



Rail Fleet Services Monthly Report June 2013



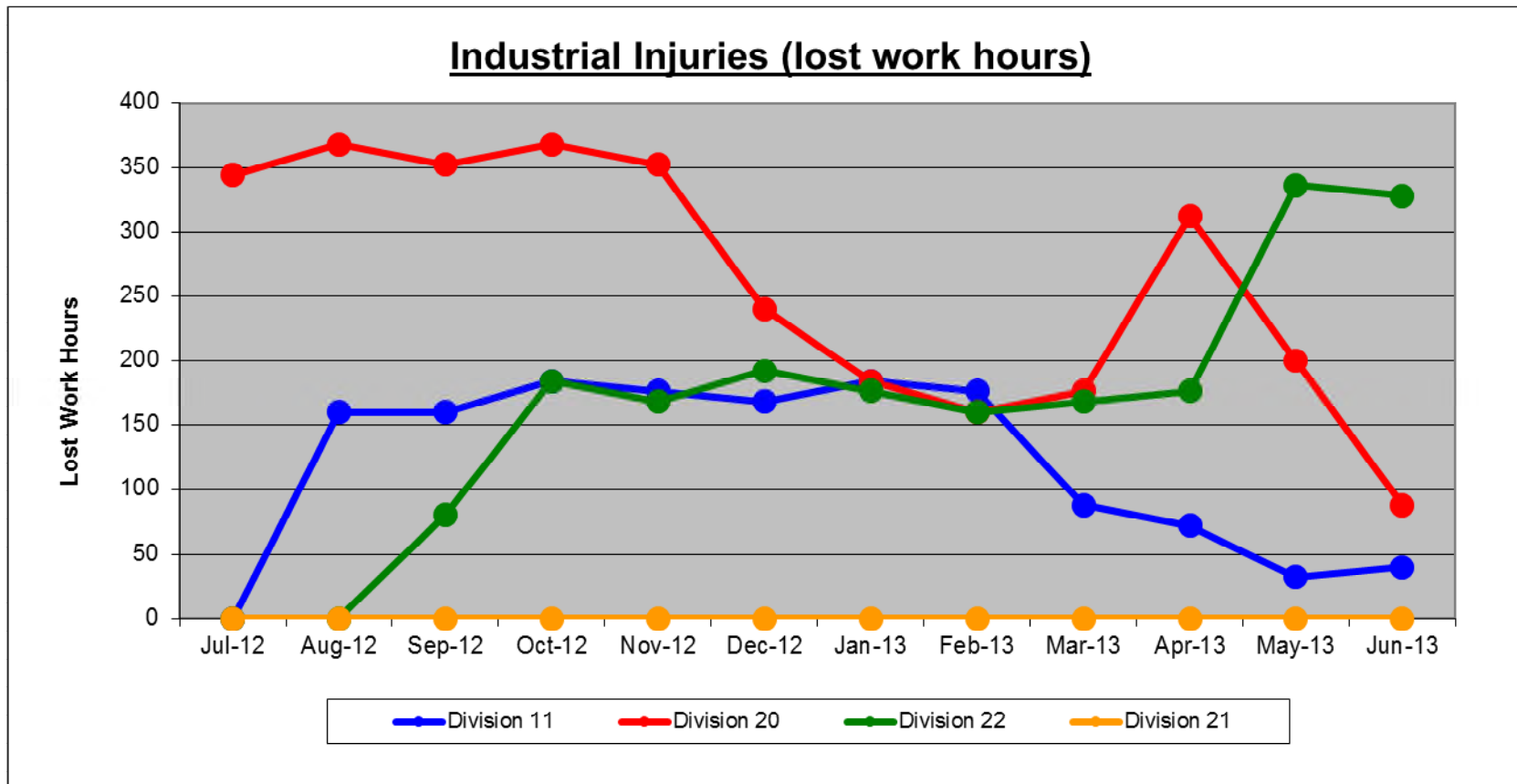
Metro

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Industrial Injuries – Lost Work Hours June 2013

	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Year to Date
Division 11	0	160	160	184	176	168	184	176	88	72	32	40	1,440
Division 20	344	368	352	368	352	240	184	160	176	312	200	88	3,144
Division 22	0	0	80	184	168	192	176	160	168	176	336	328	1,968
Division 21	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	344	528	592	736	696	600	544	496	432	560	568	456	6,552



Rail Vehicle Accidents & Major Incidents

June 2013

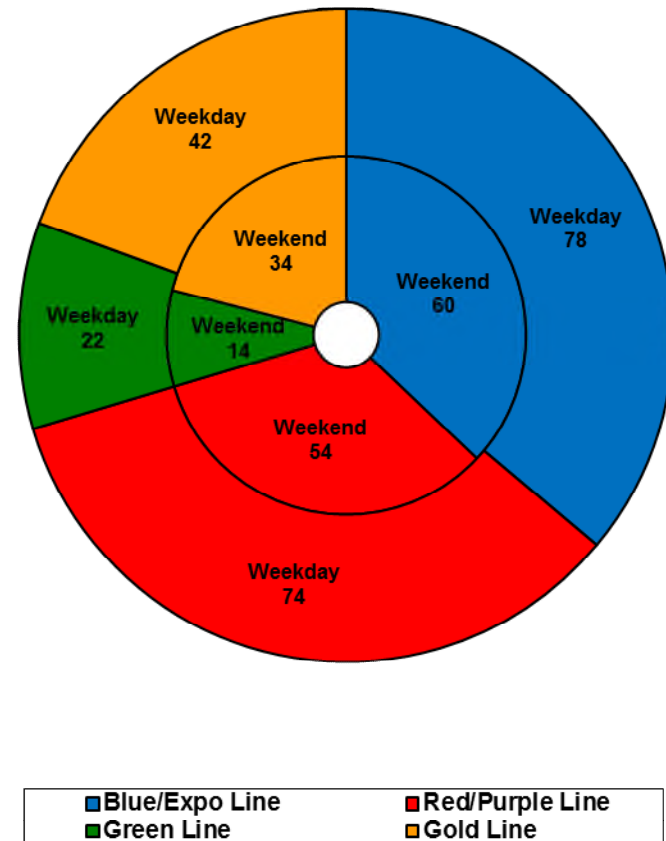
Repair Costs	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Totals
Blue/Expo Line	\$674	\$8,226	\$4,726	\$1,668	\$494	\$5,262	\$18,740	\$3,288	\$2,959	\$237,017	\$11,700	\$4,926	\$299,680
Red/Purple Line	\$0	\$0	\$778	\$0	\$0	\$0	\$2,244	\$0	\$0	\$4,165	\$0	\$0	\$7,187
Green Line	\$120	\$0	\$0	\$0	\$0	\$503	\$202	\$126	\$0	\$0	\$0	\$0	\$951
Gold Line	\$0	\$1,583	\$0	\$0	\$0	\$0	\$176	\$0	\$0	\$0	\$261	\$8,220	\$10,240
Totals	\$794	\$9,809	\$5,504	\$1,668	\$494	\$5,765	\$21,362	\$3,414	\$2,959	\$241,182	\$11,961	\$13,146	\$318,058

Rail Vehicle Accident Costs - June 2013				
Metro Blue Line				
Date	Incident #	Problem code	Incident Description	Cost
6/1/13	2325264	Train vs. Vehicle	A 10-72 was reported involving an auto just south of Pico Station and approximately before Venice interlocking proximity.	\$378.00
6/3/13	2325483	Train vs. Vehicle	A 10-73 was reported involving Train 124 making contact with a vehicle at Washintong/Broadway grade crossing.	\$4,548.00
Total				4,926.00
Metro Gold Line				
6/6/13	2327758	Train vs. Vehicle	A 10-72 was reported at Downey Road on track 1 involving Train 2 heading southbound.	\$0.00
6/27/13	2335816	Train vs. Vehicle	A 10-72 was reported on track 2 heading southbound between 3rd Street and Downey Road.	\$8,220.00
Total				\$8,220.00
Metro Green Line				
6/5/13	2327146	Train vs. Object	A 10-71 was reported to CCTV operator at Vermont Station alleging a patron was struck by the train on the platform.	\$0.00
Total				\$0.00
GRAND TOTAL				\$13,146.00
(10-71) = Train vs. Object, (10-72) = Train vs. Pedestrian, (10-73) = Train vs. Vehicle (10-74) = Train vs. MTA Vehicle, (10-75) = Derailment				

Service Delivery June 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	80	103%
Weekend:	60	65	109%
Late Pullouts: 1 *			
Monthly Mileage:	632,022		
Red/Purple Line Fleet Size:		104	
<u>Pull Out</u>	<u>Vehicles Required</u>	<u>Average Available</u>	<u>% Up (Down)</u>
Weekday:	74	86	116%
Weekend:	54	72	134%
Late Pullouts: 0*			
Monthly Mileage:	624,470		
Green Line Fleet Size:		29	
<u>Pull Out</u>	<u>Vehicles Required</u>	<u>Average Available</u>	<u>% Up (Down)</u>
Weekday:	22	23	104%
Weekend:	14	19	133%
Late Pullouts: 0 *			
Monthly Mileage:	228,706		
Gold Line Fleet Size:		50	
<u>Pull Out</u>	<u>Vehicles Required</u>	<u>Average Available</u>	<u>% Up (Down)</u>
Weekday:	42	43	103%
Weekend:	**34	44	111%
Late Pullouts: 0 *			
Monthly Mileage:	328,532	** Change in VR as of 6/23/13	

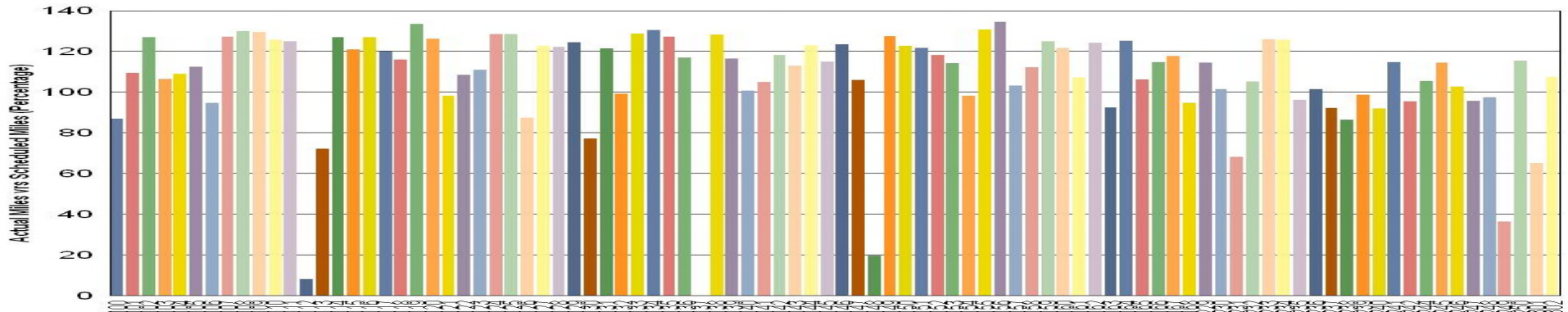
* Due to a vehicle -related problem



Vehicle Utilization

June 2013

Metro Blue/Expo Line Fleet



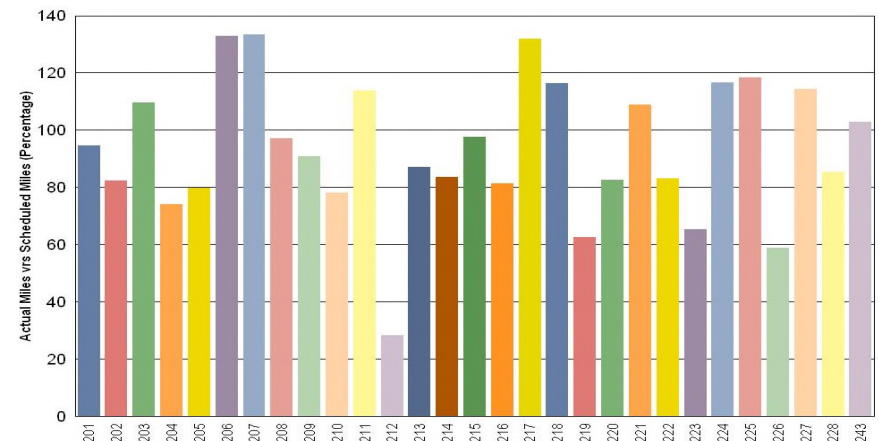
Blue/Expo Lines:

- 112 Vehicle held out of service due body repair from train hitting a bumping post at 7th and Metro.
- 137 Vehicle held out of service due to major damage involving train hitting a bumping post/wall at 7th and Metro.
- 148 Vehicle held out of service due to scheduled exterior paint campaign.
- 249 Vehicle held out of service due to scheduled brake overhaul.

Green Line:

- 212 Vehicle held out of service due to repair of excessive propulsion faults and replacement of no motion relays.

Metro Green Line



Vehicle Utilization

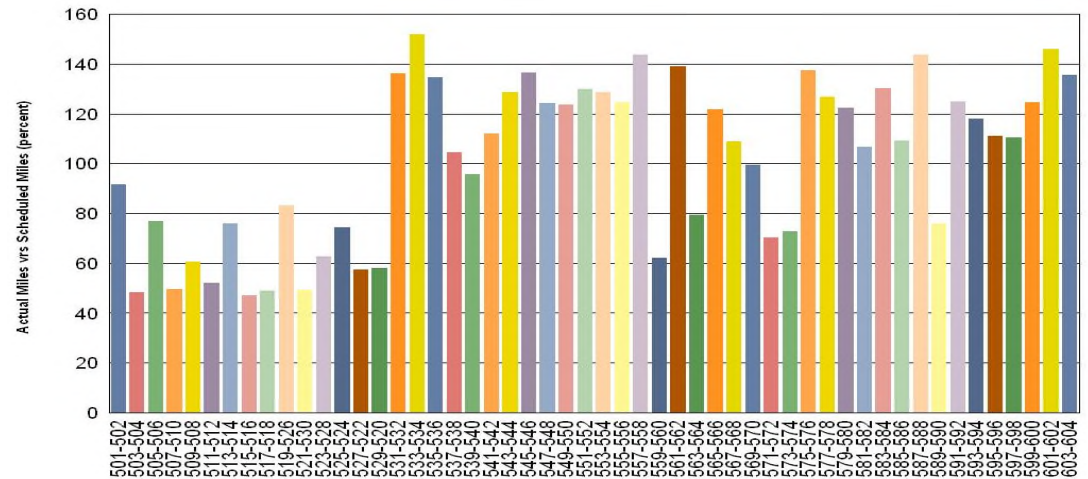
June 2013

Red/Purple Lines:

Explanation for under-used vehicles:

The fleet has met the daily maximum utilization requirements for the month of June.

Metro Red/Purple Lines

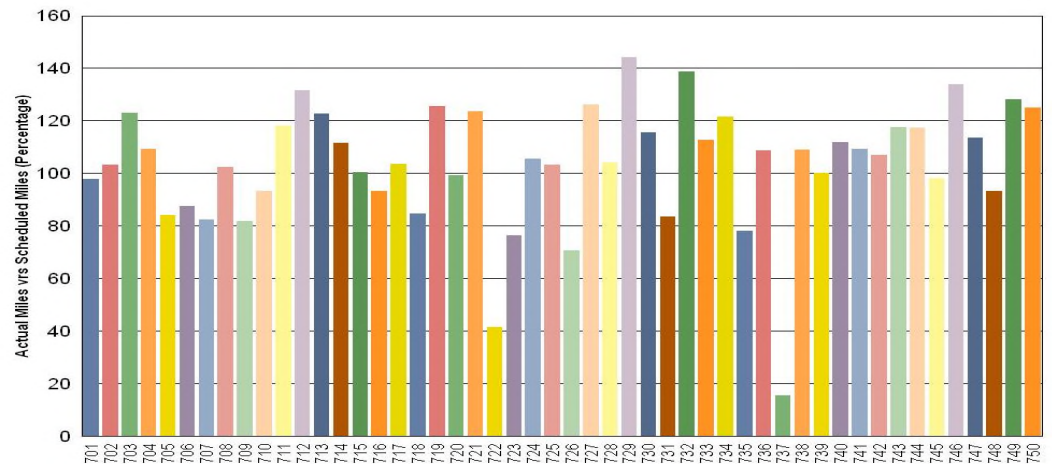


Gold Line:

737

Vehicle held out of service due to multi-fault ATP problem. Vehicle returned to service on 6/25/13.

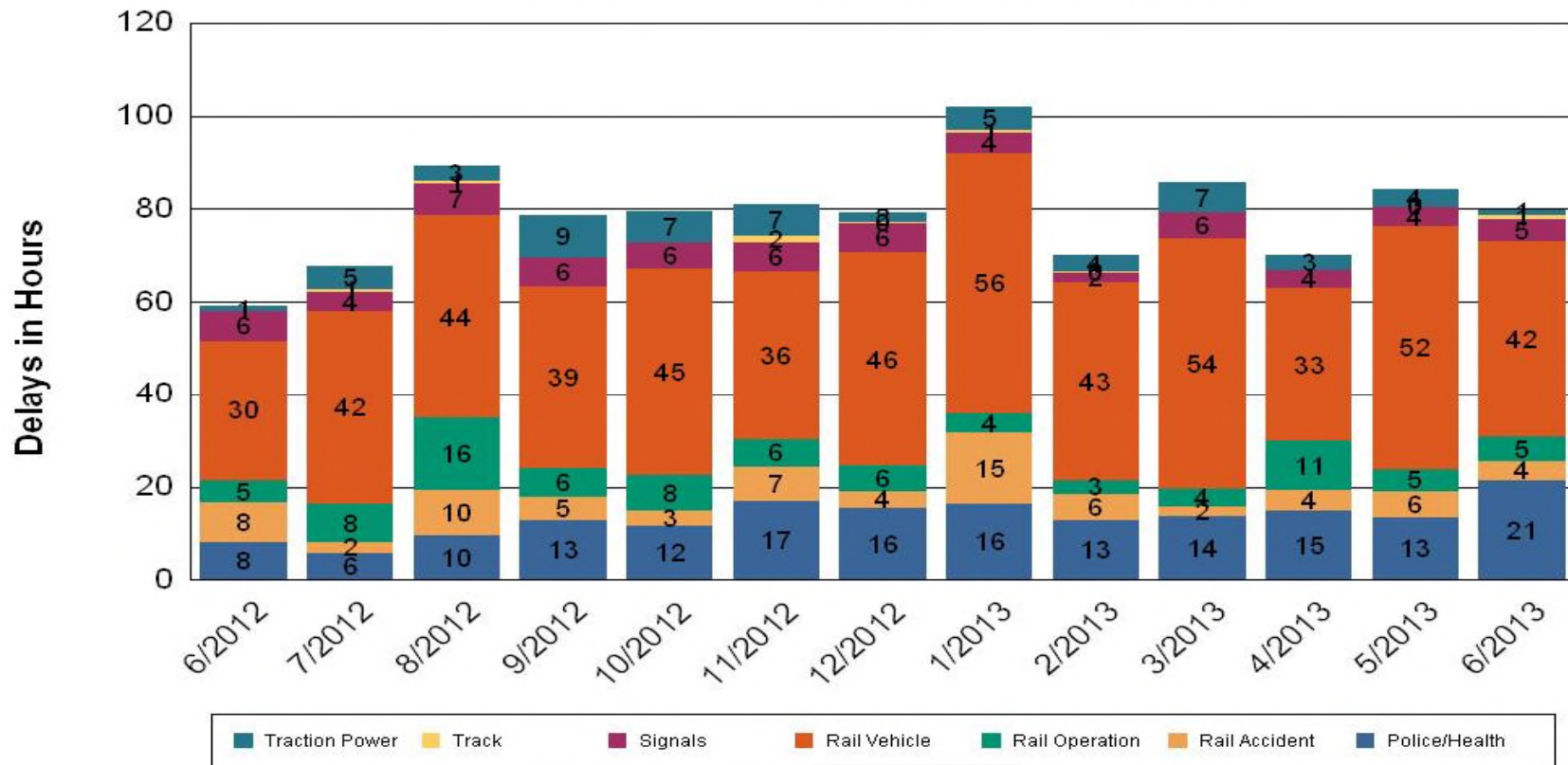
Metro Gold Line



All Train Delay Incidents June 2013

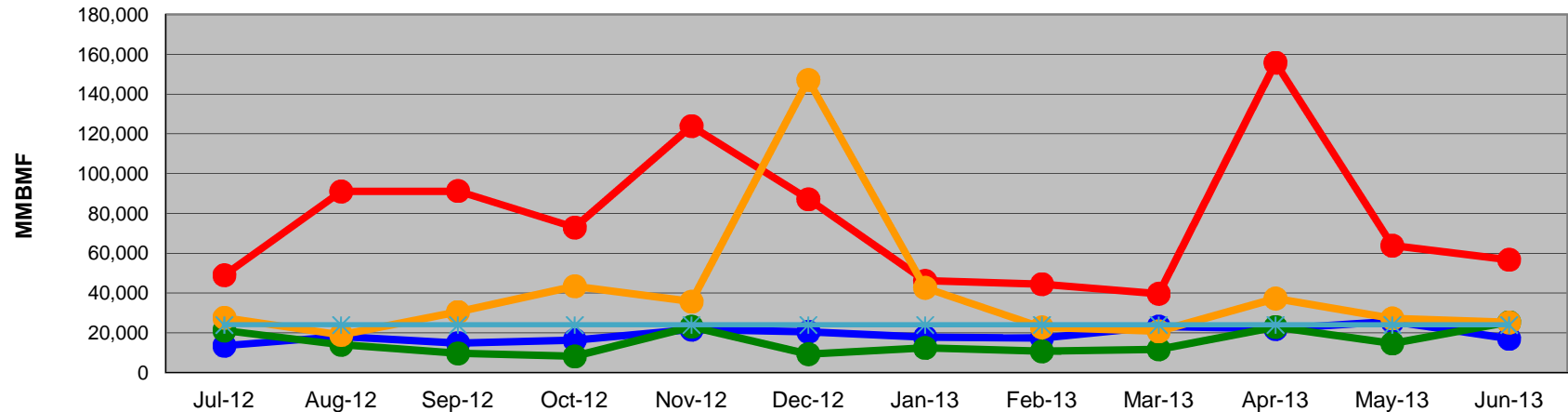
All Train Delays

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



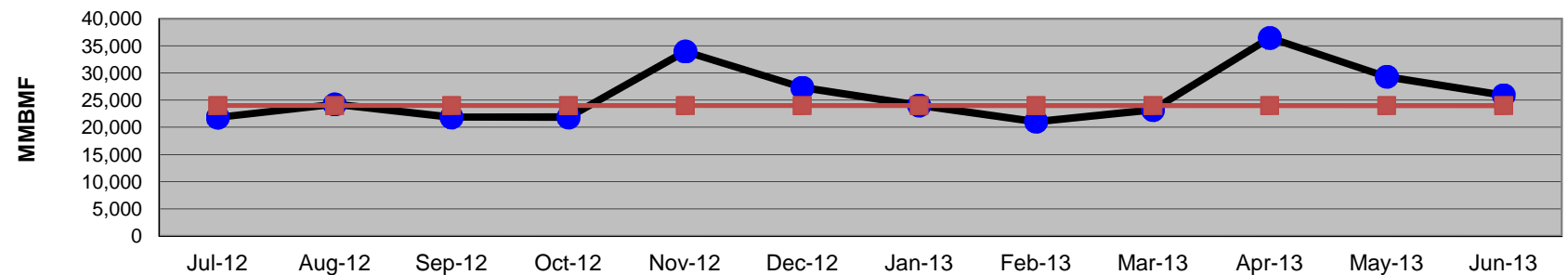
Mean Miles Between Failures (Major) Year to Date

Mean Miles Between Major Failures (12 months)



	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13
Blue/Expo Lines	13,559	18,185	14,867	16,391	21,686	20,542	17,876	17,418	23,226	21,992	25,783	17,082
Red/Purple Lines	49,022	91,119	91,340	72,959	123,933	87,167	46,203	44,509	39,694	155,798	63,886	56,770
Green Line	21,266	14,043	9,726	8,243	23,154	9,341	12,485	10,752	11,772	22,981	14,742	25,412
Gold Line	27,641	19,040	30,564	43,461	35,725	147,123	42,687	22,795	20,817	37,306	27,296	25,272
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

Mean Miles Between Major Failures (all)

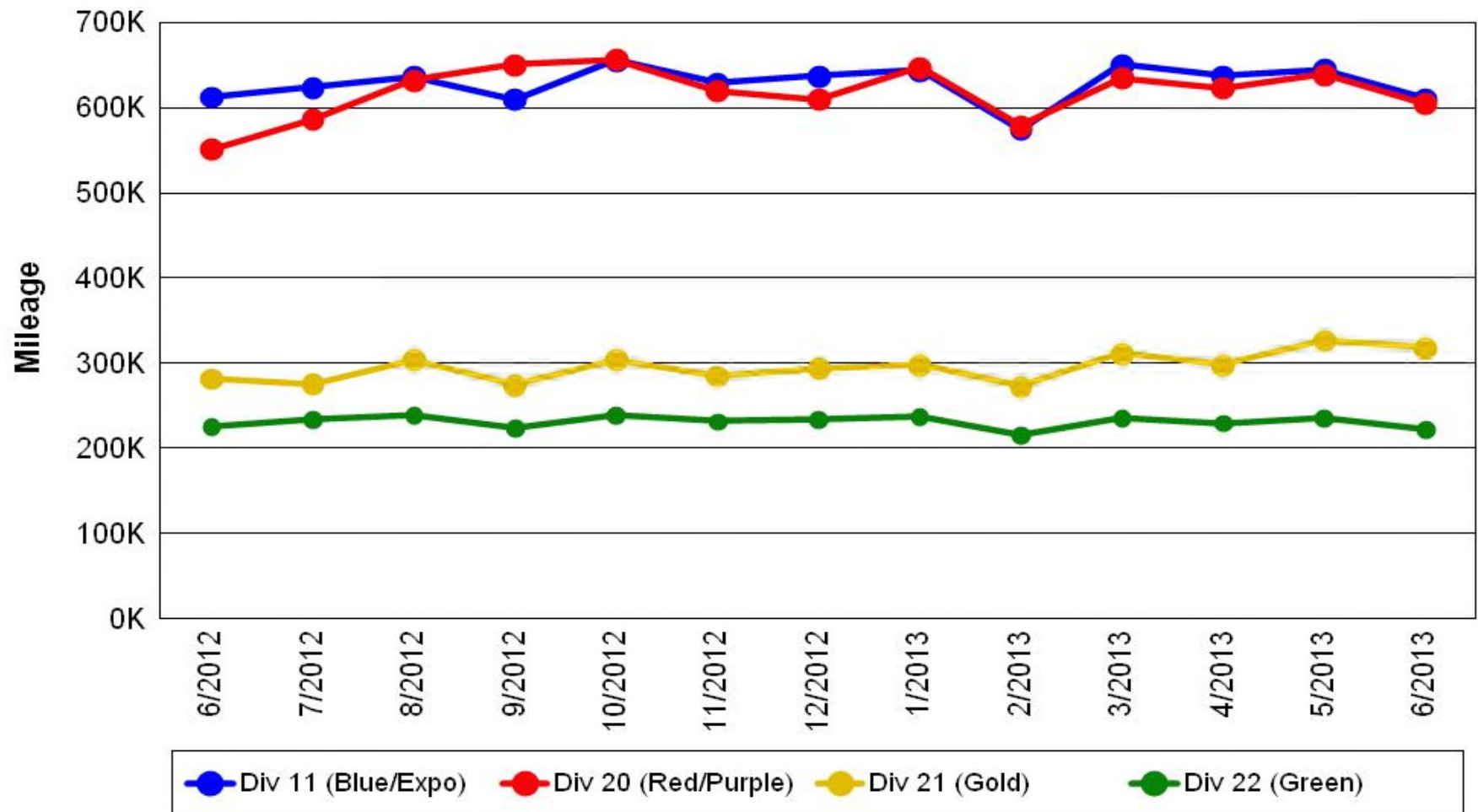


	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13
All Rail	21,802	24,236	21,846	21,830	33,960	27,304	24,032	21,051	23,203	36,455	29,315	25,910
Goal	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000

Mileage Between Data Range (by month)

June 2013

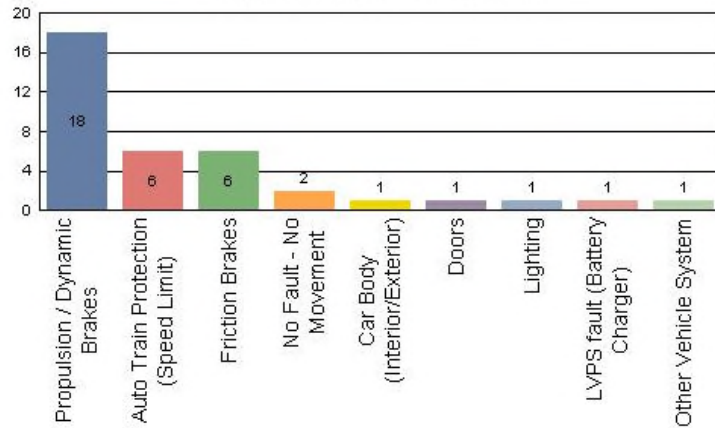
Rail Division Monthly Mileage



Major Incidents June 2013

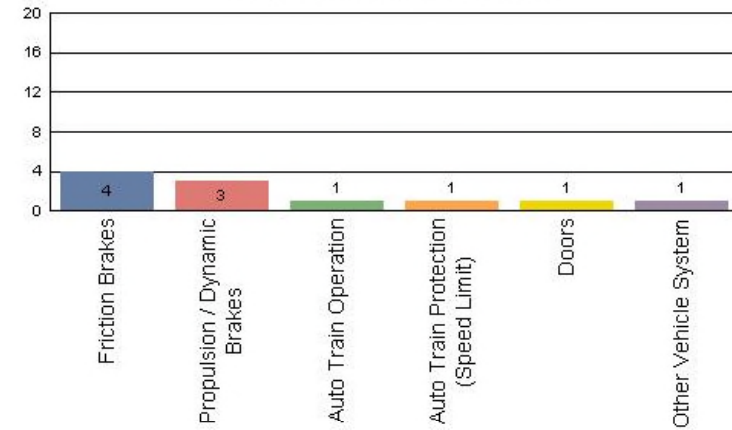
Metro Blue/Expo Line

Top Incident Categories



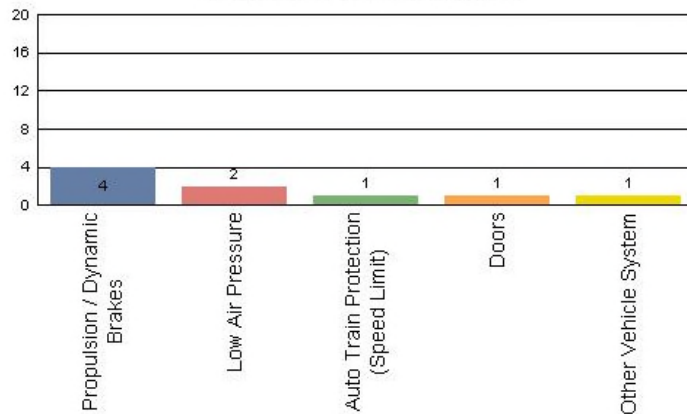
Metro Red/Purple Line

Top Incident Categories



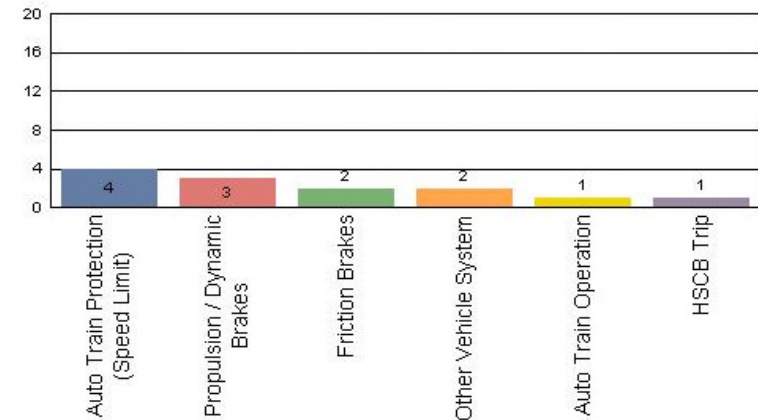
Metro Green Line

Top Incident Categories



Metro Gold Line

Top Incident Categories



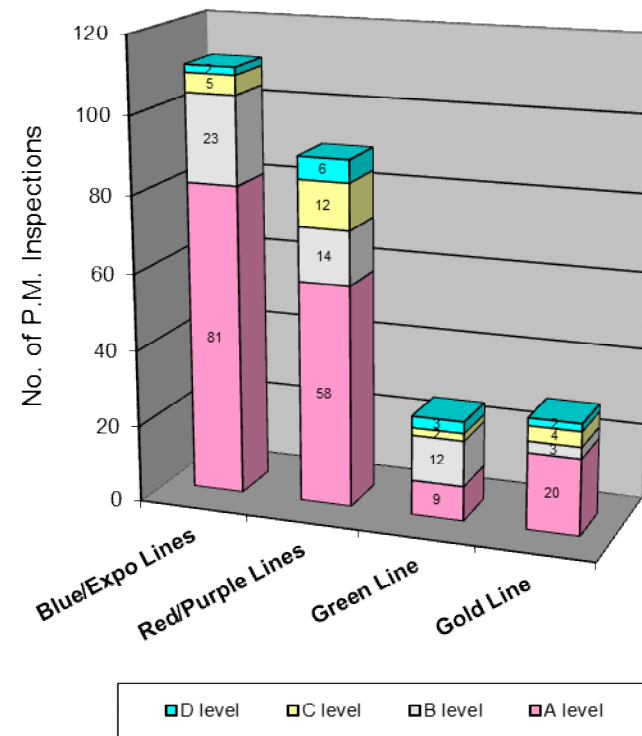
Preventive Maintenance Compliance

June 2013

PM Compliance	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13
Blue/Expo Lines	100%	100%	100%	100%	100%	100%	99%	100%	100%	100%	100%	100%
Red/Purple Lines	100%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Green Line	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	91%	100%
Gold Line	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

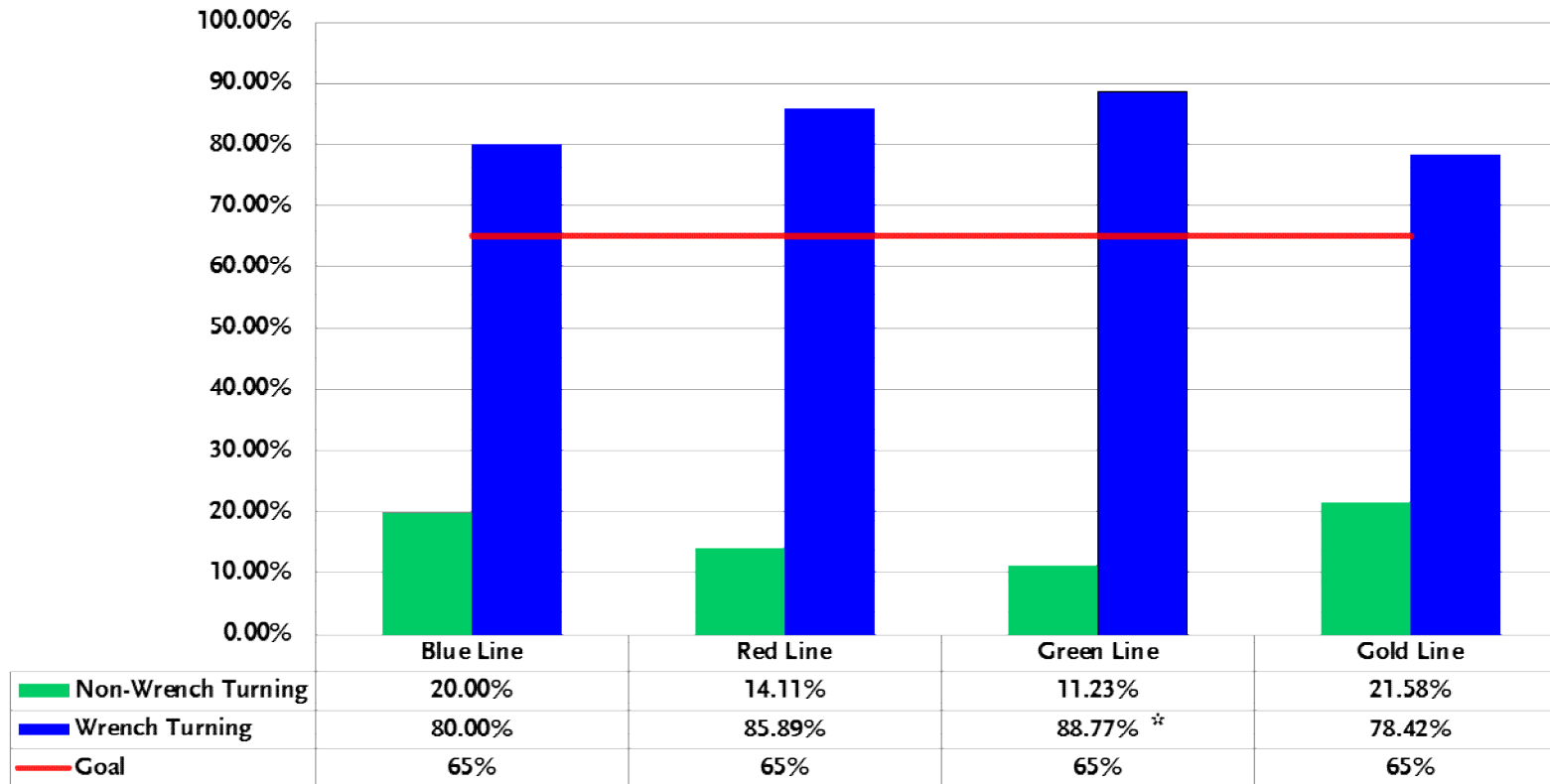
Number of Preventive Maintenance Inspections - June 2013					
Line	A level	B level	C level	D level	Totals
Blue/Expo Lines	81	23	5	2	111
Red/Purple Lines	58	14	12	6	90
Green Line	9	12	2	3	26
Gold Line	20	3	4	2	29
Totals:	168	52	23	13	256

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 June 2013

RFS - Wrench Turning June 2013

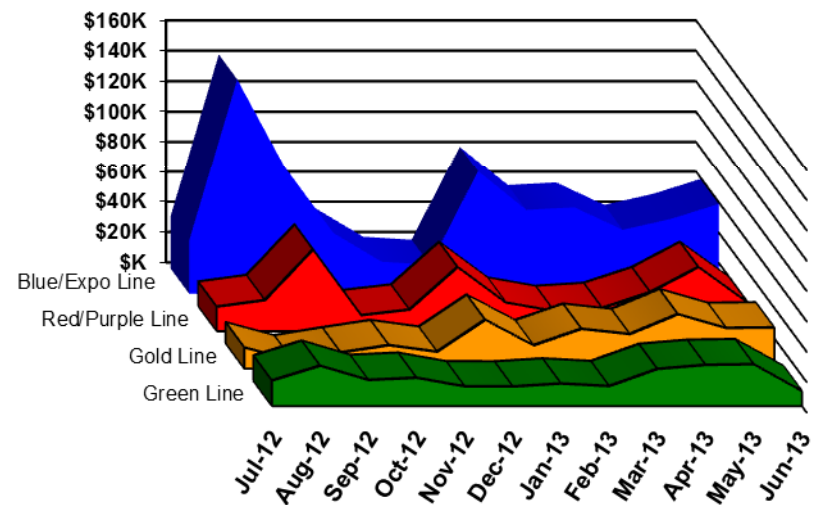


Vandalism & Graffiti Report

June 2013

	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Year-to-Date
Blue/Expo Line	\$35K	\$142K	\$83K	\$40K	\$21K	\$19K	\$81K	\$55K	\$57K	\$42K	\$49K	\$59K	\$683K
Red/Purple Line	\$16K	\$20K	\$54K	\$10K	\$14K	\$42K	\$19K	\$13K	\$15K	\$26K	\$42K	\$19K	\$292K
Green Line	\$17K	\$27K	\$17K	\$19K	\$13K	\$13K	\$15K	\$13K	\$24K	\$27K	\$28K	\$10K	\$222K
Gold Line	\$14K	\$5K	\$11K	\$15K	\$11K	\$32K	\$15K	\$26K	\$23K	\$36K	\$27K	\$27K	\$243K
Totals:	\$82K	\$194K	\$165K	\$84K	\$59K	\$106K	\$130K	\$108K	\$119K	\$131K	\$146K	\$116K	\$1,439K

June 2013 Vandalism & Graffiti - All Rail				
	Qty	Labor	Materials	Totals
Windows replaced	239	\$19,908	\$33,563	\$53,471
Vandal Shields	364	\$11,697	\$5,573	\$17,270
Seats Cleaned	605	\$2,399	\$0	\$2,399
Seats Replaced	278	\$8,757	\$10,493	\$19,250
Graffiti removal - other	1,083	\$15,082	\$2,084	\$17,166
Repainting panels	30	\$5,270	\$779	\$6,049
Totals	2,599	\$63,113	\$52,492	\$115,605



Graffiti Pictures June 2013

Blue Line



Green Line



Gold Line



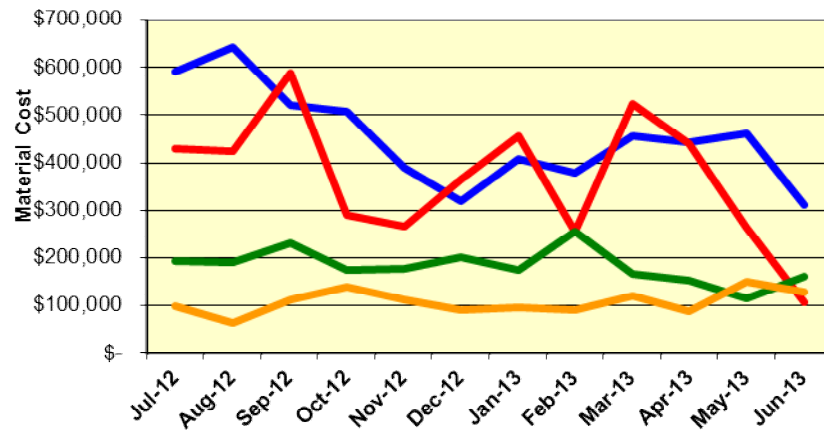
Material and Labor Costs

June 2013

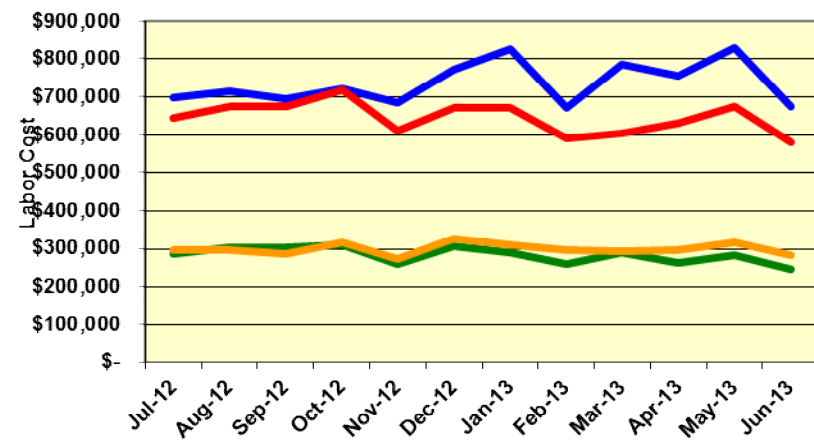
June preliminary financial provided. Final data not available due to year end closing.

MATERIALS	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13
Blue/Expo Lines	\$ 591,928	\$ 643,006	\$ 520,023	\$ 506,591	\$ 388,758	\$ 320,127	\$ 407,585	\$ 379,796	\$ 457,700	\$ 444,569	\$ 463,311	\$ 311,415
Red/Purple Lines	\$ 428,864	\$ 424,173	\$ 587,362	\$ 289,365	\$ 265,900	\$ 365,489	\$ 458,038	\$ 254,026	\$ 522,856	\$ 440,708	\$ 263,158	\$ 105,805
Green Line	\$ 194,003	\$ 189,811	\$ 230,008	\$ 174,361	\$ 175,923	\$ 200,257	\$ 173,693	\$ 254,286	\$ 166,766	\$ 151,982	\$ 114,311	\$ 159,526
Gold Line	\$ 98,449	\$ 64,112	\$ 112,270	\$ 138,235	\$ 111,198	\$ 90,479	\$ 95,355	\$ 91,890	\$ 120,086	\$ 89,212	\$ 149,564	\$ 129,742

Material Costs



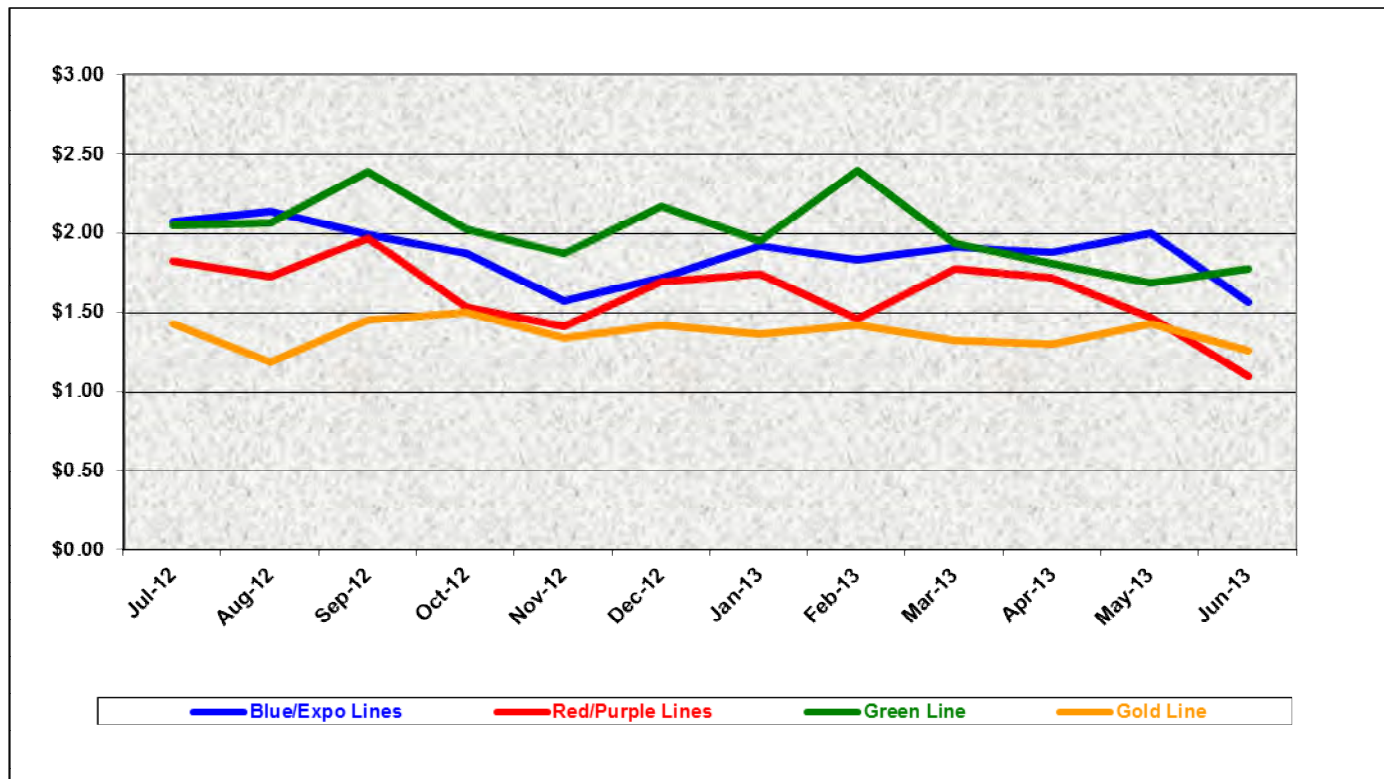
Labor Costs



LABOR	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13
Blue/Expo Lines	\$ 699,849	\$ 716,987	\$ 695,926	\$ 722,379	\$ 683,896	\$ 772,382	\$ 827,656	\$ 671,298	\$ 788,111	\$ 755,561	\$ 829,721	\$ 675,752
Red/Purple Lines	\$ 645,748	\$ 676,501	\$ 674,192	\$ 718,139	\$ 610,872	\$ 671,039	\$ 671,792	\$ 590,750	\$ 605,903	\$ 631,518	\$ 675,950	\$ 579,395
Green Line	\$ 286,110	\$ 304,066	\$ 304,487	\$ 309,399	\$ 258,637	\$ 306,761	\$ 290,453	\$ 261,863	\$ 289,639	\$ 263,955	\$ 282,841	\$ 247,129
Gold Line	\$ 296,565	\$ 296,078	\$ 286,489	\$ 318,284	\$ 272,259	\$ 326,736	\$ 311,060	\$ 297,422	\$ 292,452	\$ 298,759	\$ 317,387	\$ 282,541
Totals	\$1,928,272	\$1,993,632	\$1,961,094	\$2,068,201	\$1,825,664	\$2,076,918	\$2,100,961	\$1,821,333	\$1,976,105	\$1,949,793	\$2,105,899	\$1,784,817

Cost Per Mile June 2013

Cost per mile:	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Average
Blue/Expo Lines	\$2.07	\$2.14	\$1.99	\$1.87	\$1.57	\$1.72	\$1.92	\$1.83	\$1.92	\$1.88	\$2.01	\$1.56	\$1.87
Red/Purple Lines	\$1.83	\$1.73	\$1.97	\$1.53	\$1.41	\$1.70	\$1.75	\$1.46	\$1.78	\$1.72	\$1.47	\$1.10	\$1.62
Green Line	\$2.05	\$2.07	\$2.39	\$2.02	\$1.88	\$2.17	\$1.96	\$2.40	\$1.94	\$1.81	\$1.68	\$1.78	\$2.01
Gold Line	\$1.43	\$1.18	\$1.45	\$1.50	\$1.34	\$1.42	\$1.36	\$1.42	\$1.32	\$1.30	\$1.43	\$1.25	\$1.37



ATU Absences vs. Overtime

June 2013

ABSENCE TYPE and HOURS	3940 Admin.	3941 Blue	3942 Red	3943 Green	3944 Gold	3947 Expo	Total
AWP-ABSENT W/O PERMISSION	0.00	0.00	0.00	48.00	0.00	0.00	48.00
BER-BEAVEMENT	0.00	64.00	64.00	0.00	0.00	0.00	128.00
CTO-COMPENSATORY TIME OFF	0.00	27.00	60.00	28.00	12.00	4.00	131.00
CUT-EMPLOYEE LEAVES EARLY	0.00	1.33	0.48	0.50	0.45	0.00	2.76
CVA - CASUAL VACATION	48.00	108.00	672.00	84.00	112.00	0.00	1,024.00
DSL-DISABILITY LEAVE/LONG	0.00	848.00	248.00	160.00	168.00	0.00	1,424.00
EFH-EMG. FLOAT HOL.	0.00	16.00	80.00	136.00	88.00	0.00	320.00
ETO-EXCUSED TIME OFF	4.05	46.30	42.33	12.88	43.80	2.00	151.36
FMI-FAM IND INJURY	0.00	0.00	168.00	0.00	32.00	0.00	200.00
FML-FAMILY CARE LEAVE	0.00	320.00	457.50	96.00	464.00	0.00	1,337.50
FMS-FAMILY LEAVE SICK	0.00	8.00	221.10	40.00	120.00	0.00	389.10
HLF-HOLIDAY FLOATING	48.00	1,112.00	536.00	288.00	296.00	16.00	2,296.00
II-INDUSTRIAL INJURY	0.00	40.00	0.00	144.00	0.00	0.00	184.00
IIR-INDUS INJURY-REOCCUR.	0.00	0.00	64.00	0.00	0.00	0.00	64.00
IPD-INJURED PARTIAL DAY	0.00	3.98	0.00	0.00	0.00	0.00	3.98
JUR-JURY DUTY	0.00	0.00	8.00	16.00	8.00	0.00	32.00
LC1-LABOR CODE 233	24.00	55.90	163.01	8.00	56.00	0.00	306.91
LTI-OCCPIL/LONGTRM INJ LEAVE	0.00	0.00	0.00	184.00	0.00	0.00	184.00
MLN-MILITARY ABSENCE-UNPAID	0.00	0.00	0.00	32.00	0.00	0.00	32.00
OWP-OFF WITH PERMISSION	0.00	0.00	8.00	0.00	8.00	0.00	16.00
RTO-REQUESTED TIME OFF-NO PA	0.00	0.00	8.00	0.00	0.00	0.00	8.00
SCK-SICK PAY	16.00	64.00	16.00	64.00	56.00	0.00	216.00
SCW-SICK WITHOUT PAY	0.00	120.00	24.00	127.55	0.00	0.00	271.55
TAR-TARDY	0.00	1.71	0.79	1.58	0.00	0.05	4.13
VAC-VACATION	0.00	1,435.90	1,024.00	474.50	512.00	68.00	3,514.40
VAS-VACATION WHILE SICK	0.00	0.00	36.00	0.00	0.00	0.00	36.00
Total Absence Hours	140	4,272	3,901	1,945	1,976	90	12,325
ATU Number of Work Force (assigned)	8	121	111	46	47	6	339
Full Work Force hours/month	1,386	20,969	19,236	7,972	8,145	1,040	58,749
Absence as a % of Work Force	10%	20%	20%	24%	24%	9%	21%
OVERTIME TYPE and HOURS	3940	3941	3942	3943	3944	3947	Total
CTB-COMPENSATORY TIME TO BANK	45	1266	1311	388	285	48	3343
OTP-PREM OVERTIME	664	4534	3813	2432	1549	147	13138
WLO-Worked Lunch Overtime	79	142	158	121	98	10	607
Total	787	5941	5283	2942	1932	204	17089
Overtime as a % of Work Force	57%	28%	27%	37%	24%	20%	29%
UNCOVERED ABSENCES	3940	3941	3942	3943	3944	3947	Total
Absences FTE	1	25	23	11	11	1	71
OTP FTE	5	34	30	17	11	1	99
FTE Difference	-4	-9	-7	-6	0	0	-28

Note: Overtime also covers other required activities.

Rail Vehicle Engineering Project Summary

June 2013

Preparation of Engineering Technical Specifications	Tracking #	Status
Blower Motor and Chopper AC-Inverter	A650-TS-047 Rev. 0	In Process by Procurement
HVAC Evaporator AC Motor.Inverter	A650-TS-046 Rev. 0	In Process by Procurement
Red Line AC Gear Box (Rev. 0)	A650/TS/026	IFB 12-0024, Low bidder IM&E - Field Visit is required.
MBL Battery Set	P865/P2020/TS/069	Draft in review
Vital Relay Calibration P865/P2020	Sole Source	In Process by Procurement
Windows glass and rubber glazing specification	P865-P2020/TS-066	Single bid - NASG
Friction Brake Kit Less Air Compressor Overhaul	P2000/TS/035 Rev 0	Released to Procurement for bid - SS was signed - Awarded to Wabtec
Powered Axle Overhaul SOW	P865-P2020/TS/063 and 052	IFB 13-0030, Low bid is ORX
Red Line DC Gear Box	P650/TS/040 Rev. 0	*Released to Procurement for bid - Dealing with Flender as OEM *Competitive bid is In Process by Procurement Both bids are on Hold
Red Line DC Gear Box - New gearbox design	A650/TS/044 Rev. 0	In Process by Procurement
Aux power supply equipment (APSE) - Static Inverter	P865-P2020/TS/065 Rev. 0 [2 Parts]	IFB 13-0028 (ABB-Transtechtechnik-Vossloh)
Tire kit specification	P865-P2020/TS/064	IFB-13-0043, Globe Electric is the low bidder-under investigation by Procurement
Tire kit specification	P2000/TS/018	IFB-13-0043, Globe Electric is the low bidder-under investigation by Procurement
Red Line (Base Buy) DC Traction Motor	P650/TS/041	Released to Procurement - HMI, the lowest bid is in evaluation process.
MBL HVAC Compressor	P865/P2020/TS/067 Rev. 0	Released to Procurement - IFB 13-0015 - Transicold is the low bidder.
Head Sign LED	P2000/TS/037 Rev. 0	In Process by Procurement
Chevron springs	P865/P2020/TS/068 Rev. 0	Released to Procurement for bid - IFB 13-0015 In Process by Procurement -GMT is the low bidder. Required 1st article for testing and approval.
Chopper Air Filter	P865-P2020/TS/050	In Signature
Motor Alternator Filter	P865-P2020/TS/051	In Signature
Inverter Air Filter	A650/TS/036	In Signature
Pantograph	P2550/TS/006	Draft in review
	General - All Lines	Status
Roadway Worker Protection		CPUC/Installing ProTran1 Device-P865/P2020/P2000 completed, A650/P2550 in installation
New Radios installed to replace old radios		Meeting 3/7/2012-Contract awarded, MBL and P2000 completed. A650 in installation process P2550 in prototype completeed.
St. Louis LRV		Testing flooring for fire rating - investigating computability.
Proposed Spread Spectrum Frequency Hopping technology for vehicle door control safety system all lines.		Consider Protran system (FCC15 passed) as the first prototype to try. Work in progress to consider system design, test and installation. Estimate to be developed for installation costs for Project.

Rail Vehicle Engineering Project Summary (cont'd)

June 2013

	P2000 Overhaul Program	Status
Master Controller - Bombardier Refurbish		Ongoing Program
RSS and EOSS Bundle Cables/Connectors		In Progress - Glenair
Speed Sensors		Testing new speed sensors from Smith System
Bombardier Engineering Team visit and provide OEM support on Speed Sensor, EMI, MC,...and other issues		In Progress
	P865/P2020 Program	Status
Under seat - No motion relays		ABB Prototype installed on 07/24/12 for one month test period. Test was successful. Received all kits and RFS are in process of installation.
Replace air compressor DC motor with AC motor		Knorr prototype in Modifying 1 unit is received - Scheduling Knorr field visit to install and test on the car. Prototype installed and in testing.
LED Destination Signs		Luminator installed the prototype - Working on certification and production.
	A650 Overhaul Program	Status
HPT Upgrade		Wabtec Proposal received. NTP issued 08/08/12. One car set prototype in testing. First delivery of 16 units scheduled for 02/22/13. Contract in progress.
ABI New Traction Motor Mount		ABI for Fleet Modification in progress. A total of one hundred sixteen (116) trucks were completed.
Rubber Flooring PRF		Dealing with OEM - PRF. Delivery schedule by end of May.
Door Operator Gearbox and Rollers Overhaul		In Progress - Buying kits from Vapor Stone to overhaul GB and motor in-house.
Base Buy DC fleet investigation		LJ-CH2M and engineering addressing PECE testing, Capacitors replacement, and modifying A17-A22-A23 boards. Field power supply calibration completed. PECE test procedure. Replacing all system capacitors.
	P2550	Status
3P Flip Up Seat Finger Guard		Submitted SS to Procurement - Testori - 2nd prototype received and requires modification. Final prototype was accepted.
Compressor Desiccant Material		Prototype Canistor fitting manufactured and tried at MGLD. Air leak present. Knorr to investigate installation procedure or O ring issues. Final prototype is in testing.
Ground Brush Schunk (Lamellar Seal failure investigation)		Awaiting ABI/Schunk final update. ABI/Schunk recommended to remove all Lamellar seals, Metro requested an FMI.
HVAC investigation		Water drain and smoking filter issues - Dealing with Thermoking and ABI. TK performing 3 FMI across the fleet. Modification Bulletin for HVAC SS filter issued for signature.
Lateral shock absorber		Investigating the failure of the resilient bushing. ABI will change the Gimo to ZF type on the entire fleet.
Center truck adapter plate		ABI modifying the profile of the adapter plate fleet wide.
Center truck resilient pins		ABI in process of finalizing the design of new pin.
TWC Testing		Investigate TWC performance issue on B end of Vehicle. TWC Test plan proposed by ASTS. Test plan is under review by Metro, LTK, and Systra.

QA-Warranty Program Projects Summary

June 2013

QA-WARRANTY ACTIVITIES

- On-Going, P2550 parts tracking: Contract Spares, Capital Spares, Metro Loaned Parts status to ABI
- On-Going, Division Warranty Parts Claims Processing
- P2550 Fleet High Speed Coupling failure investigation (Action pending ABI)
- P2550 Shock Absorber fleet failure declared, ABI will replace 336 lateral shock absorbers under warranty conditions 2 Vehicles of 50 new shock absorbers installed
- P2550 (Lamellar Seal) Truck Resilient Pin Bushing fleet failure declared (Action pending ABI)
- P2550 4 of 50 Cars have new profile connection beam installed with original resilient pins and bushings
- A650 Base Buy & Option Car Fleet Warranty Truck Frame Mod Campaign (119 of 216 Trucks modified to date). MRL Warranty Cost Avoidance savings accrued to date \$1.78 million
- On-Going, Management's Special Interest Phase-2 Supplemental Inspections, MBL & MGL P2000 Fleet 9 of 52 cars completed
- QA PMI Audits, Spot Checks, Surprise/Unannounced Audits performed (8)
- 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

June 2013

Training classes completed during the month of June 2013

Description	Course Hours	Student Count	Training Hours
Blue & Expo Line Training - (P865/2020 & P2000 LRV):			
RFS SIEMENS 2000 HVAC	64	9	576
RFS SIEMENS 2000 TRUCK	16	9	144
REFRIGERANT RECOVERY SYSTEMS (608)	16	8	128

Total Blue Line Training (Hours): 848

Red Line Training (Breda A650 HRV):			
RFS SHUTTLE WAGON	8	6	48
RFS HRV RE-RAILING	8	6	48

Total Red Line Training (Hours): 96

Green Line Training (P2000 LRVs):			
RFS SIEMENS 2000 FRICTION BRAKES	48	5	240

Total Green Line Training (Hours): 240

Gold Line Training (P2550 LRVs):			
RFS ANSALDOBREDA 2550 H.V.A.C.	16	2	32
RFS ANSALDOBREDA 2550 TRUCKS	24	1	24
RFS ANSALDOBREDA 2550 CAR BODY	16	1	16

Total Gold Line Training (Hours): 72

Total RFS Instruction for the month of June 2013 (Hours): 1,256

Other Instruction Activities

Staff Vacation	120
P2000 Vehicle Course Preparation	80
P2550 Vehicle Course Preparation	40
Red Line PTU Setup	40
Red Line Engineering Support	24

Total Other Instruction Activities 304.0

Core Vehicle Training Completed: BLUE RED GREEN GOLD

Percentage of core vehicle training complete: 73.9% 91.5% 83.8% 84.3%
Siemens P2000 training complete: 50.3% N/A N/A N/A

Average Specialist Rail Experience Level in Years: 11.3 9.7 9.2 9.8

Core Training Completed

