Los Angeles County
Metropolitan Transportation Authority California

OPERATIONS
MONTHLY RAIL PERFORMANCE REPORT

OCTOBER 2016


## METRO RAIL PERFORMANCE - OCTOBER 2016

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## Metro Rail Scorecard Overview

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

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

Metro Rail is responsible for the operation of approximately 104 heavy rail cars and 203 light rail cars carrying nearly 110 million passengers each year.
Also included in this report are Key Performance Indicators for Wayside, which is in the process of being developed.

| Measurement | FY 2014 | FY 2015 | FY 2016 | FY 2017 <br> Target | $\begin{gathered} \text { FY } 2017 \\ \text { YTD } \end{gathered}$ | FYTD <br> Status | Aug Month | Sep Month | Oct Month |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Systemwide |  |  |  |  |  |  |  |  |  |
| On-Time Pullouts | 99.55\% | 99.67\% | 99.63\% | 99.50\% | 99.66\% | $\bigcirc$ | 99.43\% | 99.47\% | 99.96\% |
| Mean Miles Between Chargeable Mechanical Failures | 28,829 | 34,524 | 30,482 | 27,911 | 28,053 | $\bigcirc$ | 30,440 | 28,862 | 34,320 |
| In-Service On-time Performance | 97.92\% | 98.39\% | 98.10\% | 98.00\% | 98.62\% | $\bigcirc$ | 99.04\% | 98.52\% | 98.67\% |
| Service Delivery Ratio | 99.12\% | 99.35\% | 99.22\% | 99.25\% | 99.34\% | $\bigcirc$ | 99.53\% | 99.57\% | 99.21\% |
| Traffic Accidents Per 100,000 Train Miles | 1.47 | 1.18 | 1.17 | 0.00 | 1.20 | $\bigcirc$ | 1.35 | 0.71 | 1.63 |
| CPUC Reportable Accidents per 100,000 Train Miles | 0.10 | 0.43 | 0.60 | 0.67 | 0.41 | $\bigcirc$ | 0.54 | 0.28 | 0.54 |
| Passenger Accidents per 100,000 Boardings | 0.025 | 0.013 | 0.016 | 0.009 | 0.026 | $\bigcirc$ | 0.020 | 0.000 | 0.053 |
| Complaints per 100,000 Boardings | 0.91 | 0.78 | 1.43 | 1.12 | 2.02 | $\bigcirc$ | 2.08 | 1.95 | 1.86 |
| New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours ${ }^{1,2}$ | 15.35 | 11.11 | 10.97 | 10.42 | 11.65 | $\bigcirc$ | 9.45 | 8.90 | 14.24 |
| Lost Work Days per 200,000 Exposure Hours ${ }^{1,2}$ | 861 | 880 | 482 | 458.16 | 747 | $\bigcirc$ | 747 | 961 |  |
| OSHA Injuries per 200,000 Exposure Hours ${ }^{1,2}$ | 8.18 | 6.68 | 6.32 | 6.00 | 7.17 | $\bigcirc$ | 5.67 | 5.93 |  |
|  |  |  |  |  |  |  |  |  |  |
| Wayside |  |  |  |  |  |  |  |  |  |
| Overdue Work Orders | 174 | 355 | 1,279 | N/A | 1,893 | N/A | 371 | 481 | 732 |
| Overdue Preventive Maintenace Work Orders | 0 | 5 | 162 | N/A | 673 | N/A | 125 | 203 | 202 |
| Completed Inspections \% | 99.41\% | 99.51\% | 99.57\% | N/A | 99.47\% | N/A | 100.00\% | 99.27\% | 98.74\% |
| New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours | 9.28 | 9.07 | 4.77 | 4.53 | 4.94 | $\bigcirc$ | 3.66 | 8.11 | 7.89 |
| Lost Work Days per 200,000 Exposure Hours ${ }^{1}$ | 179 | 309 | 148 | 141 | 62 | $\bigcirc$ | 10 | 130 |  |
| OSHA Injuries per 200,000 Exposure Hours ${ }^{1}$ | 6.31 | 8.28 | 4.40 | 4.18 | 3.96 | $\bigcirc$ | 3.66 | 4.06 |  |
|  |  |  |  |  |  |  |  |  |  |
| Blue Line |  |  |  |  |  |  |  |  |  |
| On-Time Pullouts | 99.37\% | 99.41\% | 99.59\% | 99.50\% | 99.52\% | $\bigcirc$ | 99.44\% | 99.25\% | 100.00\% |
| Mean Miles Between Chargeable Mechanical Failures | 18,731 | 23,716 | 19,240 | 19,572 | 16,363 | $\bigcirc$ | 14,730 | 15,526 | 20,992 |
| In-Service On-time Performance | 95.84\% | 97.28\% | 96.10\% | 97.00\% | 97.57\% | $\bigcirc$ | 97.51\% | 97.59\% | 98.47\% |
| Service Delivery Ratio | 98.36\% | 98.88\% | 98.41\% | 98.46\% | 99.01\% | $\bigcirc$ | 99.22\% | 99.22\% | 99.15\% |
| Traffic Accidents Per 100,000 Train Miles | 2.97 | 2.48 | 2.38 | 0.00 | 2.28 | $\bigcirc$ | 3.19 | 1.34 | 2.62 |
| CPUC Reportable Accidents per 100,000 Train Miles | 0.00 | 0.89 | 1.39 | 1.34 | 0.81 | $\bigcirc$ | 1.28 | 0.67 | 0.66 |
| Passenger Accidents per 100,000 Boardings | 0.058 | 0.034 | 0.016 | 0.006 | 0.035 |  | 0.000 | 0.000 | 0.048 |
| Complaints per 100,000 Boardings | 1.10 | 0.90 | 1.33 | 1.09 | 1.56 | $\bigcirc$ | 1.76 | 1.84 | 1.50 |
| New Workers' Compensation Indemnity Claims per | 17.46 | 15.10 | 15.08 | 15.58 | 16.41 | $\bigcirc$ | 17.94 | 5.38 | 15.51 |
| Lost Work Days per 200,000 Exposure Hours ${ }^{1}$ | 990 | 1,622 | 797 | 786 | 971 | O | 1,182 | 998 |  |
| OSHA Injuries per 200,000 Exposure Hours ${ }^{1}$ | 5.71 | 10.64 | 6.79 | 9.58 | 9.30 | $\bigcirc$ | 11.96 | 5.38 |  |

[^0]| Measurement | FY 2014 | FY 2015 | FY 2016 | FY 2017 <br> Target | $\begin{gathered} \text { FY } 2017 \\ \text { YTD } \end{gathered}$ | FYTD Status | Aug Month | Sep Month | Oct Month |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Red Line |  |  |  |  |  |  |  |  |  |
| On-Time Pullouts | 99.72\% | 99.91\% | 99.79\% | 99.50\% | 100.00\% | $\bigcirc$ | 100.00\% | 100.00\% | 100.00\% |
| Mean Miles Between Chargeable Mechanical Failures | 63,099 | 85,090 | 94,312 | 112,652 | 101,108 | $\bigcirc$ | 87,317 | 81,557 | 296,934 |
| In-Service On-time Performance | 98.91\% | 99.13\% | 99.45\% | 99.50\% | 99.57\% | $\bigcirc$ | 99.63\% | 99.72\% | 99.79\% |
| Service Delivery Ratio | 99.57\% | 99.60\% | 99.71\% | 99.71\% | 99.80\% | $\bigcirc$ | 99.79\% | 99.89\% | 99.94\% |
| Traffic Accidents Per 100,000 Train Miles | 1.01 | 0.47 | 0.75 | 0.00 | 0.64 | $\bigcirc$ | 0.00 | 0.87 | 0.84 |
| CPUC Reportable Accidents per 100,000 Train Miles | 0.00 | 0.07 | 0.07 | 0.60 | 0.00 | $\bigcirc$ | 0.00 | 0.00 | 0.00 |
| Passenger Accidents per 100,000 Boardings | 0.006 | 0.002 | 0.002 | 0.003 | 0.000 | - | 0.000 | 0.000 | 0.000 |
| Complaints per 100,000 Boardings | 0.60 | 0.54 | 0.57 | 0.56 | 0.86 | $\bigcirc$ | 0.72 | 0.86 | 0.91 |
| New Workers' Compensation Indemnity Claims per | 20.22 | 6.20 | 16.43 | 13.29 | 13.04 | $\bigcirc$ | 13.01 | 11.06 | 21.04 |
| *Lost Work Days per 200,000 Exposure Hours | 927 | 649 | 526 | 556 | 1,244 | $\bigcirc$ | 958 | 1,889 |  |
| *OSHA Injuries per 200,000 Exposure Hours | 11.79 | 3.54 | 7.99 | 6.55 | 6.00 | $\bigcirc$ | 6.51 | 11.06 |  |



| Gold Line |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| On-Time Pullouts | 99.56\% | 99.98\% | 99.68\% | 99.50\% | 99.94\% | $\bigcirc$ | 99.88\% | 100.00\% | 100.00\% |
| Mean Miles Between Chargeable Mechanical Failures | 45,894 | 44,171 | 40,426 | 51,665 | 28,750 | $\bigcirc$ | 38,914 | 40,000 | 30,271 |
| In-Service On-time Performance | 98.03\% | 98.56\% | 97.60\% | 97.50\% | 97.78\% | - | 98.94\% | 96.34\% | 97.45\% |
| Service Delivery Ratio | 99.03\% | 99.34\% | 99.11\% | 99.16\% | 99.01\% | O | 99.35\% | 99.55\% | 98.35\% |
| Traffic Accidents Per 100,000 Train Miles | 1.03 | 1.14 | 0.99 | 0.00 | 0.64 | $\bigcirc$ | 0.42 | 0.00 | 1.29 |
| CPUC Reportable Accidents per 100,000 Train Miles | 0.00 | 0.30 | 0.60 | 0.50 | 0.21 | $\bigcirc$ | 0.42 | 0.00 | 0.43 |
| Passenger Accidents per 100,000 Boardings | 0.052 | 0.007 | 0.039 | 0.035 | 0.035 | O | 0.000 | 0.000 | 0.140 |
| Complaints per 100,000 Boardings | 1.04 | 1.01 | 2.73 | 2.26 | 2.99 | $\bigcirc$ | 3.26 | 2.72 | 2.73 |
| New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours | 14.98 | 15.96 | 11.87 | 12.20 | 16.38 | $\bigcirc$ | 17.47 | 10.81 | 15.86 |
| *Lost Work Days per 200,000 Exposure Hours | 1,460 | 1,068 | 766 | 808 | 1,342 | $\bigcirc$ | 1,620 | 1,529 |  |
| *OSHA Injuries per 200,000 Exposure Hours | 9.12 | 3.83 | 9.29 | 10.07 | 9.20 | $\bigcirc$ | 11.64 | 0.00 |  |


| Expo Line |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| On-Time Pullouts | - | - | 99.53\% | 99.50\% | 98.28\% | $\bigcirc$ | 96.77\% | 96.67\% | 100.00\% |
| Mean Miles Between Chargeable Mechanical Failures | - | - | 18,114 | 19,572 | 24,721 | $\bigcirc$ | 35,667 | 25,499 | 31,499 |
| In-Service On-time Performance | 98.70\% | 99.14\% | 98.61\% | 97.05\% | 98.99\% | $\bigcirc$ | 99.56\% | 99.41\% | 98.63\% |
| Service Delivery Ratio | 99.45\% | 99.64\% | 99.56\% | 99.65\% | 99.26\% | $\bigcirc$ | 99.61\% | 99.50\% | 98.84\% |
| Traffic Accidents Per 100,000 Train Miles | 1.17 | 1.02 | 0.74 | 0.00 | 1.75 | $\bigcirc$ | 1.96 | 2.16 | 1.79 |
| CPUC Reportable Accidents per 100,000 Train Miles | 1.17 | 1.02 | 0.50 | 0.37 | 1.25 | $\bigcirc$ | 0.98 | 1.08 | 1.79 |
| Passenger Accidents per 100,000 Boardings | 0.000 | 0.000 | 0.019 | 0.000 | 0.041 | O | 0.000 | 0.000 | 0.165 |
| Complaints per 100,000 Boardings | 1.53 | 1.13 | 3.38 | 1.87 | 5.22 | $\bigcirc$ | 6.02 | 4.79 | 3.97 |
| New Workers' Compensation Indemnity Claims per | - | 24.97 | 8.44 | 0.00 | 14.93 | $\bigcirc$ | 0.00 | 17.51 | 24.21 |
| *Lost Work Days per 200,000 Exposure Hours | - | 937 | 73 | 0 | 170 | $\bigcirc$ | 279 | 89 |  |
| *OSHA Injuries per 200,000 Exposure Hours | - | - | 5.63 | 0.00 | 11.60 | $\bigcirc$ | - | 17.51 |  |

* There is One Month lag in reporting this data

O Green - High probability of achieving the target (on track). Meets Target at $100 \%$ or better.
Yellow - Uncertain if the target will be achieved -- slight problems, delays or management issues. Falls below Target 70-99\%.
ORed - High probability that the target will not be achieved -- significant problems and/or delays. Falls below Target >70\%.

## METRO RAIL PERFORMANCE - OCTOBER 2016

## Rail Performance by Vehicle Type




[^1]


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


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

## (11) <br> Metro

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




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


Rail Mean Vehicle Miles Between Major Failure by Vehicle Type
Light Rail - Siemens
Metro


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


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

## Rail Fleet Distribution - OCTOBER 2016

| Number of Rail Vehicle Type by <br> Division | Blue | Red / <br> Purple | Green | Gold | Expo |
| ---: | :---: | :---: | :---: | :---: | :---: |
| AnsaldoBreda 2550 Base - AC |  |  |  | 50 |  |
| Breda 650 Base - DC |  | 30 |  |  |  |
| Breda 650 Option - AC |  | 74 |  |  |  |
| KinkiSharyo P3010 |  |  |  | 10 | 27 |
| 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 | $\mathbf{6 9}$ | $\mathbf{1 0 4}$ | $\mathbf{2 9}$ | $\mathbf{6 0}$ | $\mathbf{5 0}$ |

## Vehicle Availability Systemwide

| Blue |  |  |  |
| :---: | :---: | :---: | :---: |
| Day Type | Vehicles <br> Required | Average Available | Average \% Available |
| Weekday | 60 | 59 | 98\% |
| Weekend | 26 | 47 | 182\% |
| Red/ Purple |  |  |  |
| Day Type | Vehicles <br> Required | Average Available | Average \% Available |
| Weekday | 74 | 78 | 106\% |
| Weekend | 54 | 67 | 124\% |
| Green |  |  |  |
| Day Type | Vehicles <br> Required | Average Available | Average \% Available |
| Weekday | 22 | 22 | 101\% |
| Weekend | 14 | 16 | 115\% |
| Gold |  |  |  |
| Day Type | Vehicles <br> Required | Average Available | Average \% Available |
| Weekday | 45 | 48 | 106\% |
| Weekend | 28 | 38 | 137\% |
| Expo |  |  |  |
| Day Type | Vehicles <br> Required | Average Available | Average \% Available |
| Weekday | 28 | 35 | 125\% |
| Weekend | 29 | 35 | 121\% |



## Cleanliness by Vehicle Type

(M) Metro

Rail Cleanliness by General Vehicle Type


Note: Data Collection Began September 2016

## RAIL DELAYS BY CATEGORY - SYSTEMWIDE

Revenue Hours Lost Related to - ACCIDENTS


Revenue Hours Lost Related to - OPERATIONS


Revenue Hours Lost Related to - OTHER
Blue, Red/Purple, Green, Gold \& Expo Line Other Delays


Revenue Hours Lost Related to - POLICE \& HEALTH
Blue, Red/Purple, Green, Gold \& Expo Line Police \& Health Delays


Revenue Hours Lost Related to - Vehicle Delays


Revenue Hours Lost Related to - WAYSIDE
Blue, Red/Purple, Green, Gold \& Expo Line Wayside Delays


## Rail Service Performance

## In Service On Time Performance by Line



Ratio of Scheduled to Revenue Hours Delivered by Line
Blue, Red/Purple, Green, Gold \& Expo Line SRHD


Mean Miles Between Mechanical Failures by Line
Blue, Red/Purple, Green, Gold \& Expo Line MMBMF


Workers Comp Claims by Line
Blue, Red/Purple, Green, Gold \& Expo Line WC


## On-Time Pullouts Ratio by Line



## Rail Safety Performance

## CPUC REPORTABLE ACCIDENTS PER 100,000 TRAIN MILES

Blue, Red/Purple, Green, Gold \& Expo Line CPUC Accident Ratio


## TRAFFIC ACCIDENTS PER 100,000 TRAIN MILES

Blue, Red/Purple, Green, Gold \& Expo Line Traffic Accident Ratio


## PASSENGER ACCIDENTS PER 100,000 BOARDINGS



Worker's Comp. Claims
Aug 2016 - Oct 2016
3 Month Comparison


## Lost Work Days and OSHA Injuries

Jul 2016 - Sep 2016
3 Month Comparison



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

Systemwide Vertical Transportation Availability by Line


Note: Escalators at Blue and Expo Lines

## BLUE LINE

Out of a total of 19,736 hours operated, there were approximately 167 total hours of service delays.

|  | Revenue |  |
| :--- | ---: | ---: |
| October 2016 Service Hours * | Hours | Per Cent |
| Revenue Hours without Delays | 19,569 | $99.2 \%$ |
| Cancelled + Delayed Hours | 167 | $0.8 \%$ |
| Total Revenue Hours | $\mathbf{1 9 , 7 3 6}$ | $\mathbf{1 0 0 . 0 \%}$ |


| Summary of the major contributors: | Count | Hours | Per Cent |
| :--- | ---: | ---: | ---: |
| Operations | 7 | 6.3 | $3.8 \%$ |
| Accidents | 4 | 35.9 | $21.5 \%$ |
| Vehicle Maintenance | 38 | 53.6 | $32.1 \%$ |
| Wayside | 0 | 0.0 | $0.0 \%$ |
| Police \& Health | 12 | 71.2 | $42.6 \%$ |
| Other | 0 | 0.0 | $0.0 \%$ |
| Total | $\mathbf{6 1}$ | $\mathbf{1 6 7 . 0}$ | $\mathbf{1 0 0 . 0 \%}$ |

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



## October 2016 Blue Line major delay contributors were as follows:

## Operations Incidents:

10/5/2016 6:36:00 PM - Incident\# 2785157 (1 lost trip, 168 lost minutes)
Train Delay due to dirty car

10/6/2016 5:15:00 PM - Incident\# 2785622 (0 lost trips, 6 lost minutes)
Operator reports of a medical problem on board train 147A
Train 127
T-376
(147A)156-125
Willow St., Trk. 2, southbound

10/7/2016 7:36:00 PM - Incident\# 2786111 (0 lost trips, 6 lost minutes)
Near miss
Train 130
T-357
(239A)-233
Southbound, Gage crossing, Track 2

10/13/2016 12:48:00 PM - Incident\# 2788254 (0 lost trips, 10 lost minutes)
Operator 10-100 @ Transit Mall

10/17/2016 3:41:00 PM - Incident\# 2789621 (0 lost trips, 11 lost minutes)
Train 125 late pull, due to prop faults in the yard.

10/21/2016 12:23:00 AM - Incident\# 2791214 (1 lost trip, 166 lost minutes)
7th and Metro/Sick Car on Train 108.

10/24/2016 2:46:00 PM - Incident\# 2792379 (0 lost trips, 10 lost minutes)
Transit Mall

## Accidents:

10/8/2016 7:48:00 PM - Incident\# 2786341 (1 lost trip, 137 lost minutes)
Train vs Pedestrian
Train 101
Track 1, NB Imperial Ped X-Ing
T-253
(236A)-250-246

10/9/2016 5:35:00 AM - Incident\# 2786391 (1 lost trip, 178 lost minutes)
Train vs Auto
Train 102
Track \#1 NB
Washington Blvd/Broadway Ave
T-363
(140A)-163-149

10/19/2016 9:43:00 AM - Incident\# 2790362 (1 lost trip, 167 lost minutes)
Track-2 under 110 Freeway, Train-103 T-102 consist \#168-125-165 struck auto attempting left turn in front of train into parking lot under I-10 Freeway.

10/19/2016 12:56:00 PM - Incident\# 2790399 (10 lost trips, 1,672 lost minutes)
10-73
Train 107
T-132
(235A)-239-232
Southbound track 2 at Florence crossing.

## Vehicle Maintenance Incidents:

10/3/2016 4:40:00 PM - Incident\# 2784174 (0 lost trips, 12 lost minutes)
Propulsion fault with no movement
Train \#127
T-125
(233)-245-239

San Pedro Station, Track \#2, SB

10/4/2016 12:50:00 PM - Incident\# 2784514 (1 lost trip, 178 lost minutes)
Operator reports of no movement
Train 105
T-307
137-153-142
Motorman platform, Trk. 1, northbound

10/5/2016 5:41:00 AM - Incident\# 2784784 (0 lost trips, 7 lost minutes)
Propulsion / Dynamic Brakes
(157A)-126-151
Train 101
T-118
North of Spring, Southbound, Track 2

10/6/2016 5:34:00 AM - Incident\# 2785252 (0 lost trips, 10 lost minutes)
Propulsion faults/loss of cab signal
Train 111
LRV 109A/114/140
T-152
103rd St station track 1

10/6/2016 6:00:00 PM - Incident\# 2785631 (1 lost trip, 175 lost minutes)
Operator reports of no movement at the Artesia interlocking
Train 122
T-059
139-168-(153A)
Artesia interlocking, Trk. 1, northbound

10/7/2016 2:47:00 PM - Incident\# 2786036 (O lost trips, 12 lost minutes)
Door will not close.
Train 104
T-
(143A)-(123)-(150)
Washington Station, Track 2, southbound.
M-175 Notified to board all cars at 103rd st station

10/7/2016 3:45:00 PM - Incident\# 2786051 (O lost trips, 6 lost minutes)
Propulsion brake fault
Train 126
T-291
118A-163-137
Florence Station, Track 1, Northbound.

10/7/2016 4:02:00 PM - Incident\# 2786076 (O lost trips, 20 lost minutes)
No horn and gong.
Train 104
T-400
(233B)-239
Artesia Station, Track 1, Northbound.

10/7/2016 5:40:00 PM - Incident\# 2786097 (1 lost trip, 169 lost minutes)
No Fault - No Movement.
Train 124
T-298
(138)-160-112

Southbound, 7th and Metro Center Station, Track 2
Notifications: S: R-; S: R-; S: R-; S: R-; CCTV: R-; ROC Floor Manager: R-; MBL yard co

10/7/2016 6:58:00 PM - Incident\# 2786106 (0 lost trips, 6 lost minutes)
Door problem operator error.
Train 127
T-053
116-145-127
Southbound, Pico Station, Track 2

10/8/2016 8:31:00 AM - Incident\# 2786211 (1 lost trip, 122 lost minutes)
Recurring propulsion failure.
Train \# 603
T-405
Cars \# 162-107-(100-B).
S/Bound 7th \& Metro Station Platform \# 2

10/8/2016 12:32:00 PM - Incident\# 2786259 (O lost trips, 12 lost minutes)
Operator reports of no movement
Train \#605
T-241
(1022)-1027-1021

Pico Station, Track \#2, SB

10/8/2016 4:44:00 PM - Incident\# 2786315 ( 0 lost trips, 12 lost minutes)
Propulsion fault with a speed restriction of 35 mph
Train \#107
T-291
(148B)-152
Pico Station, Track \#2, SB

10/9/2016 12:38:00 PM - Incident\# 2786447 (0 lost trips, 12 lost minutes)
Reports of over speed, requesting ATP bypass for motivate
Train \#107
T-473
(109A)-114
Compton Station, Track \#2, SB

10/10/2016 5:50:00 PM - Incident\# 2786941 (1 lost trip, 167 lost minutes)
Propulsion fault with a speed restriction.
Reports recurring propulsion dynamic brake fault.
Train 132
T-300
240-237-302
Southbound, Artesia Station, Track 1

10/11/2016 7:20:00 PM - Incident\# 2787502 (0 lost trips, 15 lost minutes)
Operator reports of a no movemenet no indication.
Train 321
T-321
232-238-245
Vernon station, Trk. 2, southbound

10/12/2016 6:50:00 PM - Incident\# 2787943 (3 lost trips, 515 lost minutes)
Operator reports of no movement
Train 123
T-082
(158)120-135

Pico station, Trk. 1, northbound

10/12/2016 7:00:00 PM - Incident\# 2787944 (0 lost trips, 12 lost minutes)
Operator reports of no movement
Train 109
T-201
247-248
Artesi station, Trk. 1, northbound

10/13/2016 8:01:00 AM - Incident\# 2788117 (0 lost trips, 6 lost minutes)
ATP failure/Overspeed alarm
Train 103
LRV 118A/115/161
T-182
Wardlow station track 2 southbound

10/14/2016 2:46:00 PM - Incident\# 2788736 (1 lost trip, 172 lost minutes)
No Fault - No Movement, Cars \#(118B)-138-122
Train \#123
T-246
200 feet of Del Amo Station, Track \#001, Northbound.
10/16/2016 1:11:00 PM - Incident\# 2789103 (1 lost trip, 162 lost minutes)
Operator reports of no movement
Train \#101
T-490
(134)-158-135

Elm grade crossing, Track \#1, NB

10/16/2016 4:55:00 PM - Incident\# 2789130 (1 lost trip, 162 lost minutes)
Operator reports of no movement
Train \#111
T-75
(115A)-120-156
Artesia Station, Track \#1, NB

10/17/2016 6:49:00 AM - Incident\# 2789266 (0 lost trips, 5 lost minutes)
ATP failure.
Train \# 102
T-335
(140A)-113-162
SB, Artesia Station, Track \# 2

10/17/2016 6:52:00 AM - Incident\# 2789271 (1 lost trip, 167 lost minutes)
Propulsion fault with a speed restriction.
Train 115
T-415
(AB)--
NB,Florence Station, Track 1

10/17/2016 9:09:00 AM - Incident\# 2789371 (0 lost trips, 6 lost minutes)
Train 108 reports broken wiper on car (248B)

10/17/2016 3:01:00 PM - Incident\# 2789600 (1 lost trip, 177 lost minutes)
Reports of self applying brakes
Train \#106
T-286
156-158-117
Grand Station, Track \#2, SB

10/19/2016 8:28:00 AM - Incident\# 2790297 (1 lost trip, 167 lost minutes)
7MC, Train-115 T-415 consist \#163-153-123 with dirty car on car \#153A.

10/19/2016 4:33:00 PM - Incident\# 2790499 (0 lost trips, 5 lost minutes)
Propulsion fault with a speed restriction.
Reports recurring propulsion dynamic brake fault.
Train 123
T-034
(148B)-(130)-(117)
Southbound, Willobrook Station, Track 2

10/20/2016 2:33:00 PM - Incident\# 2791037 (0 lost trips, 10 lost minutes)
Reports of propulsion fault and MA Low/ Emergency lighting.
Train \#109
T-348
116-145-109
Willow Station, Track \#1, NB
10/20/2016 6:02:00 PM - Incident\# 2791126 (1 lost trip, 167 lost minutes)
Reports of propulsion fault with a speed restriction of 35 mph
Train \#125
T-34
105-140-113
Willowbrook Station, Track \#2, SB

10/21/2016 6:53:00 AM - Incident\# 2791301 (0 lost trips, 6 lost minutes)
Auto Train Protection (Speed Limit) (No Movement)
(232B)-239-235
Train 111
T-211
Willow, Southbound, Track 2
10/21/2016 4:03:00 PM - Incident\# 2791538 (0 lost trips, 5 lost minutes)
Propulsion / Dynamic Brakes
Train 123
T-034
237-(234)
Vernon Station, Track 2, Southbound
10/23/2016 6:10:00 PM - Incident\# 2792004 (0 lost trips, 12 lost minutes)
Operator reports of no movement
Train 114
T-490
(240)247

Grand station, Trk. 1, northbound

10/24/2016 4:53:00 AM - Incident\# 2792094 (0 lost trips, 5 lost minutes)
Propulsion / Dynamic Brakes
(163A)-158-168
Train 109
T-46
Willow, Southbound, Track 2

## 10/26/2016 9:49:00 AM - Incident\# 2793174 (0 lost trips, 10 lost minutes)

MP 13.4 track-2, Train-118 T-262 conssit \#235-242-236 with loss of cab signaling and propulsion faults on rail vehicle also. Operating car/cab \#235B.

10/28/2016 7:39:00 AM - Incident\# 2794010 (1 lost trip, 166 lost minutes)
Operator reports friction brakes problems on LRV 156
Train 114
T-415
LRV'S (156) 129-166
Willow Station, track 2, Northbound ( crossing over from track 2 to track 1 at willow pocket).
10/28/2016 12:52:00 PM - Incident\# 2794156 (0 lost trips, 12 lost minutes)
Train 103 has a door problem. Doors 7 and 8 on 249A are off the track and will not close.
Train 103
T-251
LRV'S ( 249A ) 236-250
Transit Mall, Track 1 nortbound.

10/31/2016 8:00:00 AM - Incident\# 2794850 (2 lost trips, 331 lost minutes)
Operator reports of an air leak
Train 113
T-487
(113)162-122

7th Metro Ctr., Trk.2, southbound

## Police \& Health Incidents:

10/1/2016 3:23:00 PM - Incident\# 2783570 (0 lost trips, 12 lost minutes)
Operator reported sick indivisual.
Train 108
T-183
(140A)-117-161
Northbound, Willowbrook Station, Track 1

10/3/2016 7:04:00 PM - Incident\# 2784195 (0 lost trips, 3,600 lost minutes)
T-415 was informed that there is a suspious package on platform \#1
10/6/2016 1:20:00 PM - Incident\# 2785522 (0 lost trips, 5 lost minutes)
LASD Deputy Whitmore advises of a male black with a gun
10/6/2016 4:05:00 PM - Incident\# 2785599 (0 lost trips, 12 lost minutes)
LASD reports of a traffic acident at 8th \& Pine

10/10/2016 1:38:00 PM - Incident\# 2786844 (0 lost trips, 8 lost minutes)
passenger refused medical attention.
Train 106
T-149
(126A)-118-157
Southbound, 1st Station, Track 2.

10/10/2016 7:42:00 PM - Incident\# 2786961 (0 lost trips, 18 lost minutes)
Wilmington/T-353 reports a PIC reporting a man having a stroke.

10/14/2016 12:16:00 AM - Incident\# 2788448 (0 lost trips, 10 lost minutes)
Sick patron on train
Train 104
Transit Mall Station Southside
T-237
(250A)-236

10/19/2016 11:56:00 AM - Incident\# 2790383 (0 lost trips, 10 lost minutes)
3rd st and Long Beach Blvd. Trespasser

10/19/2016 5:13:00 PM - Incident\# 2790513 (0 lost trips, 15 lost minutes)
Sick passenger
Train 102
T-059
111-(126)-160
Southbound, Grand station track 2.

10/24/2016 5:26:00 AM - Incident\# 2792101 (0 lost trips, 10 lost minutes)
Traffic Accident MTA Not Involved at Myrrh Grade Crossing.

10/29/2016 1:07:00 PM - Incident\# 2794415 (2 lost trips, 232 lost minutes)
Passenger alleged to have a gun. Black male, black shirt, black beanie.
Train 106
T-494
147-110
SB, PCH Station, Track 2
10/31/2016 4:55:00 PM - Incident\# 2795073 (2 lost trips, 341 lost minutes)
Operator reports of a traffic accidenty (non MTA) at the intersection of Venice and Flower
Train 122
T-231
234-230-245
Venice Blvd., Trk. 1, northbound

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 27,195 hours operated, there were approximately 15 total hours of service delays.

| October 2016 Service Hours* | Revenue Hours | Per Cent |  |
| :---: | :---: | :---: | :---: |
| Revenue Hours without Delays | 27,180 | 99.9\% |  |
| Cancelled + Delayed Hours | 15 | 0.1\% |  |
| Total Revenue Hours | 27,195 | 100.0\% |  |
| Summary of the major contributors: | Count | Hours | Per Cent |
| Operations | 1 | 0.1 | 0.8\% |
| Accidents | 0 | 0.0 | 0.0\% |
| Vehicle Maintenance | 8 | 6.3 | 41.2\% |
| Wayside | 1 | 7.7 | 50.6\% |
| Police \& Health | 3 | 0.4 | 2.6\% |
| Other | 2 | 0.7 | 4.8\% |
| Total | 15 | 15.3 | 100.0\% |

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



## October 2016 Red Line major delay contributors were as follows:

## Operations Incidents:

10/18/2016 5:06:00 AM - Incident\# 2789807 (0 lost trips, 7 lost minutes)
Train 201+07 West from Civic Center Station
Vehicle Maintenance Incidents:
10/7/2016 6:00:00 AM - Incident\# 2785723 (0 lost trips, 7 lost minutes)
LVPS failure
Train 204
T-080
Cars 553-554-603-(604)-593-594
Wilshire Vermont AL East

10/8/2016 12:06:00 PM - Incident\# 2786240 (0 lost trips, 9 lost minutes)
Operator reports doors are not opening.
Cars: 509508 (505) 506523524.
Vermont Beverly Station, AL track, eastbound.
Train 202, T-483

10/11/2016 10:26:00 AM - Incident\# 2787298 (0 lost trips, 5 lost minutes)
Car 523 doors 1/3 cut out
Train 202
T-209
7th Metro Station AL track Eaastbound
consist 513-514-523-528

10/12/2016 10:04:00 PM - Incident\# 2787974 (0 lost trips, 20 lost minutes)
Reports emergincy brake failure, unable to move.
T-328
Train 217
Vermont Santa Monica, AL, Eastbound
Cars: 567566581582575 (576)

10/14/2016 11:12:00 AM - Incident\# 2788643 (0 lost trips, 12 lost minutes)
Car 595-596 Electric Brake cut out and Propulsion cut out
Train 207
T-22
T-333
Civic Center Station and Westlake MacArthur park Station
AR Westbound
Consist 603-604-595-596

10/25/2016 5:10:00 PM - Incident\# 2792885 (0 lost trips, 10 lost minutes)
Train 217 ( $591,592,585,586,563,564$ ) T-217, Pershing Square Station, AL reports he is having a door probllem.

## 10/27/2016 8:19:00 AM - Incident\# 2793566 (O lost trips, 6 lost minutes)

Train $207(539,540,533,534,591,59)$ T-319, 7th \& Metro, AR reports possible door problem, friction brake application.

10/31/2016 8:19:00 PM - Incident\# 2795111 (2 lost trips, 309 lost minutes)
Recurring Emergency Brake Application.
Train \#214
T-166
Cars \#(601)-602-541-542-553-554.
W/Bound Vermont Beverly Station A/R Track.

## Wayside Incidents:

10/19/2016 4:33:00 PM - Incident\# 2790524 ( 3 lost trips, 463 lost minutes)
SCADA indicates D05, D04, D03, and DIS 01 opened on their own at 7th Metro Cntr at 1633 hrs.

## Police \& Health Incidents:

10/1/2016 8:55:00 AM - Incident\# 2783490 (0 lost trips, 8 lost minutes)
Patron reported laying on the floor of car 539 on train 201. Medical requested

10/18/2016 12:00:00 PM - Incident\# 2789974 (0 lost trips, 6 lost minutes)
Female patron reported to have a seizure on board train 202 car 541 at Vermont Sunset Station

10/31/2016 5:14:00 PM - Incident\# 2795079 (0 lost trips, 10 lost minutes)
Train \# 213 Cars \# 593-594-589-(590)-547-548 Operator T-483, reports a female patron has been assaulted.
Other Incidents:
10/23/2016 9:17:00 AM - Incident\# 2791923 (0 lost trips, 40 lost minutes)
SCADA Failure system wide, Control unable to remotely close breakers at Union Station.
10/24/2016 2:26:00 PM - Incident\# 2792392 (0 lost trips, 4 lost minutes)
TRACS indicates loss of TRACS throughout the mainline.

## 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 TRIPS


## VERTICAL TRANSPORTATION AVAILABILITY




## GREEN LINE

Out of a total of 7,992 hours operated, there were approximately 21 total hours of service delays.

|  | Revenue |  |  |
| :--- | ---: | ---: | :---: |
| October 2016 Service Hours * | Hours | Per Cent |  |
| Revenue Hours without Delays | 7,970 | $99.7 \%$ |  |
| Cancelled + Delayed Hours | 21 | $0.3 \%$ |  |
| Total Revenue Hours | $\mathbf{7 , 9 9 2}$ | $\mathbf{1 0 0 . 0 \%}$ |  |


| Summary of the major contributors: | Count | Hours | Per Cent |
| :---: | :---: | :---: | :---: |
| Operations | 3 | 6.8 | 31.6\% |
| Accidents | 1 | 0.1 | 0.3\% |
| Vehicle Maintenance | 18 | 11.6 | 54.3\% |
| Wayside | 5 | 0.7 | 3.4\% |
| Police \& Health | 2 | 1.2 | 5.6\% |
| Other | 1 | 1.0 | 4.7\% |
| Total | 30 | 21.4 | 100.0\% |

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



## October 2016 Green Line major delay contributors were as follows:

## Operations Incidents:

10/3/2016 2:32:00 PM - Incident\# 2784110 (6 lost trips, 395 lost minutes)
Due to no manpower at the Green Line Yard, Alpha "I" has been canceled. Summary adjustements will be made to provide rush hour service with minimal delays.

10/4/2016 2:52:00 PM - Incident\# 2784564 (0 lost trips, 5 lost minutes) Late pull out due to signaling issues in the yard.

10/6/2016 3:25:00 PM - Incident\# 2785582 (O lost trips, 7 lost minutes) No operator

## Accidents:

10/19/2016 4:39:00 PM - Incident\# 2790508 (0 lost trips, 4 lost minutes)
Train vs. bicycle, Cars \#(203A)-205
Train \#332
T-274
Harbor Station, Track \#002, Eastbound

## Vehicle Maintenance Incidents:

10/1/2016 2:34:00 PM - Incident\# 2783543 (1 lost trip, 60 lost minutes)
Propulsion unable to clear. cars 204A-208
T-235
Train 334
Westbound
Long Beach station
MTO MODE

10/2/2016 1:02:00 PM - Incident\# 2783733 (1 lost trip, 62 lost minutes)
Friction brake fault cars 201-225
T-269
Train 333
Track 2
Eastbound
Crenshaw station
ATO MODE

10/2/2016 10:03:00 PM - Incident\# 2783809 (1 lost trip, 82 lost minutes)
Car 205 lost air pressure
T-13
Train 332
Consist(205)
East of Douglas Station, Track \#2, Eastbound

10/3/2016 6:25:00 AM - Incident\# 2783873 (0 lost trips, 7 lost minutes)
Loss of cab signal
Train 336
LRV 222A/224
T-496
Marine station track 1

10/3/2016 1:15:00 PM - Incident\# 2784077 (1 lost trip, 66 lost minutes)
Auto Train Protection (Speed Limit), Cars \#(221A-210)
Train \#332
T-274
Wilmington East tail track, track \#002, Eastbound

10/4/2016 4:02:00 PM - Incident\# 2784621 (0 lost trips, 5 lost minutes)
Car 223A Prop fault/Speed Restriction not clearing.
T-409
Train 352
Cars (223A)-205
Marine Station, Tracj 2, eastbound.

10/5/2016 3:53:00 PM - Incident\# 2785105 (O lost trips, 5 lost minutes)
Cab signal loss
Train 350
Car 223
T-343
Wilmington Station
Westbound

10/5/2016 5:55:00 PM - Incident\# 2785143 (0 lost trips, 5 lost minutes)
Car 221B loses ATP in ATO/Manual Modes.
T-105
Train 334
Cars (221B)-243
Vermont Station, Track 2,westbound.

10/5/2016 7:37:00 PM - Incident\# 2785164 (0 lost trips, 15 lost minutes)
Emergency lighting
Train 361
Car 228
T-105
Normalk Station

10/7/2016 8:25:00 AM - Incident\# 2785851 (1 lost trip, 73 lost minutes)
Friction brakes failure to release.
Train \# 341
T-344
Cars \# 211-(224-B)
W/Bound approaching Hawthorne Station Track-1.

10/13/2016 4:35:00 PM - Incident\# 2788357 (0 lost trips, 7 lost minutes)
ATP failure/loss of cab signal
Train 333
T-458
El Segundo Interlocking
Eastbound

10/17/2016 4:57:00 PM - Incident\# 2789661 (0 lost trips, 7 lost minutes)
Auto Train Protection (Speed Limit), Cars \#(207A)-203
Train \#353
T-458
Norwalk Station, Track \#001, Westbound.

10/20/2016 2:45:00 PM - Incident\# 2791077 (1 lost trip, 66 lost minutes)
No fault no movement cars 220-207
Train 352
T-247
Track 2
Eastbound
YDI \#4

10/20/2016 5:17:00 PM - Incident\# 2791120 (O lost trips, 8 lost minutes)
Propulsion fualt unable to clear. cars 207-204
Train 31
T-343
Track 2
Marine station
East bound

10/22/2016 9:24:00 PM - Incident\# 2791824 (0 lost trips, 5 lost minutes)
Windows on doors 1 and 2 are shattered on car 208B.
Train 331
T-450
Track 1, W/B
Norwalk Station
(208B)-218
ATO mode
10/25/2016 7:06:00 AM - Incident\# 2792623 (1 lost trip, 74 lost minutes)
Car 204 B has unclearable prop faults with speed restriction
T-057
Train-342
Consist-204(203B)
Crenshaw Station, Track \#2, Eastbound
10/26/2016 6:16:00 AM - Incident\# 2793035 (0 lost trips, 12 lost minutes)
Friction brake fault. Speed restriction.
Train 342
T-40
Norwalk Station
Track 1, W/B
ATO \& MTO modes
(204A)-209
10/27/2016 6:44:00 AM - Incident\# 2793517 (2 lost trips, 141 lost minutes)
Doors will not open.
Train 335
Track 1, W/B
Lakewood Station
T-71
(210A)-223
ATO \& MTO modes

## Wayside Incidents:

10/9/2016 12:02:00 PM - Incident\# 2786443 (0 lost trips, 4 lost minutes)
Marine interlocking false occupancy.

10/14/2016 1:05:00 PM - Incident\# 2788713 (0 lost trips, 12 lost minutes)
False occupancy (Track Circuit 21)

10/20/2016 9:22:00 AM - Incident\# 2790846 (O lost trips, 7 lost minutes)
Aviation East to Crenshaw

10/22/2016 7:33:00 PM - Incident\# 2791812 (0 lost trips, 10 lost minutes)
Multiple locations with breakers opened, Hawthrone yard, El Segundo, Crenshaw, Paramount and Bell flower. De energized tracks at the locations stated.

10/24/2016 5:44:00 AM - Incident\# 2792098 (0 lost trips, 10 lost minutes)
OCS: hanger wires and arm damage
R-099
2.0 mile post marker, 100 East of Douglas Station, track \#001

## Police \& Health Incidents:

10/2/2016 4:14:00 PM - Incident\# 2783769 (1 lost trip, 62 lost minutes)
Person on brigde over norwalk station, LASD has stopped train movement.

10/8/2016 1:07:00 PM - Incident\# 2786255 (0 lost trips, 10 lost minutes)
Train unable to depart norwalk station due to trespasser.
Train 332
T-235
204A-216
Track 1
Norwalk station
Westbound

## Other Incidents:

10/1/2016 2:50:00 PM - Incident\# 2783546 (1 lost trip, 60 lost minutes)
Palm trees outside of ROC need to be trimmed

## 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




GOLD LINE
Out of a total of 19,505 hours operated, there were approximately 322 total hours of service delays.

| October 2016 Service Hours * | Revenue Hours | Per Cent |
| :---: | :---: | :---: |
| Revenue Hours without Delays | 19,182 | 98.3\% |
| Cancelled + Delayed Hours | 322 | 1.7\% |
| Total Revenue Hours | 19,505 | 100.0\% |


| Summary of the major contributors: | Count | Hours | Per Cent |
| :--- | ---: | ---: | ---: |
| Operations | 4 | 0.9 | $0.3 \%$ |
| Accidents | 3 | 4.3 | $1.3 \%$ |
| Vehicle Maintenance | 26 | 172.4 | $53.5 \%$ |
| Wayside | 3 | 108.9 | $33.8 \%$ |
| Police \& Health | 5 | 35.8 | $11.1 \%$ |
| Other | 0 | 0.0 | $0.0 \%$ |
| Total | $\mathbf{4 1}$ | $\mathbf{3 2 2 . 2}$ | $\mathbf{1 0 0 . 0 \%}$ |

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



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

## Operations Incidents:

10/13/2016 7:49:00 AM - Incident\# 2788110 (0 lost trips, 5 lost minutes)
Operator Late
T-159
Train 452
LRV (706) 708
Union Station, Track 1, Northbound.

10/24/2016 7:43:00 AM - Incident\# 2792210 (0 lost trips, 9 lost minutes)
Train 427, T-338 experienced no movement departing Azusa / Citrus.

10/27/2016 8:27:00 PM - Incident\# 2793853 (0 lost trips, 15 lost minutes)
Single tracking implemented Irwindale and Citrus station on track 2 due to Hi-rail vehicle setting on. (Emergency Work being performed)

10/30/2016 6:30:00 AM - Incident\# 2794535 (0 lost trips, 23 lost minutes)
Tree trimming as per Track Allocation.

## Accidents:

10/6/2016 9:54:00 PM - Incident\# 2785672 (0 lost trips, 10 lost minutes)
10/72 at Ave 57 Track 1 Northbound.
T-11, Train 401 (non revenue)
Operating Car 726A, 748

10/9/2016 2:51:00 AM - Incident\# 2786375 (1 lost trip, 244 lost minutes)
Train 407 was involved in a vehicular hit and run (10-73) southbound at Avenue 52.

10/10/2016 5:22:00 AM - Incident\# 2786587 (O lost trips, 4 lost minutes)
Allleged Slip/Fall on LRV 737A
T-347
Train \# 411
LRV (737A) 743
Monrovia Station, Track 1, northbound.

## Vehicle Maintenance Incidents:

10/3/2016 5:35:00 AM - Incident\# 2783863 (1 lost trip, 224 lost minutes)
Train 405, Cars (1011) and 1010.
Azusa/ Citrus Station, Platform 1 south.
No cab signal and sluggish propulsion.

10/7/2016 7:34:00 AM - Incident\# 2785824 (1 lost trip, 229 lost minutes)
Master Controller loose on LRV 703A
T-077
Train 453
LRV (703A) 704
Atlantic Station, Track 1, northbound.

10/7/2016 4:44:00 PM - Incident\# 2786077 (1 lost trip, 231 lost minutes)
Propulsion failure on consist (1011)1015.
Southwest Museum Station
Train \#429, T-463, track \#2, southbound.

10/8/2016 2:45:00 PM - Incident\# 2786287 (0 lost trips, 9 lost minutes)
(729)-733

Propulsion Fault
Train\# 402
SB Allen
T-151

10/11/2016 10:03:00 AM - Incident\# 2787264 (2 lost trips, 464 lost minutes)
ATP fault no movement
Train \#407 T-014 Car\#1008A-1009
Highland park station northbound.

10/11/2016 3:50:00 PM - Incident\# 2787460 (2 lost trips, 461 lost minutes)
No movement consist (1011B)1015.
Sierra Madre Station
Train \#405, T-482, track \#2, southbound.

10/11/2016 6:05:00 PM - Incident\# 2787499 (O lost trips, 10 lost minutes)
ATP failure consist (747B)713.
Arcadia Station
Train \#407, T-273, track \#1, northbound.

10/12/2016 8:57:00 AM - Incident\# 2787706 (2 lost trips, 471 lost minutes)
Propulsion / Dynamic Brakes LRV 710
T-017
Train 452
LRV 710705
SMV Station, Track 2, southbound.

10/13/2016 4:53:00 AM - Incident\# 2788032 (0 lost trips, 12 lost minutes)
APS fault with no AC rail car 1006
T-120, Train 404
1007-(1006)
Track 2, Citrus, South

10/13/2016 5:55:00 PM - Incident\# 2788384 (2 lost trips, 463 lost minutes)
(741)-715

ATP/ADU Miscommunication
Train 427
NB Union Station
T-232

10/14/2016 6:40:00 PM - Incident\# 2788801 (2 lost trips, 462 lost minutes)
No high or low horn (718A)740.
Arcadia Station
Train \#407, T-441, track \#2, southbound.

10/15/2016 11:12:00 PM - Incident\# 2789010 (0 lost trips, 10 lost minutes)
Train 409 Atlantic Station
No Fault - No Movement
Car 740-B

10/17/2016 7:37:00 AM - Incident\# 2789386 (0 lost trips, 10 lost minutes)
Prop fault
Train 404
Cars: (1005A)-1009
T-109
Southbound, Track 2, Citrus station

10/17/2016 8:38:00 PM - Incident\# 2789714 (13 lost trips, 3,009 lost minutes)
Car 1012-1006 no movement, unable to initiate stop and proceed.
T-425
Train 421
Cars (1012)-1006
Union Station North Interlocking signal 2N Track 1 NB.

10/20/2016 9:41:00 AM - Incident\# 2790844 (0 lost trips, 8 lost minutes)
Self Applying Friction Brakes LRV 941B
T-248
Train 408
LRV (741B) 748
Civic Center Station, Track 1, northbound.

## 10/22/2016 9:01:00 PM - Incident\# 2791821 (0 lost trips, 13 lost minutes)

Auto Train Protection (Speed Limit) ATP failure
cars \#(747B)-727
Train \#407
T-441
Irwindale Station, Track \#002, Southbound
10/24/2016 1:38:00 PM - Incident\# 2792381 (0 lost trips, 12 lost minutes)
Train 404, Cars 714 and 727.
Duarte Station, Track 2 south.
Prop fualt unclearable.
10/24/2016 3:24:00 PM - Incident\# 2792435 (2 lost trips, 483 lost minutes)

T-453 reports smoke in the train on train 404, cars 735-738, Highland Park Station, Track 1, Northbound.
10/24/2016 7:31:00 PM - Incident\# 2792492 (1 lost trip, 232 lost minutes)
T-151 on train 453 cars 1008,1007reports no movement at Highland Park Station, Track 1, Northbound.

10/25/2016 9:38:00 AM - Incident\# 2792680 (0 lost trips, 13 lost minutes)
Friction brakes wont release
Train 402
LRV 741A/731
T-103
Duarte station track 2 southbound

10/25/2016 11:48:00 AM - Incident\# 2792741 (1 lost trip, 232 lost minutes)
Speed restriction unknown cause
Train 407
LRV 1010/1015
T-173
Irwindale station track 2 southbound

10/26/2016 6:55:00 AM - Incident\# 2793049 (0 lost trips, 10 lost minutes)
Auto Train Protection (Speed Limit)
T-338
Train 425
LRV 747-743
Lake Station, Track 1, northbound.

10/26/2016 3:41:00 PM - Incident\# 2793312 (1 lost trip, 252 lost minutes)
Friction brakes would not release 727,(741 B)
Lincoln Heights station
Train 455, T-60, TK 1, NB

10/26/2016 6:07:00 PM - Incident\# 2793344 (1 lost trip, 232 lost minutes)
ATP failure 736,(712)
Downtown Azusa
Train 438, T-196, Tk 2, SB

10/28/2016 7:03:00 AM - Incident\# 2793997 (12 lost trips, 2,785 lost minutes)
Propulsion / Dynamic Brakes, cars \#(741-736)
Train \#406
T-028
60 Fwy, Track \#002, Southbound.

10/31/2016 9:11:00 AM - Incident\# 2794866 (O lost trips, 7 lost minutes)
Auto Train Protection (Speed Limit) failure on LRV 747A
T-270
Train 401
LRV 747A-736
Irwindale Station, Track 2, southbound.

## Wayside Incidents:

10/4/2016 10:00:00 AM - Incident\# 2784441 (0 lost trips, 18 lost minutes)
Blown OCS insulation on track \#2, by MOS 221 Indiana Siding.

10/7/2016 10:09:00 AM - Incident\# 2785891 (0 lost trips, 10 lost minutes)
Track MT-126, walking Track Inspection from SMV to Fillmore Station.

10/27/2016 3:32:00 PM - Incident\# 2793827 (28 lost trips, 6,503 lost minutes)
Damaged OCS
Azusa Citrus tail track 1

## Police \& Health Incidents:

10/13/2016 4:45:00 PM - Incident\# 2788362 ( 6 lost trips, 1,389 lost minutes)
T-441 Reported Vehicle Fouling Track 2 at 1st and Indiana.

10/18/2016 11:07:00 AM - Incident\# 2789962 (0 lost trips, 4 lost minutes)

Patron reporting a man with a gun on Train 402, LRV (749)-741, northbound from Memorial Park Station.

10/23/2016 7:21:00 PM - Incident\# 2792020 (0 lost trips, 25 lost minutes)
Train 402 reported a stalled vehicle on track no. 1 at Fremont and Grevelia.

10/27/2016 11:22:00 AM - Incident\# 2793638 (2 lost trips, 480 lost minutes)
Notified by LASD Dixon of a trespasser on right of way between Union and Chinatown.

10/27/2016 1:39:00 PM - Incident\# 2793662 (1 lost trip, 249 lost minutes)
Medical emergency on board train 401
T-134
Train 401
Track 2 at South Pasadena.
714735

## 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 Gold Line Escalator Availability



## EXPO LINE

Out of a total of 16,836 hours operated, there were approximately 195 total hours of service delays.

| October 2016 Service Hours * | Revenue |  |
| :--- | ---: | ---: |
| Revenue Hours without Delays | 16,641 | $98.8 \%$ |
| Cancelled + Delayed Hours | 195 | $1.2 \%$ |
| Total Revenue Hours | $\mathbf{1 6 , 8 3 6}$ | $\mathbf{1 0 0 . 0 \%}$ |


| Summary of the major contributors: | Count | Hours | Per Cent |
| :--- | ---: | ---: | ---: |
| Operations | 3 | 0.4 | $0.2 \%$ |
| Accidents | 3 | 85.0 | $43.5 \%$ |
| Vehicle Maintenance | 11 | 9.5 | $4.9 \%$ |
| Wayside | 2 | 5.0 | $2.5 \%$ |
| Police \& Health | 4 | 89.3 | $45.7 \%$ |
| Other | 1 | 6.3 | $3.2 \%$ |
| Total | $\mathbf{2 4}$ | $\mathbf{1 9 5 . 4}$ | $\mathbf{1 0 0 . 0 \%}$ |

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



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

## Operations Incidents:

10/1/2016 7:30:00 PM - Incident\# 2783605 (O lost trips, 7 lost minutes)
Canceled assignment due to no operator

10/25/2016 5:22:00 PM - Incident\# 2792884 (0 lost trips, 9 lost minutes)
Operator departs 4th Street Station 9 minutes late.

10/28/2016 3:17:00 AM - Incident\# 2793931 (0 lost trips, 10 lost minutes)
Information only.
Car adds at Santa Monica station per schedule M-727

## Accidents:

10/17/2016 10:59:00 AM - Incident\# 2789446 (1 lost trip, 145 lost minutes)
Train versus tresspasser.
Train 609
T-227
1024-1038-1017
NB-Arlington grade crossing- track 3

10/30/2016 8:40:00 PM - Incident\# 2794680 (31 lost trips, 4,371 lost minutes)
Train 606 reported a possible body near Track 4 at Bagley Grade Crossing.
Train 606
1035-1037-1016
T-392
Culver City Station Northbound Track \#3.

10/31/2016 3:27:00 PM - Incident\# 2795049 (6 lost trips, 584 lost minutes)
10-73 Train vs Auto at Halldale Ave. and Exposition track 3
Incident location later updated to Denker Ave.
Vehicle Maintenance Incidents:
10/1/2016 4:25:00 AM - Incident\# 2783428 (0 lost trips, 15 lost minutes)
No movement, no faults
Train 602
T-54
(165)-115-135

7th/metro S/B
15 minute service delay.

10/2/2016 7:13:00 PM - Incident\# 2783790 (0 lost trips, 12 lost minutes)
Door problem no movement.
Train 603
T-325
(1023B)-1018-1038
Southbound, Culver City Station, Track 4

10/7/2016 8:39:00 PM - Incident\# 2786123 (1 lost trip, 137 lost minutes)
Propulsion / Dynamic Brakes, cars \#(233B)-250
Train \#607
T-142
Expo/USC station, Track \#004, Southbound.

10/11/2016 2:50:00 PM - Incident\# 2787412 (1 lost trip, 137 lost minutes)
Operator reports of no movement
Train 603
T-142
(1021B)1027-1023
26th Strret, Trk. 3, northbound

10/14/2016 12:48:00 PM - Incident\# 2788700 (O lost trips, 7 lost minutes)
Propulsion / Dynamic Brakes
T-268
Train 606
(1026B)-1044-1020
Southbound, La Brea station track 4.

10/15/2016 6:50:00 PM - Incident\# 2788986 (1 lost trip, 132 lost minutes)
Operator reports of rail car (106) shutting down every few seconds
Train 605
T-252
(106)146-154

Santa Monica Terminal, Trk. 3, northbound

10/20/2016 8:30:00 AM - Incident\# 2790817 (O lost trips, 7 lost minutes)
Train 607 has Kinky Sharyo Issues no movement
T-47, Train 607
Track 3, Santa Monica, North
1030-1024-1039

10/20/2016 6:00:00 PM - Incident\# 2791127 (0 lost trips, 12 lost minutes)
Prop fault w/ speed restriction on car 249A
T-407, train 605
(249)-246-250

23rd Street Station, track 4, south

10/21/2016 7:11:00 AM - Incident\# 2791319 (0 lost trips, 8 lost minutes)
Auto Train Protection (Speed Limit) (No Movement)
1035-1038-1034
T-47
Train 606
Metro, Southbound, Track 2

10/25/2016 5:51:00 PM - Incident\# 2792890 (1 lost trip, 94 lost minutes)
Service cancelled from 4th Street Station to 26 th Street Station due to a B/O consist.

10/28/2016 11:50:00 AM - Incident\# 2794219 (0 lost trips, 9 lost minutes)
Train-612
T-438
Cars (105)-132-115
Northbound, Track \#3
Western Station
Door problem.

## Wayside Incidents:

10/24/2016 12:25:00 PM - Incident\# 2792362 (O lost trips, 15 lost minutes)
Train 617 signal overrun.

10/31/2016 5:07:00 AM - Incident\# 2794734 (3 lost trips, 282 lost minutes)
DC Breaker: B05 Open and unable to close remotely.

## Police \& Health Incidents:

10/4/2016 1:50:00 PM - Incident\# 2784575 (40 lost trips, 5,322 lost minutes)
Officer involved stabbing/shooting at Santa Monica Station

10/11/2016 4:09:00 PM - Incident\# 2787453 (0 lost trips, 12 lost minutes)
LASD Deputy Whitmore reports of a person with a gun aboard train 603
Train 603
T-097
115-108-161
Palms station, Trk. 4, southbound

10/19/2016 12:48:00 PM - Incident\# 2790404 (0 lost trips, 10 lost minutes)
Traffic accident MTA not involved at 11th ave blocking track 4

10/22/2016 1:31:00 PM - Incident\# 2791719 (0 lost trips, 12 lost minutes)
Operator reports of Sheriff's personnel dealing with an unruly passenger on board rail car 1022
Train 607
T-524 (student), T-354
1023(1022)1019
La Cienega, Trk. 4, southbound

## Other Incidents:

10/31/2016 6:13:00 AM - Incident\# 2794802 (4 lost trips, 376 lost minutes)
Train Delay due to RFS Inspection

## 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




[^0]:    ${ }^{1}$ There is a One Month lag in reporting this data
    ${ }^{2}$ Includes Operations, RFS and Wayside
    Green - High probability of achieving the target (on track). Meets Target at $100 \%$ or better
    Y Yellow - Uncertain if the target will be achieved -- slight problems, delays or management issues. Falls below Target $70-99 \%$
    O Red - High probability that the target will not be achieved -- significant problems and/or delays. Falls below Target >70\%.

[^1]:    MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures. \%Change is from previous month

