

Los Angeles County
Metropolitan Transportation Authority
California

OPERATIONS MONTHLY RAIL PERFORMANCE REPORT

SEPTEMBER 2019



METRO RAIL PERFORMANCE – SEPTEMBER 2019

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Metro Rail Scorecard Overview

Metro operates heavy rail, the Red and Purple Lines, from Union Station to North Hollywood and Union Station to Wilshire/Western. Data for Red and Purple lines are reported under Metro Red line in this report. Metro also operates four light rail lines: Blue Line from Downtown to Long Beach, Green Line along the 105 freeway, Gold Line from Azusa to East Los Angeles, and Expo Line from Los Angeles to Santa Monica. Metro Rail is responsible for the operation of approximately 104 heavy rail cars and 203 light rail cars carrying nearly 110 million passengers each year. Also included in this report are Key Performance Indicators for Wayside, which is in the process of being developed.

Measurement	FY 2017	FY 2018	FY 2019	FY 2020 Target	FY 2020 YTD	FYTD Status	Jul Month	Aug Month	Sep Month
Systemwide									
On-Time Pullouts	99.61%	99.68%	99.72%	99.80%	99.69%	●	99.56%	99.72%	99.79%
Mean Miles Between Chargeable Mechanical Failures ³	29,711	31,146	39,034	44,540	39,859	●	36,692	39,287	44,583
In-Service On-time Performance	98.24%	98.48%	98.81%	99.10%	98.90%	●	98.91%	98.77%	99.02%
Service Delivery Ratio	99.23%	99.22%	99.56%	99.70%	99.72%	●	99.82%	99.60%	99.73%
Traffic Accidents Per 100,000 Train Miles	1.01	0.96	0.68	0.85	0.64	●	0.63	0.94	0.33
CPUC Reportable Accidents per 100,000 Train Miles	0.36	0.54	0.29	0.37	0.32	●	0.31	0.47	0.16
Passenger Accidents per 100,000 Boardings	0.023	0.022	0.014	0.010	0.009	●	0.027	0.000	0.000
Complaints per 100,000 Boardings	1.98	1.81	1.83	1.10	1.59	●	1.63	1.32	1.84
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours ^{1,2}	12.27	11.17	11.43	10.05	11.59	●	4.72	18.43	11.47
Lost Work Days per 200,000 Exposure Hours ^{1,2}	733	886	800	821.44	836	●	833	839	-
OSHA Injuries per 200,000 Exposure Hours ^{1,2}	8.53	7.61	7.23	6.43	7.46	●	4.72	10.14	-
Wayside Maintenance & Engineering									
Past-Due Preventive Maintenance - Aging of Outstanding Work Orders	1	3	55	N/A	209	N/A	31	34	144
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	5.35	5.02	5.31	5.40	15.63	●	3.55	16.99	10.75
Lost Work Days per 200,000 Exposure Hours ¹	194	312	218	296	108	●	114	102	0
OSHA Injuries per 200,000 Exposure Hours ¹	4.01	4.01	3.84	4.13	6.95	●	3.55	10.19	0
Blue Line									
On-Time Pullouts	99.60%	99.39%	99.46%	99.50%	99.46%	●	98.92%	100.00%	99.44%
Mean Miles Between Chargeable Mechanical Failures ³	15,405	13,772	22,391	22,391	83,825	●	177,184	173,761	30,401
In-Service On-time Performance	96.44%	97.11%	98.13%	98.80%	99.65%	●	99.72%	99.35%	99.88%
Service Delivery Ratio	98.54%	98.42%	99.31%	99.40%	99.74%	●	99.80%	99.52%	99.92%
Traffic Accidents Per 100,000 Train Miles	2.18	1.63	1.05	1.84	1.69	●	3.32	1.67	0.00
CPUC Reportable Accidents per 100,000 Train Miles	0.71	1.03	0.38	0.40	1.13	●	1.66	1.67	0.00
Passenger Accidents per 100,000 Boardings	0.046	0.033	0.013	0.010	0.000	●	0.000	0.000	0.000
Complaints per 100,000 Boardings	1.67	2.22	1.73	1.40	2.68	●	3.01	1.17	3.89
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	16.74	13.95	14.22	11.90	14.41	●	18.42	18.42	6.24
Lost Work Days per 200,000 Exposure Hours ¹	836	1,016	695	953	1,113	●	751	1,476	-
OSHA Injuries per 200,000 Exposure Hours ¹	10.40	8.10	5.96	5.93	9.21	●	6.14	12.28	-

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.

● Green - High probability of achieving the target (on track). Meets Target at 100% or better.

● Yellow - Uncertain if the target will be achieved -- slight problems, delays or management issues. Falls below Target 70 - 99%.

● 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 2017	FY 2018	FY 2019	FY 2020 Target	FY 2020 YTD	FYTD Status	Jul Month	Aug Month	Sep Month
Red Line									
On-Time Pullouts	99.95%	99.88%	99.85%	100.00%	99.87%	●	99.61%	100.00%	100.00%
Mean Miles Between Chargeable Mechanical Failures ³	104,637	68,407	58,255	94,165	51,630	●	41,176	50,065	72,273
In-Service On-time Performance	99.39%	99.33%	99.41%	99.70%	99.52%	●	99.46%	99.47%	99.64%
Service Delivery Ratio	99.72%	99.65%	99.73%	100.00%	99.77%	●	99.72%	99.79%	99.79%
Traffic Accidents Per 100,000 Train Miles	0.57	0.64	0.57	0.57	0.28	●	0.00	0.00	0.86
CPUC Reportable Accidents per 100,000 Train Miles	0.14	0.21	0.28	0.21	0.00	●	0.00	0.00	0.00
Passenger Accidents per 100,000 Boardings	0.004	0.000	0.002	0.000	0.010	●	0.029	0.000	0.000
Complaints per 100,000 Boardings	1.19	1.16	1.35	0.55	0.69	●	0.66	0.70	0.73
New Workers' Compensation Indemnity Claims per	12.68	11.80	14.74	10.80	5.79	●	5.70	5.65	6.05
*Lost Work Days per 200,000 Exposure Hours	992	827	755	809	700	●	706	694	-
*OSHA Injuries per 200,000 Exposure Hours	7.52	4.99	9.67	3.89	2.84	●	5.70	0.00	-

Green Line									
On-Time Pullouts	99.69%	99.59%	99.85%	99.70%	99.61%	●	99.08%	99.76%	100.00%
Mean Miles Between Chargeable Mechanical Failures ³	16,375	21,614	22,144	22,651	21,396	●	24,773	20,446	19,532
In-Service On-time Performance	98.69%	98.72%	98.76%	99.00%	98.45%	●	98.01%	98.80%	98.54%
Service Delivery Ratio	99.61%	99.38%	99.70%	100.00%	99.81%	●	99.86%	99.75%	99.80%
Traffic Accidents Per 100,000 Train Miles	0.48	0.34	0.25	0.35	0.26	●	0.00	0.78	0.00
CPUC Reportable Accidents per 100,000 Train Miles	0.07	0.00	0.06	0.40	0.00	●	0.00	0.00	0.00
Passenger Accidents per 100,000 Boardings	0.048	0.010	0.021	0.010	0.000	●	0.000	0.000	0.000
Complaints per 100,000 Boardings	2.08	1.69	2.08	1.20	2.44	●	2.64	2.68	1.98
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	9.14	12.87	6.82	11.52	14.97	●	0.00	26.43	17.99
*Lost Work Days per 200,000 Exposure Hours	712	984	1,321	930	1,009	●	1,106	916	-
*OSHA Injuries per 200,000 Exposure Hours	6.65	9.84	5.31	8.70	8.97	●	0.00	17.62	-

Gold Line									
On-Time Pullouts	99.82%	99.84%	99.58%	100.00%	99.68%	●	99.87%	99.46%	99.70%
Mean Miles Between Chargeable Mechanical Failures ³	38,427	43,588	40,584	49,281	37,284	●	24,637	38,533	74,537
In-Service On-time Performance	97.61%	98.19%	98.50%	98.80%	97.15%	●	97.40%	96.78%	97.27%
Service Delivery Ratio	98.88%	99.07%	99.39%	99.50%	99.51%	●	99.84%	99.22%	99.47%
Traffic Accidents Per 100,000 Train Miles	0.61	0.55	0.55	0.51	0.62	●	0.91	0.91	0.00
CPUC Reportable Accidents per 100,000 Train Miles	0.25	0.26	0.25	0.40	0.31	●	0.46	0.46	0.00
Passenger Accidents per 100,000 Boardings	0.030	0.086	0.044	0.010	0.028	●	0.082	0.000	0.000
Complaints per 100,000 Boardings	2.77	2.65	2.71	1.80	2.86	●	3.26	2.01	3.34
New Workers' Compensation Indemnity Claims per 200,000 Exposure Hours	14.31	14.24	14.15	11.67	15.59	●	0.00	25.75	21.07
*Lost Work Days per 200,000 Exposure Hours	1,055	1,146	1,391	993	1,738	●	1,899	1,578	-
*OSHA Injuries per 200,000 Exposure Hours	9.69	11.87	10.61	8.94	10.32	●	5.17	15.45	-

Expo Line									
On-Time Pullouts	98.76%	99.71%	99.87%	99.70%	99.69%	●	99.68%	99.69%	99.69%
Mean Miles Between Chargeable Mechanical Failures ³	33,402	57,013	93,728	93,278	43,243	●	81,986	32,641	37,125
In-Service On-time Performance	98.48%	98.72%	98.93%	98.90%	99.30%	●	99.52%	99.02%	99.34%
Service Delivery Ratio	99.46%	99.54%	99.67%	99.80%	99.83%	●	99.92%	99.76%	99.82%
Traffic Accidents Per 100,000 Train Miles	1.26	1.78	1.19	1.26	0.91	●	0.00	1.79	0.95
CPUC Reportable Accidents per 100,000 Train Miles	0.63	1.30	0.56	0.40	0.61	●	0.00	0.89	0.95
Passenger Accidents per 100,000 Boardings	0.018	0.010	0.010	0.010	0.000	●	0.000	0.000	0.000
Complaints per 100,000 Boardings	3.68	2.20	2.11	1.40	1.97	●	1.72	1.51	2.74
New Workers' Compensation Indemnity Claims per	19.26	12.57	16.21	11.84	9.61	●	0.00	20.93	7.37
*Lost Work Days per 200,000 Exposure Hours	887	1,470	980	1,343	796	●	845	749	-
*OSHA Injuries per 200,000 Exposure Hours	16.60	9.92	9.73	9.92	7.13	●	7.28	6.98	-

* 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.

● Green - High probability of achieving the target (on track). Meets Target at 100% or better.

● Yellow - Uncertain if the target will be achieved -- slight problems, delays or management issues. Falls below Target 70 - 99%.

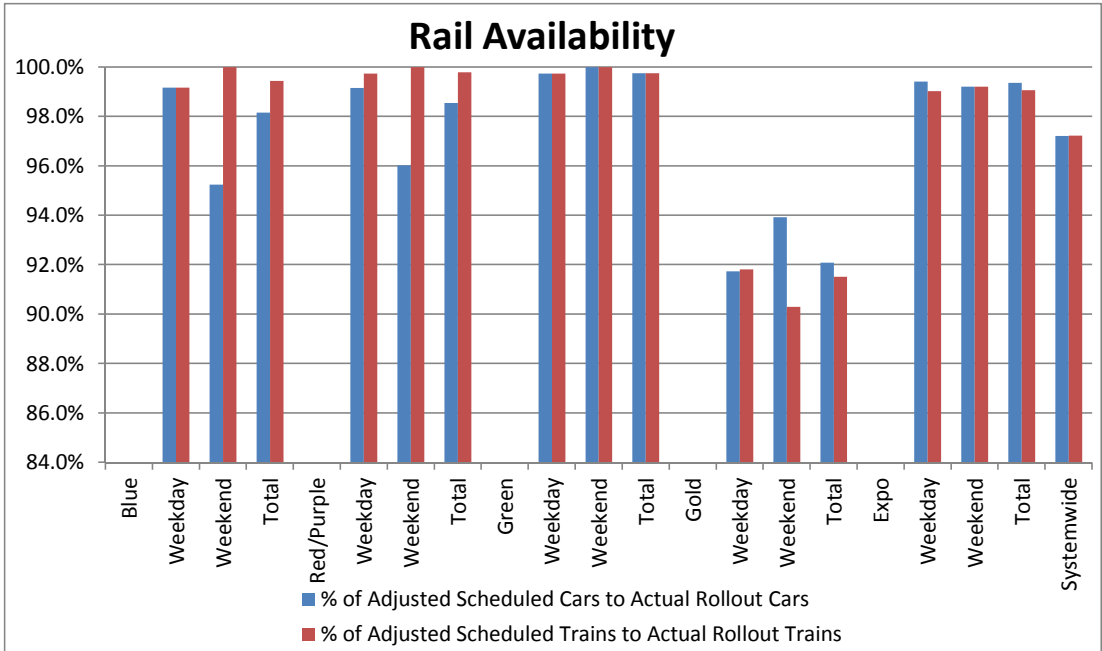
● Red - High probability that the target will not be achieved -- significant problems and/or delays. Falls below Target >70%.

N/A = Not Available

Vehicle Availability

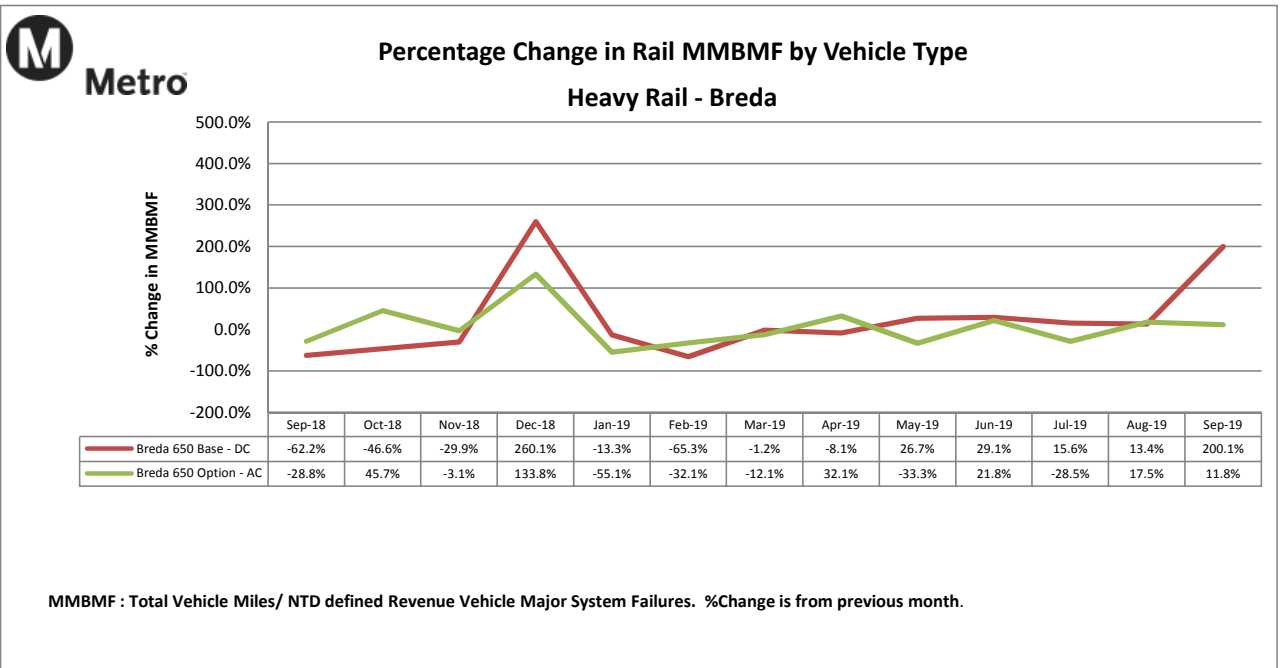
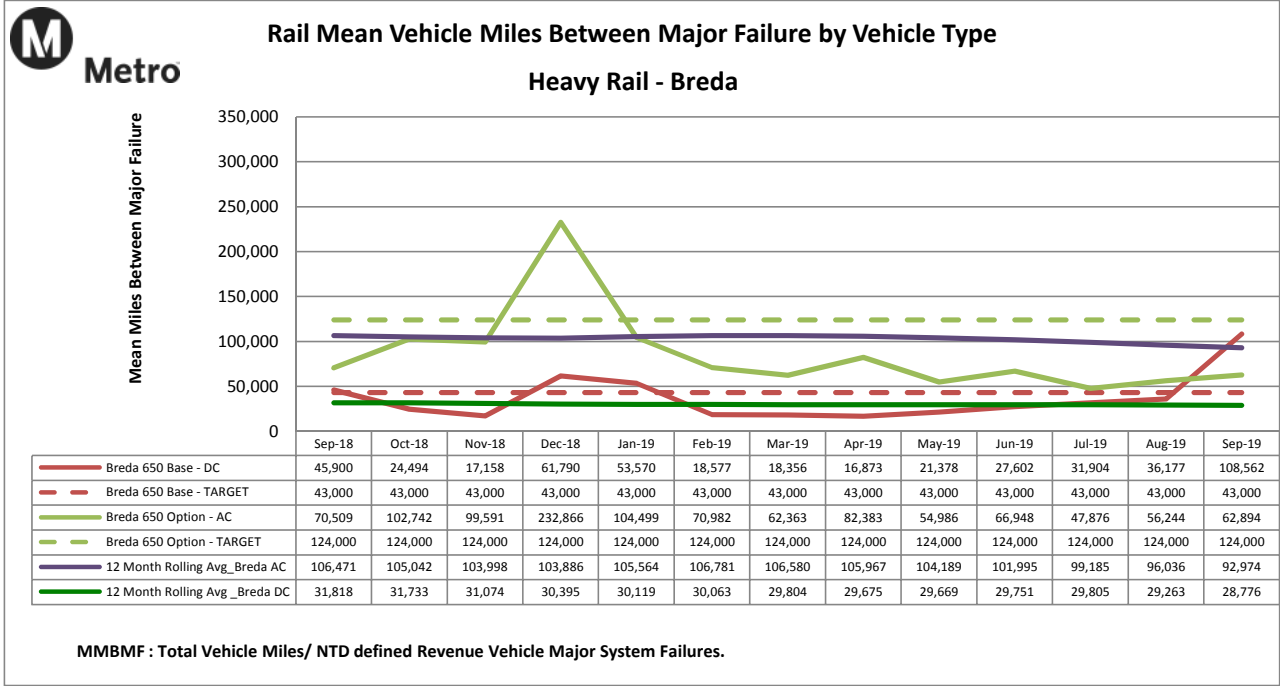
Sep 2019

Day Type	% of Adjusted Scheduled Cars to Actual Rollout Cars	% of Adjusted Scheduled Trains to Actual Rollout Trains
Blue		
Weekday	99.17%	99.17%
Weekend	95.24%	100.00%
Total	98.15%	99.44%
Red/Purple		
Weekday	99.15%	99.74%
Weekend	96.02%	100.00%
Total	98.55%	99.79%
Green		
Weekday	99.74%	99.74%
Weekend	100.00%	100.00%
Total	99.75%	99.75%
Gold		
Weekday	91.74%	91.81%
Weekend	93.92%	90.30%
Total	92.08%	91.51%
Expo		
Weekday	99.41%	99.02%
Weekend	99.21%	99.21%
Total	99.36%	99.06%
Systemwide	97.21%	97.22%



METRO RAIL PERFORMANCE – SEPTEMBER 2019

Rail Performance by Vehicle Type

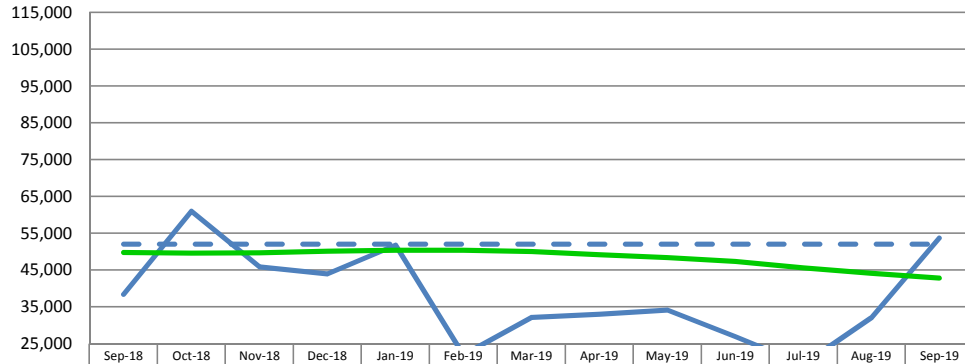




Metro

Rail Mean Vehicle Miles Between Major Failure by Vehicle Type Light Rail - Breda

Mean Miles Between Major Failure



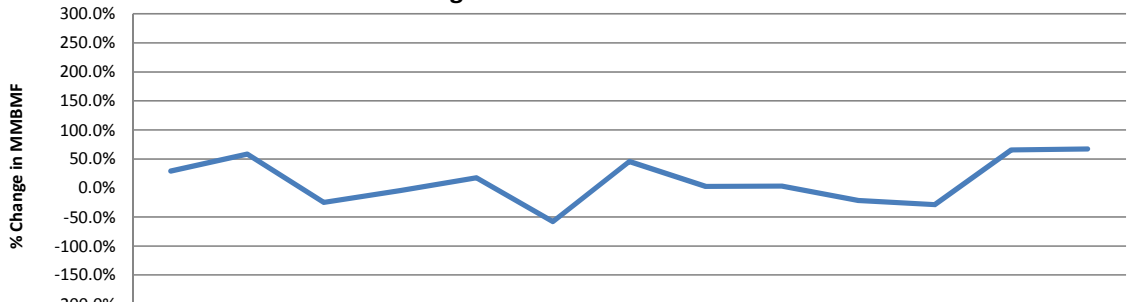
	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
— AnsaldoBreda 2550 Base - AC	38,403	60,989	45,884	43,889	51,768	21,949	32,069	32,976	34,128	26,913	19,321	32,039	53,666
- - AnsaldoBreda 2550 Base - TARGET	52,000	52,000	52,000	52,000	52,000	52,000	52,000	52,000	52,000	52,000	52,000	52,000	52,000
— 12 Month Rolling Avg AnsaldoBreda2550Base - AC	49,789	49,586	49,710	50,097	50,339	50,411	50,011	49,160	48,395	47,296	45,542	44,074	42,820

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



Metro

Percentage Change in Rail MMBMF by Vehicle Type Light Rail - Breda



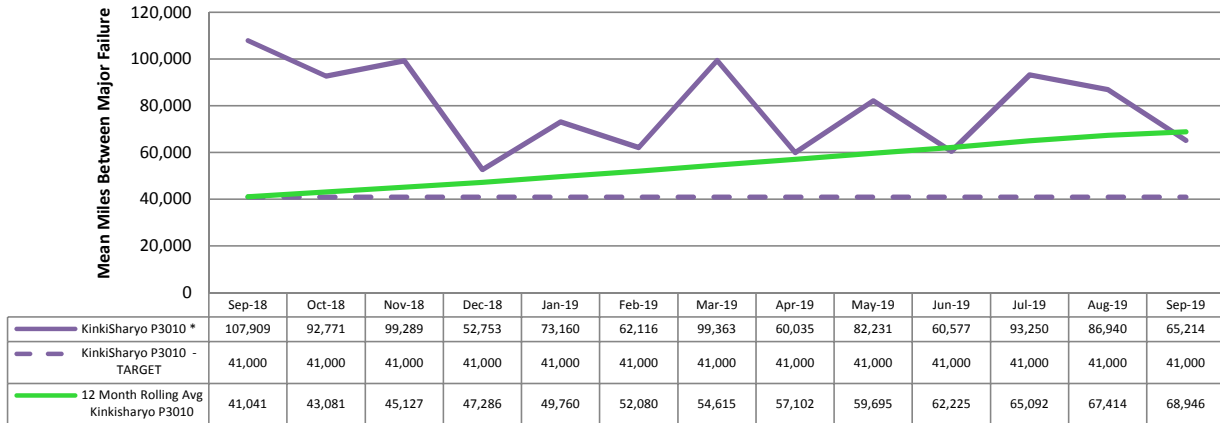
	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
— AnsaldoBreda 2550 Base - AC	29.6%	58.8%	-24.8%	-4.3%	18.0%	-57.6%	46.1%	2.8%	3.5%	-21.1%	-28.2%	65.8%	67.5%

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



Metro

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

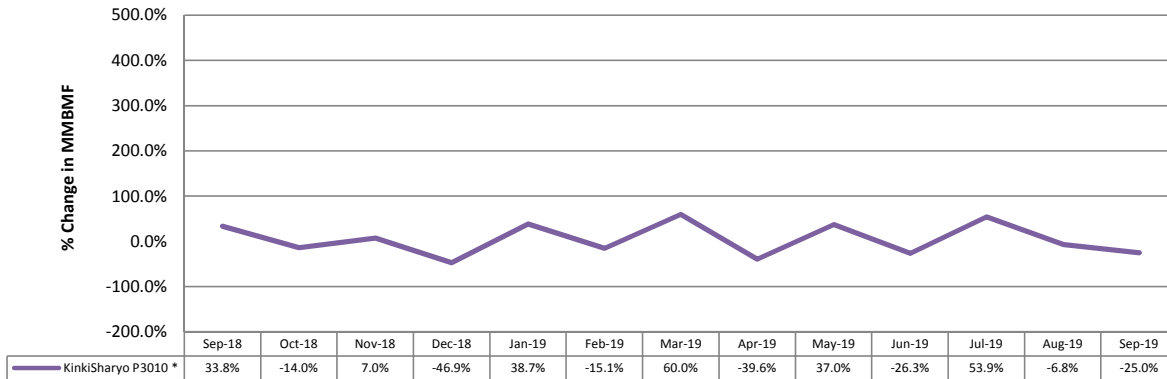


MMBMF : Total Vehicle Miles/ NTD defined Revenue Vehicle Major System Failures.



Metro

Percentage Change in Rail MMBMF by Vehicle Type Light Rail - KinkiSharyo



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

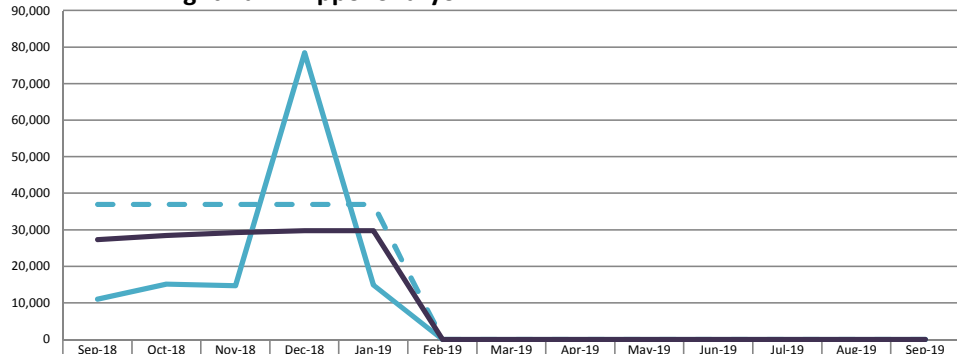


Metro

Rail Mean Vehicle Miles Between Major Failure by Vehicle Type

Light Rail - NipponSharyo

Mean Miles Between Major Failure



	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
Nippon Sharyo 2020 - DC *	11,089	15,181	14,712	78,477	14,858	0	0	0	0	0	0	0	0
Nippon Sharyo 2020 - TARGET	37,000	37,000	37,000	37,000	37,000	0	0	0	0	0	0	0	0
12 Month Rolling Avg Nippon Sharyo 2020 - DC	27,348	28,502	29,261	29,756	29,803	0	0	0	0	0	0	0	0

* Nippon Sharyo 2020 Cars did not operate starting in February 2019

** Nippon Sharyo 865 -DC Cars have been retired starting September 2018

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

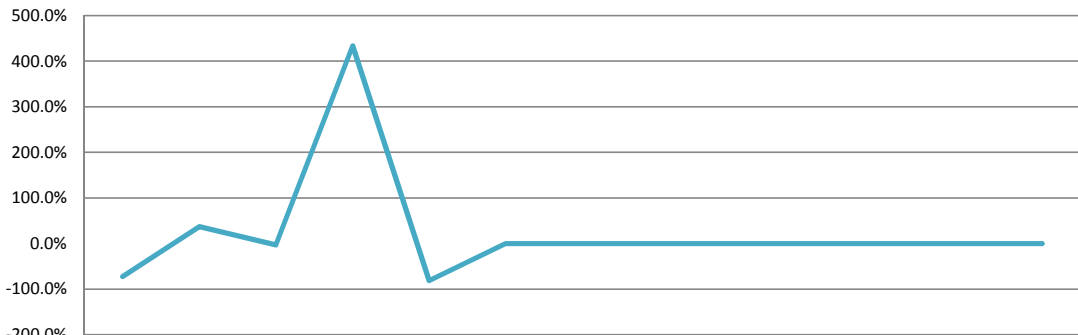


Metro

Percentage Change in Rail MMBMF by Vehicle Type

Light Rail - NipponSharyo

% Change in MMBMF



	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
Nippon Sharyo 2020 - DC *	-72.3%	36.9%	-3.1%	433.4%	-81.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

* Nippon Sharyo 2020 did not operate starting in February 2019

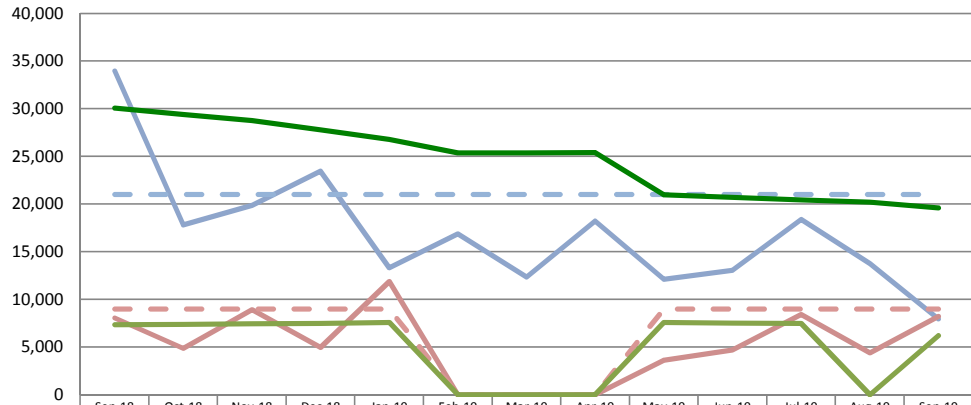
** Nippon Sharyo 865 -DC Cars have been retired starting September 2018

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



Rail Mean Vehicle Miles Between Major Failures by Vehicle Type Light Rail - Siemens

Mean Miles Between Major Failure



	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
Siemens 2000 Base - AC	33,989	17,816	19,888	23,455	13,310	16,886	12,338	18,216	12,118	13,056	18,410	13,747	7,953
Siemens 2000 Base - TARGET	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
Siemens 2000 GE/ATP - AC **	8,052	4,877	8,911	4,963	11,882	0	0	0	3,607	4,711	8,422	4,402	8,222
Siemens 2000 GE/ATP - TARGET **	9,000	9,000	9,000	9,000	9,000	0	0	0	9,000	9,000	9,000	9,000	9,000
12 Month Rolling Avg Siemens 2000 Base - AC	30,076	29,419	28,766	27,801	26,804	25,377	25,372	25,427	20,982	20,708	20,446	20,206	19,619
12 Month Rolling Avg - Siemens 2000 GE/ATP - AC	7,356	7,382	7,450	7,496	7,573	0	0	0	7,591	7,527	7,488	0	6,193

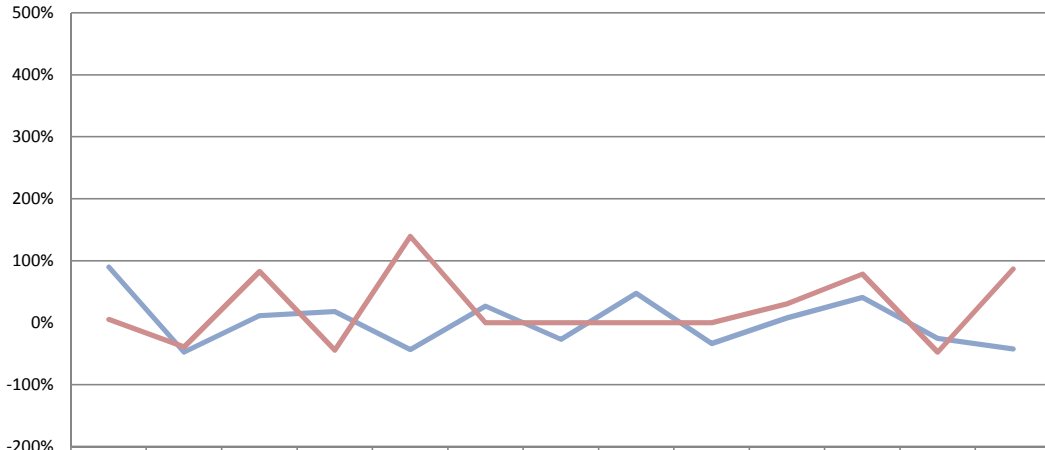
** The Siemens 2000 GE/ATP AC cars did not operate starting in February 2019 and resumed in May 2019.

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



Percentage Change in Rail MMBMF by Vehicle Type Light Rail - Siemens

% Change in MMBMF



	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
Siemens 2000 Base - AC	89.7%	-47.6%	11.6%	17.9%	-43.3%	26.9%	-26.9%	47.6%	-33.5%	7.7%	41.0%	-25.3%	-42.1%
Siemens 2000 GE/ATP - AC **	5.1%	-39.4%	82.7%	-44.3%	139.4%	0.0%	0.0%	0.0%	0.0%	30.6%	78.8%	-47.7%	86.8%

** The Siemens 2000 GE/ATP AC cars did not operate starting in February 2019.

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

Mean Miles Between Major Failures

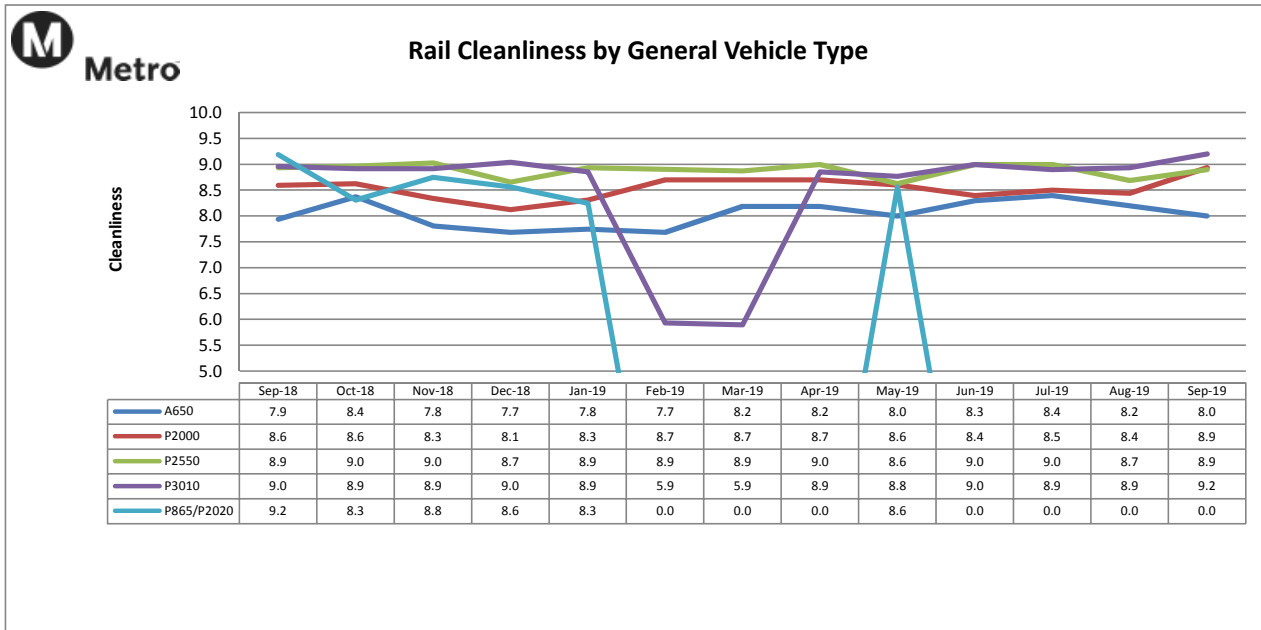
	FY 2019	FY2020 Goal	FY2020 YTD
AnsaldoBreda2550Base - AC	37,825	52,000	29,284
Breda 650 Base - DC	27,616	43,000	49,244
Breda 650 Option - AC	85,062	124,000	55,115
Kinkisharyo P3010	70,566	41,000	80,419
Nippon Sharyo 2020 - DC	21,405	37,000	0
Nippon Sharyo 865 - DC			0**
Siemens 2000 Base - AC	17,841	21,000	12,803
Siemens 2000 GE/ATP - AC	6,920	9,000	6,193

** retired in September 2018

Rail Fleet Distribution – September 2019

Number of Rail Vehicle Type by Division	Blue	Red / Purple	Green	Gold	Expo	Total
AnsaldoBreda 2550 Base - AC				50		50
Breda 650 Base - DC		28				28
Breda 650 Option - AC		68				68
KinkiSharyo P3010	54		25	47	56	182
Nippon Sharyo 2020 - DC	15					15
0						0
Siemens 2000 Base - AC	7				15	22
Siemens 2000 GE/ATP - AC			16			16
TOTALS	76	96	41	97	71	381

Cleanliness by Vehicle Type Sep 2019

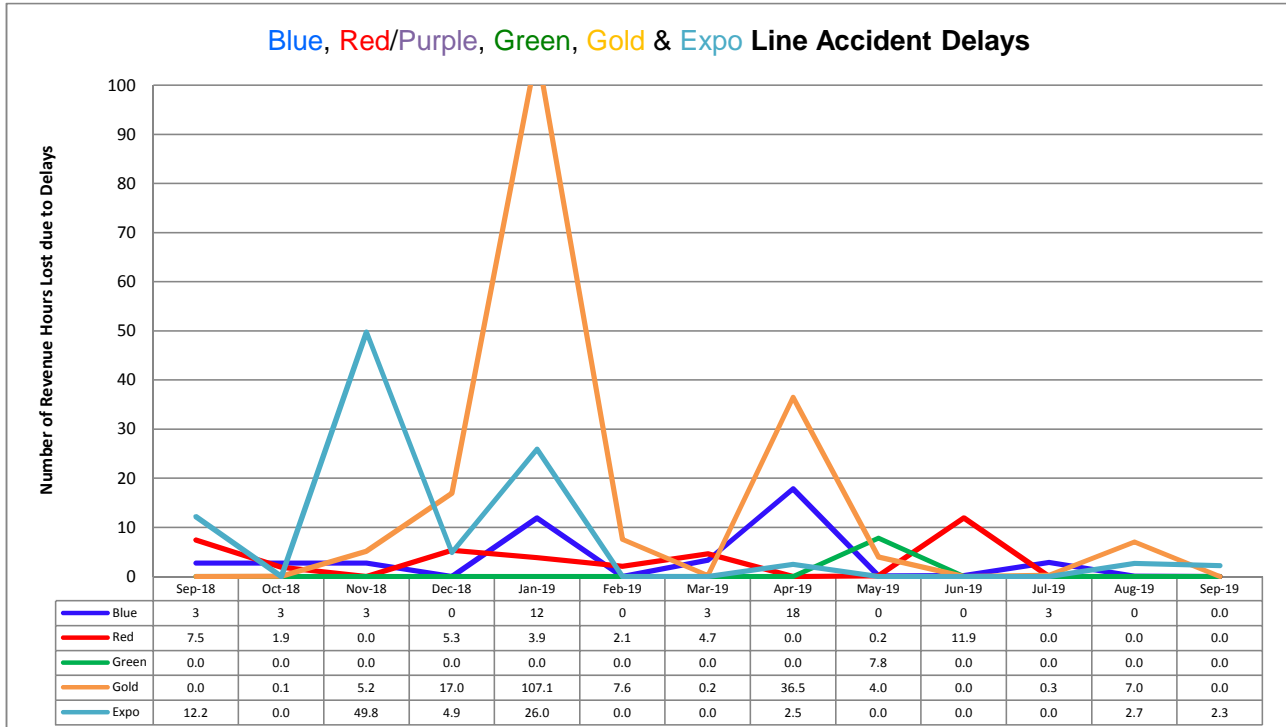


P2020 has only one cleanliness inspection since Jan 2019 due to Blue Line Construction

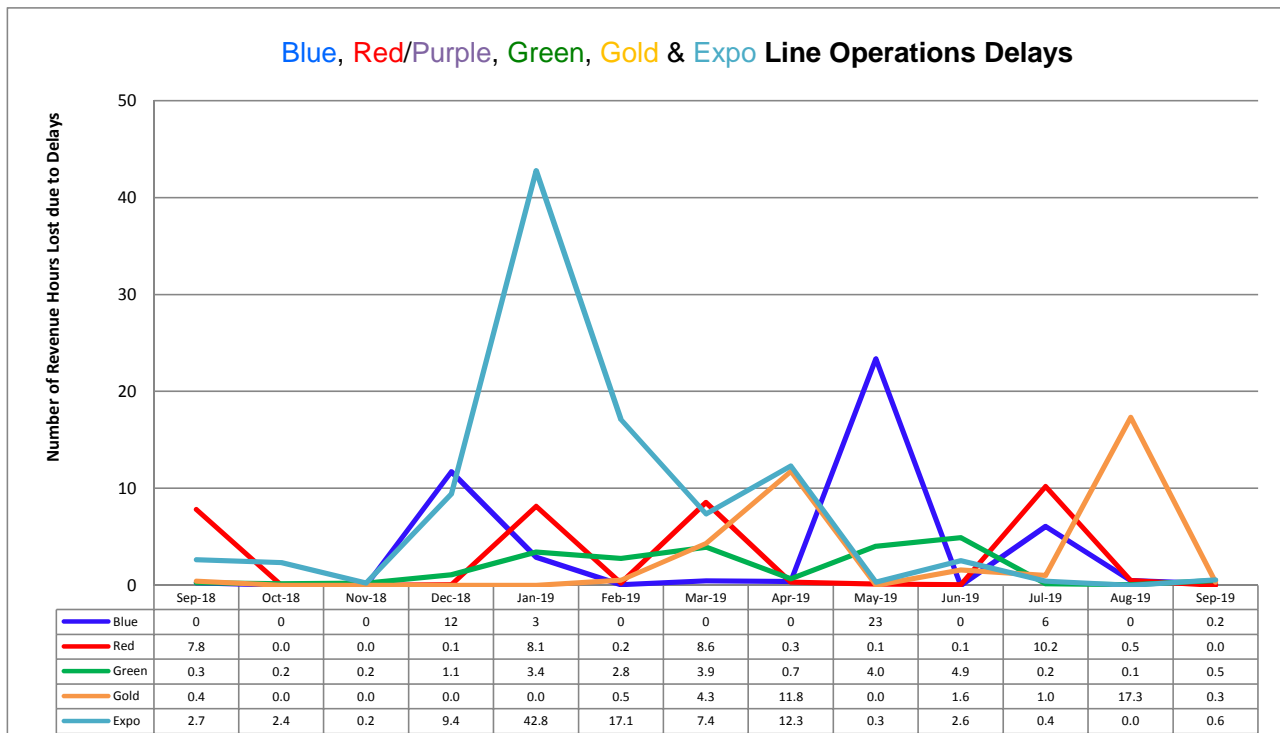
RAIL DELAYS BY CATEGORY - SYSTEMWIDE

Revenue Hours Lost Related to - ACCIDENTS

Sep 2019

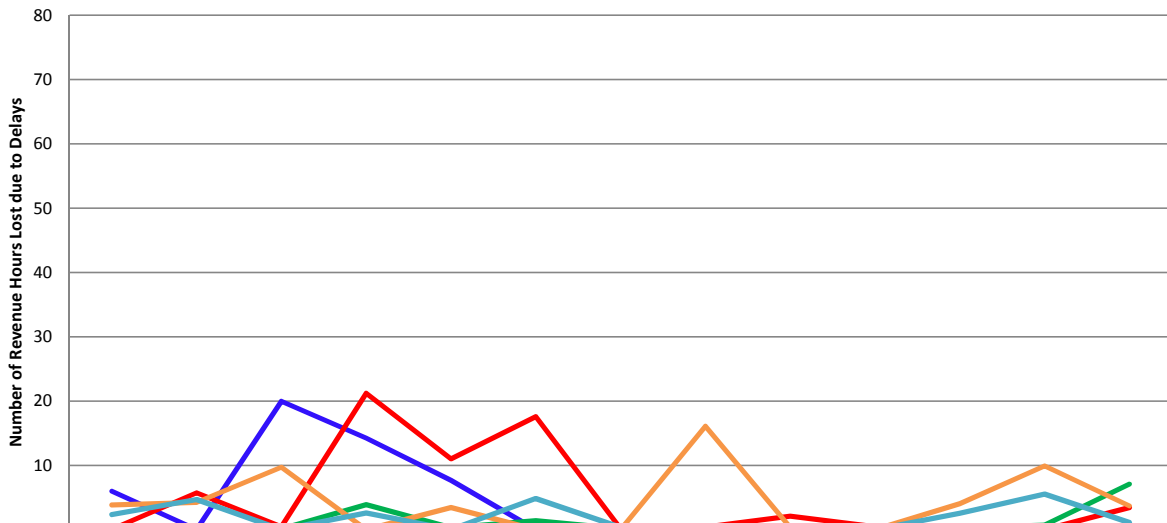


Revenue Hours Lost Related to - OPERATIONS



Revenue Hours Lost Related to - OTHER

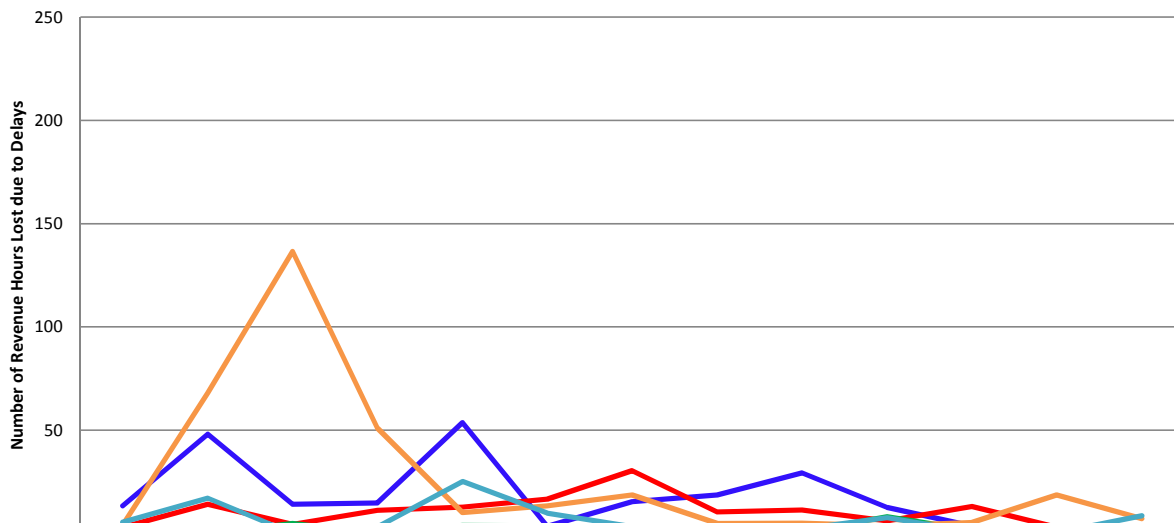
Blue, Red/Purple, Green, Gold & Expo Line Other Delays



	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
Blue	6	0	20	14	8	0	0	0	0	0	0	0	0.4
Red	0.1	5.7	0.5	21.2	11.0	17.6	0.2	0.4	2.1	0.5	0.3	0.0	3.5
Green	0.0	0.1	0.1	3.9	0.3	1.4	0.2	0.1	0.0	0.0	0.3	0.7	7.1
Gold	3.8	4.3	9.7	0.0	3.5	0.0	0.0	16.1	0.4	0.0	4.0	9.9	3.7
Expo	2.4	4.7	0.0	2.6	0.0	4.9	0.4	0.0	0.0	0.0	2.6	5.6	1.1

Revenue Hours Lost Related to - POLICE & HEALTH

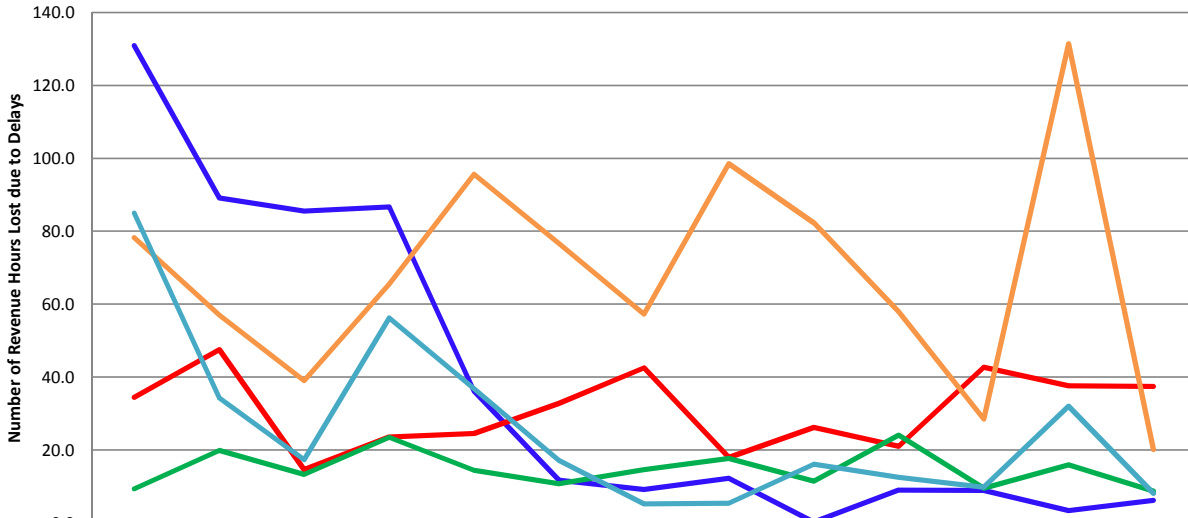
Blue, Red/Purple, Green, Gold & Expo Line Police & Health Delays



	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
Blue	13	48	14	15	54	4	15	19	29	13	4	3	0.3
Red	3.0	14.2	4.4	11.3	12.8	16.7	30.4	10.5	11.4	6.2	13.2	3.1	3.0
Green	1.4	0.0	5.0	0.2	4.0	3.9	0.9	1.9	1.0	8.2	1.6	3.9	0.6
Gold	4.2	68.1	136.5	51.1	10.2	13.4	18.8	4.9	5.1	3.9	5.4	18.7	7.2
Expo	5.6	17.2	0.2	3.3	25.2	9.9	3.4	0.4	2.3	7.7	0.9	0.4	8.7

Revenue Hours Lost Related to - Vehicle Delays

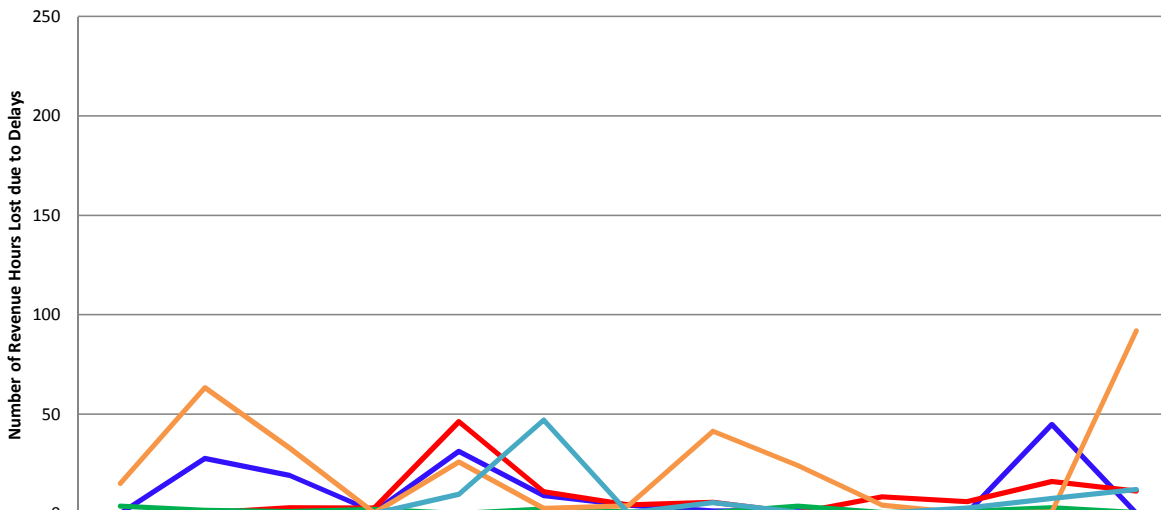
Blue, Red/Purple, Green, Gold & Expo Line Vehicle Delays



	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
Blue	130.9	89.2	85.5	86.7	36.2	11.8	9.3	12.3	0.3	9.1	9.0	3.4	6.2
Red	34.5	47.6	14.7	23.6	24.6	32.8	42.6	18.0	26.3	21.1	42.7	37.6	37.5
Green	9.4	19.9	13.4	23.5	14.5	10.8	14.6	17.7	11.5	24.2	9.6	15.9	8.8
Gold	78.3	57.0	39.0	65.6	95.7	76.7	57.3	98.6	82.4	57.9	28.5	131.4	20.2
Expo	85.0	34.3	17.4	56.2	36.9	17.2	5.2	5.5	16.1	12.6	9.8	32.0	8.2

Revenue Hours Lost Related to - WAYSIDE

Blue, Red/Purple, Green, Gold & Expo Line Wayside Delays

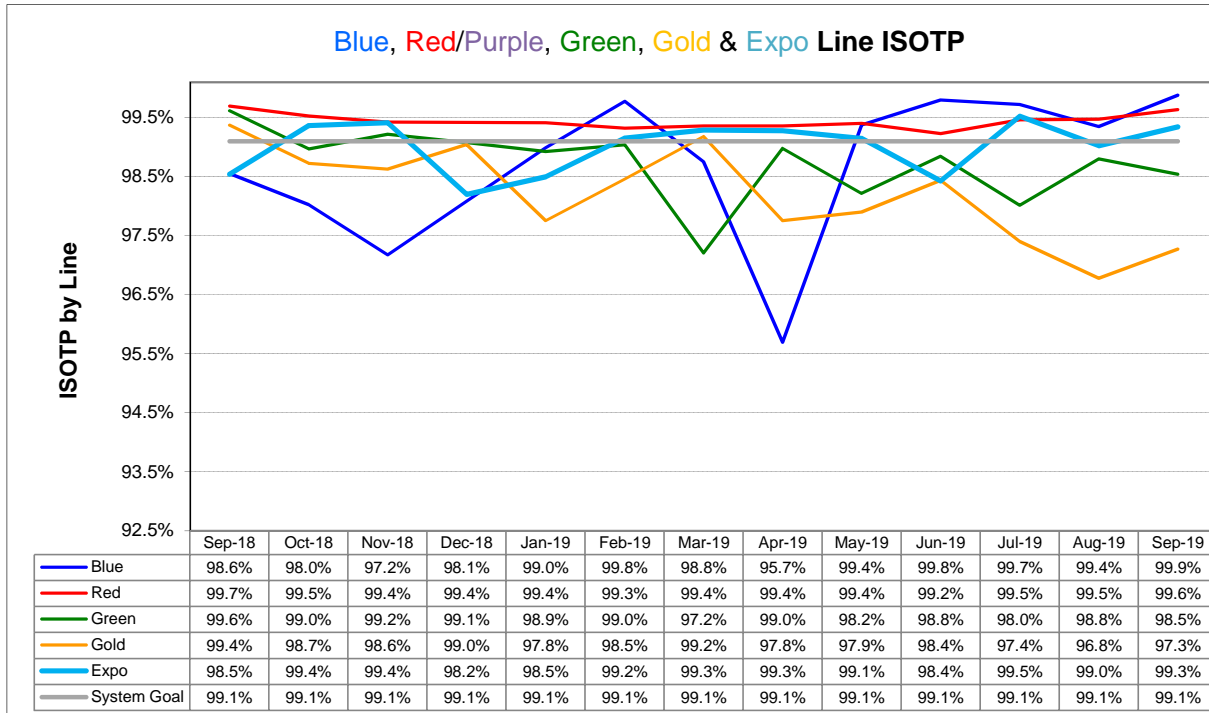


	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
Blue	0	28	19	1	31	9	4	1	1	0	0	45	0.0
Red	0.1	0.4	2.9	2.9	46.2	11.0	4.4	5.6	0.3	8.4	6.0	16.2	11.4
Green	3.8	1.6	1.1	2.2	0.1	2.3	0.9	0.6	3.7	0.6	1.2	2.9	0.6
Gold	15.2	63.3	32.8	0.3	26.0	2.6	3.9	41.5	24.1	4.3	0.0	0.8	91.9
Expo	0.0	0.4	0.0	0.0	9.7	47.0	0.4	5.5	0.6	0.3	2.8	7.7	12.1

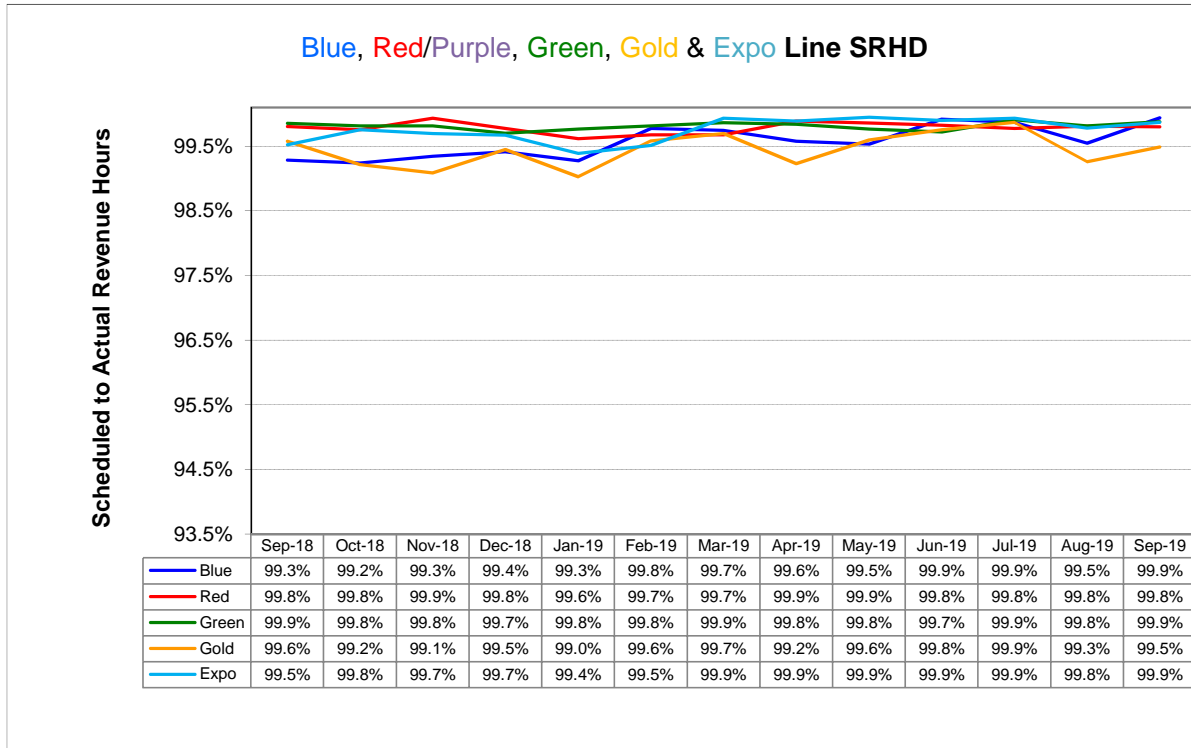
Rail Service Performance

In Service On Time Performance by Line

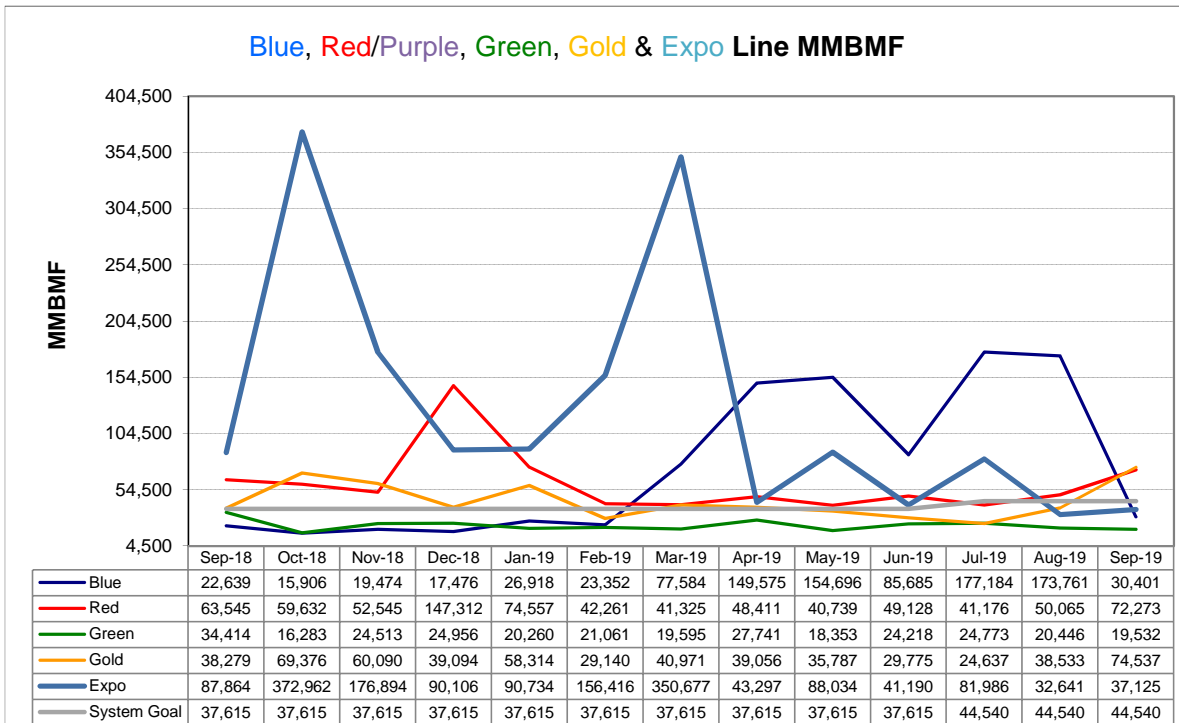
Sep 2019



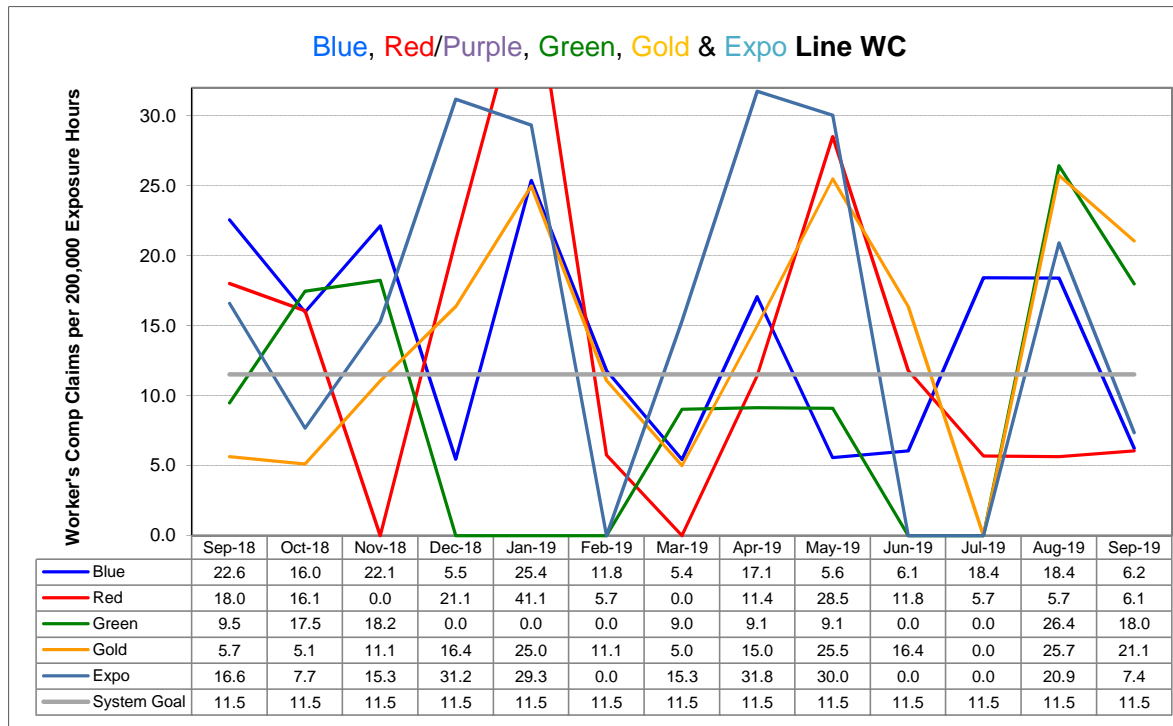
Ratio of Scheduled to Revenue Hours Delivered by Line



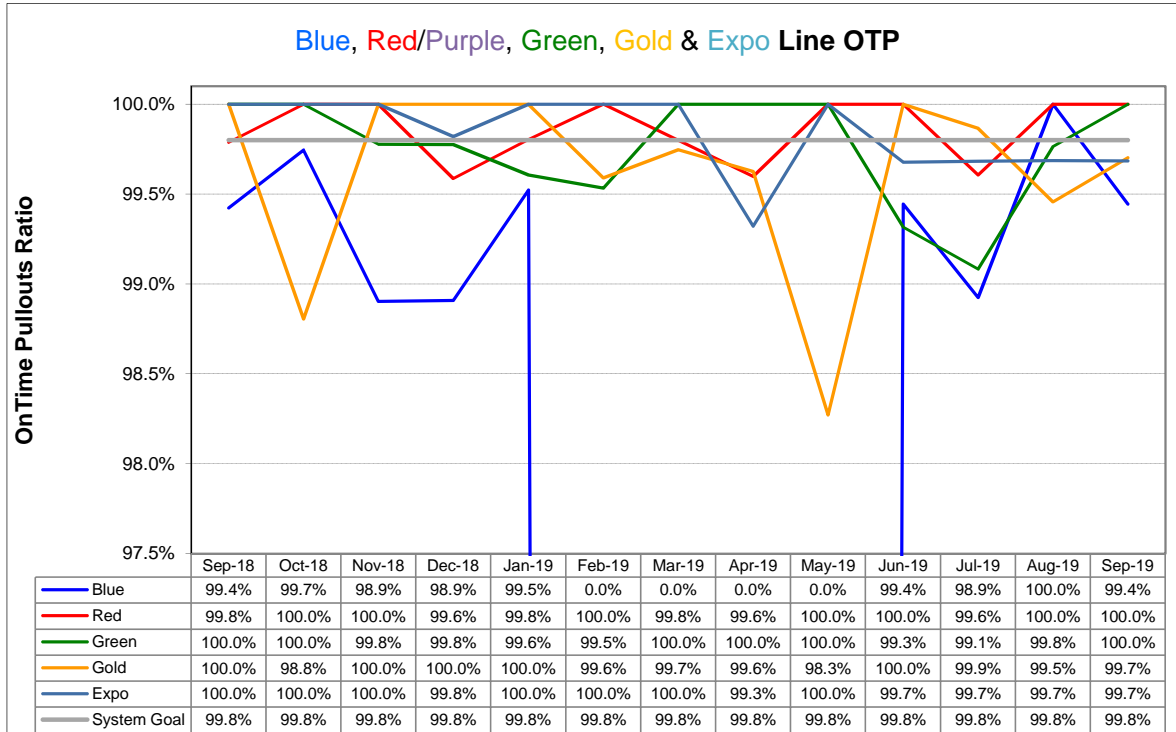
Mean Miles Between Mechanical Failures by Line



Workers Comp Claims by Line



On-Time Pullouts Ratio by Line

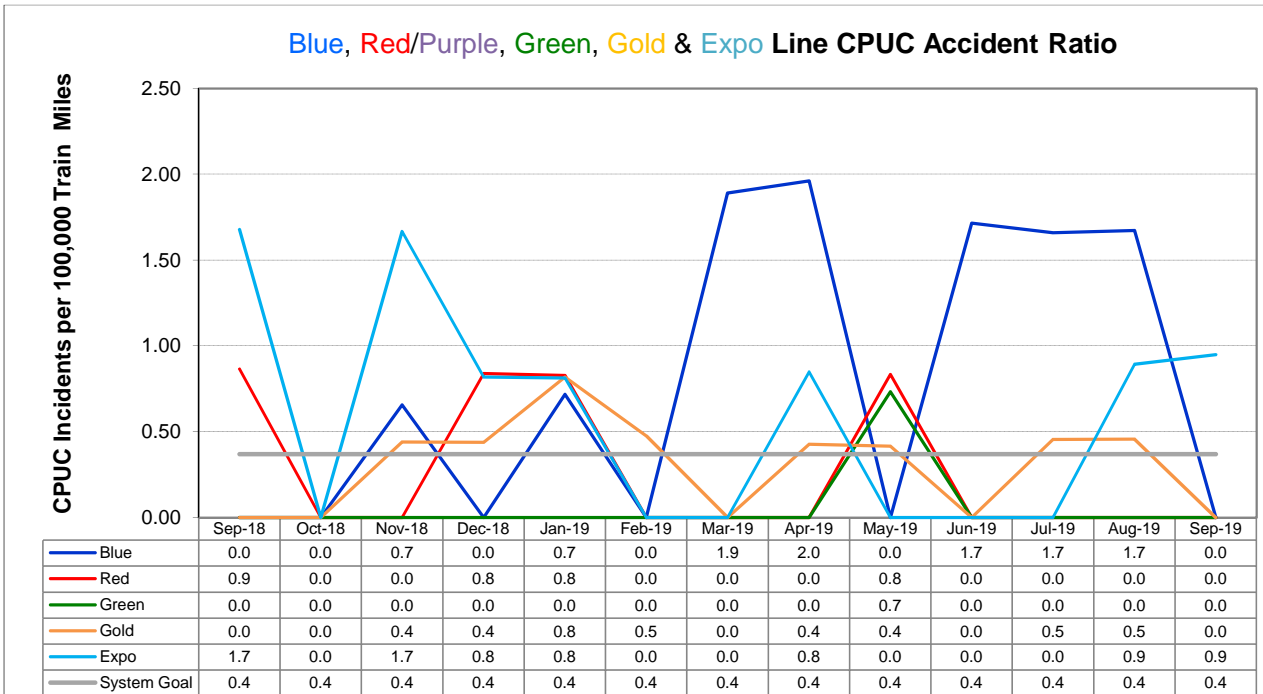


Due to Blue Line Construction, Blue pulled out of EXPO for Feb, Mar, Apr and May 2019.

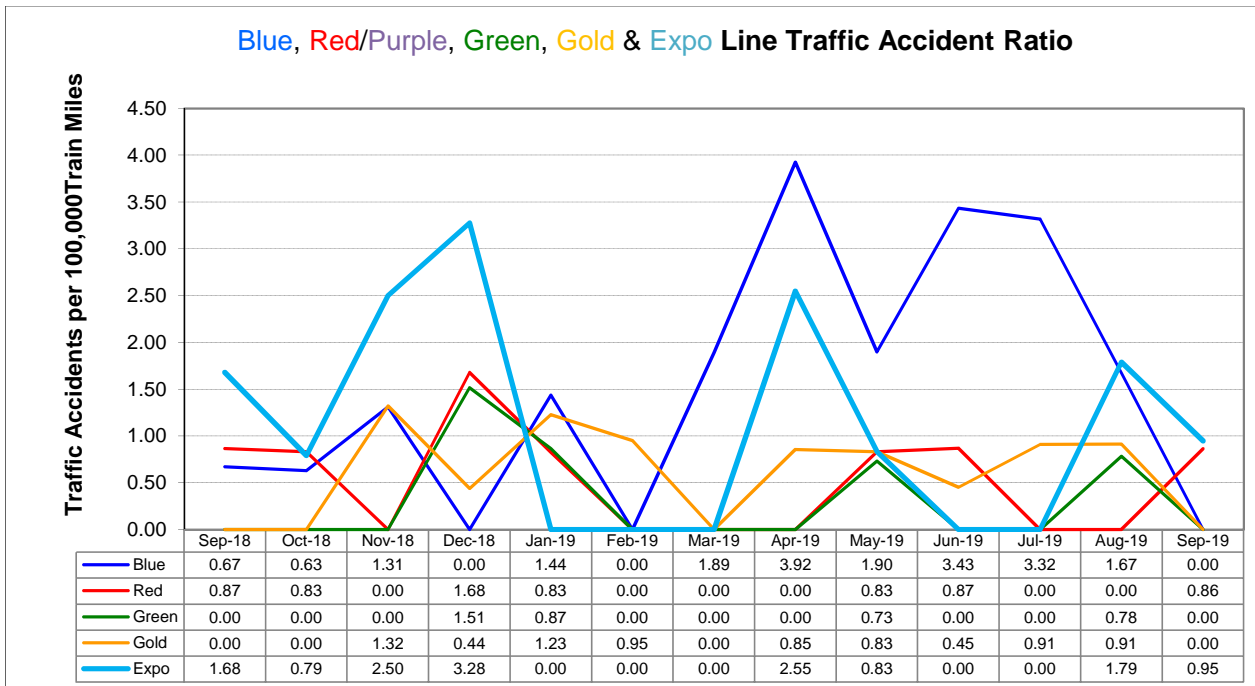
Rail Safety Performance

CPUC REPORTABLE INCIDENTS PER 100,000 TRAIN MILES

Sep 2019



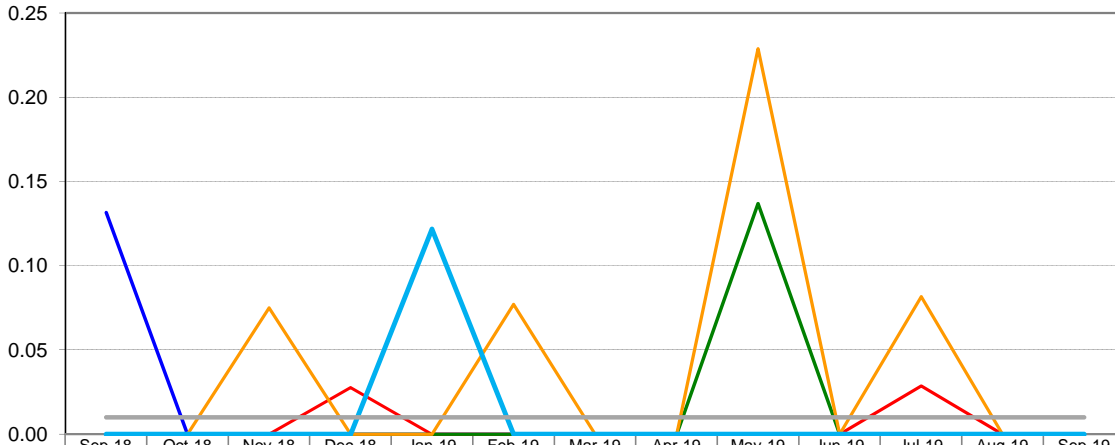
TRAFFIC ACCIDENTS PER 100,000 TRAIN MILES



PASSENGER ACCIDENTS PER 100,000 BOARDINGS

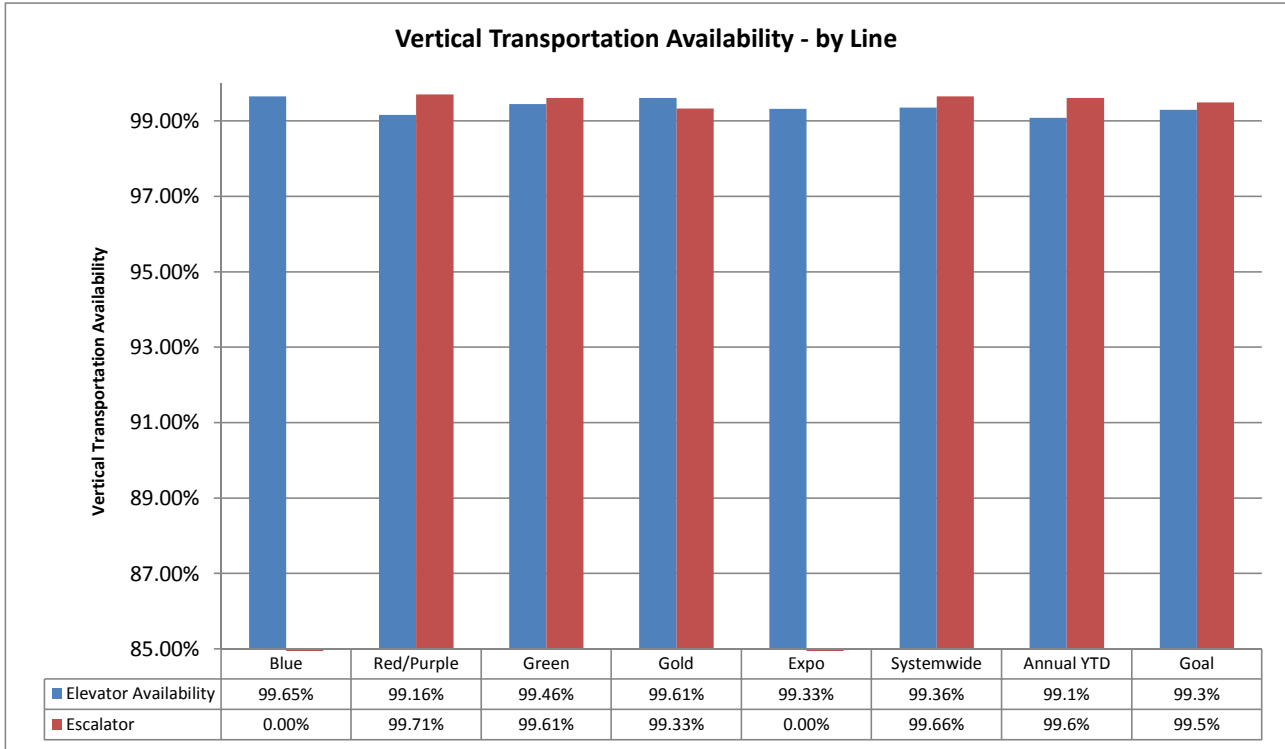
Blue, Red/Purple, Green, Gold & Expo Line Passenger Accident Ratio

Passenger Accidents per 100,000 Boardings



	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
Blue	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Red	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00
Green	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00
Gold	0.00	0.00	0.08	0.00	0.00	0.08	0.00	0.00	0.23	0.00	0.08	0.00	0.00
Expo	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
System Goal	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

Systemwide Vertical Transportation Availability by Line Sep 2019

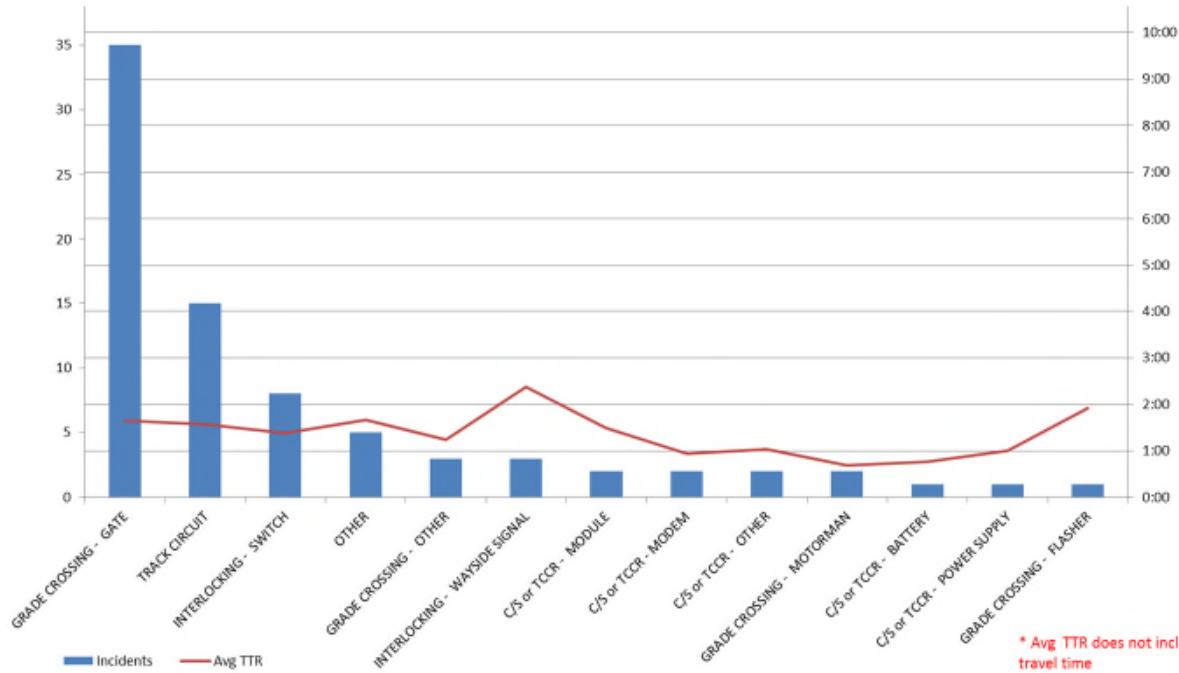


Note: No Escalators at Blue and Expo Lines

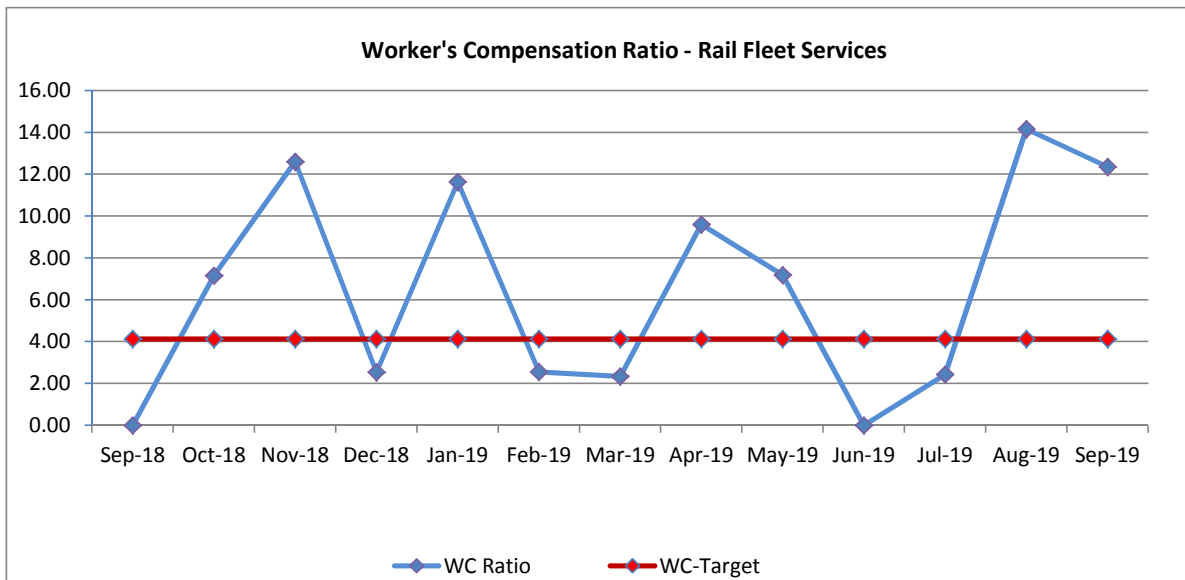
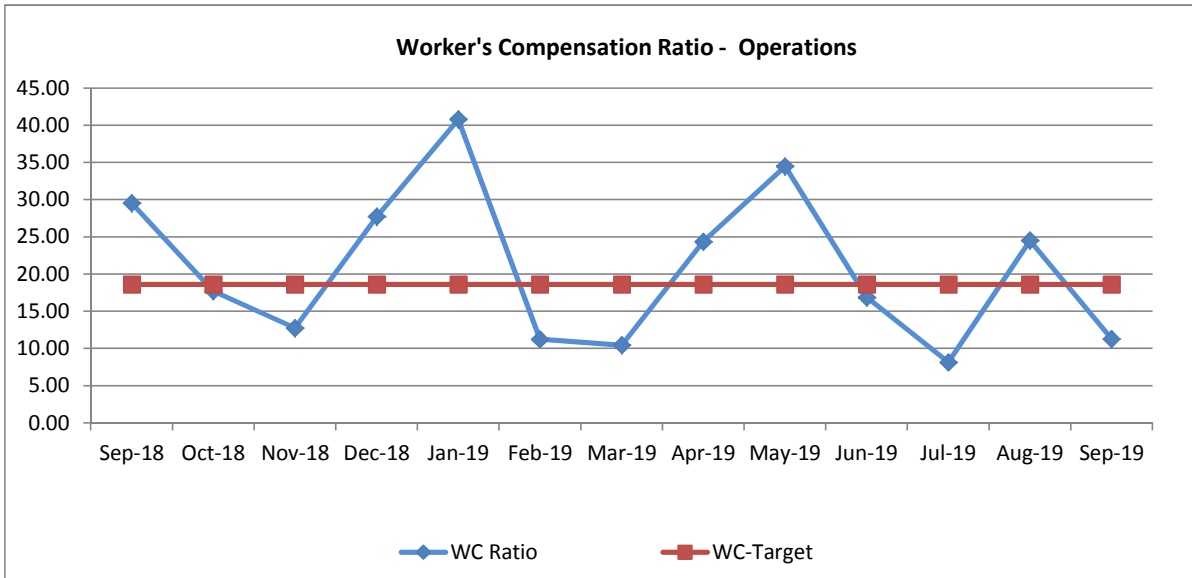
Wayside Signal Maintenance
 [Incidents & Avg Time-To-Repair (TTR)]
 September 2019

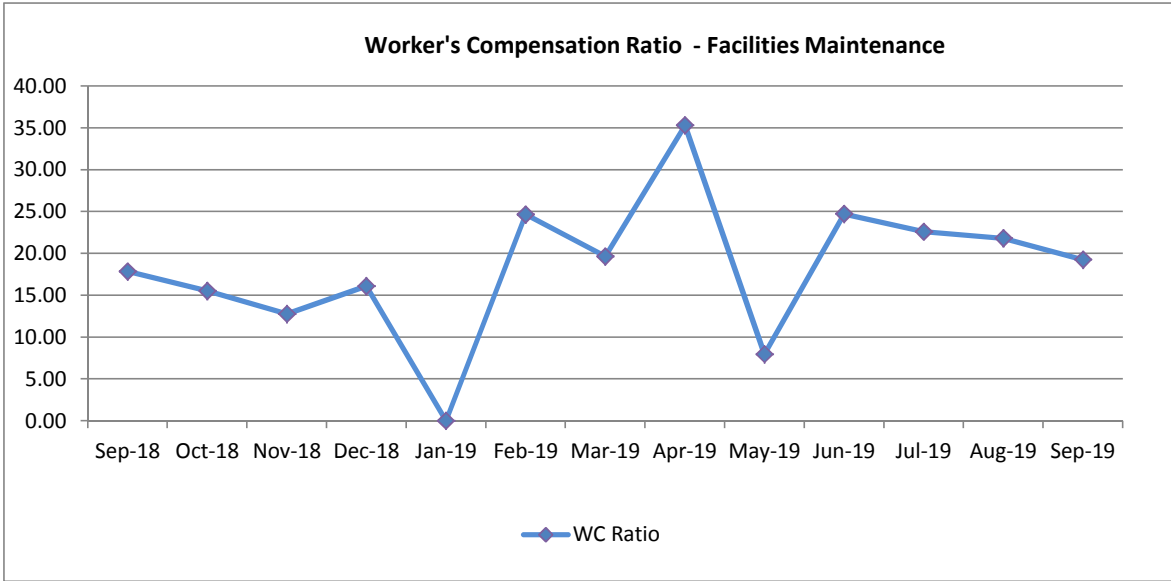
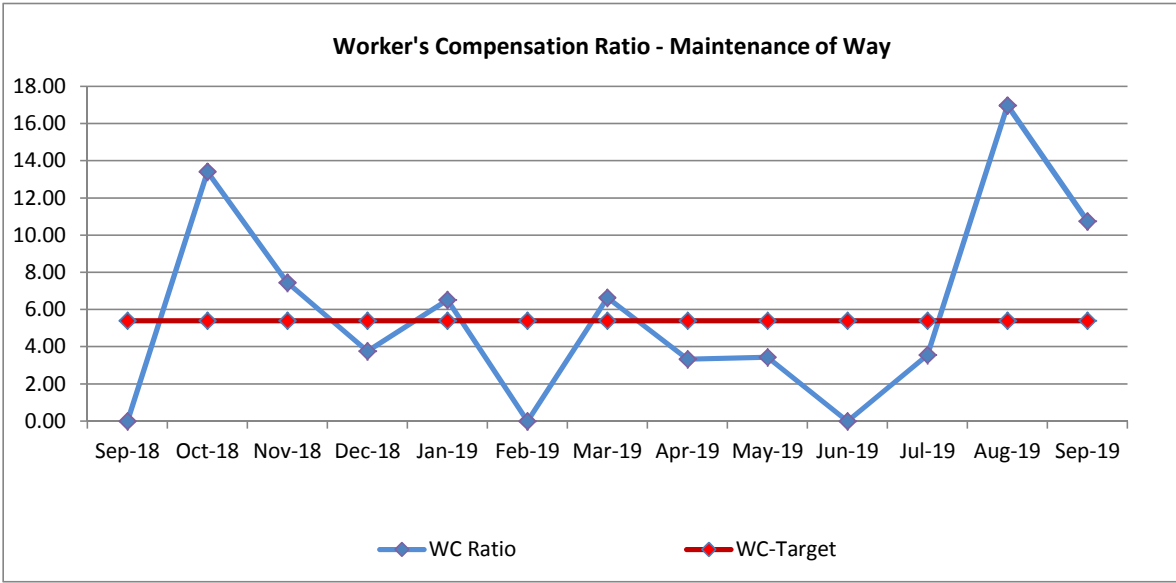
Number of Incidents

Avg TTR

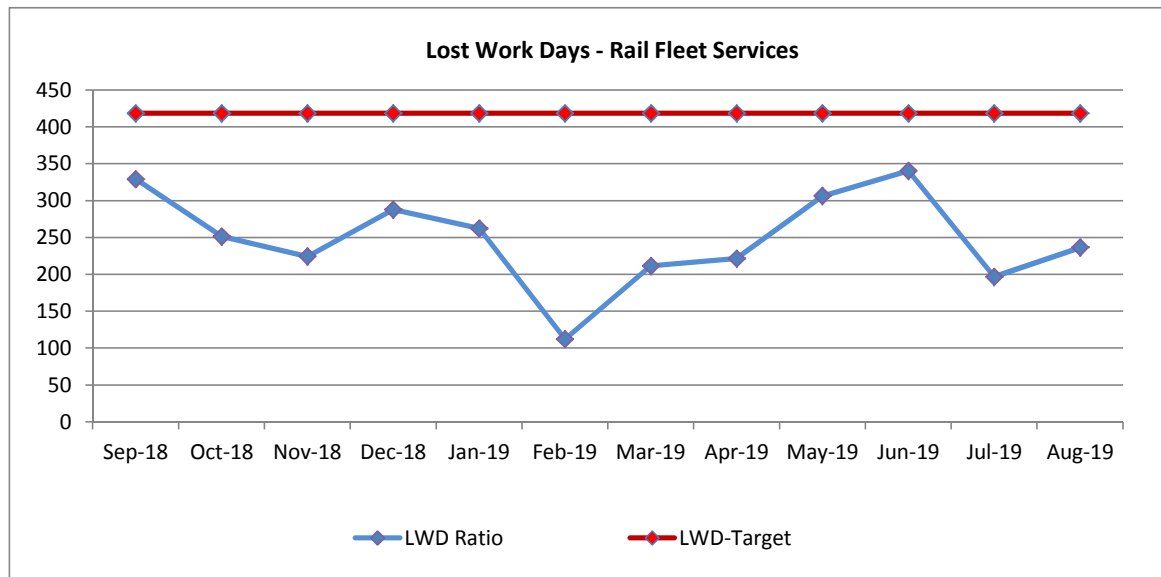
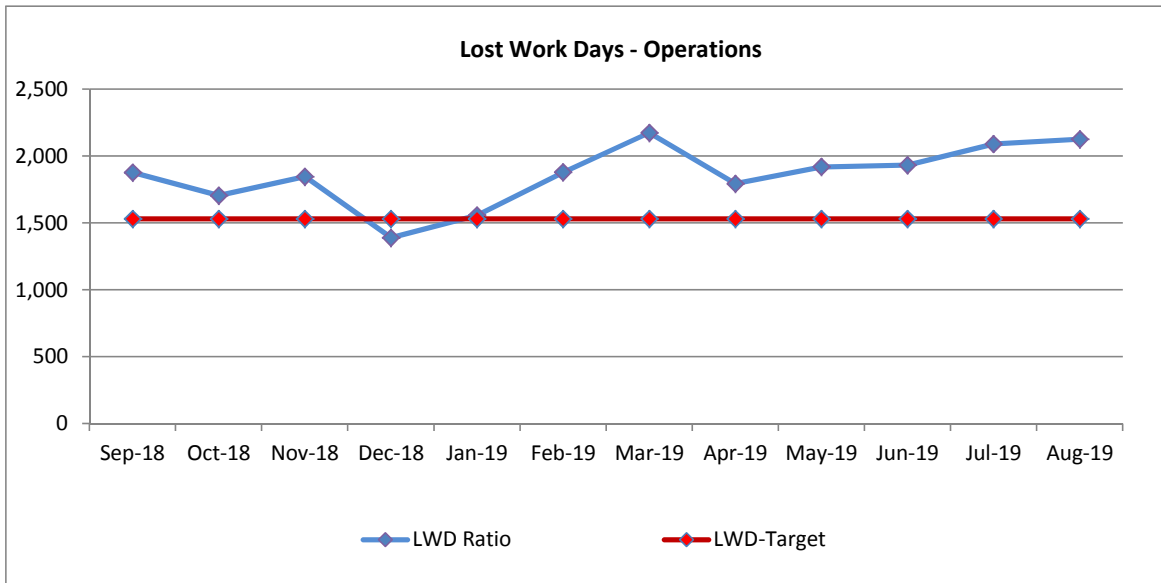


Administrative Key Performance Indicators Worker's Compensation, Lost Work Days, OSHA Sep 2019

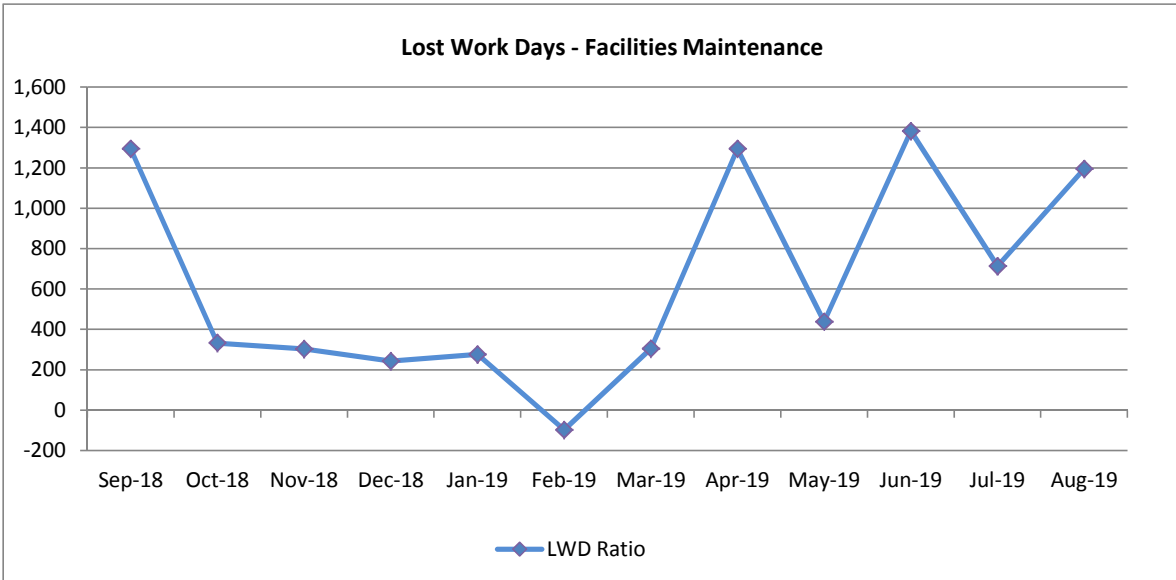
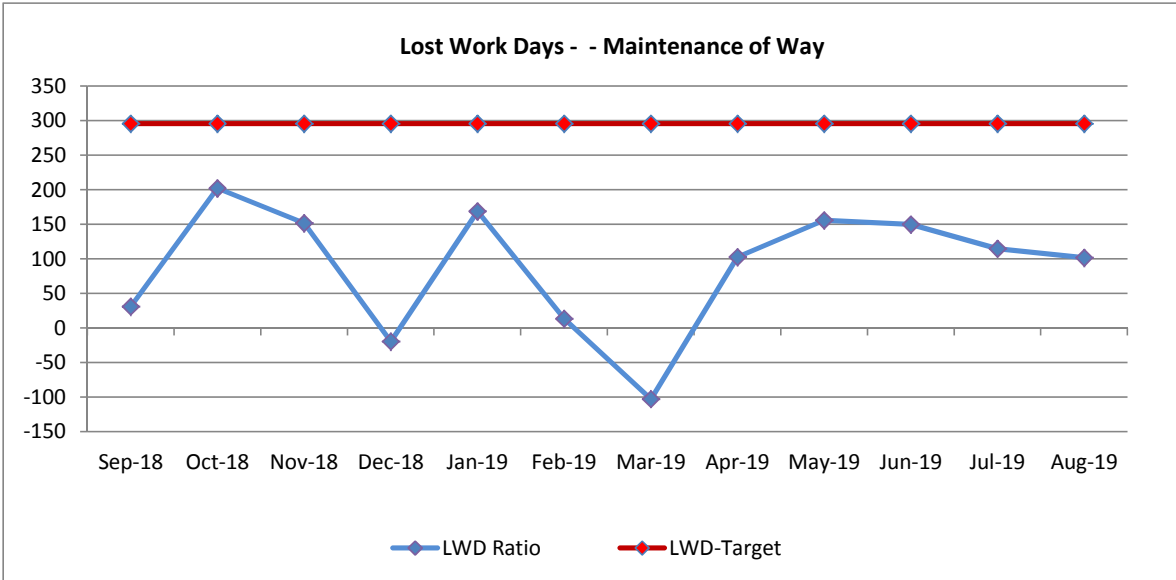




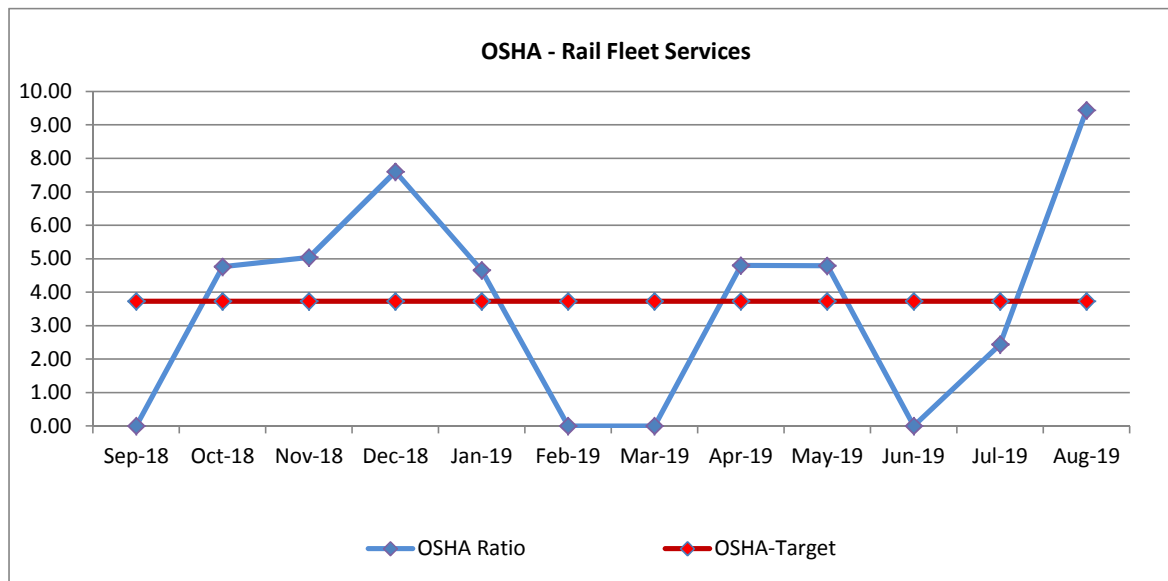
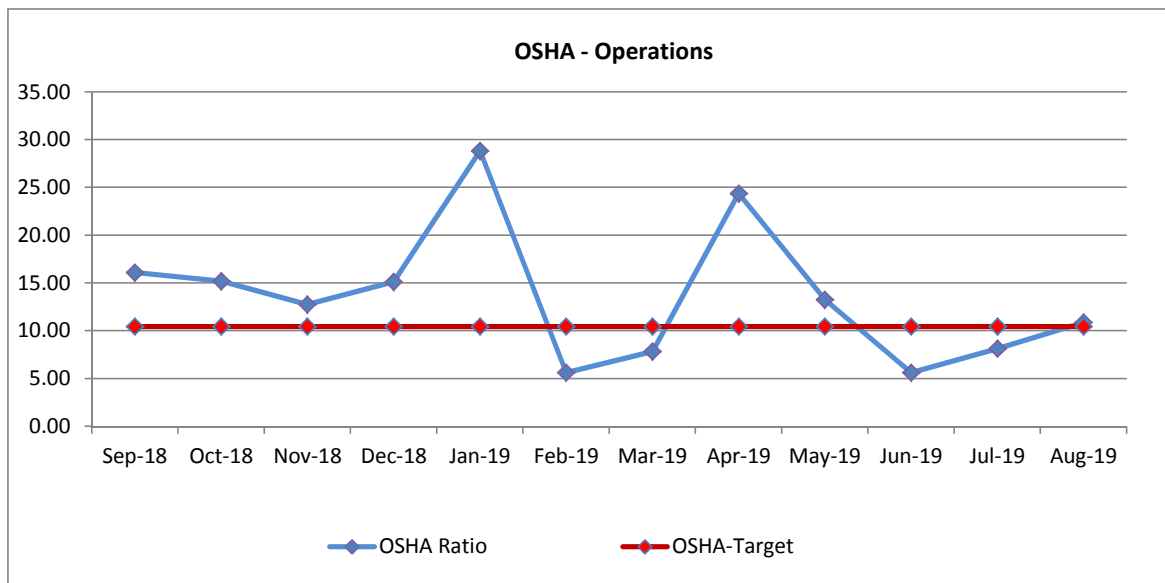
Facilities Maintenance goals to be established.



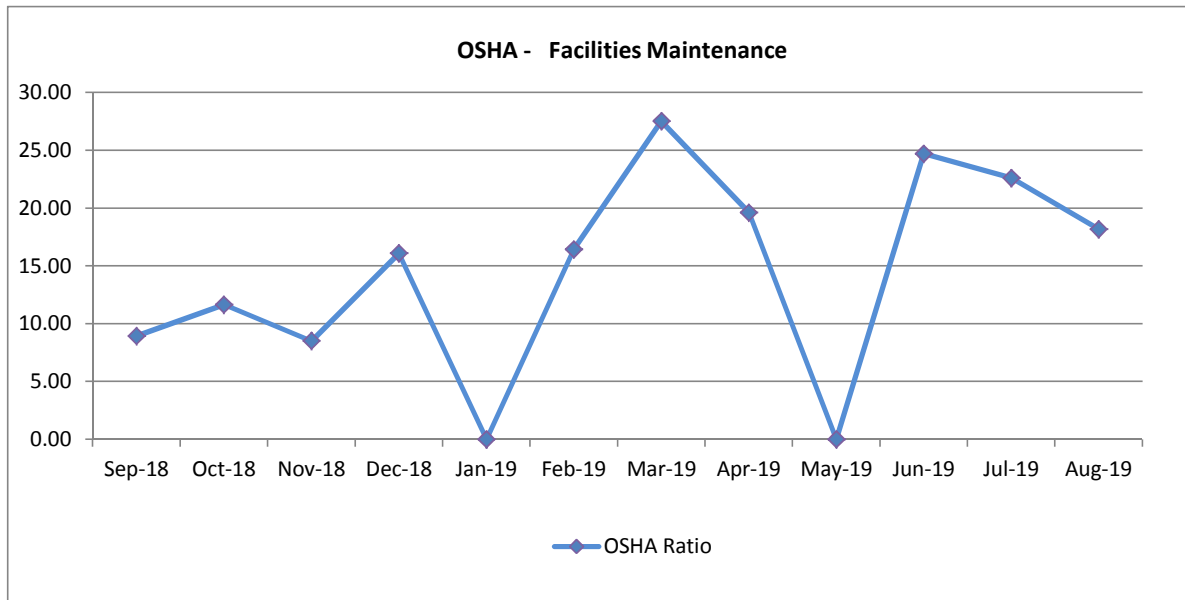
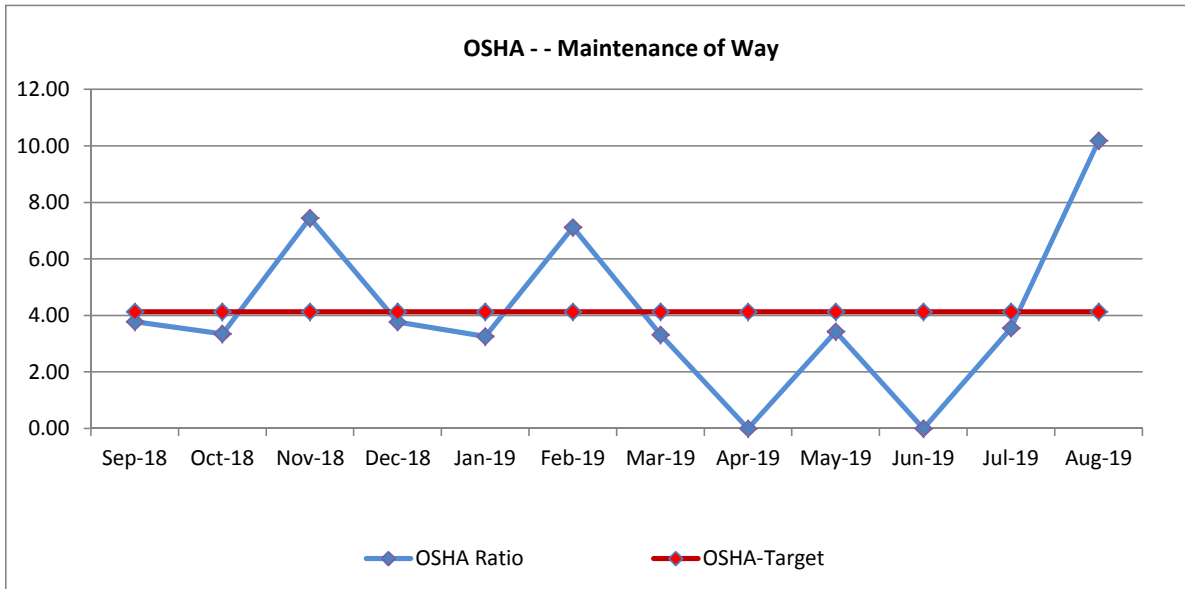
Note: There is a one month lag in Lost Work Days and OSHA data.



Facilities Maintenance goals to be established.
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Facilities Maintenance goals to be established.

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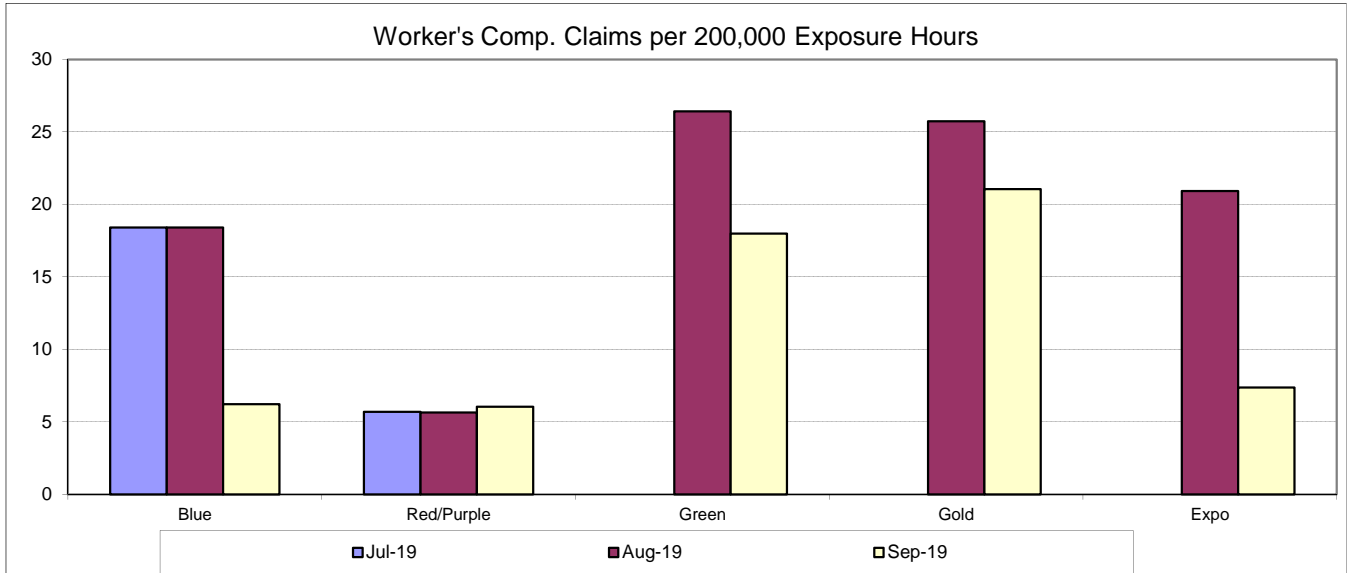
Worker's Comp. Claims

Jul 2019 - Sep 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)



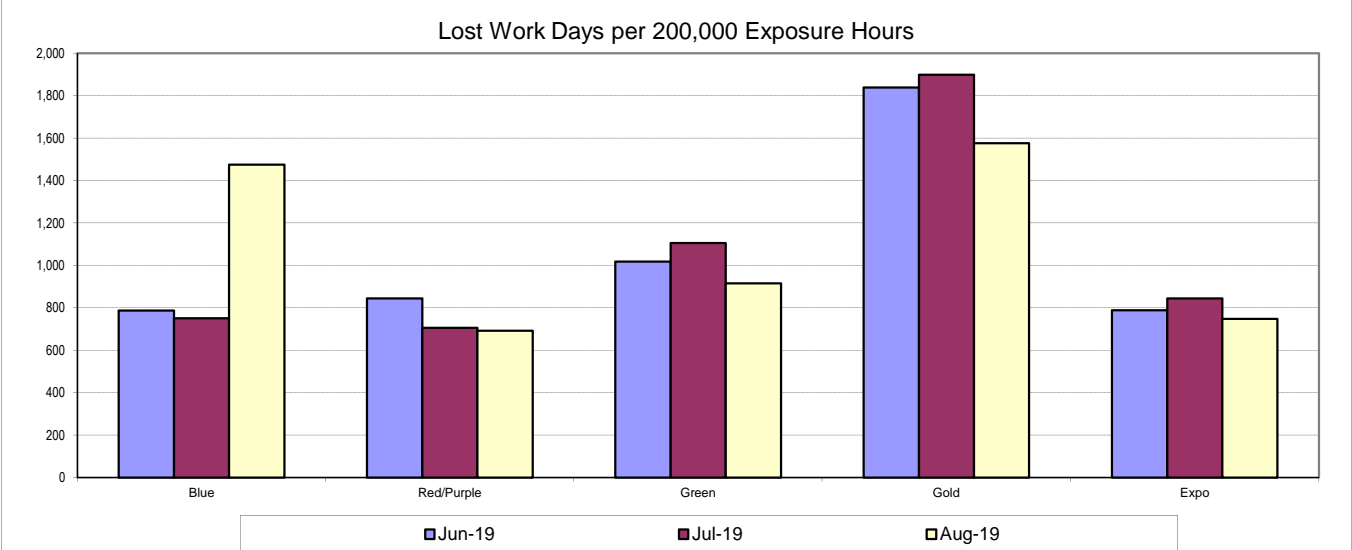
Lost Work Days and OSHA Injuries

Jun 2019 - Aug 2019

3 Month Comparison

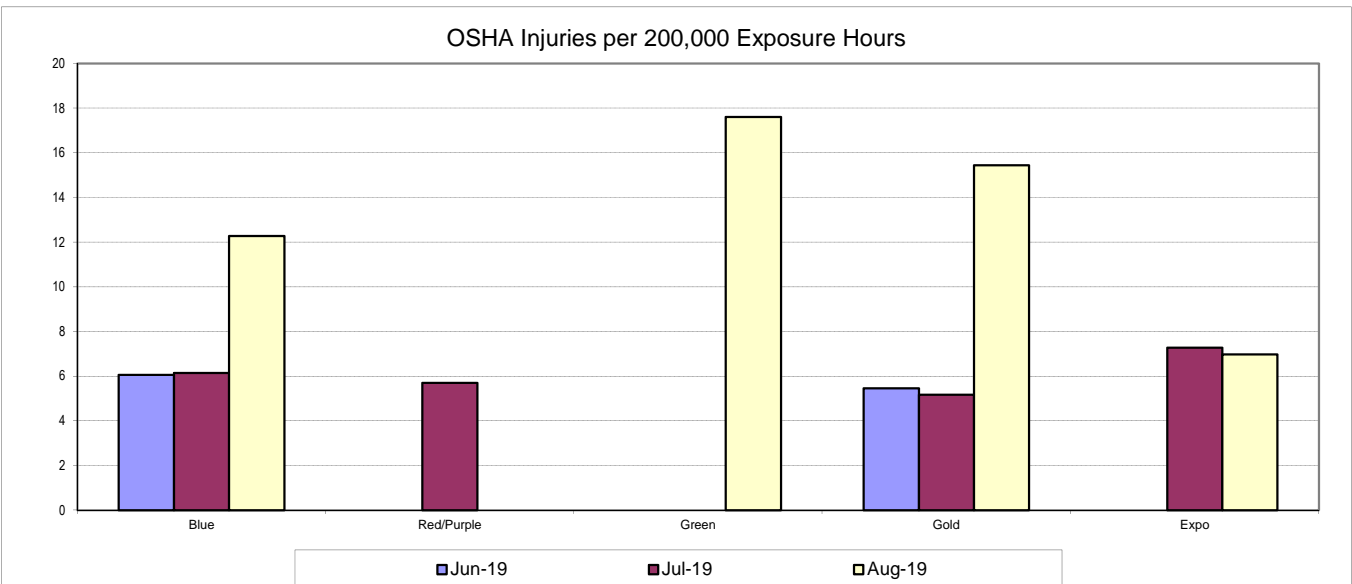
LWD Definition: Number of paid working days lost due to employees workers' compensation injuries each month per 200,000 exposure hours. This indicator measures use of Transitional Duty Program.

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

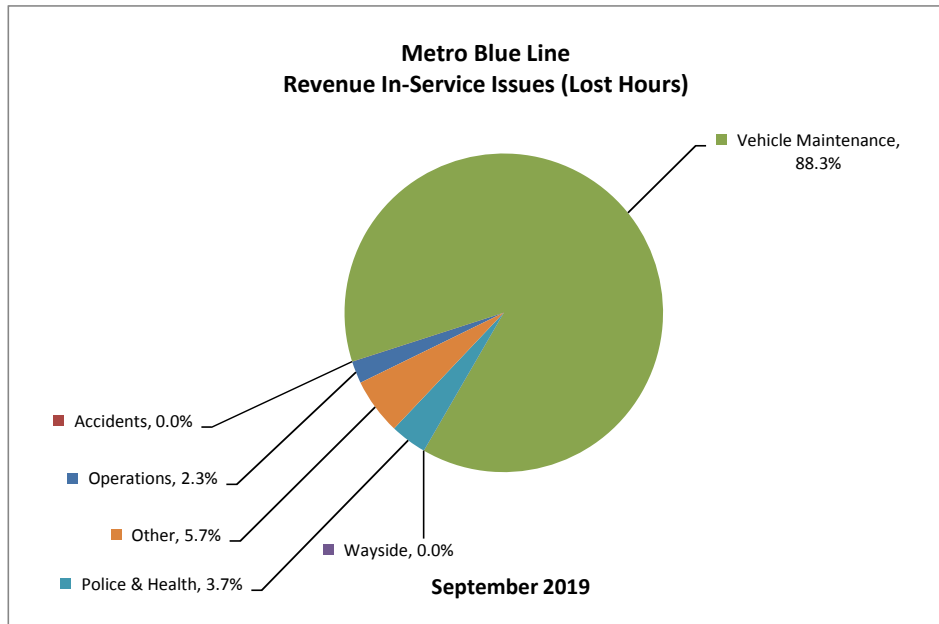
Out of a total of 9,408 hours operated, there were approximately 7 total hours of service delays.

September 2019 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	9,401	99.9%
Cancelled + Delayed Hours	7	0.1%
Total Revenue Hours	9,408	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	1	0.2	2.3%
Accidents	0	0.0	0.0%
Vehicle Maintenance	5	6.2	88.3%
Wayside	0	0.0	0.0%
Police & Health	4	0.3	3.7%
Other	4	0.4	5.7%
Total	14	7.0	100.0%

* 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



September 2019 Blue Line incidents causing delay were as follows:

Operations Incidents:

9/28/2019 1:54:00 PM - Incident# 3206569 (0 lost trips, 10 lost minutes)

Approaching Compton Station, operator reports flats on car 1123-1100

Train 101

Track 1

Northbound

T-308

1123-1190

Vehicle Maintenance Incidents:

9/9/2019 4:30:00 AM - Incident# 3198141 (1 lost trip, 174 lost minutes) CHARGEABLE

T-216 arriving late at the Willow Station due to problems with the train.

T-216

Tr#104

Cars(1073A)-1112-1140

Southbound Trk#1

Sound wall

9/10/2019 5:55:00 AM - Incident# 3198660 (0 lost trips, 6 lost minutes) CHARGEABLE

Air Conditioning leaking, cars 1173-(1112)-1140

Train #103

T-541

Compton Station, track #2, Southbound.

9/11/2019 4:32:00 AM - Incident# 3199137 (0 lost trips, 5 lost minutes) CHARGEABLE

Roll-Out, cars #1116-1131-1123

Train #104

T-216

Blue line Yard

9/12/2019 9:48:00 AM - Incident# 3199816 (1 lost trip, 174 lost minutes) CHARGEABLE

Train 101 reports no movement at transit mall.

Train 101

T-264

LRV'S (1087) 1118-1084

Transit Mall track 1 northbound

9/19/2019 10:33:00 PM - Incident# 3203130 (0 lost trips, 18 lost minutes)

No Cab Signal also B/O speedometer

Train 105 TK #2 SB Compton Station

T-69

(1116B)-1083-1117

Police & Health Incidents:

9/9/2019 4:59:00 AM - Incident# 3198205 (0 lost trips, 8 lost minutes) CHARGEABLE

T-256 reports that there was a patron with a weapon on his person in car #1092.

9/11/2019 6:48:00 PM - Incident# 3199569 (0 lost trips, 5 lost minutes) CHARGEABLE

Long Beach Police Department Officer Grajea Metro Unit #3 was on scene reporting 2 buses at 1st and Long Beach involved in a accident and blocking both tracks.

9/20/2019 9:50:00 AM - Incident# 3203341 (0 lost trips, lost minutes)

Late departure from Transit Mall Station due to blocked track, Track 1.

9/26/2019 6:28:00 PM - Incident# 3205959 (0 lost trips, 3 lost minutes)

Trespasser

Train 105

T-244

1107-1090-1123

Northbound, Track 1 8Th and Long Beach TK 2.

Other Incidents:

9/28/2019 6:19:00 PM - Incident# 3206612 (0 lost trips, lost minutes) CHARGEABLE

Train 102

(1084)-1118

T201

Track #2

Compton Station

Operator reports someone spilled gas on the consist.

Unable to Duplicate:

9/9/2019 5:19:00 AM - Incident# 3198180 (0 lost trips, 8 lost minutes) CHARGEABLE

T-216 experiencing problems with cab signals on car #1073 A.

T-216

Tr#104

Cars(1073A)-1112-1140

Southbound Trk#2

Willow Station

9/20/2019 11:55:00 AM - Incident# 3203393 (0 lost trips, 8 lost minutes) CHARGEABLE

Train 101

Southbound

Track #2

(1090B)-1076-1139

T-262

Operator reports propulsion problems with loss of power at 26th Street.

Reset:

9/11/2019 9:31:00 AM - Incident# 3199312 (0 lost trips, 6 lost minutes) CHARGEABLE

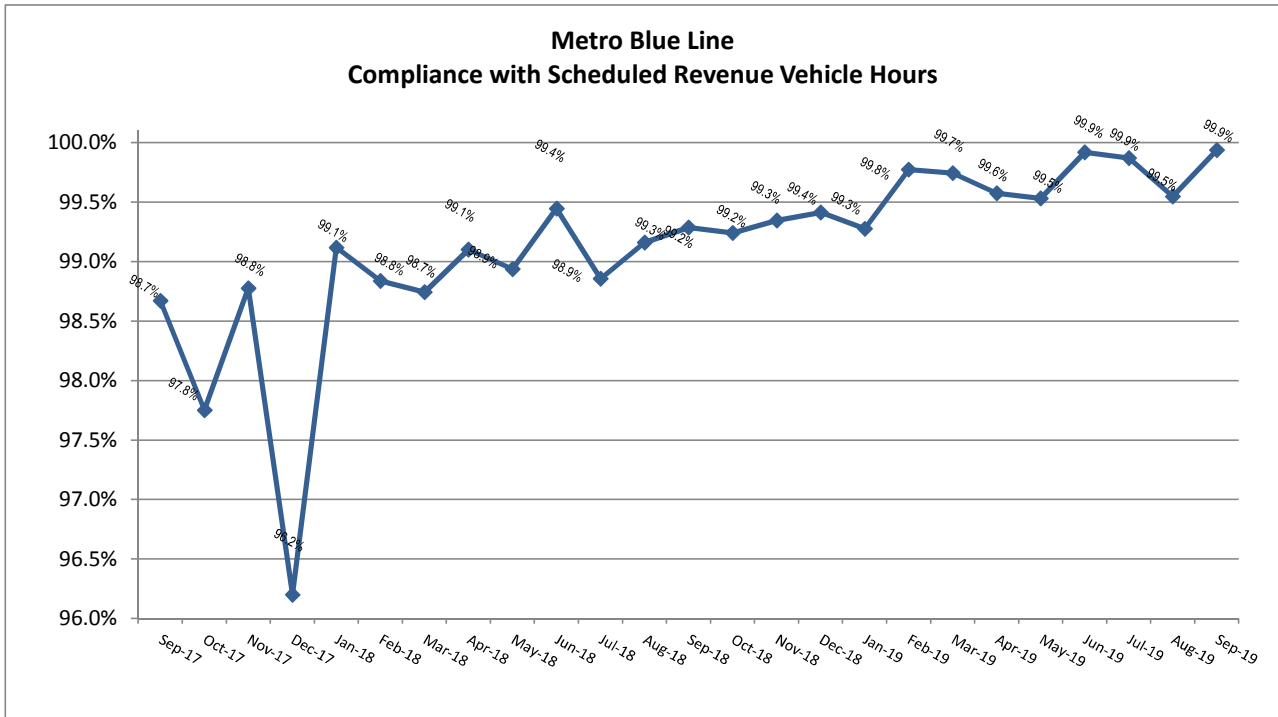
Auto Train Protection (Speed Limit) cars #(1140A)-1073-1093

Train #105

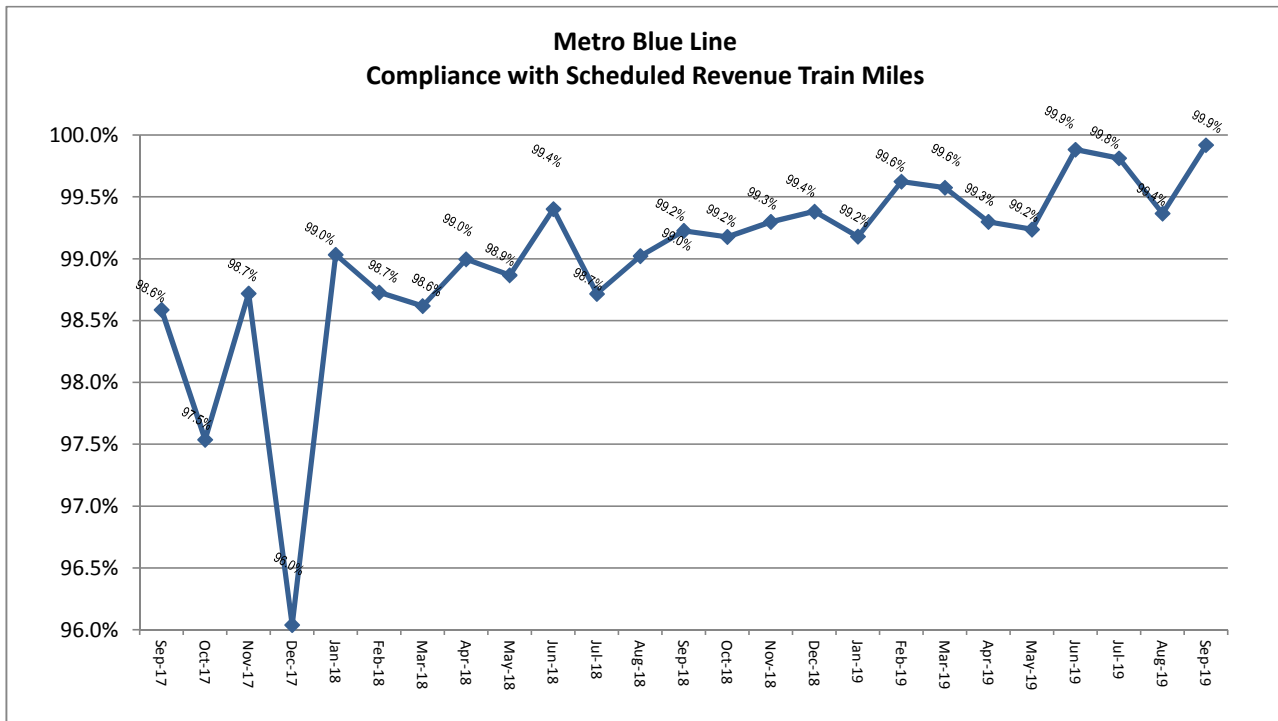
T-216

Wardlow Station, track #2, Southbound.

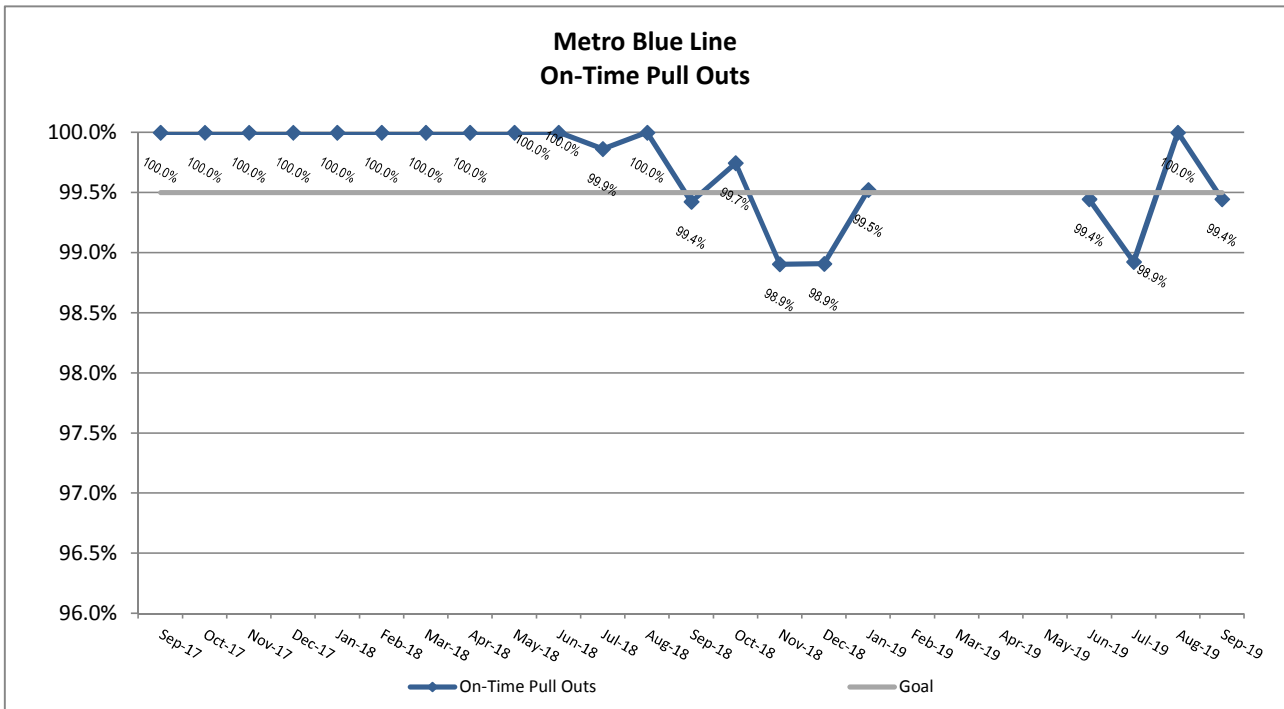
MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS
COMPLIANCE WITH SCHEDULED VEHICLE HOURS
Sep 2019



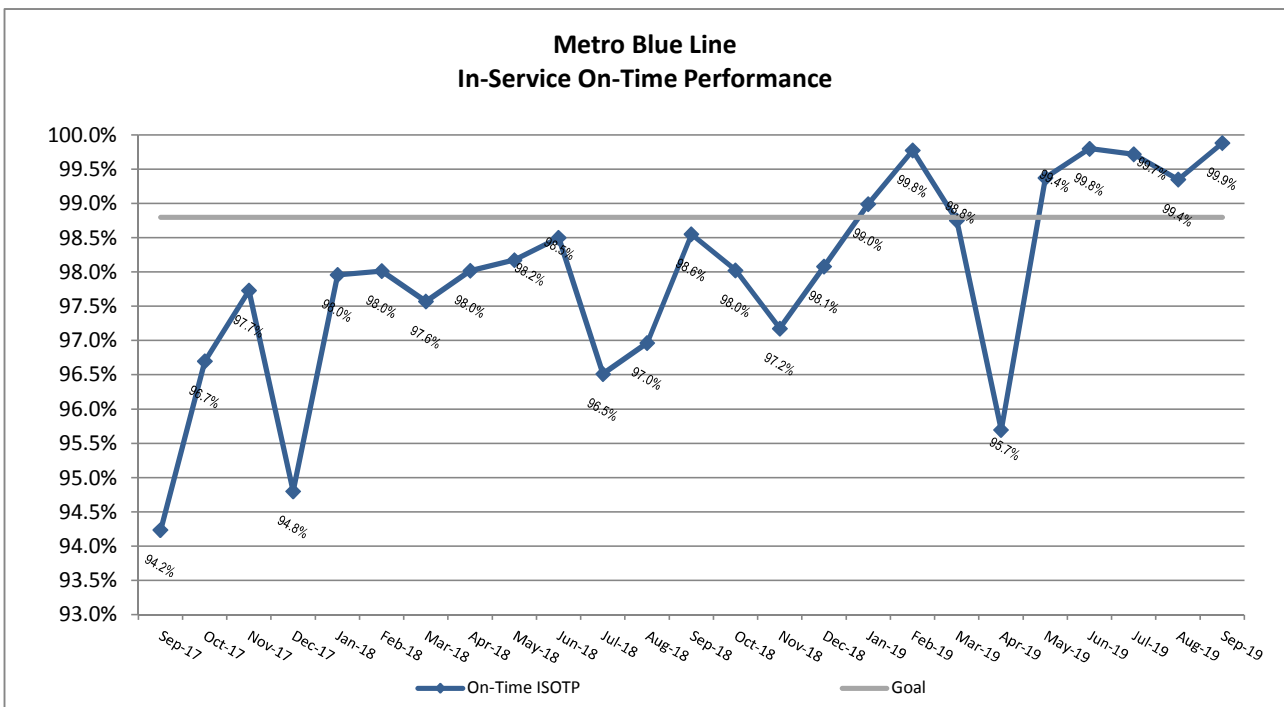
COMPLIANCE WITH SCHEDULED TRAIN MILES



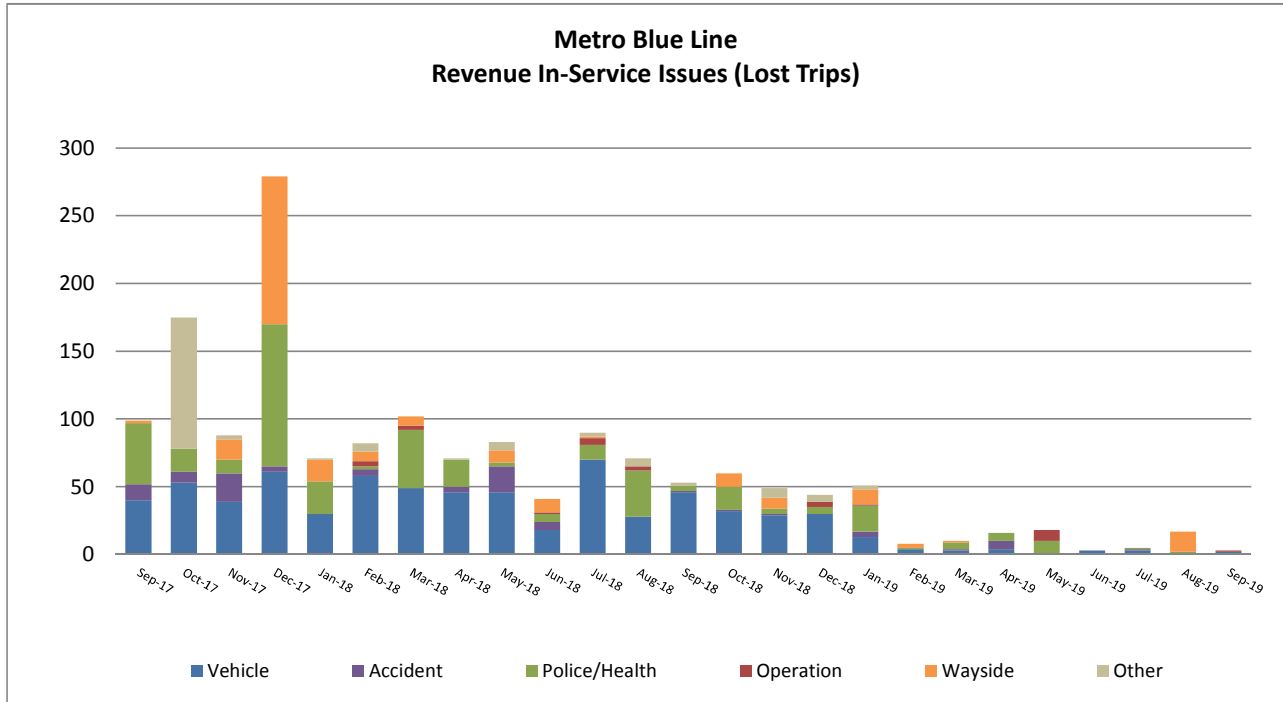
ON-TIME PULL OUTS



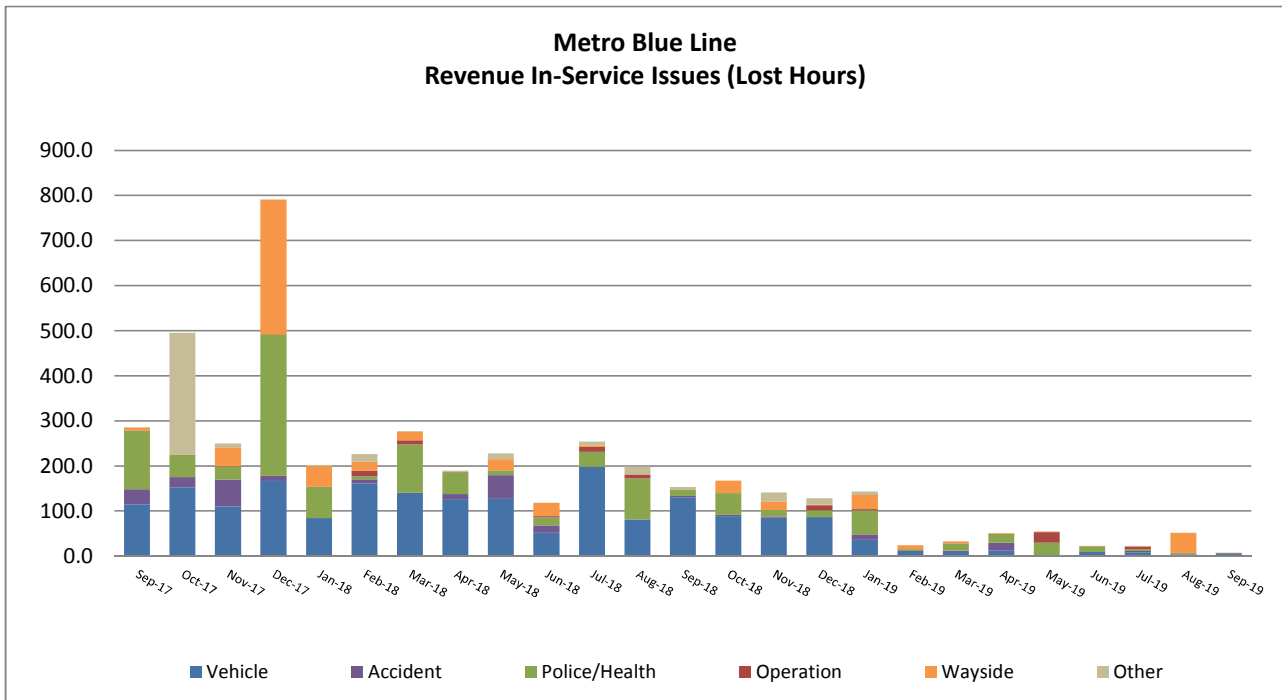
IN-SERVICE ON-TIME PERFORMANCE CHART



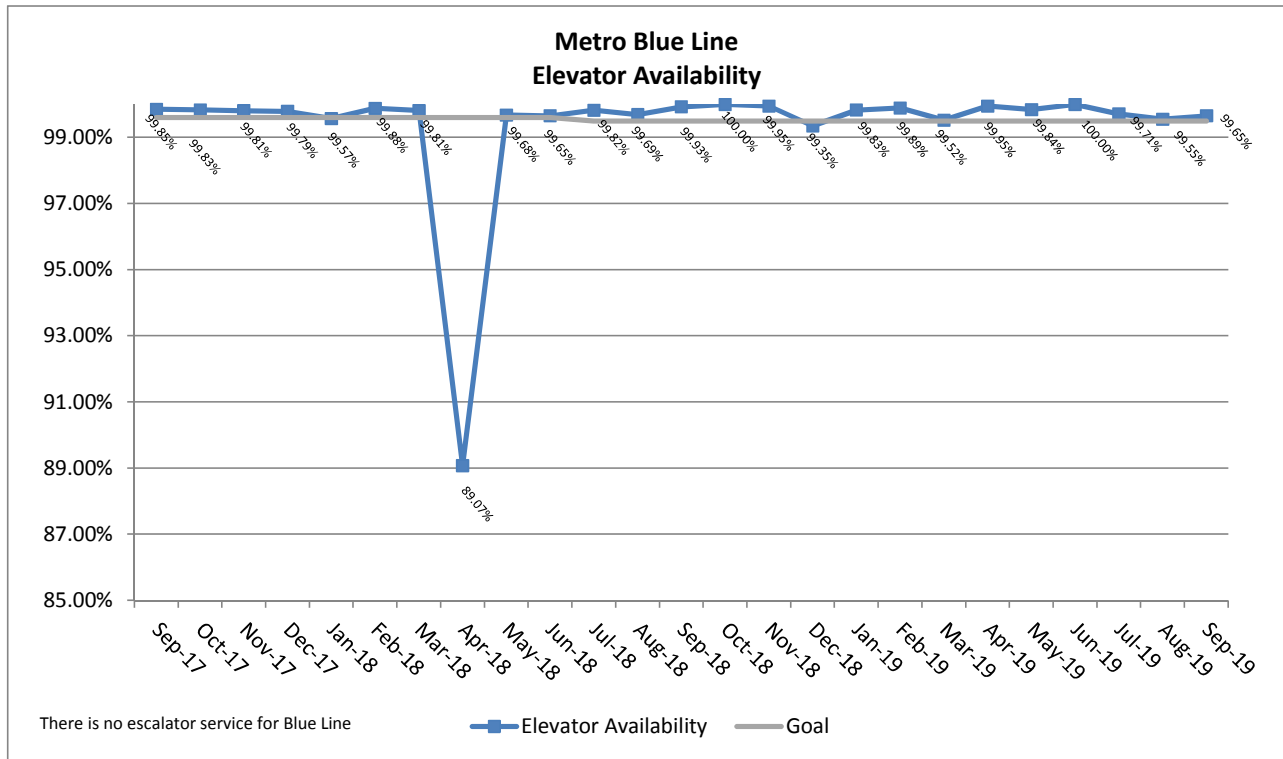
LOST TRIPS



LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY



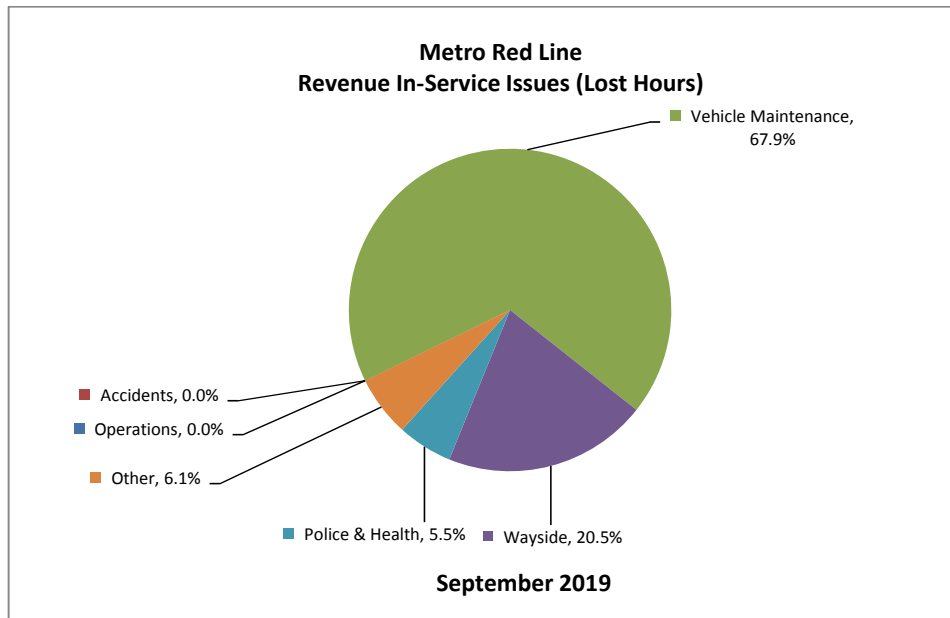
RED LINE

Out of a total of 26,411 hours operated, there were approximately 55 total hours of service delays.

September 2019 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	26,356	99.8%
Cancelled + Delayed Hours	55	0.2%
Total Revenue Hours	26,411	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	0	0.0	0.0%
Accidents	0	0.0	0.0%
Vehicle Maintenance	9	37.7	67.9%
Wayside	2	11.4	20.5%
Police & Health	2	3.1	5.5%
Other	5	3.4	6.1%
Total	18	55.6	100.0%

* 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



September 2019 Red Line incidents causing delay were as follows:

Operations Incidents:

None

Vehicle Maintenance Incidents:

9/3/2019 11:32:00 AM - Incident# 3195697 (12 lost trips, 1,810 lost minutes)

Stuck mode selector

Train 205

T-031/074

CArs 569-570-575-(576)

Signal US 2 AL East

9/4/2019 7:50:00 PM - Incident# 3196564 (0 lost trips, 6 lost minutes) CHARGEABLE

Loss of cab signal emergency brake application 593,594,559,560,567(568).

Westlake Station

Train #214, T-199, AL, eastbound.

9/8/2019 12:44:00 PM - Incident# 3198015 (1 lost trip, 116 lost minutes)

Report of multiple emergency brake application.

T-022

Train 203

Cars (603)-604-565-566

Civic Center AR westbound.

9/10/2019 4:17:00 PM - Incident# 3199034 (1 lost trip, 156 lost minutes)

Recurring emergency brake application.

Train #214

T-074

Cars #599-600-545-546-533-(534).

E/Bound Westlake Station A/L Track.

9/13/2019 1:45:00 PM - Incident# 3200437 (1 lost trip, 149 lost minutes)

T-333 reports Emergency lighting in cars # 557 and 558 in Train # 204. H/V AL E.

9/20/2019 3:09:00 PM - Incident# 3203490 (0 lost trips, 3 lost minutes)

Mode Selector for key switch is loose.

Train 206

T-169

(579)-580-567-568

Eastbound, Track BR Wilsher/Western.

9/23/2019 5:24:00 AM - Incident# 3204137 (0 lost trips, 7 lost minutes)

Car 567 Friction brake fault will not clear.
Train 210
(567)-568-537-538-581-582
T-318
Union Station, AR, Westbound

9/24/2019 10:35:00 AM - Incident# 3204844 (0 lost trips, 11 lost minutes)

Emergency Brakes not releasing on car (568)
Train 209
T-170
North Hollywood, AL, westbound
535 536 567 (568)

9/30/2019 6:28:00 PM - Incident# 3207306 (0 lost trips, 5 lost minutes)

T-197
Train 201
Operator reports friction brakes will not release in car 588.
Wilshire Vermont AR west
587, (588), 571, 572

Wayside Incidents:

9/13/2019 2:00:00 PM - Incident# 3200480 (1 lost trip, 155 lost minutes)

False occupancy track circuits 3A and 3BT.
Wilshire Vermont Station

9/15/2019 4:25:00 AM - Incident# 3200945 (3 lost trips, 534 lost minutes) CHARGEABLE

Train 204 No movement at yard limits
(501)-502/525-524/517-518
T-254
Yard limits, AL track

Police & Health Incidents:

9/5/2019 5:57:00 AM - Incident# 3196679 (1 lost trip, 171 lost minutes) CHARGEABLE

Train Operator T-384 reports a trespasser on the right of way at Union Station AL-E (Behind Signal US-10)

9/6/2019 6:30:00 AM - Incident# 3197169 (0 lost trips, 6 lost minutes) CHARGEABLE

Train #207 departed late 6 minutes late due to police activity.

Other Incidents:

9/8/2019 4:07:00 AM - Incident# 3197924 (0 lost trips, 5 lost minutes) CHARGEABLE

Yard routing issue (Annex board): Train 202
T-104
541-542/549-550
Yard limits

9/25/2019 6:04:00 PM - Incident# 3205501 (0 lost trips, 7 lost minutes)

Train 218

T-179

Bloody male patron entered Vermont Sunset Station at 1804 hours attempted to board consist.

Vermont Sunset AR west

579, (580) 591, 592, 587, 588

Unable to Duplicate:

9/3/2019 10:11:00 AM - Incident# 3195668 (0 lost trips, 9 lost minutes)

Mode Selector Stuck

Train 201

T-031

Cars (543)-544-577-578

North Hollywood AR East

9/10/2019 6:44:00 AM - Incident# 3198677 (0 lost trips, 12 lost minutes)

No door close indication: No movement

Train 204

T-31

545-546/543-544/549-(550)

Vermont/Santa Monica, AL Eastbound

9/15/2019 8:23:00 PM - Incident# 3201127 (1 lost trip, 174 lost minutes)

T-199 reports door problems, unable to open doors or initiate berthing bypass.

Train 206

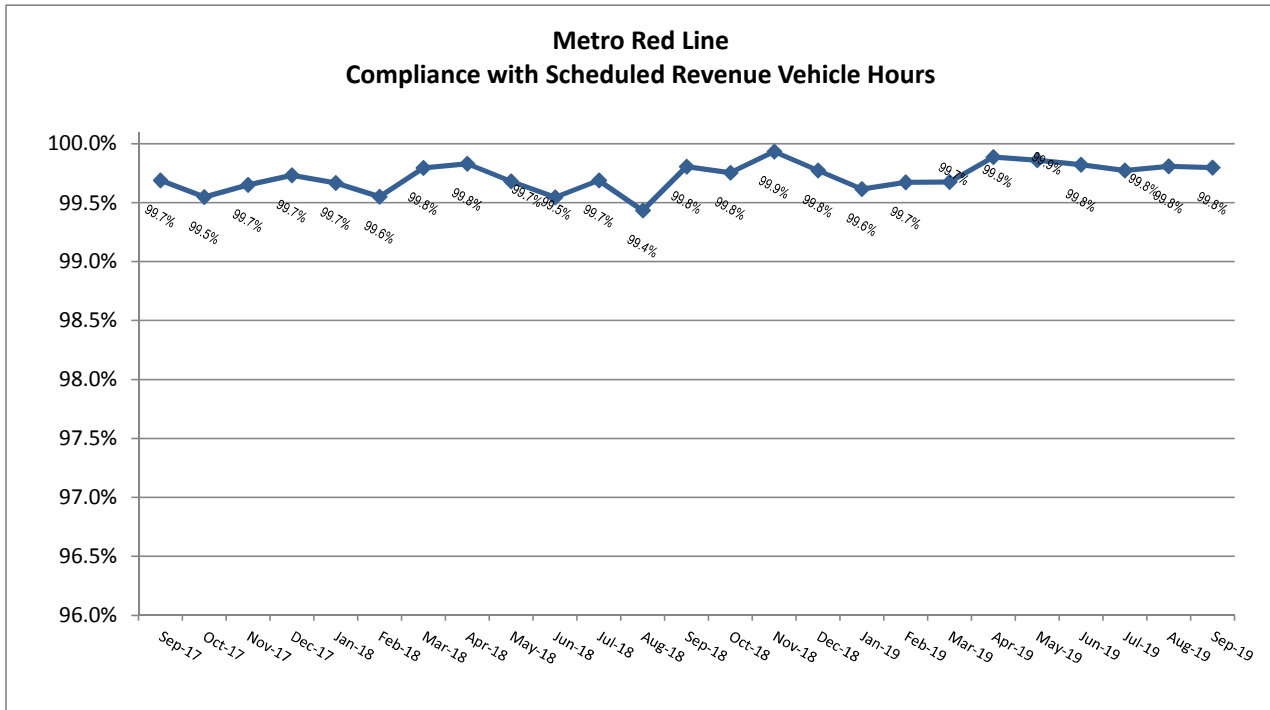
Cars 533, 534, 537, 538, 567, 568

Vermont/ Beverly AL and 7th Metro AL

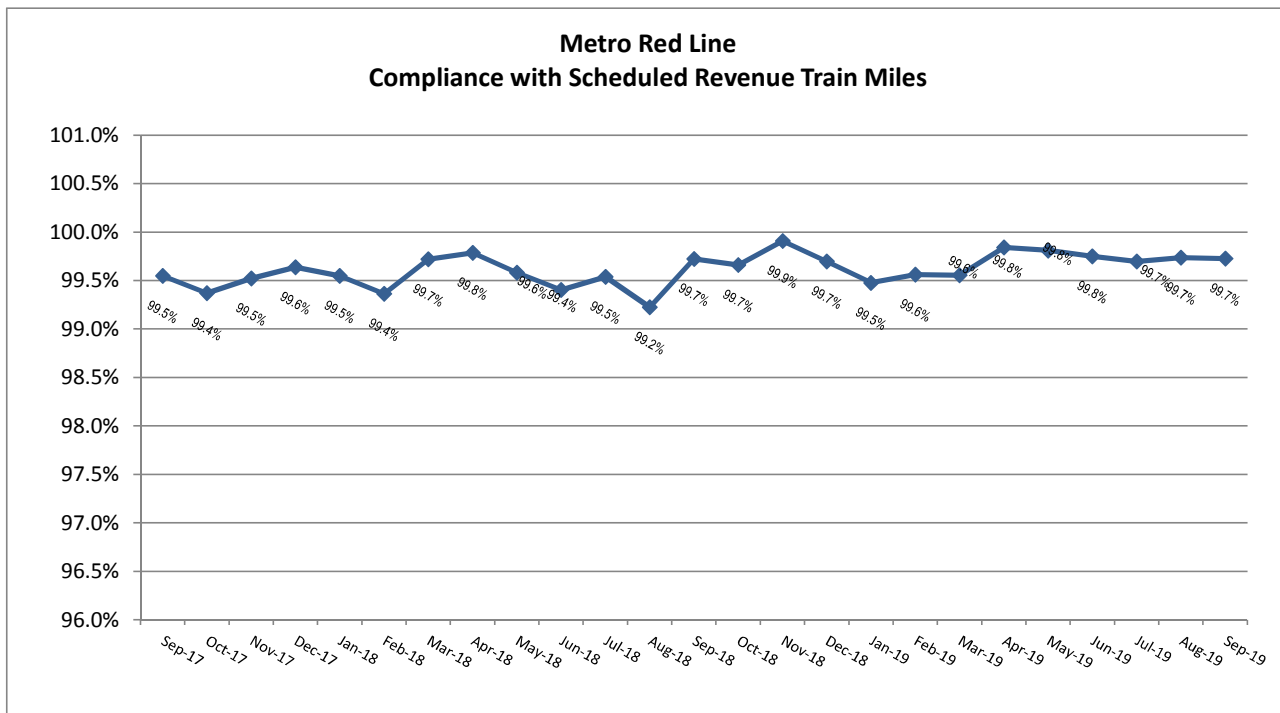
MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

COMPLIANCE WITH SCHEDULED VEHICLE HOURS

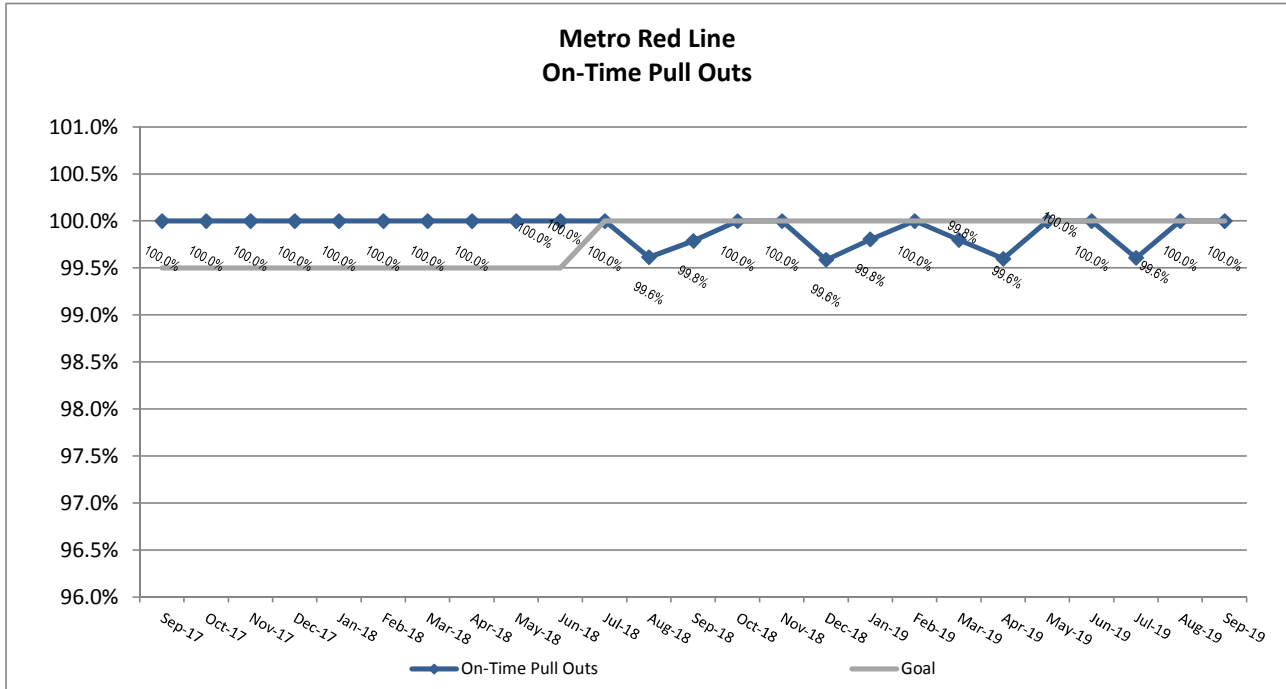
Sep 2019



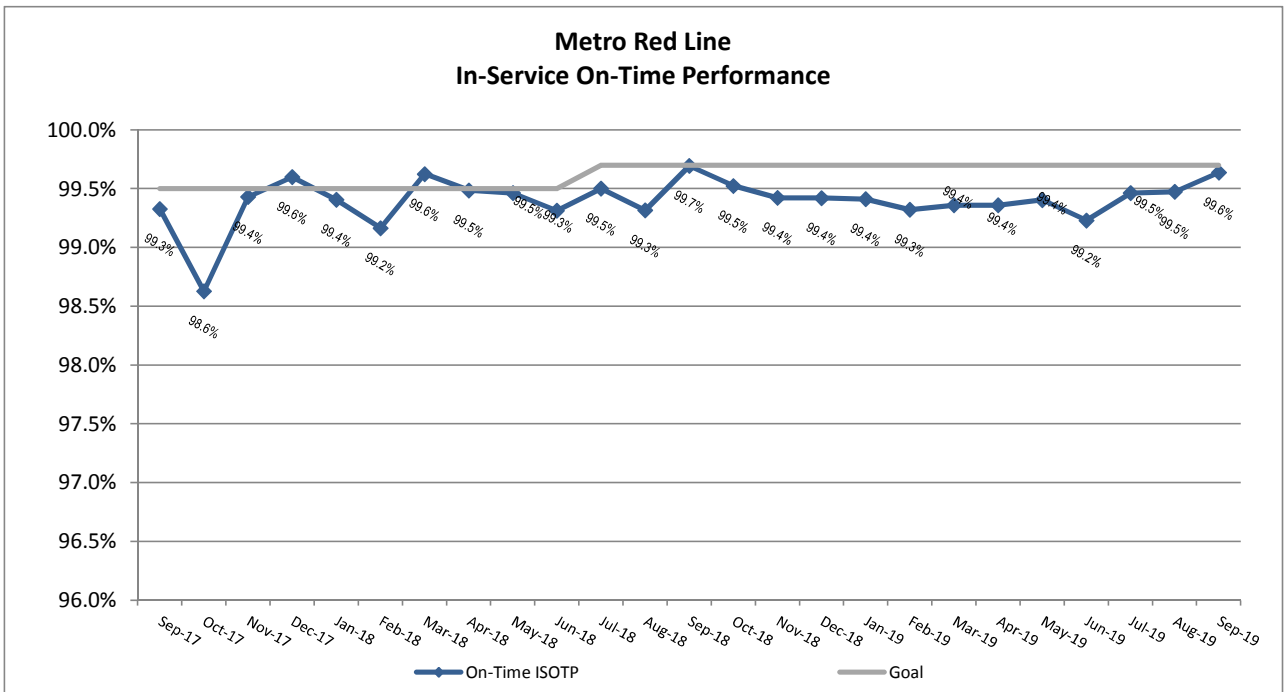
COMPLIANCE WITH SCHEDULED TRAIN MILES



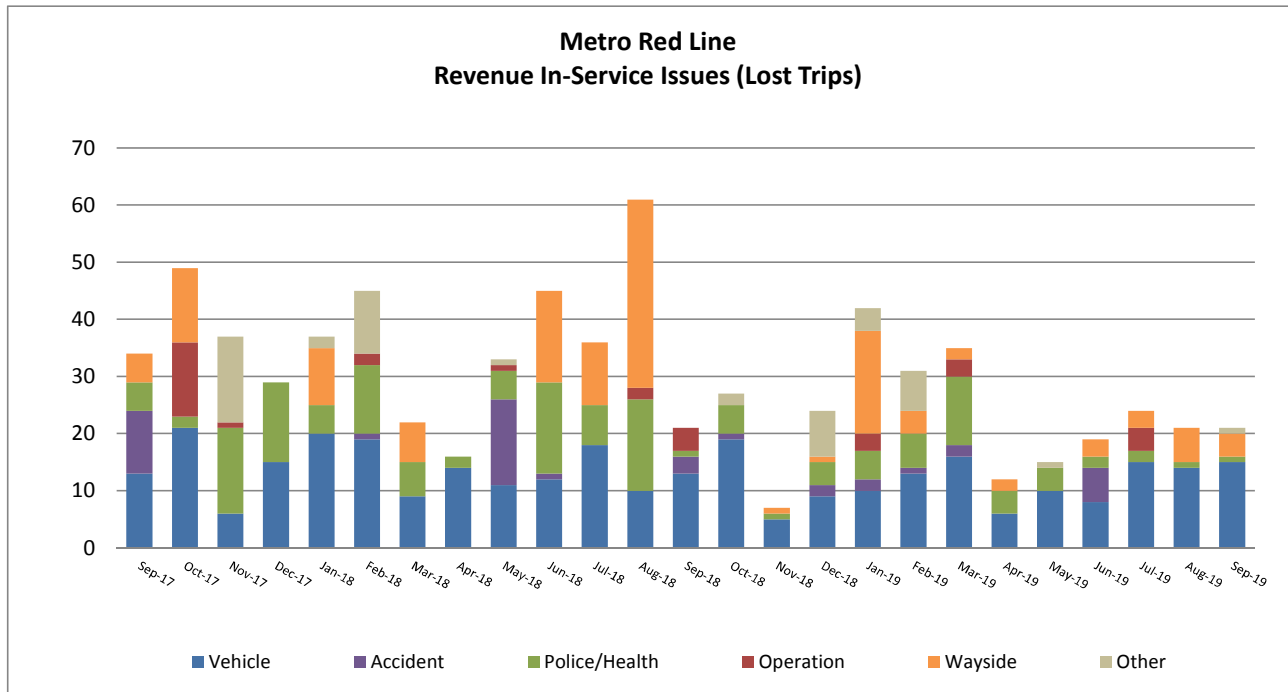
ON-TIME PULL OUTS



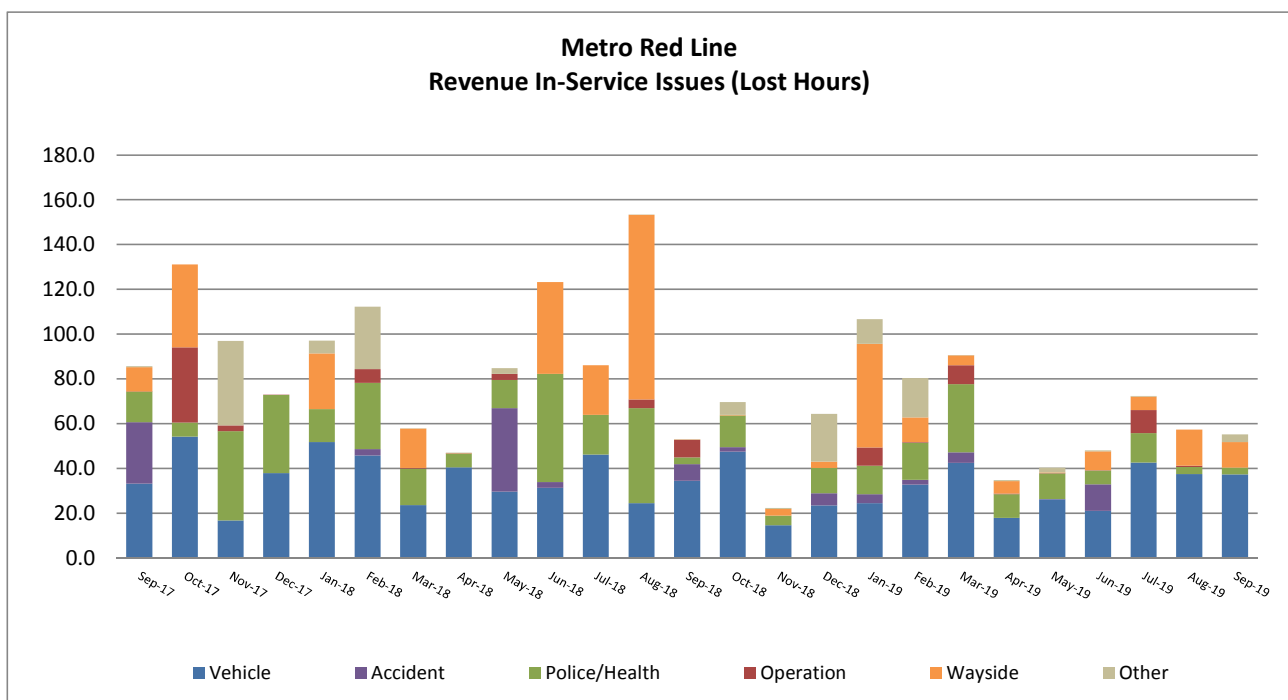
IN-SERVICE ON-TIME PERFORMANCE



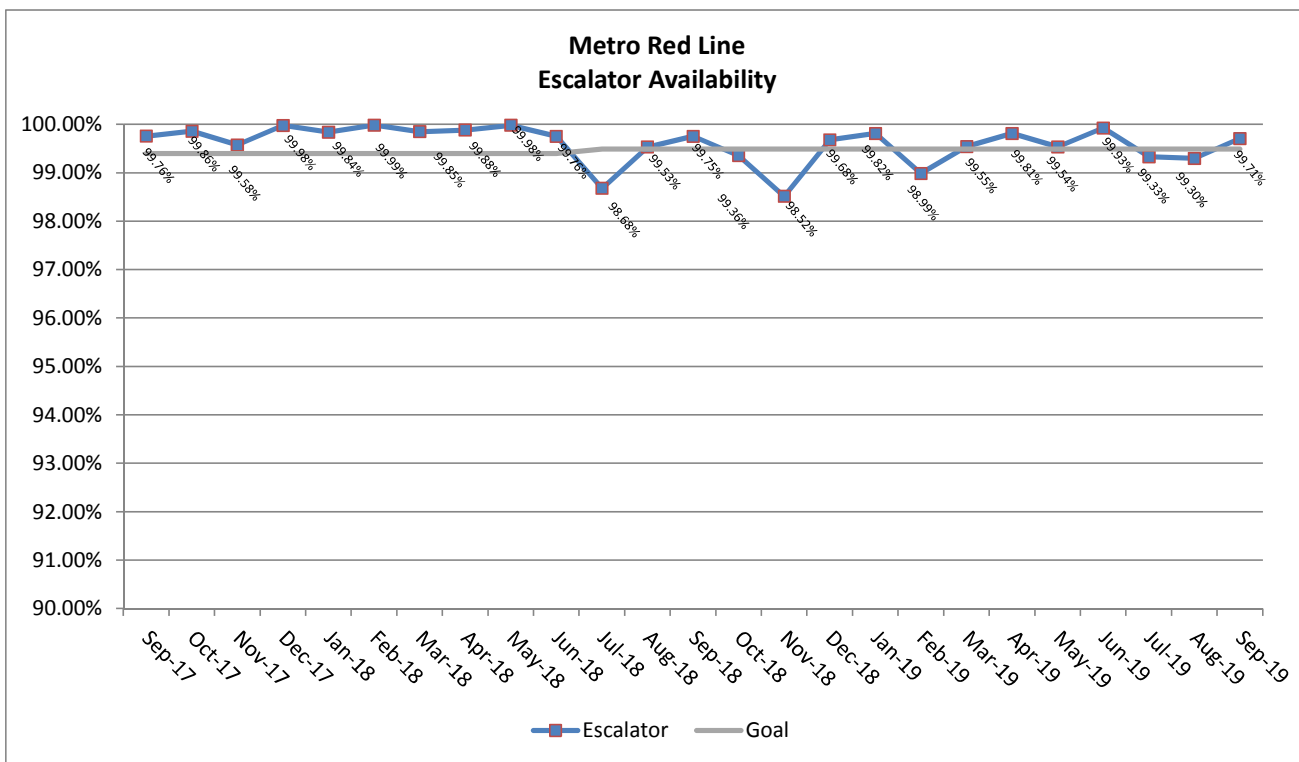
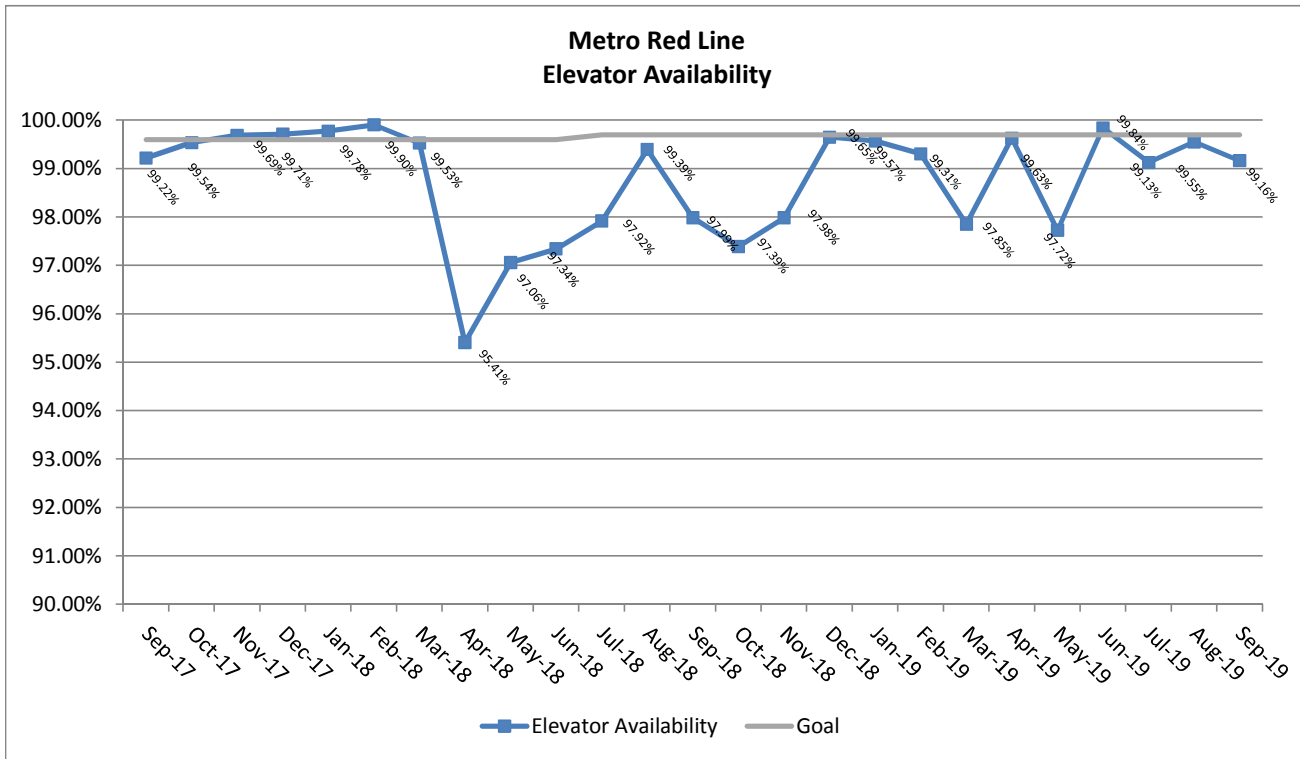
LOST TRIPS



LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY



GREEN LINE

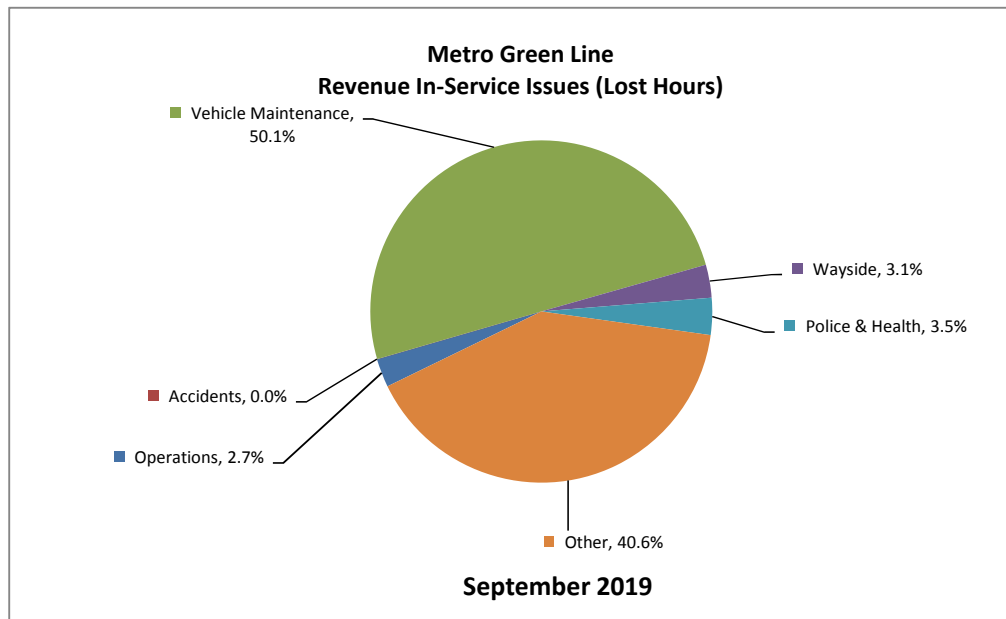
Out of a total of 8,918 hours operated, there were approximately 18 total hours of service delays.

September 2019 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	8,900	99.8%
Cancelled + Delayed Hours	18	0.2%
Total Revenue Hours	8,918	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	2	0.5	2.7%
Accidents	0	0.0	0.0%
Vehicle Maintenance	14	8.8	50.1%
Wayside	5	0.6	3.1%
Police & Health	4	0.6	3.5%
Other	16	7.1	40.6%
Total	41	17.6	100.0%

* 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



September 2019 Green Line incidents causing delay were as follows:

Operations Incidents:

9/2/2019 12:07:00 AM - Incident# 3195121 (0 lost trips, 13 lost minutes) CHARGEABLE

Rule Violation/ 4250 Schedule Adherence

Train #335, T-13

Car # 227, Aviation Station, EB

9/4/2019 11:17:00 PM - Incident# 3196611 (0 lost trips, 16 lost minutes) CHARGEABLE

Unable to uncouple

Train 351 T-294

TK 1 Marine

1145-1146

Vehicle Maintenance Incidents:

9/2/2019 12:21:00 PM - Incident# 3195315 (0 lost trips, 12 lost minutes) CHARGEABLE

No cab signals. car (225B)-209

T-193

Track 2

Eastbound

Wilmington station

ATO MODE

9/3/2019 4:19:00 AM - Incident# 3195496 (0 lost trips, 8 lost minutes) CHARGEABLE

ATP fail no movement

Train #333 T-079 Car 206B-209

eastbound at Mariposa.

9/4/2019 5:58:00 PM - Incident# 3196549 (0 lost trips, 10 lost minutes)

Train 353

T-394

Operator reports no movement in car 243. M-132 stated the brakes will not release he will set consist up for dead tow.

Willowbrook Track 2 east.

203, (243)

9/4/2019 9:53:00 PM - Incident# 3196599 (0 lost trips, 10 lost minutes) CHARGEABLE

Broken Windshield

Train 333 TK 2

Marine T-255

(1144A)-1147

9/6/2019 10:52:00 PM - Incident# 3197101 (0 lost trips, 15 lost minutes)

T-13 reports no cab signal.

9/9/2019 5:56:00 AM - Incident# 3198166 (0 lost trips, 3 lost minutes)

Auto Train Protection (Speed Limit), cars (202)-203

Train #336

T-193

Crenshaw Station, track #1, Westbound.

9/10/2019 3:11:00 PM - Incident# 3198975 (0 lost trips, 10 lost minutes)

No cab signals (225A)

Train 333

T 235

(225A)-208

Track 2

Eastbound

Aviation station

ATO MODE

9/17/2019 6:07:00 AM - Incident# 3201785 (0 lost trips, 8 lost minutes)

Loss of Air Pressure due to Propulsion Fault and Speed Restriction.

Train 346

T-409

(222)-225

Harbor Station, westbound, Track 1.

9/17/2019 10:37:00 AM - Incident# 3201942 (0 lost trips, 10 lost minutes)

Loss of cab signal at Marine IL.

Train 336

T-078

(1168B)-1177

Marine IL, Track 2, Eastbound.

9/24/2019 5:10:00 AM - Incident# 3204649 (2 lost trips, 144 lost minutes)

Loss of movement after emergency brake self applied.

Train 336

T-078

(220A)-225

Hawthorne Station, Track 2, eastbound.

Crenshaw IL, Track 2, eastbound.

9/24/2019 10:40:00 PM - Incident# 3205111 (0 lost trips, 12 lost minutes)

Train-356

T-450.

LRV- 202- (205B).

Marine Station, Track #2 Eastbound.

OC Code and ATP Failure.

9/25/2019 5:12:00 PM - Incident# 3205492 (2 lost trips, 142 lost minutes)

Operator reports that the train has a friction brake fault and no movement.

9/26/2019 3:10:00 PM - Incident# 3205894 (1 lost trip, 66 lost minutes)

Propulsion fault speed restriction
Train 335 TK1
Wb Lakewood
T-184
(217A)-206

9/30/2019 9:34:00 AM - Incident# 3207077 (1 lost trip, 79 lost minutes)

Train-332 T-193 cars 220-216 with self applying friction brakes on car 220A. Exchanged patrons and equipment at Vermont Station. Rail Fleet Services Technician (M268) advises equipment removed immediately from service. Third occurrence today.

Wayside Incidents:

9/3/2019 2:49:00 PM - Incident# 3195849 (0 lost trips, 8 lost minutes)

Marine IL, switch 1 out of correspondance.

9/16/2019 1:29:00 AM - Incident# 3201161 (0 lost trips, 5 lost minutes) CHARGEABLE

Inspection: Switch Machine Inspection
Marine Interlocking, Track #1/2
MS-154/EIC, MS-155/Watchperson

9/25/2019 10:46:00 AM - Incident# 3205301 (0 lost trips, 7 lost minutes)

Traction Power personnel (TP-063, 196, 121, 146, 194, 188, 176, 197, 180) are requesting authorization to enter the ROW

9/26/2019 5:45:00 AM - Incident# 3205614 (0 lost trips, 6 lost minutes) CHARGEABLE

Marine interlocking showing out of correspondance intermittently.

9/26/2019 10:38:00 AM - Incident# 3205742 (0 lost trips, 7 lost minutes) CHARGEABLE

Work Permit E-5/Traction Power performing a rolling High Rail inspection of the OCS from Yard to Marine to Norwalk and back. High Rail # 939
TP-176 EIC
TP-180 Watchperson
TP-197 Pilot
TP-149 supporting.

Police & Health Incidents:

9/15/2019 4:49:00 PM - Incident# 3201087 (0 lost trips, 10 lost minutes) CHARGEABLE

Harbor Station, nude male hispanic on edge of the Platform.

9/20/2019 7:28:00 AM - Incident# 3203254 (0 lost trips, 9 lost minutes) CHARGEABLE

Norwalk Station G-403 assaulted by a patron not letting G403 get onboard.

9/23/2019 1:34:00 PM - Incident# 3204427 (0 lost trips, 10 lost minutes) CHARGEABLE

LASD contacted ROC to stop a train that had a suspected male with a gun. Affected train was train 335, train was directed to hold at Aviation Station and wait for LASD.

9/24/2019 4:08:00 PM - Incident# 3205020 (0 lost trips, 8 lost minutes) CHARGEABLE

LASD, at Wilmington Station, officers request control to hold trains for a possible suspect.

Other Incidents:

9/4/2019 7:43:00 AM - Incident# 3196083 (1 lost trip, 76 lost minutes) CHARGEABLE

Train 335 / Operator T-113 / Consist 1193-(1176)

Operator reports an African American Female in Car 1176b, complaining of shortness of breath.

Train 335 off loaded patrons at Vermont Station Track 2. Train held for LAFD to respond.

9/8/2019 12:16:00 AM - Incident# 3197790 (0 lost trips, 8 lost minutes) CHARGEABLE

Patron pulled emergency T at Paramount interlocking.

Unable To Duplicate:

9/18/2019 4:03:00 PM - Incident# 3202540 (0 lost trips, 15 lost minutes)

Operator reports that the train has no movement just west of the Norwalk Interlocking.

T-235

Train 355

Cars (1184)-1148

West of Norwalk Interlocking, Track 1, westbound

9/9/2019 4:35:00 PM - Incident# 3198529 (0 lost trips, 12 lost minutes)

T-235 on Train 356 states no cab signal going through Yard Interface Interlocking.

Train 356, cars (1174A)-1173, Yard Interface, Track 2, Eastbound.

9/13/2019 5:19:00 AM - Incident# 3200184 (0 lost trips, 10 lost minutes)

Train 335 / Operator T-302 / Consist (1193B)-1168

Operator reports no cab signals departing Norwalk Station Track 1.

9/1/2019 3:33:00 PM - Incident# 3195049 (2 lost trips, 130 lost minutes)

Train 335

T-20

El Segundo IL, Westbound, Track 1

LRV's (1151)-1171

T-20 reported Train 335 went into emergency braking and then no movement at El Segundo IL, operating LRV 1151.

9/3/2019 9:18:00 PM - Incident# 3195980 (0 lost trips, 15 lost minutes) CHARGEABLE

No Fault - Loss of Cab Signals

T-302, Train # 356

Aviation Station, Track #3, EB

Car # (1170A)-1148

9/5/2019 1:03:00 PM - Incident# 3196891 (0 lost trips, 16 lost minutes)

SLC fault, HSCB trip and speed restriction (1177B)1151.

Lakewood Station

Train #334, T-136, track #1, westbound.

9/6/2019 7:35:00 AM - Incident# 3197209 (0 lost trips, 6 lost minutes) CHARGEABLE

Train 333 / Operator T-055 / Consist (1144)-1147

Norwalk Station Track 2 Westbound

Operator reports no movement with no faults indicated.

Reset:

9/8/2019 6:47:00 PM - Incident# 3198074 (0 lost trips, 10 lost minutes) CHARGEABLE

Train 333

T-168

Long Beach Station, Track 2, Eastbound

(227)-209

T-168 reported a propulsion fault with a speed restriction departing Long Beach Station in LRV 227.

9/4/2019 11:11:00 AM - Incident# 3199737 (0 lost trips, 10 lost minutes)

Train 336 / Operator T-20 / Consist 1150-(1177)

Operator was holding at Vermont Station due to the single tracking and experienced a door problem.

Operator cleared the problem and experienced a 10 minute delay in service Eastbound.

9/5/2019 6:19:00 AM - Incident# 3196689 (0 lost trips, 7 lost minutes) CHARGEABLE

Train 343

T-55

LRV Cars 1176-1193

Track 1 WB Departing Avalon Station.

Operator is reporting a loss of Cab Signals.

9/15/2019 2:06:00 PM - Incident# 3201059 (1 lost trip, 80 lost minutes)

Cars (1168-1193) doors do not open.

T-257

Train 331

Harbor Station, Track 2, eastbound.

9/18/2019 4:01:00 AM - Incident# 3202241 (0 lost trips, 12 lost minutes)

Train 343 / Operator T-070 / Consist (1150)-1174

Operator reports no speed code departing Marine Track 2. Operator utilized stop and proceed mode to Douglas Station. Upon arrival to Douglas the Operator performed a "Local Off" and cleared the fault.

9/19/2019 5:32:00 AM - Incident# 3202719 (0 lost trips, 10 lost minutes)

Train 346 no movement.

T-57

Train 346

Cars:(1193)-1169

EB Douglas Station Tk-2

9/29/2019 7:25:00 PM - Incident# 3206839 (0 lost trips, 11 lost minutes) CHARGEABLE

Train 331 HSCB Trip.

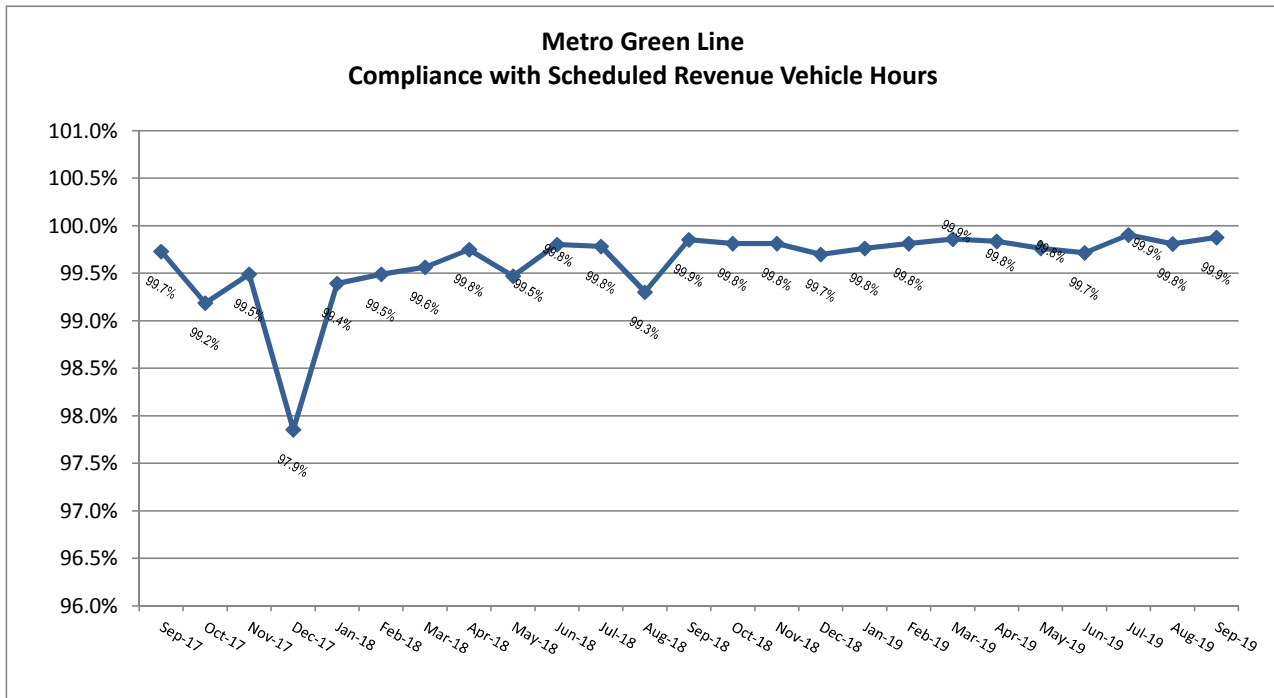
T-294

Train 331

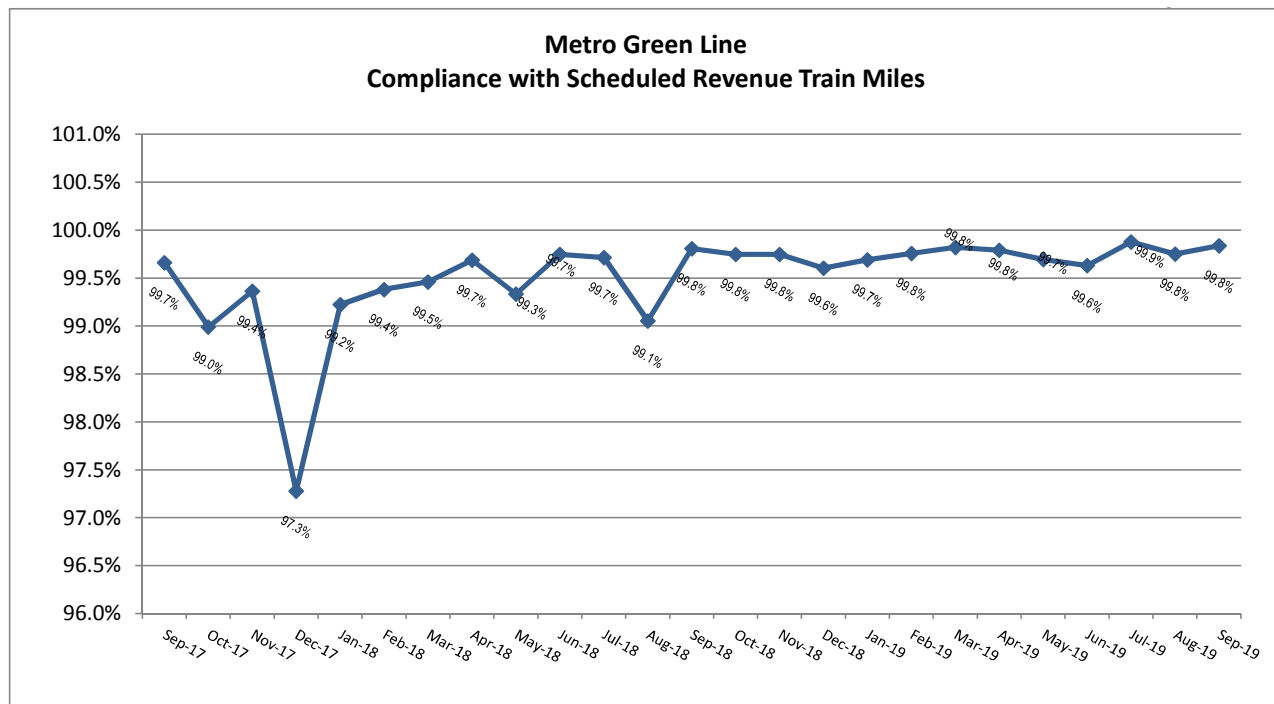
Cars: (1177)-1144

WB Marine Station

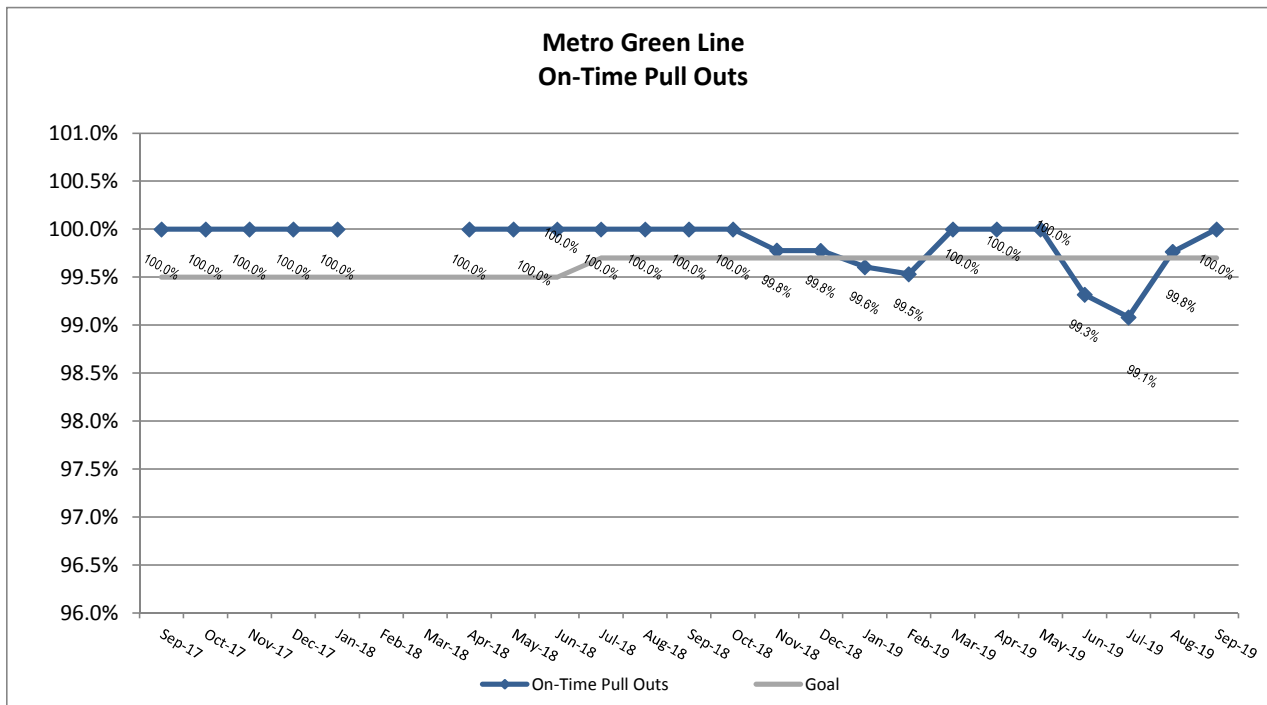
MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS COMPLIANCE WITH SCHEDULED VEHICLE HOURS Sep 2019



COMPLIANCE WITH SCHEDULED TRAIN MILES

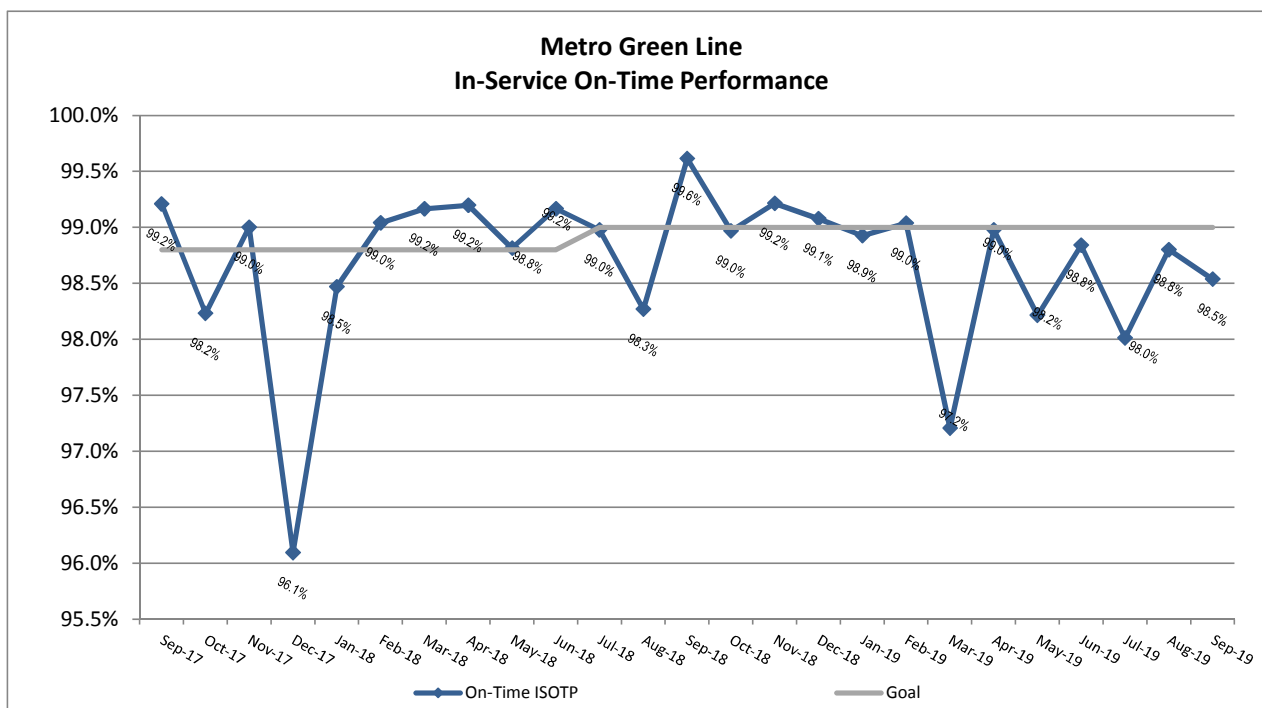


ON-TIME PULL OUTS

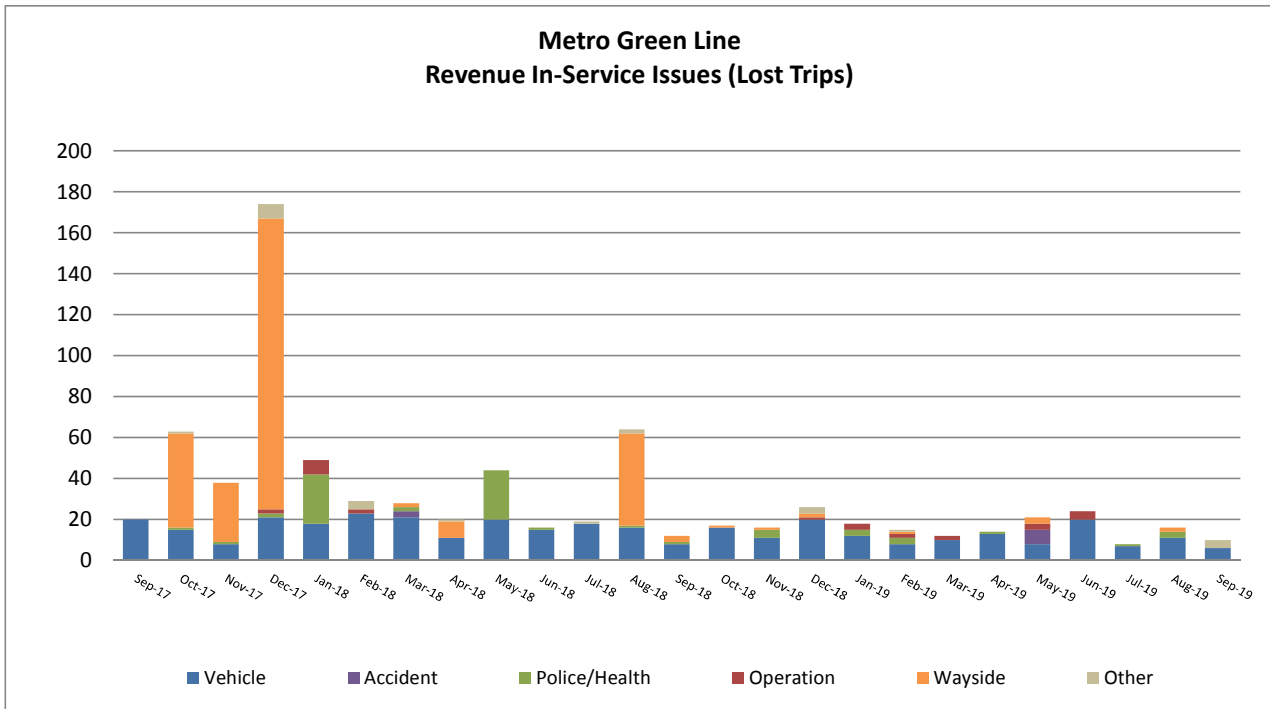


Due to the Crenshaw line link construction in Feb and March 2018, Green Line trains did not pull in or pull out, trains stayed on the tracks.

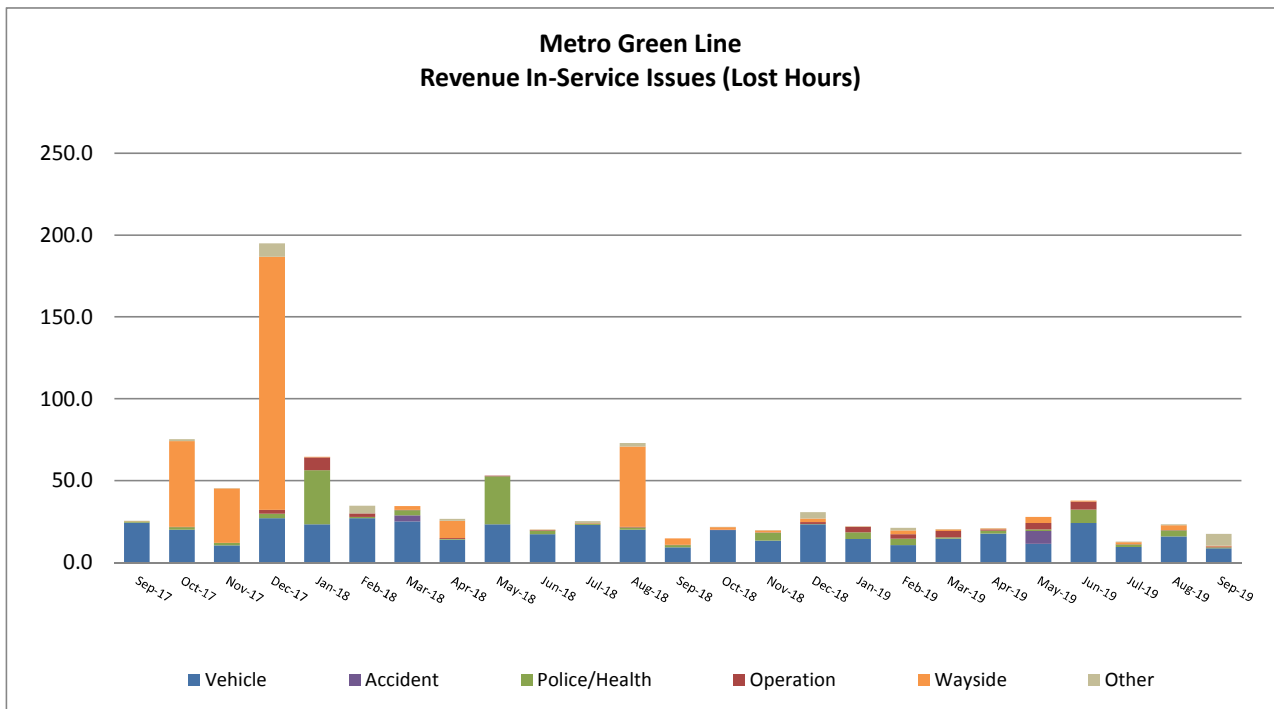
IN-SERVICE ON-TIME PERFORMANCE



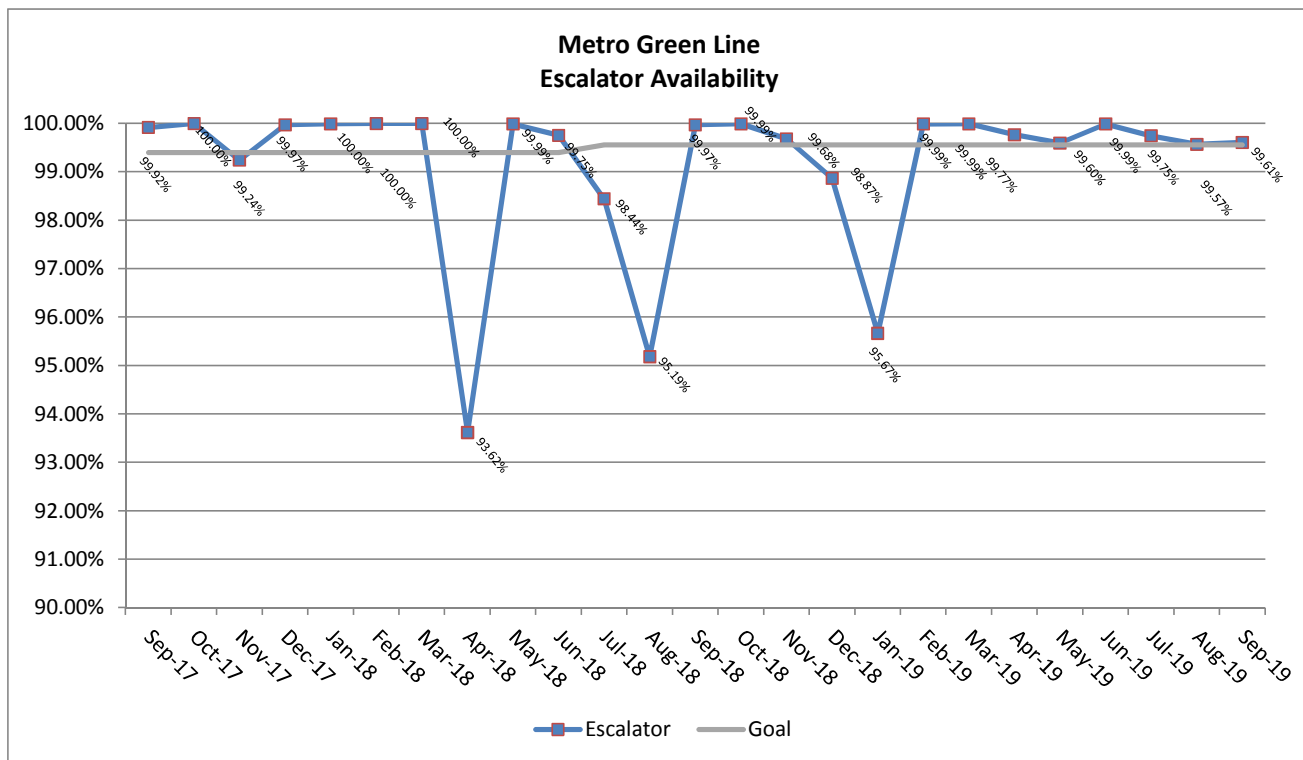
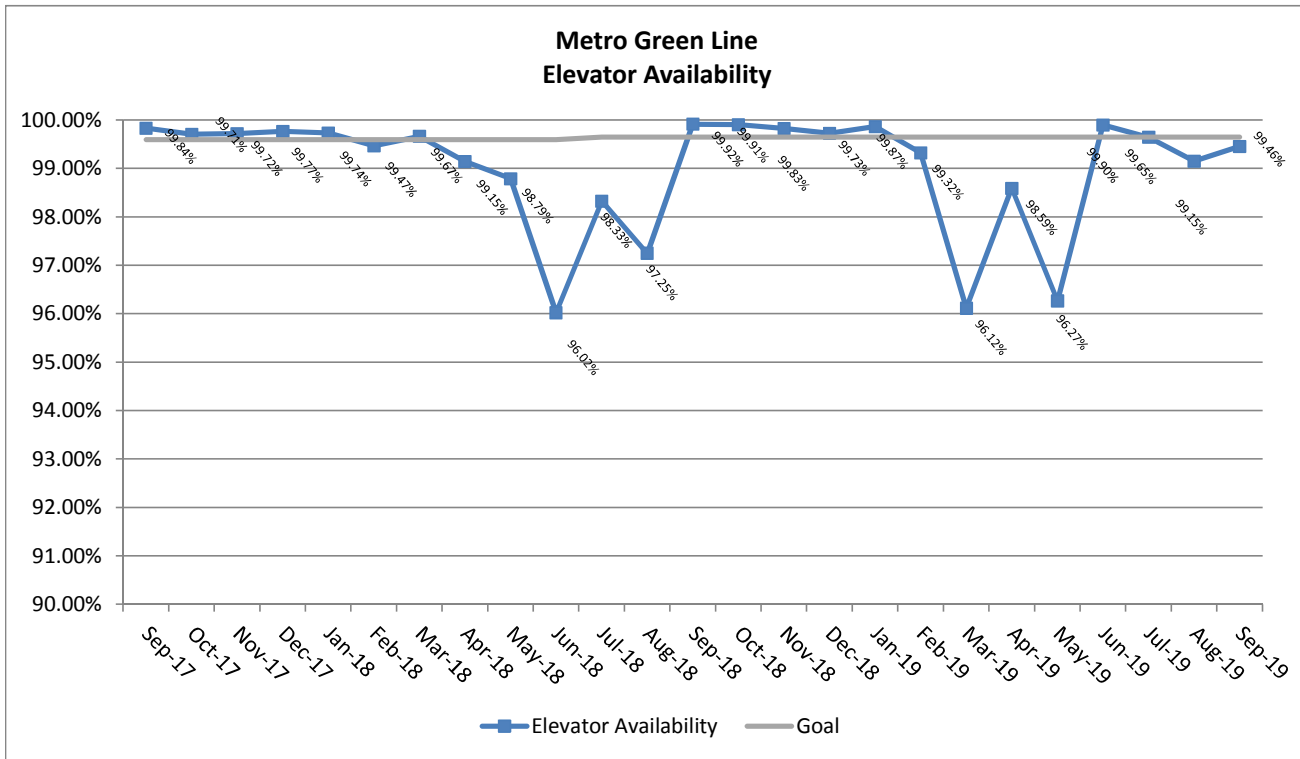
LOST TRIPS



LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY



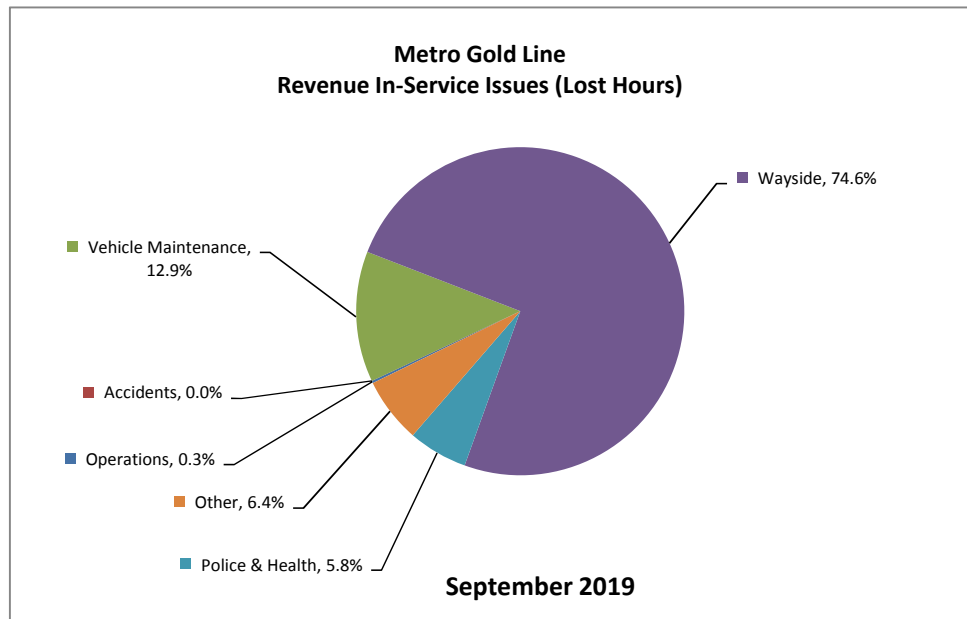
GOLD LINE

Out of a total of 23,075 hours operated, there were approximately 123 total hours of service delays.

September 2019 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	22,952	99.5%
Cancelled + Delayed Hours	123	0.5%
Total Revenue Hours	23,075	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	4	0.3	0.3%
Accidents	0	0.0	0.0%
Vehicle Maintenance	9	15.9	12.9%
Wayside	7	91.9	74.6%
Police & Health	4	7.2	5.8%
Other	9	7.9	6.4%
Total	33	123.2	100.0%

* 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



September 2019 Gold Line incidents causing delay were as follows:

Operations Incidents:

9/7/2019 6:56:00 AM - Incident# 3197683 (0 lost trips, 4 lost minutes) CHARGEABLE

10-100

train #401

T-224

Atlantic Station, track #1, Northbound.

9/19/2019 7:06:00 AM - Incident# 3202760 (0 lost trips, 5 lost minutes)

Train 454, T-36 departed 5 minutes late from APU Station. Scheduled to depart at 0701 and departed at 0706 hours.

9/20/2019 2:34:00 AM - Incident# 3203160 (0 lost trips, lost minutes) CHARGEABLE

Late pull outs due to Operator refusing to pull into yard.

9/20/2019 3:41:00 PM - Incident# 3203534 (0 lost trips, 10 lost minutes) CHARGEABLE

T-445 arrived late to Atlantic Station

Vehicle Maintenance Incidents:

9/1/2019 2:42:00 PM - Incident# 3195046 (1 lost trip, 146 lost minutes)

Brake fault on car 728-(722A)

T-340

Track 1

Sierra Madre

Northbound

9/3/2019 11:25:00 AM - Incident# 3195693 (0 lost trips, 6 lost minutes)

Air Conditioning, car #(702B)-732-704

Train #401

T-178

Azusa/Citrus, track #2, Southbound.

9/5/2019 5:30:00 PM - Incident# 3197009 (1 lost trip, 218 lost minutes)

Operator reports LVPS fault.

Train-426

T-008

Cars (726),709, 722

Delmar Station, Track 1, NB

9/8/2019 12:54:00 PM - Incident# 3198029 (1 lost trip, 151 lost minutes)

LVPS fault on car (728B)
Train 409
T-488
702-(728B)
Track 2
Irwindale station
Southbound

9/15/2019 10:24:00 PM - Incident# 3201132 (0 lost trips, 5 lost minutes)

Reports of no cab signal
Train # 410
T-192
(1166A)-1009-1059
Lincoln/Cypress Station, Track #2, SB

9/20/2019 4:47:00 AM - Incident# 3203168 (0 lost trips, 5 lost minutes) CHARGEABLE

Train 403 reports of doors not opening.
T-98
Train 403
Cars: (1166)-1109-1181
Tk-1 SB APU/ Citrus

9/26/2019 9:43:00 AM - Incident# 3205716 (1 lost trip, 210 lost minutes)

Brakes on indication
Train 454
Cars 739-750-(744)
Sierra Madre Track 1 North

9/26/2019 9:40:00 PM - Incident# 3205991 (1 lost trip, 210 lost minutes)

Friction Brake fault on all 3 cars
748-746-736
Train 453
T-122
Chinatown Tk 2 SB

9/30/2019 2:44:00 PM - Incident# 3207217 (0 lost trips, 9 lost minutes)

Train 402 was unable to couple properly.
T-161
Train 402
Cars:(1160)-1164-1064
SB Tk-1 APU/ Citrus

Wayside Incidents:

9/6/2019 2:00:00 PM - Incident# 3197568 (25 lost trips, 5,206 lost minutes) CHARGEABLE

Arinc system displays multiple OCS segments are deenergized along with DC bus #2. Breaker A-04 locked out and B-04 tripped.

9/7/2019 7:55:00 AM - Incident# 3197686 (0 lost trips, 22 lost minutes) CHARGEABLE

OCS repairs

TP-194

Pilot: TP-

Train #940

Indian Siding to South West Museum interlocking.

9/8/2019 1:39:00 AM - Incident# 3197795 (0 lost trips, 20 lost minutes)

Utility undervoltage A01, DC Bus 2 undervoltage, RT01 X-Form deenergized, RT02 X-2 form deenergized, RT03 X-3 deenergized, Monrovia yard FCP summary supv alarm, Monrovia yard FCP trouble alarm

9/9/2019 5:32:00 AM - Incident# 3198175 (1 lost trip, 209 lost minutes)

Train operator reporting OCS wire down train 406 stranded between stations Sierra Madre and Allen Station.

9/16/2019 11:36:00 AM - Incident# 3201598 (0 lost trips, 25 lost minutes)

Operator reports no movement.

Train-402

T-283

Cars 744,748,738

Lake Station, Track 1, NB

9/19/2019 10:13:00 AM - Incident# 3202871 (0 lost trips, 15 lost minutes)

Emergency OCS Repair Tk-2, 2 Hi-Rail vehicles
in tandem known as train 949.

TP-63 (EIC)

TP-146 (watch person with protran)

9/28/2019 7:55:00 AM - Incident# 3206496 (0 lost trips, 18 lost minutes)

Tree Trimming and OCS Inspection, Traction Power and Facilities Maintenance will coordinate.

Police & Health Incidents:

9/4/2019 7:46:00 PM - Incident# 3196566 (0 lost trips, 5 lost minutes)

Reports of trespasser in the refuge area.

Train #403

T-245

1111-1013-1191

Lincoln Cypress Station, Track #1, NB

9/8/2019 1:28:00 AM - Incident# 3197917 (0 lost trips, 18 lost minutes)

LASD Willeum informed control of a alleged robbery on train 410 and to be held at SMV with doors closed

9/19/2019 4:52:00 AM - Incident# 3202720 (2 lost trips, 397 lost minutes)

Train 401 reports a trespasser naked on track 1 unable to proceed.

9/29/2019 10:19:00 PM - Incident# 3206875 (0 lost trips, 12 lost minutes)

Train 407 reports a 10-57 on the lead car 1058A

Train 407

T-323

(1158A)-1126

Sierra Madre IL, Reverse Running on Track 1, Southbound

Other Incidents:

9/17/2019 4:54:00 PM - Incident# 3202140 (0 lost trips, 8 lost minutes)

South of SMV IL, Track 1, MP 13.3 weed fire.

9/19/2019 10:53:00 PM - Incident# 3203133 (0 lost trips, 7 lost minutes) CHARGEABLE

Vomit on consist (1158)1178.

Citrus Station

Train #423, T-540, track #1, southbound.

9/27/2019 4:58:00 AM - Incident# 3206053 (0 lost trips, 10 lost minutes) CHARGEABLE

T-421 reported an individual on his consist requesting medical attention.

9/30/2019 1:53:00 PM - Incident# 3207192 (1 lost trip, 198 lost minutes) CHARGEABLE

Train 404 reports of dirty car.

T-280

Train 404

Cars: (1010)-1013

SB Tk-1 Heritage Square

Unable to Duplicate:

9/4/2019 7:23:00 AM - Incident# 3196087 (0 lost trips, lost minutes)

Propulsion fault unable to clear

Train #454 T-036 car#737-736-741

southbound at Sierra Madre station.

9/5/2019 7:15:00 AM - Incident# 3196717 (1 lost trip, 229 lost minutes)

High Speed Circuit Breaker Fault

Train 412

T-441

Cars 724-701-705B

Allen Station Track 2 South

9/19/2019 5:48:00 PM - Incident# 3203085 (0 lost trips, 8 lost minutes) CHARGEABLE

Doors 7/8
Train 406
T-411
1126-(1159)-1157
Northbound, Track 1 South Pasadena station.

9/23/2019 10:47:00 PM - Incident# 3204607 (0 lost trips, 7 lost minutes)

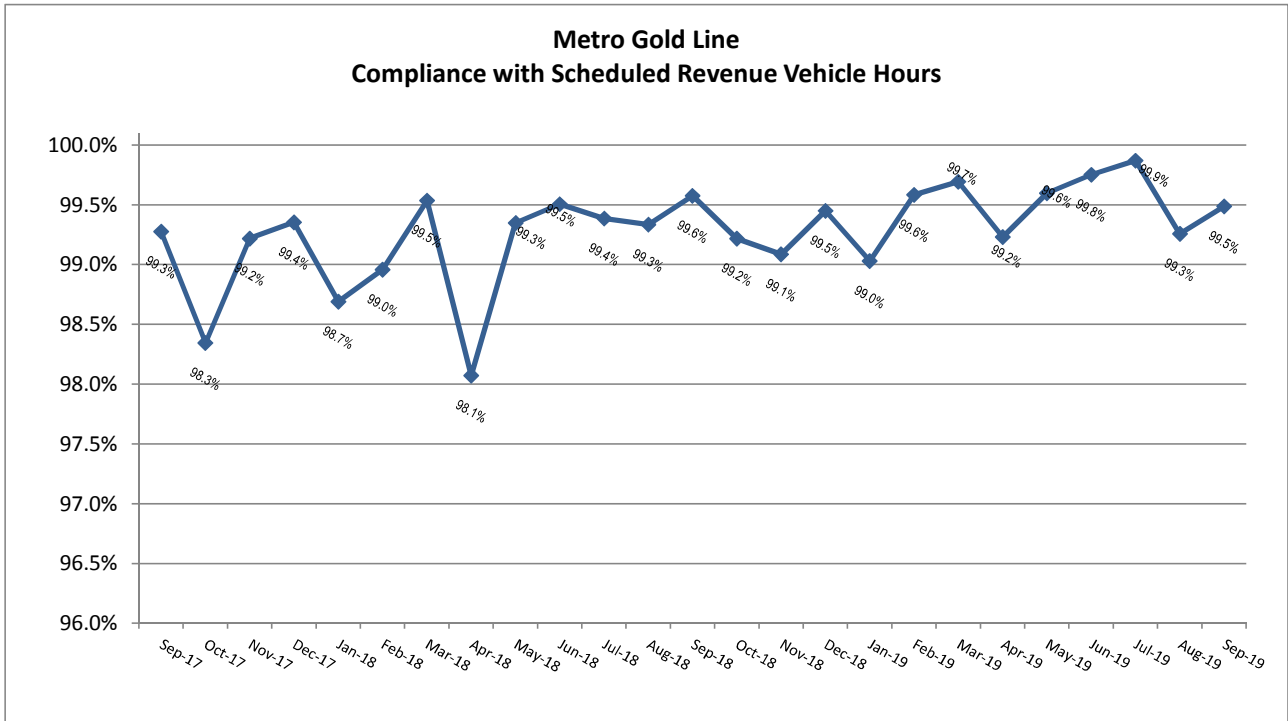
Damaged Left Side Mirror on LRV 728A
Train 423
T-151
(728A)-715
APU Station, Platform 1, Southbound

Reset:

9/27/2019 10:30:00 AM - Incident# 3206214 (0 lost trips, 8 lost minutes)

T-17 reported to Control that he had a speed code of 3 mph at Atlantic Station.
T-17
Train 402
(1012)-1164-1005
Northbound, Track 1
Atlantic Station

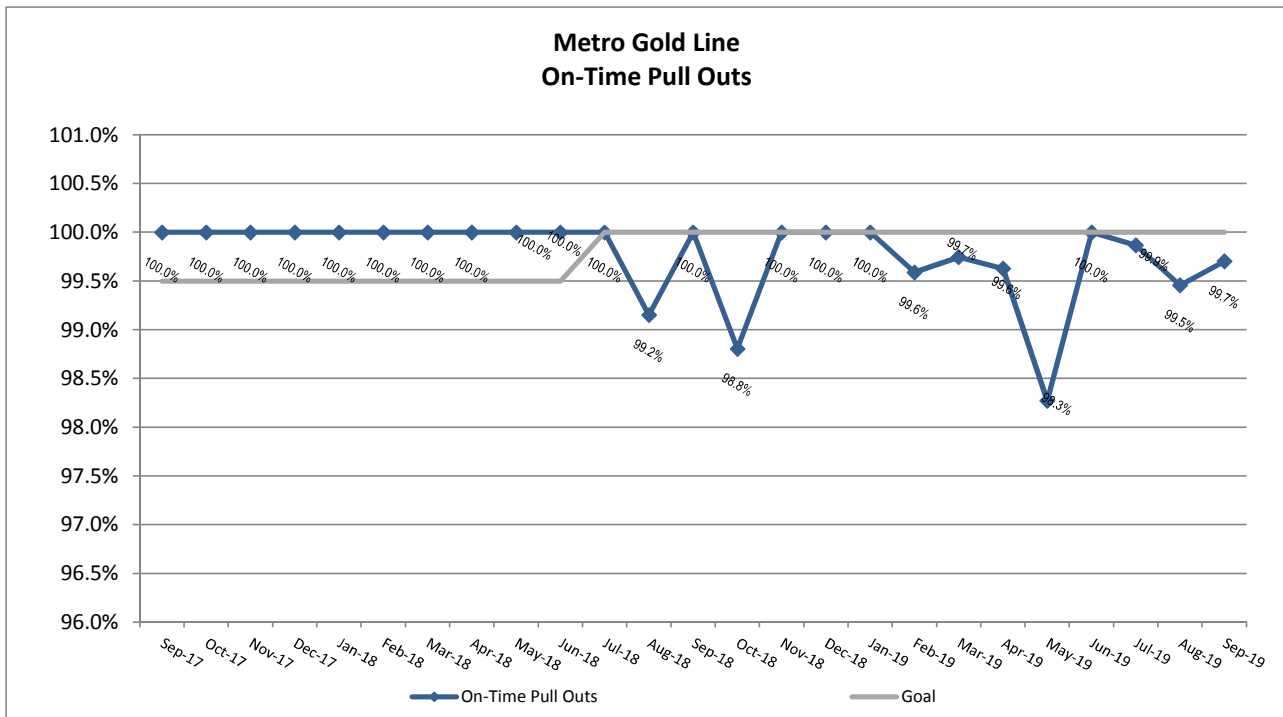
MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS
COMPLIANCE WITH SCHEDULED VEHICLE HOURS
Sep 2019



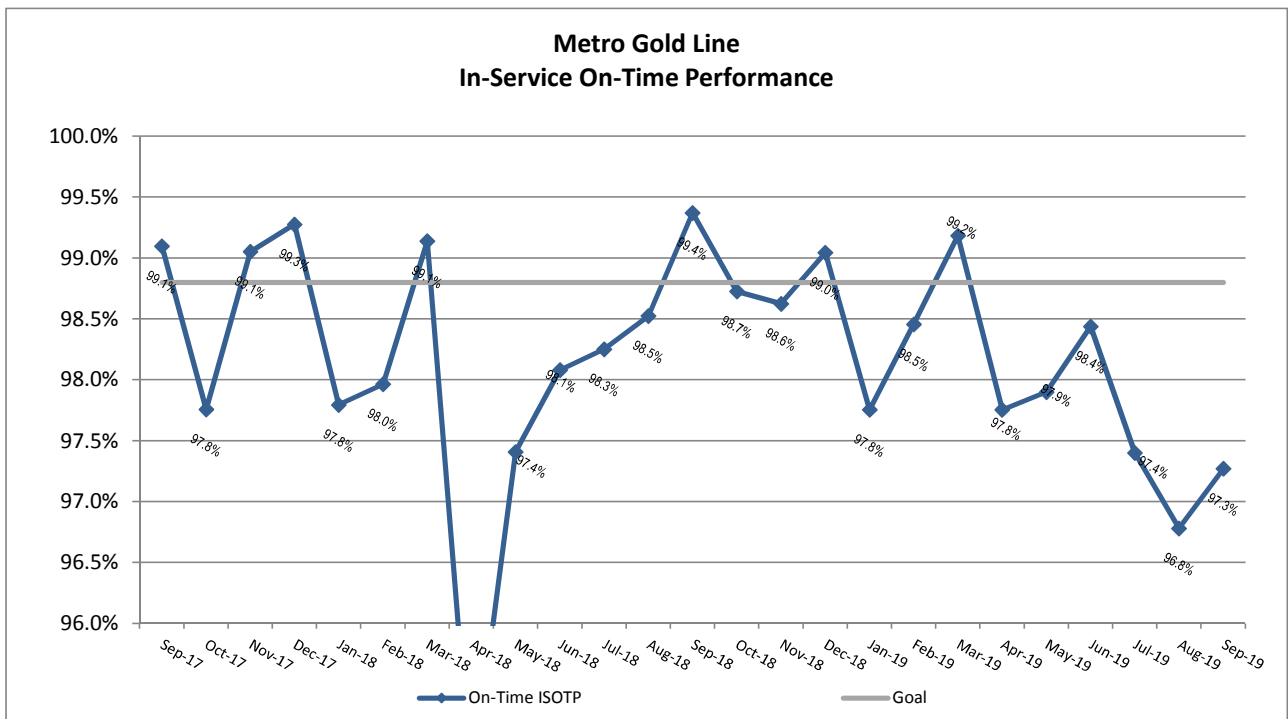
COMPLIANCE WITH SCHEDULED TRAIN MILES



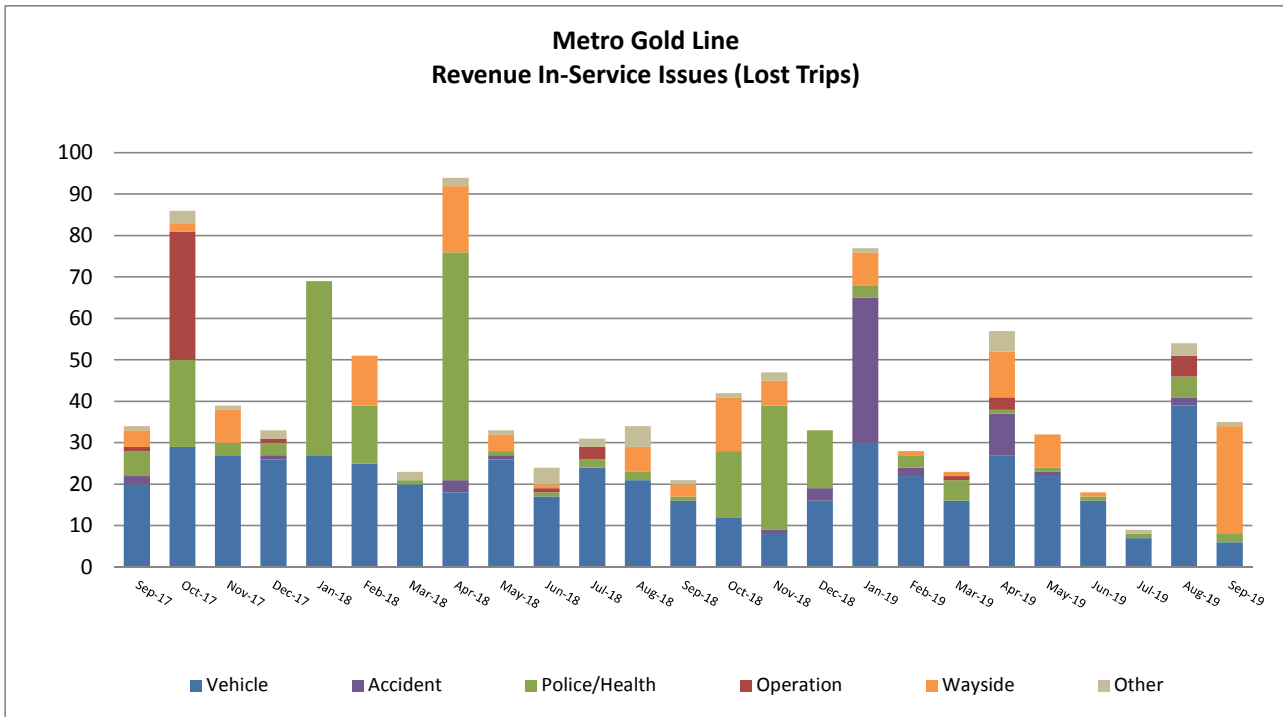
ON-TIME PULL OUTS



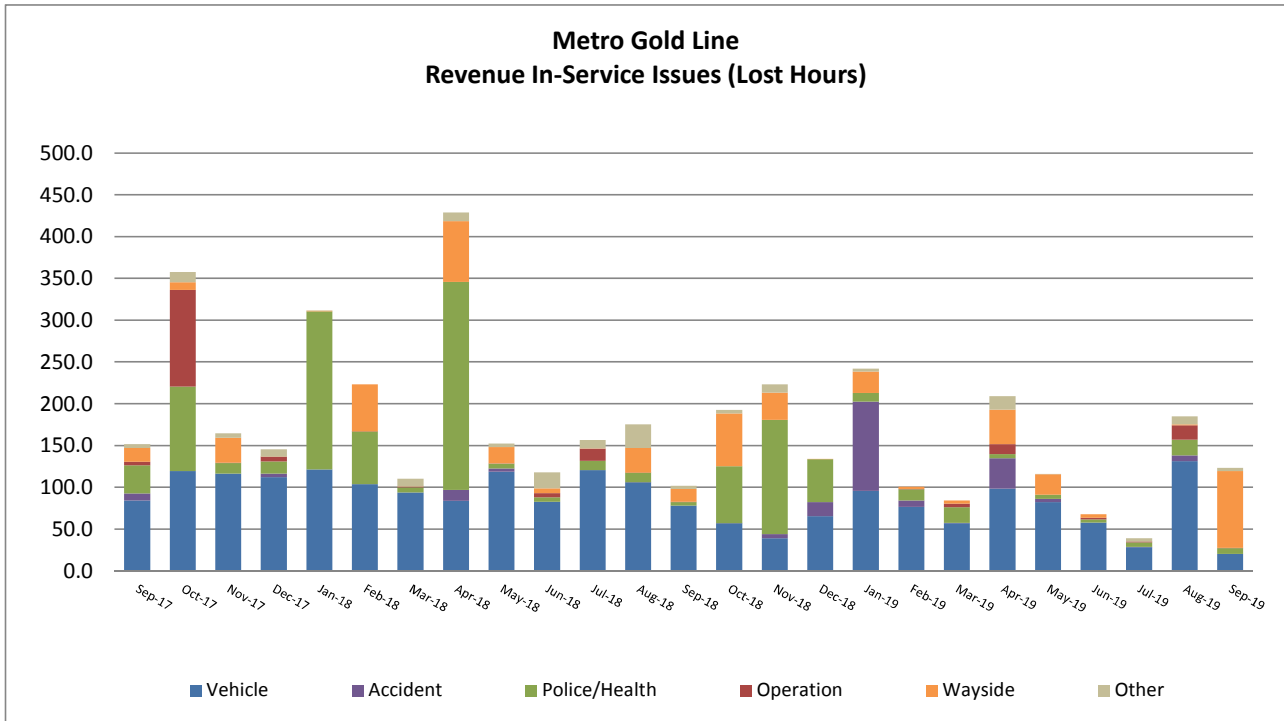
IN-SERVICE ON-TIME PERFORMANCE



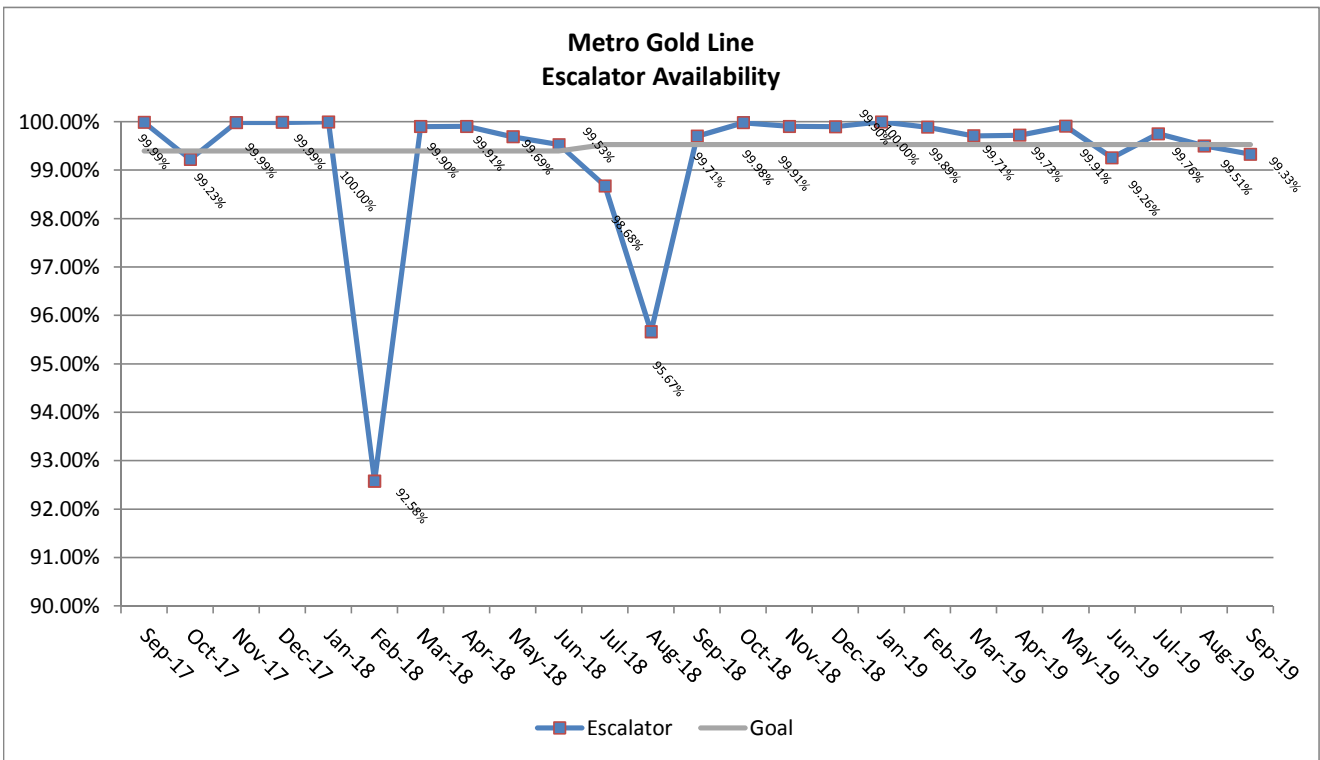
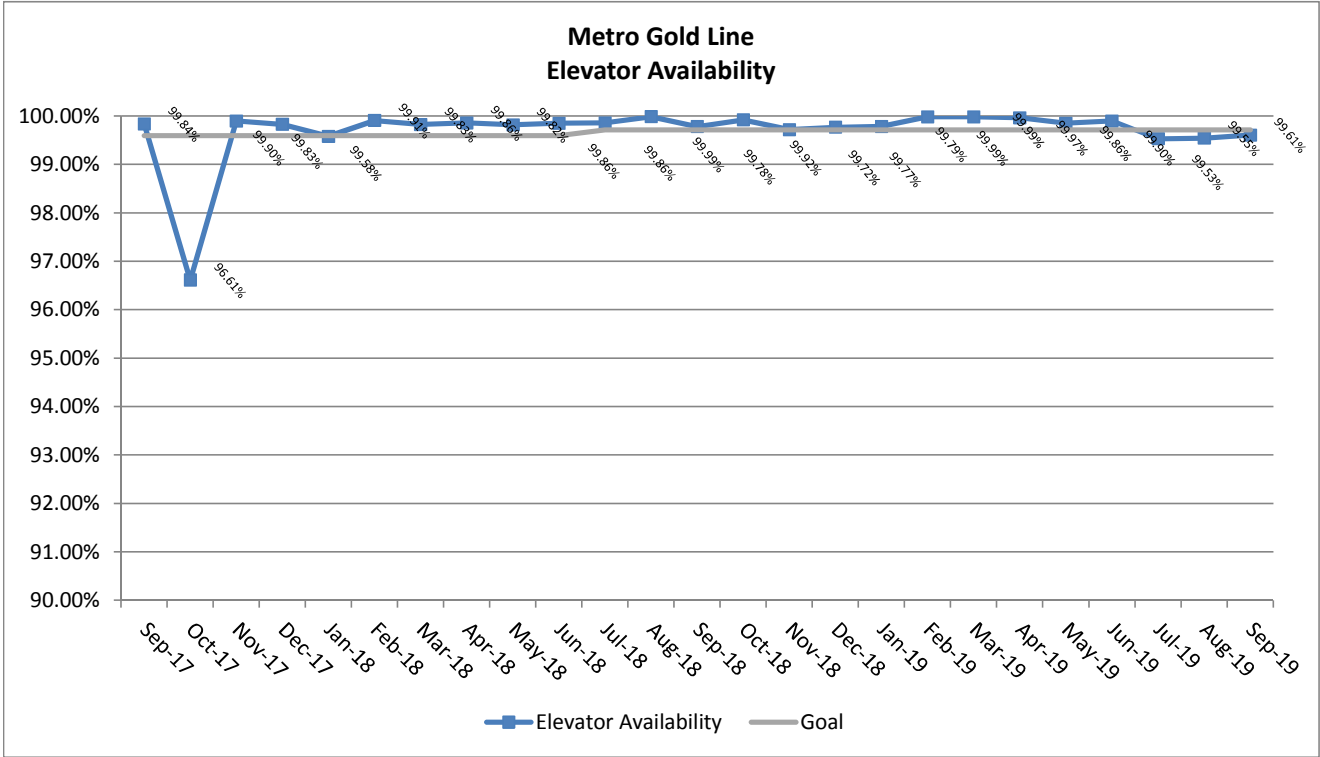
LOST TRIPS



LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY



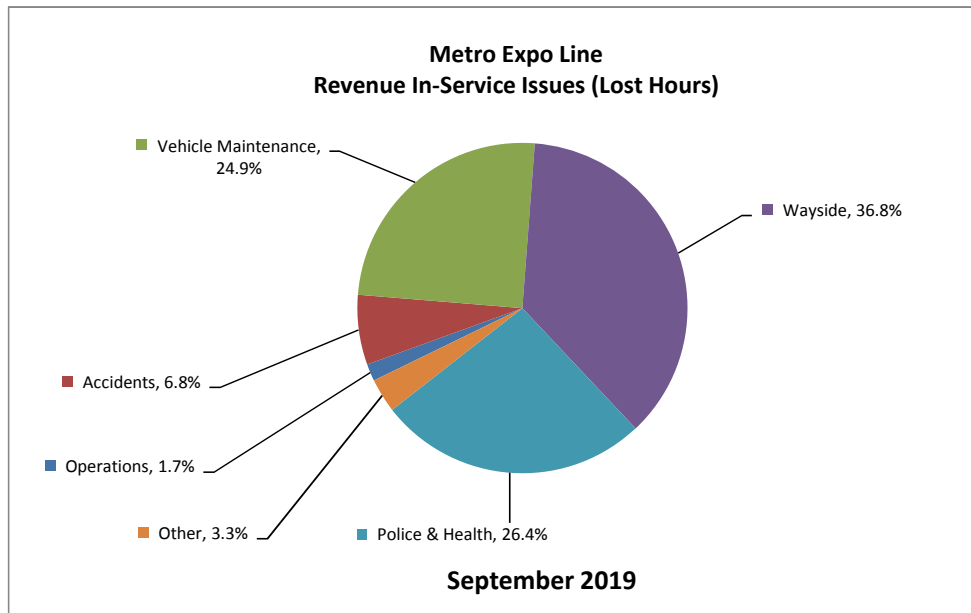
EXPO LINE

Out of a total of 18,425 hours operated, there were approximately 33 total hours of service delays.

September 2019 Service Hours *	Revenue	
	Hours	Percent
Revenue Hours without Delays	18,392	99.8%
Cancelled + Delayed Hours	33	0.2%
Total Revenue Hours	18,425	100.0%

Summary of the incidents:	Count	Hours	Percent
Operations	5	0.6	1.7%
Accidents	1	2.3	6.8%
Vehicle Maintenance	9	8.2	24.9%
Wayside	7	12.1	36.8%
Police & Health	8	8.7	26.4%
Other	7	1.1	3.3%
Total	37	32.9	100.0%

* 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



September 2019 Expo Line incidents causing delay were as follows:

Operations Incidents:

9/4/2019 1:13:00 PM - Incident# 3196333 (0 lost trips, 13 lost minutes) CHARGEABLE

Train 607 was delayed by 13 minutes on its 13:13 departure due to coupling procedures at Santa Monica Station. It was accidentally uncoupled at Santa Monica Station on its 11:13 departure trip.
Schedule M-778

9/5/2019 10:13:00 AM - Incident# 3196809 (0 lost trips, 9 lost minutes) CHARGEABLE

Train 621 departed late from Santa Monica Station.

9/26/2019 6:58:00 PM - Incident# 3205962 (0 lost trips, lost minutes)

Due to crowded platforms

9/29/2019 2:07:00 PM - Incident# 3206794 (0 lost trips, 4 lost minutes) CHARGEABLE

Operator states she misread the summary and left Santa Monica 4 minutes late

Train 612

T-296

1048-1053-1032

Track 3

Santa Monica station

9/30/2019 6:27:00 PM - Incident# 3207307 (0 lost trips, 7 lost minutes)

Train 618

T-232

(1047)-1061-1032

Downtown Santa Monica, Track 4, Northbound

T-232 reported not being able to engage in Street Run on LRV 1047.

Accidents:

9/22/2019 11:06:00 AM - Incident# 3203951 (1 lost trip, 135 lost minutes)

T-241 reports a 10-73 at the 18th/Flower grade crossing.

T-241

Tr#606

Cars(1024B)-1052-1045

Southbound Trk#4

Flower/18th

Vehicle Maintenance Incidents:

9/2/2019 7:08:00 PM - Incident# 3195414 (0 lost trips, 4 lost minutes)

Aux power (AC or MA Fault)

Train 610

T-142

Cars 1066)-1051-1001

4th Santa Monica

9/3/2019 3:49:00 PM - Incident# 3195841 (0 lost trips, 8 lost minutes)

T-486 on train 610 states having an intermidate propulsion fault with intermidate speed restriction.

Train 610 cars 1046-1016-1069, Palms Station, Track 3, Nortnhbound.

9/5/2019 5:35:00 AM - Incident# 3196708 (2 lost trips, 298 lost minutes)

Air Compressors off on Train 604.

Train 604

T-038

(302)-(245)-(246)

28th Street, Track 4, Southbound.

9/10/2019 7:51:00 AM - Incident# 3198705 (0 lost trips, 20 lost minutes)

Doors

(240)-302-246

Train 602

T-47

Sepulveda, Northbound, Track 3

9/16/2019 5:45:00 PM - Incident# 3201630 (1 lost trip, 141 lost minutes)

Aux power (AC or MA Fault)

Train 605

T-412

Cars (1018) 1064-1021

23rd street station southbound.

9/23/2019 11:35:00 PM - Incident# 3204615 (0 lost trips, 10 lost minutes)

Train Operator T-29 states no movement.

Train 619

T-29

Cars 1071-(1041)-1039

Northbound, track 3, DTSM Station

9/24/2019 9:58:00 AM - Incident# 3204811 (0 lost trips, 6 lost minutes)

No Movemnet

Train 603 TK 4

SB Crenshaw T-89

(1064B)-1060-1017

9/30/2019 3:48:00 PM - Incident# 3207257 (0 lost trips, 5 lost minutes)

Train 606
T-114
(1017)-1068-1018
Palms Station, Northbound, Track 3
T-114 reported an SLC Fault with speed restriction on LRV 1017.

Wayside Incidents:

9/2/2019 7:45:00 PM - Incident# 3195423 (0 lost trips, 6 lost minutes)

UPS General Alarm TCC and Barrington, Military and Westwood gates are being held down.

9/4/2019 4:34:00 AM - Incident# 3196010 (0 lost trips, 10 lost minutes)

Interlocking: Switch Out Of Correspondence
ARINC
7th and Metro South interlocking, switch 12.

9/13/2019 3:48:00 PM - Incident# 3200606 (0 lost trips, lost minutes)

Train 601
Track 4
Southbound
T-358
(1071A)-1028-1064
States he has a reoccurring prop fault.

9/13/2019 4:06:00 PM - Incident# 3200590 (1 lost trip, 144 lost minutes)

Train 620
T-546
(245A)-302-(246A)
Northbound Track #3
I-10 Box
Train operator states has a friction brake fault with no movement.

9/13/2019 6:37:00 PM - Incident# 3200597 (2 lost trips, 275 lost minutes)

Operator reports that the train has no movement with a SLC fault.

Train 621
T-252
Cars (1014A)-1042-1065
23rd street Station, track 4, westbound

9/14/2019 2:47:00 PM - Incident# 3200871 (1 lost trip, 161 lost minutes)

National, Overland, and Clarington TPSS displayed open breakers.

9/19/2019 3:23:00 PM - Incident# 3203032 (1 lost trip, 133 lost minutes)

AC Breaker: Open
A01 and B05
18th street TPSS

Police & Health Incidents:

9/1/2019 4:20:00 AM - Incident# 3194887 (0 lost trips, 60 lost minutes)

Operator reports a car on the ROW.

T-226

Tr#601

Cars(1049-1036-1070)

Southbound Trk#4

Between Western Station & Grammercy Grade

9/4/2019 6:47:00 AM - Incident# 3196058 (0 lost trips, 4 lost minutes)

unruly passenger, cars #(1063A)-1002-1061

Train #612

T-100

Downtown Santa Monica, track #4, Northbound.

9/5/2019 8:53:00 PM - Incident# 3197061 (0 lost trips, 5 lost minutes)

Reports of altercation aboard.

Train # 610

T-315

(1068A)-1019-1029

23rd Street Station, Track #4, SB

9/6/2019 10:57:00 AM - Incident# 3197387 (0 lost trips, 37 lost minutes)

T-243 on train 603, car 1043A, La Brea, track 4, off platform, reported a fight between multiple individuals aboard the train.

9/16/2019 5:33:00 AM - Incident# 3201200 (0 lost trips, 8 lost minutes)

T-303 reported an individual on board his train throwing shoes at another patron.

T-303

Train 611

(1004)-1035-1017

Northbound, Track 4

Sepulveda Station

9/17/2019 8:00:00 PM - Incident# 3202196 (3 lost trips, 398 lost minutes)

Train Delay/ 7th Metro

Presidential Motorcade

LAPD/ Sgt Chairez

9/21/2019 2:37:00 PM - Incident# 3203774 (0 lost trips, 5 lost minutes)

Train 609 (1067,1035,1065) T-427, 7th & Metro, Track 1 reports he received a report that there is a patron who is unresponsive on board car 1067A.

9/30/2019 1:42:00 PM - Incident# 3207191 (0 lost trips, 5 lost minutes)

LAPD Operator 763 reported someone aboard train 602 possibly armed with a weapon.

Other Incidents:

9/3/2019 3:00:00 PM - Incident# 3195867 (0 lost trips, 14 lost minutes)

T- 296 on Train 603 reports propulsion fault and HVAC failure with a speed restriction.
Train 603, cars (1020A)-1039-1050, Culver City Station, Track 4, Southbound.

9/7/2019 9:53:00 AM - Incident# 3197710 (0 lost trips, 10 lost minutes)

Train operator reports of feces in rail car 1049B
Train 607
T-296
(1049B)1053-1045
Sepulveda station, Trk. 3, Northbound

9/21/2019 5:23:00 PM - Incident# 3203806 (0 lost trips, 12 lost minutes)

R-139 reports train 608 (1031,1068,1018) on track 1 at 7th & Metro has blood all over the place.

Unable To Duplicate:

9/15/2019 3:03:00 PM - Incident# 3201067 (0 lost trips, 14 lost minutes)

Sick Individual
Train 611
T-454
Cars 1025)-1060-1053
Jefferson platform 2 northbound.

9/6/2019 3:58:00 PM - Incident# 3197532 (0 lost trips, 5 lost minutes) CHARGEABLE

Operator reports that train 617 has a STL fault that later developed into a brake fault with over heating brakes and a speed restriction.
Train 617
T-374 North and T-546 South
Cars 1018-(1022)-1054
7 and Metro, track 1

9/22/2019 5:14:00 AM - Incident# 3203897 (0 lost trips, 11 lost minutes) CHARGEABLE

Operator T-100 reports a brake fault with no movement.
T-100
Tr#604
Cars(1048B)-1016-1037
Southbound Trk#4
Between 7th Ave/Degnan Intl.

Reset:

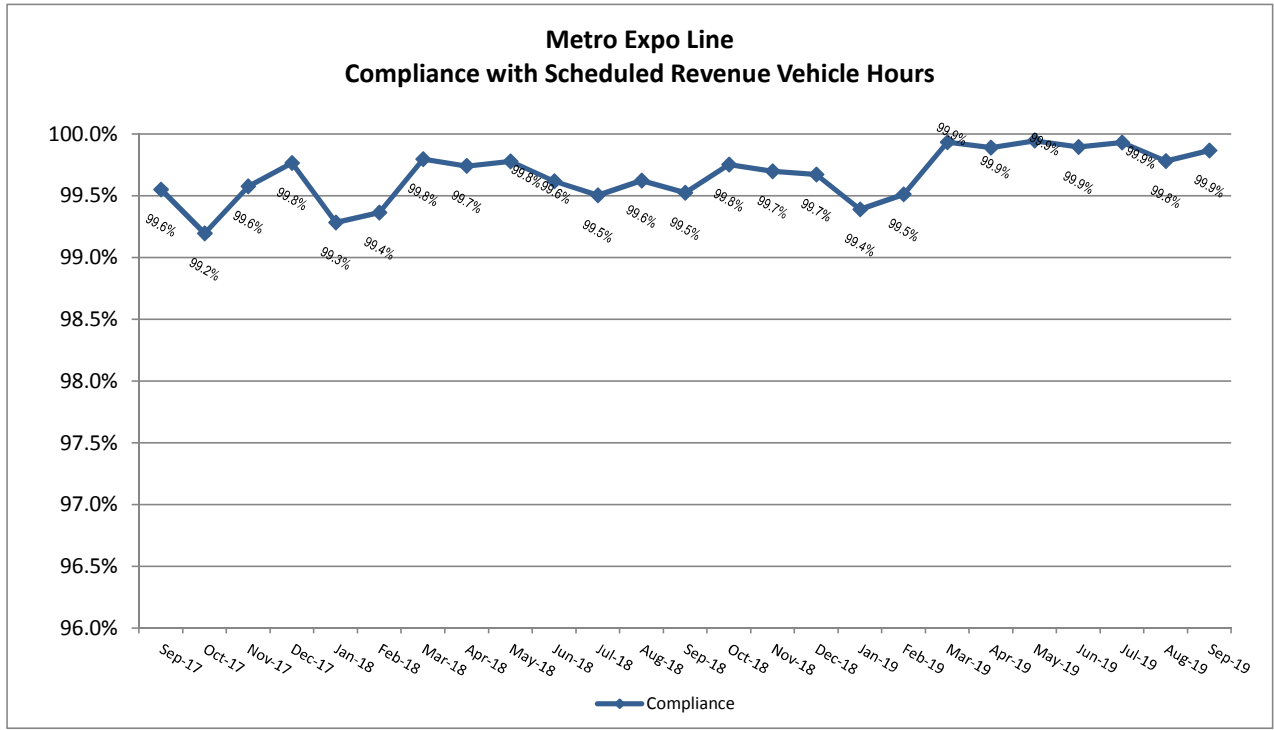
9/1/2019 2:08:00 PM - Incident# 3195035 (0 lost trips, 5 lost minutes)

Aux power (AC or MA Fault)
No movement.
Train 606
T-296
Cars 1033)-1037-1043
4th Santa Monica Station.

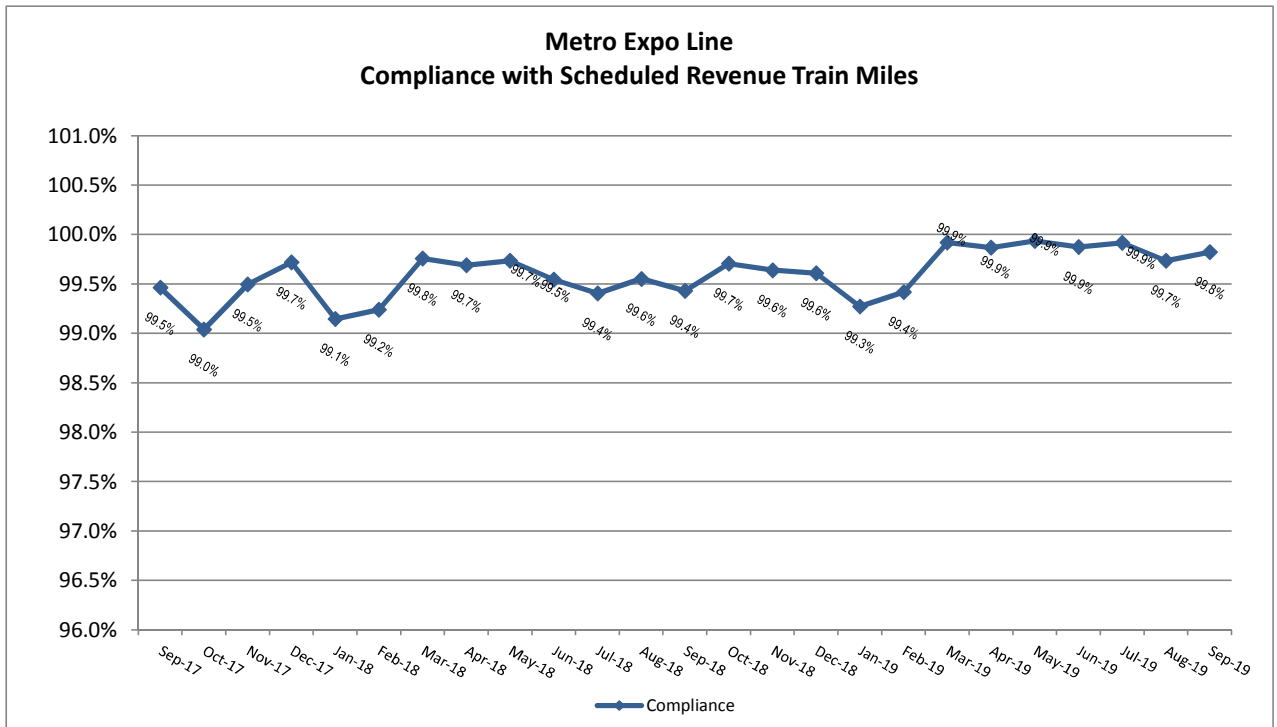
MEASURES OF THE OVERALL SERVICE IMPACT OF RAIL INCIDENTS

COMPLIANCE WITH SCHEDULED VEHICLE HOURS

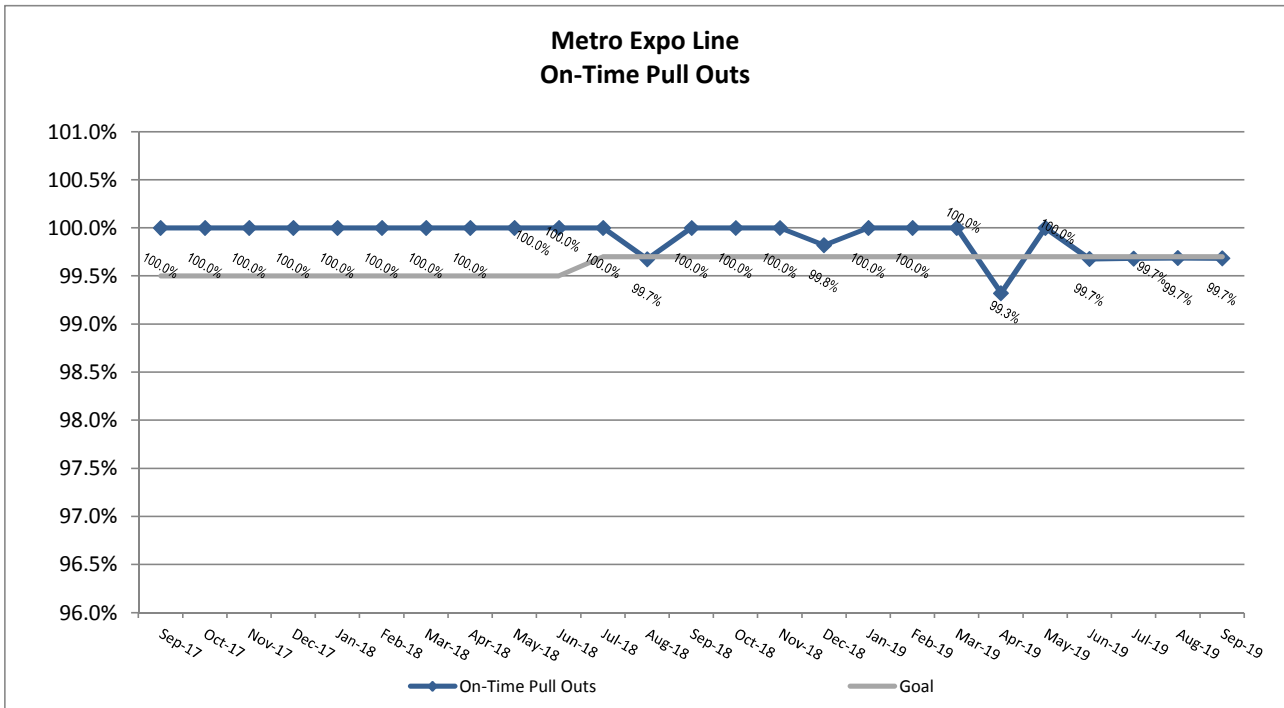
Sep 2019



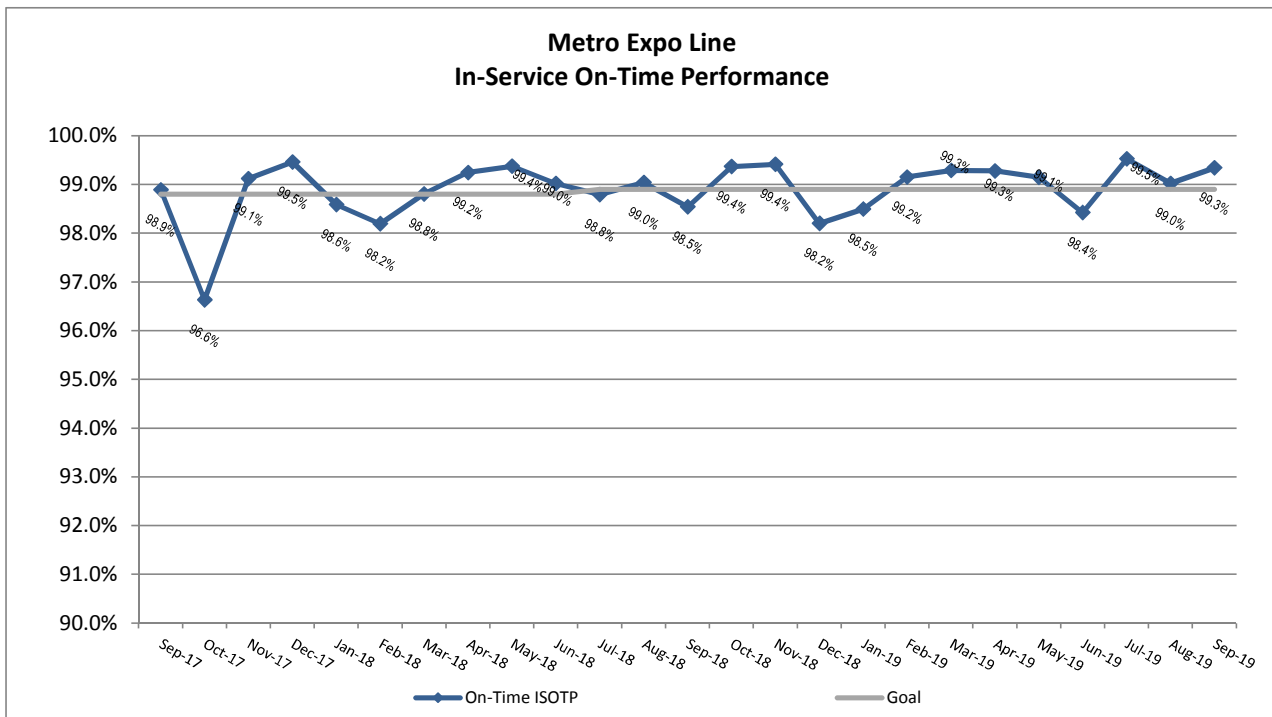
COMPLIANCE WITH SCHEDULED TRAIN MILES



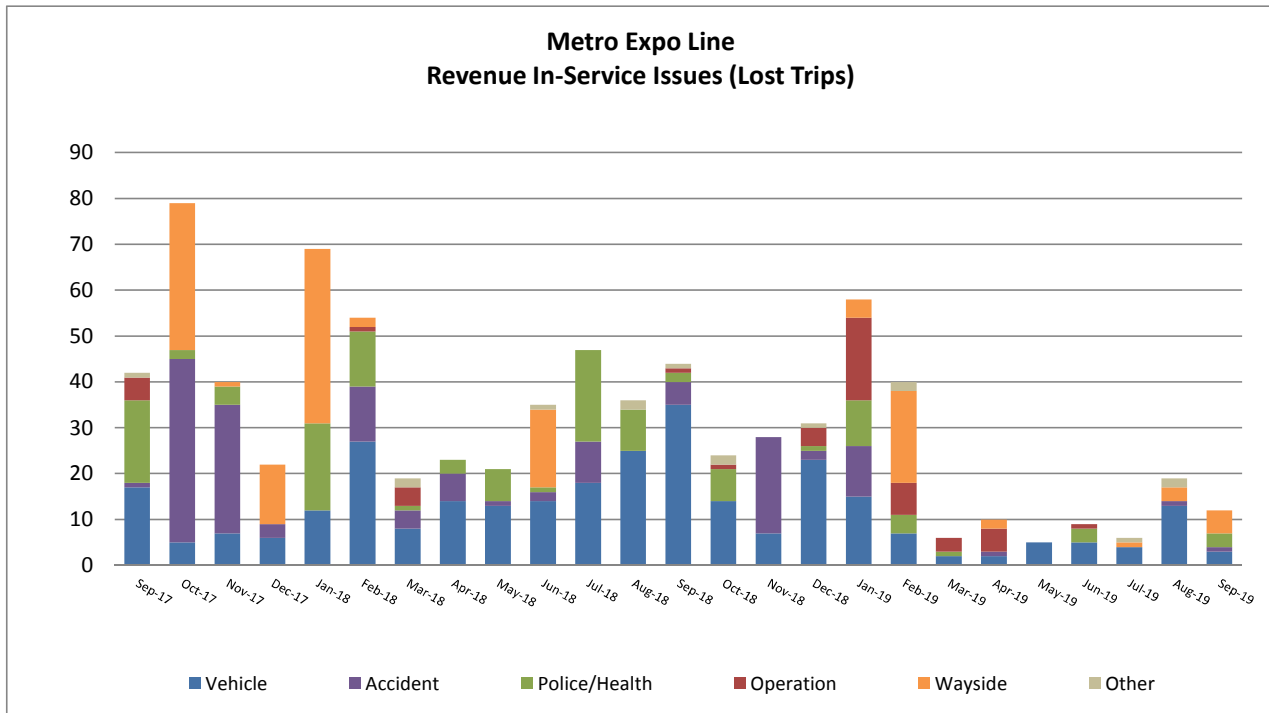
ON-TIME PULL OUTS



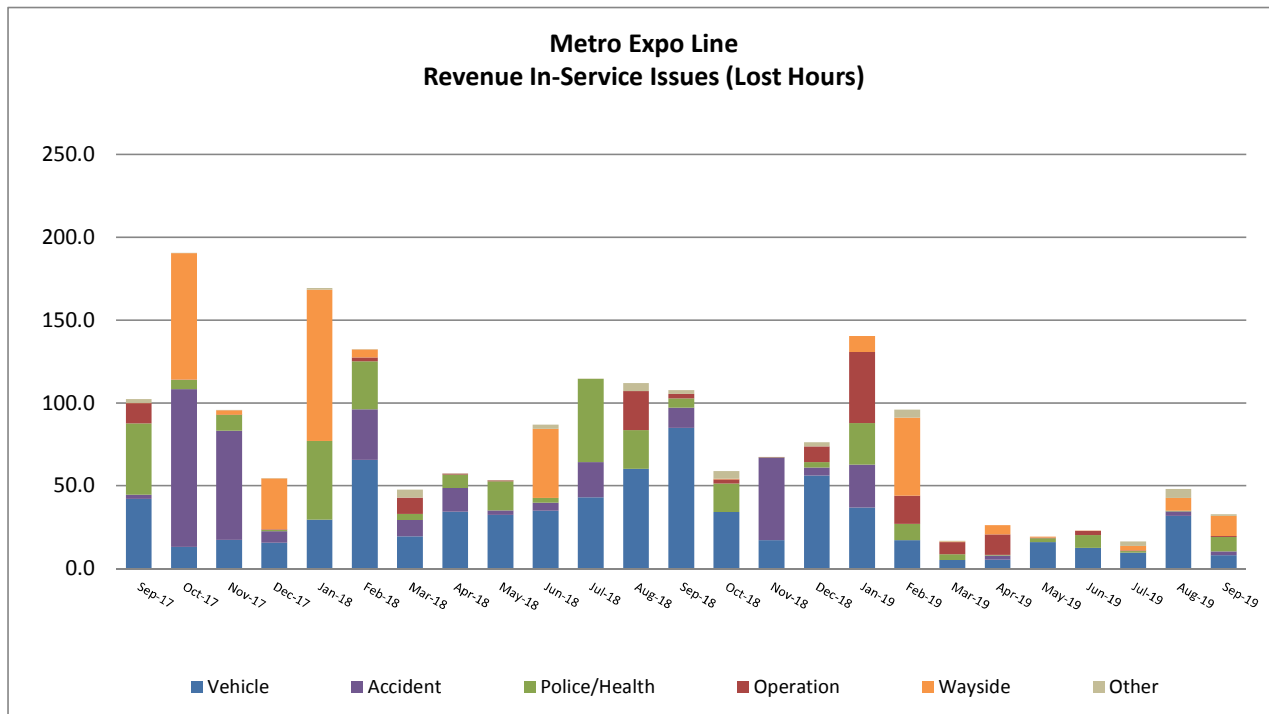
IN-SERVICE ON-TIME PERFORMANCE



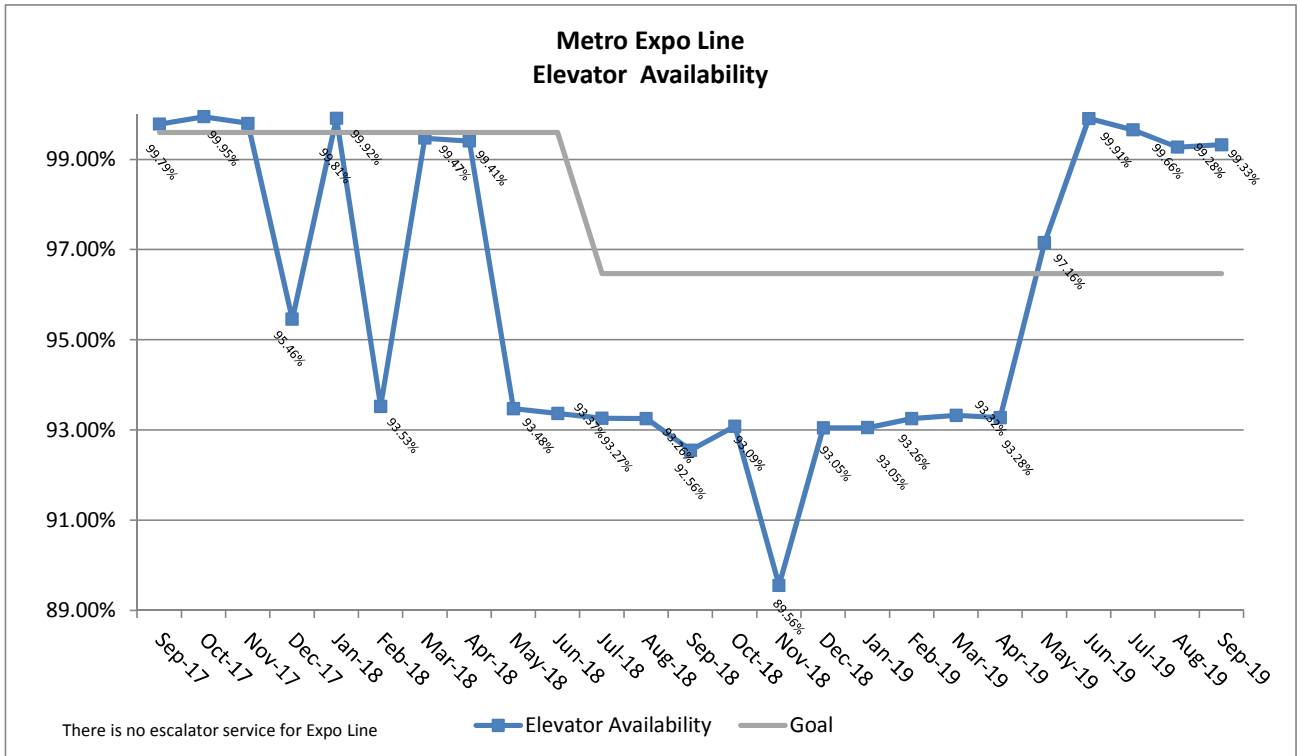
LOST TRIPS



LOST HOURS



VERTICAL TRANSPORTATION AVAILABILITY



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