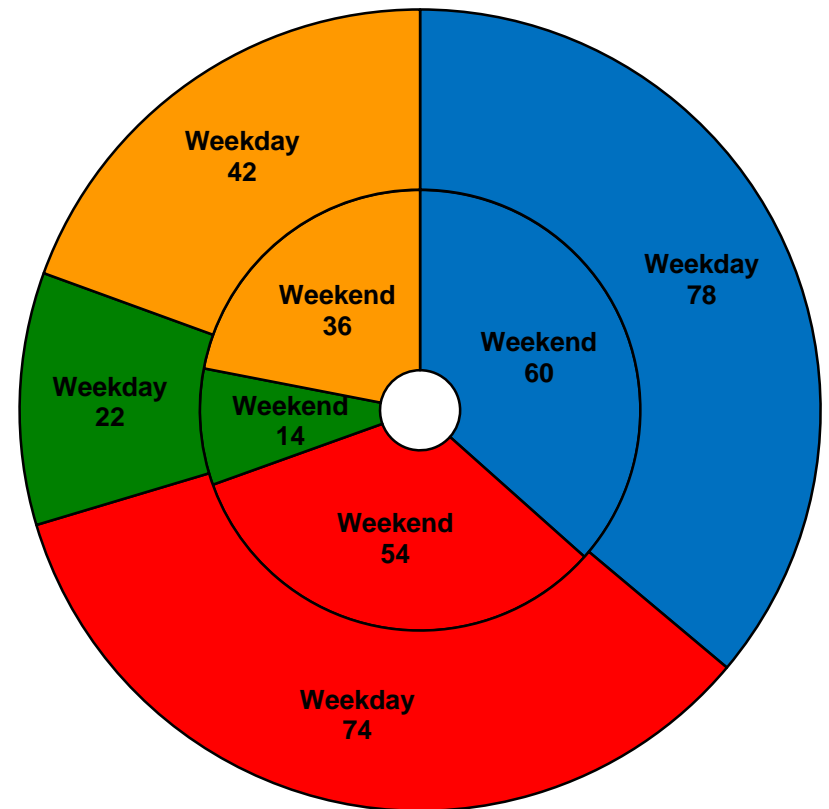
<u>Pull Out</u>	<u>Vehicles Required</u>	<u>Average Available</u>	<u>% Up (Down)</u>
Weekday:	74	79	107%
Weekend:	54	69	128%
Late Pullouts: 0*			
Monthly Mileage:	627,946		

Green Line Fleet Size: 29

<u>Pull Out</u>	<u>Vehicles Required</u>	<u>Average Available</u>	<u>% Up (Down)</u>
Weekday:	22	22	100%
Weekend:	14	17	121%
Late Pullouts: 0*			
Monthly Mileage:	233,323		

Gold Line Fleet Size: 50

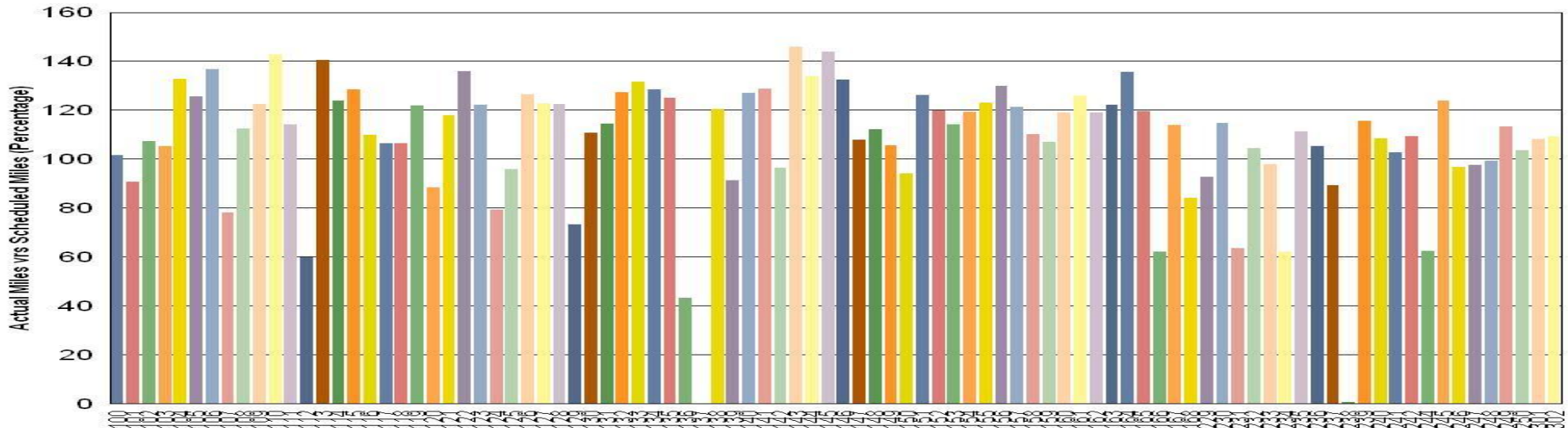
<u>Pull Out</u>	<u>Vehicles Required</u>	<u>Average Available</u>	<u>% Up (Down)</u>
Weekday:	42	44	105%
Weekend:	36	40	111%
Late Pullouts: 0*			
Monthly Mileage:	331,013		



■ Blue/Expo Line ■ Red/Purple Line ■ Green Line ■ Gold Line

Vehicle Utilization July 2014

Metro Blue/Expo Line



Blue/Expo Line:

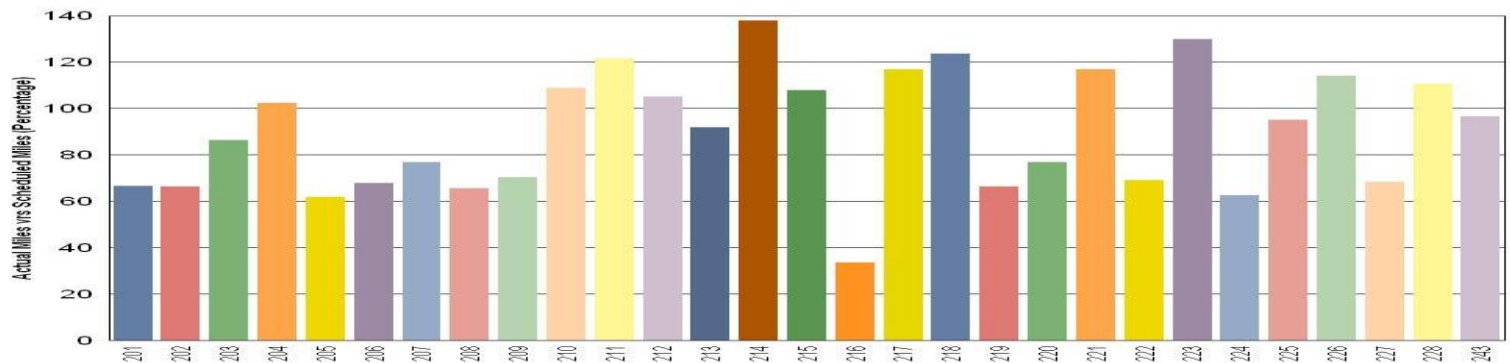
Car # 137 Out of service due to major accident repair.

Car # 238 Out of service for troubleshooting and repair due to repeat friction brake failure.

Metro Green Line

Green Line:

Car # 216 On hold for axle/gearbox and Friction Brake overhaul.



Note: Percentage includes an average 4% mileage deduction for yard mileage and vehicle testing.



Vehicle Utilization July 2014

Red/Purple Line:

The following cars were out of service due to:

Car # 501-502 Freon Conversion and Door Overhaul

Car # 503-504 Propulsion issue

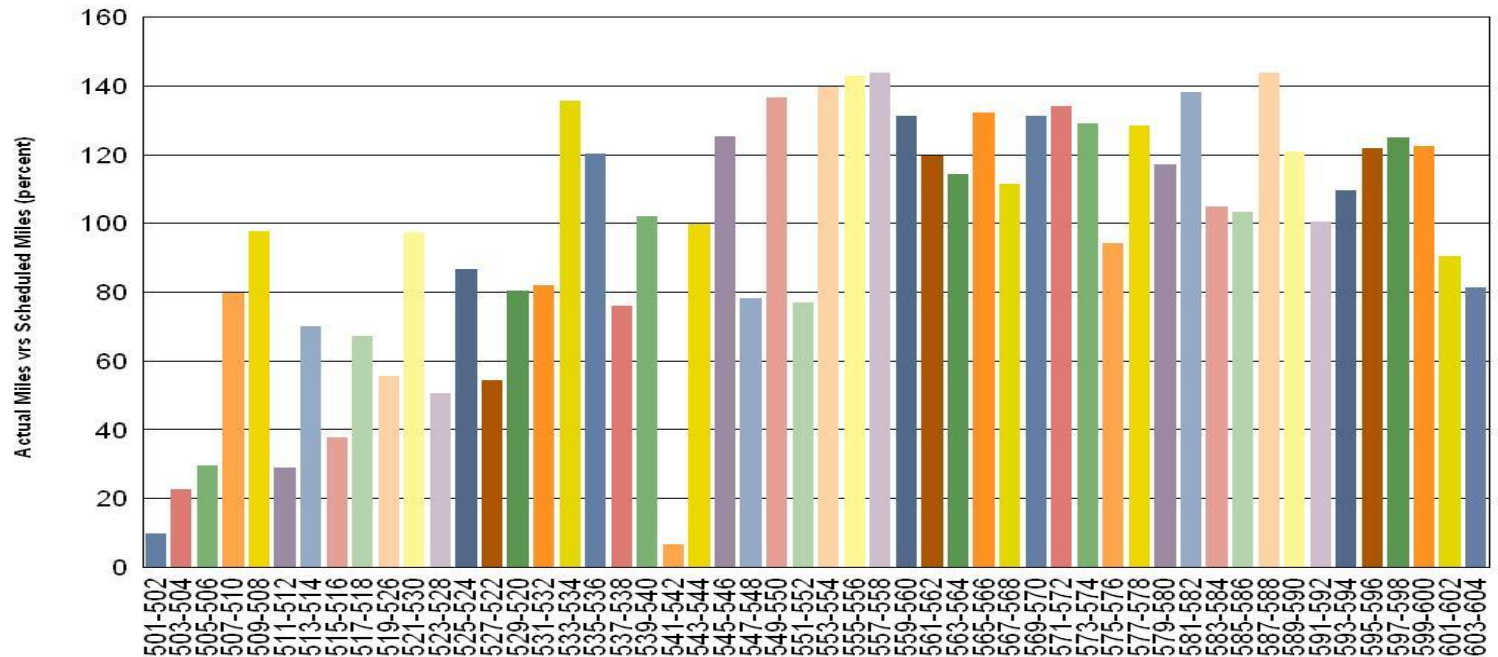
Car # 505-506 Truck Vibration issue

Car # 511-512 Propulsion issue

Car # 515-516 CB1 trip and Propulsion issue

Car # 541-542 Floor Project

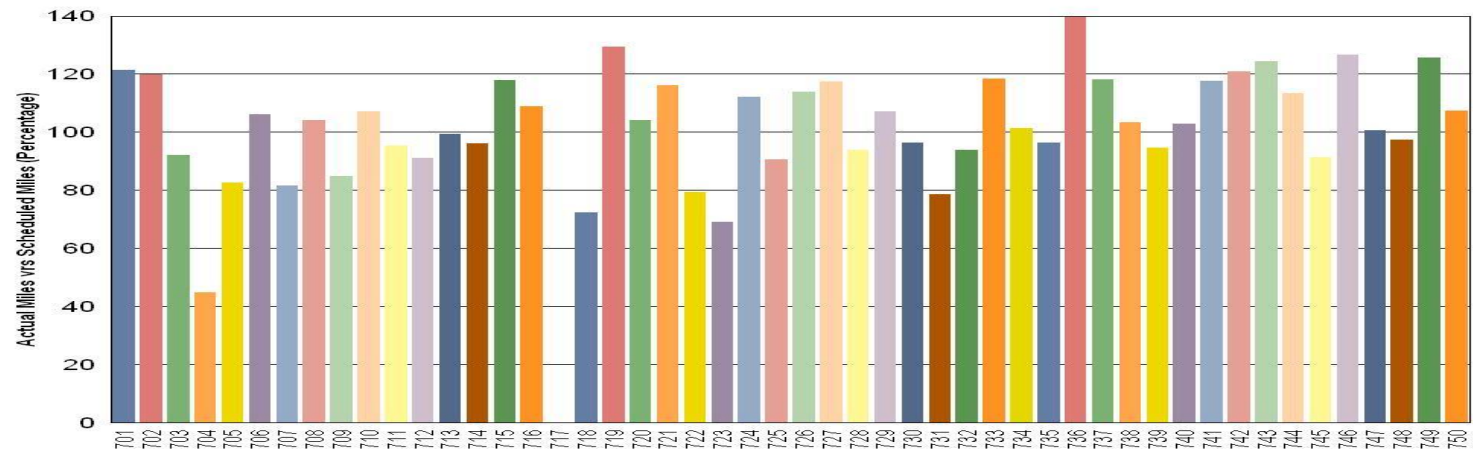
Metro Red/Purple Line



Gold Line:

Car # 717 Out of service for replacement of burnt wiring.

Metro Gold Line



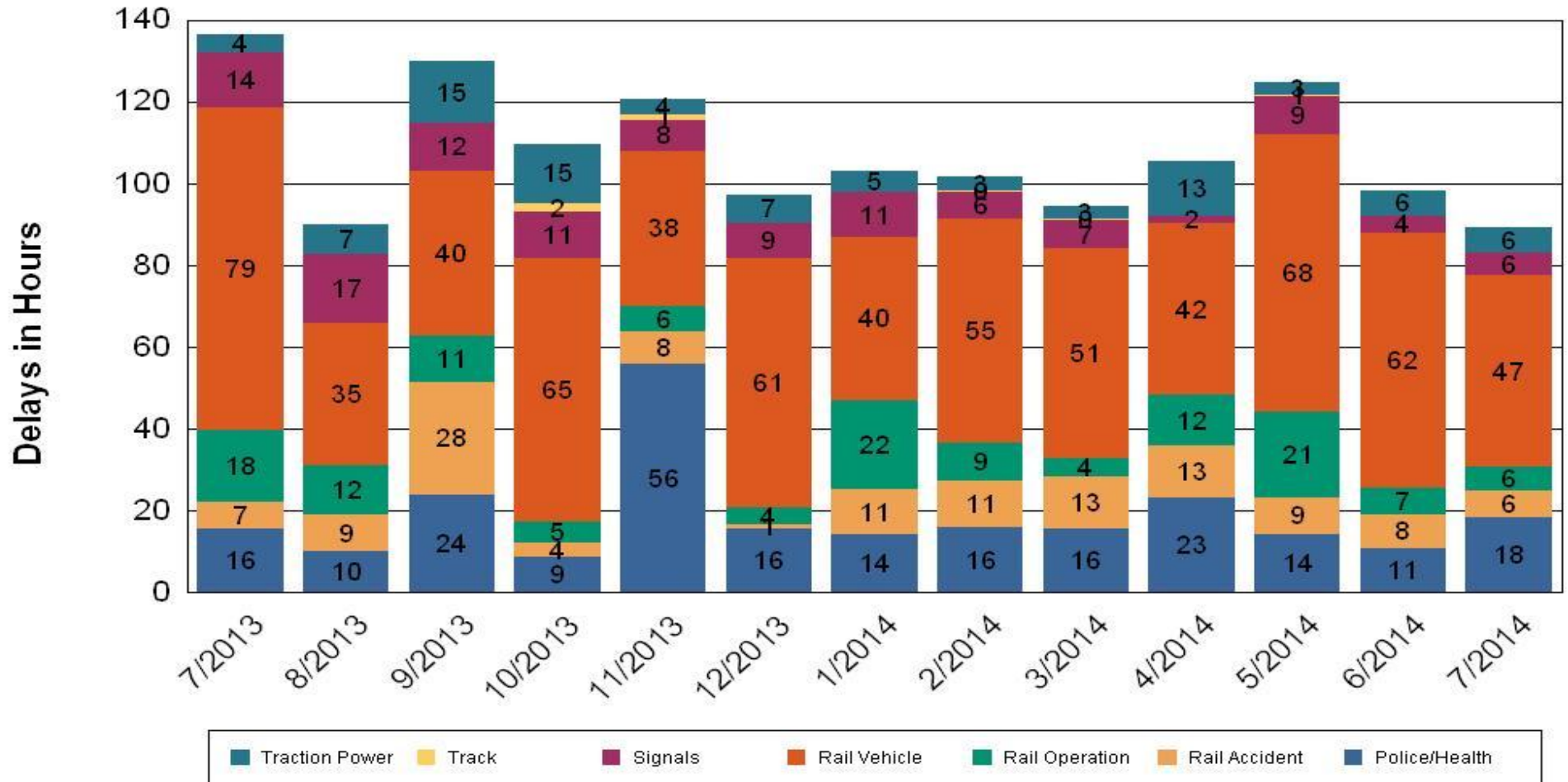
•Percentage includes an average 4% mileage deduction for yard mileage and vehicle testing.



All Train Delay (Hours) July 2014

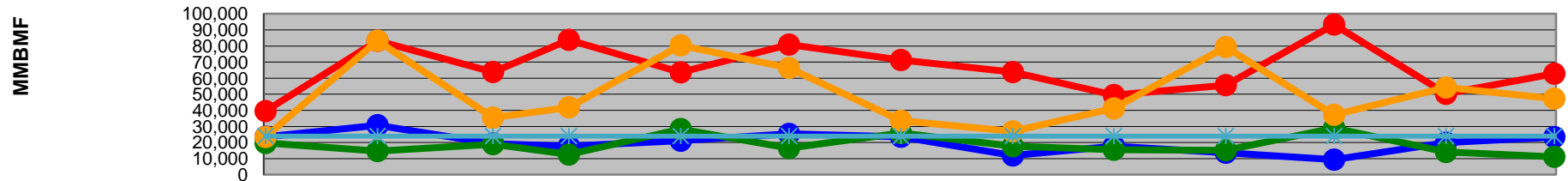
All Train Delays

Totals Include the delay to all trains involved (not just the primary incident)



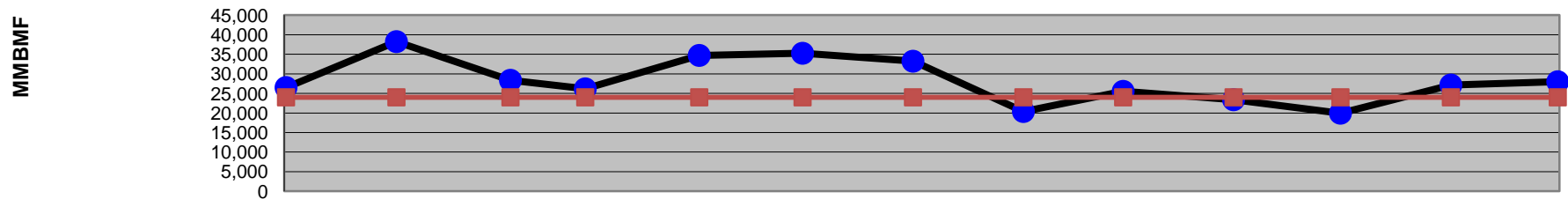
Mean Miles Between Failures (Major) Year to Date – July 2014

Mean Miles Between Major Failures (by line)



	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14
Blue/Expo Lines	23,591	30,773	19,332	17,764	21,123	25,328	23,589	11,929	17,769	13,668	9,340	19,912	23,369
Red/Purple Lines	39,539	83,229	63,847	83,821	63,627	80,905	71,293	63,798	49,520	55,687	93,356	50,272	62,795
Green Line	19,703	14,712	18,988	12,516	28,350	16,495	25,856	17,688	15,504	15,172	28,980	14,115	11,111
Gold Line	23,454	83,320	35,489	41,867	80,419	66,350	33,531	26,904	41,188	79,364	37,202	54,208	47,288
Goal	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000

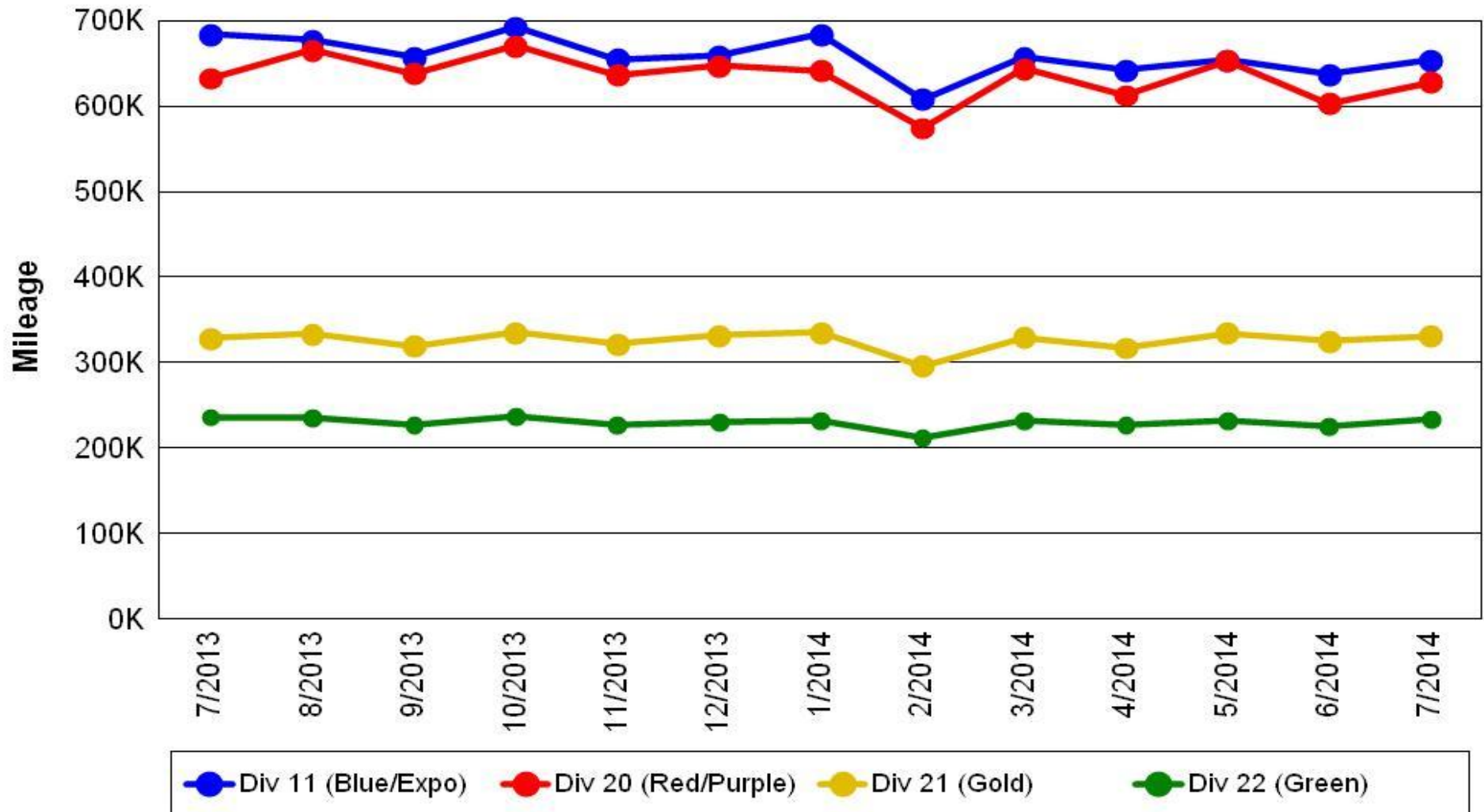
Mean Miles Between Major Failures (all)



	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14
All Rail	26,501	38,230	28,354	26,164	34,709	35,254	33,224	20,370	25,524	23,376	19,935	27,144	27,979
Goal	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000

Mileage Between Data Range (by month) July 2014

Rail Division Monthly Mileage

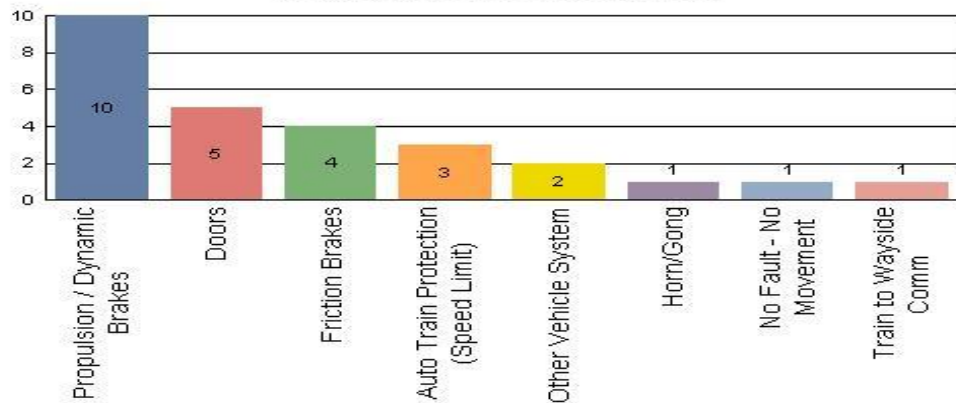


Top Incident Categories

July 2014

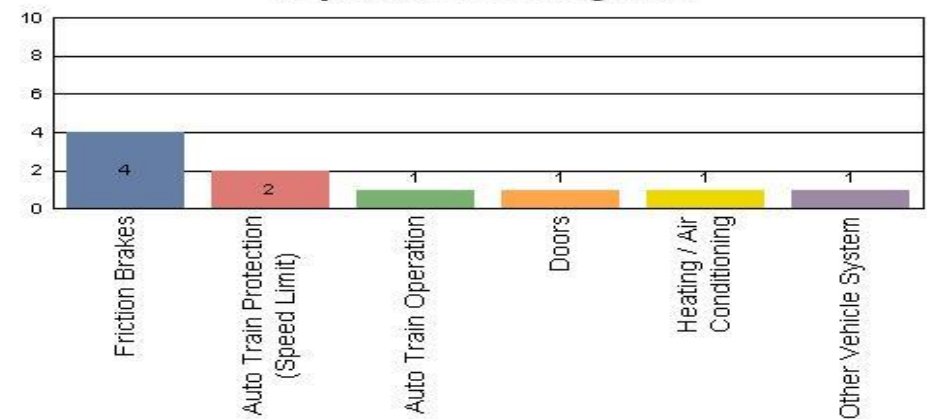
Metro Blue/Expo Line

Top Incident Categories



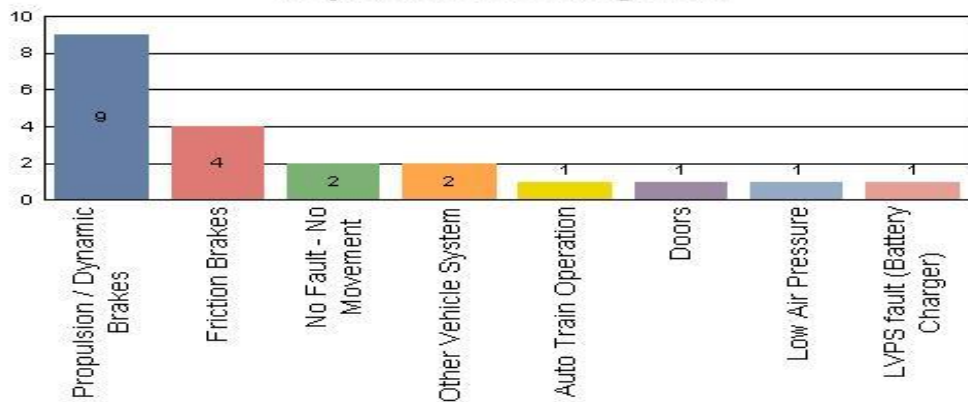
Metro Red/Purple Line

Top Incident Categories



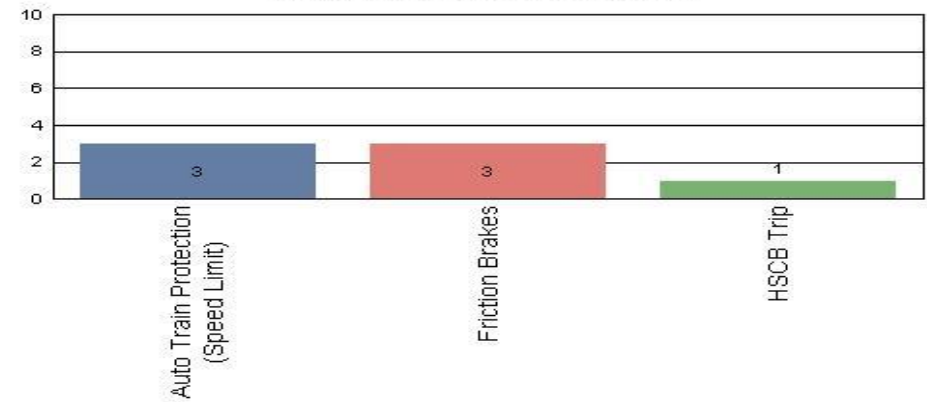
Metro Green Line

Top Incident Categories



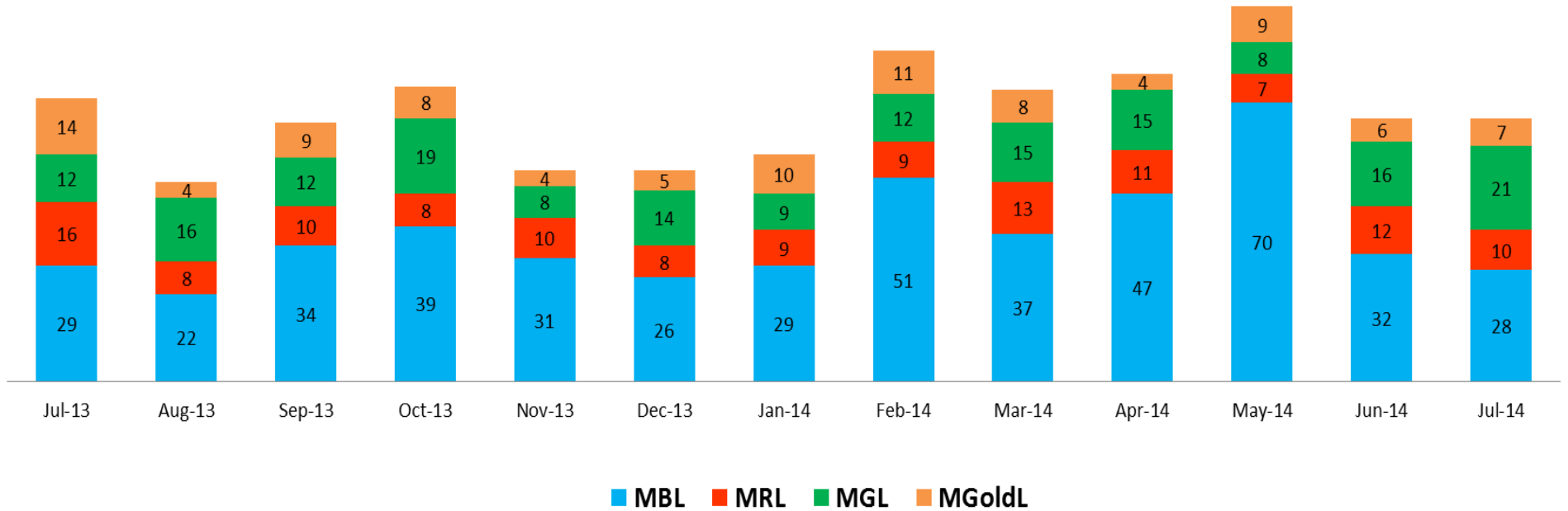
Metro Gold Line

Top Incident Categories



Major Incidents July 2014

Numbers of Major Incidents by Line



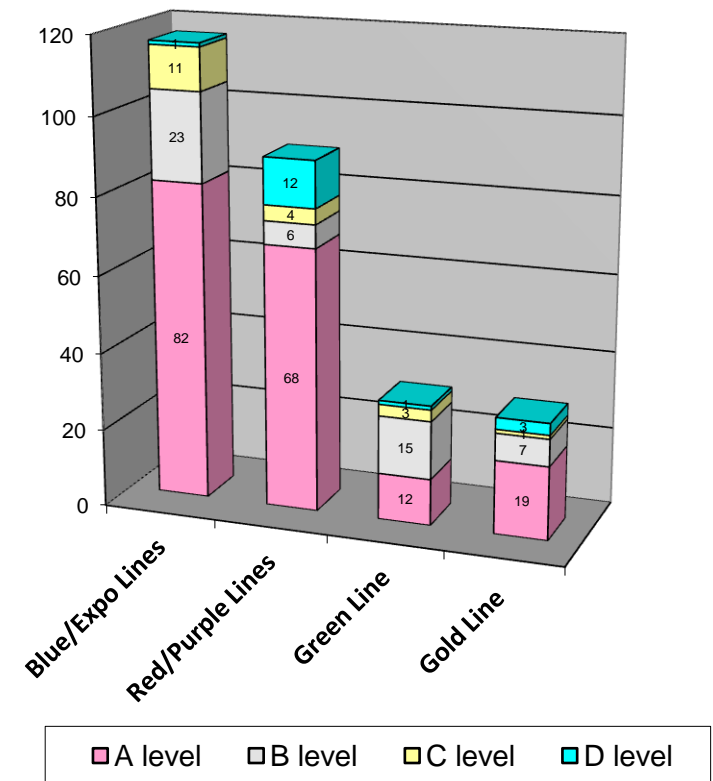
Preventive Maintenance Compliance July 2014

PM Compliance	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14
Blue/Expo Lines	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Red/Purple Lines	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Green Line	100%	100%	100%	96%	92%	100%	100%	100%	100%	100%	100%	97%*	100%
Gold Line	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Inspection was completed, but passed target window by 10 miles.

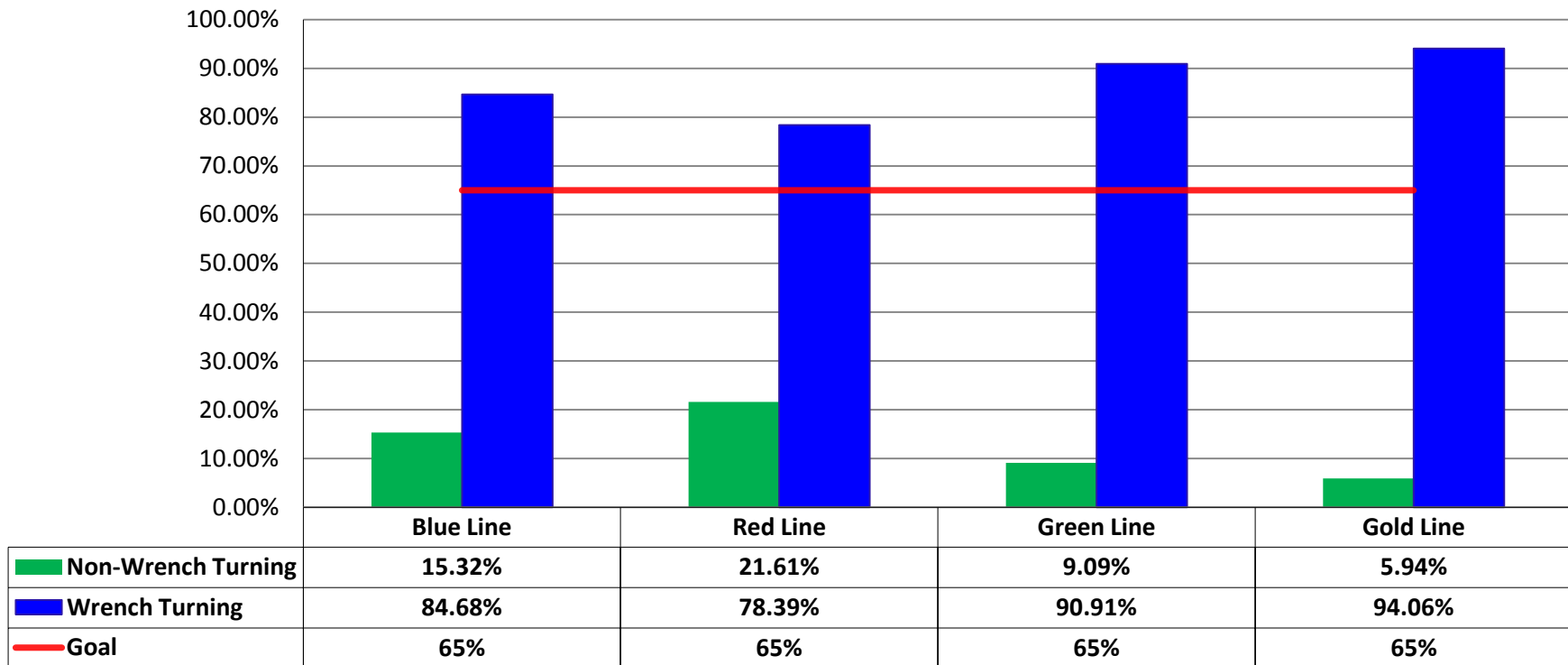
Number of Preventive Maintenance Inspections - July 2014					
Line	A level	B level	C level	D level	Totals
Blue/Expo Lines	82	23	11	1	117
Red/Purple Lines	68	6	4	12	90
Green Line	12	15	3	1	31
Gold Line	19	7	1	3	30
Totals:	181	51	19	17	268

Explanation of PM Inspection levels		Miles			
Line	Type	A level	B level	C level	D level
Blue/Expo Lines	P865/P2020	5,000	15,000	30,000	60,000
Blue/Expo Lines	P2000	7,500	22,500	45,000	90,000
Red/Purple Lines	A650	7,500	22,500	45,000	90,000
Green Line	P2000	7,500	22,500	45,000	90,000
Gold Line	P2550	10,000	30,000	60,000	120,000



RFS Wrench Turning July 2014

RFS - Wrench Turning July 2014

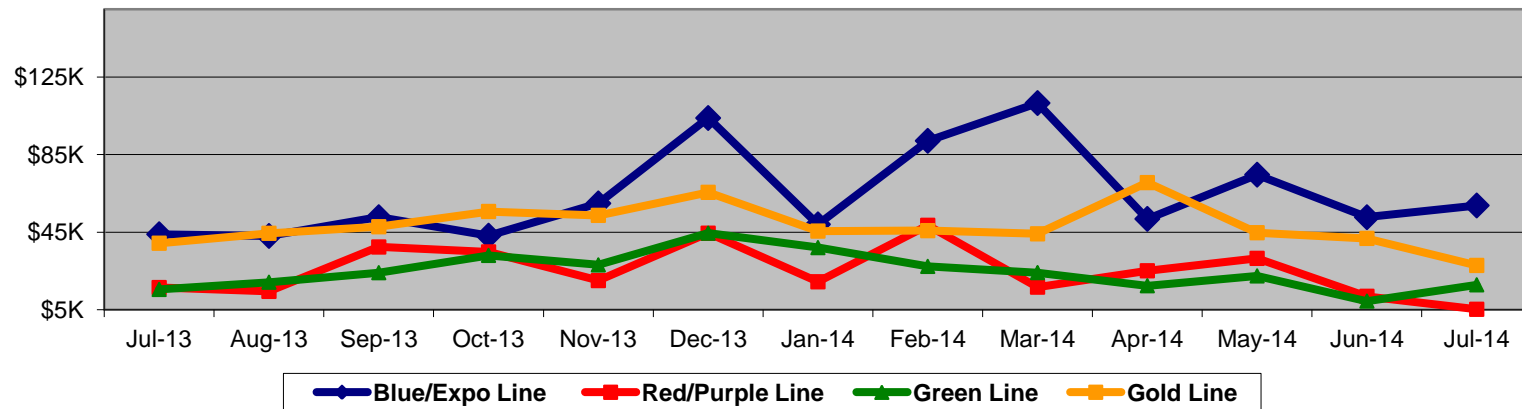


Vandalism & Graffiti Report

July 2014

Graffiti Costs

	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	13-Month Period
Blue/Expo Line	\$44K	\$43K	\$53K	\$43K	\$60K	\$104K	\$49K	\$92K	\$112K	\$52K	\$75K	\$53K	\$59K	\$837K
Red/Purple Line	\$16K	\$14K	\$37K	\$35K	\$20K	\$44K	\$19K	\$49K	\$17K	\$25K	\$32K	\$12K	\$5K	\$326K
Green Line	\$15K	\$19K	\$24K	\$33K	\$28K	\$44K	\$37K	\$27K	\$24K	\$17K	\$22K	\$9K	\$18K	\$320K
Gold Line	\$39K	\$44K	\$48K	\$56K	\$54K	\$66K	\$46K	\$46K	\$44K	\$71K	\$45K	\$42K	\$28K	\$627K
Totals:	\$115K	\$121K	\$162K	\$167K	\$162K	\$258K	\$151K	\$214K	\$197K	\$165K	\$173K	\$116K	\$110K	\$2,111K



July 2014 Vandalism & Graffiti - All Rail				
	Qty	Labor	Materials	Totals
Windows Replaced	217	\$ 21,987	\$ 32,825	\$ 54,812
Vandal Shields	379	\$ 9,157	\$ 9,963	\$ 19,120
Seats Cleaned	566	\$ 3,200	\$ -	\$ 3,200
Seats Replaced	57	\$ 1,797	\$ 1,466	\$ 3,263
Graffiti Removal - Other	871	\$ 7,565	\$ 751	\$ 8,316
Repainting Panels	247	\$ 17,955	\$ 3,066	\$ 21,021
Totals	2,337	\$ 61,661	\$ 48,071	\$ 109,732

Graffiti Pictures July 2014

Blue Line



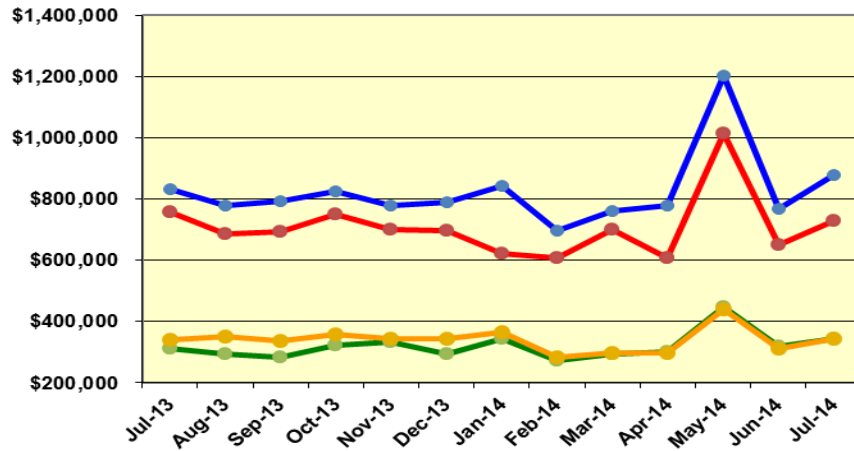
Green Line



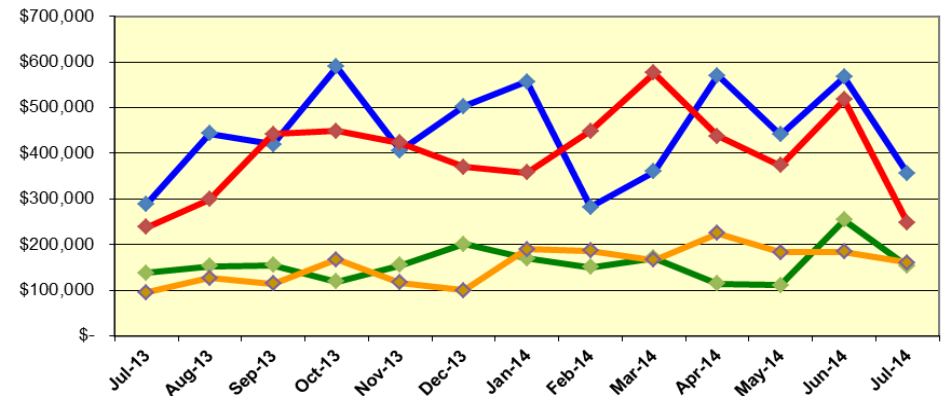
Labor and Material Costs

July 2014

Labor Costs



Material Costs



	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14*	Jun-14	Jul-14
LABOR COSTS													
Blue/Expo Lines	\$ 833,333	\$ 777,432	\$ 794,828	\$ 826,769	\$ 780,678	\$ 788,589	\$ 842,979	\$ 695,394	\$ 760,511	\$ 778,469	\$ 1,204,234	\$ 767,717	\$ 879,339
Red/Purple Lines	\$ 756,262	\$ 684,850	\$ 693,597	\$ 750,452	\$ 700,975	\$ 697,759	\$ 620,440	\$ 608,097	\$ 701,156	\$ 608,816	\$ 1,015,092	\$ 650,226	\$ 728,383
Green Line	\$ 312,740	\$ 295,374	\$ 284,105	\$ 323,749	\$ 332,737	\$ 292,482	\$ 345,262	\$ 271,877	\$ 294,381	\$ 302,213	\$ 449,117	\$ 318,516	\$ 345,270
Gold Line	\$ 338,719	\$ 352,473	\$ 336,795	\$ 357,408	\$ 343,700	\$ 345,170	\$ 363,886	\$ 283,563	\$ 298,069	\$ 297,634	\$ 438,759	\$ 313,589	\$ 344,331
Totals	\$ 2,241,054	\$ 2,110,129	\$ 2,109,325	\$ 2,258,378	\$ 2,158,090	\$ 2,123,999	\$ 2,172,567	\$ 1,858,931	\$ 2,054,117	\$ 1,987,132	\$ 3,107,202	\$ 2,050,048	\$ 2,297,323

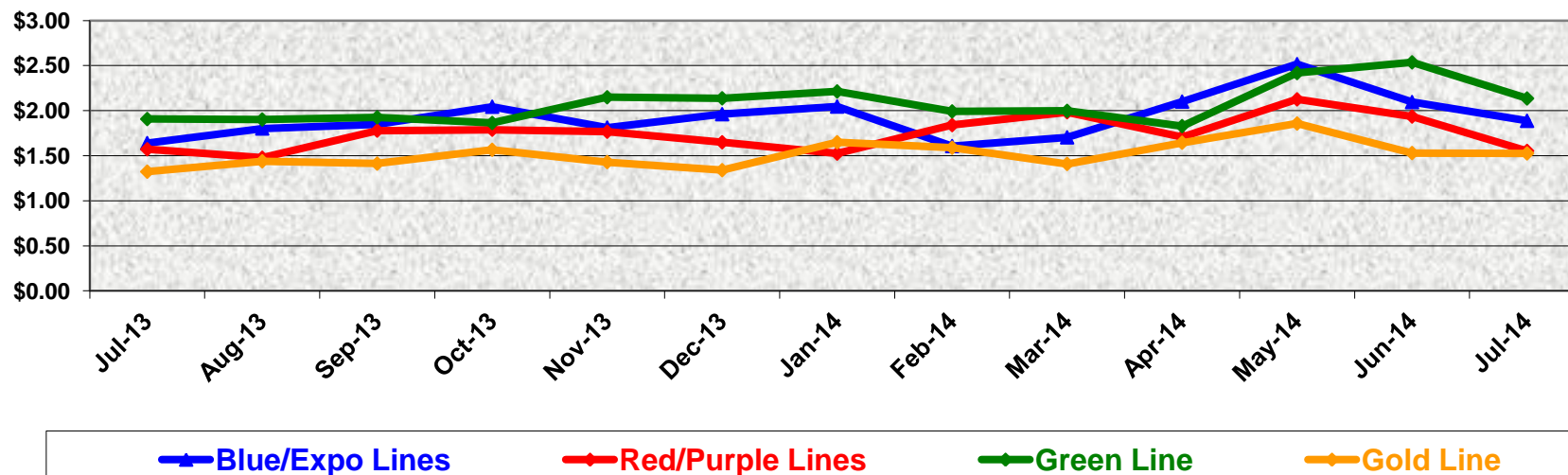
*ATU Contract for pay increase was approved by the Board and ATU staff got retro pay in May 2014.

	MATERIAL COSTS												
Blue/Expo Lines	\$ 288,894	\$ 442,803	\$ 419,133	\$ 589,324	\$ 406,032	\$ 502,761	\$ 556,457	\$ 282,466	\$ 359,845	\$ 570,775	\$ 440,576	\$ 567,257	\$ 355,405
Red/Purple Lines	\$ 238,207	\$ 298,670	\$ 441,927	\$ 449,033	\$ 422,849	\$ 369,819	\$ 357,244	\$ 448,225	\$ 575,495	\$ 437,612	\$ 373,815	\$ 516,934	\$ 247,048
Green Line	\$ 138,190	\$ 152,243	\$ 154,678	\$ 119,411	\$ 154,582	\$ 201,035	\$ 169,759	\$ 150,881	\$ 170,250	\$ 113,979	\$ 111,344	\$ 254,264	\$ 153,001
Gold Line	\$ 95,664	\$ 126,942	\$ 114,461	\$ 167,128	\$ 116,167	\$ 99,267	\$ 189,310	\$ 186,640	\$ 166,216	\$ 224,430	\$ 183,115	\$ 183,869	\$ 160,751
Totals	\$ 760,956	\$ 1,020,659	\$ 1,130,199	\$ 1,324,896	\$ 1,099,631	\$ 1,172,883	\$ 1,272,769	\$ 1,068,212	\$ 1,271,807	\$ 1,346,796	\$ 1,108,849	\$ 1,522,323	\$ 916,204

Cost Per Mile July 2014

Cost per mile:	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14
Blue/Expo Lines	\$1.64	\$1.80	\$1.85	\$2.04	\$1.81	\$1.96	\$2.05	\$1.61	\$1.70	\$2.10	\$2.52	\$2.10	\$1.89
Red/Purple Lines	\$1.57	\$1.48	\$1.78	\$1.79	\$1.77	\$1.65	\$1.52	\$1.84	\$1.98	\$1.71	\$2.13	\$1.93	\$1.55
Green Line	\$1.91	\$1.90	\$1.93	\$1.86	\$2.15	\$2.14	\$2.21	\$1.99	\$2.00	\$1.83	\$2.42	\$2.54	\$2.14
Gold Line	\$1.32	\$1.44	\$1.41	\$1.57	\$1.43	\$1.34	\$1.65	\$1.59	\$1.41	\$1.64	\$1.86	\$1.53	\$1.53

Cost per Mile



ATU Absences vs. Overtime

July 2014

ABSENCE TYPE and HOURS	3940 Admin.	3941 Blue	3942 Red	3943 Green	3944 Gold	3947 Expo	Total
AWP-ABSENT W/O PERMISSION	-	24	-	8	8	-	40
BER-BEREAVEMENT	-	24	72	-	-	-	96
CTO-COMPENSATORY TIME OFF	-	67	96	32	20	-	215
CUT-EMPLOYEE LEAVES EARLY	-	1	-	-	0	-	1
CVA - CASUAL VACATION	12	267	365	88	324	8	1,064
DSL-DISABILITY LEAVE/LONG	-	744	288	360	-	168	1,560
EFH-EMG. FLOAT HOL.	-	48	184	24	24	-	280
ETO-EXCUSED TIME OFF	3	77	31	19	60	3	191
FMI-FAM IND INJURY	-	-	104	-	256	-	360
FML-FAMILY CARE LEAVE	-	750	712	192	184	-	1,838
FMS-FAMILY LEAVE SICK	-	232	203	-	8	-	443
HLF-HOLIDAY FLOATING	104	960	456	192	296	32	2,040
HNP-HOLIDAY NOT PAID	-	-	-	16	-	-	16
HOL-HOLIDAY LEGAL	40	560	504	152	160	24	1,440
IPD-INJURED PARTIAL DAY	-	-	4	-	-	-	4
JUR-JURY DUTY	-	16	-	8	-	-	24
LC1-LABOR CODE 233	-	72	170	24	60	8	334
LTI-OCCPIL/LONGTRM INJ LEAVE	-	184	248	176	352	-	960
MLN-MILITARY ABSENCE-UNPAID	-	16	-	-	-	-	16
OWP-OFF WITH PERMISSION	-	-	10	-	-	-	10
RTO-REQUESTED TIME OFF-NO PAY	-	132	4	9	-	-	145
SCK-SICK PAY	-	122	200	40	40	-	402
SCW-SICK WITHOUT PAY	-	-	168	208	16	-	392
SUS-DISCIPLINARY SUSPENSION	-	16	-	80	-	-	96
TAR-TARDY	0	2	0	0	0	-	3
VAC-VACATION	76	2,017	1,366	608	692	34	4,792
VAS-VACATION WHILE SICK	-	-	58	-	-	-	58
Total Absence Hours	235	6,330	5,243	2,235	2,501	277	16,820
ATU Number of Work Force (assigned)	8	119	104	44	50	4	329
Full Work Force hours/month	1,386	20,623	18,023	7,625	8,665	693	57,016
Absence as a % of Work Force	17%	31%	29%	29%	29%	40%	30%

OVERTIME TYPE and HOURS	3940 Admin.	3941 Blue	3942 Red	3943 Green	3944 Gold	3947 Expo	Total
CTB-COMPENSATORY TIME TO BANK	30	305	569	167	262	32	1,364
OTP-PREM OVERTIME	516	5,740	5,313	2,416	1,605	290	15,881
WLO-Worked Lunch Overtime	28	143	140	132	91	8	541
Total Overtime Hours	574	6,188	6,023	2,715	1,958	330	17,787
Overtime as a % of Work Force	41%	30%	33%	36%	23%	48%	31%
FTE Calculation - Absence & OT Hour	3940	3941	3942	3943	3944	3947	Total
Absences FTE	1	37	30	13	14	2	97
OTP FTE	3	36	35	16	11	2	103
FTE Difference	-2	1	-5	-3	3	0	-6



Metro

Note: Overtime also covers other required activities, including Training, Component Overhaul, and Special Events.

RFS Instruction Department Activities

July 2014

Training classes completed during the month of July 2014

Description	Course Hours	Student Count	Training Hours
<u>Blue & Expo Line Training - (P865/2020 & P2000 LRV):</u>			
RFS 865/2020 M.A. & LVPS	44	5	220
RFS 865/2020 FRICTION BRAKES	32	6	192
RFS 865/2020 ATP & TWC	48	2	96
RFS 865/2020 PROPULSION	48	6	288
Total Blue Line Training (Hours):			576
<u>Green Line Training (P2000 LRVs):</u>			
RFS SIEMENS 2000 PROPULSION	80	3	240
Total Green Line Training (Hours):			240
<u>Gold Line Training (P2550 LRVs):</u>			
RFS ANSALDOBREDA 2550 INTEGRATED DISPLAY	24	2	48
RFS ANSALDOBREDA 2550 PANTOGRAPH/HIGH VOLTAGE DIST.	40	2	80
RFS ANSALDOBREDA 2550 MAINLINE DUTY, DEAD TOW AND VEHICLE REC	24	6	144
Total Gold Line Training (Hours):			272
<u>Total RFS Instruction for the month of July 2014 (Hours):</u>			<u>1,088</u>

Other Instruction Activities

Instructor Vacation and Holiday	176
A650 Curriculum, Administrative, and Technical Support	80
P865/P2020 Curriculum, Administrative, and Technical Support	40
P2000 Curriculum, Administrative, and Technical Support	56
P2550 Curriculum, Administrative, and Technical Support	40
LATTC Curriculum Development (KSME)	120
<u>Total Other Instruction Activities</u>	<u>512</u>

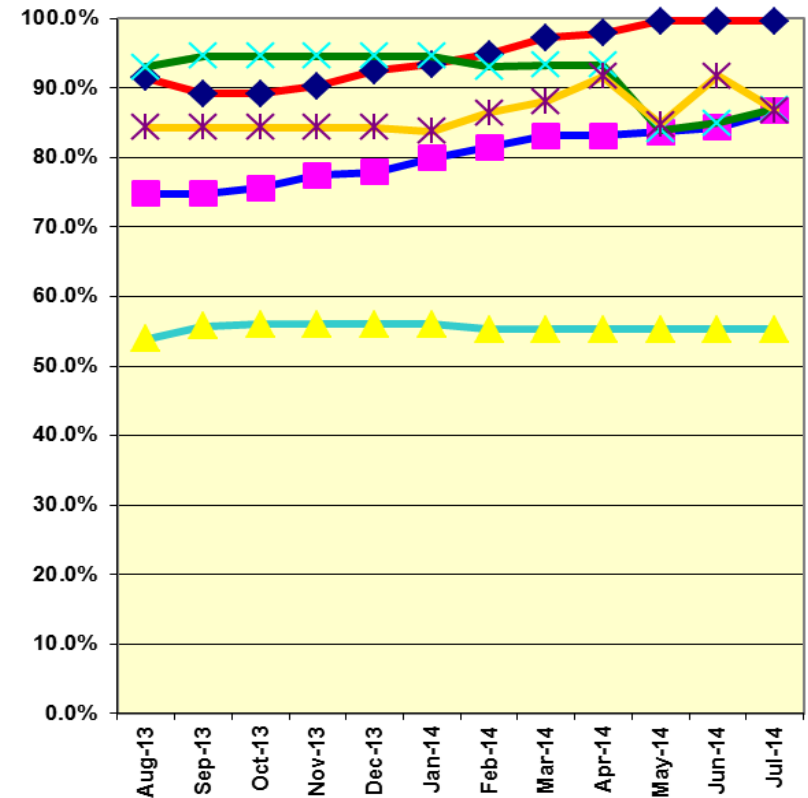
RAIL SYSTEM SAFETY Training provided by Transportation Instruction	<u>393</u>
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Core Vehicle Training Completed: BLUE RED GREEN GOLD

Percentage of core vehicle training complete:	86.7%	99.6%	87.0%	86.8%
Siemens P2000 training complete:	55.3%	N/A	N/A	N/A

Average Specialist Rail Experience Level in Years:	12.2	10.3	9.5	8.8
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Core Training Completed



Variations caused by new hires, employee transfers, & training completed