

## METRO RAIL PERFORMANCE - DECEMBER 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 Target | $\begin{array}{\|c\|} \hline \text { FY } 2017 \\ \text { YTD } \end{array}$ | FYTD <br> Status | Oct Month | Nov Month | Dec Month |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Systemwide |  |  |  |  |  |  |  |  |  |
| On-Time Pullouts | 99.55\% | 99.67\% | 99.63\% | 99.50\% | 99.65\% | $\bigcirc$ | 99.96\% | 99.33\% | 99.97\% |
| Mean Miles Between Chargeable Mechanical Failures | 28,829 | 34,524 | 30,482 | 27,911 | 28,138 | $\bigcirc$ | 34,320 | 34,270 | 24,134 |
| In-Service On-time Performance | 97.92\% | 98.39\% | 98.10\% | 98.00\% | 98.24\% | $\bigcirc$ | 98.67\% | 96.96\% | 97.74\% |
| Service Delivery Ratio | 99.12\% | 99.35\% | 99.22\% | 99.25\% | 99.21\% | $\bigcirc$ | 99.21\% | 99.10\% | 98.80\% |
| Traffic Accidents Per 100,000 Train Miles | 1.47 | 1.18 | 1.17 | N/A | 1.01 | N/A | 1.63 | 0.13 | 1.18 |
| CPUC Reportable Accidents per 100,000 Train Miles | 0.10 | 0.43 | 0.60 | 0.67 | 0.32 | $\bigcirc$ | 0.54 | 0.00 | 0.26 |
| Passenger Accidents per 100,000 Boardings | 0.025 | 0.013 | 0.016 | 0.009 | 0.023 | $\bigcirc$ | 0.053 | 0.032 | 0.000 |
| Complaints per 100,000 Boardings | 0.91 | 0.78 | 1.43 | 1.12 | 1.93 | $\bigcirc$ | 1.86 | 2.10 | 1.39 |
| New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours ${ }^{1,2}$ | 15.35 | 11.11 | 10.97 | 10.42 | 12.19 | $\bigcirc$ | 14.24 | 15.68 | 10.88 |
| Lost Work Days per 200,000 Exposure Hours ${ }^{1,2}$ | 861 | 880 | 482 | 458.16 | 721 | $\bigcirc$ | 542 | 32 |  |
| OSHA Injuries per 200,000 Exposure Hours ${ }^{1,2}$ | 8.18 | 6.68 | 6.32 | 6.00 | 9.14 | $\bigcirc$ | 13.29 | 10.78 |  |
|  |  |  |  |  |  |  |  |  |  |
| Wayside |  |  |  |  |  |  |  |  |  |
| Overdue Work Orders (Non-PMP) - Aging of Outstanding Work Orders | 71 | 193 | 1,001 | N/A | 2,497 | N/A | 376 | 37 | 739 |
| Past-Due Preventive Maintenance - Aging of Outstanding Work Orders | 0 | 2 | 143 | N/A | 887 | N/A | 118 | 39 | 220 |
| \% of Completed Inspections | 99.41\% | 99.51\% | 99.57\% | N/A | 99.27\% | N/A | 100.00\% | 98.77\% | 97.75\% |
| New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours | 9.28 | 9.07 | 4.77 | 4.53 | 4.70 | $\bigcirc$ | 7.89 | 4.12 | 4.24 |
| Lost Work Days per 200,000 Exposure Hours ${ }^{1}$ | 179 | 309 | 148 | 141 | 124 | $\bigcirc$ | 51 | 43 |  |
| OSHA Injuries per 200,000 Exposure Hours ${ }^{1}$ | 6.31 | 8.28 | 4.40 | 4.18 | 4.78 | $\bigcirc$ | 7.89 | 44.00 |  |
| 49.00 |  |  |  |  |  |  |  |  |  |
| Blue Line |  |  |  |  |  |  |  |  |  |
| On-Time Pullouts | 99.37\% | 99.41\% | 99.59\% | 99.50\% | 99.66\% | $\bigcirc$ | 100.00\% | 99.85\% | 100.00\% |
| Mean Miles Between Chargeable Mechanical | 18,731 | 23,716 | 19,240 | 19,572 | 16,954 | $\bigcirc$ | 20,992 | 53 | 17,131 |
| In-Service On-time Performance | 95.84\% | 97.28\% | 96.10\% | 97.00\% | 96.86\% | $\bigcirc$ | 98.47\% | 5400.00\% | 96.47\% |
| Service Delivery Ratio | 98.36\% | 98.88\% | 98.41\% | 98.46\% | 98.79\% | $\bigcirc$ | 99.15\% | 5900.00\% | 98.56\% |
| Traffic Accidents Per 100,000 Train Miles | 2.97 | 2.48 | 2.38 | N/A | 2.28 | N/A | 2.62 | 0.00 | 4.50 |
| CPUC Reportable Accidents per 100,000 Train Miles | 0.00 | 0.89 | 1.39 | 1.34 | 0.76 | $\bigcirc$ | 0.66 | 0.00 | 1.29 |
| Passenger Accidents per 100,000 Boardings | 0.058 | 0.034 | 0.016 | 0.006 | 0.032 | $\bigcirc$ | 0.048 | 63.000 | 0.000 |
| Complaints per 100,000 Boardings | 1.10 | 0.90 | 1.33 | 1.09 | 1.64 | $\bigcirc$ | 1.50 | 64.00 | 1.29 |
| New Workers' Compensation Indemnity Claims per | 17.46 | 15.10 | 15.08 | 15.58 | 19.13 | $\bigcirc$ | 15.51 | 66.00 | 27.59 |
| Lost Work Days per 200,000 Exposure Hours ${ }^{1}$ | 990 | 1,622 | 797 | 786 | 907 | O | 845 | 785 |  |
| OSHA Injuries per 200,000 Exposure Hours ${ }^{1}$ | 5.71 | 10.64 | 6.79 | 9.58 | 9.82 | $\bigcirc$ | 0.00 | 21.57 |  |

[^0]| Measurement | FY 2014 | FY 2015 | FY 2016 | FY 2017 <br> Target | $\begin{array}{\|c\|} \hline \text { FY } 2017 \\ \text { YTD } \\ \hline \end{array}$ | FYTD <br> Status | Oct Month | Nov Month | Dec 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 | 63,099 | 85,090 | 94,312 | 112,652 | 106,434 | $\bigcirc$ | 296,934 | 85,507 | 196,096 |
| In-Service On-time Performance | 98.91\% | 99.13\% | 99.45\% | 99.50\% | 99.56\% | $\bigcirc$ | 99.79\% | 99.58\% | 99.51\% |
| Service Delivery Ratio | 99.57\% | 99.60\% | 99.71\% | 99.71\% | 99.81\% | $\bigcirc$ | 99.94\% | 99.88\% | 99.79\% |
| Traffic Accidents Per 100,000 Train Miles | 1.01 | 0.47 | 0.75 | N/A | 0.57 | N/A | 0.84 | 0.86 | 0.00 |
| 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 | 0.004 | $\bigcirc$ | 0.000 | 0.026 | 0.000 |
| Complaints per 100,000 Boardings | 0.60 | 0.54 | 0.57 | 0.56 | 0.79 | $\bigcirc$ | 0.91 | 0.82 | 0.51 |
| New Workers' Compensation Indemnity Claims per | 20.22 | 6.20 | 16.43 | 13.29 | 14.07 | $\bigcirc$ | 21.04 | 15.82 | 16.12 |
| *Lost Work Days per 200,000 Exposure Hours | 927 | 649 | 526 | 556 | 1,201 | $\bigcirc$ | 867 | 1,420 |  |
| *OSHA Injuries per 200,000 Exposure Hours | 11.79 | 3.54 | 7.99 | 6.55 | 10.23 | O | 10.52 | 21.10 |  |


| Green Line |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| On-Time Pullouts | 99.69\% | 99.32\% | 99.49\% | 99.50\% | 99.89\% | $\bigcirc$ | 99.78\% | 100.00\% | 100.00\% |
| Mean Miles Between Chargeable Mechanical Failures | 19,513 | 21,054 | 19,238 | 19,911 | 15,547 | $\bigcirc$ | 18,831 | 16,983 | 8,808 |
| In-Service On-time Performance | 97.85\% | 97.39\% | 98.52\% | 98.20\% | 98.43\% | $\bigcirc$ | 98.37\% | 98.99\% | 98.23\% |
| Service Delivery Ratio | 99.57\% | 99.50\% | 99.59\% | 99.62\% | 99.61\% | $\bigcirc$ | 99.73\% | 99.75\% | 99.54\% |
| Traffic Accidents Per 100,000 Train Miles | 0.49 | 0.21 | 0.42 | N/A | 0.69 | N/A | 1.66 | 0.00 | 0.00 |
| CPUC Reportable Accidents per 100,000 Train Miles | 0.00 | 0.07 | 0.07 | 0.18 | 0.00 | $\bigcirc$ | 0.00 | 0.00 | 0.00 |
| Passenger Accidents per 100,000 Boardings | 0.023 | 0.024 | 0.034 | 0.011 | 0.074 | $\bigcirc$ | 0.000 | 0.117 | 0.000 |
| Complaints per 100,000 Boardings | 1.15 | 0.88 | 1.53 | 1.30 | 2.10 | $\bigcirc$ | 2.58 | 1.88 | 1.50 |
| New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours | 16.51 | 7.32 | 7.18 | 9.27 | 5.14 | $\bigcirc$ | 0.00 | 0.00 | 0.00 |
| *Lost Work Days per 200,000 Exposure Hours | 1,299 | 479 | 228 | 195 | 977 | $\bigcirc$ | 828 | 751 |  |
| *OSHA Injuries per 200,000 Exposure Hours | 11.30 | 4.07 | 3.19 | 2.34 | 4.12 | $\bigcirc$ | 0.00 | 0.00 |  |


| Gold Line |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| On-Time Pullouts | 99.56\% | 99.98\% | 99.68\% | 99.50\% | 99.79\% | O | 100.00\% | 98.96\% | 100.00\% |
| Mean Miles Between Chargeable Mechanical Failures | 45,894 | 44,171 | 40,426 | 51,665 | 33,255 | $\bigcirc$ | 30,271 | 65,357 | 38,175 |
| In-Service On-time Performance | 98.03\% | 98.56\% | 97.60\% | 97.50\% | 97.31\% | $\bigcirc$ | 97.45\% | 97.47\% | 95.29\% |
| Service Delivery Ratio | 99.03\% | 99.34\% | 99.11\% | 99.16\% | 98.64\% | $\bigcirc$ | 98.35\% | 99.11\% | 96.69\% |
| Traffic Accidents Per 100,000 Train Miles | 1.03 | 1.14 | 0.99 | N/A | 0.50 | N/A | 1.29 | 0.00 | 0.43 |
| CPUC Reportable Accidents per 100,000 Train Miles | 0.00 | 0.30 | 0.60 | 0.50 | 0.14 | $\bigcirc$ | 0.43 | 0.00 | 0.00 |
| Passenger Accidents per 100,000 Boardings | 0.052 | 0.007 | 0.039 | 0.035 | 0.024 | $\bigcirc$ | 0.140 | 0.000 | 0.000 |
| Complaints per 100,000 Boardings | 1.04 | 1.01 | 2.73 | 2.26 | 2.76 | $\bigcirc$ | 2.73 | 2.15 | 2.40 |
| New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours | 14.98 | 15.96 | 11.87 | 12.20 | 13.75 | $\bigcirc$ | 15.86 | 16.67 | 0.00 |
| *Lost Work Days per 200,000 Exposure Hours | 1,460 | 1,068 | 766 | 808 | 1,066 | $\bigcirc$ | 592 | 731 |  |
| *OSHA Injuries per 200,000 Exposure Hours | 9.12 | 3.83 | 9.29 | 10.07 | 9.86 | $\bigcirc$ | 10.57 | 11.11 |  |



[^1]
## METRO RAIL PERFORMANCE - DECEMBER 2016

## Rail Performance by Vehicle Type



There was no FY16 target established by car type.
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.



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There was no FY16 target established by car type.
MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures.

## (1) <br> Metro

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




There was no FY16 target established by car type.
MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures.

| Percentage Change in Rail MMBMF by Vehicle Type |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Light Rail - NipponSharyo |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $500.0 \%$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 400.0\% |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\sum 200.0 \%$ - |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{rr}\text { Ј̌ } & 0.0 \% \\ \text { ¢̊ } & -100.0 \% ~\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| -100.0\% |  |  |  |  |  |  |  |  |  |  |  |  |  |
| -200.0\% | Dec-15 | Jan-16 | Feb-16 | Mar-16 | Apr-16 | May-16 | Jun-16 | Jul-16 | Aug-16 | Sep-16 | Oct-16 | Nov-16 | Dec-16 |
| - Nippon Sharyo 2020-DC | 820.0\% | -2.5\% | -85.8\% | 60.4\% | 348.3\% | -50.1\% | -53.7\% | -0.5\% | -33.4\% | 25.4\% | -10.3\% | 25.1\% | -46.3\% |
| —— Nippon Sharyo 865 - DC | -37.3\% | -9.1\% | 10.7\% | 19.0\% | -5.2\% | 13.2\% | -29.8\% | -7.6\% | 38.8\% | 25.1\% | 10.7\% | 5.2\% | -40.3\% |

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


There was no FY16 target established by car type.
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 - DECEMBER 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 |  |  |  | 12 | 36 |
| Nippon Sharyo 2020 - DC | 11 |  |  |  | 4 |
| Nippon Sharyo 865 - DC | 37 |  |  |  | 17 |
| Siemens 2000 Base - AC |  |  | 29 |  |  |
| Siemens 2000 GE/ATP - AC | 17 |  |  |  | 6 |
| TOTALS | $\mathbf{6 5}$ | $\mathbf{1 0 4}$ | $\mathbf{2 9}$ | $\mathbf{6 2}$ | $\mathbf{6 3}$ |

## Vehicle Availability Systemwide

| Blue |  |  |  |
| :---: | :---: | :---: | :---: |
| Day Type | Vehicles <br> Required | Average Available | Average \% Available |
| Weekday | 57 | 58 | 102\% |
| Weekend | 26 | 42 | 162\% |
| Red/ Purple |  |  |  |
| Day Type | Vehicles <br> Required | Average Available | Average \% Available |
| Weekday | 65 | 78 | 120\% |
| Weekend | 43 | 62 | 143\% |
| Green |  |  |  |
| Day Type | Vehicles <br> Required | Average Available | Average \% Available |
| Weekday | 22 | 22 | 99\% |
| Weekend | 14 | 17 | 118\% |
| Gold |  |  |  |
| Day Type | Vehicles <br> Required | Average Available | Average \% Available |
| Weekday | 47 | 51 | 108\% |
| Weekend | 28 | 39 | 138\% |
| Expo |  |  |  |
| Day Type | Vehicles <br> Required | Average Available | Average \% Available |
| Weekday | 44 | 44 | 99\% |
| Weekend | 30 | 40 | 135\% |



## Cleanliness by 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 - 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


Workers Comp Claims by Line


## On-Time Pullouts Ratio by Line



[^2]
## 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
43
Blue, Red/Purple, Green, Gold \& Expo Line Traffic Accident Ratio


## PASSENGER ACCIDENTS PER 100,000 BOARDINGS



Expo Line Service did not begin until March 2016.

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


## Lost Work Days and OSHA Injuries

Sep 2016 - Nov 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: No Escalators at Blue and Expo Lines

## BLUE LINE

Out of a total of 20,124 hours operated, there were approximately 291 total hours of service delays.

| December 2016 Service Hours * | Revenue |  |
| :--- | ---: | ---: |
| Revenue Hours without Delays | 19,833 | Per Cent |
| Cancelled + Delayed Hours | $29.6 \%$ |  |
| Total Revenue Hours | $\mathbf{2 0 , 1 2 4}$ | $\mathbf{1 0 0 . 0 \%}$ |


| Summary of the major contributors: | Count | Hours | Per Cent |
| :--- | ---: | ---: | ---: |
| Operations | 2 | 8.5 | $2.9 \%$ |
| Accidents | 4 | 76.4 | $26.3 \%$ |
| Vehicle Maintenance | 42 | 102.8 | $35.4 \%$ |
| Wayside | 2 | 3.5 | $1.2 \%$ |
| Police \& Health | 12 | 93.0 | $32.0 \%$ |
| Other | 3 | 6.4 | $2.2 \%$ |
| Total | $\mathbf{6 5}$ | $\mathbf{2 9 0 . 7}$ | $\mathbf{1 0 0 . 0 \%}$ |

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



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

Operations Incidents:
12/9/2016 4:24:00 AM - Incident\# 2810373 (1 lost trip, 166 lost minutes)
Train 105
Missed northbound trip from Willow to Washington due to scheduling error.
12/14/2016 6:37:00 PM - Incident\# 2812471 (2 lost trips, 346 lost minutes)
Car 229 lost hi voltage power
T-354
Train-604
Consist-230244(229A)
Portal near 12th Street, South, Track \#2

## Accidents:

12/1/2016 1:26:00 PM - Incident\# 2807038 (7 lost trips, 1,193 lost minutes)
Train vs Auto 10-73
Train\#108
T\#308
Car\# (160B),110,143
Track 2,Southbound,Transit Mall
12/2/2016 6:18:00 PM - Incident\# 2807772 (2 lost trips, 347 lost minutes)
Train-101
T-237
Cars (244)-233-232
Southbound Track \#2
55th Grade Crossing
Train vs Other (Bicycle) at 55th Grade Crossing.
12/19/2016 4:44:00 PM - Incident\# 2814327 (11 lost trips, 1,844 lost minutes)
10-73 (Pedestrian on bike)
Train 124
Track \#2 SB Nadeu Crossing
T-503 operating along with student operator 25937
(107B)-164-132
12/29/2016 5:14:00 PM - Incident\# 2817538 (7 lost trips, 1,199 lost minutes)
10-72 Train vs Pedestrian (non-fatal)
Train 126
Track \#2 Southbound Alondra X-Ing
T-291
(241A)-242-250
Vehicle Maintenance Incidents:
12/1/2016 5:50:00 AM - Incident\# 2806745 (1 lost trip, 178 lost minutes)
Propulsion Fault with a speed restriction of 35 mph .
Train\#106
T\#076
Car\#125,(101),136
Track 2, Southbound, Washington Station
12/1/2016 8:57:00 AM - Incident\# 2806871 (0 lost trips, 15 lost minutes)
Friction Brake fault.
Train\#111
T\#87
Car\#(116B), 118
Track 2,southbound,Firestone Station

12/2/2016 5:14:00 AM - Incident\# 2807270 (0 lost trips, 12 lost minutes)
Reports of propulsion fault with a speed restriction of 35 mph
Train \# 111
T-152
237-235-(246)
Wardlow Station, Track 1, Northbound
12/5/2016 7:53:00 AM - Incident\# 2808502 (0 lost trips, 6 lost minutes)
Prop/Fault, Spin Slide.
Train \#111.
T-355.
LRV- (231), 239, 244.
Firestone Station, track \#1, Northbound.
12/5/2016 9:42:00 AM - Incident\# 2808596 (0 lost trips, 10 lost minutes) No Cab Signal departing 7/MC, track \#2, Southbound.
Train \#103.
T-102.
LRV- (110B), 143.
7/MC, Track \#2, Southbound.
12/7/2016 7:24:00 AM - Incident\# 2809519 (0 lost trips, 12 lost minutes)
No movement door problem.
Train \#114
Train Operator T-200
Cars (115A), 153, 101
Willow Station, Track 1, Northbound
12/7/2016 10:02:00 AM - Incident\# 2809824 (0 lost trips, 12 lost minutes)
Reports reports unable to engage street run
Train \# 104
T-211
(248B)-301-235
Transit Mall, Track \#1, NB

12/7/2016 3:19:00 PM - Incident\# 2809724 (1 lost trip, 168 lost minutes)
Operator reports a door problem with no movement.
Cars 231, 247, 230
Train 121
Operator T-130
7th and Metro, TRK 2, southbound

12/8/2016 5:10:00 AM - Incident\# 2809870 (1 lost trip, 184 lost minutes)
Propulsion / Dynamic Brakes
(231)-233-302

Train 106
T-335
Washington, Northbound, Track 1
12/8/2016 7:35:00 PM - Incident\# 2810265 (0 lost trips, 5 lost minutes)
Propulsion / Dynamic Brakes
Train 106
T-495
(301A)-248-302
Southbound, Florence station Track 2.

12/9/2016 6:15:00 AM - Incident\# 2810445 (1 lost trip, 172 lost minutes)
Multiple ATP faults
Train 117
(113A)-118-119
Main Yard
+6 delay

12/9/2016 4:43:00 PM - Incident\# 2810668 (1 lost trip, 178 lost minutes)
Doors 6/7 malfunctioning on car 236A
T-352, train 104
(236)-230-247

Florence, track 2, south

12/9/2016 5:12:00 PM - Incident\# 2810679 (1 lost trip, 181 lost minutes)
No Fault - No Movement on train 109
T-357, train 109
114-106-111
Firestone, track 1, north

12/9/2016 6:10:00 PM - Incident\# 2810692 (2 lost trips, 332 lost minutes)
T-300
Train-104
Cars (236)-301-247
Anaheim Station,Track \#1
Northbound
Doors unable to close.
12/10/2016 6:51:00 PM - Incident\# 2810898 (0 lost trips, 6 lost minutes)
Propulsion fault will not clear (125B)144.
Slauson Station
Train \#109, T-250, track \#2, southbound.

12/11/2016 5:28:00 AM - Incident\# 2810947 (0 lost trips, 6 lost minutes)
Prop/Fault.
Train \#110.
T-363.
LRV- 241, (242), 245.
Pacific Station, Track \#1, Northbound.

12/12/2016 10:05:00 AM - Incident\# 2811293 (2 lost trips, 350 lost minutes)
Operator reports of slow movement
Train 105
T-262
233-248-(245B)
Central Ave., Trk. 2, southbound

12/12/2016 3:57:00 PM - Incident\# 2811488 (4 lost trips, 671 lost minutes)
Operator reports of a propulsion fault with a speed resriction
Train 108
T-026
(166-164)-104
Firestone station, Trk. 2, southbound

12/14/2016 10:56:00 PM - Incident\# 2812559 (1 lost trip, 184 lost minutes)
Cab Door
Train 104
T-75
(159)-143

S/B 7th Met
+12 minute Delay

12/15/2016 4:06:00 PM - Incident\# 2812902 (4 lost trips, 686 lost minutes)
Self applying friction brakes on 301A, Train with no movement.
Train 102
T-258
LRV'S ( 301A ) 234-239
Venice Interlocking, Track 2, Southbound.

12/16/2016 5:35:00 AM - Incident\# 2813188 (1 lost trip, 172 lost minutes)
Friction brake fault /Traction motor cover exposed.
Train 105
T-87
(101)-145-140

Washington
S/B
12/16/2016 6:19:00 AM - Incident\# 2813100 (0 lost trips, 12 lost minutes)
No Fault no movement
Train 116
T-43
(247)-248-240

S/B Wardlow.
+12 service delay

12/16/2016 8:17:00 AM - Incident\# 2813257 (3 lost trips, 527 lost minutes) Vehicle System, HSCB Logic fault, HVAC and air compressor, cars \#(153A)-112-155
Train \#119
T-194
Florence Station, TRack \#002, Southbound.

12/17/2016 3:01:00 PM - Incident\# 2813659 (2 lost trips, 258 lost minutes)
Operator reports of no movement
Train 104
T-415
(239)233-302

San Pedro station, Trk. 2, southbound

12/18/2016 3:56:00 PM - Incident\# 2813849 (0 lost trips, 10 lost minutes)
Train 113 reporting Propulsion Faults in LRV 242
Train 113
T-250
LRV'S 301- ( 242 )- 245
7th \& Metro Center, Track 2, Southbound.
12/19/2016 8:26:00 AM - Incident\# 2814067 (1 lost trip, 168 lost minutes)
ATP failure; affecting left/platform bank doors on all three cars, doors would not open.
Train 117
T-69
(250-233-239)
NB, Compton Station, Track 1

12/20/2016 7:16:00 AM - Incident\# 2814513 (1 lost trip, 168 lost minutes)
Propulsion fault
Train 114
T-50
126 (130) 120
Slauson Station S/B

12/20/2016 8:13:00 AM - Incident\# 2814520 (1 lost trip, 168 lost minutes)
Air pipe BO in the sandbox, making rattling sounds.
Train 118
T-187
236-(229)-230
SB, 7th and Metro Center Station, Track 2

12/21/2016 12:24:00 PM - Incident\# 2815009 (1 lost trip, 183 lost minutes)
Train 107 no movement at Grand station.

12/21/2016 9:41:00 PM - Incident\# 2815154 (1 lost trip, 168 lost minutes)
HSCB Trip
Train \#101
T-307
153A-164
NB, Willow Station, Track \#1

12/22/2016 7:06:00 AM - Incident\# 2815306 (0 lost trips, 10 lost minutes)
No fault no movement.
Train 117
T-194
(101)-131-144

Washington Trk 1

12/22/2016 11:51:00 AM - Incident\# 2815409 (1 lost trip, 168 lost minutes)
Propulsion fault.
Train 101
T\#46
Cars\#158,165,(159A)
Track 2,Imperial Station,Southbound
12/22/2016 12:03:00 PM - Incident\# 2815388 (0 lost trips, 12 lost minutes)
Propulsion fault.
Train\#111
T-415
Car\# 137,127,(122A)
Track 1,7 th and Metro,northbound

12/23/2016 7:07:00 PM - Incident\# 2815895 (0 lost trips, 21 lost minutes)
Train 121
Pico Station
Northbound
T-348

12/23/2016 9:05:00 PM - Incident\# 2815918 (1 lost trip, 188 lost minutes)
Friction brakes locked
Train 103
T-258
car 140(a)
Pacific/5th
Northbound

12/24/2016 11:02:00 AM - Incident\# 2816030 (0 lost trips, 9 lost minutes)
Doors will not open on 239. Recurring propulsion faults. REPEATER: 2nd day in a row.
Train 106
T-182
231-(239)-247
SB, 1st street Station, Track 2

12/28/2016 5:12:00 AM - Incident\# 2816878 (0 lost trips, 10 lost minutes)
Propulsion fault
Train 104
T-335
(302B)-234-245
7th Metro Trk 2
+10 delay

12/28/2016 7:49:00 AM - Incident\# 2816924 (1 lost trip, 193 lost minutes)
Train-105
T-355
Cars 105-(120)-109
Southbound, Track \#2
Vernon Station
Propulsion / Dynamic Brakes (Blown Motor Fuse) at Vernon Station.

12/29/2016 3:34:00 PM - Incident\# 2817498 (1 lost trip, 168 lost minutes)
Train 122 reports propulsion faults with a speed restriction. LRV 122B
Train 122
T-307
LRV'S 130- (122B) 149
San Pedro Station, track 1, northbound.
12/30/2016 4:19:00 AM - Incident\# 2817646 (1 lost trip, 176 lost minutes) PROP FAULT
Train 102
T-118
(245A)-234-301
N/B 108th Trk 1

12/31/2016 3:45:00 PM - Incident\# 2818122 (0 lost trips, 8 lost minutes)
Train 105 reports that he is not able to open doors at platform 2 to pick up patrons.
Train 105
T-258
LRV'S ( 165A ) 167-126
Metro Center, Track 2, Southbound.

12/31/2016 4:34:00 PM - Incident\# 2818130 (0 lost trips, 8 lost minutes)
Operator reports doors not closing.
Train 103
T-246
LRV"S 240-( 239 ) 249
San Pedro Station, Track 2, Southbound.

## Wayside Incidents:

12/15/2016 12:25:00 AM - Incident\# 2812560 (1 lost trip, 193 lost minutes)
Deenergized Washington and Flower
Train 627
T-380
1047-1020
Washington and Flower S/B
Track 1

+ 19 minutes delay N/B to 7th Met
+ 22 minutes delay from 7th Met

12/22/2016 5:00:00 AM - Incident\# 2815204 (0 lost trips, 18 lost minutes)
False occupancy track circuit \# 1. Switch 13 Trk 1
Police \& Health Incidents:
12/3/2016 12:29:00 PM - Incident\# 2807959 (0 lost trips, 10 lost minutes)
Blockade at Transit Mall, possible PSP.
12/3/2016 2:56:00 PM - Incident\# 2807998 (1 lost trip, 116 lost minutes)
Operator reports of Stabbing aboard the Train.
Train 108
(107B) 117
T-400
Wardlow Station, Track 1, Northbound

12/8/2016 4:25:00 PM - Incident\# 2810231 (0 lost trips, 15 lost minutes)
LASD Deputy Lane reports a robbery at the Artesia Station platform.
12/9/2016 9:12:00 AM - Incident\# 2810516 (0 lost trips, 12 lost minutes)
Train delay due to police activity
12/11/2016 11:56:00 PM - Incident\# 2811097 (0 lost trips, 18 lost minutes)
Person having a seizure aboard car 162, Train 108.
Train 108
T-413
Consist 144-162-138
103rd Street Station, Track 1 NB
12/17/2016 7:25:00 AM - Incident\# 2813568 (0 lost trips, 22 lost minutes)
Passenger vehicle was was partially blocking track 2 at San Pedro
Train 104
T-321
126-151-130
San Pedro, Trk. 1, northbound

12/19/2016 7:26:00 PM - Incident\# 2814356 (12 lost trips, 2,012 lost minutes)
Blockade
Train 110 NB Track \#1 20th X-ing
T-201
(126A)-151-130

12/20/2016 5:32:00 AM - Incident\# 2814448 (0 lost trips, 6 lost minutes)
Passenger reporting individual smoking illegal drugs.
12/20/2016 8:10:00 PM - Incident\# 2814774 (0 lost trips, 15 lost minutes)
LASD reports of a passenger on board train 108 that assualted another passenger.
Train 108
T-250
149-114-153
Grand station, Trk. 1, northbound
12/29/2016 6:34:00 AM - Incident\# 2817281 (16 lost trips, 2,682 lost minutes)
Bomb Threat involving Long Beach Police Dept patrol car at 1st and Pine.
12/30/2016 3:36:00 PM - Incident\# 2817915 (2 lost trips, 350 lost minutes)
Train 102 reports a semi-truck blocking tracks 1 and 2 at 41st Grade Crossing

12/31/2016 1:27:00 PM - Incident\# 2818101 (2 lost trips, 323 lost minutes)
Trespasser standing track, 1 Hill \& Long Beach Bl facing northbound in front of train refusing to clear.

## Other Incidents:

12/11/2016 9:52:00 AM - Incident\# 2811000 (2 lost trips, 348 lost minutes)
Late Pull Out.

12/19/2016 3:51:00 AM - Incident\# 2813926 (0 lost trips, 16 lost minutes)
ATP failure on 129A; train could not clear interlocking.
Train 102
T-335
(129A)-115-101
NB, Mainyard Interlocking 3N, arrival track

12/20/2016 5:00:00 AM - Incident\# 2814431 (0 lost trips, 17 lost minutes)
Train delay from the yard
Train 109
T-390
233-239-247
Blue LineYard
17 minute delay

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 26,758 hours operated, there were approximately 56 total hours of service delays.

|  |  | Revenue |  |
| :--- | ---: | ---: | :---: |
| December 2016 Service Hours * | Hours | Per Cent |  |
| Revenue Hours without Delays | 26,702 | $99.8 \%$ |  |
| Cancelled + Delayed Hours | 56 | $0.2 \%$ |  |
| Total Revenue Hours | $\mathbf{2 6 , 7 5 8}$ | $\mathbf{1 0 0 . 0 \%}$ |  |


| Summary of the major contributors: | Count | Hours | Per Cent |
| :--- | ---: | ---: | ---: |
| Operations | 3 | 0.3 | $0.5 \%$ |
| Accidents | 0 | 0.0 | $0.0 \%$ |
| Vehicle Maintenance | 9 | 20.4 | $36.2 \%$ |
| Wayside | 3 | 3.2 | $5.6 \%$ |
| Police \& Health | 10 | 29.7 | $52.7 \%$ |
| Other | 2 | 2.8 | $4.9 \%$ |
| Total | $\mathbf{2 7}$ | $\mathbf{5 6 . 4}$ | $\mathbf{1 0 0 . 0 \%}$ |

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



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

## Operations Incidents:

12/18/2016 4:55:00 PM - Incident\# 2813853 (0 lost trips, 10 lost minutes)
T-012 reported Emergency intercom activation at Wilshire Vermont AR Platform.

12/23/2016 11:44:00 AM - Incident\# 2815748 (0 lost trips, 6 lost minutes)
T-074 reports he needs to operate in ATO due to his eyes burning, head ache, does not feel safe to operate in MTO. T-074 states symptoms resulted from the strong odor of urine from an individual that has been urinating on trains through out the morning.

12/25/2016 5:14:00 PM - Incident\# 2816198 (0 lost trips, 2 lost minutes)
Train 201 T-199 reports a patron jumped onto the AR Trackway, at Westlake Station.
Vehicle Maintenance Incidents:
12/1/2016 8:50:00 AM - Incident\# 2806872 (0 lost trips, 9 lost minutes)
No Hollywood Station AR Track, Train-204 T-10 consist \#522-527-530-521-512-511 with several door issues on car \#512.
12/2/2016 6:13:00 PM - Incident\# 2807771 (1 lost trip, 155 lost minutes)
T-015 reported friction won't release on car 521.
T-015
Train 215
Cars: (521) 530517518507510
Union Station AL West
12/6/2016 4:32:00 PM - Incident\# 2809294 (0 lost trips, 7 lost minutes)
Train 214 ( $521,530,513,514,515,516$ ) T-328, Union Station, AL reports reocurring emergency brake application. Operting car 565.

12/8/2016 12:35:00 AM - Incident\# 2809842 (1 lost trip, 158 lost minutes)
Operator reports CB1 trip \& low air pressure on cars 519/526.
Train 209
T-317
Cars 527522 (519 526).
Wilshire Normandie BR west.

12/8/2016 5:20:00 AM - Incident\# 2809869 (4 lost trips, 610 lost minutes)
Low Air Pressure with emergency brakes and parking brakes applied
Train 211
T-012
Cars 543-544-545-546-(539)-540
AL Between Universal City and Hollywood Highland CP 43

12/8/2016 10:25:00 AM - Incident\# 2810124 (0 lost trips, 4 lost minutes)
Train $208(507,510,521,530)$ T-278, North Hollywood Station, AR, reports emegency brake application.
12/12/2016 10:35:00 AM - Incident\# 2811307 (1 lost trip, 159 lost minutes)
Car 550 Emergency Brake Application, unable to reset
Train 209
T-328
Consist 581-582-549-550

12/25/2016 6:25:00 AM - Incident\# 2816121 (1 lost trip, $\mathbf{1 1 6}$ lost minutes)
Emergency brakes self apply in the west interlocking while departing Union Station.
Train-208
T-312
Westbound Union
(511) 512509508

12/30/2016 11:36:00 PM - Incident\# 2817984 (0 lost trips, 8 lost minutes)
Doors do not open on car 531,532,593,595(543)544.
Universal City Station
Train \#214, T-199, AL, eastbound.

## Wayside Incidents:

12/5/2016 10:07:00 AM - Incident\# 2808598 (0 lost trips, 8 lost minutes)
Westlake/MacArthur AL Track, Train-201 T-15 575-576-580-579 requesting authorization to invest smoke in tunnel just east of station location.

12/11/2016 10:39:00 PM - Incident\# 2811087 (1 lost trip, 174 lost minutes)
Breakers D03 Vermont Beverly and D08 Wilshire Vermont not able to close.
12/29/2016 2:02:00 PM - Incident\# 2817487 (0 lost trips, 8 lost minutes)
TRACS indicated Union Station West interlocking switch 1A, 1B out of correspondence.

## Police \& Health Incidents:

12/3/2016 2:20:00 PM - Incident\# 2808006 (2 lost trips, 232 lost minutes)
Man with a gun on Train 208 car 587 at North Hollywood.

12/5/2016 2:57:00 AM - Incident\# 2808641 (0 lost trips, 5 lost minutes)
Report of male black adult, half naked causing disturbance.
12/8/2016 5:38:00 PM - Incident\# 2810248 (0 lost trips, 4 lost minutes)
Union Station female patron requesting medical assistance on board Train \# 214 A/L Platform.
12/10/2016 4:36:00 AM - Incident\# 2810745 (O lost trips, 14 lost minutes)
Altercation on Train 202
T-278
Cars 537-538-547-(548)
Hollywood Highland AR West
12/15/2016 8:08:00 AM - Incident\# 2812653 (0 lost trips, 10 lost minutes)
Altercation between two females
Train 210
T-127
Cars (533)-534-573-574-535-536
Pershing Square AR West

12/19/2016 10:05:00 AM - Incident\# 2814138 (10 lost trips, 1,484 lost minutes)
Reports trespasseron the AR track walking towards Civic Center.
12/25/2016 11:16:00 AM - Incident\# 2816155 (0 lost trips, 10 lost minutes)
LASD and LAPD requeted trains 205 and 208 to hold at Vermont/Santa Monica, due to suspects currently at platform level.

12/26/2016 3:11:00 PM - Incident\# 2816345 (0 lost trips, 2 lost minutes)
Train 207 car 578 an individual is laying unresponsive on the floor.
12/31/2016 5:04:00 AM - Incident\# 2818000 (0 lost trips, 10 lost minutes)
Train 204 T-276 reports a trespasser on the Vermont/Santa Monica interlocking.
12/31/2016 5:15:00 PM - Incident\# 2818142 (0 lost trips, 12 lost minutes)
Patron reports being assaulted, medical assistance requested.
Westlake Station
Other Incidents:
12/6/2016 8:57:00 AM - Incident\# 2809018 (0 lost trips, 11 lost minutes)
Train 203 reports smoke in the east interlocking at Westlake Station.
T-80
517518507508
Westlake Station AL Eastbound

12/16/2016 3:50:00 AM - Incident\# 2813057 (1 lost trip, 156 lost minutes)
Loss of SCADA due to update.

## MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

COMPLIANCE WITH SCHEDULED VEHICLE HOURS 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 8,170 hours operated, there were approximately 38 total hours of service delays.

|  |  | Revenue |
| :--- | ---: | ---: |
| December $\mathbf{2 0 1 6}$ Service Hours * | Hours | Per Cent |
| Revenue Hours without Delays | 8,133 | $99.5 \%$ |
| Cancelled + Delayed Hours | 38 | $0.5 \%$ |
| Total Revenue Hours | $\mathbf{8 , 1 7 0}$ | $\mathbf{1 0 0 . 0 \%}$ |


| Summary of the major contributors: | Count | Hours | Per Cent |
| :---: | :---: | :---: | :---: |
| Operations | 1 | 0.1 | 0.2\% |
| Accidents | 0 | 0.0 | 0.0\% |
| Vehicle Maintenance | 33 | 34.0 | 90.3\% |
| Wayside | 2 | 0.7 | 1.9\% |
| Police \& Health | 3 | 1.6 | 4.2\% |
| Other | 3 | 1.3 | 3.4\% |
| Total | 42 | 37.7 | 100.0\% |

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



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

## Operations Incidents:

12/20/2016 4:39:00 PM - Incident\# 2814725 (0 lost trips, 5 lost minutes)
Train Delay, 5 minutes
Train \#343
T-255
Norwalk Station, Track \#001, Westbound
Vehicle Maintenance Incidents:
12/1/2016 6:27:00 AM - Incident\# 2806789 (1 lost trip, 68 lost minutes)
Propulsion Fault / Speed Restriction / ATP Fail
(204)-215

Train 244
T-20
Douglas, eastbound
12/1/2016 1:36:00 PM - Incident\# 2807035 (1 lost trip, 68 lost minutes)
ATP Failure
Car 214
Train 334
Mile Marker 8.9
Eastbound.

12/1/2016 6:16:00 PM - Incident\# 2807148 (1 lost trip, 75 lost minutes)
ATP Failure/door will not open
Car 228
Train 352
Lakewood Station
Westbound

12/3/2016 4:31:00 AM - Incident\# 2807848 (0 lost trips, 10 lost minutes)
Propulsion faults. Speed restriction.
Train 333
Track 2, E/B
T-458
Marine Station
ATO \& MTO modes
(213A)-204

12/4/2016 10:25:00 AM - Incident\# 2808197 (0 lost trips, 5 lost minutes)
Propulsion fault on 205.
Train 333
T-260
(205)-225

EB, Douglas Station, Track 2

12/5/2016 7:40:00 AM - Incident\# 2808496 (1 lost trip, 79 lost minutes)
Friction Brakes
(226)-220

Train 332
T-112
Mariposa, Westbound, Track 1

12/5/2016 2:54:00 PM - Incident\# 2808711 (0 lost trips, 12 lost minutes)
Friction Brake Fault- No Movement 214B
Train 331
T-458
(214B)-225
Avalon, Track 2, East
12/5/2016 6:53:00 PM - Incident\# 2808785 (2 lost trips, 131 lost minutes) Friction brake fault on car (208)-204
Train 331
Track 2
Eastbound
Just west of crenshaw IL
ATO MODE

12/6/2016 4:47:00 AM - Incident\# 2808870 (0 lost trips, 9 lost minutes)
Auto Train Protection (Speed Limit), 225- (217)
Train \#344
T-274
Yard Interface, Track \#002, Eastbound
12/6/2016 1:07:00 PM - Incident\# 2809159 (0 lost trips, 15 lost minutes)
Friction Brake fault on car 214
T-458, train 333
(214)-208

Marine, track 2, east

12/6/2016 3:23:00 PM - Incident\# 2809241 (0 lost trips, 7 lost minutes)
Car 207 overshot platform in ATO
T-177, train 352
(207)-243

Lakewood, track 1, west
12/7/2016 1:54:00 PM - Incident\# 2809675 (2 lost trips, 147 lost minutes)
Propulsion fault
Train 335
Car 219
Westbound
Wilmington Pocket
12/7/2016 7:18:00 PM - Incident\# 2809792 (2 lost trips, 132 lost minutes)
Friction brake fault
Train 351
Car 226
Wilmington Station
Eastbound
12/8/2016 2:57:00 PM - Incident\# 2810209 (0 lost trips, 7 lost minutes)
Propulsion / Dynamic Brakes, (220A)-225
Train \#335
T-140
Aviation Station, Track \#002, Eastbound

12/9/2016 7:15:00 AM - Incident\# 2810442 (1 lost trip, 64 lost minutes)
Propulsion Fault / Speed Restriction / Pantograph Down
202-(222)
Train 346
T-141
Willowbrook, westbound

12/9/2016 2:14:00 PM - Incident\# 2810638 (3 lost trips, 193 lost minutes)
Friction brakes no movement (214)-208
T-343
Train 333
Track 1
Westbound
West of El Segundo station
ATO MODE

12/12/2016 4:12:00 AM - Incident\# 2811134 (0 lost trips, 5 lost minutes)
Propulsion Fault Speed Restriction
(221)-208

Train 338
T-210
Mariposa, eastbound

12/13/2016 6:45:00 AM - Incident\# 2811696 (0 lost trips, 15 lost minutes)
Car 212B Re-occurring overspeed and loss of cab signals
Train 333
T-458 Mariposa Station track 1 Westbound
T-112 Avalon Station track 1 Westbound
Consist 212-222

12/14/2016 5:08:00 AM - Incident\# 2812093 (1 lost trip, 76 lost minutes)
Report of flat wheels due to self applying friction brakes.
Train 337
T-141
Track 2, E/B
Hawthorne Station
ATO mode
(214A)-204

12/16/2016 3:23:00 PM - Incident\# 2813415 (5 lost trips, 322 lost minutes)
CB1 trip on car (211)-210
T-458
Train 346
Track 2
Eastbound
El Segundo station
ATO MODE

12/16/2016 5:52:00 PM - Incident\# 2813482 (1 lost trip, 64 lost minutes)
Propulsion Fault unable to clear on Train 343
(228)-218

T-220
Lakewood Station West Bound Track \#1.
12/18/2016 12:30:00 PM - Incident\# 2813809 (0 lost trips, 8 lost minutes)
Car 204B prop fault speed restriction
T-257
Train-334
Consist(204B)220
Wilmington Station, Track\#1, Eastbound
12/19/2016 4:18:00 AM - Incident\# 2813930 (1 lost trip, 74 lost minutes)
Propulsion Fault
(203)-218

Train 333
T-202
Yard Interface, westbound
12/19/2016 3:03:00 PM - Incident\# 2814290 (2 lost trips, 139 lost minutes)
Propulsion / Dynamic Brakes, cars \#(210A)-213
Train \#334
T-044
Avalon Station, Track \#002, Eastbound.
12/19/2016 10:02:00 PM - Incident\# 2814377 (1 lost trip, 66 lost minutes)
Operator reports overspeed on Car 212.
Car 212
Train 344
T-450
Douglas TRK 2, eastbound
12/23/2016 6:50:00 AM - Incident\# 2815633 (1 lost trip, 70 lost minutes)
\Train 340 with T-257 reports Friction Brake faults at Wilmington west pocket on track 2 with no movement. Car 207B with 203
12/23/2016 9:52:00 AM - Incident\# 2815710 (0 lost trips, 10 lost minutes)
Propulsion / Dynamic Brakes
(222)-205
T-57
Train 333
Aviation, Eastbound, Track 2
12/27/2016 6:20:00 AM - Incident\# 2816476 (0 lost trips, 5 lost minutes)
Propulsion faults with speed restriction.
Train 340
Track 2, E/B
Marine Station
T-257
ATO \& MTO modes
(222B)-226
12/28/2016 6:46:00 AM - Incident\# 2816901 (0 lost trips, 8 lost minutes)
Train 334, LRV's (204A) and 22.
Avalon station westbound on track 1.
Prop Fault and only doing 30 mph .
12/28/2016 10:03:00 AM - Incident\# 2816974 (0 lost trips, 16 lost minutes)
Train 335, LRV's 217 and 205.
Westbound track 1 Long Beach Station.
Prop fault with speed restriction.
12/28/2016 3:09:00 PM - Incident\# 2817092 (0 lost trips, 8 lost minutes)
Operator reports friction brake fault with no movement.
Cars 223, 214
Train 336
T-396
6.3 TRK 2, eastbound
12/28/2016 8:44:00 PM - Incident\# 2817210 (1 lost trip, 72 lost minutes)
Operator reports that he has an overspeed on Car 226A.
Cars 222, 226
Train 342
T-496
Lakewood TRK 1, westbound
12/31/2016 6:42:00 PM - Incident\# 2818146 (1 lost trip, 59 lost minutes)
Propulsion Fault on Train 351
Train 35
203-(219)
T-458
Lakewood Station Westbound Track \#1.

## Wayside Incidents:

12/21/2016 12:14:00 PM - Incident\# 2815007 (0 lost trips, 24 lost minutes)
Track circuit 311 false occupancy.

12/29/2016 6:04:00 AM - Incident\# 2817271 (0 lost trips, 20 lost minutes)
Track Circuit 23: Track \#002, False Occupancy
SCADA/ARINC
Marine Interlocking
Police \& Health Incidents:
12/1/2016 10:07:00 AM - Incident\# 2806898 (1 lost trip, 74 lost minutes) Medical Emergency at Lakewood Station

12/3/2016 1:34:00 PM - Incident\# 2807978 (0 lost trips, 6 lost minutes)
LASD reports Trespasser west of wilmington station
12/8/2016 2:09:00 PM - Incident\# 2810177 (0 lost trips, 15 lost minutes)
Altercations aboard trains, cars (204)-218
Train \#331
T-496
Harbor Station, Track \#002, Eastbound.

## Other Incidents:

12/12/2016 6:29:00 AM - Incident\# 2811168 (1 lost trip, 66 lost minutes)
Train 341 has been dispatched out late from Green Line Yard.
12/12/2016 4:13:00 PM - Incident\# 2811494 (0 lost trips, 6 lost minutes)
Operator reports a large amount to fecess on Car 216.
Cars (216), 218
Train 332
T-409
Marine, TRK 2, westbound

12/19/2016 9:56:00 AM - Incident\# 2814108 (0 lost trips, 4 lost minutes)
Emergency Exit: Emergency Access Gate
SCADA
Mariposa West

## MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

COMPLIANCE WITH SCHEDULED VEHICLE HOURS CHART


39
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 19,666 hours operated, there were approximately 651 total hours of service delays.

|  | Revenue |  |
| :--- | ---: | ---: |
| December 2016 Service Hours * | Hours | Per Cent |
| Revenue Hours without Delays | 19,014 | $96.7 \%$ |
| Cancelled + Delayed Hours | 651 | $3.3 \%$ |
| Total Revenue Hours | $\mathbf{1 9 , 6 6 6}$ | $\mathbf{1 0 0 . 0 \%}$ |


| Summary of the major contributors: | Count | Hours | Per Cent |
| :--- | ---: | ---: | ---: |
| Operations | 5 | 4.6 | $0.7 \%$ |
| Accidents | 1 | 5.2 | $0.8 \%$ |
| Vehicle Maintenance | 27 | 43.1 | $6.6 \%$ |
| Wayside | 4 | 0.7 | $0.1 \%$ |
| Police \& Health | 11 | 597.4 | $91.7 \%$ |
| Other | 3 | 0.4 | $0.1 \%$ |
| Total | $\mathbf{5 1}$ | $\mathbf{6 5 1 . 5}$ | $\mathbf{1 0 0 . 0 \%}$ |

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



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

## Operations Incidents:

12/3/2016 12:46:00 AM - Incident\# 2807825 (1 lost trip, 234 lost minutes)
Train 422 SB Trip Cancelled Citrus to Duarte

12/9/2016 12:11:00 PM - Incident\# 2810571 (0 lost trips, 18 lost minutes)
Train Delay See M3\#2,810,526, Scheduling problem
Train \#452
T-151
South Pasadena Station, Southbound

12/16/2016 6:15:00 AM - Incident\# 2813109 (O lost trips, 10 lost minutes)

R-89 and R-93 will take over trains on the mainline as instruction trains from Azusa / Citrus to Union Station.

12/21/2016 10:34:00 AM - Incident\# 2814974 (0 lost trips, 4 lost minutes)
Train Delay, radio communication announcement of the month being made Train \#454
T-452
Atlantic Station, Track \#00, Northbound

12/27/2016 6:14:00 PM - Incident\# 2816799 (0 lost trips, 10 lost minutes)
Train 402 Lost Headway SB From Azusa Citrus Station

## Accidents:

12/29/2016 12:10:00 AM - Incident\# 2817232 (1 lost trip, 314 lost minutes)
10-72 south of Arcadia Station approximately 200 feet
T-137
Train 439
Consist (736A)718
Arcadia Station, Track \#1, Northbound
Vehicle Maintenance Incidents:
12/1/2016 4:59:00 AM - Incident\# 2806771 (1 lost trip, 232 lost minutes)
(742)-746

HSCB Fault W/ Speed Restriction
Train 405
NB Irwindale
T-14

12/1/2016 5:18:00 AM - Incident\# 2806774 (0 lost trips, 13 lost minutes)
(1012)-1010

Propulsion Fault/No Movement
Train 413
SB Indiana
T-19

12/2/2016 6:43:00 AM - Incident\# 2807310 (0 lost trips, 10 lost minutes)
High Speed Fault / Propulsion Dynamic Brake Fault/Speed Rest.
717-(724)
T-156
Train 417
Atlantic Station, northbound

12/2/2016 8:04:00 AM - Incident\# 2807349 (0 lost trips, 6 lost minutes)
Auto Train Protection (Speed Limit), Cars \#(1009A)-1011
Train \#404
T-018
Allen Interlocking, Track \#002, Southbound.

12/3/2016 7:03:00 PM - Incident\# 2808073 (0 lost trips, 12 lost minutes)
(1008)-1007

ATP Failure
Train 404
NB Little Tokyo
T-452

12/7/2016 12:01:00 PM - Incident\# 2809638 (2 lost trips, 462 lost minutes)
Report of smoke on LRV 1007-1010
T-203
Train 413
LRV 1007-1010
Arcadia Station, Track 1, northbound.

12/7/2016 7:56:00 PM - Incident\# 2809804 (0 lost trips, 20 lost minutes)
Pantograph Damage 741
Train 403
T-290
741-750
Tk 1 NB Monrovia Station

12/8/2016 11:36:00 AM - Incident\# 2810115 (0 lost trips, 18 lost minutes)
Propulsion / Dynamic Brakes LRV 1012-1006
T-103
Train 403
LRV 1012-1006
Chinatown Station, Track 1, northbound.

12/9/2016 5:15:00 PM - Incident\# 2810677 (0 lost trips, 13 lost minutes)
HSCB Trip, Cars \#(716B)-724
Train \#406
T-189
Fillmore Station, Track \#002, Southbound.
12/10/2016 2:09:00 AM - Incident\# 2810737 (0 lost trips, 7 lost minutes)
(1006)-1009

Propulsion/APS Fault
Train \#434
SB Arcadia
T-290

12/13/2016 5:07:00 AM - Incident\# 2811619 (0 lost trips, 12 lost minutes) Train 416, Cars (1012), 1011, and 1008.
APU/Citrus Station, Track 2 south.
Unable to clear carwash mode ( 5 mph ).
12/13/2016 1:18:00 PM - Incident\# 2811882 (0 lost trips, 5 lost minutes)
LVPS fault on car 1015
R-93, train 403
(1015)-1005

Atlantic Station, track 2, north

12/13/2016 6:00:00 PM - Incident\# 2811956 (1 lost trip, 235 lost minutes)
CCTV received report from a passenger that a set of doors opened and closed in car 739B while train was in motion.

12/17/2016 4:28:00 PM - Incident\# 2813679 (0 lost trips, 7 lost minutes)
Propulsion / Dynamic Brakes, cars \#(719-737)
Train \#410
T-452
Pasadena Monterey, Track \#00, Southbound

12/19/2016 8:09:00 AM - Incident\# 2814024 (0 lost trips, 4 lost minutes)
Train 411, Cars (713) and 717.
APU/Citrus station, platform 2 south.
HSCB and TCU trouble.

12/19/2016 9:21:00 PM - Incident\# 2814380 (0 lost trips, 10 lost minutes)
Friction Brake fault on out of service train 425
Track 1 NB Filmore Station
T-189
731-749

12/19/2016 11:05:00 PM - Incident\# 2814385 (O lost trips, 12 lost minutes)
Major and Minor Propulsion fault 718
T-203
Track 2 SB APU Citrus Station
718-726-719

12/21/2016 10:11:00 AM - Incident\# 2814969 (0 lost trips, 12 lost minutes)
Announcements, P.A not working, cars \#1015-1007
Train\#404
T-019
Downtown Azusa, Track \#002, Southbound

12/21/2016 6:55:00 PM - Incident\# 2815136 (1 lost trip, 244 lost minutes)
Prop Faults
Train 401
Cars (743B-736)
T-447
Southbound, track 2, Arcadia station

12/21/2016 8:31:00 PM - Incident\# 2815145 (1 lost trip, 244 lost minutes)
Prop Faults
Train 454
Cars (706-707)
T-137
Southbound, track 2, Arcadia station

12/23/2016 4:35:00 AM - Incident\# 2815584 (0 lost trips, 25 lost minutes)
No Fault - No Movement
(1006)-1005

T-103
Train 455
4BS, Southbound, Track 2
12/26/2016 7:33:00 AM - Incident\# 2816262 (0 lost trips, 7 lost minutes)
Train 407, LRV's 1010 and 1015.
APU/Citrus station, platform 1 south.
Low air pressure in both cars.

12/27/2016 5:58:00 AM - Incident\# 2816455 (1 lost trip, 234 lost minutes)
No Head lights
750-(726B)
Train 420
T-280
Downtown Azusa, southbound

## 12/27/2016 5:36:00 PM - Incident\# 2816787 (0 lost trips, 6 lost minutes)

Train $431(731,724)$ T-207, Allen Station, track 2 has reocurring propulsion fault in car 731.

12/27/2016 6:43:00 PM - Incident\# 2816801 (0 lost trips, 12 lost minutes)
(1013)-1008-1011

Propulsion Fault/Speed Restriction
Train 440
SB Duarte
T-207/433

12/28/2016 5:45:00 AM - Incident\# 2816882 (2 lost trips, 488 lost minutes)
ATP Fail / No Movement
1011-(1008)
Train 403
T-159
Sierra Madre signal 8s, southbound

12/28/2016 4:22:00 PM - Incident\# 2817124 (1 lost trip, 234 lost minutes)
Train $405(713,731)$ T-499 departing APU through Irwindale Station reports reocurring ATP fault indications with no movement which do clear with trouble shooting.

## Wayside Incidents:

12/13/2016 8:35:00 AM - Incident\# 2811716 (0 lost trips, 5 lost minutes)
Loss Of Cab Signaling/Directionals at Fillmore Station, track 2

12/17/2016 7:15:00 AM - Incident\# 2813559 (0 lost trips, 9 lost minutes)
MT-146 and MT-11 will perform debris removal from Pasadena Monterry grade-crossing to Arroyo Seco on track 1.

12/18/2016 4:45:00 AM - Incident\# 2813732 (0 lost trips, 9 lost minutes)
ARINC SUMMARY ALARMS indicates crossing gates are held down at Fremont, Hope, Mission, El Centro, Orange Grove and Indiana grade crossings due to track circuit overlay alarms.

12/27/2016 11:20:00 PM - Incident\# 2816868 (O lost trips, 16 lost minutes)
MS-152 and MS-12 will replace the switch machine at Sierra Madre IL switch 3b.
Police \& Health Incidents:
12/1/2016 7:37:00 AM - Incident\# 2806846 (0 lost trips, 5 lost minutes)
Passenger Problem verbal altercation onboard LRV 737B.
12/3/2016 1:24:00 PM - Incident\# 2807975 (0 lost trips, 12 lost minutes)
Alleged male with gun.

12/3/2016 3:22:00 PM - Incident\# 2808007 (1 lost trip, 224 lost minutes)
Car 721A sick.
T-180
Train 412
Cars 750-(721B)
Citrus Station, Track 2, southbound.

12/7/2016 8:20:00 AM - Incident\# 2809542 (21 lost trips, 4,873 lost minutes)
Individual left a brief case wrapped with a T-shirt on the north end of Lake Station.

12/8/2016 12:39:00 PM - Incident\# 2810141 (0 lost trips, 12 lost minutes)
Verbal sexual harassment on board Train 401 LRV 728 at Atlantic Station.
12/12/2016 4:33:00 PM - Incident\# 2811507 (0 lost trips, 23 lost minutes)
Operator notified control of an individual making threats against passengers. Heritage Square station
train 425
T-134
NB Tk 1
721-719

12/14/2016 8:30:00 PM - Incident\# 2812479 (0 lost trips, 13 lost minutes)
Trains held clear of Chinatown while LASD apprehends someone.
12/18/2016 7:09:00 PM - Incident\# 2813868 (0 lost trips, 4 lost minutes)
Individual Was Vomiting and Requested Medical Assistance

12/22/2016 4:50:00 AM - Incident\# 2815217 (129 lost trips, 30,201 lost minutes)
OCS damaged. Esatbound lanes on 210 freeway. East of San Gabriel Bvd. Tractor trailor vehicle drifted into the ROW causing damage to the concrete barrier and OCS poles. Mile post 12.9.

12/22/2016 3:23:00 PM - Incident\# 2815460 (2 lost trips, 468 lost minutes)
Blockade, Cars \#(707-705)
Train \#453
T-207
Rowan Street, Track \#002, Northbound.

12/22/2016 6:43:00 PM - Incident\# 2815541 (0 lost trips, 10 lost minutes)
Individual Was Reported to be Bleeding on Car 718

## Other Incidents:

12/10/2016 5:10:00 PM - Incident\# 2810885 (0 lost trips, 8 lost minutes)
Dity car (739), 742
Train 410
T-189
Sierra Madre Station
Northbound

12/15/2016 9:08:00 AM - Incident\# 2812686 (0 lost trips, 5 lost minutes)
Dirty car 720-713
T-440
Train 402
LRV 720-713
Duarte Station, Track 2, southbound.
12/19/2016 7:44:00 AM - Incident\# 2814014 (0 lost trips, 13 lost minutes)
Train 405 reports medical emergency.

## MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

COMPLIANCE WITH SCHEDULED VEHICLE HOURS CHART


## COMPLIANCE WITH SCHEDULED TRAIN MILES CHART



## ON-TIME PULL OUTS CHART



IN-SERVICE ON-TIME PERFORMANCE CHART


LOST TRIPS


LOST HOURS


## VERTICAL TRANSPORTATION AVAILABILITY




## EXPO LINE

Out of a total of 19,323 hours operated, there were approximately 95 total hours of service delays.

|  | Revenue |  |
| :--- | ---: | ---: |
| December 2016 Service Hours * | Hours | Per Cent |
| Revenue Hours without Delays | 19,228 | $99.5 \%$ |
| Cancelled + Delayed Hours | 95 | $0.5 \%$ |
| Total Revenue Hours | $\mathbf{1 9 , 3 2 3}$ | $\mathbf{1 0 0 . 0 \%}$ |


| Summary of the major contributors: | Count | Hours | Per Cent |
| :--- | ---: | ---: | ---: |
| Operations | 4 | 8.8 | $9.2 \%$ |
| Accidents | 1 | 45.6 | $47.9 \%$ |
| Vehicle Maintenance | 19 | 34.9 | $36.7 \%$ |
| Wayside | 0 | 0.0 | $0.0 \%$ |
| Police \& Health | 5 | 0.9 | $0.9 \%$ |
| Other | 6 | 5.0 | $5.3 \%$ |
| Total | $\mathbf{3 5}$ | $\mathbf{9 5 . 1}$ | $\mathbf{1 0 0 . 0 \%}$ |

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



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

## Operations Incidents:

12/7/2016 3:54:00 PM - Incident\# 2809734 (0 lost trips, 20 lost minutes)
Service delay due to a stalled train on platform 2 at 7th and Metro.
12/10/2016 10:07:00 PM - Incident\# 2810923 (0 lost trips, 11 lost minutes)
T-530 violated Rule 4076 Reporting Delays.
12/14/2016 10:56:00 PM - Incident\# 2813039 (0 lost trips, 22 lost minutes)
Delays due to 2812559

12/23/2016 7:29:00 PM - Incident\# 2815883 (4 lost trips, 474 lost minutes)
Train delay
Train 620 cars 1044-1045
Train 609 cars 1036-1019

## Accidents:

12/21/2016 5:26:00 PM - Incident\# 2815126 (23 lost trips, 2,733 lost minutes)
Train-620
T-265
Cars (1040B)-1030
Southbound, Track \#4
Flower/ 23rd Street
Auto vs. Train
Vehicle Maintenance Incidents:
12/1/2016 5:50:00 AM - Incident\# 2806766 (1 lost trip, 105 lost minutes)
Propulsion / Dynamic Brakes
(1043B)-1041
Train 612
T-214
Bundy, Northbound, Track 3
12/1/2016 6:00:00 PM - Incident\# 2807150 (0 lost trips, 6 lost minutes)
Door malfunction
Train 607
Track \#3 NB Westwood/ Rancho Park Station
T-525
(152A)-104
12/2/2016 7:08:00 AM - Incident\# 2807338 (0 lost trips, 15 lost minutes)
Reports door problem.
Train \#605
T-358
1040-1050
Pico Station, Southbound, Track 2
12/10/2016 3:44:00 PM - Incident\# 2810871 (0 lost trips, 5 lost minutes)
Car 142B lost movement.
T-529
Train 602
Cars (142B)-102-147
17th St Interlocking, Track 3, northbound.

12/11/2016 1:08:00 AM - Incident\# 2810935 (1 lost trip, 141 lost minutes) Car 246A lost movement, multiple faults.
T-507
Train 603
Cars (246A)-238-250
La Cienega Station, Track 4, southbound
12/14/2016 4:46:00 AM - Incident\# 2812081 (1 lost trip, 131 lost minutes)
Propulsion / Dynamic Brakes
(246)-238

Train 612
T-241
17th Street, Northbound, Track 3
12/14/2016 6:47:00 PM - Incident\# 2812454 (4 lost trips, 491 lost minutes) Operator reports no movement and no indications.
Cars 229, 244, 230
Train 204
T-524
Portal TRK 2, southbound
12/15/2016 1:13:00 AM - Incident\# 2812552 (1 lost trip, 119 lost minutes)
Train operator reports of no movement.
Train 625
T-526
Cars (246A), 238
Track 4, Farmdale Station, Southbound
12/15/2016 4:51:00 PM - Incident\# 2812910 (2 lost trips, 251 lost minutes) Operator reports propulsion failure with a speed restriction on Car 155A.
Car 143, 128, 155A
Train 601
T-162
La Cienega TRK 4, southbound

12/15/2016 5:58:00 PM - Incident\# 2812917 (3 lost trips, 358 lost minutes)
Operator reports she cannot see out of the window of 109A.
Cars 162, 109
Train 604
T-514
Bundy TRK 4, southbound.
12/18/2016 1:33:00 AM - Incident\# 2813724 (0 lost trips, 10 lost minutes)
Reports of friction brake fault
Train \# 603
T-521
(104A)-144-131
Santa Monica Staion, Track 3, Northbound

12/18/2016 4:40:00 AM - Incident\# 2813726 (1 lost trip, 148 lost minutes)
Car 249 Propulsion Dynamic Brakes fault with speed restriction, at Westwood operator reports doors are not opening.
Train 604
T-089
Track 3 Northbound at Bundy Station
Train 604
T-89
Consist 236-249-229

12/18/2016 5:17:00 AM - Incident\# 2813731 (0 lost trips, 7 lost minutes)
No Fault/ No movement
Train 601
T-374
(1016A)-1048-1018
Track 3 Northbound at Lincoln Blvd (South of 17th)

12/19/2016 5:42:00 AM - Incident\# 2813941 (0 lost trips, 5 lost minutes)
Train 601
T-136
Cars (104)-152-133
Santa Monica station tk4 N/B

12/21/2016 10:59:00 PM - Incident\# 2815168 (0 lost trips, 10 lost minutes)
Train 625
T-501
Cars (102)121-162
Santa Monica tk 4

12/27/2016 9:24:00 AM - Incident\# 2816667 (O lost trips, 12 lost minutes)
Door Problem
Train \#608.
T-405.
LRV- (166A \& B), 102, 155.
Santa Monica Station, Track \#3, Northbound.

12/27/2016 2:26:00 PM - Incident\# 2816734 (0 lost trips, 30 lost minutes)
Prop/Fault with speed restriction.
Train \#601.
T-510.
LRV- (166A),102, 151.
Palms Station, Track \#4, Southbound.

12/30/2016 7:22:00 AM - Incident\# 2817711 (1 lost trip, 132 lost minutes)
Friction brake fault with recurring no movement.
Train 603
T-136
(1023-1027-1050)
SB, Western Station, Track 4

12/30/2016 4:39:00 PM - Incident\# 2817936 (1 lost trip, 119 lost minutes)
Train operator reports flats on train.
Train 622, T-381
(1048A)-1039
Track 4, 17th Street, South

Police \& Health Incidents:
12/1/2016 10:32:00 PM - Incident\# 2807196 (0 lost trips, 6 lost minutes)
Passenger brandishing knife
Train 602 Track \#3 Santa Monica Station
T-525
(236)-238

12/15/2016 1:25:00 PM - Incident\# 2812825 (0 lost trips, 24 lost minutes) Stabbing Train 601 departing Santa Monica Station

12/23/2016 9:55:00 AM - Incident\# 2815708 (0 lost trips, 5 lost minutes)
Operator reports of a verbal argument between two passengers
Train 602
T-472
(1020)1035-1017

Westwood station, Trk. 3, northbound
12/26/2016 6:19:00 PM - Incident\# 2816377 (0 lost trips, 9 lost minutes)
Train Delay
Train \#608, T-517
(1038B)-1024-1014
SB, Crenshaw Station, Track \#4

12/30/2016 11:55:00 AM - Incident\# 2817842 (0 lost trips, 7 lost minutes)
Train 608 reports that a sick patron is on board his middle car 104

## Other Incidents:

12/3/2016 4:53:00 AM - Incident\# 2807849 (0 lost trips, 17 lost minutes)
Expo yard limits: 4 out late trains due to all cab doors being opened in multiple cars/trains. Delays were not initially as bad but were made worse by single track operations at yard limits.

12/13/2016 5:57:00 AM - Incident\# 2811644 (0 lost trips, 7 lost minutes)
Operator failed to report reason for 7 minute outlate. Scheduled pull-out 0549, Actual Pull out 0556

12/16/2016 5:56:00 AM - Incident\# 2813085 (0 lost trips, 19 lost minutes)
Rolled Out Late
T-230 missed out
Train \#604
Expo Yard.

12/16/2016 6:13:00 AM - Incident\# 2813097 (1 lost trip, 135 lost minutes)
Out Late, train \#617
Yard Controller R-1

12/16/2016 7:02:00 AM - Incident\# 2813170 (0 lost trips, 6 lost minutes)
Out Late, Train \#609
Cars \#(131-144-104)
Yarc Controller R-110
Expo Yard

12/30/2016 8:22:00 AM - Incident\# 2817650 (1 lost trip, 119 lost minutes)
4th Street Interlocking: Loss of SCADA: "INVALID" indication only; loss of "AUTO" and "CENTRAL" interlocking functions. Controller unable to clear signals or set switches.

## MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

COMPLIANCE WITH SCHEDULED VEHICLE HOURS CHART


39
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
    O Green - High probability of achieving the target (on track). Meets Target at $100 \%$ or better.
    〇 Yellow - Uncertain if the target will be achieved -- slight problems, delays or management issues. Falls below Target 70-99\%,
    Red - High probability that the target will not be achieved -- significant problems and/or delays. Falls below Target >70\%
    N/A = Not Available

[^1]:    * There is One Month lag in reporting this data

    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\%.
    ORed - High probability that the target will not be achieved -- significant problems and/or delays. Falls below Target $>70 \%$. N/A = Not Available

[^2]:    Expo Line Service did not begin until March 2016.

