



Rail Fleet Services Monthly Report December 2013



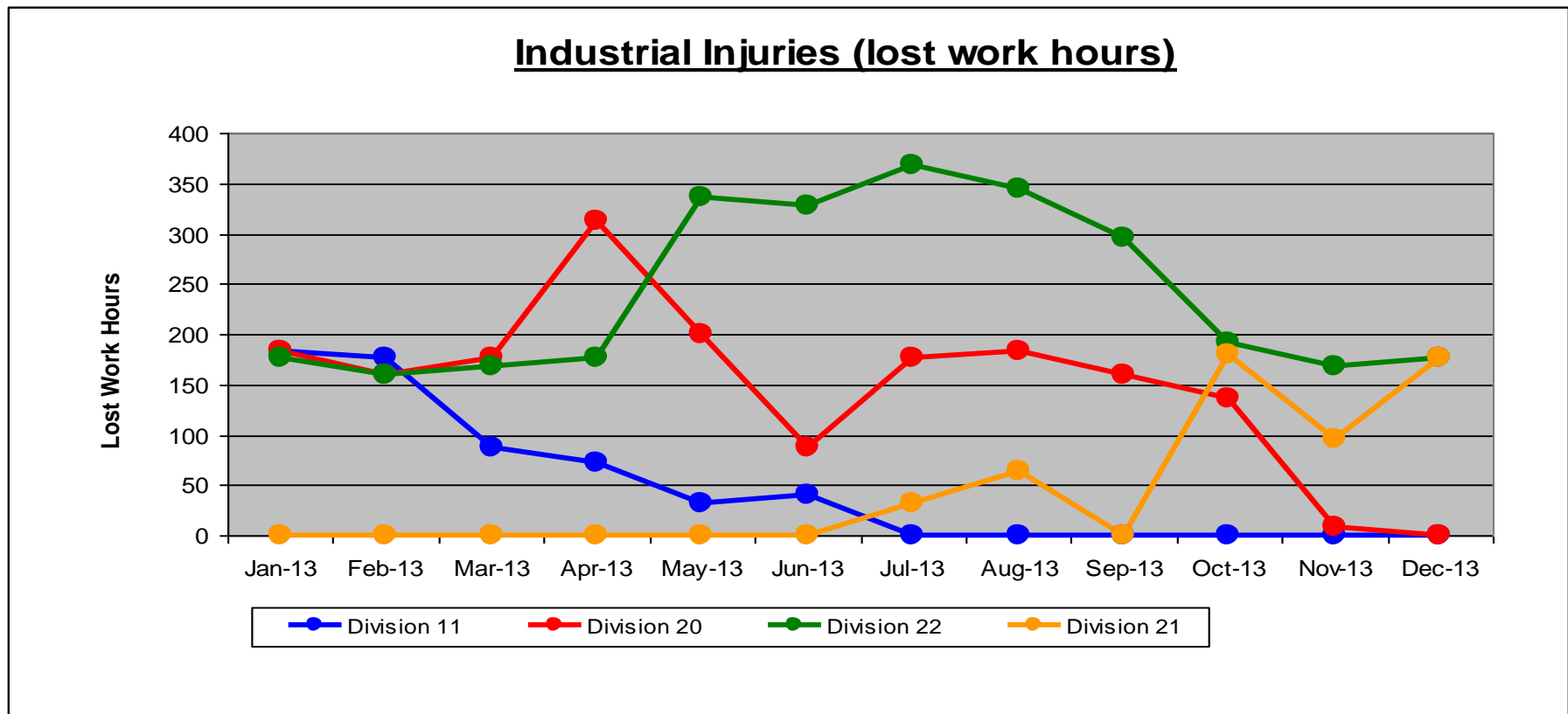
Metro

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Industrial Injuries – Lost Work Hours December 2013

	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	12-Month Period
Division 11	184	176	88	72	32	40	0	0	0	0	0	0	592
Division 20	184	160	176	312	200	88	176	184	160	136	8	0	1,784
Division 22	176	160	168	176	336	328	368	344	296	192	168	176	2,888
Division 21	0	0	0	0	0	0	32	64	0	180	96	176	548
Totals	544	496	432	560	568	456	576	592	456	508	272	352	5,812



Rail Vehicle Accidents & Major Incidents

December 2013

Repair Costs	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	12-Month Period
Blue/Expo Line	\$18,740	\$3,288	\$2,959	\$237,017	\$11,700	\$4,926	\$14,951	\$2,338	\$3,700	\$11,475	\$13,838	\$0	\$324,932
Red/Purple Line	\$2,244	\$0	\$0	\$4,165	\$0	\$0	\$0	\$1,358	\$0	\$0	\$0	\$0	\$7,767
Green Line	\$202	\$126	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,008	\$1,336
Gold Line	\$176	\$0	\$0	\$0	\$261	\$8,220	\$0	\$537	\$0	\$0	\$0	\$0	\$9,194
Totals	\$21,362	\$3,414	\$2,959	\$241,182	\$11,961	\$13,146	\$14,951	\$4,233	\$3,700	\$11,475	\$13,838	\$1,008	\$343,229

Rail Vehicle Accident Costs - December 2013				
Date	Incident #	Problem Code	Incident Description	Cost
Metro Expo				
12/13/13	2398480	Train vs. Object	A 10-71 was reported; skateboard was thrown under 244A Train 121, T 357, Crenshaw, Track 3, North.	\$ -
Total				\$ -
Metro Green Line				
12/29/13	2403830	Train vs. Object	A 10-71 was reported; Test train # 71 made contact with trash can on track # 1 at Lakewood Station.	\$ 1,008
Total				\$ 1,008
Grand Total				\$ 1,008
(10-71) = Train vs. Object, (10-72) = Train vs. Pedestrian, (10-73) = Train vs. Vehicle (10-74) = Train vs. MTA Vehicle, (10-75) = Derailment				

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 December 2013

Blue/Expo Line Fleet Size: 92

<u>Pull Out</u>	<u>Vehicles Required</u>	<u>Average Available</u>	<u>% Up (Down)</u>
Weekday:	78	79	101%
Weekend:	60	64	107%
Late Pullouts: 1*			
Monthly Mileage:	658,528		

Red/Purple Line Fleet Size: 104

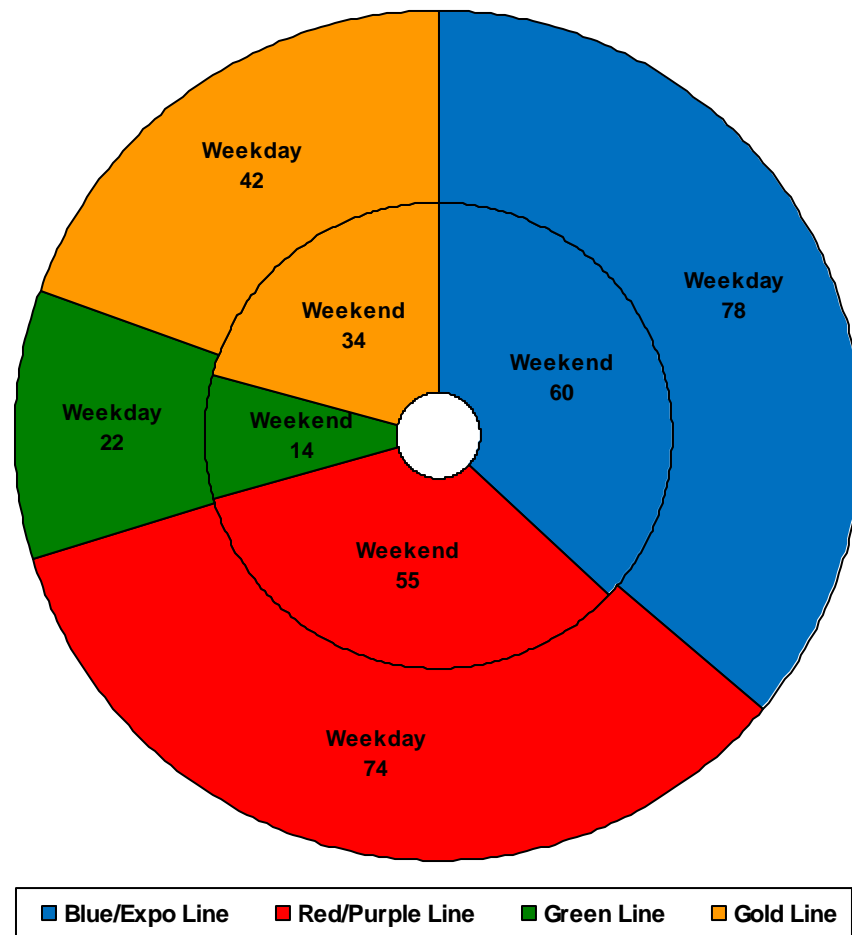
<u>Pull Out</u>	<u>Vehicles Required</u>	<u>Average Available</u>	<u>% Up (Down)</u>
Weekday:	74	80	108%
Weekend:	55	69	125%
Late Pullouts: 0*			
Monthly Mileage:	647,240		

Green Line Fleet Size: 29

<u>Pull Out</u>	<u>Vehicles Required</u>	<u>Average Available</u>	<u>% Up (Down)</u>
Weekday:	22	23	105%
Weekend:	14	18	129%
Late Pullouts: 0*			
Monthly Mileage:	230,934		

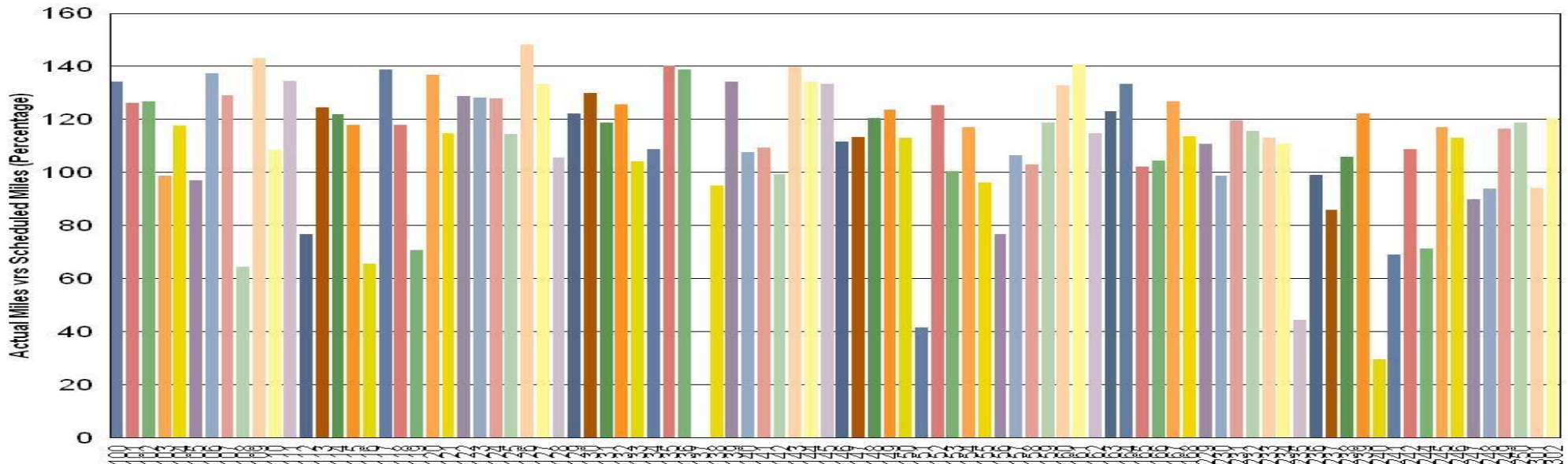
Gold Line Fleet Size: 50

<u>Pull Out</u>	<u>Vehicles Required</u>	<u>Average Available</u>	<u>% Up (Down)</u>
Weekday:	42	43	102%
Weekend:**	34	39	115%
Late Pullouts: 0*			
Monthly Mileage:	331,748		



Vehicle Utilization December 2013

Metro Blue/Expo Line



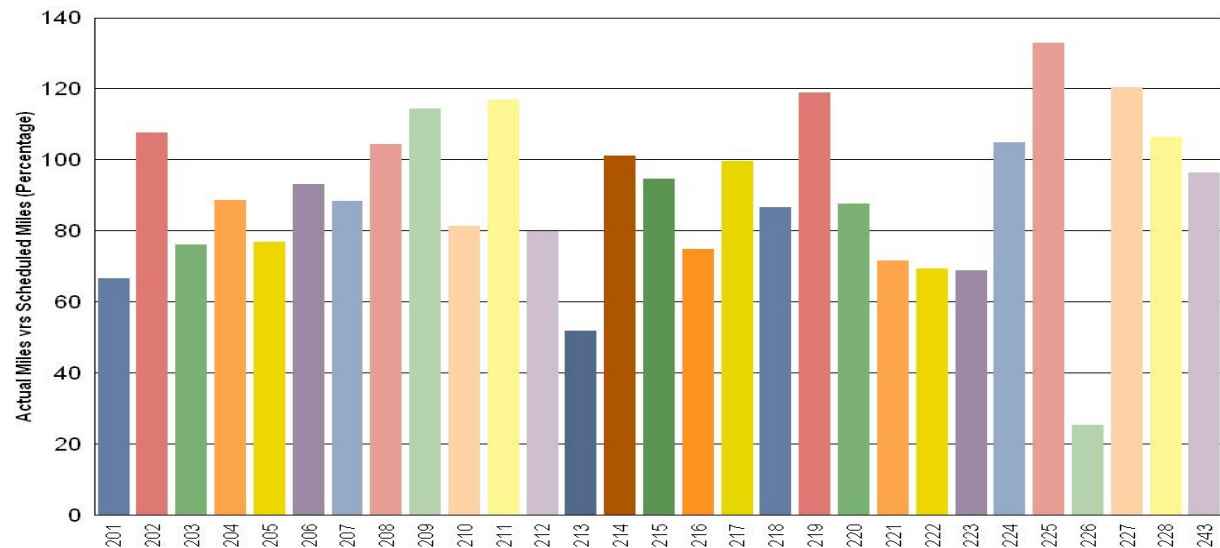
Blue/Expo Line:

Car # 137 Out of service for major accident repair.

Car # 240 Out of service for major inspection and unscheduled troubleshooting and repairs.

Green Line:

Car # 226 Out of service for graffiti abatement and replacement of one broken window.



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

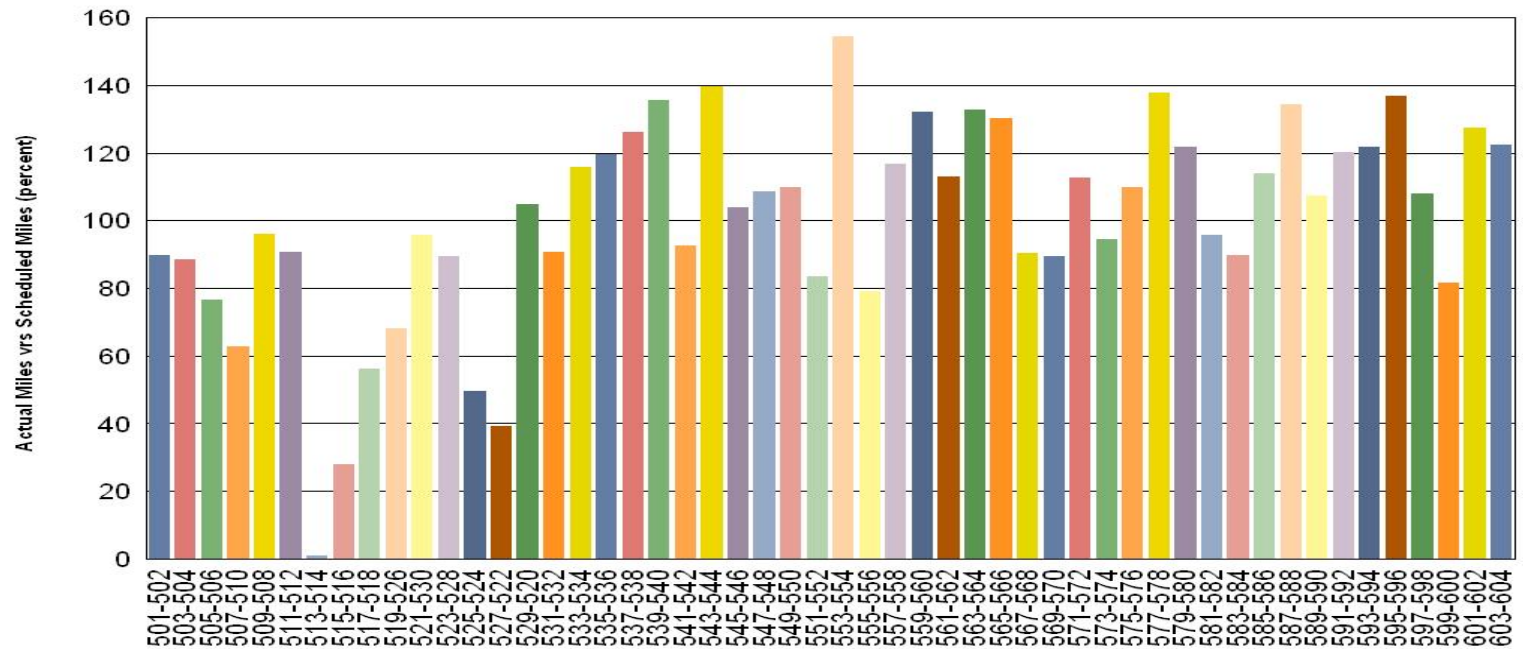
Vehicle Utilization December 2013

Red/Purple Line:

Car # 513-514 Out of service for floor repairing.

Car # 515-516 and # 527-522 Out of service due to propulsion problem.

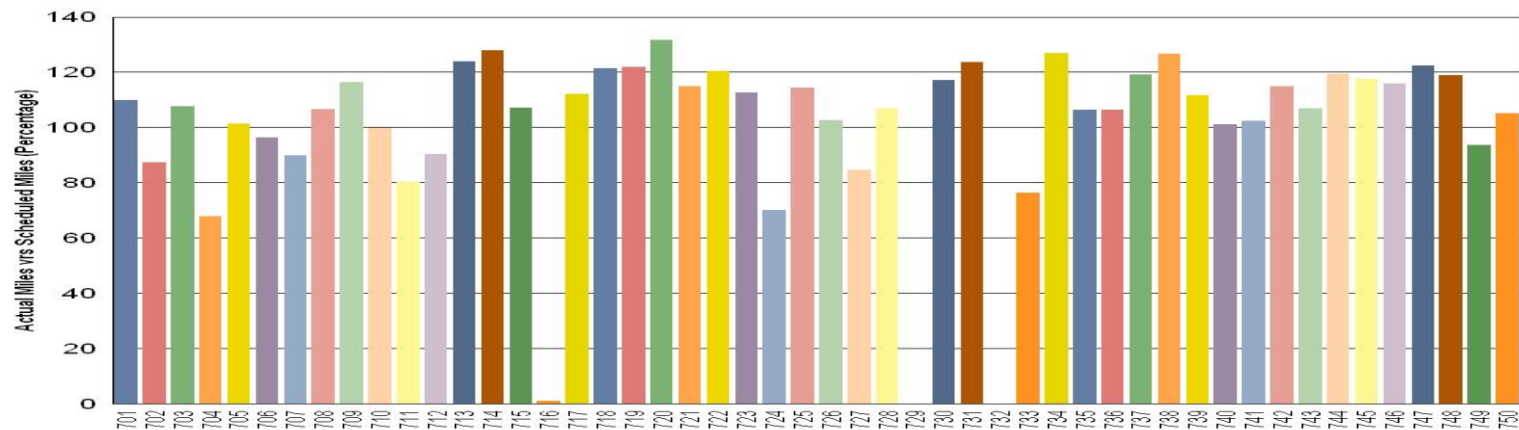
Metro Red/Purple Line



Gold Line:

Car # 716, 729, and 732 Out of service for repairs, and long lead time parts.

Metro Gold Line

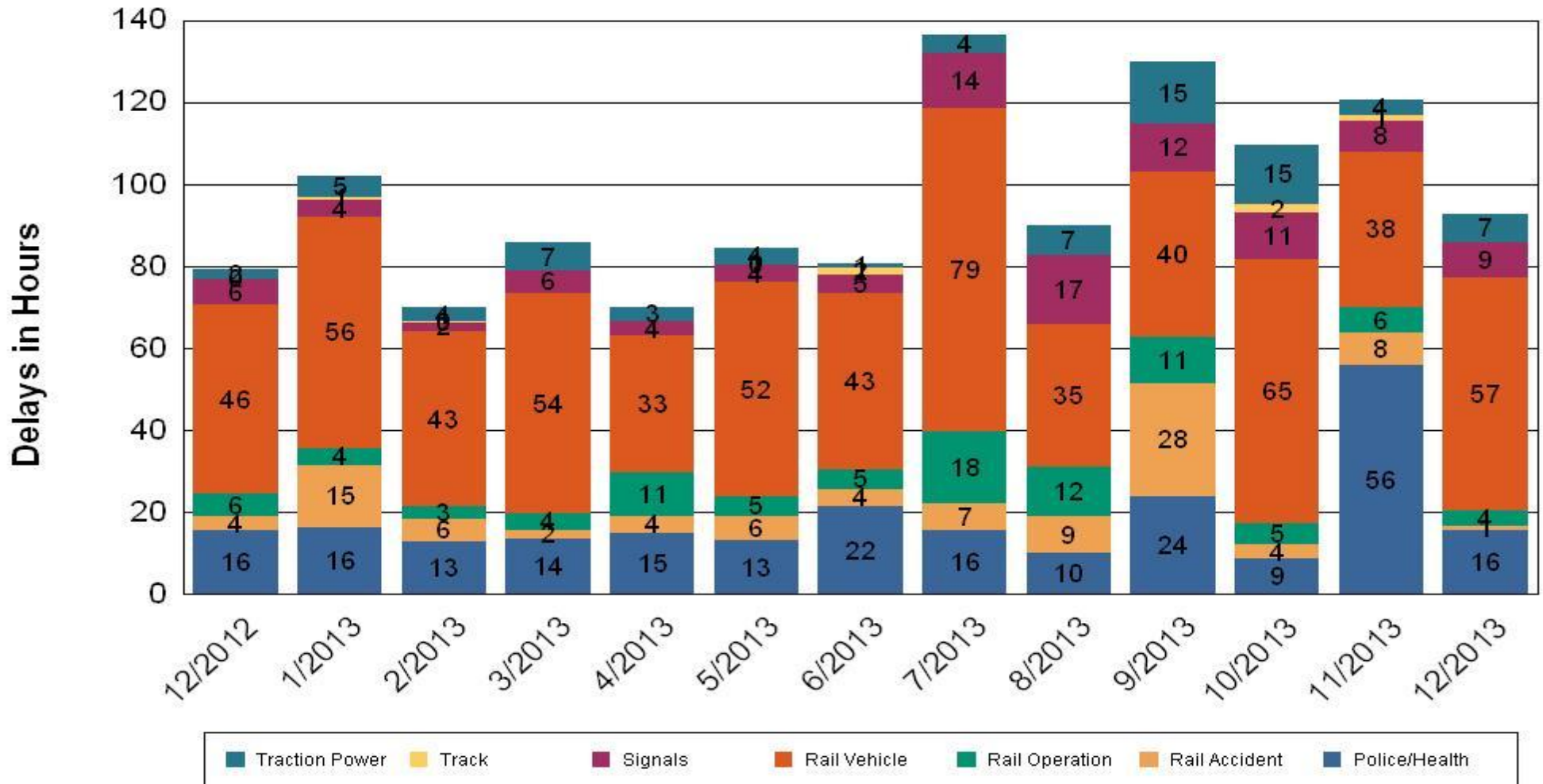


•Percentage includes an average 4% mileage deduction for yard mileage and vehicle testing.

All Train Delay Incidents December 2013

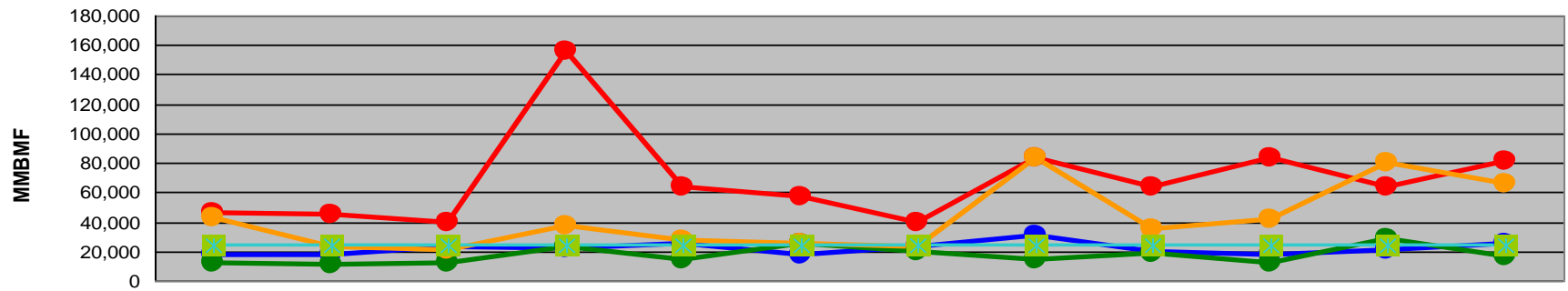
All Train Delays

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



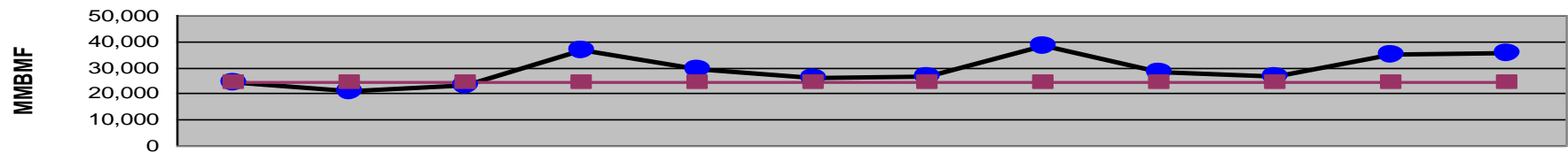
Mean Miles Between Failures (Major) Year to Date

Mean Miles Between Major Failures (by line)



	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13
Blue/Expo Lines	17,876	17,418	23,226	21,992	25,783	17,082	23,591	30,773	19,332	17,764	21,123	25,328
Red/Purple Lines	46,203	44,509	39,694	155,798	63,886	56,770	39,539	83,229	63,847	83,821	63,627	80,905
Green Line	12,485	10,752	11,772	22,981	14,742	25,412	19,703	14,712	18,988	12,516	28,350	16,495
Gold Line	42,687	22,795	20,817	37,306	27,296	25,272	23,454	83,320	35,489	41,867	80,419	66,350
Goal	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,001

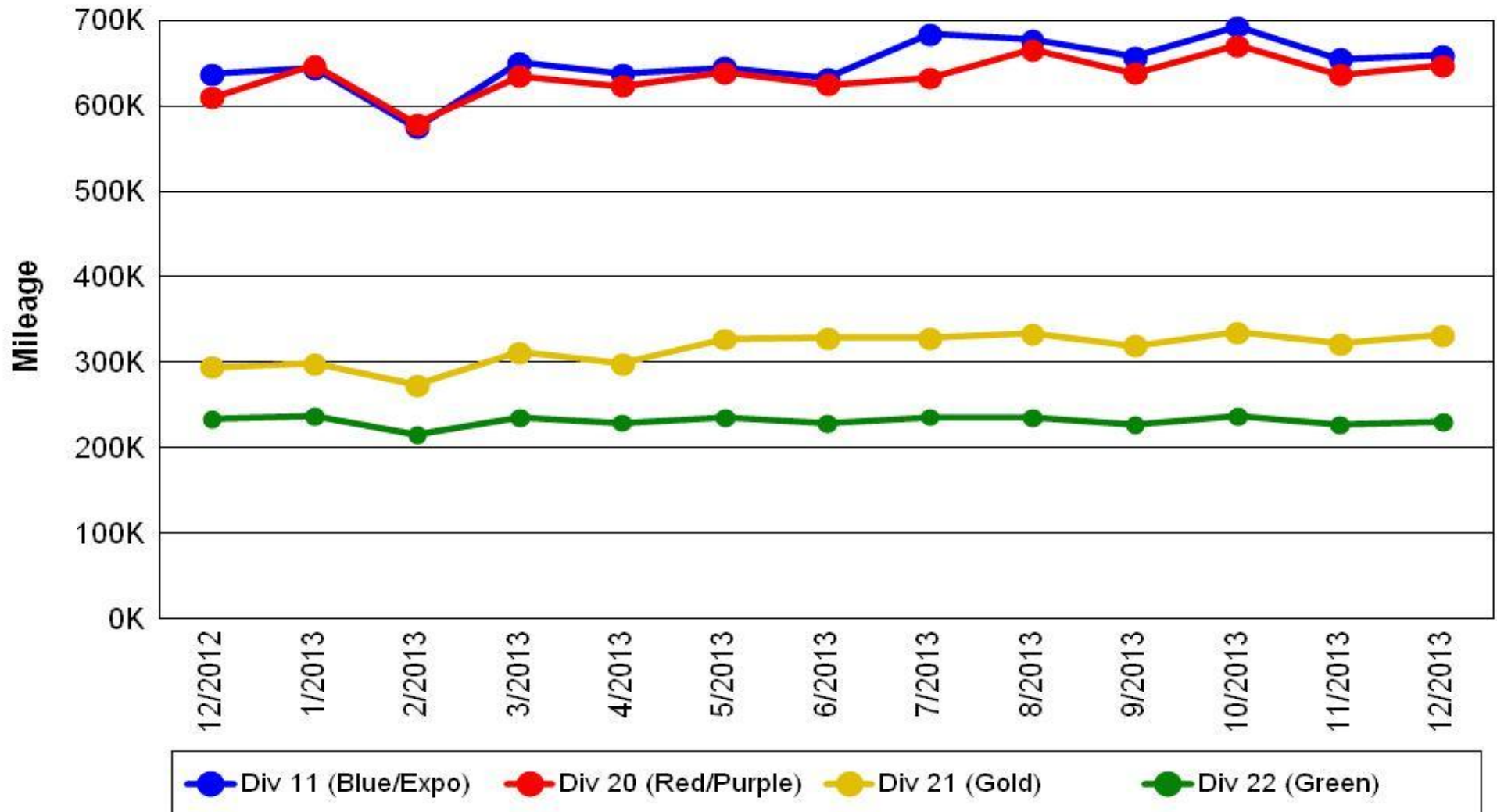
Mean Miles Between Major Failures (all)



	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13
All Rail	24,032	21,051	23,203	36,455	29,315	25,910	26,501	38,230	28,354	26,164	34,709	35,254
Goal	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000

Mileage Between Data Range (by month) December 2013

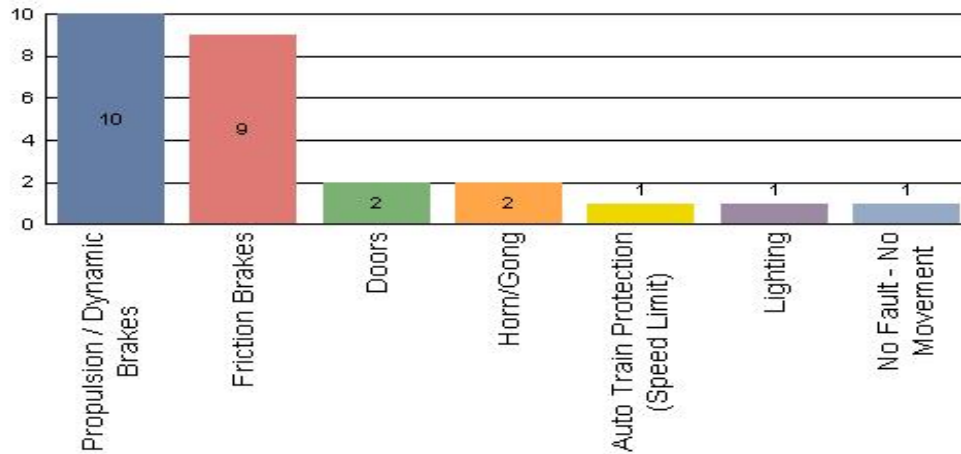
Rail Division Monthly Mileage



Major Incidents December 2013

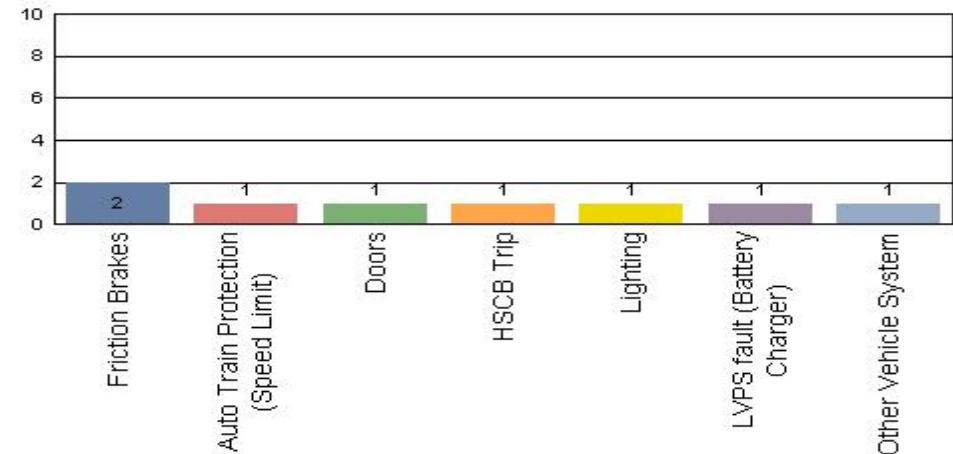
Metro Blue/Expo Line

Top Incident Categories



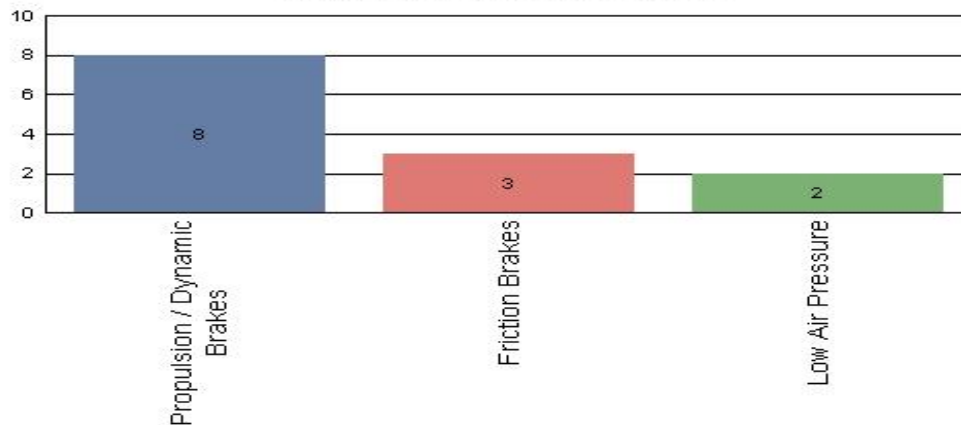
Metro Red/Purple Line

Top Incident Categories



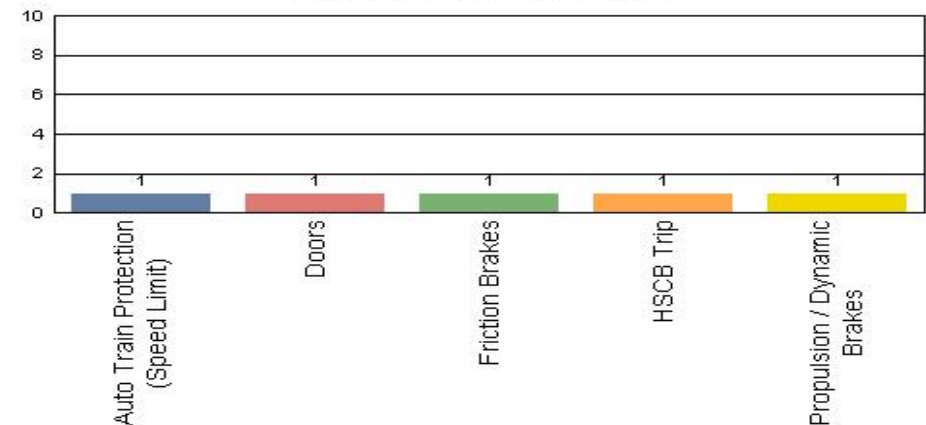
Metro Green Line

Top Incident Categories



Metro Gold Line

Top Incident Categories

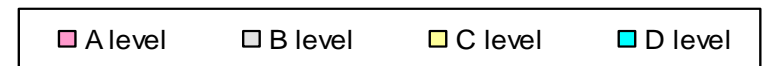
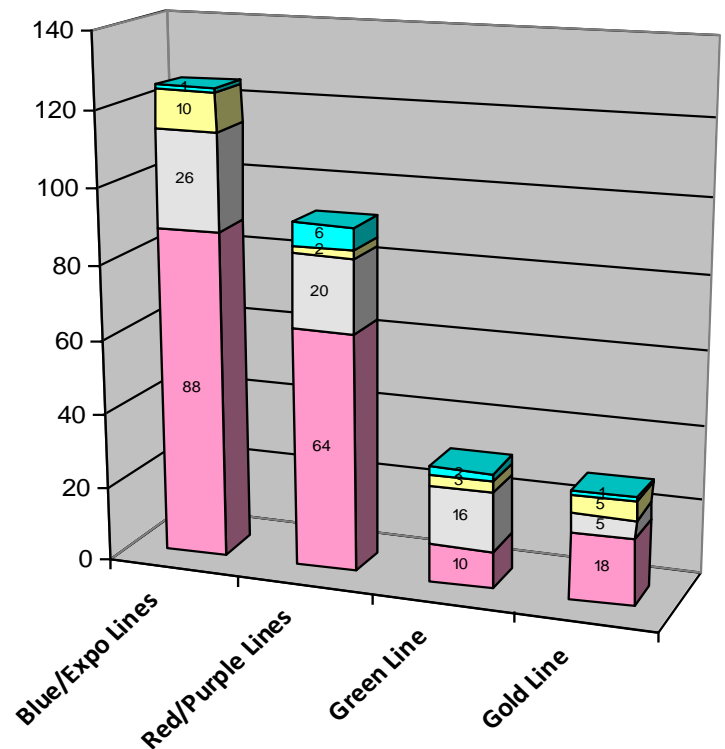


Preventive Maintenance Compliance December 2013

PM Compliance	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13
Blue/Expo Lines	99%	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%
Green Line	100%	100%	100%	100%	91%	100%	100%	100%	100%	96%	92%	100%
Gold Line	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

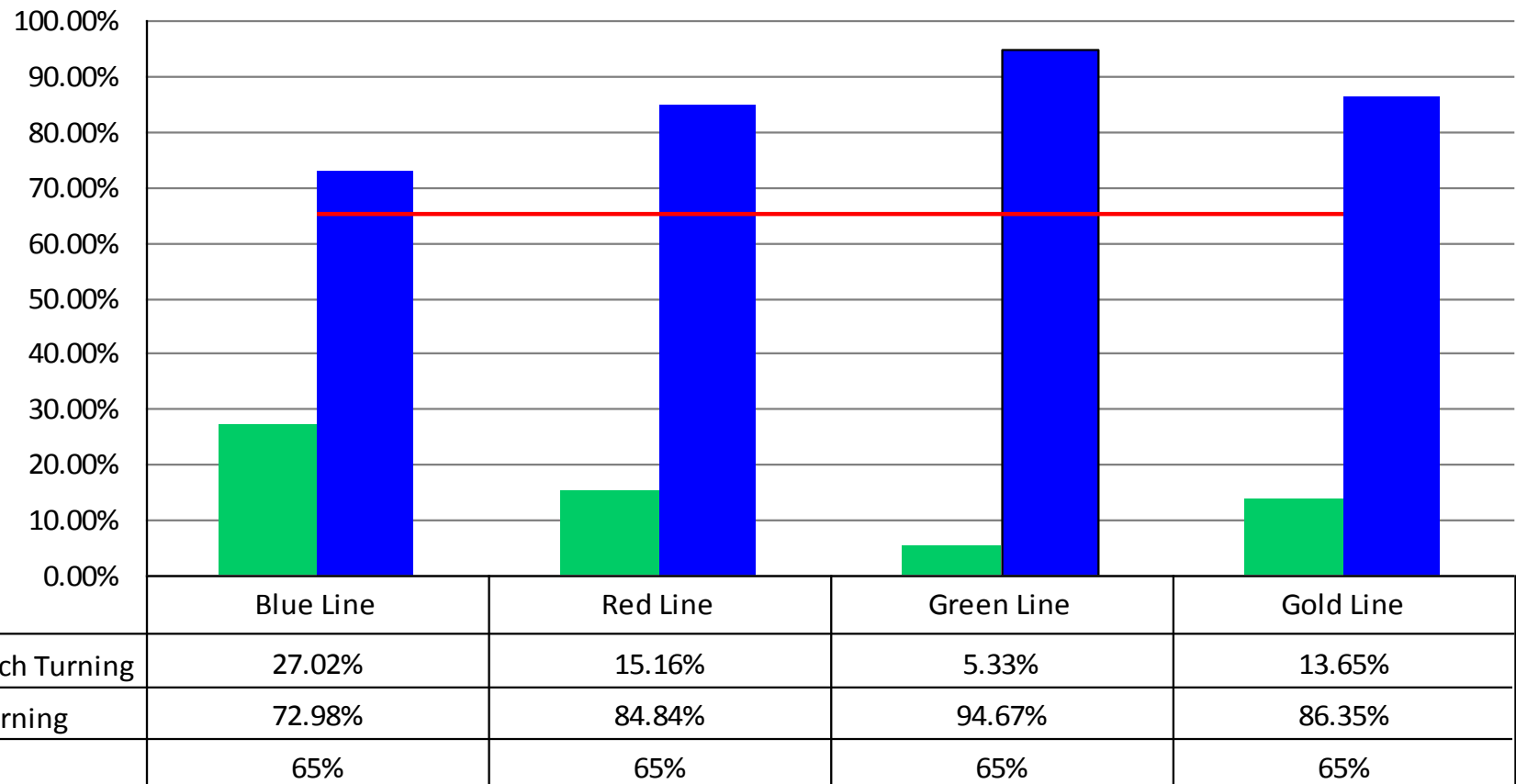
Number of Preventive Maintenance Inspections - December 2013					
Line	A level	B level	C level	D level	Totals
Blue/Expo Lines	88	26	10	1	125
Red/Purple Lines	64	20	2	6	92
Green Line	10	16	3	2	31
Gold Line	18	5	5	1	29
Totals:	180	67	20	10	277

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 December 2013

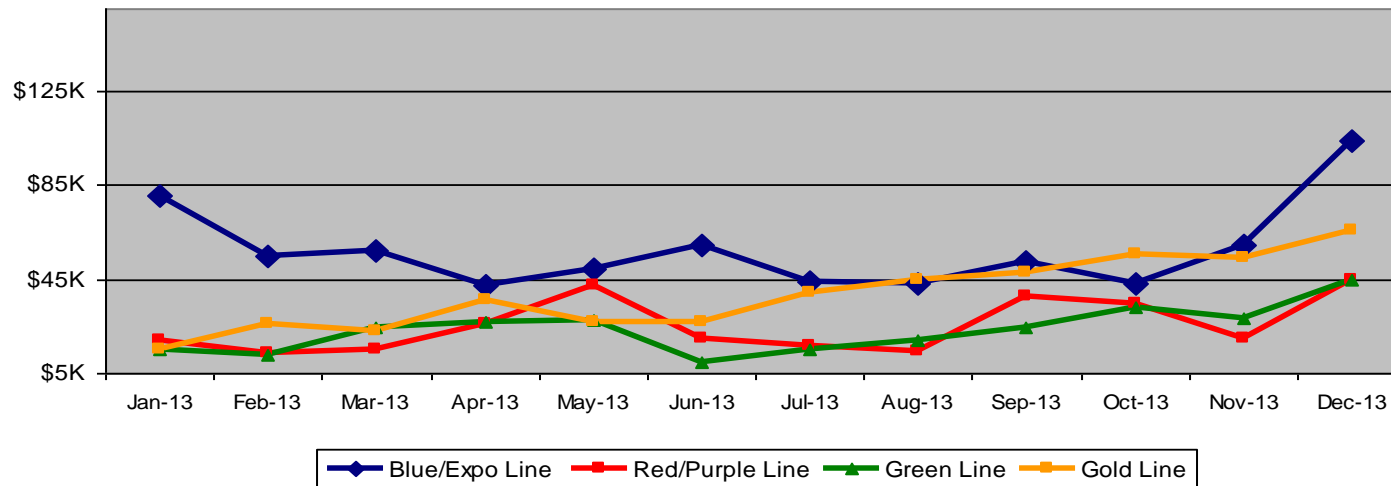
RFS - Wrench Turning December 2013



Vandalism & Graffiti Report

December 2013

	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	12-Month Period
Blue/Expo Line	\$81K	\$55K	\$57K	\$42K	\$49K	\$59K	\$44K	\$43K	\$53K	\$43K	\$60K	\$104K	\$690K
Red/Purple Line	\$19K	\$13K	\$15K	\$26K	\$42K	\$19K	\$16K	\$14K	\$37K	\$35K	\$20K	\$44K	\$302K
Green Line	\$15K	\$13K	\$24K	\$27K	\$28K	\$10K	\$15K	\$19K	\$24K	\$33K	\$28K	\$44K	\$281K
Gold Line	\$15K	\$26K	\$23K	\$36K	\$27K	\$27K	\$39K	\$44K	\$48K	\$56K	\$54K	\$66K	\$460K
Totals:	\$130K	\$108K	\$119K	\$131K	\$146K	\$116K	\$115K	\$121K	\$162K	\$167K	\$162K	\$258K	\$1,734K



December 2013 Vandalism & Graffiti - All Rail				
	Qty	Labor	Materials	Totals
Windows replaced	450	\$46,053	\$65,360	\$111,413
Vandal Shields	1,028	\$28,402	\$11,993	\$40,395
Seats Cleaned	304	\$2,384	\$0	\$2,384
Seats Replaced	475	\$14,963	\$19,750	\$34,713
Graffiti removal - other	696	\$24,084	\$840	\$24,924
Repainting panels	438	\$32,004	\$12,529	\$44,533
Totals	3,391	\$147,890	\$110,472	\$258,362

Graffiti Pictures December 2013

Blue Line



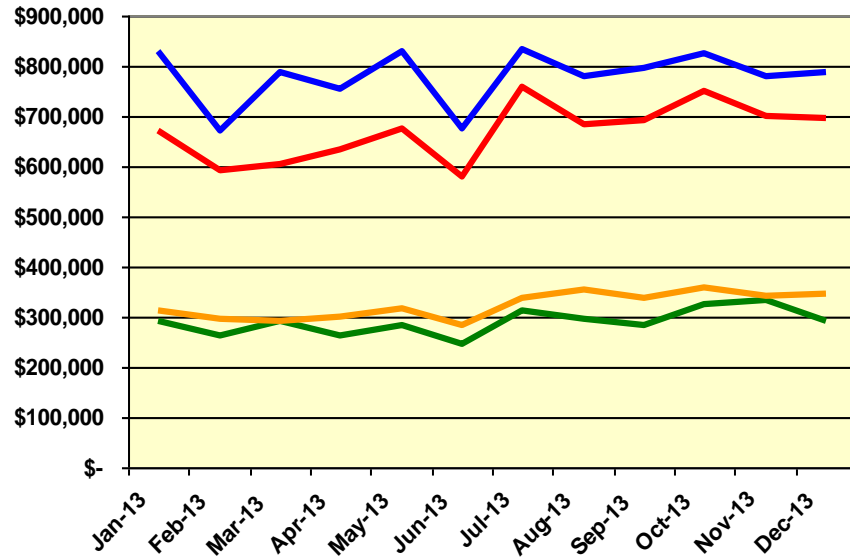
Green Line



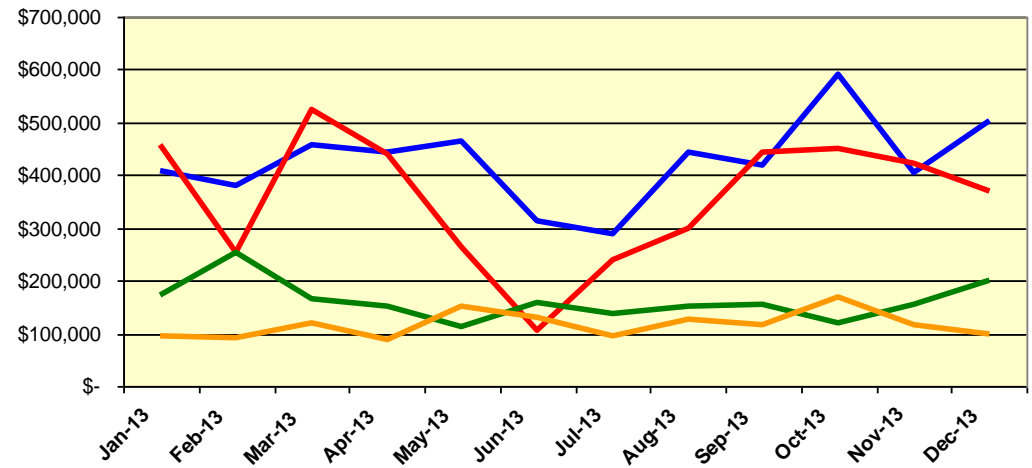
Labor and Material Costs

December 2013

Labor Costs



Material Costs



Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13
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LABOR COSTS

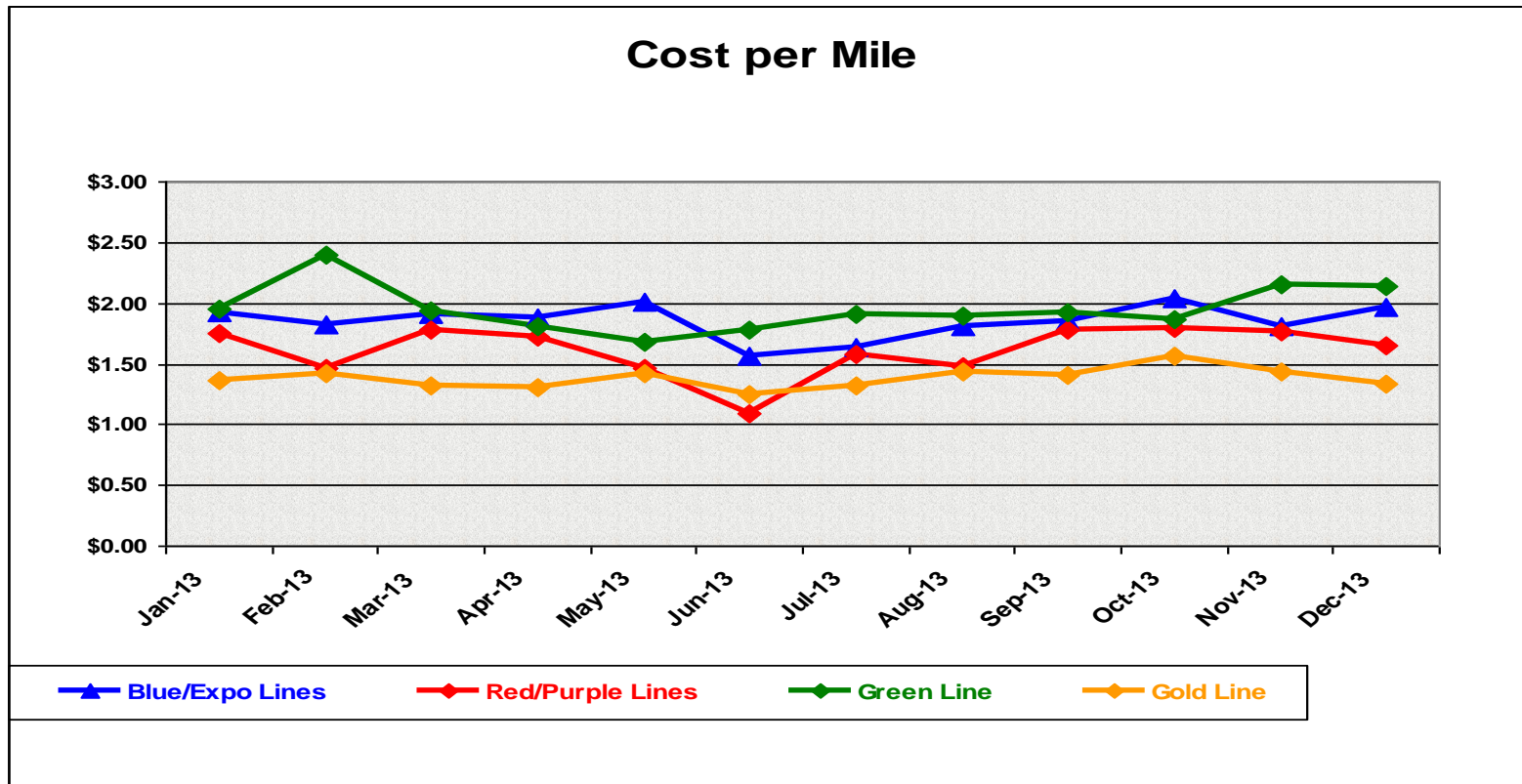
Blue/Expo Lines	\$ 827,656	\$ 671,298	\$ 788,111	\$ 755,561	\$ 829,721	\$ 675,752	\$ 833,333	\$ 777,432	\$ 794,828	\$ 826,769	\$ 780,678	\$ 788,589
Red/Purple Lines	\$ 671,792	\$ 590,750	\$ 605,903	\$ 631,518	\$ 675,950	\$ 579,395	\$ 756,262	\$ 684,850	\$ 693,597	\$ 750,452	\$ 700,975	\$ 697,759
Green Line	\$ 290,453	\$ 261,863	\$ 289,639	\$ 263,955	\$ 282,841	\$ 247,129	\$ 312,740	\$ 295,374	\$ 284,105	\$ 323,749	\$ 332,737	\$ 292,482
Gold Line	\$ 311,060	\$ 297,422	\$ 292,452	\$ 298,759	\$ 317,387	\$ 282,541	\$ 338,719	\$ 352,473	\$ 336,795	\$ 357,408	\$ 343,700	\$ 345,170
Totals	\$ 2,100,961	\$ 1,821,333	\$ 1,976,105	\$ 1,949,793	\$ 2,105,899	\$ 1,784,817	\$ 2,241,054	\$ 2,110,129	\$ 2,109,325	\$ 2,258,378	\$ 2,158,090	\$ 2,123,999

MATERIAL COSTS

Blue/Expo Lines	\$ 407,585	\$ 379,796	\$ 457,700	\$ 444,569	\$ 463,311	\$ 311,415	\$ 288,894	\$ 442,803	\$ 419,133	\$ 589,324	\$ 406,032	\$ 502,761
Red/Purple Lines	\$ 458,038	\$ 254,026	\$ 522,856	\$ 440,708	\$ 263,158	\$ 105,805	\$ 238,207	\$ 298,670	\$ 441,927	\$ 449,033	\$ 422,849	\$ 369,819
Green Line	\$ 173,693	\$ 254,286	\$ 166,766	\$ 151,982	\$ 114,311	\$ 159,526	\$ 138,190	\$ 152,243	\$ 154,678	\$ 119,411	\$ 154,582	\$ 201,035
Gold Line	\$ 95,355	\$ 91,890	\$ 120,086	\$ 89,212	\$ 149,564	\$ 129,742	\$ 95,664	\$ 126,942	\$ 114,461	\$ 167,128	\$ 116,167	\$ 99,267
Totals	\$ 1,134,671	\$ 979,998	\$ 1,267,408	\$ 1,126,471	\$ 990,344	\$ 706,488	\$ 760,956	\$ 1,020,659	\$ 1,130,199	\$ 1,324,896	\$ 1,099,631	\$ 1,172,883

Cost Per Mile December 2013

Cost per mile:	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13
Blue/Expo Lines	\$1.92	\$1.83	\$1.92	\$1.88	\$2.01	\$1.56	\$1.64	\$1.80	\$1.85	\$2.04	\$1.81	\$1.96
Red/Purple Lines	\$1.75	\$1.46	\$1.78	\$1.72	\$1.47	\$1.10	\$1.57	\$1.48	\$1.78	\$1.79	\$1.77	\$1.65
Green Line	\$1.96	\$2.40	\$1.94	\$1.81	\$1.68	\$1.78	\$1.91	\$1.90	\$1.93	\$1.86	\$2.15	\$2.14
Gold Line	\$1.36	\$1.42	\$1.32	\$1.30	\$1.43	\$1.25	\$1.32	\$1.44	\$1.41	\$1.57	\$1.43	\$1.34



ATU Absences vs. Overtime

December 2013

ABSENCE TYPE and HOURS	3940 Admin.	3941 Blue	3942 Red	3943 Green	3944 Gold	3947 Expo	Total
BER-BEREAVEMENT	-	96	-	-	-	24	120
CTO-COMPENSATORY TIME OFF	-	319	300	100	140	48	907
CUT-EMPLOYEE LEAVES EARLY	-	0	1	1	-	-	1
CVA - CASUAL VACATION	-	296	384	16	308	24	1,028
DSL-DISABILITY LEAVE/LONG	-	352	192	88	-	-	632
EFH-EMG. FLOAT HOL.	-	17	112	24	32	-	185
ETO-EXCUSED TIME OFF	4	44	48	21	48	2	166
FMI-FAM IND INJURY	-	-	56	-	-	-	56
FML-FAMILY CARE LEAVE	-	348	363	300	104	-	1,115
FMS-FAMILY LEAVE SICK	-	24	122	7	16	-	169
HLF-HOLIDAY FLOATING	-	272	248	80	144	24	768
HNP-HOLIDAY NOT PAID	-	-	-	8	-	-	8
HOL-HOLIDAY LEGAL	72	640	704	184	200	32	1,832
JUR-JURY DUTY	8	-	-	-	-	-	8
LC1-LABOR CODE 233	-	92	292	56	48	-	488
LTI-OCCPIL/LONGTRM INJ LEAVE	-	-	-	176	176	-	352
OWP-OFF WITH PERMISSION	-	-	32	-	8	-	40
RTO-REQUESTED TIME OFF-NO PAY	-	28	8	-	32	-	68
SCK-SICK PAY	-	192	149	81	104	-	526
SCW-SICK WITHOUT PAY	-	176	-	4	48	-	228
SUS-DISCIPLINARY SUSPENSION	-	8	-	-	-	-	8
TAR-TARDY	-	3	1	2	1	-	6
VAC-VACATION	180	775	932	244	280	24	2,435
Total Absence Hours	264	3,681	3,943	1,392	1,688	178	11,145
ATU Number of Work Force (assigned)	9	120	111	47	48	5	340
Full Work Force hours/month	1,560	20,796	19,236	8,145	8,318	867	58,922
Absence as a % of Work Force	17%	18%	20%	17%	20%	20%	19%

OVERTIME TYPE and HOURS	3940 Admin.	3941 Blue	3942 Red	3943 Green	3944 Gold	3947 Expo	Total
CTB-COMPENSATORY TIME TO BANK	13	129	91	115	79	12	439
OTP-PREM OVERTIME	659	5,430	4,641	2,460	1,841	203	15,236
WLO-Worked Lunch Overtime	46	141	200	132	110	7	636
Total Overtime Hours	718	5,700	4,933	2,707	2,031	222	16,311
Overtime as a % of Work Force	46%	27%	26%	33%	24%	26%	28%
FTE Calculation - Absence & OT Hours	3940	3941	3942	3943	3944	3947	Total
Absences FTE	2	21	23	8	10	1	64
OTP FTE	4	33	28	16	12	1	94
FTE Difference	-2	-12	-5	-8	-2	0	-30

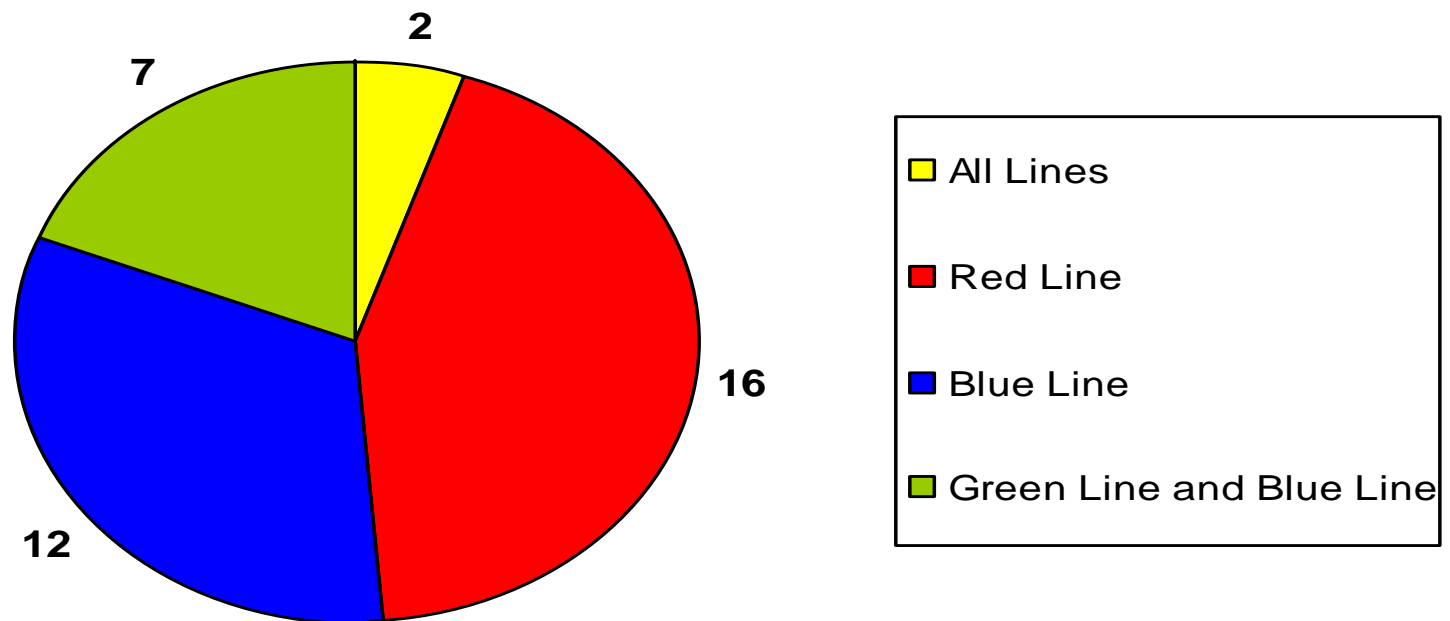
Rail Vehicle Engineering Project Summary

December 2013

Engineering Technical Specifications

100% Completion - Total of 37

December 2013

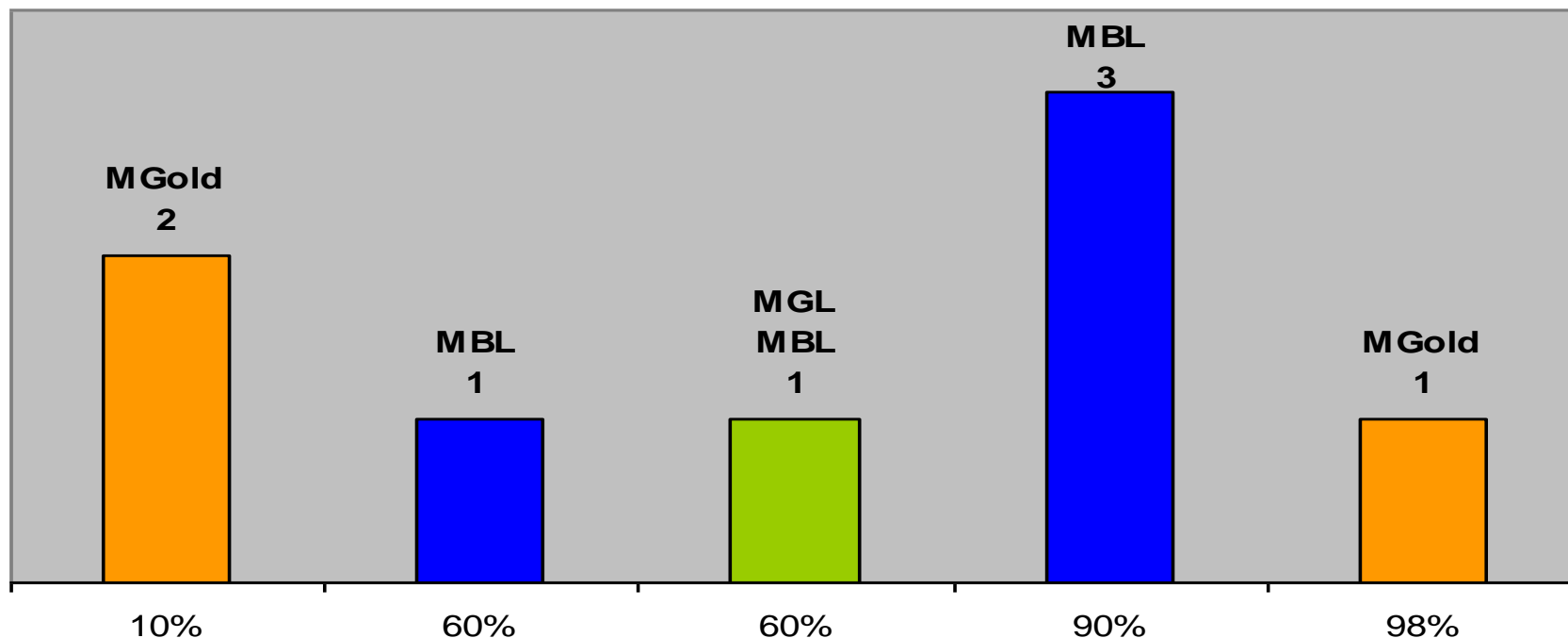


Details of specifications are available upon request.

Rail Vehicle Engineering Project Summary (cont'd)

December 2013

Engineering Technical Specifications Less than 100% Completion - Total of 8 December 2013

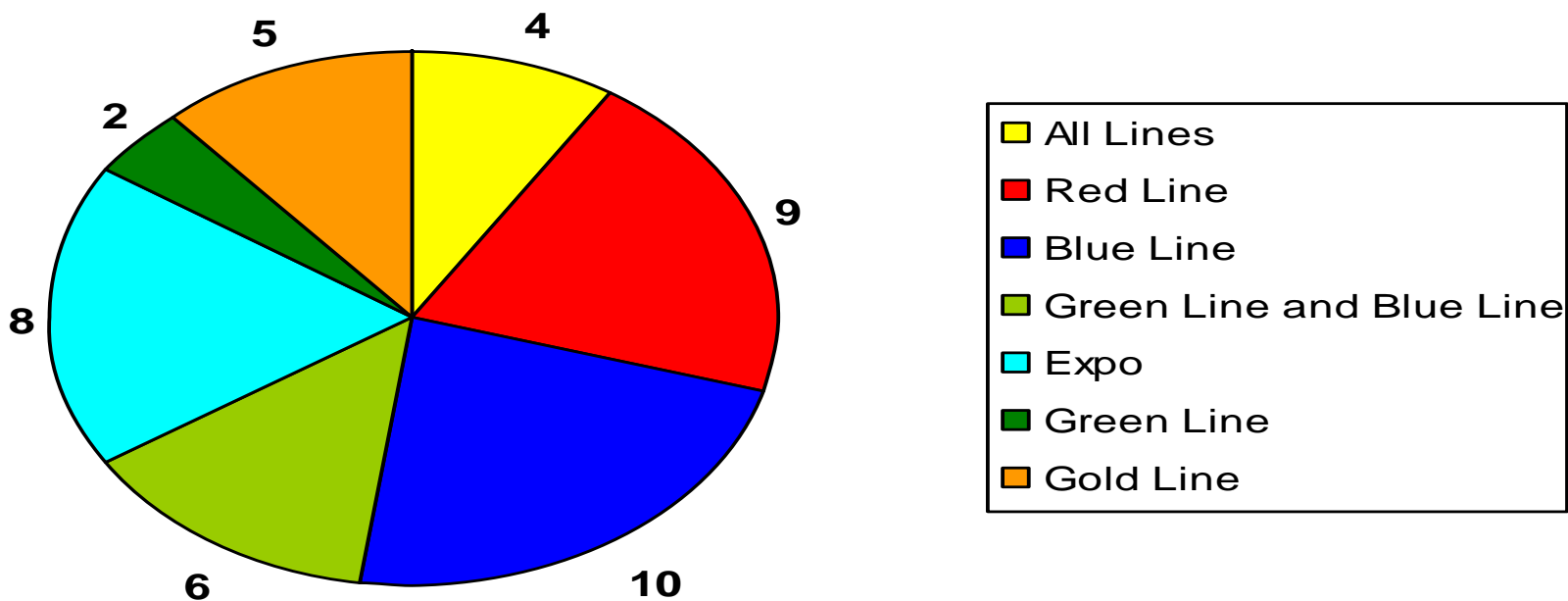


Details of specifications are available upon request.

Rail Vehicle Engineering Project Summary (cont'd)

December 2013

Engineering Projects 100% Completion - Total of 44 December 2013



Details of projects are available upon request.

Rail Vehicle Engineering Project Summary (cont'd)

December 2013

Engineering Projects Less than 100% Completion - Total of 56 - All Lines December 2013



Details of projects are available upon request.

QA-Warranty Activities

December 2013

- QA PMI Audits, Spot Checks, Unannounced Audits performed (26)
- On-Going, P2550 parts tracking: Contract Spares, Capital Spares, Metro Loaned Parts status to ABI
- On-Going, Division Warranty Parts Claims Processing
- P2550 Traction Motor Junction Box Overheated lugs repairs in progress
- P2550 (Lamellar Seal) Truck Resilient Pin Bushing fleet failure declared (Action pending ABI)
- P2550 40 of 50 Cars have new profile connection beam installed. 2 of 50 Cars with replacement resilient pins and bushings and connection beam.
- A650 Base Buy & Option Car Fleet Warranty Truck Frame Mod Campaign (147 of 216 Trucks modified to date). MRL Warranty Cost Avoidance savings accrued to date \$2.2 million.
- SmartDrive test installation of 25 vehicles complete MBL
- MBL journal bearing replacement program in progress
- On-Going Warranty-QA interest oversight & tracking: Overhauls / Mod Programs, (A650/P2000/P2020/865/P2550) Propulsion System, Master Controllers, Capacitor Banks, Air Compressors, Aux Power, Couplers, Gearboxes, Articulation Diaphragms, Friction Brakes, HPT's, Brake Resistor Grids, T/M's, MA's, HVAC, Doors, A/C Motors – (Blowers & Evaporators)

RFS Instruction Department Activities

December 2013

Training classes completed during the month of December 2013

Description	Course Hours	Student Count	Training Hours
Blue & Expo Line Training - (P865/2020 & P2000 LRV):			
RFS PROTRAN1 TRAINING	1	24	24
WAYSIDE WORKER PROTECTION	4	32	128
RFS 865/2020 FRICTION BRAKES	32	5	160
Total Blue Line Training (Hours):			312
Red Line Training (Breda A650 HRV):			
RFS BRED A 650 DOOR SYSTEMS	24	8	192
RFS BRED A 650 F.B. ELECTRONICS	40	8	320
RFS BRED A 650 FRICTION BRAKES	40	8	320
HAZARD COMMUNICATION FOR EMPLOYEES	2	1	2
Total Red Line Training (Hours):			834
Green Line Training (P2000 LRVs):			
RFS PROTRAN1 TRAINING	1	21	21
WAYSIDE WORKER PROTECTION	4	21	84
Total Green Line Training (Hours):			105
Gold Line Training (P2550 LRVs):			
RFS PROTRAN1 TRAINING	1	15	15
WAYSIDE WORKER PROTECTION	4	15	60
HAZARD COMMUNICATION FOR EMPLOYEES	2	1	2
Total Gold Line Training (Hours):			77
Total RFS Instruction for the month of December 2013 (Hours):			1,328

Other Instruction Activities

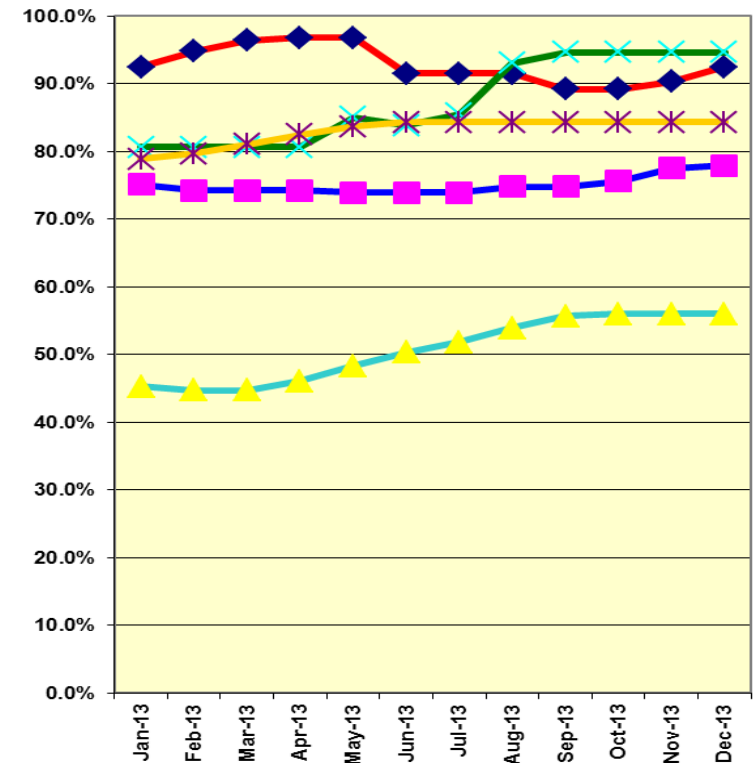
Instructor Vacation & Holidays	216
P865/P2020 Vehicle Course Preparation	16
A650 Vehicle Course Preparation	16
WWP Preparation	8
ProTran1 Preparation	8
Event Recorder & Brandt Truck Class Preparation	24
Total Other Instruction Activities	288.0

Core Vehicle Training Completed: BLUE RED GREEN GOLD

Percentage of core vehicle training complete:	77.9%	92.5%	94.6%	84.3%
Siemens P2000 training complete:	56.0%	N/A	N/A	N/A

Average Specialist Rail Experience Level in Years: 11.6 9.9 9.7 10.3

Core Training Completed



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