

Los Angeles County  
Metropolitan Transportation Authority  
California

# OPERATIONS MONTHLY RAIL PERFORMANCE REPORT

AUGUST 2016



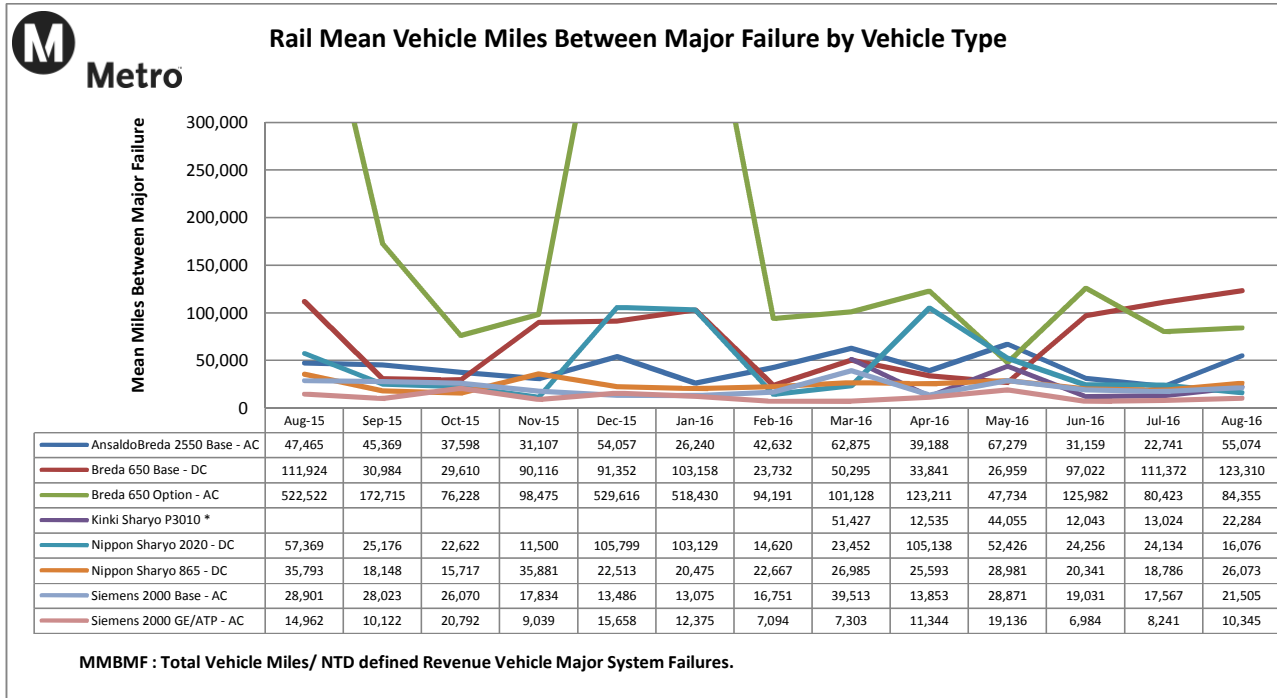
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## METRO RAIL PERFORMANCE – AUGUST 2016

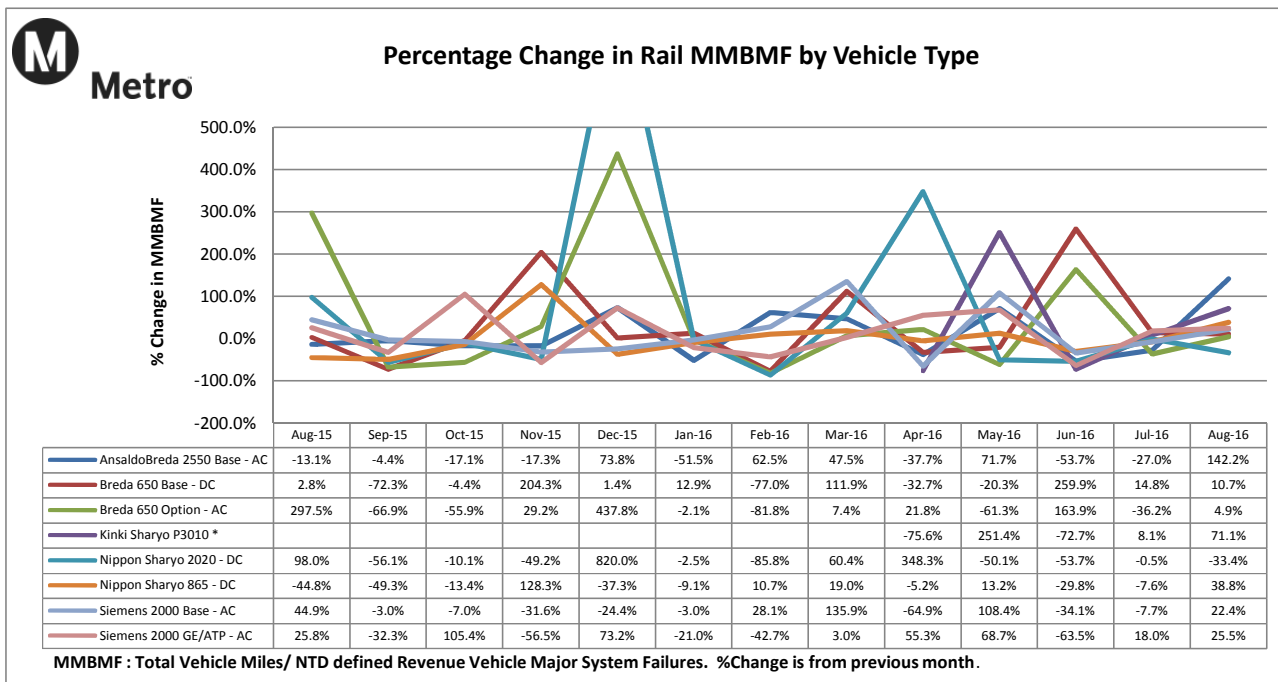
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## METRO RAIL PERFORMANCE – AUGUST 2016

### Rail Performance Systemwide



\* KinkiSharyo rolling stock began service March 2016



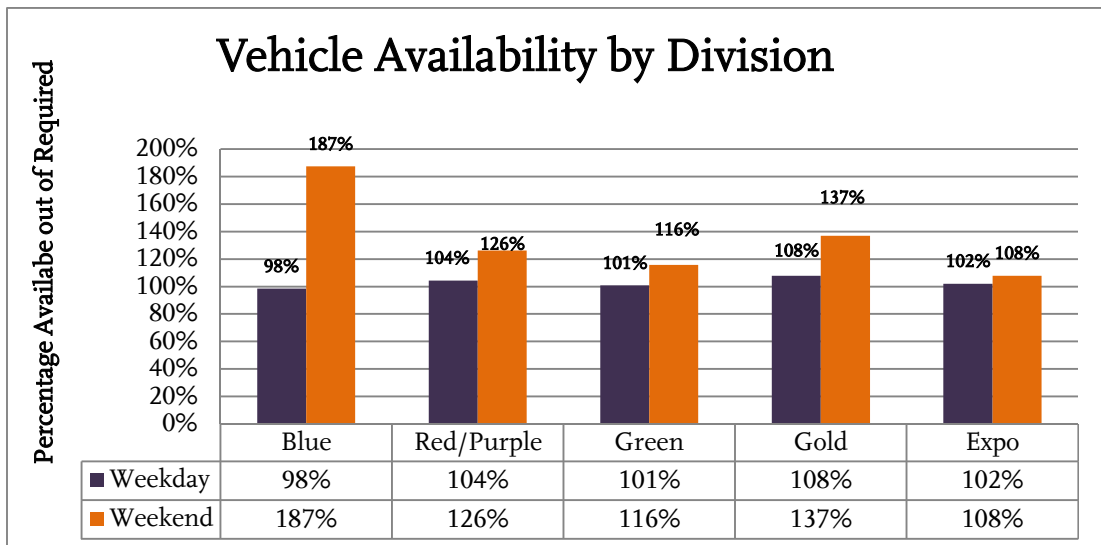
\* KinkiSharyo rolling stock began service March 2016

### Rail Fleet Distribution – AUGUST 2016

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			
Kinki Sharyo P3010				10	21
Nippon Sharyo 2020 - DC	14				1
Nippon Sharyo 865 - DC	38				16
Siemens 2000 Base - AC			29		
Siemens 2000 GE/ATP - AC	17				6
<b>TOTALS</b>	<b>69</b>	<b>104</b>	<b>29</b>	<b>60</b>	<b>44</b>

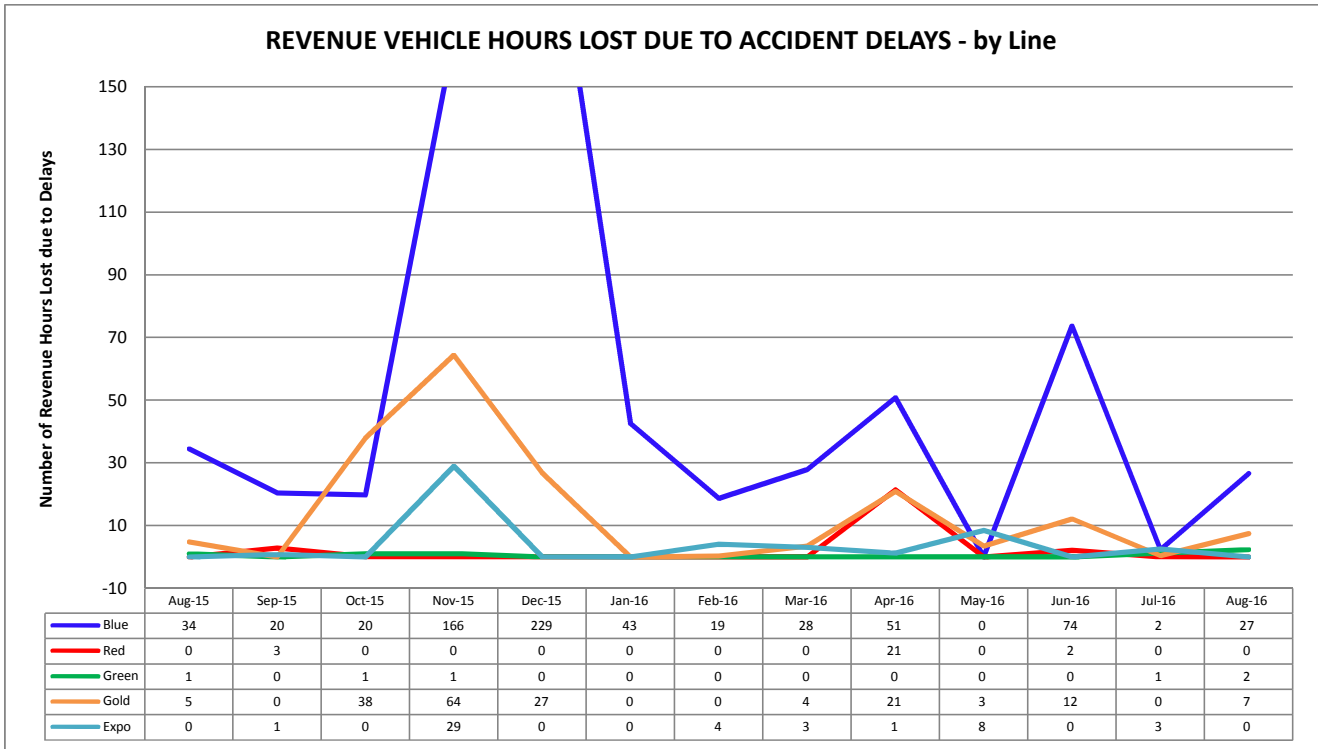
## Vehicle Availability Systemwide

Blue			
Day Type	Vehicles Required	Average Available	Average % Available
Weekday	60	59	98%
Weekend	26	49	187%
Red/ Purple			
Day Type	Vehicles Required	Average Available	Average % Available
Weekday	74	77	104%
Weekend	55	69	126%
Green			
Day Type	Vehicles Required	Average Available	Average % Available
Weekday	22	22	101%
Weekend	14	16	116%
Gold			
Day Type	Vehicles Required	Average Available	Average % Available
Weekday	44	47	108%
Weekend	28	38	137%
Expo			
Day Type	Vehicles Required	Average Available	Average % Available
Weekday	26	27	102%
Weekend	26	28	108%

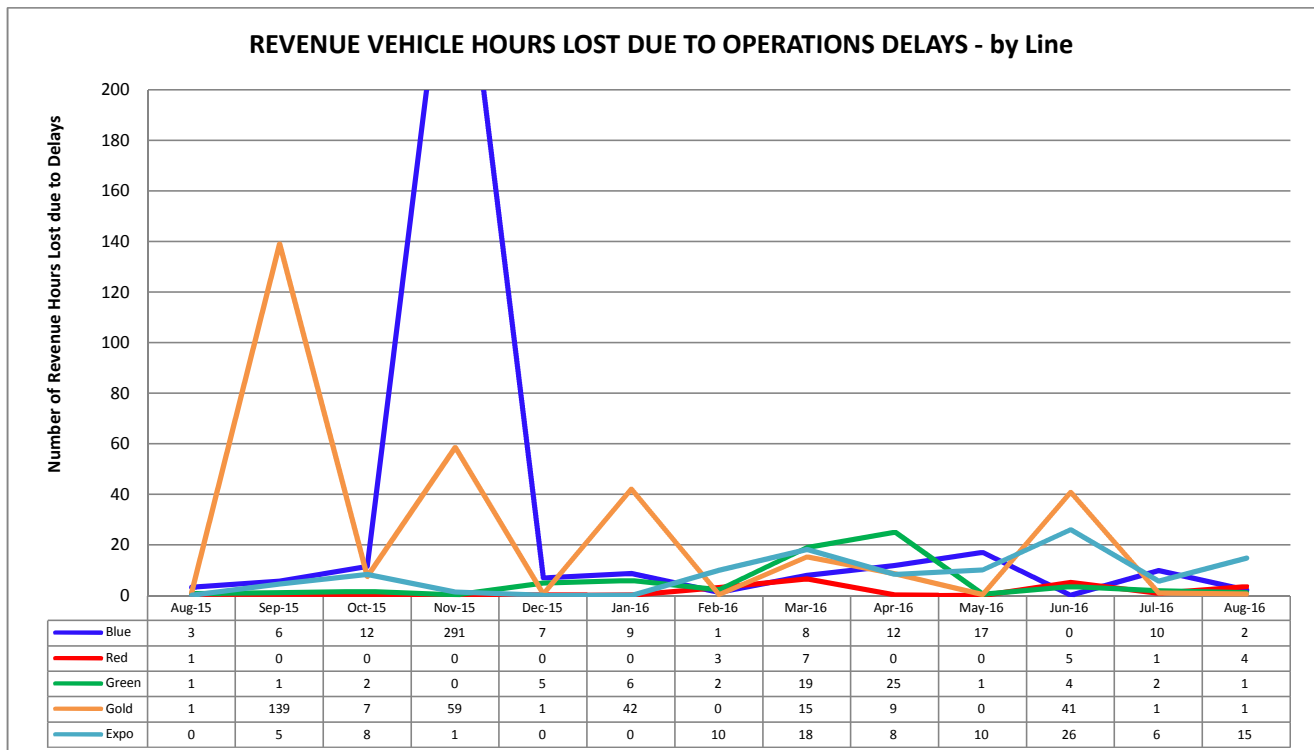


## RAIL DELAYS BY CATEGORY - SYSTEMWIDE

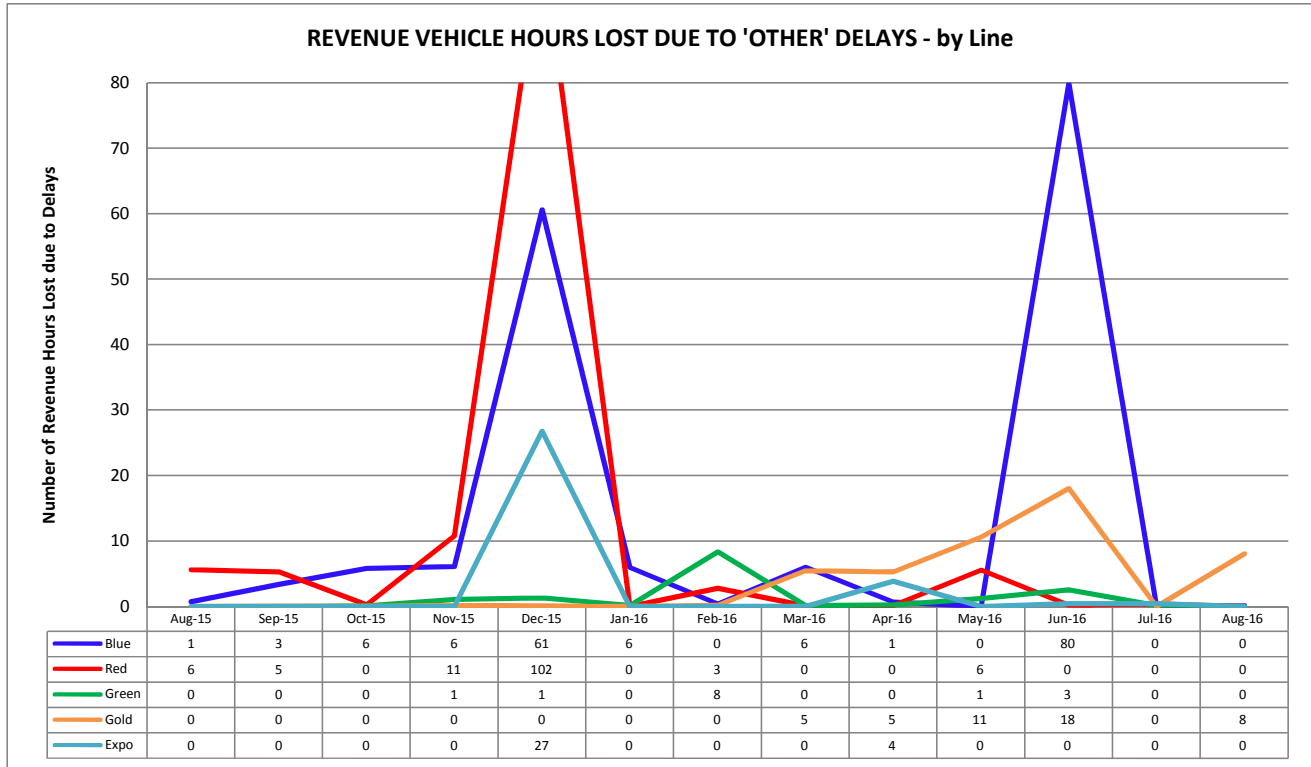
### Revenue Hours Lost Related to - ACCIDENTS



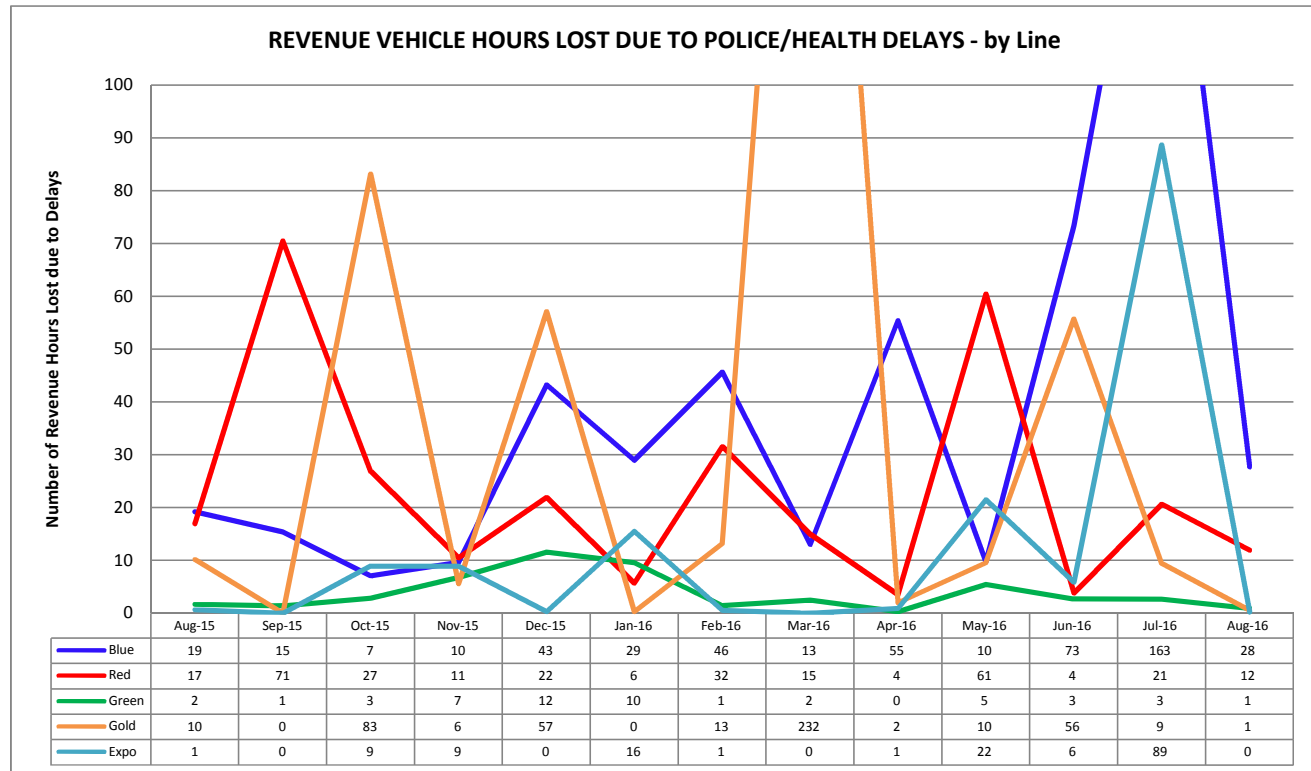
### Revenue Hours Lost Related to - OPERATIONS



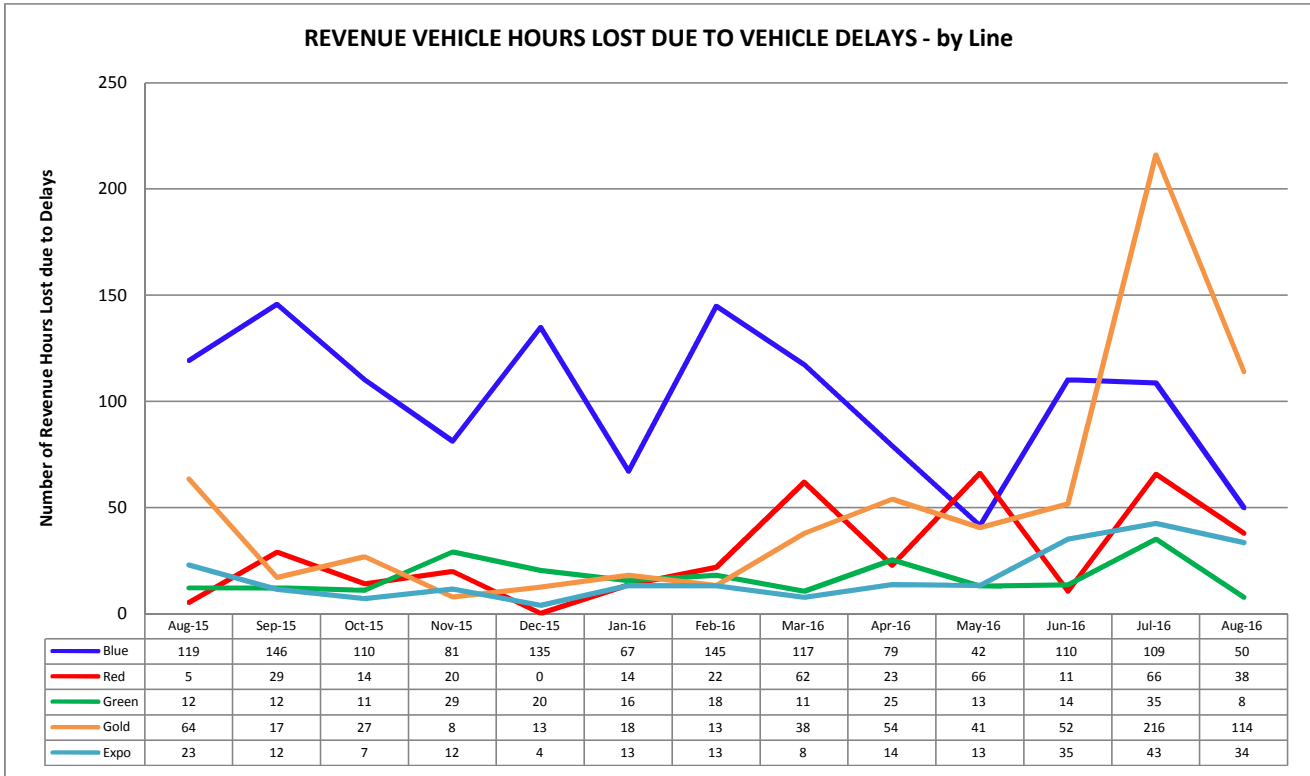
### Revenue Hours Lost Related to - OTHER



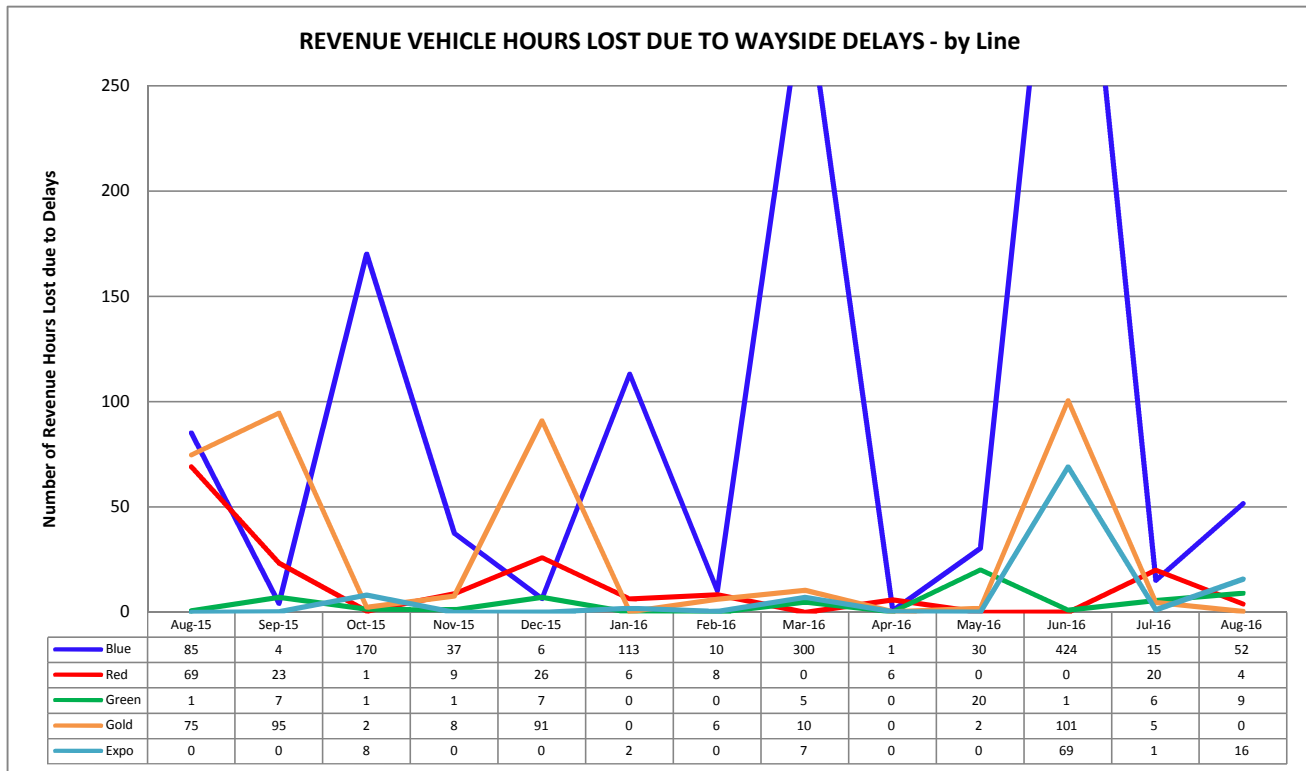
### Revenue Hours Lost Related to - POLICE & HEALTH



### Revenue Hours Lost Related to - Vehicle Delays

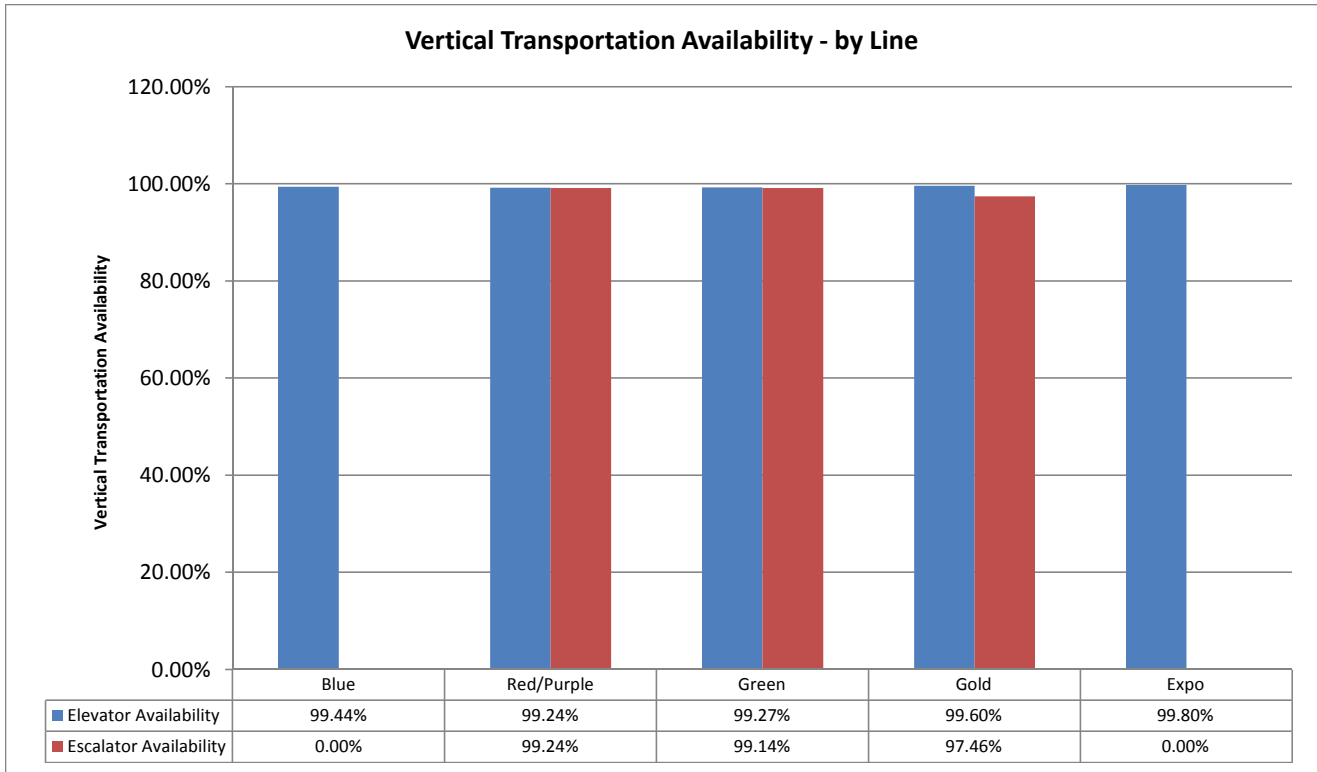


### Revenue Hours Lost Related to - WAYSIDE





## Systemwide Vertical Transportation Availability by Line

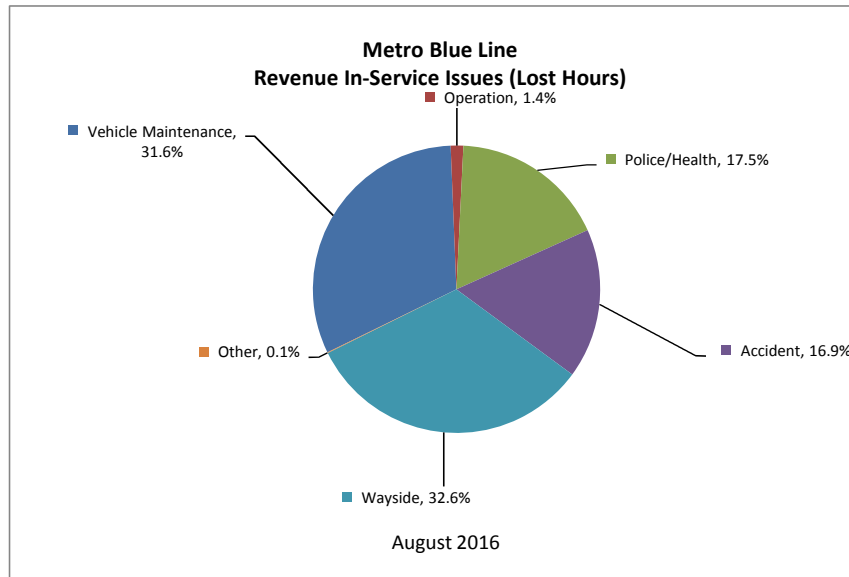


## BLUE LINE

Out of a total of 20,182 hours operated, there were approximately 158 total hours of service delays.

August 2016 Service Hours	Revenue	
	Hours	Per Cent
Revenue Hours without Delays	20,024	99.2%
Hours Delayed	158	0.8%
<b>Total Revenue Hours</b>	<b>20,182</b>	<b>100.0%</b>

Summary of the major contributors:	Count	Hours	Per Cent
Operations	15	2.2	1.4%
Accidents	5	26.7	16.9%
Vehicle Maintenance	40	50.0	31.6%
Wayside	4	51.6	32.6%
Police & Health	17	27.7	17.5%
Other	1	0.2	0.1%
<b>Total</b>	<b>82</b>	<b>158.4</b>	<b>100.0%</b>



## **August 2016 Blue Line major delay contributors were as follows:**

### **Wayside Incidents:**

**8/20/2016 6:07:00 AM - Incident# 2767370 (13 lost trips, 1,621 lost minutes)**

R-099 reports section insulator is beingheld by one screw.

**8/24/2016 10:11:00 AM - Incident# 2768880 (0 lost trips, 8 lost minutes)**

Imperial Switch 23 Out Of Correspondence

**8/27/2016 6:30:00 AM - Incident# 2770047 (0 lost trips, 75 lost minutes)**

ETS: Tripped at PCH with Breakers B05 PCH and B01 1st Street opened and unable to close.

**8/28/2016 12:40:00 PM - Incident# 2770315 (12 lost trips, 1,392 lost minutes)**

Loss of DC power from Washington Station to Vernon Station.

### **Vehicle Maintenance Incidents:**

**8/1/2016 7:55:00 AM - Incident# 2759762 (2 lost trips, 335 lost minutes)**

Spin slide, speed restriction.

Train 110

T-352

240-233

NB, Wardlow Station, Track 1

**8/2/2016 6:27:00 AM - Incident# 2760182 (0 lost trips, 6 lost minutes)**

Propulsion / Dynamic Brakes with MA Low

(156)-167-157

Train 104

T-224

Wardlow, Southbound, Track 2

**8/3/2016 6:26:00 AM - Incident# 2760620 (1 lost trip, 167 lost minutes)**

Wardlow Station, Train-117 T-231 consist #235-236 with steady propulsion faults on car #235.

**8/3/2016 7:42:00 AM - Incident# 2760628 (1 lost trip, 167 lost minutes)**

Willow Station, Train-109 T-115 consist #158-101-138 with B/O horn/gong on car #158B.

**8/3/2016 8:21:00 AM - Incident# 2760647 (1 lost trip, 167 lost minutes)**

Del Amo Station, Train-106 T-37 consist #237-245 with intermittent horn/gong on car #237A.

**8/4/2016 3:58:00 PM - Incident# 2761343 (0 lost trips, 8 lost minutes)**

Lose of Cab Signal  
Train #106  
T-264  
(246B)-229  
Willowbrook Station, Track #2, SB

**8/5/2016 5:26:00 PM - Incident# 2761827 (0 lost trips, 12 lost minutes)**

Train 123  
T-130  
(244B)-234-242  
7th and Metro Center Station, Track 2,  
Propulsion fault.

**8/8/2016 1:13:00 PM - Incident# 2762556 (0 lost trips, 4 lost minutes)**

Door will not close 3/4 122B.  
Train 102  
T-307  
144-(122B)-117  
Northbound, Firestone Station, Track 1

**8/8/2016 2:15:00 PM - Incident# 2762595 (0 lost trips, 8 lost minutes)**

Door will not close 4/5 126A and 7/8 132B  
Train 106  
T-307  
(126A)-155-(132)  
Northbound, Pacific Station, Track 1

**8/8/2016 4:30:00 PM - Incident# 2762670 (0 lost trips, 10 lost minutes)**

Emergency door handle  
Train 125  
T-053  
(119)-158-110  
Southbound, Pico Station, Track 2

**8/12/2016 6:05:00 AM - Incident# 2764139 (0 lost trips, 10 lost minutes)**

Train-102  
T-046  
Cars (230)-245-237  
18th/Flower, Track #2  
Southbound No Fault - No Movement

**8/12/2016 7:50:00 AM - Incident# 2764212 (0 lost trips, 9 lost minutes)**

Train-104  
T-281  
Cars 123-(127)-132  
Slauson Track #2  
Southbound Propulsion / Dynamic Brakes.

**8/12/2016 2:30:00 PM - Incident# 2764350 (0 lost trips, 7 lost minutes)**

Propulsion / Dynamic Brakes, cars #(136A)-168-148  
Train #121  
T-034  
Del Amo Station, Track #001, Northbound.

**8/14/2016 12:52:00 PM - Incident# 2764809 (0 lost trips, 10 lost minutes)**

Train 108: Self Applying Brakes  
T-335  
Compton Station  
Trk 1, North  
Cars (236)-237

**8/15/2016 7:01:00 AM - Incident# 2764980 (1 lost trip, 172 lost minutes)**

Operator reports self applying brakes  
Train 115  
T-50  
(161A)-128-121  
Track 2 S/B Grand Station

**8/15/2016 7:34:00 AM - Incident# 2765007 (1 lost trip, 167 lost minutes)**

Vehicle Tech. reports loud noise from under carriage  
Train 116  
T-258  
145-(117)-155  
Track 2 S/B Grand

**8/15/2016 10:18:00 PM - Incident# 2765388 (0 lost trips, 5 lost minutes)**

Speed restriction  
Train 110  
T-353  
(168)-125-158  
P.c.H north track1

**8/16/2016 7:33:00 AM - Incident# 2765505 (0 lost trips, 6 lost minutes)**

Propulsion / Dynamic Brakes  
(231B-235-247)  
Train 114  
T-164  
Artesia, Northbound, Track 1

**8/16/2016 7:38:00 AM - Incident# 2765516 (0 lost trips, 6 lost minutes)**

Friction Brakes (Self applying brakes)  
(242B-237-245)  
Train 117  
T-493  
103rd, Southbound, Track 2

**8/17/2016 4:41:00 AM - Incident# 2765931 (1 lost trip, 172 lost minutes)**

No cab signal. ATP fail.  
Train 104  
T-87  
Track 1, N/B  
Alondra Grade crossing  
(156A)-105-167

**8/18/2016 11:56:00 AM - Incident# 2766627 (0 lost trips, 12 lost minutes)**

Operator reports low air pressure  
Train # 103  
T-352  
250-(236)-246  
Washington Station, Track #2, SB

**8/20/2016 3:10:00 PM - Incident# 2767461 (2 lost trips, 261 lost minutes)**

Train loses air while attempting to uncouple a consist with a B/O A/C.  
Train 107, T-292  
143-149-(101A)  
Track 2, Willow, South

**8/20/2016 5:16:00 PM - Incident# 2767480 (0 lost trips, 7 lost minutes)**

Train operator reports loss of air pressure on train.  
Train 106, T-376  
(141B)-152  
Track 2, 103rd, South

**8/22/2016 12:55:00 PM - Incident# 2768055 (1 lost trip, 167 lost minutes)**

Operator reports of a recurring propulsion fault, which cannot be cleared. Train 104  
T-174  
(301)302-232  
7th Metro Ctr., Trk. 2, southbound

**8/23/2016 10:29:00 AM - Incident# 2768467 (0 lost trips, 10 lost minutes)**

Train no movement.  
Grand Station, Track #2, Southbound.  
T-493.  
LRV- (126B), 130, 162.  
Train #102

**8/24/2016 4:19:00 PM - Incident# 2769039 (0 lost trips, 12 lost minutes)**

Operator reports of no movement, with a possible door problem.  
Train 132  
T-211  
230-239-302  
4th/Pacific, Trk. 1, northbound

**8/25/2016 5:25:00 PM - Incident# 2769516 (1 lost trip, 167 lost minutes)**

Propulsion fault unable to clear (301)-232  
Train 128  
T-291  
Track1  
Northbound  
Willow station

**8/28/2016 1:44:00 PM - Incident# 2770309 (1 lost trip, 116 lost minutes)**

Propulsion fault with a speed restriction of 35mph  
Train #106  
T-400  
(148)-100  
Pico Station, Track #2, SB

**8/29/2016 5:12:00 AM - Incident# 2770414 (0 lost trips, 7 lost minutes)**

Auto Train Protection (Speed Limit) LRV 245B  
T-493  
Train 103  
LRV (245B) 301 247  
7MC Station, Track 2, Southbound.

**8/29/2016 8:26:00 AM - Incident# 2770507 (0 lost trips, 4 lost minutes)**

Emergency door release pulled  
T-183  
Train 413  
LRV 237 246 250  
Grand Station, Track 2, southbound.

**8/29/2016 12:05:00 PM - Incident# 2770648 (0 lost trips, 11 lost minutes)**

Operator reports of rrecurring propulsion faults  
Train 105  
T-259  
(109B)134-123  
Willowbrook station, Trk. 2, southbound

**8/29/2016 3:17:00 PM - Incident# 2770711 (1 lost trip, 180 lost minutes)**

Operator reports of a propulsion fault with no movement.  
Train 125  
T-164  
(153B)105  
Del Amo station, Trk. 1, northbound

**8/29/2016 5:17:00 PM - Incident# 2770743 (1 lost trip, 180 lost minutes)**

Operator reports of no movement. Train 11  
T-411  
(139)126-132  
Slauson station, Trk. 1, northbound

**8/29/2016 5:30:00 PM - Incident# 2770745 (0 lost trips, 11 lost minutes)**

Operator reports of a propulsion fault with a speed restriction  
Train 133  
T-250  
(120)(118)136  
Wardlow station, Trk. 1, northbound

**8/29/2016 10:38:00 PM - Incident# 2770846 (0 lost trips, 24 lost minutes)**

Pico/Train 494/Cars 166, 158/Reports that he feels like he is dragging something.

**8/30/2016 6:27:00 AM - Incident# 2770942 (0 lost trips, 18 lost minutes)**

T-194 reports propulsion faults on car 120A on train 118 at Del Amo station.

**8/30/2016 12:00:00 PM - Incident# 2771158 (0 lost trips, 20 lost minutes)**

Propulsion / Dynamic Brakes fault on train 102  
T-298, train 102  
126-129-159  
Grand Station, track 1, north



**8/30/2016 5:57:00 PM - Incident# 2771335 (1 lost trip, 168 lost minutes)**

Friction Brakes burning on car 239  
T-130, train 123  
(239)-302-247  
Imperial, track 2, south

**8/31/2016 8:02:00 AM - Incident# 2771503 (0 lost trips, 8 lost minutes)**

Propulsion / Dynamic Brakes  
(136-105)  
Train 118  
T-034  
Southbound, Track 2, Artesia

**8/31/2016 8:11:00 AM - Incident# 2771513 (1 lost trip, 168 lost minutes)**

Propulsion / Dynamic Brakes  
(244A)-224  
Train 120  
T-194  
Southbound, Track 2 Washington

**Police & Health Incidents:**

**8/6/2016 2:03:00 PM - Incident# 2762025 (1 lost trip, 133 lost minutes)**

Deputy Macias requested to hold train 102 at Del Amo Station.  
T-053  
Train 102  
(133)-155  
Del Amo Station, Northbound Tk 1

**8/7/2016 9:59:00 AM - Incident# 2762180 (0 lost trips, 20 lost minutes)**

Train-109  
T-233  
Cars (165)-137  
Northbound, Track 1  
Del Amo Station Misc. Passenger Problem operator claiming to be attacked by patron.

**8/7/2016 1:53:00 PM - Incident# 2762221 (0 lost trips, 10 lost minutes)**

Operator reports of a trespasser in the Portal at 7th Metro Ctr.  
Train 603k  
T381  
154A-146-100  
7th Metro Ctr, (Portal), Trk. 2, southbound

**8/7/2016 8:51:00 PM - Incident# 2762276 (0 lost trips, 24 lost minutes)**

Compton LASD request that no trains service Compton Station due to police activity.

**8/7/2016 9:05:00 PM - Incident# 2762288 (0 lost trips, 15 lost minutes)**

Train 109 Northbound at Del Amo station.

T-298 reported male individual with weapon on the platform.

**8/10/2016 3:30:00 PM - Incident# 2763552 (0 lost trips, 9 lost minutes)**

Operator reports of a person acting erratically on the train

**8/13/2016 3:47:00 PM - Incident# 2764673 (0 lost trips, 13 lost minutes)**

LASD was holding train 109 at Artesia station

Train 109

T-053

113-120

Artesia station, Trk. 2, southbound

**8/13/2016 10:32:00 PM - Incident# 2764725 (0 lost trips, 10 lost minutes)**

Patron having a seizure

Train 614

Platform #1 7th/Metro Center

T-75

(152A)-114

**8/13/2016 10:42:00 PM - Incident# 2764721 (0 lost trips, 8 lost minutes)**

Reports of an individual brandishing a firearm

Train #106, Track #1 NB Del Amo,

T-400

(142A)-133

**8/15/2016 7:15:00 PM - Incident# 2765348 (0 lost trips, 10 lost minutes)**

Sick passenger

**8/17/2016 7:25:00 AM - Incident# 2766084 (8 lost trips, 1,354 lost minutes)**

Blockade at Slauson Station (Suicidal person).

**8/21/2016 5:15:00 PM - Incident# 2767742 (0 lost trips, 4 lost minutes)**

LASD Deputy Payne advises of an assault on rail car 104.

**8/25/2016 12:05:00 AM - Incident# 2769112 (0 lost trips, 15 lost minutes)**

Passenger was robbed on train 102 while pulling into Artesia Station.

**8/25/2016 12:07:00 AM - Incident# 2769090 (0 lost trips, 11 lost minutes)**

Passenger setting fire to newspaper in the seats.

**8/26/2016 2:12:00 PM - Incident# 2769910 (0 lost trips, 4 lost minutes)**

LASD request to hold train

Train 101

T-46

126-148-139

Track 2

Southbound

Compton station

**8/27/2016 9:22:00 PM - Incident# 2770187 (0 lost trips, 16 lost minutes)**

Alleged fight, then Person with alleged firearm

Train 109

Track #1

NB 103rd Street Station

T-292

(103)-121

**8/31/2016 3:33:00 PM - Incident# 2771703 (0 lost trips, 5 lost minutes)**

Operator reports of a trespasser Train 107

T-357

247-302-301

103rd Street, Trk. 2, southbound

**Other Incidents:**

**8/25/2016 7:08:00 PM - Incident# 2769543 (0 lost trips, 10 lost minutes)**

Main yard interlocking, RTU in down.

**Operations Incidents:**

**8/9/2016 2:32:00 PM - Incident# 2763069 (0 lost trips, 4 lost minutes)**

Train Delay: Propulsion Fault

T-34

Train 121

Cars: 148-114-(110)

Del Amo Station, Trk 1, Southbound

Propulsion Fault with speed restriction and audible

**8/9/2016 4:15:00 PM - Incident# 2763134 (0 lost trips, 9 lost minutes)**

Train Delay: Friction Brake Application  
T-183, Train 124  
Cars: 123-135-13  
Washington Station, Trk 2, Southbound  
9 minute delay  
Train Controller: R-176  
Communications Controller: R-066

**8/9/2016 8:15:00 PM - Incident# 2763198 (0 lost trips, 12 lost minutes)**

Train Delay: Air leak  
Train 131  
Cars 248,232,242  
T-201  
Vernon Station, Trk 2, Southbound

**8/10/2016 7:37:00 AM - Incident# 2763362 (0 lost trips, 8 lost minutes)**

Train Delay due cab signals fluxation coming from Expo.

**8/11/2016 5:04:00 AM - Incident# 2763678 (0 lost trips, 9 lost minutes)**

Train Delay due to Controller error.

**8/12/2016 3:36:00 PM - Incident# 2764394 (0 lost trips, 6 lost minutes)**

Train Delay, Cars # 246B-248-(240A) (locked herself out of the cab  
Train #110  
T-264  
Washington Station, Track #002, Southbound.

**8/15/2016 10:56:00 PM - Incident# 2765393 (0 lost trips, 10 lost minutes)**

Train delay  
train 102  
T-201  
Cars (138)-165-112  
7 & Metro track 2

**8/19/2016 7:52:00 AM - Incident# 2767039 (0 lost trips, 9 lost minutes)**

T-26 operating Train 108 went 10-100 at Transit Mall

**8/19/2016 10:28:00 AM - Incident# 2767120 (0 lost trips, 5 lost minutes)**

Train Operator T-26 went 10-100 at Transit Mall  
T-26, Train 101, Transit Mall, Northbound

**8/20/2016 2:12:00 PM - Incident# 2767443 (0 lost trips, 16 lost minutes)**

Train delay due to two sets of doors being cut out on train.

**8/20/2016 11:27:00 PM - Incident# 2767540 (0 lost trips, 10 lost minutes)**

Train 104  
T-75  
Cars 129-118  
Willowbrook tk 2

**8/24/2016 2:49:00 PM - Incident# 2768995 (0 lost trips, 6 lost minutes)**

Train 123 was delayed departing from the MBL Yard  
Train 123  
T-149  
232-301-231  
MBL Yard

**8/24/2016 3:40:00 PM - Incident# 2769015 (0 lost trips, 12 lost minutes)**

Operator reports of a non-cycling bar signal at the 1st Street station  
Train 105  
T-400  
240-237-245  
1st Street station, Trk. 2, southbound

**8/28/2016 8:11:00 PM - Incident# 2770351 (0 lost trips, 10 lost minutes)**

Train delay  
Train 104  
Cars 110-167  
Grand station N/B track 2

**8/29/2016 9:05:00 AM - Incident# 2770521 (0 lost trips, 7 lost minutes)**

Train 106 at Willow Signal 4N, Rule Violation red/red aspect.

**Accidents:**

**8/5/2016 2:22:00 AM - Incident# 2761492 (0 lost trips, 12 lost minutes)**

Accident at Alondra Grade Crossing. Non MTA involved. The vehicle hit and knocked down the Signal Mask onto Track #1.

**8/5/2016 4:08:00 PM - Incident# 2761800 (0 lost trips, 8 lost minutes)**

Train 105  
T-413  
(111A)-129  
Florence Station, Track 2, Operator T413 at Florence track 2 stated that a passenger struck the train with his surf

**8/13/2016 5:18:00 AM - Incident# 2764533 (10 lost trips, 1,247 lost minutes)**

Artesia/Train 609/T-200 reports 10-72.

**8/23/2016 2:31:00 PM - Incident# 2768583 (1 lost trip, 167 lost minutes)**

Reports Train vs Auto

Train #131

T-250

(167A)-156-122

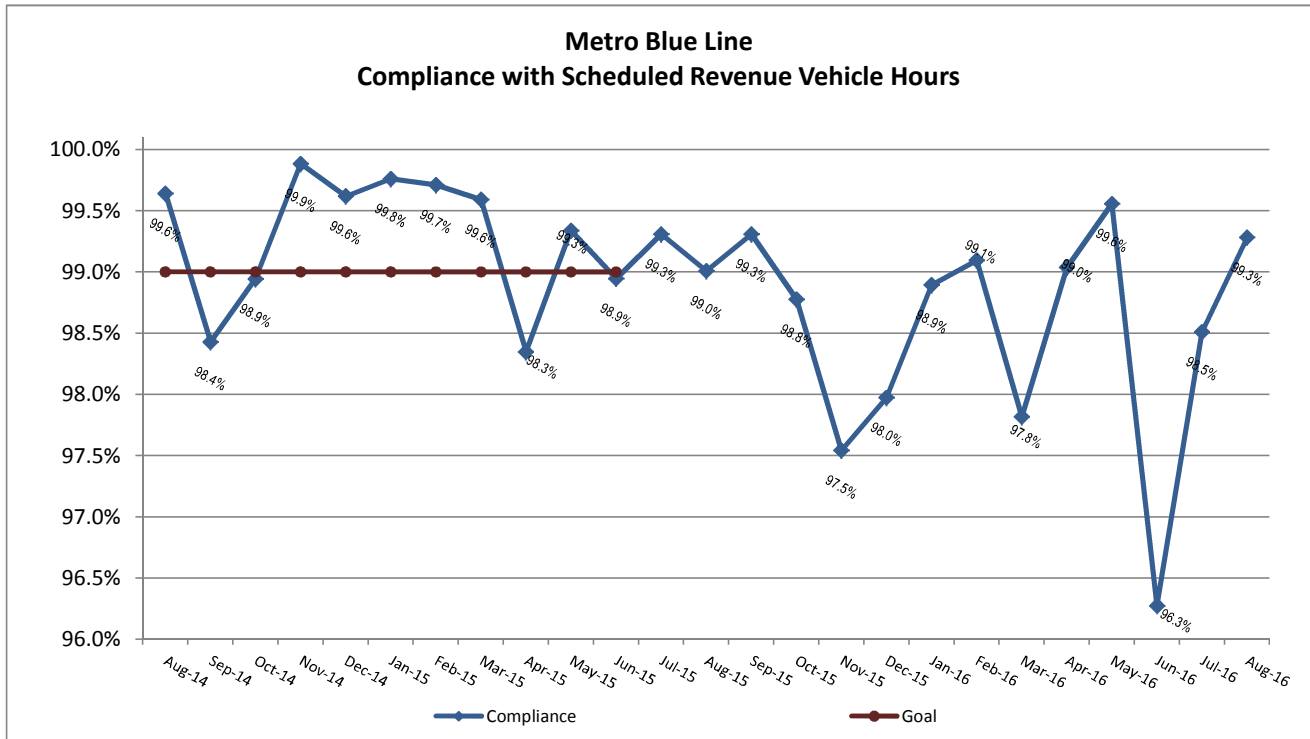
NB, Pacific/3rd Street, Track #1

**8/30/2016 11:11:00 AM - Incident# 2771057 (1 lost trip, 168 lost minutes)**

Train 105 with Operator T-224 with cars 123 and 109 reports vehicle made left turn in front of train at Washington and Naomi Ave intersection and made contact. Operator reports as incident minor with no injuries and no damage to the train.

## MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

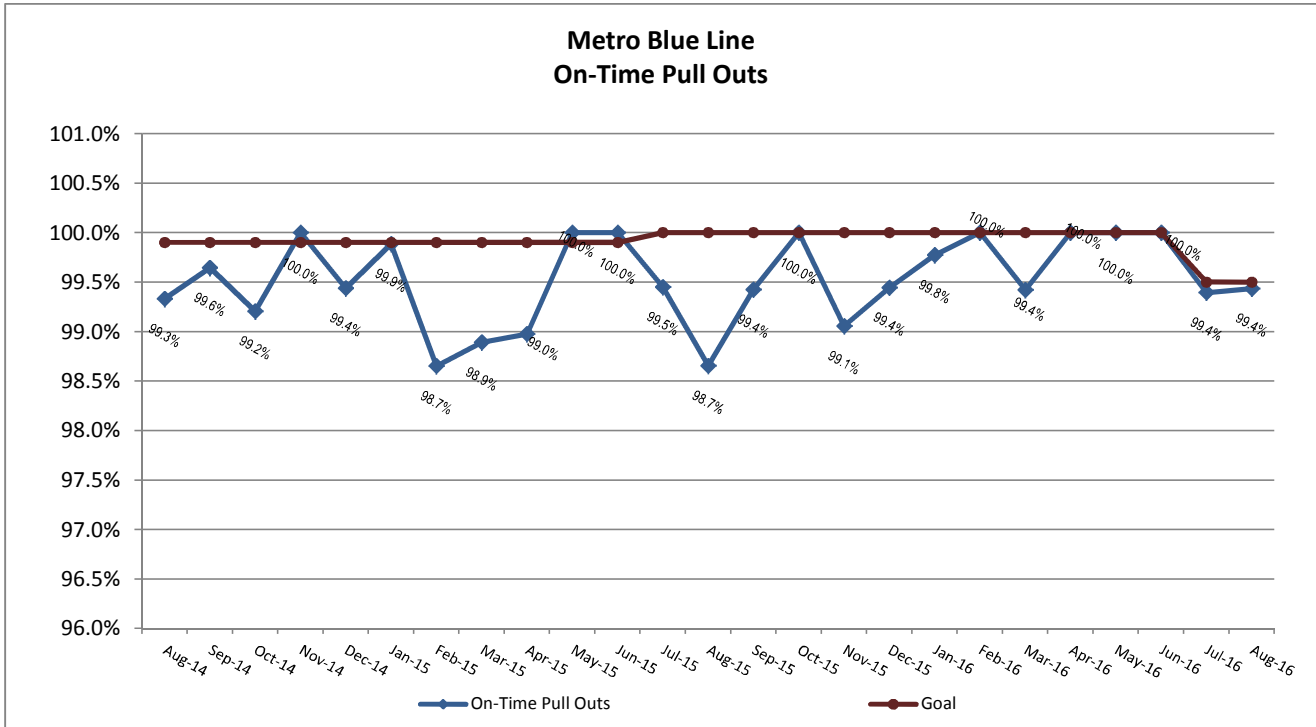
### COMPLIANCE WITH SCHEDULED VEHICLE HOURS CHART



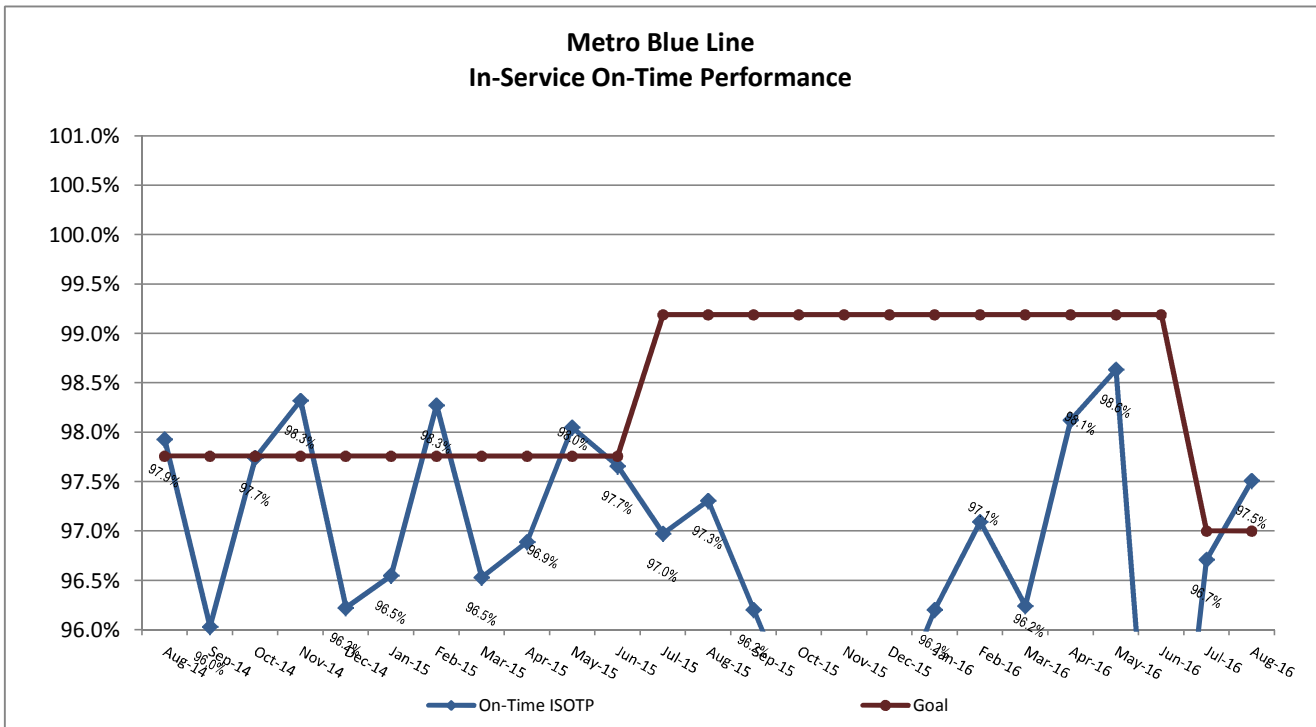
### COMPLIANCE WITH SCHEDULED TRAIN MILES CHART



### ON-TIME PULL OUTS CHART

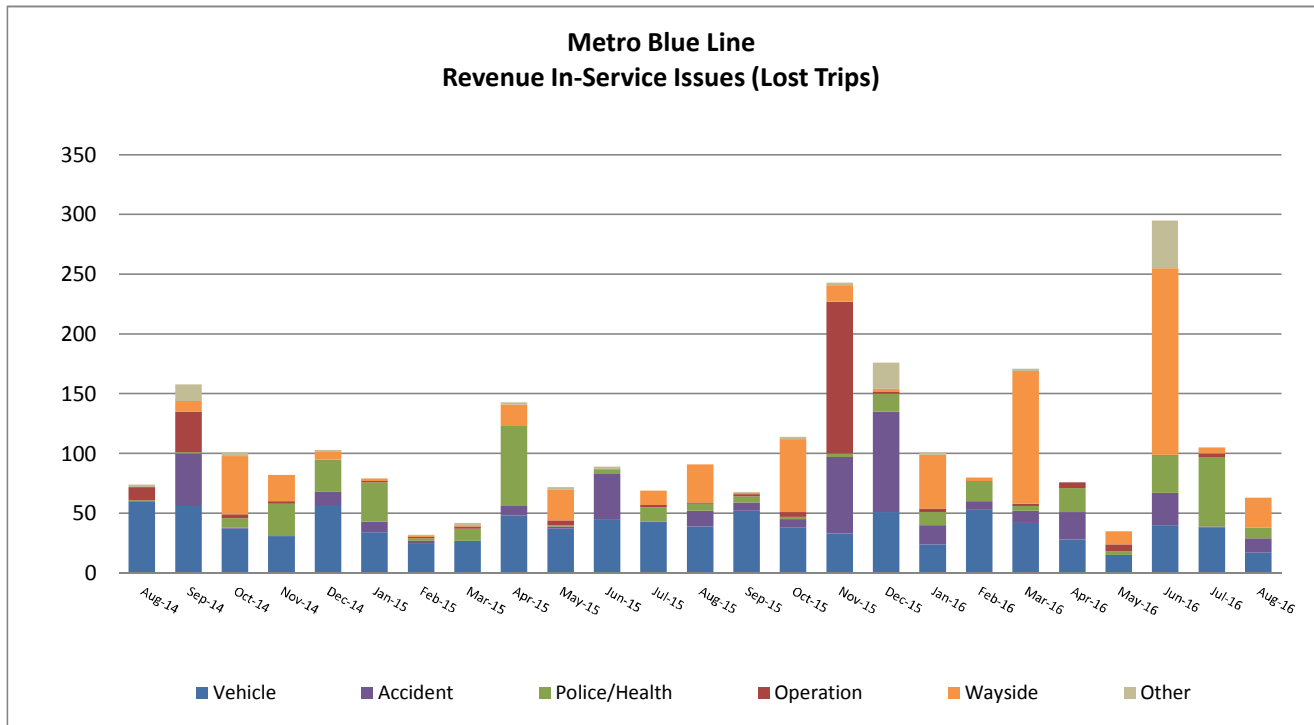


### IN-SERVICE ON-TIME PERFORMANCE CHART

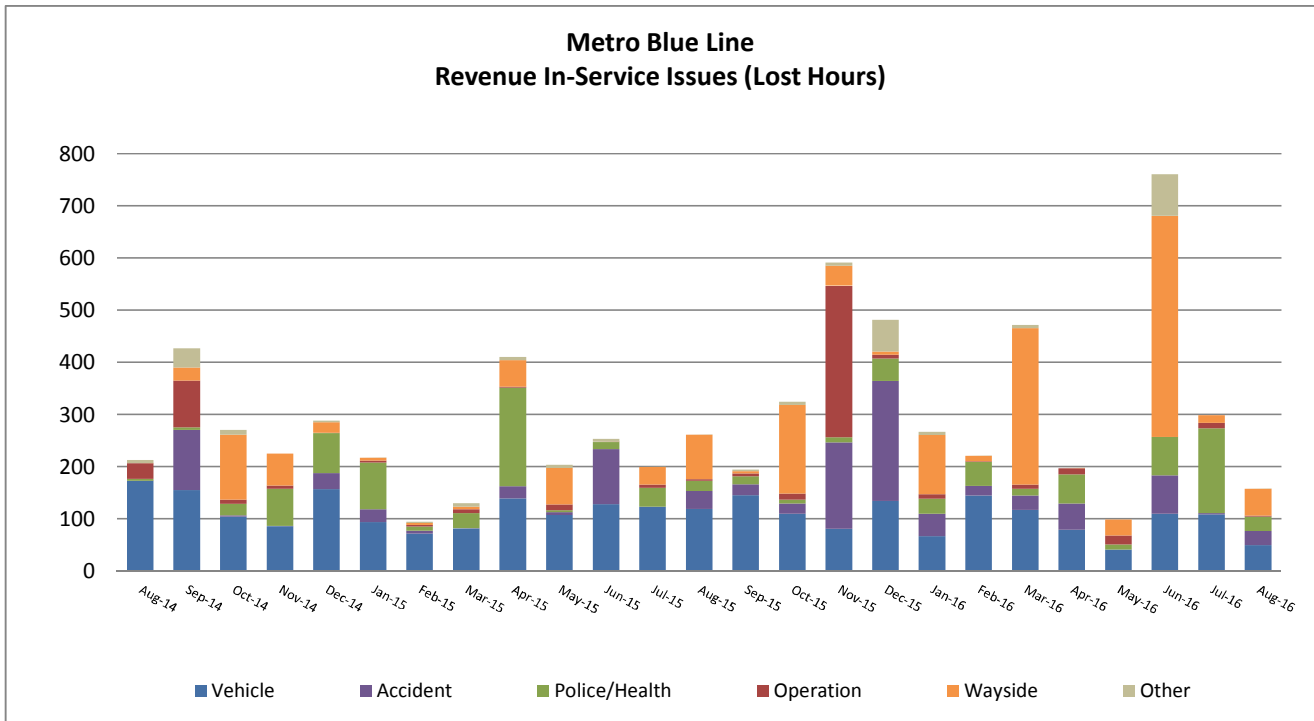




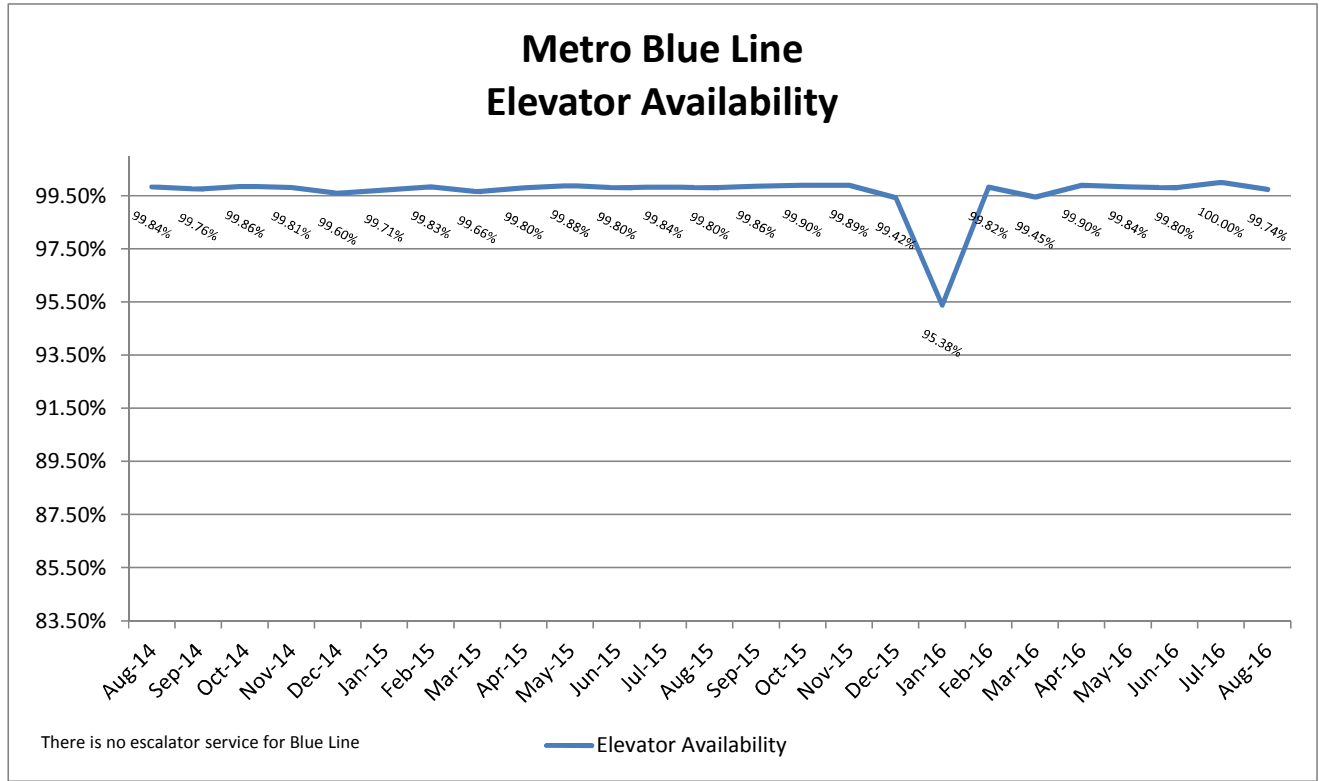
### Lost Trips



### Lost Hours



**VERTICAL TRANSPORTATION AVAILABILITY**

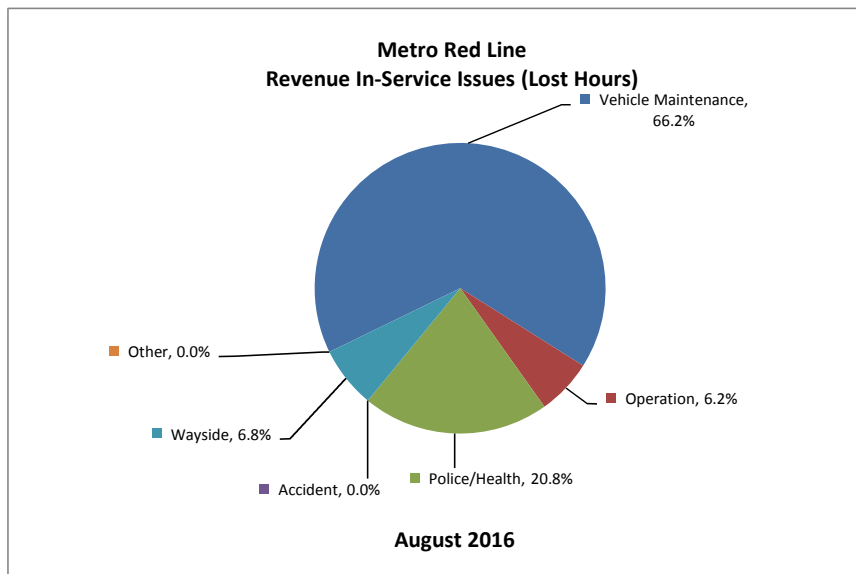


## RED LINE

Out of a total of 27,881 hours operated, there were approximately 57 total hours of service delays.

August 2016 Service Hours	Revenue	
	Hours	Per Cent
Revenue Hours without Delays	27,823	99.8%
Hours Delayed	57	0.2%
<b>Total Revenue Hours</b>	<b>27,881</b>	<b>100.0%</b>

Summary of the major contributors:	Count	Hours	Per Cent
Operations	5	3.6	6.2%
Accidents	0	0.0	0.0%
Vehicle Maintenance	10	37.9	66.2%
Wayside	2	3.9	6.8%
Police & Health	10	11.9	20.8%
Other	0	0.0	0.0%
<b>Total</b>	<b>27</b>	<b>57.3</b>	<b>100.0%</b>



## **August 2016 Red Line major delay contributors were as follows:**

### **Wayside Incidents:**

#### **8/10/2016 9:20:00 PM - Incident# 2763661 (0 lost trips, 220 lost minutes)**

Loss of cab signals on the AR/BR tracks at Wilshire Vermont, Wilshire Normandie and Vermont Beverly.

#### **8/12/2016 1:09:00 AM - Incident# 2764135 (0 lost trips, 14 lost minutes)**

MS-141 and TP-133 performing battery maintenance at Wilshire Western.

### **Vehicle Maintenance Incidents:**

#### **8/3/2016 5:17:00 PM - Incident# 2760887 (1 lost trip, 172 lost minutes)**

Report of friction brake self apply unable to clear, no movement.

T-033

Train 218

Cars 595-596-589-590-541-(542)

Civic AR westbound.

#### **8/8/2016 10:43:00 AM - Incident# 2762495 (0 lost trips, 12 lost minutes)**

Train 208 (507,510,503,504) T-278, Vermont Beverly, AL reports doors did not open.

#### **8/8/2016 6:14:00 PM - Incident# 2762694 (2 lost trips, 319 lost minutes)**

Train 219(531,532,591,592,565,566) T-074, approaching Vermont Santa Monica, AR reports friction brake application with 2 cars on the platform and 4 in the tunnel.

#### **8/10/2016 12:25:00 PM - Incident# 2763469 (1 lost trip, 149 lost minutes)**

Train 207 (603,604,541,542), T-101, XP-3, AR reports friction brake application, no movement.

#### **8/16/2016 8:29:00 PM - Incident# 2765831 (0 lost trips, 1,140 lost minutes)**

Friction brake not releasing, operating car 562.

T-33

Train 21

Cars 603,604,565,566,561,(562)

Union Station West Interlocking.

#### **8/17/2016 10:12:00 AM - Incident# 2766109 (1 lost trip, 149 lost minutes)**

Hollywood Vine Station A/L East consist fails to stop at the six car and overshot the platform.

Train # 202

T-209

Cars # 573-574-541-(541).

E/Bound Hollywood Vine Station A/L Track.

**8/22/2016 5:55:00 PM - Incident# 2768195 (1 lost trip, 149 lost minutes)**

Train 214 (593,594,601,602,579,580) T-199, Vermont Beverly, AR contacted control stating there was a rat in her cab and then departed the station.

**8/23/2016 5:40:00 PM - Incident# 2768611 (0 lost trips, 18 lost minutes)**

Train 201 Car 512 experiencing auxiliary power failure, train came into a complete darkness at Westlake McArthur.

**8/29/2016 9:58:00 PM - Incident# 2770805 (1 lost trip, 149 lost minutes)**

Reports car 558 is getting premature overspeed. T-418

Train 209

Wilshire Vermont, BL, Eastbound

Cars: 573 574 557 (558)

**8/31/2016 11:40:00 AM - Incident# 2771610 (0 lost trips, 17 lost minutes)**

Emergency brake application. No movement

Train 206

T-328

Vermont/Sunset AL East

571 572 553 (554)

**Police & Health Incidents:**

**8/3/2016 4:06:00 PM - Incident# 2760857 (0 lost trips, 10 lost minutes)**

Report of trespasser walking on service walkway AL east of the interlocking.

**8/4/2016 1:21:00 PM - Incident# 2761274 (0 lost trips, 10 lost minutes)**

Train Operator reports a sick individual bleeding from the mouth area at Wilshire Vermont Train 206.

**8/5/2016 6:12:00 AM - Incident# 2761560 (0 lost trips, 9 lost minutes)**

Train 211 reports a male Hispanic firing up wire with a lighter behind the operating cab, 550.

Universal city Station, AL track

T-84, Eastbound.

**8/8/2016 12:11:00 PM - Incident# 2762536 (2 lost trips, 299 lost minutes)**

SCADA indicates intrusion alarm activated on the AR, west end of the platform at Vermont Beverly followed by immediate deenergized track indication between Wilshire Vermont and Vermont Sunset with ETS 11 trip indication at Vermont Beverly.

**8/13/2016 4:21:00 PM - Incident# 2764680 (0 lost trips, 8 lost minutes)**

Per LASD request, Train 206 held at Wilshire Western Station for Police activity looking for suspect.

**8/13/2016 6:34:00 PM - Incident# 2764702 (2 lost trips, 348 lost minutes)**

Train Operator reports a trespasser on the Right of Way west of cross passage 9 Between Pershing Square and 7th and Metro.

**8/14/2016 6:33:00 PM - Incident# 2764870 (0 lost trips, 10 lost minutes)**

T-418 reports altercation occurring on train 206 car 555 (cars 577, 578, 555, 556, 603, 604)|, Wilshire Vermont, AR, Westbound. Wilshire Western trip.

**8/26/2016 4:59:00 PM - Incident# 2769950 (0 lost trips, 6 lost minutes)**

Report of a group of patrons having physical altercation on car 535.

**8/27/2016 2:01:00 PM - Incident# 2770127 (0 lost trips, 3 lost minutes)**

Per LASD request, trains bypassed Hollywood and Western Station due to search for suspect.

**8/28/2016 9:06:00 AM - Incident# 2770253 (0 lost trips, 12 lost minutes)**

Trespasser observed on the AR East at Vermont Beverly Station.

**Operations Incidents:**

**8/13/2016 12:46:00 PM - Incident# 2764621 (1 lost trip, 174 lost minutes)**

Operator T-378 for Alpha K was late reporting to the mainline for Train 208 North Hollywood trip.

**8/15/2016 10:40:00 AM - Incident# 2765397 (0 lost trips, 20 lost minutes)**

Train 217 reports overshot the platform AL track, reverse running. Operator reports jerking brake arriving at the Station.

Wilshire Vermont Station.

Cars: 517 518 527 522 501 502

T-22, operating cab 517.

**8/17/2016 5:37:00 AM - Incident# 2765941 (0 lost trips, 6 lost minutes)**

Train 202 Wilshire Western 6 min delay departing Union Station, due to LASD holding train for unknown reasons.

**8/23/2016 5:05:00 AM - Incident# 2768264 (0 lost trips, 6 lost minutes)**

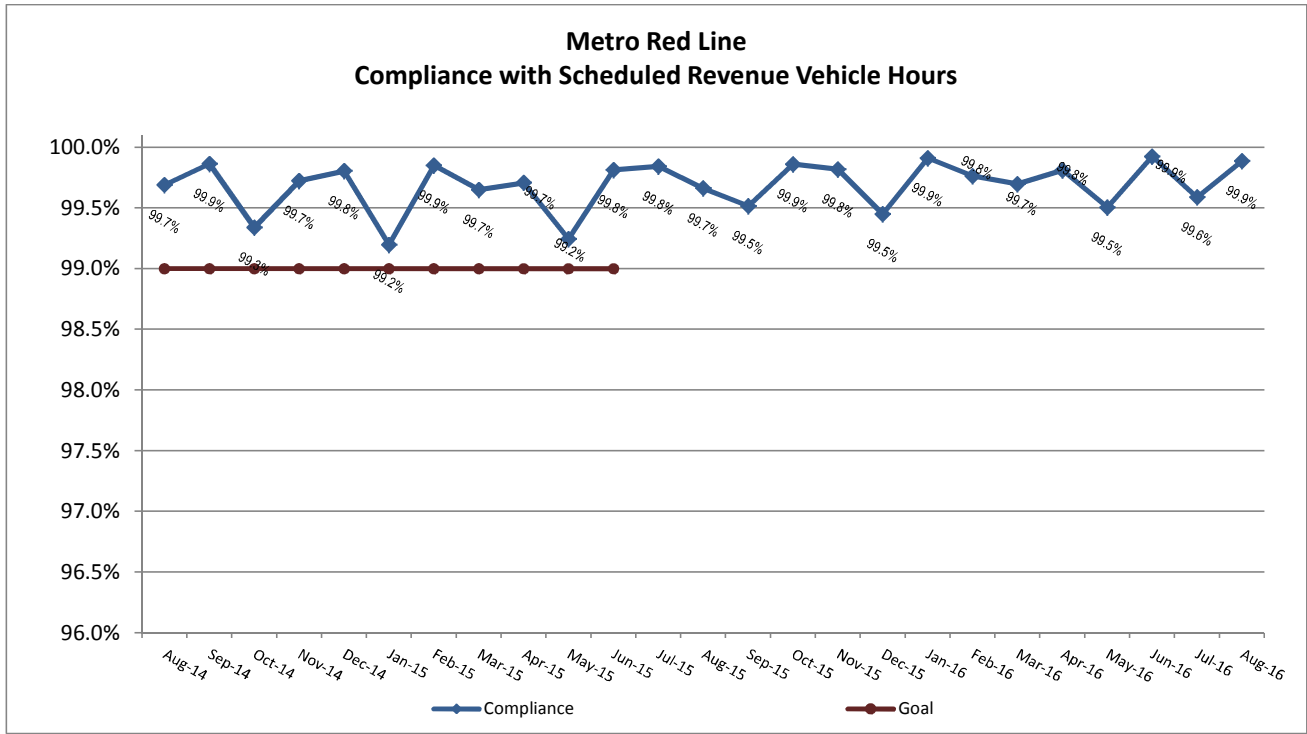
Train 201 Westbound delayed 6 minutes, LASD held train.

**8/29/2016 5:12:00 AM - Incident# 2770407 (0 lost trips, 8 lost minutes)**

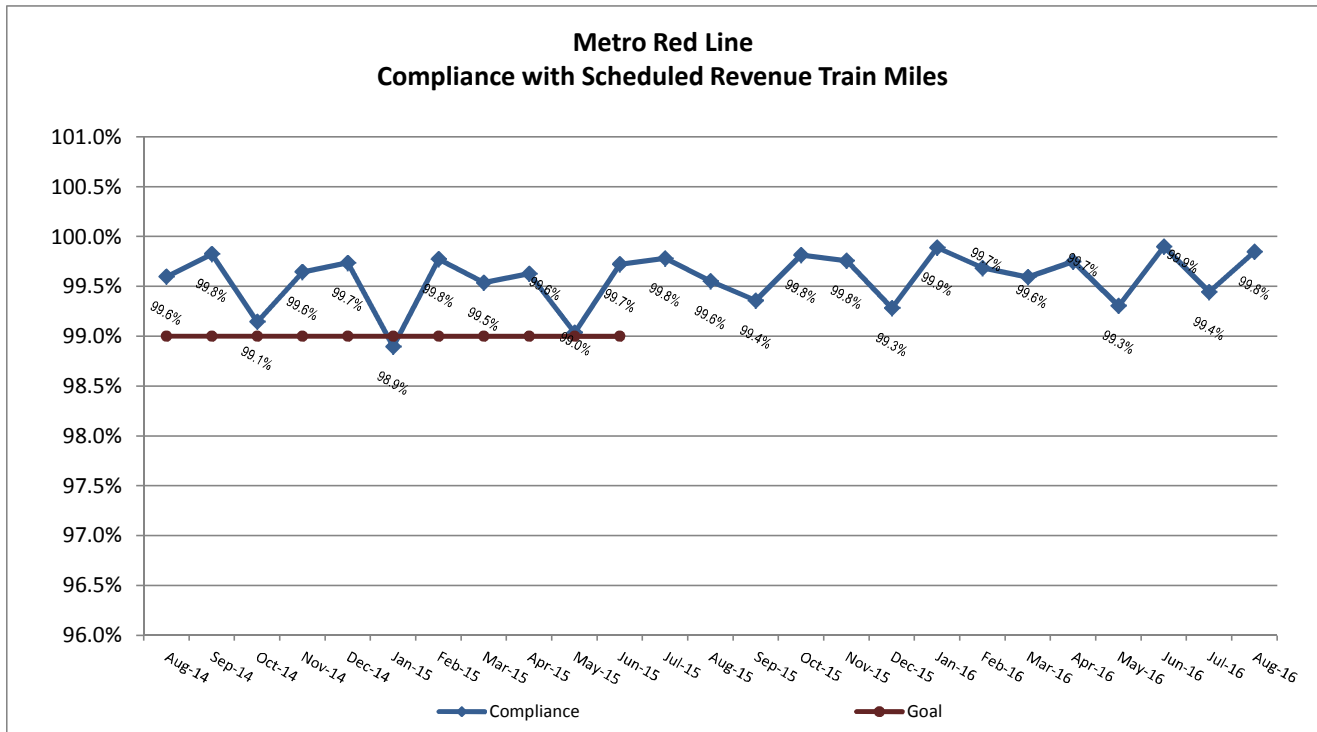
LASD held train for unknown reason over 8 minutes.

## MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

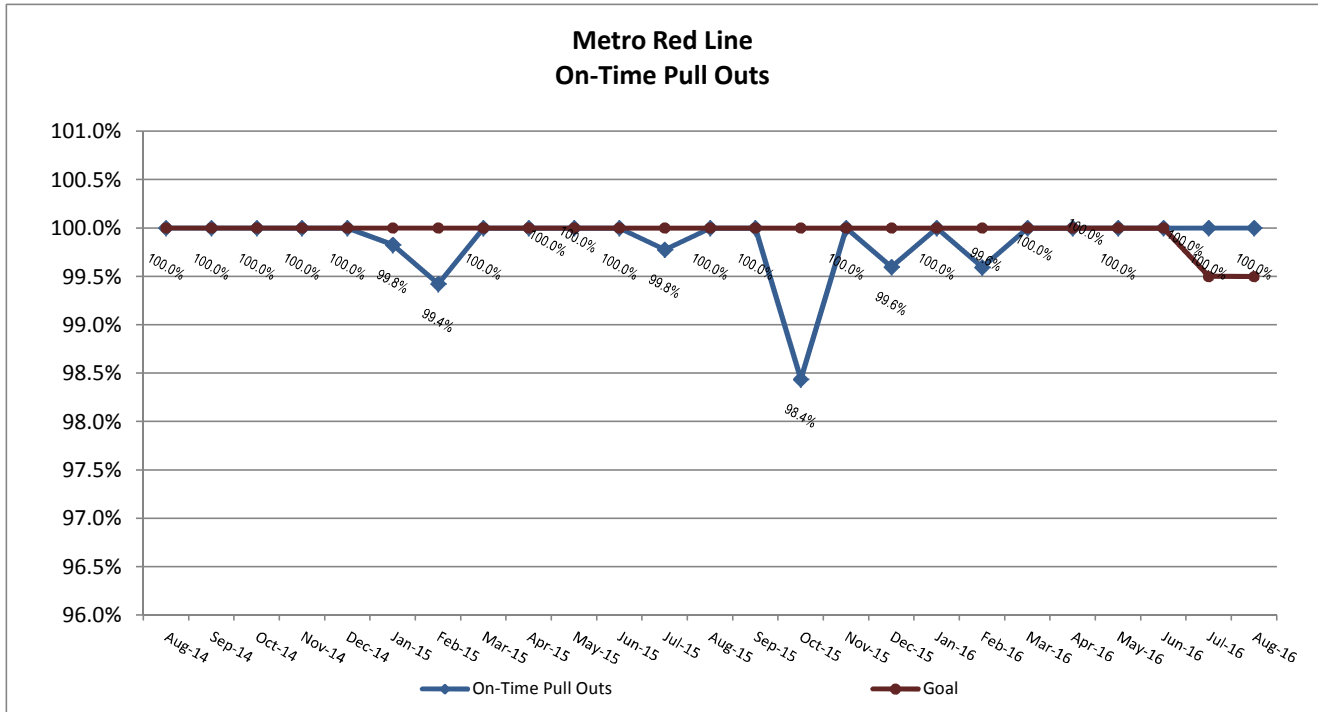
### COMPLIANCE WITH SCHEDULED VEHICLE HOURS CHART



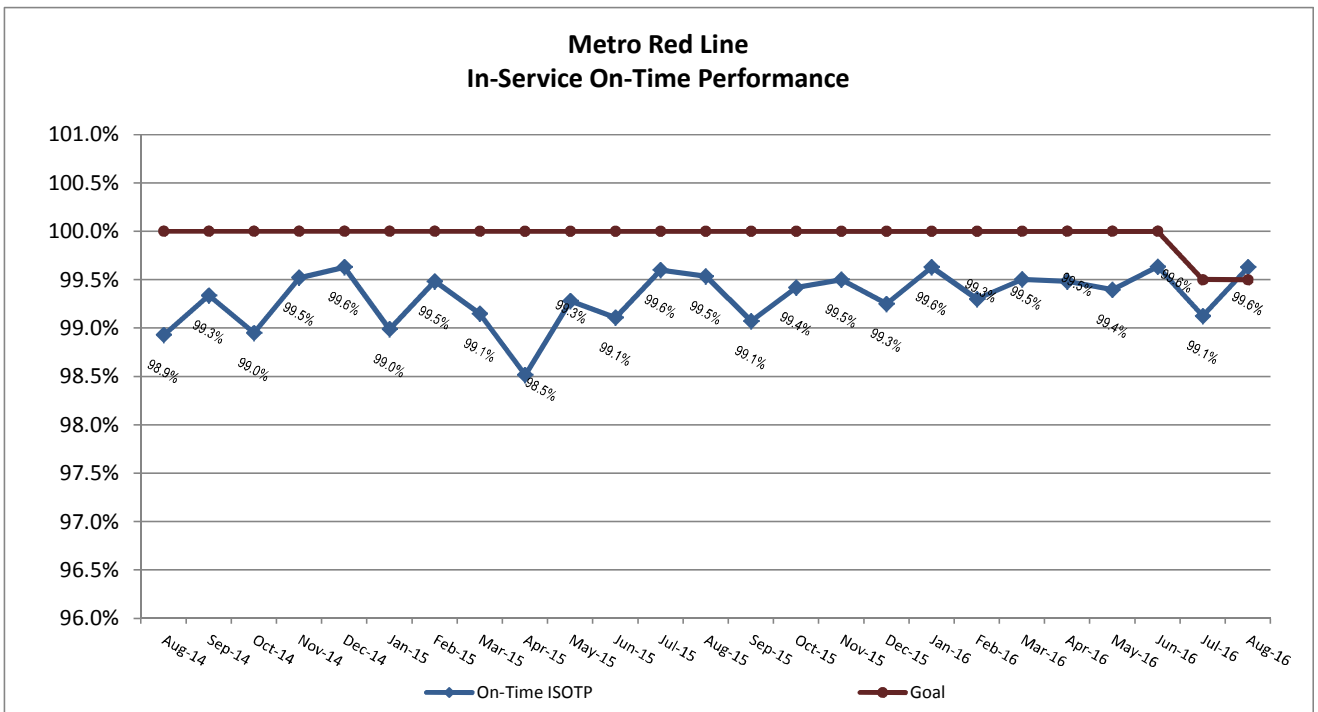
### COMPLIANCE WITH SCHEDULED TRAIN MILES CHART



### ON-TIME PULL OUTS CHART

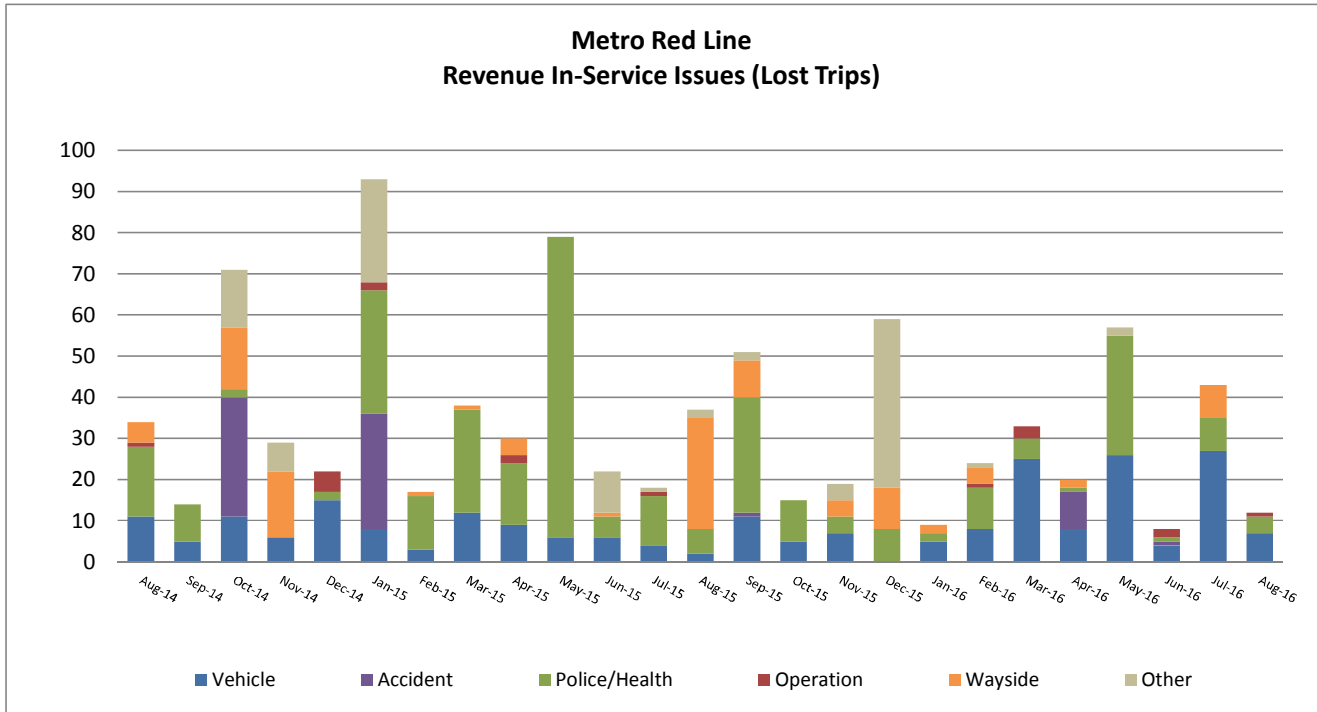


### IN-SERVICE ON-TIME PERFORMANCE CHART

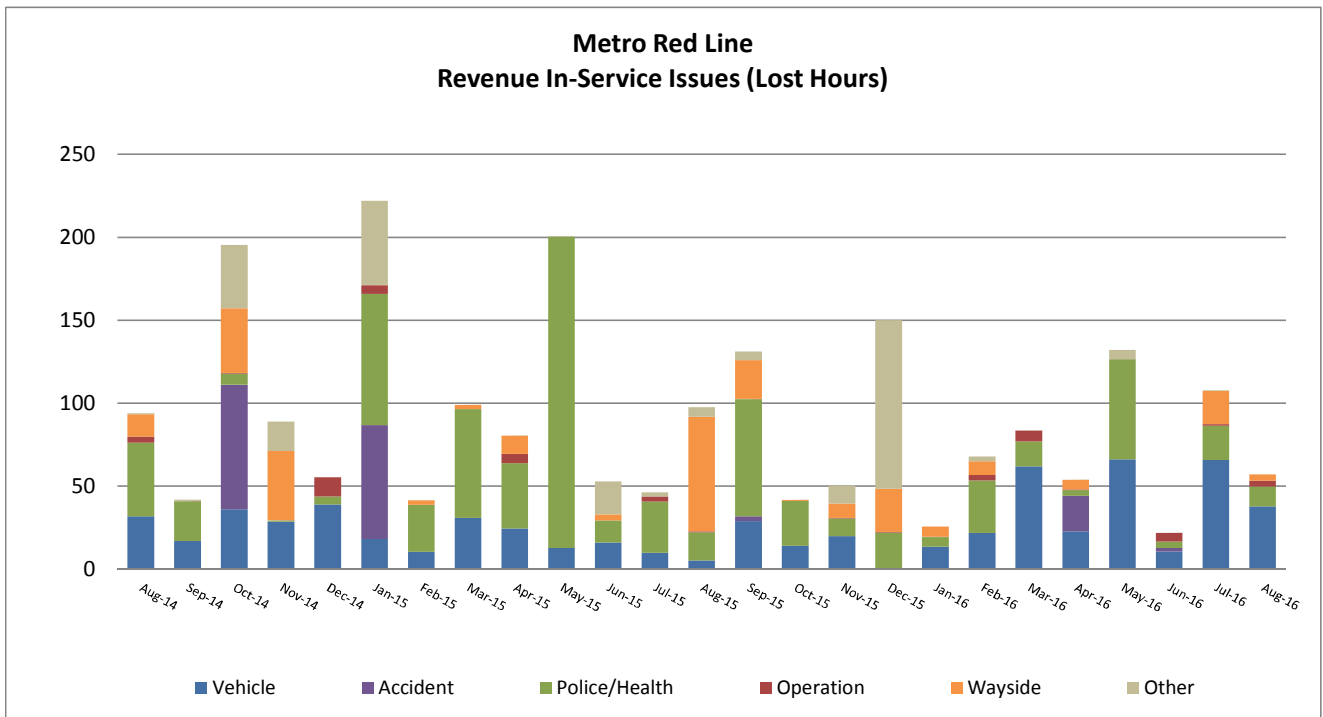




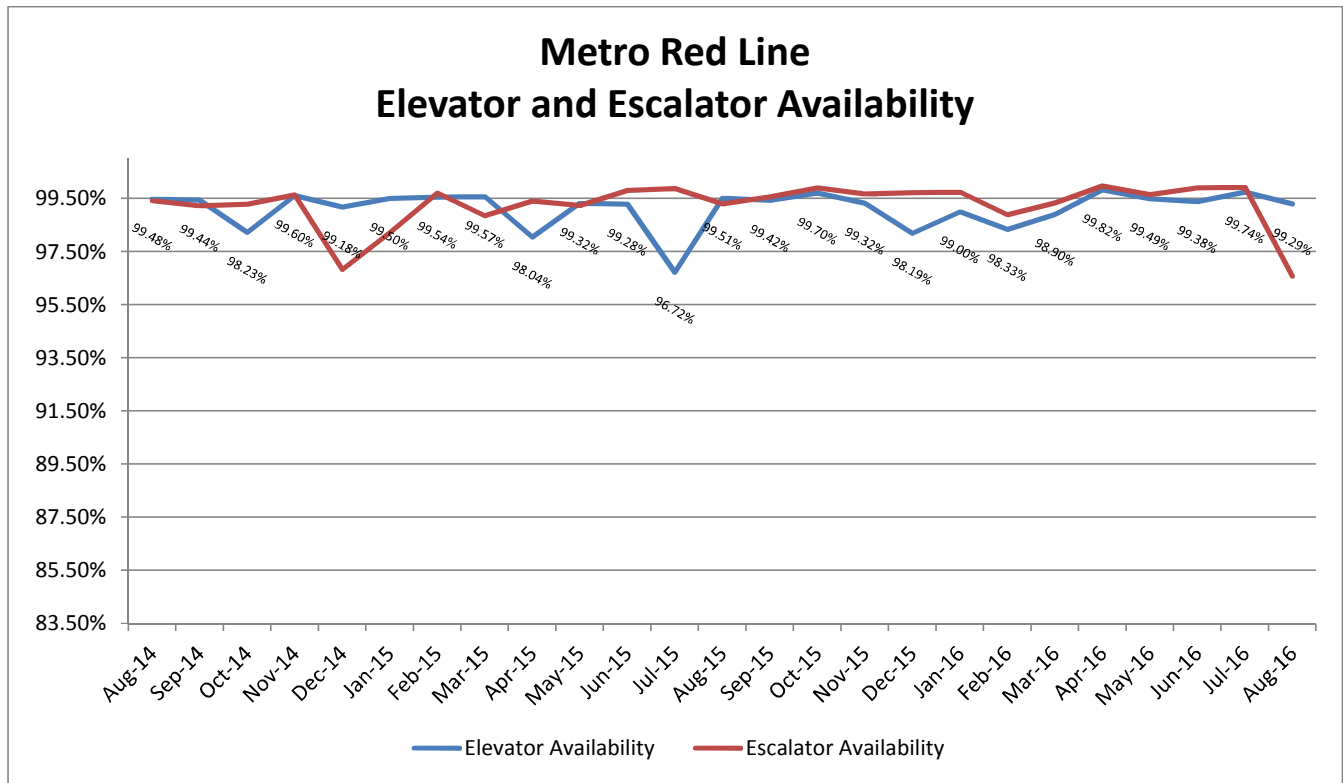
### Lost Trips



### Lost Hours



**VERTICAL TRANSPORTATION AVAILABILITY**

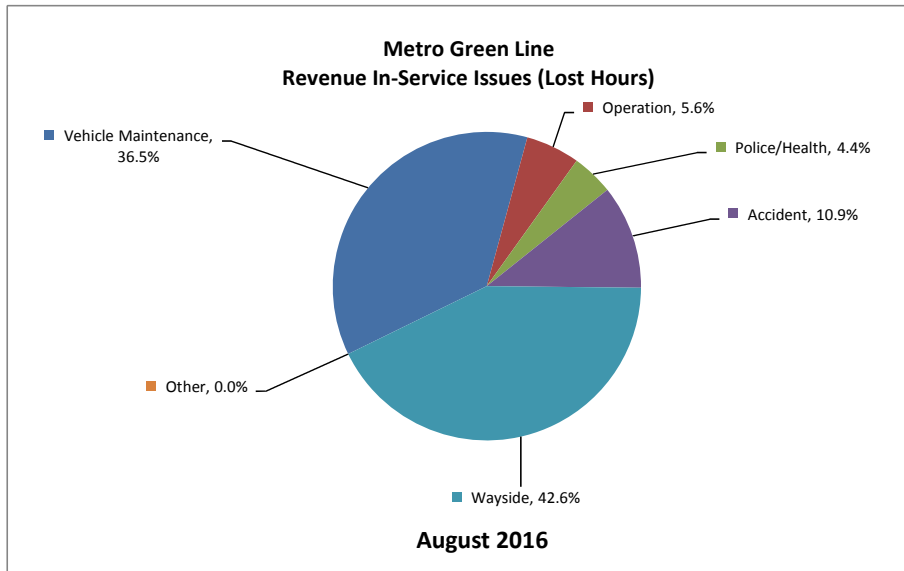


## GREEN LINE

Out of a total of 8,019 hours operated, there were approximately 21 total hours of service delays.

August 2016 Service Hours	Revenue	
	Hours	Per Cent
Revenue Hours without Delays	7,998	99.7%
Hours Delayed	21	0.3%
<b>Total Revenue Hours</b>	<b>8,019</b>	<b>100.0%</b>

Summary of the major contributors:	Count	Hours	Per Cent
Operations	7	1.2	5.6%
Accidents	1	2.3	10.9%
Vehicle Maintenance	19	7.8	36.5%
Wayside	1	9.1	42.6%
Police & Health	6	0.9	4.4%
Other	0	0.0	0.0%
<b>Total</b>	<b>34</b>	<b>21.3</b>	<b>100.0%</b>



## **August 2016 Green Line major delay contributors were as follows:**

### **Wayside Incidents:**

**8/7/2016 5:43:00 AM - Incident# 2762162 (8 lost trips, 544 lost minutes)**

Train 334 reports OCS at Yard Interface is down on tracks 1 and 2.

### **Vehicle Maintenance Incidents:**

**8/2/2016 12:05:00 PM - Incident# 2760374 (0 lost trips, 10 lost minutes)**

Operator reports Prop fault not clearing

Train 331

T-105

(222A)-205

Track 1 W/B Lakewood

**8/2/2016 3:45:00 PM - Incident# 2760446 (0 lost trips, 4 lost minutes)**

Propulsion / Dynamic Brakes, Cars #(220B)-227

Train #353

T-057

Wilmington Station, Track #001, Westbound

**8/3/2016 5:34:00 AM - Incident# 2760582 (0 lost trips, 5 lost minutes)**

Train 333 reports train did not berth properly at Douglas

T-141, Train 333

Track 2, Douglas, East

(202A)-214

**8/5/2016 4:26:00 PM - Incident# 2761811 (2 lost trips, 129 lost minutes)**

Propulsion fault unable to clear. 203 213

Train 335

T-020

Track 2

Eastbound

Avalon station

ATO MODE

**8/8/2016 2:11:00 PM - Incident# 2762597 (0 lost trips, 5 lost minutes)**

Auto Train Protection (Speed Limit), Cars #(203A)-213

Train #335

T-057

Norwalk Station, Track #001, Westbound.

**8/9/2016 5:15:00 AM - Incident# 2762840 (0 lost trips, 10 lost minutes)**

Friction brakes/no movement

Train 345

LRV 201A/207

T-057

Yard Interface signal 12 westbound

**8/9/2016 3:51:00 PM - Incident# 2763122 (0 lost trips, 6 lost minutes)**

Propulsion / Dynamic Brakes, and VDU goes on/off Cars #(220A)-243

Train #354

T-344

PAramount Intelocking, TRack #001, Westbound.

**8/12/2016 5:55:00 AM - Incident# 2764137 (0 lost trips, 6 lost minutes)**

Train's vehicle system will not cycle / boot-up

222-(207)

Train 333

T-260

Norwalk Station, westbound

**8/12/2016 2:58:00 PM - Incident# 2764391 (0 lost trips, 10 lost minutes)**

Propulsion faults

Train 333

Car 228a

Westbound

Avalon Station

**8/15/2016 1:05:00 PM - Incident# 2765206 (0 lost trips, 7 lost minutes)**

Car 225A spin-slide, Prop fault with a speed restriction.

T-96

Train 332

Cars (225A)-207

Vermont Station, Track 2, eastbound.

**8/17/2016 2:33:00 PM - Incident# 2766247 (0 lost trips, 8 lost minutes)**

Door problems

Car 209B

Train 334

Mariposa Station

Westbound

**8/21/2016 11:02:00 AM - Incident# 2767639 (1 lost trip, 62 lost minutes)**

Train 333, Cars (207A) and 217.

Douglas Station, Track 2 eastbound.

Prop fault and spin slide activation.

**8/22/2016 3:13:00 PM - Incident# 2768130 (1 lost trip, 78 lost minutes)**

Propulsion / Dynamic Brakes, Cars #(223B)-211

Train #354

T-344

Norwalk West interlocking, Track #001, Westbound.

**8/23/2016 4:53:00 PM - Incident# 2768606 (0 lost trips, 12 lost minutes)**

Car 202 overshot station by one full car length while in ATO

T-294, train 333

(202A)-217

Douglas, track 2, east

**8/24/2016 7:40:00 AM - Incident# 2768788 (0 lost trips, 10 lost minutes)**

Spin/slide activating

Train 341

LRV 224A/201

T-274

Crenshaw station track 2 eastbound

**8/24/2016 8:14:00 AM - Incident# 2768801 (0 lost trips, 9 lost minutes)**

Propulsion faults wont clear

Train 341

LRV 222A/203

T-085

Lakewood station track 1 westbound

**8/28/2016 10:44:00 PM - Incident# 2770372 (0 lost trips, 20 lost minutes)**

Low Air Pressure on car 243

Train 351

Diuglas Station Eastbound

T-294

**8/29/2016 1:58:00 PM - Incident# 2770673 (0 lost trips, 4 lost minutes)**

Auto Train Protection (Speed Limit) spin slide, cars #(224A)-226

Train #333

T-048

Lakewood Station, Track #001, Westbound.

**8/31/2016 7:26:00 AM - Incident# 2771471 (1 lost trip, 70 lost minutes)**

Propulsion faults/no movement

Train 346

LRV 208B/205

T-112

Long Beach station track 1 westbound

**Police & Health Incidents:**

**8/3/2016 10:11:00 AM - Incident# 2760714 (0 lost trips, 14 lost minutes)**

Map case glass at Norwalk Station

**8/5/2016 3:11:00 PM - Incident# 2761781 (0 lost trips, 7 lost minutes)**

LASD requests to hold train 351 at Long Beach station for a man with a gun.

Train 351

223-205

T-71

Track 1

Westbound

Long Beach station

**8/5/2016 5:11:00 PM - Incident# 2761822 (0 lost trips, 7 lost minutes)**

Trespasser east of Harbor station.

Train 331

T-385

224-210

Track 1

Westbound

On approach to harbor station

**8/23/2016 1:15:00 PM - Incident# 2768535 (0 lost trips, 10 lost minutes)**

Possible robbery aboard train 335 at Harbor Station

**8/23/2016 9:55:00 PM - Incident# 2768644 (0 lost trips, 10 lost minutes)**

Male Black assaulted by an Hispanic couple

**8/30/2016 7:34:00 PM - Incident# 2771349 (0 lost trips, 7 lost minutes)**

Misc. Passenger Problem (possible suicidal person)

LASD: Hayward

Wilmington Station.

**Operations Incidents:**

**8/1/2016 8:30:00 AM - Incident# 2759783 (0 lost trips, 15 lost minutes)**

Train delay due to emergency door release activation.

**8/4/2016 12:00:00 PM - Incident# 2761240 (0 lost trips, 5 lost minutes)**

Train Delay (debris on the right of way)

Train #334

T-260

Marine Station, Track #001, Westbound

**8/4/2016 1:37:00 PM - Incident# 2761283 (0 lost trips, 5 lost minutes)**

Train 332 Male Black threatening patrons on trailing Car 223.

T-96

Cars 222-(223)

Willowbrook Station, Track 1, westbound.

**8/4/2016 10:06:00 PM - Incident# 2761436 (0 lost trips, 19 lost minutes)**

Loss of air after uncoupling

243A

Train 331

T-24

Yard Interface eastbound

**8/11/2016 9:43:00 AM - Incident# 2763744 (0 lost trips, 12 lost minutes)**

Scheduled single track operation Lynwood crossover to Norwalk Interlocking.

**8/14/2016 9:24:00 AM - Incident# 2764783 (0 lost trips, 9 lost minutes)**

Marine Station, Train-332 T-57 consist #204-211 notified ROC at 9:22 hours performing 10-100 with scheduled departure time of 9:24 hours.

**8/16/2016 6:00:00 PM - Incident# 2765791 (0 lost trips, 7 lost minutes)**

Train 334 was not answering the Radio. Train was given a speed restriction and a stop aspect at Crenshaw Interlocking due to a trespasser on the ROW.

**Accidents:**

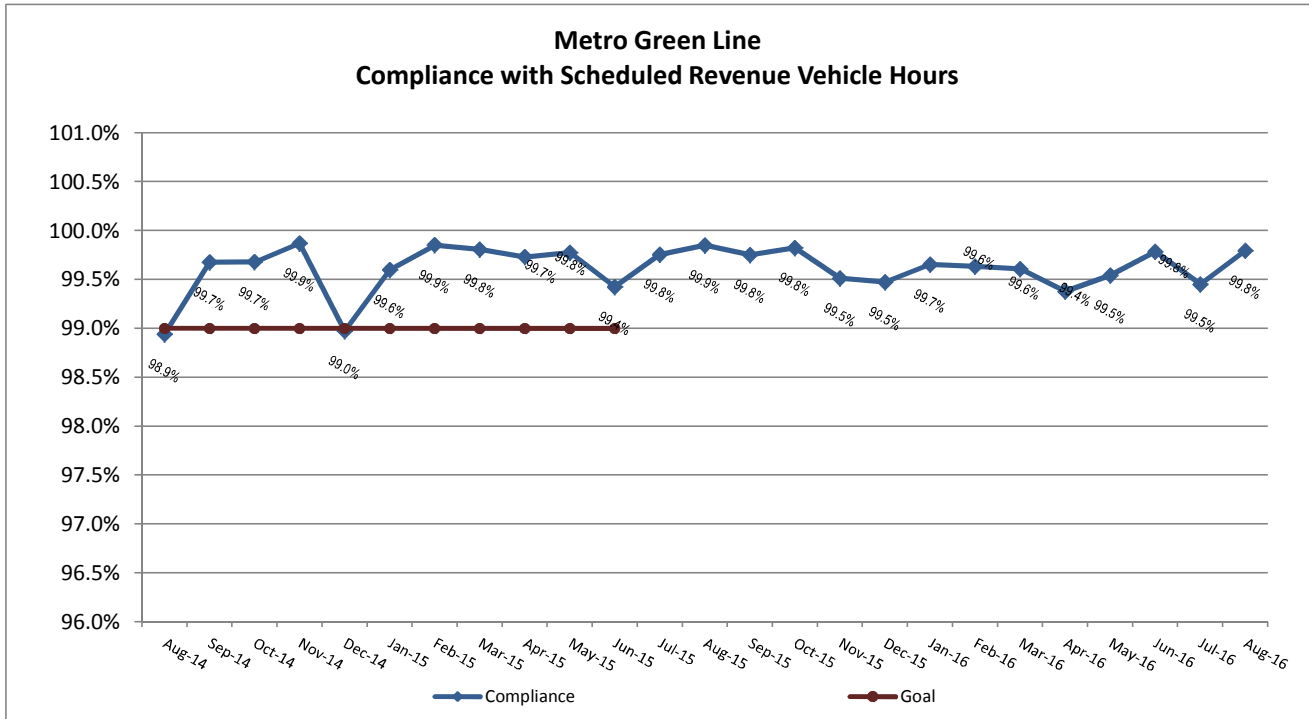
**8/19/2016 4:16:00 PM - Incident# 2767280 (2 lost trips, 139 lost minutes)**

Train vs. Debris on ROW

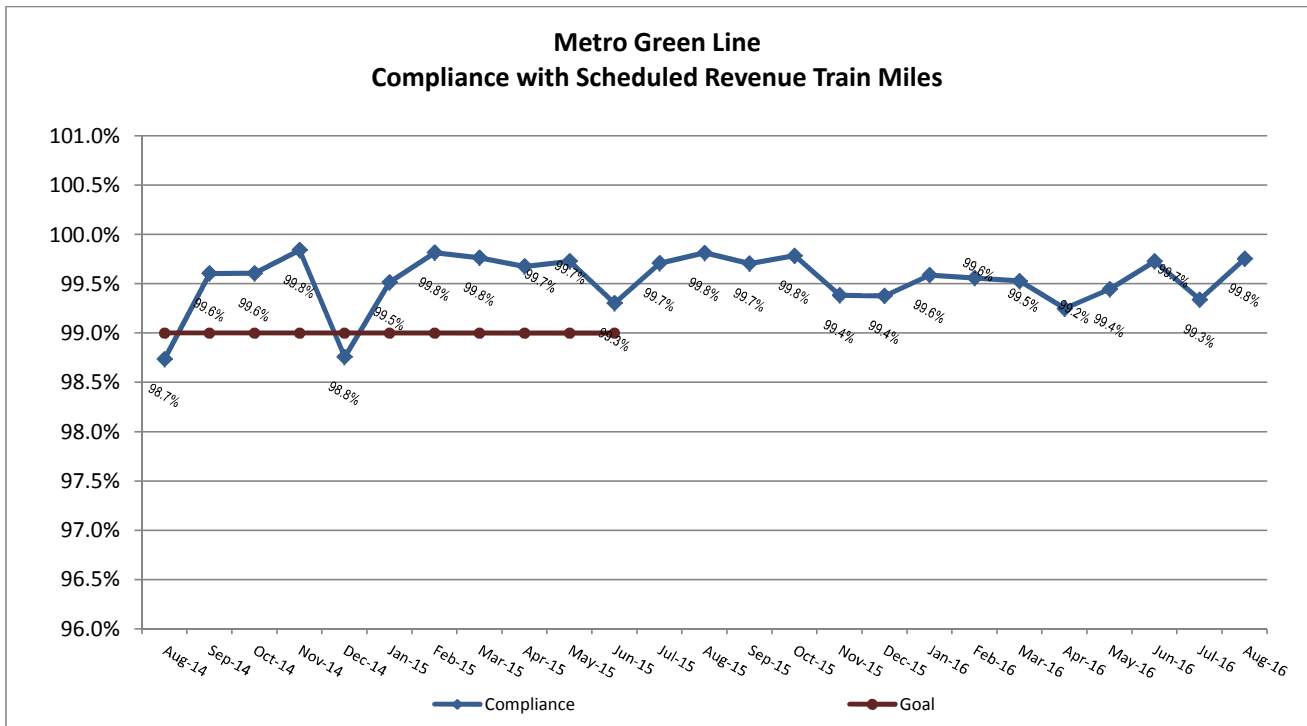


## MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

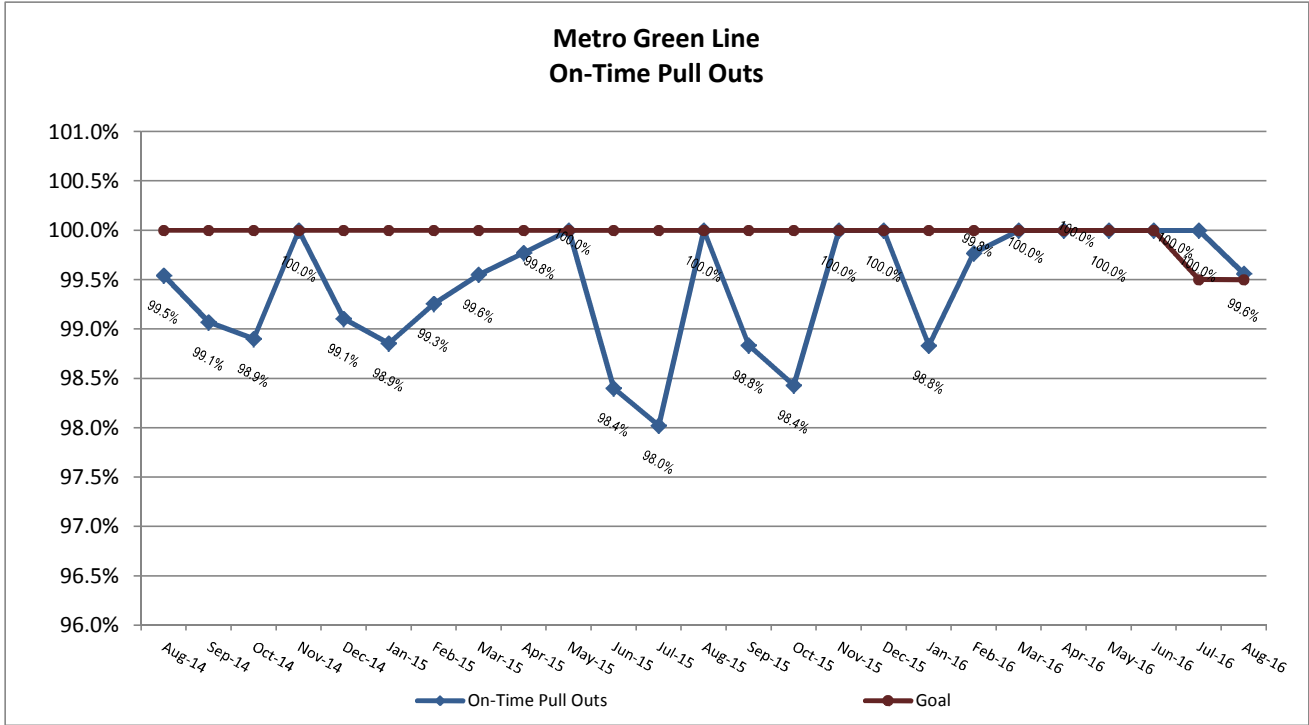
### COMPLIANCE WITH SCHEDULED VEHICLE HOURS CHART



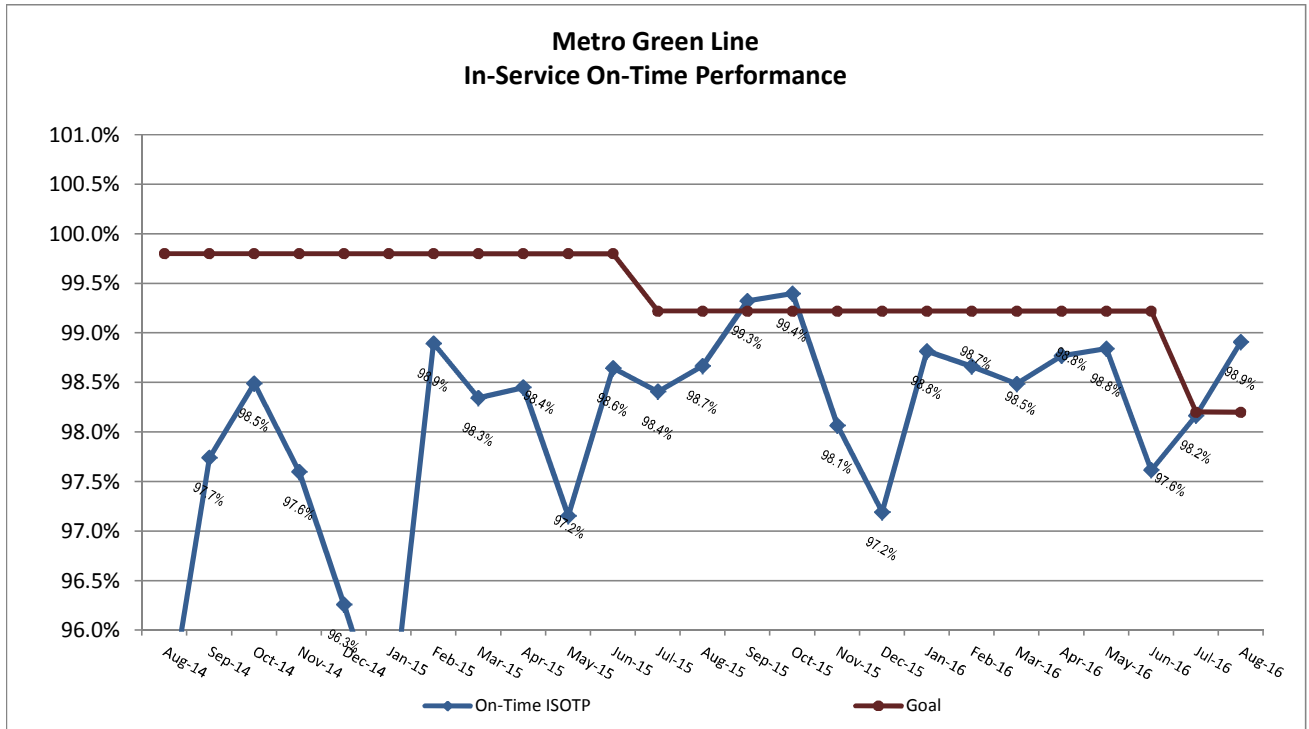
### COMPLIANCE WITH SCHEDULED TRAIN MILES CHART



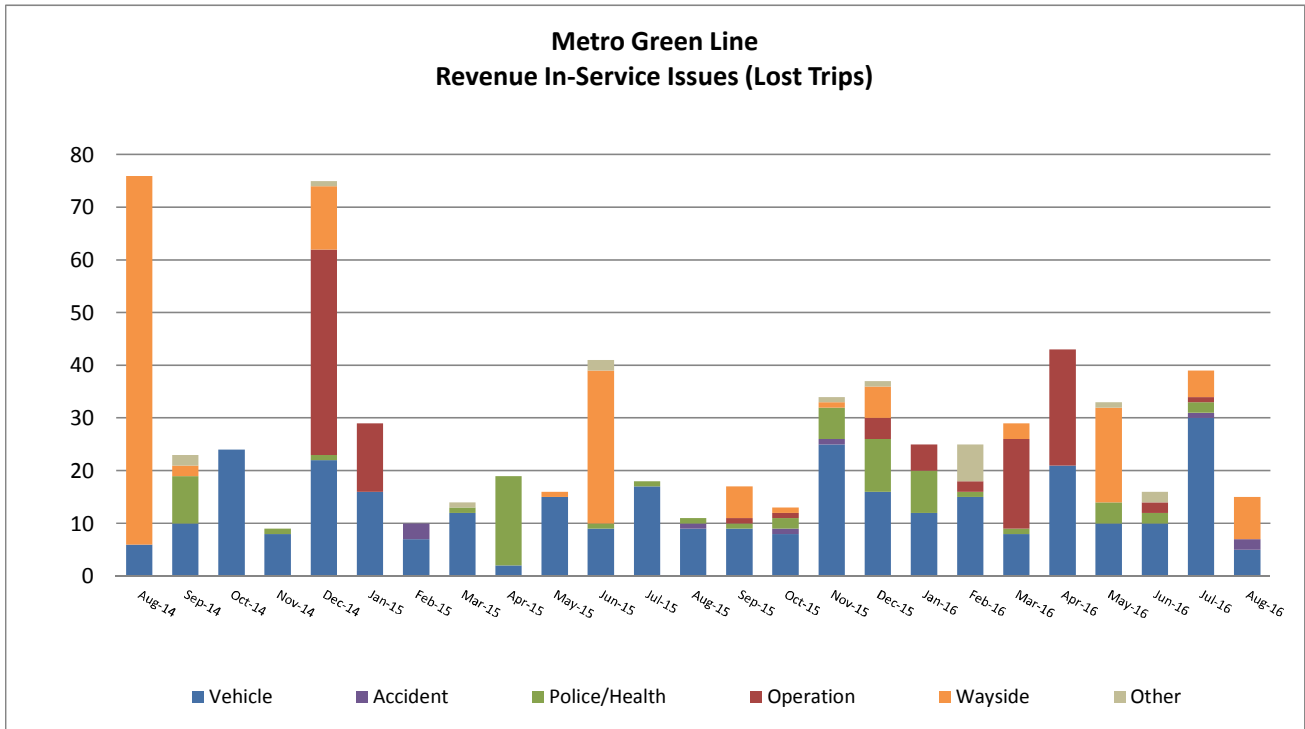
### ON-TIME PULL OUTS CHART



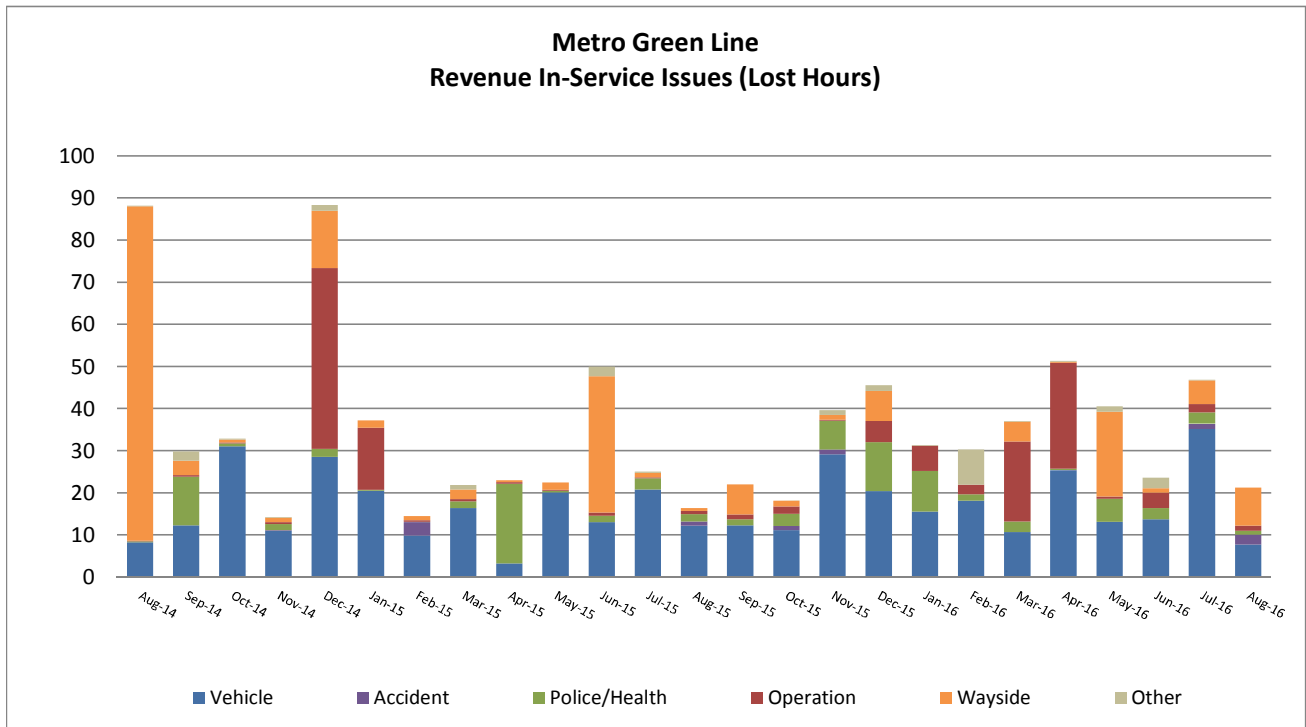
### IN-SERVICE ON-TIME PERFORMANCE CHART



### Lost Trips

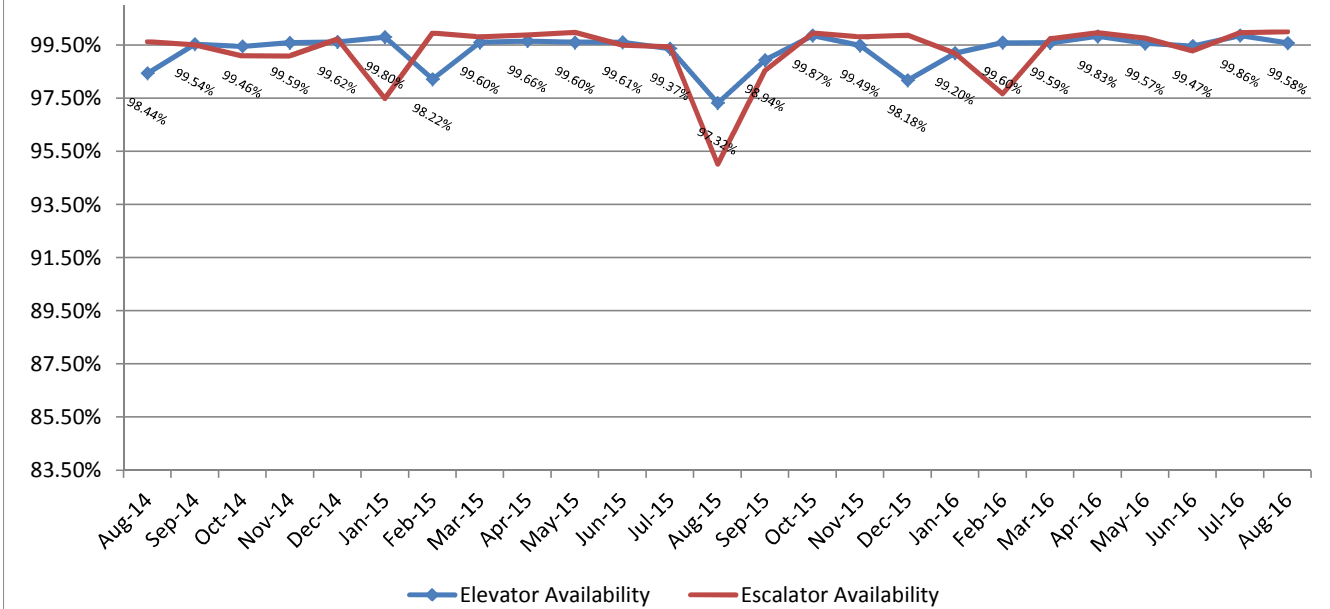


### Lost Hours



**VERTICAL TRANSPORTATION AVAILABILITY**

**Metro Green Line  
Elevator and Escalator Availability**

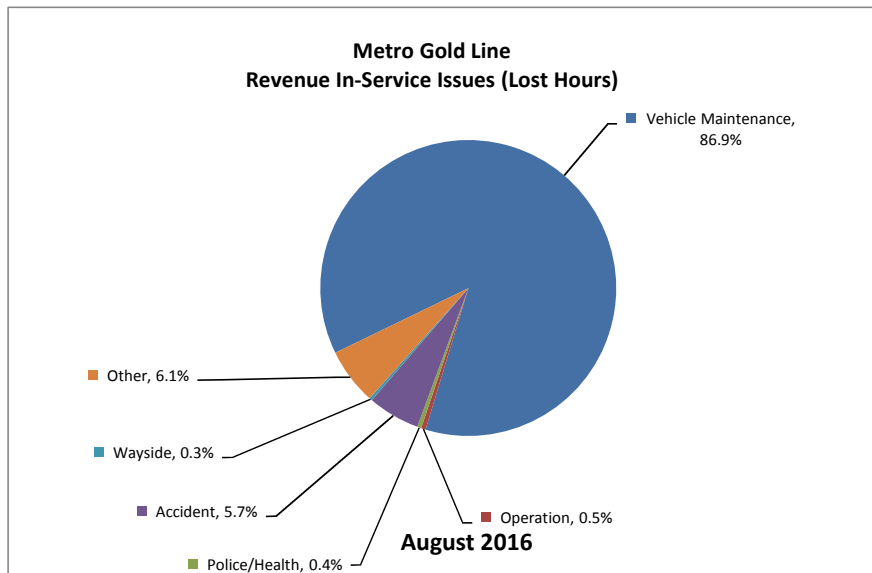


## GOLD LINE

Out of a total of 20,133 hours operated, there were approximately 131 total hours of service delays.

August 2016 Service Hours	Revenue	
	Hours	Per Cent
Revenue Hours without Delays	20,002	99.3%
Hours Delayed	131	0.7%
<b>Total Revenue Hours</b>	<b>20,133</b>	<b>100.0%</b>

Summary of the major contributors:	Count	Hours	Per Cent
Operations	4	0.7	0.5%
Accidents	1	7.5	5.7%
Vehicle Maintenance	32	114.0	86.9%
Wayside	2	0.4	0.3%
Police & Health	3	0.6	0.4%
Other	2	8.0	6.1%
<b>Total</b>	<b>44</b>	<b>131.2</b>	<b>100.0%</b>



## August 2016 Gold Line major delay contributors were as follows:

### Wayside Incidents:

**8/14/2016 8:50:00 PM - Incident# 2764883 (0 lost trips, 20 lost minutes)**

Emergency Switch Replacement SW Museum Interlocking

**8/18/2016 4:02:00 AM - Incident# 2766464 (0 lost trips, 6 lost minutes)**

Signal 12N not clearing

### Vehicle Maintenance Incidents:

**8/3/2016 5:29:00 PM - Incident# 2760888 (1 lost trip, 224 lost minutes)**

Train 404 (722,715), T-323 departing Atlantic on track 1 reports recurring HSCB trip indication.

**8/4/2016 1:41:00 PM - Incident# 2761279 (0 lost trips, 7 lost minutes)**

Propulsion / Dynamic Brakes, (1010A)-1013

Train #454

T-106

Downtown Azusa Station, Track #002, Southbound.

**8/5/2016 5:31:00 AM - Incident# 2761535 (1 lost trip, 224 lost minutes)**

Loss of cab signal. Unable to maintain speed code.

Train 453

T-203

Track 1 Chinatown northbound

(705) 711

**8/6/2016 5:40:00 AM - Incident# 2761819 (1 lost trip, 224 lost minutes)**

Train 402 (722,732) T-304, Heritage Square Station, track 1 reports every time he powers up, the train feels as if it is dragging.

**8/6/2016 6:13:00 AM - Incident# 2761909 (1 lost trip, 224 lost minutes)**

Train 406 (1008,1005), T-463 departing Civic Ctr. Station, track 1 reports train lost propulsion and several fault indications illuminated.

**8/6/2016 4:15:00 PM - Incident# 2762064 (1 lost trip, 236 lost minutes)**

(705)-711

Door Fault - No Movement

NB SMV Station

Train #412

T-216

**8/6/2016 5:40:00 PM - Incident# 2762073 (0 lost trips, 8 lost minutes)**

(1011)-1009

Train 409

ATP Fault With No Movement

NB Arcadia Station

T-263

**8/6/2016 9:58:00 PM - Incident# 2762094 (0 lost trips, 10 lost minutes)**

Lost cab signal. ATP fail fault.

Train 403

T-387

Track 1

Del Mar Station

(718B)-737

**8/10/2016 2:00:00 PM - Incident# 2763509 (1 lost trip, 252 lost minutes)**

Train 404 (1008-1005), T-119, Union Station, track 2 reports smoking brakes in trailing car 1008.

**8/10/2016 3:23:00 PM - Incident# 2763544 (1 lost trip, 226 lost minutes)**

Train 427 (739,744) T-134, Fillmore Station, track 2 reports smoking brakes on train 739.

**8/12/2016 2:08:00 PM - Incident# 2764341 (0 lost trips, 12 lost minutes)**

Train 407 (1009-1011) T-116, Sierra Madre Villa Station, track 1 reports burning brakes on car 1009.

**8/14/2016 3:53:00 PM - Incident# 2764854 (0 lost trips, 12 lost minutes)**

1009-(1011)

Train 411

Reported HSCB fault with No Movement

NB Atlantic

T-151

**8/16/2016 11:10:00 AM - Incident# 2765635 (7 lost trips, 1,578 lost minutes)**

Propulsion fault no movement

Train #404 T-019 Car#1006- 1007

southbound at Indiana station.

**8/16/2016 3:42:00 PM - Incident# 2765753 (1 lost trip, 224 lost minutes)**

Friction brake fault (732)737.

Chinatown Station

Train #422, T-238, track #1, northbound.

**8/16/2016 4:40:00 PM - Incident# 2765774 (3 lost trips, 672 lost minutes)**

Bad order air gage (706)708.

Citrus Station

Train #453, track #2, southbound.

**8/16/2016 7:58:00 PM - Incident# 2765820 (2 lost trips, 448 lost minutes)**

Friction brake fault on consist (739)715.

Fillmore Station

Train #402, T-88, track #2, southbound.

**8/17/2016 5:18:00 AM - Incident# 2765936 (1 lost trip, 224 lost minutes)**

Track brake dragging on LRV 710

T-122

Train # 453

LRV (710) 708

Atlantic Station, Track \$1, northbound.

**8/17/2016 6:10:00 AM - Incident# 2765962 (1 lost trip, 224 lost minutes)**

LVPS fault (Battery Charger) LRV 1012-1015

T-178

Train 403

LRV 1012-1015

Atlantic Station, northbound, Track 1.

**8/17/2016 3:07:00 PM - Incident# 2766276 (2 lost trips, 448 lost minutes)**

Train 451 (1012-1015) T-91, Fillmore Station, track 1 reports consist will not gain cab signals higher than 35MPH and shows no fault indications.

**8/19/2016 7:23:00 AM - Incident# 2767052 (0 lost trips, 7 lost minutes)**

Propulsion / Dynamic Brakes LRV 1008

T-028

Train # 401

LRV 1008-1005

Allen Station, northboud, Track # 1.

**8/20/2016 5:52:00 AM - Incident# 2767368 (0 lost trips, 12 lost minutes)**

Propulsion / Dynamic Brakes LRV 713

T-248

Train 401

LRV 713-715

Irwindale Station, Track 2, southbound.

**8/23/2016 12:56:00 AM - Incident# 2768238 (0 lost trips, 13 lost minutes)**

Car 715 prop fault, no movement.

Train 406

T-373

Consist 735-715

San Gabriel River, Track 2 SB



**8/23/2016 7:45:00 AM - Incident# 2768378 (1 lost trip, 230 lost minutes)**

LVPS fault (Battery Charger)  
(1010)-1013  
Train 405  
T-173  
Sierra Madere, Northbound, Track 1

**8/23/2016 10:48:00 AM - Incident# 2768474 (0 lost trips, 7 lost minutes)**

Propulsion / Dynamic Brakes (w/2mph speed restriction)  
Train 405  
(719A)-716  
T-267  
Southbound, Track 2, Azusa Citrus

**8/23/2016 5:39:00 PM - Incident# 2768613 (2 lost trips, 448 lost minutes)**

(1012)-1015  
Train 404  
Prop Faults/Doors Indicate Open  
NB Pico Aliso  
T-180

**8/25/2016 9:00:00 AM - Incident# 2769296 (0 lost trips, 10 lost minutes)**

Door problem  
Train #419 T-014 car #1012A-1015  
Pico Aliso Southbound.

**8/26/2016 9:16:00 AM - Incident# 2769740 (0 lost trips, 5 lost minutes)**

Doors 1/2 cut-out on LRV746B  
T-453  
Train 411  
LRV (746B) 747  
Maravilla Station, Track 2, southbound.

**8/26/2016 10:28:00 AM - Incident# 2769822 (0 lost trips, 10 lost minutes)**

Propulsion / Dynamic Brakes LRV 714A  
T-477  
Train 403  
LRV (714A) 744  
Irwindale Station, Track 2, southbound.

**8/27/2016 4:56:00 AM - Incident# 2770039 (2 lost trips, 599 lost minutes)**

Propulsion / Dynamic Brakes LRV 743  
T-116  
Train 405  
LRV (743) 742 741  
Irwindale Station, Track #1, Northbound.

**8/29/2016 8:34:00 AM - Incident# 2770514 (0 lost trips, 11 lost minutes)**

Door problem  
Train #413 T-178 Car #734A-725 doors 7 & 8  
,northbound at Lincoln Cypress station

**8/31/2016 5:54:00 AM - Incident# 2771443 (0 lost trips, 7 lost minutes)**

Doors on trailing LRV 724 not closing  
T-065  
Train 413  
LRV (714) 724  
Chinatown Station, Track 1, northbound.

**8/31/2016 8:28:00 AM - Incident# 2771602 (0 lost trips, 1 lost minute)**

Smoking Friction Brakes  
T-477  
Train 404  
LRV (734A) 725  
Heritage Square Station, Track # 2, southbound.

**Police & Health Incidents:**

**8/12/2016 10:23:00 AM - Incident# 2764256 (0 lost trips, 8 lost minutes)**

Train #411 T-065 reports Patron on Car #736,741  
requesting medical assistance  
,Northbound at Highland park station.

**8/12/2016 10:12:00 PM - Incident# 2764503 (0 lost trips, 20 lost minutes)**

Person with a knife

**8/30/2016 7:14:00 AM - Incident# 2770928 (0 lost trips, 7 lost minutes)**

Train 116 LRV 745-748 at Memorial Park Station, Misc. Passenger Problem.

**Other Incidents:**

**8/5/2016 2:21:00 PM - Incident# 2761760 (2 lost trips, 468 lost minutes)**

Train Fire on car 747  
T-407, train 421  
(747)-745  
Filmore, track 2, south

**8/5/2016 4:00:00 PM - Incident# 2761792 (0 lost trips, 15 lost minutes)**

Fire: Lincoln Cypress, track 2

**Operations Incidents:**

**8/4/2016 3:48:00 PM - Incident# 2761331 (0 lost trips, 10 lost minutes)**

Train Delay

R-040

Train #454

Correction noted (not T-063) T-232

Azusa/Citrus Station

**8/18/2016 6:01:00 PM - Incident# 2766882 (0 lost trips, 15 lost minutes)**

Train 454(1008-1005) T-036 arrived APU 15 minutes down with no trouble calls reported to control or late departure from APU.

**8/23/2016 9:12:00 AM - Incident# 2768425 (0 lost trips, 6 lost minutes)**

Train Delay due to operator failure to follow instructions from ROC.

**8/27/2016 7:24:00 PM - Incident# 2770174 (0 lost trips, 10 lost minutes)**

Train 412 Departed Azusa Citrus 10 Minutes Late

**Accidents:**

**8/31/2016 7:27:00 AM - Incident# 2771479 (2 lost trips, 448 lost minutes)**

Auto vs. Train

T-122

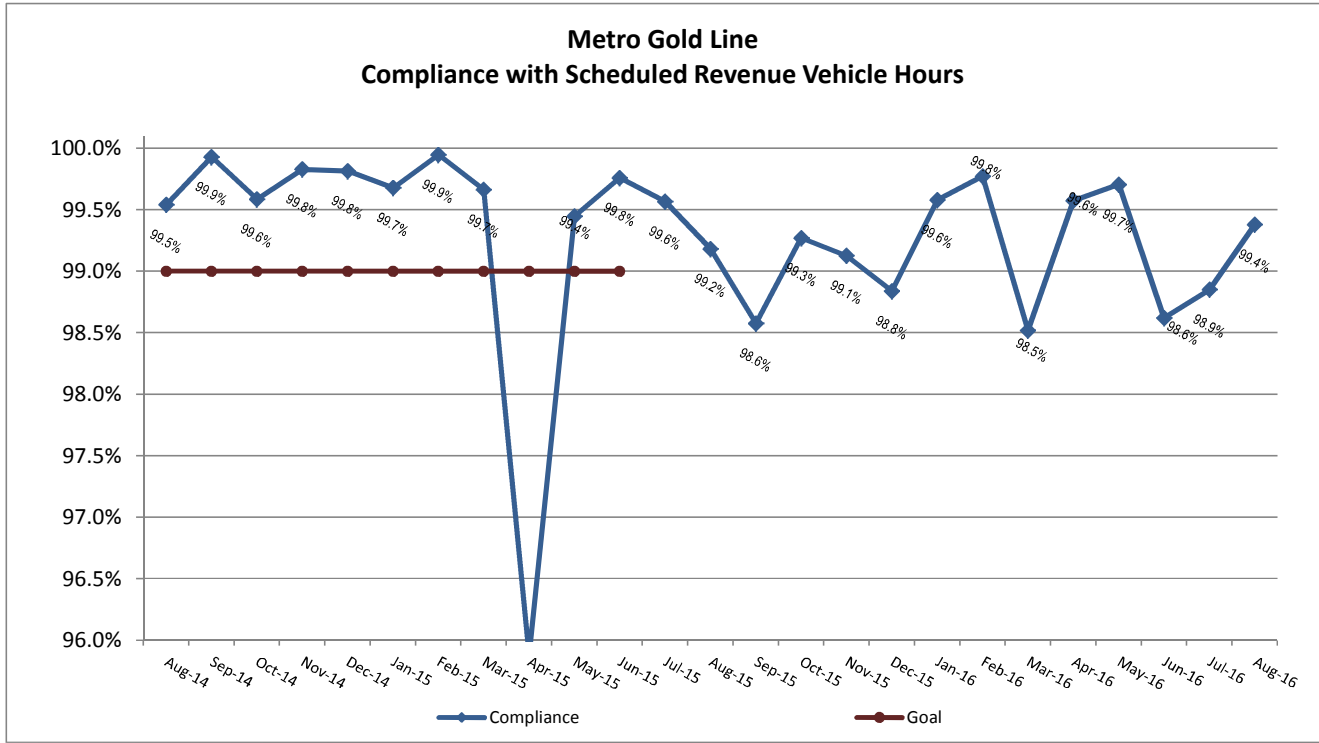
Train 403

LRV (723A) 742

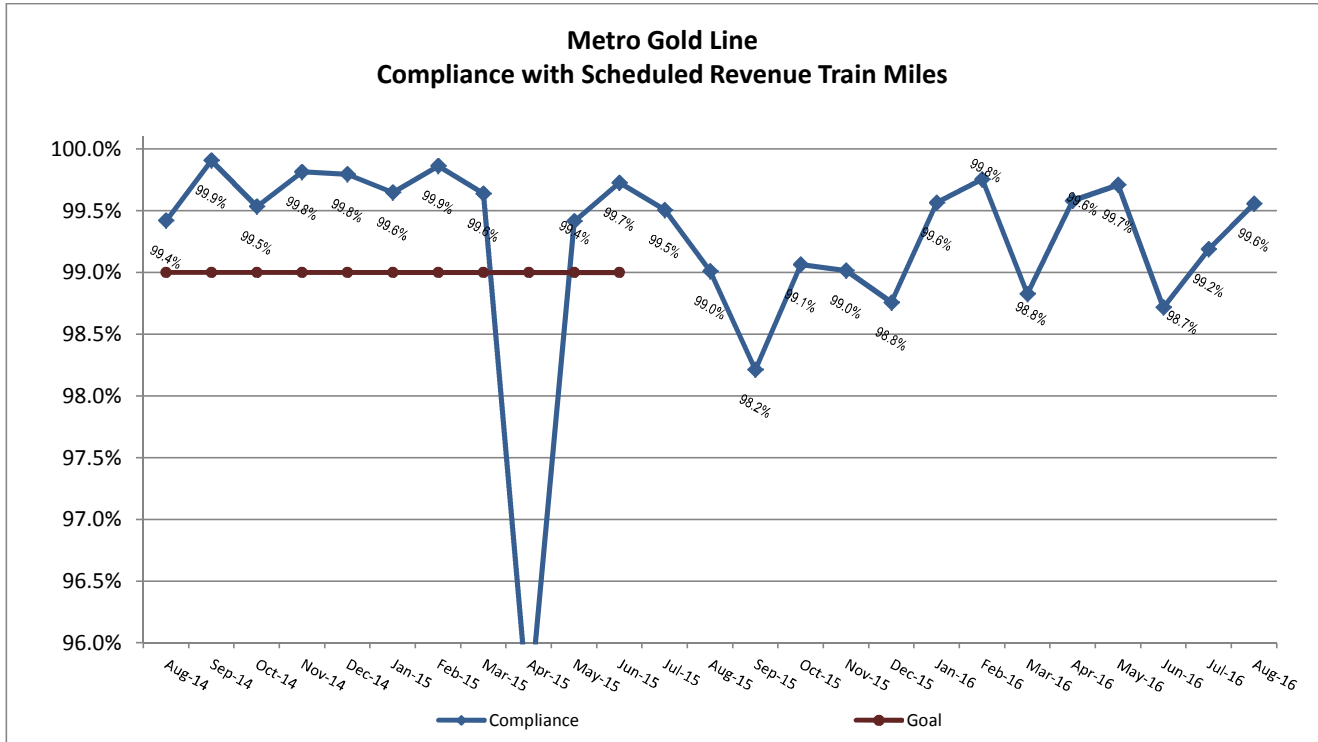
California gradecrossing, Track 2, southbound.

## MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

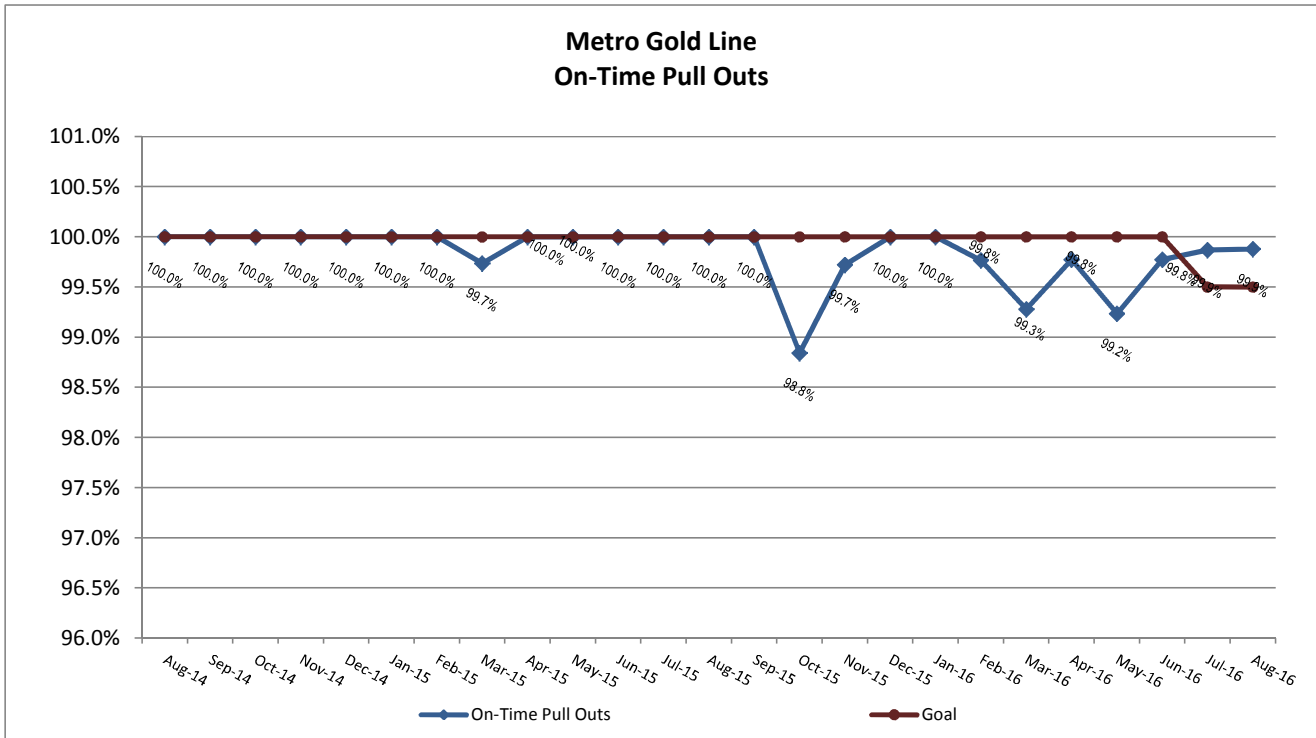
### COMPLIANCE WITH SCHEDULED VEHICLE HOURS CHART



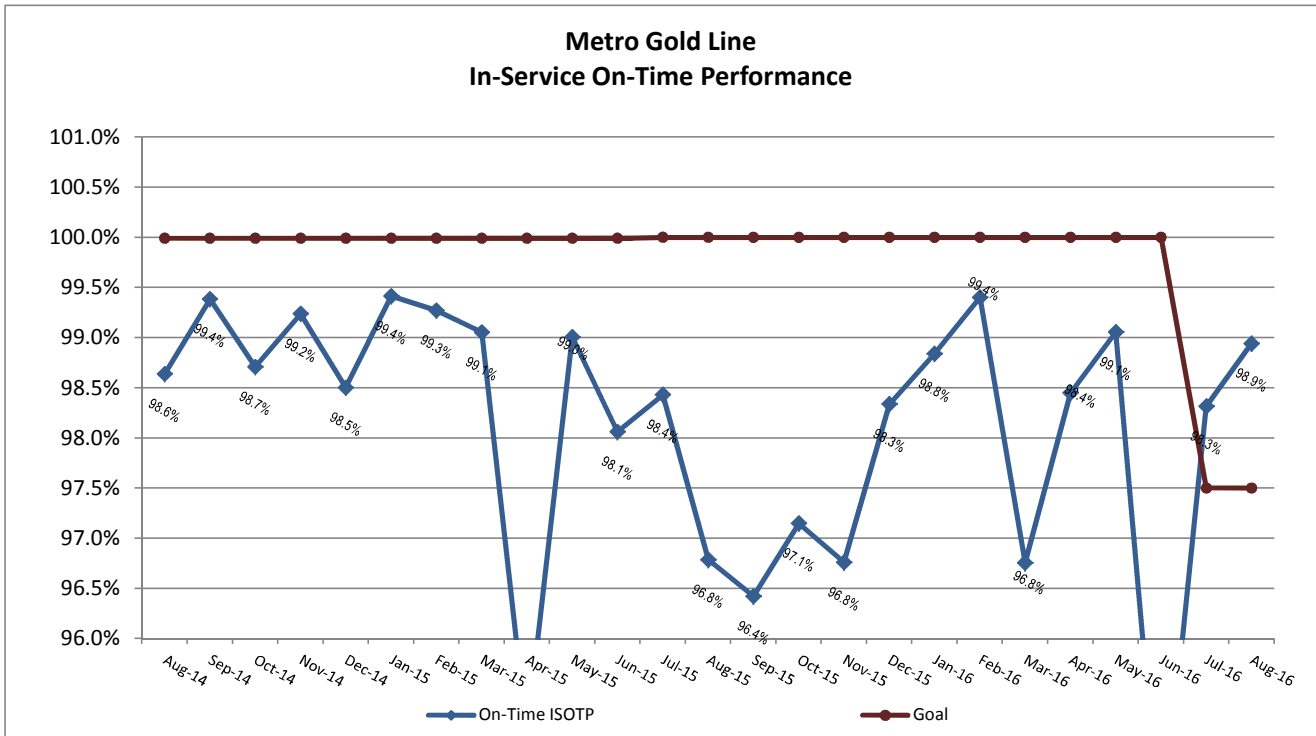
### COMPLIANCE WITH SCHEDULED TRAIN MILES CHART



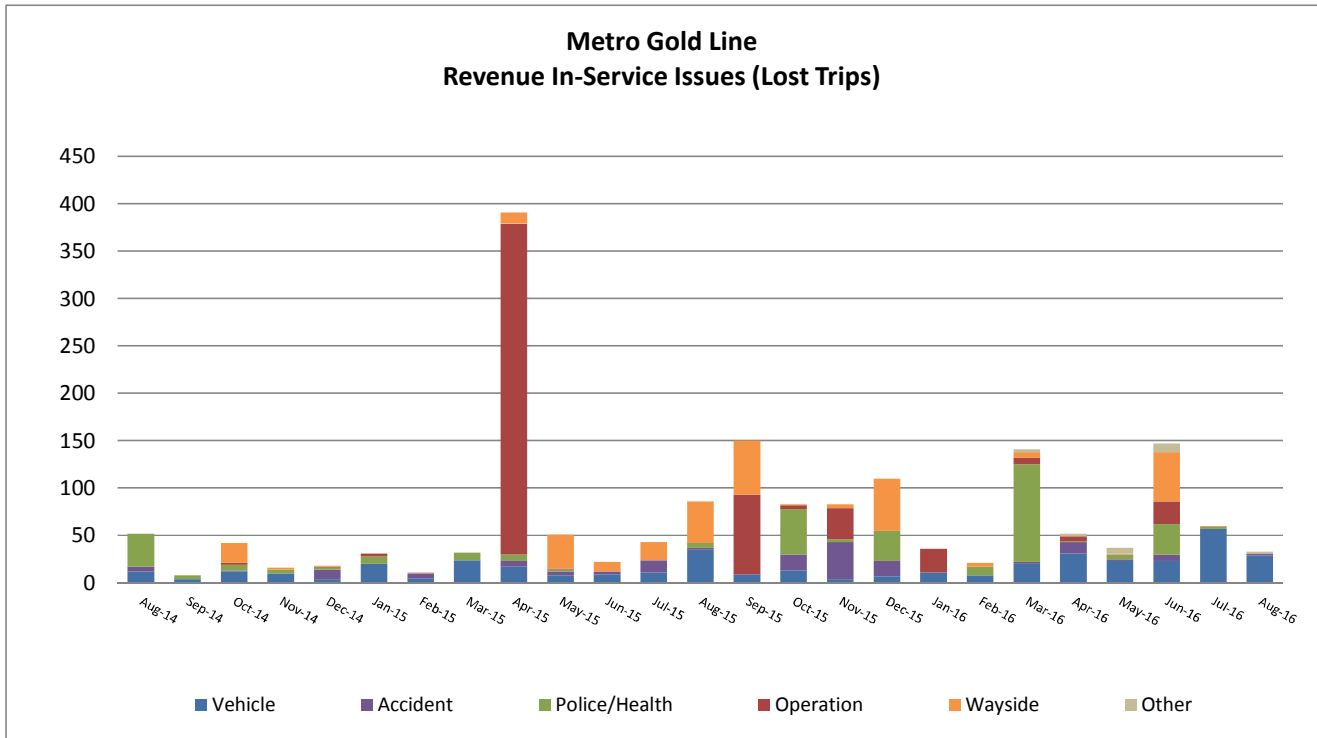
### ON-TIME PULL OUTS CHART



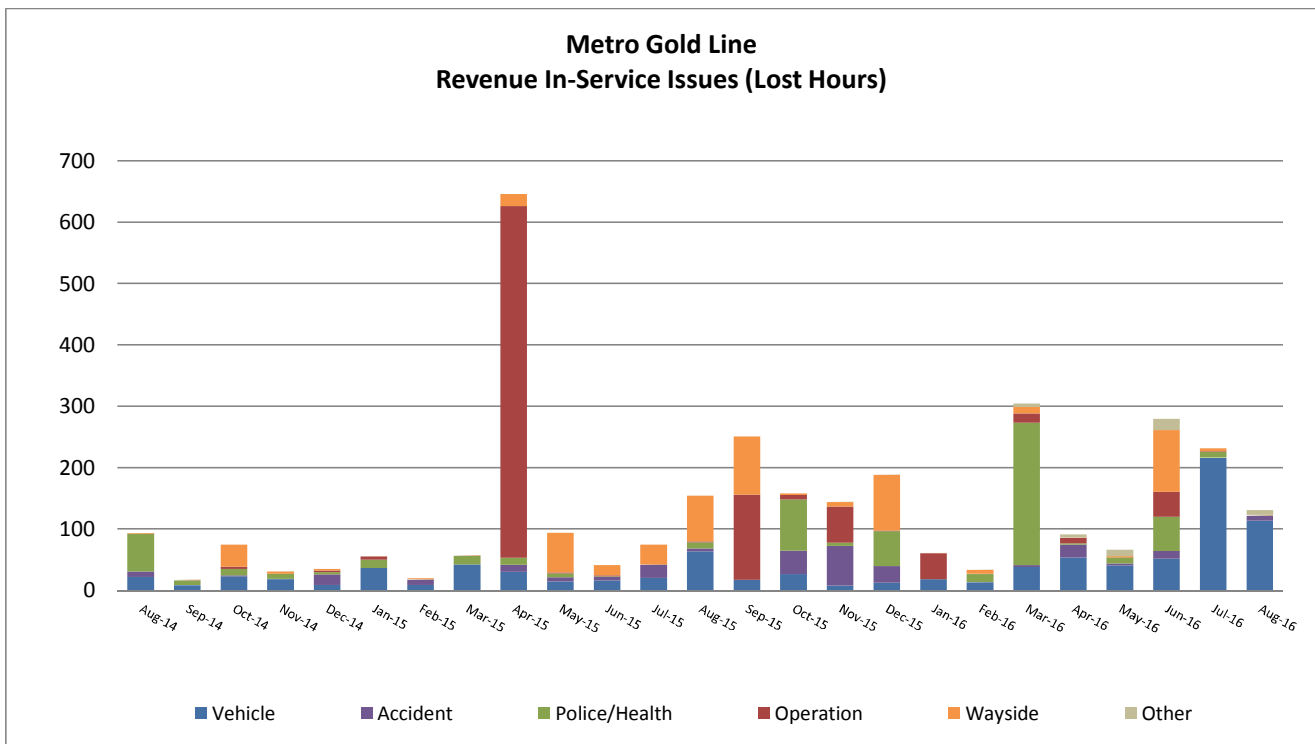
### IN-SERVICE ON-TIME PERFORMANCE CHART



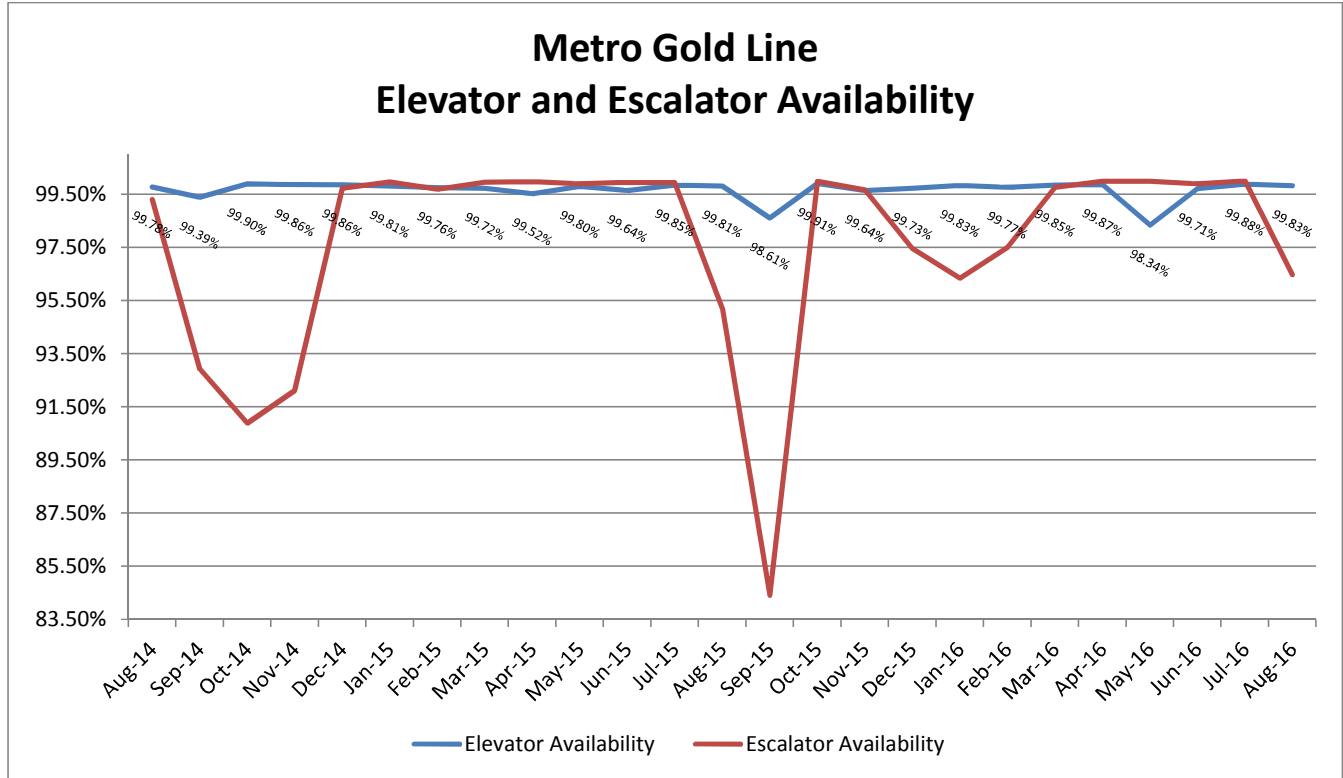
### Lost Trips



### Lost Hours



**VERTICAL TRANSPORTATION AVAILABILITY**

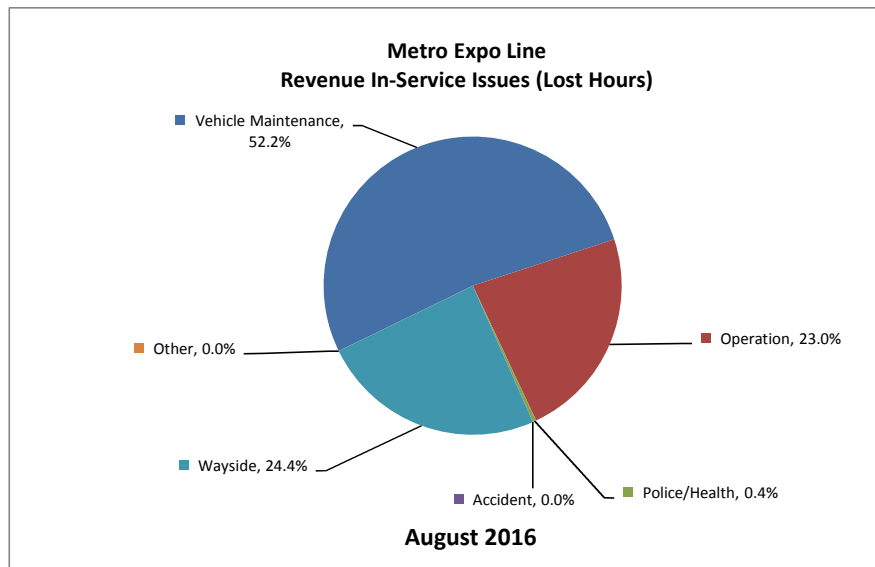


## EXPO LINE

Out of a total of 16,659 hours operated, there were approximately 64 total hours of service delays.

August 2016 Service Hours	Revenue	
	Hours	Per Cent
Revenue Hours without Delays	16,595	99.6%
Hours Delayed	64	0.4%
<b>Total Revenue Hours</b>	<b>16,659</b>	<b>100.0%</b>

Summary of the major contributors:	Count	Hours	Per Cent
Operations	10	14.8	23.0%
Accidents	0	0.0	0.0%
Vehicle Maintenance	21	33.6	52.2%
Wayside	3	15.7	24.4%
Police & Health	2	0.3	0.4%
Other	0	0.0	0.0%
<b>Total</b>	<b>36</b>	<b>64.3</b>	<b>100.0%</b>





## August 2016 Expo Line major delay contributors were as follows:

### Wayside Incidents:

**8/2/2016 8:58:00 AM - Incident# 2760301 (1 lost trip, 133 lost minutes)**

Loss of traction power between 17th TPSS and Barrington TPSS.

**8/14/2016 4:07:00 AM - Incident# 2764742 (0 lost trips, 10 lost minutes)**

Yard Control lost routing capability.

**8/15/2016 3:05:00 AM - Incident# 2764921 (6 lost trips, 798 lost minutes)**

Open breakers at Overland TPSS, Clarington and Sepulveda.

### Vehicle Maintenance Incidents:

**8/4/2016 5:02:00 AM - Incident# 2761018 (0 lost trips, 5 lost minutes)**

Train 609 reports propulsion faults on car 133 at Santa Monica station.

**8/5/2016 8:40:00 AM - Incident# 2761622 (3 lost trips, 397 lost minutes)**

Loss of air pressure on 250B.

Train 602

T-268

(250B)-249

SB, Westwood Station, Track 4

**8/6/2016 5:34:00 PM - Incident# 2762068 (0 lost trips, 10 lost minutes)**

MA low 1029-(1028)-1030

Train 697

T-362

Track 4

Southbound

23rd station

**8/8/2016 3:17:00 PM - Incident# 2762693 (0 lost trips, 15 lost minutes)**

Door problem (Operator error). Train remained in service

Train 608

T-380

(229B)-236-246

Southbound, Sepulveda Station, Track 4

Train remained in service.

**8/10/2016 11:01:00 AM - Incident# 2763440 (0 lost trips, 10 lost minutes)**

Doors not closing  
Train 608  
LRV 229A/236  
T-358  
Metro Center platform 2

**8/13/2016 3:14:00 PM - Incident# 2764656 (0 lost trips, 10 lost minutes)**

Train operator reports smoking brakes.  
Train 608, T-380  
1025-1029-(1028A)  
Track 4, Farmdale, South

**8/13/2016 4:00:00 PM - Incident# 2764675 (1 lost trip, 158 lost minutes)**

Train experiencing reoccurring propulsion faults.  
Train 614, T-519  
(232A)-301-302  
Track 4, Crenshaw, South

**8/16/2016 7:11:00 AM - Incident# 2765489 (1 lost trip, 133 lost minutes)**

Train Operator T-136 reports no movemnt on train 608 at USC station. Operator stated possible door problem but unable to identify.

**8/17/2016 8:07:00 AM - Incident# 2766009 (1 lost trip, 133 lost minutes)**

Friction brake fault.  
Train 605 (233A),234,239  
T-230  
Southbound Bagley Grade crossing.

**8/21/2016 7:44:00 AM - Incident# 2767597 (1 lost trip, 139 lost minutes)**

Train 605 reports no movement at 17th street  
T-412, Train 605  
Track 4, 17th Street, South  
(162)-130-(137)

**8/23/2016 4:13:00 PM - Incident# 2768586 (3 lost trips, 409 lost minutes)**

ATP fail fault with no movement.  
Train 601  
T-354  
(1018A)-1024-1022  
Northbound, Santa Monica Station, Track 3

**8/27/2016 1:50:00 PM - Incident# 2770130 (0 lost trips, 4 lost minutes)**

Smoking brakes 154(106)116.  
Santa Monica Station  
Train #607, T-369, track #3, southbound.

**8/28/2016 1:53:00 PM - Incident# 2770298 (0 lost trips, 8 lost minutes)**

Propulsion fault with a speed restriction.  
Reports recurring propulsion dynamic brake fault.  
Train # 606  
T-188  
154-(132)-116  
NB, Westwood Station, Track #3

**8/28/2016 4:55:00 PM - Incident# 2770331 (1 lost trip, 146 lost minutes)**

Operator reports of doors not opening onboth the right and left side.

Train 615  
T-381  
(235A)231-232  
26th Street Station, Trk. 3, northbound

**8/28/2016 6:04:00 PM - Incident# 2770333 (0 lost trips, 9 lost minutes)**

Reports no movement  
Train #604  
T-469  
(235A)-231-232  
NB, Flower and Washington, Track #1

**8/29/2016 4:30:00 PM - Incident# 2770731 (1 lost trip, 132 lost minutes)**

Train 607  
T-407  
Cars 1023 1021 1014  
Santa Monica station Track 3 north.  
Condensation leakin 1023B

**8/30/2016 8:16:00 PM - Incident# 2771359 (0 lost trips, 15 lost minutes)**

ATP failure, Emergency Brake Application  
Train 604  
Operator T-442  
Cars: (1034), 1036,1029  
Western Station, Trk 3, NB

**8/31/2016 5:25:00 AM - Incident# 2771431 (0 lost trips, 4 lost minutes)**

Train 606, Cars 104, 144 and 127.  
Jefferson station, Track 3 north.  
Prop fault with emergency lighting.

**8/31/2016 9:20:00 AM - Incident# 2771583 (0 lost trips, 10 lost minutes)**

Train 600, Cars 101, 144 and 127  
Hauser crossing south track 4.  
No movement due to friction brakes locked.

**8/31/2016 3:16:00 PM - Incident# 2771738 (1 lost trip, 132 lost minutes)**

Reports of ATP failure and emergencybraking.1018B-1023-1029  
Train 612  
T-472  
Farmdale station  
Track 3  
Northbound

**8/31/2016 4:42:00 PM - Incident# 2771762 (1 lost trip, 132 lost minutes)**

Loss of air presure departing arriving at 17th street station.  
Train 612  
T-219  
1023-1029  
Track 3  
Northbound  
17th street station

**Police & Health Incidents:**

**8/2/2016 2:33:00 PM - Incident# 2760411 (0 lost trips, 10 lost minutes)**

Operator reports of a fight on board the train  
Train 605  
T-449  
109-121  
USC/Expo, Trk. 4, southbound

**8/21/2016 11:34:00 AM - Incident# 2767644 (0 lost trips, 5 lost minutes)**

Train 602 reports automobile on track 4 at Gramercy PL.

**Operations Incidents:**

**8/3/2016 8:45:00 PM - Incident# 2760549 (3 lost trips, 412 lost minutes)**

Contractor will inspect and test wayside camera.

**8/4/2016 10:43:00 AM - Incident# 2761203 (1 lost trip, 141 lost minutes)**

Train operator overran Signal 4N Santa Monica during departure, Operator T-47 Lead car 246B with 229, Train

**8/7/2016 4:47:00 AM - Incident# 2762118 (0 lost trips, 14 lost minutes)**

Out Late.  
Train #609.  
T-511.  
LRV- 128, 123, 150.  
6S Mainyard, southbound.

**8/10/2016 1:42:00 PM - Incident# 2763595 (0 lost trips, 12 lost minutes)**

Train Delays due to unscheduled coupling at Santa Monica

**8/13/2016 8:13:00 PM - Incident# 2764709 (0 lost trips, 10 lost minutes)**

10 minute delay  
Train 603  
T-502  
(248B)-240  
Northbound, Santa Monica Station, Track 3

**8/15/2016 6:15:00 PM - Incident# 2765336 (0 lost trips, 11 lost minutes)**

Reports no movement  
Train #608  
T-381  
(246)-250  
NB, Crenshaw Station, Track #3

**8/18/2016 6:43:00 AM - Incident# 2766517 (0 lost trips, 8 lost minutes)**

Santa Monica Interlocking signal 4N overrun indication.

**8/22/2016 1:25:00 PM - Incident# 2768104 (0 lost trips, 10 lost minutes)**

MA Low with emergency lighting  
Train 601  
T-407  
7Th Street Metro Center Southbound track 2  
1024-(1028)-1029

**8/26/2016 2:24:00 PM - Incident# 2769903 (0 lost trips, 6 lost minutes)**

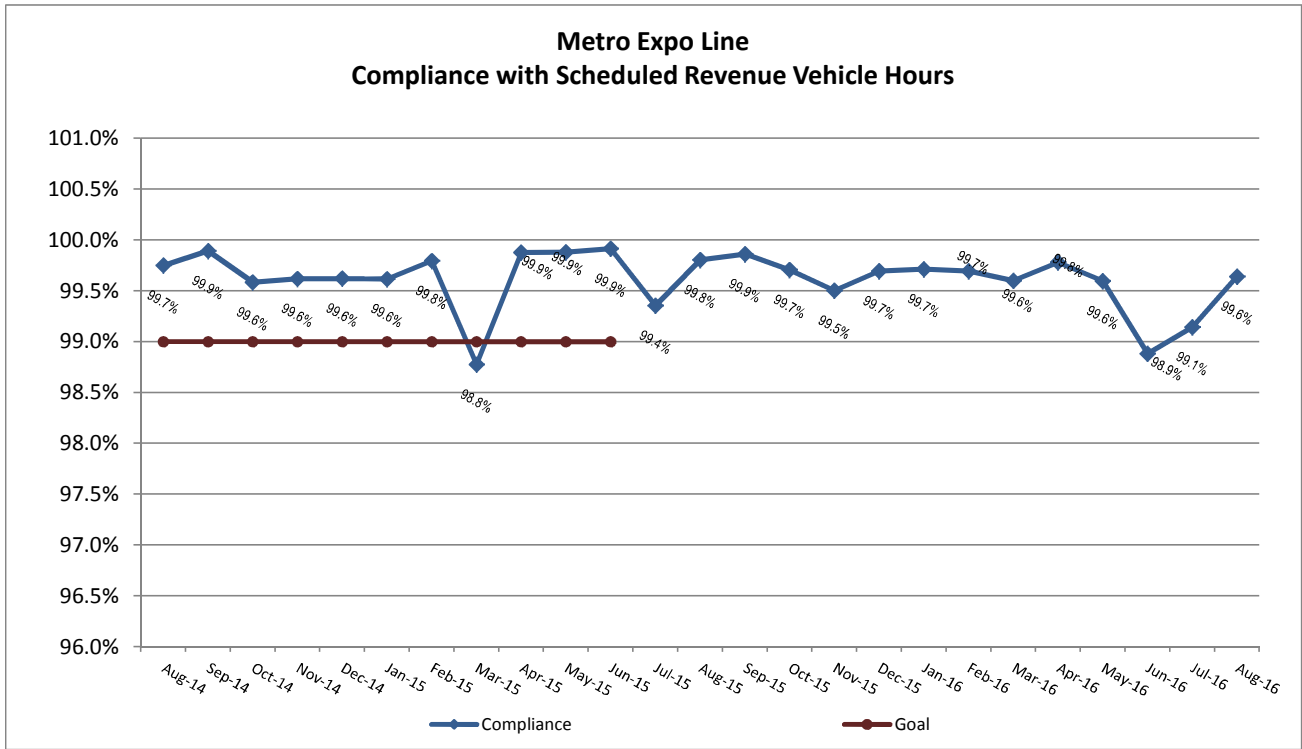
Temporary loss of power at Sepulveda & Clarington TPSS

**8/30/2016 5:03:00 AM - Incident# 2770883 (2 lost trips, 264 lost minutes)**

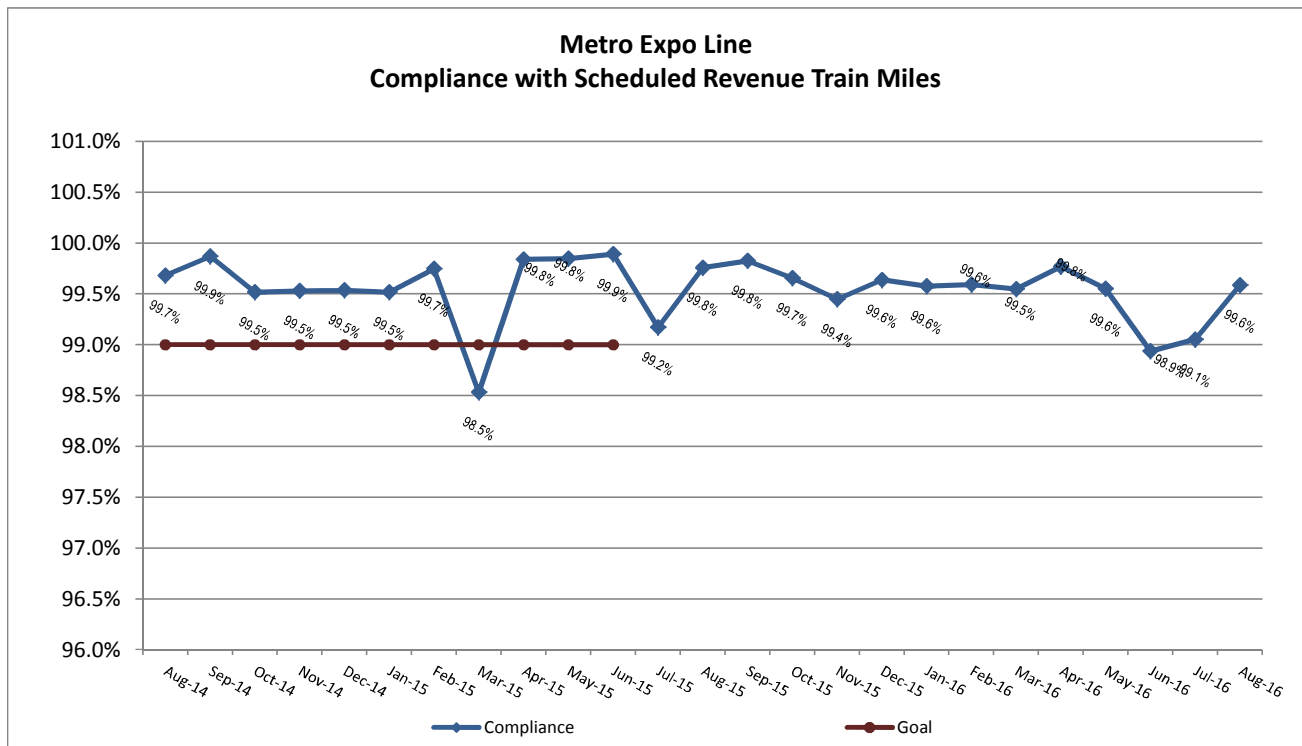
Train 609 per maintenance out of service.

## MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

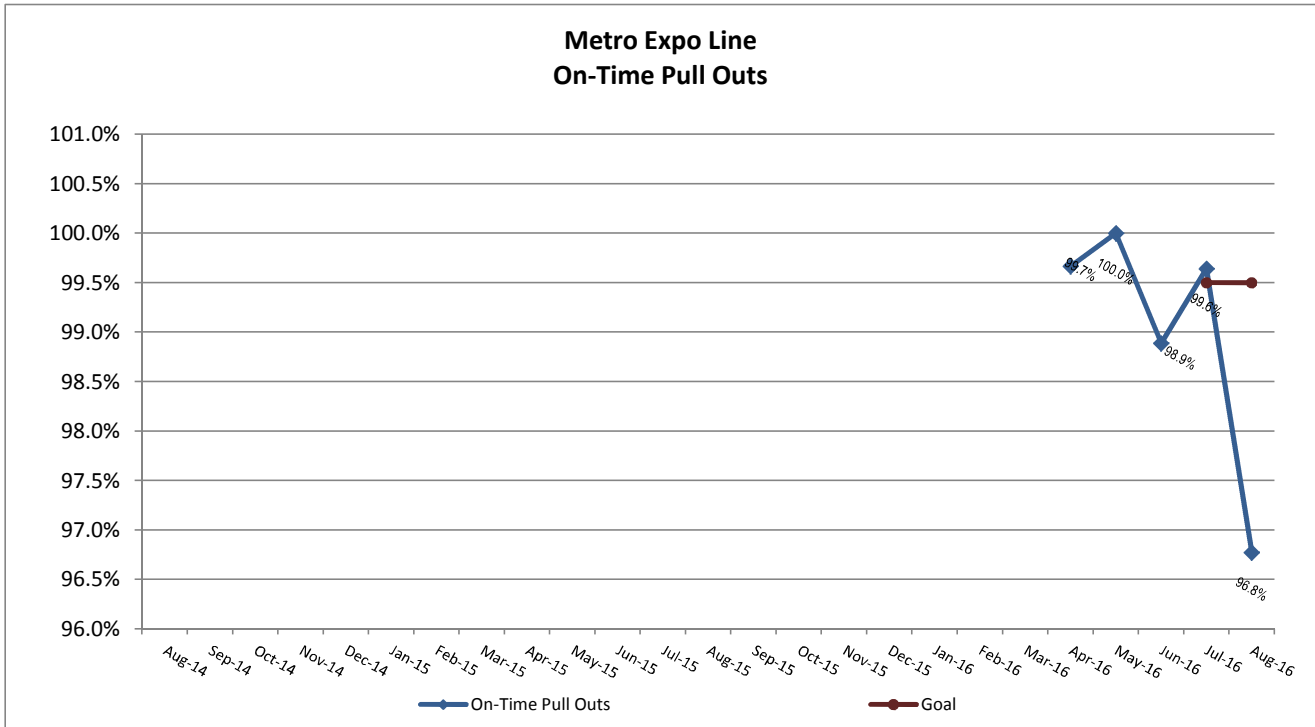
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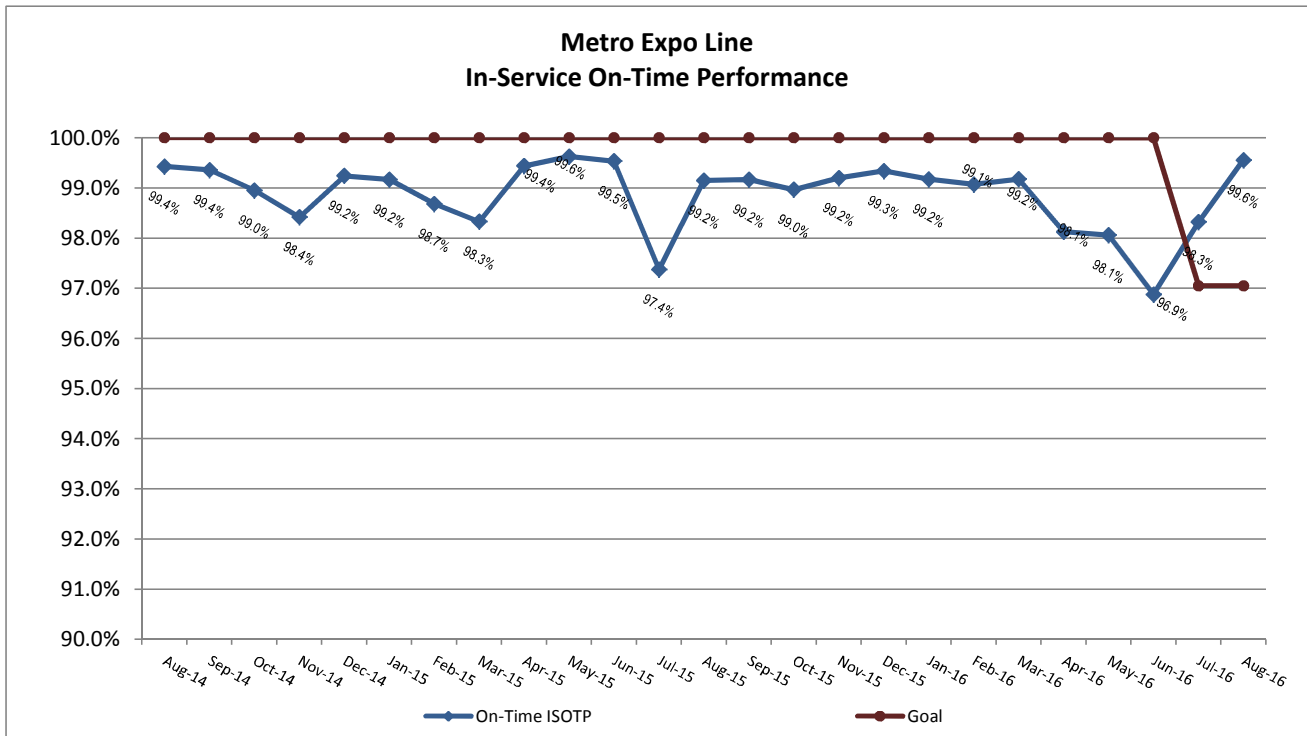
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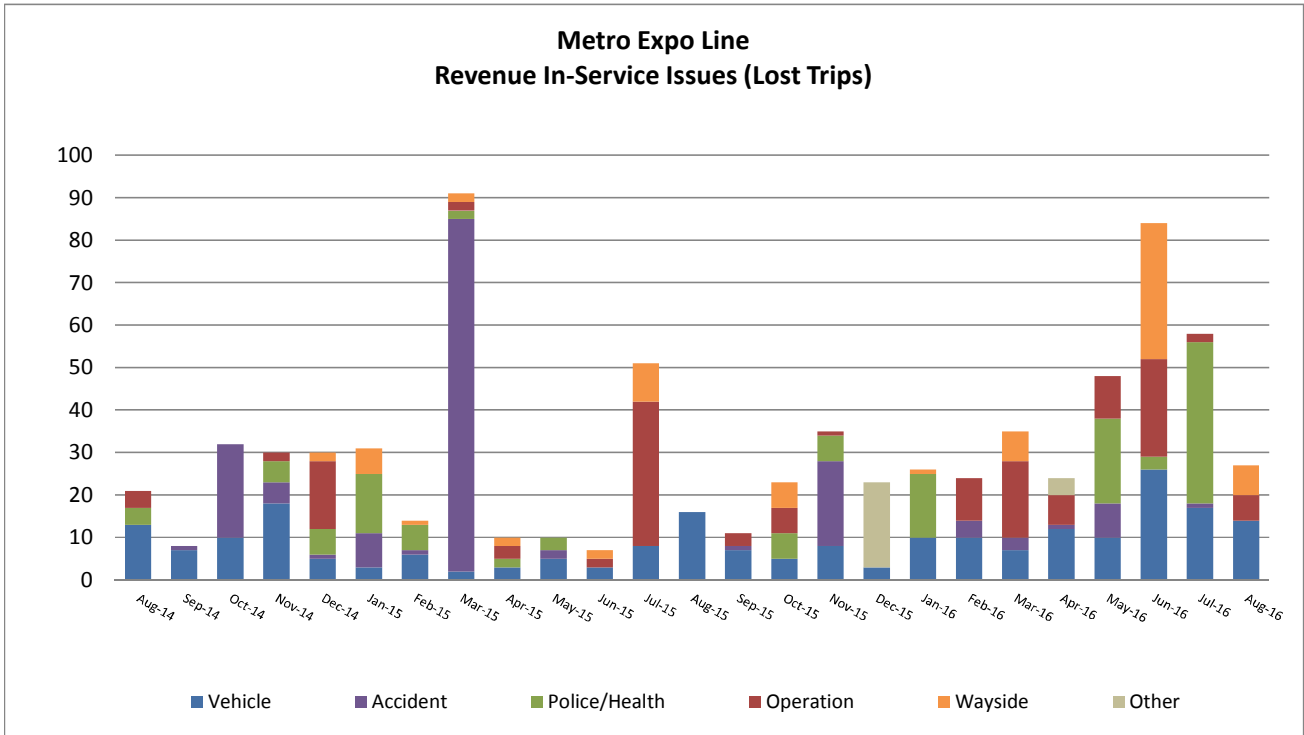
### ON-TIME PULL OUTS CHART



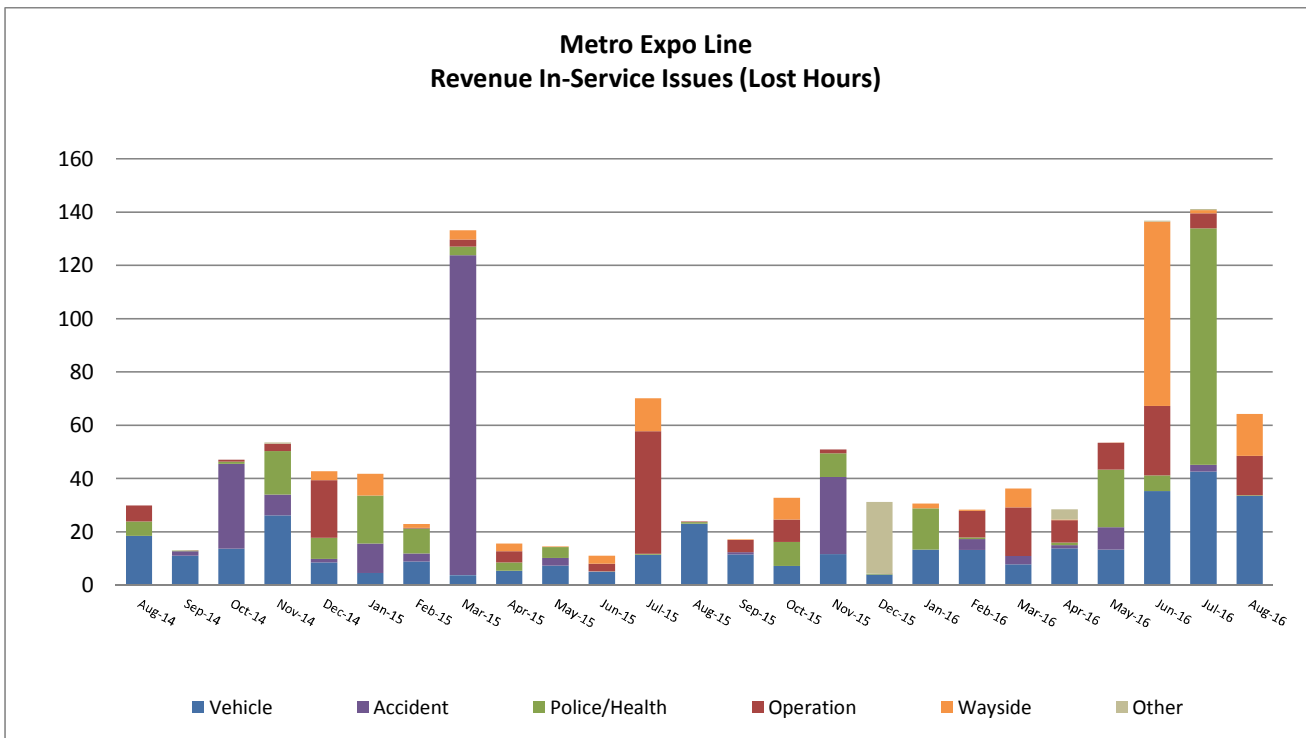
### IN-SERVICE ON-TIME PERFORMANCE CHART



### Lost Trips



### Lost Hours





**VERTICAL TRANSPORTATION AVAILABILITY**

