

METRO RAIL PERFORMANCE FY16 –FEBRUARY 2016

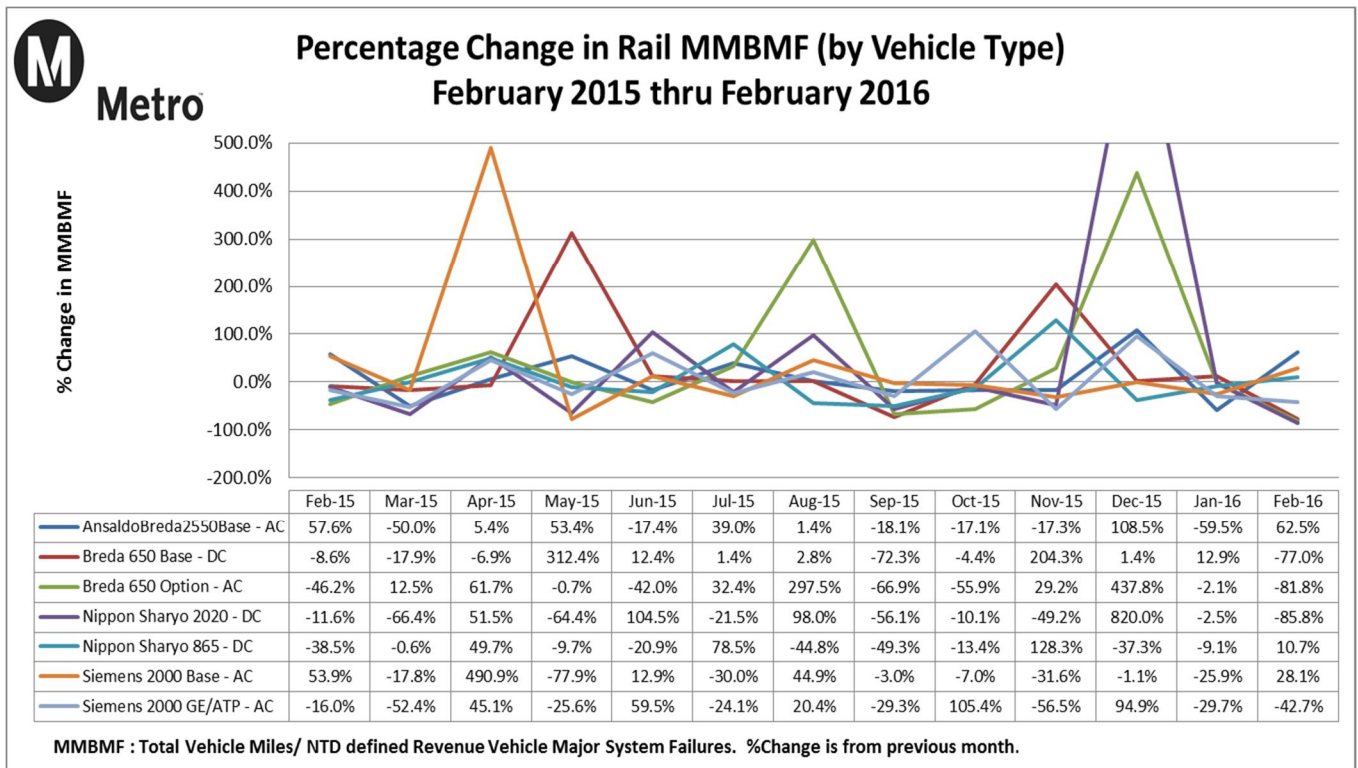
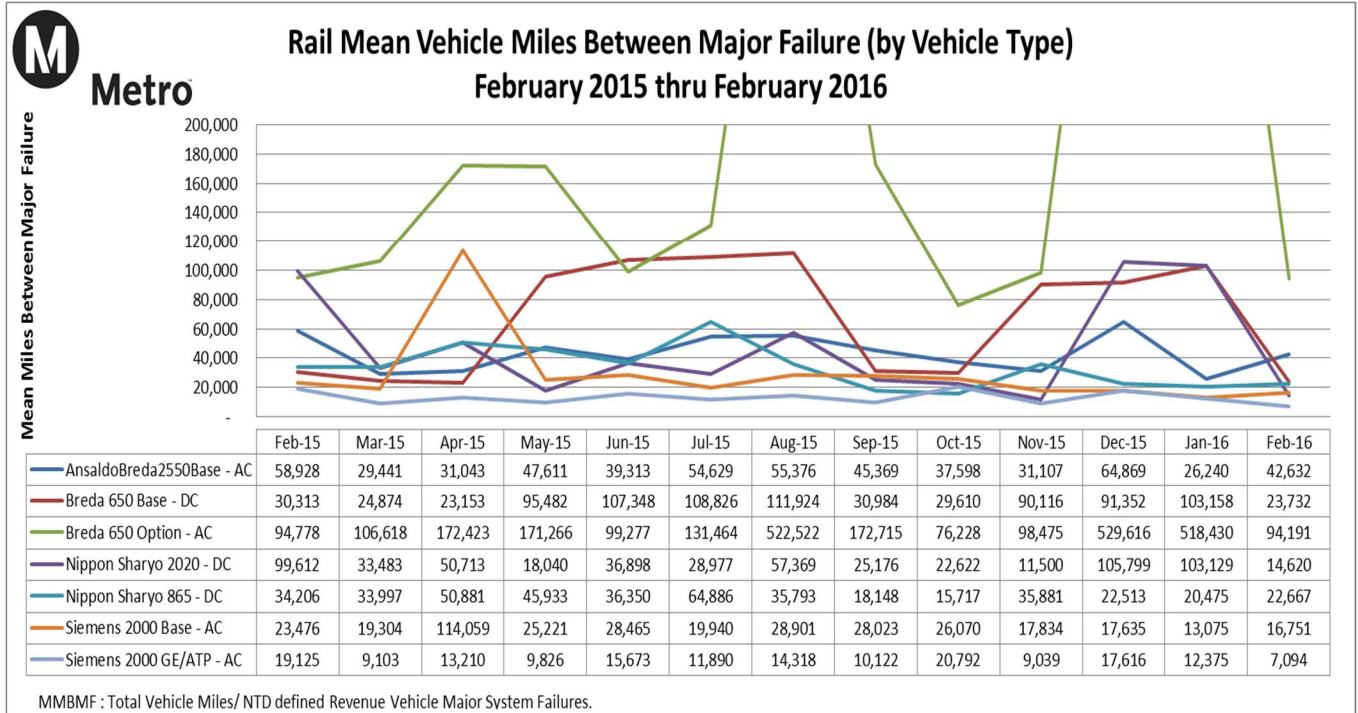


METRO RAIL PERFORMANCE – FY16 –FEBRUARY 2016

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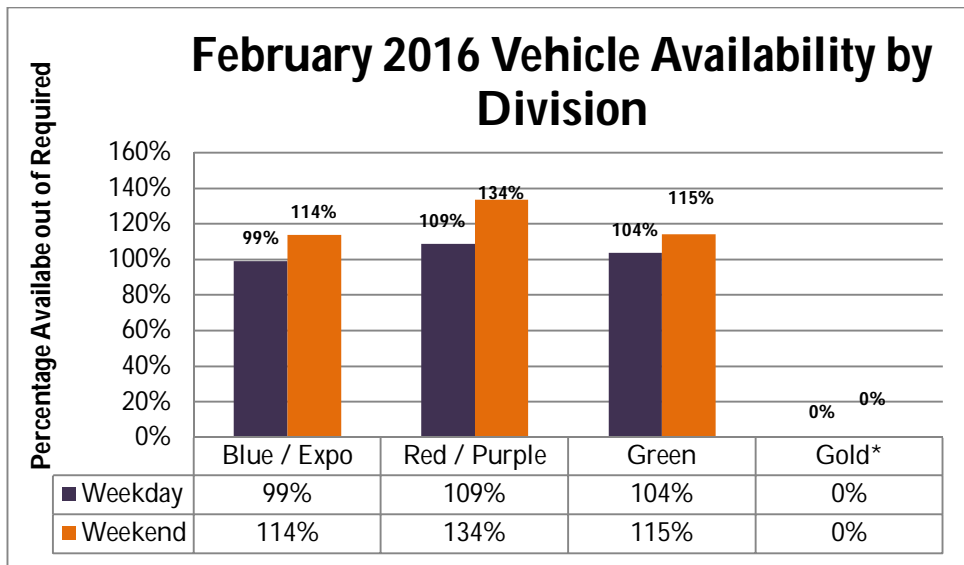
METRO RAIL PERFORMANCE – FY16 –FEBRUARY 2016

RAIL PERFORMANCE SYSTEMWIDE



Number of Rail Vehicle Type by Division	<u>RED/ PURPLE</u>	<u>BLUE/ EXPO</u>	<u>GREEN</u>	<u>GOLD</u>
AnsaldoBreda2550Base - AC				50
Breda 650 Base - DC	30			
Breda 650 Option - AC	74			
Nippon Sharyo 2020 - DC		15		
Nippon Sharyo 865 - DC		54		
Siemens 2000 Base - AC			29	
Siemens 2000 GE/ATP - AC		23		
TOTALS	104	92	29	50

VEHICLE AVAILABILITY SYSTEMWIDE

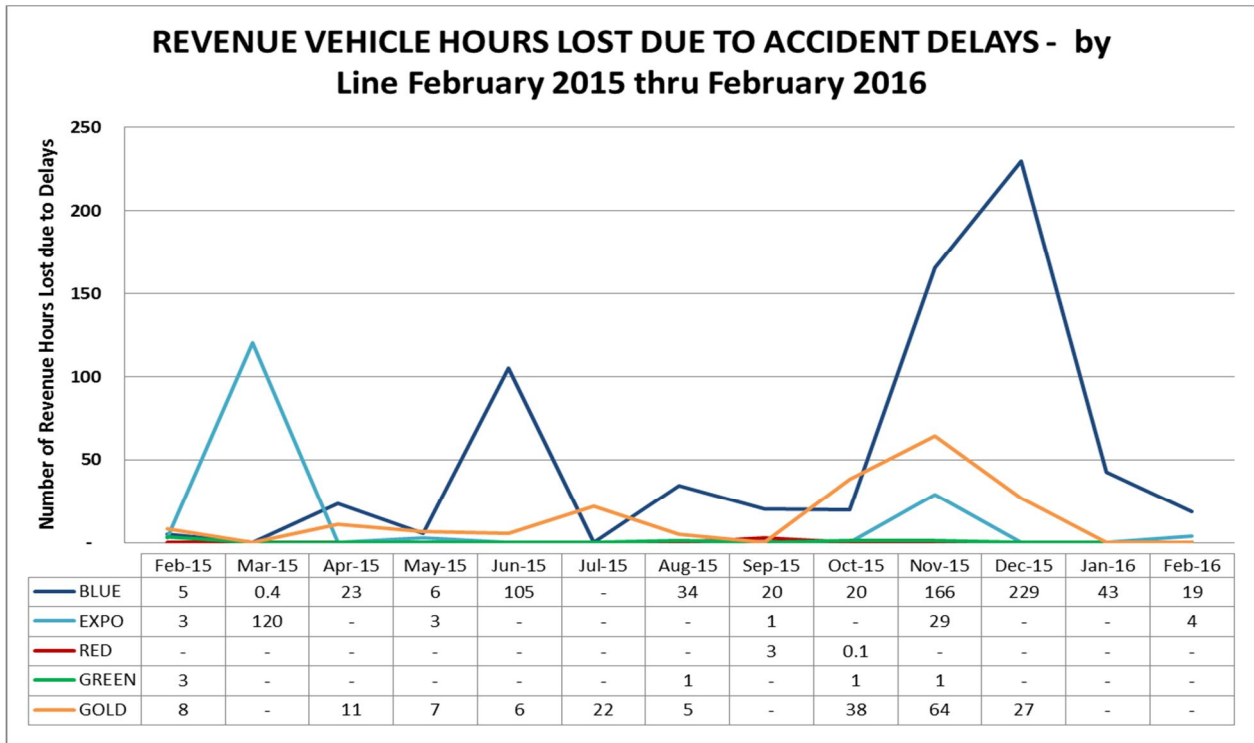


FEBRUARY 2016 VEHICLE AVAILABILITY

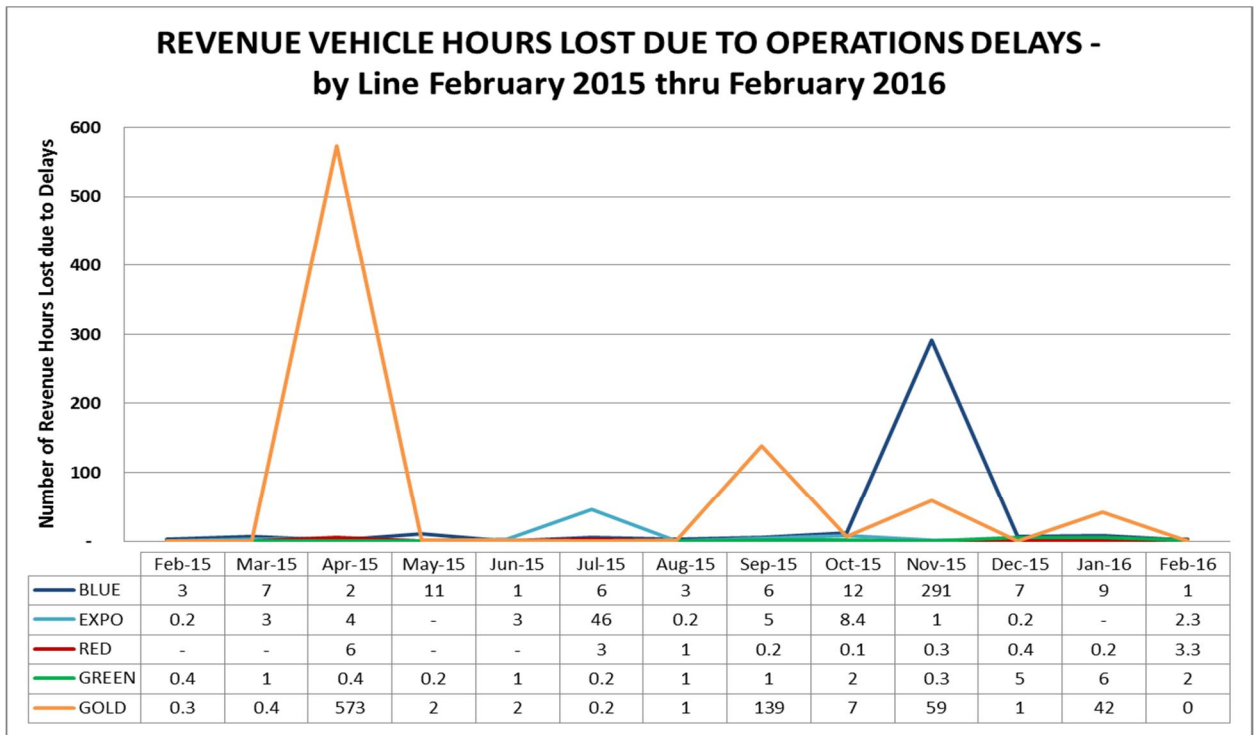
Blue/ Expo			
Pullout Type	Vehicles Required	Average Available	Average % Available
Weekday	77	75	99%
Weekend	48	55	114%
Red/ Purple			
Pullout Type	Vehicles Required	Average Available	Average % Available
Weekday	73	79	109%
Weekend	54	72	134%
Green			
Pullout Type	Vehicles Required	Average Available	Average % Available
Weekday	22	22	104%
Weekend	14	16	115%
Gold*			
Pullout Type	Vehicles Required	Average Available	Average % Available
Weekday	0	0	0%
Weekend	0	0	0%

* Gold line data not available

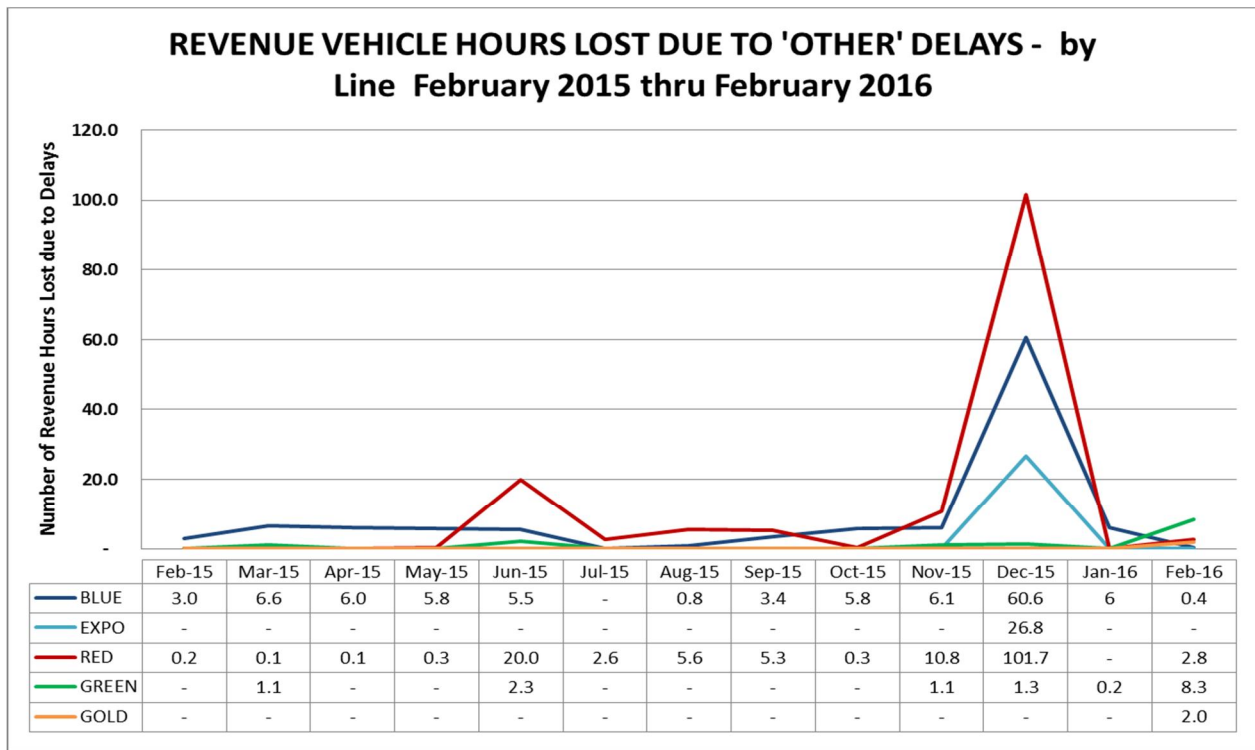
RAIL DELAYS BY CATEGORY – SYSTEMWIDE
REVENUE HOURS LOST RELATED TO – ACCIDENTS



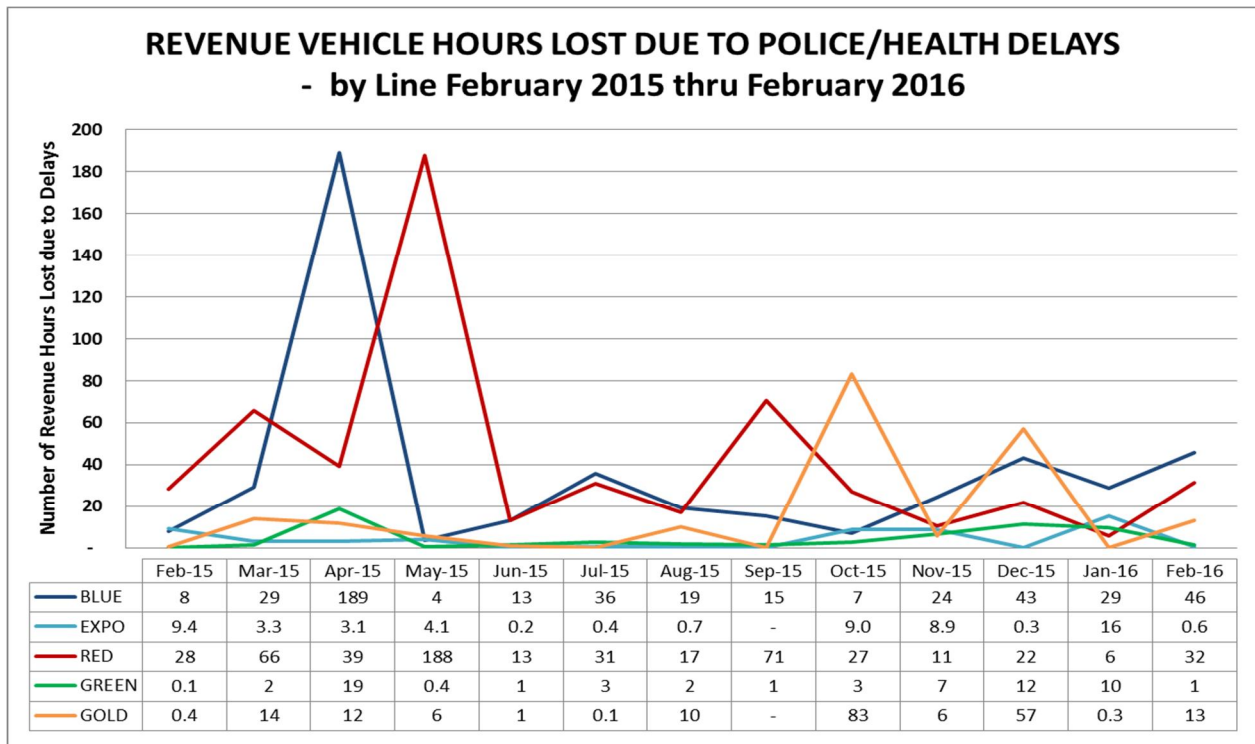
REVENUE HOURS LOST RELATED TO – OPERATIONS



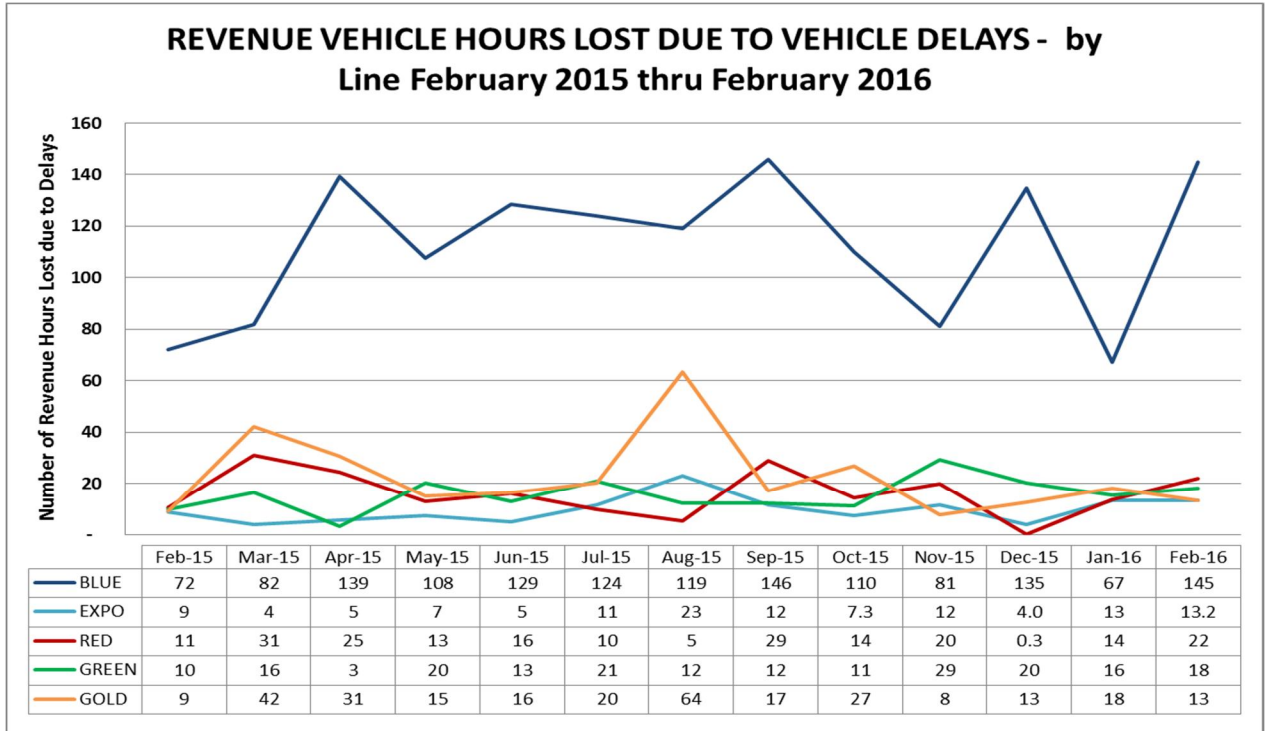
REVENUE HOURS LOST RELATED TO – OTHER



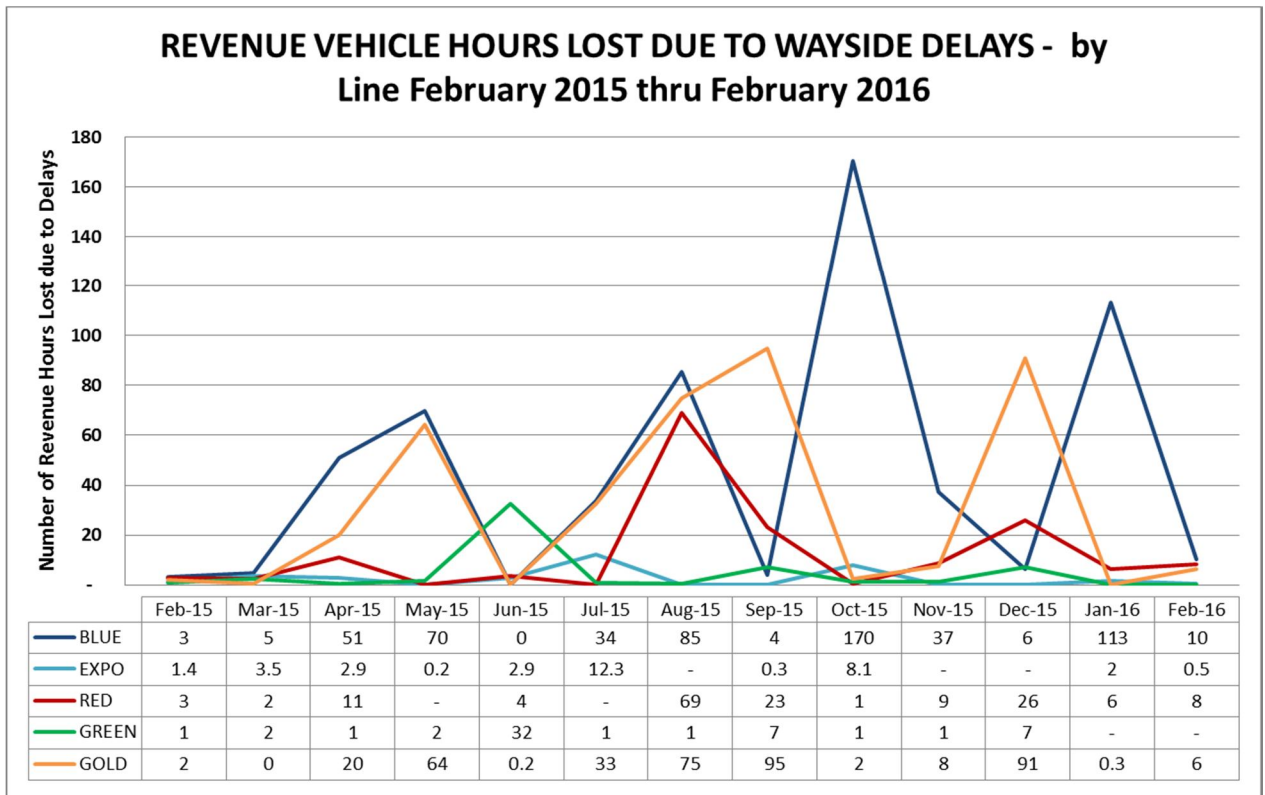
REVENUE HOURS LOST RELATED TO – POLICE & HEALTH



REVENUE HOURS LOST RELATED TO – VEHICLE



REVENUE HOURS LOST RELATED TO – WAYSIDE



RAIL PERFORMANCE BY LINE

BLUE LINE

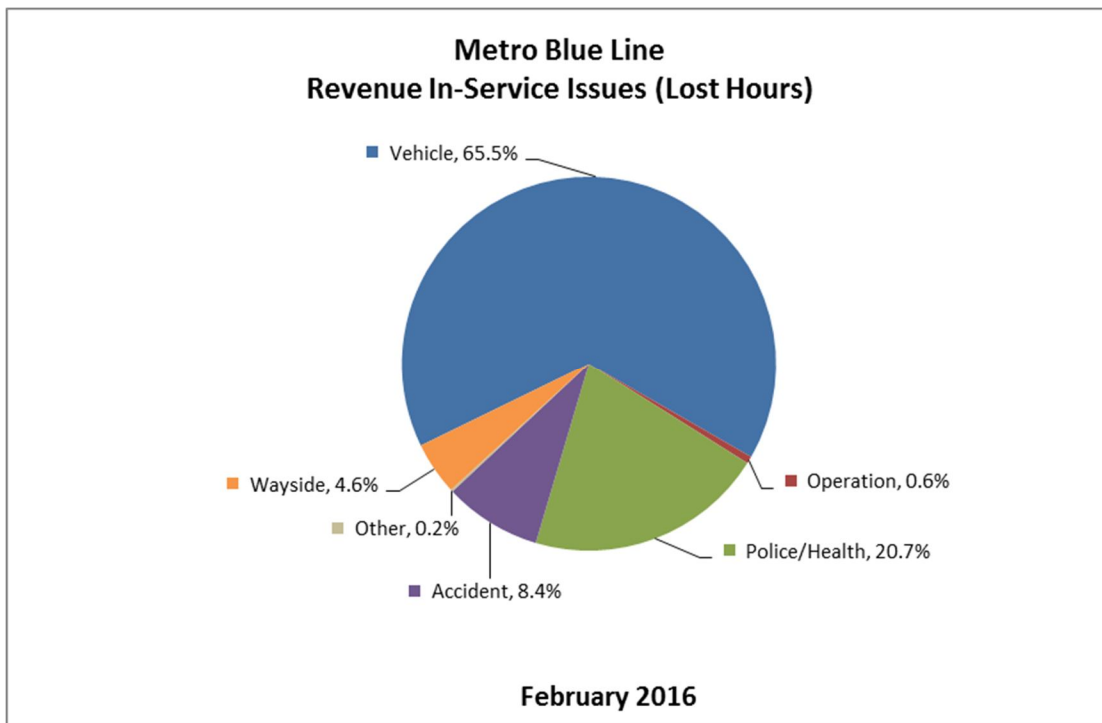
Out of a total of 20,402 hours operated, there were approximately 221 total hours of service delays.

February 2016 Service Hours:

Revenue Hours without Delays	20,181	98.9%
Hours Delayed	221	1.1%
Total Revenue Hours	20,402	100%

Summary of the major contributors:

• Operations	1 hour	1 %
• Accidents	19 hours	8 %
• Vehicle	145 hours	66 %
• Wayside	10 hours	5 %
• Police & Health	46 hours	20 %
• Other	0 hours	0 %
Total:	221 hours	100%



February 2016 Blue Line major delay contributors were as follows:

Blue Line Accident:

02/13/16 Accident

Train 111 reported a Train Vs Auto Incident at Long Beach Blvd and Burnett st on track 2. Single track and shuttle operations implemented around affected train. LASD reported no injuries and damage to vehicle involved was minor. Trains 115 and 113 operated as shuttles. At 1319 hrs, LBPD released Train 111 which was routed to the Yard out of service. 5 trips canceled with a max delay of 38 mins.

02/21/16 Accident

Train 101 reported making a contact with a vehicle making an illegal left turn at Washington and Olive. Single track operations between Maple and Venice Interlocking implemented. One train turned back. At 1530 hrs, Train 101 proceeded southbound out of service. 2 trips canceled with a max delay of 20 mins.

Blue Line Police/Health:

02/23/16 Police/Health

Train 116 reported an Auto accident, Metro not involved, on Long Beach Boulevard at 4th Street. A fencing support pole was damaged and blocked Metro tracks. Turnback operations implemented at Willow station. A two car consist provide shuttle service in the Long Beach Loop. At 2025 hrs LBFD cut and remove damaged post blocking mainline track. At 2036 hrs, the incident track was released and normal operations resumed. 5 trips canceled with a max delay of 36 mins.

02/05/16 Police/Health

LASD held Train 106 at Grand Station Northbound for a report of a person with a gun. All trains were turned back from San Pedro NB and proceeding SB to Expo from 7th/ Metro. LASD cleared the incident at 2204 hrs. A patron was apprehended at Grand Station. 7 trips canceled with a max delay of 35 mins.

02/17/16 Police/Health

A patron on board Train 140 Southbound at 5th Street Station reported an individual with weapon. Train held for law enforcement. Turn back operations implemented. 2 trips canceled with a max delay of 25 mins.

02/12/16 Police/Health

Train 108 reported re-current propulsion fault/speed restriction/door jams on Car 248 Northbound at Willowbrook Station. Train 108 offloaded at Vernon Station and was removed from service. 1 trip canceled with a max delay of 21 mins.



Blue Line Wayside:

02/22/16 Power

SCADA indicated the Breakers opened at Florence, Firestone and 103rd de-energizing tracks south of Florence station to 103rd station. Train 104 was stuck on the platform at 103rd southbound, and train 127 stuck on the platform at Firestone station. Turnback operations implemented. A field tech responded and reset the breakers at 1532 hrs. 3 trips canceled with a max delay 38 mins.

02/07/16 Power

SCADA indicated a Power failure between Firestone Station and Washington Station. Control issued a Clearance Cards to bypass Red aspects and Manual Blocks. SB Long beach trains were delayed up to 20 mins from Washington Station until 1843 hours. 29 trips affected with a max delay of 20 mins.

02/17/16 Track

Advisory 8 issued for singletrack operational delays due to 24th grade maintenance. 24 trips affected with a max delay of 20 mins.

02/12/16 Signal

Trains began losing cab signals Southbound between El Segundo to Stockwell and Northbound between Rosecrans to Stockwell. Stop and proceed procedures were authorized to regain cab signals. Signals on scene cleared the fault at 0732 hrs. 20 trips affected with a max delay of 15 mins.

Blue Line Vehicle Maintenance:

02/11/16 Vehicle Maintenance

Train 128 reported a brake fault Car 148 Northbound at Del Amo. The train remained in service with a restricted speed due to no replacement available. 24 mins max delay.

02/17/16 Vehicle Maintenance

Train 114 reported Propulsion Dynamic Brake Fault with MA Low and B/O windshield Wipers on Car 110 Southbound at Willowbrook station. Train 114 Offloaded @ Compton Station and was removed from service. 1 trip canceled with a max delay of 24 mins.

02/10/16 Vehicle Maintenance

Test Train 1967 reported No movement, with no fault on Car 110 Northbound at Willow platform. Turnback and single track operations implemented. Train 197 cleared and returned to the Yard at 1044 hrs. 1 trip canceled with a max delay of 22 mins.

02/11/16 Vehicle Maintenance

Car Cut Train 315 reported no movement on Car 167 Northbound at Wardlow. Single track operations implemented. At 2000 hrs, the Operator was able to cleared propulsion faults and frictions brakes not releasing problem and proceed to the Yard. 22 mins max delay.



02/03/16 Vehicle Maintenance

Train 111 reported loss of air on Car 247 Southbound at Vernon station and doors unable to open. Single tracking operations implemented. Train released to head to MBL Yard as of 1046 hrs. Train 111 was routed off the mainline at 1128 hrs. 3 trips canceled with a max delay of 20 mins.

02/18/16 Vehicle Maintenance

Train 105 has no movement due to locked brakes on Car 241 Southbound at San Pedro street. A Veh Tech responded from Willowbrook station and was able to clear codes. 20 mins max delay.

02/22/16 Vehicle Maintenance

Train 110 reported a Propulsion fault with no movement on Car 156 Northbound at Transit Mall. 1 trip canceled with a max delay of 20 mins.

02/04/16 Vehicle Maintenance

Train 115 reported no movement with a friction brake fault on Car 236 Southbound at the Venice IL. Single tracking operations implemented and turn backs. 4 trips canceled with max delay of 15 mins.

02/03/16 Vehicle Maintenance

Train 128 reported smoking brakes from car 118 Southbound at 103rd Station. Train 128 offloaded at Willowbrook and placed in the Imperial Pocket. Trip cancelledp south to Willow and north from Willow to & 7th and Metro. 2 trips canceled with a max delay of 12 mins.

02/08/16 Vehicle Maintenance

Train 106 reported an EMI and AC Fault and unable to continue in service on Car 249 Southbound at Del Amo. Round trip from Del Amo to Transit Mall Canceled. 2 trips canceled with a max delay of 12 mins.

02/16/16 Vehicle Maintenance

Train 105 reported a Propulsion / Dynamic Brakes fault on Car 229 Southbound at San Pedro Station. Train 105 swapped routes with Train 120. Northbound Train 120 reported prop faults at Del Amo. Train 120 offloaded at Del Amo. Train 120 had no power to proceed uphill to recover to yard from Del Amo Station. Turnback and Single tracking operations implemented. Train was able to proceed north to Willowbrook pocket. 4 trips canceled with a max delay of 12 mins. .

02/18/16 Vehicle Maintenance

Train 112 reported the Doors jammed and , no movement on Car 248 Northbound at Willow Station. Train 112 was offloaded and door bypassed to regain movement out of service. 2 trips canceled with a max delay of 12 mins.



02/20/16 Vehicle Maintenance

Train 115 reported a trespasser standing in front of train Southbound at Long Beach Blvd and 16th Street. Train returned to PCH station and swapped with Train 114. Train 115 was canceled both directions. 2 trips canceled with a max delay of 12 mins.

02/11/16 Vehicle Maintenance

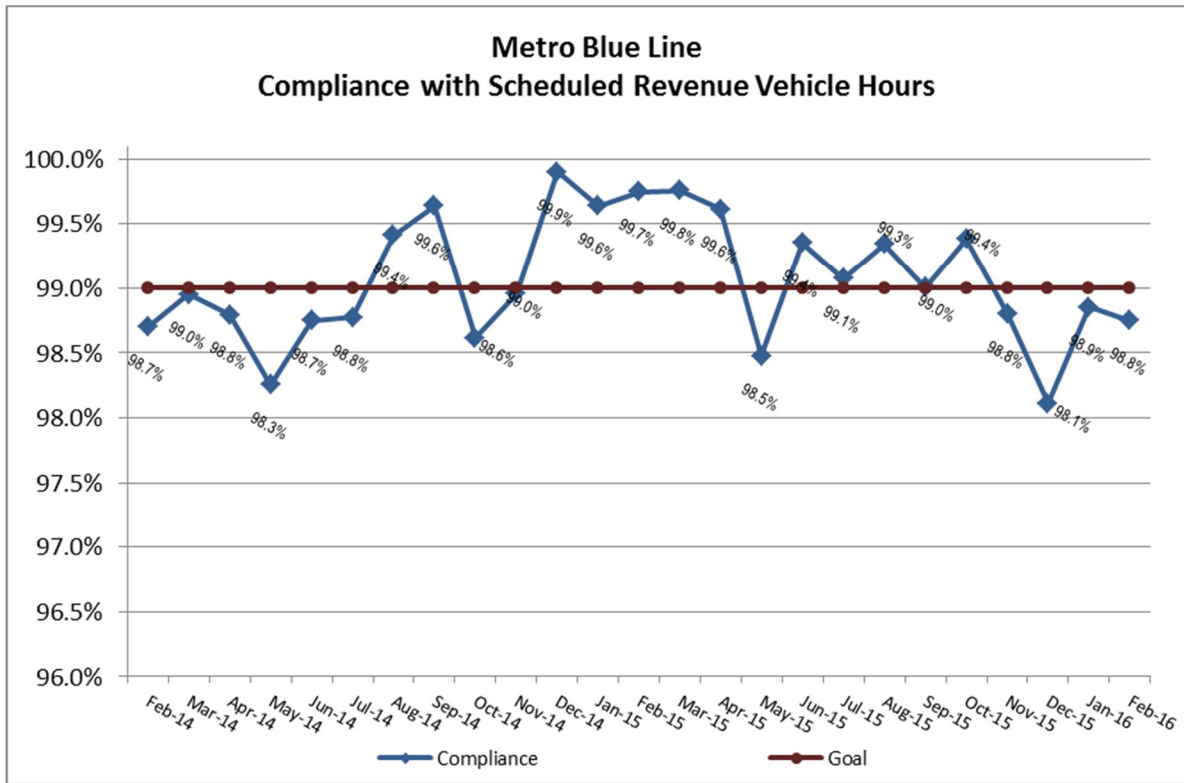
Northbound Train 105 reported arriving at Washington Station and experienced smoking brakes, MA Low, Propulsion Fault on Car 165. : Train 105 offloaded, crossed over and proceeded southbound to the Imperial Pocket. Del Amo pull in 124 was also canceled southbound. 2 trips canceled with a max delay of 10 mins.

02/16/16 Vehicle Maintenance

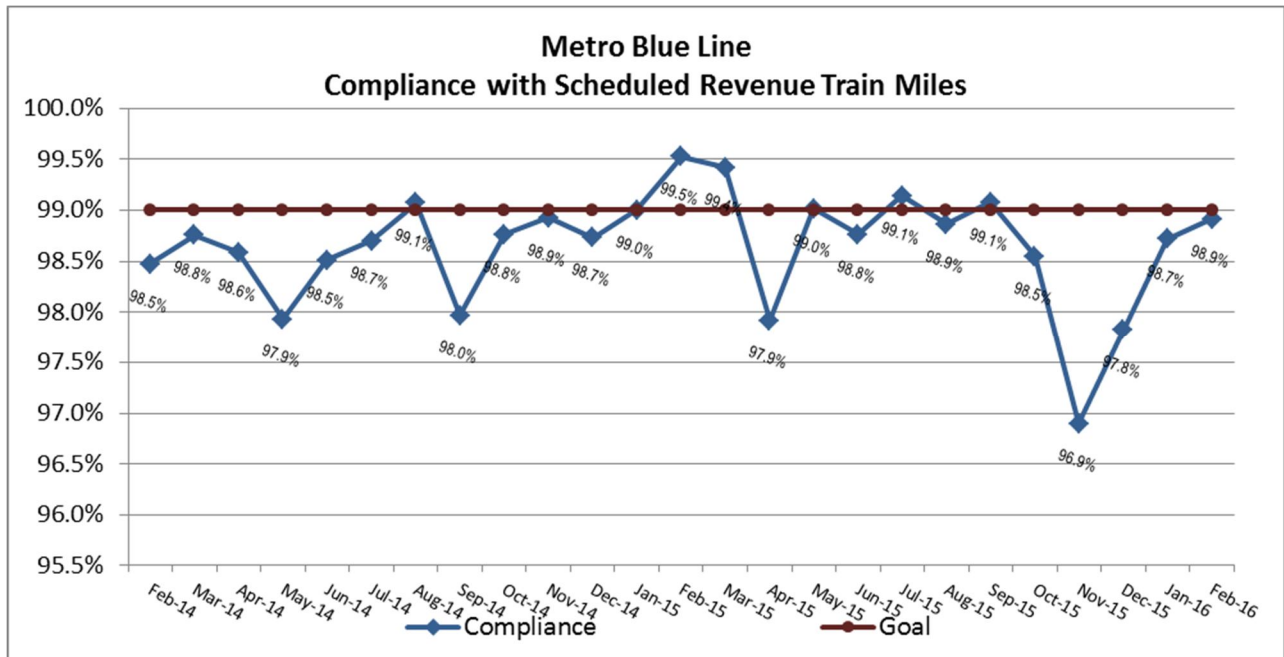
Train 121 reported a Propulsion / Dynamic Brakes fault on Car 109 Northbound at Wardlow. Train 121 was offloaded and recovered to the yard. Trip was cancelled from Wardlow to 7MC and 7MC to Del Amo. 2 trips canceled with a max delay of 6 mins.

MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS FOLLOWS:

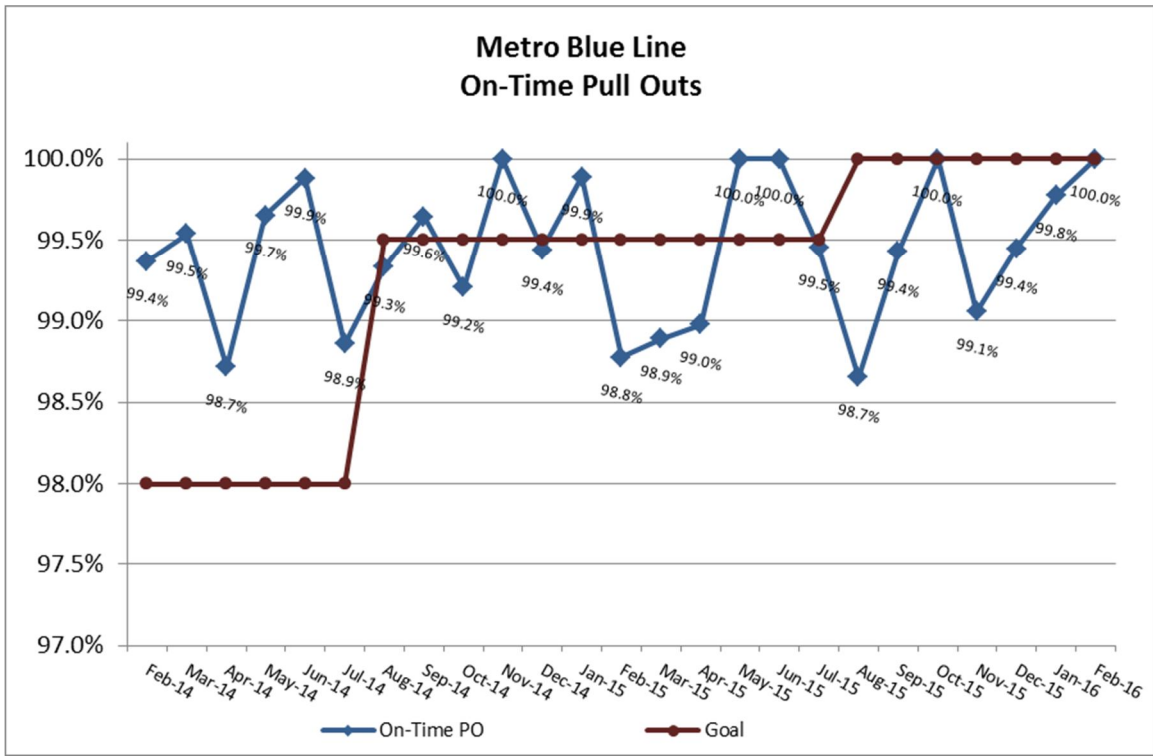
COMPLIANCE WITH SCHEDULED VEHICLE HOURS CHART



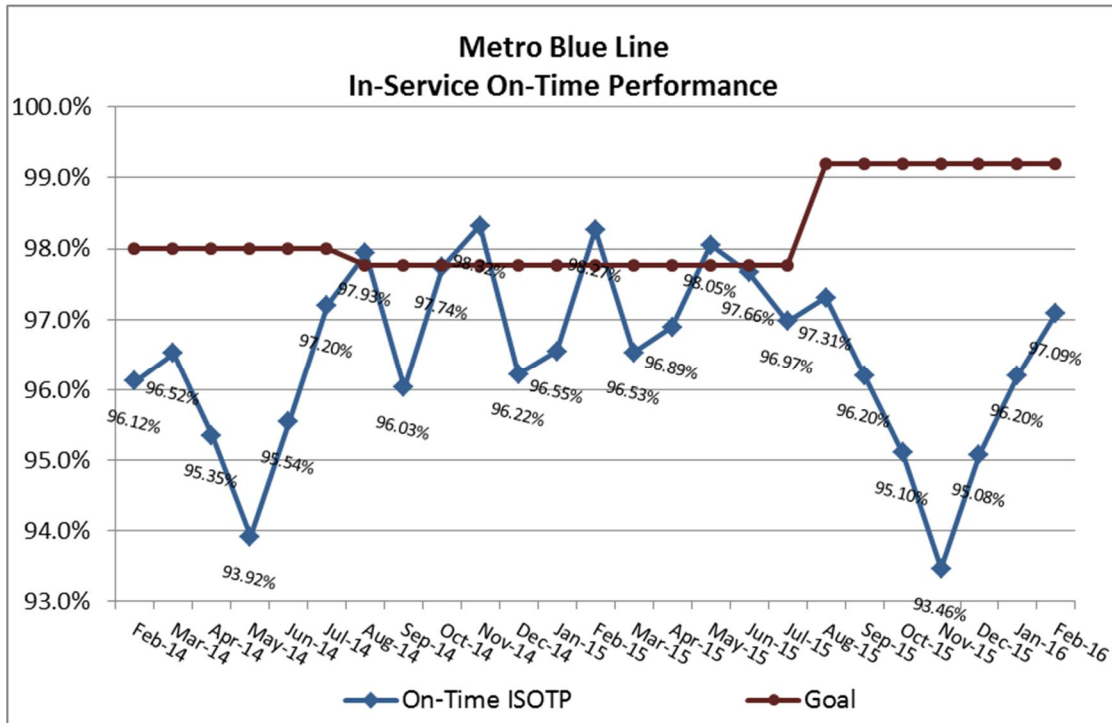
COMPLIANCE WITH SCHEDULED TRAIN MILES CHART

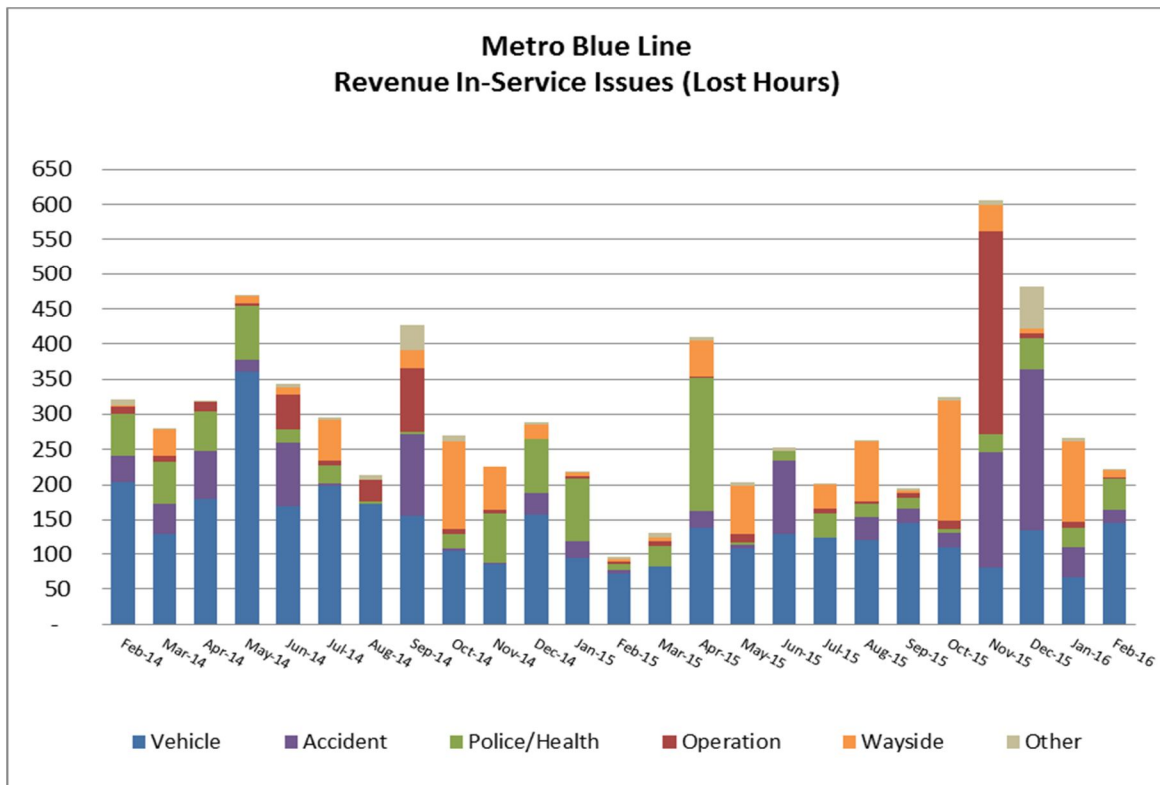
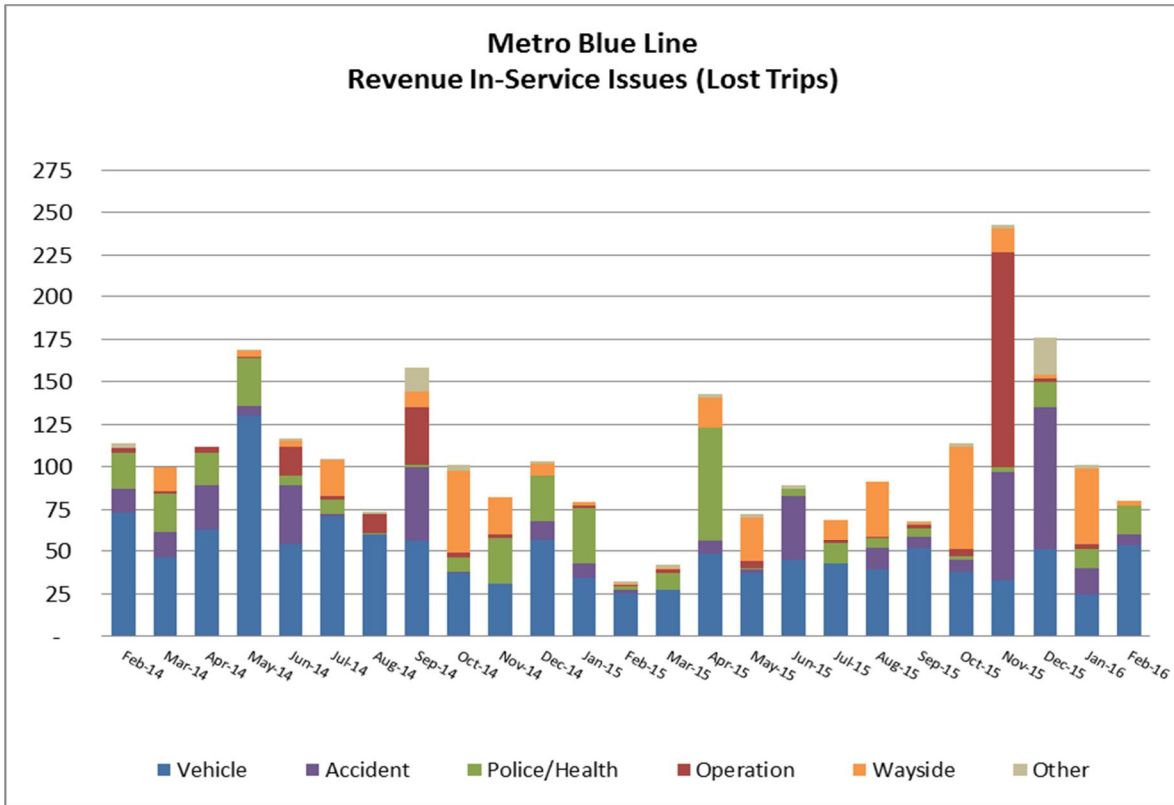


ON-TIME PULL OUTS CHART



IN-SERVICE ON-TIME PERFORMANCE CHART





EXPO LINE

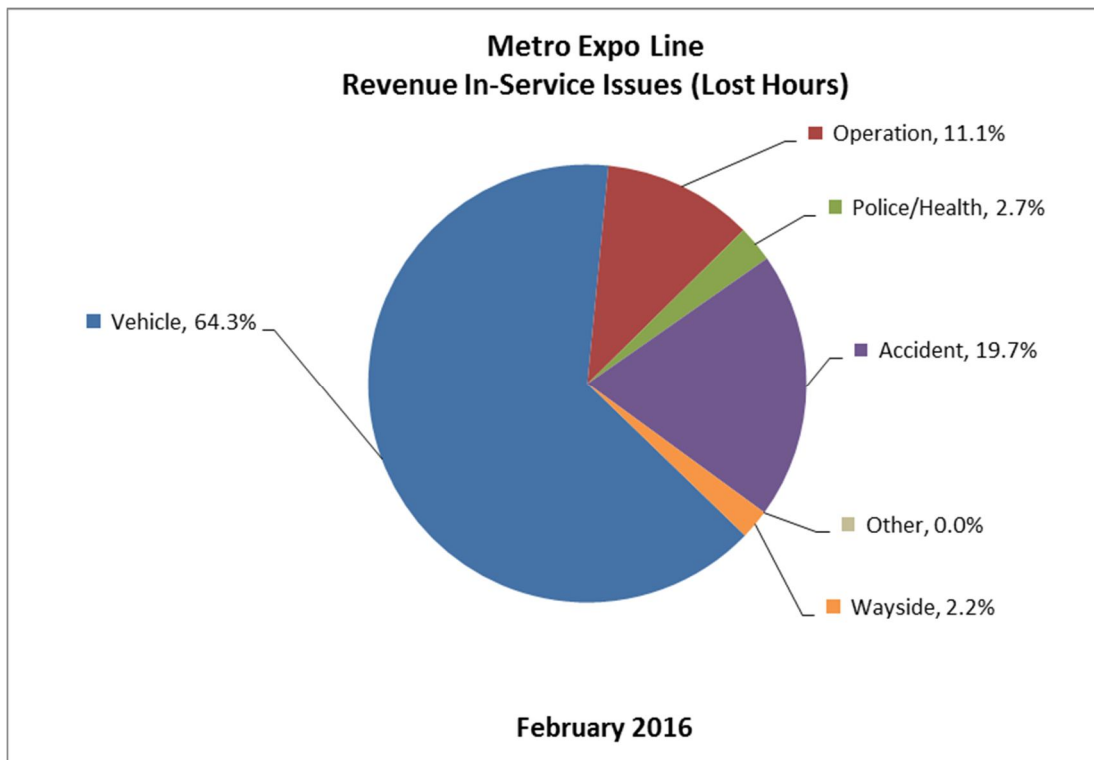
Out of a total of 8,591 hours operated, there were approximately 31 total hours of service delays.

February 2016 Service Hours:

Revenue Hours without Delays	8,571	99.8%
Hours Delayed	21	0.2%
Total Revenue Hours	8,591	100.0%

Summary of the major contributors:

• Operations	0 hours	11 %
• Accidents	0 hours	20 %
• Vehicle	13 hours	64 %
• Wayside	2 hours	2 %
• Police & Health	16 hours	3 %
• Other	0 hours	0 %
Total:	31 hours	100%



February 2016 Expo Line major delay contributors were as follows:

EXPO Wayside:

02/29/16 Power

Train 109 reported a loss of traction power feed at Culver City Station on approach to the station. A total of (23) patrons evacuated from incident/disabled train and walked to Culver City Station. 27 mins max delay.

EXPO Line Accident:

02/22/16 Accident

Train 107 reported an Train vs. Auto on Track 3 Northbound at the Normandie Crossing with no injuries and significant damage to both vehicles. LAFD shut down both tracks for approximately 25 mins. Turnback and Single tracking implemented. The incident scene was released at 1039 hrs. Normal operations resumed. 4 trips canceled and 20 trips affected with a max delay of 25 mins.

EXPO Vehicle Maintenance:

02/23/16 Vehicle Maintenance

Train 108 reported a blown motor fuse on Car 151 Northbound at La Cienega Station. Train 108 was canceled to 7th Metro. 1 trip canceled with a max delay of 24 mins.

02/03/16 Vehicle Maintenance

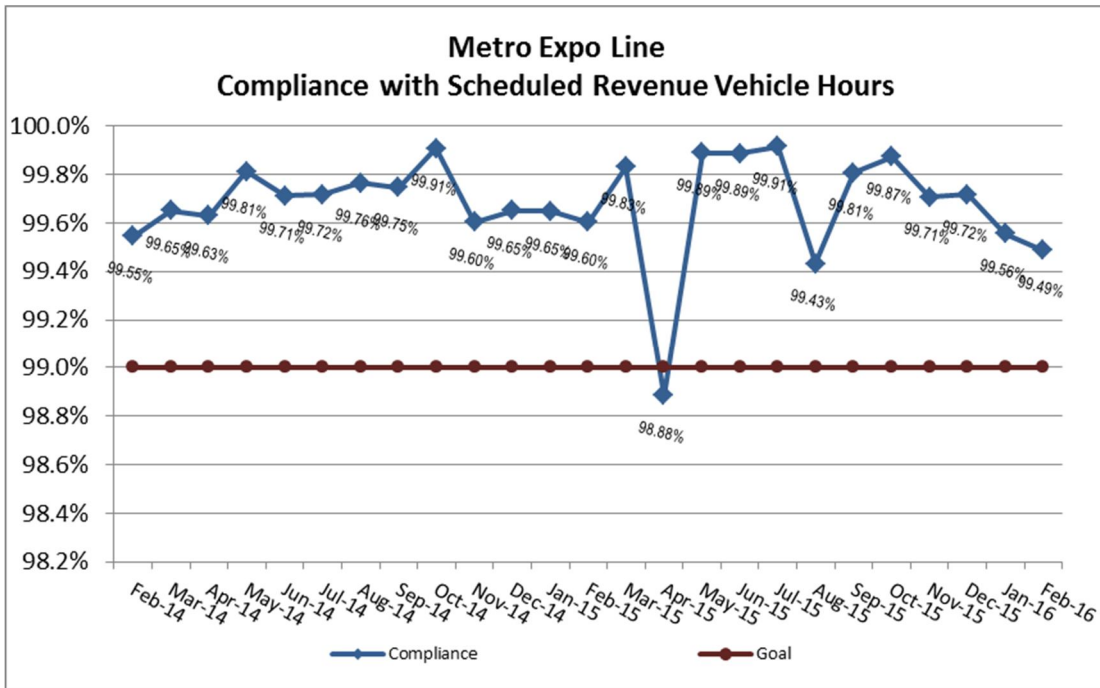
Train 117 reports door problem on Car 247 with no Movement southbound at Western Station. Single tracking operations implemented. Train 117 was canceled from Western Station to Culver City southbound and from Culver City to 7th & Metro Northbound. Train 117 was removed from the line 0759 hrs. 2 trips canceled with a max delay of 12 mins.

02/16/16 Vehicle Maintenance

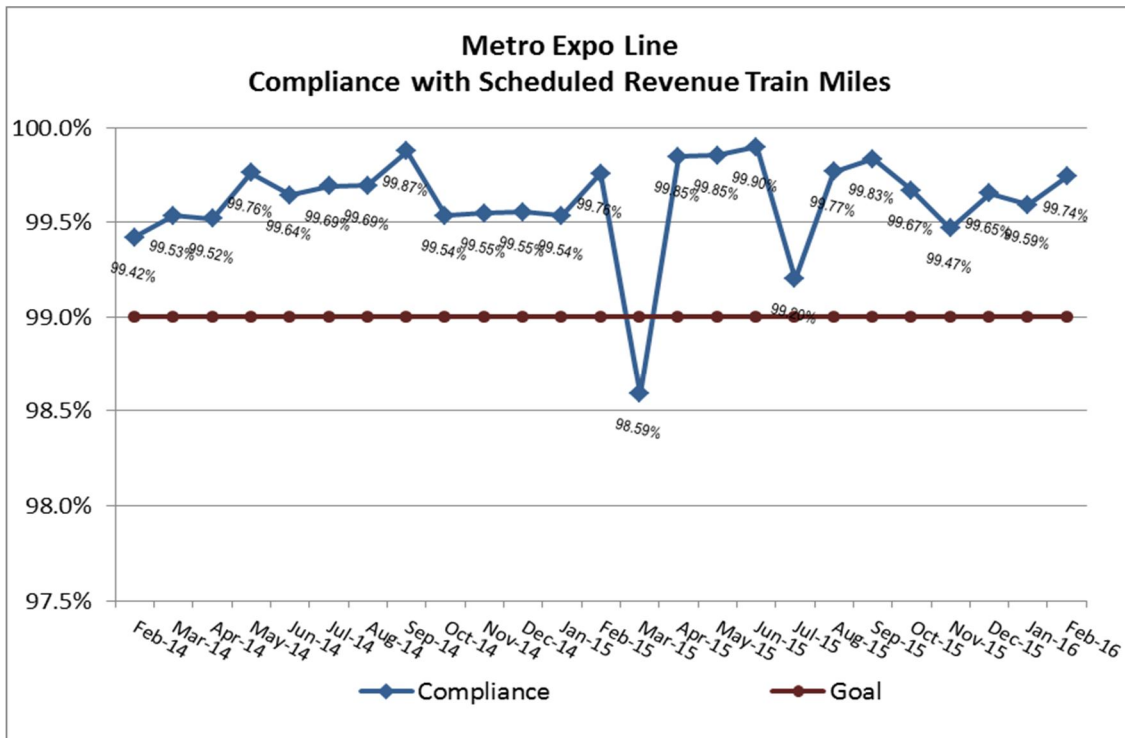
Train 111 reported no movement with no indication on Car 234 Southbound at 18th Street and would not move in ATP Bypass. Train 111 offloaded. Train 109 was single tracked. Train 113 was cancelled south to Expo and sent to Imperial for turnback from Willowbrook Station by the downtown controller. Train 111 regained movement and was placed in ATP Bypass with Clearance Card in Manual Block North to 7th and Metro. 2 trips canceled with a max delay of 12 mins.

MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS FOLLOWS:

COMPLIANCE WITH SCHEDULED VEHICLE HOURS CHART



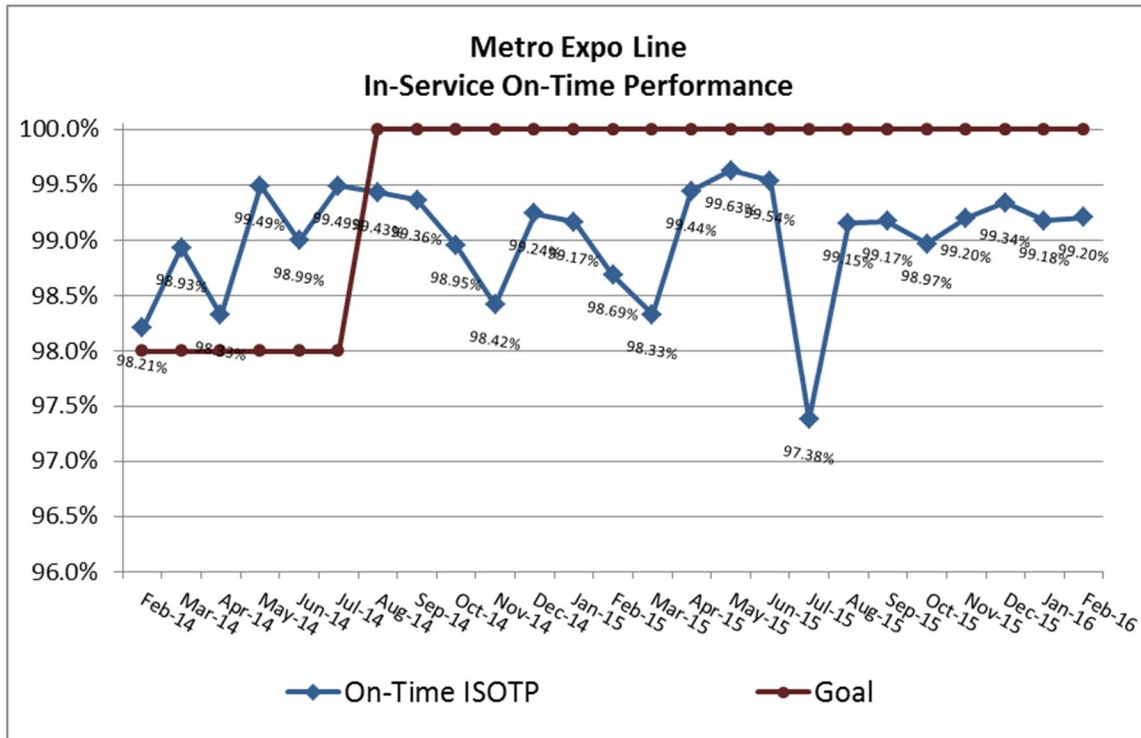
COMPLIANCE WITH SCHEDULED TRAIN MILES CHART

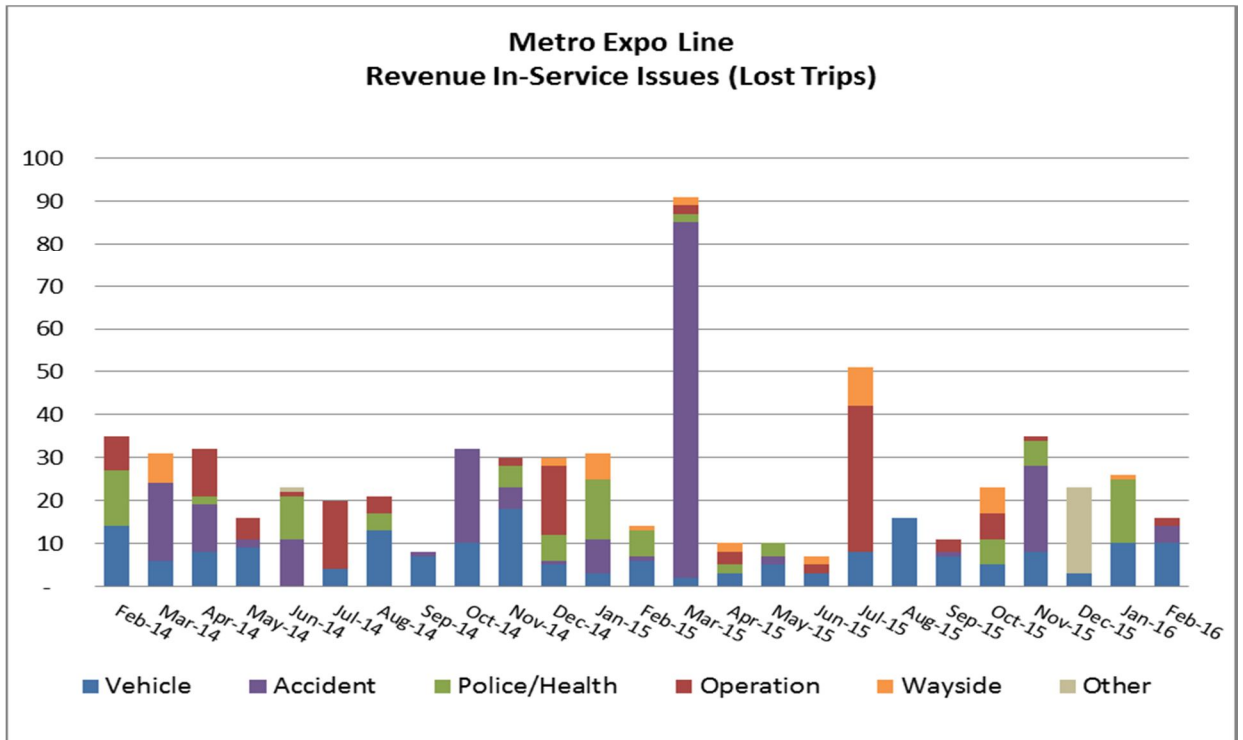
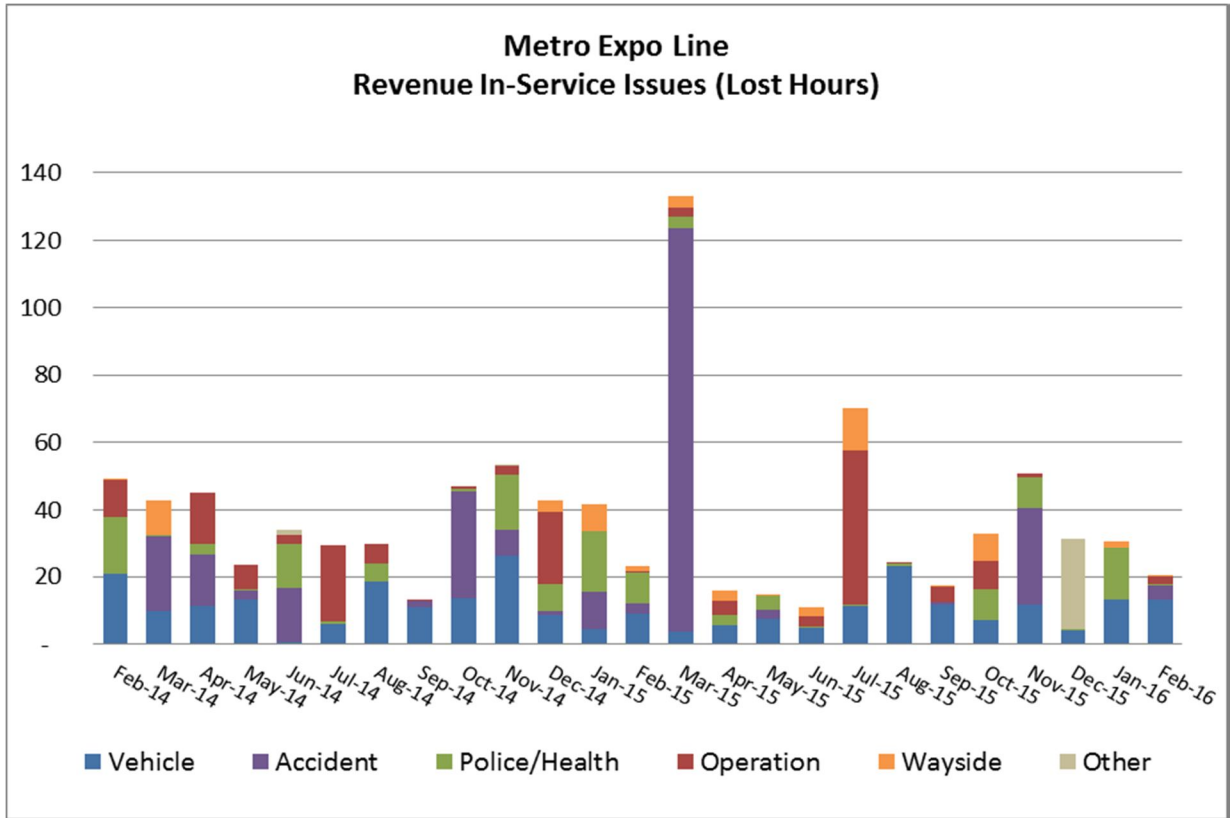


ON-TIME PULL OUTS

Expo Line Pull Outs are included in Blue line Pull Outs.

IN-SERVICE ON-TIME PERFORMANCE CHART





RED / PURPLE LINE

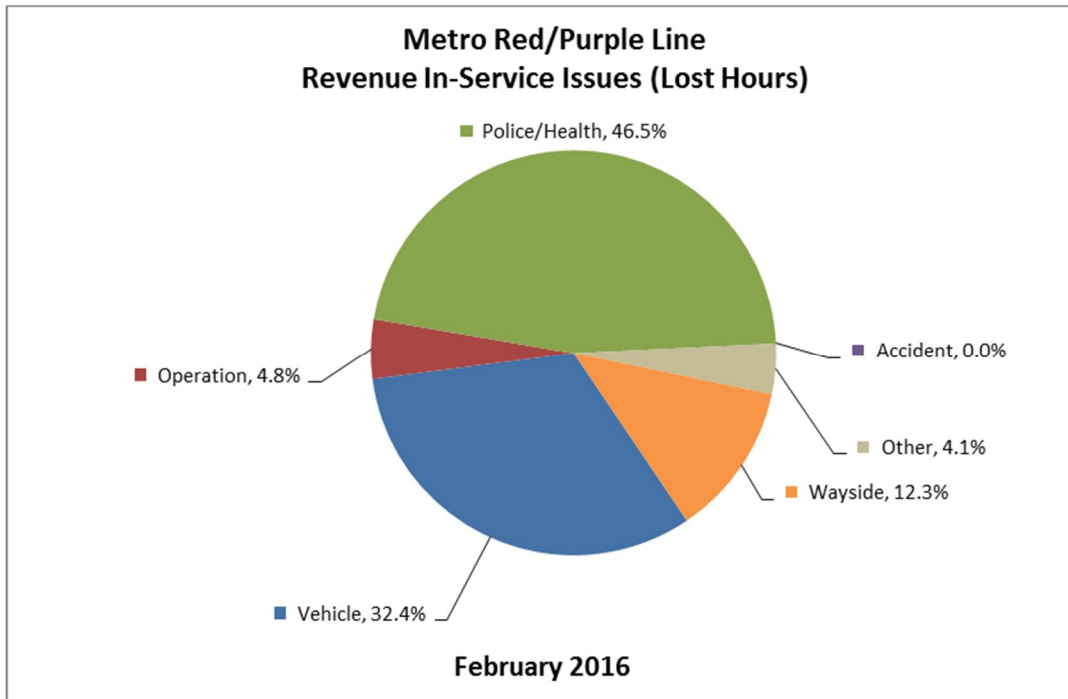
Out of a total of 24,725 hours operated, there were approximately 26 total hours of service delays.

February 2016 Service Hours:

Revenue Hours without Delays	24,658	99.7%
Hours Delayed	68	0.3%
Total Revenue Hours	24,725	100.0%

Summary of the major contributors:

• Operations	<1 hours	5 %
• Accidents	0 hours	0 %
• Vehicle	14 hours	32 %
• Wayside	6 hours	12 %
• Police & Health	6 hours	47 %
• Other	0 hours	4 %
Total:	26 hours	100 %



February 2016 Red/Purple Line major delay contributors were as follows:

Red Line Police/Health:

02/29/16 Police/Health

Operators reported a trespasser on the right of way at cross passage 61 to 64 between North Hollywood Station to Universal City Station. Track was deenergized. Turnback operations and single tracking operations implemented. LASD detained the suspect and power was restored at 1920 hrs. 6 trips canceled with a max delay of 30 mins.

02/16/16 Police/Health

Train 218 reported a Medical Emergency in Station at 7th & Metro. A patron was assaulted on board Car 512. Turnback and single track operations implemented. Train 218 was canceled and held for medical services. Incident Train was released at 1801 hrs. out of service to Union. 4 trips canceled with a max delay of 10 mins.

Red Line Wayside:

02/21/16 Signal

SCADA indicated locked switches unable to align remotely the Union West Interlocking. Turn back operations implemented from Westlake. Trains 207 was held at 7th Metro, Train 209 at Pershing and Train 204 at Civic Center for approximately 20 minutes until arrived to through switches. The incident cleared at 2128 hrs. 2 trips canceled with a max delay of 20 mins.

Red Line Vehicle Maintenance:

02/08/16 Vehicle Maintenance

Train 217 reported no movement on Car 588 at 7th/Metro B. Train 217 offloaded. Single tracking and turn back operations implemented. The friction brakes cut out in car 588 for movement into the MacArthur PT. 2 trips canceled with a max delay of 15 mins.

02/26/16 Vehicle Maintenance

Train 213 reported no movement eastbound on Car 586 between Civic and Union Station. Turnback and single tracking operations implemented between Westlake and Union Station. The operator regained movement at 1955 hrs. 2 trips canceled with a max delay of 15.

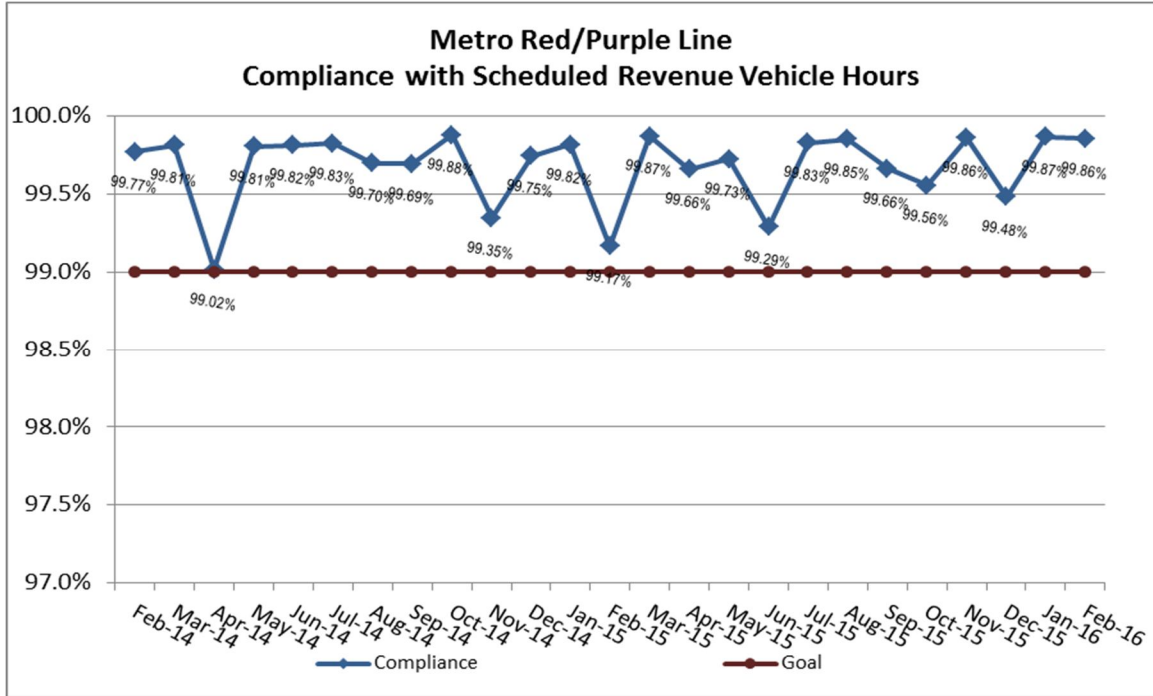
Red Line Operations:

02/20/16 Operations

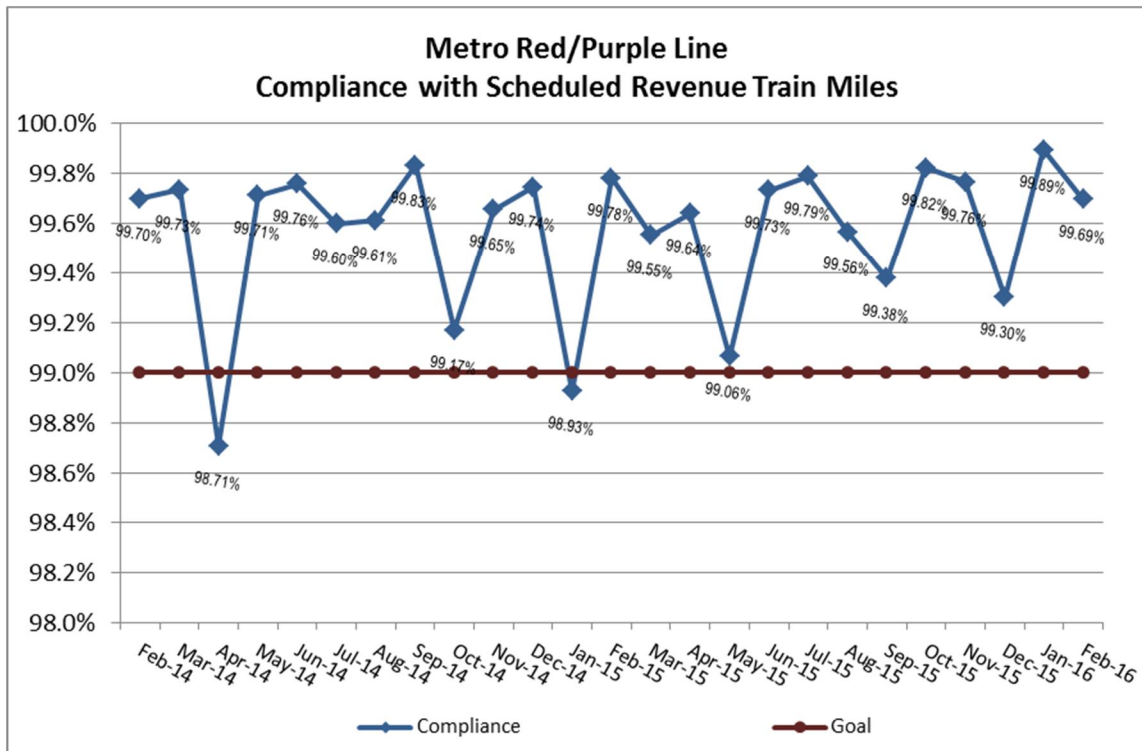
North Hollywood trains were delayed up to 15 minutes due to single tracking over the AR track, between Universal City and Hollywood and Vine. The summary did not include 20 minute headway for work on the right of way. 10 trips affected.

MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS FOLLOWS:

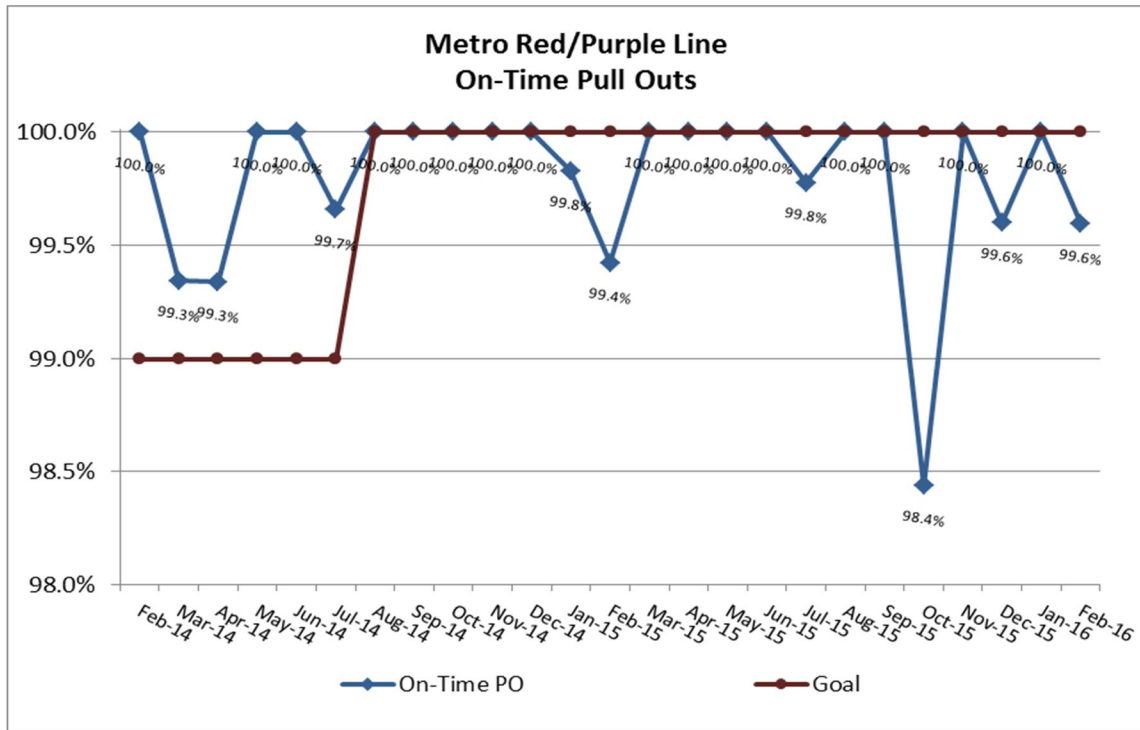
COMPLIANCE WITH SCHEDULED VEHICLE HOURS CHART



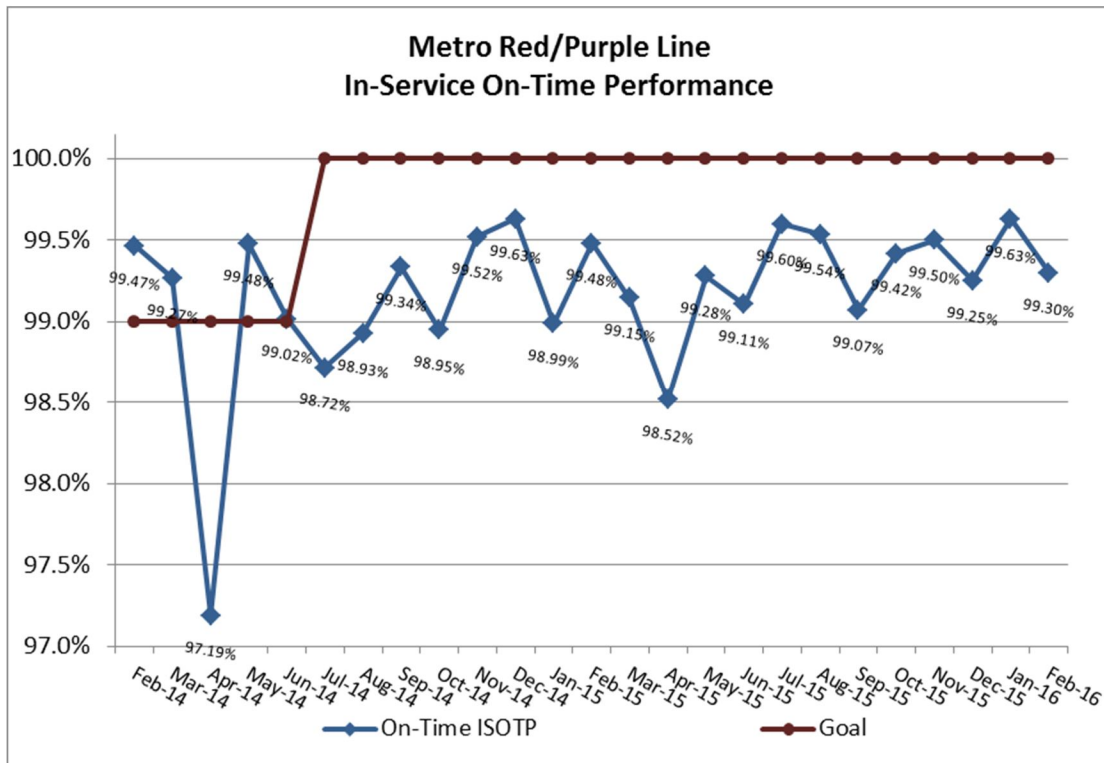
COMPLIANCE WITH SCHEDULED TRAIN MILES CHART

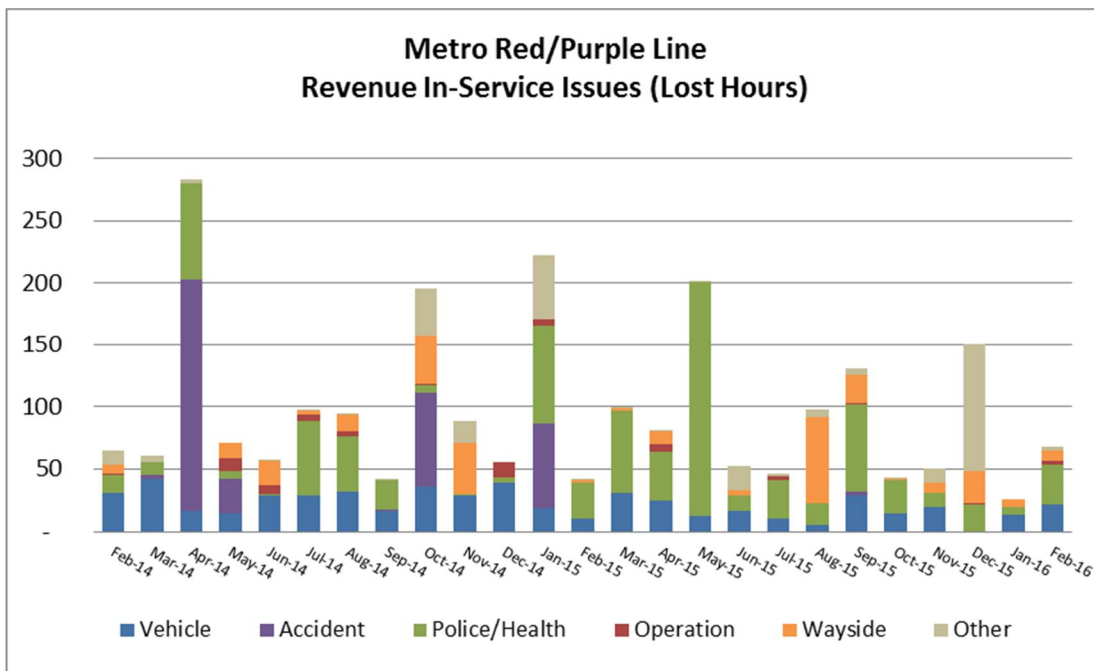
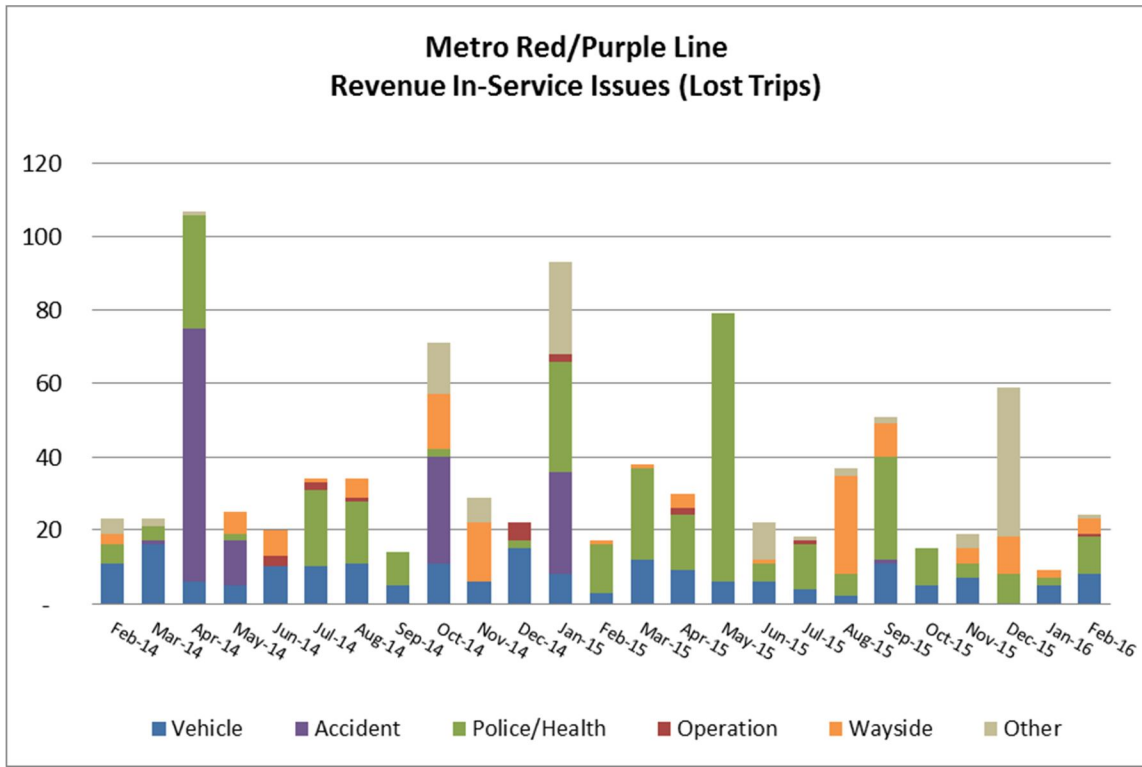


ON-TIME PULL OUTS CHART



IN-SERVICE ON-TIME PERFORMANCE CHART





GREEN LINE

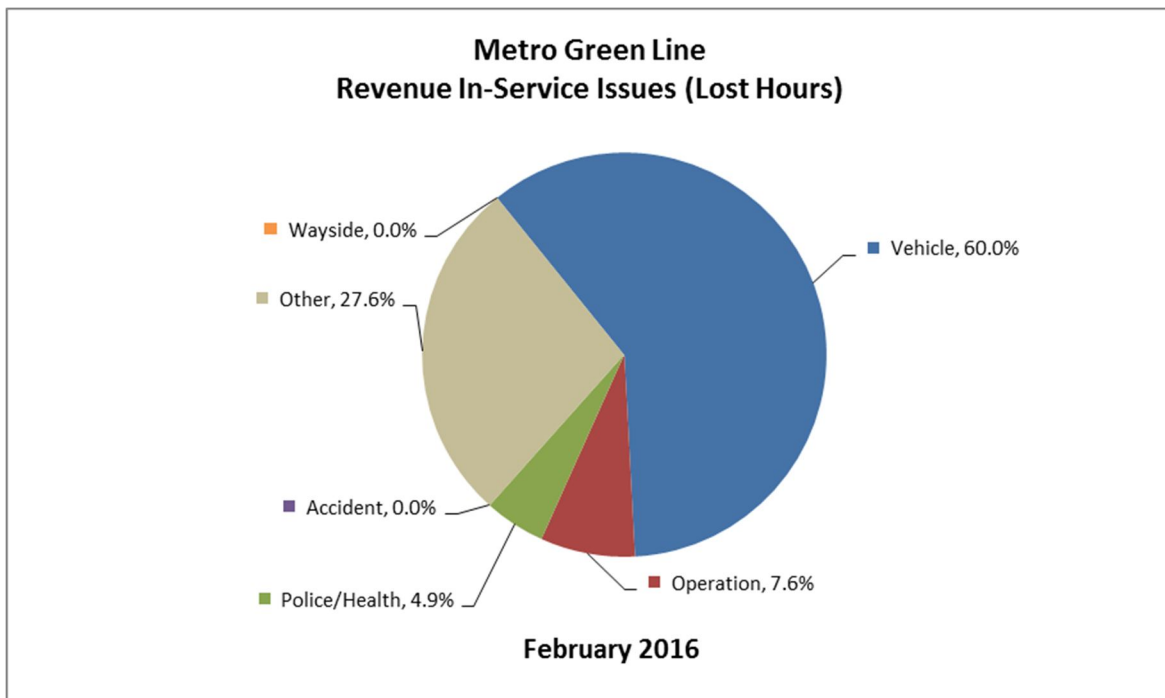
Out of a total of 7,431 hours operated, there were approximately 31 total hours of service delays.

February 2016 Service Hours:

Revenue Hours without Delays	7,401	99.6%
Hours Delayed	30	0.4%
Total Revenue Hours	7,431	100.0%

Summary of the major contributors:

• Operations	6 hours	8 %
• Accidents	0 hours	0 %
• Vehicle	15 hours	60 %
• Wayside	0 hours	0 %
• Police & Health	10 hours	5 %
• Other	<1 hour	28 %
Total:	31 hours	100%





February 2016 Green Line major delay contributors were as follows:

Green Line Operations:

02/22/16 Operations

All trains incurred up to 6 minutes delays due to Kinkisharyo testing between Lynwood to paramount interlockings. The test train exited the mainline at 1339 hrs. 26 trips affected with a max delay of 16 mins.

02/08/16 Yard Operations

Trains 345, Train 334 and Train 346 did not pull-out the Yard due to 5 operators calling out for duty. The line was bumped to maintain service. 5 trips canceled with a max delay of 15 mins.

02/08/16 Yard Operations

Trains 353 and 354 did not pull out of Green Line Yard due to lack of man power. The line was bumped to maintain service. 3 trips canceled with a max delay of 9 mins.

Green Line Vehicle Maintenance:

02/08/16 Vehicle Maintenance

Train 332 reported propulsion faults on Car 206 Westbound at Avalon Station. Train 332 offloaded at Avalon Station. Single tracking operations implemented. Train was removed from service. 2 trips canceled with a max delay of 14 mins.

02/11/16 Vehicle Maintenance

Train 411 reported no movement southbound on Car 737 just south of Allen Station. Single track and turn back operations implemented. Train 411 returned to Allen Station off loaded (150 ppl) and then recovered to Sierra Madre. 2 trips canceled with a max delay of 10 mins.

02/24/16 Vehicle Maintenance

Train 335 reported a propulsion faults that's not clearing/Dark ADU on Car 208 Westbound at Willowbrook station. Train offloaded and was removed to the Wilmington Pocket. No replacement train available. Trip canceled from Willowbrook to Marine and back to Norwalk. 2 trips canceled with a max delay of 8 mins.

02/25/16 Vehicle Maintenance

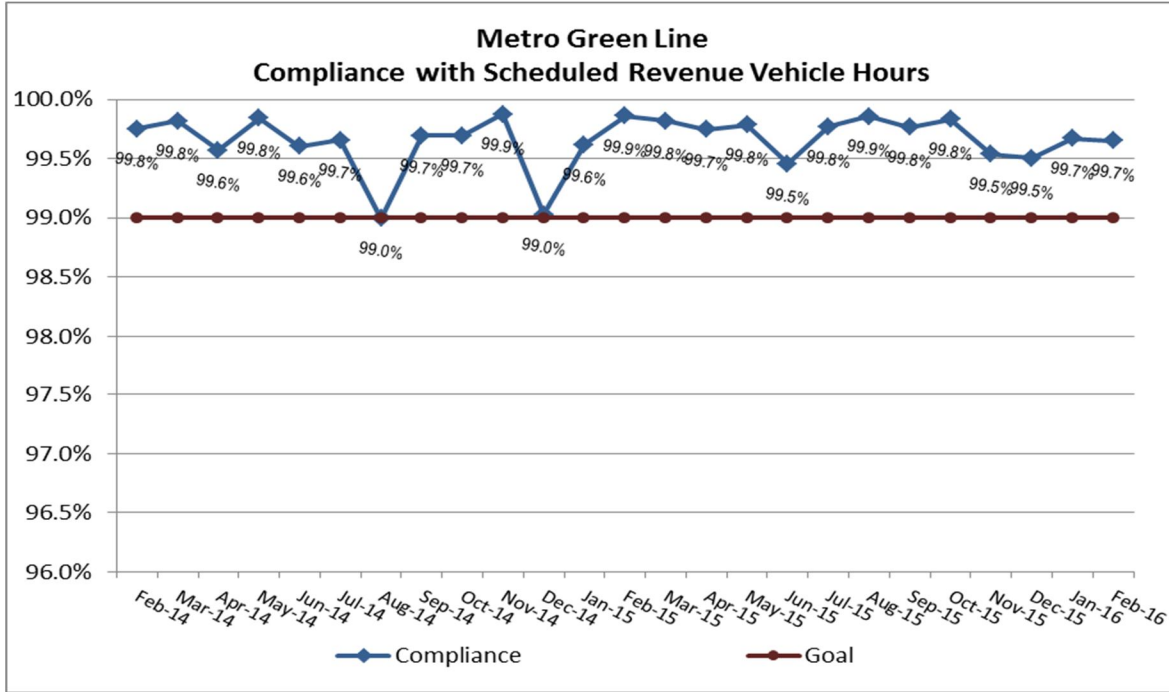
Train 335 reported propulsion faults with speed restriction on Car 215 Eastbound at Douglas Station. Follower train was turned back west at Lakewood Station trip cancelled east from Lakewood to Norwalk with a 7 minute delay. Eastbound train 335 was lost due to no available train. 2 trips canceled with a max delay of 8 mins.

02/29/16 Vehicle Maintenance

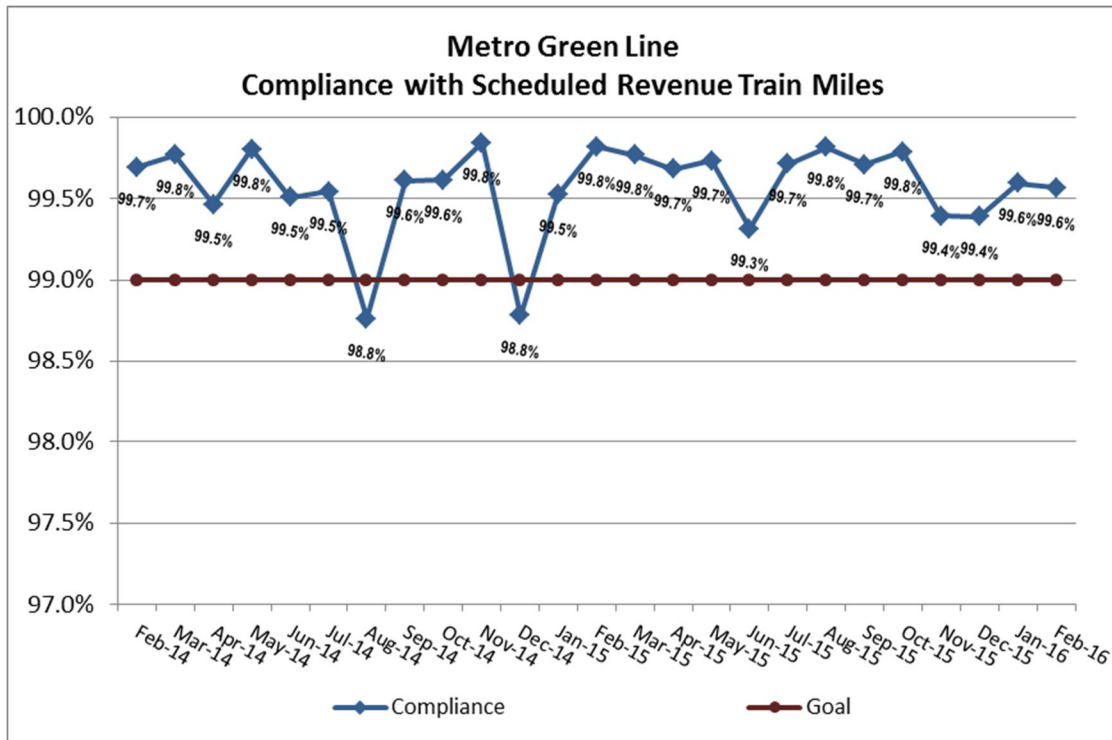
Train 361 reported an HVAV problem on Car 201 which caused the train not to be placed in service and a round trip to be canceled. 2 trips canceled with a max delay of 5 mins.

MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS FOLLOWS:

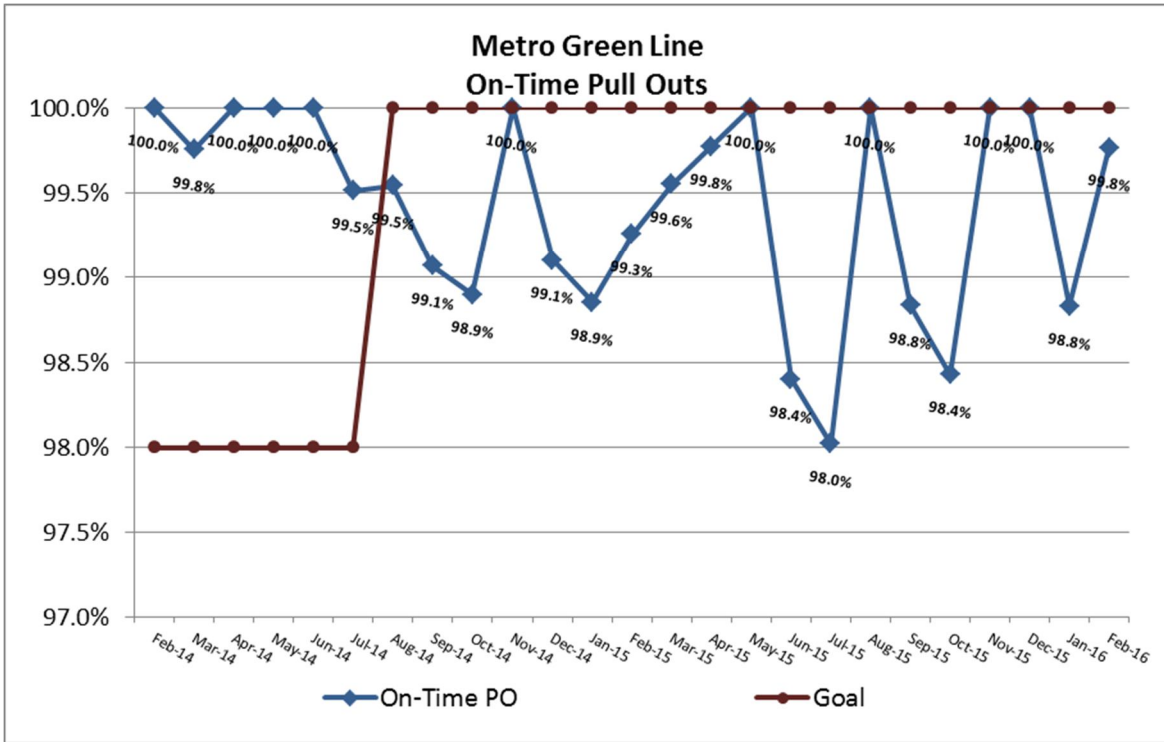
COMPLIANCE WITH SCHEDULED VEHICLE HOURS CHART



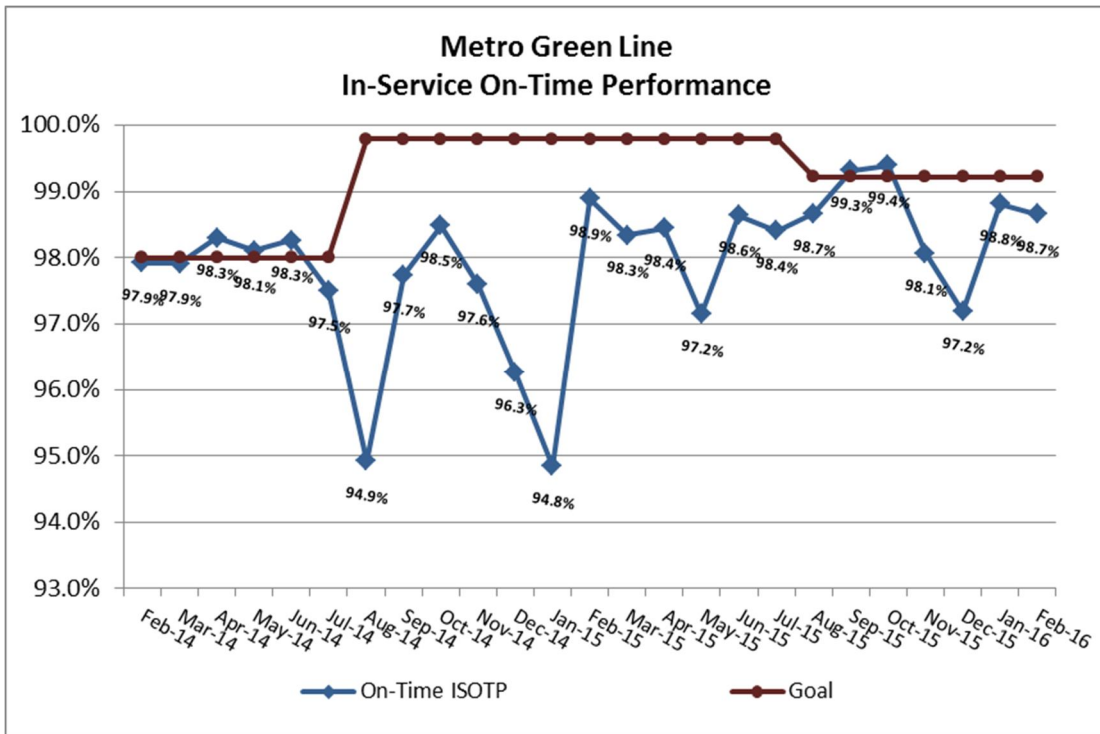
COMPLIANCE WITH SCHEDULED TRAIN MILES CHART

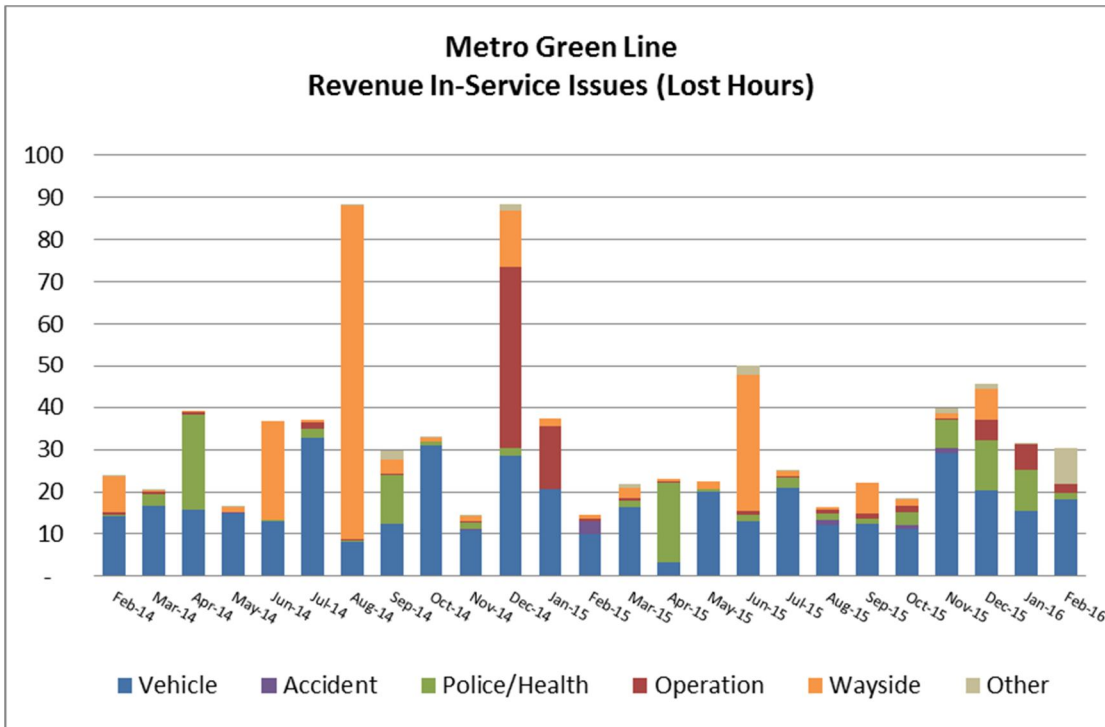
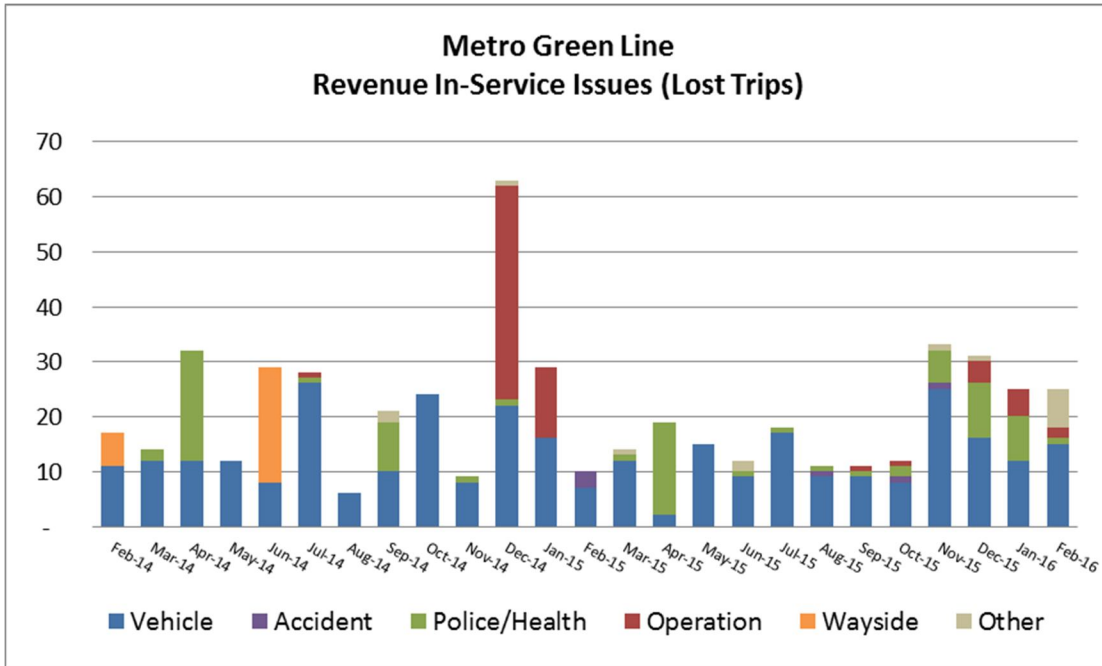


ON-TIME PULL OUTS CHART



IN-SERVICE ON-TIME PERFORMANCE CHART





GOLD LINE

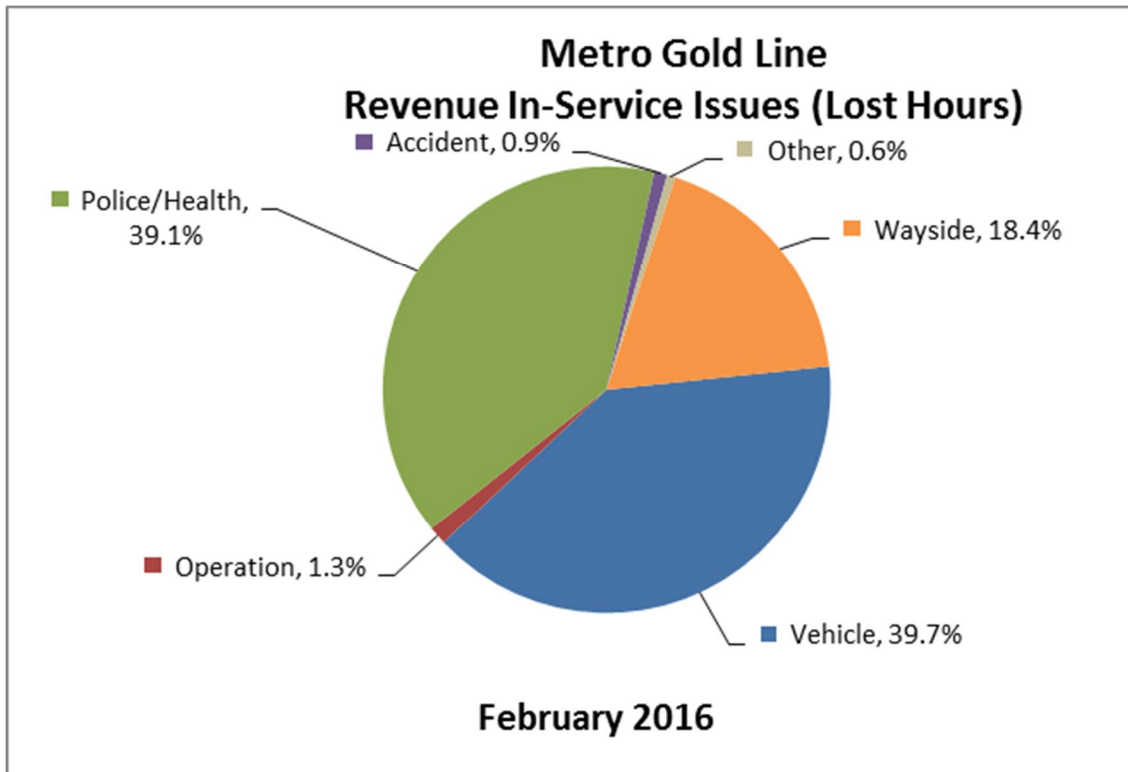
Out of a total of 13,748 hours operated, there were approximately 61 total hours of service delays.

February 2016 Service Hours:

Revenue Hours without Delays	13,417	99.7%
Hours Delayed	34	0.3%
Total Revenue Hours	13,451	100%

Summary of the major contributors:

• Operations	42 hours	69 %
• Accidents	0 hours	0 %
• Vehicle	18 hours	30 %
• Wayside	<1 hours	<1 %
• Police & Health	<1 hours	<1 %
• Other	0 hours	0 %
Total:	61 hours	100%





Gold Line major delay contributors were as follows:

Gold Line Vehicle Maintenance:

02/06/16 Vehicle Maintenance

Train 473 reported a LVPS fault on car 714 departing Indiana Station northbound. When train departed Soto Station westbound, Operator reported no movement with (2) doors on the platform. Operator attempted to trouble-shoot to no avail. Train 473 Offloaded at Soto Station. Single tracking operations implemented. At 1530 hrs, the train regained movement out of service to Pico Aliso. 2 trips canceled with a max delay of 10 mins.

Gold Line Police/Health:

02/05/16 Police/Health

SCADA indicated a Loss of Traction power between Soto and Pico/Aliso Station due to breakers open at Soto TPSS. Control was unable to close breakers. Turn back operations implemented at Soto Station for service to Atlantic Station. At 1215 hrs, Traction Power personnel reported they were unable to close the breakers at the affected TPSS & initiated a walking inspection of the OCS. Normal operations implemented at 1555 hrs. 4 cancellations with a max delay of 60 for bus bridge to be established.

02/19/16 Police/Health

LASD shut down Union station with no trains allowed to enter Union Station until further notice due to a report of unattended package at Union Station. Turn back operations implemented at Chinatown Station. LASD deputy cleared Union Station for service at 2259 hrs. 8 trips canceled with max delay of 50 mins.

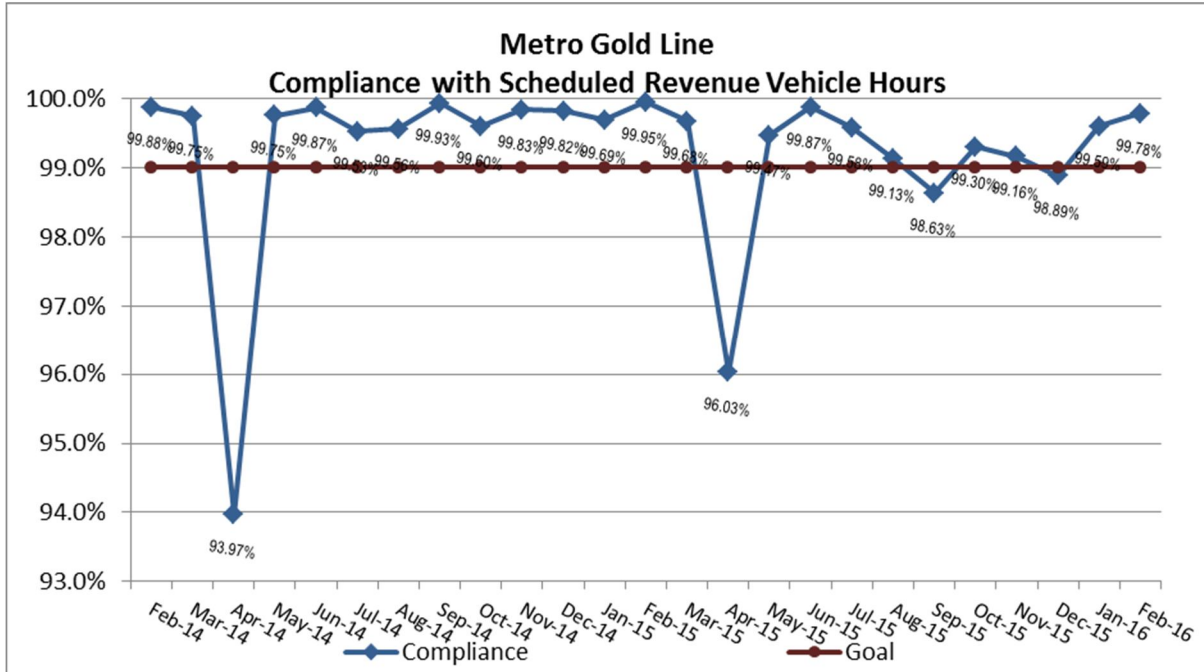
Gold Line Wayside:

02/23/16 Signal

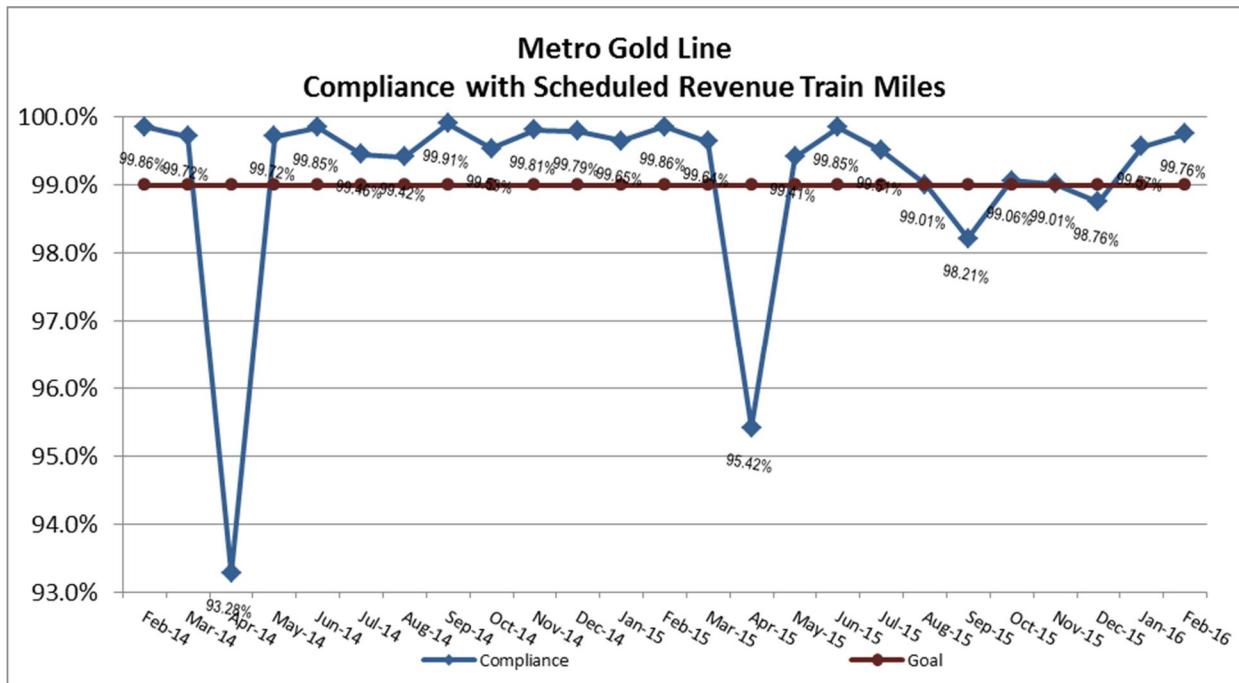
ARINC indicated a false occupancy at San Anita/Wash. Pre-revenue trains experienced a 22 minute delay Southbound due to the false occupancy. The fault was cleared at 0937 hrs. 22 mins max delay.

MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS FOLLOWS:

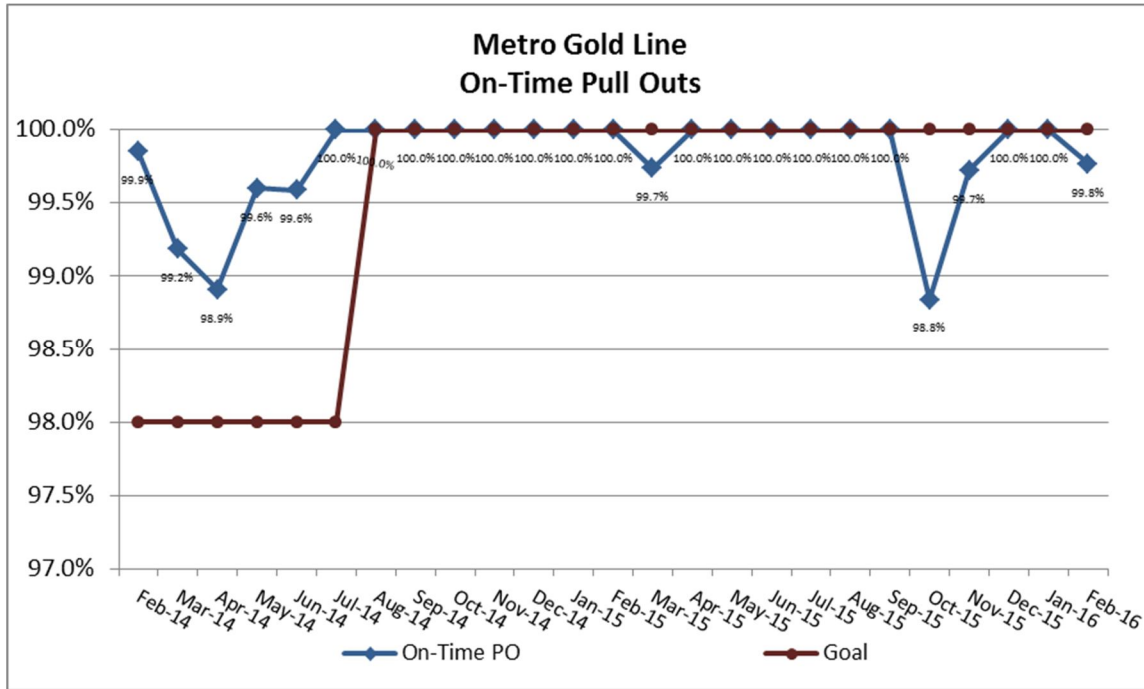
COMPLIANCE WITH SCHEDULED VEHICLE HOURS CHART



COMPLIANCE WITH SCHEDULED TRAIN MILES CHART



ON-TIME PULL OUTS CHART



IN-SERVICE ON-TIME PERFORMANCE CHART

