Los Angeles County
Metropolitan Transportation Authority
Califomia

## OPERATIONS MONTHLY RAIL PERFORMANCE REPORT



## METRO RAIL PERFORMANCE - MARCH 2017

Contents Page
Systemwide Performance
Rail Scorecard ..... 3
Rail Mean Miles Between Major Failure by Vehicle Type ..... 5
Fleet Distribution Report ..... 10
Vehicle Availability by Division ..... 11
Cleanliness ..... 12
Lost Revenue Vehicle Hours by Category, by Division ..... 13
Rail Service Performance ..... 16
Workers Comp Claims ..... 20
Lost Work Days ..... 21
Vertical Transportation - Systemwide ..... 22Blue Line Performance
Performance Summary ..... 23
Major Incident Detail ..... 24
Performance Charts ..... 35
Red / Purple Line Performance
Performance Summary ..... 39
Major Incident Detail ..... 40
Performance Charts ..... 43
Green Line Performance
Performance Summary ..... 47
Major Incident Detail ..... 48
Performance Charts ..... 52
Gold Line Performance
Performance Summary ..... 56
Major Incident Detail ..... 57
Performance Charts ..... 61
Expo Line Performance
Performance Summary ..... 65
Major Incident Detail ..... 66
Performance Charts ..... 68

## 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 | Jan Month | Feb Month | Mar Month |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Systemwide |  |  |  |  |  |  |  |  |  |
| On-Time Pullouts | 99.55\% | 99.67\% | 99.63\% | 99.50\% | 99.64\% | $\bigcirc$ | 99.55\% | 99.51\% | 99.77\% |
| Mean Miles Between Chargeable Mechanical Failures | 28,829 | 34,524 | 30,482 | 27,911 | 29,061 | $\bigcirc$ | 30,510 | 33,481 | 29,637 |
| In-Service On-time Performance | 97.92\% | 98.39\% | 98.10\% | 98.00\% | 98.11\% | $\bigcirc$ | 97.24\% | 97.92\% | 98.28\% |
| Service Delivery Ratio | 99.12\% | 99.35\% | 99.22\% | 99.25\% | 99.17\% | $\bigcirc$ | 99.16\% | 98.89\% | 99.27\% |
| Traffic Accidents Per 100,000 Train Miles | 1.47 | 1.18 | 1.17 | N/A | 1.08 | N/A | 1.83 | 1.15 | 0.65 |
| CPUC Reportable Accidents per 100,000 Train Miles | 0.10 | 0.43 | 0.60 | 0.67 | 0.42 | $\bigcirc$ | 1.04 | 0.43 | 0.39 |
| Passenger Accidents per 100,000 Boardings | 0.025 | 0.013 | 0.016 | 0.009 | 0.027 | $\bigcirc$ | 0.010 | 0.023 | 0.071 |
| Complaints per 100,000 Boardings | 0.91 | 0.78 | 1.43 | 1.12 | 2.02 | $\bigcirc$ | 2.24 | 2.01 | 2.36 |
| New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours ${ }^{1,2}$ | 15.35 | 11.11 | 10.97 | 10.42 | 12.87 | $\bigcirc$ | 10.59 | 14.51 | 17.45 |
| Lost Work Days per 200,000 Exposure Hours ${ }^{1,2}$ | 861 | 880 | 482 | 458.16 | 745 | $\bigcirc$ | 579 | 800 |  |
| OSHA Injuries per 200,000 Exposure Hours ${ }^{1,2}$ | 8.18 | 6.68 | 6.32 | 6.00 | 8.83 | $\bigcirc$ | 7.70 | 9.33 |  |
|  |  |  |  |  |  |  |  |  |  |
| Wayside |  |  |  |  |  |  |  |  |  |
| Overdue Work Orders (Non-PMP) - Aging of Outstanding Work Orders | 67 | 160 | 673 | N/A | 2,121 | N/A | 250 | 414 | 77 |
| Past-Due Preventive Maintenance - Aging of Outstanding Work Orders | 0 | 1 | 25 | N/A | 246 | N/A | 13 | 44 | 43 |
| \% of Completed Inspections | 99.41\% | 99.51\% | 99.57\% | N/A | 99.46\% | N/A | 100.00\% | 100.00\% | 98.33\% |
| New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours | 9.28 | 9.07 | 4.77 | 4.53 | 4.87 | $\bigcirc$ | 3.94 | 4.08 | 7.4 |
| Lost Work Days per 200,000 Exposure Hours ${ }^{1}$ | 179 | 309 | 148 | 141 | 153 | $\bigcirc$ | 79 | 314 |  |
| OSHA Injuries per 200,000 Exposure Hours ${ }^{1}$ | 6.31 | 8.28 | 4.40 | 4.18 | 4.52 | $\bigcirc$ | 7.89 | 4.08 |  |
|  |  |  |  |  |  |  |  |  |  |
| Blue Line |  |  |  |  |  |  |  |  |  |
| On-Time Pullouts | 99.37\% | 99.41\% | 99.59\% | 99.50\% | 99.62\% | $\bigcirc$ | 98.98\% | 99.69\% | 100.00\% |
| Mean Miles Between Chargeable Mechanical | 18,731 | 23,716 | 19,240 | 19,572 | 15,473 | O | 14,406 | 15,852 | 10,647 |
| In-Service On-time Performance | 95.84\% | 97.28\% | 96.10\% | 97.00\% | 96.31\% | $\bigcirc$ | 93.27\% | 95.93\% | 96.44\% |
| Service Delivery Ratio | 98.36\% | 98.88\% | 98.41\% | 98.46\% | 98.54\% | $\bigcirc$ | 97.57\% | 97.70\% | 98.82\% |
| Traffic Accidents Per 100,000 Train Miles | 2.97 | 2.48 | 2.38 | N/A | 2.11 | N/A | 3.92 | 0.69 | 0.6 |
| CPUC Reportable Accidents per 100,000 Train Miles | 0.00 | 0.89 | 1.39 | 1.34 | 0.80 | $\bigcirc$ | 1.96 | 0.00 | 0.64 |
| Passenger Accidents per 100,000 Boardings | 0.058 | 0.034 | 0.016 | 0.006 | 0.055 | $\bigcirc$ | 0.000 | 0.111 | 0.202 |
| Complaints per 100,000 Boardings | 1.10 | 0.90 | 1.33 | 1.09 | 1.67 | $\bigcirc$ | 1.69 | 1.39 | 2.07 |
| New Workers' Compensation Indemnity Claims per | 17.46 | 15.10 | 15.08 | 15.58 | 18.13 | $\bigcirc$ | 10.69 | 11.68 | 25.18 |
| Lost Work Days per 200,000 Exposure Hours ${ }^{1}$ | 990 | 1,622 |  | 786 | 939 | O | 728 | 1,542 |  |
| OSHA Injuries per 200,000 Exposure Hours ${ }^{1}$ | 5.71 | 10.64 | 6.79 | 9.58 | 10.99 | $\bigcirc$ | 5.35 | 5.84 |  |

${ }^{1}$ 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

| 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 | Jan Month | Feb Month | Mar Month |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Red Line |  |  |  |  |  |  |  |  |  |
| On-Time Pullouts | 99.72\% | 99.91\% | 99.79\% | 99.50\% | 99.98\% | $\bigcirc$ | 100.00\% | 100.00\% | 99.80\% |
| Mean Miles Between Chargeable Mechanical | 63,099 | 85,090 | 94,312 | 112,652 | 113,732 | $\bigcirc$ | 148,218 | 109,220 | 145,093 |
| In-Service On-time Performance | 98.91\% | 99.13\% | 99.45\% | 99.50\% | 99.38\% | $\bigcirc$ | 99.29\% | 98.56\% | 99.11\% |
| Service Delivery Ratio | 99.57\% | 99.60\% | 99.71\% | 99.71\% | 99.72\% | $\bigcirc$ | 99.67\% | 99.54\% | 99.35\% |
| Traffic Accidents Per 100,000 Train Miles | 1.01 | 0.47 | 0.75 | N/A | 0.66 | N/A | 1.66 | 0.91 | 0.00 |
| CPUC Reportable Accidents per 100,000 Train Miles | 0.00 | 0.07 | 0.07 | 0.60 | 0.19 | $\bigcirc$ | 1.66 | 0.00 | 0.00 |
| Passenger Accidents per 100,000 Boardings | 0.006 | 0.002 | 0.002 | 0.003 | 0.006 | $\bigcirc$ | 0.000 | 0.000 | 0.025 |
| Complaints per 100,000 Boardings | 0.60 | 0.54 | 0.57 | 0.56 | 1.08 | $\bigcirc$ | 1.34 | 1.74 | 1.93 |
| New Workers' Compensation Indemnity Claims per | 20.22 | 6.20 | 16.43 | 13.29 | 13.90 | $\bigcirc$ | 11.39 | 6.17 | 22.38 |
| *Lost Work Days per 200,000 Exposure Hours | 927 | 649 | 526 | 556 | 1,054 | $\bigcirc$ | 653 | 771 |  |
| *OSHA Injuries per 200,000 Exposure Hours | 11.79 | 3.54 | 7.99 | 6.55 | 8.55 | O | 5.70 | 6.17 |  |


| Green Line |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| On-Time Pullouts | 99.69\% | 99.32\% | 99.49\% | 99.50\% | 99.61\% | $\bigcirc$ | 99.52\% | 98.70\% | 98.89\% |
| Mean Miles Between Chargeable Mechanical Failures | 19,513 | 21,054 | 19,238 | 19,911 | 15,878 | $\bigcirc$ | 14,376 | 19,422 | 16,863 |
| In-Service On-time Performance | 97.85\% | 97.39\% | 98.52\% | 98.20\% | 98.50\% | $\bigcirc$ | 98.53\% | 98.87\% | 98.52\% |
| Service Delivery Ratio | 99.57\% | 99.50\% | 99.59\% | 99.62\% | 99.58\% | $\bigcirc$ | 99.39\% | 99.71\% | 99.50\% |
| Traffic Accidents Per 100,000 Train Miles | 0.49 | 0.21 | 0.42 | N/A | 0.46 | N/A | 0.00 | 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 | 0.051 | $\bigcirc$ | 0.000 | 0.000 | 0.000 |
| Complaints per 100,000 Boardings | 1.15 | 0.88 | 1.53 | 1.30 | 2.15 | $\bigcirc$ | 1.30 | 2.72 | 2.76 |
| New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours | 16.51 | 7.32 | 7.18 | 9.27 | 8.93 | $\bigcirc$ | 19.65 | 20.51 | 8.89 |
| *Lost Work Days per 200,000 Exposure Hours | 1,299 | 479 | 228 | 195 | 779 | $\bigcirc$ | 463 | 352 |  |
| *OSHA Injuries per 200,000 Exposure Hours | 11.30 | 4.07 | 3.19 | 2.34 | 5.11 | $\bigcirc$ | 19.65 | 0.00 |  |


| Gold Line |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| On-Time Pullouts | 99.56\% | 99.98\% | 99.68\% | 99.50\% | 99.77\% | - | 100.00\% | 99.19\% | 100.00\% |
| Mean Miles Between Chargeable Mechanical Failures | 45,894 | 44,171 | 40,426 | 51,665 | 37,658 | $\bigcirc$ | 54,892 | 43,930 | 53,570 |
| In-Service On-time Performance | 98.03\% | 98.56\% | 97.60\% | 97.50\% | 97.37\% | $\bigcirc$ | 97.70\% | 97.05\% | 97.72\% |
| Service Delivery Ratio | 99.03\% | 99.34\% | 99.11\% | 99.16\% | 98.75\% | $\bigcirc$ | 99.39\% | 98.33\% | 99.06\% |
| Traffic Accidents Per 100,000 Train Miles | 1.03 | 1.14 | 0.99 | N/A | 0.67 | N/A | 1.25 | 0.94 | 0.83 |
| CPUC Reportable Accidents per 100,000 Train Miles | 0.00 | 0.30 | 0.60 | 0.50 | 0.29 | $\bigcirc$ | 0.42 | 0.47 | 0.83 |
| Passenger Accidents per 100,000 Boardings | 0.052 | 0.007 | 0.039 | 0.035 | 0.032 | $\bigcirc$ | 0.000 | 0.000 | 0.141 |
| Complaints per 100,000 Boardings | 1.04 | 1.01 | 2.73 | 2.26 | 2.88 | $\bigcirc$ | 2.68 | 2.80 | 3.89 |
| New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours | 14.98 | 15.96 | 11.87 | 12.20 | 15.91 | $\bigcirc$ | 5.37 | 30.04 | 26.21 |
| *Lost Work Days per 200,000 Exposure Hours | 1,460 | 1,068 | 766 | 808 | 1,131 | $\bigcirc$ | 788 | 763 |  |
| *OSHA Injuries per 200,000 Exposure Hours | 9.12 | 3.83 | 9.29 | 10.07 | 9.00 | $\bigcirc$ | 0.00 | 18.02 |  |


| Expo Line |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| On-Time Pullouts |  | - | 99.53\% | 99.50\% | 99.02\% | $\bigcirc$ | 99.20\% | 100.00\% | 99.81\% |
| Mean Miles Between Chargeable Mechanical Failures |  | - | 18,114 | 19,572 | 29,058 | $\bigcirc$ | 32,390 | 49,240 | 110,378 |
| In-Service On-time Performance | 98.70\% | 99.14\% | 98.61\% | 97.05\% | 98.33\% | $\bigcirc$ | 96.62\% | 98.96\% | 99.16\% |
| Service Delivery Ratio | 99.45\% | 99.64\% | 99.56\% | 99.65\% | 99.36\% | $\bigcirc$ | 99.70\% | 99.50\% | 99.75\% |
| Traffic Accidents Per 100,000 Train Miles | 1.17 | 1.02 | 0.74 | N/A | 1.61 | N/A | 2.33 | 3.48 | 1.52 |
| CPUC Reportable Accidents per 100,000 Train Miles | 1.17 | 1.02 | 0.50 | 0.37 | 0.85 | $\bigcirc$ | 1.55 | 1.74 | 0.00 |
| Passenger Accidents per 100,000 Boardings | 0.000 | 0.000 | 0.019 | 0.000 | 0.024 | $\bigcirc$ | 0.066 | 0.000 | 0.000 |
| Complaints per 100,000 Boardings | 1.53 | 1.13 | 3.38 | 1.87 | 4.25 | $\bigcirc$ | 5.40 | 2.38 | 2.22 |
| New Workers' Compensation Indemnity Claims per | - | 24.97 | 8.44 | 0.00 | 19.69 | $\bigcirc$ | 22.34 | 24.74 | 14.35 |
| *Lost Work Days per 200,000 Exposure Hours | - | 937 | 73 | 0 | 697 | $\bigcirc$ | 1,012 | 1,195 |  |
| *OSHA Injuries per 200,000 Exposure Hours | - | - | 5.63 | 0.00 | 18.41 | $\bigcirc$ | 14.89 | 24.74 |  |

[^0]
## METRO RAIL PERFORMANCE - MARCH 2017

## 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.



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



[^1][^2]

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 <br> Metro <br> Light Rail - NipponSharyo |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $500.0 \%$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 400.0\% |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Mar-16 | Apr-16 | May-16 | Jun-16 | Jul-16 | Aug-16 | Sep-16 | Oct-16 | Nov-16 | Dec-16 | Jan-17 | Feb-17 | Mar-17 |
| Nippon Sharyo 2020-DC | 60.4\% | 348.3\% | -50.1\% | -53.7\% | -0.5\% | -33.4\% | 25.4\% | -10.3\% | 25.1\% | -46.3\% | 47.1\% | 131.9\% | -33.0\% |
| Nippon Sharyo 865 - DC | 19.0\% | -5.2\% | 13.2\% | -29.8\% | -7.6\% | 38.8\% | 25.1\% | 10.7\% | 5.2\% | -40.3\% | -5.8\% | 0.7\% | -7.1\% |

[^3]
## Rail Mean Vehicle Miles Between Major Failure by Vehicle Type

Metro
Light Rail - Siemens

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | P~on |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | - $-2-2-2-0-2$ |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Mar-16 | Apr-16 | May-16 | Jun-16 | Jul-16 | Aug-16 | Sep-16 | Oct-16 | Nov-16 | Dec-16 | Jan-17 | Feb-17 | Mar-17 |
| - Siemens 2000 Base - AC | 39,513 | 13,853 | 28,871 | 19,031 | 17,567 | 21,505 | 18,725 | 19,184 | 17,318 | 9,073 | 14,888 | 19,848 | 17,159 |
| - - Siemens 2000 Base - TARGET |  |  |  |  | 20,778 | 20,778 | 20,778 | 20,778 | 20,778 | 20,778 | 20,778 | 20,778 | 20,778 |
| - Siemens 2000 GE/ATP - AC | 7,303 | 11,344 | 19,136 | 6,984 | 8,241 | 10,345 | 7,365 | 11,790 | 10,601 | 6,716 | 7,700 | 5,125 | 5,161 |
| - - Siemens 2000 GE/ATP - TARGET |  |  |  |  | 11,559 | 11,559 | 11,559 | 11,559 | 11,559 | 11,559 | 11,559 | 11,559 | 11,559 |

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.

## Mean Miles Beween Major Failures

|  | FY 2016 | FY 2017 <br> Goal | FY 2017 <br> YTD |
| :--- | ---: | ---: | ---: |
| AnsaldoBreda2550Base - AC | 42,292 | 44,517 | 53,332 |
| Breda 650 Base - DC | 50,526 | 53,185 | 72,935 |
| Breda 650 Option - AC | 120,372 | 126,708 | 136,891 |
| Kinkisharyo P3010 | 19,068 | 20,072 | 30,867 |
| Nippon Sharyo 2020 - DC | 29,653 | 31,214 | 19,618 |
| Nippon Sharyo 865 - DC | 24,759 | 26,062 | 24,967 |
| Siemens 2000 Base - AC | 19,739 | 20,778 | 16,232 |
| Siemens 2000 GE/ATP - AC | 10,981 | 11,559 | 7,664 |

Rail Fleet Distribution - MARCH 2017

| 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 |  |  |  | 15 | 50 |
| Nippon Sharyo 2020 - DC | 12 |  |  |  | 3 |
| Nippon Sharyo 865 - DC | 40 |  |  |  | 14 |
| Siemens 2000 Base - AC |  |  | 29 |  |  |
| Siemens 2000 GE/ATP - AC | 19 |  |  |  | 4 |
| TOTALS | $\mathbf{7 1}$ | $\mathbf{1 0 4}$ | $\mathbf{2 9}$ | $\mathbf{6 5}$ | $\mathbf{7 1}$ |


| Blue |  |  |  |
| :---: | :---: | :---: | :---: |
| Day Type | Vehicles <br> Required | Average Available | Average \% Available |
| Weekday | 57 | 57 | 100\% |
| Weekend | 26 | 40 | 155\% |
| Red/ Purple |  |  |  |
| Day Type | Vehicles <br> Required | Average Available | Average \% Available |
| Weekday | 64 | 78 | 121\% |
| Weekend | 40 | 62 | 155\% |
| Green |  |  |  |
| Day Type | Vehicles <br> Required | Average Available | Average \% Available |
| Weekday | 22 | 22 | 101\% |
| Weekend | 14 | 16 | 115\% |
| Gold |  |  |  |
| Day Type | Vehicles Required | Average Available | Average \% Available |
| Weekday | 48 | 52 | 108\% |
| Weekend | 28 | 40 | 143\% |
| Expo |  |  |  |
| Day Type | Vehicles <br> Required | Average Available | Average \% Available |
| Weekday | 47 | 47 | 100\% |
| Weekend | 30 | 46 | 152\% |



## Cleanliness by Vehicle Type

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 - 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


Mean Miles Between Mechanical Failures by Line


Workers Comp Claims by Line


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



Expo Line Service began in March 2016.

Worker's Comp. Claims
Jan 2017 - Mar 2017
3 Month Comparison


## Lost Work Days and OSHA Injuries

Dec 2016 - Feb 2017
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 20,321 hours operated, there were approximately 239 total hours of service delays.

| Revenue <br>  <br> March 2017 Service Hours * |  |  |
| :--- | ---: | ---: |
| Revenue Hours without Delays | 20,081 | Percent |
| Cancelled + Delayed Hours | 239 | $1.2 \%$ |
| Total Revenue Hours | $\mathbf{2 0 , 3 2 1}$ | $\mathbf{1 0 0 . 0 \%}$ |


| Summary of the major contributors: | Count | Hours | Percent |
| :---: | :---: | :---: | :---: |
| Operations | 13 | 23.2 | 9.7\% |
| Accidents | 2 | 28.1 | 11.8\% |
| Vehicle Maintenance | 69 | 148.9 | 62.2\% |
| Wayside | 3 | 14.3 | 6.0\% |
| Police \& Health | 17 | 21.9 | 9.2\% |
| Other | 2 | 2.9 | 1.2\% |
| Total | 106 | 239.4 | 100.0\% |

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



## March 2017 Blue Line major delay contributors were as follows:

Operations Incidents:
3/1/2017 3:13:00 PM - Incident\# 2840183 (0 lost trips, 5 lost minutes)
10-100 at Willowbrook station (Northbound).
T-307
Train 122
(237A)-238-231
Northbound, Willowbrook station Track 1.
3/9/2017 5:34:00 AM - Incident\# 2842957 (0 lost trips, 8 lost minutes)
Train Delay (Operator Error)
Train 112
T-490
(237)-302-239
Willow Turn Back Trk 2
8 minute delay
3/11/2017 8:00:00 AM - Incident\# 2843808 (0 lost trips, 10 lost minutes) All Blue Line and Expo trains departing 10 minutes late from 7th \& Metro due to the Single tracking between 7th \& Metro and Venice Interlocking. From 0800 to m 1200 hours.
3/16/2017 7:03:00 PM - Incident\# 2845910 (0 lost trips, 10 lost minutes)
Train Delay
T-358
Car 164-161-117
T-358
T-Mall South Platform
3/17/2017 2:08:00 PM - Incident\# 2846232 (1 lost trip, 166 lost minutes)
Train 119 was cancelled southbound from 7th \& Metro southbound, due bad gap train.
3/17/2017 3:35:00 PM - Incident\# 2846260 (0 lost trips, 6 lost minutes)
Due to train traffic on Flower between 7th \& Metro and Junction.
3/20/2017 5:15:00 PM - Incident\# 2851513 (0 lost trips, 6 lost minutes)
Train operator reports reoccurring self applying brakes and a propulsion fault.
Train 125, T-130
(165B)-111-134
Track 2, Wardlow, South
3/22/2017 6:10:00 PM - Incident\# 2848014 (2 lost trips, 350 lost minutes) Operator reports of Metro Bus obstructing Track 2 at Myrrh Grade crossing.
Train 110
T-75
Cars 143-153-151
Myrrh Grade Crossing, Track 2, Southbound
3/22/2017 7:45:00 PM - Incident\# 2848033 (0 lost trips, 10 lost minutes)
Operator T-357 violated rule 2021.
3/26/2017 2:35:00 AM - Incident\# 2849081 (1 lost trip, 116 lost minutes)
Train cancelled due to manpower.
3/29/2017 10:59:00 PM - Incident\# 2850523 (4 lost trips, 690 lost minutes)
Arinc displayed an overrun at signal 4n Venice Interlocking.
Train 101
T-183
Cars(139A),165
Signal 4s Venice Interlocking, Track 1, Northbound

3/30/2017 12:02:00 PM - Incident\# 2850793 (0 lost trips, 11 lost minutes)
Train 111 departed late 5 minutes southbound from 7th \& Metro Station.

3/31/2017 6:59:00 AM - Incident\# 2851063 (0 lost trips, 3 lost minutes)
Train delay due to door issues in the yard.
Train 119
T-256
(232-245)
Blue line yard
5 minute delay to main yard. In service 3 minute delay starting at Del Amo.
Accidents:
3/9/2017 7:03:00 AM - Incident\# 2842968 (6 lost trips, 1,003 lost minutes)
10-73 Train VS Auto
Train 603
T-136
(1031B)-1037
12th Flower N/B
6 minute delay

3/29/2017 1:38:00 PM - Incident\# 2850361 (4 lost trips, 686 lost minutes) Compton Platform/Mirror struck patron on the platform.

Vehicle Maintenance Incidents:
3/1/2017 7:11:00 AM - Incident\# 2839933 (0 lost trips, 13 lost minutes)
Propulsion faults
Train 101
T-102
229-301-(229)
13 min service delay
3/2/2017 4:03:00 PM - Incident\# 2840651 (0 lost trips, 6 lost minutes)
Train 123 reports repeated propulsion faults.
T-053
LRV'S (167) 126-158
7th \& Metro, track 2 , southbound.
3/5/2017 12:36:00 PM - Incident\# 2841488 (1 lost trip, 148 lost minutes)
Spin slides and self applying brakes reported.
Train 107
Consist: (245a), 229
T-034
Compton Station, track 1, northbound

3/6/2017 12:42:00 PM - Incident\# 2841856 (1 lost trip, 169 lost minutes)

Train 110 reports propulsion faults with friction brake faults and minimal movement at Florence station. Cars 234a with 248244

3/6/2017 3:17:00 PM - Incident\# 2841893 (1 lost trip, 175 lost minutes)
Propulsion / Dynamic Brakes
Train 122
238-229-233
Northbound, track 1 Compton station.

3/6/2017 4:18:00 PM - Incident\# 2841916 (0 lost trips, 10 lost minutes)
Door Will Not Close
Train 102, T-253
Cars 239, 235, 247
Trk 2, SB, Vernon Station

3/6/2017 10:04:00 PM - Incident\# 2841966 (2 lost trips, 337 lost minutes)
Train with no movement
Train \#107, T-149
(301)-237-302

SB, Willow Station, Track \#2
3/7/2017 2:50:00 PM - Incident\# 2842299 (0 lost trips, 5 lost minutes)
Train-108
T-253
Cars (108)-148-122
Northbound Track \#1
Wardlow Station
Propulsion / Dynamic Brakes unable to clear.
3/8/2017 9:46:00 AM - Incident\# 2843835 (1 lost trip, 167 lost minutes)
Door problem
Train 102
Consist: 142-115-(154a)
T-026
Florence Sta, track 2, southbound
3/8/2017 11:31:00 AM - Incident\# 2842681 (0 lost trips, 12 lost minutes)
No movement.
Train 109
Consist: 151-(145)-113
T-264
Wardlow Station, track 2, southbound

3/10/2017 4:31:00 PM - Incident\# 2843645 (0 lost trips, 12 lost minutes)
Train 120 reports doors problems at Willowbrook Station, not closing.
3/10/2017 8:56:00 PM - Incident\# 2843702 (1 lost trip, 186 lost minutes)
Operator reports of no movement.
Train 109
T-400
Cars(147A)-141-157
Willow Station, Track 2, Northbound

3/13/2017 11:30:00 PM - Incident\# 2844629 (1 lost trip, 184 lost minutes)
No Fault - No Movement
Train \#109
T-95
145B-110
NB, 103rd St. Station, Track \#1

3/14/2017 5:04:00 AM - Incident\# 2844679 (1 lost trip, 180 lost minutes)
No Movement
Train 108
T-262
(231B)-241-235
1N imperial Trk 2 NB
3/14/2017 9:04:00 AM - Incident\# 2844849 (0 lost trips, 5 lost minutes)
No movement reported.
Train 118
Consist: (239a), 301, 247
T-495
Naomi St, northbound, track 1

3/14/2017 4:01:00 PM - Incident\# 2844979 ( 0 lost trips, 8 lost minutes)
Train-121
T-352
Cars (122A)-124-165
Southbound Track \#2
Slauson Station
HSCB Trip (BMF).

3/14/2017 10:09:00 PM - Incident\# 2845047 (1 lost trip, 168 lost minutes)
Doors (Left Side Not Showing Closed, no movement)
Train 103
Track \#2 Del Amo Station SB
T-485
(301)-239-231

3/15/2017 5:14:00 AM - Incident\# 2845135 (0 lost trips, 6 lost minutes)
Audible overspeed /continuous shut down.
Train 101
T-259
(101B)-150-108
Willowbrook S/B Trk 2
+6 minute delay
3/15/2017 10:27:00 AM - Incident\# 2845299 (1 lost trip, 180 lost minutes)
Propulsion fault, no movement
Train 108
Consist: (138b), 140-118
Track 1
Wardlow Station, northbound, track 1

3/15/2017 12:51:00 PM - Incident\# 2845311 (1 lost trip, 175 lost minutes)
M-261 brake issues
Train 17
Consist: (126b), 157, 137
T- 262
Willowbrook Station, southbound, track 2
3/15/2017 1:30:00 PM - Incident\# 2845336 (2 lost trips, 339 lost minutes)
Operator reports propulsion, speed restriction on Car 301.
Cars 234, 241, 301
Train 105
T-201
Compton TRK 1, northbound

3/17/2017 7:53:00 AM - Incident\# 2846151 (0 lost trips, 12 lost minutes)
Propulsion / Dynamic Brakes
(110)-130-145

T-34
Wardlow, Southbound, Track 2
3/17/2017 10:01:00 AM - Incident\# 2846198 (2 lost trips, 332 lost minutes)
Friction Brakes (Emergency braking)
(150)-168-128

Train 102
T-043
Compton, Southbound, Track 2

3/17/2017 1:44:00 PM - Incident\# 2846227 (0 lost trips, 7 lost minutes)
Train 108 reports door problems, cuts doors 1 and 2 on LRV 159B.
Train 108
T-253
LRV'S ( 159B ) 120-101
Slauson Station, track 2, south
3/17/2017 2:27:00 PM - Incident\# 2846241 (1 lost trip, 166 lost minutes)
Operator notified control an African-American female alleges she was threatened by another passenger.
3/19/2017 10:41:00 PM - Incident\# 2846714 (1 lost trip, 126 lost minutes)
Prop fault, no movement.
Train 107
T-149
Consist 231a-245
Anaheim Station, Track 1 NB

3/20/2017 4:03:00 AM - Incident\# 2846764 (1 lost trip, 174 lost minutes)
Propulsion / Dynamic Brakes
129-(100)-126
Train 101
T-282
Willowbrook, Northbound, Track 1

3/20/2017 11:52:00 AM - Incident\# 2846993 (0 lost trips, 10 lost minutes)
Propulsion / Dynamic Brakes with Speed restriction
(248A)-247-235
Train 103
T-335
Compton, Northbound, Track 1
3/20/2017 2:37:00 PM - Incident\# 2847054 (2 lost trips, 337 lost minutes)
Air Conditioning not working LRV 234A
T-043
Train 106
LRV (234A) 239229
Washington Station, Track 2, southbound.
3/20/2017 4:20:00 PM - Incident\# 2847102 (1 lost trip, 168 lost minutes)
Propulsion / Dynamic Brakes
Train 120
T-059
108-140-159
Northbound, Willow station.

3/21/2017 7:10:00 AM - Incident\# 2847278 (0 lost trips, 7 lost minutes) Train 106, LRV's (248B), 244, and 241.
119th Grade Crossing, Track 1 north.
Prop fault with no movement.
3/21/2017 5:39:00 PM - Incident\# 2847564 (0 lost trips, 5 lost minutes)
Propulsion Fault
Train 120, T-86
Cars: 301, 230, 250
Florence Station, Trk 2, Southbound
3/22/2017 6:57:00 AM - Incident\# 2847738 (3 lost trips, 513 lost minutes)
Friction Brakes/Self Applying Brakes
Train 107
T-97
(239B)-250-230
Anahiem N/B Trk 1
15 minute delay

3/22/2017 8:27:00 AM - Incident\# 2847784 (0 lost trips, 6 lost minutes)
Propulsion / Dynamic Brakes
139-(110)-163
Train 107
T-82
103rd, Southbound, Track 2
3/22/2017 3:59:00 PM - Incident\# 2847967 (0 lost trips, 10 lost minutes)
Operator reports re-occurring friction brake fault on Car 118A.
Cars 121, 155, (118)
Train 101
T-415
Grand TRK 2, southbound

3/23/2017 5:11:00 AM - Incident\# 2848101 (0 lost trips, 5 lost minutes) Operator reports of no movement.

Train 103
T-115
242-244-301
Compton Station, Trk. 1. Northbound

3/23/2017 8:40:00 AM - Incident\# 2848241 (1 lost trip, 168 lost minutes)
Self applying friction brakes with no movement
Train 103
T-518/76
LRV'S 301 ( 244 ) 242
103rd Street Station, track 2 , southbound.

3/23/2017 1:55:00 PM - Incident\# 2848314 (0 lost trips, 5 lost minutes)
Train 105 reporting Propulsion Faults
Train 105
T-201
LRV-145-159-138
Washington Station, track 1 , north

3/23/2017 4:18:00 PM - Incident\# 2848368 (1 lost trip, 168 lost minutes)
Train 125 reporting propulsion faults at on LRV 245
Train 125
T-240
LRV'S (245) 240-237
Pico Station, Track 1, Northbound.
3/23/2017 5:30:00 PM - Incident\# 2848394 (1 lost trip, 168 lost minutes)
Train 111 reporting propulsion faults with a speed restriction.
Train 111
T-201
LRV'S (147A) 101-129
Slauson Station, track 2, southbound.

3/24/2017 7:46:00 AM - Incident\# 2848593 (0 lost trips, 5 lost minutes)
Train 111 reporting re ocurrent propulsion faults.
Train 111
T-259
LRV'S ( 149 ) 157-140
Willowbrook Station, track 1, northbound
3/24/2017 4:18:00 PM - Incident\# 2848786 (2 lost trips, 346 lost minutes)
Train 119 reporting Propulsion faults with a speed restriction of 35 mph .
Train 119
T-348
LRV'S ( 163 ) 110-101
Willow Station, track 1, northbound.

3/24/2017 8:42:00 PM - Incident\# 2848834 (1 lost trip, 166 lost minutes)
Operator T-149 reports of having a dirty car.
Train 104
T-149
Cars 129-100-118
Wardlow Station, Track 1, Northbound

3/24/2017 8:46:00 PM - Incident\# 2848837 (0 lost trips, 15 lost minutes) Train Operator T-149 reports of door problems at Grand Station.
Train 104
T-149
Cars 237-240-245
Grand Station, Track 1, Northbound
3/25/2017 12:45:00 PM - Incident\# 2848964 (0 lost trips, 4 lost minutes)
Train 102 reports that the Knob for ATP bypass on LRV 301B is broken.

3/25/2017 1:10:00 PM - Incident\# 2848972 (1 lost trip, 154 lost minutes)
Train 102 reports that doors will not open at the platform.
Train 102
T-258
LRV'S ( 239 ) 248-239
7th \& Metro Center, track 2, southbound.

3/26/2017 2:22:00 PM - Incident\# 2849150 (0 lost trips, 6 lost minutes)
Propulsion / Dynamic Brakes, cars \#(1017)-1021-1054
Train \#602
T-472
7th and Metro, Track \#002, Southbound.
3/27/2017 7:34:00 AM - Incident\# 2849384 (0 lost trips, 6 lost minutes)
Friction Brakes
(244A)-240-301
Train 119
T-110
Washington/Maple, Track 1, Northbound

3/27/2017 8:40:00 AM - Incident\# 2849361 (2 lost trips, 340 lost minutes)
Friction Brakes
(115B)-155-161
Train 107
T-326
Artesia, Southbound, Track 2

3/27/2017 11:59:00 AM - Incident\# 2849453 (0 lost trips, 12 lost minutes)
Propulsion / Dynamic Brakes
(110)-168-165

Train 105
T-201
Metro Center, Southbound, Track 2

3/27/2017 5:09:00 PM - Incident\# 2849614 (2 lost trips, 341 lost minutes)
Train operator reports a reoccurring propulsion fault.
Train 126, T-42
(161A)-166-155
Track 2, Washington, South
3/27/2017 7:34:00 PM - Incident\# 2849647 (1 lost trip, 168 lost minutes)
Train operator reports a clicking sound from ATP rack with an audible.
Train 104, T-149
(164AB)-111-165
Track 2, Willowbrook, South

3/28/2017 6:15:00 AM - Incident\# 2849784 (1 lost trip, 183 lost minutes)
Doors
Train 102
T-281
(245)-231-248

Pacific Coast HWY Trk 1 N/B

3/28/2017 6:16:00 AM - Incident\# 2849791 (0 lost trips, 15 lost minutes)
Self Applying Brakes
Train 114
T-43
(239B)-246-229
Compton Station N/B Trk 1

3/28/2017 4:33:00 PM - Incident\# 2850043 (0 lost trips, 11 lost minutes)
Train-107
T-021
Cars (248A)-231
Northbound, Track \#1
Artesia Station
Propulsion / Dynamic Brakes, unable to clear.

## 3/28/2017 7:23:00 PM - Incident\# 2850100 (2 lost trips, 335 lost minutes)

Self Applying brakes
Train \# 106
T-353
(239B)-246-229
SB, Willowbrook Station, Track \#2
3/28/2017 7:47:00 PM - Incident\# 2850104 (2 lost trips, 335 lost minutes)
Door Problem
Train \# 107
T-485
(163B)-149-164
SB, Artesia Station, Track \#2

3/29/2017 5:11:00 AM - Incident\# 2850169 (0 lost trips, 8 lost minutes)
Reoccuring Propulsion Fault
Train 103
T-115
(113B)-165-139
Trk 1 Compton N/B

3/29/2017 3:05:00 PM - Incident\# 2850384 (2 lost trips, 335 lost minutes) Washington and Broadway/TR 109 has a friction brake failure.

3/29/2017 7:46:00 PM - Incident\# 2850496 (0 lost trips, 12 lost minutes) Operator reports of not being able to engage in cab signal.
Train 111
T-95
Cars (231), 122, 244
Washington Station, Track 2, Southbound

3/30/2017 7:45:00 AM - Incident\# 2850685 (0 lost trips, 5 lost minutes) Train 110 reports that all doors did not open on his trailing car 158.
Train 110
T-164
LRV'S 113B-112-158
Transit Mall Station, Track 2, Northbound.
3/30/2017 2:16:00 PM - Incident\# 2850895 (4 lost trips, 678 lost minutes)
Train 120 reports Loss of Cab Signals on LRV 231A
Train 120
T-400
LRV'S ( 231 ) 233-244
Wardlow Station, track 1, Northbound.
3/30/2017 5:02:00 PM - Incident\# 2850913 (0 lost trips, 5 lost minutes) Train 108 reports no power on approach to Manville grade crossing.
Train 108
T-300
LRV'S ( 239A ) 247-230
Manville Crossing, track 1, northbound.

3/30/2017 5:24:00 PM - Incident\# 2850920 (0 lost trips, 8 lost minutes)
Train 103 reports a Propulsion Faults that will not clear.
Train 103
T-043
LRV'S ( 301B ) 302
103 rd Street Station, track 2, southbound.
3/30/2017 7:14:00 PM - Incident\# 2850939 (0 lost trips, 7 lost minutes)
Train Operator T-42 reports of no movement.
Train 107
T- 42
Cars (232B), 245
Washington Station, Track 2, Southbound

Doors
Train 101
T-182
237-(232-245)
Trk 2 S/B Pico Station

- 6 minute delay

3/31/2017 8:43:00 AM - Incident\# 2851116 (0 lost trips, 12 lost minutes)
Train 119 reports a door problem on LRV 245B
Train 119
t-231
LRV'S 232- (245B)
Wardlow Station, Track 1, Northbound.
3/31/2017 12:22:00 PM - Incident\# 2851207 (0 lost trips, 15 lost minutes)
Train 105 is reporting dynamic brake faults on LRV 126B when braking.
Train 105
T-201
LRV'S (126B) 122-149
Firestone Station, track 2, southbound.

3/31/2017 7:19:00 PM - Incident\# 2851324 (1 lost trip, 202 lost minutes)
Operator T-357 reports of having a HSCB Trip.
Train 108
T-357
Cars (121), 107, 130
WIllow Station, Track 1, northbound

## Wayside Incidents:

3/4/2017 7:25:00 AM - Incident\# 2841222 (1 lost trip, 165 lost minutes)
TP-121 opened b03 @ Pico for track alloc work, however this de-energized trk 2 Metro Center from trk 2 to bumping post. This action disabled M-228 (pink) singletrack operation crossovers from Metro Center South Interlocking to Venice Interlocking.

3/16/2017 7:28:00 AM - Incident\# 2845626 (0 lost trips, 15 lost minutes)
Traction Power Deenergized Tracks
B03 @ PCH and B04 @ Wiilow.
Tracks 1 between Pacific Coast Hwy and Willow N/B
Train 113, 111, 109,108 Affected.

3/31/2017 9:28:00 AM - Incident\# 2851161 (4 lost trips, 676 lost minutes)
A/C breakers open simultaneous at Artesia TPSS, Dominguez TPSS and at Del Amo TPSS. Lossing power from Artesia nterlocking to
Wardlow Station, Tracks 1 and 2.

Police \& Health Incidents:
3/2/2017 7:39:00 AM - Incident\# 2840392 (0 lost trips, 17 lost minutes)
Operator reports of a vehicle blocking track 2
Train 104
T-182
244-248-239
43rd Street, Trk. 2, southbound
3/3/2017 11:28:00 AM - Incident\# 2841016 (0 lost trips, 12 lost minutes)
T-281 reports aa male exposing perhaps unstable/10-390. Subsequently at 1140 he is a trespasser moving from track 1 to track 2 . He is clothed but shirtless.

3/3/2017 12:10:00 PM - Incident\# 2841057 (0 lost trips, 12 lost minutes)
Patron seizure on $\operatorname{Tr} 103 \mathrm{nb}$ inside lead car 145a. Subsequently the patron exited while holding for pmedical attention and continued seizure on track 2 Florence.

3/3/2017 9:24:00 PM - Incident\# 2841176 (0 lost trips, 20 lost minutes)
Sick Individual
Train Operator reports a patron having seizures aboard train 104

3/8/2017 5:17:00 PM - Incident\# 2842841 (2 lost trips, 334 lost minutes)
Trains bypass Willowbrook Station due to police activity.

3/11/2017 6:30:00 AM - Incident\# 2843753 (1 lost trip, 121 lost minutes)
Trespasser, Track \#1, south of Willow Station.
Train \# 107
T-236.
LRV-(302), 237.
Willow Station, track \#2, southbound.

3/13/2017 3:47:00 PM - Incident\# 2844541 (1 lost trip, 184 lost minutes)
Assault/ Patron with a knife
Train \#124
T-042
(138B)-127-116
NB, Vernon Station, Track \#1

3/13/2017 11:58:00 PM - Incident\# 2844632 (0 lost trips, 20 lost minutes)
Emergency: Patron Sick
Seizure, 103rd St Station
Train \# 109, T-95
Car \#( 145B)-110
3/14/2017 10:20:00 AM - Incident\# 2844885 (0 lost trips, 20 lost minutes)
Trespasser reported on ROW between 48 th \& 55th and subsequently opened crew door from trackside 2 at 52 nd and boarded the train, distupting patrons and trying to break into the operators cab door.

3/17/2017 9:25:00 PM - Incident\# 2846347 (0 lost trips, $\mathbf{8}$ lost minutes)
Train operator T-90 reports that a passenger refused to get off the train.
Train 110
T-90
Cars:128-(168)-150
Wardlow Station, Track 1, Northbound
3/18/2017 12:11:00 AM - Incident\# 2846358 (1 lost trip, 164 lost minutes)
Deputy Countryman request for Train 101 to hold at Compton Station, due to reports of passengers with a gun.
Train 101
T-503
Cars 100-129-119
Compton Station, Track 1, northbound

3/18/2017 1:15:00 AM - Incident\# 2846362 (0 lost trips, 6 lost minutes)
Train Operator T-485 reports of an altercation aboard the train, between a male and female.
Train 109
T-485
Cars 230-245
South side Transit Mall

3/21/2017 4:48:00 PM - Incident\# 2847554 (2 lost trips, 335 lost minutes)
Non-MTA vehicle made contact with the track 2 platform at PCH station
3/25/2017 11:45:00 AM - Incident\# 2848951 (0 lost trips, 19 lost minutes)
Train 101 reports a trespasser in front of her train north of 41st grade crossing.

3/29/2017 9:42:00 PM - Incident\# 2850510 (0 lost trips, 23 lost minutes)
Deputy Arillano request for southbound Train at Artesia Station to hold.
Train 107
T-487
Cars(145), 168, 161
Artesia Station, Track 2, Southbound
3/30/2017 1:09:00 PM - Incident\# 2850822 (0 lost trips, 10 lost minutes)
Train 105 reporting that there is a physical fight on board between a Female African American and a Male Afrian American.
Train 105
T-201
LRV'S ( 121B ) 130-162
Long beach \& 8th, track 1, Northbound

3/31/2017 9:13:00 PM - Incident\# 2851338 (0 lost trips, 10 lost minutes)
Deputy Flores request for Train 104 to hold at Artesia Station.

## Other Incidents:

3/18/2017 3:05:00 PM - Incident\# 2846470 (0 lost trips, 5 lost minutes)
Train 106 reported that a patron defecate on LRV 130
Train 106
T-233
LRV'S 150 (130)-168
Anaheim Station, Track 1, northbound.
3/22/2017 6:52:00 AM - Incident\# 2847726 (1 lost trip, 168 lost minutes)
Out Late from the Yard
Train 119
T-321
123-156-145
Blueline Yard Limits

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 26,833 hours operated, there were approximately 173 total hours of service delays.

| Mevenue <br> March 2017 Service Hours * |  |  |
| :--- | ---: | ---: |
| Revenue Hours without Delays | 26,660 | Percent |
| Cancelled + Delayed Hours | 173 | $0.6 \%$ |
| Total Revenue Hours | $\mathbf{2 6 , 8 3 3}$ | $\mathbf{1 0 0 . 0 \%}$ |


| Summary of the major contributors: |
| :--- |
| Count |
|  Hours Percent  <br> Operations 3 4.6 $2.6 \%$ <br> Accidents 0 0.0 $0.0 \%$ <br> Vehicle Maintenance 13 37.6 $21.7 \%$ <br> Wayside 2 50.0 $28.9 \%$ <br> Police \& Health 13 80.9 $46.7 \%$ <br> Other 2 0.2 $0.1 \%$ <br> Total $\mathbf{3 3}$ $\mathbf{1 7 3 . 2}$ $\mathbf{1 0 0 . 0 \%}$ |

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



## March 2017 Red Line major delay contributors were as follows:

## Operations Incidents:

3/17/2017 12:59:00 AM - Incident\# 2846215 (0 lost trips, 10 lost minutes)
T-32 operating 2 pack train from yard to couple to BO consist at North Hollywood
3/19/2017 4:27:00 AM - Incident\# 2846561 (1 lost trip, 116 lost minutes)
Train 202 delayed 18 minute at Civic Center westbound due to emergency brake applications/no movement.
3/28/2017 6:47:00 AM - Incident\# 2849785 (1 lost trip, 148 lost minutes)
T-068 reports being bitten by a Pit bull at Wilshire/Western.
Vehicle Maintenance Incidents:
3/2/2017 5:44:00 AM - Incident\# 2840333 (0 lost trips, 10 lost minutes)
ATP Fail / Emergency Brake Application
591592597598589 (590)
Train 201
T-80
Solar Drive, eastbound

3/2/2017 2:59:00 PM - Incident\# 2840604 (5 lost trips, 762 lost minutes)
Train 213 car 518 door is off its track.
3/5/2017 4:42:00 AM - Incident\# 2841406 (2 lost trips, 246 lost minutes)
Operator reports multiple emergency brake applications.
Cars 589, 590, 563, 564
Train 204
T-212
Vermont Beverly AR, westbound
3/7/2017 6:20:00 AM - Incident\# 2842091 (4 lost trips, 604 lost minutes)
Train 202 T-328 with no movement at Wilshire Western.

3/7/2017 2:13:00 PM - Incident\# 2842302 (0 lost trips, 4 lost minutes)
Report of flashing cab signal, emergency brake won't release.
T-179
Train 202
Cars (517)-518-509-508
Westlake MacArthur AR westbound.

3/8/2017 7:59:00 PM - Incident\# 2842862 (1 lost trip, 149 lost minutes)
Reports propulsion failure and no movement.
T-169
Train 212
North Hollywood, AR, Eastbound
Cars: (501) 502505506513514
3/10/2017 5:41:00 PM - Incident\# 2843668 (1 lost trip, 161 lost minutes)
Reports propulsion failure on car 568.
T-169
Train 218
7th Metro, AL, Eastbound
Cars: 567 (568) 553554603604
3/17/2017 5:23:00 PM - Incident\# 2846296 (0 lost trips, 5 lost minutes)
T-117 reports emergency brakes applied and would not release with flashing cab signals going through Union Station West Interlocking, AL track, Westbound, (cars 589, 590, 565, 566, 547, 548).

3/23/2017 7:52:00 PM - Incident\# 2848419 (1 lost trip, 148 lost minutes)
ATP fault no movement
T-169
Train 212
Cars 509,508,519,526,505,506
North Hollywood AR EB.
3/28/2017 4:37:00 AM - Incident\# 2849727 (1 lost trip, 148 lost minutes)
Train 211 experience a friction brake fault, train was not moving any faster than 10 MPH and flashing cab signals.

3/28/2017 5:39:00 AM - Incident\# 2849734 (0 lost trips, 8 lost minutes)
Train 202 car 586 doors 10/12 are not closing.

3/29/2017 8:22:00 AM - Incident\# 2850231 (0 lost trips, 5 lost minutes)
Train $204(571,572,569,570,531,532)$ T-209, Westlake Station, AR reports door problems in trailing car.

3/30/2017 6:35:00 PM - Incident\# 2850931 (0 lost trips, 4 lost minutes)
Car 509 Doors 5/7 were hard to cut out, would not lock.
T-312
Train 203
Cars (509),508,523,528
Westlake/MacArthur AR WB.

## Wayside Incidents:

3/2/2017 10:20:00 AM - Incident\# 2840512 (20 lost trips, 2,983 lost minutes)
Track Circuit at Union Station US3B failed, it displayed a false occupancy.

3/4/2017 12:45:00 AM - Incident\# 2841188 (0 lost trips, 19 lost minutes)
Junction box cover opened Vermont Santa Monica Interlocking AL E and touched Third Rail.

## Police \& Health Incidents:

3/4/2017 9:01:00 AM - Incident\# 2841244 (0 lost trips, 12 lost minutes)
Male patron reports having chest pains and requests medical attention
Train 203
T-378
Cars 601-602-(531)-532
7th/Metro AR West

3/5/2017 4:46:00 PM - Incident\# 2841534 (30 lost trips, 3,492 lost minutes)
CCTV received a report of two male individuals involved in a physical altercation.
3/7/2017 8:00:00 AM - Incident\# 2842171 (0 lost trips, 6 lost minutes)
Union Station AR Track, Train-202 T-68 cars 505/506/523/526 with medical emergency on-board car 506.

3/7/2017 4:34:00 PM - Incident\# 2842392 (2 lost trips, 297 lost minutes)
Report of a black female yelling and screaming at passengers and causing disturbance.

3/10/2017 7:41:00 PM - Incident\# 2843693 (1 lost trip, 149 lost minutes)
Train 216,. T-3 reports physical altercation on board at W/M AR platform.

3/15/2017 9:27:00 AM - Incident\# 2845221 (1 lost trip, 164 lost minutes)
T-209 reports receiving PIC call from car 562 (Train 201, cars 531,532,561,562,589,590) of a female patron that has lost consciousness. Train 201, Westlake Station, AL Track, Eastbound.

3/20/2017 9:51:00 AM - Incident\# 2846926 (1 lost trip, 148 lost minutes)
Patron assaulted on board train 207 at Universal City Station AL platform. LASD and Medical assistance requested.

3/20/2017 7:12:00 PM - Incident\# 2847157 (1 lost trip, 148 lost minutes)

Train \# 214 W/Bound Hollywood Vine Station A/R, operator reports that several patrons complained of being assaulted. Cars \#561-562-565-(566)-569-570

3/22/2017 8:55:00 PM - Incident\# 2848047 (0 lost trips, 10 lost minutes)
Vermont Santa Monica Station platform G-207, reports a physical altercation.

3/26/2017 7:43:00 PM - Incident\# 2849192 (1 lost trip, 116 lost minutes)
Patron hitting and kicking operator door Train \# 203 Car \# 506
3/27/2017 6:13:00 AM - Incident\# 2849293 (0 lost trips, 6 lost minutes)
Police Activity
Train 202
T-328
Cars 519-526-505-506
Union Station AR West

3/31/2017 5:16:00 AM - Incident\# 2851012 (0 lost trips, 7 lost minutes)
Operator T-7 reported a sleeping trespasser on the ROW at Hollywood Vine in the interlocking.
3/31/2017 6:56:00 PM - Incident\# 2851317 (2 lost trips, 298 lost minutes)
Union Station Train \# 201, Cars \#(583)-584-589-590, an unattended item found under a passenger seat.

## Other Incidents:

3/3/2017 1:46:00 PM - Incident\# 2841084 (0 lost trips, 5 lost minutes)
Yard de energized due to a trespasser.
3/27/2017 7:40:00 AM - Incident\# 2849332 (0 lost trips, 6 lost minutes)
Sick Car Cut Out
Train 202
T-364
Cars 519-526-505-(506)
Wilshire Western BR East

## 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 8,494 hours operated, there were approximately 43 total hours of service delays.

|  |  | Revenue |  |
| :--- | ---: | ---: | :---: |
| March $\mathbf{2 0 1 7}$ Service Hours * | Hours | Percent |  |
| Revenue Hours without Delays | 8,452 | $99.5 \%$ |  |
| Cancelled + Delayed Hours | 43 | $0.5 \%$ |  |
| Total Revenue Hours | $\mathbf{8 , 4 9 4}$ | $\mathbf{1 0 0 . 0 \%}$ |  |


| Summary of the major contributors: | Count | Hours | Percent |
| :---: | :---: | :---: | :---: |
| Operations | 3 | 1.7 | 4.0\% |
| Accidents | 0 | 0.0 | 0.0\% |
| Vehicle Maintenance | 26 | 14.0 | 32.9\% |
| Wayside | 3 | 6.7 | 15.6\% |
| Police \& Health | 11 | 12.5 | 29.3\% |
| Other | 3 | 7.8 | 18.3\% |
| Total | 46 | 42.6 | 100.0\% |

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



## March 2017 Green Line major delay contributors were as follows:

## Operations Incidents:

3/5/2017 8:29:00 AM - Incident\# 2841438 (0 lost trips, 15 lost minutes)
Train Delay (pink Letter M-238) Single track operations
R-050
Marine to El Segundo Interlocking
3/15/2017 10:09:00 PM - Incident\# 2845484 (1 lost trip, 78 lost minutes)
MT-140, MT-121 and MT-136 will operate hi-rail train 99 to El Segundo Station track 1 to perform padding removal.

3/31/2017 6:33:00 AM - Incident\# 2851064 (0 lost trips, 8 lost minutes)
Operator T-20 was not onboard the train at scheduled departure time. Train 334 scheduled departure is 06:25 hours. Train departed at 06:33 hours.

Vehicle Maintenance Incidents:
3/1/2017 5:34:00 PM - Incident\# 2840227 (0 lost trips, 5 lost minutes)
Propulsion / Dynamic Brakes, (203A)-209
Train \#336
T-064
Wilmington Station, Tack \#002, Eastbound.
3/5/2017 7:42:00 AM - Incident\# 2841428 (0 lost trips, 16 lost minutes)
Auto Train Protection (Speed Limit), cars \# (210A)-243
Train \#335
T-279
Marine Station, Track \#002, Eastbound.

3/7/2017 7:07:00 AM - Incident\# 2842087 (0 lost trips, 5 lost minutes)
Car 219 propulsion fault with speed restriction
T-210
Train 341
Norwalk Station track 1 Westbound
Consist 211-219
3/7/2017 11:29:00 PM - Incident\# 2842471 (2 lost trips, 132 lost minutes)
Lost air pressure. No movement.
Train 343
T-278
Track 2, E/B
Douglas Station
ATO/ MTO modes
(211B)

3/8/2017 3:35:00 PM - Incident\# 2842804 (0 lost trips, 6 lost minutes)
Propulsion fault
Car 220
train 336
T-070
Hawthorne Station
3/10/2017 6:31:00 AM - Incident\# 2843378 (0 lost trips, 6 lost minutes)
Train 341 with operator T-140 reports propulsion/ Friction brake faults at Marine station platform 1. Lead car
221A with 224.

3/12/2017 9:03:00 AM - Incident\# 2843984 (0 lost trips, 5 lost minutes)
ATP failure with an emergency brake application.
Train \# 331
T-344
Cars \#(202-A)-203
W/Bound Norwalk Station Track-1.

3/12/2017 10:20:00 AM - Incident\# 2843999 (0 lost trips, 4 lost minutes)
Consist overshot the platform while operating in ATO Mode.
Train \# 333
T-343
Cars \#(218-A)-207
W/Bound Lakewood Station Track-1.
3/13/2017 12:50:00 PM - Incident\# 2844409 (1 lost trip, 69 lost minutes)
Propulsion / Dynamic Brakes, car \#(224B)-227
Train \#331
T-105
Norwalk Station, Track \#001, Westbound.
3/13/2017 3:31:00 PM - Incident\# 2844492 (0 lost trips, 8 lost minutes)
Operator reports a non-clearing produlsion with peed restrictions.
Cars 215, 220
Train 334
T-235
Norwalk, TRk 1, westbound
3/14/2017 6:12:00 PM - Incident\# 2845026 (1 lost trip, 70 lost minutes)
Propulsion Fault / Speed Restriction
212-202
Train 344
T-450
Lakewood, westbound
3/15/2017 6:33:00 AM - Incident\# 2845160 (4 lost trips, 272 lost minutes)
ATP Fail Fault. No movement.
Train 341
T-140
Track 2, E/B
Marine Station
ATO/ MTO modes
(218A)-212
3/16/2017 2:13:00 PM - Incident\# 2845776 (0 lost trips, 5 lost minutes)
Prop faults with Speed Restriction
T-140
Train-332
Consist (210)219
Hawthorne Station, Eastbound, Track \#2
3/17/2017 11:33:00 PM - Incident\# 2846354 (0 lost trips, 13 lost minutes)
No Cab Signal on car 243A
Train 346
Norwalk Station Westbound Track \#1.
T-85
(243A)
3/18/2017 11:39:00 AM - Incident\# 2846431 (0 lost trips, 11 lost minutes)
Consist fails to proceed in Manual Operation Mode due to a faulty manual controller problem and cars not
communicating.
Train \# 333
T-064
Cars \# 203-(225-B).
E/Bound Hawthorne Station Track \#2.
3/20/2017 6:35:00 AM - Incident\# 2846859 (1 lost trip, 66 lost minutes)
Excessive Spin Slide / Propulsion Fault
(211)-207
Train 333
T-20
Vermont Station, westbound
3/21/2017 7:16:00 AM - Incident\# 2847279 (0 lost trips, 19 lost minutes)
Overspeed in ATO / Flats
(208)B-213
Train 335
T-64
Long Beach Station, westbound
3/25/2017 11:08:00 PM - Incident\# 2849064 (0 lost trips, 8 lost minutes)
No Cab Signal / No Movement
(227A)-220
Train 334
T-141
Marine Station, eastbound
3/27/2017 5:05:00 AM - Incident\# 2849236 (0 lost trips, 6 lost minutes)
ATP Failure on car 208
(208)-216
T-57
Marine Station Track \#2 Eastbound

3/28/2017 8:29:00 AM - Incident\# 2849837 (0 lost trips, 6 lost minutes)
Car 243B 3/4 doors are cut out
T-344
Train-341
Consist-(243A)217
Norwalk Station,

3/28/2017 10:50:00 AM - Incident\# 2849896 (0 lost trips, 6 lost minutes) Car 243B 3/4 doors are cut out
T-344
Train-341
Consist-(243A)217
Norwalk Station, Track \#1, Westbound
3/28/2017 1:38:00 PM - Incident\# 2849981 (0 lost trips, 12 lost minutes)
Car 217 doors will not open/Prop Fault.
T-105
Train 331
Cars (217-207)
Douglas Station, Track 1, westbound.
3/29/2017 6:47:00 AM - Incident\# 2850207 (0 lost trips, 10 lost minutes)
Some doors are not opening.
Train 333
T-44
Track 1, W/B
Mariposa Station
ATO and MTO modes
(220)-209

3/30/2017 9:36:00 AM - Incident\# 2850772 (0 lost trips, 10 lost minutes)
Self applying brakes/no movement on car 211
T-140, train 333
(211A)-219
Marine, track 2, east
3/30/2017 5:55:00 PM - Incident\# 2850930 (0 lost trips, 7 lost minutes)
Propulsion Fault on car 206
Train 337
(206)-216

T-409
Norwalk Station Track \#1.
3/31/2017 6:12:00 AM - Incident\# 2851051 (1 lost trip, 64 lost minutes)
No cab signal.
Train 340
T-64
Track 1, W/B
Norwalk Station
ATO and MTO modes
(226B)-218
Wayside Incidents:
3/9/2017 9:30:00 AM - Incident\# 2842995 (0 lost trips, 12 lost minutes)
OCS Inspection: Marine BP to El Segundo IL, track 2
3/10/2017 5:39:00 PM - Incident\# 2843655 (0 lost trips, 5 lost minutes)
All breakers from Lakewood to Norwalk show open
3/18/2017 6:01:00 PM - Incident\# 2846514 (6 lost trips, 383 lost minutes)
Train 332 reported Loss of Traction Power at Lynwood Interlocking Eastbound Track \#2.
(224)-220

T-71
Police \& Health Incidents:
3/2/2017 9:27:00 PM - Incident\# 2840733 ( 0 lost trips, 18 lost minutes)
LASD held Train 344 at Harbor Station for possible Robbery Suspect.
Train 344
(211)-244

Harbor Station Westbound Track \#1.
T-294
3/6/2017 6:12:00 AM - Incident\# 2841640 (0 lost trips, 9 lost minutes)
Train 338 was delayed due to sleeper(s) security sweep at Willowbrook Station westbound.

3/10/2017 11:03:00 AM - Incident\# 2843486 (1 lost trip, 66 lost minutes)
Train operator on train 334 contacted ROC stated individual with open wounds on train. T-496 and car 219

3/10/2017 8:25:00 PM - Incident\# 2843696 (0 lost trips, 13 lost minutes)
LASD reports receiving a call regarding a person with a machete
Train 343
T-55
209(211)
Track 2
Westbound
Long Beach station
3/12/2017 11:43:00 PM - Incident\# 2844117 (0 lost trips, 10 lost minutes)
Train Operator reported that a Black Male was harassing a Hispanic Female on Train 351.
T-48
215
Crenshaw Station Track \#1.
3/13/2017 1:04:00 PM - Incident\# 2844414 (0 lost trips, 15 lost minutes)
Assault, Cars \#(216A)-223
Train \#333
T-057
Long Beach Station, Track \#002, Eastbound

3/13/2017 5:20:00 PM - Incident\# 2844560 (1 lost trip, 83 lost minutes)
Lakewood, Long Beach/LASD requested a hold for a robbery.

Operator notified control an African-American female alleges she was threatened by another passenger.
Train 346 operated by T-396 reports an individual is requesting medical attention onboard at Aviation Station.

3/17/2017 7:49:00 AM - Incident\# 2846079 (0 lost trips, 5 lost minutes)
Sick passenger onboard Train 334 at Norwalk
Train 334, Track 1, Norwalk Staion
Inside LRV 223 B

3/24/2017 2:44:00 PM - Incident\# 2848753 (7 lost trips, 451 lost minutes)
LASD reports police activity at Hawthorne station, by pass the station.

3/30/2017 9:03:00 PM - Incident\# 2850953 (0 lost trips, 10 lost minutes)
LASD reported that a Possible Suicidal Person wanted to jump into the Tracks at Harbor Station.
Train 339
T-141
(225)-217

Harbor Station Eastbound Track \#2.
Other Incidents:
3/2/2017 3:55:00 AM - Incident\# 2840322 (5 lost trips, 329 lost minutes)
No operator for alpha "F".
3/7/2017 6:06:00 AM - Incident\# 2842065 (0 lost trips, 6 lost minutes)
LASD held train at El Segundo station to remove sleeping patron from car 210
Train 337
T-79
El Segundo Station Track 2 Eastbound

3/28/2017 6:28:00 AM - Incident\# 2849725 (2 lost trips, 132 lost minutes)
Late pull out due to a broken right side mirror on car 243A
Green lin yard controlller R-158
Train 341
T-140
Green Line yard
Consist 243-217

## 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 20,786 hours operated, there were approximately 194 total hours of service delays.

|  | Revenue |  |
| :--- | ---: | ---: |
| March 2017 Service Hours * | Hours | Percent |
| Revenue Hours without Delays | 20,592 | $99.1 \%$ |
| Cancelled + Delayed Hours | 194 | $0.9 \%$ |
| Total Revenue Hours | $\mathbf{2 0 , 7 8 6}$ | $\mathbf{1 0 0 . 0 \%}$ |


| Summary of the major contributors: | Count |  | Hours |
| :--- | ---: | ---: | ---: |
| Percent |  |  |  |
| Operations | 5 | 4.5 | $2.3 \%$ |
| Accidents | 2 | 12.4 | $6.4 \%$ |
| Vehicle Maintenance | 27 | 62.5 | $32.2 \%$ |
| Wayside | 1 | 0.2 | $0.1 \%$ |
| Police \& Health | 12 | 114.6 | $59.0 \%$ |
| Other | 1 | 0.2 | $0.1 \%$ |
| Total | 48 | 194.4 | $\mathbf{1 0 0 . 0 \%}$ |

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



## March 2017 Gold Line major delay contributors were as follows:

## Operations Incidents:

3/8/2017 9:32:00 AM - Incident\# 2842580 (0 lost trips, lost minutes)
Temporary Letter Emergency Schedule for single tracking between Del Mar IL to Indiana IL. Schedule
adjustment by ROC Controller two minutes @ Atlantic Station.
3/8/2017 3:53:00 PM - Incident\# 2842633 (0 lost trips, 17 lost minutes)
Due to single tracking between Del Mar IL and Indiana
Train 407
T-304
northbound
Allen
3/10/2017 4:43:00 PM - Incident\# 2843664 (1 lost trip, 239 lost minutes)
T-180 violated Rule\# 4351 Signal Overrun at 4S Ditman Interlocking, Track 2, southbound.
Train 426
Cars (724B)-740
3/17/2017 9:34:00 AM - Incident\# 2846114 (0 lost trips, 8 lost minutes)
Track Allocation (pink letter M-258)
TP-121
Indiana 2N and South West Museum 2S.
3/27/2017 5:48:00 AM - Incident\# 2849243 (0 lost trips, 6 lost minutes)
T-36 on Alpha BG departed 6 min late from APU.

## Accidents:

3/9/2017 8:30:00 AM - Incident\# 2842998 (1 lost trip, 245 lost minutes)
Auto vs. Train, cars \# (716A)-725-735
Train \#414
T-338
3rd Street and Woods, Track \#002, Southbound.
3/14/2017 2:57:00 PM - Incident\# 2844944 (2 lost trips, 497 lost minutes)
Train vs Auto, 10-73, 718(715B).
Temple Street
Train \#432, T-156, track \#2, southbound.
Vehicle Maintenance Incidents:
3/1/2017 6:48:00 AM - Incident\# 2839913 (1 lost trip, 248 lost minutes)
No movement friction brakes wont release on car 732
T-159
Tk 1 NB Downey Road
732-736-747
3/3/2017 5:47:00 AM - Incident\# 2840799 (0 lost trips, 9 lost minutes)
Propulsion / Dynamic Brakes
T-477
Train 455
LRV 703-701
Maravilla Station, Track1, northbound.
3/3/2017 2:48:00 PM - Incident\# 2841094 (0 lost trips, 10 lost minutes)
Cars (717-743) majo/minor prop faults/friction brakes faults, no movement.
T-91
Train 402
Del Mar Station, Track 2, southbound.
3/5/2017 11:23:00 AM - Incident\# 2841468 (0 lost trips, 12 lost minutes)
Auto Train Protection (Speed Limit)
T-493
Train 409
LRV 730 (722) 726
Allen Station, Track 2, southbound.

## 3/5/2017 2:17:00 PM - Incident\# 2841504 (0 lost trips, 10 lost minutes)

B/O Windshield wipper
T-100
Train 409
LRV (1013B) 10121011
Allen Station, Track 2, southbound.

3/6/2017 5:15:00 AM - Incident\# 2841614 (0 lost trips, 10 lost minutes)
No head lights on car 726
T-451
Train 415
SB Track 2 Downtown Azusa station
726-722-730

3/6/2017 6:59:00 AM - Incident\# 2841657 (0 lost trips, 20 lost minutes)
No propulsion reported on car 706
T-280
Train 455
Track 1 NB Atlantic station
706-709

3/6/2017 6:57:00 PM - Incident\# 2841950 (1 lost trip, 241 lost minutes)
Master Controller is loose on consist (713A)733, unable to proceed northbound.
South Pasadena Station
Train \#408, T-263, track \#1, northbound.

3/7/2017 2:05:00 PM - Incident\# 2842330 (1 lost trip, 241 lost minutes)
Door faults on both cars 734-750
Train 402
T-305
Northbound
Southwest Museum

3/8/2017 8:14:00 PM - Incident\# 2842870 (1 lost trip, 240 lost minutes)
Operator reports of sluggish movement
Train 407
T-196
(716)715

Civic Ctr., Trk. 1, northbound

3/9/2017 9:35:00 AM - Incident\# 2843034 (0 lost trips, 15 lost minutes)
Train to Wayside Comm, cars \#1057-1006
Train \#404
T-317
Allen Station, Track \#001, Northbound

3/10/2017 4:26:00 PM - Incident\# 2843667 (0 lost trips, 8 lost minutes)
Car743 ATP Failure, no movement.
T-429
Train 452
Cars (743)-733
Citrus Station, Track 2, southbound.
3/10/2017 4:27:00 PM - Incident\# 2843666 (2 lost trips, 484 lost minutes) Car 1058-1010 Pantographs going up/down on it self.
T-501
Train 404
Cars (1058-1010)
Indiana Station, Track 2, southbound.
3/13/2017 7:36:00 AM - Incident\# 2844269 (0 lost trips, 7 lost minutes)
Door issues on car 740A 7 and 8
Train 415
T-317
SB Tk 2 Arcadia station
732-750-740

3/15/2017 6:24:00 AM - Incident\# 2845154 (0 lost trips, 6 lost minutes)
Friction Brakes would not release on 721
Train 417
T-77
Track 2 NB departing Atlantic
726-721
3/17/2017 6:24:00 AM - Incident\# 2846041 (1 lost trip, 240 lost minutes)
Operator reports of propulsion faults
Train 418
T-019
(1057)1006
Chinatown Station, trk. 2, southbound
3/22/2017 5:43:00 PM - Incident\# 2848020 (1 lost trip, 246 lost minutes)
Operator reports Propulsion fault with restriction Speed, 35 mph .
Cars: 1012 (1058) 1056.
Train 428, Fillmore Station, Northbound TK 1.
T-447.
3/23/2017 12:54:00 PM - Incident\# 2848293 (1 lost trip, 249 lost minutes)
Propulsion / Dynamic Brakes, cars \#703-705
Train \#452
T-154
Indiana Station, Track \#001, Northbound.
3/25/2017 2:13:00 PM - Incident\# 2848978 (0 lost trips, 5 lost minutes)
Auto Train Operation, cars \#(1012A)-1057
Train \#413
T-066
Arcadia Station, Track \#001, Northbound.
3/25/2017 5:03:00 PM - Incident\# 2849021 (1 lost trip, 224 lost minutes)
Propulsion / Dynamic Brakes, Cars \#(717A)-743
Train \#402
T-232
Downtown Azusa, Track \#002, Southbound
3/26/2017 4:23:00 AM - Incident\# 2849076 (0 lost trips, 12 lost minutes) Operator reports of rail car (717A) not engaging in Stree Run Territory.
Train 401
T-216
(717A)718
Civic Center, Trk. 1, northbound
3/28/2017 5:44:00 AM - Incident\# 2849735 (1 lost trip, 245 lost minutes)
Propulsion fault 701B
T-178
Train 452
Tk 2 SB Soto Station
710-701
3/29/2017 4:53:00 AM - Incident\# 2850167 (1 lost trip, 240 lost minutes)
Prop Fault with a speed restriction all 3 cars
T-248
Train 413
Tk 1 NB Duarte Station
1005-1009-1010
3/30/2017 3:11:00 PM - Incident\# 2850866 (0 lost trips, 7 lost minutes)
T-470 reports train 408 cars 1013-1059, at Atlantic Station, platform 1, heading Northbound has no movement
with alarms and no indications (only audible).
3/30/2017 7:18:00 PM - Incident\# 2850940 (0 lost trips, 3 lost minutes)
Friction Brakes
Train 422
T-304
718-707
Southbound, Track 1 Azusa station.
3/31/2017 5:10:00 PM - Incident\# 2851297 (1 lost trip, 243 lost minutes)
Propulsion / Dynamic Brakes, 717-(740-720)
Train \#405
T-146
Maravilla Station, Track \#001, Northbound.

3/31/2017 7:17:00 PM - Incident\# 2851321 (2 lost trips, 477 lost minutes)
Car 1059 prop fault/speed restriction and unknown audible.
T-228
Train 401
Cars (1012)-1006
Monrovia Station, Track 2, southbound.

## Wayside Incidents:

3/21/2017 9:44:00 AM - Incident\# 2847346 (0 lost trips, 12 lost minutes)
MT-108 performing a walking track inspection from Southwest Museum to Fillmore.

## Police \& Health Incidents:

3/7/2017 9:04:00 PM - Incident\# 2842454 (1 lost trip, 253 lost minutes)
T-160 reports male patron reporting being assaulted on Train 424, Car 1056, (cars 1056, 1058), Soto Station, Track 2, Southbound.

3/15/2017 7:07:00 PM - Incident\# 2845459 (0 lost trips, 8 lost minutes)
Protesters blocking Temple Street.
3/18/2017 4:52:00 AM - Incident\# 2846372 (2 lost trips, 448 lost minutes)
Train 402 reports person on board requiring medical attention.
Track 2 Indiana station. Car 749

3/20/2017 4:27:00 AM - Incident\# 2846765 (0 lost trips, 4 lost minutes)

Operator notified control an African-American female alleges she was threatened by another passenger.

3/20/2017 12:30:00 PM - Incident\# 2846999 (1 lost trip, 239 lost minutes)
Patron having seizure unknown car 745-730
Train 407
T-19
Northbound
Ave 55

3/25/2017 12:12:00 AM - Incident\# 2848861 (22 lost trips, 4,928 lost minutes)
All Trains Bypassing Soto Station Due to Police Activity/Investigation

3/26/2017 2:21:00 PM - Incident\# 2849148 (1 lost trip, 224 lost minutes)
Train $406(719,728)$ T-430, Union Station, track 1 reports female individual exited the train and tripped on the platform.

3/27/2017 3:08:00 PM - Incident\# 2849560 (2 lost trips, 490 lost minutes)
T-88 reports wheelchair patron fell out of his chair and has a bloody nose. Train 403, cars 750, 747, Union Station, Track 2, Southbound.

3/27/2017 5:42:00 PM - Incident\# 2849621 (1 lost trip, 253 lost minutes)
Train 407, cars 741, 735, 721, Del Mar, Track 1, Northbound, T-305 reports passenger laying on floor needing medical attention.

3/29/2017 5:35:00 AM - Incident\# 2850171 (0 lost trips, 10 lost minutes)
T-39 reports male Hispanic passenger bleeding from the nose on the train and appears disoriented in car 1056 at Lake Station.

3/29/2017 7:53:00 AM - Incident\# 2850224 (0 lost trips, 8 lost minutes)
T-447 reports individual passed out on his train. Tk 2 at South Pasadena Station on car 733.

3/30/2017 5:52:00 AM - Incident\# 2850580 (0 lost trips, 12 lost minutes)
Female patron alleges she fell boarding train 405 SB tk 2 at Union Station.
Other Incidents:
3/10/2017 11:21:00 AM - Incident\# 2843492 ( 0 lost trips, 10 lost minutes)
Radio, cars \#(743A)-733
Train \#401
T-178
Arcadia and Sierra Madre I/L

## 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 19,929 hours operated, there were approximately 49 total hours of service delays.

| Mevenue <br> March 2017 Service Hours * |  |  |
| :--- | ---: | ---: |
| Revenue Hours without Delays | 19,880 | $99.8 \%$ |
| Cancelled + Delayed Hours | 49 | $0.2 \%$ |
| Total Revenue Hours | $\mathbf{1 9 , 9 2 9}$ | $\mathbf{1 0 0 . 0 \%}$ |


| Summary of the major contributors: | Count | Hours | Percent |
| :---: | :---: | :---: | :---: |
| Operations | 1 | 0.1 | 0.2\% |
| Accidents | 0 | 0.0 | 0.0\% |
| Vehicle Maintenance | 10 | 15.8 | 32.3\% |
| Wayside | 2 | 28.5 | 58.0\% |
| Police \& Health | 5 | 0.6 | 1.2\% |
| Other | 3 | 4.0 | 8.2\% |
| Total | 21 | 49.0 | 100.0\% |

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



## March 2017 Expo Line major delay contributors were as follows:

Operations Incidents:3/22/2017 3:38:00 PM - Incident\# 2847958 (0 lost trips, 5 lost minutes)
Train Delay, Cars \#1034-1030-1051
Train \#608
T-268
7th and Metro Center, Track \#001, Northbound.
Vehicle Maintenance Incidents:
3/1/2017 9:25:00 PM - Incident\# 2840266 (0 lost trips, 4 lost minutes)
Train operator reports ATP failure.
Train 603, T-123
(114B)-102
Track 3, 17th Street, North
3/2/2017 9:24:00 AM - Incident\# 2840456 (0 lost trips, 14 lost minutes)
Car 103A no faults, no movement Train 609
Train 609
T-534
17th Street St. Station
Consist 1030-1025
3/6/2017 12:12:00 PM - Incident\# 2841852 (1 lost trip, 119 lost minutes)
Cab Door misaligned.
Train \#607.
T-313.
LRV- (1027B), 1020.
Santa Monica Station, track \#3, northbound.
3/9/2017 11:53:00 PM - Incident\# 2843302 (1 lost trip, 119 lost minutes)
Operator reports of no movement.
Train 625
T-392
Cars(1020B), 1003, 1044
7th/Metro Tail trk 2, Northbound
3/11/2017 12:11:00 PM - Incident\# 2843818 (1 lost trip, 141 lost minutes)
Dirty Car.
Train \#605.
T-062.
LRV-(142A), 154, 152.
Santa Monica Station, Track \#3, Northbound.
3/15/2017 8:38:00 PM - Incident\# 2845479 (1 lost trip, 127 lost minutes)
Operator reports of no movement.
Train 621
T-
Cars (1034)-1036-1021
Bundy Station, Track 3, Northbound
3/16/2017 4:52:00 PM - Incident\# 2845855 (1 lost trip, 125 lost minutes)
Operator reports a non-clearing friction brake fault.
Cars 1035, 1060, 1054
Train 602
T-354
Santa Monica TRK 3, northbound
3/18/2017 6:10:00 PM - Incident\# 2846503 (0 lost trips, 5 lost minutes)
Train operator reports no movement.
Train 603, T-150
(1035B)-1060-1054
Track 3, Farmdale, North
3/25/2017 7:33:00 AM - Incident\# 2848909 (1 lost trip, 156 lost minutes)
No propulsion and movement.
Train\#606
T\#241
(131A),146,102
Track\#4,southbound,Vermont Station

3/26/2017 7:18:00 AM - Incident\# 2849099 (1 lost trip, 141 lost minutes)
Operator reports human waste in Car 1026.
Cars 1026, 1040, 1043
Train 603
T-123
Bundy TRK 4, southbound

## Wayside Incidents:

3/4/2017 7:21:00 AM - Incident\# 2841236 (12 lost trips, 1,692 lost minutes)
Turn Backs from 23rd Street Station, back to Santa Monica.
Train \#603.
T-374.

3/6/2017 7:05:00 AM - Incident\# 2841665 (0 lost trips, 15 lost minutes)
False occupancy detected south of the La Brea Station ,Trk 4 only.

## Police \& Health Incidents:

3/2/2017 7:45:00 AM - Incident\# 2840455 (0 lost trips, 15 lost minutes)
Expo Line service delay caused by a blockade on the Blue Line tracks between 41st and Vernon Grade crossings. Private vehicle drove in to the right of way at 43 street and stopped on track 2.

3/8/2017 2:24:00 PM - Incident\# 2842757 (0 lost trips, 6 lost minutes)
LASD: Roggy, reported a bicycle theft, the suspect boarded northbound train \#606 and Culver City PD is requesting to hold the train.
3/13/2017 3:12:00 PM - Incident\# 2844491 (0 lost trips, 5 lost minutes)
Train delay due to MTA bus blocking train 4.
Train 607
T-472
1023-1052
Southbound Track 4 at Normandie.

3/31/2017 12:56:00 PM - Incident\# 2851215 (0 lost trips, 6 lost minutes)
Caucasian male, fell on the ROW,track\#3-Santa Monica Station.
3/31/2017 4:02:00 PM - Incident\# 2851275 (0 lost trips, 5 lost minutes) Train 602 reports no movement at Pico Station.
Train 602
T-354
LRV'S 1048-1036
Pico Station, Track 2, Southbound.

## Other Incidents:

3/2/2017 3:19:00 PM - Incident\# 2840600 ( 1 lost trip, 119 lost minutes)
Expo yard control reports not having enough equipment for rollout.

3/10/2017 5:11:00 AM - Incident\# 2843343 (1 lost trip, 119 lost minutes)
Train \#608 out late due to mechanical problems before roll out.
3/17/2017 2:35:00 PM - Incident\# 2846233 (0 lost trips, 5 lost minutes)
Train-626
T-528
Cars (1028)-1041
Northbound, Track \#4
Santa Monica Station
Out Late due to operator was unaware of their assignment in the yard.

## 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]:    * 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\%.
    O Red - High probability that the target will not be achieved -- significant problems and/or delays. Falls below Target >70\%
    N/A = Not Available

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

[^2]:    * KinkiSharyo rolling stock began service March 2016

[^3]:    MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures. \%Change is from previous month.

