



# **Rail Fleet Services Monthly Report January 2015**



**Metro**

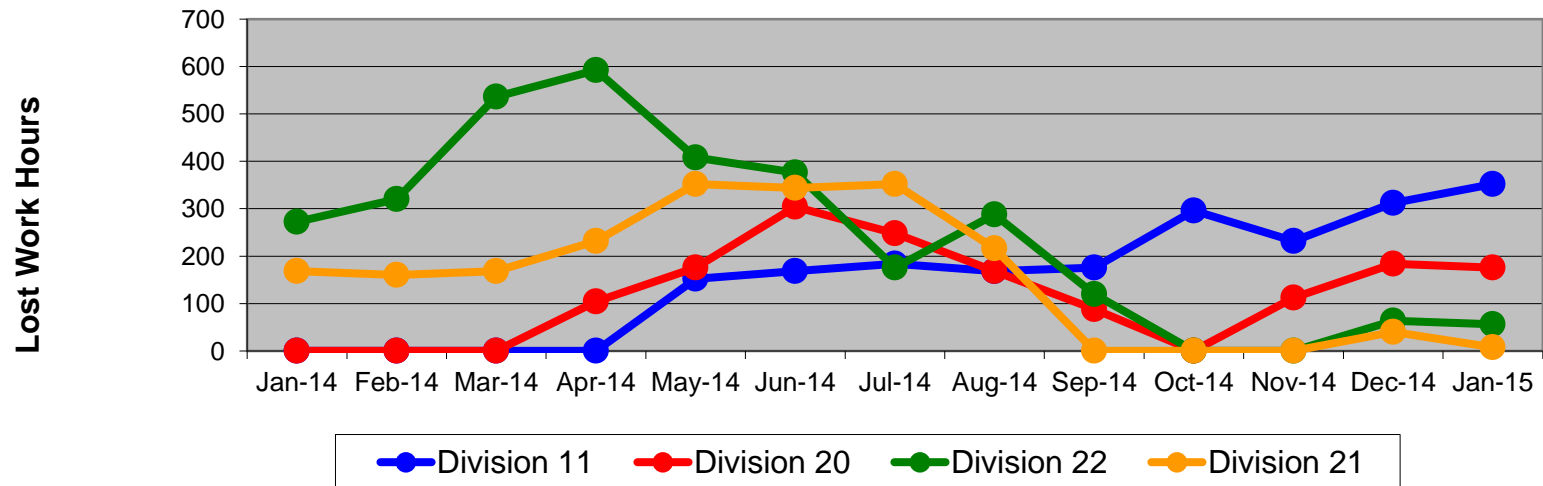
# Table of Contents

•	Safety		
	- Industrial Injuries	Page	3
	- Rail Vehicle Accidents & Major Incidents	Page	4
•	Customer Service		
	- Service Delivery – AM/PM Pull-Outs	Page	5
	- Vehicle Utilization – Blue Line & Green Line	Page	6
	- Vehicle Utilization – Red Line & Gold Line	Page	7
	- All Train Delay Incidents	Page	8
	- Mean Miles Between Failures (Major)	Page	9
	- Mileage Between Data Range (by month)	Page	10
•	Business Processes		
	- Top Incident Categories	Page	11
	- Major Incidents	Page	12
	- Preventive Maintenance Compliance	Page	13
	- RFS Wrench Turning	Page	14
•	Finance		
	- Vandalism & Graffiti Costs	Page	15
	- Graffiti Pictures	Page	16
	- Labor & Material Costs	Page	17
	- Cost per mile	Page	18
	- Absence vs. Overtime	Page	19

# Industrial Injuries – Lost Work Hours January 2014-2015

	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	13-Month Period
Division 11	0	0	0	0	152	168	184	168	176	296	232	312	352	2,040
Division 20	0	0	0	104	176	304	248	168	88	0	112	184	176	1,560
Division 22	272	320	536	592	408	376	176	288	120	0	0	64	56	3,208
Division 21	168	160	168	232	352	344	352	216	0	0	0	40	8	2,040
Totals	440	480	704	928	1,088	1,192	960	840	384	296	344	600	592	8,848

## Industrial Injuries (lost work hours)



# Rail Vehicle Accidents & Major Incidents

## January 2014-2015

Repair Costs	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	13-Month Period
Blue/Expo Line	\$8,370	\$15,618	\$13,690	\$72,961	\$9,463	\$9,964	\$1,528	\$207	\$42,690	\$12,945	\$5,762	\$3,463	\$9,301	\$205,962
Red/Purple Line	\$0	\$0	\$356	\$0	\$0	\$0	\$0	\$0	\$0	\$4,194	\$0	\$0	\$0	\$4,550
Green Line	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$267	\$0	\$0	\$0	\$267
Gold Line	\$0	\$0	\$714	\$0	\$0	\$5,860	\$50,059	\$1,669	\$0	\$0	\$0	\$5,664	\$0	\$63,966
<b>Totals</b>	<b>\$8,370</b>	<b>\$15,618</b>	<b>\$14,760</b>	<b>\$72,961</b>	<b>\$9,463</b>	<b>\$15,824</b>	<b>\$51,587</b>	<b>\$1,876</b>	<b>\$42,690</b>	<b>\$17,406</b>	<b>\$5,762</b>	<b>\$9,127</b>	<b>\$9,301</b>	<b>\$274,745</b>

Rail Vehicle Accident Costs - January 2015				
Date	Incident #	Problem Code	Incident Description	Repair Cost
Metro Blue/Expo Line				
1/31/15	2547743	Train vs. Vehicle	A 10-73 was reported at Track #2, Southbound, Washington and Flower.	\$ 262
1/13/15	2551519	Train vs. Pedestrian	Train vs. passenger at Anaheim station.	\$ -
1/13/15	2551378	Train vs. Pedestrian	A 10-72 was reported at Track #3, Northbound, Arlington Grade Crossing.	\$ 189
1/14/15	2551982	Derailment	A 10-75 was reported for the training car with the Student Operator and Instructor derailed in Blue Line Yard /north loop.	\$ 3,900
1/30/15	2557538	Train vs. Pedestrian	A 10-73 was reported at Track #2, Southbound, 24th Street Grade Crossing.	\$ 4,950
<b>Total</b>				<b>\$ 9,301</b>
<b>Grand Total</b>				<b>\$ 9,301</b>
(10-71) = Train vs. Object, (10-72) = Train vs. Pedestrian, (10-73) = Train vs. Vehicle (10-74) = Train vs. MTA Vehicle, (10-75) = Derailment				
<b>Note:</b> Repair costs are only the expenses captured during the time period of the report. Actual costs may be significantly higher, if repairs are spread out over several months.				

# Service Delivery January 2015

## January 2015 - Service Delivery

### Blue/Expo Line Fleet Size: 92

<u>Pull Out</u>	<u>Vehicles Required</u>	<u>Average Available</u>	<u>% Up (Down)</u>
Weekday:	78	78	100%
Weekend:	60	66	110%
Late Pullouts: 1			
<b>Monthly Mileage:</b>	<b>661,426</b>		

### Red/Purple Line Fleet Size: 104

<u>Pull Out</u>	<u>Vehicles Required</u>	<u>Average Available</u>	<u>% Up (Down)</u>
Weekday:	74	80	108%
Weekend:	54	64	119%
Late Pullouts: 0			
<b>Monthly Mileage:</b>	<b>627,528</b>		

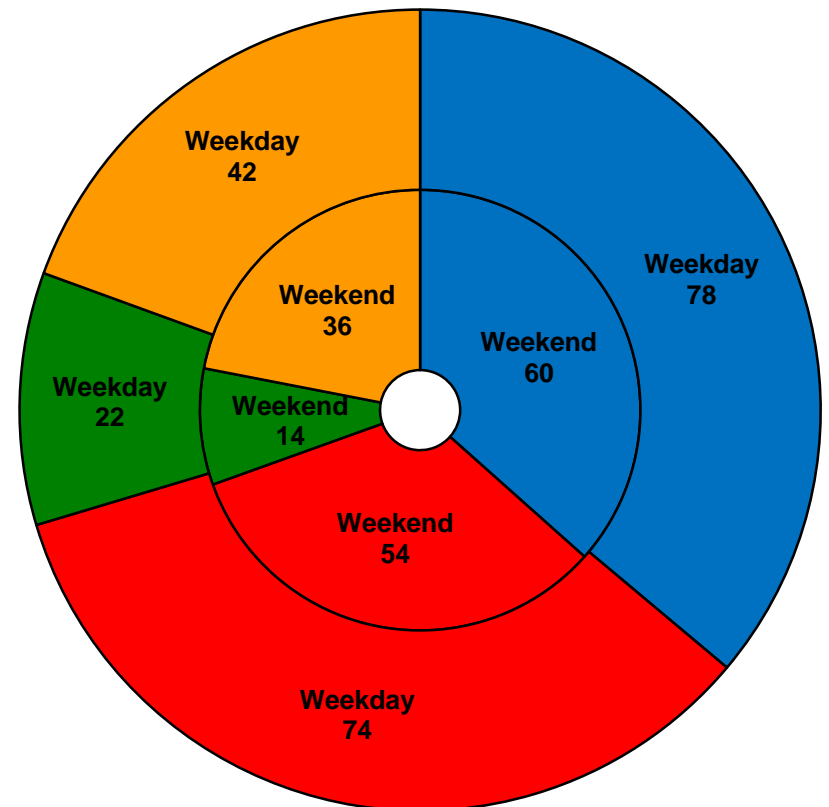
### Green Line Fleet Size: 29

<u>Pull Out</u>	<u>Vehicles Required</u>	<u>Average Available</u>	<u>% Up (Down)</u>
Weekday:	22	22	100%
Weekend:	14	15	107%
Late Pullouts: 0			
<b>Monthly Mileage:</b>	<b>228,801</b>		

### Gold Line Fleet Size: 50\*

<u>Pull Out</u>	<u>Vehicles Required</u>	<u>Average Available</u>	<u>% Up (Down)</u>
Weekday:	42	43	102%
Weekend:	36	40	111%
Late Pullouts: 0			
<b>Monthly Mileage:</b>	<b>336,594</b>		

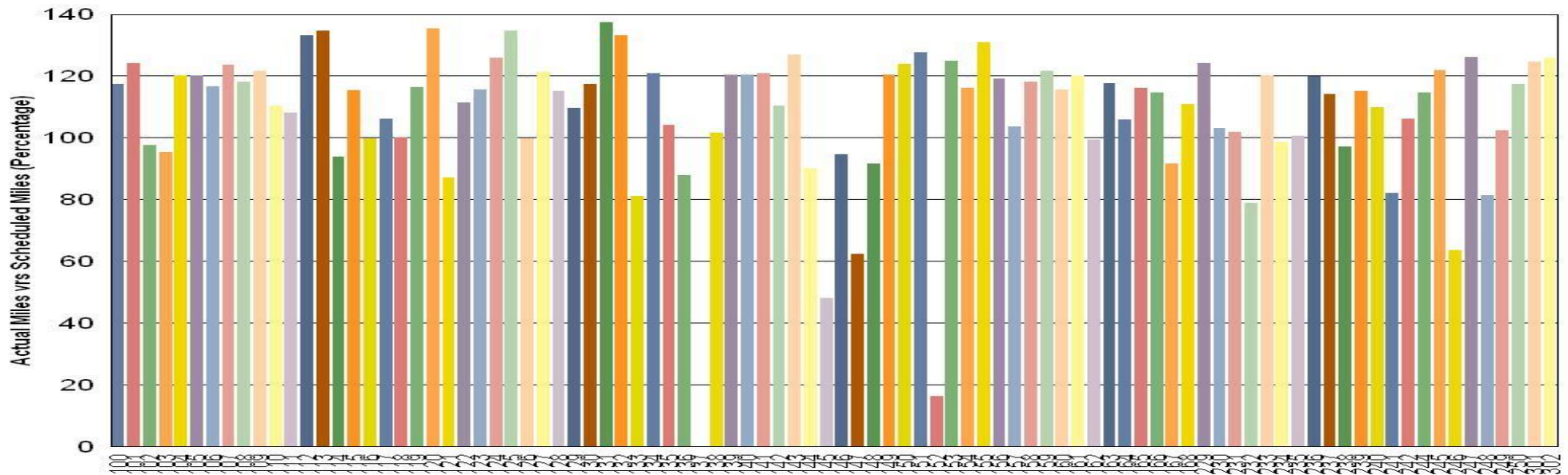
\*One LRV transferred to Foothill Construction Authority on 1/29/2015.



■ Blue/Expo Line ■ Red/Purple Line ■ Green Line ■ Gold Line

# Vehicle Utilization January 2015

## Metro Blue/Expo Line



### Blue/Expo Line:

Car # 137 Out of service due to Major Accident Repair

Car # 152 Out of service for Interior Work

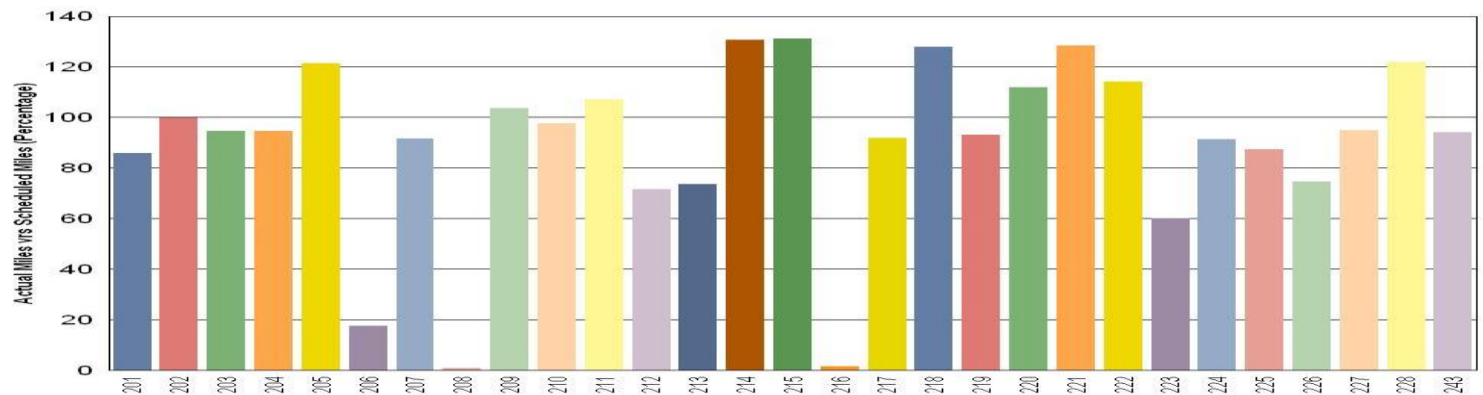
### Green Line:

Car # 206 On hold for Electromagnetic Interference Fault

Car # 208 On hold for Propulsion Troubleshooting

Car # 216 On hold for Exterior Body Rehab

## Metro Green Line



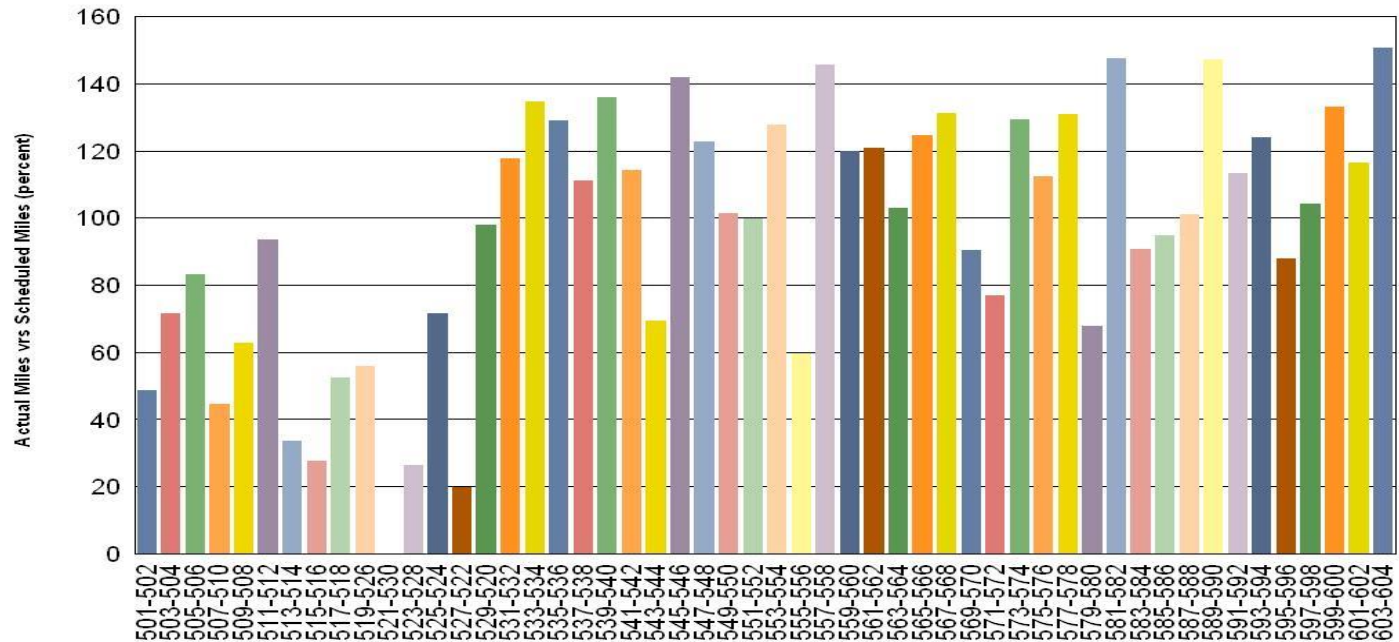
Note: Percentage includes an average 4% mileage deduction for yard mileage and vehicle testing.

# Vehicle Utilization January 2015

## Red/Purple Line:

The following cars were out of service due to:  
 Car # 513-514 Waiting for blower motor  
 Car # 515-516 Propulsion Failure  
 Car # 521-530 Traction Motor and Truck Rebuild  
 Car # 523-528 High Speed Circuit Breaker Burnt  
 Car # 527-522 High Speed Circuit Breaker Burnt and waiting for blower motor

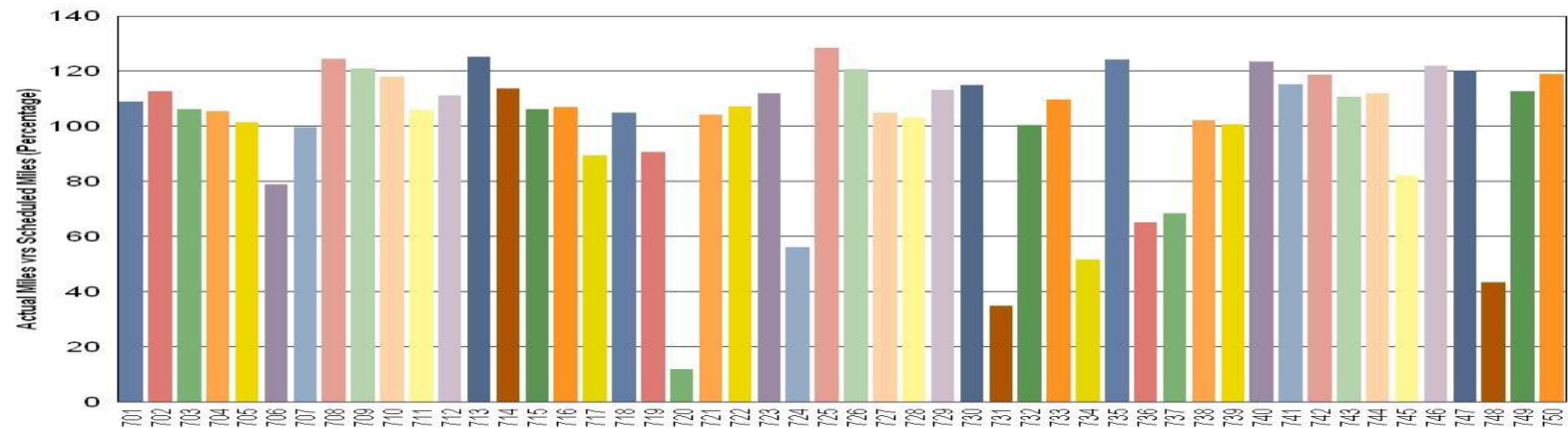
## Metro Red/Purple Line



## Gold Line:

Car # 720 & 731 On hold for Preventive Maintenance

## Metro Gold Line



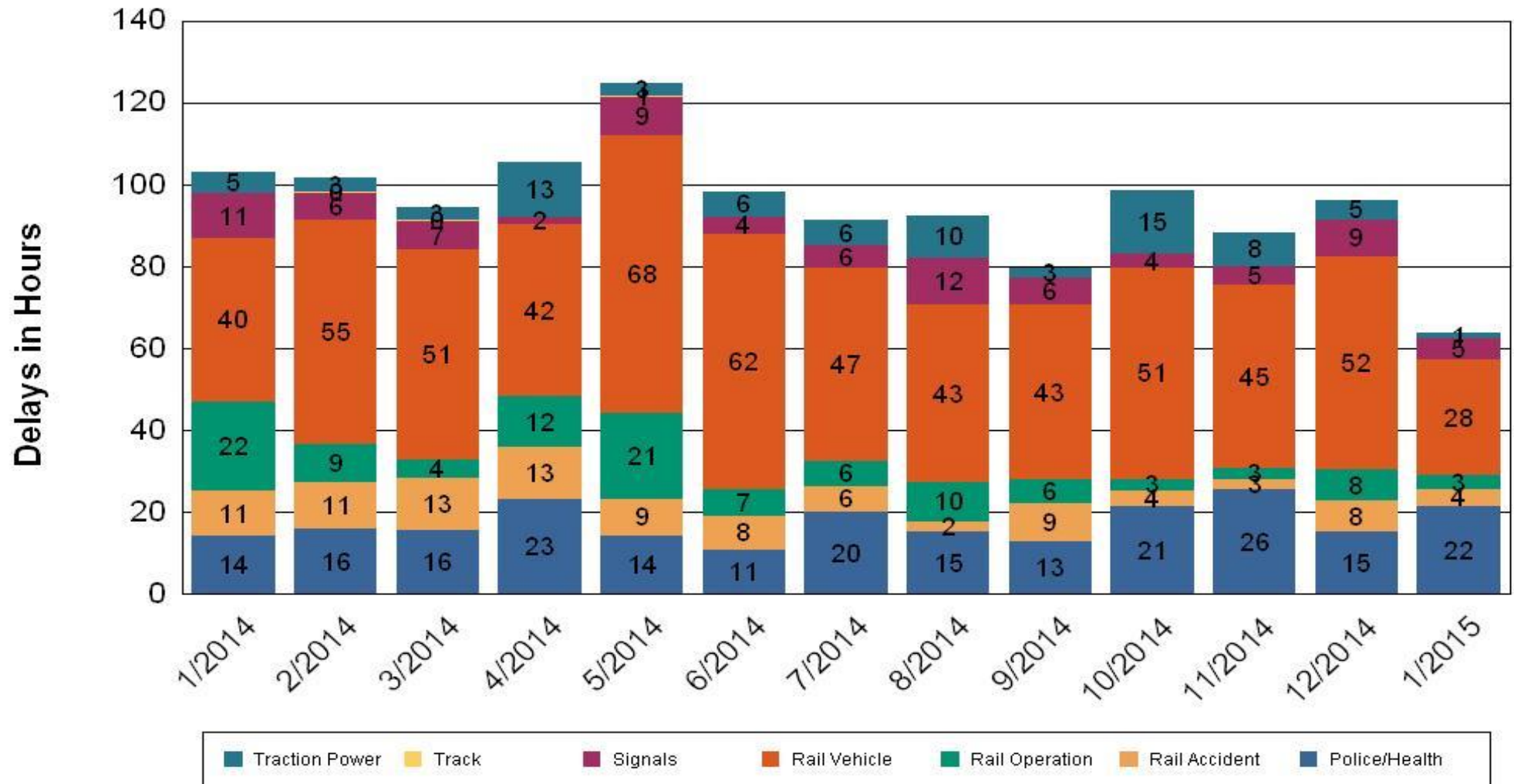
•Percentage includes an average 4% mileage deduction for yard mileage and vehicle testing.



# All Train Delays (Hours) January 2014-2015

## All Train Delays

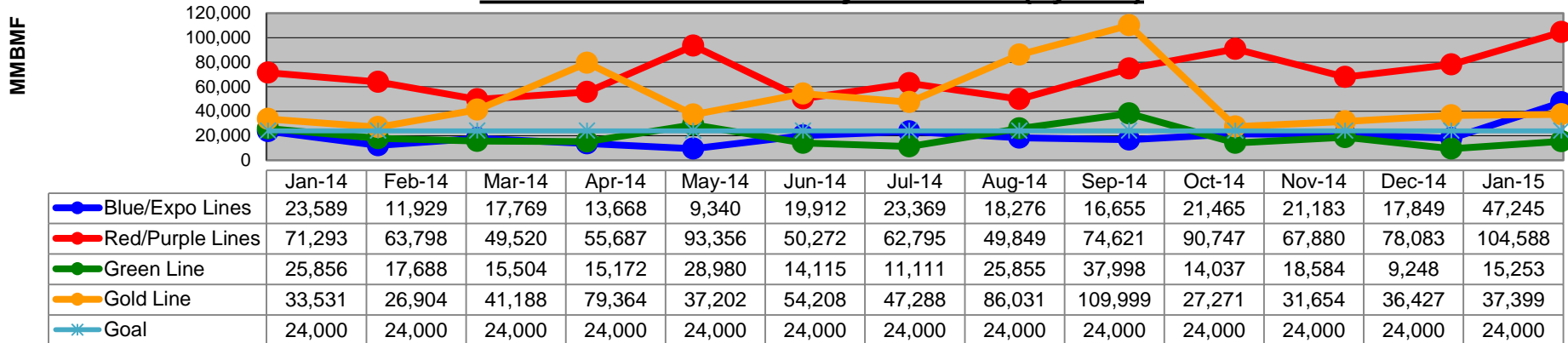
Totals Include the delay to all trains involved (not just the primary incident)



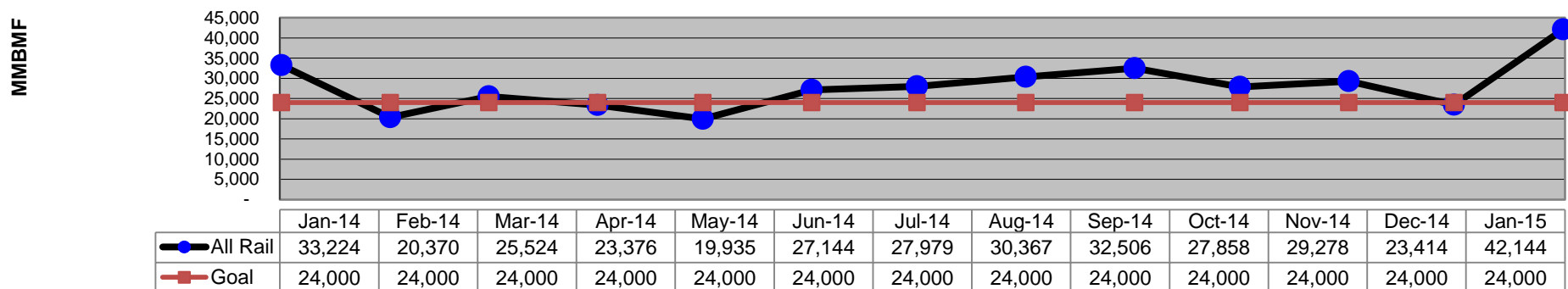


# Mean Miles Between Failures (Major) January 2014-2015

## Mean Miles Between Major Failures (by line)



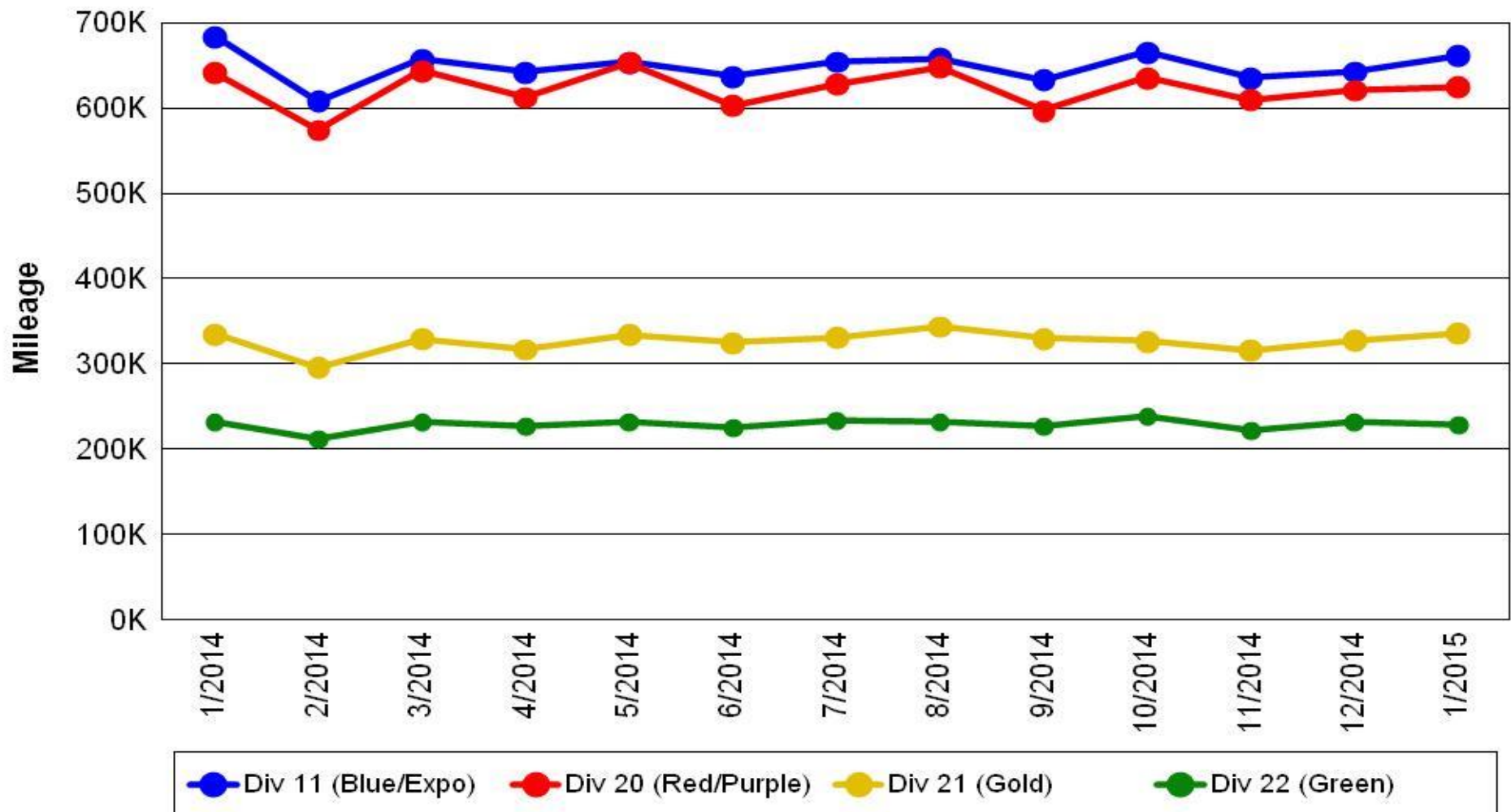
## Mean Miles Between Major Failures (all)



# Mileage Between Data Range (by month)

## January 2014-2015

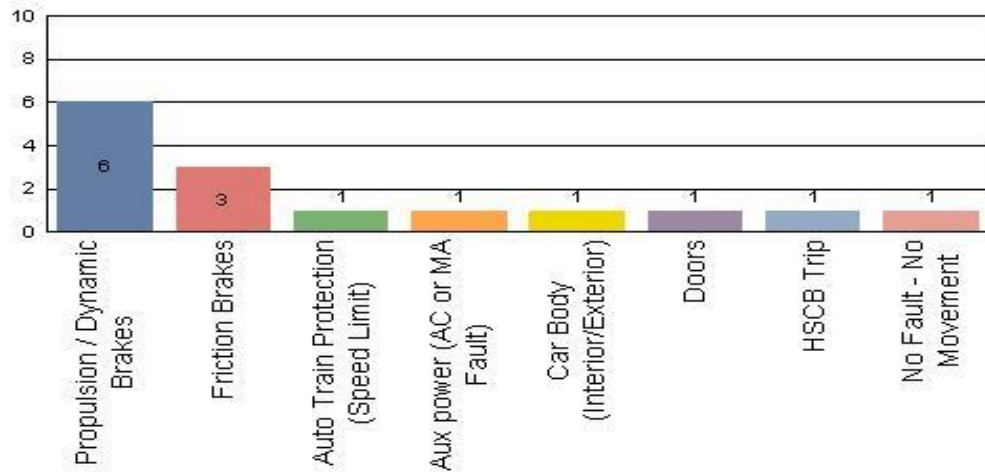
### Rail Division Monthly Mileage



# Top Incident Categories January 2015

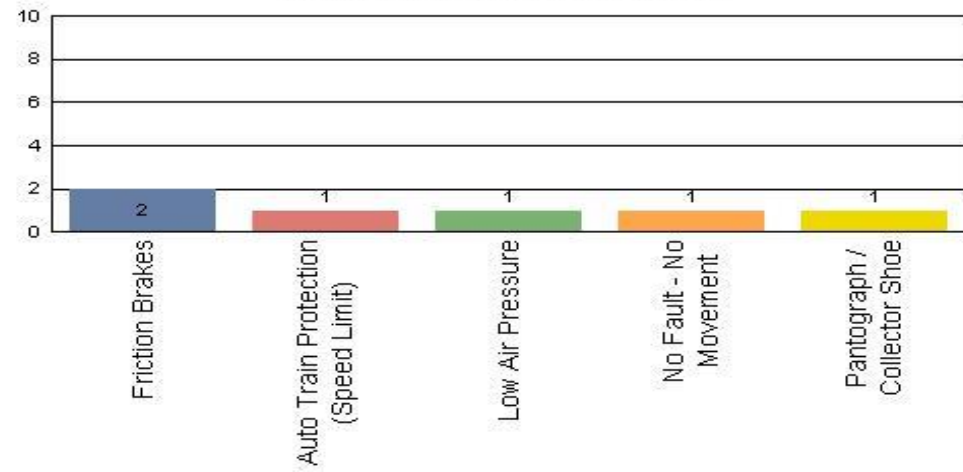
## Metro Blue/Expo Line

### Top Incident Categories



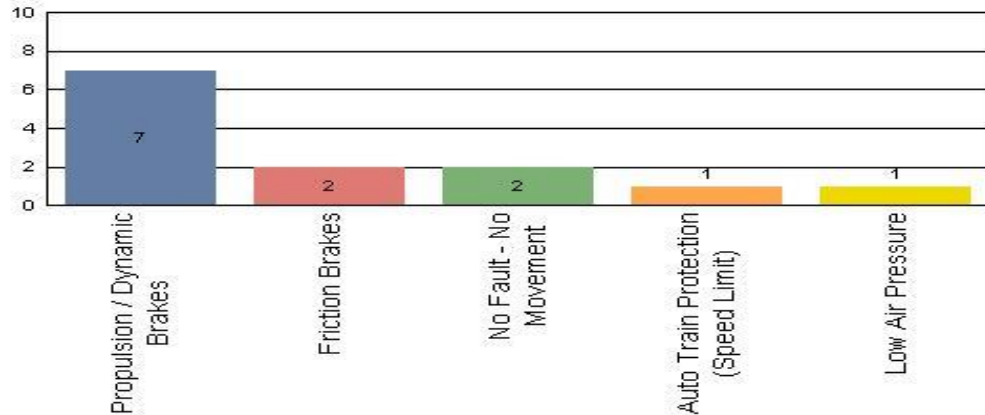
## Metro Red/Purple Line

### Top Incident Categories



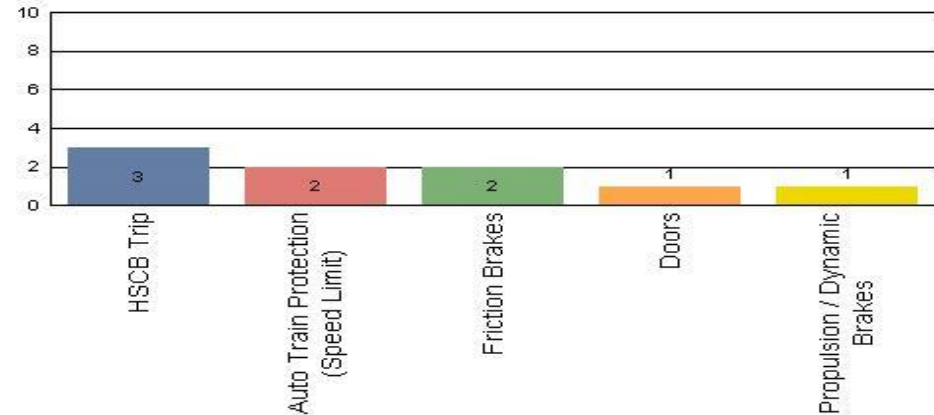
## Metro Green Line

### Top Incident Categories



## Metro Gold Line

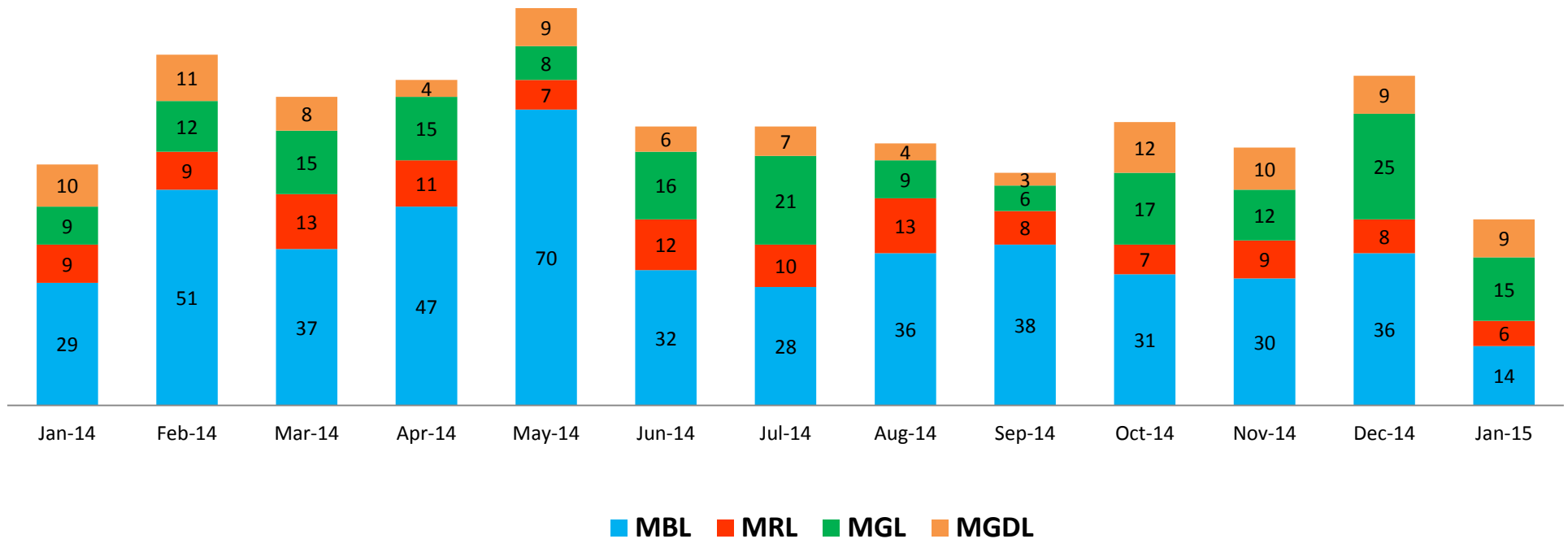
### Top Incident Categories



# Major Incidents

## January 2014-2015

### Numbers of Major System Failures (by Line)

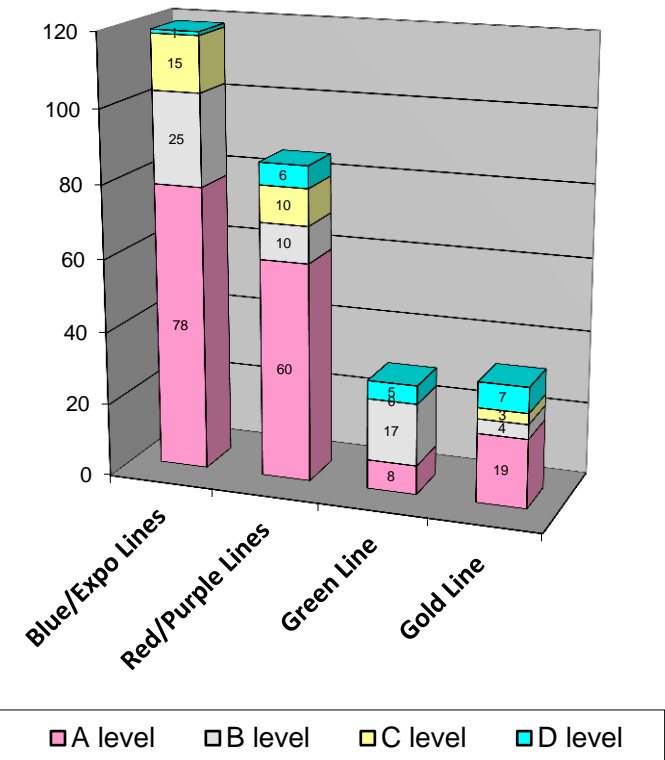


# Preventive Maintenance Compliance January 2014-2015

PM Compliance	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15
Blue/Expo Lines	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Red/Purple Lines	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Green Line	100%	100%	100%	100%	100%	97%*	100%	100%	100%	100%	97%	100%	100%
Gold Line	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

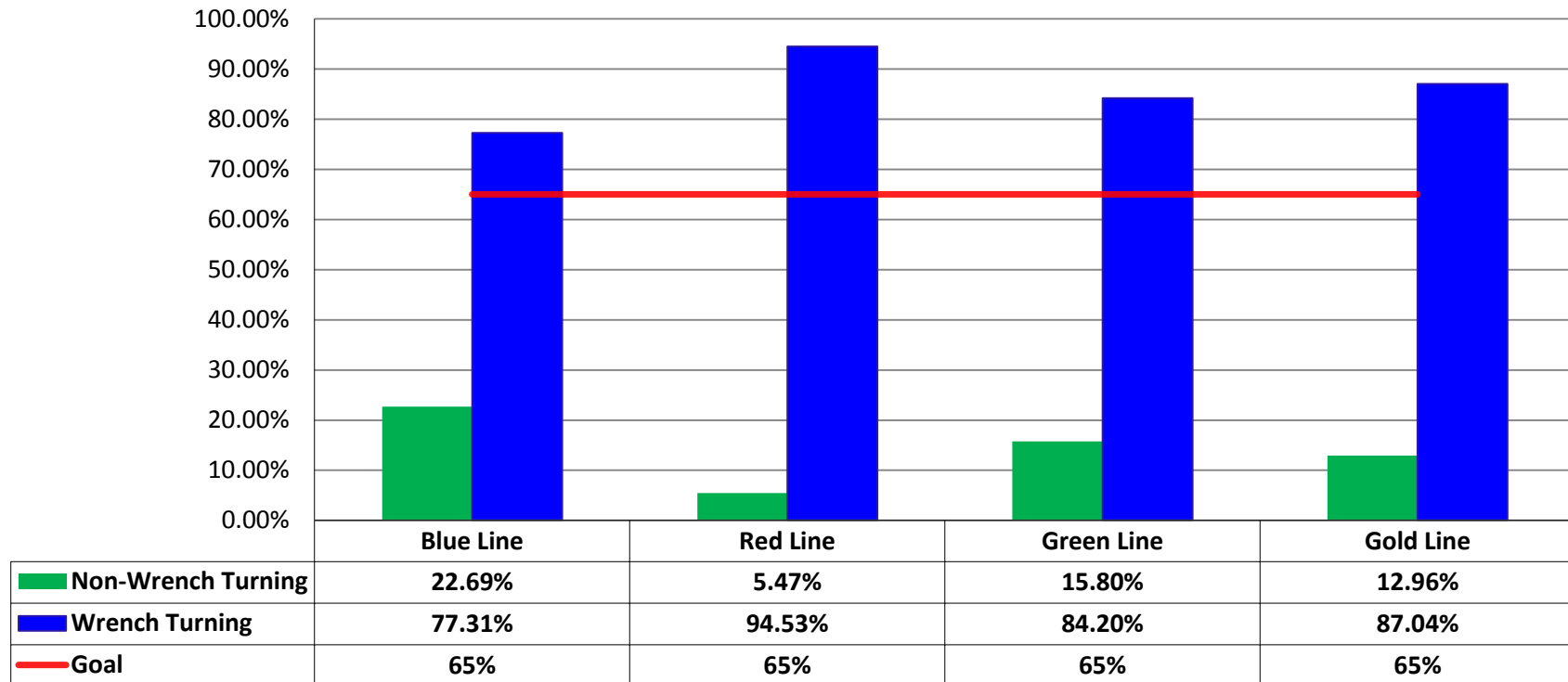
Number of Preventive Maintenance Inspections - January 2015					
Line	A level	B level	C level	D level	Totals
Blue/Expo Lines	78	25	15	1	119
Red/Purple Lines	60	10	10	6	86
Green Line	8	17	0	5	30
Gold Line	19	4	3	7	33
Totals:	165	56	28	19	268

Explanation of PM Inspection levels		Miles			
Line	Type	A level	B level	C level	D level
Blue/Expo Lines	P865/P2020	5,000	15,000	30,000	60,000
Blue/Expo Lines	P2000	7,500	22,500	45,000	90,000
Red/Purple Lines	A650	7,500	22,500	45,000	90,000
Green Line	P2000	7,500	22,500	45,000	90,000
Gold Line	P2550	10,000	30,000	60,000	120,000



# RFS Wrench Turning January 2015

## RFS - Wrench Turning January 2015

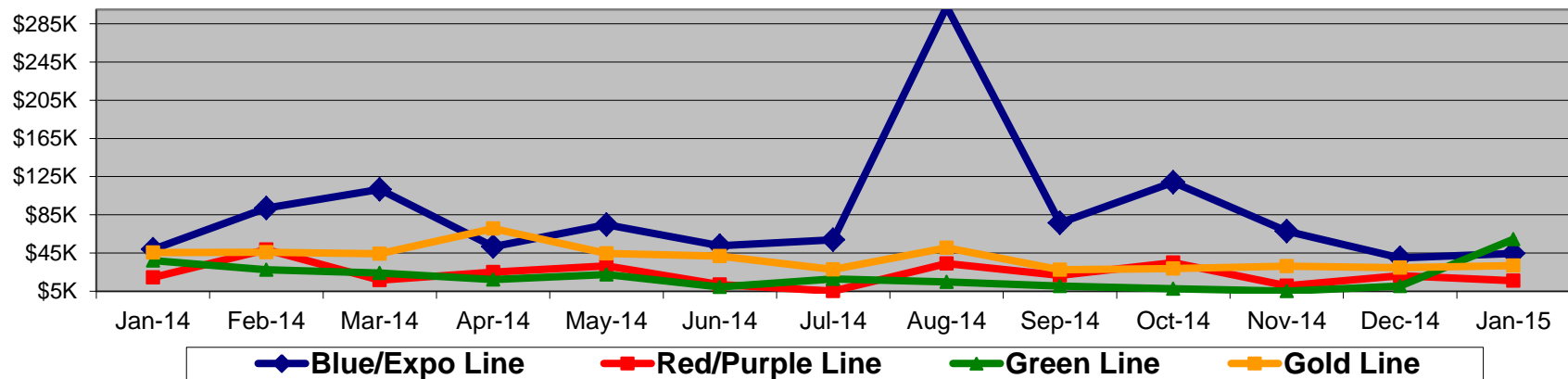


Notes: Labor hours contributed by Maint Specialist Leader, Rail Body/Paint Repair Leader, and Maint Specialist Temporary Leader

# Vandalism & Graffiti Report

## January 2014-2015

Graffiti Costs														
	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	13-Month Period
Blue/Expo Line	\$49K	\$92K	\$112K	\$52K	\$75K	\$53K	\$59K	\$303K	\$77K	\$119K	\$68K	\$40K	\$45K	\$1142K
Red/Purple Line	\$19K	\$49K	\$17K	\$25K	\$32K	\$12K	\$5K	\$34K	\$22K	\$35K	\$11K	\$21K	\$16K	\$297K
Green Line	\$37K	\$27K	\$24K	\$17K	\$22K	\$9K	\$18K	\$15K	\$10K	\$8K	\$5K	\$10K	\$59K	\$264K
Gold Line	\$46K	\$46K	\$44K	\$71K	\$45K	\$42K	\$28K	\$51K	\$28K	\$29K	\$31K	\$30K	\$32K	\$520K
Totals:	\$151K	\$214K	\$197K	\$165K	\$173K	\$116K	\$110K	\$402K	\$136K	\$190K	\$115K	\$102K	\$152K	\$2,222K

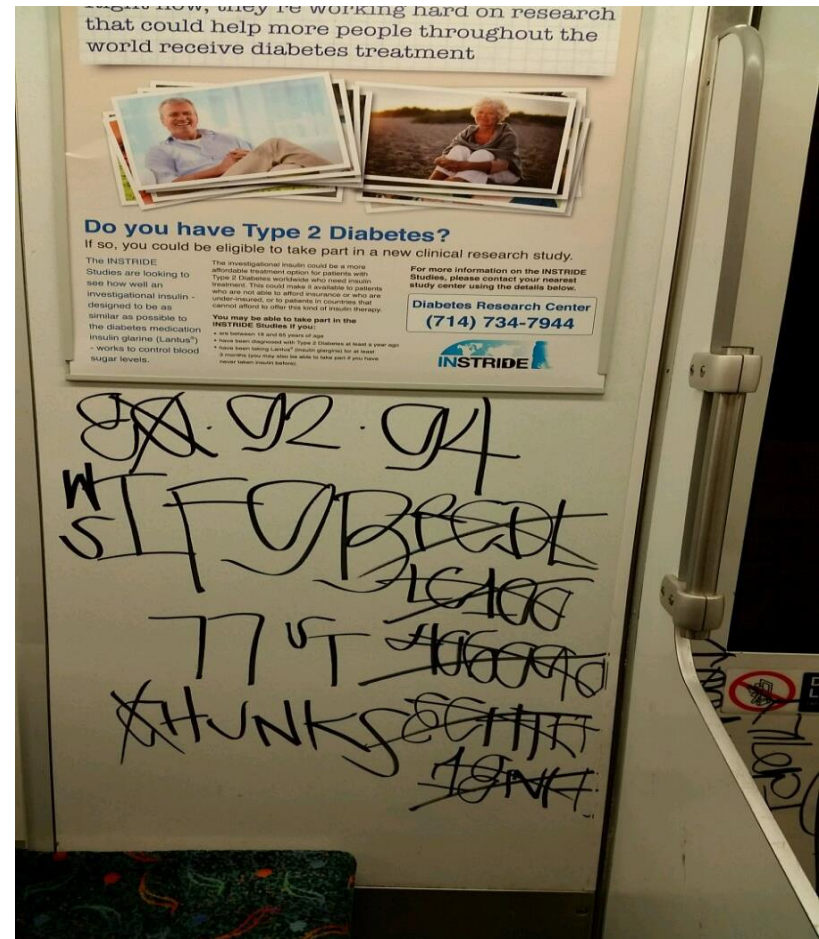


January 2015 Vandalism & Graffiti - All Rail				
	Qty	Labor	Materials	Totals
Windows Replaced	59	\$ 13,121	\$ 14,845	\$ 27,966
Vandal Shields Replaced	781	\$ 19,698	\$ 17,424	\$ 37,122
Seats Cleaned	473	\$ 1,682	\$ -	\$ 1,682
Seats Inserts Replaced	182	\$ 5,351	\$ 6,928	\$ 12,279
Graffiti Removal - Other	865	\$ 42,798	\$ 11,993	\$ 54,791
Repainting Panels	228	\$ 14,364	\$ 3,505	\$ 17,869
<b>Totals</b>	<b>2,588</b>	<b>\$ 97,014</b>	<b>\$ 54,695</b>	<b>\$ 151,709</b>



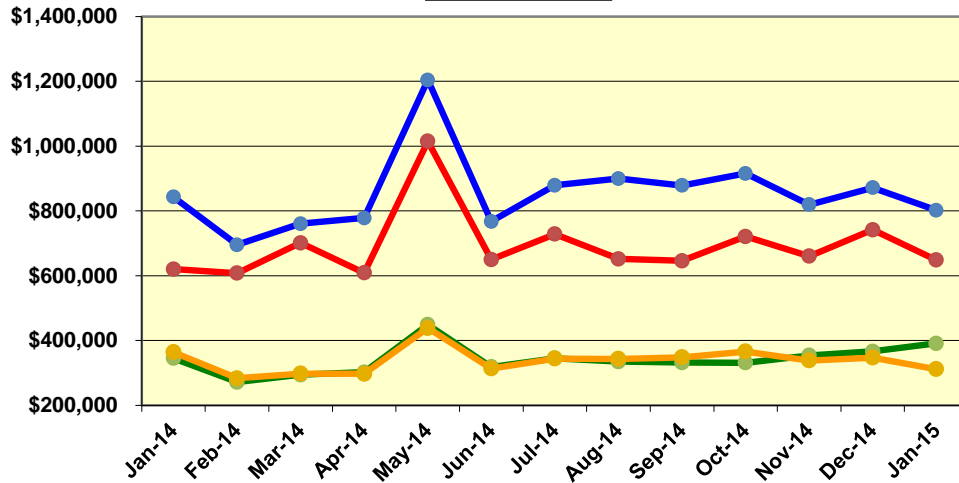
# Graffiti Pictures January 2015

## Blue Line

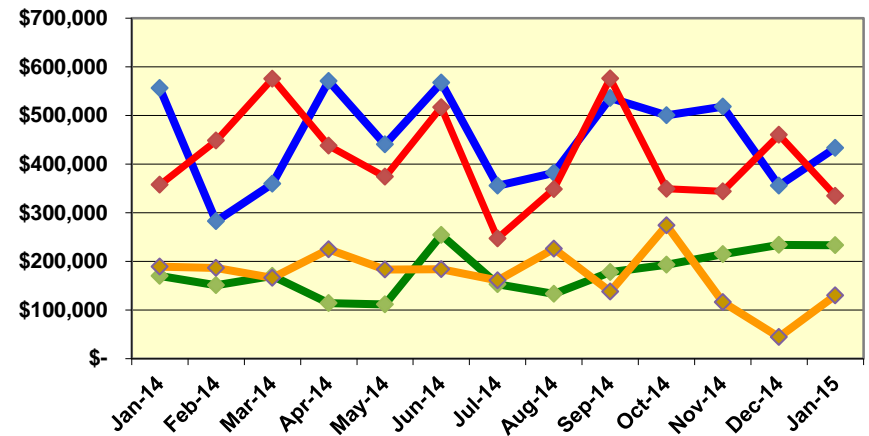


# Labor and Material Costs January 2014-2015

Labor Costs



Material Costs



Jan-14	Feb-14	Mar-14	Apr-14	May-14*	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15
--------	--------	--------	--------	---------	--------	--------	--------	--------	--------	--------	--------	--------

**Labor Costs**

Blue/Expo Lines	\$ 842,979	\$ 695,394	\$ 760,511	\$ 778,469	\$ 1,204,234	\$ 767,717	\$ 879,339	\$ 900,043	\$ 878,598	\$ 915,432	\$ 819,497	\$ 871,682	\$ 802,256
Red/Purple Lines	\$ 620,440	\$ 608,097	\$ 701,156	\$ 608,816	\$ 1,015,092	\$ 650,226	\$ 728,383	\$ 652,202	\$ 645,981	\$ 721,060	\$ 660,321	\$ 741,908	\$ 648,538
Green Line	\$ 345,262	\$ 271,877	\$ 294,381	\$ 302,213	\$ 449,117	\$ 318,516	\$ 345,270	\$ 334,772	\$ 331,870	\$ 331,661	\$ 354,058	\$ 366,422	\$ 391,161
Gold Line	\$ 363,886	\$ 283,563	\$ 298,069	\$ 297,634	\$ 438,759	\$ 313,589	\$ 344,331	\$ 343,246	\$ 348,288	\$ 366,248	\$ 338,610	\$ 347,182	\$ 311,868
Totals	\$ 2,172,567	\$ 1,858,931	\$ 2,054,117	\$ 1,987,132	\$ 3,107,202	\$ 2,050,048	\$ 2,297,323	\$ 2,230,262	\$ 2,204,736	\$ 2,334,400	\$ 2,172,486	\$ 2,327,193	\$ 2,153,823

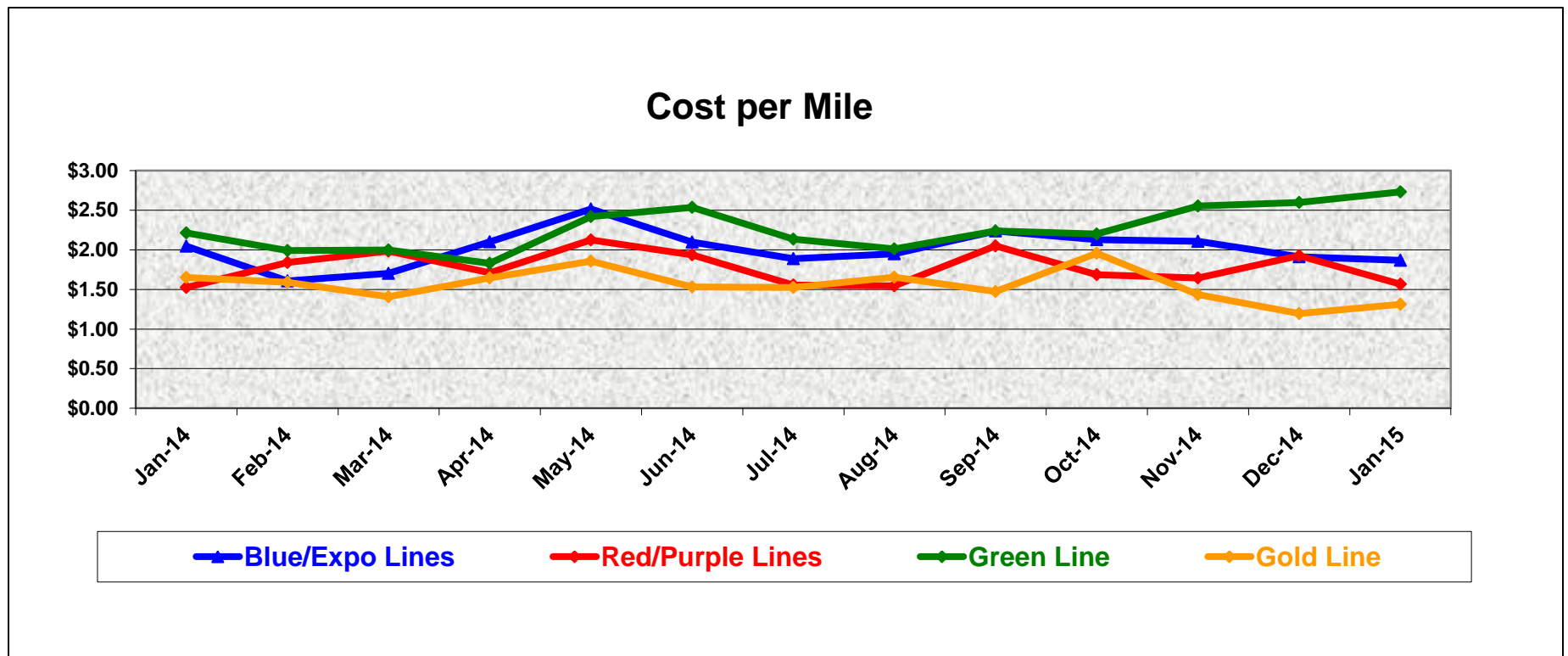
**Material Costs**

Blue/Expo Lines	\$ 556,457	\$ 282,466	\$ 359,845	\$ 570,775	\$ 440,576	\$ 567,257	\$ 355,405	\$ 382,184	\$ 536,100	\$ 500,390	\$ 518,334	\$ 355,729	\$ 433,347
Red/Purple Lines	\$ 357,244	\$ 448,225	\$ 575,495	\$ 437,612	\$ 373,815	\$ 516,934	\$ 247,048	\$ 348,370	\$ 576,230	\$ 349,031	\$ 343,936	\$ 460,076	\$ 334,623
Green Line	\$ 169,759	\$ 150,881	\$ 170,250	\$ 113,979	\$ 111,344	\$ 254,264	\$ 153,001	\$ 133,386	\$ 178,206	\$ 193,176	\$ 214,902	\$ 234,118	\$ 233,318
Gold Line	\$ 189,310	\$ 186,640	\$ 166,216	\$ 224,430	\$ 183,115	\$ 183,869	\$ 160,751	\$ 225,818	\$ 137,883	\$ 274,059	\$ 116,179	\$ 44,498	\$ 130,036
Totals	\$ 1,272,769	\$ 1,068,212	\$ 1,271,807	\$ 1,346,796	\$ 1,108,849	\$ 1,522,323	\$ 916,204	\$ 1,089,759	\$ 1,428,418	\$ 1,316,657	\$ 1,193,351	\$ 1,094,420	\$ 1,131,324

# Cost Per Mile

## January 2014-2015

Cost per mile:	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15
Blue/Expo Lines	\$2.05	\$1.61	\$1.70	\$2.10	\$2.52	\$2.10	\$1.89	\$1.95	\$2.24	\$2.13	\$2.11	\$1.91	\$1.87
Red/Purple Lines	\$1.52	\$1.84	\$1.98	\$1.71	\$2.13	\$1.93	\$1.55	\$1.54	\$2.05	\$1.68	\$1.64	\$1.92	\$1.57
Green Line	\$2.21	\$1.99	\$2.00	\$1.83	\$2.42	\$2.54	\$2.14	\$2.01	\$2.24	\$2.20	\$2.55	\$2.60	\$2.73
Gold Line	\$1.65	\$1.59	\$1.41	\$1.64	\$1.86	\$1.53	\$1.53	\$1.65	\$1.47	\$1.96	\$1.44	\$1.19	\$1.31



# ATU Absences vs. Overtime

## January 2015

ABSENCE TYPE and HOURS	3941 & 3947 Blue & Expo	3942 Red	3943 Green	3944 Gold	Total
AWP-ABSENT W/O PERMISSION	-	-	33	-	33
BER-BEREAVEMENT	40	-	40	24	104
CTO-COMPENSATORY TIME OFF	251	296	188	128	863
CUT-EMPLOYEE LEAVES EARLY	1	-	-	0	1
DSL-DISABILITY LEAVE/LONG	880	16	352	88	1,336
EFH-EMG. FLOAT HOL.	16	64	8	40	128
ETO-EXCUSED TIME OFF	80	61	16	51	207
FMI-FAM IND INJURY	-	176	176	-	352
FML-FAMILY CARE LEAVE	856	532	316	43	1,747
FMS-FAMILY LEAVE SICK	92	140	84	19	335
HLF-HOLIDAY FLOATING	152	168	104	136	560
HNP-HOLIDAY NOT PAID	-	-	24	24	48
HOL-HOLIDAY LEGAL	480	448	120	96	1,144
II-INDUSTRIAL INJURY	-	-	56	-	56
IIR-INDUS INJURY -REOCCUR.	-	176	-	-	176
LC1-LABOR CODE 233	304	279	92	160	835
LTI-OCCPIL/LONGTRM INJ LEAVE	352	-	-	8	360
OWP-OFF WITH PERMISSION	-	4	-	-	4
RTO-REQUESTED TIME OFF-NO PAY	48	-	24	-	72
SCK-SICK PAY	104	252	87	192	635
SCW-SICK WITHOUT PAY	10	18	16	-	44
TAR-TARDY	2	1	1	1	4
VAC-VACATION	904	923	214	360	2,401
<b>Total Absence Hours</b>	<b>4,571</b>	<b>3,555</b>	<b>1,950</b>	<b>1,368</b>	<b>11,444</b>
ATU Number of Work Force (budget)	125	104	46	48	323
Full Work Force hours/month	21,663	18,023	7,972	8,318	55,976
<b>Absence as a % of Work Force</b>	<b>21%</b>	<b>20%</b>	<b>24%</b>	<b>16%</b>	<b>20%</b>

OVERTIME TYPE and HOURS	3941 & 3947 Blue & Expo	3942 Red	3943 Green	3944 Gold	Total
CTB-COMPENSATORY TIME TO BANK	264	181	98	80	622
OTP-PREM OVERTIME	5,708	4,174	2,797	1,524	14,203
WLO-Worked Lunch Overtime	157	221	84	47	509
<b>Total Overtime Hours</b>	<b>6,129</b>	<b>4,576</b>	<b>2,979</b>	<b>1,650</b>	<b>15,334</b>
<b>Overtime as a % of Work Force</b>	<b>28%</b>	<b>25%</b>	<b>37%</b>	<b>20%</b>	<b>27%</b>



**Metro**

Note: Overtime also covers other required activities, including Training, Component Overhaul, and Special Events.