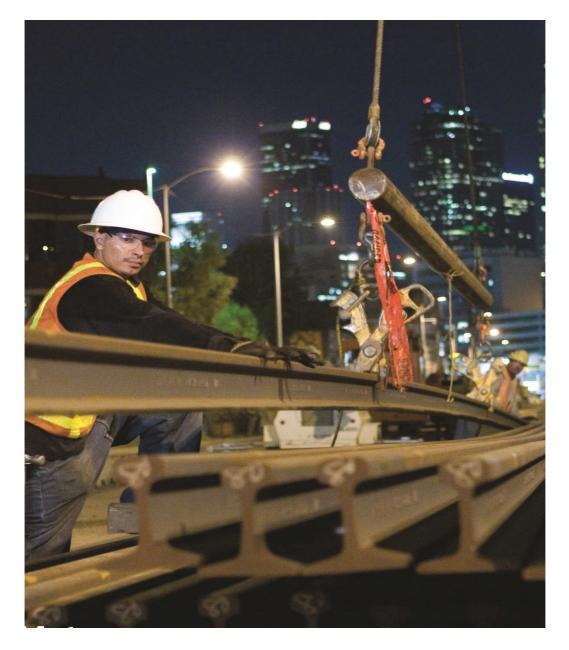
METRO RAIL PERFORMANCE May 2016

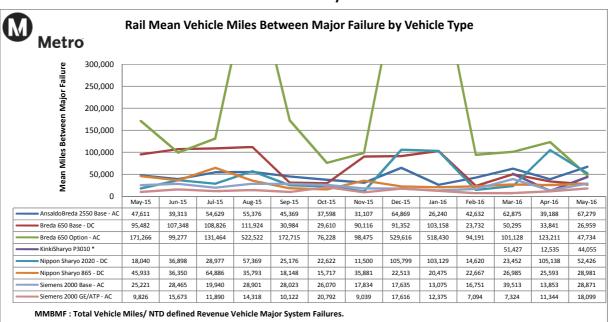




METRO RAIL PERFORMANCE – MAY 2016

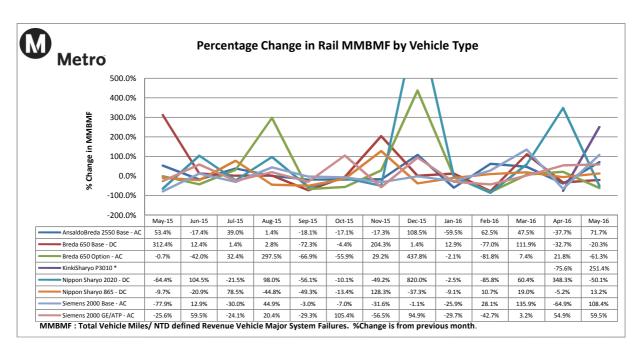
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METRO RAIL PERFORMANCE – MAY 2016



Rail Performance Systemwide

* KinkiSharyo rolling stock began service March 2016



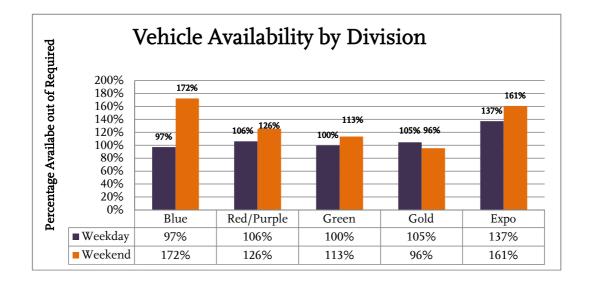
* KinkiSharyo rolling stock began service March 2016

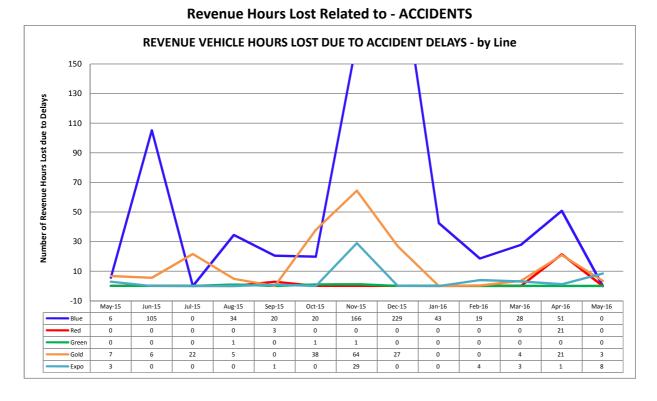
Number of Rail Vehicle Type by		Red /			
Division	Blue	Purple	Green	Gold	Ехро
AnsaldoBreda 2550 Base - AC				50	
Breda 650 Base - DC		30			
Breda 650 Option - AC		74			
KinkiSharyo P3010				10	15
Nippon Sharyo 2020 - DC	14				1
Nippon Sharyo 865 - DC	38				16
Siemens 2000 Base - AC			29		
Siemens 2000 GE/ATP - AC	17				6
TOTALS	69	104	29	60	38

Rail Fleet Distribution – MAY 2016

Blue			
Day Type	Vehicles Required	Average Available	Average % Available
Weekday	60	58	97%
Weekend	26	45	172%
Red/ Purple			
Day Type	Vehicles Required	Average Available	Average % Available
Weekday	74	79	106%
Weekend	55	69	126%
Green			
Day Type	Vehicles Required	Average Available	Average % Available
Weekday	22	22	100%
Weekend	14	16	113%
Gold		-	-
Day Type	Vehicles Required	Average Available	Average % Available
Weekday	24	25	105%
Weekend	40	38	96%
Ехро			
Day Type	Vehicles Required	Average Available	Average % Available
Weekday	20	27	137%
Weekend	20	32	161%

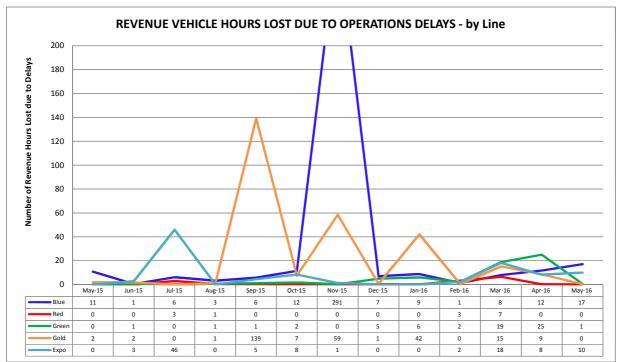
Vehicle Availability Systemwide

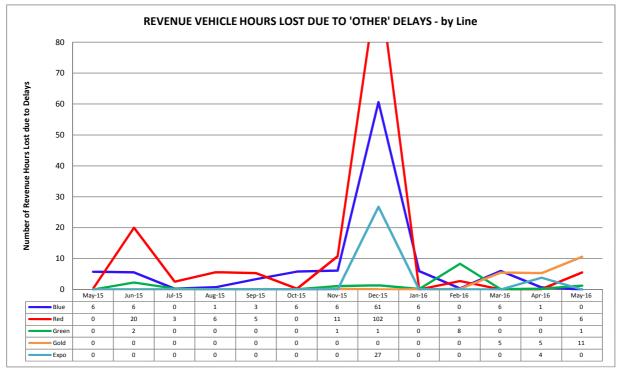




RAIL DELAYS BY CATEGORY - SYSTEMWIDE

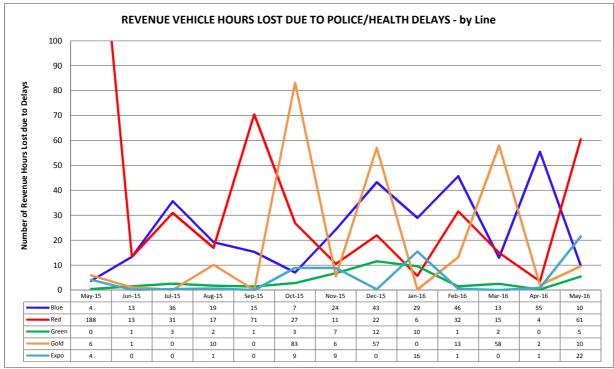
Revenue Hours Lost Related to - OPERATIONS

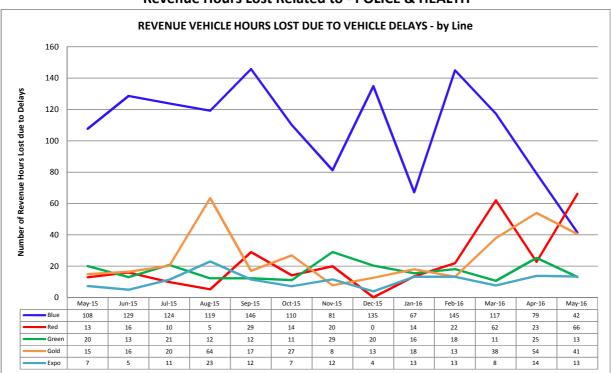




Revenue Hours Lost Related to - OTHER

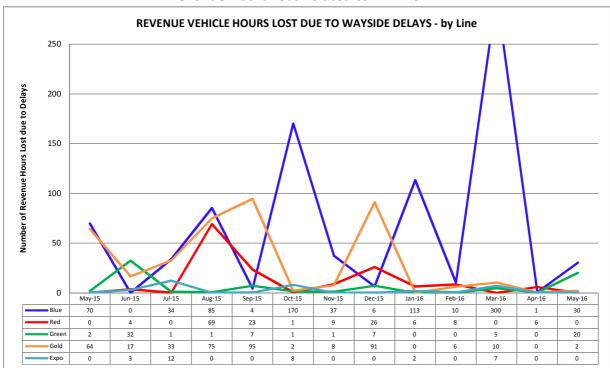
Revenue Hours Lost Related to - POLICE & HEALTH

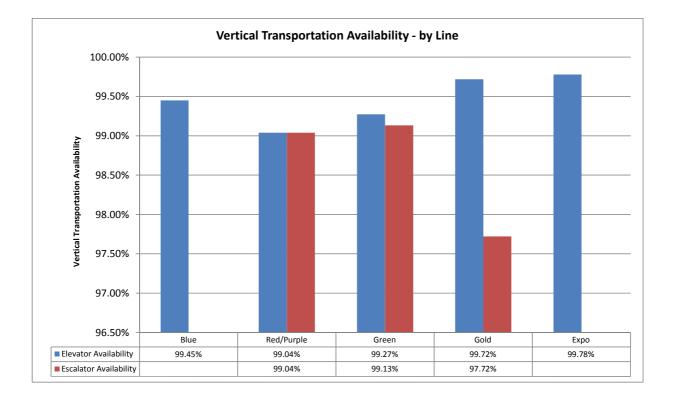






Revenue Hours Lost Related to - WAYSIDE





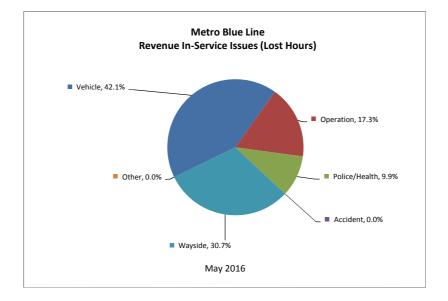
Systemwide Vertical Transportation Availability by Line

BLUE LINE

Out of a total of 20,152 hours operated, there were approximately 99 total hours of service delays.

	Revenue	
May 2016 Service Hours	Hours	Per Cent
Revenue Hours without Delays	20,053	99.5%
Hours Delayed	99	0.5%
Total Revenue Hours	20,152	100.0%

Detail of Delay by Type	Count	Hours	Per Cent
Operations	4	17.2	17.3%
Accidents	0	0.0	0.0%
Vehicle Maintenance	21	41.6	42.1%
Wayside	3	30.4	30.7%
Police & Health	14	9.8	9.9%
Other	0	0.0	0.0%
Total	42	99.0	100.0%



May 2016 Blue Line major delay contributors were as follows:

Operations:

05/02/2016

Per summary M-324 and Washington IL not functioning as designed (blocked & clamped) as well as turnbacks from Vernon station, all MBL trains are experiencing delays. 15 to 20 minute delays. 18 trips affected with a max delay of 20 mins.

Police/Health:

05/17/2016

Train 104 reported physical altercation on board at Washington station, gap train placed in service at 7th & Metro. 32 mins max delay.

Vehicle Maintenance:

05/10/2016

Train 126 departing 7th Metro Ctr. experienced slow movement (10 MPH) on Car 156. Turnback & single tracking operations implemented. At 1733 hrs, Train 126 was offloaded at Pico Station and was pushed back to 7th Metro Center by Expo Train 604. 11 Blue Line Trains and 8 EXPO Trains canceled with a max delay of 12 mins.

05/14/2016

Test Train 510 reported no movement on Car 238 at the Venice Interlocking. Turnback and single tracking operations implemented. At 0735 hrs, Test Train 510 regained movement. 3 trips canceled with a max delay of 12

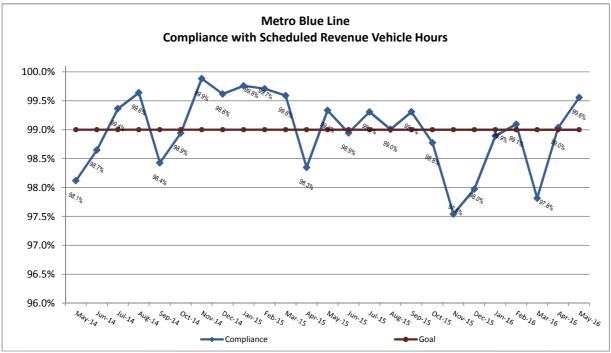
05/24/2016

Train 125 experienced recurring non-clearing prop faults, passengers offloaded at Willowbrook, B.O. train routed into Imperial pocket, replacement train from BLY. 2 trips canceled with a max delay of 14 mins.

05/13/2016

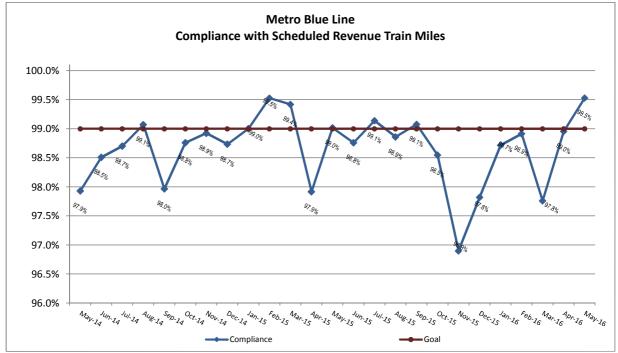
Train 118 reported a prop fault on Car 116 Southbound at Grand Station. Train offloaded at Grand. No gap train available and no equipment in Blue Line Yard. 1 round trip to Willow was canceled. 2 trips canceled with a max delay of 6 mins.

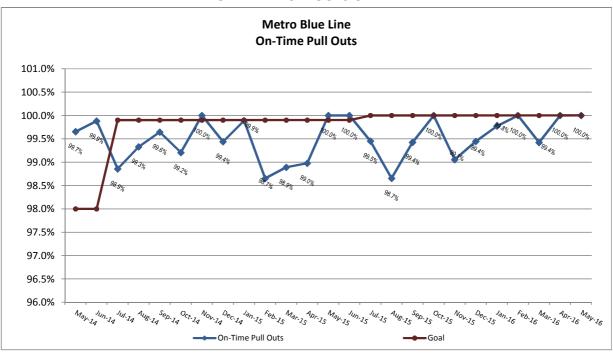




COMPLIANCE WITH SCHEDULED VEHICLE HOURS CHART

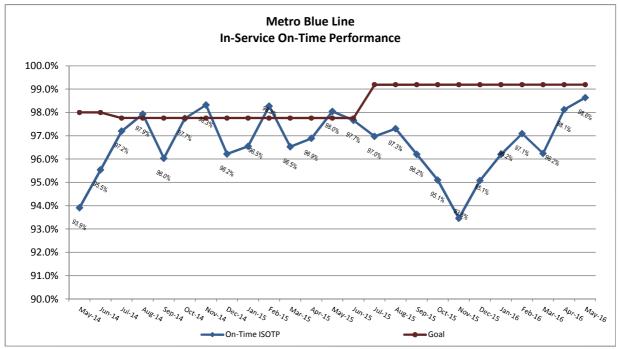
COMPLIANCE WITH SCHEDULED TRAIN MILES CHART

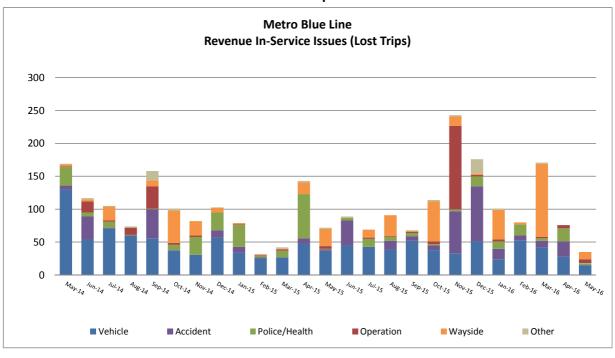




ON-TIME PULL OUTS CHART

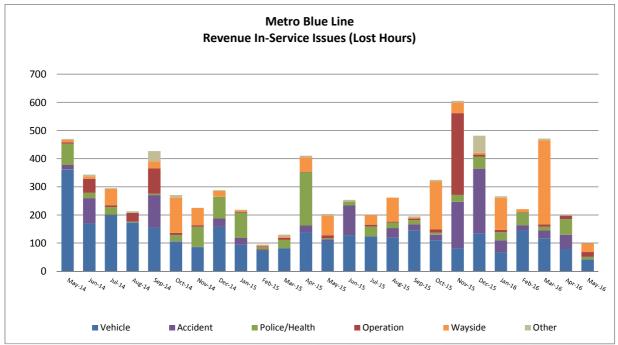
IN-SERVICE ON-TIME PERFORMANCE CHART



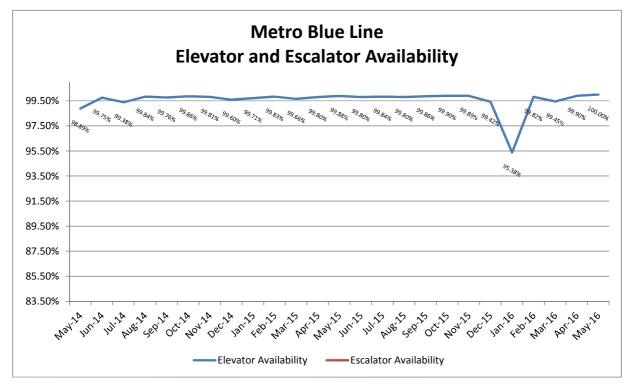


Lost Trips

Lost Hours



VERTICAL TRANSPORTATION AVAILABILITY

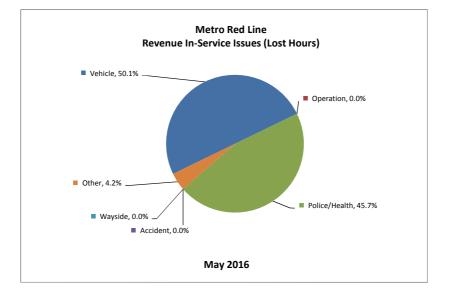


RED LINE

Out of a total of 26,102 hours operated, there were approximately 132 total hours of service delays.

	Revenue		
May 2016 Service Hours	Hours	Per Cent	
Revenue Hours without Delays	25,970	99.5%	
Hours Delayed	132	0.5%	
Total Revenue Hours	26,102	100.0%	

Detail of Delay by Type	Count	Hours	Per Cent
Operations	0	0.0	0.0%
Accidents	0	0.0	0.0%
Vehicle Maintenance	19	66.2	50.1%
Wayside	0	0.0	0.0%
Police & Health	9	60.5	45.7%
Other	2	5.6	4.2%
Total	30	132.3	100.0%



May 2016 Red Line major delay contributors were as follows:

Police/Health:

05/28/2016

A female passenger accessed the AL at Universal City and started to walk westbound. Both tracks were deenergized from Universal City to North Hollywood. All trains were turned back from Universal City to Union Station. LASD Responded to Universal City and at 1940 hrs to sweep the tracks. All Crosspasages were inspected and no trespasser found. Normal operations resumed at 2034 hrs. 20 trips canceled with a max delay of 2 hrs due to no rail service from Universal to N. Hollywood.

05/30/2016

Train 203 reported a tresspasser between Normandie Station to Wilshire Vermont Station. LASD conducted walking inspection from Wilshire Vermont to Wilshire Normandie Station. LASD contacted tresspasser at Normandie Station. 4 trips canceled with a max delay of 30 mins.

05/19/2016

Due to police activity, trains were held at the North Hollywood Station. Train 214 was turned back at Universal City and also lost the headway Eastbound. 2 trips canceled with a max delay of 10 mins.

05/22/2016

Train 206 reported an emergency on board the train Westbound at Union Station. A patron had a cut on his head. The patron departed Union Station on his own without transport. 2 trips canceled with a max delay of 10 mins.

05/23/2016

Male Patron on the ROW at Vermont Beverly standing in front of the train, LASD, LAFD, and RTOS dispatched, single tracking around affected train, male patron removed from the ROW. 20 mins max delay.

Rail Comm:

05/23/2016

Cross passage 31 at Hollywood Western, smoke detector alarm activated, LAFD, LASD, and S-20 responding, LAFD reset fire control panel, no evidence of smoke, bus bridge cancelled. 2 trains were turned back away from the affected area. 2 trips canceled with a max delay of 20 mins.



Vehicle Maintenance: 05/18/2016

Train 214 at North Hollywood IL with no movement, relay train from yard limit to Union station placed in service. Turnback operations implemented. At 1750 hrs, Train 214 regain movement and relocated back to North Hollywood AL platform. 6 trips canceled with a max delay of 40 mins.

05/13/2016

Train 209 reported no movement on Car 501 westbound at 7th Metro Center Station. Turn back and reverse run operations implemented from Westlake to Union Station. At 1522 hrs, Train 209 proceeded out of service. 6 trips canceled with a max delay of 20 mins.

05/13/2016

Train 201 at Civic Center Westbound reported a compressor cut out and propulsion failure. No movement westbound. Train 201 given clearance card for EMO bypass switch activated authorization into reverse traffic on AR track back to Union Station. Train 207 reversed ends back to North Hollywood and off loaded all passengers at Westlake Station on the AL. Train 205 off loaded all passengers at Civic Center and reversed ends back to Wilshire Western. 3 trips canceled with a max delay of 10 mins.

05/09/2016

Train 218 at Union Station reported no movement due to emergency brake application on Car 549 Westbound. Train 218 offloaded and a round trip was canceled. 2 trips canceled with a max delay of 20 mins.

05/03/2016

Train 206 reported Recurring emergency brake application and no movement on Car 539 Westbound at Westlake Station. Train 206 off loaded approximately 100 passengers. Round trip to Wilshire/Western Station canceled. 2 trips canceled with a max delay of 10 mins.

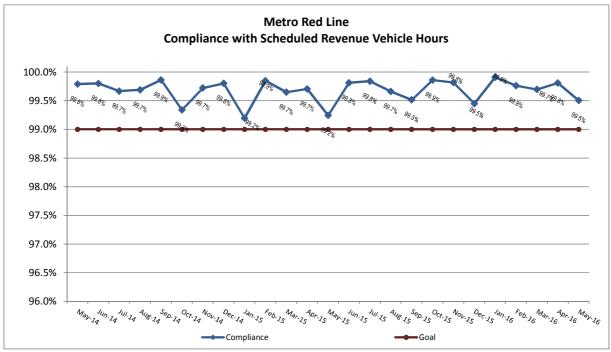
05/17/2016

Train 218 unable to proceed east from North Hollywood Station. Train 219 was turned back at Universal on Train 218 time. A gap placed in service at NH on Train 219s Eastbound departured. 2 trips canceled with a max delay of 10 mins.

05/19/2016

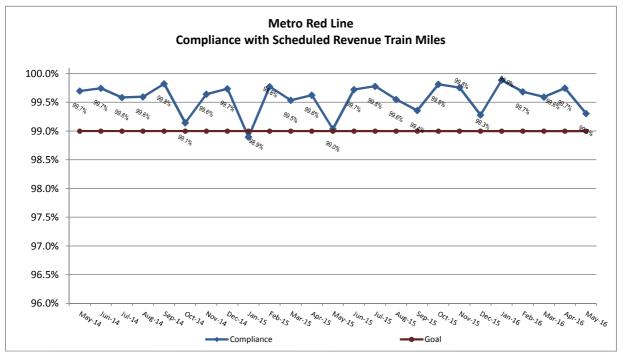
Train 206 reported flashing cab signals on Car 559 AR West at Union Station with no movement. Trip cancelled to Wilshire Western and train placed out of service. 2 trips canceled with a max delay of 10 mins.

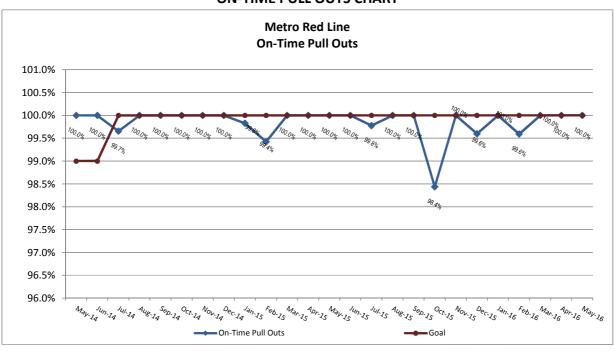
MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS



COMPLIANCE WITH SCHEDULED VEHICLE HOURS CHART

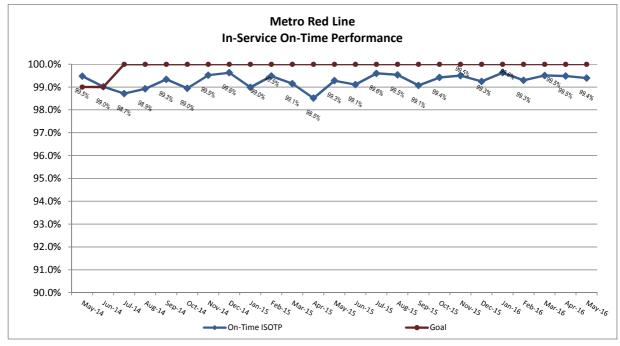
COMPLIANCE WITH SCHEDULED TRAIN MILES CHART

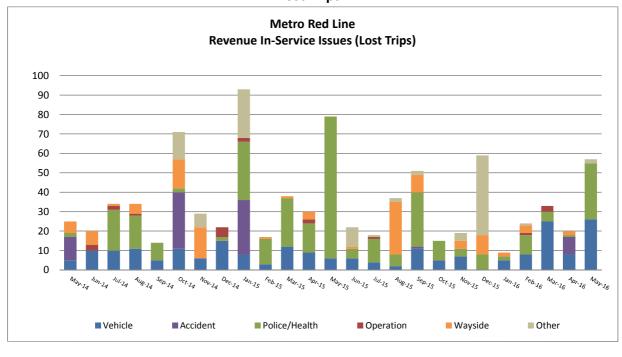




ON-TIME PULL OUTS CHART

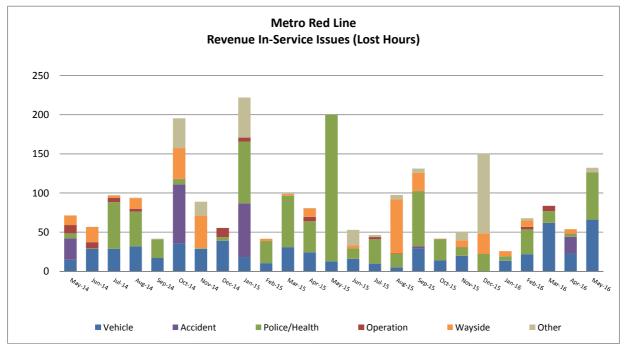
IN-SERVICE ON-TIME PERFORMANCE CHART



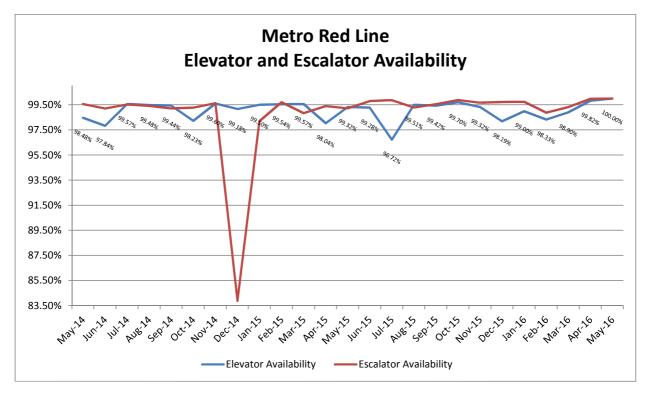


Lost Trips

Lost Hours



VERTICAL TRANSPORTATION AVAILABILITY

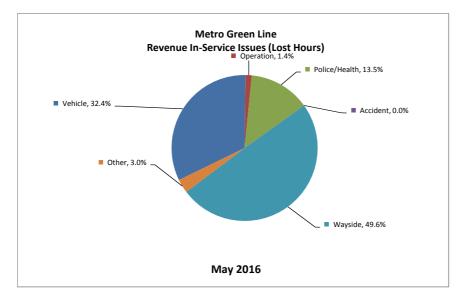


GREEN LINE

Out of a total of 7,824 hours operated, there were approximately 41 total hours of service delays.

	Revenue		
May 2016 Service Hours	Hours	Per Cent	
Revenue Hours without Delays	7,784	99.5%	
Hours Delayed	41	0.5%	
Total Revenue Hours	7,824	100.0%	

Detail of Delay by Type	Count	Hours	Per Cent
Operations	4	0.6	1.4%
Accidents	0	0.0	0.0%
Vehicle Maintenance	19	13.1	32.4%
Wayside	2	20.1	49.6%
Police & Health	7	5.5	13.5%
Other	2	1.2	3.0%
Total	34	40.5	100.0%



May 2016 Green Line major delay contributors were as follows:

Police/Health: 05/13/2016

Train 333 reported a patron requesting LASD. The patron stated she was robbed. Suspect fled scene patron was holding doors and refused to let train depart at Hawthorne Station Eastbound. Train 333 was turned back at Long Beach Station for on time recovery. 2 trips canceled with a max delay of 15 mins.

05/12/2016

Train 354 at Aviation Station was held due to police activity. No trains allowed to pass Aviation. At 1628 hours, LASD released train 354 at Aviation Station westbound. 1 trip canceled with max delay of 26 mins.

Vehicle Maintenance: 05/21/2016

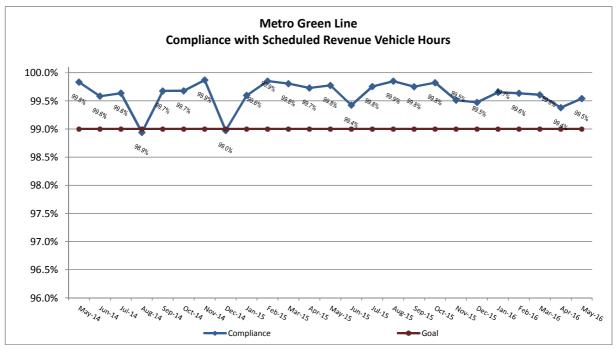
Train 334 reported no movement on Car 217 at El Segundo Station eastbound. . 15 Patrons off loaded at El Segundo and canceled in both directions. 20 minute service delay from Aviation to Norwalk Station eastbound. Train was replaced with an uncoupled rail car at Marine Station 2 trips canceled with a max delay of 20 mins.

Wayside:

05/09/2016

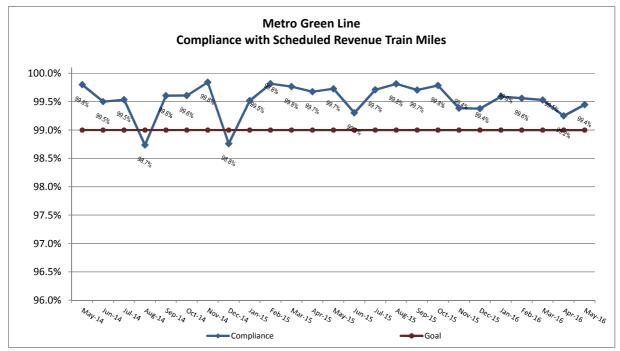
SCADA indicated the utility feed at Hawthorne TPSS opened and un able to close breakers at the adjacent TPSS. No power from Crenshaw to Aviation. Turn back operations implemented from Crenshaw and from Aviation. At 1543 hr, Traction Power personnel requested to send close commands remotely to Aviation and Crenshaw breakers. At 1544 hrs all breakers were closed and normal operations resumed. 16 trips canceled with a max delay of 83 mins.

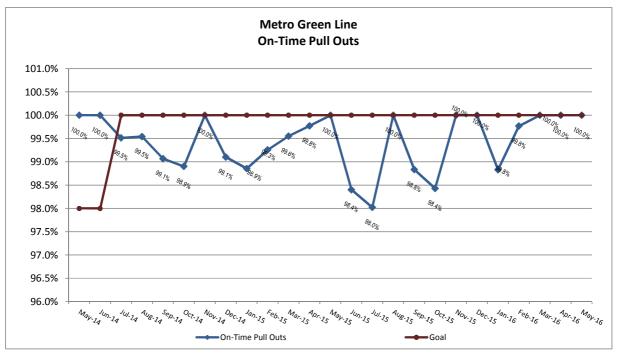
MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS



COMPLIANCE WITH SCHEDULED VEHICLE HOURS CHART

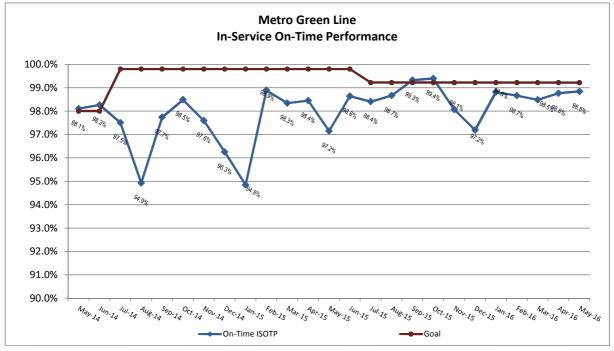
COMPLIANCE WITH SCHEDULED TRAIN MILES CHART

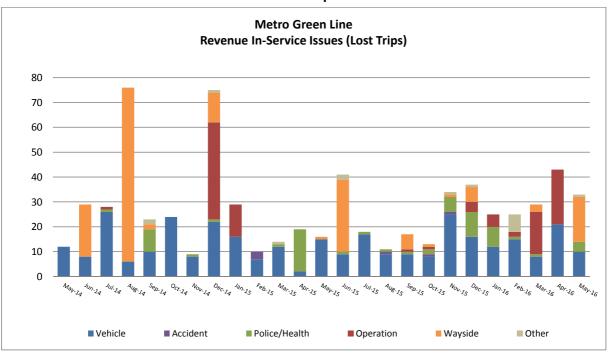




ON-TIME PULL OUTS CHART

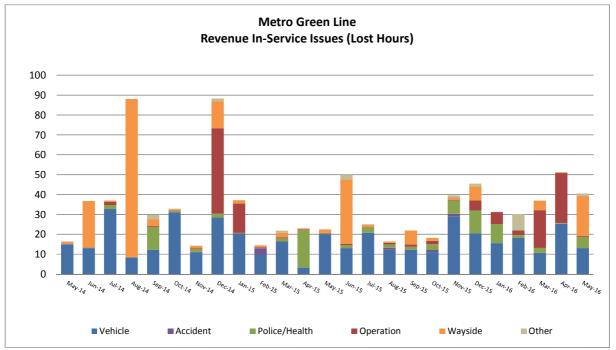
IN-SERVICE ON-TIME PERFORMANCE CHART



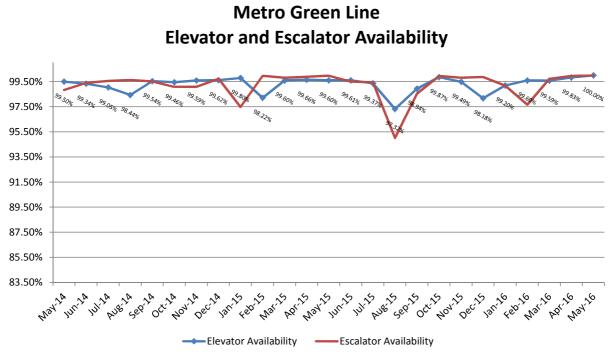


Lost Trips

Lost Hours





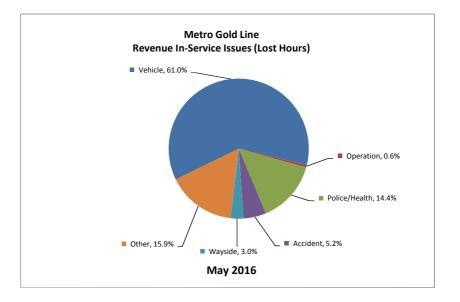


GOLD LINE

Out of a total of 20,720 hours operated, there were approximately 67 total hours of service delays.

	Revenue	
May 2016 Service Hours	Hours	Per Cent
Revenue Hours without Delays	20,653	99.7%
Hours Delayed	67	0.3%
Total Revenue Hours	20,720	100.0%

Detail of Delay by Type	Count	Hours	Per Cent
Operations	3	0.4	0.6%
Accidents	1	3.4	5.2%
Vehicle Maintenance	27	40.6	61.0%
Wayside	2	2.0	3.0%
Police & Health	8	9.6	14.4%
Other	5	10.6	15.9%
Total	46	66.6	100.0%



May 2016 Gold Line major delay contributors were as follows:

Accident:

05/28/2016

Train 439 reported a Train vs. Patron incident at Lake Station platform. A person made contact with the mirror as the train berthed. Single tracking operations implemented. Service back to Normal Operations as of 1833 hrs. 2 trips canceled with a max delay of 8 mins.

Vehicle Maintenance:

05/31/2016

Train 405 reports recurring LVPS faults. Control instructed operator to take over consist on platform 1 and depart as train 431 to Azusa. All train 405 trips cancelled due to no equipmet available at either yard. 5 trips canceled with a max delay of 6 mins.

05/11/2016

Train 437 reported Kinki-sharyo Car 1007A had burning brakes upon arrival to Indiana Station. Operator off loading train, a tech was on board trouble-shooting. Single tracking and turn back operations implemented. At 1255 hrs. the disabled train was removed from the mainline. Normal operations resumed. 4 trips canceled with a max delay of 10 mins.

05/10/2016

Train 403 reported an extremely dirty car northbound at Memorial Park station Northbound. Train 403 was offloaded at Sierra Madre station and pulled into Monrovia yard for clean out. There were no trains available for replacement. Train 403 was canceled for an additional round trip. 3 trips canceled with a max delay.

05/24/2016

Train 424 disabled friction brakes at Soto station single tracking at Soto, train 424 activated ATP bypass for movement to offload and be removed from service. Northbound trip also canceled. 2 trips canceled with a max delay of 12 mins.

05/19/2016

Train 439 reported no movement on Car K1009 Northbound at 3rd and Indiana. Train was recovered back to Atlantic Station southbound. Train 429 was turn back at Mariachi Station northbound. 2 trips canceled with a max delay of 10 mins.

05/27/2016

Train 429 has high speed circuit breaker fault with speed restriction, tech/operator unable to clear fault, consist offloaded at Union station, no manpower to operate replacement train. 2 trips canceled with a max delay of 6 mins.

05/30/2016

Train 427 reported a friction brake fault, no movement on Car 711 northbound Downtown Azusa Station. The train was able to proceed SB and return to the Yard.



Yard Operations:

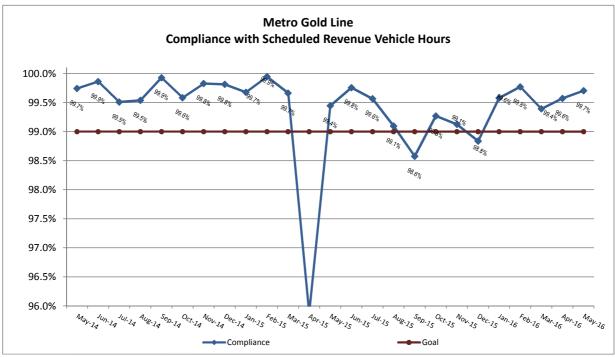
05/21/2016

Gold Line Yard Control reported there was no Operator available at Division 24 to pull-out Train 437, alpha R. All trips for train 437 were cancelled until a replacement Operator became available. 4 trips canceled with a max delay of 7 mins.

05/05/2016

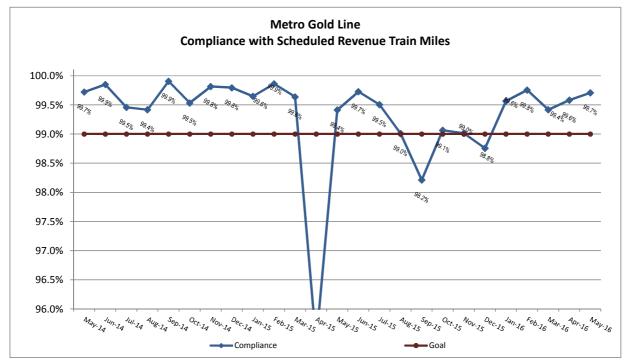
There was no available operator to pull out train 446, Baker yard will provide replacement operator, headway split until yard control provides replacement train. 2 trips canceled with a max delay of 7 mins.

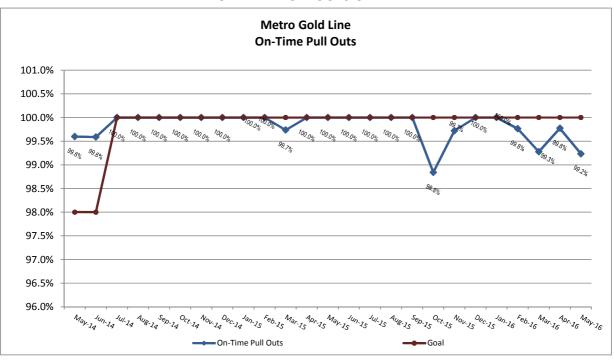
MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS



COMPLIANCE WITH SCHEDULED VEHICLE HOURS CHART

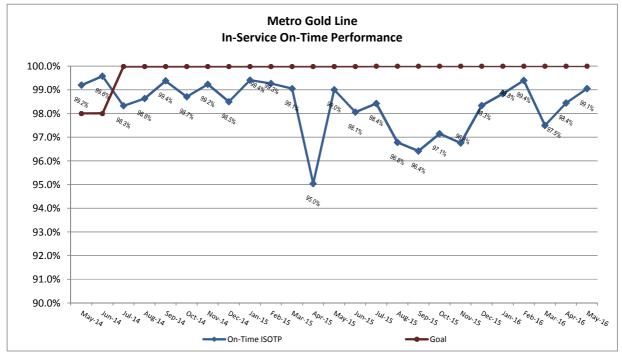
COMPLIANCE WITH SCHEDULED TRAIN MILES CHART

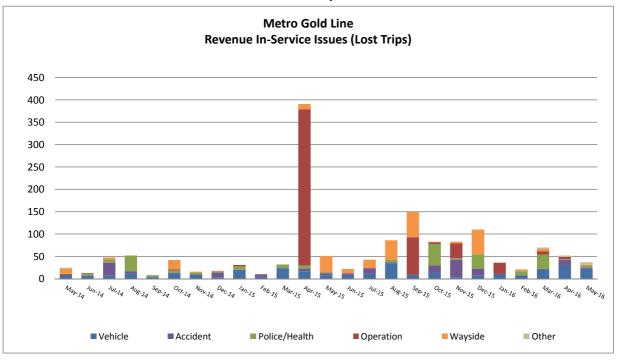




ON-TIME PULL OUTS CHART

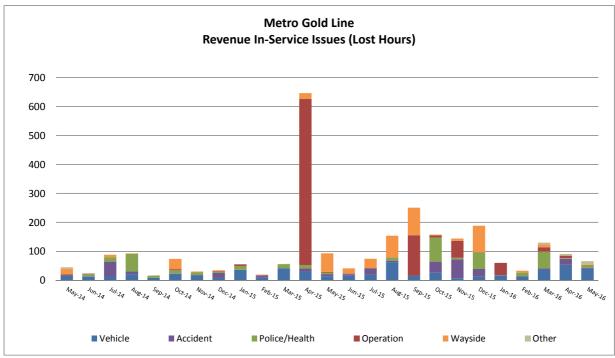
IN-SERVICE ON-TIME PERFORMANCE CHART



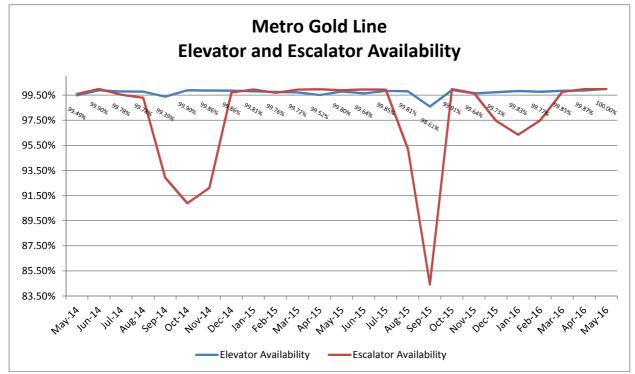


Lost Trips

Lost Hours





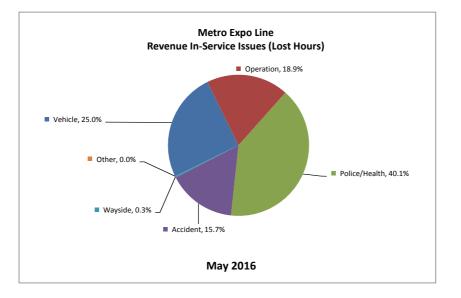


EXPO LINE

Out of a total of 12,090 hours operated, there were approximately 54 total hours of service delays.

	Revenue		
May 2016 Service Hours	Hours	Per Cent	
Revenue Hours without Delays	12,036	99.6%	
Hours Delayed	54	0.4%	
Total Revenue Hours	12,090	100.0%	

Detail of Delay by Type	Count	Hours	Per Cent
Operations	3	10.1	18.9%
Accidents	3	8.4	15.7%
Vehicle Maintenance	20	13.4	25.0%
Wayside	1	0.2	0.3%
Police & Health	6	21.5	40.1%
Other	0	0.0	0.0%
Total	33	53.6	100.0%



May 2016 Expo Line major delay contributors were as follows:

Accident:

05/12/2016

Train 607 reported an Accident involving an Auto Southbound at Flower at 18th Street. Single track and turn back operations implemented from Venice Interlocking to Maple on the Blue Line, and 22nd Street on the expo line. Turned back every other train from 23rd St. Station. and Grand Station on the Blue line. At 1608 hrs, Train 607 was released by LASD and moved to 23rd St. Station to off load and be placed out of service. 13 trips canceled with a max delay of 50 mins.

Police/Health:

05/23/2016

LAPD reported a vehicle on ROW blocking both the tracks at St. Andrews grade crossing. Turn back operations implemented at Western and Crenshaw. Vehicle was removed from tracks at 0655 hrs and normal service resumed at 07:00 hrs. 16 trips canceled with a max delay of 111 mins due to loss of rail service through the affected area.

05/29/2016

Trip canceled due to fight onboard train 607 and that left a lot of blood on the floor. Train 606 was already delayed from an earlier issue in Santa Monica. 1 trip canceled with a max delay of 20 mins.

05/04/2016

Train 603 being held by LASD looking for a gun suspect at Crenshaw station, single tracking operations in affect, gap placed in service at 7th & Metro for on time departure. 22 minute delay for train 603 and 12 minute delay N/B service.

Vehicle Maintenance:

05/23/2016

Train 605 at Pico station experienced no movement, no indication on Cars 1023-1022-1029. Single tracking operations implemented. At 1140 hrs, Train 605 was moved from Pico Station Northbound, stored at 7th and Metro tail track. 1 trip canceled with a max delay of 28 mins.

05/07/2016

Train 604 experienced friction brake with spin slide no movement on Car 238 on approach to 17th street Northbound. The operator was placed on the next northbound train. One headway was per the schedule. 1 trip canceled with a max delay of 20 mins.

05/29/2016

Train 604 was unable to engage street run or pick up cab signals on Cars K1016 & K1019 northbound at 17th street station. Train 604 offloaded and was pulled into the Yard. 1 trip canceled with a max delay of 20 mins.

05/29/2016

Train 606 at Santa Monica reported no movement on Cars K1022 and K1017. KI techs request atp bypass. Train 606 offloaded at 17th street station 200 patrons. 1 trip canceled with a max delay of 20 mins.

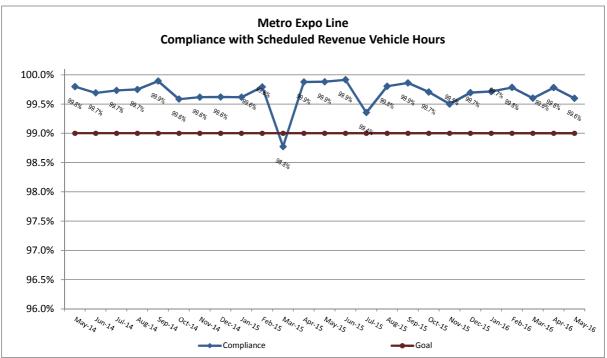
05/14/2016

Train 604 lost movement 7th and Metro Center Station on Car 250 southbound. Train 604 was able to regain movement North, offloaded and stored in the tail track.

Wayside: 05/24/2016

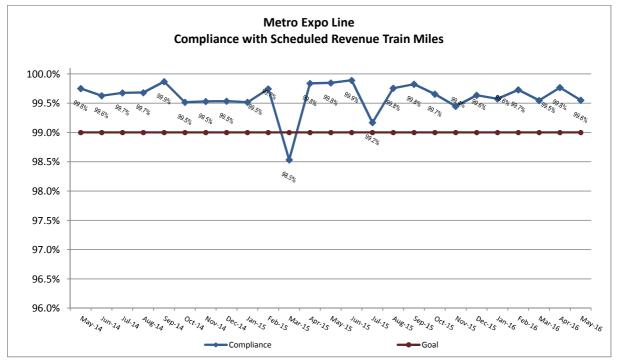
Train 604 reported excessive sparking from pantograph north of Washington/Junction. After inspection, a field Tech reported a section insulator appears to be bad on Track 3 just south of the Washington/Junction. Track 3 was taken out of service for repairs and trains single tracking around affected area. Work was completed at 0404 hrs. 2 trips with and 20 trips affected with a max delay of 12 mins.

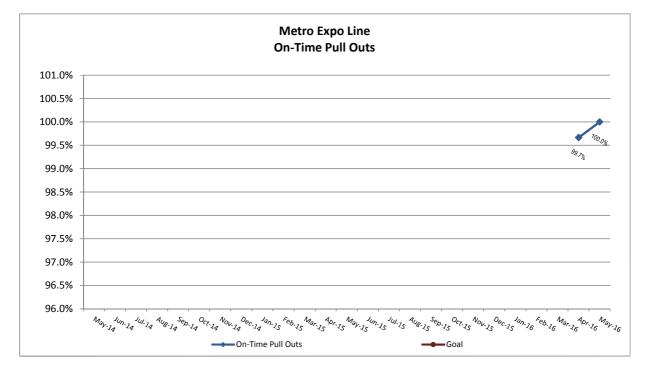
MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS



COMPLIANCE WITH SCHEDULED VEHICLE HOURS CHART

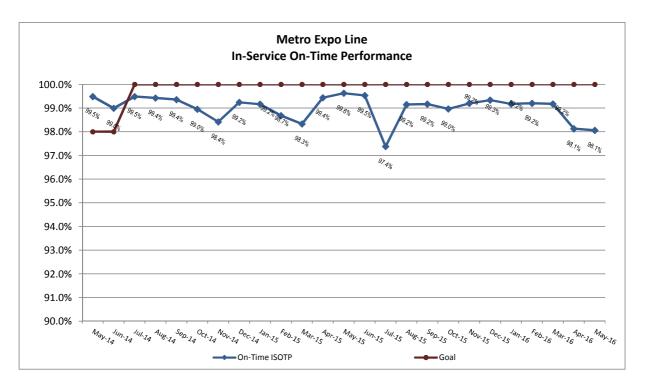
COMPLIANCE WITH SCHEDULED TRAIN MILES CHART

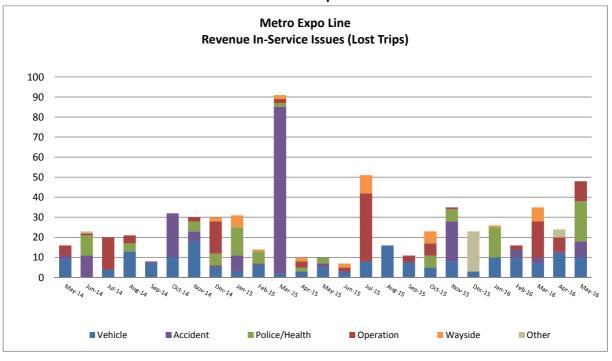




ON-TIME PULL OUTS CHART

IN-SERVICE ON-TIME PERFORMANCE CHART





Lost Trips

Lost Hours Metro Expo Line **Revenue In-Service Issues (Lost Hours)** 140 120 100 80 60 40 20 0 May-14 0_{C1-14} Dec-14 Feb.15 May-16 Aug. 14 Sep.14 NOV-JA Jan-15 Mar-15 Apr-15 May-15 Jun-25 JUI-25 AU8-25 Sep-25 Oct. 15 Nov. 15 Dec. 15 Jan-16 Feb. 16 Mar. 16 Apr. 16 141-14 un-14 Vehicle Police/Health Operation Wayside Other Accident

VERTICAL TRANSPORTATION AVAILABILITY

