



Rail Fleet Services Monthly Report February 2013

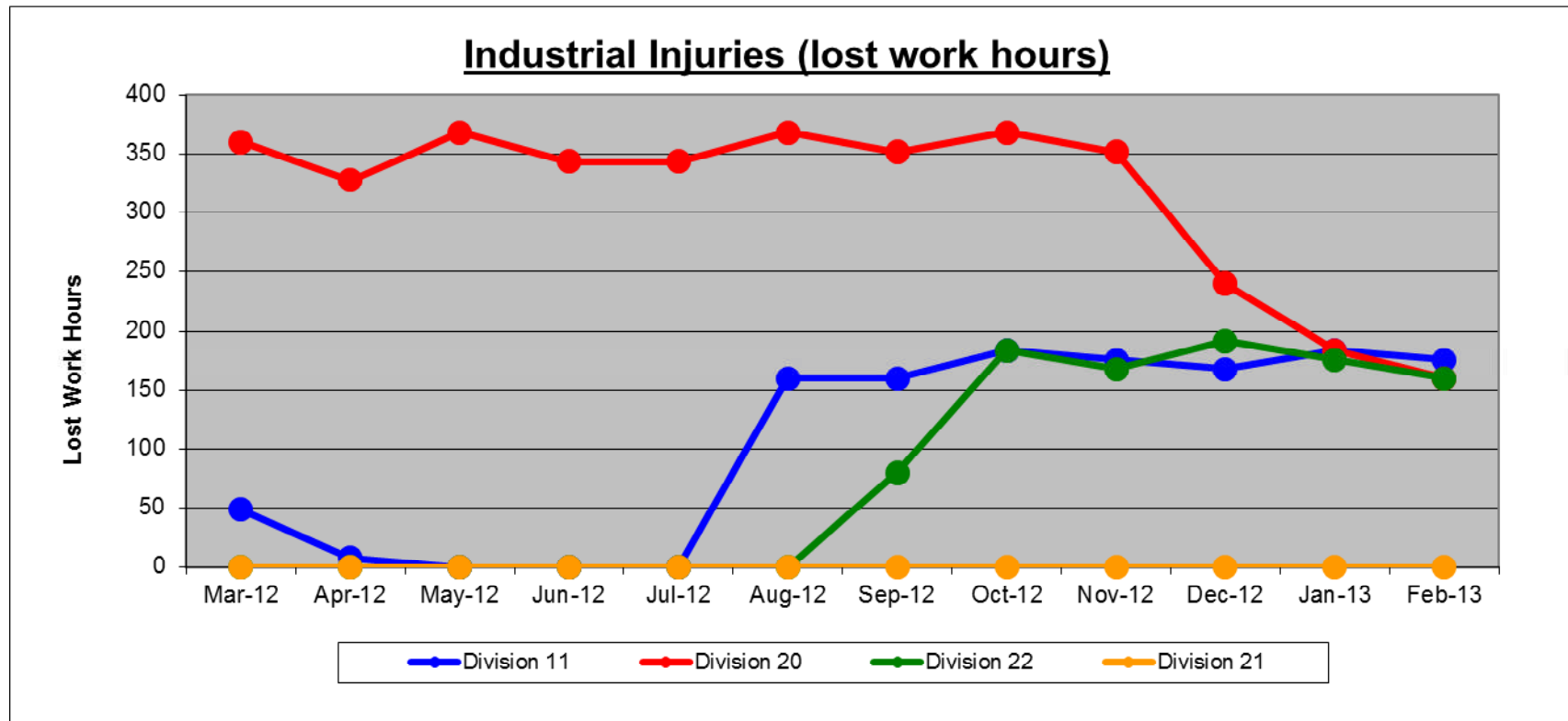


Metro

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Industrial Injuries – Lost Work Hours February 2013



	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Year to Date
Division 11	49	8	0	0	0	160	160	184	176	168	184	176	1,265
Division 20	360	328	368	344	344	368	352	368	352	240	184	160	3,768
Division 22	0	0	0	0	0	0	80	184	168	192	176	160	960
Division 21	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	409	336	368	344	344	528	592	736	696	600	544	496	5,993

Rail Vehicle Accidents & Major Incidents

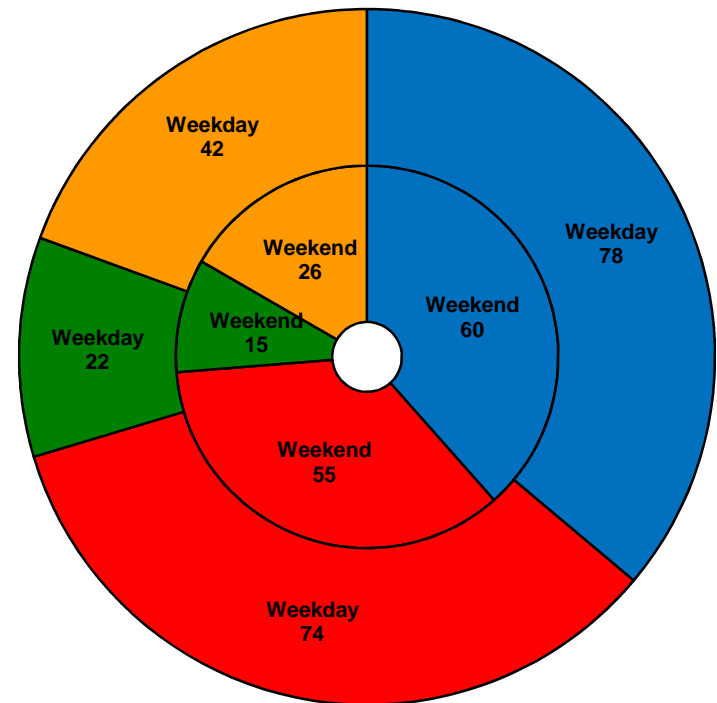
February 2013

Repair Costs	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Totals
Blue/Expo Line	\$18,570	\$2,675	\$1,718	\$1,186	\$674	\$8,226	\$4,726	\$1,668	\$494	\$5,262	\$18,740	\$3,288	\$67,227
Red/Purple Line	\$0	\$1,115	\$571	\$0	\$0	\$0	\$778	\$0	\$0	\$0	\$2,244	\$0	\$4,708
Green Line	\$0	\$989	\$0	\$0	\$120	\$0	\$0	\$0	\$0	\$503	\$202	\$126	\$1,940
Gold Line	\$4,134	\$0	\$0	\$752	\$0	\$1,583	\$0	\$0	\$0	\$0	\$176	\$0	\$6,645
Totals	\$22,704	\$4,779	\$2,289	\$1,938	\$794	\$9,809	\$5,504	\$1,668	\$494	\$5,765	\$21,362	\$3,414	\$80,520

Rail Vehicle Accident Costs - February 2013				
Metro Blue Line				
Date	Incident #	Problem code	Incident Description	Cost
2/9/2013	2283505	Train vs. Pedestrian	A 10-72 was reported at Century grade crossing heading southbound on track 2.	\$2,380.00
2/6/2013	2285988	Train vs. Pedestrian	A 10-72 was reported heading southbound at Artesia Blvd. pedestrian crossing.	\$908.00
				3,288.00
Metro Gold Line				
2/15/2013	2285988	Train vs. Object	A 10-71 occurred with Train 417 making contact with a misaligned gate at Figueroa Street.	\$0.00
				\$0.00
Metro Green Line				
2/14/2013	2285223	Train vs. Pedestrian	A 10-72 occurred on track 1 involving Train 33 at Wilmington Station.	\$126.00
				\$126.00
				GRAND TOTAL
				\$3,414.00
(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 February 2013

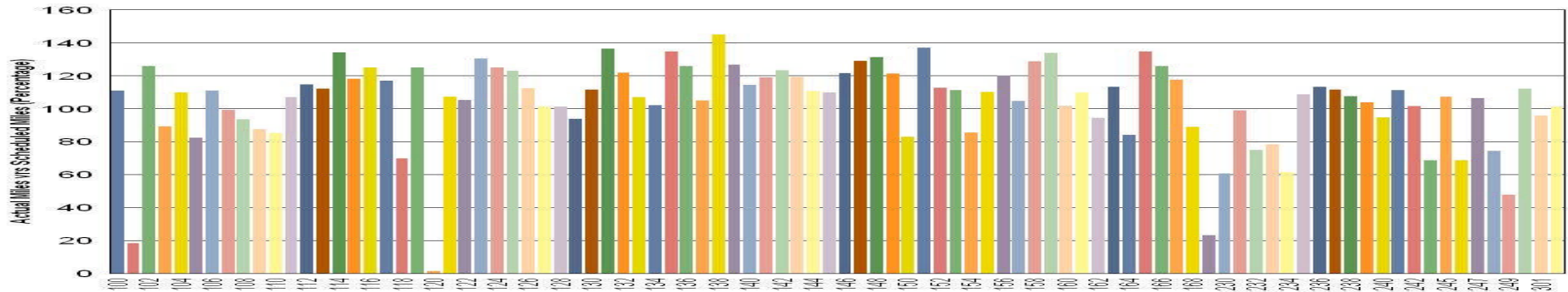
<u>Blue/Expo Line Fleet Size:</u>		92	
	<u>Vehicles</u>	<u>Average</u>	<u>% Up</u>
<u>Pull Out</u>	<u>Required</u>	<u>Available</u>	<u>(Down)</u>
Weekday:	78	80	103%
Weekend:	60	64	107%
Late Pullouts: 0 *			
Monthly Mileage:	574,800		
<u>Red/Purple Line Fleet Size:</u>		104	
	<u>Vehicles</u>	<u>Average</u>	<u>% Up</u>
<u>Pull Out</u>	<u>Required</u>	<u>Available</u>	<u>(Down)</u>
Weekday:	74	84	113%
Weekend:	55	70	128%
Late Pullouts: 0 *			
Monthly Mileage:	578,614		
<u>Green Line Fleet Size:</u>		29	
	<u>Vehicles</u>	<u>Average</u>	<u>% Up</u>
<u>Pull Out</u>	<u>Required</u>	<u>Available</u>	<u>(Down)</u>
Weekday:	22	23	104%
Weekend:	15	17	115%
Late Pullouts: 0 *			
Monthly Mileage:	215,032		
<u>Gold Line Fleet Size:</u>		50	
	<u>Vehicles</u>	<u>Average</u>	<u>% Up</u>
<u>Pull Out</u>	<u>Required</u>	<u>Available</u>	<u>(Down)</u>
Weekday:	42	43	103%
Weekend:	26	42	160%
Late Pullouts: 0 *			
Monthly Mileage:	273,537		



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

Vehicle Utilization February 2013

Metro Blue/Expo Line Fleet



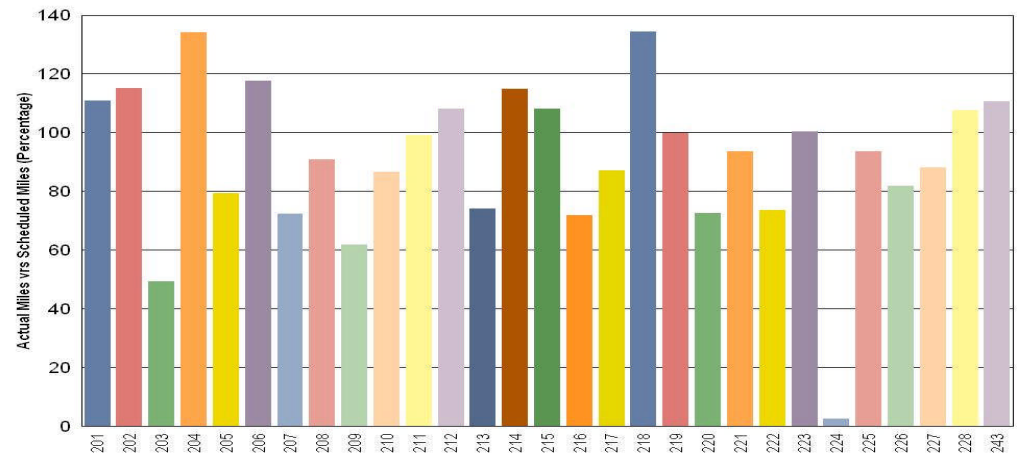
Blue/Expo Lines:

- 100 Vehicle held out of service for exterior body repair and painting and for interior graffiti abatement. Vehicle is now back in service.
- 120 Vehicle held out of service due to continued automatic train protection/speedometer problems and friction brake issues.
- 229 Vehicle held out of service due to continued ATP failure issues requiring removal and replacement of all friction brake discs.

Green Line:

- 224 Vehicle 224 has been held out of service due to excessive electromagnetic interference and required replacement of auxiliary inverter to resolve the issue. Vehicle is back in service.

Metro Green Line

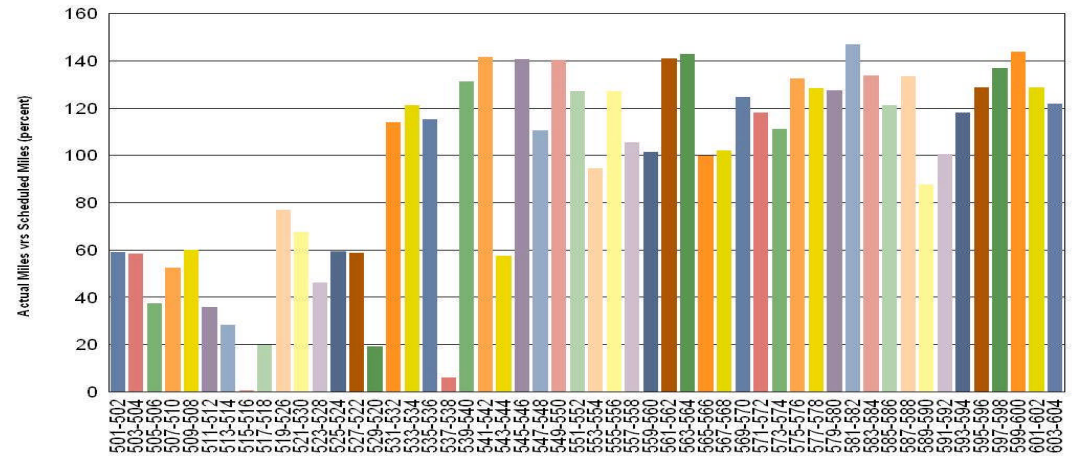


Vehicle Utilization February 2013

Red/Purple Lines: Explanation for under-used vehicles:

- 505-506 Vehicle held out of service due to propulsion problems.
- 511-512 Vehicle held out of service due to preventive inspection and corrective repairs.
- 513-514 Vehicle held out of service due to propulsion and brake problems.
- 515-516 Vehicle held out of service due to ATP problems.
- 517-518 Vehicle held out of service due to a major inspection (90k).
- 529-520 Vehicle held out of service due to an auxiliary power fault.
- 537-538 Vehicle held out of service due to propulsion and vibration problems.

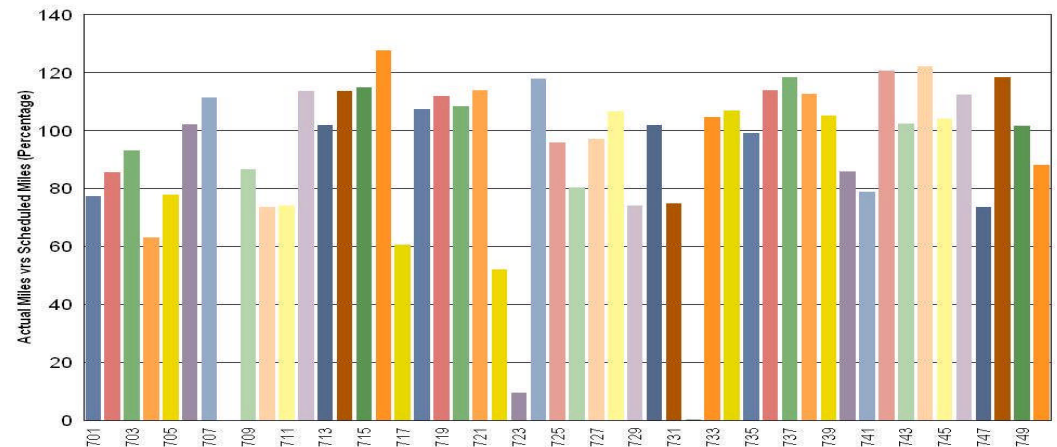
Metro Red/Purple Lines



Gold Line:

- 708 Vehicle held out of service due to a major high speed coupler failure. Corrective action is being reviewed by project team and contractor.
- 723 Vehicle held out of service due to repeated HVAC faults. Contractor is scheduled for repair.
- 732 Vehicle held out of service due to low voltage power supply issues that require extensive time and troubleshooting. Problem was corrected and vehicle placed back into service in March.

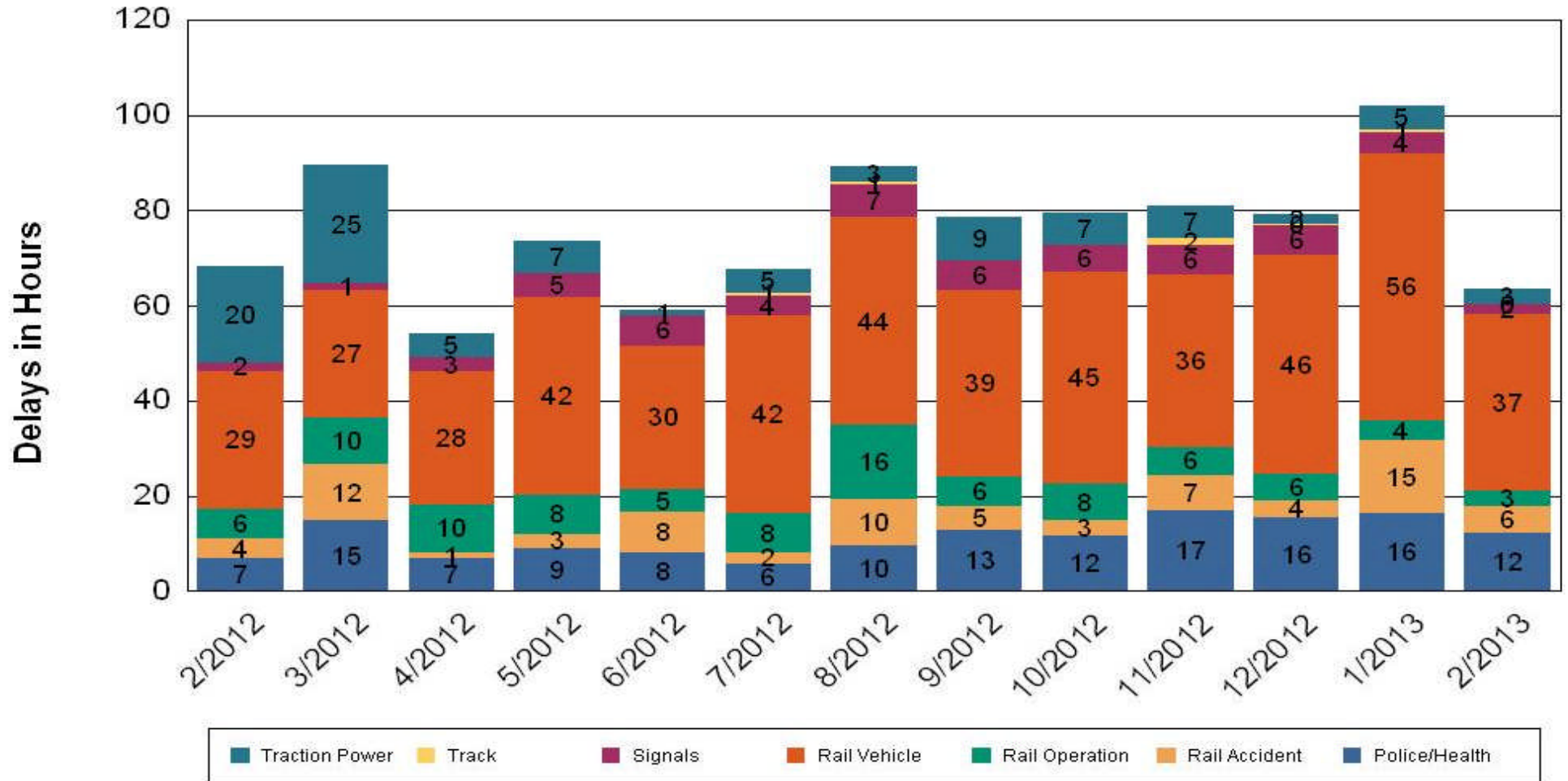
Metro Gold Line



All Train Delay Incidents February 2013

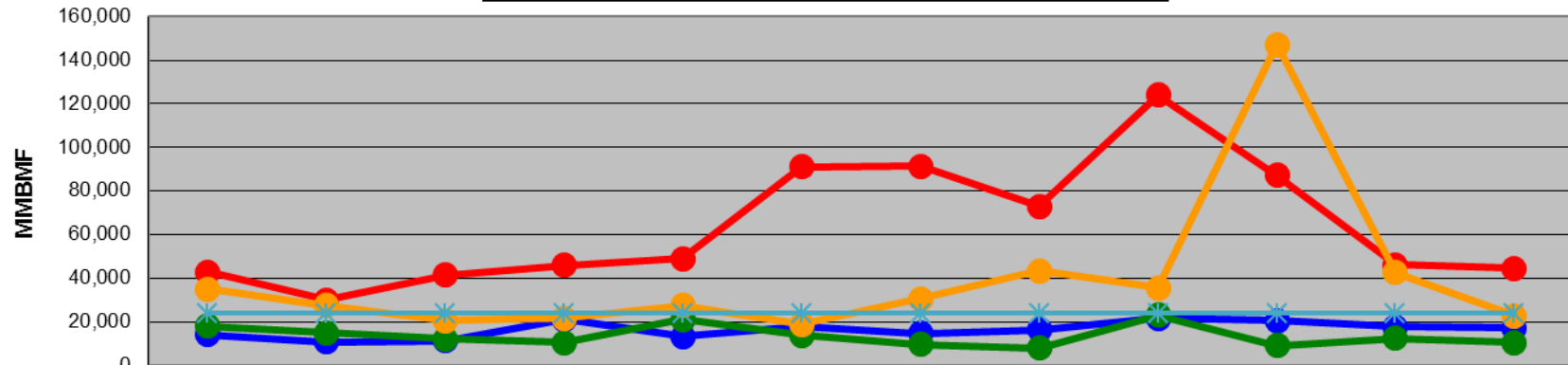
All Train Delays

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



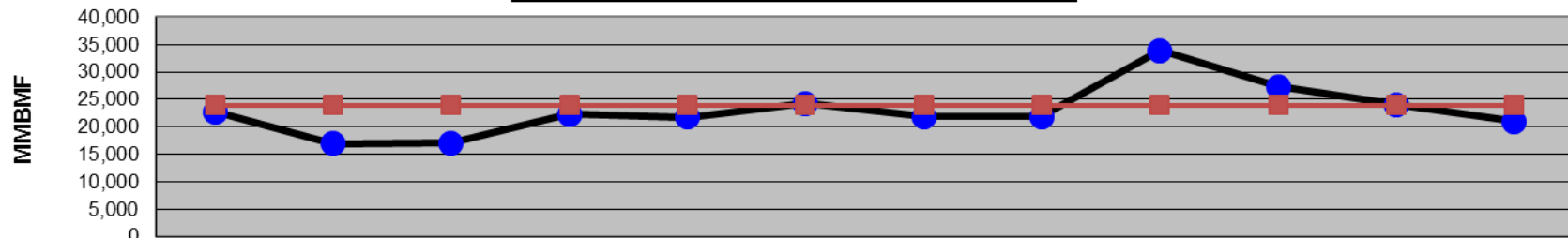
Mean Miles Between Failures (Major) Year to Date

Mean Miles Between Major Failures (12 months)



	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13
Blue/Expo Lines	14,216	10,803	11,546	21,129	13,559	18,185	14,867	16,391	21,686	20,542	17,876	17,418
Red/Purple Lines	42,883	30,255	41,539	46,006	49,022	91,119	91,340	72,959	123,933	87,167	46,203	44,509
Green Line	18,092	15,108	12,342	10,775	21,266	14,043	9,726	8,243	23,154	9,341	12,485	10,752
Gold Line	35,279	27,526	20,649	21,726	27,641	19,040	30,564	43,461	35,725	147,123	42,687	22,795
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

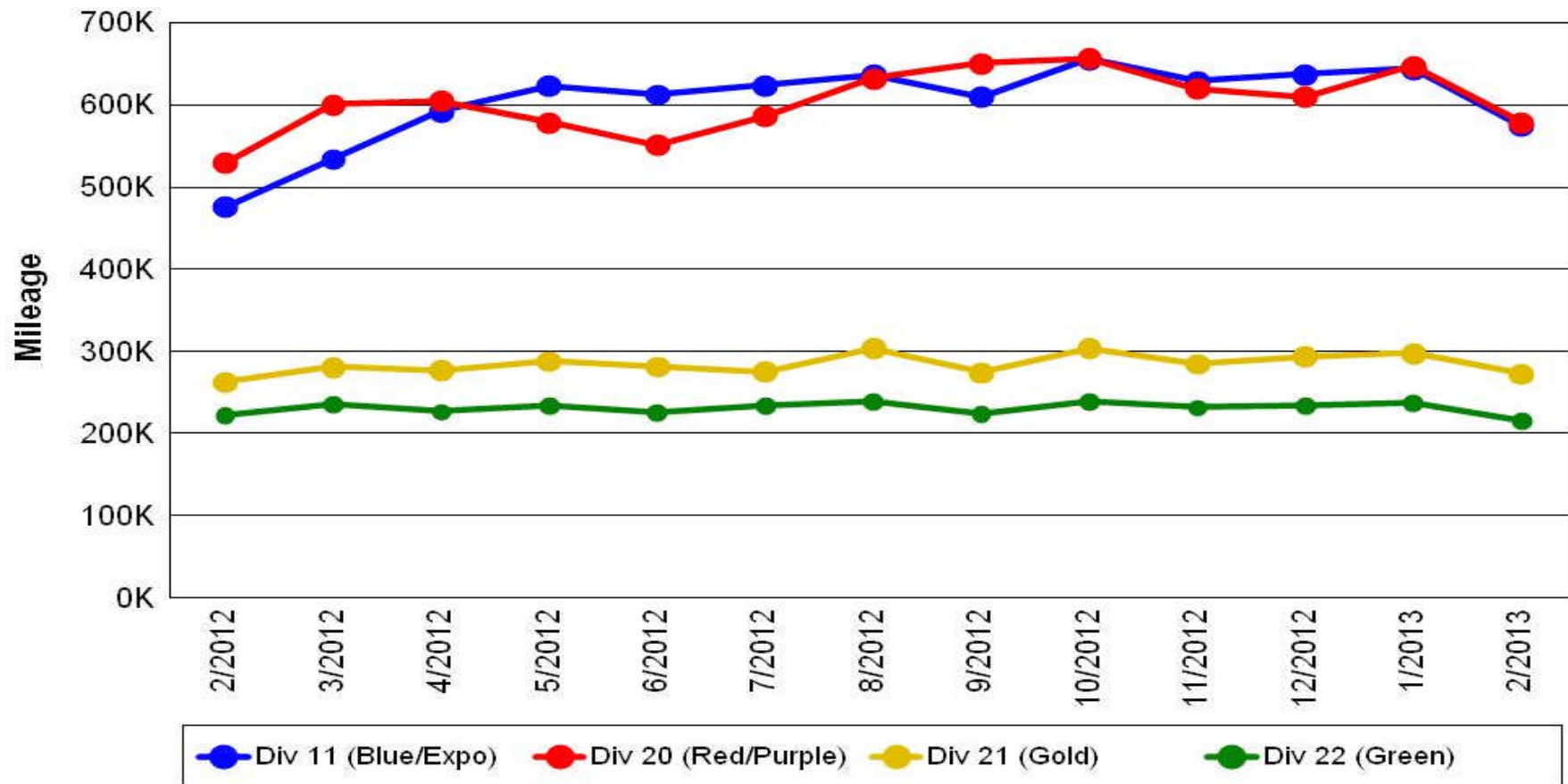
Mean Miles Between Major Failures (all)



	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13
All Rail	22,712	17,011	17,115	22,314	21,802	24,236	21,846	21,830	33,960	27,304	24,032	21,051
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) February 2013

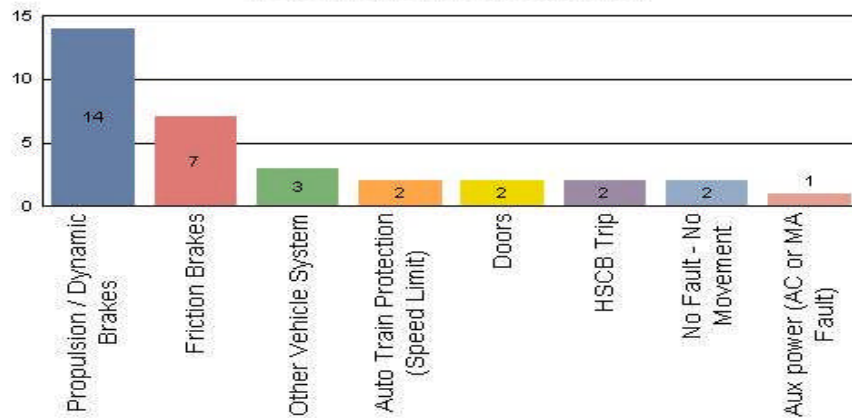
Rail Division Monthly Mileage



Major Incidents February 2013

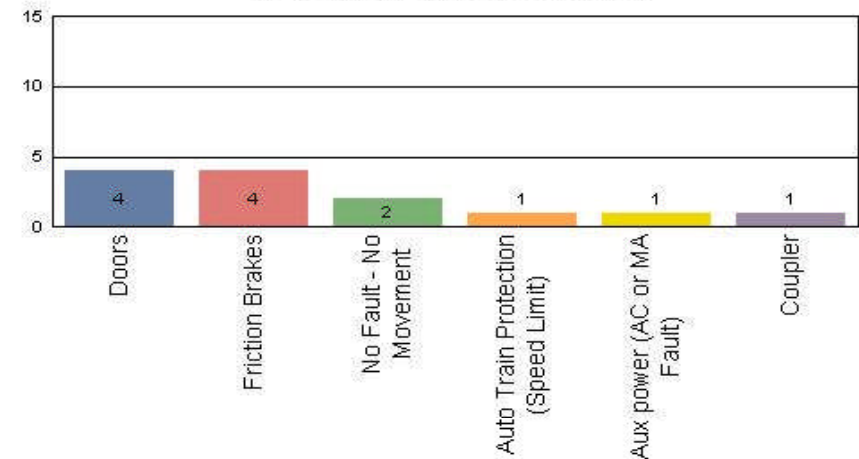
Metro Blue/Expo Line

Top Incident Categories



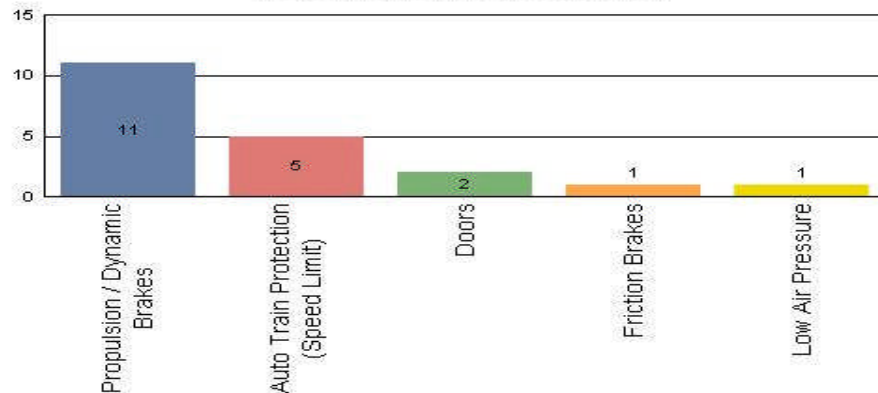
Metro Red/Purple Line

Top Incident Categories



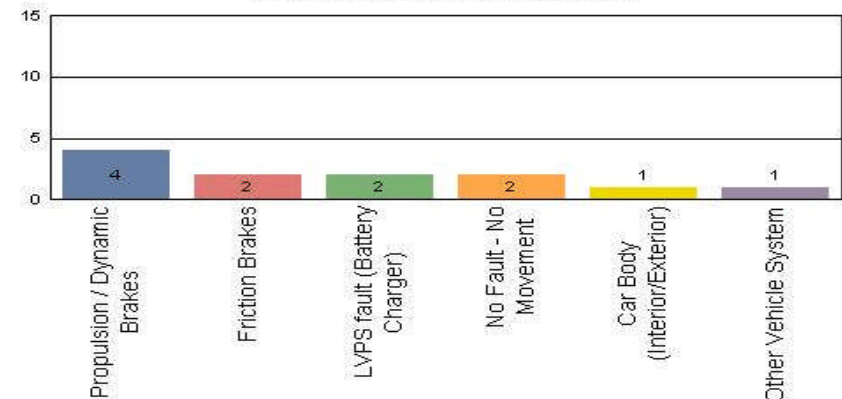
Metro Green Line

Top Incident Categories



Metro Gold Line

Top Incident Categories



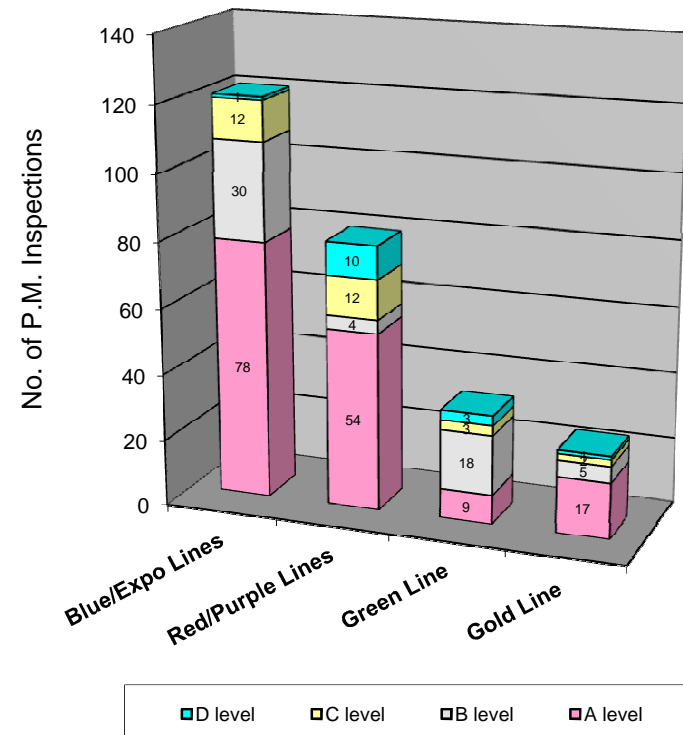
Preventive Maintenance Compliance

February 2013

PM Compliance	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13
Blue/Expo Lines	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	*99%	100%
Red/Purple Lines	100%	100%	100%	100%	100%	*98%	100%	100%	100%	100%	100%	100%
Green Line	100%	100%	100%	96%	100%	100%	100%	100%	100%	100%	100%	100%
Gold Line	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

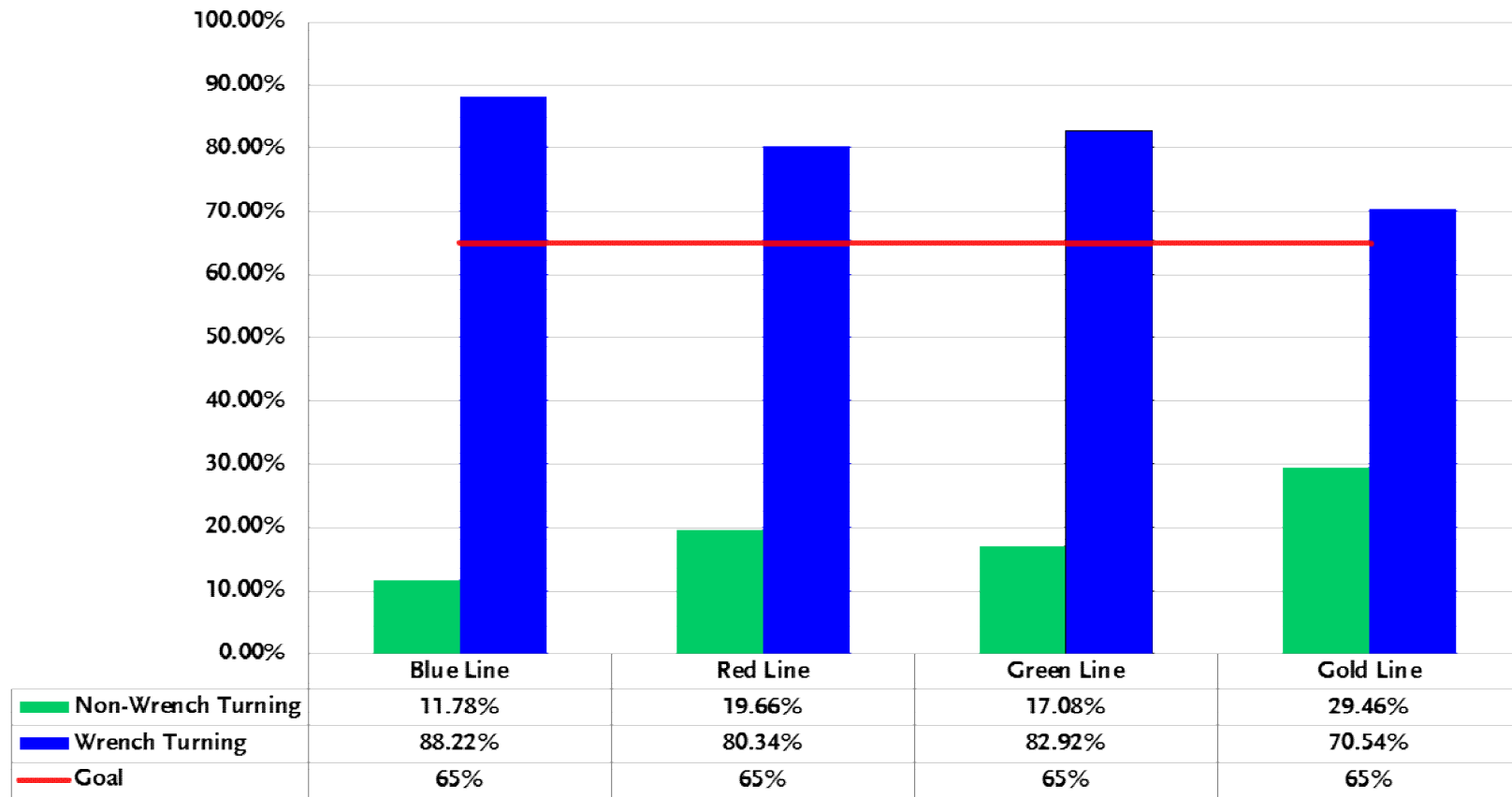
Number of Preventive Maintenance Inspections - February 2013					
Line	A level	B level	C level	D level	Totals
Blue/Expo Lines	67	17	11	3	98
Red/Purple Lines	50	14	4	4	72
Green Line	5	19	1	2	27
Gold Line	17	7	0	5	29
Totals:	139	57	16	14	226

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 February 2013

RFS - Wrench Turning Feb-13

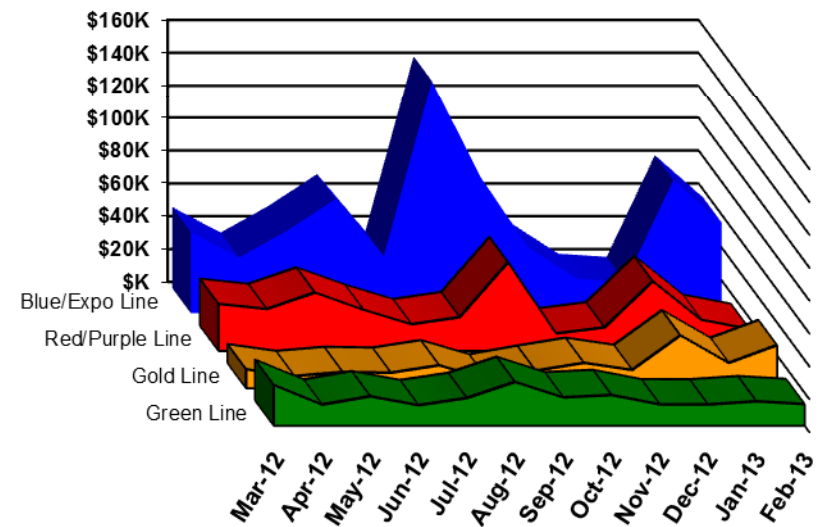


Vandalism & Graffiti Report

February 2013

	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Year-to-Date
Blue/Expo Line	\$49K	\$34K	\$50K	\$69K	\$35K	\$142K	\$83K	\$40K	\$21K	\$19K	\$81K	\$55K	\$678K
Red/Purple Line	\$28K	\$25K	\$35K	\$25K	\$16K	\$20K	\$54K	\$10K	\$14K	\$42K	\$19K	\$13K	\$304K
Green Line	\$25K	\$13K	\$18K	\$12K	\$17K	\$27K	\$17K	\$19K	\$13K	\$13K	\$15K	\$13K	\$201K
Gold Line	\$11K	\$7K	\$10K	\$9K	\$14K	\$5K	\$11K	\$15K	\$11K	\$32K	\$15K	\$26K	\$168K
Totals:	\$114K	\$79K	\$113K	\$116K	\$82K	\$194K	\$165K	\$84K	\$59K	\$106K	\$130K	\$108K	\$1,351K

February 2013 Vandalism & Graffiti - All Rail				
	Qty	Labor	Materials	Totals
Windows replaced	138	\$10,017	\$17,687	\$27,704
Vandal Shields	453	\$13,429	\$6,357	\$19,786
Seats Cleaned	589	\$2,309	\$0	\$2,309
Seats Replaced	507	\$15,971	\$17,702	\$33,673
Graffiti removal - other	868	\$7,793	\$120	\$7,913
Repainting panels	24	\$15,091	\$1,319	\$16,410
Totals	2,579	\$64,610	\$43,185	\$107,795



Graffiti Pictures February 2013

Blue Line



Green Line



Gold Line

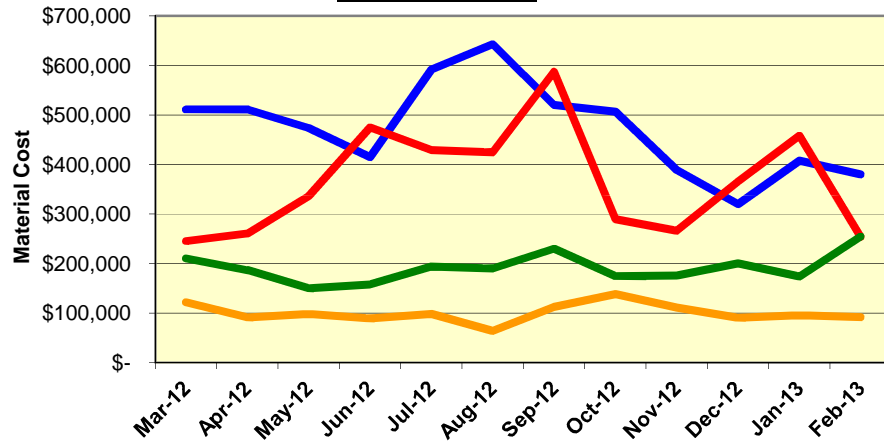


Material and Labor Costs

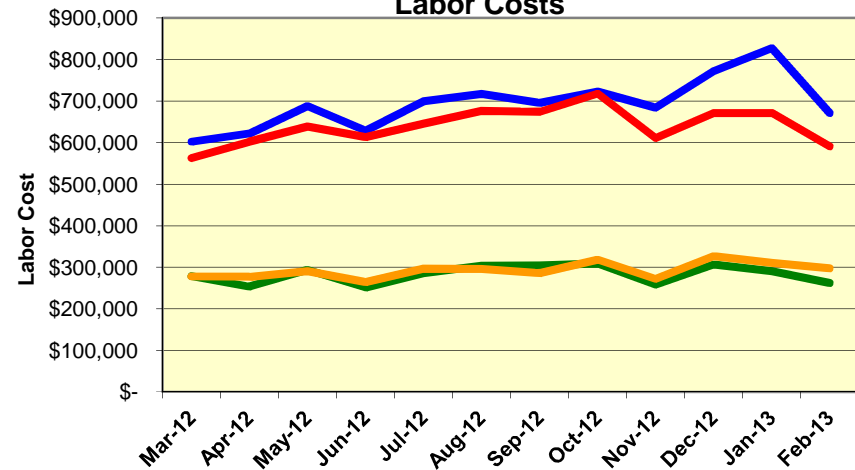
February 2013

MATERIALS	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13
Blue/Expo Lines	\$ 510,512	\$ 511,185	\$ 473,281	\$ 414,601	\$ 591,928	\$ 643,006	\$ 520,023	\$ 506,591	\$ 388,758	\$ 320,127	\$ 407,585	\$ 379,796 *
Red/Purple Lines	\$ 244,902	\$ 260,532	\$ 335,824	\$ 474,908	\$ 428,864	\$ 424,173	\$ 587,362	\$ 289,365	\$ 265,900	\$ 365,489	\$ 458,038	\$ 254,026 *
Green Line	\$ 210,220	\$ 186,572	\$ 149,660	\$ 157,920	\$ 194,003	\$ 189,811	\$ 230,008	\$ 174,361	\$ 175,923	\$ 200,257	\$ 173,693	\$ 254,274 *
Gold Line	\$ 121,821	\$ 91,218	\$ 98,407	\$ 88,885	\$ 98,449	\$ 64,112	\$ 112,270	\$ 138,235	\$ 111,198	\$ 90,479	\$ 95,355	\$ 91,890
Totals	\$ 1,087,455	\$ 1,049,507	\$ 1,057,172	\$ 1,136,314	\$ 1,313,244	\$ 1,321,102	\$ 1,449,663	\$ 1,108,552	\$ 941,779	\$ 976,352	\$ 1,134,671	\$ 979,986

Material Costs



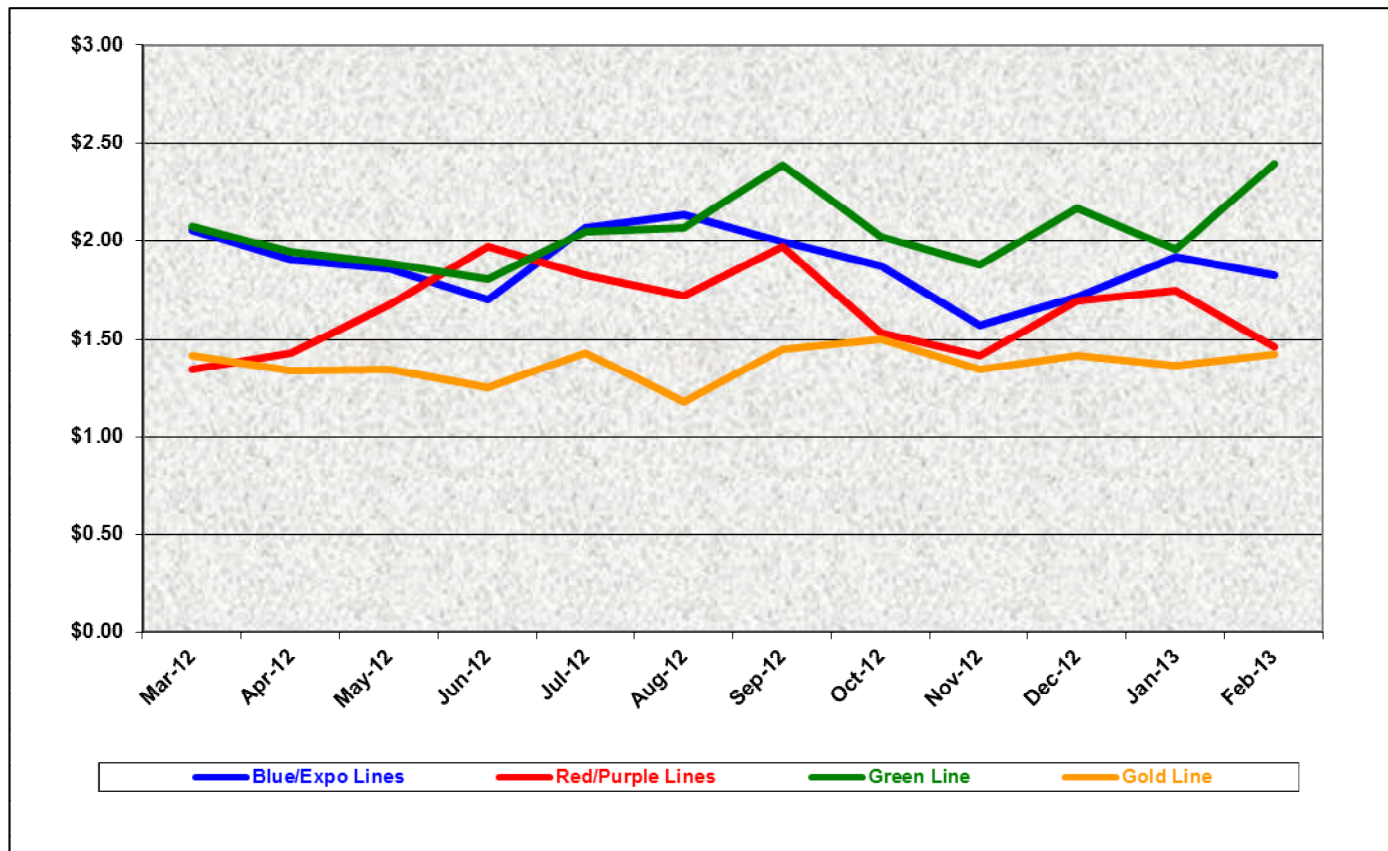
Labor Costs



LABOR	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13
Blue/Expo Lines	\$ 601,905	\$ 622,113	\$ 687,897	\$ 628,928	\$ 699,849	\$ 716,987	\$ 695,926	\$ 722,379	\$ 683,896	\$ 772,382	\$ 827,656	\$ 671,298
Red/Purple Lines	\$ 562,875	\$ 602,434	\$ 639,102	\$ 613,032	\$ 645,748	\$ 676,501	\$ 674,192	\$ 718,139	\$ 610,872	\$ 671,039	\$ 671,792	\$ 590,750
Green Line	\$ 278,653	\$ 253,643	\$ 293,492	\$ 251,094	\$ 286,110	\$ 304,066	\$ 304,487	\$ 309,399	\$ 258,637	\$ 306,761	\$ 290,453	\$ 261,863
Gold Line	\$ 277,944	\$ 276,975	\$ 290,375	\$ 264,536	\$ 296,565	\$ 296,078	\$ 286,489	\$ 318,284	\$ 272,259	\$ 326,736	\$ 311,060	\$ 297,422
Totals	\$1,721,377	\$1,755,165	\$1,910,866	\$1,757,590	\$1,928,272	\$1,993,632	\$1,961,094	\$2,068,201	\$1,825,664	\$2,076,918	\$2,100,961	\$1,821,333

Cost Per Mile February 2013

Cost per mile:	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Average
Blue/Expo Lines	\$2.06	\$1.91	\$1.86	\$1.70	\$2.07	\$2.14	\$1.99	\$1.87	\$1.57	\$1.72	\$1.92	\$1.83	\$1.89
Red/Purple Lines	\$1.35	\$1.43	\$1.68	\$1.97	\$1.83	\$1.73	\$1.97	\$1.53	\$1.41	\$1.70	\$1.75	\$1.46	\$1.65
Green Line	\$2.08	\$1.94	\$1.89	\$1.81	\$2.05	\$2.07	\$2.39	\$2.02	\$1.88	\$2.17	\$1.96	\$2.40	\$2.05
Gold Line	\$1.42	\$1.34	\$1.34	\$1.25	\$1.43	\$1.18	\$1.45	\$1.50	\$1.34	\$1.42	\$1.36	\$1.42	\$1.37



ATU Absences vs. Overtime

February 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	8.00	0.00	64.00	8.00	0.00	80.00
BER-BEAVEMENT	0.00	0.00	0.00	40.00	24.00	24.00	88.00
CTO-COMPENSATORY TIME OFF	0.00	223.32	215.98	144.83	188.50	52.00	824.63
CUT-EMPLOYEE LEAVES EARLY	1.00	1.50	0.02	0.00	0.00	0.00	2.52
CVA - CASUAL VACATION	8.00	92.00	380.00	0.00	192.00	0.00	672.00
DSL-DISABILITY LEAVE/LONG	0.00	792.00	160.00	160.00	152.00	0.00	1,264.00
EFH-EMG. FLOAT HOL.	0.00	16.00	56.00	16.00	24.00	0.00	112.00
ETO-EXCUSED TIME OFF	11.50	41.32	24.06	5.50	55.75	1.50	139.63
FMI-FAM IND INJURY	0.00	0.00	160.00	72.00	0.00	0.00	232.00
FML-FAMILY CARE LEAVE	0.00	416.00	528.00	112.00	8.00	0.00	1,064.00
FMS-FAMILY LEAVE SICK	0.00	104.00	203.20	0.00	0.00	0.00	307.20
HLF-HOLIDAY FLOATING	32.00	304.00	208.00	56.00	32.00	16.00	648.00
II-INDUSTRIAL INJURY	0.00	16.00	160.00	152.00	0.00	0.00	328.00
IIR-INDUS INJURY-REOCCUR.	0.00	160.00	0.00	0.00	0.00	0.00	160.00
IPD-INJURED PARTIAL DAY	4.00	0.00	0.00	0.00	0.00	0.00	4.00
JUR-JURY DUTY	0.00	80.00	0.00	0.00	0.00	8.00	88.00
LC1-LABOR CODE 233	16.00	368.00	264.50	132.00	144.00	16.00	940.50
LTI-OCCPIL/LONGTERM INJ LEAVE	0.00	0.00	0.00	8.00	0.00	0.00	8.00
OWP-OFF WITH PERMISSION	0.00	0.00	0.00	0.00	1.00	0.00	1.00
RTO-REQUESTED TIME OFF-NO PA	0.00	48.00	40.00	0.00	0.00	0.00	88.00
SCK-SICK PAY	0.00	352.00	192.00	68.00	88.00	48.00	748.00
SCW-SICK WITHOUT PAY	0.00	56.00	32.00	40.00	8.00	0.00	136.00
SPN-SCHOOL PARTNER NOT PAID	0.00	0.00	0.00	0.00	8.00	0.00	8.00
TAR-TARDY	0.03	2.02	1.90	2.09	0.18	0.00	6.22
VAC-VACATION	36.00	644.00	436.00	220.00	127.50	24.00	1,487.50
VAS-VACATION WHILE SICK	0.00	68.40	0.00	0.00	0.00	0.00	68.40
Total Absence Hours	109	3,793	3,062	1,292	1,061	190	9,506
ATU Number of Work Force (assigned)	7	122	109	46	46	6	336
Full Work Force hours/month	1,213	21,143	18,890	7,972	7,972	1,040	58,229
Absence as a % of Work Force	9%	18%	16%	16%	13%	18%	16%
OVERTIME TYPE and HOURS	3940	3941	3942	3943	3944	3947	Total
CTB-COMPENSATORY TIME TO BANK	4	129	157	30	65	16	401
OTP-PREM OVERTIME	456	4733	3743	1314	1390	153	11788
WLO-Worked Lunch Overtime	10	132	134	80	83	9	447
Total	470	4993	4035	1423	1539	178	12637
Overtime as a % of Work Force	39%	24%	21%	18%	19%	17%	22%
UNCOVERED ABSENCES	3940	3941	3942	3943	3944	3947	Total
Absences FTE	1	22	18	7	6	1	55
OTP FTE	3	29	23	8	9	1	73
FTE Difference	-2	-7	-5	-1	-3	0	-18

Note: Overtime also covers other required activities.

Rail Vehicle Engineering Project Summary

February 2013

Preparation of Engineering Technical Specifications	Tracking #	Status
Red Line AC Gear Box (Rev. 0)	A650/TS/026	IFB 12-0024 issued and schedule to close 01/11/2013
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	Released to Procurement for bid - In DEOD
Friction Brake Kit Less Air Compressor Overhaul	P2000/TS/035 Rev 0	Released to Procurement for bid - SS was signed - Going to December 13 Board for approval
A650 Battery Specification	A650/TS/39	Released to Procurement for bid - Hoppeke to deliver 1st article for testing and approval
Powered Axle Overhaul SOW	P865-P2020/TS/063 and 052	Released to Procurement for bid - In DEOD
Seat Insert	P865-P2020/TS/62	Released to Procurement - Awarded to Sardo -PO# SD259396 due end of December, 2013
Red Line DC Gear Box (Rev. 0)	P650/TS/040	Released to Procurement for bid - Dealing with Flender as OEM Competitive bid is on HOLD pending resolution.
Vandal Shield for all lines	A650-P865-P2000-P2550/TS/012	Released to Procurement- Contract awarded
Aux power supply equipment (APSE) - Static Inverter	P865-P2020/TS/065 Rev. 0 [2 Parts]	Released to Procurement for bid - In DEOD
Tire kit specification	P865-P2020/TS/064	Released to Procurement for bid
Red Line (Base Buy) DC Traction Motor	P650/TS/041	Released to Procurement - Bid is on Hold (Resin verification)
MBL HVAC Compressor	P865/P2020/TS/067 Rev. 0	Released to Procurement for bid - Reply to Bid questions.
Head Sign LED	P2000/TS/xx	Draft in process
Chevron springs	P865/P2020/TS/068 Rev. 0	Released to Procurement for bid - IFB 13-0015 issued, Bid due on 01/23/2013
Filter-Fresh Air	P2550/TS/004	In review process
Filter-Return Air	P2550/TS/005	In review process
Chopper Air Filter	P865-P2020/TS/050	Draft in review
Motor Alternator Filter	P865-P2020/TS/051	Draft in review
Inverter Air Filter	A650/TS/036	Draft in review
General - All Lines		Status
Roadway Worker Protection		CPUC/Installing ProTran1 Device-P865/P2020/P2000 completed, A650/P2550 in installation
Fleet Failure Analysis		CH2M Hill - LTK
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.
Bike Space		P2000/P2550/A650 Fleet modification completed.
St. Louis LRV		Testing flooring for fire rating - investigating computability.
P2000 Overhaul Program		Status
Mapping mainline		Conducted mapping the entire line in 2 weeks for ATP/ATO/TWC
Master Controller - Bombardier Refurbish		Ongoing Program
RSS and EOSS Bundle Cables/Connectors - Glenair		In Progress
CCH possible replacement (Focon)		Send information to Focon
TWC Calibration procedure.		TWC calibration procedures completed. Issued and Training completed at Division.
Speed Sensors		Testing new speed sensors from Smith System
Friction Brake failure investigation		Metro technical team with Wabtec (OEM) ongoing investigation.
Coupler Overhaul		In Progress
Bombardier Engineering Team visit and provide OEM support on Speed Sensor, EMI, MC,...and other issues		In Progress
Prototype "smart" automatic sanding circuit on P2000 vehicle.		
Install and test Smith-System Speed Sensors		

Rail Vehicle Engineering Project Summary (cont'd)

February 2013

P865/P2020 Program		Status
Remove the remotely reset CB1 Breaker		Fleet modification completed.
"G" force measurement on Transponder installed on P865/P2020		H&K installed "G" sensor on transponder and collected data for analysis - 03/08/12. New carbody mounted bracket were tested and completed fleet modification. New antennas are in installation progress.
Under seat - No motion relays		ABB Prototype installed on 07/24/12 for one month test period. Test was successful. In process of procuring kits.
Replace air compressor DC motor with AC motor		Knorr prototype on order - Due in October 2012 - Modifying 1 unit is in process by Knorr
ATP Antenna investigation		Survey 100% of the fleet - Recommend to replace all ATP antenna. Installed 2 each, new antennas on car 129 and 160. Data on 160 loop test was too high for series old new installation. ALSTOM did not release any antenna schematic or testing procedures.
Cardan Failure Investigation		Lab testing failed components and evaluate those in service - Kar's Lab
A650 Overhaul Program		Status
Investigate Car 505/506		Satatic test completed, dynamic yard test completed, mainline dynamic test scheduled the week of 12/10.
HPT Upgrade		Wabtec Proposal received. NTP issued 08/08/12. One car set prototype in testing
ABI New Traction Motor Mount		ABI for Fleet Modification in progress. A total of seventy seven (88) trucks were completed.
Friction Brake Kit Overhaul		Overhaul program in place - Wabtec (30 Base cars were added and approved)
Ribbed Rubber Flooring PRF		Dealing with OEM - No bids received from others. Proceeding with PRF.
Door Operator Gearbox and Rollers Overhaul		In Progress - Buying kits from Vapor Stone to overhaul GB and motor in house.
H-4 electronic units		Unit upgrade - Fleet issues (Wabtec) to provide new unit proposal.
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.
HVAC Evaporator AC motor/Inverter		Testing 1st article from Vapor Stone on one car.
Traction motor Blower- AC motor/Inverter		Testing 1st article from ATS on one car.
12 GTO (6 GTO+ and 6 GTO-) will be bench tested and installed on the train for dynamic testing.		In progress
PSI 3-day visit from 2/8-2/10/2013 regarding GE Tester performance to compare with PSI Tester. Installed GTO for dynamic main line testing		In Progress
LJKeiger's work continues on base-buy PECE system.		In Progress
P2550		Status
Vehicle Acceptance		Fifty cars have been Final Accepted.
3P Flip Up Seat Finger Guard		Submitted SS to Procurement - Testori - 1st prototype received and requires modification.
Find alternative Vendor for Reverse Engineer PCB Boards P2550		In Progress
Compressor Desiccant Material		In Progress
Rubber Boots (High Voltage)		In Progress - Vulcanite. Bought from OEM through A&E Telecom.
Cyclope light and Destination Sign Glass		In Progress - NASG
Ground Brush Schunk (Lamellar Seal failure investigation)		Awaiting ABI/Schunk final update.
HVAC investigation		Water drain and smoking filter issues - Prototype being manufactured by Metros CMF
Lateral shock absorber		Investigating the failure of the resilient bushing.
Expo		Status
P2000 Couple/un-couple issues		Investigation completed - Test was successful - Fleet modification in process.
Mapping entire MBL and Expo line		Mapped entire MBL and Expo line ATP/ATO/Line voltage/track signals.
Junction of Blue line and Expo line Testing - ATP		Testing indicated signal track problem at Culver City. Wayside are recertify track circuits. Testing completed on 10/18/12 indicated track circuit installation problem. GE investigating.
Loss of Cab signal, speed code 45 mph. Support GE, B&C, Wayside to resolve problems at La Cienega Station Expo line		In Progress to follow up. Update Project: GE replaced New Impedance Bond and verify that 90% of Blue line had been resolved. We will test with Wayside to resolve the rest of the fleet.
35 Cab Flips @ Culver City Platform and La Cienega Interlocking		Coordinate with Wayside to resolve the problems. GE vendor get involved to resolve a system design problem on E2C. (diode vs. no diode) Latest updated from BNC: No Diode for EXPO. Awaiting GE&BNC completion to finalize this issue. Repair completed to be tested by RFS Engineering 02/13/13
Support B&C by testing car on La Cienega		B&C Engineer and Wayside will be on site to adjust cab signals.

P2550 Vehicle Acceptance Program

February 2013

Vehicle Status Update:

- Project staff working with AB to close out open items including deliverable documentation.
- AB performing ATP-by pass switch modification. To date, 45 cars completed.
- AB performing Door system improvement modification. To date, 45 cars completed.

Engineering Activities Update:

- Event recorder: Configuration finalized and event recorders activated. 44 cars completed. Access to the remaining vehicles, and parts for those cars, are being addressed. The final training schedule for the event recorder has been Set for April.
- ATP/TWC Configuration: Vendor testing to resolve TWC change order issues was completed. A-STS to continue with software changes and perform qualification of the system in March.
- Engineering issues regarding warranty items are being addressed.

Project Management:

- Contract spares continue to be delivered to Metro and most parts needed for day-to-day maintenance have been received. Critical parts needed for heavy repairs are beginning to arrive including two spare truck sets.
- Director level project meeting on technical and commercial items held February 8th, 2013.
- Daily and bi-weekly meetings are scheduled with contractor management to address project issues.

QA-Warranty Program Projects Summary

February 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 (Action pending ABI)
- P2550 (Lamellar Seal) Truck Resilient Pin Bushing fleet failure declared (Action pending ABI)
- A650 Base Buy & Option Car Fleet Warranty Truck Frame Mod Campaign (52 of 220 Trucks modified to date). MRL Warranty Cost Avoidance savings accrued to date \$780,000 .
- On-Going, Management's Special Interest Phase-2 Supplemental Inspections, MBL & MGL P2000 Fleet 4 of 52 cars completed
- QA PMI Audits, Spot Checks, Surprise/Unannounced Audits performed (4)
- RFS FAI's or equipment inspection/failure investigations (5)
- A650 Vehicles 505/506 re-commissioning, troubleshooting, Opt-testing 1000-mile. (Burn-in completed)
- 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 February 2013

Training classes completed during the month of February 2013

Description	Course Hours	Student Count	Training Hours
Blue & Expo Line Training - (P865/2020 & P2000 LRV):			
RFS 2-WEEK RAIL INTRODUCTION	80	1	80
RFS BRANDT HIGH-RAIL TRUCK	4	21	84

Total Blue Line Training (Hours): 164

Red Line Training (Breda A650 HRV):

RFS 2-WEEK RAIL INTRODUCTION	8	1	8
RFS BRED A 650 TICU	16	1	16
RFS BRED A 650 COMMUNICATIONS	12	7	84
RFS BRED A 650 ATO SHOP TESTER	24	7	168
RFS BRED A 650 SIGNALRAIL ATO	40	7	280

Total Red Line Training (Hours): 556

Gold Line Training (P2550 LRVs):

RFS ANSALDOBREDA 2550 COMMUNICATIONS	24	2	48
RFS ANSALDOBREDA 2550 INTEGRATED DISPLAY	24	2	48
RFS ANSALDOBREDA 2550 APS\LVPS\BATTERY	24	2	48

Total Gold Line Training (Hours): 144

Total RFS Instruction for the month of February 2013 (Hours): 864

Other Instruction Activities

RFS SIEMENS MAINLINE DUTY, DEAD TOW AND VEHICLE RECOVERY (HANDS ON) Class and Preparation	160
RFS BRANDT HIGH-RAIL TRUCK Preparation	64
A650 & P2550 Vehicle Course Preparation	64

Total Other Instruction Activities 288.0

Core Vehicle Training Completed: BLUE RED GREEN GOLD

Percentage of core vehicle training complete: 74.2% 94.8% 80.6% 79.7%

Siemens P2000 training complete: 44.7% N/A N/A N/A

Average Specialist Rail Experience Level in Years: 11.1 10.1 9.2 9.3

Core Training Completed

