



Rail Fleet Services Monthly Report October 2014



Metro

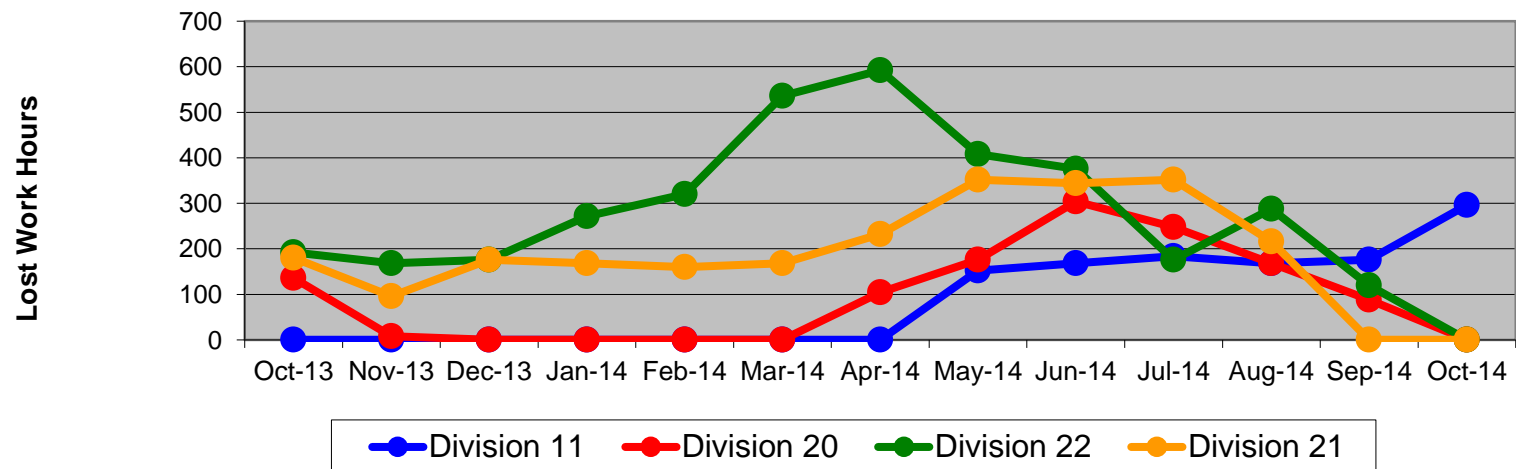
Table of Contents

•	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
•	Growth		
	- RFS Instruction Department Activities	Page	20

Industrial Injuries – Lost Work Hours October 2013-2014

	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	13-Month Period
Division 11	0	0	0	0	0	0	0	152	168	184	168	176	296	1,144
Division 20	136	8	0	0	0	0	104	176	304	248	168	88	0	1,232
Division 22	192	168	176	272	320	536	592	408	376	176	288	120	0	3,624
Division 21	180	96	176	168	160	168	232	352	344	352	216	0	0	2,444
Totals	508	272	352	440	480	704	928	1,088	1,192	960	840	384	296	8,444

Industrial Injuries (lost work hours)



Rail Vehicle Accidents & Major Incidents

October 2013-2014

Repair Costs	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14
Blue/Expo Line	\$11,475	\$13,838	\$0	\$8,370	\$15,618	\$13,690	\$72,961	\$9,463	\$9,964	\$1,528	\$207	\$42,690	\$12,945
Red/Purple Line	\$0	\$0	\$0	\$0	\$0	\$356	\$0	\$0	\$0	\$0	\$0	\$0	\$4,194
Green Line	\$0	\$0	\$1,008	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$267
Gold Line	\$0	\$0	\$0	\$0	\$0	\$714	\$0	\$0	\$5,860	\$50,059	\$1,669	\$0	\$0
Totals	\$11,475	\$13,838	\$1,008	\$8,370	\$15,618	\$14,760	\$72,961	\$9,463	\$15,824	\$51,587	\$1,876	\$42,690	\$17,406

Rail Vehicle Accident Costs - October 2014				
Date	Incident #	Problem Code	Incident Description	Repair Cost
Metro Blue/Expo Line				
10/18/14	2520522	Train vs. Vehicle	A 10-73 was reported at Track #4, Southbound, Raymond Avenue.	\$ 9,179
10/18/14	2520533	Train vs. Pedestrian	A 10-72 was reported at Track #3, Northbound, Arlington Grade Crossing.	\$ 189
10/30/14	2524548	Train vs. Vehicle	A 10-73 was reported at Track #1, Northbound, Grand Avenue.	\$ 3,577
Total				\$ 12,945
Metro Red Line				
10/29/14	2524025	Derailement	A 10-75 was reported, Hi Rail Vehicle has detailed between Universal City and Hortense.	\$ 4,194
Total				\$ 4,194
Metro Green Line				
10/12/14	2517854	Train vs. Pedestrian	A 10-72 was reported at Track #1, Vermont Station.	\$ 267
Total				\$ 267
Grand Total				\$ 17,406
(10-71) = Train vs. Object, (10-72) = Train vs. Pedestrian, (10-73) = Train vs. Vehicle (10-74) = Train vs. MTA Vehicle, (10-75) = Derailement				

Note: 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 October 2014

October 2014 - 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	67	112%
Late Pullouts: 0*			
Monthly Mileage:	665,400		

Red/Purple Line Fleet Size: 104

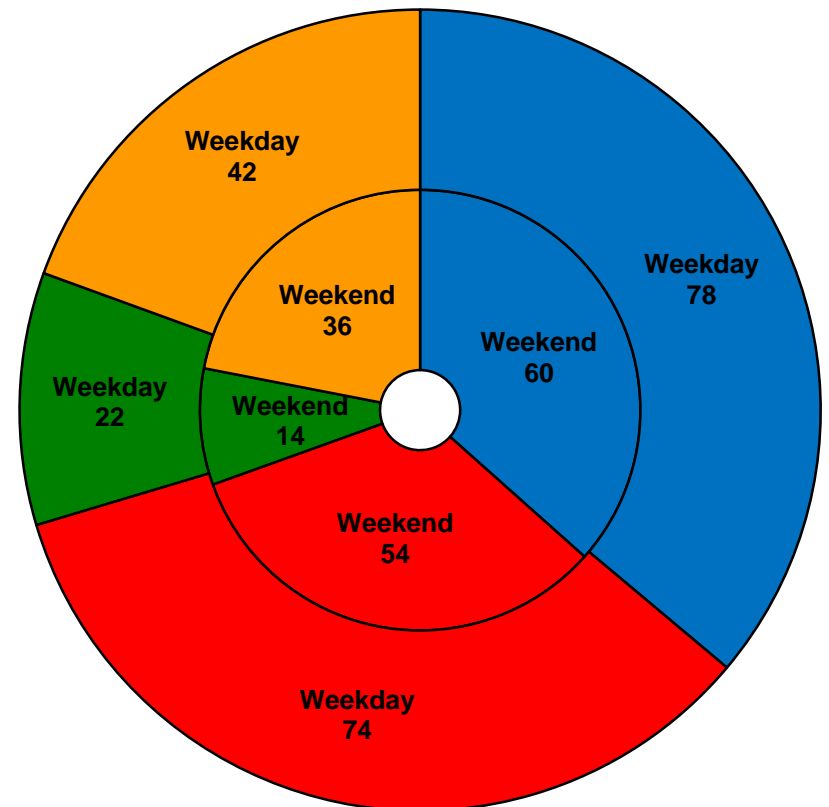
<u>Pull Out</u>	<u>Vehicles Required</u>	<u>Average Available</u>	<u>% Up (Down)</u>
Weekday:	74	80	108%
Weekend:	54	70	130%
Late Pullouts: 0*			
Monthly Mileage:	635,232		

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	16	114%
Late Pullouts: 0*			
Monthly Mileage:	238,631		

Gold Line Fleet Size: 50

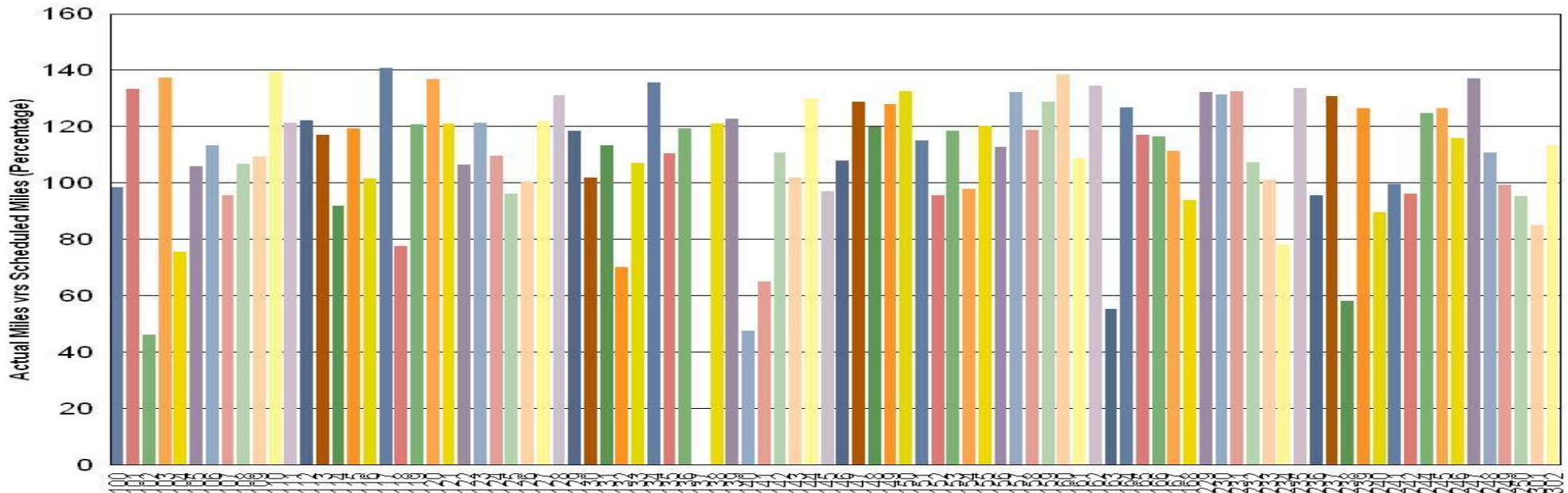
<u>Pull Out</u>	<u>Vehicles Required</u>	<u>Average Available</u>	<u>% Up (Down)</u>
Weekday:	42	43	102%
Weekend:	36	42	117%
Late Pullouts: 0*			
Monthly Mileage:	327,248		



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

Vehicle Utilization October 2014

Metro Blue/Expo Line



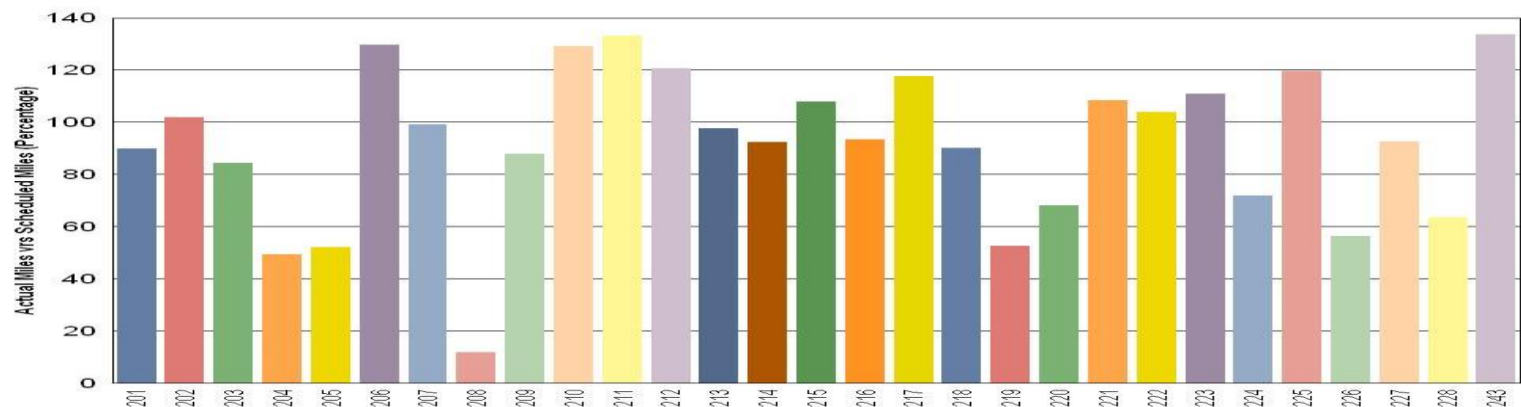
Blue/Expo Line:

Car # 137 Out of service due to major accident repair

Metro Green Line

Green Line:

Car # 208 On hold for propulsion troubleshooting



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



Vehicle Utilization October 2014

Red/Purple Line:

The following cars were out of service due to:

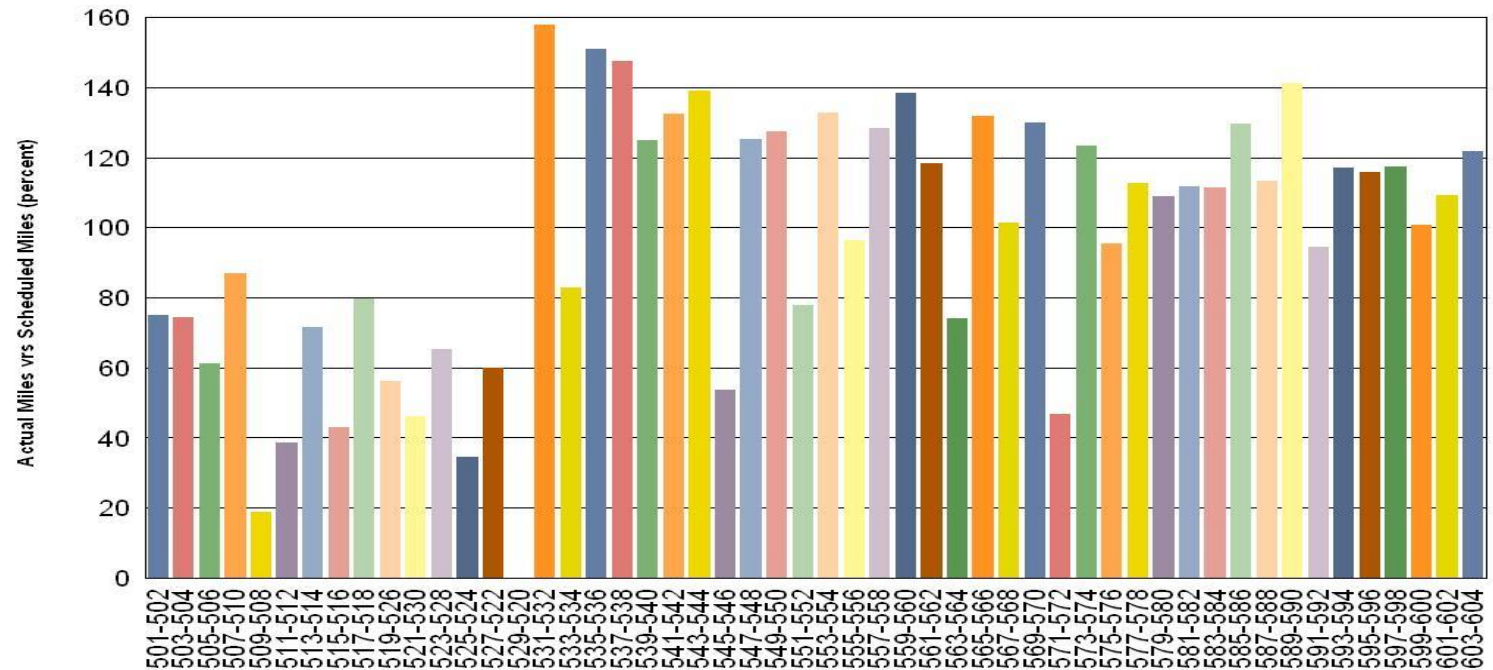
Car # 509-508 Door and HVAC project

Car # 511-512 Propulsion Fault

Car # 525-524 Propulsion Fault and Truck Motor Replacement

Car # 529-520 Truck Motor Mount Modification

Metro Red/Purple Line

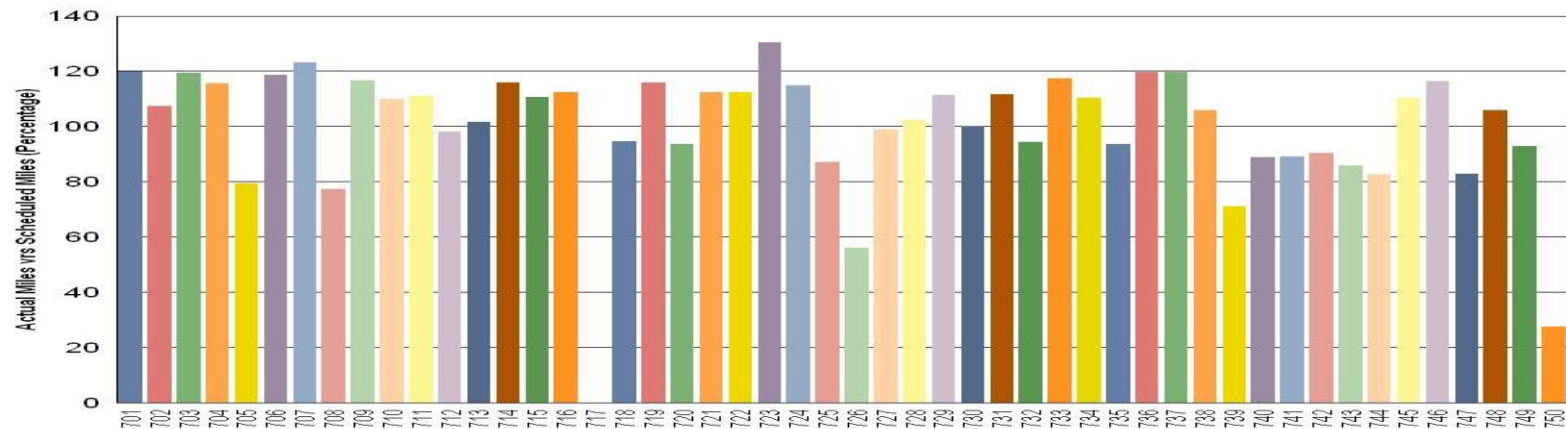


Gold Line:

Car # 717 Out of service for replacement of burnt wiring

Car # 750 Out of service for burnt/melted HVAC power wiring

Metro Gold Line



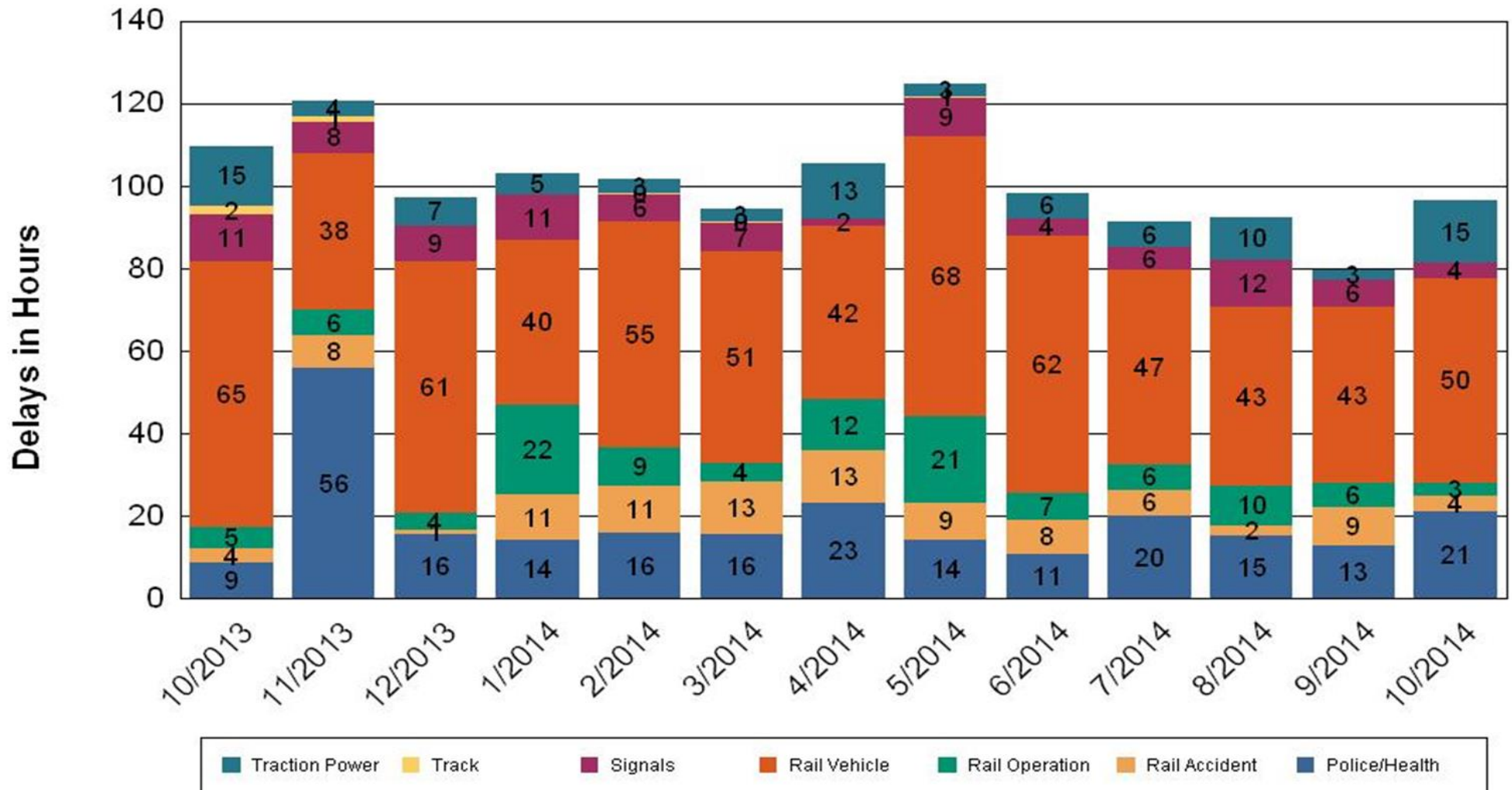
•Percentage includes an average 4% mileage deduction for yard mileage and vehicle testing.



All Train Delays (Hours) October 2013-2014

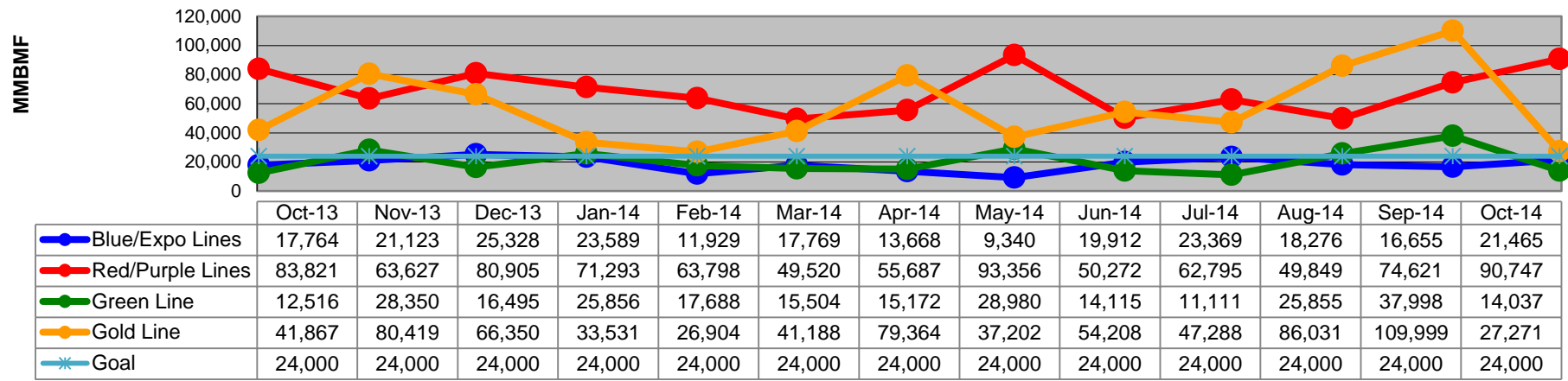
All Train Delays

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

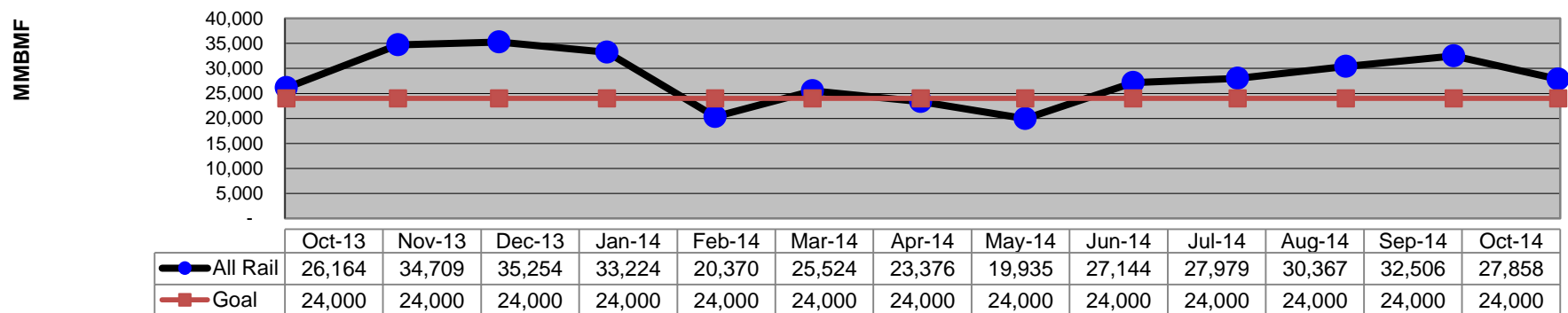


Mean Miles Between Failures (Major) October 2013-2014

Mean Miles Between Major Failures (by line)

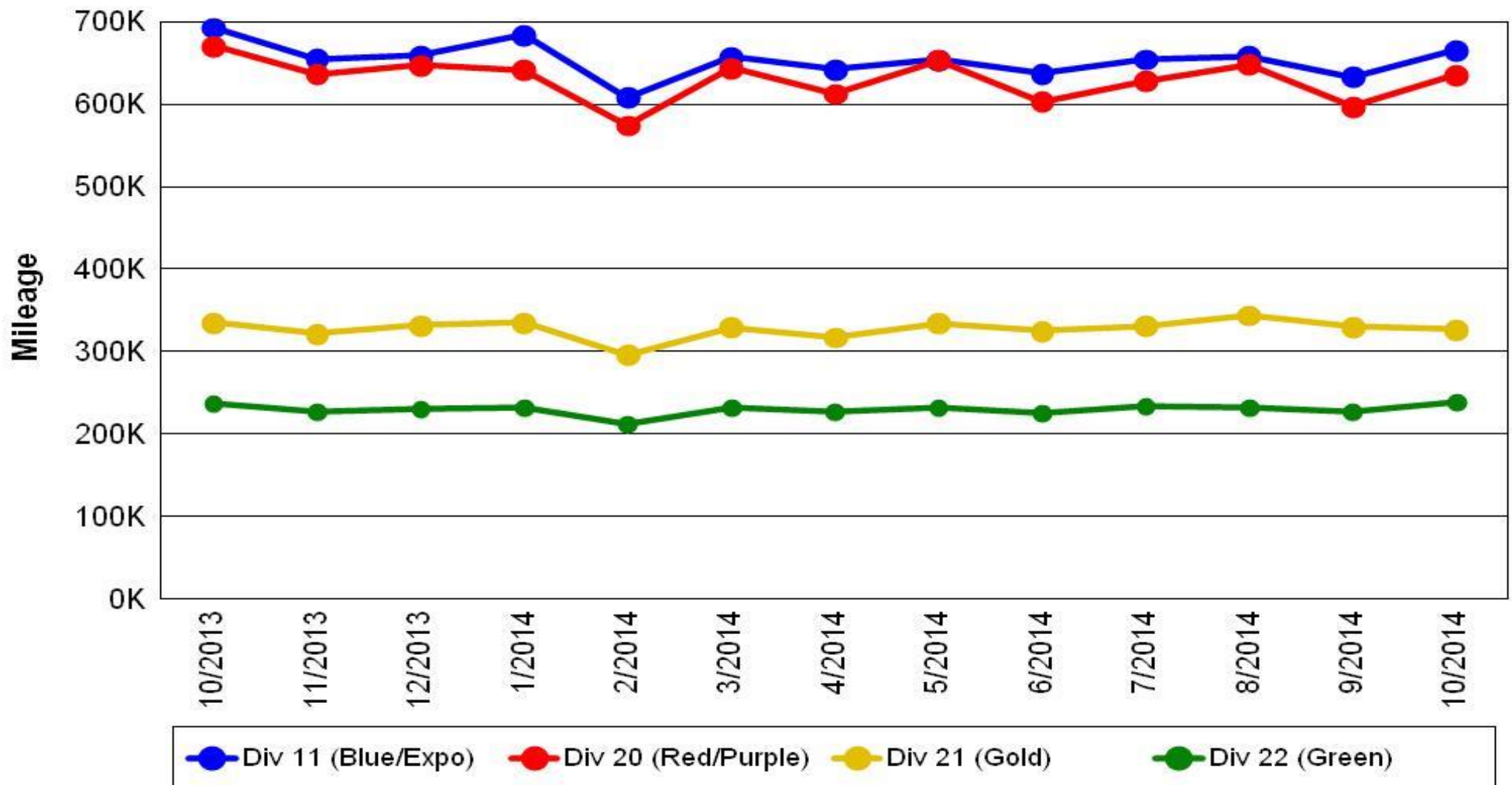


Mean Miles Between Major Failures (all)



Mileage Between Data Range (by month) October 2013-2014

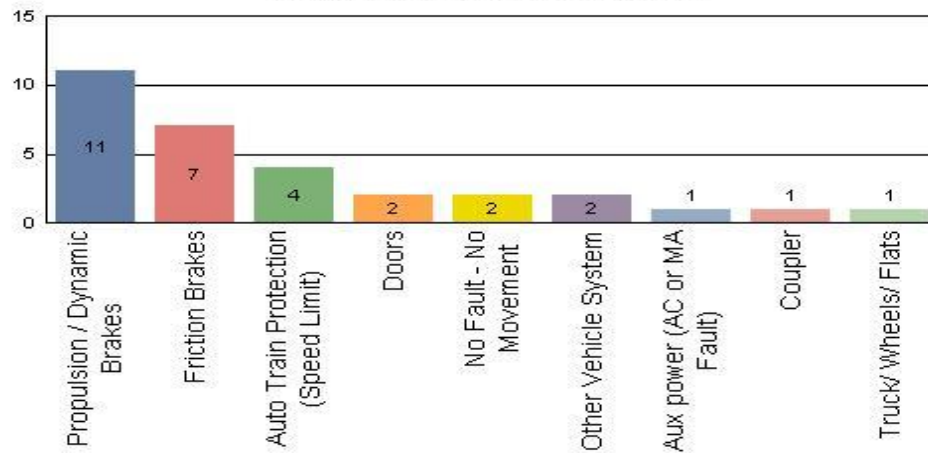
Rail Division Monthly Mileage



Top Incident Categories October 2014

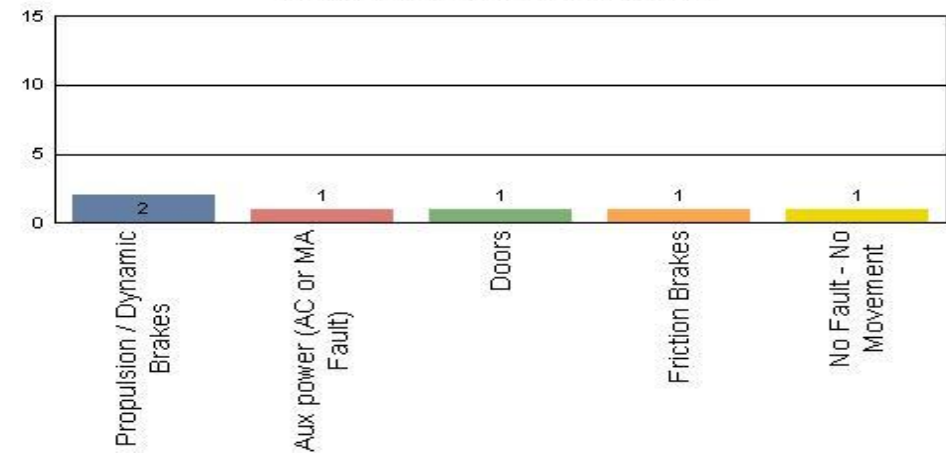
Metro Blue/Expo Line

Top Incident Categories



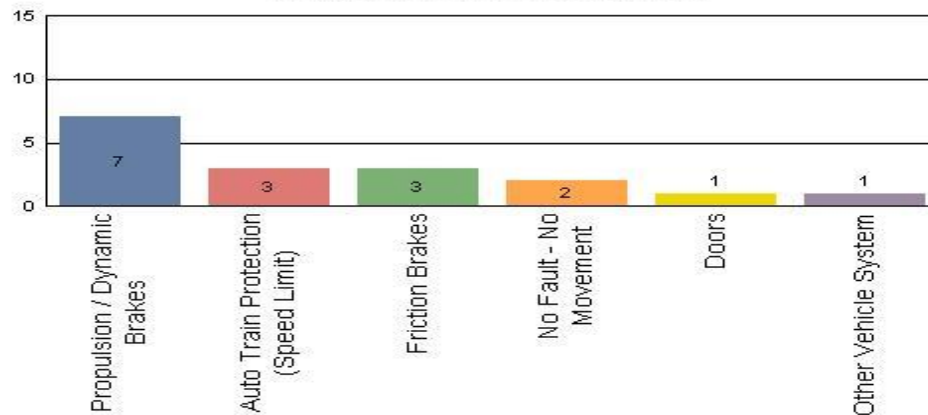
Metro Red/Purple Line

Top Incident Categories



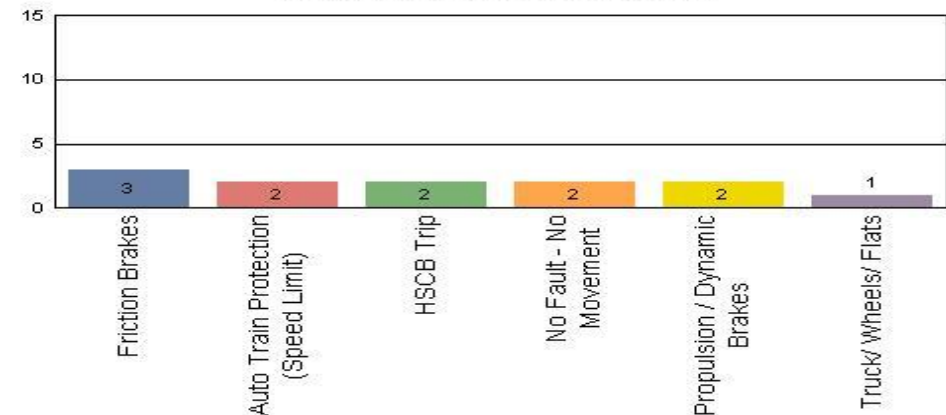
Metro Green Line

Top Incident Categories



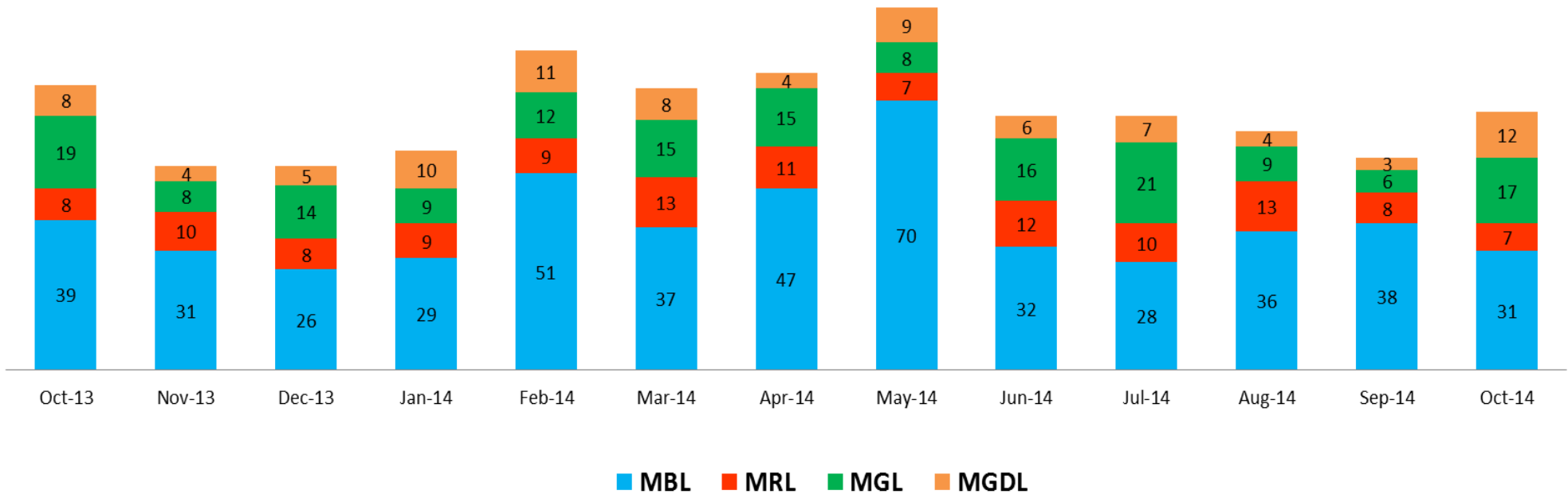
Metro Gold Line

Top Incident Categories



Major Incidents October 2013-2014

Numbers of Major System Failures (by Line)

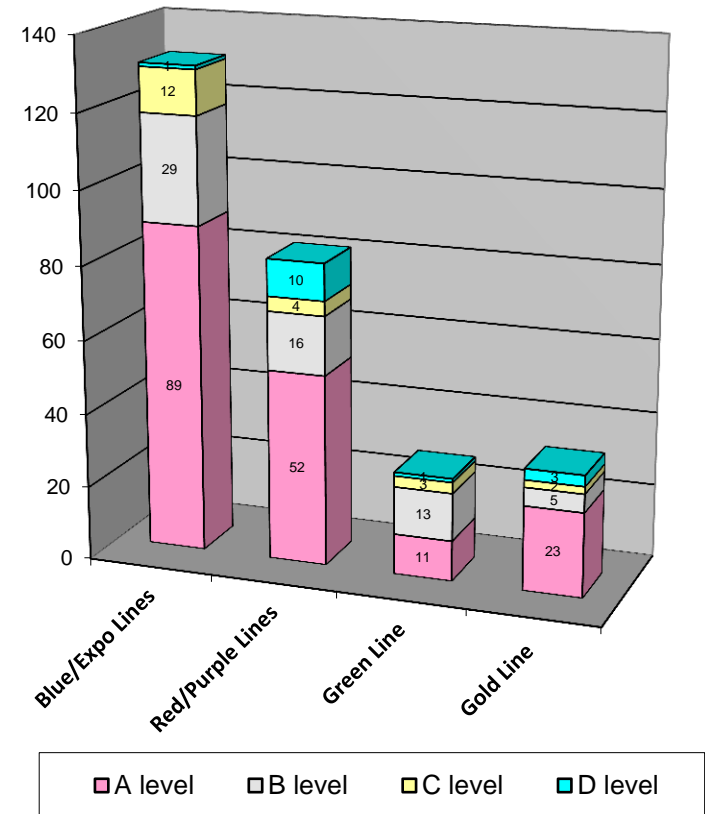


Preventive Maintenance Compliance October 2013-2014

PM Compliance	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14
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	96%	92%	100%	100%	100%	100%	100%	100%	97%*	100%	100%	100%	100%
Gold Line	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

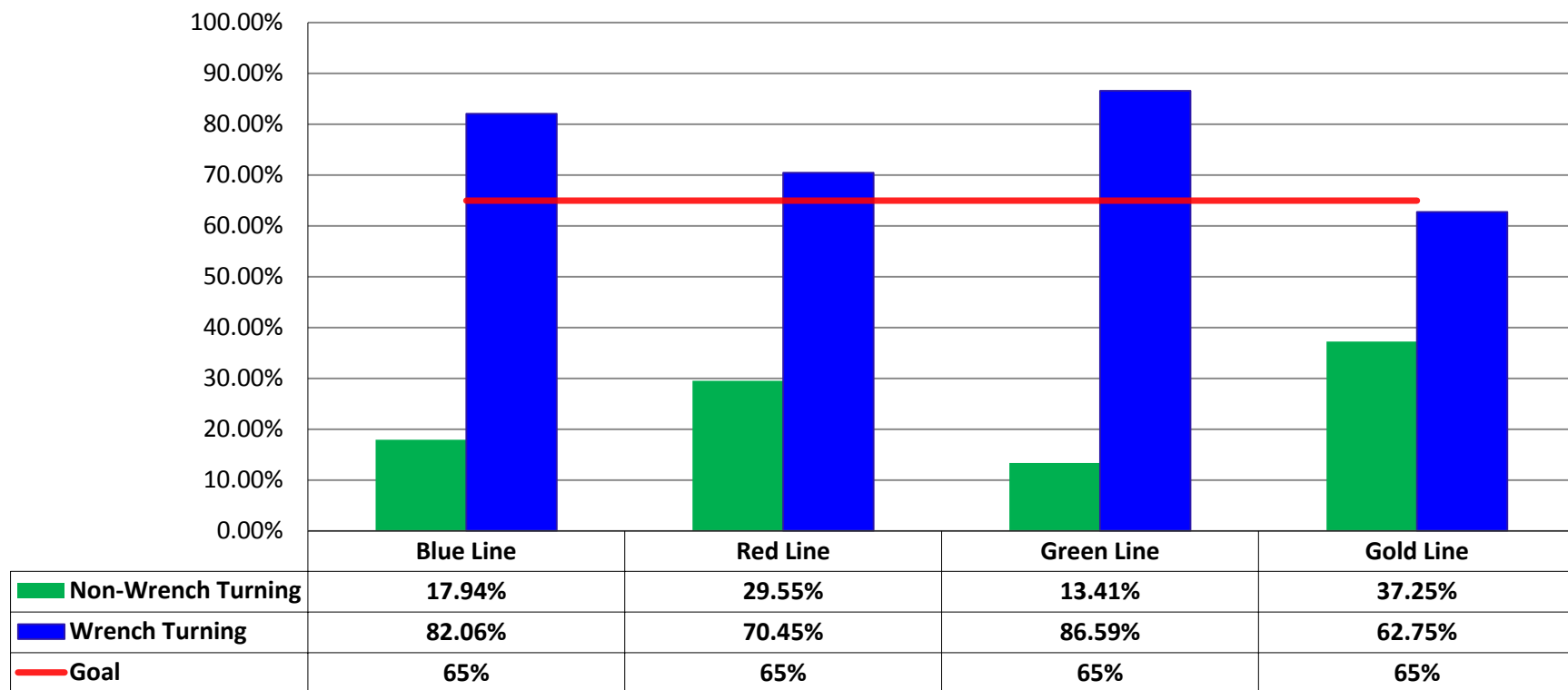
Number of Preventive Maintenance Inspections - October 2014					
Line	A level	B level	C level	D level	Totals
Blue/Expo Lines	89	29	12	1	131
Red/Purple Lines	52	16	4	10	82
Green Line	11	13	3	1	28
Gold Line	23	5	2	3	33
Totals:	175	63	21	15	274

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 October 2014

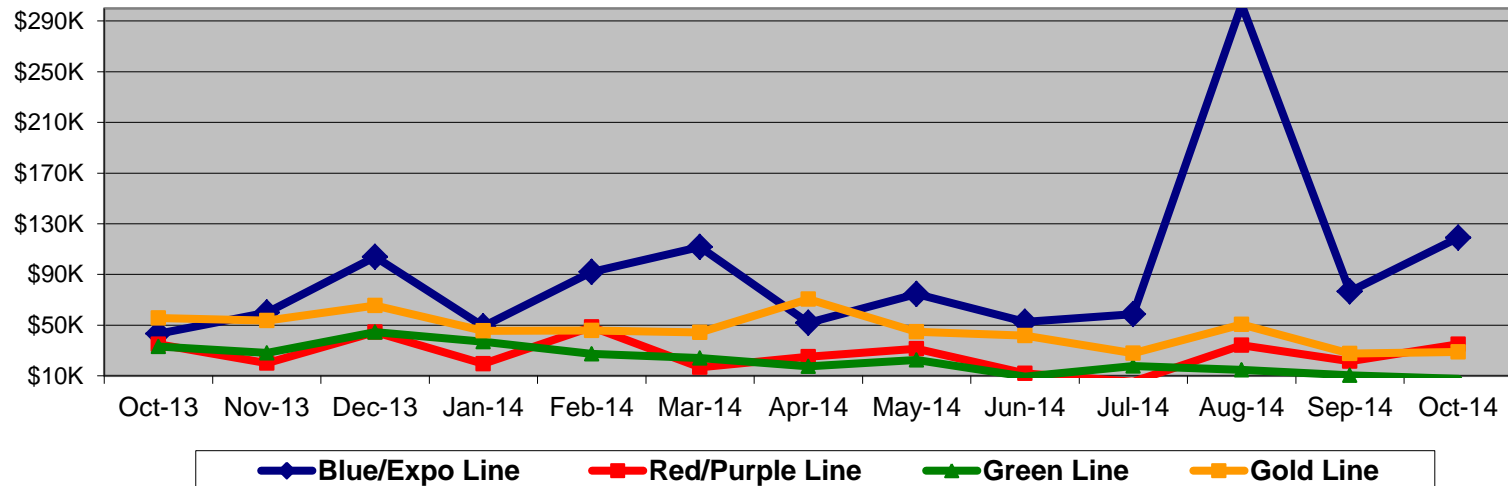
RFS - Wrench Turning October 2014



Vandalism & Graffiti Report

October 2013-2014

	Graffiti Costs													
	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	13-Month Period
Blue/Expo Line	\$43K	\$60K	\$104K	\$49K	\$92K	\$112K	\$52K	\$75K	\$53K	\$59K	\$303K	\$77K	\$119K	\$1196K
Red/Purple Line	\$35K	\$20K	\$44K	\$19K	\$49K	\$17K	\$25K	\$32K	\$12K	\$5K	\$34K	\$22K	\$35K	\$348K
Green Line	\$33K	\$28K	\$44K	\$37K	\$27K	\$24K	\$17K	\$22K	\$9K	\$18K	\$15K	\$10K	\$8K	\$294K
Gold Line	\$56K	\$54K	\$66K	\$46K	\$46K	\$44K	\$71K	\$45K	\$42K	\$28K	\$51K	\$28K	\$29K	\$602K
Totals:	\$167K	\$162K	\$258K	\$151K	\$214K	\$197K	\$165K	\$173K	\$116K	\$110K	\$402K	\$136K	\$190K	\$2,441K



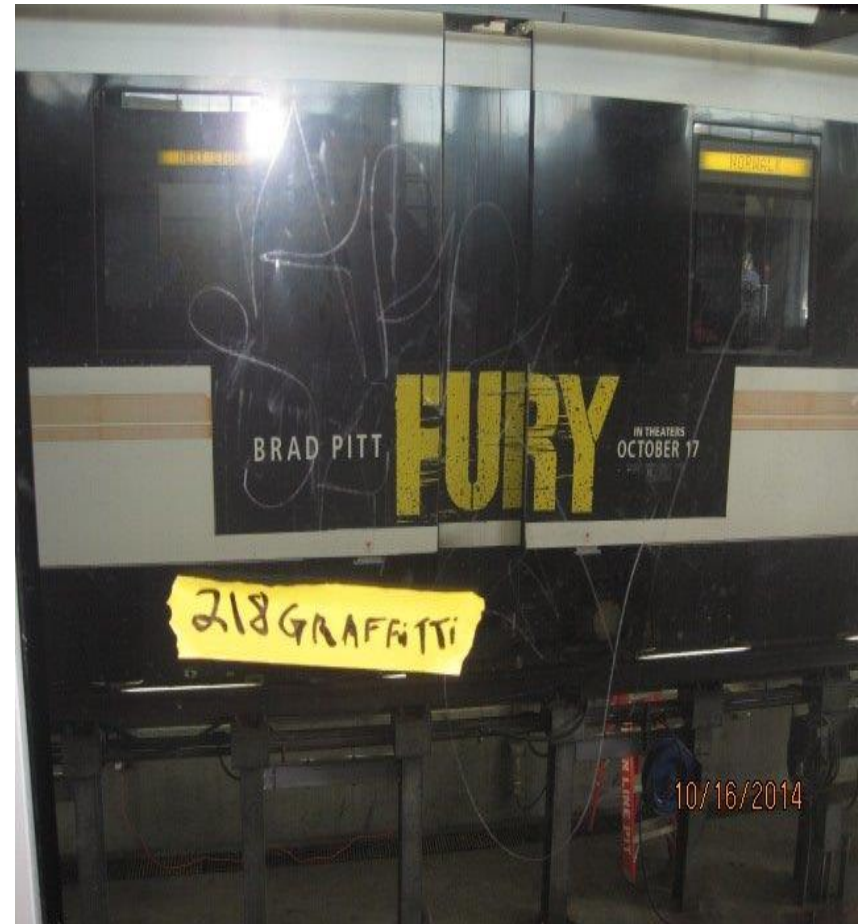
October 2014 Vandalism & Graffiti - All Rail				
	Qty	Labor	Materials	Totals
Windows Replaced	197	\$ 90,468	\$ 18,487	\$ 108,955
Vandal Shields Replaced	379	\$ 11,961	\$ 4,805	\$ 16,766
Seats Cleaned	522	\$ 1,916	\$ -	\$ 1,916
Seats Inserts Replaced	271	\$ 8,537	\$ 11,602	\$ 20,139
Graffiti Removal - Other	901	\$ 27,340	\$ 1,000	\$ 28,340
Repainting Panels	119	\$ 7,497	\$ 6,686	\$ 14,183
Totals	2,389	\$ 147,719	\$ 42,580	\$ 190,299

Graffiti Pictures October 2014

Blue Line



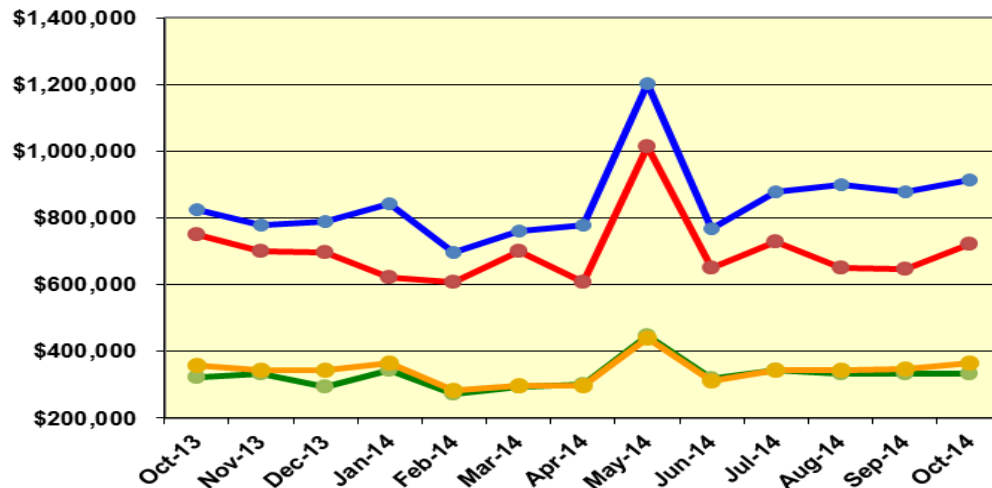
Green Line



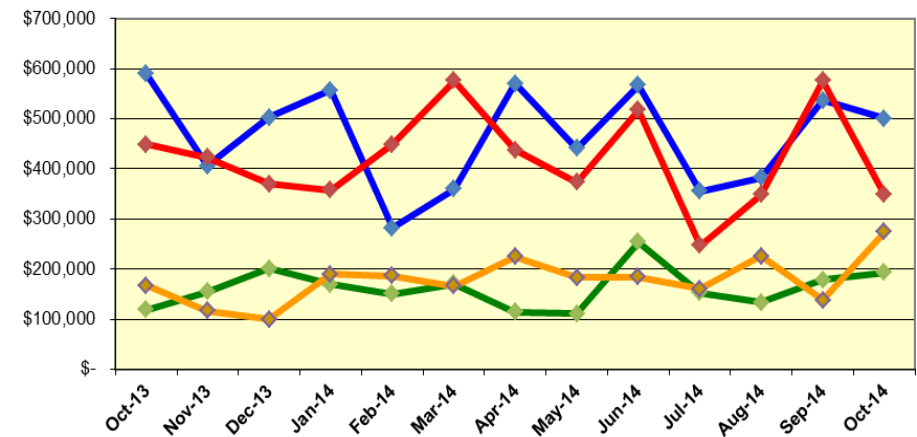
Labor and Material Costs

October 2013-2014

Labor Costs



Material Costs



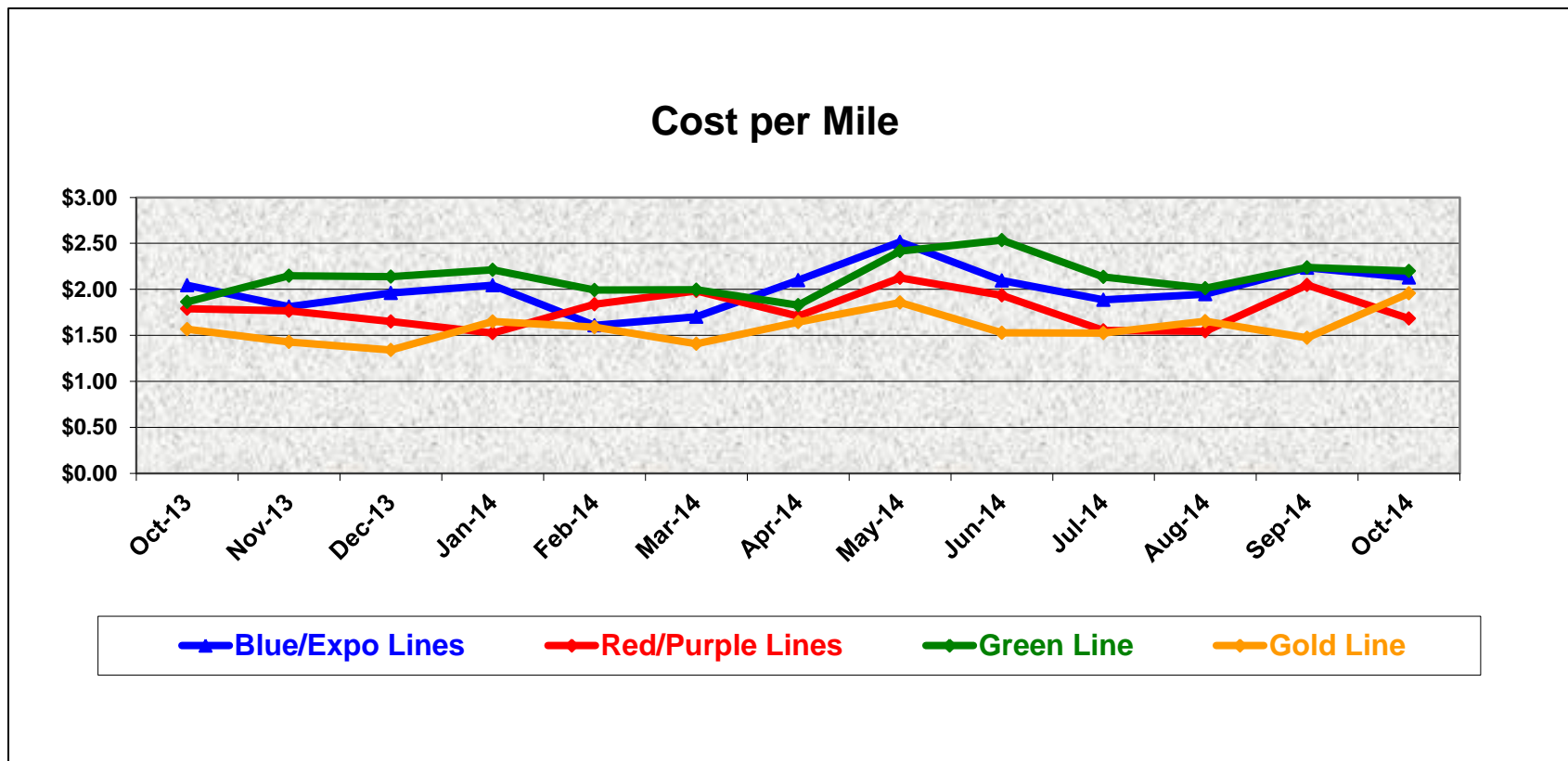
	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14*	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14
LABOR COSTS													
Blue/Expo Lines	\$ 826,769	\$ 780,678	\$ 788,589	\$ 842,979	\$ 695,394	\$ 760,511	\$ 778,469	\$ 1,204,234	\$ 767,717	\$ 879,339	\$ 900,043	\$ 878,598	\$ 915,432
Red/Purple Lines	\$ 750,452	\$ 700,975	\$ 697,759	\$ 620,440	\$ 608,097	\$ 701,156	\$ 608,816	\$ 1,015,092	\$ 650,226	\$ 728,383	\$ 652,202	\$ 645,981	\$ 721,060
Green Line	\$ 323,749	\$ 332,737	\$ 292,482	\$ 345,262	\$ 271,877	\$ 294,381	\$ 302,213	\$ 449,117	\$ 318,516	\$ 345,270	\$ 334,772	\$ 331,870	\$ 331,661
Gold Line	\$ 357,408	\$ 343,700	\$ 345,170	\$ 363,886	\$ 283,563	\$ 298,069	\$ 297,634	\$ 438,759	\$ 313,589	\$ 344,331	\$ 343,246	\$ 348,288	\$ 366,248
Totals	\$ 2,258,378	\$ 2,158,090	\$ 2,123,999	\$ 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

*ATU Contract for pay increase was approved by the Board and ATU staff got retro pay in May 2014.

	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14
MATERIAL COSTS													
Blue/Expo Lines	\$ 589,324	\$ 406,032	\$ 502,761	\$ 556,457	\$ 282,466	\$ 359,845	\$ 570,775	\$ 440,576	\$ 567,257	\$ 355,405	\$ 382,184	\$ 536,100	\$ 500,390
Red/Purple Lines	\$ 449,033	\$ 422,849	\$ 369,819	\$ 357,244	\$ 448,225	\$ 575,495	\$ 437,612	\$ 373,815	\$ 516,934	\$ 247,048	\$ 348,370	\$ 576,230	\$ 349,031
Green Line	\$ 119,411	\$ 154,582	\$ 201,035	\$ 169,759	\$ 150,881	\$ 170,250	\$ 113,979	\$ 111,344	\$ 254,264	\$ 153,001	\$ 133,386	\$ 178,206	\$ 193,176
Gold Line	\$ 167,128	\$ 116,167	\$ 99,267	\$ 189,310	\$ 186,640	\$ 166,216	\$ 224,430	\$ 183,115	\$ 183,869	\$ 160,751	\$ 225,818	\$ 137,883	\$ 274,059
Totals	\$ 1,324,896	\$ 1,099,631	\$ 1,172,883	\$ 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

Cost Per Mile October 2013-2014

Cost per mile:	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14
Blue/Expo Lines	\$2.04	\$1.81	\$1.96	\$2.05	\$1.61	\$1.70	\$2.10	\$2.52	\$2.10	\$1.89	\$1.95	\$2.24	\$2.13
Red/Purple Lines	\$1.79	\$1.77	\$1.65	\$1.52	\$1.84	\$1.98	\$1.71	\$2.13	\$1.93	\$1.55	\$1.54	\$2.05	\$1.68
Green Line	\$1.86	\$2.15	\$2.14	\$2.21	\$1.99	\$2.00	\$1.83	\$2.42	\$2.54	\$2.14	\$2.01	\$2.24	\$2.20
Gold Line	\$1.57	\$1.43	\$1.34	\$1.65	\$1.59	\$1.41	\$1.64	\$1.86	\$1.53	\$1.53	\$1.65	\$1.47	\$1.96



ATU Absences vs. Overtime

October 2014

ABSENCE TYPE and HOURS	3941 & 3947 Blue & Expo	3942 Red	3943 Green	3944 Gold	Total
AWP-ABSENT W/O PERMISSION	-	-	-	8	8
BER-BEREAVEMENT	-	40	-	-	40
CTO-COMPENSATORY TIME OFF	191	232	116	104	643
CUT-EMPLOYEE LEAVES EARLY	15	0	-	-	15
DSL-DISABILITY LEAVE/LONG	704	88	296	-	1,088
EFH-EMG. FLOAT HOL.	8	24	16	32	80
ETO-EXCUSED TIME OFF	81	31	9	69	190
FML-FAMILY CARE LEAVE	492	347	400	40	1,279
FMS-FAMILY LEAVE SICK	96	140	32	16	284
HLF-HOLIDAY FLOATING	336	344	124	176	980
JUR-JURY DUTY	8	-	56	-	64
LC1-LABOR CODE 233	168	119	80	96	463
LTI-OCCPIL/LONGTRM INJ LEAVE	296	-	-	-	296
MLN-MILITARY ABSENCE-UNPAID	16	-	-	-	16
OWP-OFF WITH PERMISSION	-	90	-	-	90
RTO-REQUESTED TIME OFF-NO PAY	97	-	5	-	102
SCK-SICK PAY	315	162	160	96	733
SCW-SICK WITHOUT PAY	98	8	22	8	136
SPN-SCHOOL PARTNER NOT PAID	-	-	-	12	12
SUS-DISCIPLINARY SUSPENSION	-	-	79	-	79
TAR-TARDY	6	1	1	1	9
UNP-UNION BUS PAID	-	-	4	-	4
VAC-VACATION	948	1,084	314	624	2,970
Total Absence Hours	3,874	2,711	1,714	1,282	9,582
ATU Number of Work Force (assigned)	134	107	49	49	339
Full Work Force hours/month	23,222	18,543	8,492	8,492	58,749
Absence as a % of Work Force	17%	15%	20%	15%	16%

OVERTIME TYPE and HOURS	3941 & 3947 Blue & Expo	3942 Red	3943 Green	3944 Gold	Total
CTB-COMPENSATORY TIME TO BANK	145	126	19	48	338
OTP-PREM OVERTIME	5,723	4,369	1,668	1,375	13,136
WLO-Worked Lunch Overtime	196	192	127	62	577
Total Overtime Hours	6,064	4,688	1,814	1,485	14,051
Overtime as a % of Work Force	26%	25%	21%	17%	24%

RFS Instruction Department Activities

October 2014

Training classes completed during the month of October 2014

Description	Course Hours	Student Count	Training Hours
Blue & Expo Line Training - (P865/2020 & P2000 LRV):			
RFS 865/2020 LIGHTING & DEST	12	5	60
RFS 865/2020 PANTOGRAPH	8	5	40
RFS 865/2020 TRUCKS	24	5	120
RFS 865/2020 HVAC SYSTEM	64	5	320
RFS 2-WEEK RAIL INTRODUCTION	80	3	240
REFRIGERANT RECOVERY SYSTEMS (608)	16	4	64

Total Blue Line Training (Hours): 844

Green Line Training (P2000 LRVs):			
RFS SIEMENS MAINLINE DUTY, DEAD TOW AND VEHICLE RECOVERY (HA)	24	3	72
RFS SIEMENS 2000 DOOR CONTROLS	40	3	120
RFS SIEMENS 2000 HVAC	48	3	144
REFRIGERANT RECOVERY SYSTEMS (608)	16	3	48

Total Green Line Training (Hours): 336

Total RFS Instruction for the month of October 2014 (Hours): 1,180

Other Instruction Activities

Instructor Vacation and Holiday	64
A650 Curriculum, Administrative, and Technical Support	144
P865/P2020 Curriculum, Administrative, and Technical Support	80
P2000 Curriculum, Administrative, and Technical Support	24
P2550 Curriculum, Administrative, and Technical Support	160
LATTC Curriculum Development (KSME)	120

Total Other Instruction Activities 592

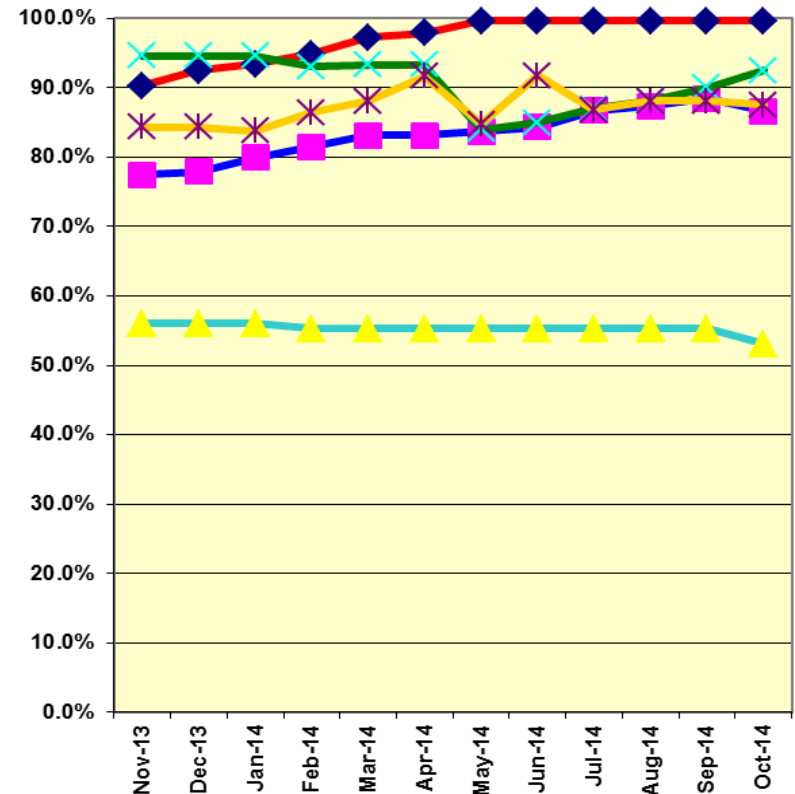
Core Vehicle Training Completed: BLUE RED GREEN GOLD

Percentage of core vehicle training complete: 86.6% 99.6% 92.5% 87.5%

Siemens P2000 training complete: 53.1% N/A N/A N/A

Average Specialist Rail Experience Level in Years: 12.0 11.0 10.0 9.1

Core Training Completed



Variations caused by new hires, employee transfers, & training completed