

Los Angeles County  
Metropolitan Transportation Authority  
California

# OPERATIONS MONTHLY RAIL PERFORMANCE REPORT

APRIL 2017



# METRO RAIL PERFORMANCE – APRIL 2017

<b>Contents</b>	<b>Page</b>
<b>Systemwide Performance</b>	
Rail Scorecard	3
Rail Mean Miles Between Major Failure by Vehicle Type	5
Fleet Distribution Report	10
Vehicle Availability by Division	11
Cleanliness	12
Lost Revenue Vehicle Hours by Category, by Division	13
Rail Service Performance	16
Workers Comp Claims	21
Lost Work Days	22
Vertical Transportation - Systemwide	23
<b>Blue Line Performance</b>	
Performance Summary	24
Major Incident Detail	25
Performance Charts	34
<b>Red / Purple Line Performance</b>	
Performance Summary	38
Major Incident Detail	39
Performance Charts	41
<b>Green Line Performance</b>	
Performance Summary	45
Major Incident Detail	46
Performance Charts	50
<b>Gold Line Performance</b>	
Performance Summary	54
Major Incident Detail	55
Performance Charts	59
<b>Expo Line Performance</b>	
Performance Summary	63
Major Incident Detail	64
Performance Charts	66

## Metro Rail Scorecard Overview

Metro operates heavy rail, the Red and Purple Lines, from Union Station to North Hollywood and Union Station to Wilshire/Western. Data for Red and Purple lines are reported under Metro Red line in this report.

Metro also operates four light rail lines: Blue Line from Downtown to Long Beach, Green Line along the 105 freeway, Gold Line from Azusa to East Los Angeles, and Expo Line from Los Angeles to Santa Monica.

Metro Rail is responsible for the operation of approximately 104 heavy rail cars and 203 light rail cars carrying nearly 110 million passengers each year.

Also included in this report are Key Performance Indicators for Wayside, which is in the process of being developed.

Measurement	FY 2014	FY 2015	FY 2016	FY 2017 Target	FY 2017 YTD	FYTD Status	Feb Month	Mar Month	Apr Month
<b>Systemwide</b>									
On-Time Pullouts	99.55%	99.67%	99.63%	99.50%	99.61%	●	99.51%	99.77%	99.29%
Mean Miles Between Chargeable Mechanical Failures	28,829	34,524	30,482	27,911	29,066	●	33,481	29,637	29,112
In-Service On-time Performance	97.92%	98.39%	98.10%	98.00%	98.14%	●	97.92%	98.28%	98.48%
Service Delivery Ratio	99.12%	99.35%	99.22%	99.25%	99.18%	●	98.89%	99.27%	99.23%
Traffic Accidents Per 100,000 Train Miles	1.47	1.18	1.17	N/A	1.08	N/A	1.15	0.65	1.10
CPUC Reportable Accidents per 100,000 Train Miles	0.10	0.43	0.60	0.67	0.39	●	0.43	0.39	0.14
Passenger Accidents per 100,000 Boardings	0.025	0.013	0.016	0.009	0.024	●	0.023	0.071	0.000
Complaints per 100,000 Boardings	0.91	0.78	1.43	1.12	2.00	●	2.01	2.36	1.75
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours <sup>1,2</sup>	15.35	11.11	10.97	10.42	12.79	●	14.51	17.47	12.05
Lost Work Days per 200,000 Exposure Hours <sup>1,2</sup>	861	880	482	458.16	732	●	800	639	-
OSHA Injuries per 200,000 Exposure Hours <sup>1,2</sup>	8.18	6.68	6.32	6.00	8.98	●	9.33	10.11	-
<b>Wayside</b>									
Overdue Work Orders (Non-PMP) - Aging of Outstanding Work Orders	64	138	635	N/A	2,123	N/A	271	344	706
Past-Due Preventive Maintenance - Aging of Outstanding Work Orders	0	1	25	N/A	264	N/A	28	79	110
% of Completed Inspections	99.41%	99.51%	99.57%	N/A	99.55%	N/A	100.00%	99.33%	99.34%
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	9.28	9.07	4.77	4.53	4.41	●	4.08	7.50	0.00
Lost Work Days per 200,000 Exposure Hours <sup>1</sup>	179	309	148	141	149	●	314	120	-
OSHA Injuries per 200,000 Exposure Hours <sup>1</sup>	6.31	8.28	4.40	4.18	4.43	●	4.08	3.75	-
<b>Blue Line</b>									
On-Time Pullouts	99.37%	99.41%	99.59%	99.50%	99.63%	●	99.69%	100.00%	99.70%
Mean Miles Between Chargeable Mechanical Failures	18,731	23,716	19,240	19,572	15,410	●	15,852	10,647	14,849
In-Service On-time Performance	95.84%	97.28%	96.10%	97.00%	96.27%	●	95.93%	96.44%	95.90%
Service Delivery Ratio	98.36%	98.88%	98.41%	98.46%	98.47%	●	97.70%	98.82%	97.84%
Traffic Accidents Per 100,000 Train Miles	2.97	2.48	2.38	N/A	2.17	N/A	0.69	0.64	2.69
CPUC Reportable Accidents per 100,000 Train Miles	0.00	0.89	1.39	1.34	0.79	●	0.00	0.64	0.67
Passenger Accidents per 100,000 Boardings	0.058	0.034	0.016	0.006	0.050	●	0.111	0.202	0.000
Complaints per 100,000 Boardings	1.10	0.90	1.33	1.09	1.70	●	1.39	2.07	2.04
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours <sup>1</sup>	17.46	15.10	15.08	15.58	18.50	●	11.68	25.08	21.91
Lost Work Days per 200,000 Exposure Hours <sup>1</sup>	990	1,622	797	786	914	●	1,542	730	-
OSHA Injuries per 200,000 Exposure Hours <sup>1</sup>	5.71	10.64	6.79	9.58	10.87	●	5.84	10.03	-

<sup>1</sup> There is a One Month lag in reporting this data

<sup>2</sup> Includes Operations, RFS and Wayside

● Green - High probability of achieving the target (on track). Meets Target at 100% or better.

● Yellow - Uncertain if the target will be achieved -- slight problems, delays or management issues. Falls below Target 70 - 99%.

● Red - High probability that the target will not be achieved -- significant problems and/or delays. Falls below Target >70%.

N/A = Not Available

Measurement	FY 2014	FY 2015	FY 2016	FY 2017 Target	FY 2017 YTD	FYTD Status	Feb Month	Mar Month	Apr Month
<b>Red Line</b>									
On-Time Pullouts	99.72%	99.91%	99.79%	99.50%	99.98%	●	100.00%	99.80%	100.00%
Mean Miles Between Chargeable Mechanical Failures	63,099	85,090	94,312	112,652	111,801	●	109,220	145,093	96,997
In-Service On-time Performance	98.91%	99.13%	99.45%	99.50%	99.38%	●	98.56%	99.11%	99.42%
Service Delivery Ratio	99.57%	99.60%	99.71%	99.71%	99.71%	●	99.54%	99.35%	99.69%
Traffic Accidents Per 100,000 Train Miles	1.01	0.47	0.75	N/A	0.68	N/A	0.91	0.00	0.87
CPUC Reportable Accidents per 100,000 Train Miles	0.00	0.07	0.07	0.60	0.17	●	0.00	0.00	0.00
Passenger Accidents per 100,000 Boardings	0.006	0.002	0.002	0.003	0.005	●	0.000	0.025	0.000
Complaints per 100,000 Boardings	0.60	0.54	0.57	0.56	1.12	●	1.74	1.93	1.47
New Workers' Compensation Indemnity Claims per	20.22	6.20	16.43	13.29	13.66	●	6.17	22.47	11.41
*Lost Work Days per 200,000 Exposure Hours	927	649	526	556	1,021	●	771	762	-
*OSHA Injuries per 200,000 Exposure Hours	11.79	3.54	7.99	6.55	7.59	●	6.17	0.00	-

<b>Green Line</b>									
On-Time Pullouts	99.69%	99.32%	99.49%	99.50%	99.65%	●	98.70%	98.89%	100.00%
Mean Miles Between Chargeable Mechanical Failures	19,513	21,054	19,238	19,911	15,776	●	19,422	16,863	14,907
In-Service On-time Performance	97.85%	97.39%	98.52%	98.20%	98.55%	●	98.87%	98.52%	99.06%
Service Delivery Ratio	99.57%	99.50%	99.59%	99.62%	99.60%	●	99.71%	99.50%	99.71%
Traffic Accidents Per 100,000 Train Miles	0.49	0.21	0.42	N/A	0.50	N/A	0.00	0.00	0.84
CPUC Reportable Accidents per 100,000 Train Miles	0.00	0.07	0.07	0.18	0.00	●	0.00	0.00	0.00
Passenger Accidents per 100,000 Boardings	0.023	0.024	0.034	0.011	0.046	●	0.000	0.000	0.000
Complaints per 100,000 Boardings	1.15	0.88	1.53	1.30	2.15	●	2.72	2.76	2.14
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	16.51	7.32	7.18	9.27	9.03	●	20.51	8.92	9.90
*Lost Work Days per 200,000 Exposure Hours	1,299	479	228	195	715	●	352	268	-
*OSHA Injuries per 200,000 Exposure Hours	11.30	4.07	3.19	2.34	5.59	●	0.00	8.92	-

<b>Gold Line</b>									
On-Time Pullouts	99.56%	99.98%	99.68%	99.50%	99.80%	●	99.19%	100.00%	100.00%
Mean Miles Between Chargeable Mechanical Failures	45,894	44,171	40,426	51,665	36,698	●	43,930	53,570	29,660
In-Service On-time Performance	98.03%	98.56%	97.60%	97.50%	97.48%	●	97.05%	97.72%	98.45%
Service Delivery Ratio	99.03%	99.34%	99.11%	99.16%	98.81%	●	98.33%	99.06%	99.38%
Traffic Accidents Per 100,000 Train Miles	1.03	1.14	0.99	N/A	0.65	N/A	0.94	0.83	0.45
CPUC Reportable Accidents per 100,000 Train Miles	0.00	0.30	0.60	0.50	0.26	●	0.47	0.83	0.00
Passenger Accidents per 100,000 Boardings	0.052	0.007	0.039	0.035	0.029	●	0.000	0.141	0.000
Complaints per 100,000 Boardings	1.04	1.01	2.73	2.26	2.77	●	2.80	3.89	1.74
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	14.98	15.96	11.87	12.20	14.95	●	30.04	26.14	5.87
*Lost Work Days per 200,000 Exposure Hours	1,460	1,068	766	808	1,121	●	763	1,039	-
*OSHA Injuries per 200,000 Exposure Hours	9.12	3.83	9.29	10.07	10.40	●	18.02	20.92	-

<b>Expo Line</b>									
On-Time Pullouts	-	-	99.53%	99.50%	98.70%	●	100.00%	99.81%	96.40%
Mean Miles Between Chargeable Mechanical Failures	-	-	18,114	19,572	30,797	●	49,240	110,378	62,795
In-Service On-time Performance	98.70%	99.14%	98.61%	97.05%	98.39%	●	98.96%	99.16%	99.11%
Service Delivery Ratio	99.45%	99.64%	99.56%	99.65%	99.39%	●	99.50%	99.75%	99.62%
Traffic Accidents Per 100,000 Train Miles	1.17	1.02	0.74	N/A	1.53	N/A	3.48	1.52	0.83
CPUC Reportable Accidents per 100,000 Train Miles	1.17	1.02	0.50	0.37	0.77	●	1.74	0.00	0.00
Passenger Accidents per 100,000 Boardings	0.000	0.000	0.019	0.000	0.022	●	0.000	0.000	0.000
Complaints per 100,000 Boardings	1.53	1.13	3.38	1.87	3.99	●	2.38	2.22	1.86
New Workers' Compensation Indemnity Claims per	-	24.97	8.44	0.00	20.86	●	24.74	14.26	31.27
*Lost Work Days per 200,000 Exposure Hours	-	937	73	0	747	●	1,195	1,096	-
*OSHA Injuries per 200,000 Exposure Hours	-	-	5.63	0.00	18.78	●	24.74	21.39	-

\* There is One Month lag in reporting this data

● Green - High probability of achieving the target (on track). Meets Target at 100% or better.

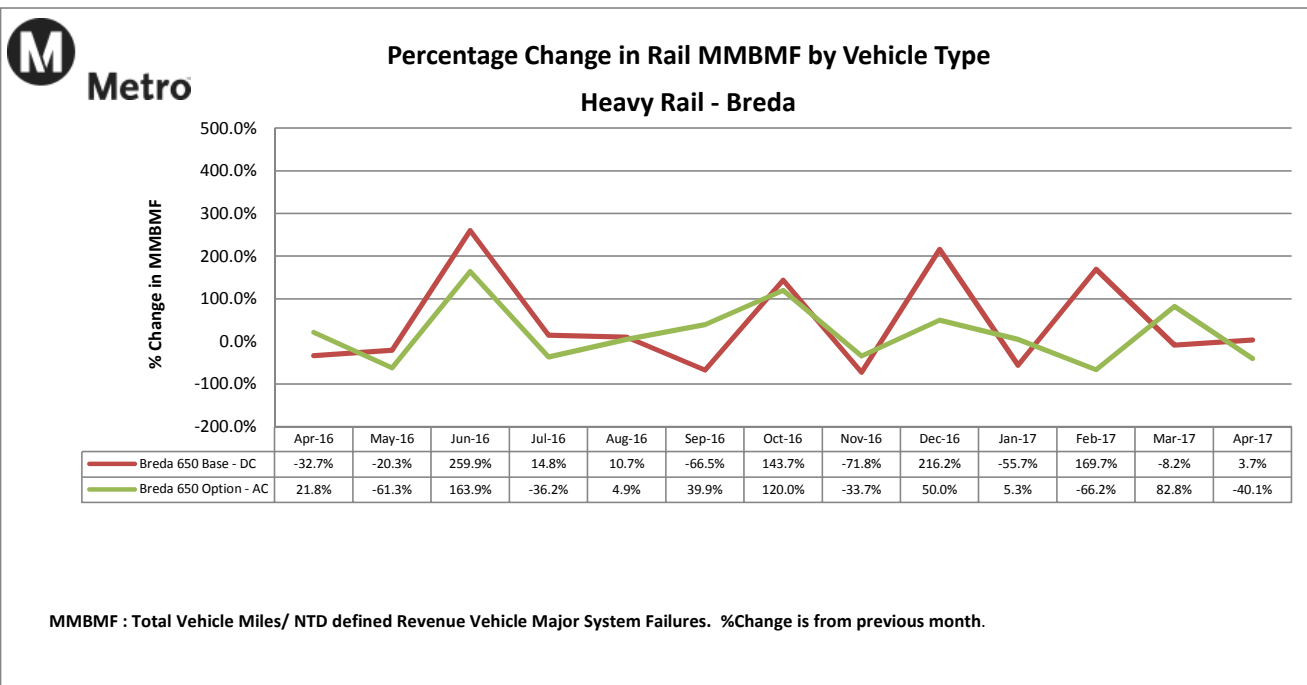
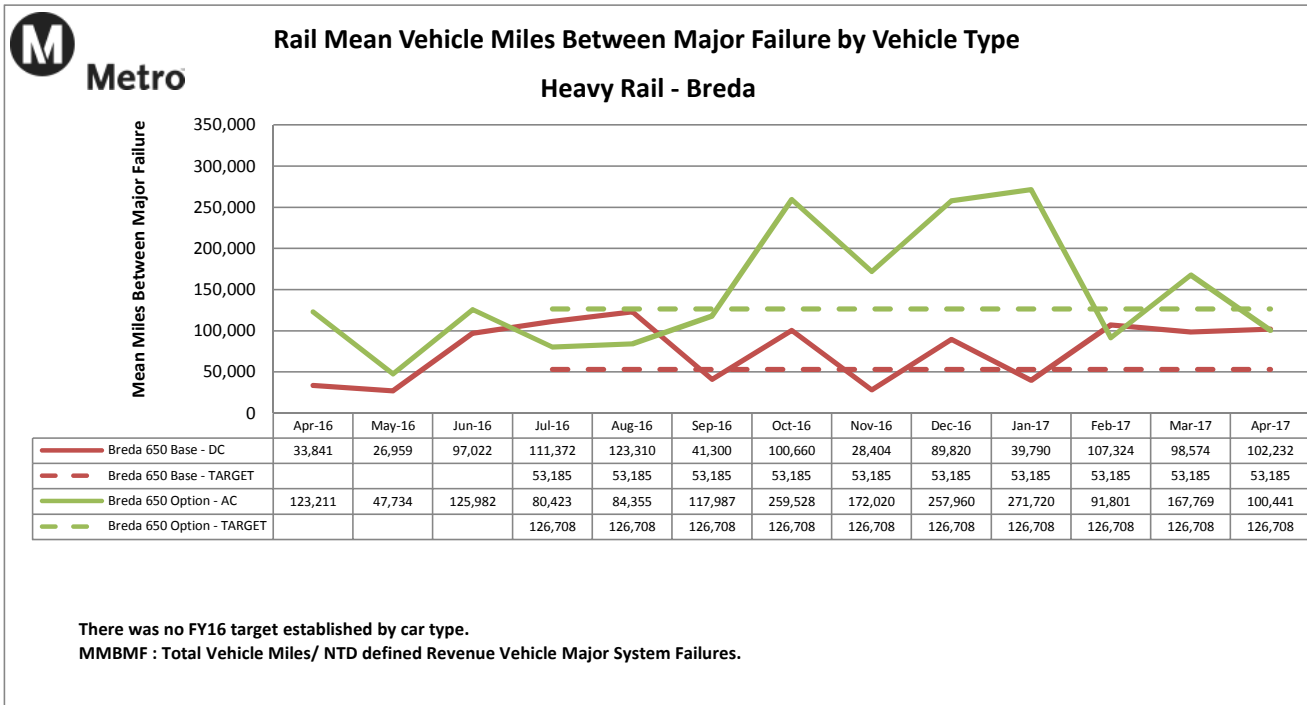
● Yellow - Uncertain if the target will be achieved -- slight problems, delays or management issues. Falls below Target 70 - 99%.

● Red - High probability that the target will not be achieved -- significant problems and/or delays. Falls below Target >70%.

N/A = Not Available

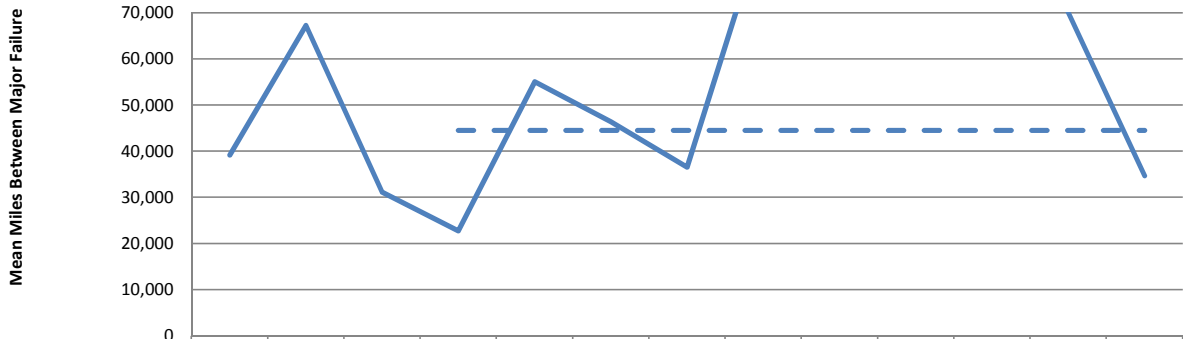
# METRO RAIL PERFORMANCE – APRIL 2017

## Rail Performance by Vehicle Type





### Rail Mean Vehicle Miles Between Major Failure by Vehicle Type Light Rail - Breda

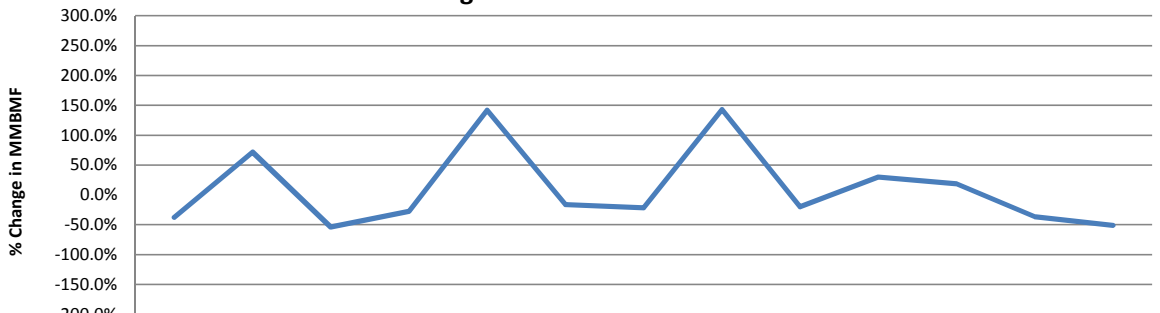


	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17
— AnsaldoBreda 2550 Base - AC	39,188	67,279	31,159	22,741	55,074	46,395	36,556	88,934	71,550	92,980	110,322	70,117	34,678
- - AnsaldoBreda 2550 Base - TARGET				44,517	44,517	44,517	44,517	44,517	44,517	44,517	44,517	44,517	44,517

There was no FY16 target established by car type.  
MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures.



### Percentage Change in Rail MMBMF by Vehicle Type Light Rail - Breda



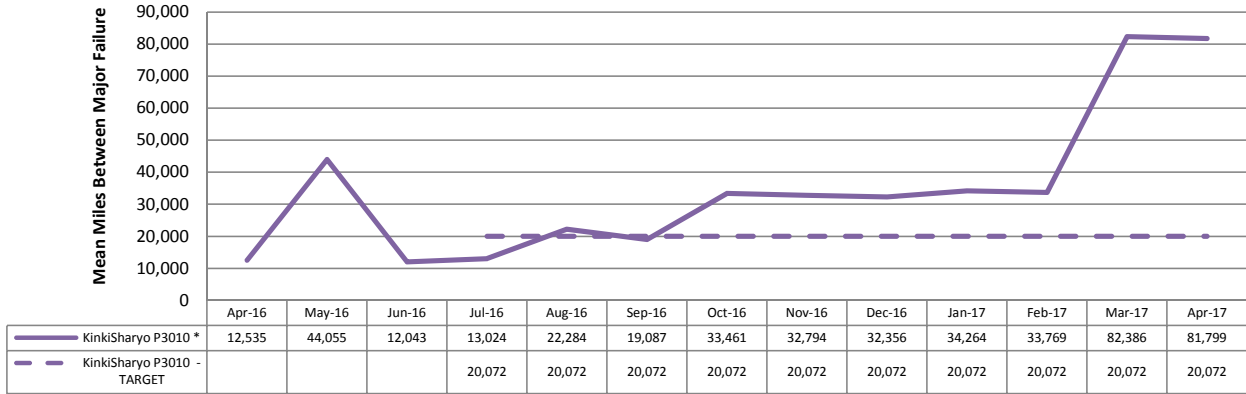
	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17
— AnsaldoBreda 2550 Base - AC	-37.7%	71.7%	-53.7%	-27.0%	142.2%	-15.8%	-21.2%	143.3%	-19.5%	30.0%	18.7%	-36.4%	-50.5%

MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures. %Change is from previous month.



Metro

### Rail Mean Vehicle Miles Between Major Failure by Vehicle Type Light Rail - KinkiSharyo

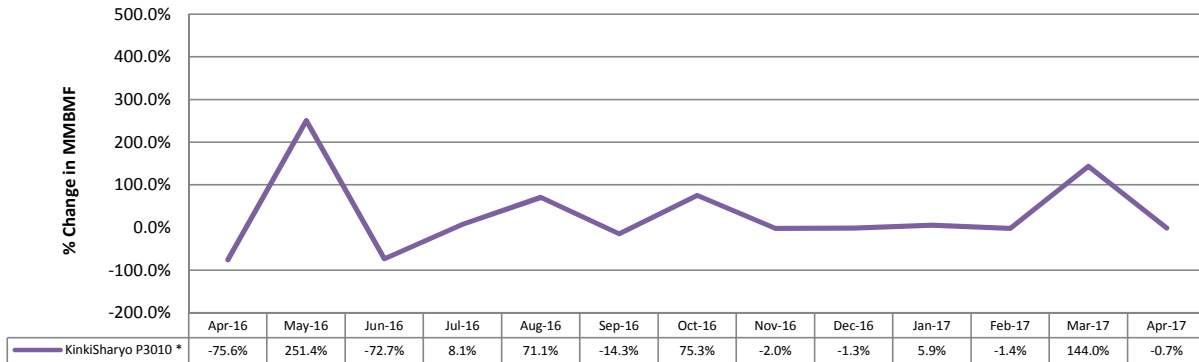


There was no FY16 target established by car type.  
 MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures.



Metro

### Percentage Change in Rail MMBMF by Vehicle Type Light Rail - KinkiSharyo



MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures. %Change is from previous month.

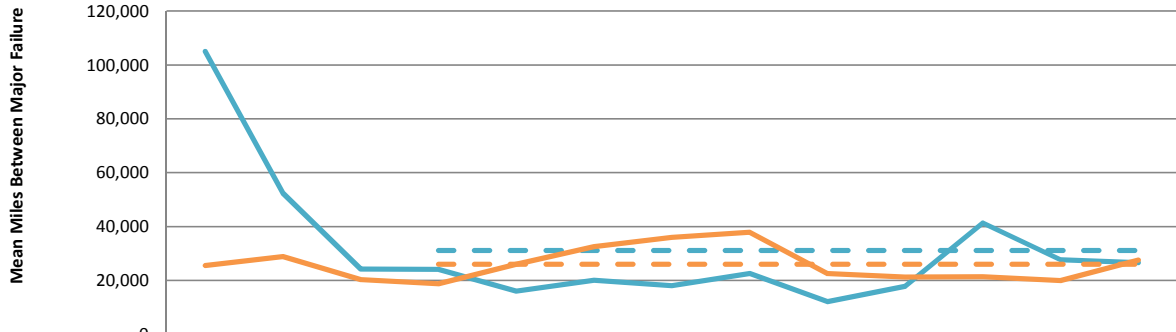
\* KinkiSharyo rolling stock began service March 2016



Metro

### Rail Mean Vehicle Miles Between Major Failure by Vehicle Type

#### Light Rail - NipponSharyo



	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17
Nippon Sharyo 2020 - DC	105,138	52,426	24,256	24,134	16,076	20,161	18,085	22,626	12,147	17,872	41,450	27,775	26,695
Nippon Sharyo 2020 - TARGET				31,214	31,214	31,214	31,214	31,214	31,214	31,214	31,214	31,214	31,214
Nippon Sharyo 865 - DC	25,593	28,981	20,341	18,786	26,073	32,617	36,102	37,961	22,672	21,350	21,490	19,955	27,593
Nippon Sharyo 865 - TARGET				26,062	26,062	26,062	26,062	26,062	26,062	26,062	26,062	26,062	26,062

There was no FY16 target established by car type.

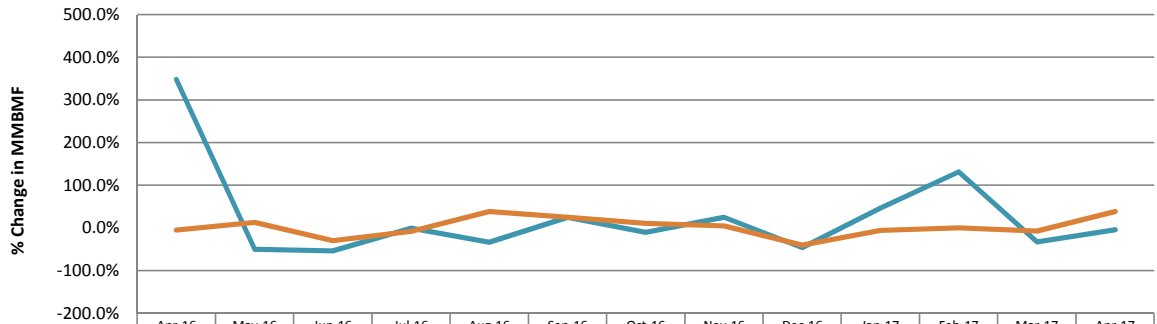
MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures.



Metro

### Percentage Change in Rail MMBMF by Vehicle Type

#### Light Rail - NipponSharyo



	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17
Nippon Sharyo 2020 - DC	348.3%	-50.1%	-53.7%	-0.5%	-33.4%	25.4%	-10.3%	25.1%	-46.3%	47.1%	131.9%	-33.0%	-3.9%
Nippon Sharyo 865 - DC	-5.2%	13.2%	-29.8%	-7.6%	38.8%	25.1%	10.7%	5.2%	-40.3%	-5.8%	0.7%	-7.1%	38.3%

MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures. %Change is from previous month.

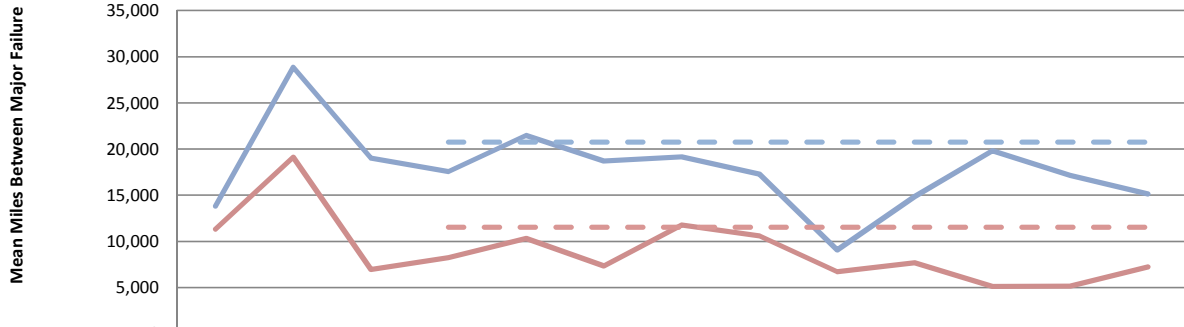




**Metro**

**Rail Mean Vehicle Miles Between Major Failure by Vehicle Type**

**Light Rail - Siemens**



	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17
Siemens 2000 Base - AC	13,853	28,871	19,031	17,567	21,505	18,725	19,184	17,318	9,073	14,888	19,848	17,159	15,154
Siemens 2000 Base - TARGET				20,778	20,778	20,778	20,778	20,778	20,778	20,778	20,778	20,778	20,778
Siemens 2000 GE/ATP - AC	11,344	19,136	6,984	8,241	10,345	7,365	11,790	10,601	6,716	7,700	5,125	5,161	7,257
Siemens 2000 GE/ATP - TARGET				11,559	11,559	11,559	11,559	11,559	11,559	11,559	11,559	11,559	11,559

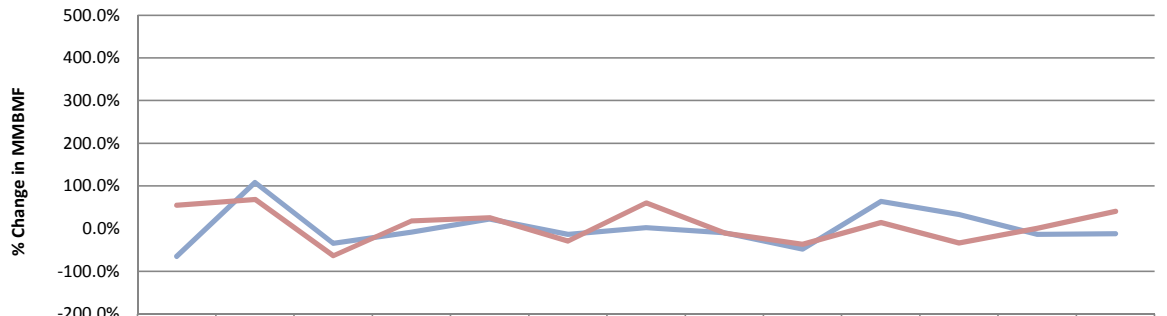
There was no FY16 target established by car type.  
 MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures.



**Metro**

**Percentage Change in Rail MMBMF by Vehicle Type**

**Light Rail - Siemens**



	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17
Siemens 2000 Base - AC	-64.9%	108.4%	-34.1%	-7.7%	22.4%	-12.9%	2.5%	-9.7%	-47.6%	64.1%	33.3%	-13.6%	-11.7%
Siemens 2000 GE/ATP - AC	55.3%	68.7%	-63.5%	18.0%	25.5%	-28.8%	60.1%	-10.1%	-36.6%	14.7%	-33.4%	0.7%	40.6%

MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures. %Change is from previous month.

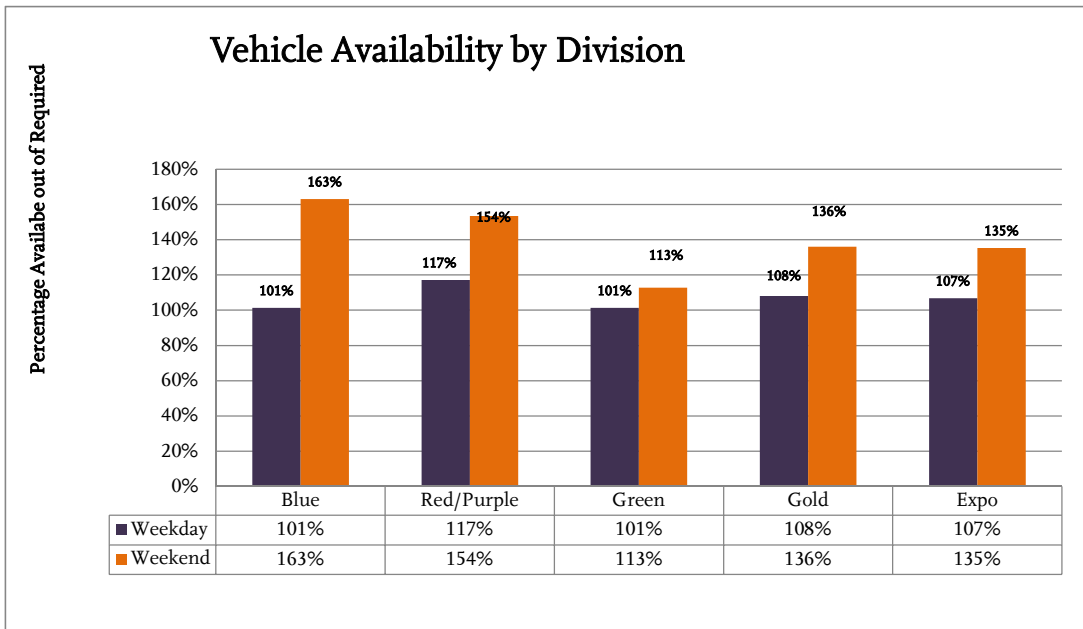
### Mean Miles Between Major Failures

	FY 2016	FY 2017 Goal	FY 2017 YTD
AnsaldoBreda2550Base - AC	42,292	44,517	53,332
Breda 650 Base - DC	50,526	53,185	72,935
Breda 650 Option - AC	120,372	126,708	136,891
Kinkisharyo P3010	19,068	20,072	30,867
Nippon Sharyo 2020 - DC	29,653	31,214	19,618
Nippon Sharyo 865 - DC	24,759	26,062	24,967
Siemens 2000 Base - AC	19,739	20,778	16,232
Siemens 2000 GE/ATP - AC	10,981	11,559	7,664

### Rail Fleet Distribution – APRIL 2017

Number of Rail Vehicle Type by Division	Blue	Red / Purple	Green	Gold	Expo
AnsaldoBreda 2550 Base - AC				50	
Breda 650 Base - DC		30			
Breda 650 Option - AC		74			
KinkiSharyo P3010				15	50
Nippon Sharyo 2020 - DC	12				3
Nippon Sharyo 865 - DC	40				14
Siemens 2000 Base - AC			29		
Siemens 2000 GE/ATP - AC	19				4
<b>TOTALS</b>	<b>71</b>	<b>104</b>	<b>29</b>	<b>65</b>	<b>71</b>

Blue			
Day Type	Vehicles Required	Average Available	Average % Available
Weekday	57	58	101%
Weekend	26	42	163%
Red/ Purple			
Day Type	Vehicles Required	Average Available	Average % Available
Weekday	64	75	117%
Weekend	40	61	154%
Green			
Day Type	Vehicles Required	Average Available	Average % Available
Weekday	22	22	101%
Weekend	14	16	113%
Gold			
Day Type	Vehicles Required	Average Available	Average % Available
Weekday	48	52	108%
Weekend	28	38	136%
Expo			
Day Type	Vehicles Required	Average Available	Average % Available
Weekday	47	50	107%
Weekend	30	41	135%

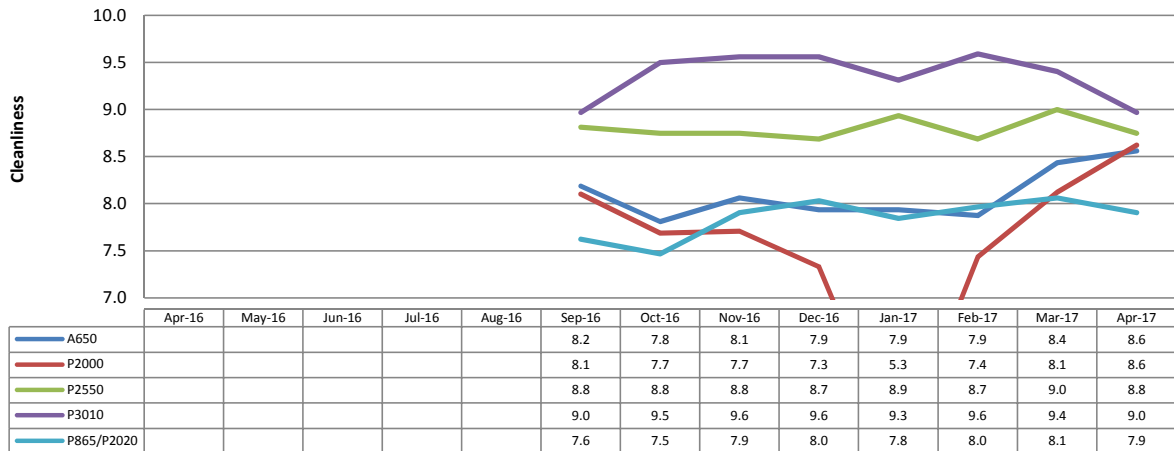


# Cleanliness by Vehicle Type



Metro

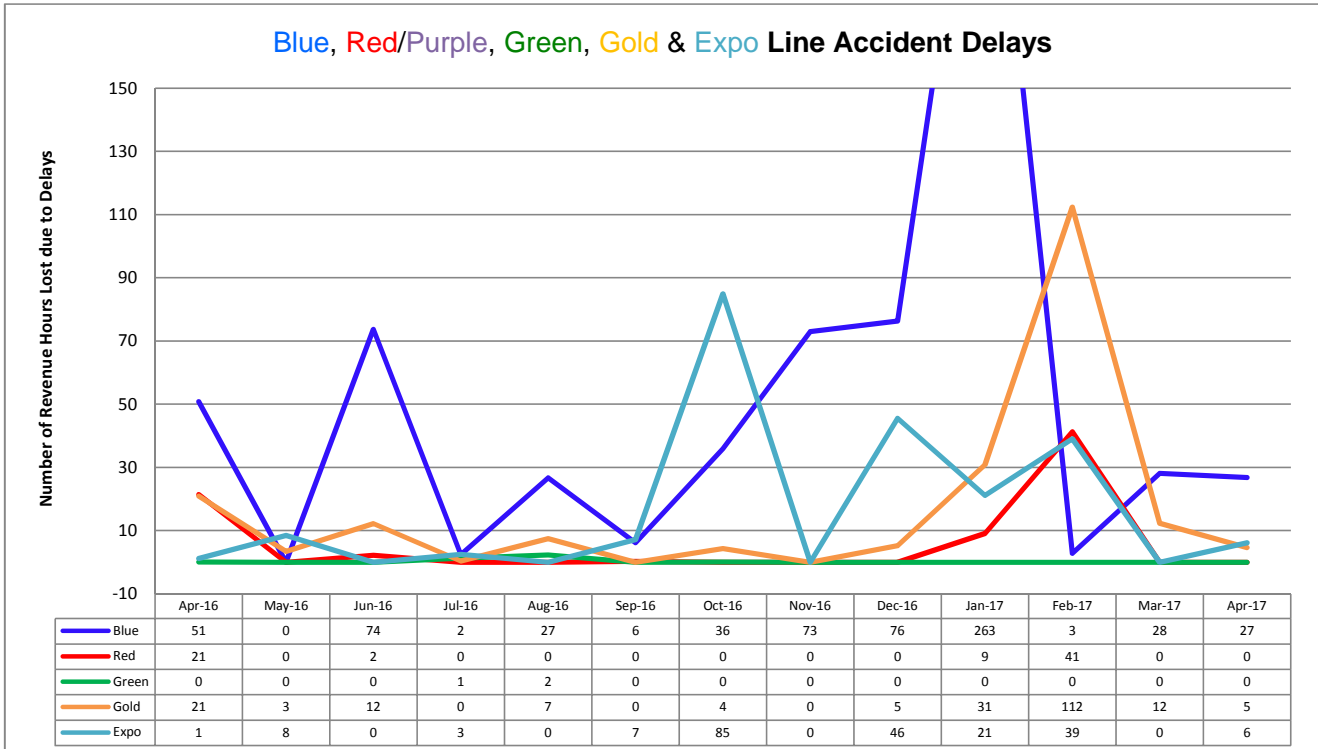
Rail Cleanliness by General Vehicle Type



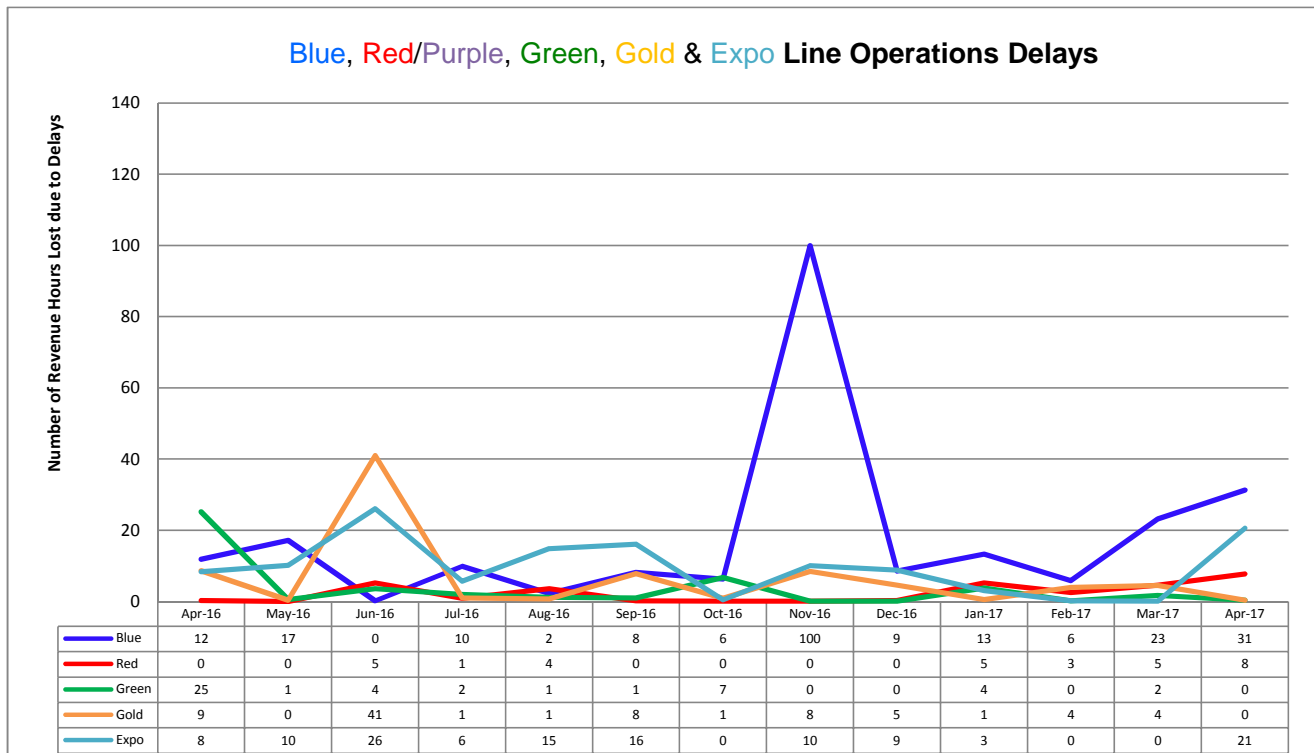
Note: Data Collection Began September 2016

## RAIL DELAYS BY CATEGORY - SYSTEMWIDE

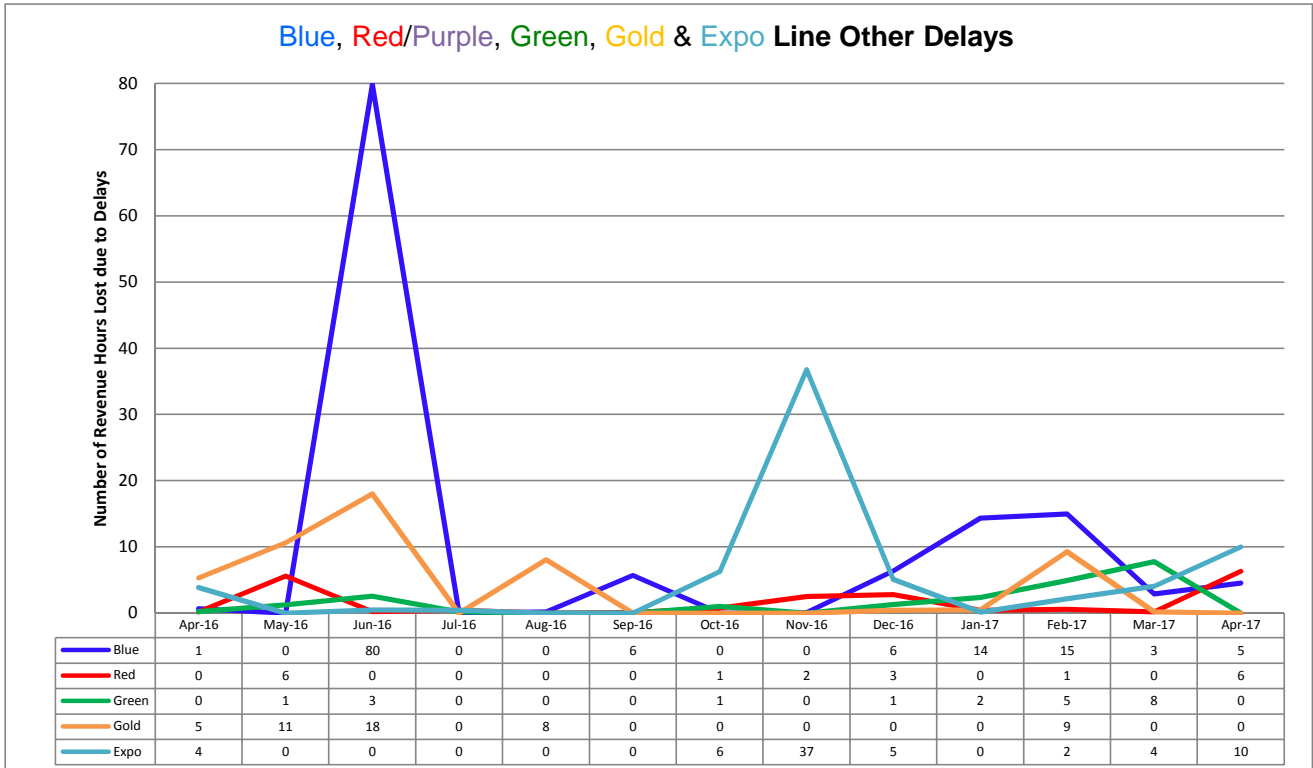
### Revenue Hours Lost Related to - ACCIDENTS



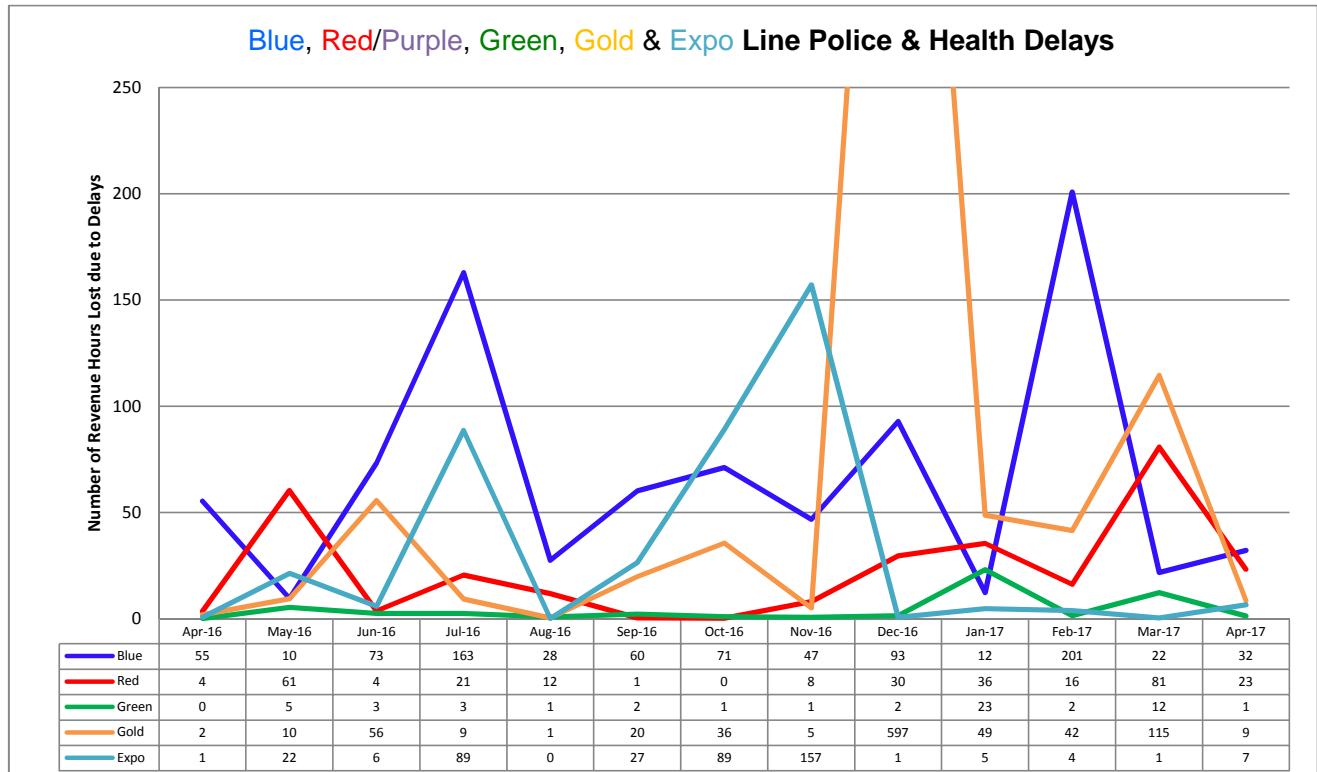
### Revenue Hours Lost Related to - OPERATIONS



Revenue Hours Lost Related to - OTHER

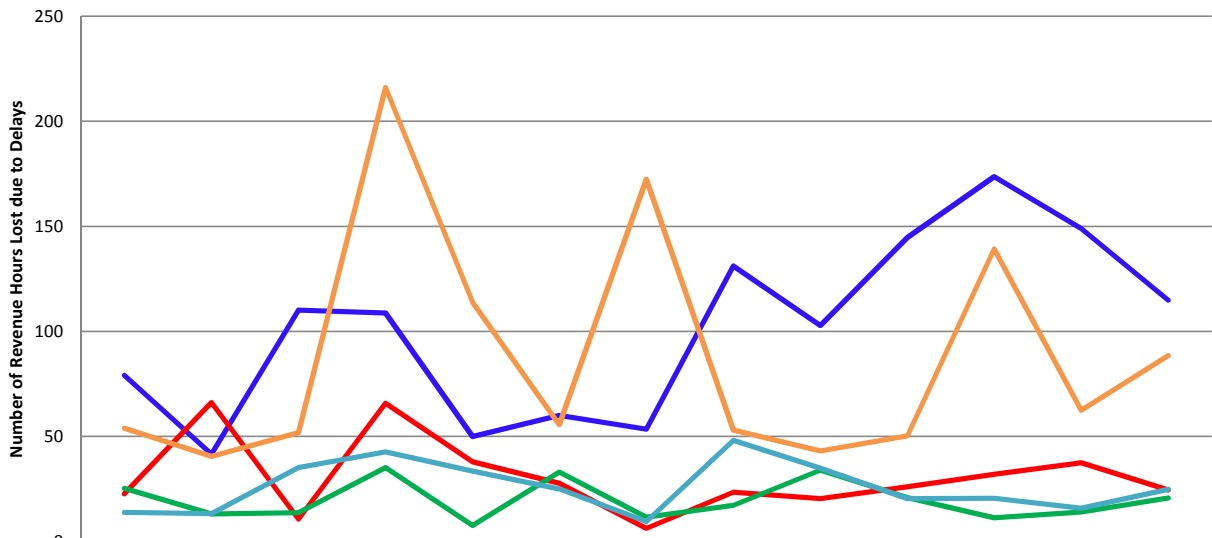


Revenue Hours Lost Related to - POLICE & HEALTH



Revenue Hours Lost Related to - Vehicle Delays

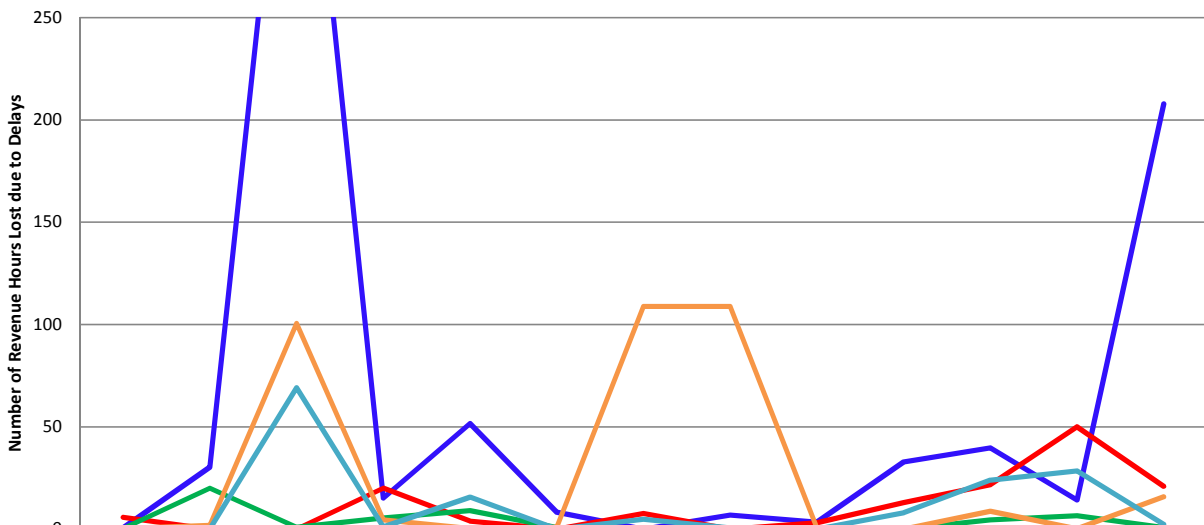
Blue, Red/Purple, Green, Gold & Expo Line Vehicle Delays



	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17
Blue	79	42	110	109	50	60	54	131	103	145	174	149	115
Red	23	66	11	66	38	28	6	24	20	26	32	38	25
Green	25	13	14	35	8	33	12	17	34	21	11	14	21
Gold	54	41	52	216	114	56	172	53	43	50	139	63	89
Expo	14	13	35	43	34	25	10	48	35	21	21	16	25

Revenue Hours Lost Related to - WAYSIDE

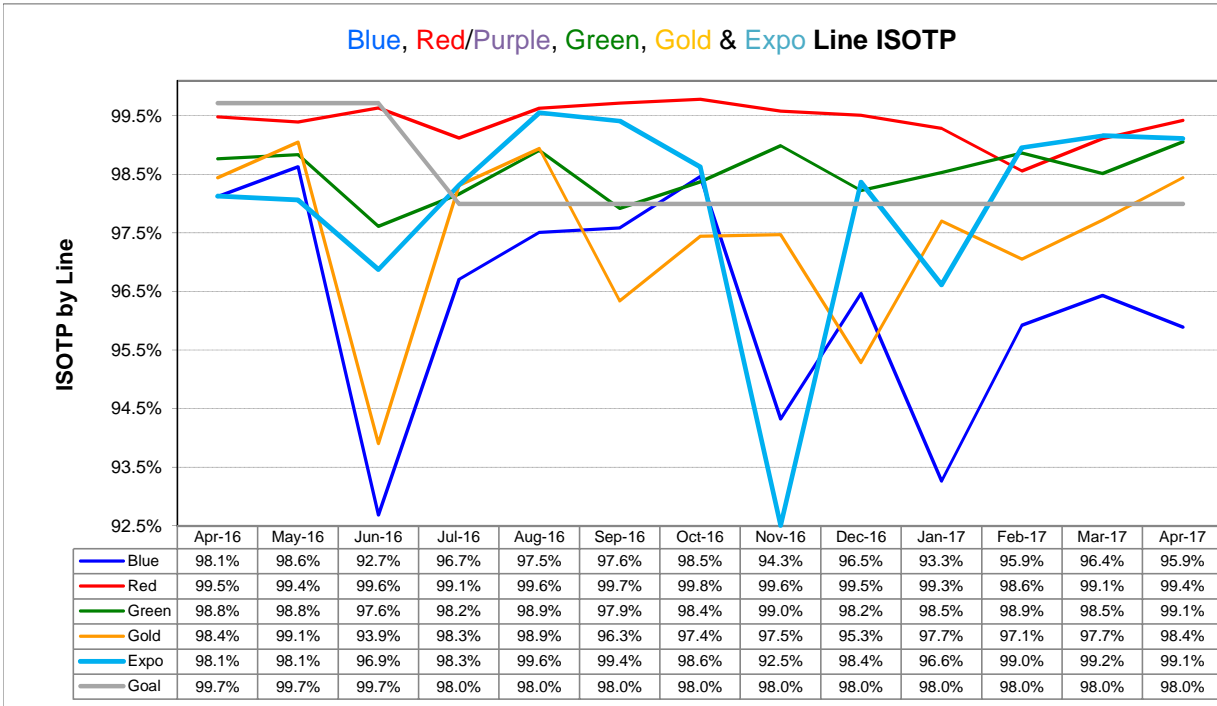
Blue, Red/Purple, Green, Gold & Expo Line Wayside Delays



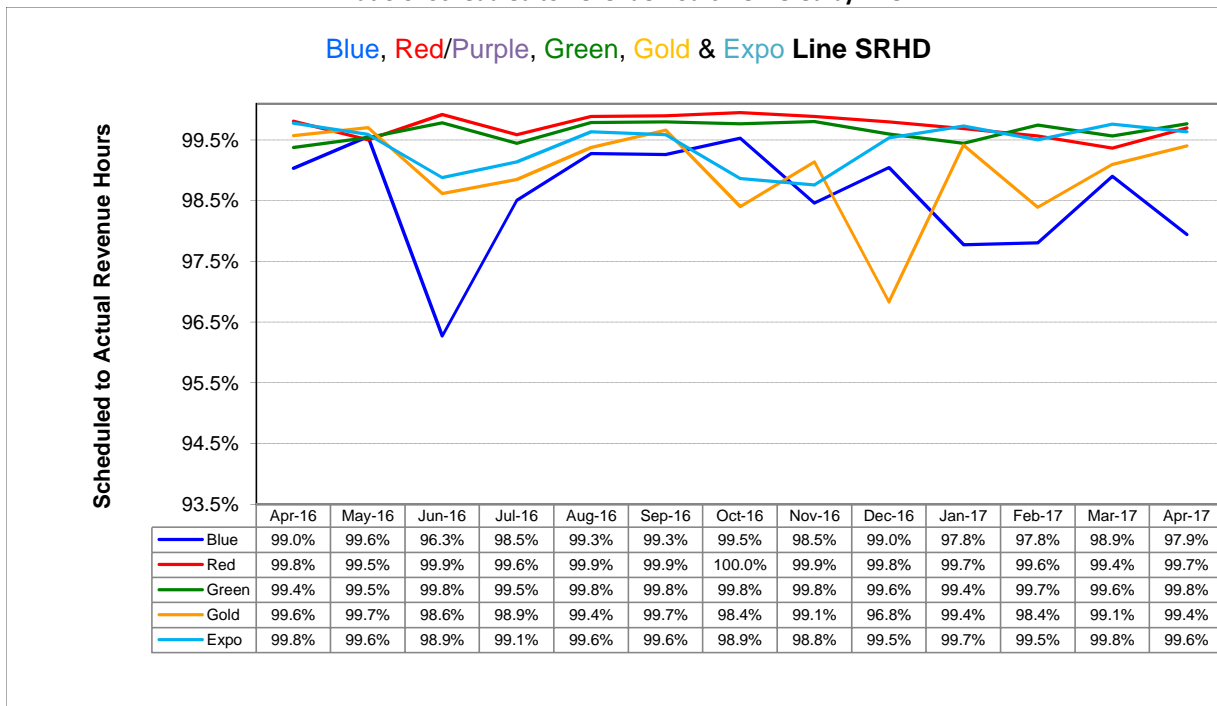
	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17
Blue	1	30	424	15	52	8	0	7	4	33	40	14	208
Red	6	0	0	20	4	0	8	0	3	13	22	50	21
Green	0	20	1	6	9	1	1	1	1	0	5	7	1
Gold	0	2	101	5	0	1	109	109	1	0	9	0	16
Expo	0	0	69	1	16	0	5	1	0	8	24	28	2

# Rail Service Performance

## In Service On Time Performance by Line

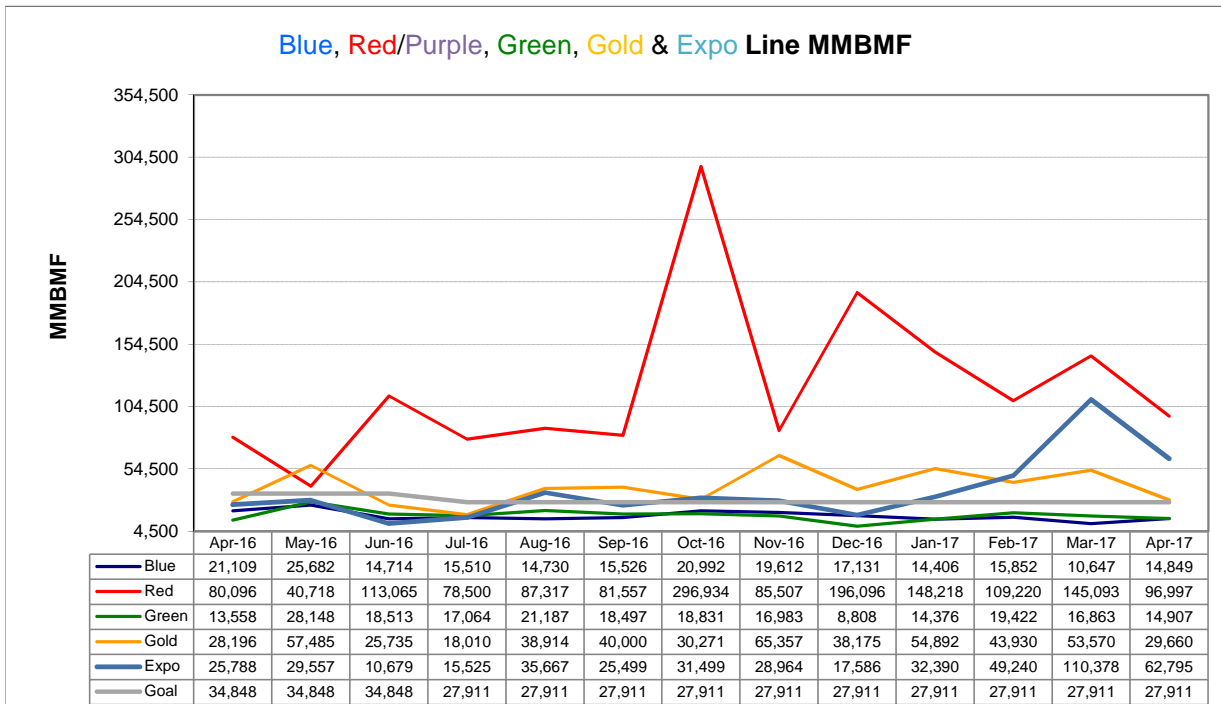


## Ratio of Scheduled to Revenue Hours Delivered by Line



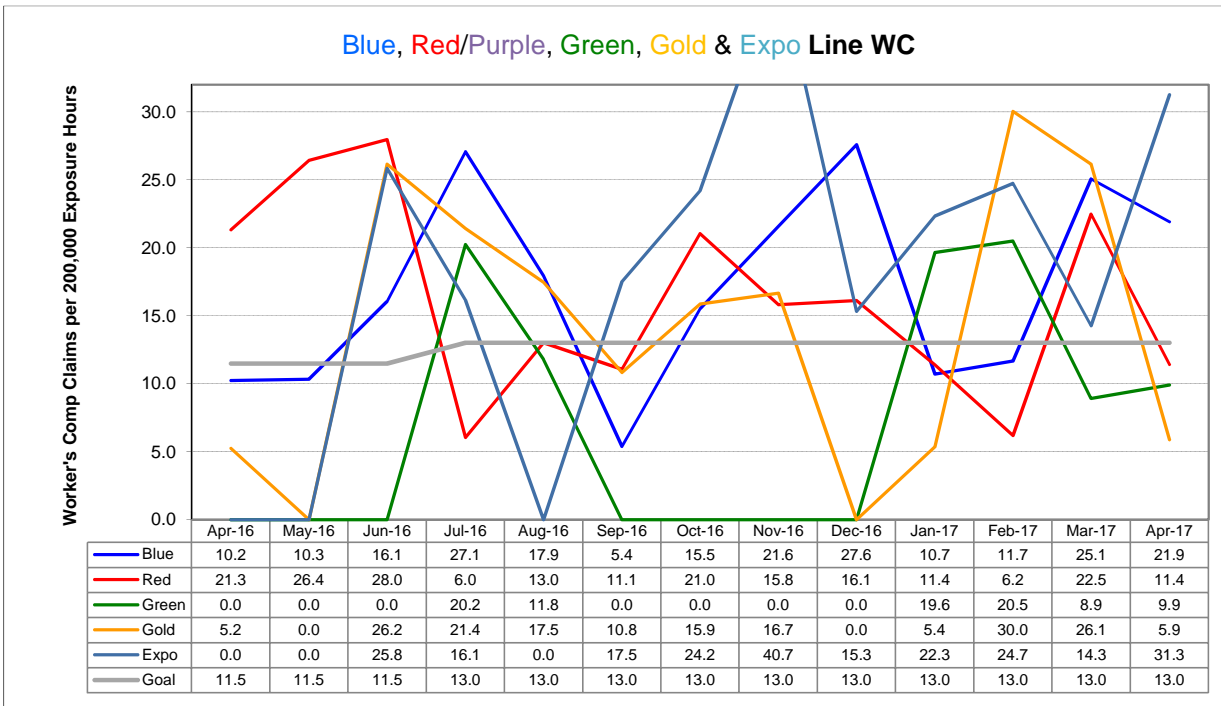


### Mean Miles Between Mechanical Failures by Line



Expo Line Service began in March 2016.

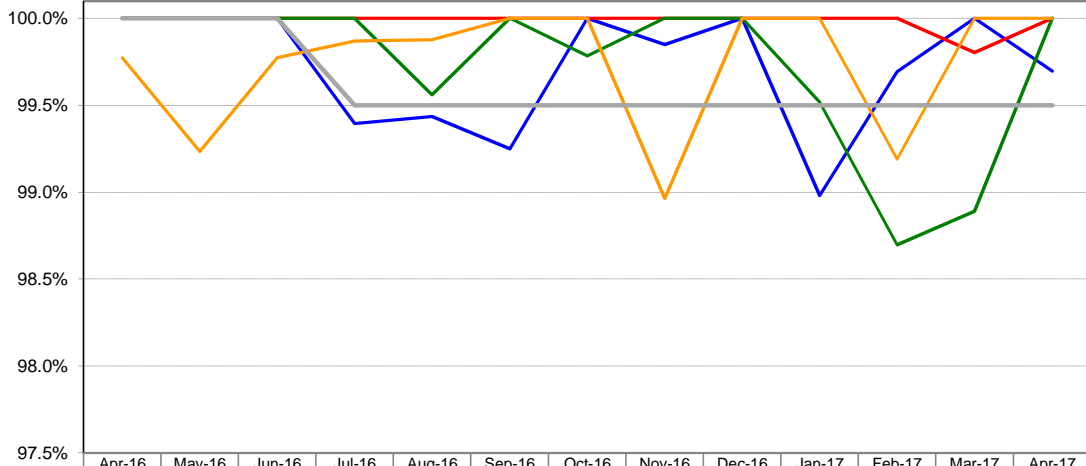
### Workers Comp Claims by Line



### On-Time Pullouts Ratio by Line

Blue, Red/Purple, Green, Gold & Expo Line OTP

OnTime Pullouts Ratio

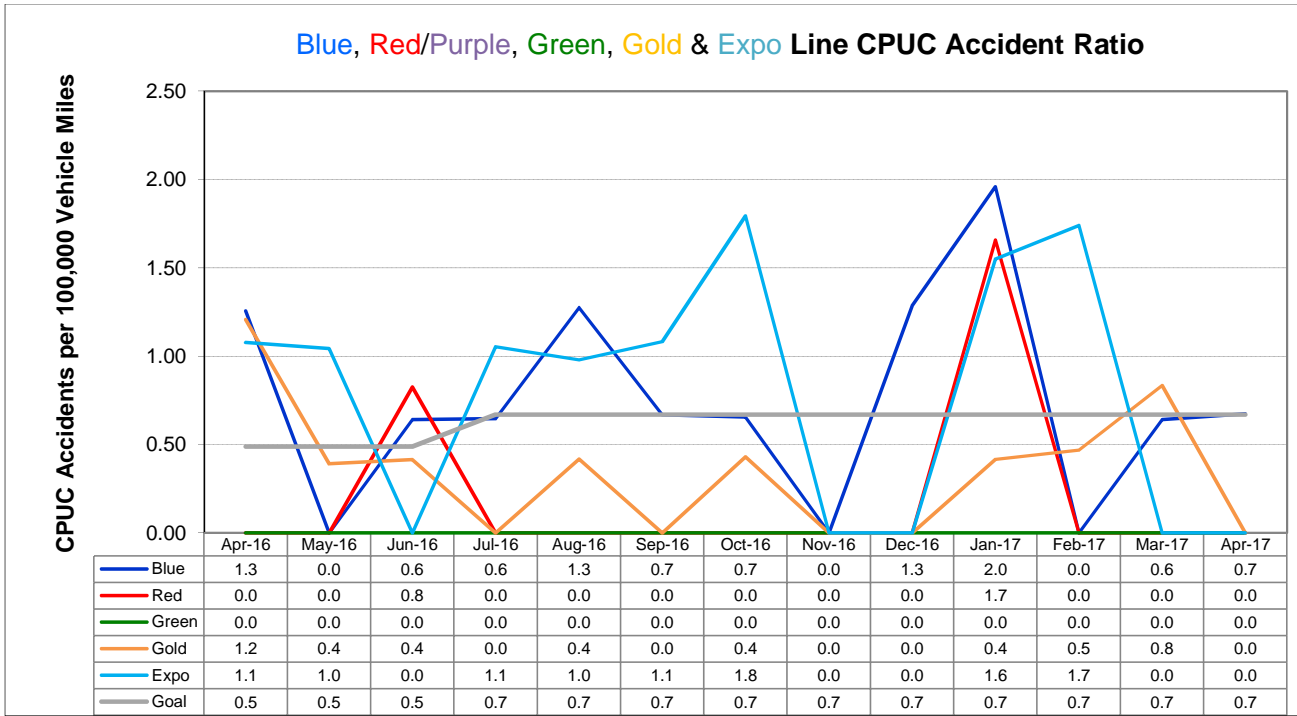


	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17
Blue	100.0%	100.0%	100.0%	99.4%	99.4%	99.2%	100.0%	99.8%	100.0%	99.0%	99.7%	100.0%	99.7%
Red	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.8%	100.0%
Green	100.0%	100.0%	100.0%	100.0%	99.6%	100.0%	99.8%	100.0%	100.0%	99.5%	98.7%	98.9%	100.0%
Gold	99.8%	99.2%	99.8%	99.9%	99.9%	100.0%	100.0%	99.0%	100.0%	100.0%	99.2%	100.0%	100.0%
Expo				99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%
Goal	100.0%	100.0%	100.0%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%

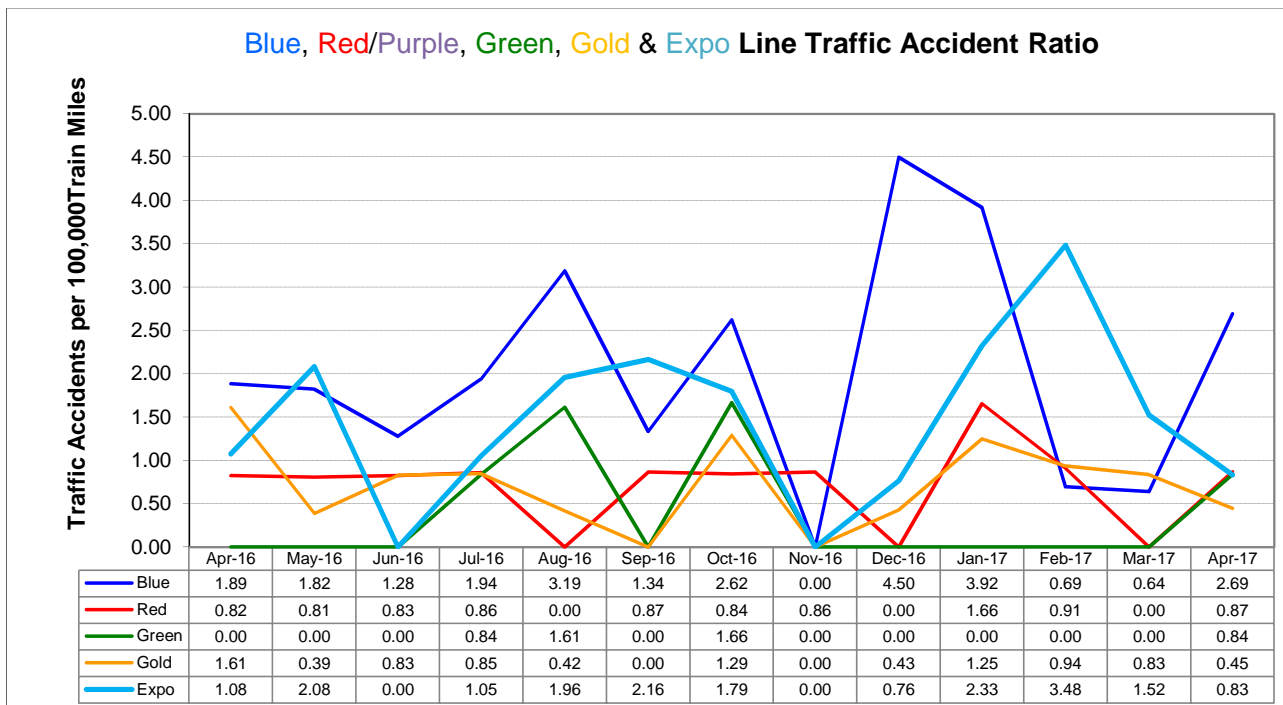
Expo Line Service began in March 2016.

# Rail Safety Performance

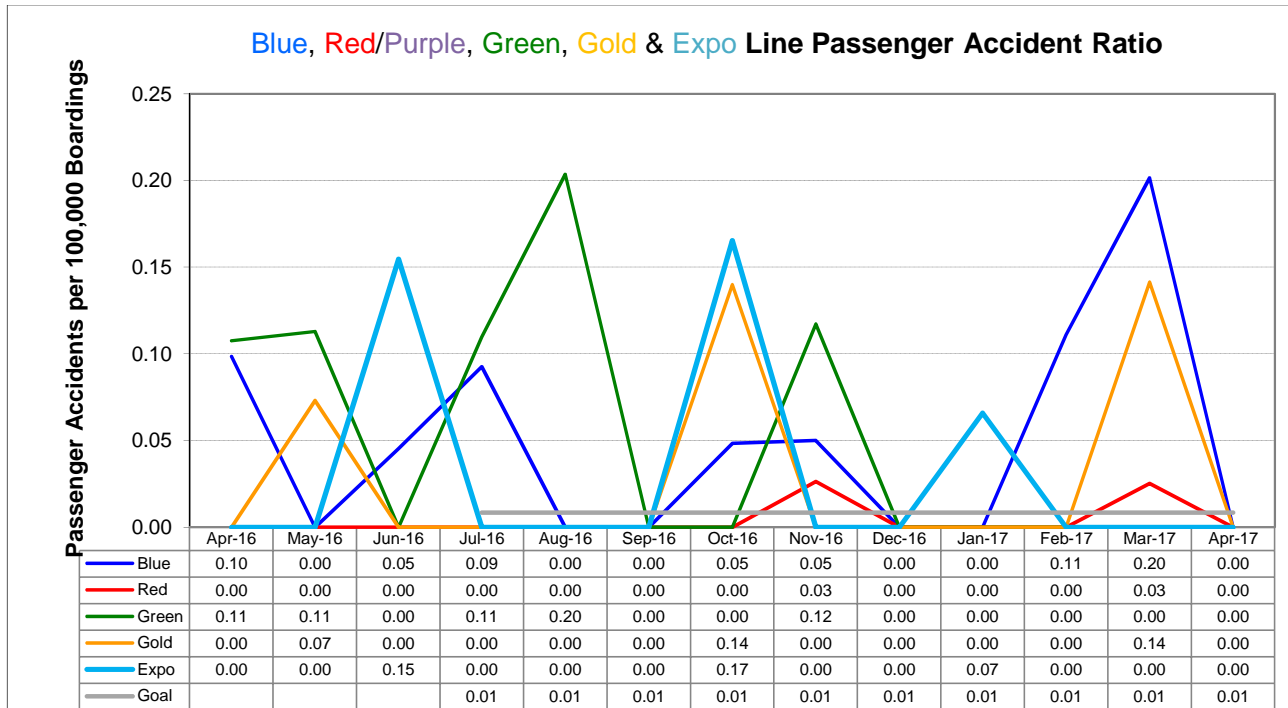
## CPUC REPORTABLE ACCIDENTS PER 100,000 TRAIN MILES



## TRAFFIC ACCIDENTS PER 100,000 TRAIN MILES



### PASSENGER ACCIDENTS PER 100,000 BOARDINGS

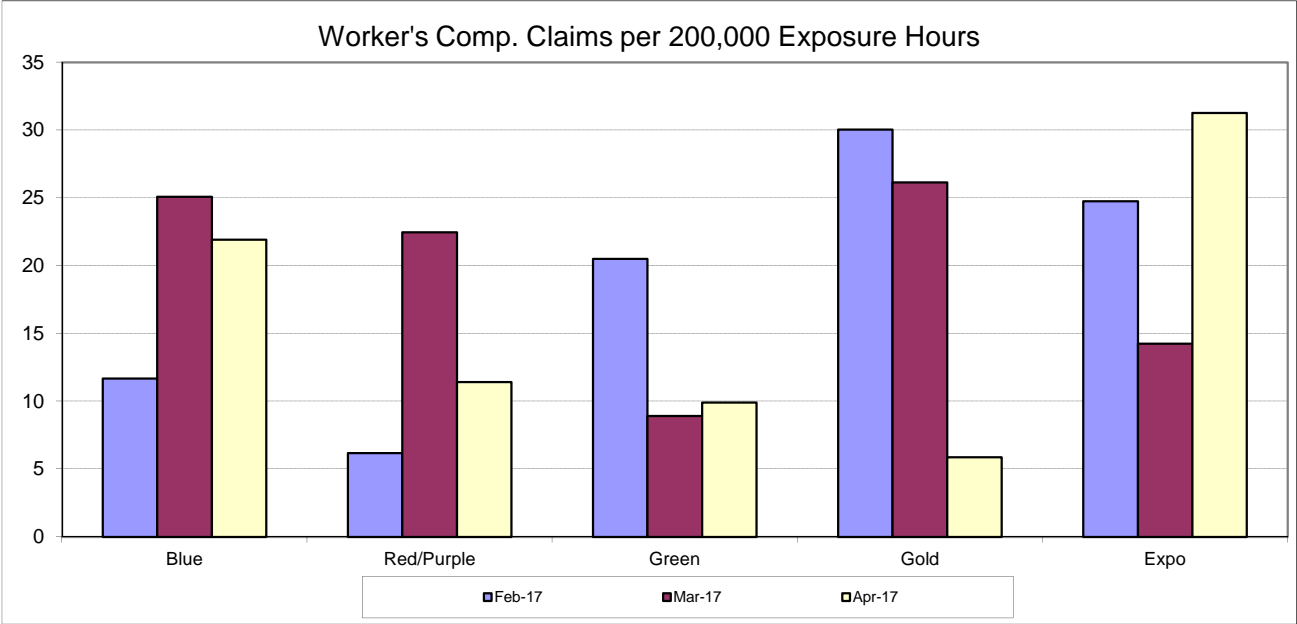


Expo Line Service began in March 2016.

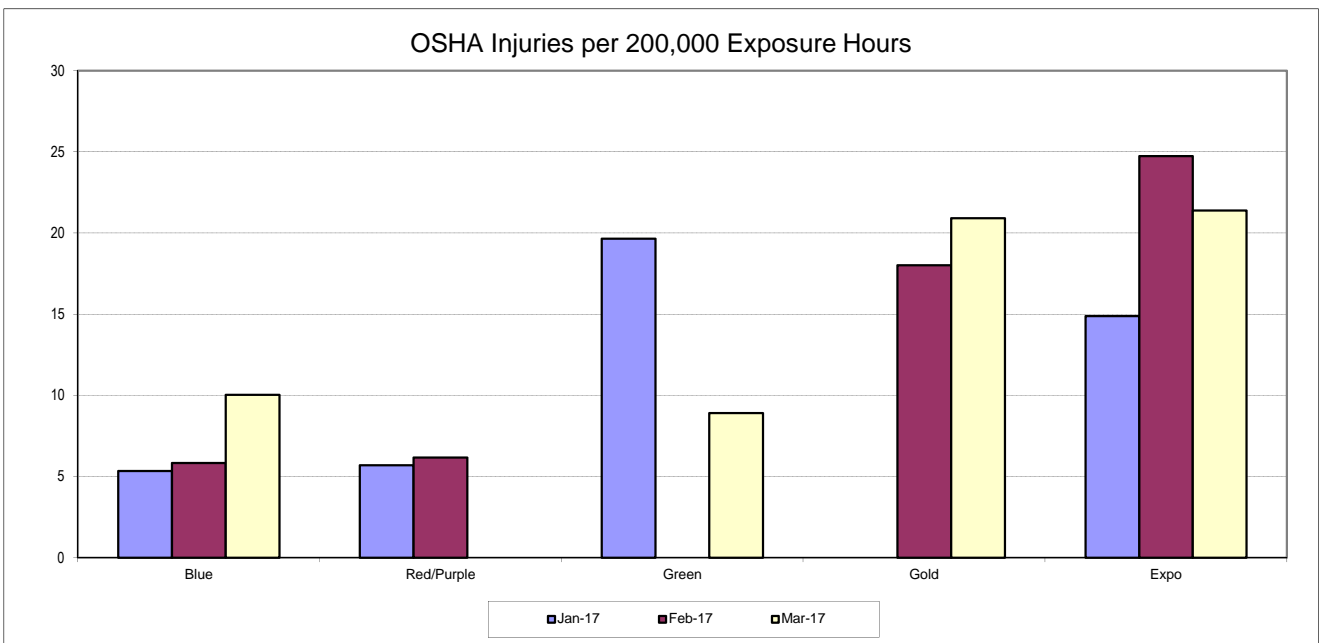
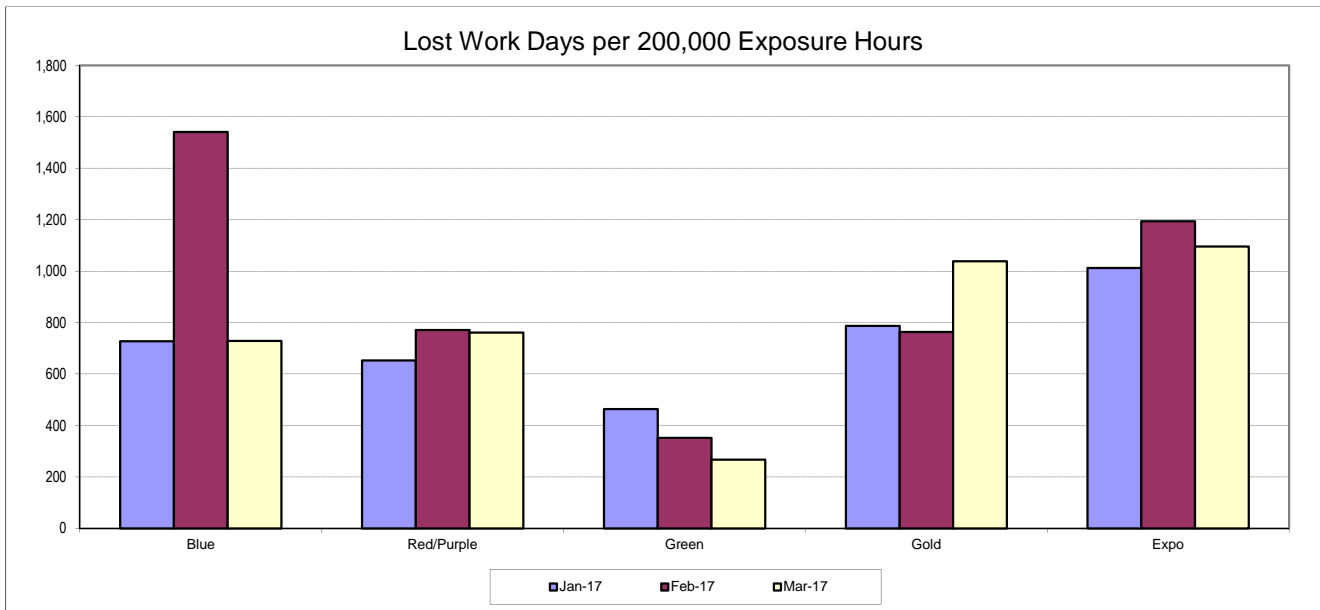
# Worker's Comp. Claims

Feb 2017 - Apr 2017

3 Month Comparison

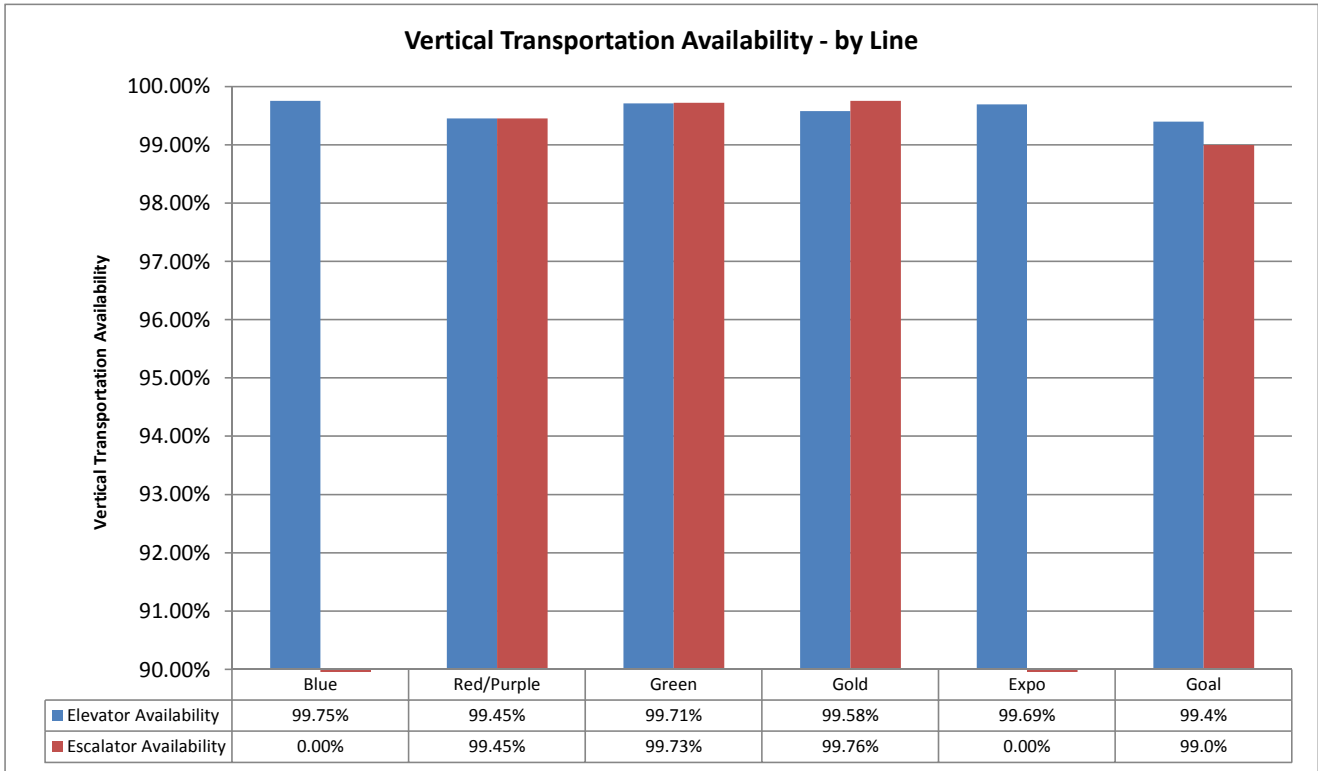


## Lost Work Days and OSHA Injuries Jan 2017 - Mar 2017 3 Month Comparison



Note: There is a one month lag in Lost Work Days and OSHA data.

## Systemwide Vertical Transportation Availability by Line



Note: No Escalators at Blue and Expo Lines

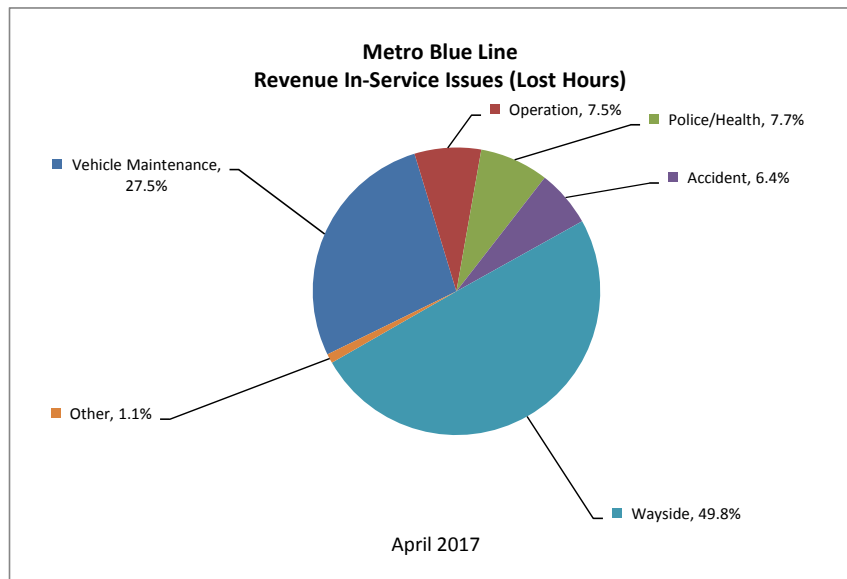
## BLUE LINE

Out of a total of 19,381 hours operated, there were approximately 418 total hours of service delays.

April 2017 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	18,963	97.8%
Cancelled + Delayed Hours	418	2.2%
<b>Total Revenue Hours</b>	<b>19,381</b>	<b>100.0%</b>

Summary of the major contributors:	Count	Hours	Percent
Operations	8	31.3	7.5%
Accidents	2	26.8	6.4%
Vehicle Maintenance	47	114.8	27.5%
Wayside	6	207.9	49.8%
Police & Health	12	32.3	7.7%
Other	5	4.5	1.1%
<b>Total</b>	<b>80</b>	<b>417.8</b>	<b>100.0%</b>

\* Data from M3 used to report Service Delays is under review for accuracy





## **April 2017 Blue Line major delay contributors were as follows:**

### **Operations Incidents:**

#### **4/8/2017 10:00:00 AM - Incident# 2853886 (3 lost trips, 507 lost minutes)**

Northbound trains are turning back from Grand and Washington Station due to emergency maintenance work.

Train#107

T#238

Cars#130,124,100

Track#1,Grand Station,Northbound

#### **4/10/2017 3:45:00 PM - Incident# 2854535 (2 lost trips, 335 lost minutes)**

Train 119 reporting Propulsion faults

Train 119

M-175

LRVS 140-158 ( 165 )

Metro Center Tail Track 2

#### **4/14/2017 9:01:00 AM - Incident# 2856009 (1 lost trip, 166 lost minutes)**

Southbound trip, for Train#117 was cancelled at 7th&Metro,Train#101,cars(115,104,160) belong to Expo and the line was bumped.

#### **4/14/2017 1:10:00 PM - Incident# 2856101 (1 lost trip, 166 lost minutes)**

Train 111 is delayed due to Expo trains being crossed over at 7th&Metro.

Train#111

T#34

140,100,130

Track#2,Southbound,Imperial Station

#### **4/14/2017 4:57:00 PM - Incident# 2856159 (0 lost trips, 17 lost minutes)**

Canine on the ROW at Greenleaf in between Tracks 1&2.

Train#124

T#34

124,151,165

Track 2,Southbound,Greenleaf

#### **4/18/2017 7:00:00 PM - Incident# 2857301 (1 lost trip, 168 lost minutes)**

Trip cancelled from Tranist Mall to Willow on Train 101 due to previous delays due to unscheduled single tracking.

#### **4/27/2017 6:43:00 AM - Incident# 2860176 (3 lost trips, 503 lost minutes)**

7th Metro Ctr. departures on Expo trains were cancelled

#### **4/29/2017 8:00:00 AM - Incident# 2861082 (0 lost trips, 17 lost minutes)**

Traction Power doing OCS repairs on Track 2 between Washington and Florence Interlockings. Single Tracking on track 1 per Pink Letter

M-384

### **Accidents:**

#### **4/2/2017 8:55:00 PM - Incident# 2851710 (1 lost trip, 116 lost minutes)**

10-73

Train 104

T-413

Consist 136b-157

Long Beach Blvd & 19th Street, northbound

**4/21/2017 3:46:00 PM - Incident# 2858462 (9 lost trips, 1,494 lost minutes)**

Train-119  
T-348  
Cars (239A)-235-244  
Southbound Track #2  
119th Grade Crossing  
Train vs. Auto at Intersection at 119th Grade Crossing Track #2 Southbound.

**Vehicle Maintenance Incidents:**

**4/1/2017 10:48:00 AM - Incident# 2851423 (0 lost trips, 20 lost minutes)**

Prop/ Fault, speed restriction.  
Train #107.  
T-233.  
LRV- (165B), 149.  
Willow Station, Track #1, Northbound.

**4/1/2017 12:39:00 PM - Incident# 2851438 (1 lost trip, 116 lost minutes)**

Self applying Track Brake.  
Train #110.  
T-473.  
LRV- (239B), 248.  
Track #2, northbound, reverse running, Stockwell.

**4/2/2017 5:00:00 PM - Incident# 2851672 (1 lost trip, 116 lost minutes)**

Train operator reports slow propulsion and an isolate/connect problem.  
Train 108  
T-72  
Consist 137a-154

**4/4/2017 6:53:00 AM - Incident# 2852241 (2 lost trips, 335 lost minutes)**

Friction Brakes (Smoking brakes)  
(137A)-121-140  
Train 109  
T-115  
Compton, Southbound, Track 2

**4/5/2017 4:16:00 AM - Incident# 2852631 (0 lost trips, 23 lost minutes)**

No Fault No Movement  
Train 103  
T-115  
(250)-241-302  
Trk 2 S/B mpm 17.00  
23 minute delay

**4/5/2017 6:23:00 AM - Incident# 2852649 (0 lost trips, 10 lost minutes)**

Doors  
Train 102  
T-355  
245-(231)-242  
Del Amo S/B trk 2  
10 minute delay

**4/5/2017 3:25:00 PM - Incident# 2852914 (1 lost trip, 173 lost minutes)**

Train 122 report the he was getting Emergency braking due to a door flickering indication on LRV 164 doors 3/4  
Train 122  
T-307  
LRV'S ( 164A ) 136-155  
Del AmoStation, Track 1, Northbound.

**4/6/2017 4:35:00 AM - Incident# 2853090 (0 lost trips, 10 lost minutes)**

Doors/Propulsion Fault  
Train 104  
T-174  
245-(231)-242  
Trk 1 N/B 103 rd Station  
10 minute service delay

**4/6/2017 4:35:00 PM - Incident# 2853360 (2 lost trips, 333 lost minutes)**

Train-126  
T-505  
Cars (162A)-120-123  
Southbound, Track #2  
7th/Metro Station.  
Other Vehicle System (Blown Motor Fuse)

**4/8/2017 1:13:00 AM - Incident# 2853815 (0 lost trips, 20 lost minutes)**

Train operator T-183 reports of no movement spin slide.  
Train 105  
T-183  
Cars (250-241-302)  
Willowbrook Station, Track 1, Northbound

**4/8/2017 5:09:00 AM - Incident# 2853843 (1 lost trip, 161 lost minutes)**

Train 101, LRVs (301A), 229, and 245.

**4/9/2017 11:23:00 AM - Incident# 2854102 (0 lost trips, 12 lost minutes)**

Pantograph chipped on LRV 130A  
T-390  
Train 107  
LRV (130A) 123 111  
Pacific Station, Track 1, northbound.

**4/9/2017 1:38:00 PM - Incident# 2854125 (0 lost trips, 12 lost minutes)**

Propulsion / Dynamic Brakes no movement LRV 301A  
T-490  
Train 110  
LRV (301A) 229 233  
Compton Station, Track 2, southbound.

**4/10/2017 9:42:00 AM - Incident# 2854477 (0 lost trips, 12 lost minutes)**

Propulsion / Dynamic Brakes  
(240A)-210-241  
Train 108  
T-115  
Dominguez Flyover, Southbound, Track 2

**4/10/2017 11:09:00 AM - Incident# 2854433 (1 lost trip, 168 lost minutes)**

Doors ( Will Not Open)  
(239)-248-301  
Train 109  
T-211  
Slauson, Southbound, Track 2

**4/11/2017 4:11:00 AM - Incident# 2854937 (0 lost trips, 4 lost minutes)**

Train 102 reports Propulsion Faults on LRV 156A & B  
Train 102  
T-293  
LRVS ( 156A ) 143-110  
San Pedro, Track 2, Southbound.

**4/11/2017 3:15:00 PM - Incident# 2854924 (1 lost trip, 171 lost minutes)**

Doors on train 119 due to a bad door switch on LRV 239A .  
Train 119  
T-348  
LRVS ( 239A ) 237  
Metro Center, track 2, southbound

**4/12/2017 8:21:00 AM - Incident# 2855151 (0 lost trips, 4 lost minutes)**

Train 116 reports Propulsion Faults with a speed restriction 35mph. Emergency lighting.  
Train 116  
T-043  
LRVS ( 240A ) 250-233  
103rd Street Station, track 1, northbound.

**4/12/2017 12:47:00 PM - Incident# 2855305 (13 lost trips, 2,179 lost minutes)**

Train 111 reports friction brake problems with no movement.

Train 111

T-415

LRV'S 155-( 137 ) 116

7th & Metro Portal, track 1, northbound.

**4/12/2017 10:11:00 PM - Incident# 2855486 (0 lost trips, 20 lost minutes)**

Operator reports of no movement.

Train 109

T-86

Cars(157B)-141

Slauson Station, Track 2, southbound

**4/13/2017 6:03:00 AM - Incident# 2855576 (1 lost trip, 168 lost minutes)**

Propulsion Fault

Train 101

T-187

(132-198-106)

N/B PCH Trk 1

6 minute delay

**4/13/2017 12:14:00 PM - Incident# 2855737 (1 lost trip, 183 lost minutes)**

Friction Brakes

(135)-119-155

Train 106

T-102

Pico, Southbound, Track 2

**4/13/2017 1:29:00 PM - Incident# 2855825 (0 lost trips, 5 lost minutes)**

Train 104 reports Propulsion Faults on LRV 301, Speed restriction 35mph.

Train 104

T-043

LRVS 301-242-235

Florence Station, Track 1 Northbound.

**4/13/2017 2:13:00 PM - Incident# 2855788 (1 lost trip, 184 lost minutes)**

Train 105 reporting emergency Braking at Pico Station Operating LRV 239B

Train 105

T-293

LRVS ( 239 ) 237-232

Pico Station, Track 2, Southbound.

**4/13/2017 5:06:00 PM - Incident# 2855839 (1 lost trip, 168 lost minutes)**

Train 120 reports an air leak on her consist.

Train 120

T-053

LRVS 113A-165-151

Artesia Station, track 1, northbound.

**4/14/2017 1:50:00 PM - Incident# 2856113 (1 lost trip, 166 lost minutes)**

Propulsion Track Brake Fault.

Train#103

T#357

(239B),237,301

Track 1,Northbound,Anaheim

**4/14/2017 2:00:00 PM - Incident# 2856127 (1 lost trip, 166 lost minutes)**

Door problem.

Train#102

T#46

(235A),241,248

Track#2,Compton Station,Southbound

**4/15/2017 5:00:00 AM - Incident# 2856246 (0 lost trips, 5 lost minutes)**

Operator reports of doors not opening on car 248.

T-335  
Train#101  
Cars241-(248)-233  
Southbound  
Trk #2

**4/15/2017 9:50:00 AM - Incident# 2856291 (0 lost trips, 16 lost minutes)**

Friction brake fault at Pacific Station. Conducted a 90 second shutdown and 10-37 @ 1000 hrs.

Train#102  
T#355  
(135B),128,167  
Northbound,Pacific Station

**4/17/2017 7:16:00 AM - Incident# 2856640 (1 lost trip, 174 lost minutes)**

Train has reoccurring propulsion with a speed restriction.

Train 117, T-231  
232-(302)-(301)  
Track 1, Pico, North

**4/17/2017 11:43:00 AM - Incident# 2856766 (1 lost trip, 183 lost minutes)**

Auto Train Protection (Speed Limit) (Blown Motor Fuse)

116-(109)-127  
Train 111  
T-82  
Ananheim, Northbound, Track 1

**4/17/2017 3:01:00 PM - Incident# 2856874 (1 lost trip, 168 lost minutes)**

Friction Brakes

(239)-237-229  
Train 122  
T-495  
Yard Interlocking, Northbound, Track 1

**4/17/2017 4:37:00 PM - Incident# 2856906 (0 lost trips, 9 lost minutes)**

No fault/No movement

Train 110 Track #1 NB  
Anaheim Street  
T-495  
(229)-237

**4/19/2017 6:44:00 AM - Incident# 2857425 (0 lost trips, 12 lost minutes)**

Heating / Air Conditioning (Noise coming from articulated section relating to HVAC)

(106A)-107-120  
Train 109  
T-115  
Firestone, Southbound, Track 2

**4/19/2017 1:01:00 PM - Incident# 2857607 (1 lost trip, 183 lost minutes)**

LVPS fault (Battery Charger)

(232A)-231-301  
Train 111  
T-34  
Washington and Central, Southbound, Track 2

**4/20/2017 5:26:00 AM - Incident# 2857799 (0 lost trips, 6 lost minutes)**

Reports of misaligned operator cab door

Train #  
T-110  
(155B)-139-136  
Transit Mall, Track 1, NB

**4/20/2017 11:30:00 AM - Incident# 2858001 (0 lost trips, 9 lost minutes)**

Auto Train Protection (Speed Limit) (No Speed Code)  
(1054)-1039-1062  
Train 605  
T-349  
Metro Center, Southbound, Track 2

**4/20/2017 12:27:00 PM - Incident# 2858011 (0 lost trips, 6 lost minutes)**

Doors (Slow to open)  
(302A Doors 1/2 & 3/4)-232  
Train 105  
T-164  
Slauson, Track 2, Southbound

**4/20/2017 5:50:00 PM - Incident# 2858122 (1 lost trip, 181 lost minutes)**

Train operator T-72 reports no movement.  
Train 109  
T-72  
Cars (135B)-122-141  
Imperial Pocket, Track 2, southbound

**4/24/2017 2:51:00 PM - Incident# 2859232 (0 lost trips, 6 lost minutes)**

Train 103 is reporting propulsion faults with a speed restriction on LRV 153B  
  
Train 103  
T-110  
LRVS (153B ) 148-126  
Grand Station, track 2, southbound.

**4/24/2017 6:53:00 PM - Incident# 2859304 (1 lost trip, 168 lost minutes)**

Propulsion fault with a speed restriction.  
Reports recurring propulsion dynamic brake fault.  
Train # 126  
T-307  
(232B)-237-231  
SB, Firestone Station, Track #2

**4/25/2017 4:10:00 PM - Incident# 2859626 (1 lost trip, 172 lost minutes)**

Car 145 has a E-2 code (Prop Fault with a speed restriction)  
T-363  
Train-104  
Consist 124-117(145)  
7th & Metro, Track #1, Southbound

**4/26/2017 4:23:00 PM - Incident# 2860026 (1 lost trip, 174 lost minutes)**

Train 120 reports no movement with Propulsion faults.  
Train 120  
T-321  
LRVS 117-137-129  
Wardlow Station, track 2, southbound.

**4/27/2017 2:54:00 PM - Incident# 2860394 (1 lost trip, 168 lost minutes)**

Train-119  
T-487  
Cars (232A)-302-230  
Northbound, Track #1  
Washington Station  
Car Body (Interior/Exterior) reports of the rightside skirt on car 232A damaged.

**4/28/2017 4:29:00 PM - Incident# 2860892 (1 lost trip, 166 lost minutes)**

Train-103  
T-258  
Cars (165)-100-138  
Northbound, Track #1  
Compton Station  
Propulsion / Dynamic Brakes at Compton Station Re occurring.

**4/30/2017 1:55:00 AM - Incident# 2861235 (0 lost trips, 20 lost minutes)**

Train operator reports propulsion fault with no movement.  
Train 107, T-81  
115-(120B)  
Track 2, Slauson, South.

**4/30/2017 11:38:00 AM - Incident# 2861318 (1 lost trip, 128 lost minutes)**

No movement at 9th and Pacific.  
Train#107  
T#293  
(232A),234  
Northbound,9th and Pacific

**Wayside Incidents:**

**4/3/2017 4:14:00 PM - Incident# 2852064 (0 lost trips, 10 lost minutes)**

Breakers BO2 and BO3 at Pico TPSS open by it self. Power was lost between Pico Station an Metro Center tracks 1 and 2.

**4/5/2017 3:03:00 PM - Incident# 2852893 (0 lost trips, 15 lost minutes)**

Control was not able to Stop Signal 2S Mainyard Interlocking.

**4/9/2017 10:49:00 AM - Incident# 2854098 (0 lost trips, 15 lost minutes)**

Washington and Vernon TPSS breakers opened. Vernon North ETS activated unable to reset.

**4/26/2017 5:20:00 AM - Incident# 2859767 (74 lost trips, 12,420 lost minutes)**

PD&G FOR DAMAGED TRAIN AND OCS INSPECTION.

**4/26/2017 3:50:00 PM - Incident# 2860032 (0 lost trips, 10 lost minutes)**

False Occupancy on track circuits 131 and 132, tracks 1 and 2 from Compton PED to Greenleaf Crossing.

**4/30/2017 8:40:00 AM - Incident# 2861297 (0 lost trips, 6 lost minutes)**

OCS inspection from 1N Artesia to 1S Mainyard Interlocking.

**Police & Health Incidents:**

**4/8/2017 5:10:00 PM - Incident# 2853981 (0 lost trips, 5 lost minutes)**

Train 108 report a lady passed out and vomiting on board LRV 158A.  
Train 108  
T-081  
LRV;S ( 158A ) 140-127  
Willowbrook Station, track 1, Northbound.

**4/10/2017 8:23:00 PM - Incident# 2854612 (0 lost trips, 10 lost minutes)**

Car 111 assault, Male Patron bleeding. Assaulted by 2 other males.  
T-75  
Train 101  
Cars 107-(111)-123  
Willowbrook Station, Track 2, southbound.

**4/12/2017 4:46:00 AM - Incident# 2855068 (0 lost trips, 20 lost minutes)**

Blockade/Pedestrian Injured/Metro Not involved  
Train 105  
T-87  
141-167-127  
Willowbrook GC N/B  
Between tracks 1 & 2

**4/16/2017 5:23:00 AM - Incident# 2856437 (4 lost trips, 490 lost minutes)**

CCTV R-458 Reports a White Male with a knife at Washington Station.

**4/16/2017 11:05:00 AM - Incident# 2856463 (0 lost trips, 12 lost minutes)**

LASD reports that there is a person with a Knife arguing with another patron onboard train 102, LRV 230.

**4/16/2017 9:41:00 PM - Incident# 2856535 (0 lost trips, 10 lost minutes)**

Sick Passenger

**4/22/2017 8:48:00 AM - Incident# 2858608 (0 lost trips, 13 lost minutes)**

African American female unconscious.

Train#107

T#256

145,162,(151A)

Track#1,Northbound,Imperial Station

**4/23/2017 1:29:00 AM - Incident# 2858768 (0 lost trips, 8 lost minutes)**

Operator reports of a male patron unresponsive in the trailing car at 7th/Metro Station.

**4/24/2017 6:23:00 PM - Incident# 2859293 (1 lost trip, 168 lost minutes)**

Altercations aboard trains/ Blood

Train # 101

T-183

244-301-242

SB, Imperial Station, Track #2

**4/26/2017 6:33:00 PM - Incident# 2860090 (7 lost trips, 1,184 lost minutes)**

Deputy Roggee reports of a motor home blocking the ROW at Florence grade crossing.

**4/30/2017 5:15:00 PM - Incident# 2861390 (0 lost trips, 10 lost minutes)**

Patron spraying excessive amounts of Lysol on the train and patrons are complaining.

Train#112

T#390

(116A),143

Track#2,Imperial Station,Northbound

**4/30/2017 8:58:00 PM - Incident# 2861416 (0 lost trips, 10 lost minutes)**

Trespasser on right of way

Train 102

Track #2 SB Slauson

T-500

**Other Incidents:**

**4/1/2017 10:54:00 PM - Incident# 2851533 (2 lost trips, 247 lost minutes)**

Train 109

T-81

Cars (230)-247

Vernon station N/B

**4/3/2017 7:35:00 AM - Incident# 2851810 (0 lost trips, 6 lost minutes)**

Door Problem. Emergency Release Pulled.

Train #116.

T-043.

LRV- (112B), 130, 140.

Vernon Station, Track #2, Southbound.

**4/5/2017 5:51:00 AM - Incident# 2852656 (0 lost trips, 7 lost minutes)**

Outlate

Train 114

T-43

Blue line yard

(123-151)

7 minute late on pull out.

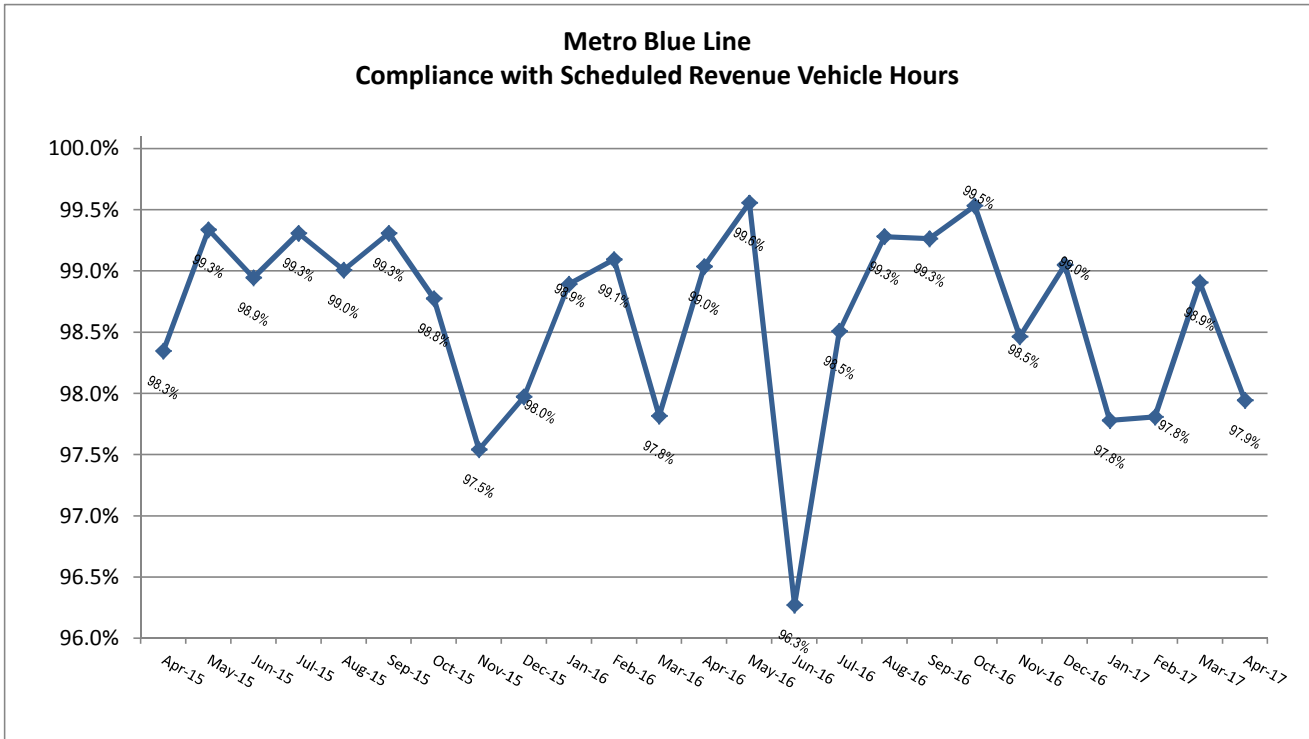


**4/23/2017 2:55:00 PM - Incident# 2858867 (0 lost trips, 4 lost minutes)**  
Male in refuge area.

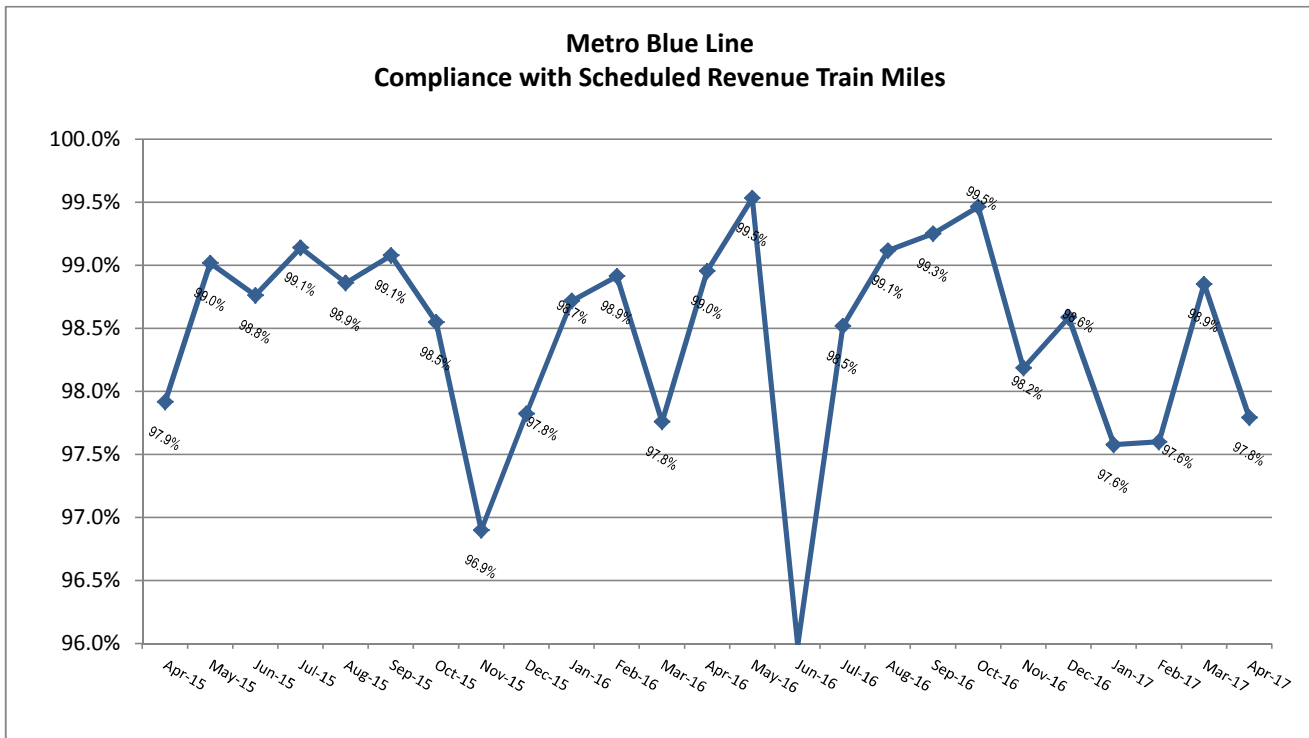
**4/30/2017 4:15:00 AM - Incident# 2861242 (0 lost trips, 6 lost minutes)**  
Late Pull out Train 102.

# MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

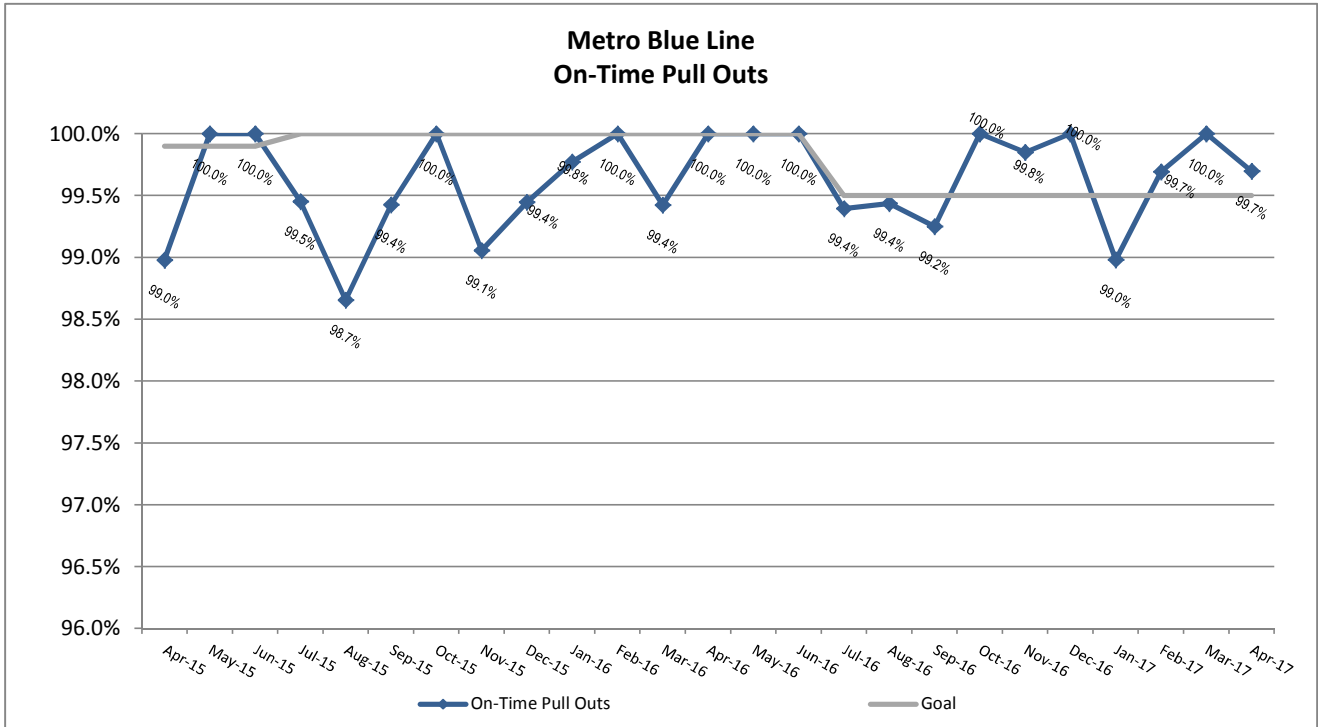
## COMPLIANCE WITH SCHEDULED VEHICLE HOURS



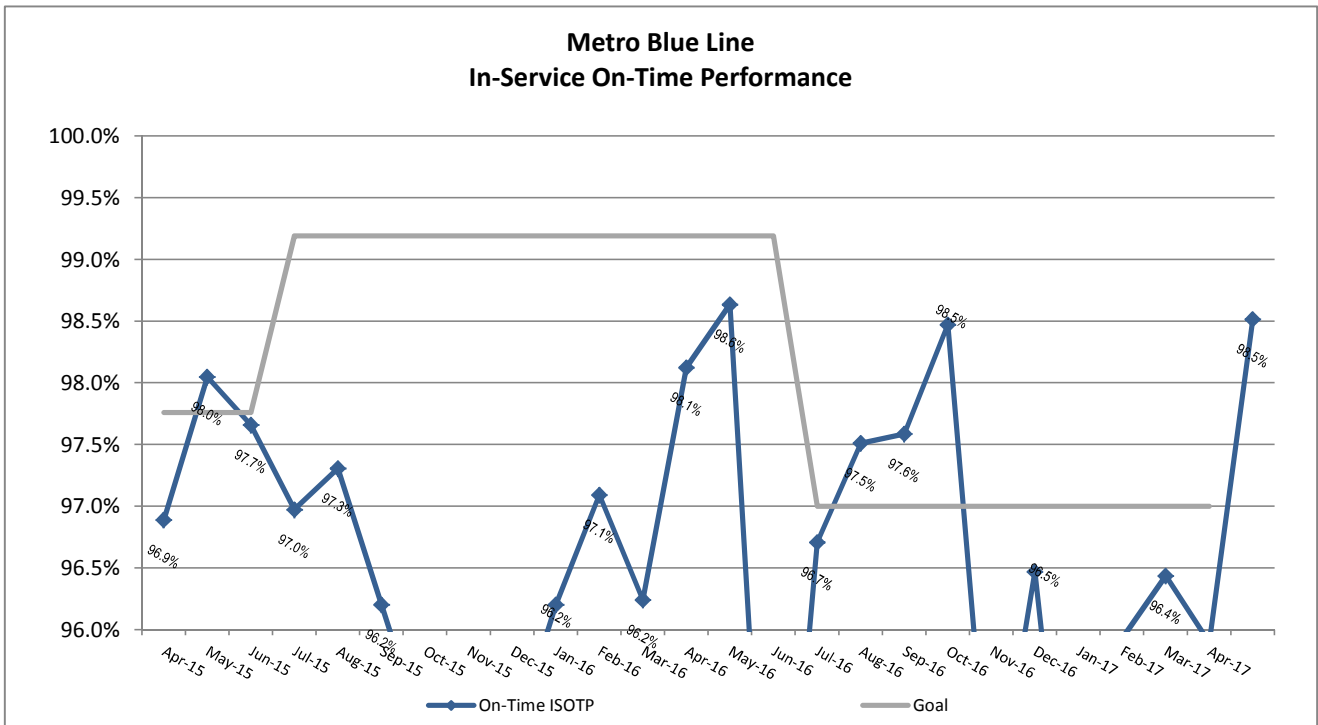
## COMPLIANCE WITH SCHEDULED TRAIN MILES



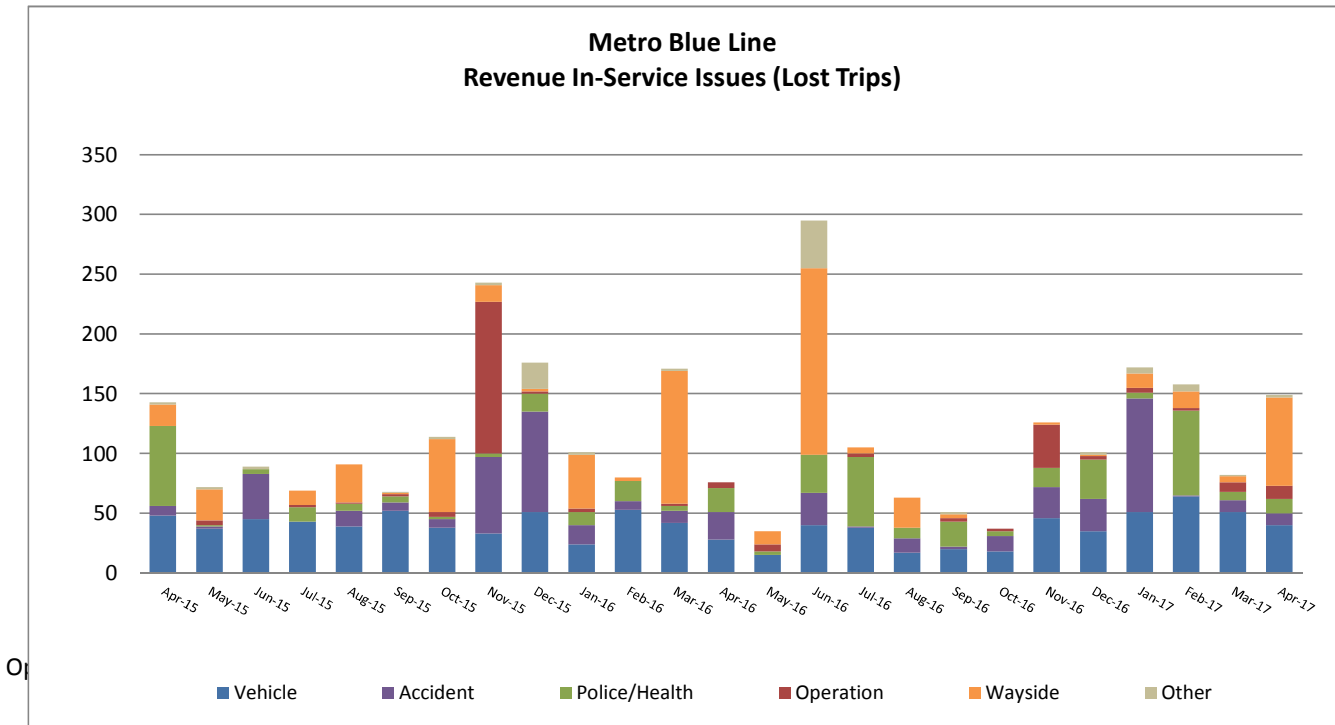
### ON-TIME PULL OUTS



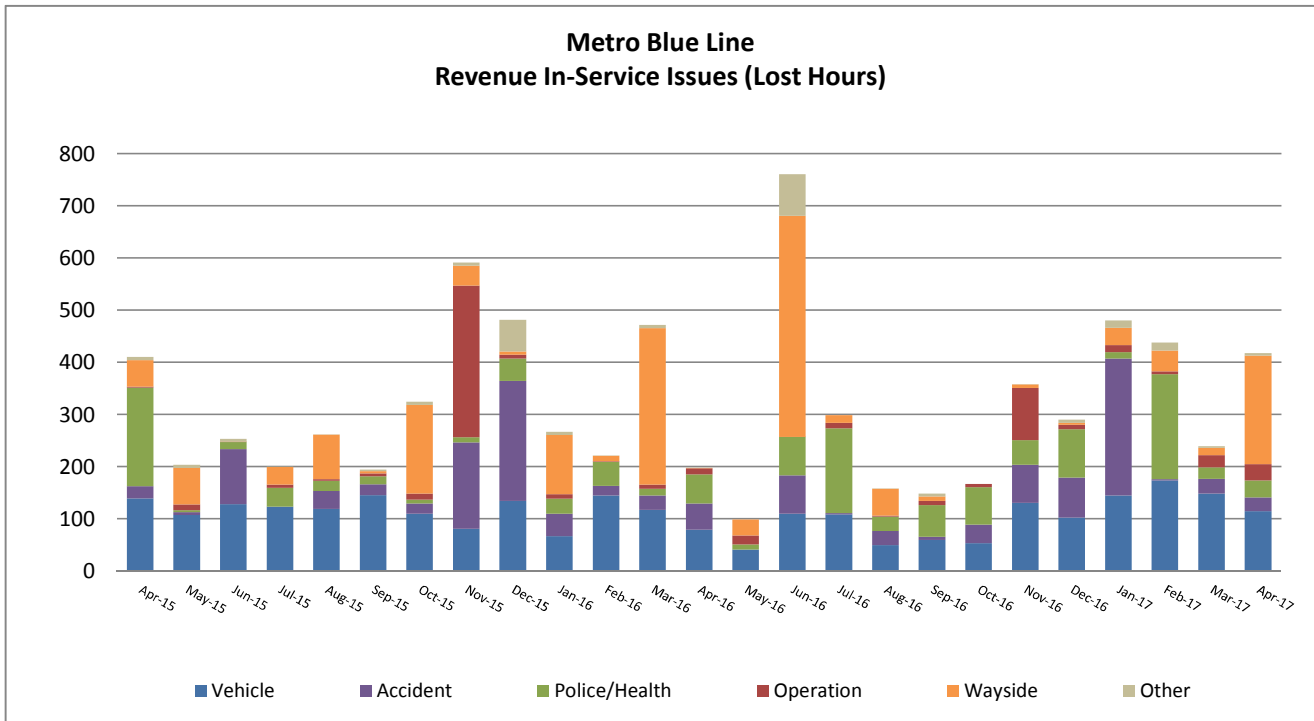
### IN-SERVICE ON-TIME PERFORMANCE CHART



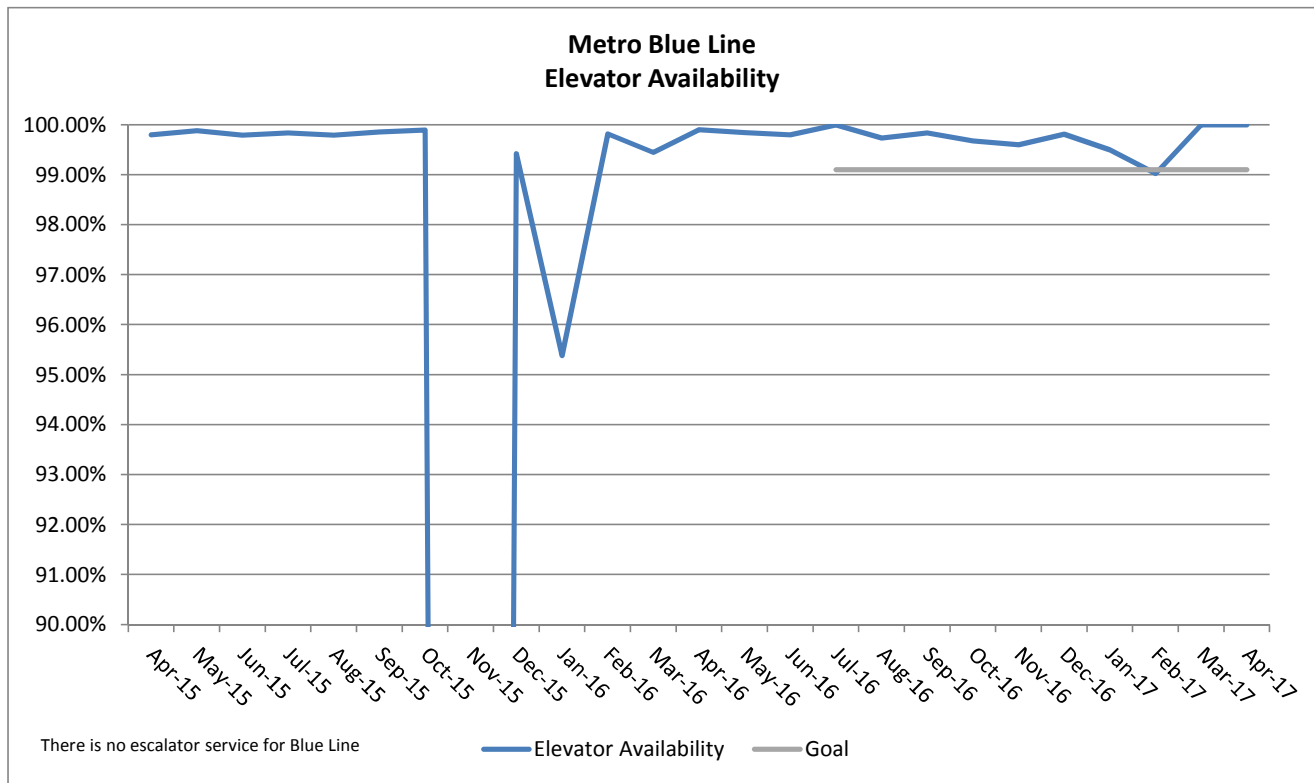
## LOST TRIPS



## LOST HOURS



## VERTICAL TRANSPORTATION AVAILABILITY



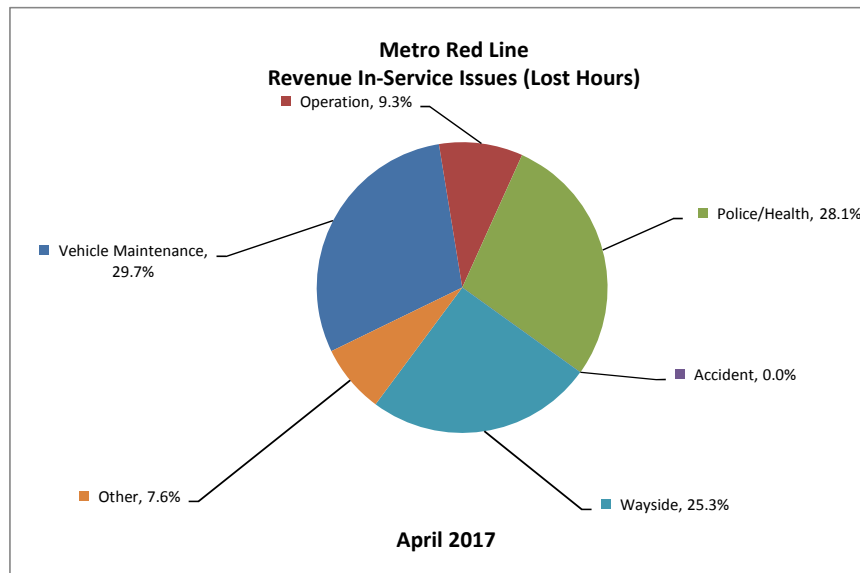
## RED LINE

Out of a total of 26,801 hours operated, there were approximately 83 total hours of service delays.

April 2017 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	26,718	99.7%
Cancelled + Delayed Hours	83	0.3%
<b>Total Revenue Hours</b>	<b>26,801</b>	<b>100.0%</b>

Summary of the major contributors:	Count	Hours	Percent
Operations	1	7.7	9.3%
Accidents	0	0.0	0.0%
Vehicle Maintenance	12	24.6	29.7%
Wayside	2	21.0	25.3%
Police & Health	8	23.4	28.1%
Other	7	6.3	7.6%
<b>Total</b>	<b>30</b>	<b>83.0</b>	<b>100.0%</b>

\* Data from M3 used to report Service Delays is under review for accuracy



## April 2017 Red Line major delay contributors were as follows:

### Operations Incidents:

**4/1/2017 1:20:00 AM - Incident# 2851350 (4 lost trips, 464 lost minutes)**

Train 214 was holding at 7th/Metro AL due to LASD activity. Once LASD cleared the train for eastbound movement the operator reported no movement.

### Vehicle Maintenance Incidents:

**4/3/2017 10:18:00 AM - Incident# 2851927 (0 lost trips, 8 lost minutes)**

T-364 reports that as she was proceeding through the interlocking on train 201 (575,576,541,542) on the AL, she heard a loud noise in one of the trucks and as she arrived at the platform, a propulsion fault showed in car 575.

**4/6/2017 10:47:00 AM - Incident# 2853197 (0 lost trips, 5 lost minutes)**

Train 208 (569,570,553,554) T-333, North Hollywood Station, AR reports he is unable to close the train doors.

**4/8/2017 8:37:00 AM - Incident# 2853873 (2 lost trips, 307 lost minutes)**

Train 202 reports no movement due to loss of power on the consist at Vermont Santa Monica AR west.

Train 202

T-175

Cars 585 586 535 538 587 588.

**4/10/2017 6:20:00 PM - Incident# 2854588 (1 lost trip, 148 lost minutes)**

No Movement: Friction Brakes Not Releasing

Train 217, T-217

Cars: (572), 571, 586, 585, 582, 581

**4/12/2017 12:37:00 PM - Incident# 2855273 (0 lost trips, 10 lost minutes)**

Train 203 (515,516,521,530) T-101, departing Civic Ctr. Station, AL reports flashing cab signals. Problem had occurred earlier in the morning departing 7th & Metro, AL only.

**4/13/2017 2:40:00 PM - Incident# 2855786 (0 lost trips, 10 lost minutes)**

Train 213 (531,532,561,562,559,560) reports dynamic, service brake, propulsion failure fault train line indication with emergency brake application, operating out of car 560.

**4/15/2017 1:57:00 PM - Incident# 2856338 (1 lost trip, 186 lost minutes)**

Emergency brake not releasing in car 559. Service brake and electric brake failure indication.

T-49

Train 205

Cars (559),560,537,538,545,546

Universal City Interlocking AR WB

**4/17/2017 1:54:00 PM - Incident# 2856830 (1 lost trip, 148 lost minutes)**

Train 203 (517,518,513,514) T-179 reports propulsion and service brake fault, train line indication in car 517.

**4/19/2017 9:52:00 PM - Incident# 2857745 (1 lost trip, 148 lost minutes)**

CB-1 trip with no movement.

Train # 217

T-049

Cars # 519-526-509-508-527-(522).

E/Bound Universal City Station A/L Track.

**4/21/2017 8:35:00 AM - Incident# 2858290 (1 lost trip, 159 lost minutes)**

Operator reports door problem, no movement.

Cars: 535 536 561 (562) 593 594.

Vermont Santa Monica, AL track, E/bound

Train 210.

T-009.

**4/30/2017 10:30:00 AM - Incident# 2861311 (1 lost trip, 174 lost minutes)**

Numerous Emergency brake applications

Train 201

T-254

Cars 535-536-563-564-583-(584)

BR between Wilshire Western and Normandie

**4/30/2017 4:04:00 PM - Incident# 2861376 (1 lost trip, 174 lost minutes)**

Train 205: Air Leak

Cars 603, 604, 589, 590, (539), 540

T-049

Wishire Western BL

**Wayside Incidents:**

**4/11/2017 11:36:00 PM - Incident# 2855032 (6 lost trips, 910 lost minutes)**

TRACS indicates ETS trip AL west ETS 054 at 23:36 hrs also ETS 053 AR East at 23:39 hrs.

**4/30/2017 2:19:00 PM - Incident# 2861348 (2 lost trips, 348 lost minutes)**

Union Station West Interlocking AL Track False Occupancy

**Police & Health Incidents:**

**4/5/2017 1:53:00 PM - Incident# 2852846 (1 lost trip, 154 lost minutes)**

Train 203 (517,518,509,508) T-384, approaching Wilshire Vermont Station, AL reports PIC activation.

**4/13/2017 6:05:00 AM - Incident# 2855588 (6 lost trips, 890 lost minutes)**

Train 211 reports trespasser.

Universal City Interlocking.

T-367.

Cars: 547 548 597 598 571 572.

**4/17/2017 4:43:00 AM - Incident# 2856569 (2 lost trips, 297 lost minutes)**

Female patron assaulted on train 210, car 542 at North Hollywood.

**4/19/2017 11:04:00 AM - Incident# 2857527 (0 lost trips, 5 lost minutes)**

Train 201 (583,584,581,582) T-271 in approach to Hollywood Highland Station reports he received a PIC report of a possible medical situation on board the train.

**4/22/2017 11:50:00 AM - Incident# 2858646 (0 lost trips, 9 lost minutes)**

Train 207 car 599 T-516 reports a Male Hispanic expressing verbal threats to other passengers. Individual was yelling he was going to kill someone with a knife.

**4/22/2017 1:40:00 PM - Incident# 2858626 (0 lost trips, 18 lost minutes)**

Westlake AL East a trespasser is on the AL Emergency Walkway.

**4/26/2017 12:14:00 PM - Incident# 2859932 (0 lost trips, 13 lost minutes)**

LASD Dixon request we hold westbound train 201 at Hollywood/Western.

Possible man with a gun.

**4/27/2017 9:22:00 AM - Incident# 2860239 (0 lost trips, 15 lost minutes)**

Trespasser on the AR at Wilshire Vermont

**Other Incidents:**

**4/3/2017 2:35:00 PM - Incident# 2852015 (0 lost trips, 6 lost minutes)**

Train #205.Cars #591-592-573-574, female patron refused to exit at Union Station A/L.

**4/9/2017 11:34:00 AM - Incident# 2854100 (1 lost trip, 174 lost minutes)**

Train 204 car 604 Service Attendant M-763 reports urine all over the train, he is unable to clean biohazard liquid on the Mainline. Biohazards Tiger Team are only in the Yard.

**4/9/2017 6:41:00 PM - Incident# 2854179 (1 lost trip, 174 lost minutes)**

Dirty Car # 505

Union Station AL East

T-179 Train # 204

Car # (505)-506-519-526

**4/13/2017 7:59:00 AM - Incident# 2855629 (0 lost trips, 10 lost minutes)**

Train 215 (525,524,513,514,515,516) T-124, North Hollywood Station, AR reports LASD is holding the train.

**4/18/2017 9:17:00 AM - Incident# 2857087 (0 lost trips, 5 lost minutes)**

S-021 reports male, black individual, wearing black pants, gray hoodie, exposing himself on board car 504

**4/20/2017 1:35:00 PM - Incident# 2858028 (0 lost trips, 5 lost minutes)**

Male patron requesting medical due to chest pains on board Train 209, car 595 at Union Station.

**4/21/2017 7:11:00 AM - Incident# 2858313 (0 lost trips, 5 lost minutes)**

Train Operator observed sparks underneath third rail caused by debris.

Hollywood Western Station, AR, W/bound.

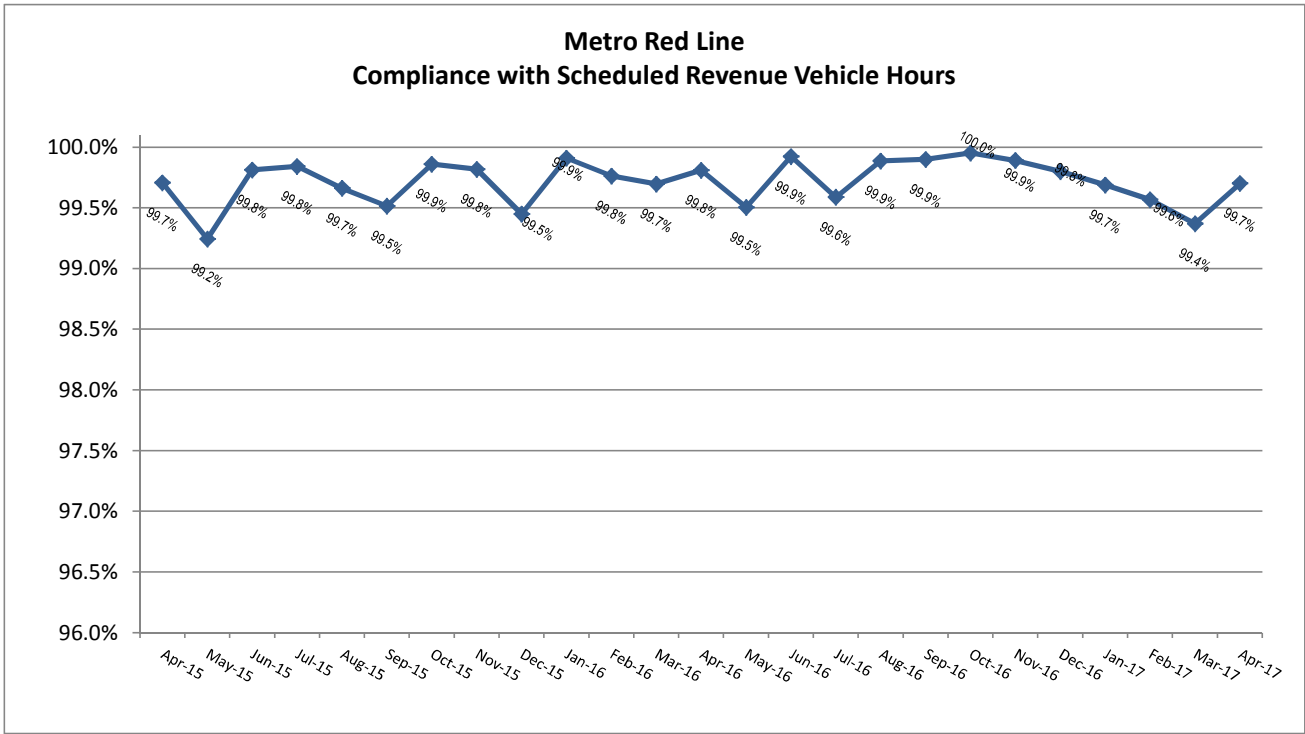
Train 207, cars: 543 544 589 590 571 572

T-080.

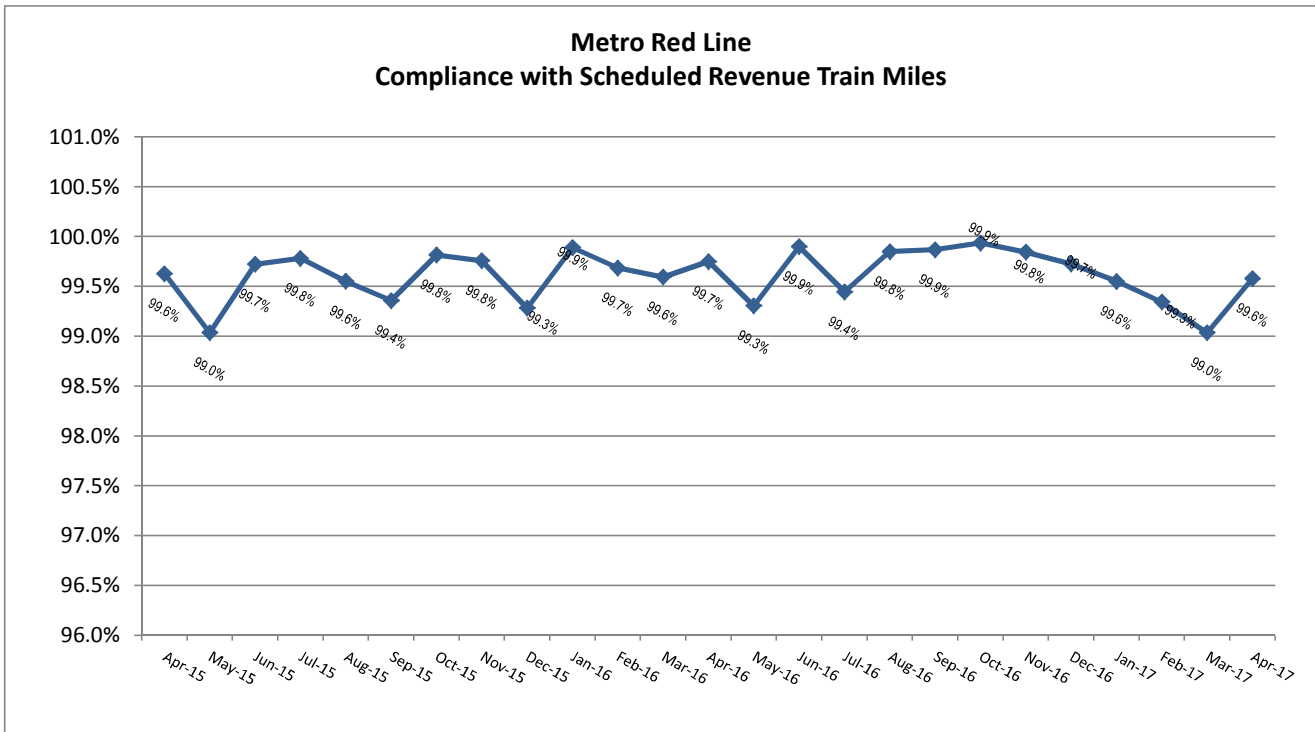


# MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

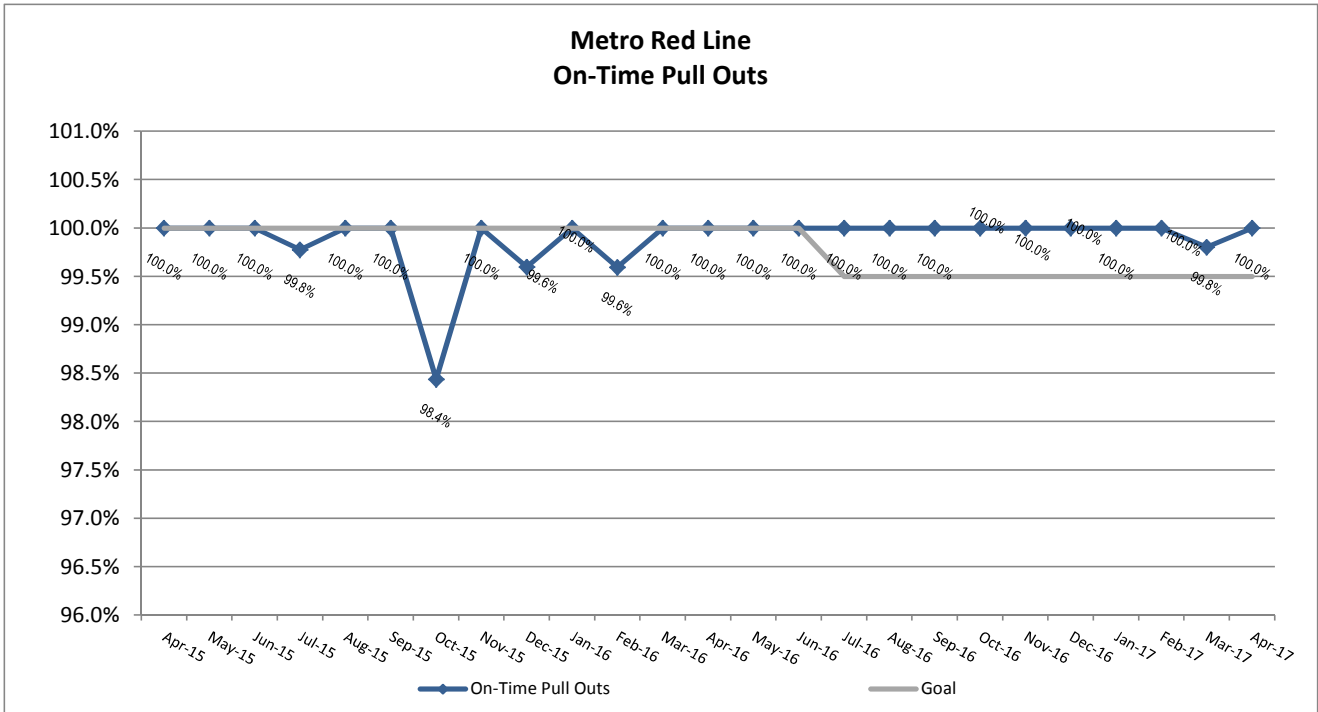
## COMPLIANCE WITH SCHEDULED VEHICLE HOURS



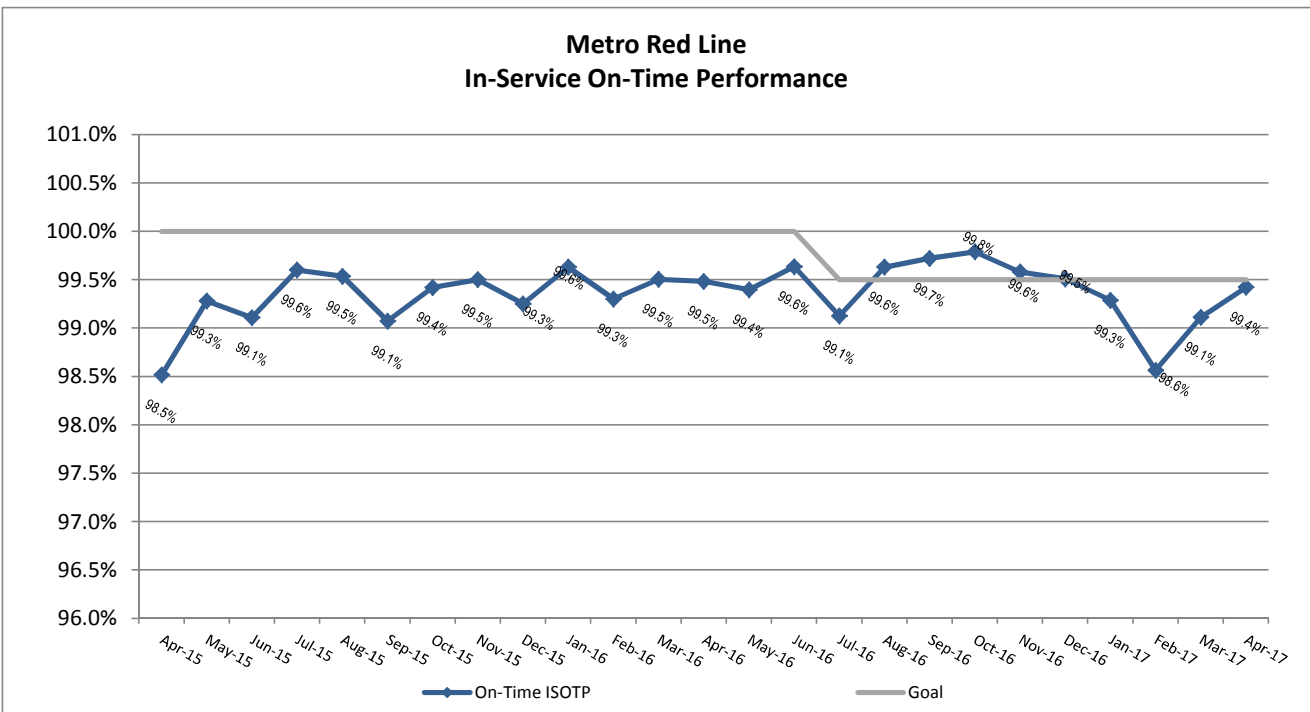
## COMPLIANCE WITH SCHEDULED TRAIN MILES



## ON-TIME PULL OUTS

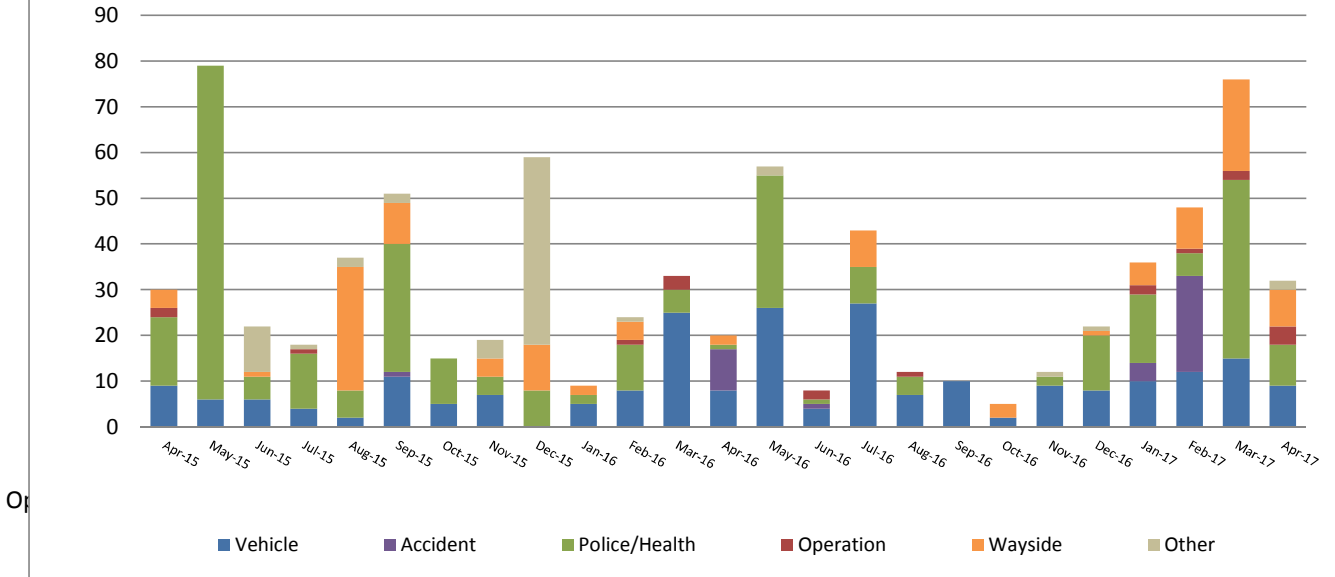


## IN-SERVICE ON-TIME PERFORMANCE



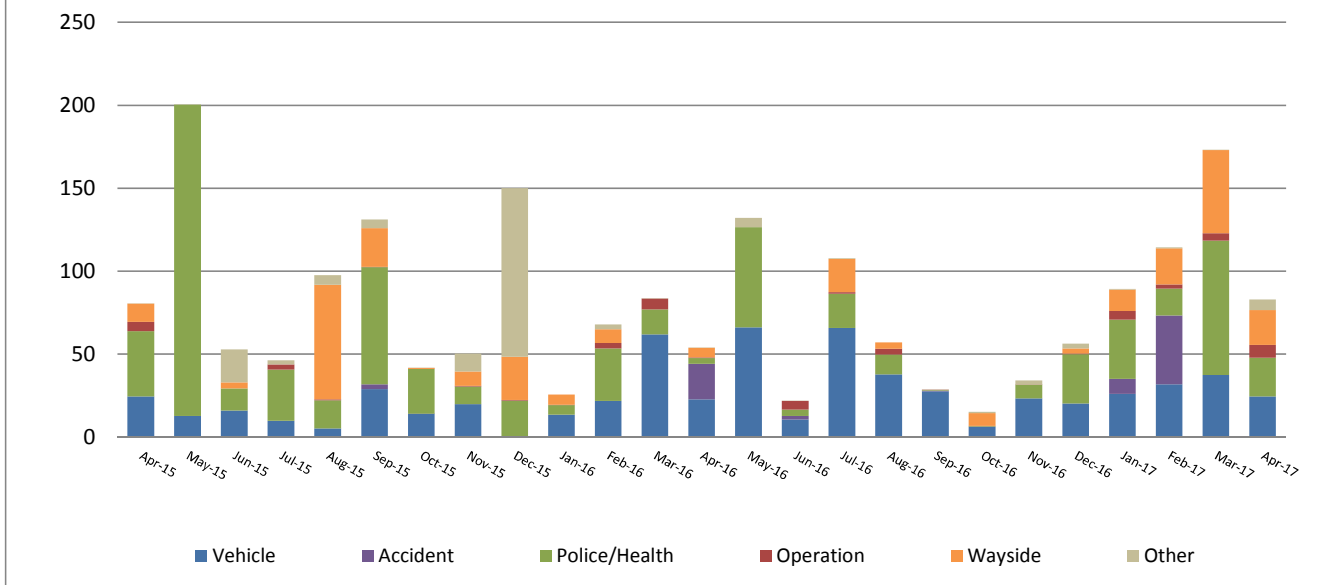
### LOST TRIPS

**Metro Red Line  
Revenue In-Service Issues (Lost Trips)**

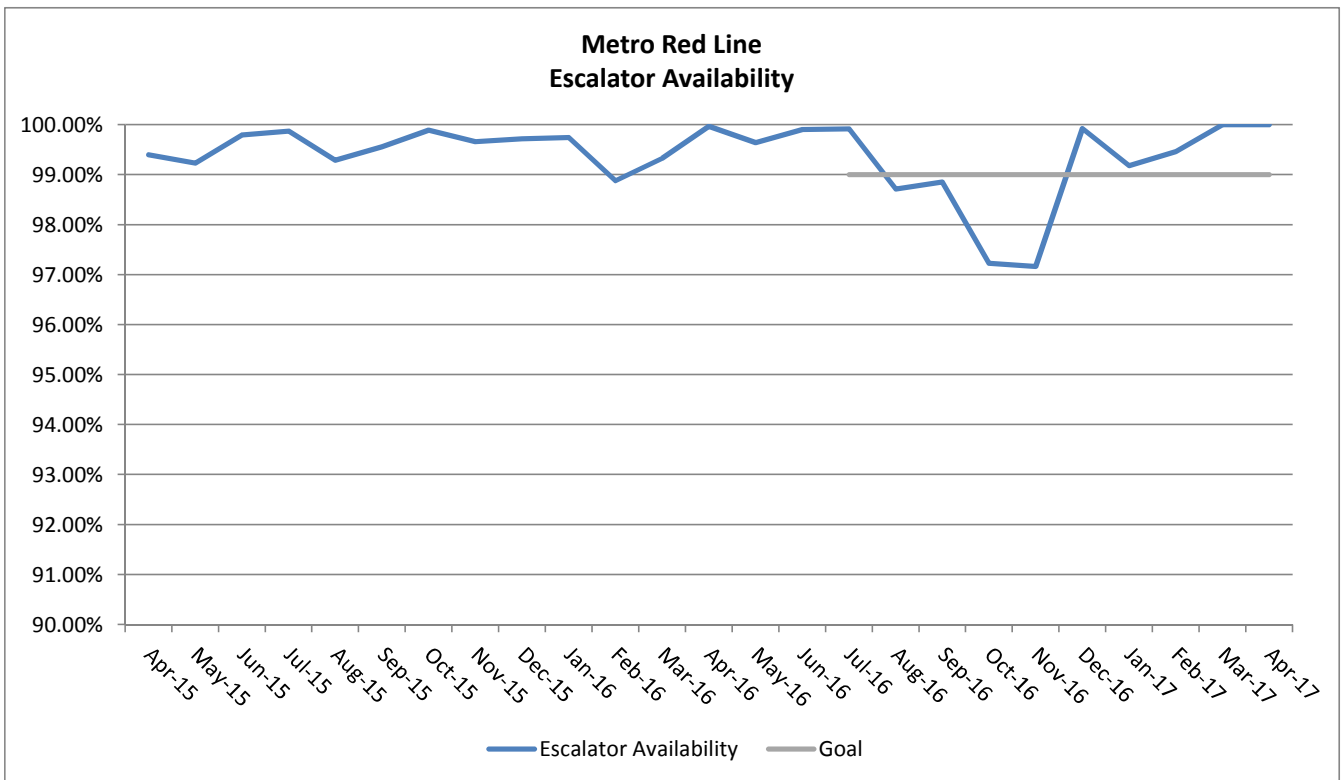
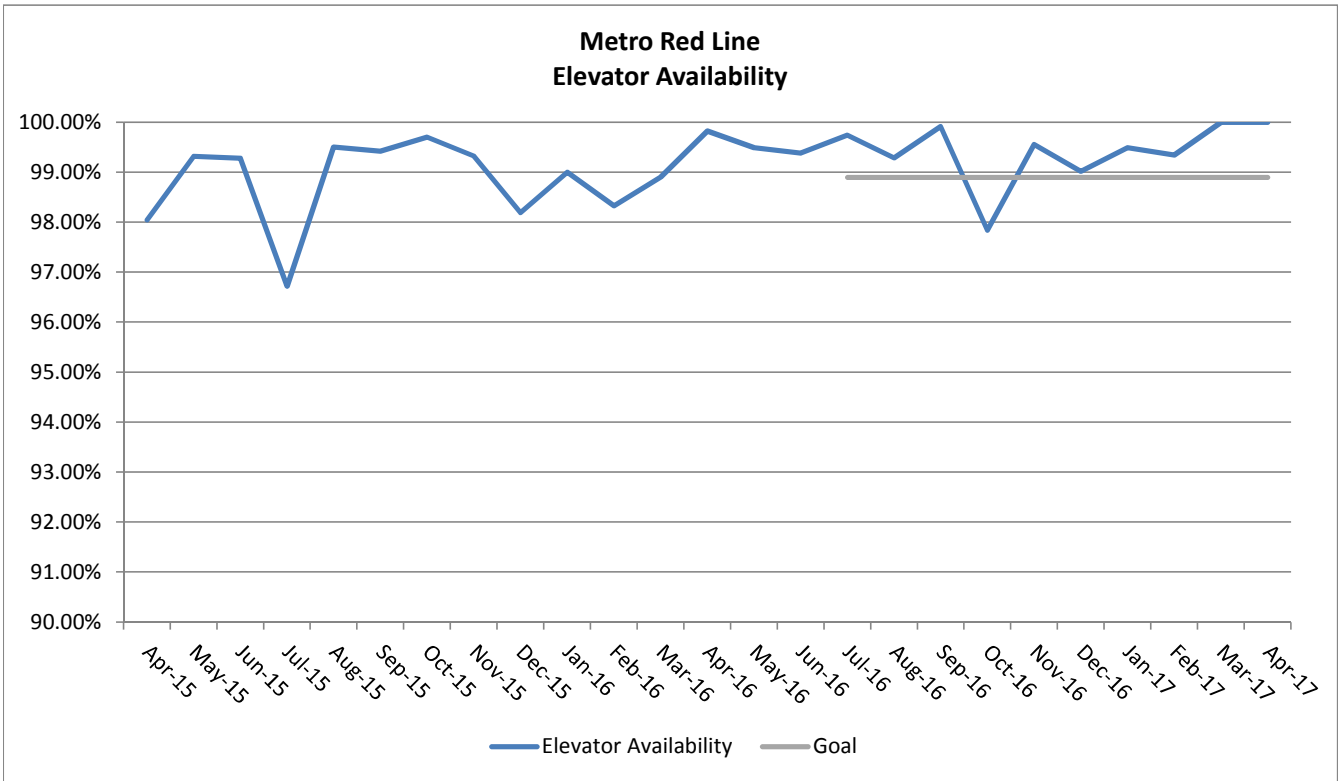


### LOST TRIPS

**Metro Red Line  
Revenue In-Service Issues (Lost Hours)**



## VERTICAL TRANSPORTATION AVAILABILITY



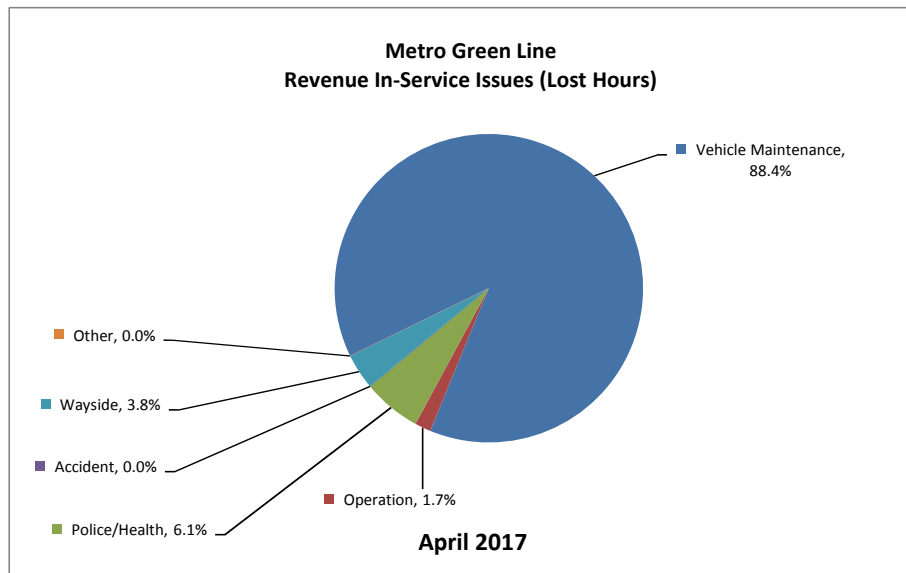
## GREEN LINE

Out of a total of 8,027 hours operated, there were approximately 24 total hours of service delays.

April 2017 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	8,003	99.7%
Cancelled + Delayed Hours	24	0.3%
<b>Total Revenue Hours</b>	<b>8,027</b>	<b>100.0%</b>

Summary of the major contributors:	Count	Hours	Percent
Operations	4	0.4	1.7%
Accidents	0	0.0	0.0%
Vehicle Maintenance	25	20.9	88.4%
Wayside	4	0.9	3.8%
Police & Health	8	1.4	6.1%
Other	0	0.0	0.0%
<b>Total</b>	<b>41</b>	<b>23.6</b>	<b>100.0%</b>

\* Data from M3 used to report Service Delays is under review for accuracy



## April 2017 Green Line major delay contributors were as follows:

### Operations Incidents:

#### **4/12/2017 3:50:00 PM - Incident# 2855373 (0 lost trips, 7 lost minutes)**

T-235 requested starlight sick due to pain not associated with work. Per Yard Control R-074  
Marine Station Track #2. Eastbound  
Train 344  
(225)-207  
T-235

#### **4/19/2017 9:03:00 AM - Incident# 2857470 (0 lost trips, 5 lost minutes)**

10-100, cars (219)-204  
Train #336  
T-148  
Norwalk Station, Track #002, Eastbound.

#### **4/22/2017 3:18:00 PM - Incident# 2858690 (0 lost trips, 5 lost minutes)**

Train #331 Cars #216-218, service delay of five minutes due to operator 10-100.

#### **4/25/2017 2:59:00 PM - Incident# 2859600 (0 lost trips, 7 lost minutes)**

Operator reports the mirror is extremely loose on Car 210B.  
Cars (210), 209  
Train 333  
T-64  
Wilmington TRK1, westbound

### Vehicle Maintenance Incidents:

#### **4/1/2017 1:19:00 PM - Incident# 2851445 (1 lost trip, 60 lost minutes)**

Report of propulsion failure with no movement.  
T-078  
Train-331  
217-(222)  
Hawthorne track 2 east bound

#### **4/2/2017 7:52:00 AM - Incident# 2851585 (0 lost trips, 15 lost minutes)**

Train 332 overshot the platform in ATO at Hawthorne station on track 1 Westbound. Operator T-260 with operating car 208B coupled to 219.

#### **4/2/2017 8:54:00 AM - Incident# 2851595 (1 lost trip, 62 lost minutes)**

Train 332 unclearable propulsion faults at Wilmington station track 2. Operator T-112 with 210B coupled to 205.

#### **4/3/2017 4:34:00 AM - Incident# 2851757 (1 lost trip, 66 lost minutes)**

Train 337 having propulsion faults and Door problems at Douglas station . Operator T-210 with cars 223 206.

#### **4/4/2017 10:21:00 PM - Incident# 2852590 (0 lost trips, 9 lost minutes)**

ATP Fail light with no movement and unable to uncouple.  
Train 345  
T-55  
Track 2, E/B  
Marine Station  
(211B)-205  
ATO and manual modes

#### **4/5/2017 5:54:00 AM - Incident# 2852648 (2 lost trips, 136 lost minutes)**

ATP fail light with no movement. Report of flat wheels on both cars. (224-217)  
Train 337  
T-20  
Track 1, W/B  
Douglas Station  
ATO and MTO modes.  
(224B)-217

#### **4/5/2017 10:40:00 AM - Incident# 2852756 (0 lost trips, 8 lost minutes)**

Doors, cars #(203A)-218  
Train #334  
T-136  
Long Beach Station, Track #002, Eastbound.

**4/5/2017 6:08:00 PM - Incident# 2852966 (0 lost trips, 7 lost minutes)**

Intermittent Friction brake Fault on car 227  
Train 342  
(227)-243  
T-274  
Hawthorne Station Track #1. Westbound

**4/6/2017 5:06:00 PM - Incident# 2853372 (1 lost trip, 75 lost minutes)**

Propulsion / Dynamic Brakes, (219A)-207  
Train #346  
T-044  
Long Beach Station, Track #002, Eastbound.

**4/8/2017 5:07:00 AM - Incident# 2853823 (1 lost trip, 60 lost minutes)**

Train 332 reports no cab signal just west of Norwalk west IL on track 1. Operator T-279 unable to troubleshoot.  
Operating car 218A with 212.

**4/10/2017 6:12:00 AM - Incident# 2854294 (3 lost trips, 197 lost minutes)**

Train 332 reports propulsion faults with no movement at Hawthorne station plt 1. Operator T-343 with car 223 coupled to 226.

**4/10/2017 6:34:00 AM - Incident# 2854318 (0 lost trips, 6 lost minutes)**

Train 337 with T-279 reports propulsion faults at Long Beach station EB. cars 228 and 227. Vehicle tech M-176 and Operator unable to troubleshoot.

**4/11/2017 7:20:00 AM - Incident# 2854723 (0 lost trips, 5 lost minutes)**

ATP Fail indicator. No movement.  
Train 337  
Track 2, E/B  
Marine Station  
T-261  
ATO and MTO modes  
(211B)-209

**4/11/2017 2:19:00 PM - Incident# 2854886 (0 lost trips, 7 lost minutes)**

Operator reports a door problem and is unable to proceed.  
Cars 210, 212  
Train 342  
T-261  
marine TRK 2. eastbound

**4/13/2017 6:05:00 AM - Incident# 2855570 (0 lost trips, 24 lost minutes)**

Auto Train Protection (Speed Limit)  
T-148  
Train 334  
LRV 202-223  
YDI 6, Track 1, westbound.

**4/14/2017 10:11:00 PM - Incident# 2856211 (0 lost trips, 15 lost minutes)**

Single car 204 lost of air pressure.  
T-450  
car 204  
Track 2  
Eastbound  
just east of Aviation west inter locking

**4/21/2017 4:22:00 AM - Incident# 2858204 (1 lost trip, 64 lost minutes)**

No cab signal. Train departed in stop and proceed mode from marine Station to Douglas Station. Train did not pick up cab signal.

**4/21/2017 8:08:00 AM - Incident# 2858280 (0 lost trips, 7 lost minutes)**

Propulsion / Dynamic Brakes  
(213A)-205  
Train 336  
T-370  
Aviation, Westbound, Track 1

**4/21/2017 12:54:00 PM - Incident# 2858429 (0 lost trips, 11 lost minutes)**

Friction Brakes  
(202)-206  
Train 334  
T-136  
Aviation East, Westbound, Track 1

**4/21/2017 1:10:00 PM - Incident# 2858435 (0 lost trips, 10 lost minutes)**

Propulsion / Dynamic Brakes  
(227A)-204  
Train 335  
T-255  
Wilmington, Westbound, Track 1

**4/26/2017 5:06:00 PM - Incident# 2860051 (2 lost trips, 132 lost minutes)**

Pulled-T  
Car 212  
Train 335  
T-105  
Lakewood Station  
Eastbound

**4/27/2017 4:31:00 PM - Incident# 2860423 (1 lost trip, 66 lost minutes)**

Dirty train  
Train 242  
car 210  
Norwalk Station

**4/28/2017 9:38:00 AM - Incident# 2860695 (1 lost trip, 64 lost minutes)**

Train 331 operated by T-436 cars 227A with 219 reports friction brake faults at Avalon station track 1. No Movement.

**4/30/2017 7:23:00 AM - Incident# 2861253 (1 lost trip, 74 lost minutes)**

Operator reports no cab signals from Car 211A.  
Cars (211A), 203  
Train 341  
T-458  
Norwalk TRK1, westbound

**4/30/2017 11:32:00 PM - Incident# 2861432 (1 lost trip, 70 lost minutes)**

Operator reports he has lost air and is unable to proceed in Car 213.  
Car 213  
Train 333  
T-260  
MPM 1.49, TRK 2 eastbound

**Wayside Incidents:**

**4/13/2017 4:48:00 AM - Incident# 2855534 (0 lost trips, 18 lost minutes)**

Marine Interlocking Track Circuit 11, Track Circuit: False Occupancy.

**4/19/2017 4:34:00 PM - Incident# 2857663 (0 lost trips, 10 lost minutes)**

OCS: Debris In Catenary  
Train #342  
T-255  
Paramount Signal #008, Track #001, Westbound

**4/21/2017 10:31:00 AM - Incident# 2858326 (0 lost trips, 13 lost minutes)**

OCS: Other (Repair)

**4/22/2017 6:12:00 PM - Incident# 2858725 (0 lost trips, 12 lost minutes)**

ARINC indicates recurring false occupancy track circuit #257.  
1. MS-137  
2. MS-126

**Police & Health Incidents:**

**4/2/2017 7:22:00 PM - Incident# 2851700 (0 lost trips, 11 lost minutes)**

A Patron requested Medical Assistance on Train 351  
213-(209)  
T-247  
Marine Station Track #2. Eastbound.

**4/3/2017 12:48:00 AM - Incident# 2851735 (0 lost trips, 20 lost minutes)**

Operator reported that a Patron was having trouble breathing on Train 331  
T-450  
207  
Vermont Station Westbound Track #1.

**4/3/2017 8:25:00 PM - Incident# 2852100 (0 lost trips, 13 lost minutes)**

Avalon/Female passenger requesting medical for her hand.



**4/4/2017 11:34:00 AM - Incident# 2852353 (0 lost trips, 4 lost minutes)**

Altercations aboard trains, cars #(212A)-216

LASD: Arrellano

Train #333

T-057

Vermont Station, Track #002, Eastbound

**4/15/2017 7:26:00 AM - Incident# 2856270 (0 lost trips, 9 lost minutes)**

Wilmington/LASD reports a non-responsive female passenger.

**4/20/2017 5:52:00 PM - Incident# 2858113 (0 lost trips, 10 lost minutes)**

LASD held Train 343 at Norwalk Station to check the consist for a Robbery Suspect.

Train 343

(210)-217

Norwalk Station Track #1. Westbound.

**4/23/2017 8:31:00 AM - Incident# 2858797 (0 lost trips, 12 lost minutes)**

Train # 333 Cars #221-208, reports a non responsive patron on board.

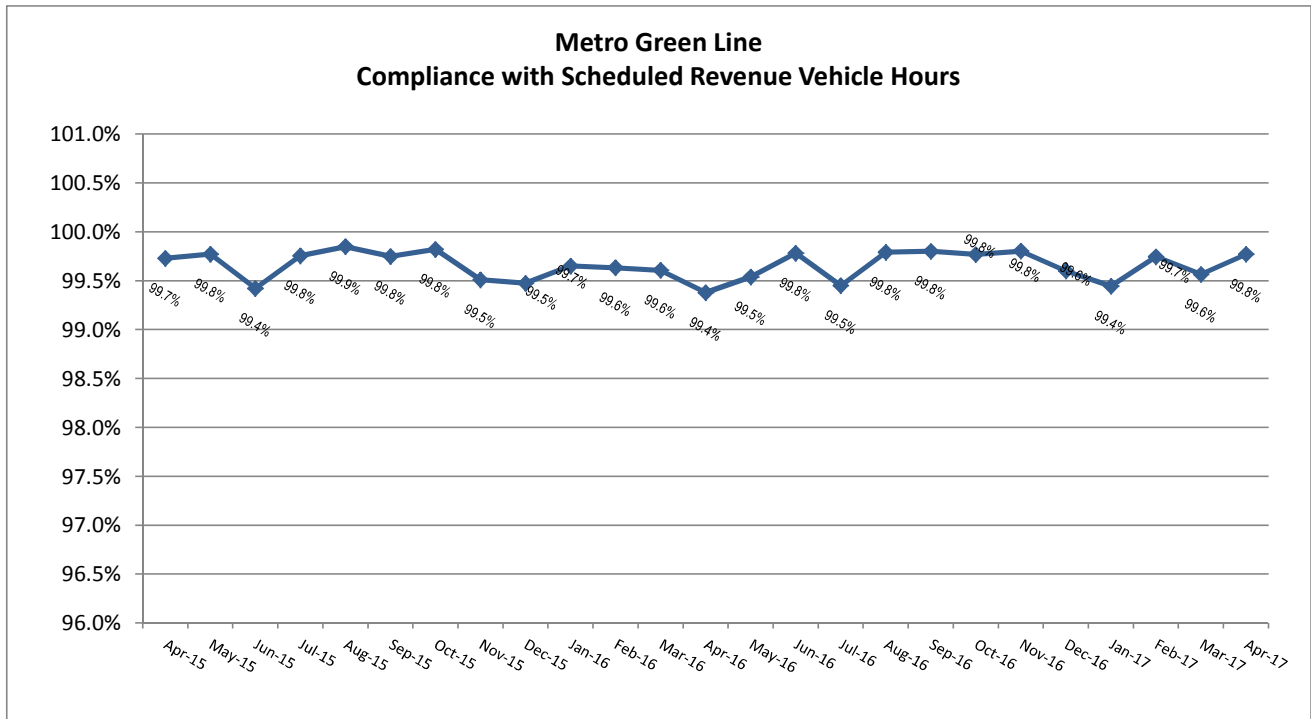
**4/29/2017 5:42:00 PM - Incident# 2861182 (0 lost trips, 7 lost minutes)**

Train # 333 Operator T-071, reports three juveniles running on the platform with one falling injuring himself. Cars

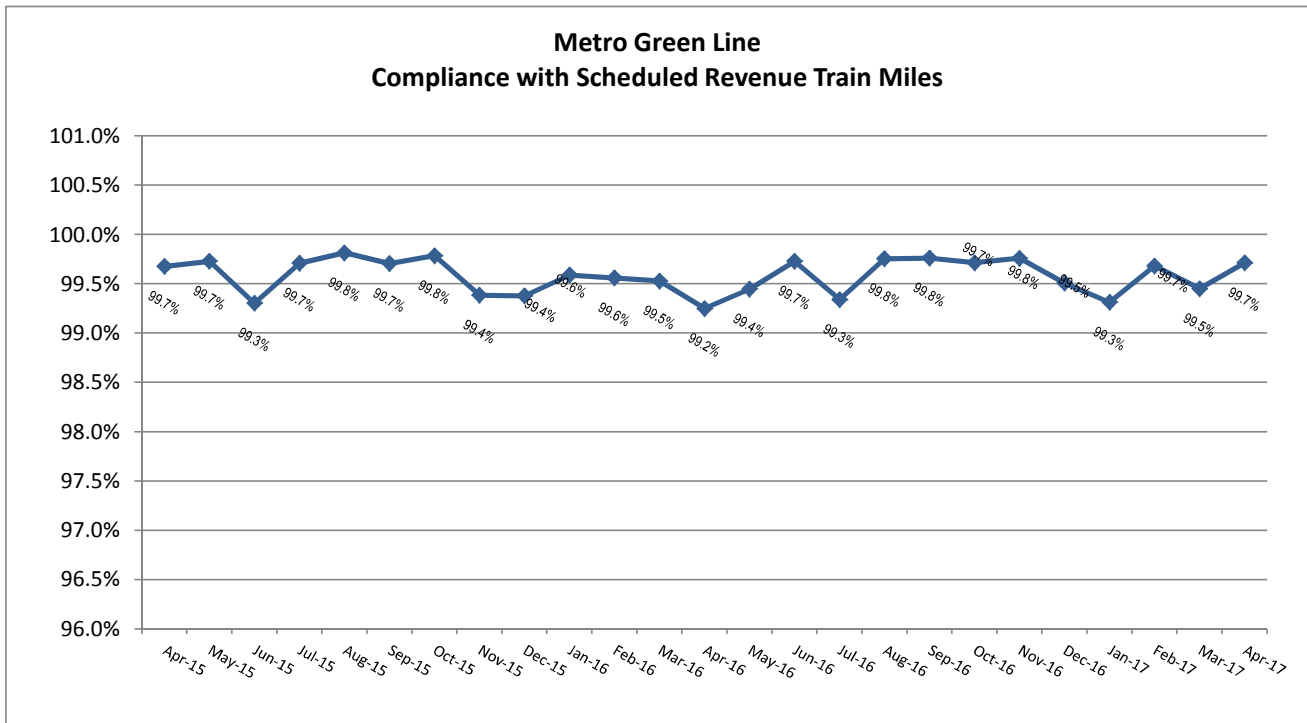
#222-227-A.

# MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

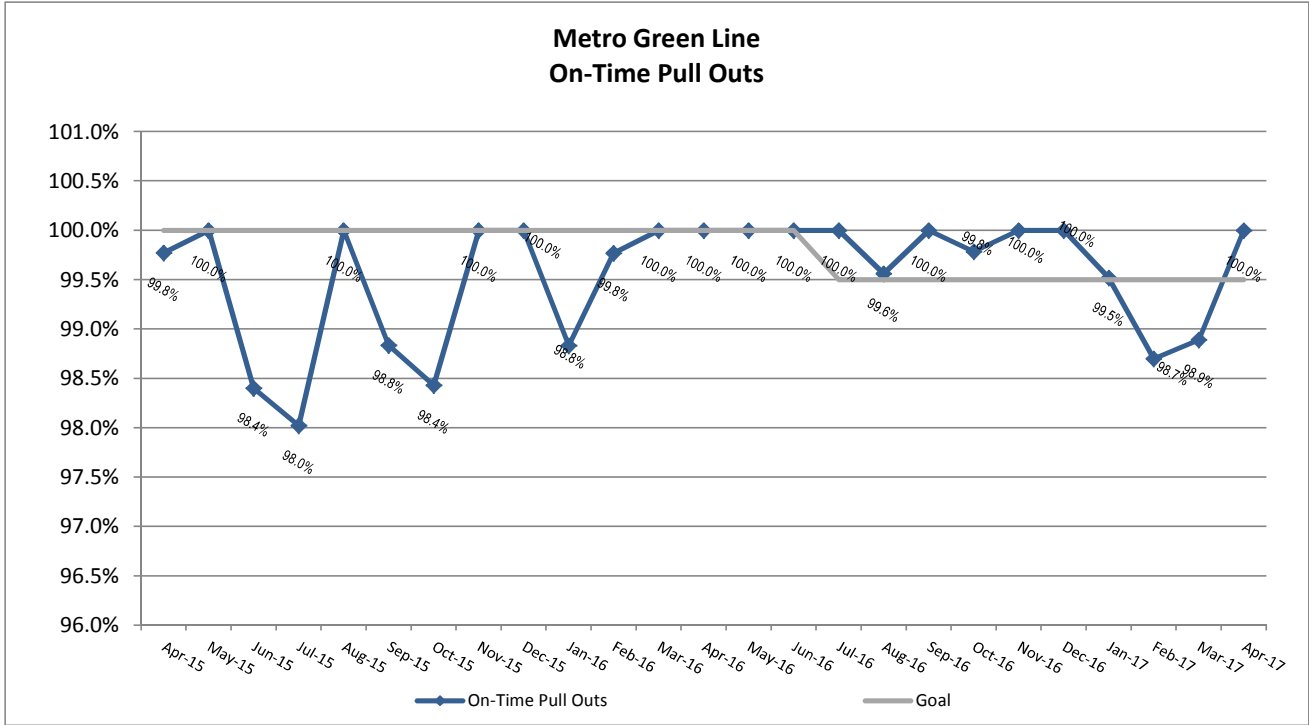
## COMPLIANCE WITH SCHEDULED VEHICLE HOURS



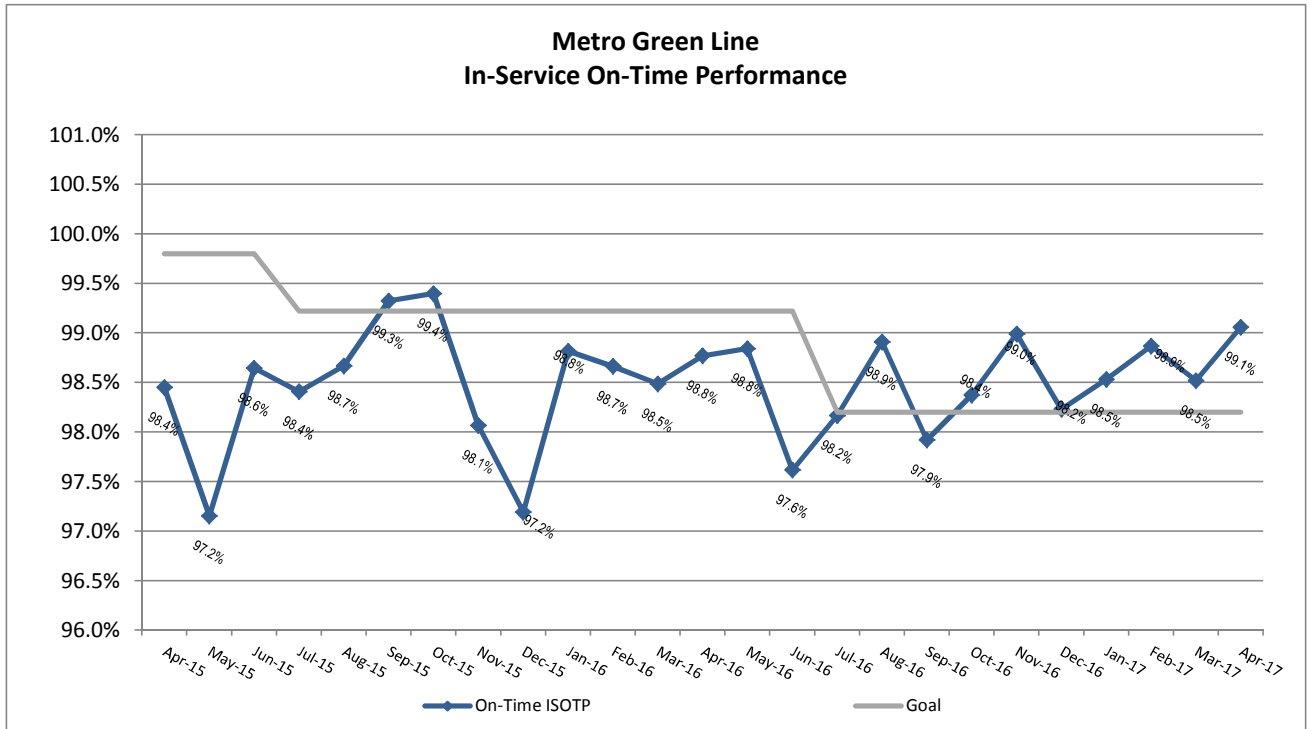
## COMPLIANCE WITH SCHEDULED TRAIN MILES



## ON-TIME PULL OUTS

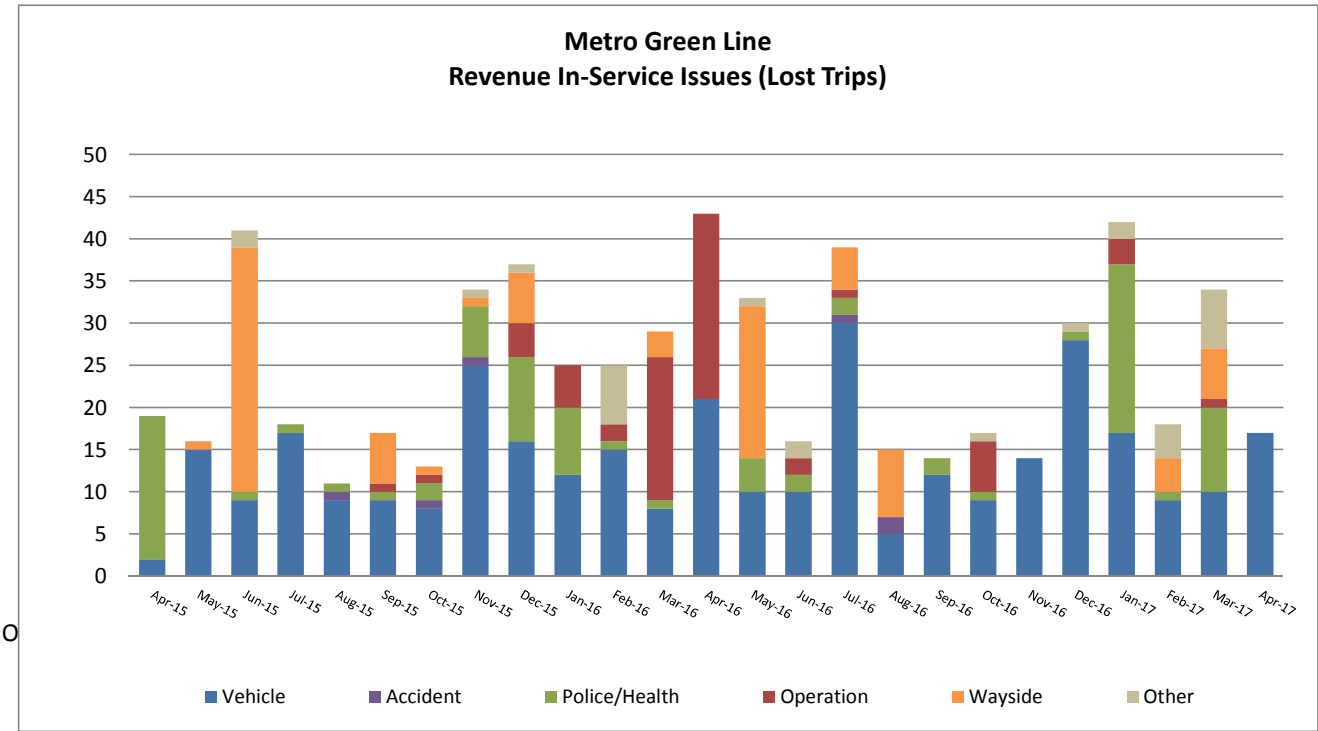


## IN-SERVICE ON-TIME PERFORMANCE



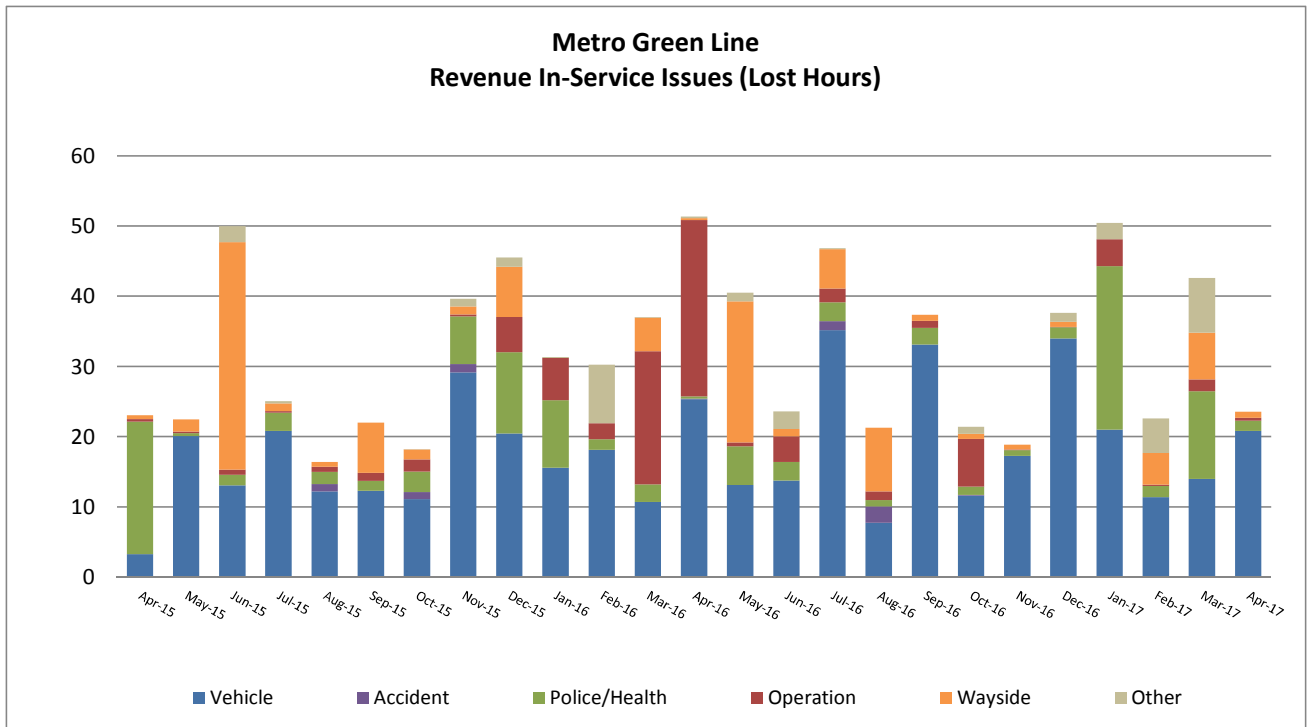
## LOST TRIPS

**Metro Green Line  
Revenue In-Service Issues (Lost Trips)**

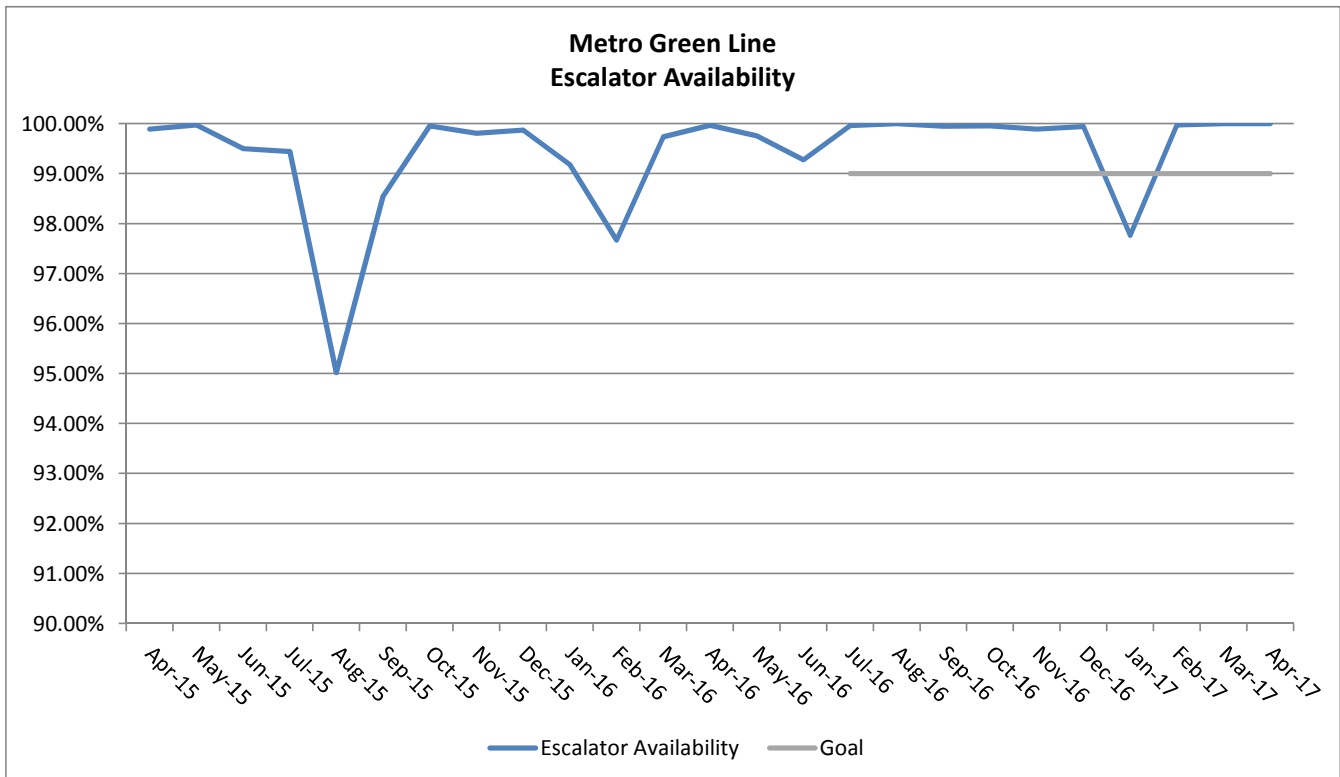
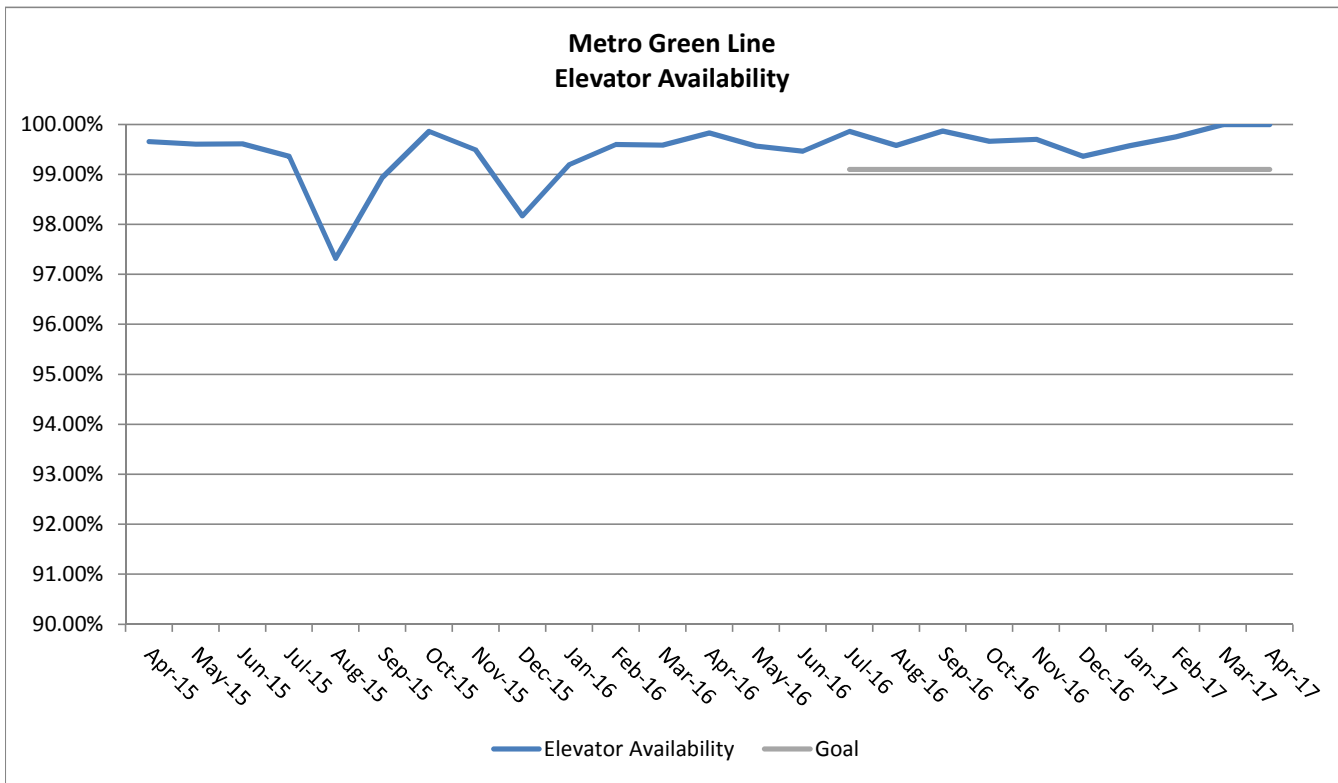


## LOST HOURS

**Metro Green Line  
Revenue In-Service Issues (Lost Hours)**



## VERTICAL TRANSPORTATION AVAILABILITY



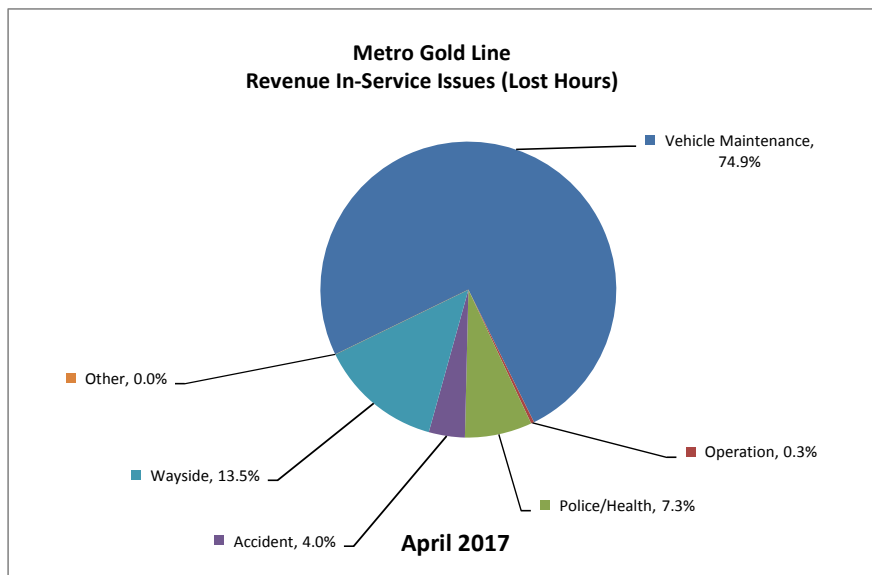
## GOLD LINE

Out of a total of 19,195 hours operated, there were approximately 118 total hours of service delays.

April 2017 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	19,077	99.4%
Cancelled + Delayed Hours	118	0.6%
<b>Total Revenue Hours</b>	<b>19,195</b>	<b>100.0%</b>

Summary of the major contributors:	Count	Hours	Percent
Operations	3	0.4	0.3%
Accidents	3	4.7	4.0%
Vehicle Maintenance	25	88.5	74.9%
Wayside	2	15.9	13.5%
Police & Health	6	8.7	7.3%
Other	0	0.0	0.0%
<b>Total</b>	<b>39</b>	<b>118.2</b>	<b>100.0%</b>

\* Data from M3 used to report Service Delays is under review for accuracy



## April 2017 Gold Line major delay contributors were as follows:

### Operations Incidents:

**4/7/2017 8:51:00 AM - Incident# 2853560 (0 lost trips, 10 lost minutes)**

10-100, cars #(712A)-704

Train #453

T-039

Azusa/Citrus Station, Track #002, Southbound

**4/11/2017 5:46:00 AM - Incident# 2854674 (0 lost trips, 6 lost minutes)**

T-340 did not follow his summary and this resulted in a 6 minute delay SB from APU.

**4/17/2017 8:28:00 AM - Incident# 2856671 (0 lost trips, 7 lost minutes)**

K-9 on the Right of Way Train Delay

### Accidents:

**4/8/2017 9:15:00 PM - Incident# 2854010 (0 lost trips, 8 lost minutes)**

Operator reports that a male white 10-390 possibly made contact with his train as the train departed from the platform.

T-406

Consist (740B)736

Train-412

Memorial Park, Track #2, Southbound

**4/12/2017 4:20:00 PM - Incident# 2855409 (0 lost trips, 15 lost minutes)**

Patron fell onto the track #1.

Fillmore Station

Train #405, T-207, track #2, southbound.

**4/26/2017 6:41:00 PM - Incident# 2860062 (1 lost trip, 258 lost minutes)**

Bicycle made contact with train consist on platform, medical assistance is needed.

Little Tokyo Station

Train #454, T-429, track #1, northbound.

Consist (705)704.

### Vehicle Maintenance Incidents:

**4/1/2017 6:09:00 PM - Incident# 2851500 (0 lost trips, 4 lost minutes)**

Car 1058A prop faults with speed restriction

T-382

Train-412

Consist (1058A)1010

Irwindale Station, Track #2, Southbound

**4/2/2017 10:11:00 AM - Incident# 2851615 (1 lost trip, 230 lost minutes)**

Train 405 (718,720) T-018 reports jerky propulsion, no fault indication.

**4/2/2017 10:35:00 AM - Incident# 2851630 (0 lost trips, 15 lost minutes)**

Train 407 (1010-1007) T-466, Irwindale Station, track 2, reports propulsion fault with speed restriction, requests authorization to key down at Duarte Station.

**4/2/2017 1:09:00 PM - Incident# 2851644 (1 lost trip, 224 lost minutes)**

Train 412 (708,711) T-11 reports LVPS fault indication in trailing car.

**4/4/2017 6:15:00 PM - Incident# 2852552 (0 lost trips, 12 lost minutes)**

Emergency brake fault trainline (717)743.

Monrovia Yard Interface

Train #406, T-159, track #2, southbound.

**4/5/2017 5:28:00 AM - Incident# 2852639 (1 lost trip, 250 lost minutes)**

Acceleromeer not functioning on car 733

T-122

Train 401

Tk 1 NB Duarte

733-723

**4/6/2017 4:01:00 AM - Incident# 2853064 (0 lost trips, 15 lost minutes)**

Train 403 Friction Break and Propulsion fault 721A  
T-128  
Train 403  
Tk2 SB APU  
721-746

**4/6/2017 5:37:00 PM - Incident# 2853379 (1 lost trip, 247 lost minutes)**

CB1 trip  
Train 421  
Track 2 southbound Union  
727 745 (740)

**4/9/2017 9:00:00 PM - Incident# 2854192 (1 lost trip, 224 lost minutes)**

Prop fault, reduced speed, car 1010.  
Train 403  
T-411  
Consist 1059-1010  
East Portal, Track 1 northbound.

**4/10/2017 6:20:00 PM - Incident# 2854589 (1 lost trip, 247 lost minutes)**

Propulsion fault (750)743,732.  
Allen Station  
Train #423, T-263, track #1, southbound.

**4/11/2017 6:42:00 AM - Incident# 2854715 (2 lost trips, 479 lost minutes)**

Smoking brakes on car 749  
T-461  
Train 455  
NB tk 1 Monrovia Station  
701-749

**4/12/2017 2:18:00 PM - Incident# 2855340 (1 lost trip, 251 lost minutes)**

Dirty vehicle (746)741.  
Atlantic Station  
Train #434, T-207, track #1 northbound.

**4/13/2017 3:57:00 PM - Incident# 2855810 (1 lost trip, 239 lost minutes)**

Train 401  
T-452  
LVPS fault/emergency lighting/speed restriction  
Monrovia Station track 1  
(747) 729

**4/14/2017 5:09:00 AM - Incident# 2855918 (1 lost trip, 238 lost minutes)**

Operator reports of propulsion faults, door problems with no movement

Train 416  
T-250  
(743)725-733  
Azusa Citrus Station, Trk. 1, southbound

**4/14/2017 6:47:00 AM - Incident# 2855974 (0 lost trips, 13 lost minutes)**

Operator reports of doors not opening  
Train 419  
T-340  
(1009B)1013  
Filmore Station, Trk. 2, southbound

**4/17/2017 2:24:00 PM - Incident# 2856869 (1 lost trip, 239 lost minutes)**

(713)-724  
Propulsion Faults  
SB Downtown Azusa  
Train 403  
T482

**4/20/2017 2:56:00 PM - Incident# 2858048 (2 lost trips, 477 lost minutes)**

LVPS failure on consist 712(710).  
Southwest Museum Station  
Train #403, T-382, track #1, northbound.



**4/21/2017 4:53:00 AM - Incident# 2858185 (1 lost trip, 245 lost minutes)**

Operator reports of a propulsion fault with a High Speed Circuit Breaker fault and a speed restriction of 35 MPH

Train 414  
T-066  
(724)747-728  
Irwindale Station, Trk. 2, southbound

**4/21/2017 2:40:00 PM - Incident# 2858452 (1 lost trip, 239 lost minutes)**

Propulsion / Dynamic Brakes, (1012-1058)  
Train #453/8407  
T-163 and T-189  
South West Museum Station, Track #002, Southbound.

**4/21/2017 4:20:00 PM - Incident# 2858481 (1 lost trip, 238 lost minutes)**

Propulsion / Dynamic Brakes, cars #(728)-747  
Train #407  
T-215  
Sierra Madre Villa Station, Track #002, Southbound

**4/24/2017 7:02:00 AM - Incident# 2859033 (1 lost trip, 259 lost minutes)**

Prop and Friction brake faults car 716  
Train 416  
T-120  
Track 1 NB Pico Aliso  
716-717

**4/24/2017 11:20:00 AM - Incident# 2859165 (1 lost trip, 239 lost minutes)**

Car 1011 propulsion fault no movement.  
T-19  
Train 405  
Cars 1011, 1010  
Atlantic Station Track 2 NB.

**4/28/2017 8:44:00 AM - Incident# 2860673 (1 lost trip, 238 lost minutes)**

(1055)-1013  
Propulsion Fault  
SB Indiana  
T-11  
Train 405

**4/29/2017 4:09:00 AM - Incident# 2860999 (1 lost trip, 224 lost minutes)**

Train 404, LRV's (723) and 717.  
APU/ Citrus Station, Track 1 south.  
Friction Brakes not releasing.

**4/30/2017 3:54:00 PM - Incident# 2861381 (1 lost trip, 224 lost minutes)**

Car 729 with minor/major prop faults and speed restriction.  
T-470  
Train 408  
Train 408  
Irwindale Station, Track 2, southbound.

**Wayside Incidents:**

**4/27/2017 8:58:00 PM - Incident# 2860494 (2 lost trips, 477 lost minutes)**

South Pasadena PD # 2026 reports Broken gate.  
Mission Meridian, TK 2, gate # 1.

**4/27/2017 10:24:00 PM - Incident# 2860510 (2 lost trips, 477 lost minutes)**

Pasadena/Monterey broken gate and making contact with OCS, TK 2.

**Police & Health Incidents:**

**4/3/2017 4:54:00 PM - Incident# 2852074 (0 lost trips, 10 lost minutes)**

Trespasser on the right of way.  
101 freeway over pass.

**4/4/2017 6:41:00 PM - Incident# 2852559 (0 lost trips, 11 lost minutes)**

Patron needs medical assistance.  
Heritage Square Station  
Train #403, T-195, track #1, northbound.  
1055, 1006.

**4/22/2017 7:52:00 PM - Incident# 2858647 (0 lost trips, 9 lost minutes)**

Female passenger claim of internal pain 733-(738)

Train 408

T-304

Northbound

Indiana Station

**4/24/2017 8:06:00 AM - Incident# 2859058 (2 lost trips, 479 lost minutes)**

Vehicle blocking Track 2 at Maravilla Station.

**4/26/2017 4:31:00 PM - Incident# 2860033 (0 lost trips, 5 lost minutes)**

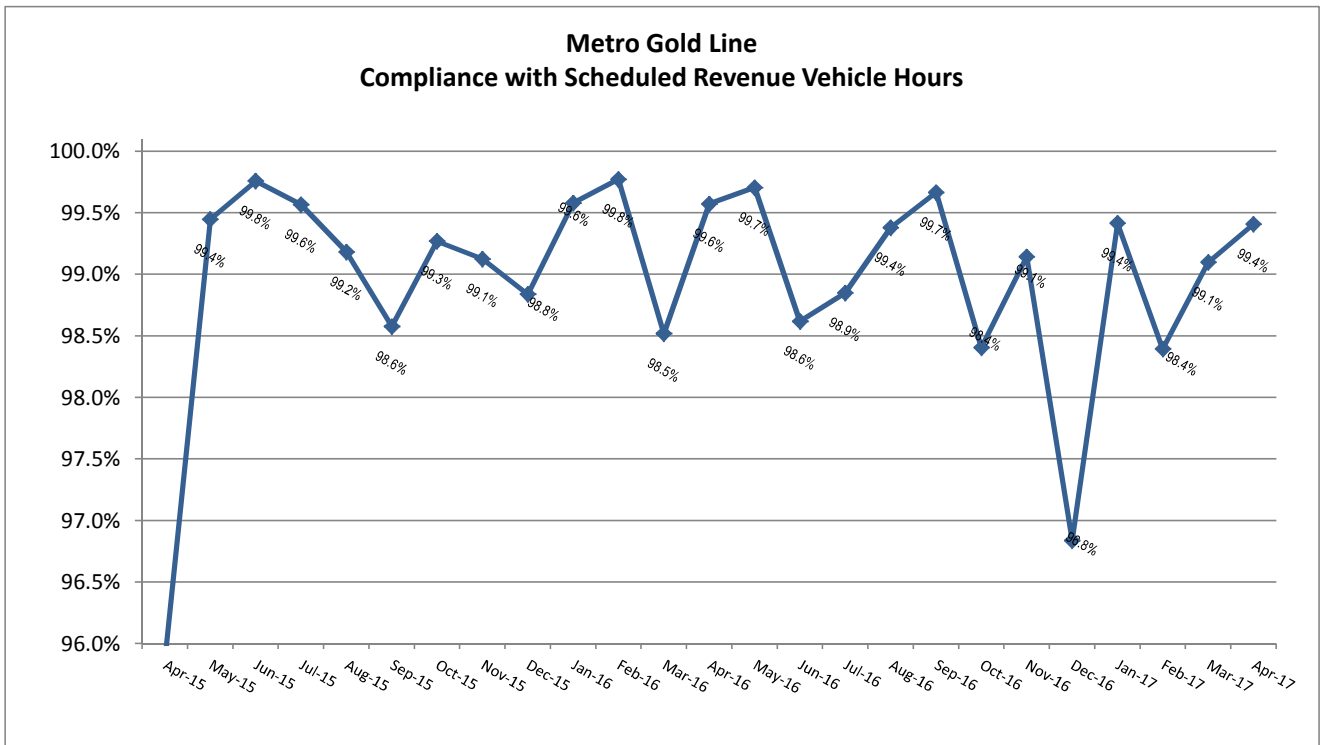
LASD requests no trains in the area of Ave 57 due to police activity.

**4/29/2017 5:55:00 AM - Incident# 2861016 (0 lost trips, 7 lost minutes)**

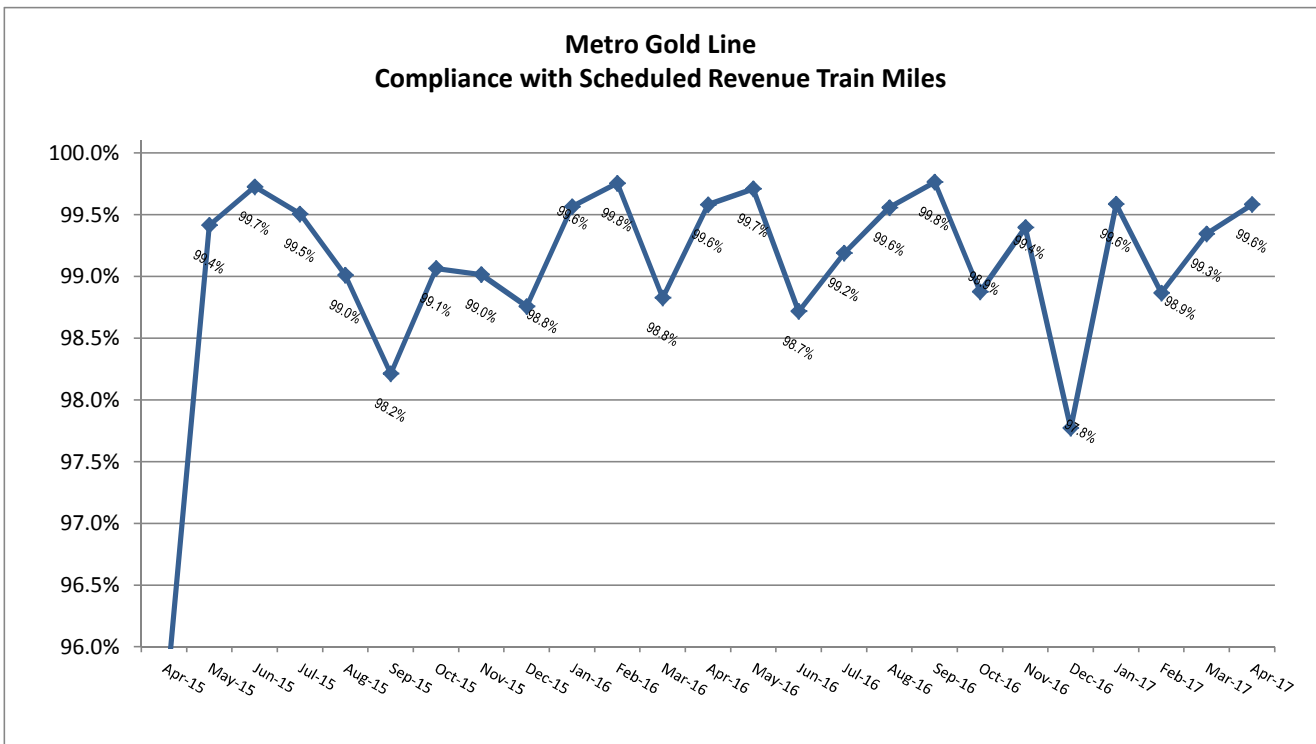
Train 408 reported car on the ROW.

# MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

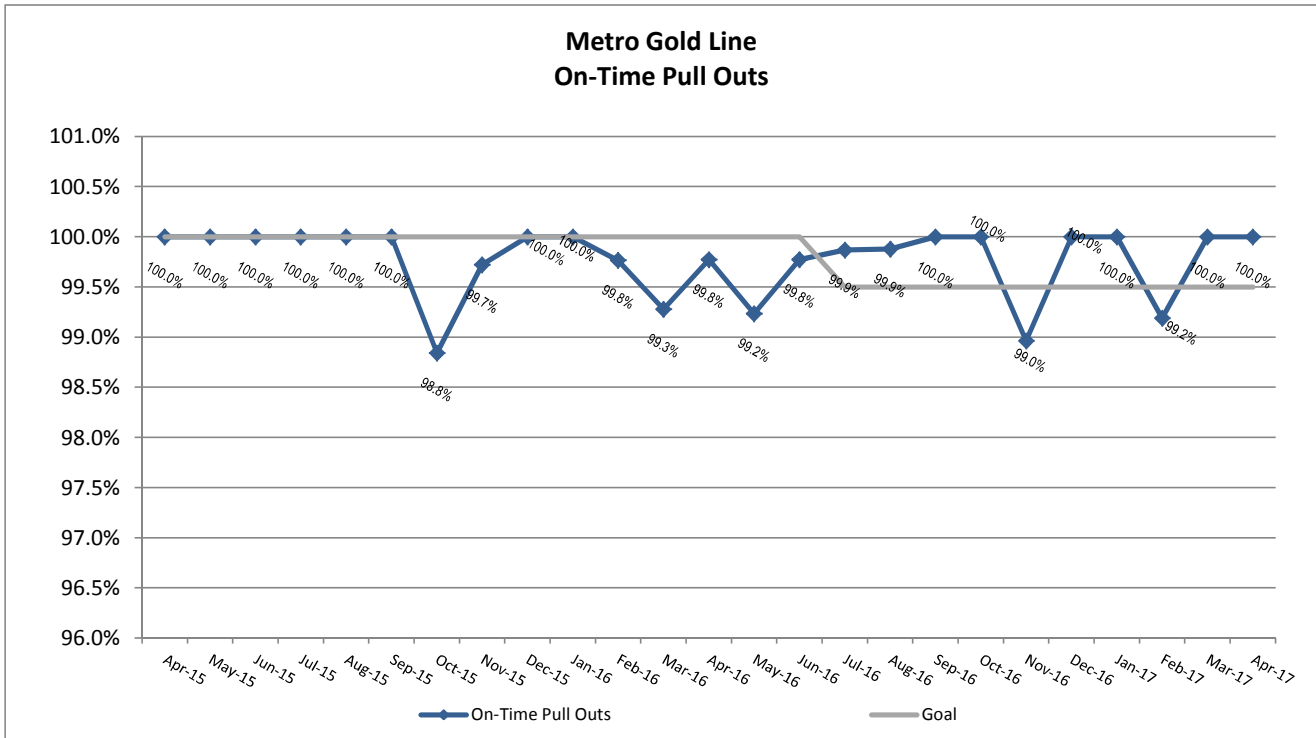
## COMPLIANCE WITH SCHEDULED VEHICLE HOURS



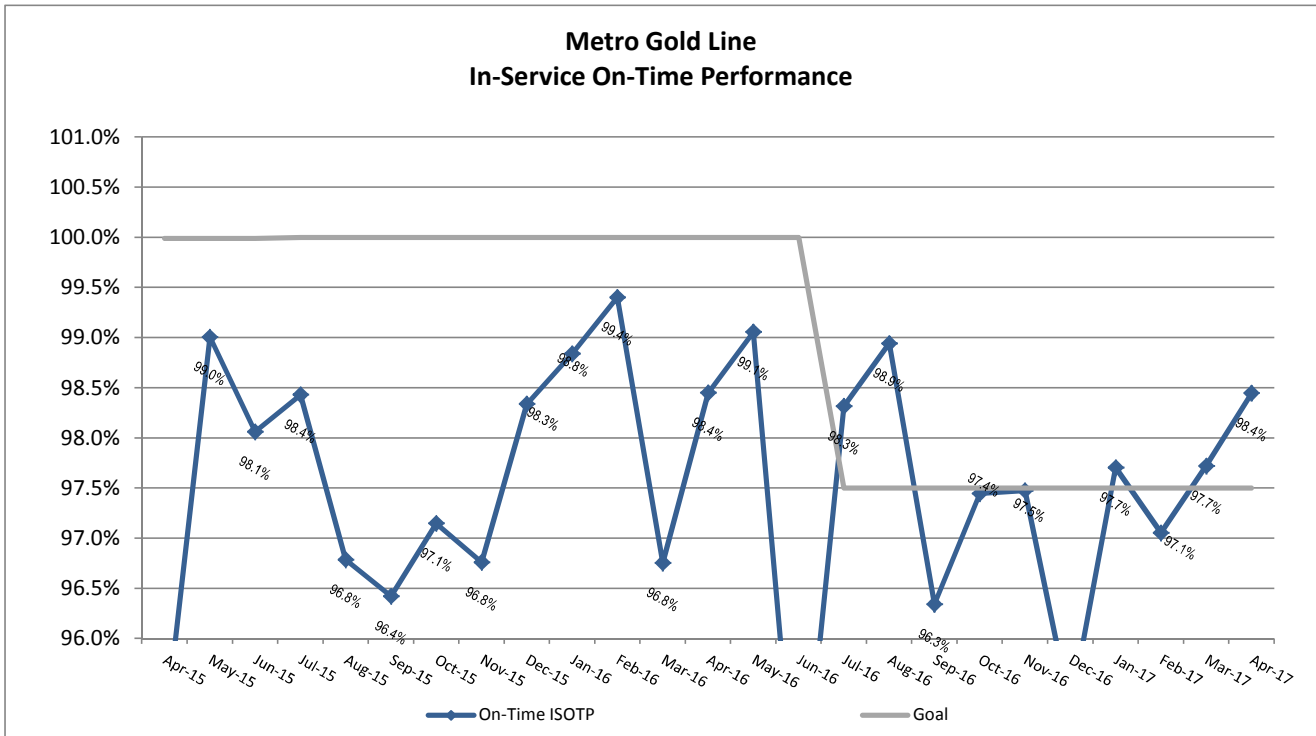
## COMPLIANCE WITH SCHEDULED TRAIN MILES



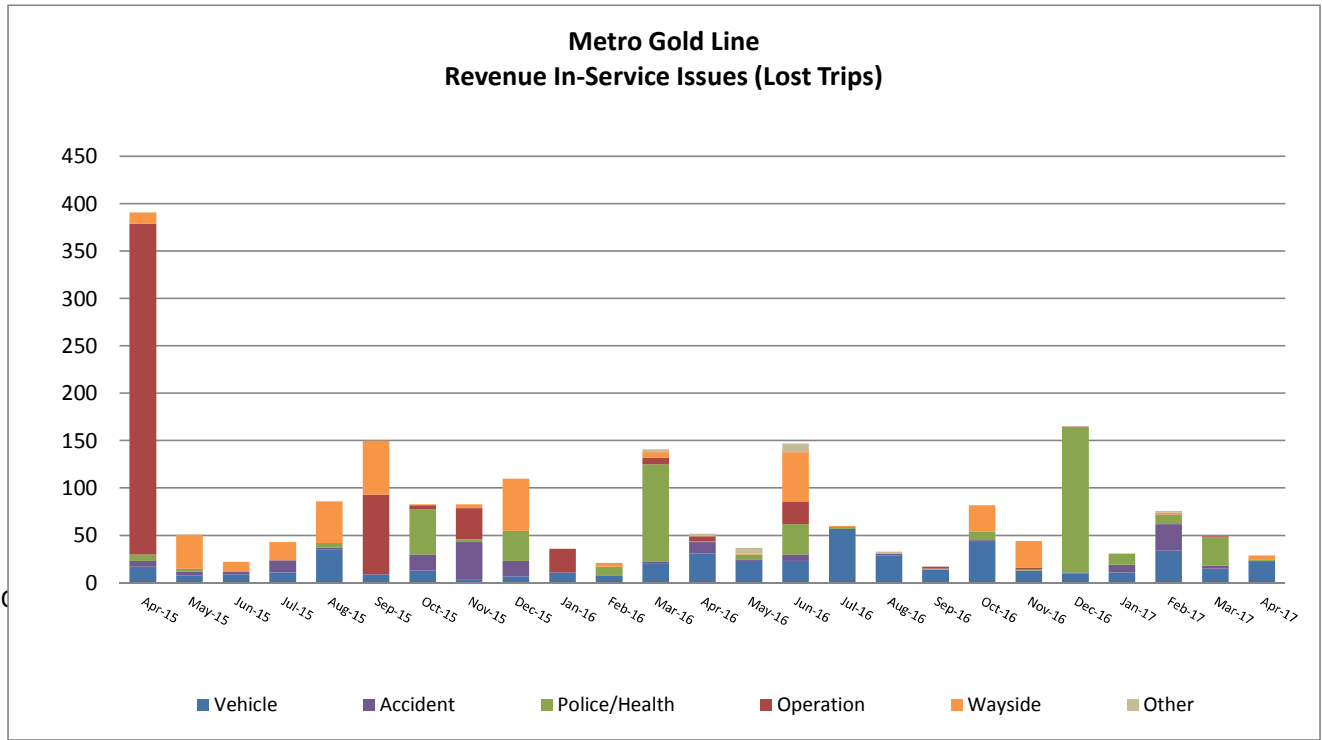
## ON-TIME PULL OUTS



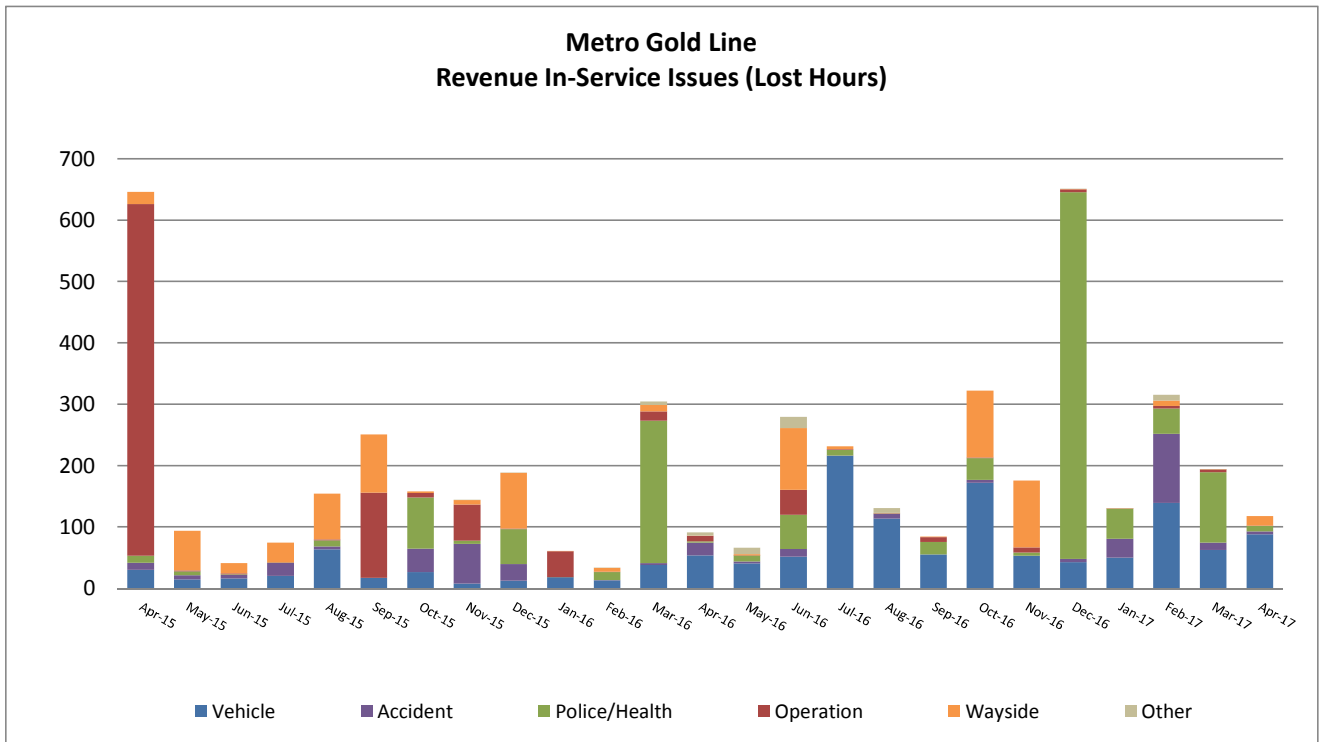
## IN-SERVICE ON-TIME PERFORMANCE



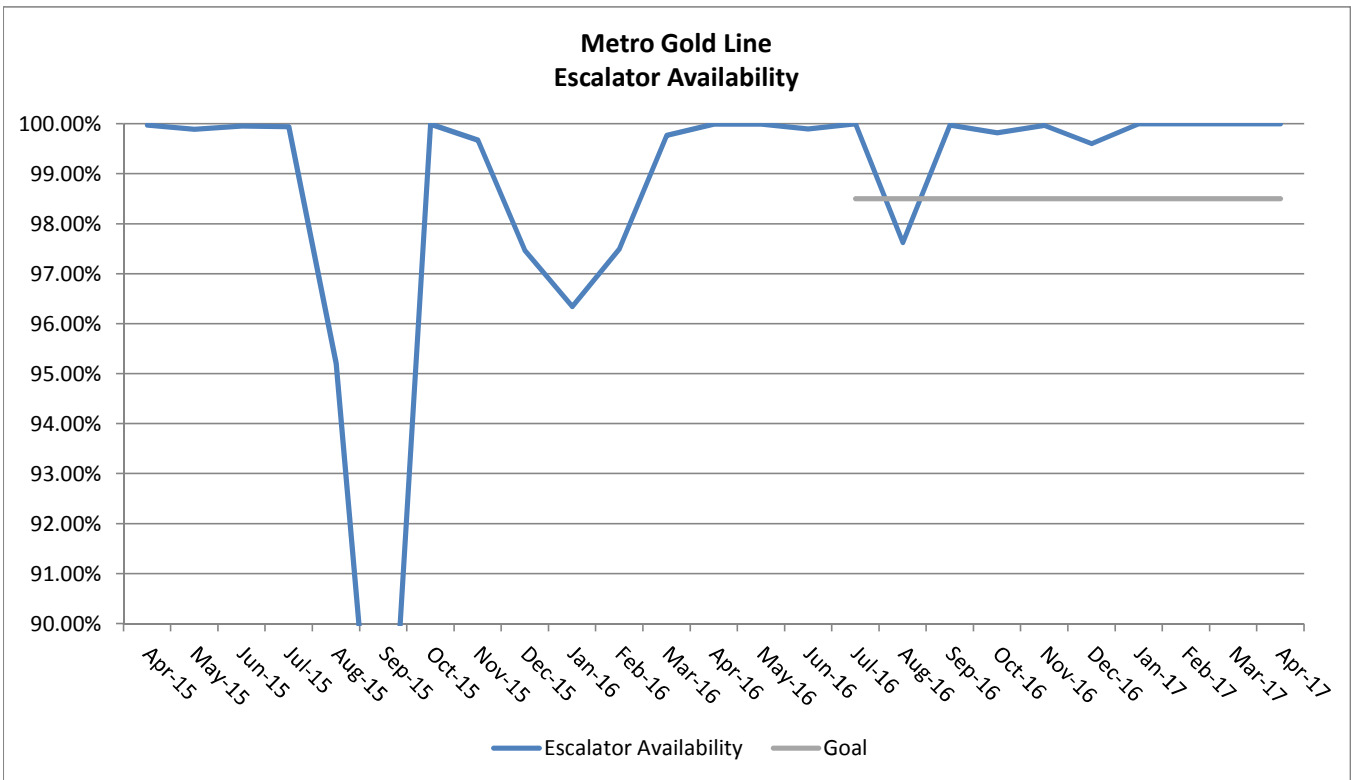
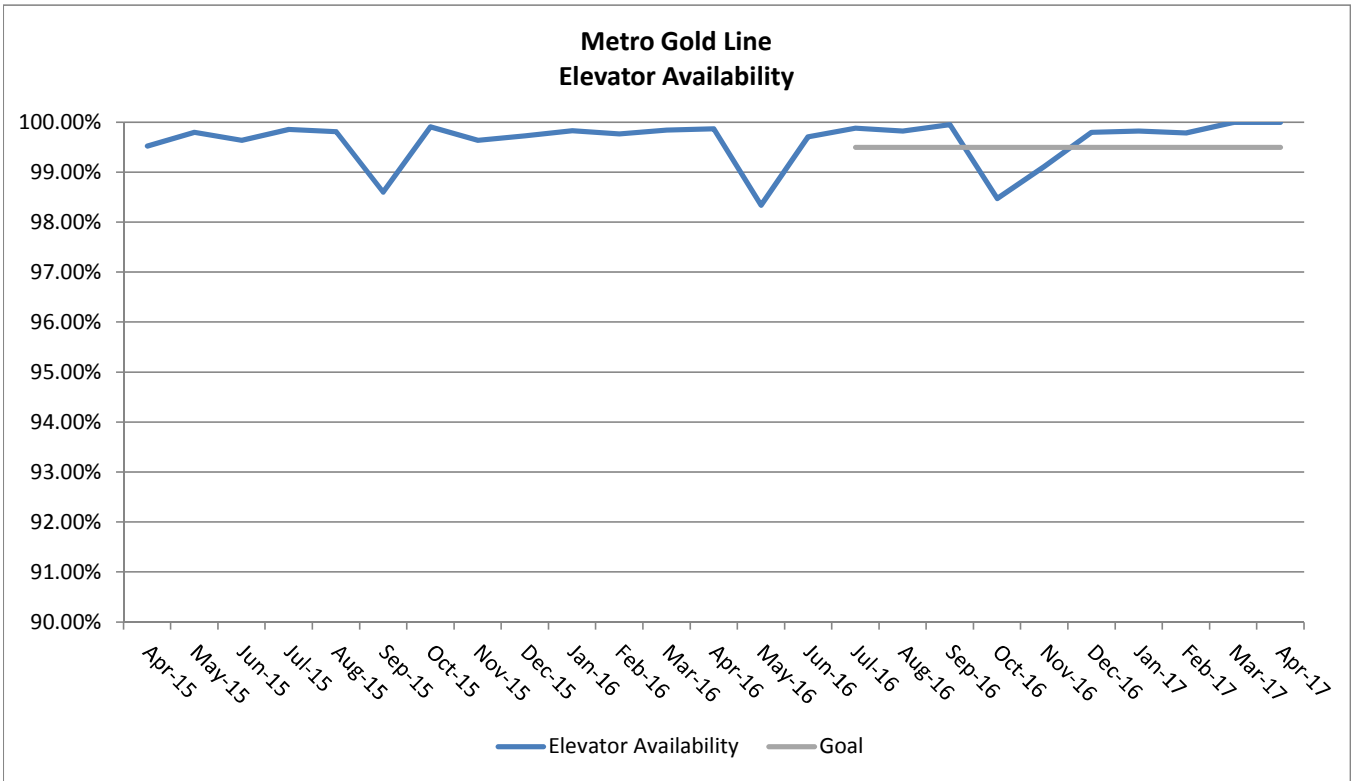
## LOST TRIPS



## LOST HOURS



## VERTICAL TRANSPORTATION AVAILABILITY



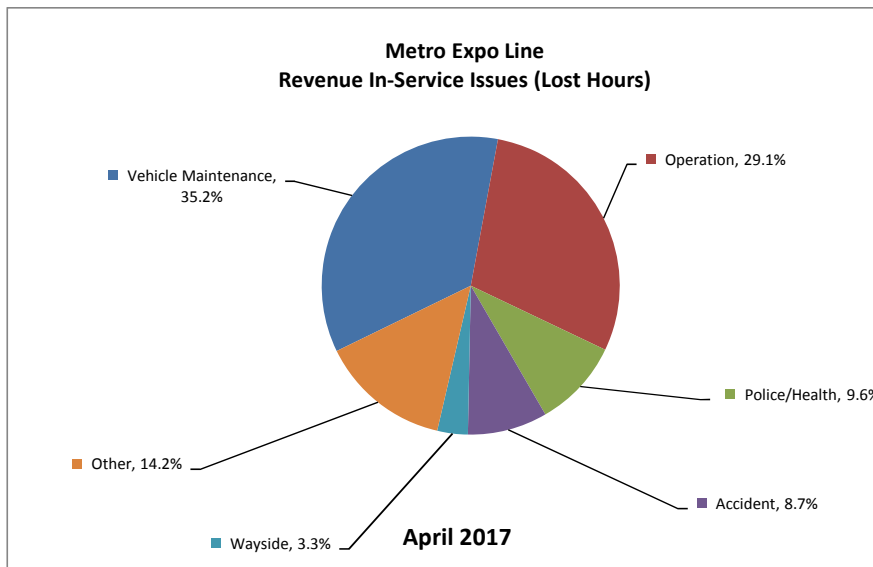
## EXPO LINE

Out of a total of 18,655 hours operated, there were approximately 71 total hours of service delays.

April 2017 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	18,584	99.6%
Cancelled + Delayed Hours	71	0.4%
<b>Total Revenue Hours</b>	<b>18,655</b>	<b>100.0%</b>

Summary of the major contributors:	Count	Hours	Percent
Operations	4	20.6	29.1%
Accidents	1	6.1	8.7%
Vehicle Maintenance	11	24.9	35.2%
Wayside	1	2.4	3.3%
Police & Health	3	6.8	9.6%
Other	2	10.0	14.2%
<b>Total</b>	<b>22</b>	<b>70.7</b>	<b>100.0%</b>

\* Data from M3 used to report Service Delays is under review for accuracy



## April 2017 Expo Line major delay contributors were as follows:

### Operations Incidents:

**4/10/2017 3:45:00 AM - Incident# 2854234 (9 lost trips, 1,082 lost minutes)**

Yard control notified ROC train 605 and other trains will be pulling out late or cancelled due to pantograph issues.

**4/12/2017 12:59:00 PM - Incident# 2855281 (0 lost trips, 15 lost minutes)**

Turn Backs due to Train 111 with no movement at 1N 7th/Metro Center.

**4/13/2017 12:19:00 PM - Incident# 2855739 (0 lost trips, 10 lost minutes)**

Due to train 106 with no movement at Pico Station Southbound cause delays to the Expo Trains.

**4/19/2017 6:06:00 PM - Incident# 2857710 (1 lost trip, 128 lost minutes)**

Train 626 was turned back from 23rd St Station, due to a BO Blue Line Train at Pico Station.

Train 626

T-403

Cars 1046-1064

23rd St Station, track 3, northbound

### Accidents:

**4/10/2017 10:18:00 AM - Incident# 2854378 (3 lost trips, 367 lost minutes)**

Auto vs. Train

T-417 and T-038

Train 619

(1060B)-1018

Southbound, Track 4 at Crenshaw.

### Vehicle Maintenance Incidents:

**4/1/2017 4:57:00 AM - Incident# 2851365 (0 lost trips, 3 lost minutes)**

Reports door problem.

Train # 606

T-401

1019-1020-(1040B)

USC/EXPO Station, Track #3, NB

**4/1/2017 11:58:00 AM - Incident# 2851422 (0 lost trips, 8 lost minutes)**

Train 530 report self applying brakes on LRV 104 and Smoking brakes.

Train-530

T-530

LRV'S 103- ( 104 ) 146

17th Street , track 3, Northbound.

**4/4/2017 12:03:00 AM - Incident# 2852147 (3 lost trips, 357 lost minutes)**

Doors/ADU False Indication

Train 623

T-150

(1034-1028)

Trk 4 Culver City Station N/B

20 delay N/B

20 delay S/B

**4/4/2017 5:17:00 AM - Incident# 2852182 (0 lost trips, 5 lost minutes)**

No Fault No Movement

Train 601

T-230

(1042A)-1014-1016

S/B Trk 4 Palm Station

5 minute delay south bound.

**4/7/2017 1:12:00 PM - Incident# 2853654 (7 lost trips, 832 lost minutes)**

Multiple trains, beginning with Train#605 were turned backed at 23rd Street Station due to OCS damage reported at 7th and Metro.

Train#605

T#89

103,104,133

Track#3,northbound

,23rd Street Station



**4/8/2017 12:56:00 AM - Incident# 2853818 (0 lost trips, 18 lost minutes)**

Train operator T-532 reports of no movement.  
Train 621  
T-532  
Cars (1032) 1040, 1034  
23rd St Station, Track 3, northbound

**4/18/2017 8:45:00 PM - Incident# 2857323 (0 lost trips, 20 lost minutes)**

Propulsion fault  
Train 629  
Car 238A  
Arlington Grade crossing  
Northbound

**4/24/2017 11:45:00 AM - Incident# 2859177 (1 lost trip, 119 lost minutes)**

Operator reports of a propulsion fault.  
Train 607  
T-123  
(1026)1017-1028  
La Cienega station, Trk. 4, southbound

**4/24/2017 3:31:00 PM - Incident# 2859240 (1 lost trip, 119 lost minutes)**

Operator reports no movement from Car 142A.  
Cars 102, 146, (142A)  
Train 609  
T-405  
7th and Metro TRK 2 BP

**4/25/2017 8:28:00 AM - Incident# 2859468 (0 lost trips, 6 lost minutes)**

Auto Train Protection (Speed Limit) ( No transition to street run)  
(1045)-1039-1054  
Train 602  
T-349  
Western, Northbound, Track 3

**4/30/2017 3:50:00 PM - Incident# 2861392 (0 lost trips, 4 lost minutes)**

Car 1053A prop faults  
T-373  
Train-603  
Consist (1053A) 1017-1052  
26th Street, Northbound, Track #3

**Wayside Incidents:**

**4/8/2017 3:53:00 PM - Incident# 2853960 (1 lost trip, 141 lost minutes)**  
Operator reports something on the something hanging from the OCS at Barrington grade crossing.

**Police & Health Incidents:**

**4/5/2017 5:17:00 PM - Incident# 2852946 (3 lost trips, 387 lost minutes)**  
4th St/Informant called and reports a man with a gun boarded the train.

**4/24/2017 3:49:00 PM - Incident# 2859274 (0 lost trips, 6 lost minutes)**  
26th St/LASD reports an assultated paton is on Train 607.

**4/25/2017 6:53:00 PM - Incident# 2859678 (0 lost trips, 12 lost minutes)**  
Trespasser (Male White)  
CCTV/R-467  
Sepulveda Station South end of the platform track #004 side.

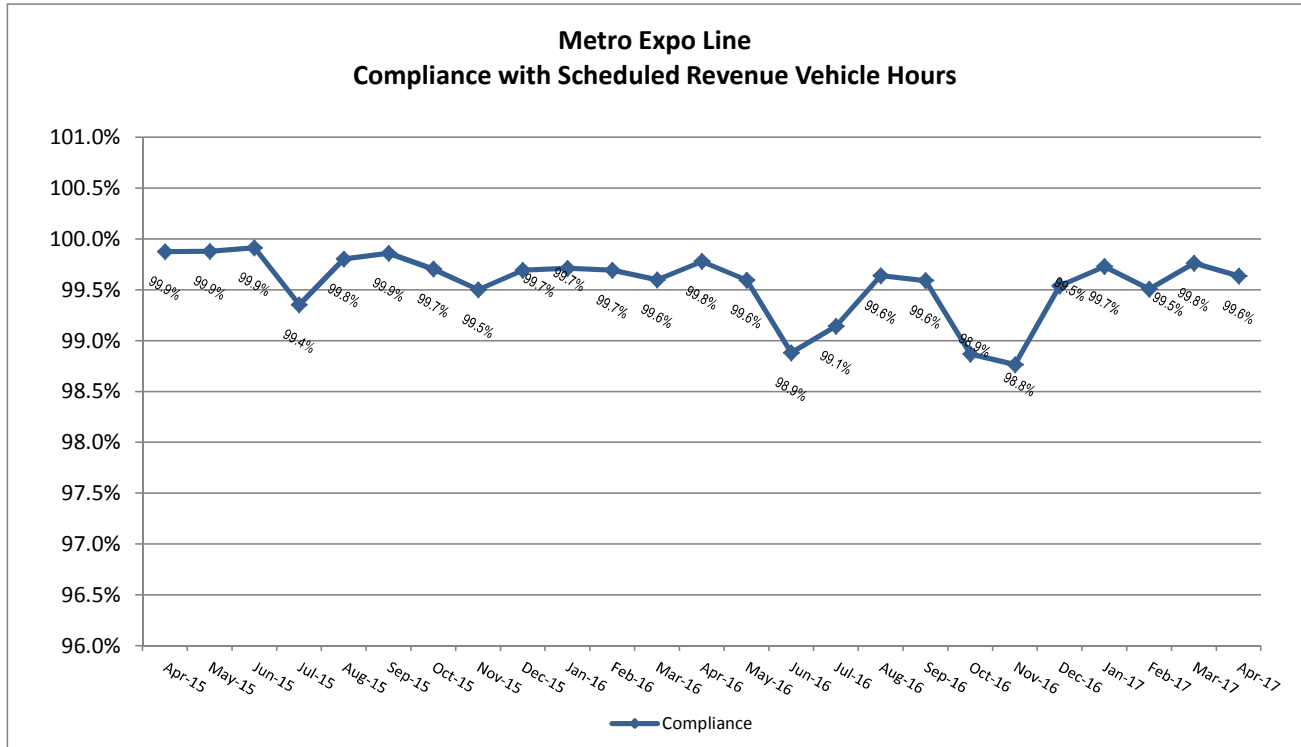
**Other Incidents:**

**4/7/2017 1:50:00 AM - Incident# 2853444 (5 lost trips, 594 lost minutes)**  
Train Fire Mock Drill Commence  
Train 517  
T-157  
1039 -(1019)  
Jefferson Expo Tunnel  
Trk 4 S/B

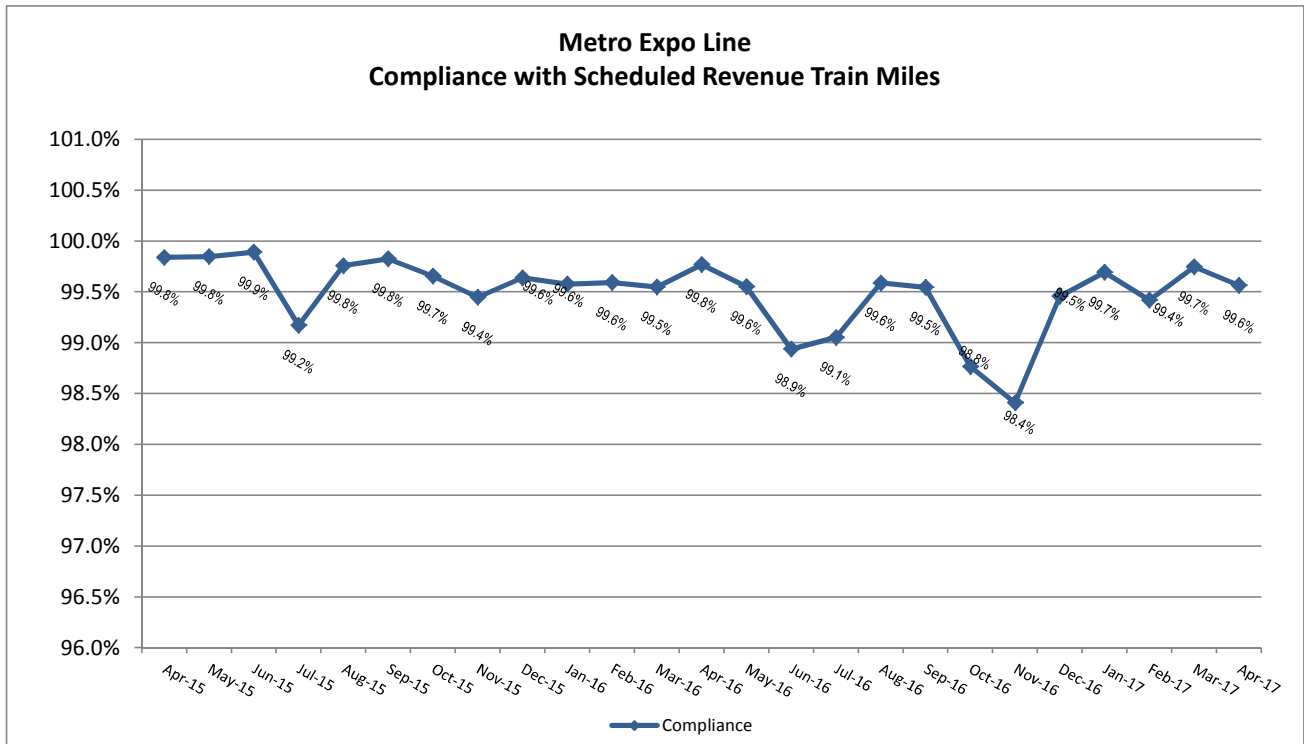
**4/27/2017 4:46:00 AM - Incident# 2860137 (0 lost trips, 6 lost minutes)**  
Out Late from Expo Yard.

# MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

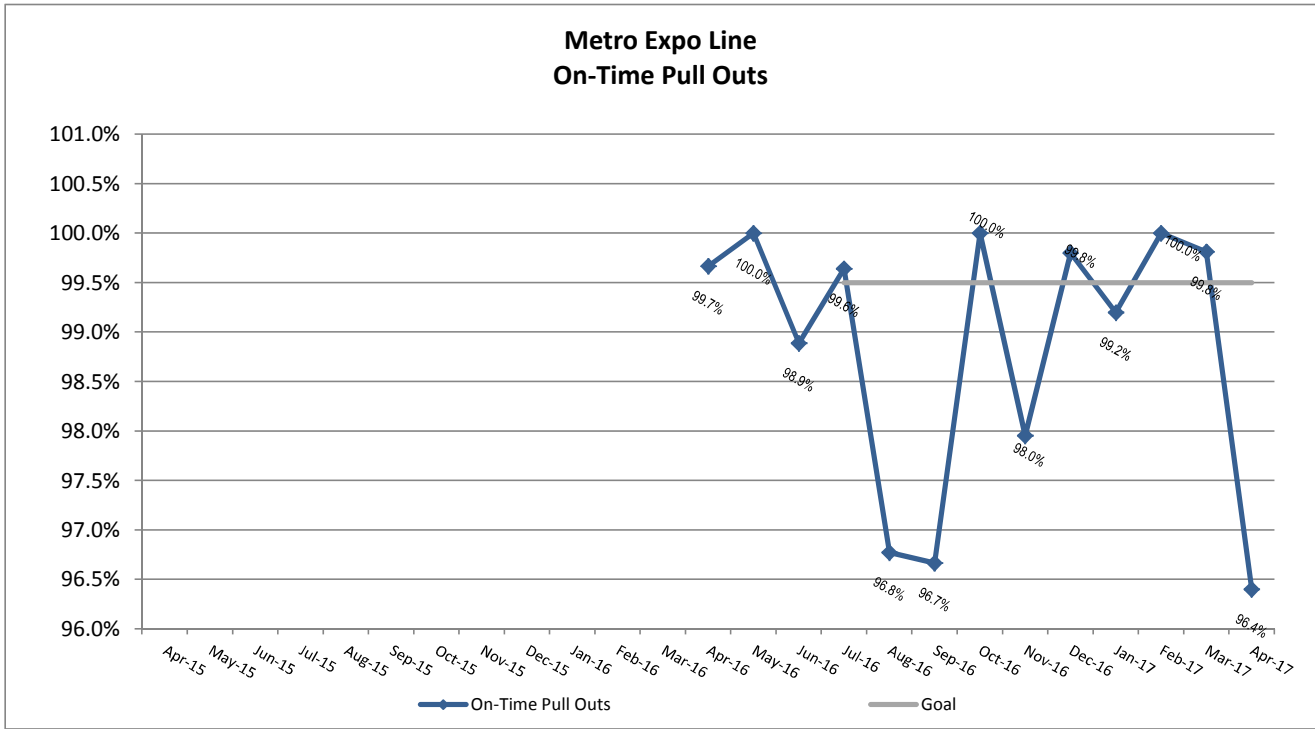
## COMPLIANCE WITH SCHEDULED VEHICLE HOURS



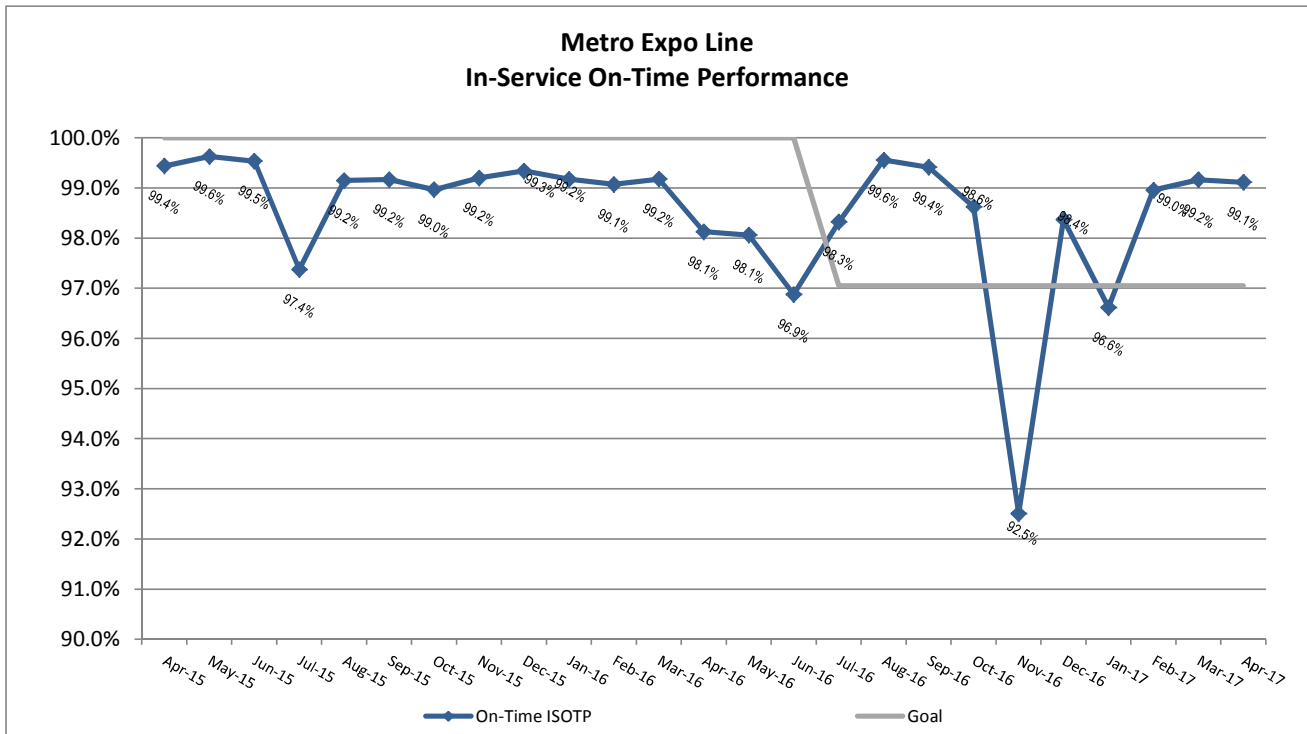
## COMPLIANCE WITH SCHEDULED TRAIN MILES



## ON-TIME PULL OUTS

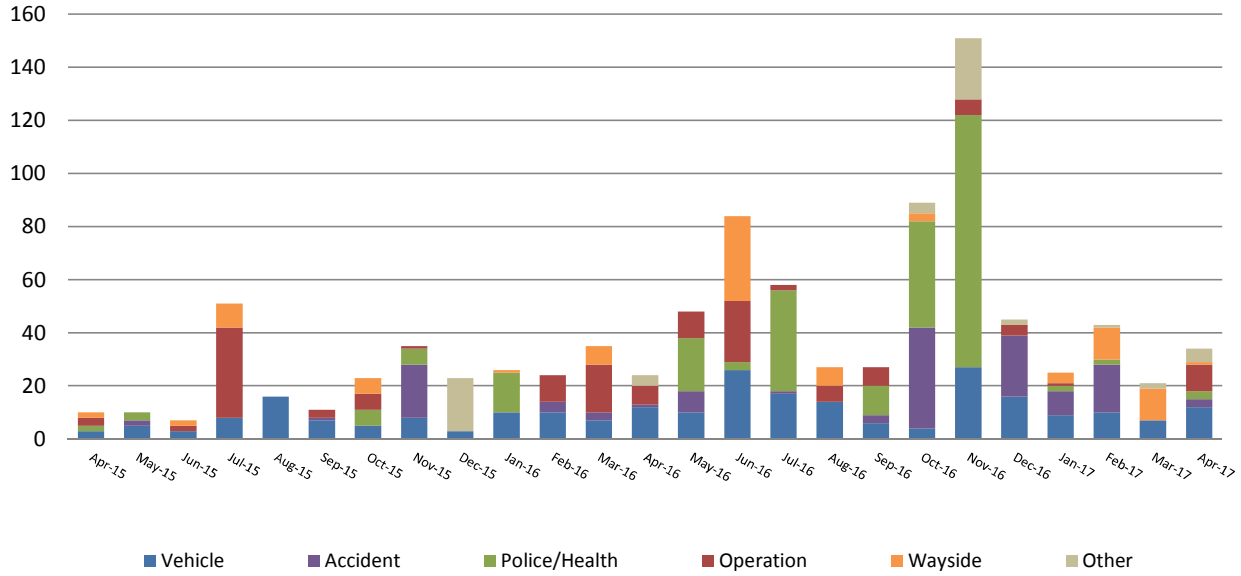


## IN-SERVICE ON-TIME PERFORMANCE



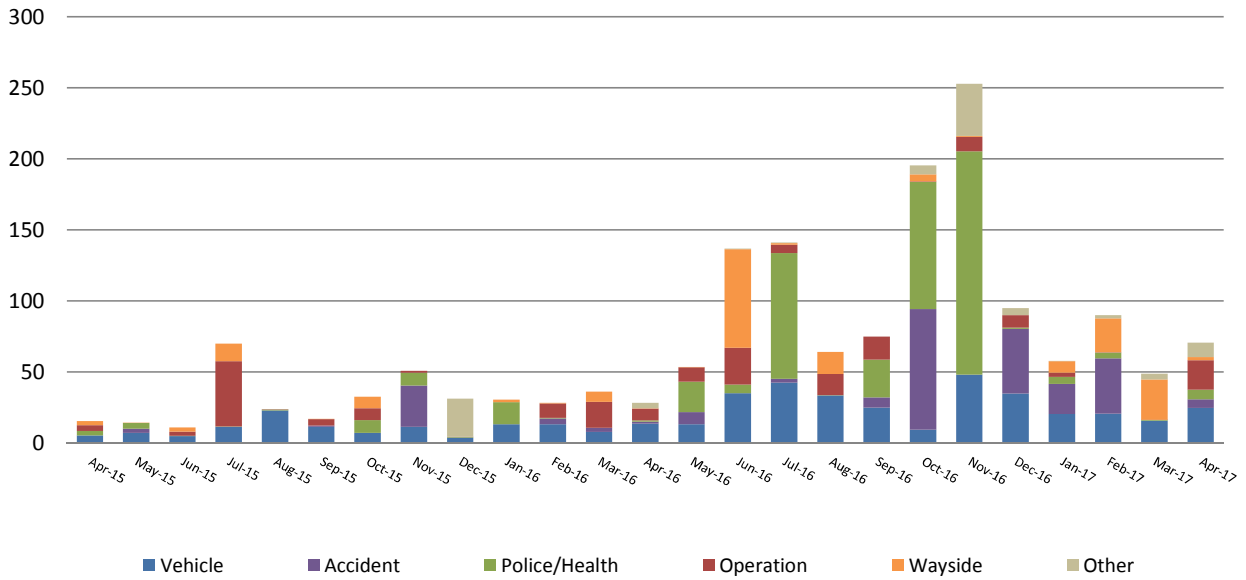
### LOST TRIPS

**Metro Expo Line  
Revenue In-Service Issues (Lost Trips)**



### LOST HOURS

**Metro Expo Line  
Revenue In-Service Issues (Lost Hours)**



## VERTICAL TRANSPORTATION AVAILABILITY

