Los Angeles County Metropolitan Transportation Authority California

# OPERATIONS MONTHLY RAIL PERFORMANCE REPORT

FEBRUARY 2017



# METRO RAIL PERFORMANCE – FEBRUARY 2017

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### 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.

				FY 2017	FY 2017	FYTD	Dec	Jan	Feb
Measurement	FY 2014	FY 2015	FY 2016	Target	YTD	Status	Month	Month	Month
Systemwide							n		
On-Time Pullouts	99.55%	99.67%	99.63%	99.50%	99.62%		99.97%	99.55%	99.51%
Mean Miles Between Chargeable Mechanical Failures	28,829	34,524	30,482	27,911	28,988		24,134	30,510	33,481
In-Service On-time Performance	97.92%	98.39%	98.10%	98.00%	98.09%		97.74%	97.24%	97.92%
Service Delivery Ratio	99.12%	99.35%	99.22%	99.25%	99.16%		98.80%	99.16%	98.89%
Traffic Accidents Per 100,000 Train Miles	1.47	1.18	1.17	N/A	1.14	N/A	1.18	1.83	1.15
CPUC Reportable Accidents per 100,000 Train Miles	0.10	0.43	0.60	0.67	0.42		0.26	1.04	0.43
Passenger Accidents per 100,000 Boardings	0.025	0.013	0.016	0.009	0.021		0.000	0.010	0.023
Complaints per 100,000 Boardings	0.91	0.78	1.43	1.12	1.98		1.39	2.24	2.01
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours <sup>1,2</sup>	15.35	11.11	10.97	10.42	12.26	0	10.88	10.59	14.53
Lost Work Days per 200,000 Exposure Hours <sup>1,2</sup>	861	880	482	458.16	738		987	32	
OSHA Injuries per 200,000 Exposure Hours <sup>1,2</sup>	8.18	6.68	6.32	6.00	8.76		7.91	7.70	
OSHA Injunes per 200,000 Exposure Hours	0.10	0.00	0.32	0.00	0.70		7.91	1.10	-
Wayside									
Overdue Work Orders (Non-PMP) - Aging of Outstanding Work Orders	0	1	30	N/A	141	N/A	16	37	57
Past-Due Preventive Maintenance - Aging of Outstanding Work Orders	0	1	30	N/A	141	N/A	16		57
% of Completed Inspections	99.41%	99.51%	99.57%	N/A	99.57%	N/A	98.71%	100.00%	99.62%
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	9.28	9.07	4.77	4.53	4.53		4.24	3.94	4.09
Lost Work Days per 200,000 Exposure Hours <sup>1</sup>	179	309	148	141	131		225		-
OSHA Injuries per 200,000 Exposure Hours <sup>1</sup>	6.31	8.28	4.40	4.18	4.59		0.00	44.00	-
	•							49.00	
Blue Line									
On-Time Pullouts	99.37%	99.41%	99.59%	99.50%	99.57%		100.00%	98.98%	99.69%
Mean Miles Between Chargeable Mechanical	18,731	23,716	19,240	19,572	16,448		17,131	14,406	15,852
In-Service On-time Performance	95.84%	97.28%	96.10%	97.00%	96.30%		96.47%	93.27%	95.93%
Service Delivery Ratio	98.36%	98.88%	98.41%	98.46%	98.50%		98.56%	97.57%	97.70%
Traffic Accidents Per 100,000 Train Miles	2.97	2.48	2.38	N/A	2.30	N/A	4.50	3.92	0.69
CPUC Reportable Accidents per 100,000 Train Miles	0.00	0.89	1.39	1.34	0.82		1.29	1.96	0.00
Passenger Accidents per 100,000 Boardings	0.058	0.034	0.016	0.006	0.037		0.000	0.000	0.111
Complaints per 100,000 Boardings	1.10	0.90	1.33	1.09	1.62		1.29	1.69	1.39
New Workers' Compensation Indemnity Claims per	17.46	15.10	15.08	15.58	17.17	0	27.59	10.69	11.68
Lost Work Days per 200,000 Exposure Hours <sup>1</sup>	990	1,622		786	859	Õ	749	728	-
OSHA Injuries per 200,000 Exposure Hours <sup>1</sup>	5.71	10.64	6.79	9.58	11.68	Õ	27.59	5.35	-

<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

				FY 2017	FY 2017	FYTD	Dec	Jan	Feb
Measurement	FY 2014	FY 2015	FY 2016	Target	YTD	Status	Month	Month	Month
Red Line									
On-Time Pullouts	99.72%	99.91%	99.79%	99.50%	100.00%		100.00%	100.00%	100.00%
Mean Miles Between Chargeable Mechanical	63,099	85,090	94,312	112,652	110,745	$\bigcirc$	196,096	148,218	109,220
In-Service On-time Performance	98.91%	99.13%	99.45%	99.50%	99.41%		99.51%	99.29%	98.56%
Service Delivery Ratio	99.57%	99.60%	99.71%	99.71%	99.76%		99.79%	99.67%	99.54%
Traffic Accidents Per 100,000 Train Miles	1.01	0.47	0.75	N/A	0.75	N/A	0.00	1.66	0.91
CPUC Reportable Accidents per 100,000 Train Miles	0.00	0.07	0.07	0.60	0.21		0.00	1.66	0.00
Passenger Accidents per 100,000 Boardings	0.006	0.002	0.002	0.003	0.003		0.000	0.000	0.000
Complaints per 100,000 Boardings	0.60	0.54	0.57	0.56	0.97		0.51	1.34	1.74
New Workers' Compensation Indemnity Claims per	20.22	6.20	16.43	13.29	12.82		16.12	11.39	6.17
*Lost Work Days per 200,000 Exposure Hours	927	649	526	556	1,091		986	653	-
*OSHA Injuries per 200,000 Exposure Hours	11.79	3.54	7.99	6.55	8.86		5.37	5.70	-

Green Line									
On-Time Pullouts	99.69%	99.32%	99.49%	99.50%	99.71%		100.00%	99.52%	98.70%
Mean Miles Between Chargeable Mechanical Failures	19,513	21,054	19,238	19,911	15,757	0	8,808	14,376	19,422
In-Service On-time Performance	97.85%	97.39%	98.52%	98.20%	98.50%		98.23%	98.53%	98.87%
Service Delivery Ratio	99.57%	99.50%	99.59%	99.62%	99.59%	$\bigcirc$	99.54%	99.39%	99.71%
Traffic Accidents Per 100,000 Train Miles	0.49	0.21	0.42	N/A	0.52	N/A	0.00	0.00	0.00
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	0.057		0.000	0.000	0.000
Complaints per 100,000 Boardings	1.15	0.88	1.53	1.30	2.07		1.50	1.30	2.72
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	16.51	7.32	7.18	9.27	8.94		0.00	19.65	20.51
*Lost Work Days per 200,000 Exposure Hours	1,299	479	228	195	839		554	463	-
*OSHA Injuries per 200,000 Exposure Hours	11.30	4.07	3.19	2.34	5.84		0.00	19.65	-

Gold Line									
On-Time Pullouts	99.56%	99.98%	99.68%	99.50%	99.74%		100.00%	100.00%	99.19%
Mean Miles Between Chargeable Mechanical Failures	45,894	44,171	40,426	51,665	36,240	0	38,175	54,892	43,930
In-Service On-time Performance	98.03%	98.56%	97.60%	97.50%	97.33%	$\bigcirc$	95.29%	97.70%	97.05%
Service Delivery Ratio	99.03%	99.34%	99.11%	99.16%	98.70%	$\bigcirc$	96.69%	99.39%	98.33%
Traffic Accidents Per 100,000 Train Miles	1.03	1.14	0.99	N/A	0.65	N/A	0.43	1.25	0.94
CPUC Reportable Accidents per 100,000 Train Miles	0.00	0.30	0.60	0.50	0.22		0.00	0.42	0.47
Passenger Accidents per 100,000 Boardings	0.052	0.007	0.039	0.035	0.018	$\bigcirc$	0.000	0.000	0.000
Complaints per 100,000 Boardings	1.04	1.01	2.73	2.26	2.75	$\bigcirc$	2.40	2.68	2.80
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	14.98	15.96	11.87	12.20	14.54	$\bigcirc$	0.00	5.37	30.04
*Lost Work Days per 200,000 Exposure Hours	1,460	1,068	766	808	1,179		2,167	788	-
*OSHA Injuries per 200,000 Exposure Hours	9.12	3.83	9.29	10.07	7.83	$\bigcirc$	5.60	0.00	-

Expo Line									
On-Time Pullouts	-	-	99.53%	99.50%	98.88%		99.80%	99.20%	100.00%
Mean Miles Between Chargeable Mechanical Failures	-	-	18,114	19,572	26,317		17,586	32,390	49,240
In-Service On-time Performance	98.70%	99.14%	98.61%	97.05%	98.24%		98.37%	96.62%	98.96%
Service Delivery Ratio	99.45%	99.64%	99.56%	99.65%	99.31%	$\bigcirc$	99.51%	99.70%	99.50%
Traffic Accidents Per 100,000 Train Miles	1.17	1.02	0.74	N/A	1.63	N/A	0.76	2.33	3.48
CPUC Reportable Accidents per 100,000 Train Miles	1.17	1.02	0.50	0.37	0.98		0.00	1.55	1.74
Passenger Accidents per 100,000 Boardings	0.000	0.000	0.019	0.000	0.028		0.000	0.066	0.000
Complaints per 100,000 Boardings	1.53	1.13	3.38	1.87	4.58		2.81	5.40	2.38
New Workers' Compensation Indemnity Claims per	-	24.97	8.44	0.00	20.45		15.31	22.34	24.74
*Lost Work Days per 200,000 Exposure Hours	-	937	73	0	626		1,407	1,012	-
*OSHA Injuries per 200,000 Exposure Hours	-	-	5.63	0.00	17.51		7.65	14.89	-

\* There is One Month lag in reporting this data

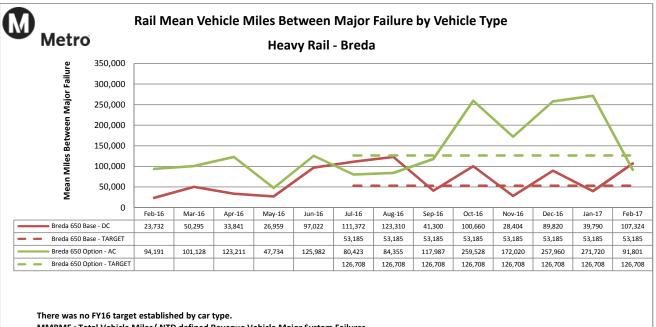
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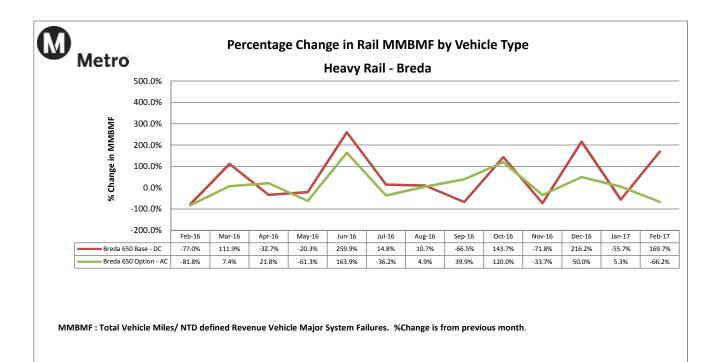
N/A = Not Available

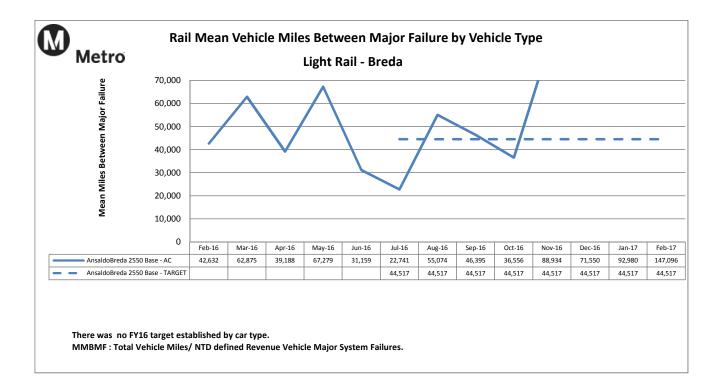
# **METRO RAIL PERFORMANCE – FEBRUARY 2017**

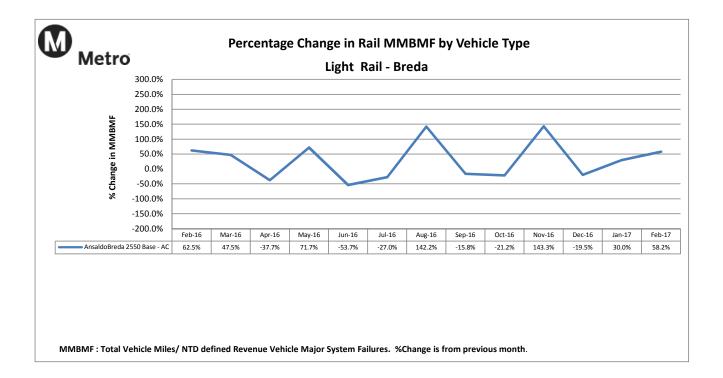


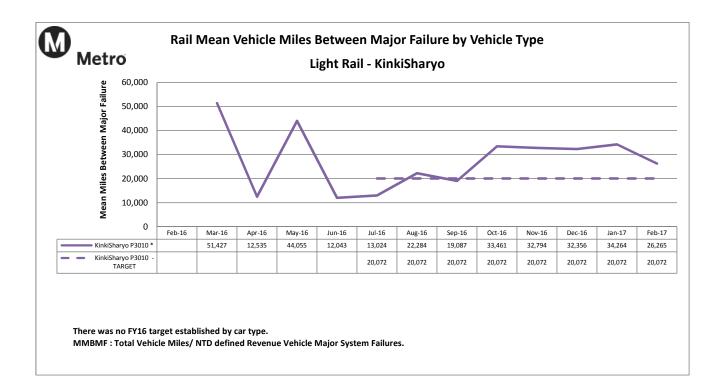
# **Rail Performance by Vehicle Type**

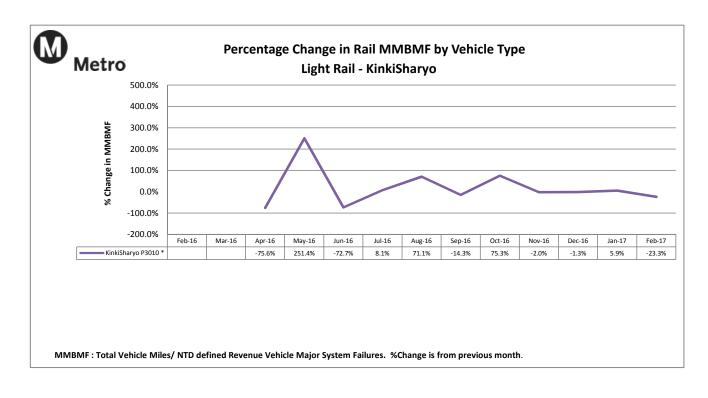
MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures.



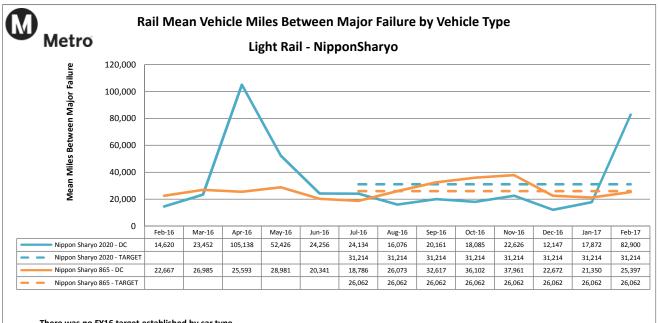






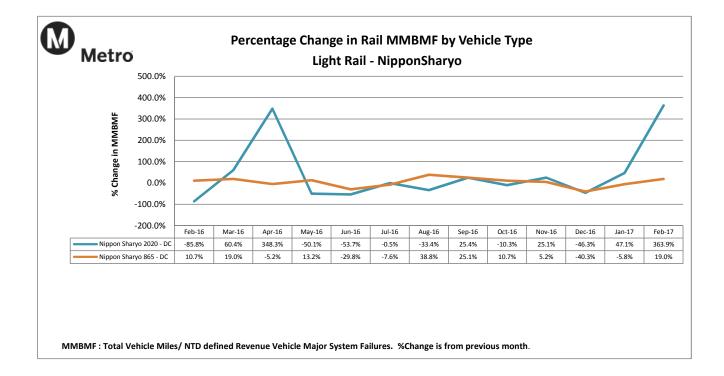


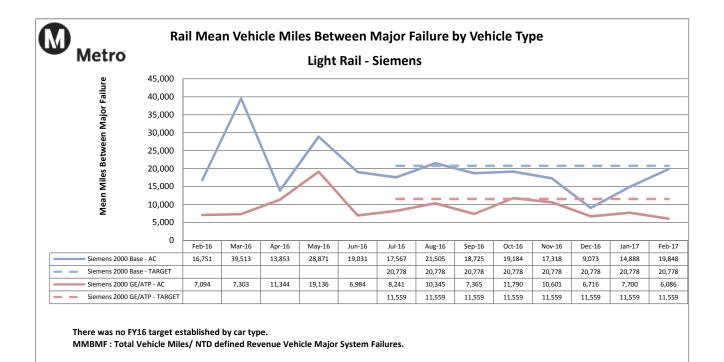
\* KinkiSharyo rolling stock began service March 2016

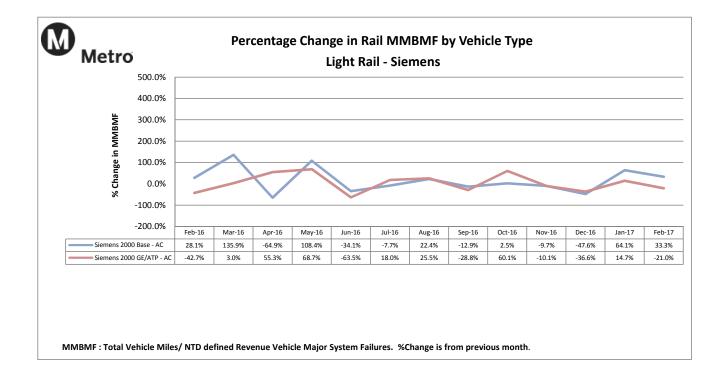


There was no FY16 target established by car type.

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







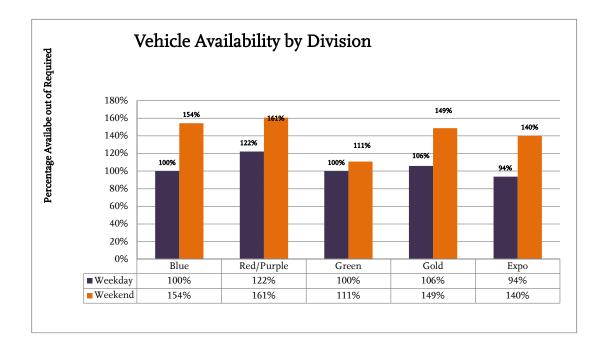
	FY 2016	FY 2017	FY 2017
	11 2010	Goal	YTD
AnsaldoBreda2550Base - AC	42,292	44,517	52,374
Breda 650 Base - DC	50,526	53,185	70,798
Breda 650 Option - AC	120,372	126,708	133,803
Kinkisharyo P3010	19,068	20,072	26,403
Nippon Sharyo 2020 - DC	29,653	31,214	19,493
Nippon Sharyo 865 - DC	24,759	26,062	26,231
Siemens 2000 Base - AC	19,739	20,778	16,118
Siemens 2000 GE/ATP - AC	10,981	11,559	8,338

# Mean Miles Beween Major Failures

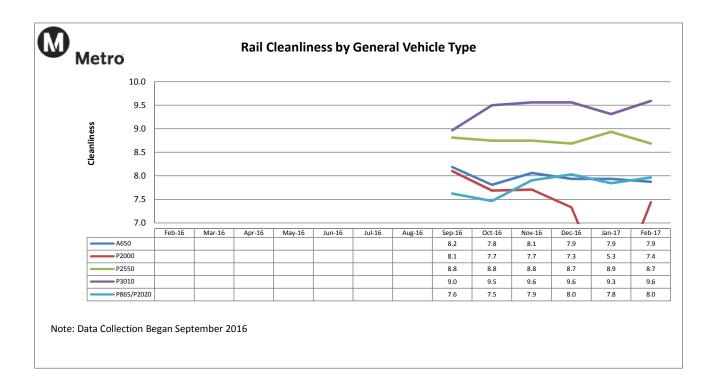
# **Rail Fleet Distribution – FEBRUARY 2017**

Number of Rail Vehicle Type by		Red /			
Division	Blue	Purple	Green	Gold	Ехро
AnsaldoBreda 2550 Base - AC				50	
Breda 650 Base - DC		30			
Breda 650 Option - AC		74			
KinkiSharyo P3010				15	39
Nippon Sharyo 2020 - DC	12				3
Nippon Sharyo 865 - DC	40				14
Siemens 2000 Base - AC			29		
Siemens 2000 GE/ATP - AC	19				4
TOTALS	71	104	29	65	60

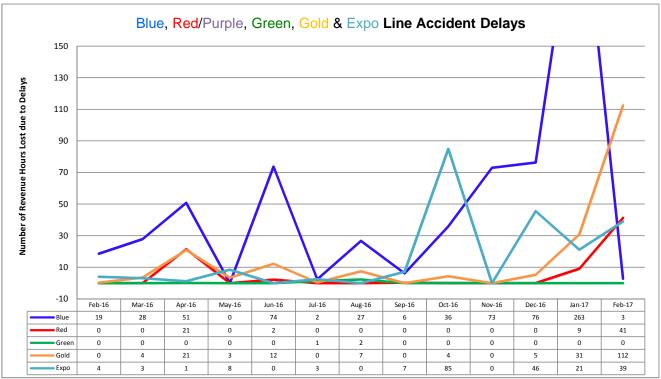
Blue			
Day Type	Vehicles Required	Average Available	Average % Available
Weekday	57	57	1009
Weekend	26	40	1549
Red/ Purple			
Day Type	Vehicles Required	Average Available	Average % Available
Weekday	64	78	1229
Weekend	40	64	1619
Green	·		
Day Type	Vehicles Required	Average Available	Average % Available
Weekday	22	22	1009
Weekend	14	16	1119
Gold			
Day Type	Vehicles Required	Average Available	Average % Available
Weekday	48	51	1069
Weekend	28	42	1499
Expo			
Day Type	Vehicles Required	Average Available	Average % Available
Weekday	47	44	949



# **Cleanliness by Vehicle Type**

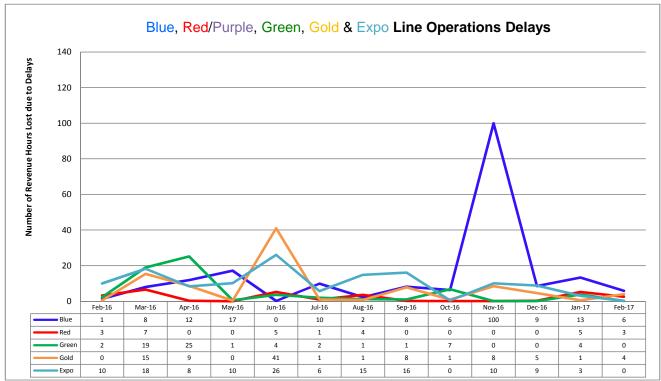


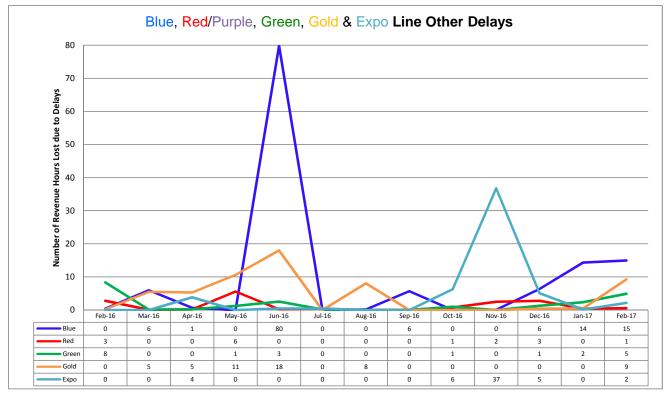
# **RAIL DELAYS BY CATEGORY - SYSTEMWIDE**



### **Revenue Hours Lost Related to - ACCIDENTS**

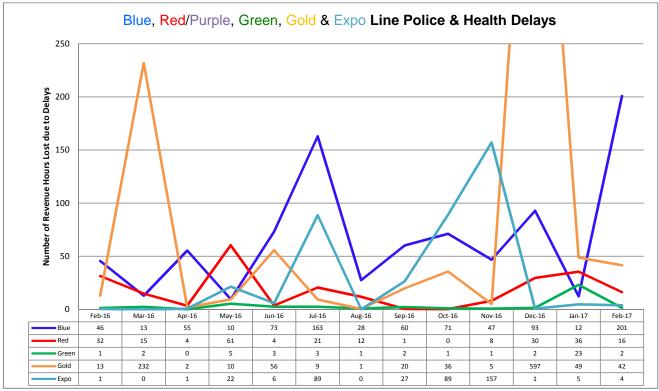
## **Revenue Hours Lost Related to - OPERATIONS**



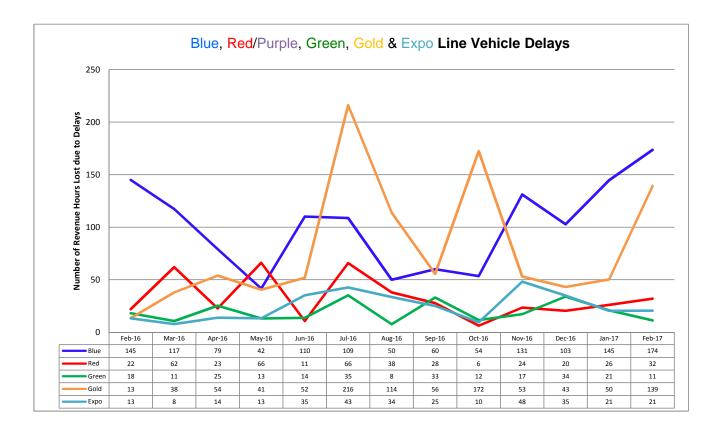


### **Revenue Hours Lost Related to - OTHER**

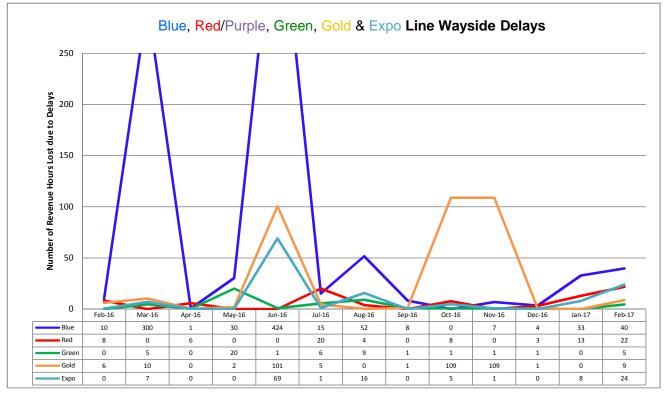
# Revenue Hours Lost Related to - POLICE & HEALTH



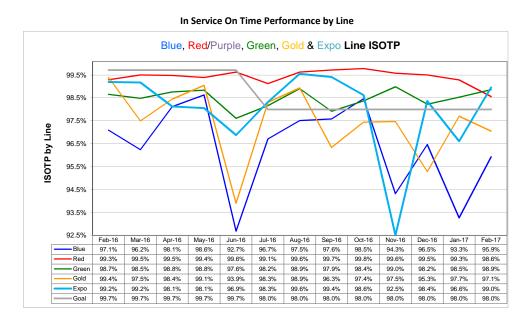
**Revenue Hours Lost Related to - Vehicle Delays** 



### **Revenue Hours Lost Related to - WAYSIDE**



### **Rail Service Performance**

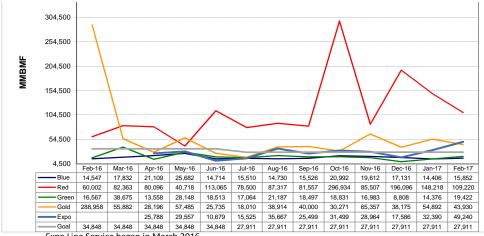


Ratio of Scheduled to Revenue Hours Delivered by Line Blue, Red/Purple, Green, Gold & Expo Line SRHD Scheduled to Actual Revenue Hours 99.5% 98.5% 97.5% 96.5% 95.5% 94.5% 93.5% Feb-16 Mar-16 Apr-16 May-16 Jun-16 Jul-16 Aug-16 Sep-16 Oct-16 Nov-16 Dec-16 Jan-17 Feb-17 - Blue 99.1% 97.8% 99.0% 99.6% 96.3% 98.5% 99.3% 99.3% 99.5% 98.5% 99.0% 97.8% 97.8% Red 99.8% 99.7% 99.8% 99.5% 99.9% 99.6% 99.9% 99.9% 100.0% 99.9% 99.8% 99.7% 99.6% - Green 99.6% 99.6% 99.4% 99.5% 99.8% 99.5% 99.8% 99.8% 99.8% 99.8% 99.6% 99.4% 99.7% Gold 99.8% 99.6% 99.7% 98.6% 98.9% 99.4% 99.7% 98.4% 99.1% 96.8% 98.4% 99.4% 99.4% Expo 99.8% 99.6% 99.8% 99.6% 98.9% 99.1% 99.6% 99.6% 98.9% 98.8% 99.5% 99.7% 99.5%

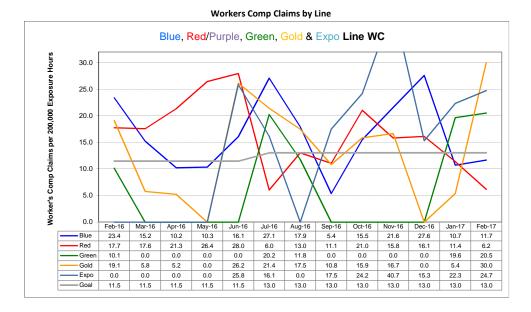
### Mean Miles Between Mechanical Failures by Line

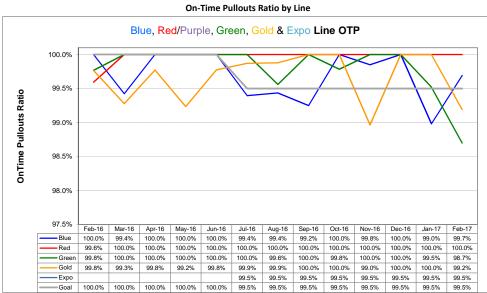
Blue, Red/Purple, Green, Gold & Expo Line MMBMF

<sup>354,500</sup> T



Expo Line Service began in March 2016.

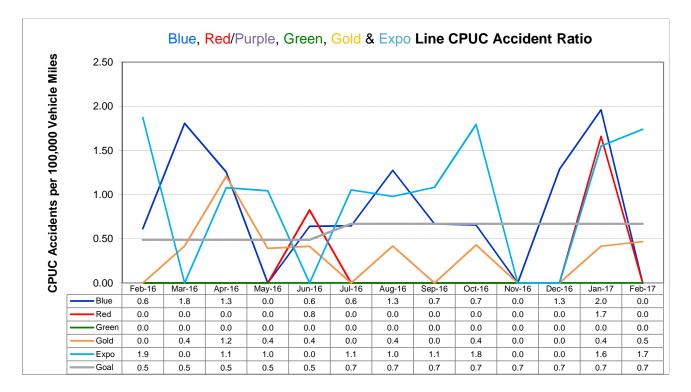




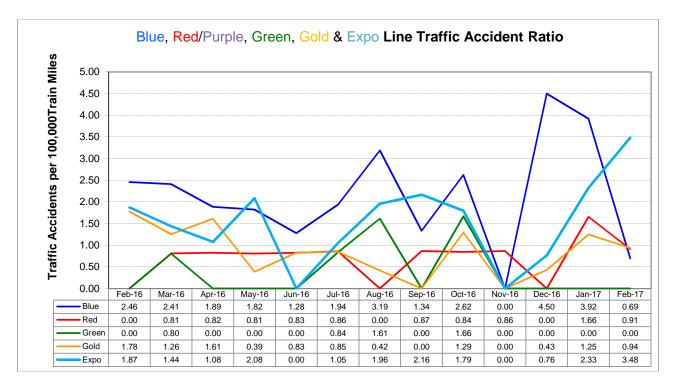
Expo Line Service began in March 2016.

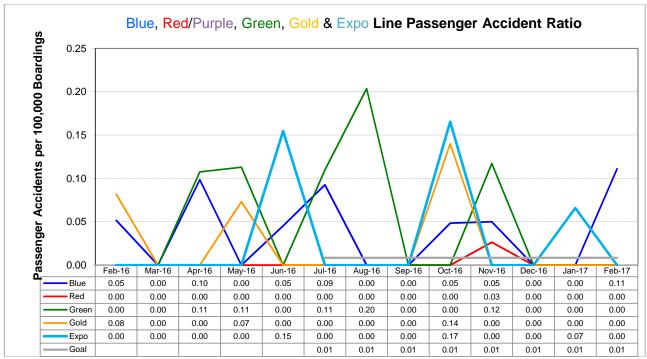
# **Rail Safety Performance**

## **CPUC REPORTABLE ACCIDENTS PER 100,000 TRAIN MILES**



## **TRAFFIC ACCIDENTS PER 100,000 TRAIN MILES**

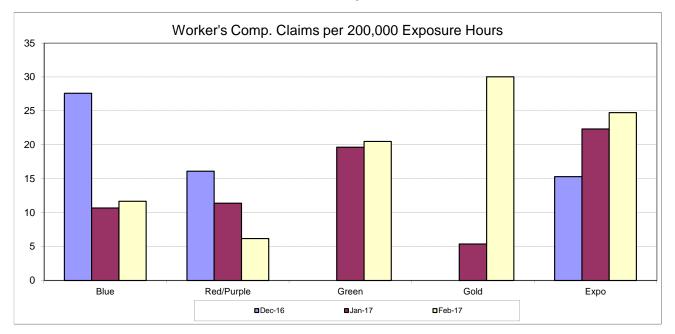




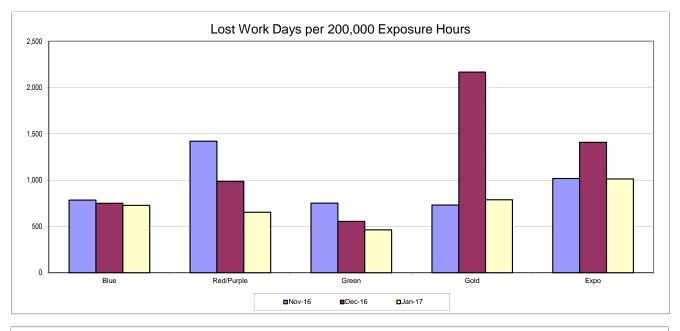
### PASSENGER ACCIDENTS PER 100,000 BOARDINGS

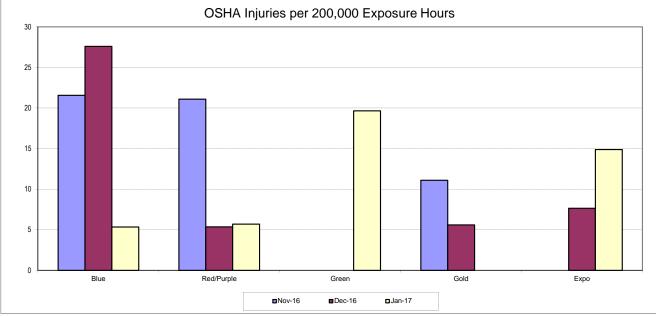
Expo Line Service began in March 2016.

# Worker's Comp. Claims Dec 2016 - Feb 2017 3 Month Comparison

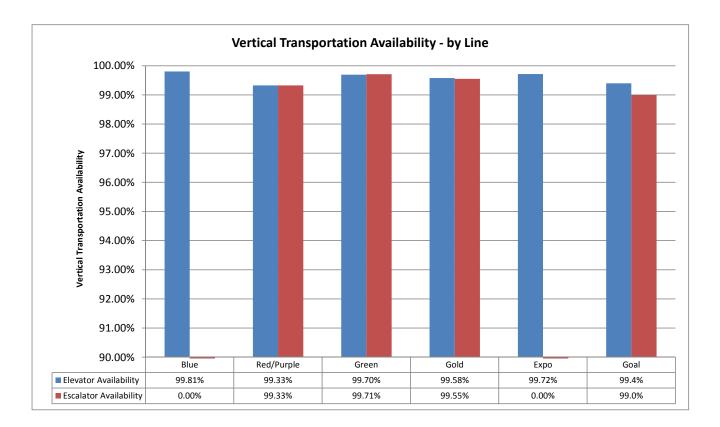


# Lost Work Days and OSHA Injuries Nov 2016 - Jan 2017 3 Month Comparison





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

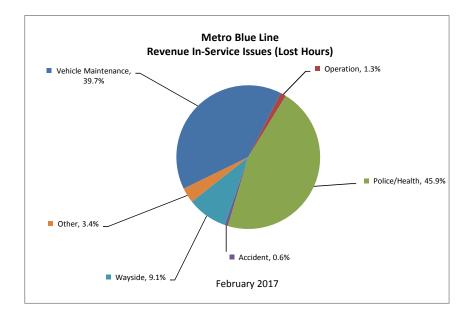
# **BLUE LINE**

Out of a total of 19,045 hours operated, there were approximately 438 total hours of service delays.

	Revenue	
February 2017 Service Hours *	Hours	Per Cent
Revenue Hours without Delays	18,607	97.7%
Cancelled + Delayed Hours	438	2.3%
Total Revenue Hours	19,045	100.0%

Summary of the major contributors:	Count	Hours	Per Cent
Operations	4	5.8	1.3%
Accidents	1	2.8	0.6%
Vehicle Maintenance	59	173.7	39.7%
Wayside	4	39.8	9.1%
Police & Health	20	200.9	45.9%
Other	9	15.0	3.4%
Total	97	438.1	100.0%

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



### February 2017 Blue Line major delay contributors were as follows:

### **Operations Incidents:**

2/13/2017 5:26:00 AM - Incident# 2833807 (0 lost trips, 7 lost minutes) Train #110 departing late due to Operator 10-100

### 2/21/2017 7:13:00 PM - Incident# 2837227 (1 lost trip, 168 lost minutes)

Train Delay T-149 Train 104 Willow Station Southbound.

2/23/2017 10:48:00 AM - Incident# 2837900 (0 lost trips, 8 lost minutes) Train 104 departed Transit Mall 8 minutes late due to a 10-100

### 2/28/2017 4:38:00 PM - Incident# 2839740 (1 lost trip, 168 lost minutes)

Train 121: Loss of Air Pressure T-246 Cars: 110, (126), 124 Del Amo, trk 2, SB

### Accidents:

2/8/2017 11:38:00 AM - Incident# 2832413 (1 lost trip, 168 lost minutes) Train vs. Other (10-390 hit windshield of train as it was approaching Florence Station).

### Vehicle Maintenance Incidents:

2/1/2017 6:08:00 AM - Incident# 2829571 (3 lost trips, 502 lost minutes) Friction Brakes (Emergency Braking) (231A)--230-250 Train 106 T-76 Compton, Southbound, Track 2

### 2/1/2017 6:12:00 AM - Incident# 2829589 (0 lost trips, 7 lost minutes)

No Fault - No Movement (163)-100-148 Train 115 T-69 Willow, Northbound, Track 1

### 2/2/2017 9:35:00 AM - Incident# 2830079 (0 lost trips, 6 lost minutes)

Prop fault on car 229A T-81, train 104 (229)-248-235 7MC, tail track 1, south

### 2/2/2017 4:58:00 PM - Incident# 2830265 (0 lost trips, 10 lost minutes)

No Fault - No Movement on car 1014 T-325, train 628 (1014)-1027 Junction, track 2, south

### 2/2/2017 5:14:00 PM - Incident# 2830276 (2 lost trips, 335 lost minutes)

Prop fault on car 123 T-300, train 108 139-(123)-158 Compton Station, track 1, north

### 2/2/2017 6:24:00 PM - Incident# 2830289 (1 lost trip, 178 lost minutes)

Operator reports of re-occurring Propulsion faults with Speed Restriction. Train 101 T-300 Cars(302) 236, 301 Vernon Station, Track 1, Northbound.

### 2/3/2017 6:09:00 AM - Incident# 2830404 (1 lost trip, 175 lost minutes)

Operator reports of train not having any cab signals. Train 103 T-046 Cars (248)-244-233 Trk 2 Washington Station Southbound

### 2/3/2017 10:28:00 AM - Incident# 2830561 (3 lost trips, 507 lost minutes)

Recurring propulsion fault with a speed restriction. Train#107 T#79 (153A),113,119 Track 2,Vernon Station,Southbound

### 2/3/2017 1:11:00 PM - Incident# 2830701 (1 lost trip, 174 lost minutes)

Propulsion fault with a speed restriction. Train#111 T#292 (117B),162,135 Track 2, Florence Station,Southbound

### 2/6/2017 5:09:00 PM - Incident# 2831588 (2 lost trips, 335 lost minutes) Train operator reports smoking brakes at Del Amo Station.

Train 124, T-307 237-(248AB)-239 Track 2, Del Amo, South

### 2/6/2017 6:51:00 PM - Incident# 2831606 (1 lost trip, 174 lost minutes)

Prop/Dyanmic Unclearable Train 101 Track #2 SB Florence Interlocking T-490 (301B)-229

### 2/6/2017 11:06:00 PM - Incident# 2832118 (0 lost trips, 20 lost minutes)

Doors Train 103 (242-235-302) Trk 1 Wardlow Station 20 minute service delay

### 2/7/2017 4:55:00 AM - Incident# 2831705 (0 lost trips, 12 lost minutes)

Propulsion Fault Dynamic Train 109 T-200 (242)-235-302 TRK 2 20th Street

### 2/7/2017 11:26:00 AM - Incident# 2831912 (2 lost trips, 350 lost minutes)

No movement at 55th Grade Train 102 Consist: (239), 232, 250 T-102 55th grade, northbound, track 2

### 2/8/2017 11:58:00 AM - Incident# 2832434 (1 lost trip, 168 lost minutes)

Doors (242B)-302-235 Train 109 T-164 Transit Mall, Northbound, Track 2

### 2/9/2017 7:59:00 AM - Incident# 2832747 (0 lost trips, 4 lost minutes)

Train 111 reporting overspeed on LRV 101A Unable to proceed north from Vernon Station. Train 111 T-046 LRV'S (101A) 168-119 Vernon Station, Track 1, Northbound.

### 2/9/2017 9:16:00 AM - Incident# 2832781 (1 lost trip, 172 lost minutes)

Car Logic alarm on LRV 148A (No Movement) Train 103 T-164 LRV'S (148A)145-105 Transit Mall Station Track 1, northbound.

### 2/10/2017 5:06:00 AM - Incident# 2833086 (2 lost trips, 332 lost minutes)

Coupler/ Uncoupled on the Main Line. Train 111 T-152 238-234-(229) S/B Mile Post 17 before Wardlow Station 12 minute delay

### 2/10/2017 6:20:00 PM - Incident# 2833386 (0 lost trips, 20 lost minutes)

Operator T-201 reports of self applying brakes. Train 105 T-201 Cars (239B) 240, 239 8th St, Track 1, Northbound

### 2/10/2017 6:24:00 PM - Incident# 2833384 (0 lost trips, 6 lost minutes)

Operator T-79 reports of no movement. Train 123 T-79 Cars (165), 163, 117 108th St Grade Crossing, Track 2, Southbound

### 2/11/2017 5:45:00 PM - Incident# 2833593 (0 lost trips, 4 lost minutes)

Door will not open. Train 110 T-059 (241)235 Northbound, Track 1 Willow station.

### 2/14/2017 4:03:00 PM - Incident# 2834529 (0 lost trips, 10 lost minutes)

Train-126 T-086 Cars (229A)-230-302 Northbound, Track #1 103rd Street Station Doors, Operator unable to cutout.

### 2/14/2017 4:17:00 PM - Incident# 2834541 (0 lost trips, 10 lost minutes)

Train-101 T-415 Cars 235-(239)-241 SOuthbound Track #2 Willowbrook Station Propulsion / Dynamic Brakes unable to clear.

### 2/15/2017 4:45:00 AM - Incident# 2834634 (2 lost trips, 340 lost minutes)

Doors/Train Line Train 108 T-262 140-131-(118) Del Amo Sation N/B Trk 1

### 2/15/2017 8:07:00 AM - Incident# 2834737 (0 lost trips, 13 lost minutes)

Train-105 T-095 Cars (250)-240-238 Southbound Track #2 Compton Station Propulsion / Dynamic Brakes unable to clear.

### 2/16/2017 5:25:00 PM - Incident# 2835356 (0 lost trips, 10 lost minutes)

Train 124 reporting no movement wit a friction brake problem Train 124 T-307 LRV'S ( 232 ) 242-239 103rd Street Station, Track 1 , northbound.

### 2/17/2017 5:18:00 AM - Incident# 2835455 (0 lost trips, 19 lost minutes)

Doors/Train Train 102 T-281 (104)-119-103 7th Metro S/B/ Grand Station 19 minute service delay

### 2/17/2017 6:59:00 AM - Incident# 2835530 (1 lost trip, 166 lost minutes)

Train 108 T-26 164-158-(136) Washington S/B 6 minute delay

### 2/17/2017 10:20:00 AM - Incident# 2835598 (1 lost trip, 166 lost minutes)

Spin slide, prop fault with speed restirction. Train 101 T-352 (241)-237-235 NB, Pacific Station, Track 1

### 2/17/2017 2:42:00 PM - Incident# 2835783 (0 lost trips, 6 lost minutes)

7th/Metro: No Movement Southbound T-256, Train 107 Cars 113-119-104 Train Controller: R-168 Communications Controller: R-066

### 2/18/2017 12:05:00 AM - Incident# 2835995 (1 lost trip, 116 lost minutes)

Propulsion faults with speed restriction. Train 101 T-81 Track 1, N/B Wardlow Station (233A)-302

### 2/18/2017 6:27:00 AM - Incident# 2836041 (1 lost trip, 116 lost minutes)

Propulsion faults with speed restriction. Train 109 T-200 Track 2, S/B Grand station (136A)-158-164

### 2/18/2017 8:29:00 AM - Incident# 2836071 (0 lost trips, 21 lost minutes)

Operator reports no movement at 5th Street Station Train 103 T-076 LRV'S (241) 248 5th Street Station, track 2, southbound.

### 2/18/2017 2:14:00 PM - Incident# 2836137 (10 lost trips, 1,162 lost minutes)

Friction Brakes self applying brakes with no Movement. Train 108 T-258 LRV'S (241) 248 Willow Street, track 2, southbound.

### 2/19/2017 4:27:00 AM - Incident# 2836243 (1 lost trip, 174 lost minutes)

Operator reports of a friction Brake Fault with restricted speed Train #105 T-390 Cars(244)-239-242 Del Amo Station Northbound TRk 1

### 2/19/2017 8:57:00 AM - Incident# 2836277 (1 lost trip, 178 lost minutes)

Friction Brakes no movement. Train 105 T-079 (112B)-161-150 Northbound, Nadeau Track 1.

#### 2/20/2017 5:48:00 AM - Incident# 2836458 (1 lost trip, 168 lost minutes)

Propulsion / Dynamic Brakes (107A)-158-161 Train 112 T-50 Artesia, Northbound, Track 1

#### 2/21/2017 4:52:00 AM - Incident# 2836813 (1 lost trip, 168 lost minutes)

Friction Brake Fault Unclearable friction brake fault Train 107 T-259 (155)-148-156 N/B Artesia

### 2/21/2017 5:36:00 AM - Incident# 2836838 (1 lost trip, 168 lost minutes) AC Fault

Train 102 T-281 237-(240)-248 S/B Artesia Station

#### 2/21/2017 6:53:00 AM - Incident# 2836852 (1 lost trip, 168 lost minutes)

Propulsion Faults Train 118 T-246 (165)-136 Compton Station N/B Trk 1

# 2/21/2017 9:11:00 AM - Incident# 2836894 (0 lost trips, 11 lost minutes)

Friction Brake/ No movement. Train #105. T-281. LRV-(244A), 239, 301. 119th Street, Northbound, Track #1.

### 2/22/2017 6:35:00 PM - Incident# 2837663 (2 lost trips, 347 lost minutes)

Operator reports no movements southbound. Cars 162, 128, 148 Train 126 T-307 Washington TRK 2, southbound

### 2/23/2017 12:08:00 AM - Incident# 2837849 (0 lost trips, 4 lost minutes)

Train 104 reporting re occurring self applying brakes. Train 104 T-282 LRV'S 239B-244-237 Transit Mall, track 2, northbound.

### 2/23/2017 4:43:00 AM - Incident# 2837752 (0 lost trips, 12 lost minutes)

Friction Brakes No Movement Train 101 T355 (239)-244-237 N/B 1N 7th Metro 12 minute delay

### 2/23/2017 4:49:00 AM - Incident# 2837750 (2 lost trips, 349 lost minutes)

Doors/No Movement Train 109 T-200 (242)233-301 S/B Willow trk 2 13 minute delay

### 2/23/2017 2:21:00 PM - Incident# 2838037 (1 lost trip, 174 lost minutes)

Train 110 reports Dynamic Brakes fault on LRV 100A Train 110 T-321 LRV'S ( 100A )- 127-129 8th & Pacific, track 1, north.

### 2/23/2017 3:59:00 PM - Incident# 2838096 (0 lost trips, 10 lost minutes)

Train 108 reports getting a call over the intercom from a passengers about smoking brakes. Train 108 T-026 LRV'S (248)231-241 Florence Station Track 2, southbound.

### 2/23/2017 6:35:00 PM - Incident# 2838153 (0 lost trips, 6 lost minutes)

Operator T-201 reports of having self applying brakes. Train 111 T-201 Cars (120A) 138-155 Willow Station, Track 2, Northbound

#### 2/23/2017 7:00:00 PM - Incident# 2838158 (0 lost trips, 14 lost minutes)

Operator T-238 could not engage street run. Train 108 T-238 Cars (231B),242 5th Street Station, Track 2, Southbound

### 2/23/2017 7:59:00 PM - Incident# 2838547 (1 lost trip, 168 lost minutes)

Operator T-258 reports of self-applying brakes. Train 105 T-258 Cars (301B)- 233-242 Anaheim Station, Track 1, Northbound

2/24/2017 3:21:00 PM - Incident# 2838491 (2 lost trips, 338 lost minutes) Train 102 reports Propulsion Faults and speed restriction of 35mph northbound.

### 2/26/2017 1:28:00 PM - Incident# 2838869 (1 lost trip, 151 lost minutes)

Reports smoking brakes. Train 105, T-042 (242)-239-238 Track 1, Willowbrook, North

### 2/26/2017 2:49:00 PM - Incident# 2838879 (1 lost trip, 158 lost minutes)

Train reported a propulsion fault, unclearable, with a speed restriction. Train 111, T-505 (301B)-232-233 Track 2, Del Amo, South

### 2/26/2017 8:00:00 PM - Incident# 2838911 (3 lost trips, 453 lost minutes)

Train operator reports loss of power at 18th and flower. Train 109, T-495 (127)-111 Track 1, 18th & Flower, North

### 2/27/2017 7:40:00 AM - Incident# 2839085 (0 lost trips, 4 lost minutes)

Reports door problem. Train # 104 T-335 234-(250)-229 7th and Metro Center Station, Track 1, NB

### 2/27/2017 11:10:00 AM - Incident# 2839180 (1 lost trip, 180 lost minutes)

No fault, no movement. Train 109 Consist: (118b), 151,148 T-076 Florence Station, southbound, track 2

### 2/27/2017 12:29:00 PM - Incident# 2839216 (0 lost trips, 8 lost minutes)

No fault, no movement Train 105 Consist: 220-250-(234) T-201 North of Stockwell St, southbound, track 2

### 2/27/2017 2:20:00 PM - Incident# 2839257 (2 lost trips, 347 lost minutes)

Self applying Friction Brakes after going into Emergency braking to avoid making contact with a trespasser. Train 103 T-286 LRV'S (239B) 242-235

# Century Crossing, track 1, northbound.

### 2/27/2017 4:58:00 PM - Incident# 2839321 (6 lost trips, 1,018 lost minutes)

Train 105 reports no movement with Propulsion Faults. Train 105 T-352 LRV'S ( 246A ) 237-238 Slauson Station, Track 2 , southbound.

### Wayside Incidents:

2/6/2017 8:52:00 AM - Incident# 2831342 (8 lost trips, 1,353 lost minutes) DC Breaker: Open at San Pedro B02/B04 Washington B02/B04 and deenergized tracks, with Train 108 smoke in trailing car 153 at San Pedro Station.

### 2/7/2017 10:43:00 AM - Incident# 2831896 (2 lost trips, 341 lost minutes)

Per Adeline at x21600 customer reports tire damage at Washington/Long Beach Av track.

#### 2/17/2017 1:25:00 PM - Incident# 2835680 (4 lost trips, 684 lost minutes)

Greenleaf Grade Crossing Gate Broken

### 2/24/2017 4:39:00 AM - Incident# 2838231 (0 lost trips, 11 lost minutes)

Switch 13 at Willow pocket track out of correspondence.

### Police & Health Incidents:

### 2/1/2017 7:07:00 PM - Incident# 2829857 (0 lost trips, 6 lost minutes) Operator reports of a female patron reporting being threatened by a male individual with a gun. Train 101 T-187 Cars(143A), 157, 126 Grand Station, Track 2, Southbound.

### 2/3/2017 6:38:00 PM - Incident# 2830759 (11 lost trips, 1,826 lost minutes)

Deputy Roguey from LASD, contacted control reporting that one of the Street lights pole at Long Beach Blvd and Burnett Blvd is smoldering and smoking.

### 2/4/2017 8:04:00 AM - Incident# 2830851 (0 lost trips, 16 lost minutes)

LASD requested time points for train 105 to remove 10\*390; Unresponsive patron; medical response; taken into custody. Train 105 T-262 NB, Pacific Station, Track 1

### 2/6/2017 1:46:00 AM - Incident# 2831169 (0 lost trips, 50 lost minutes)

Automobile incursion onto ROW near 55th Street intersection. Fencing needs to be repaired/replaced btwn 49th & 50th Streets.

### 2/7/2017 6:30:00 PM - Incident# 2832074 (0 lost trips, 6 lost minutes)

Traffic Accident/Track #1 Blocked Train 101 SB Washington/Hooper St T-293

### 2/8/2017 11:06:00 PM - Incident# 2832604 (0 lost trips, 17 lost minutes)

Operator T-86 reports of a male patron having a seizure aboard the train. Train 109 T-86 Cars 113-156 Willow Station, Track 1, Northbound

### 2/9/2017 6:04:00 PM - Incident# 2833000 (0 lost trips, 10 lost minutes)

Operator T-211 reports of a male patron having a seizure aboard the train. Train 105 T-211 Cars 165-163-117 103rd Station, Track 1, Northbound

### 2/9/2017 9:19:00 PM - Incident# 2833045 (2 lost trips, 335 lost minutes)

Deputy Ason reported a suspect with a firearm at Firestone Station Platform.

### 2/13/2017 5:09:00 PM - Incident# 2834144 (0 lost trips, 7 lost minutes)

Blockade. Washington/Long Beach, Track #2, Southbound. Train #119. T-240. LRV- (151A), 149, 148.

### 2/15/2017 9:56:00 PM - Incident# 2834988 (0 lost trips, 9 lost minutes)

Deputy Pearston requested to hold Train 101, operator T-75 at 103rd St Station, due to a male patron with a knife.

### 2/16/2017 4:36:00 PM - Incident# 2835337 (0 lost trips, 6 lost minutes)

R-136 reporting a female on board train 126, LRV 231 is claiming that she got shot, no bleeding or injury visible.

### 2/16/2017 4:51:00 PM - Incident# 2835342 (0 lost trips, 10 lost minutes)

Train 106 got a call over the intercomm reporting a physical fight on board at 1651 hours at Vernon Station.

### 2/18/2017 6:23:00 PM - Incident# 2836194 (0 lost trips, 6 lost minutes)

Operator T-149 reports of a male patron requesting medical assistance. Train 101 T-149 Cars(154A)-123-119 7th/Metro, Track 1, Northbound

### 2/18/2017 7:18:00 PM - Incident# 2836207 (0 lost trips, 13 lost minutes)

Private security officer Gabriel at Del Amo Station reported a passenger who exited the train reported to him, of a black male with a blue shirt and black pants, threatening passengers with a screwdriver.

### 2/18/2017 7:35:00 PM - Incident# 2836214 (0 lost trips, 9 lost minutes)

Operator T-53 reports of a male patron with a knife aboard the train. T-53 Train 110 Cars 123-1119 Florence Station, Track 1, Northbound

#### 2/19/2017 12:14:00 PM - Incident# 2836308 (0 lost trips, 6 lost minutes)

Assault Train 106 T-522 106-115-140 Northbound, track 1 Florence station.

#### 2/23/2017 1:25:00 PM - Incident# 2837999 (1 lost trip, 178 lost minutes) Train 105 reports that an African American female is having a seizure onboard on LRV 126A At Del Amo Station

### 2/25/2017 6:34:00 PM - Incident# 2838745 (1 lost trip, 151 lost minutes)

Deputy Witmore request for the Trains to bypass Firestone Station due to police activity.

### 2/28/2017 5:25:00 AM - Incident# 2839441 (56 lost trips, 9,387 lost minutes)

Vehicle entered ROW at Pico BI northbound thru 12th st and came to rest blocking tracks 1 & 2 inside Pico Portal.

### 2/28/2017 7:29:00 PM - Incident# 2839763 (0 lost trips, 6 lost minutes)

7th/Metro: Possible 10-390 Black Male, 40-48 years of age

### **Other Incidents:**

2/6/2017 4:39:00 AM - Incident# 2831181 (2 lost trips, 335 lost minutes) Out Late: Mechanical failure (3x in yard)

### 2/8/2017 12:35:00 AM - Incident# 2832116 (0 lost trips, 20 lost minutes)

Soiled Train Train 108 T-86 (245B)-233 7thMetro Trk 2 20 min delay

### 2/11/2017 4:30:00 AM - Incident# 2833445 (0 lost trips, 6 lost minutes)

Train105 was late to Yard Limits Train 105 T-095 120-149-161 Yard Limits, Signal 4N, northbound

### 2/13/2017 6:40:00 AM - Incident# 2833884 (1 lost trip, 168 lost minutes)

Train #119 experienced propulsion brake faults and a speed restriction arriving at the yard limits.

### 2/15/2017 3:37:00 AM - Incident# 2834633 (0 lost trips, 7 lost minutes) T-95 caused 7 minute service delay due to operator error. Unknown reason for delay.

### 2/16/2017 5:52:00 AM - Incident# 2835059 (0 lost trips, 10 lost minutes)

Train Late, Yard control and operator error. Train 101 T-95 (239)-242-232 Transit Mall N/B

### 2/18/2017 9:00:00 AM - Incident# 2836068 (2 lost trips, 232 lost minutes)

Train 193 pull-out 30 minutes late due to no manpower at the Yard.

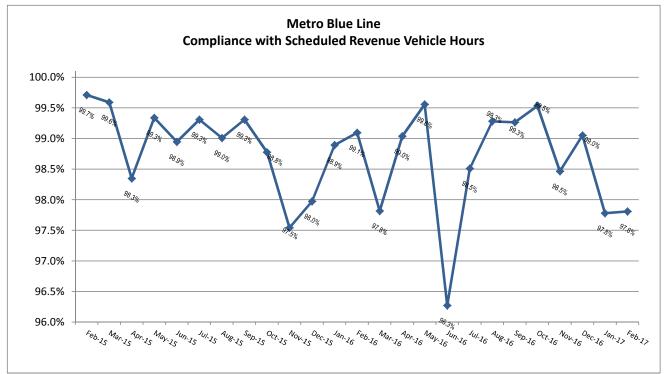
### 2/18/2017 1:16:00 PM - Incident# 2836120 (1 lost trip, 116 lost minutes)

Patron kick the glass window out door number 5/6 on LRV 141B. Train 111 T-522 LRV'S (141B ) 115-140 Willowbrook Station, track 2, southbound.

### 2/19/2017 2:00:00 PM - Incident# 2836329 (0 lost trips, 5 lost minutes)

Train 109 delayed 5 minutes at relief platform. T-335 Track 2 Southbound 232-240 Operator making relief T-353

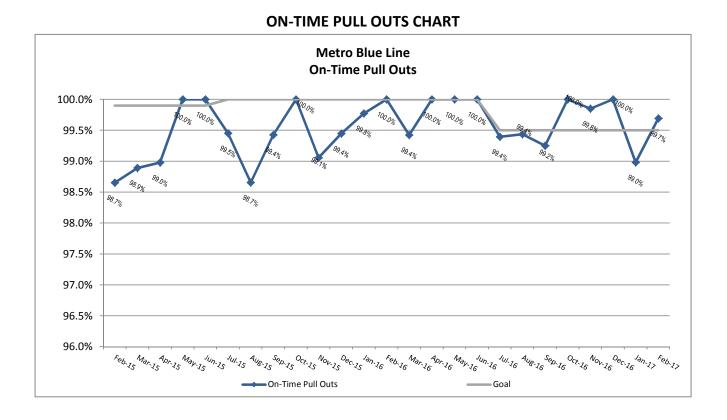
# MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS



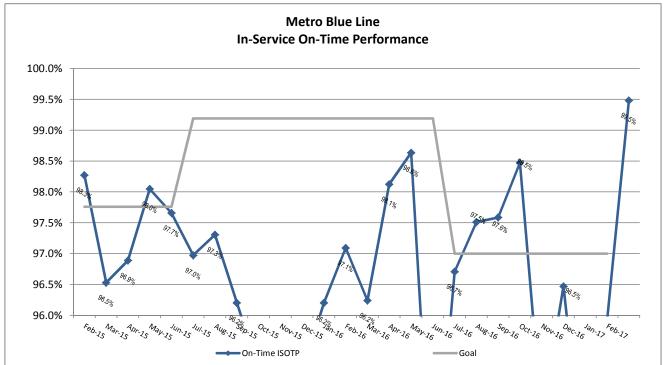
## COMPLIANCE WITH SCHEDULED VEHICLE HOURS CHART

COMPLIANCE WITH SCHEDULED TRAIN MILES CHART

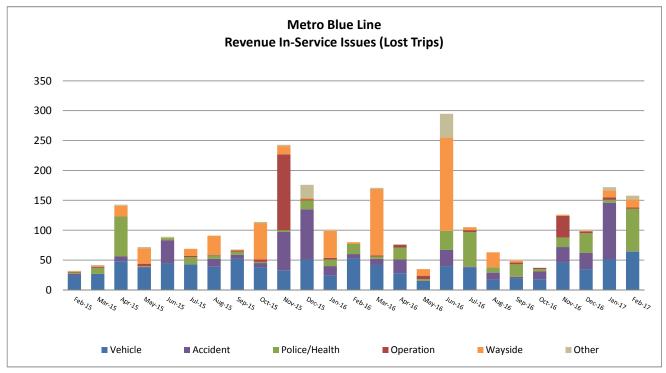




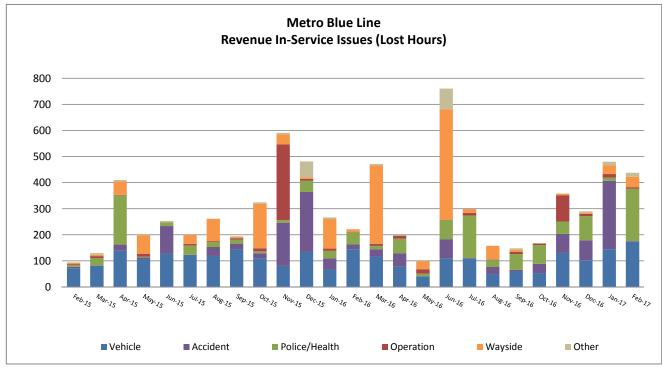
# IN-SERVICE ON-TIME PERFORMANCE CHART

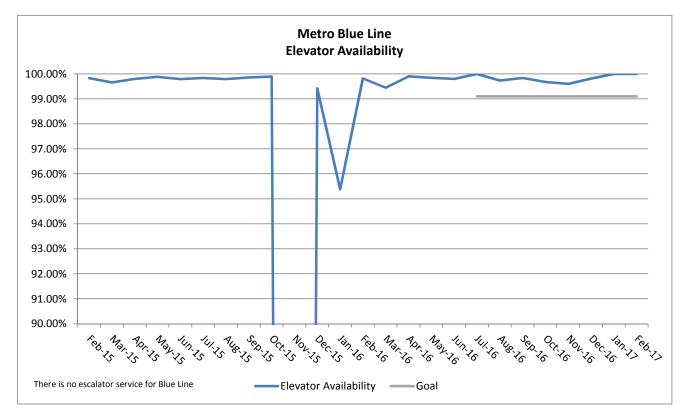


## LOST TRIPS



# LOST HOURS





## VERTICAL TRANSPORTATION AVAILABILITY

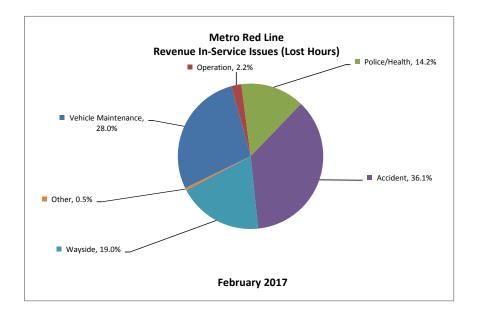
# **RED LINE**

Out of a total of 24,817 hours operated, there were approximately 114 total hours of service delays.

	Revenue	
February 2017 Service Hours *	Hours	Per Cent
Revenue Hours without Delays	24,703	99.5%
Cancelled + Delayed Hours	114	0.5%
Total Revenue Hours	24,817	100.0%

Summary of the major contributors:	Count	Hours	Per Cent
Operations	2	2.6	2.2%
Accidents	3	41.3	36.1%
Vehicle Maintenance	12	32.0	28.0%
Wayside	2	21.7	19.0%
Police & Health	9	16.3	14.2%
Other	3	0.6	0.5%
Total	31	114.5	100.0%

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



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

#### **Operations Incidents:**

#### 2/3/2017 9:15:00 PM - Incident# 2830773 (1 lost trip, 149 lost minutes) Work Permit: D-005 Dyna Electric Single Tracking Vermont/Santa Monica to Hollywood/Vine. 09:00 Hrs Traction Power Breaker unable to close, incident caused revenue service disruption.

## 2/21/2017 5:46:00 PM - Incident# 2837214 (0 lost trips, 4 lost minutes)

T-006 requests authorization to enter the main line with cars 521,530,553,554 for testing purposes.

### Accidents:

2/5/2017 5:48:00 AM - Incident# 2831031 (20 lost trips, 2,340 lost minutes) Train 205 (549,550,543,544)T-101 reports 10-72 at MPM 7.3 on the AL, just west of crosspassage 28.

### 2/21/2017 5:53:00 AM - Incident# 2836833 (0 lost trips, 20 lost minutes)

Westbound train 210 arcing on approach to North Hollywood AR. False Occupancy at North Hollywood Interlocking AR Track.

### 2/25/2017 5:07:00 AM - Incident# 2838605 (1 lost trip, 121 lost minutes)

Train 202 entered Hollywood/Highland Station individual fell and made contact with train.

#### Vehicle Maintenance Incidents:

#### 2/1/2017 7:25:00 AM - Incident# 2829622 (0 lost trips, 10 lost minutes)

Flashing Cab Signals Car # 583 Union Station AR West Train # 202 T-367 Car # (583)-584-573-574

#### 2/2/2017 11:57:00 AM - Incident# 2830153 (0 lost trips, 6 lost minutes)

Train 205 (565,566,589,590) T-333, Westlake Station, AL reports someone reported that an individual was banging their head in car 565 and shattered the window.

### 2/2/2017 7:24:00 PM - Incident# 2830293 (0 lost trips, 20 lost minutes)

Reports emergincy brake failure and unable to move.

## 2/3/2017 11:05:00 AM - Incident# 2830570 (0 lost trips, 20 lost minutes)

Train 205 (567,568,553,554) T-080, 7th & Metro and again at Vermont Beverly Station, AR reports emergency brake application with one door off of the platform.

#### 2/3/2017 6:36:00 PM - Incident# 2830744 (1 lost trip, 149 lost minutes)

Train 201: Air Loss/Emergency Brake Application T-117 Wilshire Western, BR Cars: 535,542,549,550

#### 2/7/2017 4:56:00 PM - Incident# 2832050 (0 lost trips, 12 lost minutes)

Train 219 (527,522,509,508,507,510) T-041, 7th & Metro, AR reports he has door problems, responding to trouble shoot.

## 2/8/2017 4:11:00 PM - Incident# 2832497 (5 lost trips, 742 lost minutes)

Train 218 (547,548,543,544,569,570) T-271, North Hollywood Station, AR reports that on his westbound trip he noticed car 547 indicated electric brake and propulsion cut out and he had to engage in MTO a couple of times to release friction brakes.

#### 2/8/2017 5:23:00 PM - Incident# 2832551 (1 lost trip, 148 lost minutes)

Service Brake Failure and Propulsion Failure. Train # 218 T-329 Cars #577-578-555-(556)-535-536. E/Bound Hollywood A/L Track.

#### 2/9/2017 6:35:00 AM - Incident# 2832716 (1 lost trip, 148 lost minutes)

Operator reports a loss of propulsion/no movement at Wilshire Vermont AL east. Train T-90

Cars 567 568 (547) 547.

## 2/17/2017 3:50:00 PM - Incident# 2835805 (1 lost trip, 149 lost minutes)

R-052 reports excessive amount of water accumulated throughout the entire six car consist on train 205 (577,578,535,536,585,586) Union Station, AL

#### 2/20/2017 6:26:00 AM - Incident# 2836479 (2 lost trips, 368 lost minutes)

Operator reports no movement due to emergency brake application. Train 211 T-9 Cars 569 570 531 532 583 (584). Hollywood Vine interlocking AL east.

### 2/23/2017 9:11:00 AM - Incident# 2837876 (1 lost trip, 148 lost minutes)

No movement (Friction Brakes not Releasing) Train 207 T-080 537-538-(539)-540 Union Station AL West

### Wayside Incidents:

### 2/14/2017 9:33:00 AM - Incident# 2834349 (8 lost trips, 1,187 lost minutes)

SCADA indicates Hollywood Vine TPSS D-01, D-02, D-03, D-04 with LKTRP alarm along with DIS-01 open. Deenergized track between Hollywood Western and Hollywood Vine Station on both tracks. Train 209 on the AL track near crosspassage 32.

#### 2/25/2017 12:26:00 AM - Incident# 2838592 (1 lost trip, 116 lost minutes)

TRACS 4 indicates ETS tripped at Hollywood Vine AL track (ETS RN60) with Smoke Dection and water flow.

### Police & Health Incidents:

2/1/2017 8:42:00 PM - Incident# 2829892 (2 lost trips, 297 lost minutes) Pershing Square male patron brandishing a knife on the platform. Male patron described as a african american wearing black sweater and black pants.

2/8/2017 6:50:00 AM - Incident# 2832262 (1 lost trip, 148 lost minutes) Sick patron on board Train 206 car # 567 AR Platform Union Station.

### 2/8/2017 6:56:00 AM - Incident# 2832252 (0 lost trips, 5 lost minutes)

Platform intrusion gate activation AL west. Pershing Square LASD notified.

### 2/10/2017 4:05:00 PM - Incident# 2833358 (0 lost trips, 164 lost minutes)

Hollywood Highland: Backpack Stuck Between 3rd Rail Train Controller: R-183 Communication Controller #1: R-066 Communication Controller #2: R-053

### 2/15/2017 9:53:00 AM - Incident# 2834765 (2 lost trips, 309 lost minutes)

G-529 reports sexual assault onboard train 205 westbound at Pershing/Square. Train held at 7th Metro for LASD assistance.

### 2/20/2017 9:45:00 PM - Incident# 2836760 (0 lost trips, 14 lost minutes)

Union Station: Intoxicated Female

### 2/21/2017 7:50:00 AM - Incident# 2837463 (0 lost trips, 6 lost minutes)

T-212/Train 209 reports an individual in need of medical assistance.

## 2/25/2017 3:23:00 AM - Incident# 2838600 (0 lost trips, 30 lost minutes)

Reports tresspasser on the AR track near CP-17 walking towards Westlake.

#### 2/27/2017 3:56:00 PM - Incident# 2839237 (0 lost trips, 5 lost minutes)

T-179 reports an unresponsive female covered uop with a plastic bag. Operator is unsure of passenger condition.

### Other Incidents:

## 2/7/2017 6:16:00 AM - Incident# 2831736 (0 lost trips, 7 lost minutes)

Train 209 delayed 7 minutes due to a signaling problem at yard.

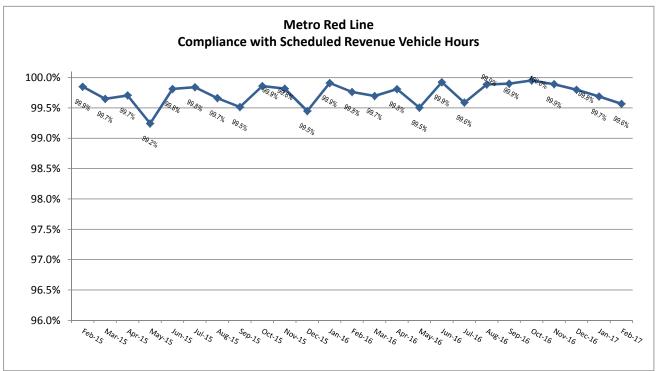
### 2/8/2017 3:45:00 PM - Incident# 2832491 (0 lost trips, 6 lost minutes)

Train 206 (587,588,561,562) T-271, Wilshire Western, BR, reports a patron will not let the train depart and is adamant that the operator tend to making a report regarding having his laptop stolen.

## 2/16/2017 11:01:00 PM - Incident# 2835415 (0 lost trips, 20 lost minutes)

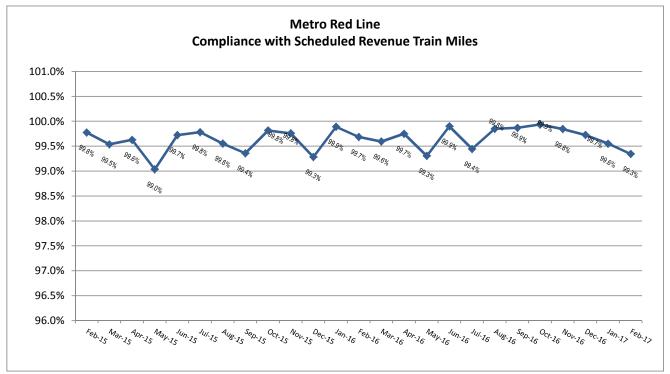
TRACS indicates loss the remote terminal unit throughout the mainline.

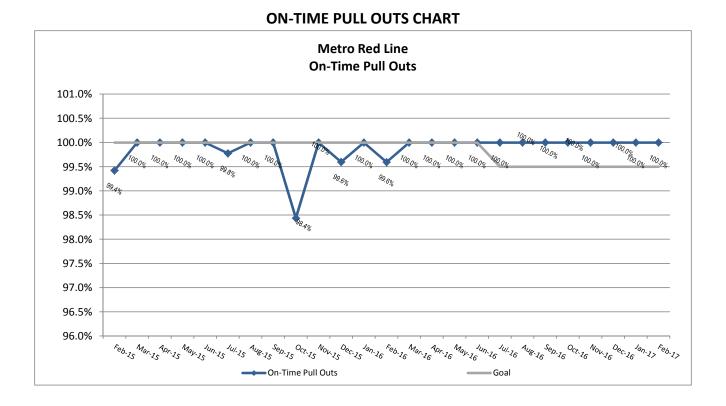
## **MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS**



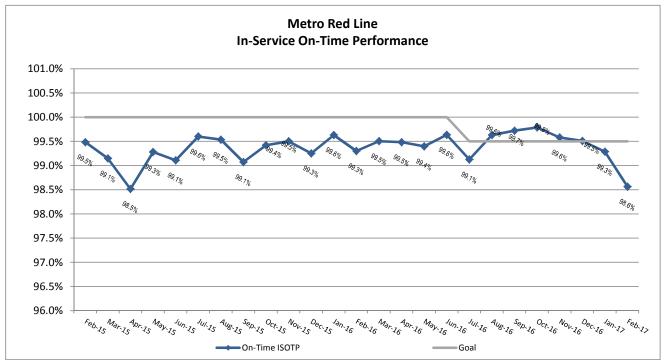
## COMPLIANCE WITH SCHEDULED VEHICLE HOURS CHART

## COMPLIANCE WITH SCHEDULED TRAIN MILES CHART

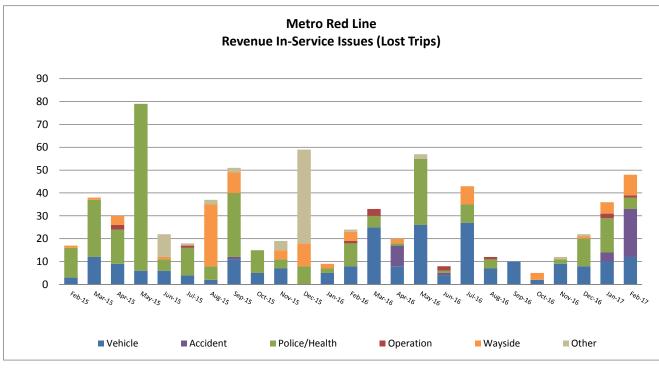




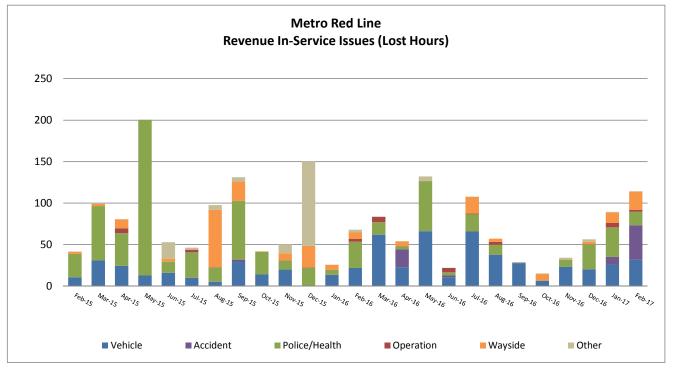
## **IN-SERVICE ON-TIME PERFORMANCE CHART**

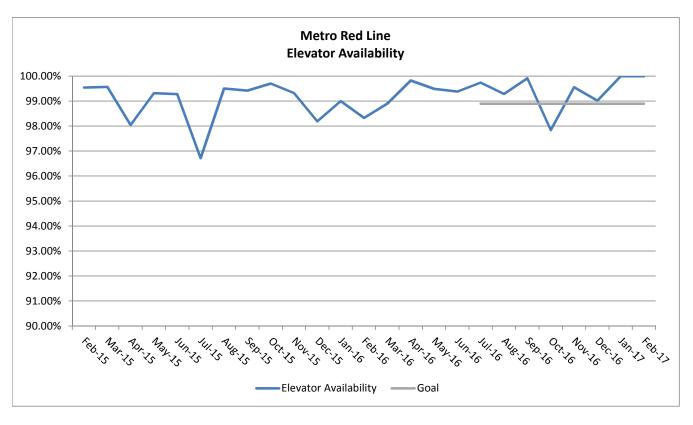




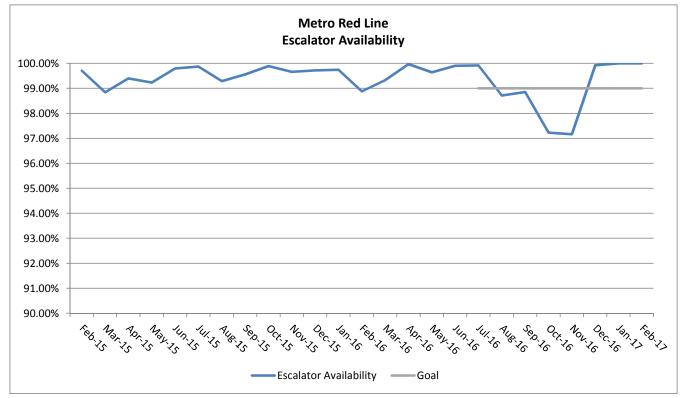


## LOST TRIPS





## VERTICAL TRANSPORTATION AVAILABILITY



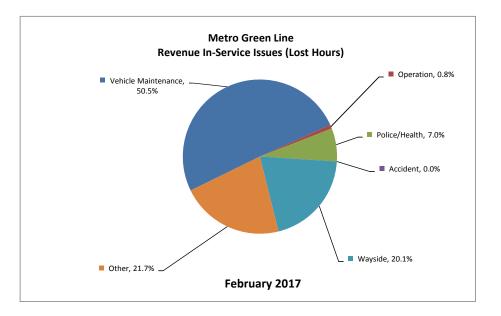
# **GREEN LINE**

Out of a total of 7,673 hours operated, there were approximately 23 total hours of service delays.

	Revenue		
February 2017 Service Hours *	Hours	Per Cent	
Revenue Hours without Delays	7,650	99.7%	
Cancelled + Delayed Hours	23	0.3%	
Total Revenue Hours	7,673	100.0%	

Summary of the major contributors:	Count	Hours	Per Cent
Operations	2	0.2	0.8%
Accidents	0	0.0	0.0%
Vehicle Maintenance	15	11.4	50.5%
Wayside	1	4.5	20.1%
Police & Health	3	1.6	7.0%
Other	4	4.9	21.7%
Total	25	22.6	100.0%

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



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

#### **Operations Incidents:**

2/9/2017 3:58:00 PM - Incident# 2832960 (0 lost trips, 6 lost minutes) Sick Operator

2/23/2017 12:40:00 PM - Incident# 2837996 (0 lost trips, 5 lost minutes) Unscheduled Single Tracking: Wilmington West - Lynwood IL

## Vehicle Maintenance Incidents:

2/1/2017 4:30:00 PM - Incident# 2829820 (3 lost trips, 210 lost minutes) Friction Brakes won't release on car 220 T-24, train 343 (220)-204 Lakewood, track 2, east

2/2/2017 4:32:00 PM - Incident# 2830253 (0 lost trips, 10 lost minutes) Train 336 reports no movement at Norwalk station platform 1. Operator T-343 with cars 222 and 225.

## 2/5/2017 4:46:00 AM - Incident# 2831027 (0 lost trips, 9 lost minutes)

Train 442 reports door problems no movement T-13, Train 442, Doors 1,2 on 219B Track 1, Norwalk, West (219B) -203

## 2/6/2017 4:20:00 AM - Incident# 2831182 (1 lost trip, 66 lost minutes)

Reports recurring propulsion fault. Train 337 T-220 212-216 WB, HarborStation, Track 2

### 2/8/2017 4:32:00 PM - Incident# 2832521 (0 lost trips, 5 lost minutes)

Prop fault on car 225 T-261, train 342 (225)-215 Lakewood, track 1, west

## 2/10/2017 12:23:00 PM - Incident# 2833268 (0 lost trips, 5 lost minutes)

Prop fault on car 203B T-257, train 336 (203)-224 Avalon, track 1, west

## 2/14/2017 3:26:00 PM - Incident# 2834489 (0 lost trips, 6 lost minutes)

Friction Brake fault Car 223 Train 446 Yard interface Signal 12

### 2/17/2017 3:30:00 PM - Incident# 2835792 (0 lost trips, 12 lost minutes)

ATP failure on car 212B T-255, train 343 (212)-225 Vermont, track 1, west

### 2/17/2017 9:33:00 PM - Incident# 2835968 (0 lost trips, 10 lost minutes)

Recurring propulsion failure and speed restriction. Train # 345 T-099 Cars # (228-A)-203 W/Bound Norwalk Station Track-1.

## 2/21/2017 7:08:00 AM - Incident# 2836859 (1 lost trip, 74 lost minutes)

ATC / Flashing Cab Signal (226)-205 Train 341 T-210 Norwalk, westbound

### 2/21/2017 5:46:00 PM - Incident# 2837213 (1 lost trip, 73 lost minutes)

Operator reports propulsion failure unable to clear. Cars (209B), 220 Train 332 T-409 Lakewood TRK 1, westbound

### 2/24/2017 5:15:00 AM - Incident# 2838234 (1 lost trip, 64 lost minutes)

Propulsion faults. No movement. Train 331 T-210 Track 2, E/B Harbor station ATO mode 205-(226)

#### 2/25/2017 5:24:00 AM - Incident# 2838614 (0 lost trips, 10 lost minutes)

Train 332 has propulsion faults that will not clear T-279, Train 332 Track 1, Hawthorne, Westbound (216B)-204

## 2/25/2017 12:55:00 PM - Incident# 2838688 (2 lost trips, 120 lost minutes)

No movement and no indications on the ADU. Train # 334 T-112 Cars #(226-A)-224 W/Bound El Segundo Station Track #1.

### 2/28/2017 4:50:00 AM - Incident# 2839407 (0 lost trips, 10 lost minutes)

Door will not open / propulsion fault 225-(221) Train 337 T-210 Aviation, westbound

#### Wayside Incidents:

2/17/2017 4:33:00 PM - Incident# 2835851 (4 lost trips, 273 lost minutes) False Occupancy: Track Circuit 1010 east of Lakewood Station

#### Police & Health Incidents:

2/17/2017 1:12:00 PM - Incident# 2835672 (1 lost trip, 64 lost minutes) Reports of gunfire at Lakewood Station

#### 2/20/2017 11:27:00 AM - Incident# 2836586 (0 lost trips, 14 lost minutes)

Unresponsive patron; turned out to be 10\*390 Train 334 T-257 204-203 EB, Marine Station, Track 1

#### 2/25/2017 4:39:00 PM - Incident# 2838732 (0 lost trips, 16 lost minutes) Medical Emergency On Board Train #334, Aviation Station Track#1.

#### **Other Incidents:**

2/3/2017 3:50:00 AM - Incident# 2830363 (0 lost trips, 23 lost minutes) Train 332 pulled out of yard 23 minutes late due to mechanical issues.

#### 2/7/2017 8:27:00 PM - Incident# 2832092 (1 lost trip, 76 lost minutes) Operator reports a passenger pulled the T handle and entered the ROW.

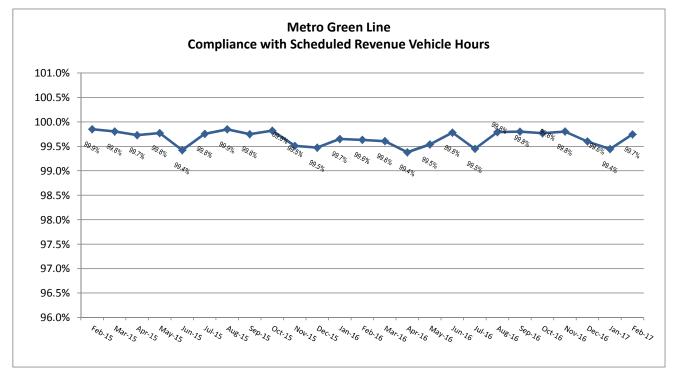
## 2/16/2017 6:39:00 AM - Incident# 2835081 (1 lost trip, 66 lost minutes)

Train 341 (last pull-out) pulled out late from the yard.

## 2/17/2017 5:29:00 AM - Incident# 2835458 (2 lost trips, 129 lost minutes)

Yard controller R-158 informed control that train 341 will not be pulling out. No manpower. T-140 called out and there is no other operator in the yard to operate.

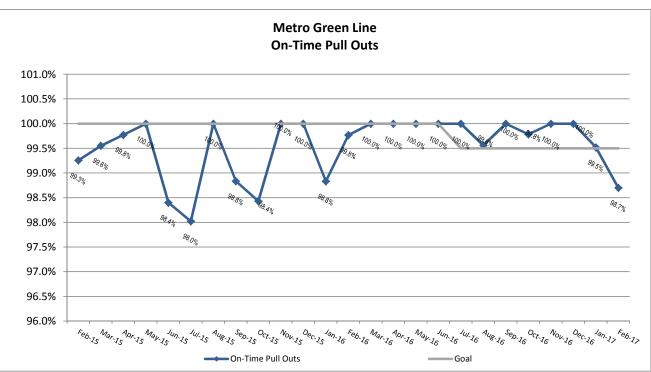
## **MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS**



## COMPLIANCE WITH SCHEDULED VEHICLE HOURS CHART

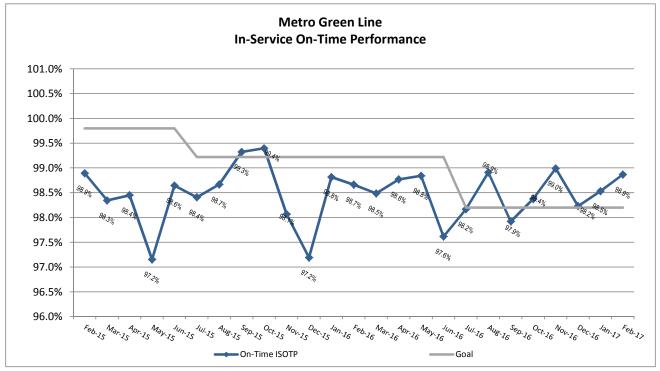
COMPLIANCE WITH SCHEDULED TRAIN MILES CHART



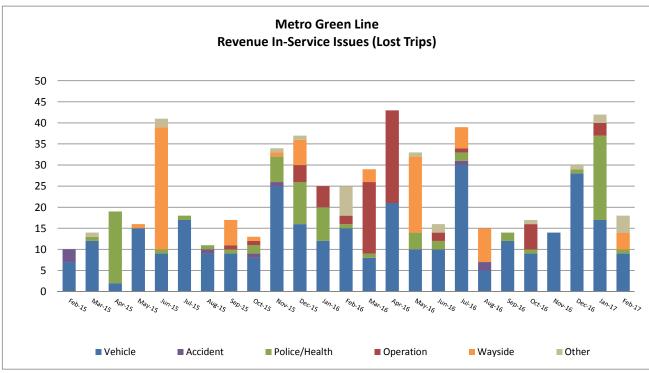


## **ON-TIME PULL OUTS CHART**

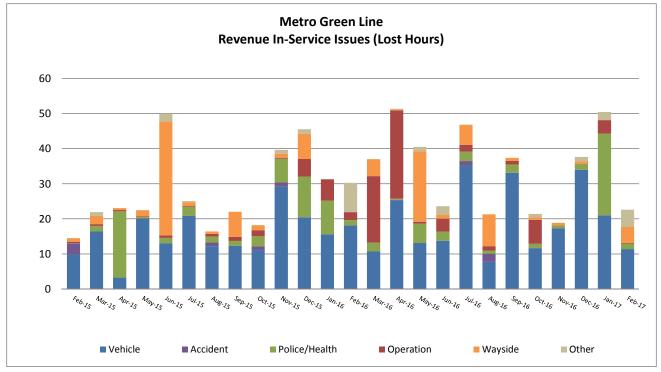
## **IN-SERVICE ON-TIME PERFORMANCE CHART**

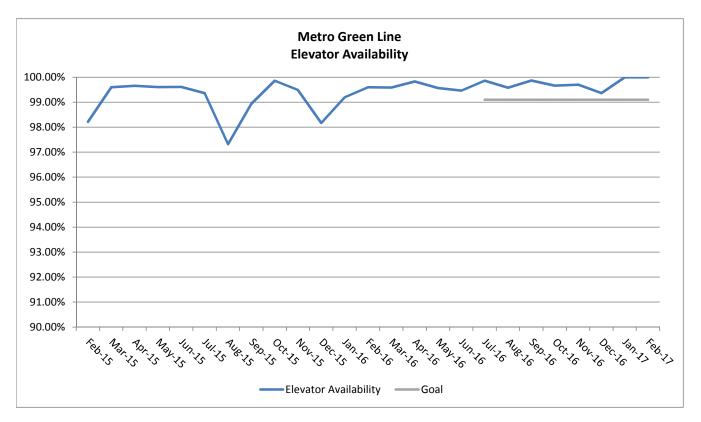




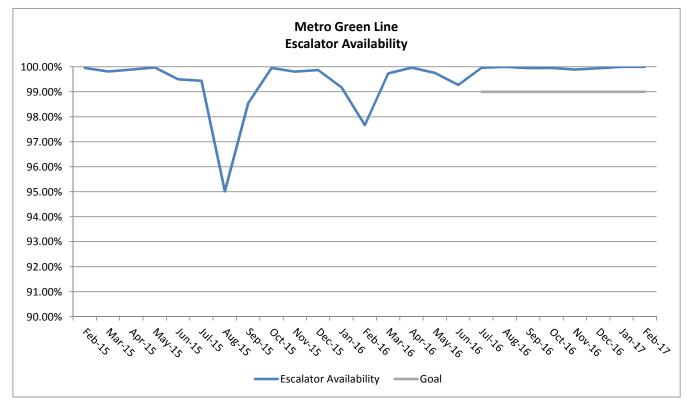


## LOST HOURS





## VERTICAL TRANSPORTATION AVAILABILITY



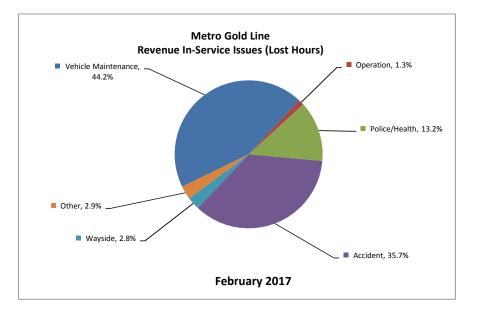
# **GOLD LINE**

Out of a total of 18,930 hours operated, there were approximately 315 total hours of service delays.

	Revenue		
February 2017 Service Hours *	Hours	Per Cent	
Revenue Hours without Delays	18,615	98.3%	
Cancelled + Delayed Hours	315	1.7%	
Total Revenue Hours	18,930	100.0%	

Summary of the major contributors:	Count	Hours	Per Cent
Operations	1	4.0	1.3%
Accidents	3	112.4	35.7%
Vehicle Maintenance	25	139.3	44.2%
Wayside	4	8.7	2.8%
Police & Health	7	41.6	13.2%
Other	4	9.2	2.9%
Total	44	315.4	100.0%

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



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

## **Operations Incidents:**

2/20/2017 4:43:00 AM - Incident# 2836433 (1 lost trip, 239 lost minutes) Small K-9 on the tracks SB at Mariachi Plaza station held up train 401

#### Accidents:

2/11/2017 9:35:00 AM - Incident# 2833491 (0 lost trips, 20 lost minutes) DRILL

Train #901 T-429 car#725 reports 10-73 at Buena vista crossing track #1 northbound.

2/15/2017 1:02:00 PM - Incident# 2834875 (26 lost trips, 6,232 lost minutes) Train 451 (702,703), track 2 at Ave 52 reports 10-73.

2/15/2017 5:58:00 PM - Incident# 2834941 (2 lost trips, 494 lost minutes) 10-73 at Avenue 54.

## Vehicle Maintenance Incidents:

2/2/2017 6:30:00 AM - Incident# 2830000 (3 lost trips, 736 lost minutes) Train 417 No Movement 1005 T-341 SB Indiana station 1005-1015-1008

### 2/2/2017 7:45:00 AM - Incident# 2830052 (2 lost trips, 503 lost minutes)

T-19 reports friction brakes continously reapply on train 416 (cars 1006-1057-1056), Highland Park Station, Track 2, Southbound.

## 2/2/2017 11:05:00 PM - Incident# 2830319 (0 lost trips, 10 lost minutes)

Vomit on consist (735B)741. Citrus Station Train #426, T-228, track #2, southbound.

#### 2/3/2017 6:55:00 AM - Incident# 2830424 (8 lost trips, 1,931 lost minutes)

Train 407 reported no movement due to a door issue on car 1058 7 and 8. NB at Maravilla station.

#### 2/5/2017 12:50:00 PM - Incident# 2831072 (0 lost trips, 8 lost minutes)

Train operator reports propulsion faults on cars 1005 and 1015 with one car showing on ADU and no PA. Track 1 Little Tokyo station.

### 2/7/2017 8:22:00 AM - Incident# 2831805 (2 lost trips, 497 lost minutes)

Friction brakes won't release (715)-728-740 Train 413 T-482 Northbound French

#### 2/9/2017 7:20:00 AM - Incident# 2832726 (0 lost trips, 5 lost minutes)

Operator reports of an ATP failure / no movement Train 455 T-014 1057-1009 Atlantic Terminal , trk. 1, northbound

## 2/12/2017 2:50:00 PM - Incident# 2833707 (1 lost trip, 224 lost minutes)

Operator reports no movement, only one car indication on ADU. Cars: (1011) 1015 Little Tokyo, TK 1 N/bound. Train 411. T-35.

## 2/15/2017 5:52:00 AM - Incident# 2834675 (1 lost trip, 240 lost minutes)

Operator reports smoking brakes on car 1006 B truck T-17 Train 408 Track 2 SB Monrovia Station 1006-1012

### 2/16/2017 4:07:00 PM - Incident# 2835327 (0 lost trips, 4 lost minutes)

Sluggish Propulsion / Dynamic Brakes, Cars #(728)-742-734 Train #428 T-146 Allen Station, Track #002, Southbound.

## 2/16/2017 8:04:00 PM - Incident# 2835403 (1 lost trip, 240 lost minutes)

(722)-737 Propulsion Fault/Speed Redstriction SB Arcadia Train 403 T-387

### 2/17/2017 4:43:00 AM - Incident# 2835448 (1 lost trip, 244 lost minutes)

Operator reports of no movement Train 414 T-066 1007-1056-10055 Irwindale station, trk. 1, northbound

## 2/17/2017 3:21:00 PM - Incident# 2835855 (0 lost trips, 10 lost minutes)

Car 731B wiper blade is BO. T-340 Train 422 Cars (731B)-720 Maravilla Station, Track 1,northbound.

## 2/17/2017 5:12:00 PM - Incident# 2835872 (1 lost trip, 238 lost minutes)

Car 1013 all doors opened at the same time. T-154 Train 402 Cars (1013)-1015 Monrovia Station, Track 2, southbound.

### 2/17/2017 5:43:00 PM - Incident# 2835887 (2 lost trips, 475 lost minutes)

Car 1005 wiper is broken off. T-290 Train 455 Cars (1005)-1057-1009 Citrus Station, Track 2, southbound.

## 2/18/2017 10:00:00 AM - Incident# 2836078 (1 lost trip, 329 lost minutes)

Propulsion fault no movement Train #408 T-429 car#745-736-709 northbound at Civic center.

## 2/19/2017 7:00:00 AM - Incident# 2836259 (0 lost trips, 5 lost minutes)

Propulsion / Dynamic Brakes, cars #(1012-1057) Train #407 T-248 Highland Park Station, Track #001, Northbound.

#### 2/20/2017 6:07:00 AM - Incident# 2836460 (3 lost trips, 723 lost minutes)

Prop fault with a speed restriction 711 T-440 Train 455 NB Tk 2 Atlantic Station 711-717

## 2/21/2017 11:30:00 AM - Incident# 2836966 (1 lost trip, 239 lost minutes)

Train 405 cars 1055-1012-1057 reported no movement between Pico/Aliso and Little Tokyo, Track 1, Northbound.

#### 2/22/2017 4:25:00 PM - Incident# 2837654 (4 lost trips, 957 lost minutes)

Train 454 (711,705) T-304 Monrovia North Interlocking, track 1 reports emergency brake application, no movement.

## 2/23/2017 3:03:00 PM - Incident# 2838048 (0 lost trips, 4 lost minutes)

Lose skirt, cars #(726A)-722 Train #407 T-011 Soto Station, Track #002, Southbound. 2/23/2017 11:44:00 PM - Incident# 2838201 (2 lost trips, 493 lost minutes) (1006)-1010 SB No Movement - No Faults Train 428 T-406 N of Lake Station

#### 2/25/2017 4:46:00 AM - Incident# 2838607 (0 lost trips, 12 lost minutes)

5 mph Speed Code 725-(734) Train 403 T-143 Atlantic Station, northbound

**2/25/2017 10:00:00 AM - Incident# 2838659 (1 lost trip, 224 lost minutes)** Train 446, LRV 1001. Irwindale interlocking

## 2/28/2017 4:17:00 PM - Incident# 2839707 (0 lost trips, 7 lost minutes)

Train 451 no movement, Propulsion / Brake Fault. Cars:(707) (705) Atlantic Station Tk 2, Northbound. T-2

#### Wayside Incidents:

2/3/2017 8:42:00 PM - Incident# 2830771 (0 lost trips, 20 lost minutes) Advisory #13 in effect. At 2040 hours, Craig TPSS B-12 remotely opened per TP-138.

## 2/17/2017 1:30:00 PM - Incident# 2835924 (0 lost trips, 5 lost minutes)

Little Tokyo C&S flooded. Causing some damage to equipment.

## 2/17/2017 5:00:00 PM - Incident# 2835873 (2 lost trips, 480 lost minutes)

Debris (Palm leaves) on the OCS, Track 1 at Ave 55. T-134 Train 451

2/18/2017 5:18:00 AM - Incident# 2836020 (0 lost trips, 20 lost minutes) ARINC SUMMARY ALARM SYSTEM indicates B15 Sunol is open and will not close remotely.

## Police & Health Incidents:

2/2/2017 4:58:00 PM - Incident# 2830273 (4 lost trips, 980 lost minutes) Traffic accident (MTA not involved) blocking track #2. 1st and Lorena street Train #431, T-466, track #2, southbound.

## 2/3/2017 10:14:00 AM - Incident# 2830544 (0 lost trips, 12 lost minutes)

Operator reports of a male black having, 26 years of age, possibly having a seizure. Train 452 T-452

(734A)724 Pico Aliso, Trk. 1, northbound

2/4/2017 7:09:00 PM - Incident# 2830975 (2 lost trips, 676 lost minutes) Altercation Reported on Train 402

### 2/4/2017 9:58:00 PM - Incident# 2830981 (1 lost trip, 335 lost minutes) Patron Laying on Floor of Car 1015

## 2/9/2017 6:13:00 AM - Incident# 2832657 (1 lost trip, 238 lost minutes)

Operator reports of urine on trailing rail car (703) Train 455 T-092 (703)710 Atlantic Terminal, Trk. 1, nouthbound

#### 2/20/2017 12:45:00 AM - Incident# 2836413 (1 lost trip, 252 lost minutes) Passenger reports a man on board brandishing a Knife

### 2/26/2017 12:01:00 AM - Incident# 2838780 (0 lost trips, 5 lost minutes)

Train 403 LRV 728-715 at Lincoln/Cypress Station, sick individaul onboard train.

## **Other Incidents:**

### 2/7/2017 12:04:00 PM - Incident# 2831920 (0 lost trips, 64 lost minutes) Fire Alarm activated @ the Colorado Box.

### 2/7/2017 4:53:00 PM - Incident# 2832049 (1 lost trip, 244 lost minutes) Memorial Park Fire Alarm activated.

## 2/9/2017 6:00:00 AM - Incident# 2832643 (0 lost trips, 7 lost minutes)

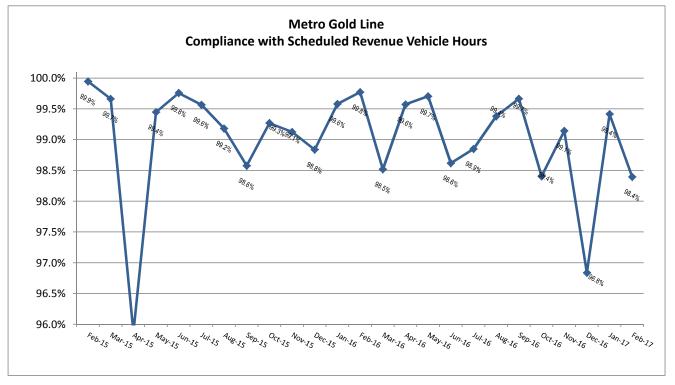
Train 420 scheduled to depart Division 24 at 0454 Hrs., northbound pulled out late from Division 24.

Train 420 1009-1006 T0 Div. 24, Trk. 1, northbound,

## 2/23/2017 5:58:00 AM - Incident# 2837758 (1 lost trip, 239 lost minutes)

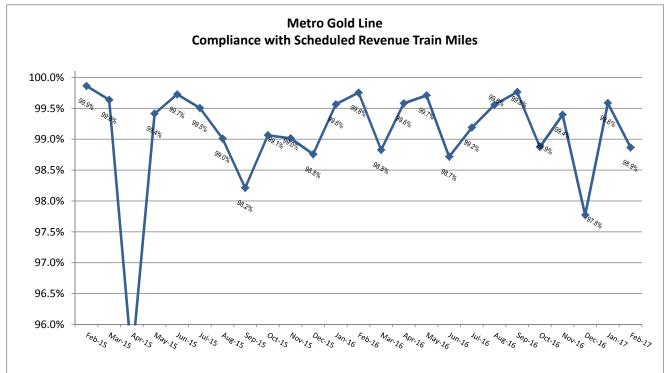
Train 419 never pulled out of Div 24 due to uncoupling issues.

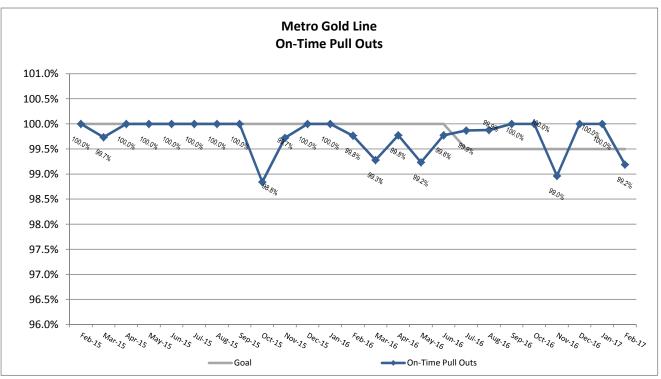
## **MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS**



## COMPLIANCE WITH SCHEDULED VEHICLE HOURS CHART

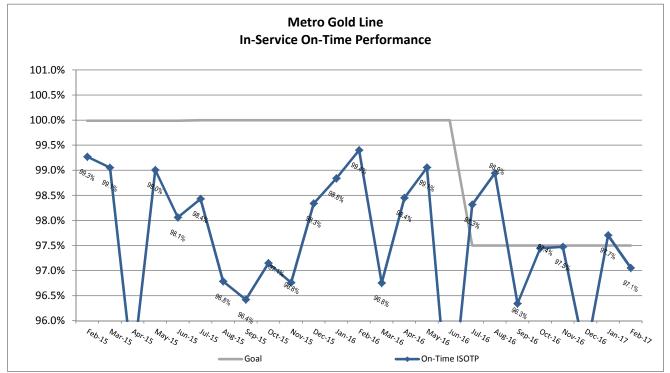
COMPLIANCE WITH SCHEDULED TRAIN MILES CHART



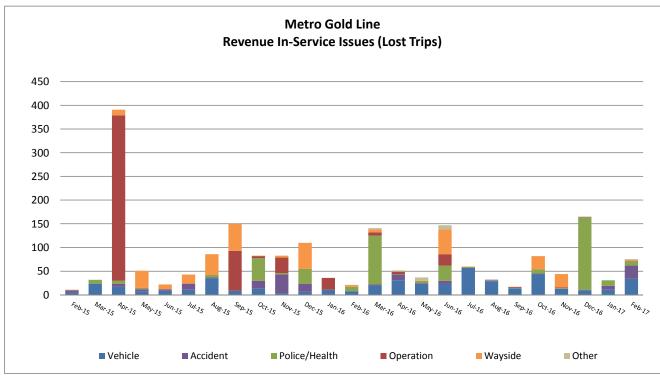


## **ON-TIME PULL OUTS CHART**

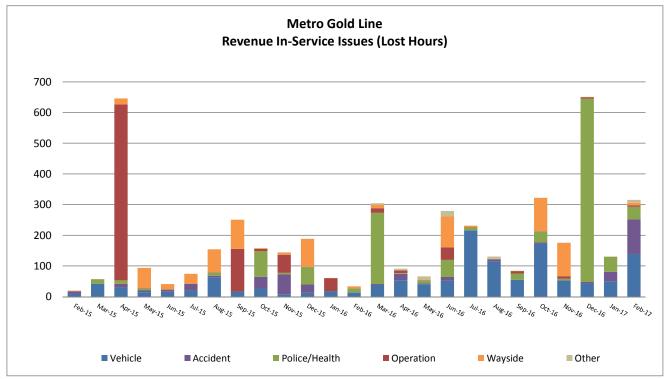
## **IN-SERVICE ON-TIME PERFORMANCE CHART**

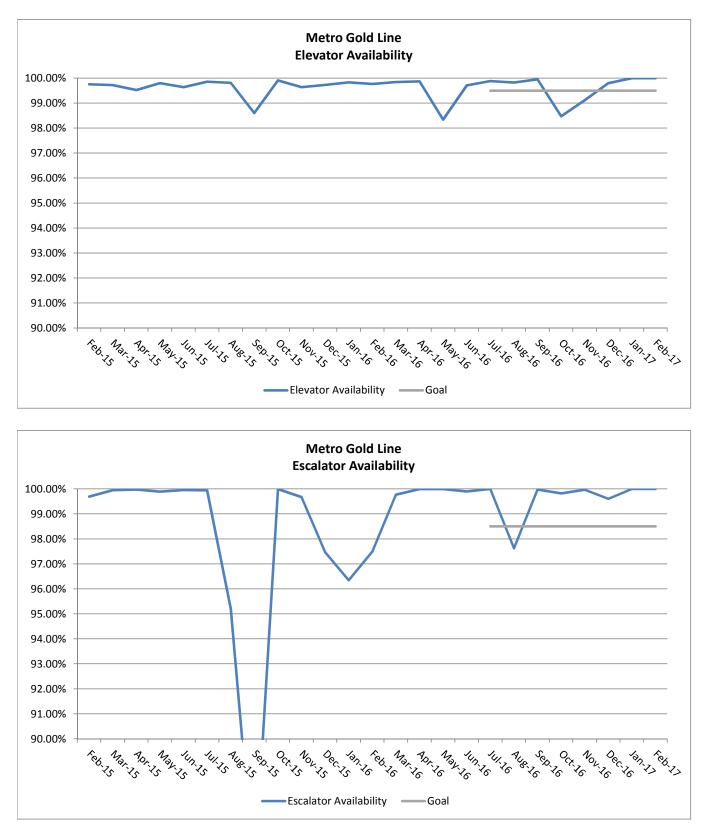


## LOST TRIPS



## LOST HOURS





## VERTICAL TRANSPORTATION AVAILABILITY

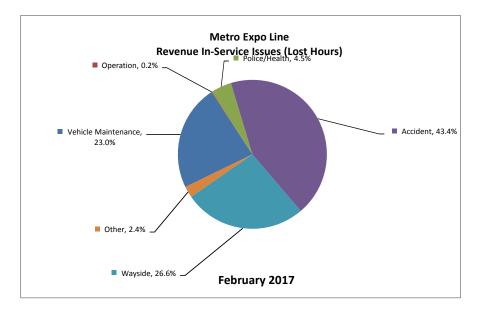
# **EXPO LINE**

Out of a total of 17,837 hours operated, there were approximately 90 total hours of service delays.

	Revenue	
February 2017 Service Hours *	Hours	Per Cent
Revenue Hours without Delays	17,747	99.5%
Cancelled + Delayed Hours	90	0.5%
Total Revenue Hours	17,837	100.0%

Summary of the major contributors:	Count	Hours	Per Cent
Operations	1	0.2	0.2%
Accidents	3	39.0	43.4%
Vehicle Maintenance	9	20.7	23.0%
Wayside	2	24.0	26.6%
Police & Health	2	4.0	4.5%
Other	3	2.2	2.4%
Total	20	90.1	100.0%

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



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

## **Operations Incidents:**

2/19/2017 3:40:00 PM - Incident# 2836337 (0 lost trips, 9 lost minutes)

Doors opened on the wrong side. Train 608 T-530 1020A-1038-1051 Track 2 Metro Center Southbound

## Accidents:

2/11/2017 9:55:00 PM - Incident# 2833597 (8 lost trips, 1,128 lost minutes) Train 601 T-521 & T-519

Cars (1020)A- 1039 30th Interlocking southbound Track 4

#### 2/15/2017 10:39:00 PM - Incident# 2834989 (1 lost trip, 129 lost minutes)

Operator T-306 reports of a hit and run. Train 628 T-306 Cars(1043A), 1026 12th/Flower, Track 2, Southbound

### 2/16/2017 7:24:00 PM - Incident# 2835386 (9 lost trips, 1,086 lost minutes)

10-73 at 6th and Colorado. (hit and run) Train 626 Track 3 T-533 (114)-136 SMFD - Engine 6 and Battalion 1 Captain Bailey Rey SMPD - Off. Burns with Sergeant Cortez conducting the investigation. No injuries or patrons transported.

## Vehicle Maintenance Incidents:

2/8/2017 8:47:00 AM - Incident# 2832303 (0 lost trips, 7 lost minutes) Train 601 reporting not clearable propulsion faults on LRV 249B Train 601 T-306 LRV'S (249B) 246 Vermont Station, track 4, southbound.

#### 2/8/2017 5:11:00 PM - Incident# 2832533 (5 lost trips, 606 lost minutes)

Train 606 reports as door problem, after troubleshooting he reported no movement with no indications. Train 606 T-150 LRV'S ( 1014 ) 1042 Palms Station, Track 4, Southbound.

### 2/10/2017 6:18:00 PM - Incident# 2833382 (2 lost trips, 240 lost minutes)

Train operator reports B/O wipers. Train 622, T-521 (1052B)-1048 Track 4, Farmdale, South

### 2/14/2017 5:00:00 PM - Incident# 2834538 (0 lost trips, 10 lost minutes)

Doors not closing. Train #621. T-135. LRV-(1037A), 1040. Culver City Station, track #3. Northbound. 2/17/2017 8:33:00 PM - Incident# 2835952 (1 lost trip, 119 lost minutes) Train-604

T-133 Cars (1039A)-1041 Southbound Track #4 USC/EXPO Station Friction Brakes Fault unable to clear.

#### 2/19/2017 7:55:00 PM - Incident# 2836379 (0 lost trips, 10 lost minutes) Train operator reports a propulsion fault with a speed restriction. Train 601, T-532 (249A)-246 Track 3, Crenshaw, North

#### 2/22/2017 9:32:00 AM - Incident# 2837548 (2 lost trips, 238 lost minutes)

Propulsion / Dynamic Brakes, no movement, cars #(129-101) Train #613 T-241 Sepulveda Station, Track #003, Northbound

### 2/23/2017 7:14:00 AM - Incident# 2837818 (0 lost trips, 5 lost minutes)

Reports of propulsion fault with a speed restriction of 35mph Train # 615 T-243 (1046A)-1048 Western Station, Track 4, Southbound

## 2/28/2017 6:20:00 PM - Incident# 2839795 (0 lost trips, 6 lost minutes)

Broken Emergency Panel Train #623, T-150 (154A)-133 SB, Culver City Station, Track #4

### Wayside Incidents:

2/2/2017 1:25:00 PM - Incident# 2830188 (2 lost trips, 244 lost minutes) Signal 4S LaCienega Interlocking (10-71).

2/13/2017 5:19:00 AM - Incident# 2833804 (10 lost trips, 1,194 lost minutes) Arinc Alarm System notified of open breaker B05 at Expo yard TPSS

## Police & Health Incidents:

2/2/2017 9:53:00 AM - Incident# 2830145 (1 lost trip, 119 lost minutes) Patron has trouble breathing. Train#617 T#306 (114B),152 Track 4,Westwood Station,Southbound

2/8/2017 11:55:00 AM - Incident# 2832400 (1 lost trip, 123 lost minutes) Train 605 reports a sick female on aboard her train.

### **Other Incidents:**

2/9/2017 5:18:00 AM - Incident# 2832646 (0 lost trips, 7 lost minutes) Out Late due to mechanical issues.

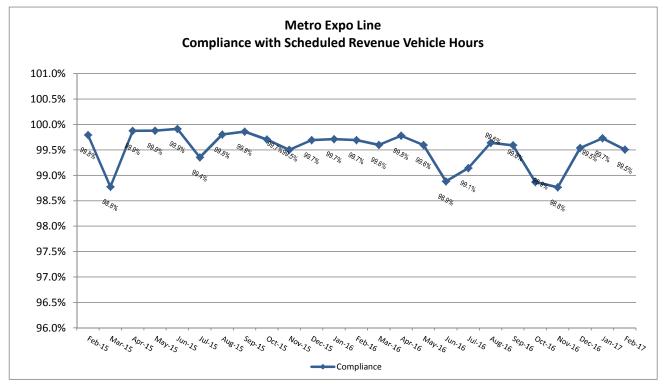
## 2/20/2017 4:32:00 PM - Incident# 2836714 (1 lost trip, 119 lost minutes)

Patron refusing to release the doors. 23rd Street Station, Track #4, Southbound. Train #602. T-354. LRV- (1028B), 1022.

## 2/22/2017 2:29:00 PM - Incident# 2837542 (0 lost trips, 5 lost minutes)

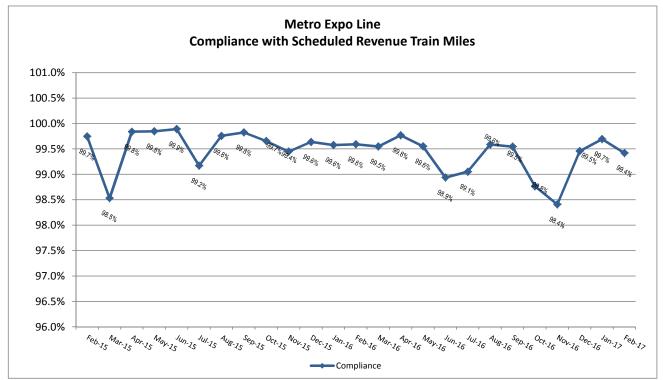
Roll-Out, 5 minutes dealy due door problem R-085 Train #620 Expo Yard

## **MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS**

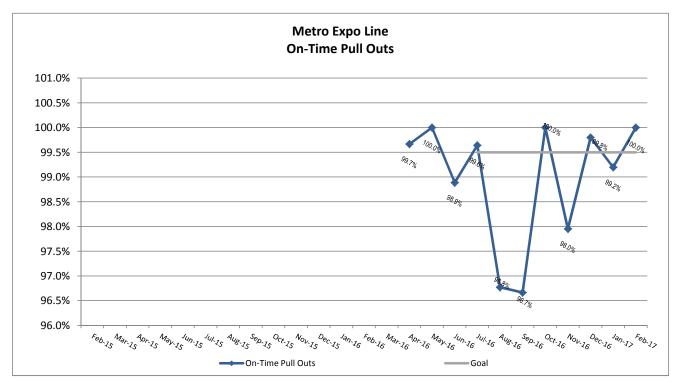


## COMPLIANCE WITH SCHEDULED VEHICLE HOURS CHART

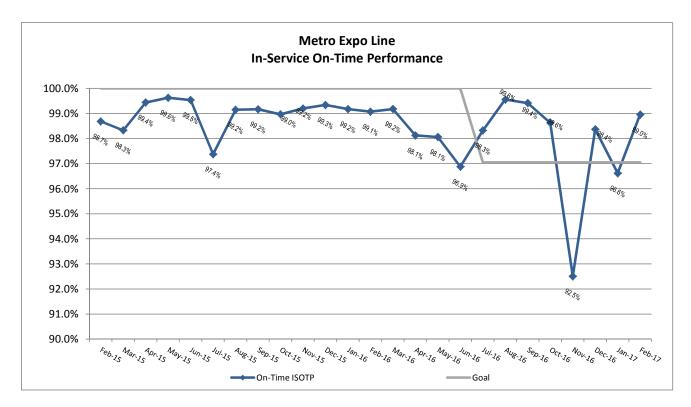
## COMPLIANCE WITH SCHEDULED TRAIN MILES CHART



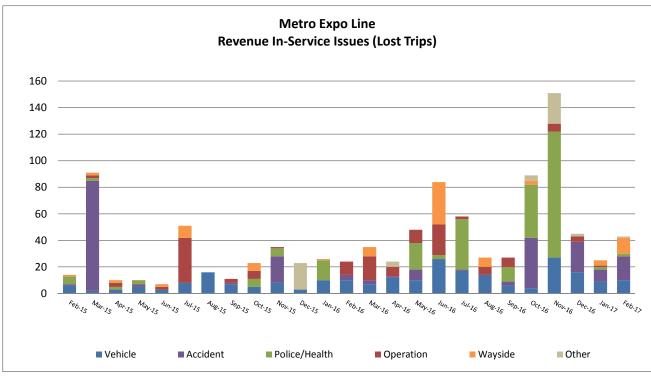




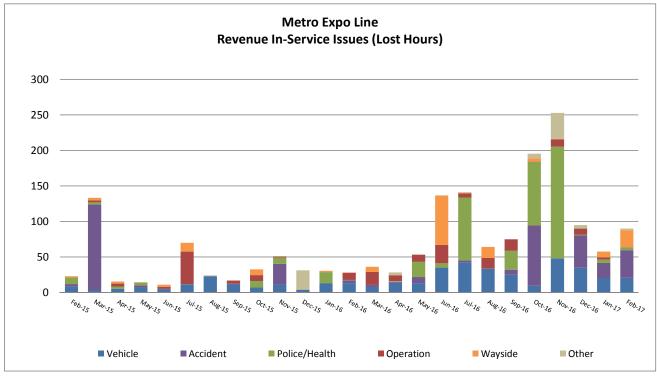
## IN-SERVICE ON-TIME PERFORMANCE CHART

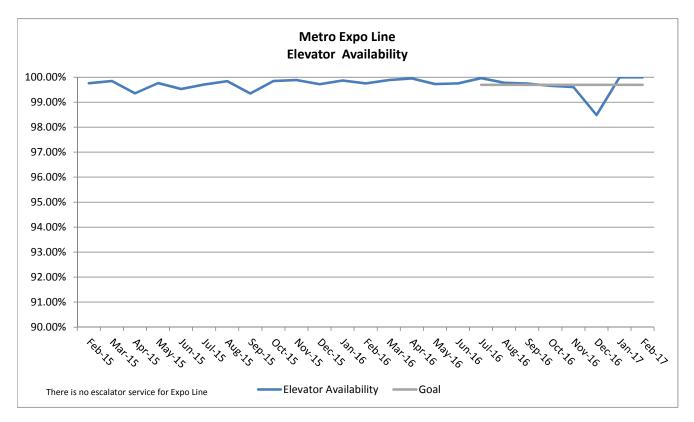






## LOST HOURS





## VERTICAL TRANSPORTATION AVAILABILITY