```
Los Angeles County
Metropolitam Transport tion Autharity
Califomia
```

> OPERATIONS
> MONTHLY RAIL
> PERFORMANCE
> REPORT


## METRO RAIL PERFORMANCE - JULY 2019

Contents ..... Page
Systemwide Performance
Rail Scorecard ..... 3
Rail Car Availability ..... 5
Rail Mean Miles Between Major Failure by Vehicle Type ..... 6
Fleet Distribution Report ..... 11
Cleanliness ..... 12
Lost Revenue Vehicle Hours by Category, by Division ..... 13
Rail Service Performance ..... 16
Rail Safety Performance ..... 19
Vertical Transportation - Systemwide ..... 21
Wayside Signals Maintenance Time To Repair ..... 22
Wayside Administrative Key Performance Indicators ..... 23
Workers Comp Claims ..... 29
Lost Work Days ..... 30
Blue Line Performance
Performance Summary ..... 31
Major Incident Detail ..... 32
Performance Charts ..... 34
Red / Purple Line Performance
Performance Summary ..... 38
Major Incident Detail ..... 39
Performance Charts ..... 44
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 ..... 64
Expo Line Performance
Performance Summary ..... 68
Major Incident Detail ..... 69
Performance Charts ..... 71

## 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.
The FY20 goals shown have not been finalized. There will be slight changes which will be reflected on the August 2019 reports.

| Measurement | FY 2017 | FY 2018 | FY 2019 | FY 2020 Target | $\begin{aligned} & \text { FY } 2020 \\ & \text { YTD } \end{aligned}$ | FYTD <br> Status | May Month | Jun Month | Jul Month |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Systemwide |  |  |  |  |  |  |  |  |  |
| On-Time Pullouts | 99.61\% | 99.68\% | 99.72\% | 99.80\% | 99.56\% | O | 99.41\% | 99.76\% | 99.56\% |
| Mean Miles Between Chargeable Mechanical Failures 3 | 29,711 | 31,146 | 39,034 | 37,615 | 36,692 | $\bigcirc$ | 38,790 | 36,984 | 36,692 |
| In-Service On-time Performance | 98.24\% | 98.48\% | 98.81\% | 99.10\% | 98.91\% | $\bigcirc$ | 98.88\% | 98.98\% | 98.91\% |
| Service Delivery Ratio | 99.23\% | 99.22\% | 99.56\% | 99.70\% | 99.82\% | $\bigcirc$ | 99.73\% | 99.78\% | 99.82\% |
| Traffic Accidents Per 100,000 Train Miles | 1.01 | 0.96 | 0.68 | 0.85 | 0.63 | $\bigcirc$ | 0.90 | 0.63 | 0.63 |
| CPUC Reportable Accidents per 100,000 Train Miles | 0.36 | 0.54 | 0.29 | 0.37 | 0.31 | $\bigcirc$ | 0.45 | 0.16 | 0.31 |
| Passenger Accidents per 100,000 Boardings | 0.023 | 0.022 | 0.014 | 0.010 | 0.027 | O | 0.049 | 0.000 | 0.027 |
| Complaints per 100,000 Boardings | 1.98 | 1.81 | 1.83 | 1.10 | 1.63 | $\bigcirc$ | 1.51 | 1.55 | 1.63 |
| New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours ${ }^{1,2}$ | 12.27 | 11.17 | 11.43 | 10.05 | 4.72 | $\bigcirc$ | 15.67 | 5.81 | 4.72 |
| Lost Work Days per 200,000 Exposure Hours ${ }^{\text {1,2 }}$ | 733 | 886 | 800 | 821.00 | 0 | O | 826 | 838 |  |
| OSHA Injuries per 200,000 Exposure Hours ${ }^{1,2}$ | 8.53 | 7.61 | 7.23 | 6.43 | 0.00 | $\bigcirc$ | 7.37 | 1.94 |  |
|  |  |  |  |  |  |  |  |  |  |
| Wayside Maintenance \& Engineering |  |  |  |  |  |  |  |  |  |
| Past-Due Preventive Maintenance - Aging of Outstanding Work Orders | 1 | 3 | 64 | N/A | 116 | N/A | 20 | 15 | 116 |
| New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours | 5.35 | 5.02 | 5.31 | 5.40 | 3.55 | $\bigcirc$ | 3.44 | 0.00 | 3.55 |
| Lost Work Days per 200,000 Exposure Hours ${ }^{1}$ | 194 | 312 | 218 | 296 | - | $\bigcirc$ | 155 | 152 | 0 |
| OSHA Injuries per 200,000 Exposure Hours ${ }^{1}$ | 4.01 | 4.01 | 3.84 | 4.13 | 0.00 | $\bigcirc$ | 3.44 | 0.00 | 0 |


| Blue Line |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| On-Time Pullouts | 99.60\% | 99.39\% | 99.46\% | 99.50\% | 98.92\% | $\bigcirc$ | -100.00\% | 99.44\% | 98.92\% |
| Mean Miles Between Chargeable Mechanical Failures 3 | 15,405 | 13,772 | 22,391 | 18,555 | 177,184 | $\bigcirc$ | 154,696 | 85,685 | 177,184 |
| In-Service On-time Performance | 96.44\% | 97.11\% | 98.13\% | 98.80\% | 99.72\% | $\bigcirc$ | 99.38\% | 99.80\% | 99.72\% |
| Service Delivery Ratio | 98.54\% | 98.42\% | 99.31\% | 99.40\% | 99.80\% | $\bigcirc$ | 99.51\% | 99.79\% | 99.80\% |
| Traffic Accidents Per 100,000 Train Miles | 2.18 | 1.63 | 1.05 | 1.84 | 3.32 | $\bigcirc$ | 1.90 | 3.43 | 3.32 |
| CPUC Reportable Accidents per 100,000 Train Miles | 0.71 | 1.03 | 0.38 | 0.40 | 1.66 | $\bigcirc$ | 0.00 | 1.72 | 1.66 |
| Passenger Accidents per 100,000 Boardings | 0.046 | 0.033 | 0.013 | 0.010 | 0.000 | $\bigcirc$ | 0.000 | 0.000 | 0.000 |
| Complaints per 100,000 Boardings | 1.67 | 2.22 | 1.73 | 1.40 | 3.01 | $\bigcirc$ | 0.49 | 3.97 | 3.01 |
| New Workers' Compensation Indemnity Claims per | 16.74 | 13.95 | 14.22 | 11.90 | 18.42 | $\bigcirc$ | 5.58 | 6.06 | 18.42 |
| Lost Work Days per 200,000 Exposure Hours ${ }^{1}$ | 836 | 1,016 | 695 | 953 |  | - | 489 | 787 |  |
| OSHA Injuries per 200,000 Exposure Hours ${ }^{1}$ | 10.40 | 8.10 | 5.96 | 5.93 |  | - | 0.00 | 6.06 |  |

[^0]| Measurement | FY 2017 | FY 2018 | FY 2019 | FY 2020 <br> Target | $\begin{gathered} \text { FY } 2020 \\ \text { YTD } \end{gathered}$ | FYTD <br> Status | May Month | Jun <br> Month | Jul Month |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Red Line |  |  |  |  |  |  |  |  |  |
| On-Time Pullouts | 99.95\% | 99.88\% | 99.85\% | 100.00\% | 99.61\% | O | 100.00\% | 100.00\% | 99.61\% |
| Mean Miles Between Chargeable Mechanical Failures 3 | 104,637 | 68,407 | 58,255 | 94,035 | 41,176 | $\bigcirc$ | 40,739 | 49,128 | 41,176 |
| In-Service On-time Performance | 99.39\% | 99.33\% | 99.41\% | 99.70\% | 99.46\% | $\bigcirc$ | 99.41\% | 99.23\% | 99.46\% |
| Service Delivery Ratio | 99.72\% | 99.65\% | 99.73\% | 100.00\% | 99.72\% | O | 99.84\% | 99.81\% | 99.72\% |
| Traffic Accidents Per 100,000 Train Miles | 0.57 | 0.64 | 0.57 | 0.57 | 0.00 | O | 0.83 | 0.87 | 0.00 |
| CPUC Reportable Accidents per 100,000 Train Miles | 0.14 | 0.21 | 0.28 | 0.21 | 0.00 | $\bigcirc$ | 0.83 | 0.00 | 0.00 |
| Passenger Accidents per 100,000 Boardings | 0.004 | 0.000 | 0.002 | 0.000 | 0.029 | $\bigcirc$ | 0.000 | 0.000 | 0.029 |
| Complaints per 100,000 Boardings | 1.19 | 1.16 | 1.35 | 0.55 | 0.66 | $\bigcirc$ | 0.81 | 1.07 | 0.66 |
| New Workers' Compensation Indemnity Claims per | 12.68 | 11.80 | 14.74 | 10.80 | 5.70 | $\bigcirc$ | 28.53 | 11.79 | 5.70 |
| *Lost Work Days per 200,000 Exposure Hours | 992 | 827 | 755 | 809 |  | - | 1,080 | 846 |  |
| *OSHA Injuries per 200,000 Exposure Hours | 7.52 | 4.99 | 9.67 | 3.89 |  | - | 17.12 | 0.00 |  |


| Green Line |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| On-Time Pullouts | 99.69\% | 99.59\% | 99.85\% | 99.70\% | 99.08\% | $\bigcirc$ | 100.00\% | 99.32\% | 99.08\% |
| Mean Miles Between Chargeable Mechanical Failures 3 | 16,375 | 21,614 | 22,144 | 22,562 | 24,773 | $\bigcirc$ | 18,353 | 24,218 | 24,773 |
| In-Service On-time Performance | 98.69\% | 98.72\% | 98.76\% | 99.00\% | 98.01\% | $\bigcirc$ | 98.22\% | 98.84\% | 98.01\% |
| Service Delivery Ratio | 99.61\% | 99.38\% | 99.70\% | 100.00\% | 99.86\% | $\bigcirc$ | 99.71\% | 99.59\% | 99.86\% |
| Traffic Accidents Per 100,000 Train Miles | 0.48 | 0.34 | 0.25 | 0.35 | 0.00 | $\bigcirc$ | 0.73 | 0.00 | 0.00 |
| CPUC Reportable Accidents per 100,000 Train Miles | 0.07 | 0.00 | 0.06 | 0.40 | 0.00 | $\bigcirc$ | 0.73 | 0.00 | 0.00 |
| Passenger Accidents per 100,000 Boardings | 0.048 | 0.010 | 0.021 | 0.010 | 0.000 | $\bigcirc$ | 0.137 | 0.000 | 0.000 |
| Complaints per 100,000 Boardings | 2.08 | 1.69 | 2.08 | 1.20 | 2.64 | $\bigcirc$ | 1.64 | 2.53 | 2.64 |
| New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours | 9.14 | 12.87 | 6.82 | 11.52 | 0.00 | $\bigcirc$ | 9.09 | 0.00 | 0.00 |
| *Lost Work Days per 200,000 Exposure Hours | 712 | 984 | 1,321 | 930 |  | - | 1,159 | 1,019 |  |
| *OSHA Injuries per 200,000 Exposure Hours | 6.65 | 9.84 | 5.31 | 8.70 |  | - | 9.09 | 0.00 |  |


| Gold Line |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| On-Time Pullouts | 99.82\% | 99.84\% | 99.58\% | 100.00\% | 99.87\% | $\bigcirc$ | 98.27\% | 100.00\% | 99.87\% |
| Mean Miles Between Chargeable Mechanical Failures 3 | 38,427 | 43,588 | 40,584 | 49,303 | 24,637 | $\bigcirc$ | 35,787 | 29,775 | 24,637 |
| In-Service On-time Performance | 97.61\% | 98.19\% | 98.50\% | 98.80\% | 97.40\% | $\bigcirc$ | 97.90\% | 98.44\% | 97.40\% |
| Service Delivery Ratio | 98.88\% | 99.07\% | 99.39\% | 99.50\% | 99.84\% | $\bigcirc$ | 99.57\% | 99.72\% | 99.84\% |
| Traffic Accidents Per 100,000 Train Miles | 0.61 | 0.55 | 0.55 | 0.51 | 0.91 | $\bigcirc$ | 0.83 | 0.45 | 0.91 |
| CPUC Reportable Accidents per 100,000 Train Miles | 0.25 | 0.26 | 0.25 | 0.40 | 0.46 | $\bigcirc$ | 0.42 | 0.00 | 0.46 |
| Passenger Accidents per 100,000 Boardings | 0.030 | 0.086 | 0.044 | 0.010 | 0.082 | $\bigcirc$ | 0.229 | 0.000 | 0.082 |
| Complaints per 100,000 Boardings | 2.77 | 2.65 | 2.71 | 1.80 | 3.26 | $\bigcirc$ | 2.90 | 2.28 | 3.26 |
| New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours | 14.31 | 14.24 | 14.15 | 11.67 | 0.00 | $\bigcirc$ | 25.50 | 16.37 | 0.00 |
| *Lost Work Days per 200,000 Exposure Hours | 1,055 | 1,146 | 1,391 | 993 |  | $\bigcirc$ | 1,745 | 1,840 |  |
| *OSHA Injuries per 200,000 Exposure Hours | 9.69 | 11.87 | 10.61 | 8.94 |  | $\bigcirc$ | 10.20 | 5.46 |  |


| Expo Line |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| On-Time Pullouts | 98.76\% | 99.71\% | 99.87\% | 99.70\% | 99.68\% | $\bigcirc$ | 100.00\% | 99.68\% | 99.68\% |
| Mean Miles Between Chargeable Mechanical Failures 3 | 33,402 | 57,013 | 93,728 | 49,557 | 81,986 | $\bigcirc$ | 88,034 | 41,190 | 81,986 |
| In-Service On-time Performance | 98.48\% | 98.72\% | 98.93\% | 98.90\% | 99.52\% | - | 99.15\% | 98.42\% | 99.52\% |
| Service Delivery Ratio | 99.46\% | 99.54\% | 99.67\% | 99.80\% | 99.92\% | $\bigcirc$ | 99.91\% | 99.89\% | 99.92\% |
| Traffic Accidents Per 100,000 Train Miles | 1.26 | 1.78 | 1.19 | 1.26 | 0.00 | $\bigcirc$ | 0.83 | 0.00 | 0.00 |
| CPUC Reportable Accidents per 100,000 Train Miles | 0.63 | 1.30 | 0.56 | 0.40 | 0.00 | $\bigcirc$ | 0.00 | 0.00 | 0.00 |
| Passenger Accidents per 100,000 Boardings | 0.018 | 0.010 | 0.010 | 0.010 | 0.000 | $\bigcirc$ | 0.000 | 0.000 | 0.000 |
| Complaints per 100,000 Boardings | 3.68 | 2.20 | 2.11 | 1.40 | 1.72 | $\bigcirc$ | 2.38 | 1.10 | 1.72 |
| New Workers' Compensation Indemnity Claims per | 19.26 | 12.57 | 16.21 | 11.84 | 0.00 | $\bigcirc$ | 30.04 | 0.00 | 0.00 |
| *Lost Work Days per 200,000 Exposure Hours | 887 | 1,470 | 980 | 1,343 |  | - | 783 | 790 |  |
| *OSHA Injuries per 200,000 Exposure Hours | 16.60 | 9.92 | 9.73 | 9.92 |  | - | 7.51 |  |  |

* There is One Month lag in reporting this data
${ }^{3}$ MMBMF for each line is based on Actual Vehicle Revenue Miles since hub miles are not available by the line operated.
Vehicles from Division 11 may operate on the Expo or Blue Line.
O 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


## Vehicle Availability

Jul 2019

| Day Type | \% of Adjusted Scheduled Cars to Actual Rollout Cars | \% of Adjusted Scheduled Trains to Actual Rollout Trains |
| :---: | :---: | :---: |
| Blue |  |  |
| Weekday | 100.00\% | 100.00\% |
| Weekend | 98.15\% | 98.15\% |
| Total | 99.46\% | 99.46\% |
| Red/Purple |  |  |
| Weekday | 98.20\% | 98.56\% |
| Weekend | 98.98\% | 98.89\% |
| Total | 98.31\% | 98.62\% |
| Green |  |  |
| Weekday | 98.80\% | 98.80\% |
| Weekend | 56.67\% | 56.67\% |
| Total | 95.98\% | 95.98\% |
| Gold |  |  |
| Weekday | 99.19\% | 99.68\% |
| Weekend | 97.62\% | 97.62\% |
| Total | 99.01\% | 99.33\% |
| Expo |  |  |
| Weekday | 96.24\% | 98.55\% |
| Weekend | 100.00\% | 100.00\% |
| Total | 96.73\% | 98.73\% |
| Systemwide | 97.95\% | 98.45\% |



## METRO RAIL PERFORMANCE - JULY 2019

Rail Performance by Vehicle 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.


[^1]

** The Siemens 2000 GE/ATP AC cars did not operate starting in Feburary 2019 and resumed in May 2019.
MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures.
0
Metro
Percentage Change in Rail MMBMF by Vehicle Type

** The Siemens 2000 GE/ATP AC cars did not operate starting in Feburary 2019.
MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures. \%Change is from previous month.

## Mean Miles Beween Major Failures

|  | FY 2019 | FY2020 <br> Goal | FY2020 <br> YTD |
| :--- | ---: | ---: | ---: |
| AnsaldoBreda2550Base - AC | 37,825 | 52,000 | 19,321 |
| Breda 650 Base - DC | 27,943 | 43,000 | 31,904 |
| Breda 650 Option - AC | 85,062 | 124,000 | 47,876 |
| Kinkisharyo P3010 | 70,566 | 41,000 | 93,250 |
| Nippon Sharyo 2020 - DC | 21,405 | 37,000 | 0 |
| Nippon Sharyo 865 - DC | 0 | 24,000 | $0^{* *}$ |
| Siemens 2000 Base - AC | 17,841 | 21,000 | 18,410 |
| Siemens 2000 GE/ATP - AC | 6,920 | 9,000 | 8,422 |

Rail Fleet Distribution - MAY 2019

| Number of Rail Vehicle Type by <br> Division | Blue | Red / <br> Purple | Green | Gold | Expo | Total |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| AnsaldoBreda 2550 Base - AC |  |  |  | 50 |  | 50 |
| Breda 650 Base - DC |  | 30 |  |  |  | 30 |
| Breda 650 Option - AC |  | 68 |  |  |  | 68 |
| KinkiSharyo P3010 | 54 |  | 22 | 46 | 56 | 178 |
| Nippon Sharyo 2020 - DC | 15 |  |  |  |  | 15 |
| 0 |  |  |  |  |  | 0 |
| Siemens 2000 Base - AC | 7 |  |  |  | 15 | 22 |
| Siemens 2000 GE/ATP - AC |  |  | 20 |  |  | 20 |
| TOTALS | 76 | 98 | 42 | 96 | 71 | 383 |

## Cleanliness by Vehicle Type Jul 2019

## (1) <br> Metro <br> Rail Cleanliness by General Vehicle Type <br> 

RAIL DELAYS BY CATEGORY - SYSTEMWIDE
Revenue Hours Lost Related to - ACCIDENTS
Jul 2019


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


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


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


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


Revenue Hours Lost Related to - WAYSIDE


## Rail Service Performance In Service On Time Performance by Line Jul 2019



Ratio of Scheduled to Revenue Hours Delivered by Line


Mean Miles Between Mechanical Failures by Line


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


On-Time Pullouts Ratio by Line


Rail Safety Performance CPUC REPORTABLE INCIDENTS PER 100,000 TRAIN MILES Jul 2019

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


TRAFFIC ACCIDENTS PER 100,000 TRAIN MILES



## Systemwide Vertical Transportation Availability by Line Jul 2019



Note: No Escalators at Blue and Expo Lines


## Administrative Key Performance Indicators Worker's Compensation, Lost Work Days, OSHA Jul 2019






Facilities Maintenance goals to be established.



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



Facilities Maintenance goals to be established.
Note: There is a one month lag in Lost Work Days and OSHA data.


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



Facilities Maintenance goals to be established.
Note: There is a one month lag in Lost Work Days and OSHA data.

## Worker's Comp. Claims

May 2019 - Jul 2019
3 Month Comparison
Worker's Comp Definition: Number of new reported Workers Compensation Indemnity and Medical claims filed per 200,000 exposure hours. This indicator measures safety.
Calculation: New reported Workers' Compensation Indemnity and Medical claims filed per 200,000 Exposure Hours = New Claims/(Exposure Hours/200,000)


## Lost Work Days and OSHA Injuries

Apr 2019 - Jun 2019
3 Month Comparison
LWD Definition: Number of paid working days lost due to employees workers' compensation injuries each month per 200,000 exposure hours. This indicator measures use of Transitional Duty Program.
Calculation: : (Total Temporary Disability Benefit Payments / Estimated TD Benefit Rate) x (5/7) / (Number Exposure Hours / 200,000)"


OSHA Definition: Work-related injuries and illnesses that result in: death, loss of consciousness, days away from work, restricted work activity or job transfer, or medical treatment beyond first aid which are filed per 200,000 exposure hours.
Calculation: New OSHA Injuries filed per 200,000 Exposure Hours = New Injuries /(Exposure Hours/200,000)


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

## BLUE LINE

Out of a total of 11,044 hours operated, there were approximately 16 total hours of service delays.

|  | Revenue <br> July 2019 Service Hours * |  |
| :--- | ---: | ---: |
| Revenue Hours without Delays | 11,028 | $99.9 \%$ |
| Cancelled + Delayed Hours | 16 | $0.1 \%$ |
| Total Revenue Hours | $\mathbf{1 1 , 0 4 4}$ | $\mathbf{1 0 0 . 0 \%}$ |

Summary of the incidents:

| Count | Hours | Percent |  |
| :--- | ---: | ---: | ---: |
| Operations | 2 | 0.2 | $1.1 \%$ |
| Accidents | 1 | 2.9 | $18.1 \%$ |
| Vehicle Maintenance | 1 | 8.7 | $54.4 \%$ |
| Wayside | 2 | 0.2 | $1.0 \%$ |
| Police \& Health | 3 | 3.6 | $22.5 \%$ |
| Other | 3 | 0.5 | $2.9 \%$ |
| Total | $\mathbf{1 2}$ | $\mathbf{1 6 . 0}$ | $\mathbf{1 0 0 . 0 \%}$ |

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

The number of incidents on the following page may differ from the summary
count due to some incidents not properly designated as Cancelled or Delayed


July 2019 Blue Line incidents causing delay were as follows:

## Operations Incidents:

7/2/2019 10:30:00 AM - Incident\# 3169658 (0 lost trips, 6 lost minutes)
T-102 Train 105
Compton SB TK 2
1107-1080--1094

7/4/2019 11:33:00 PM - Incident\# 3170656 (0 lost trips, 5 lost minutes)
Delay of service/ Late departure
Train 102
T-201
(K1078A), K1088, K1148
Compton station, track 2, southbound

## Accidents:

7/26/2019 5:32:00 PM - Incident\# 3179720 (1 lost trip, 174 lost minutes)
Train 106
Southbound
Track \#2
T-291
(1103B)-1132-1086
!st and Pine
Train operator transmitted an emergency call for 1072

## Vehicle Maintenance Incidents:

7/18/2019 8:01:00 AM - Incident\# 3176059 (3 lost trips, 522 lost minutes)
Train 103 reports a Friction Brakes application and no movement departing Willow Station track 1.
Train 103
T-433
LRV'S 1090A1094-1105
Willow Station track 1 northbound.

## Wayside Incidents:

7/21/2019 1:12:00 PM - Incident\# 3177138 (0 lost trips, 10 lost minutes)
Train 106
T-244
1078-1103-1132
Track 1 Northbound
Artesia Interlocking

Switch out of correspondence at Compton Interlocking.

7/28/2019 3:49:00 PM - Incident\# 3180217 (0 lost trips, 7 lost minutes)
Main Yard North Interlocking switches out of correspondence.

## Police \& Health Incidents:

7/15/2019 9:10:00 AM - Incident\# 3174584 (0 lost trips, 12 lost minutes)

Medical emergency on car (1107) at Willow Station.
Train \# 102
T-259
Willow, track \#2, southbound
(1107)1137 1106

7/19/2019 7:18:00 PM - Incident\# 3176733 (1 lost trip, 186 lost minutes)
T/A , MTA not involved, blockingthe tracks at 4th/Pacific.
7/28/2019 10:39:00 PM - Incident\# 3180262 (0 lost trips, 20 lost minutes)
Police Activity at 7th/Long Beach causing disruption in service.

## Other Incidents:

7/28/2019 3:30:00 PM - Incident\# 3180210 (0 lost trips, 12 lost minutes)
Train 104 reported no movement.

## Unable To Duplicate

7/4/2019 5:57:00 AM - Incident\# 3170486 (0 lost trips, 8 lost minutes) Train 102, Cars 1094-1080-1105

7/16/2019 8:12:00 PM - Incident\# 3175414 (0 lost trips, 8 lost minutes)
Train 105, LRV's (1102B), 1092, 1138.
Del Amo Station, Track 2 southbound.
System no booting back and no movement.

## MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS COMPLIANCE WITH SCHEDULED VEHICLE HOURS <br> Jul 2019



COMPLIANCE WITH SCHEDULED TRAIN MILES


## ON-TIME PULL OUTS



IN-SERVICE ON-TIME PERFORMANCE CHART


LOST TRIPS


## LOST HOURS



## VERTICAL TRANSPORTATION AVAILABILITY



## RED LINE

Out of a total of 26,281 hours operated, there were approximately 72 total hours of service delays.

|  |  | Revenue |  |
| :--- | ---: | ---: | :---: |
| July 2019 Service Hours * | Hours | Percent |  |
| Revenue Hours without Delays | 26,209 | $99.7 \%$ |  |
| Cancelled + Delayed Hours | 72 | $0.3 \%$ |  |
| Total Revenue Hours | $\mathbf{2 6 , 2 8 1}$ | $\mathbf{1 0 0 . 0 \%}$ |  |


| Summary of the incidents: |
| :--- |
| $l\|c\| r\|r\|$ <br> Operations Count |
| Hours |
| Percent |
| Accidents |

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

The number of incidents on the following page may differ from the summary
count due to some incidents not properly designated as Cancelled or Delayed


## July 2019 Red Line incidents causing delay were as follows:

## Operations Incidents:

7/1/2019 7:10:00 AM - Incident\# 3169095 (4 lost trips, 597 lost minutes)
Train 203 (Purple Line) trip cancelled at Union Station at 0710 hours due to a lack of manpower and equipment in the yard. Train 203 was used for Train 204 for a trip to North Hollywood Station.

7/20/2019 5:51:00 AM - Incident\# 3176820 (0 lost trips, 12 lost minutes) CHARGEABLE
Train 204 / Operator T-351 / Consist 553,554,535,(536)
Operator reports Emergency Brake Application in Car 536.
Union Station AR-E (Interlocking)
Operator was instructed to utilize EMO to Union Station Platform.

7/24/2019 4:52:00 PM - Incident\# 3178655 (0 lost trips, 4 lost minutes) CHARGEABLE Westlake Station A/R Track debris removal from the cover board.

1. TP-118
2. TP-185

## Vehicle Maintenance Incidents:

7/1/2019 12:20:00 PM - Incident\# 3169258 (0 lost trips, 8 lost minutes) CHARGEABLE Flashing Cab signals/Emergency brake.
T-15
Train 205
(601)-602-579-580

Wilshire/Vermont AR West.

7/1/2019 5:41:00 PM - Incident\# 3169409 (0 lost trips, 7 lost minutes) CHARGEABLE
Flashing Cab signals/Emergency brake application.
T-427
Train 215
589-590-593-594-541-(542)
C.P. 60 AL East

7/2/2019 7:17:00 PM - Incident\# 3169870 (0 lost trips, 10 lost minutes) CHARGEABLE Train 217 car 560 developed a brake fault, needs EMO to travel.

7/3/2019 5:59:00 AM - Incident\# 3170008 (O lost trips, 10 lost minutes) CHARGEABLE Emergency brakes will not release
Train 210
T-012
Cars 563-564-559-560-601-(602)
North Hollywood AR East

7/6/2019 1:10:00 PM - Incident\# 3171118 (10 lost trips, 1,597 lost minutes) CHARGEABLE
Recurring emergency brake application. ATP Circuit Breaker Tripped.
Train \#201
T-351
Cars \#559-560-581-582-591-592.
E/Bound Vermont Santa Monica A/L Track.

7/7/2019 5:50:00 PM - Incident\# 3171366 (0 lost trips, 12 lost minutes) CHARGEABLE Friction brakes not releasing.
Train 201.
T-371.

7/10/2019 7:15:00 PM - Incident\# 3172905 (0 lost trips, 4 lost minutes) CHARGEABLE
Friction Brake fail to release.
Train \#213
T-351
Cars \#529-520-501-502-521-(530).
E/Bound North Hollywood Station A/L Track.

7/11/2019 2:06:00 PM - Incident\# 3173339 (0 lost trips, 4 lost minutes) CHARGEABLE
Recurring emergency brake application.
Train \#203
T-351
Cars \#(599)-600-577-578
W/Bound Wilshire Western Interlocking B/R Track.

7/11/2019 3:08:00 PM - Incident\# 3173362 (0 lost trips, 4 lost minutes) CHARGEABLE T-145 on train 216 states friction brakes keep reapplying.
Train 216, cars 505-506-515-516-523-528, Vermont Sunset, AR Track, Westbound.

7/11/2019 5:48:00 PM - Incident\# 3173430 (0 lost trips, 12 lost minutes) CHARGEABLE
Possible burning odor inside Car \#509.
Train \#217
T-420
Cars \#517-518-527-522-(509)-508.
W/Bound Wilshire Vermont A/R Track.

7/15/2019 5:33:00 PM - Incident\# 3174899 (0 lost trips, 3 lost minutes)
Train \# 215 operated by T-272 at NH station AR W had a Door problem in car \# 560 Doors 2/4. T-272 unable to cut out the Doors at NH platform.

7/16/2019 4:23:00 PM - Incident\# 3175377 (0 lost trips, 2 lost minutes)
Train 213 Car 575 door panel not secured, it obstructed the door from closing.

7/23/2019 12:49:00 AM - Incident\# 3177791 (0 lost trips, 20 lost minutes) CHARGEABLE
T-116 reports No movement/door problems at Universal City AL reverse running.
Train \#219
Cars 511, 512
Universal AL

7/24/2019 4:24:00 AM - Incident\# 3178291 (0 lost trips, 10 lost minutes)
Emergencyy brake activated; mode selector stuck; doors not opening.
Train 211
(561)-562/551-552/547-548

T-170
Union, AR, Westbound

## 7/24/2019 4:52:00 PM - Incident\# 3178665 (0 lost trips, 6 lost minutes)

Train 216
T-312
Vermont Beverly AL east
Operator reports having door sticking on car 522.
511, 512, 529, 520, 527, (522)
7/25/2019 12:24:00 PM - Incident\# 3179066 (0 lost trips, 9 lost minutes)
Report emergency brake self apply, will not release.
T-172
Train 205
Cars (505)-506-525-524
Santa Monica AR westbound.

7/25/2019 3:43:00 PM - Incident\# 3179150 (1 lost trip, 154 lost minutes)
Report of emergency lighting and doors will not open.
T-138
Train 219
Cars (579-580)-533-534-563-564
Union Station AL westbound.

7/29/2019 6:12:00 AM - Incident\# 3180318 (1 lost trip, 159 lost minutes)
Service Brake failure
Train \# 201
T-435
Civic Center, AL, eastbound
551552543544 (599 600)

7/29/2019 3:35:00 PM - Incident\# 3180643 (0 lost trips, 4 lost minutes)
Report of multiple emergency brake application.
T-312
Train 217
Cars 593-594-583-584-567-(568)
North Hollywood AR eastbound.
7/29/2019 6:45:00 PM - Incident\# 3180654 (1 lost trip, 159 lost minutes)
Report of flashing cab signal, emergency brake apply multiple time.
T-179
Train 219
Cars 501-502-523-528-525-(524)
Hollywood Vine AL eastbound.

7/30/2019 12:20:00 PM - Incident\# 3180901 (0 lost trips, 10 lost minutes)
No movement 603,604,601(602).
Vermont Sunset Station
Train \#204, T-127, AL, eastbound.
7/31/2019 5:05:00 PM - Incident\# $\mathbf{3 1 8 1 4 8 0}$ (0 lost trips, 9 lost minutes)
Train 214
T-12
Operator reports propulsion failure and AUX power failure.
North Hollywood AL east
511, 512, 501, 502, 509, (508)

7/31/2019 8:54:00 PM - Incident\# 3181537 (0 lost trips, 10 lost minutes)
Emergency brake application car 589
Hollywood Highland AR west
Train \# 219 T-461
Car \# (589)-590-533-564-565-566

## Wayside Incidents:

7/12/2019 4:25:00 PM - Incident\# 3173889 (0 lost trips, 10 lost minutes)
North Hollywood Interlocking false occupancy/False overrun.
7/14/2019 4:19:00 AM - Incident\# 3174253 (3 lost trips, 348 lost minutes)
Trains were delayed due to switches out of correspondence at yard limits.

## Police \& Health Incidents:

7/4/2019 7:05:00 AM - Incident\# 3170512 (0 lost trips, 8 lost minutes)
MTA Security reports LAPD on board train 202 car 594, requesting to hold train at Vermont Beverly Station AR track Westbound. Reports a female patron on board being disruptive.

Train 217 report observing a trespasser on the service walkway just east of Hollywood/Western Station platform.

7/29/2019 5:18:00 AM - Incident\# 3180296 (1 lost trip, 153 lost minutes)
Train \# 210
T-104 reports of a trespasser walking Eastbound on the AL Track.
cars 547-548-577-578-575-576.
Other Incidents:

7/13/2019 1:27:00 PM - Incident\# 3174117 (0 lost trips, 8 lost minutes)
Union Station male patron falls from the platform onto the A/R Track.

7/18/2019 6:44:00 PM - Incident\# 3176324 (0 lost trips, 9 lost minutes)
Report an elderly female had fell on board Train 213 car 602.

## Reset

7/6/2019 5:46:00 AM - Incident\# 3171014 (2 lost trips, 330 lost minutes) CHARGEABLE
T464,Train 205
AL Track,East, 7mc
(576)-575-572-571

7/29/2019 5:46:00 PM - Incident\# 3180634 (0 lost trips, 8 lost minutes)
Loss of cab signals
Train 219
T-172
571-572-585-586-(539)-540
Wilshire/Vermont AL East

# MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS COMPLIANCE WITH SCHEDULED VEHICLE HOURS Jul 2019 



COMPLIANCE WITH SCHEDULED TRAIN MILES


## ON-TIME PULL OUTS



## IN-SERVICE ON-TIME PERFORMANCE



LOST TRIPS


## LOST HOURS



## VERTICAL TRANSPORTATION AVAILABILITY




## GREEN LINE

Out of a total of 9,484 hours operated, there were approximately 13 total hours of service delays.

|  |  |  |
| :--- | ---: | ---: |
| Revenue |  |  |
| July 2019 Service Hours * | Hours | Percent |
| Revenue Hours without Delays | 9,471 | $99.9 \%$ |
| Cancelled + Delayed Hours | 13 | $0.1 \%$ |
| Total Revenue Hours | $\mathbf{9 , 4 8 4}$ | $\mathbf{1 0 0 . 0 \%}$ |

Summary of the incidents:

| Count | Hours | Percent |  |
| :--- | ---: | ---: | ---: |
| Operations | 0 | 0.0 | $0.0 \%$ |
| Accidents | 0 | 0.0 | $0.0 \%$ |
| Vehicle Maintenance | 12 | 7.1 | $55.8 \%$ |
| Wayside | 8 | 1.1 | $8.7 \%$ |
| Police \& Health | 5 | 1.6 | $12.6 \%$ |
| Other | 6 | 2.9 | $22.9 \%$ |
| Total | $\mathbf{3 1}$ | $\mathbf{1 2 . 7}$ | $\mathbf{1 0 0 . 0 \%}$ |

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

The number of incidents on the following page may differ from the summary
count due to some incidents not properly designated as Cancelled or Delayed


## July 2019 Green Line incidents causing delay were as follows:

## Operations Incidents:

None

## Vehicle Maintenance Incidents:

7/1/2019 11:14:00 AM - Incident\# 3169221 ( 0 lost trips, 20 lost minutes) CHARGEABLE
Operator reports that the train has a friction brake fault.
Train 331
T-20
(218)-243

On approach to Hawthorne Station track 2 west bound

7/1/2019 3:36:00 PM - Incident\# 3169363 (1 lost trip, 66 lost minutes) CHARGEABLE
T-257 operating Train \# 337 reports No cab Signals approaching Lake wood Track \# 1. Authorized to local off and Troubleshoot but No results.

7/3/2019 11:27:00 PM - Incident\# 3170437 (O lost trips, 20 lost minutes) CHARGEABLE
Auto Train Operation
Train 335
T-121
Cars 223
Douglas station eastbound tk2

7/10/2019 5:25:00 AM - Incident\# 3172509 (1 lost trip, 72 lost minutes) CHARGEABLE
Train 336 / Operator T-078 / Consist (220), 223
T-078 reports self applying emergency brakes on car 220.
Train 336 experienced faults Eastbound at Harbor Station, Avalon Station, and Lakewood Station.

7/11/2019 6:08:00 AM - Incident\# 3173029 (0 lost trips, 10 lost minutes) CHARGEABLE
Operator T-310 reports a propulsion fault and speed restriction of 35 mph in consist (206)-226. Train 346
westbound track 1 at Harbor Station and Vermont Station.
Dispatched M-222 to investigate and troubleshoot.

7/12/2019 3:43:00 PM - Incident\# 3173858 (1 lost trip, 68 lost minutes) CHARGEABLE
Operator reporting Loss of Cab Signal on Car 222A, WB Tk-1 Lakewood Station.
T-141
Train 354
Cars: (222A)-220
M-132
WB, Tk-1, Lakewood Station.

7/13/2019 8:47:00 AM - Incident\# 3174047 (2 lost trips, 136 lost minutes) CHARGEABLE

Train 334 / Operator T-343 / Consist (1170)-1174
Norwalk Interlocking Track 1 Westbound
While attempting to depart Norwalk Station, Operator T-343 reports ATP Failure in car 1170.

7/19/2019 6:59:00 PM - Incident\# 3176712 (O lost trips, 7 lost minutes) CHARGEABLE
Train 356
T-141
(222)-(205)

Eastbound
Propulsion fault, speed restriction and doors would not open on the trailing car.

7/21/2019 11:17:00 AM - Incident\# 3177112 (0 lost trips, lost minutes)
T-344 on Train 333 WB Tk-1 reported Prop Fault with a speed restriction at Lakewood Station.
T-344
Train: 333
Cars: (218B)-215
Lakewood Tk-1 WB

7/23/2019 3:07:00 PM - Incident\# 3178051 (0 lost trips, 6 lost minutes)
Propulsion / Dynamic Brakes/ Auto Train Protection (Speed Limit), cars (208-226)
Train \#333
T-348
East of Mariposa Station, track \#1, Westbound.

7/23/2019 3:53:00 PM - Incident\# 3178105 (0 lost trips, 10 lost minutes) CHARGEABLE
Train 356
Long Beach Station
Track 2
Eastbound
(1148), 1170

T-83 reported that LRV 1148 lost cab signal departing Long Beach Station at mile post marker 10.6.

7/28/2019 2:42:00 PM - Incident\# 3180200 (0 lost trips, 10 lost minutes) CHARGEABLE
Train 331 departing Crenshaw Station Tk-1 EB would not pick up CAB Signal.
T-257
Train: 331
Cars: (1174A)-1142
EB Tk-1, Crenshaw Station.
M-192 @ Norwalk Station.

## Wayside Incidents:

7/10/2019 10:13:00 AM - Incident\# 3172594 (0 lost trips, 12 lost minutes)

TP-176, TP-197, TP-121, TP-180, and TP-149
Hi-Rail Vehicle \#935 allocated on track 1 between Paramount Interlocking and Norwalk Station for OCS repair.

EIC TP-176 / WatchPerson TP-197

7/17/2019 3:51:00 AM - Incident\# 3175493 (0 lost trips, lost minutes) CHARGEABLE
Green Line Yard
Train 332 / Operator T-070 / Consist 1169-1183
Due to the Hi Rail Vehicle experiencing difficulties setting off at the Yard Limit, Train 332 was re-routed to Yard Signal 76 due to the Hi Rail Vehicle blocking Yard Signal 78.

7/17/2019 10:04:00 AM - Incident\# 3175638 (0 lost trips, 8 lost minutes)
Hi Rail Vehicle \#939
TP-176 EIC, TP-180 Pilot, TP-158 WatchPerson, TP-126, \& TP-149. OCS Repair on Track \#2 between Marine Signal \#4 and El Segundo Signal \#2

## 7/18/2019 2:41:00 AM - Incident\# 3175955 (0 lost trips, 14 lost minutes)

Train out late
Train \#341, T-193
218-215
EB, Greren Line Yard , Track \#2

## 7/22/2019 4:57:00 PM - Incident\# 3177663 (0 lost trips, 10 lost minutes)

Hawthorne TPSS Breaker B01, Breaker B11, Breaker B12, Breaker B13 and Breaker B14 opened.
Crenshaw TPSS Breaker B01, Breaker B11, Breaker B12, Breaker B13 and Breaker B14 opened.
Douglas TPSS
El Segundo TPSS

7/25/2019 4:00:00 AM - Incident\# 3178824 (0 lost trips, 10 lost minutes)
debris over the OCS (refer to (M3 \#3,178,816)
MT-154
Mile Post Marker 6.0 to 6.1 on track \#1, East of Harbor Station. (Carpool connection to 110 Westbound.

7/26/2019 9:31:00 AM - Incident\# 3179428 (0 lost trips, 14 lost minutes)
Lakewood, Paramount, Long Beach Frwy TCCB. Modem failure.

7/30/2019 4:00:00 AM - Incident\# 3180715 (0 lost trips, 4 lost minutes)
Standby Track Circuit Failure at Norwalk TCCB and Long Beach TCCB.

## Police \& Health Incidents:

7/2/2019 5:36:00 AM - Incident\# 3169545 (0 lost trips, 10 lost minutes)
At Marine station onboard train 333 in car 203 operator reports that the lady was on the floor requesting medical help.

## 7/9/2019 12:18:00 AM - Incident\# 3171952 (0 lost trips, 10 lost minutes)

Weapon Possession
Wilmington Station
LASD/ Wilham

7/9/2019 7:57:00 AM - Incident\# 3172061 (1 lost trip, 72 lost minutes)
Patron requesting medical attention, unable to move due to leg pain.

7/10/2019 1:08:00 PM - Incident\# 3172741 (0 lost trips, 6 lost minutes) CHARGEABLE
Train 334
T-57
Norwalk Track 2 reverse running
Operator reports male trespasser walking westbound from Norwalk Station alternating from tracks 1 and 2.
208, 218

7/14/2019 8:10:00 PM - Incident\# 3174421 (0 lost trips, lost minutes)
Trespasser/ 7.3 MP ( East of Avalon Station)
Male Hispanic, Blue prison jumpsuit

## Other Incidents:

7/18/2019 2:41:00 AM - Incident\# 3175977 (0 lost trips, 20 lost minutes)
Per SCADA, Contractor Hitachi performed update for the Micro Loc Software at Marine, then the system crashed. Multiple delays for trains pulling out of the yard.

## Unable to Duplicate

7/24/2019 10:18:00 PM - Incident\# 3178785 (0 lost trips, 10 lost minutes)
Train Delay due to uncoupling problems.

## Reset

7/31/2019 10:40:00 PM - Incident\# 3181568 (0 lost trips, lost minutes) CHARGEABLE No movement coupled and uncoupled.

7/12/2019 7:16:00 AM - Incident\# 3173605 (0 lost trips, 5 lost minutes)
Train 342 / Operator T-393 / Consist (1169)-1173
Operator reports ATP Failure in Car 1169.
Avalon Station Track 1 Westbound.

7/8/2019 5:05:00 PM - Incident\# 3171869 (2 lost trips, 138 lost minutes) CHARGEABLE
Train 336
Harbor Fwy Station
Track 2
(218), 222

T-83
T-83 reported a propulsion fault with a speed restriction departing Harbor Fwy Station.

## 7/20/2019 2:55:00 PM - Incident\# 3176947 (0 lost trips, 5 lost minutes)

T-20 operating Train \# 334 departed 5 minutes late from Norwalk due to 10-100. T-20 reported Propulsion fault with speed restriction at lakewood stn Track\#1 W/B. T-20 unable to Troubleshoot . Instructed to swap Trains with Train on Platform \#2.

## MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS COMPLIANCE WITH SCHEDULED VEHICLE HOURS Jul 2019



COMPLIANCE WITH SCHEDULED TRAIN MILES


ON-TIME PULL OUTS


Due to the Crenshaw line link construction in Feb and March 2018, Green Line trains did not pull in or pull out, trains stayed on the tracks.

IN-SERVICE ON-TIME PERFORMANCE


LOST TRIPS


## LOST HOURS



## VERTICAL TRANSPORTATION AVAILABILITY




## GOLD LINE

Out of a total of 23,830 hours operated, there were approximately 44 total hours of service delays.

|  |  |  |
| :--- | ---: | ---: |
| Ruly 2019 Service Hours * | Hours | Percent |
| Revenue Hours without Delays | 23,786 | $99.8 \%$ |
| Cancelled + Delayed Hours | 44 | $0.2 \%$ |
| Total Revenue Hours | $\mathbf{2 3 , 8 3 0}$ | $\mathbf{1 0 0 . 0 \%}$ |


| Summary of the incidents: |
| :--- |
| Count |
| Hours Percent   <br> Operations 10 1.0 $2.4 \%$ <br> Accidents 1 0.3 $0.6 \%$ <br> Vehicle Maintenance 21 16.6 $42.6 \%$ <br> Wayside 0 0.0 $0.0 \%$ <br> Police \& Health 9 5.3 $13.6 \%$ <br> Other 17 15.9 $40.8 \%$ <br> Total $\mathbf{5 8}$ $\mathbf{3 9 . 0}$ $\mathbf{1 0 0 . 0 \%}$ |

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

The number of incidents on the following page may differ from the summary
count due to some incidents not properly designated as Cancelled or Delayed


## July 2019 Gold Line incidents causing delay were as follows:

## Operations Incidents:

7/8/2019 3:39:00 PM - Incident\# 3171826 (0 lost trips, lost minutes)
Out Late
Train 440
T-478
LRV cars 1006-1157-1056
Monrovia Yard Limits Track 2 northbound

7/15/2019 10:13:00 AM - Incident\# 3174640 (O lost trips, 5 lost minutes)
Train 405 had no movement when the northm LRV was uncouple from the train 105.

7/15/2019 3:38:00 PM - Incident\# 3174865 (0 lost trips, 7 lost minutes)
Train left the yard late because a Bad Order train was pulled in before Train 427 could enter the mainline.
Train 427
T-161
LRV cars 1179-1005-1059
APU/Citrus Station track 2 southbound

7/15/2019 4:00:00 PM - Incident\# 3174896 (0 lost trips, 7 lost minutes)
Late due to coupling at APU
Train 407
T-411
LRV cars 1178-1192
APU/Citrus Station track 2 southbound

7/18/2019 9:08:00 AM - Incident\# 3176068 (O lost trips, 7 lost minutes)
Train 402 which was scheduled to have the north rail car uncoupled, had problems being uncoupled.

7/18/2019 3:01:00 PM - Incident\# 3176243 (O lost trips, 5 lost minutes)
Delayed due to scheduled coupling.
Citrus Station
Train \#404, T-63,track \#2, southbound.
Consist (1124)1189,1057.

7/18/2019 3:41:00 PM - Incident\# 3176271 (0 lost trips, 5 lost minutes) CHARGEABLE
Delayed due to scheduled coupling.
Citrus Station
Train \#406, T-02, track \#2, southbound.
Consist (1006)1162,1159.

7/22/2019 9:13:00 AM - Incident\# 3177383 (O lost trips, 8 lost minutes)

Train 402 departed 08 minutes late from APU due to Isolate Connect and door problem indications.
Train 402
T-223
LRV-718-727
APU Station track 1, souithbound.

7/24/2019 5:48:00 AM - Incident\# 3178321 (O lost trips, 13 lost minutes) CHARGEABLE
Signal Over run
Train 411
T-534
Cars (718)-727-702
Signal 2N Indiana

7/26/2019 3:31:00 PM - Incident\# 3179716 (O lost trips, 4 lost minutes) CHARGEABLE
Train 406 and train 407 did not become a three car consist at APU per the schedule.

## Accidents:

7/31/2019 12:40:00 PM - Incident\# 3181375 (0 lost trips, 15 lost minutes) CHARGEABLE Train vs. Pedestrian 10-72.

Virginia grade crossing
Train \#403, T-215, track \#1, northbound.
Consist (1159A)1124.

## Vehicle Maintenance Incidents:

7/1/2019 2:55:00 PM - Incident\# 3169339 (0 lost trips, 10 lost minutes) CHARGEABLE T-106 reported an ATP fault with no movement.

7/1/2019 4:51:00 PM - Incident\# 3169403 (1 lost trip, 231 lost minutes) CHARGEABLE
Prop Fault-Friction Brake ( no movement)
Train 461 SB Track \#2 Monrovia Sta
T-203
744-741-737

7/1/2019 5:08:00 PM - Incident\# 3169460 (1 lost trip, 201 lost minutes) CHARGEABLE
Self applying friction brakes
Train 440 NB TK1 Mariachi Station
T-440
(716)-709-706

7/3/2019 2:13:00 PM - Incident\# 3170294 (0 lost trips, 8 lost minutes)
Train 403
Civic Center Station
Track 1
T-536
(705 B), 729, 723
T-536 reported self applying brakes on car 705 B.

7/3/2019 2:44:00 PM - Incident\# 3170297 (0 lost trips, 5 lost minutes) CHARGEABLE
Train 434
Atlantic Station
Track 1
(734 A), 708, 707
T-340 reported door issues on car 734 A , doors 5/6.

7/4/2019 5:39:00 AM - Incident\# 3170484 (O lost trips, 12 lost minutes) CHARGEABLE
Train 403
T-441
LRV Cars (1056A)-1055
NB Track 1 Atlantic Station
Operator reports of a door Fault LRV Car 1056A doors 7/8

7/7/2019 3:42:00 PM - Incident\# 3171350 ( 0 lost trips, 7 lost minutes) CHARGEABLE
Train 406 SB Tk-2 @ Duarte Station, T-035 reports Prop Fault with a speed restriction on car 710.
T-035
Train \#406
Cars: 716-(710)
SB Tk-2 Duarte Station.

7/7/2019 9:18:00 PM - Incident\# 3171400 (O lost trips, 8 lost minutes) CHARGEABLE
Train 410 reported no cab signals departing APU/Citrus
Train 410
T-192
(728A)-724
APU Station, Platform 1, Southbound

7/8/2019 5:54:00 AM - Incident\# 3171462 (0 lost trips, 8 lost minutes)
Propulsion / Dynamic Brakes, cars \#(718A)-714-715
Train \#401
T-354
Irwindale Station, track \#1, Northbound.

7/8/2019 4:09:00 PM - Incident\# 3171864 (O lost trips, lost minutes) CHARGEABLE
Auto Train Protection (Speed Limit)
Train 441
T-273
LRV cars 1178-1180-1172
Arcadia Station track 2 southbound

7/9/2019 4:44:00 PM - Incident\# 3172344 (O lost trips, lost minutes) CHARGEABLE

No Cab Signal
Train 433
T-158
LRV cars 1162-1188-1058
Lincoln/Cypress Station track 1 northbound

7/14/2019 12:00:00 PM - Incident\# 3174327 (O lost trips, 12 lost minutes)
Operator reports a propulsion fault in the trailing car.
Train-410
T-151
Cars 718, (710)
Track 1, Ditman IL, NB

7/15/2019 5:15:00 AM - Incident\# 3174490 (0 lost trips, 6 lost minutes)
Train/T-215 reporting brake fault with audible, Smelling brakes
Train 402
T-215
LRV'S (1180) (1012)1185
Atlantic Station track 2 northbound.

7/17/2019 10:42:00 AM - Incident\# 3175658 (1 lost trip, 206 lost minutes)
Train operator of a HSCB / Propulsion fault

Train 453
T-066
(740A) 744-739
Atlantic Terminal, Trk. 2, Northbound

7/19/2019 6:20:00 PM - Incident\# 3176713 (0 lost trips, 7 lost minutes)
Doors, Cars \#1166-(1175)-1179
Train \#408
T-316
Arcadia Station, track \#2, Southbound.

7/23/2019 4:28:00 PM - Incident\# 3178139 (0 lost trips, 8 lost minutes)
No Air Pressure
Train 940
T-178
LRV car 749
Atlantic Interlocking track 1 northbound

7/24/2019 10:50:00 AM - Incident\# 3178482 (0 lost trips, 20 lost minutes)
Propulsion Failure
Train 404
T-215
Cars 1167-(1188)
Highland Park Station

7/24/2019 1:03:00 PM - Incident\# 3178549 (0 lost trips, 8 lost minutes)
Major propulsion fault/Speed restriction
T-151
Train 409
706-(716)-(731)
Fillmore Station Tk 1 N/B

7/25/2019 12:54:00 PM - Incident\# 3179223 (1 lost trip, 211 lost minutes)
Operator reports brakes will not release.

Train-404
T-129
Cars (720), 719
Allen Station, Track 2, SB

7/30/2019 6:05:00 AM - Incident\# 3180743 (0 lost trips, 8 lost minutes) CHARGEABLE Multiple faults and speed restrictions.

Train\#402
T\#215
1167,1157,(1104A/B)
Track\#1,Northbound,Monrovia Station.

7/31/2019 6:03:00 AM - Incident\# 3181221 (O lost trips, 20 lost minutes) CHARGEABLE

Allen Station Track-2, Train-410 T-263 consist \#734-713-705 with continuous propulsion faults on car \#734B.

## Police \& Health Incidents:

7/2/2019 5:07:00 PM - Incident\# 3169844 (O lost trips, 7 lost minutes) CHARGEABLE
Female patron having a seizure on board Train 435.

7/2/2019 6:59:00 PM - Incident\# 3169869 (0 lost trips, 10 lost minutes)
Trespasser laying down between tracks at Del Mar Station.

7/10/2019 12:57:00 AM - Incident\# 3172437 (1 lost trip, 239 lost minutes)
LASD reports possible man with a gun at Irwindale Station, unknown location at station.

7/11/2019 3:17:00 AM - Incident\# 3172991 (0 lost trips, 8 lost minutes)
ARINC indicates false occuapncy:
Irwindale tk 1, tk circuit 1261, 281
Irwindale tk 2. tk circuit 1282, 1312

7/11/2019 6:20:00 AM - Incident\# 3173042 (0 lost trips, 8 lost minutes)
Field Supervisor (R-088) is requesting LAPD assistance, regarding a poossible trespasser.

## 7/11/2019 12:22:00 PM - Incident\# 3173196 (0 lost trips, 10 lost minutes)

Metro security officer Kiwi received a report of a woman screaming on train 406 car 1191.

## 7/12/2019 2:38:00 PM - Incident\# 3173913 (0 lost trips, 18 lost minutes)

South Pasadena Police department reports a suicidal Hispanic Female at Mission grade crossing.

Description: Hispanic Female approximately 18 years of age wearing a grey shirt and black leggings.

## 7/26/2019 7:30:00 AM - Incident\# 3179431 (0 lost trips, 10 lost minutes)

Train 408 was delayed by approximately ten (10) minutes upon arrival at Allen Station
Train 408
T-283
1124-1008-1178
Allen Station, Trk. 1, Northbound

7/31/2019 5:00:00 PM - Incident\# 3181484 (0 lost trips, 12 lost minutes)
Blockade, traffic accident blocking both tracks.
3rd and Mednik

## Other Incidents:

7/2/2019 4:43:00 AM - Incident\# 3169523 (0 lost trips, 6 lost minutes)
Train 404 reports that someone pull the "T" for doors on 703.
Train 404
T-338
LRV'S 710-735-( 703B )
Arcadia Station track 2 southbound.

7/7/2019 9:45:00 AM - Incident\# 3171271 (0 lost trips, 14 lost minutes)
Offensive interior car smell, inside cars $(1056,1055)$.
Train\#403
T\#250
(1056,1055)
Track\#2,Allen Station,Southbound.

7/7/2019 12:41:00 PM - Incident\# 3171303 (0 lost trips, 6 lost minutes)

Train 403 SB @ South West Museum, reports of a patron requesting medical attention for a slip and fall.
Train 403
T-156
Cars: 705-(729)
7/22/2019 7:34:00 AM - Incident\# 3177347 (1 lost trip, 206 lost minutes)

Train 413 reporting a Slip/Fall on board LRV 1011B
Train 413
T-131
LRV'S (1011B) 1188-1059
Arcadia Station, track 2 southbound.

7/25/2019 1:34:00 PM - Incident\# 3179113 (0 lost trips, 10 lost minutes)
Operator reports a small brush fire on track two side between Lincoln Cypress and MPM 1.5

## Unable to Duplicate

7/22/2019 10:30:00 PM - Incident\# 3177763 (0 lost trips, 8 lost minutes)
Reports of no power/no movement
Train \# 407
T-228
(1058B)-1104
Atlantic Station, Track \#1, NB

## 7/23/2019 12:58:00 AM - Incident\# 3177788 (0 lost trips, 10 lost minutes)

Reports of no cab signal/unable to engage stop and proceed
Train \# 424
T-316
(1161B)-1160
Little Tokyo Station, Track \#1, NB

7/24/2019 10:25:00 AM - Incident\# 3178452 (0 lost trips, 6 lost minutes)
High Speed Circuit Breaker Failure
Train 405
T-340
Cars (723)-707-712
Duarte Station track 2 South

7/8/2019 6:12:00 AM - Incident\# 3171467 (0 lost trips, 5 lost minutes) CHARGEABLE
ATP failure, cars \#(734A)-703-706
Train \#413
T-338
Indiana Station, track \#1, Northbound.

7/9/2019 6:35:00 PM - Incident\# 3172374 (1 lost trip, 219 lost minutes)
ATP Fault (no movement)
Train 403
T-158
LRV cars 1124-1165
Fillmore Station track 2 southbound

7/17/2019 3:42:00 PM - Incident\# 3175798 (0 lost trips, 8 lost minutes)

Train with no movement after coupling at APU Citrus.
T-002
Train 406
(1178)-1158-1191

APU Citrus Tk 1

7/17/2019 10:36:00 PM - Incident\# 3175932 (0 lost trips, 10 lost minutes)
Reports of no cab signal
Train \#407
T-228
(1186B)-1005
Civic Center Station, Track \#1, NB

7/24/2019 5:41:00 PM - Incident\# 3178685 (1 lost trip, 199 lost minutes)
Propulsion/Speed restriction.
T-161
Train 407
(1188)-1192-1190

Highland Park Tk 1 N/B

7/31/2019 2:18:00 PM - Incident\# 3181418 (0 lost trips, 6 lost minutes)
AIr railure aeparting main yara / $1 \perp, / \perp \angle,(/ \angle \perp A)$.
Monrovia Interlocking.

## Reset

7/3/2019 9:30:00 AM - Incident\# 3170169 (0 lost trips, 12 lost minutes)
Train 407 reports propulsion faults on LRV 735
Train 407
T-301
LRV'S 710-(735)-703
Maravilla Station track 1 northbound.

7/5/2019 4:53:00 AM - Incident\# 3170684 (1 lost trip, 219 lost minutes) CHARGEABLE
Reports door problem.
Train \#401
T-323
(1111A)-1163-1188
Little Tokyo Station, Track \#1, NB

## 7/10/2019 4:20:00 AM - Incident\# 3172451 (0 lost trips, 14 lost minutes)

Train 453
T-25
LRV Cars (742-744-747)
SB Tk2 Pico/Aliso Station
Operator is reporting of Prop/Dynamic and Friction Brake Fault

# MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS COMPLIANCE WITH SCHEDULED VEHICLE HOURS Jul 2019 



COMPLIANCE WITH SCHEDULED TRAIN MILES


## ON-TIME PULL OUTS



## IN-SERVICE ON-TIME PERFORMANCE



LOST TRIPS


## LOST HOURS



## VERTICAL TRANSPORTATION AVAILABILITY




## EXPO LINE

Out of a total of 20,343 hours operated, there were approximately 16 total hours of service delays.

|  | Revenue |  |
| :--- | ---: | ---: |
| July 2019 Service Hours * | Hours | Percent |
| Revenue Hours without Delays | 20,327 | $99.9 \%$ |
| Cancelled + Delayed Hours | 16 | $0.1 \%$ |
| Total Revenue Hours | $\mathbf{2 0 , 3 4 3}$ | $\mathbf{1 0 0 . 0 \%}$ |


| Summary of the incidents: |
| :--- |
| Sunt |
| Count |
|  Hours Percent  <br> Operations 3 0.4 $2.5 \%$ <br> Accidents 0 0.0 $0.0 \%$ <br> Vehicle Maintenance 5 4.8 $29.7 \%$ <br> Wayside 2 2.7 $16.7 \%$ <br> Police \& Health 4 0.9 $5.3 \%$ <br> Other 6 7.4 $45.8 \%$ <br> Total $\mathbf{2 0}$ $\mathbf{1 6 . 2}$ $\mathbf{1 0 0 . 0 \%}$ |

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

The number of incidents on the following page may differ from the summary
count due to some incidents not properly designated as Cancelled or Delayed


## July 2019 Expo Line incidents causing delay were as follows:

## Operations Incidents:

7/10/2019 9:08:00 PM - Incident\# 3172927 (0 lost trips, 8 lost minutes) CHARGEABLE
Operator Late for Relief
Train \#618, T-114
1047B-1050-1001
NB, Downtown Santa Monica Station, Track \#3

7/23/2019 1:48:00 PM - Incident\# 3178015 (O lost trips, 13 lost minutes) CHARGEABLE Other: Information Only.
Operator departed 23rd station in stop and proceed.
Train \#608
T-232
Cars 244-237-301
23rd station southbound.

7/31/2019 2:45:00 PM - Incident\# 3181416 (0 lost trips, 5 lost minutes)
Train 619, T-315 pulled out the yard 5 minutes down.

## Vehicle Maintenance Incidents:

7/5/2019 5:36:00 PM - Incident\# 3170929 (0 lost trips, lost minutes)
No Southbound Movement Track 4 23rd/LATTC
Train 621
T-021
$(242,247)$
23rd street, Track 4, southbound

7/9/2019 6:07:00 AM - Incident\# 3172032 (0 lost trips, 4 lost minutes)
ATP Fail no movement
Train \#615 T-038 Car \#245B-247-246
Santa Monica station northbound.

7/13/2019 1:23:00 PM - Incident\# 3174113 (1 lost trip, 141 lost minutes)
Train 609 Car 248/245/238 has intermittent propulsion faults.

7/17/2019 7:55:00 AM - Incident\# 3175601 (0 lost trips, 6 lost minutes)
DTSM Track-5, Train-609 T-123 cars 1041-1063-1032 with sluggish propulsion and dark ADU on car \#1041A.

7/23/2019 2:34:00 PM - Incident\# 3178038 (1 lost trip, 141 lost minutes)

## Doors

Train 608
T-473
Cars 244-237-301
26th street station tk4 S/B

## Wayside Incidents:

7/3/2019 5:39:00 AM - Incident\# 3169996 (0 lost trips, 6 lost minutes)
Train 606 out late due switch \#17 out of correspondence

7/14/2019 7:58:00 PM - Incident\# 3174431 (1 lost trip, 161 lost minutes)
AO1 at Cimmarron Halldale, and 37th TPSS

## Police \& Health Incidents:

7/7/2019 8:55:00 PM - Incident\# 3171390 (O lost trips, 12 lost minutes)
T-219 reports of a trespasser at 7th and Exposition walking south on track 4.

7/15/2019 8:16:00 PM - Incident\# 3174987 (0 lost trips, 13 lost minutes)
LASD requested train to hold at Bundy for reported assault.

7/15/2019 9:34:00 PM - Incident\# 3174992 (0 lost trips, 13 lost minutes)
S-65 requested law enforcement response to Santa Monica station.

7/20/2019 8:46:00 PM - Incident\# 3176996 (0 lost trips, 13 lost minutes)
TSB called requested for trains to hold due to armed 211 around the Downtown Santa Monica area.
Other Incidents:
7/2/2019 4:04:00 PM - Incident\# 3169830 (1 lost trip, 141 lost minutes) CHARGEABLE
Train 625 did not make roll out due daily inspection.

7/10/2019 6:08:00 AM - Incident\# 3172522 (0 lost trips, 6 lost minutes)
T-296 reported feces and urine on car \#1014 A.
T-296
Tr\#112
Cars(1014)_1021-1060
Southbound, Trk\#4
23rd St.

7/30/2019 6:31:00 AM - Incident\# 3180762 (O lost trips, lost minutes)
Train 616 T-226 Car\# 1067-1045-1070 reports an unstable individual holding the doors causing delay on departure Northbound @ Santa monica Station.

7/15/2019 8:43:00 AM - Incident\# 3174618 (1 lost trip, 147 lost minutes) CHARGEABLE
T-204 reported a Propulsion/ Dynamic brake fault along with door issues in operating car (246).
T-204
Train 607
(246)-245-248

Southbound, Track 4
Palms/National Station

## Uanble To Dupicate

7/18/2019 12:05:00 PM - Incident\# 3176158 (1 lost trip, 147 lost minutes)
Operator reports loss of power then reports 5 mph with dead man relay feature.
T-123
Tr\#602
Cars(1047B)-1016-1019
Northbound Trk\#3
National/Palms Intl
7/5/2019 6:27:00 AM - Incident\# 3170753 (0 lost trips, 8 lost minutes) CHARGEABLE Train 606 had no movement south from 23rd street station.

## MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS COMPLIANCE WITH SCHEDULED VEHICLE HOURS Jul 2019



COMPLIANCE WITH SCHEDULED TRAIN MILES


## ON-TIME PULL OUTS



IN-SERVICE ON-TIME PERFORMANCE


LOST TRIPS


## LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY


Note: An elevator at Culver City Station has been out of service indefinitely.


[^0]:    ${ }^{1}$ There is a One Month lag in reporting this data
    ${ }^{2}$ Includes Operations, RFS and Wayside
    ${ }^{3}$ MMBMF for each line is based on Actual Vehicle Revenue Miles since hub miles are not available by the line operated.
    Vehicles from Division 11 may operate on the Expo or Blue Line.
    O Green - High probability of achieving the target (on track). Meets Target at $100 \%$ or better.
    O 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]:    MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures. \%Change is from previous month.

