



Rail Fleet Services Monthly Report October 2012

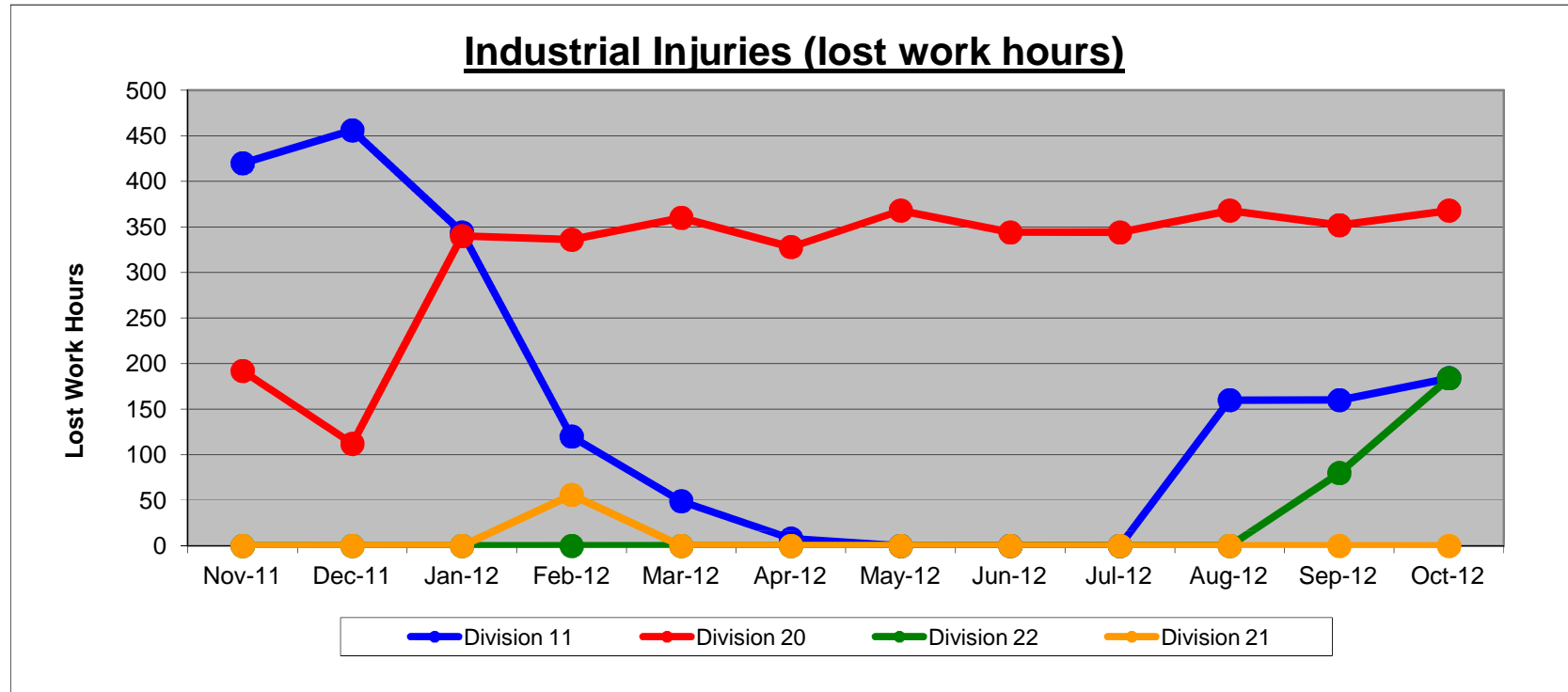


Metro

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Industrial Injuries – Lost Work Hours October 2012



	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Year to Date
Division 11	420	456	344	120	49	8	0	0	0	160	160	184	1,901
Division 20	192	112	340	336	360	328	368	344	344	368	352	368	3,812
Division 22	0	0	0	0	0	0	0	0	0	0	80	184	264
Division 21	0	0	0	56	0	0	0	0	0	0	0	0	56
Totals	612	568	684	512	409	336	368	344	344	528	592	736	6,033

Rail Vehicle Accidents & Major Incidents

October 2012

Repair Costs	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Totals
Blue/Expo Line	\$16,188	\$1,199	\$4,704	\$5,087	\$18,570	\$2,675	\$1,718	\$1,186	\$674	\$8,226	\$4,726	\$1,668	\$66,621
Red/Purple Line	\$0	\$0	\$0	\$0	\$0	\$1,115	\$571	\$0	\$0	\$0	\$778	\$0	\$2,464
Green Line	\$0	\$0	\$0	\$0	\$0	\$989	\$0	\$0	\$120	\$0	\$0	\$0	\$1,109
Gold Line	\$0	\$0	\$0	\$0	\$4,134	\$0	\$0	\$752	\$0	\$1,583	\$0	\$0	\$6,469
Totals	\$16,188	\$1,199	\$4,704	\$5,087	\$22,704	\$4,779	\$2,289	\$1,938	\$794	\$9,809	\$5,504	\$1,668	\$76,663

Rail Vehicle Accident Costs - October 2012				
Metro Blue Main Line				
Date	Incident #	Problem code	Incident Description	Cost
10/6/2012	2237660	Train vs. Pedestrian	A 10-72 was reported by operator heading southbound on track 2 before entering San Pedro pedestrian crossing.	\$547.00
10/19/2012	2242862	Train vs. Vehicle	A 10-73 was reported at Washington and Central heading northbound on track 1.	\$819.00
				1,366.00
Expo Main Line				
10/20/2012	2242974	Train vs. Vehicle	A 10-73 was reported at the intersection of Vermont and Exposition.	\$302.00
				302.00
			GRAND TOTAL	\$1,668.00
(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 October 2012

Blue/Expo Line Fleet Size: 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	102%
Weekend:	54	71	131%
Late Pullouts: 3 *			
Monthly Mileage:	655,639		

Red/Purple Line Fleet Size: 104

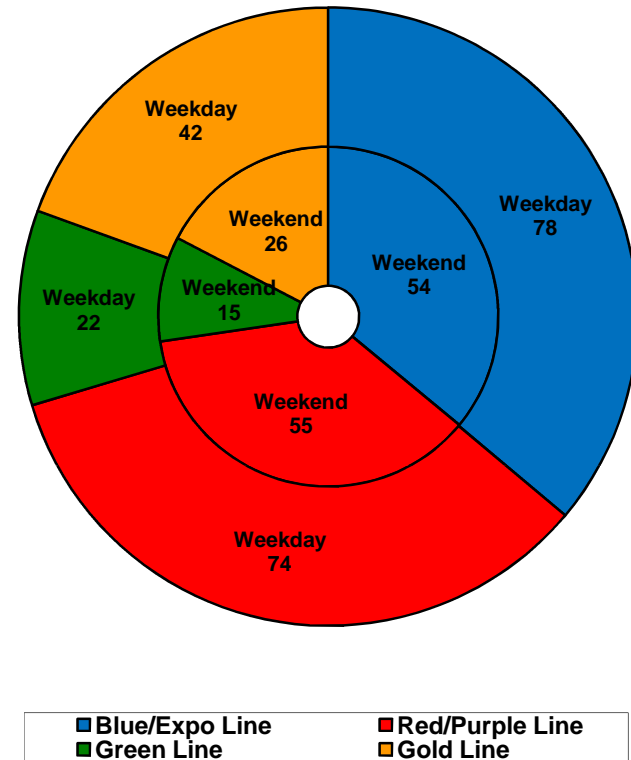
	<u>Vehicles</u>	<u>Average</u>	<u>% Up</u>
<u>Pull Out</u>	<u>Required</u>	<u>Available</u>	<u>(Down)</u>
Weekday:	74	83	112%
Weekend:	55	76	138%
Late Pullouts: 0 *			
Monthly Mileage:	656,630		

Green Line Fleet Size: 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	105%
Weekend:	15	19	128%
Late Pullouts: 0 *			
Monthly Mileage:	239,047		

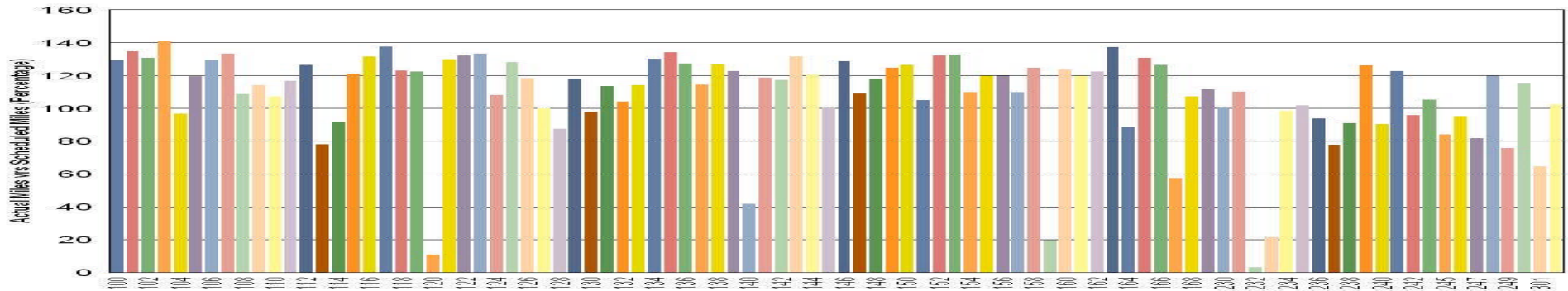
Gold Line Fleet Size: 50

	<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	163%
Late Pullouts: 0 *			
Monthly Mileage:	304,230		



Vehicle Utilization October 2012

Metro Blue/Expo Line Fleet



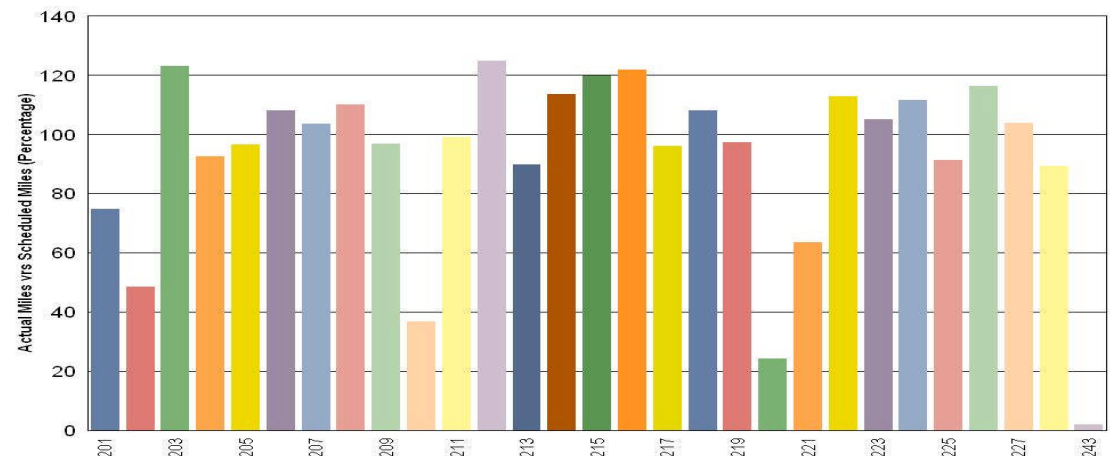
Blue/Expo Lines:

- 120 Vehicle held out of service due to friction brake problems.
- 158 Vehicle held out of service due to spherical bearings and ATP problems.
- 232 Vehicle held out of service for training purposes.
- 234 Vehicle held out of service due to propulsion and brake problems.

Green Line:

- 210 Vehicle held out of service in October to fix repeating propulsion/dynamic brake faults. Staff is working with Engineering to repair issues.
- 220 Vehicle held out of service in October due to repeat overspeed issues. To date, Issues have been corrected and unit has returned to service.
- 243 Vehicle continue to be held out of service to fix leveling problem causing propulsion faults. Staff is undergoing troubleshooting, testing, and repair on vehicle.

Metro Green Line



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

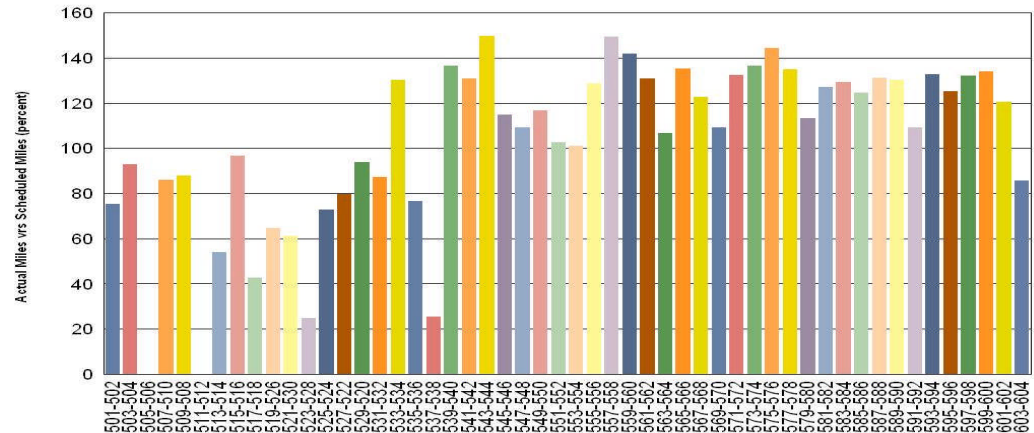
Vehicle Utilization October 2012

Red/Purple Lines:

Explanation for under-used vehicles:

- 505-506** Vehicle held out of service due to mainline failure on 8/27/12 with emergency brake not releasing. Troubleshooting completed and staff now working on commission/static testing.
- 511-512** Vehicle held out of service awaiting gearbox delivery which took 13 days. Both trucks were swapped out and rebuilt.
- 523-528** Vehicle held out of service for 12 days due to spun TM and investigating root cause for what caused the shoot-through. Staff is now using new GTOs with a new power supplies.
- 537-538** Vehicle held out of service due propulsion failures. Staff recalibrating the field power supply, swapped trucks, and replaced defective equipment. Staff is working with Engineering on determining cause of failure.

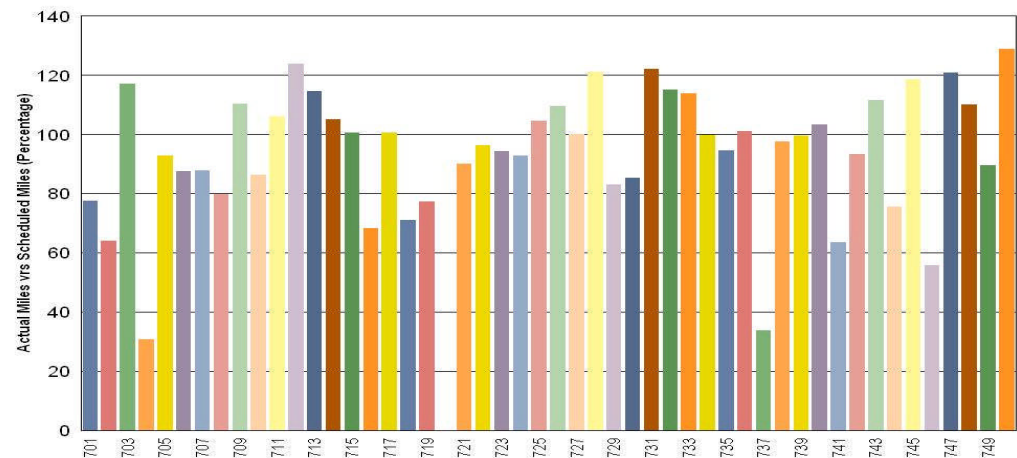
Metro Red/Purple Lines



Gold Line:

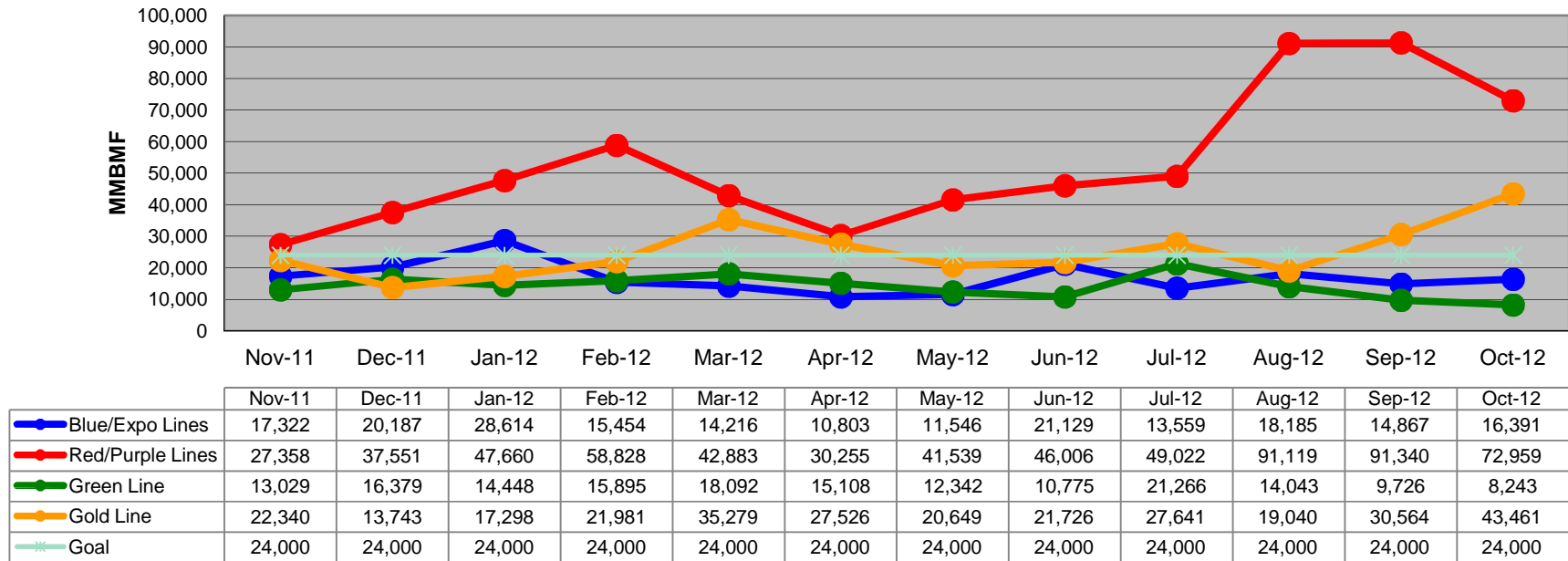
- 704** Vehicle had a self-activating horn. Contractor miswired new event recorder however staff was able to correct miswiring and return vehicle back to service.
- 720** Vehicle continues to have burned 208VDC wires in the articulation area. Staff is working with Engineering/Contractor to determine proper terminal pins, crimping, and insertion tools to perform the repair. Staff anticipates restoring and returning unit back to service by early November.
- 737** Vehicle has self-applying brakes. Staff is troubleshooting the issue and working with Engineering on a resolution.

Metro Gold Line

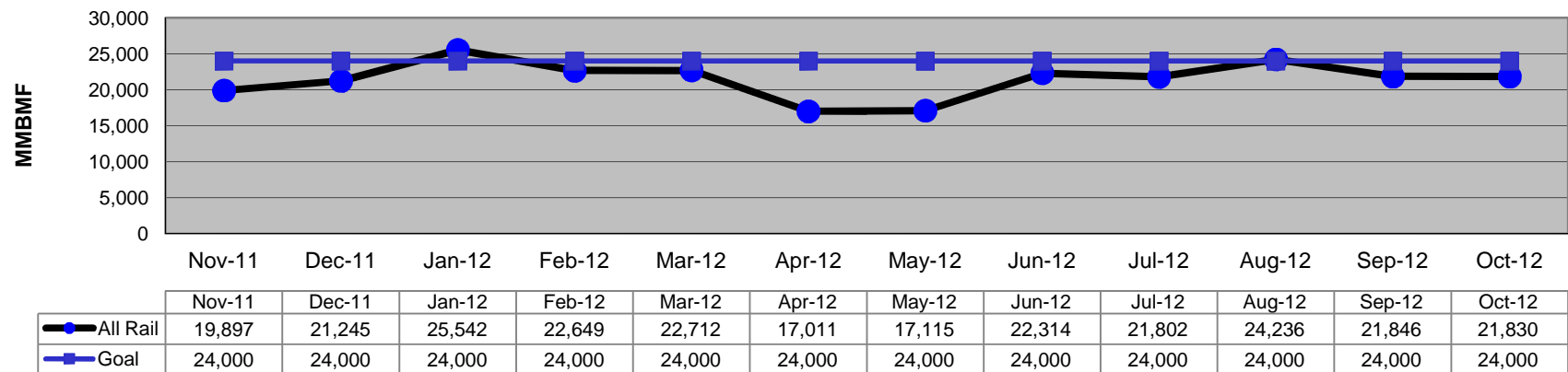


Mean Miles Between Failures (Major) Year to Date

Mean Miles Between Major Failures (12 months)

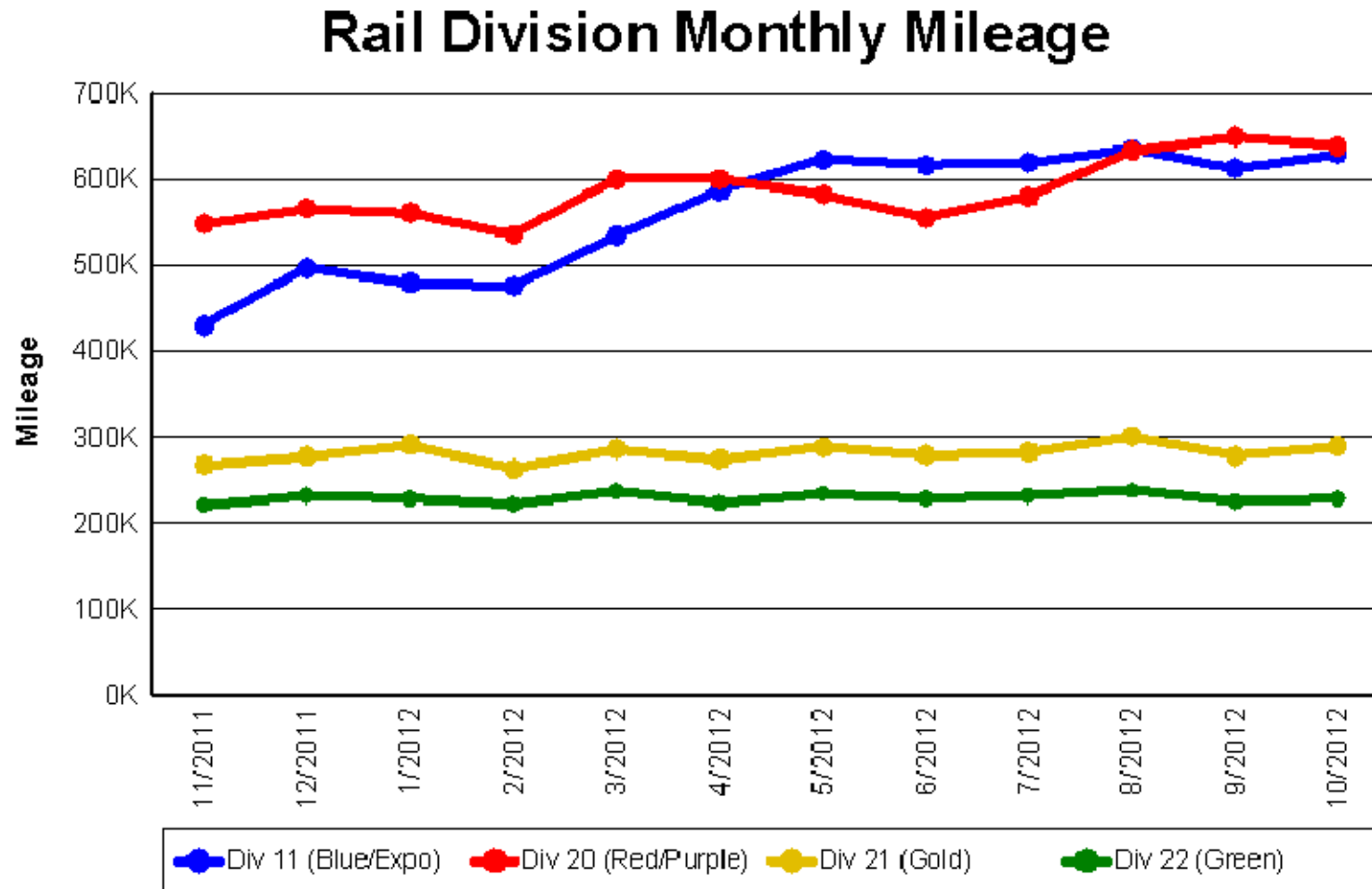


Mean Miles Between Major Failures (all)



Mileage Between Data Range (by month)

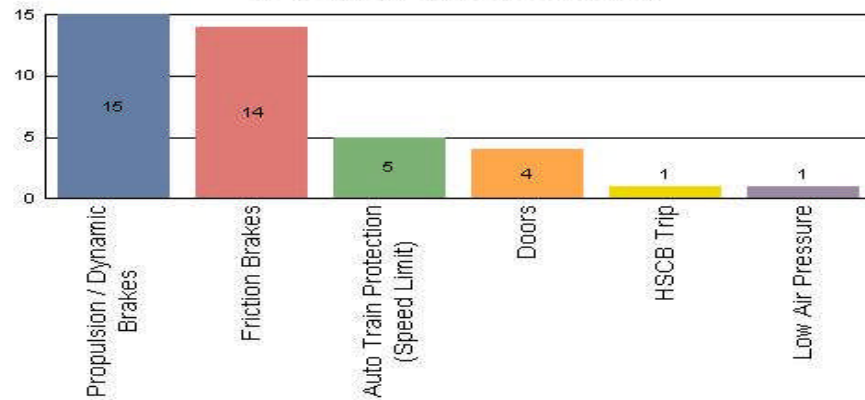
October 2012



Major Incidents October 2012

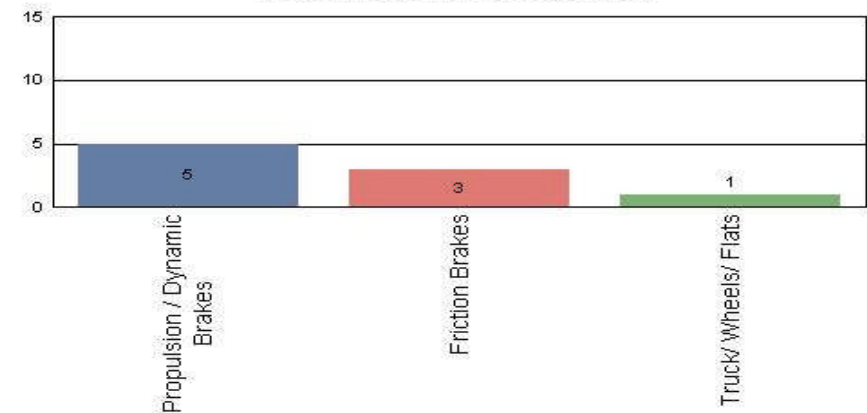
Metro Blue/Expo Line

Top Incident Categories



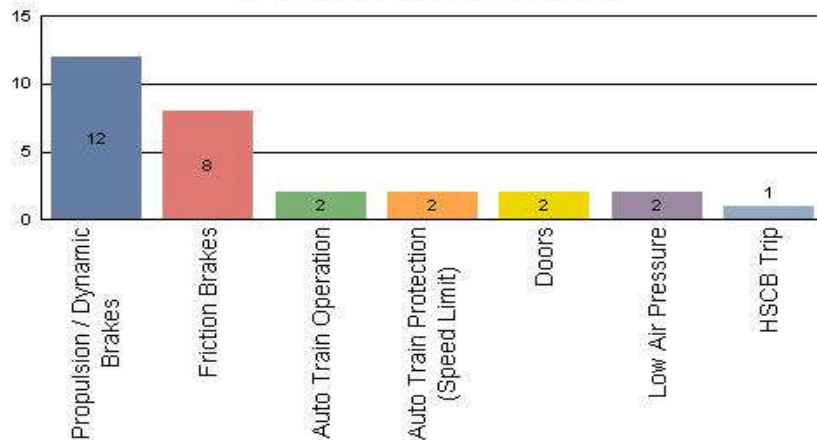
Metro Red/Purple Line

Top Incident Categories



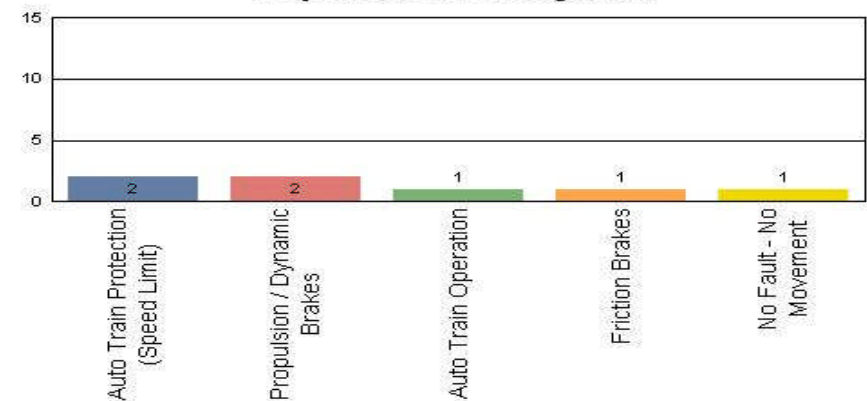
Metro Green Line

Top Incident Categories



Metro Gold Line

Top Incident Categories

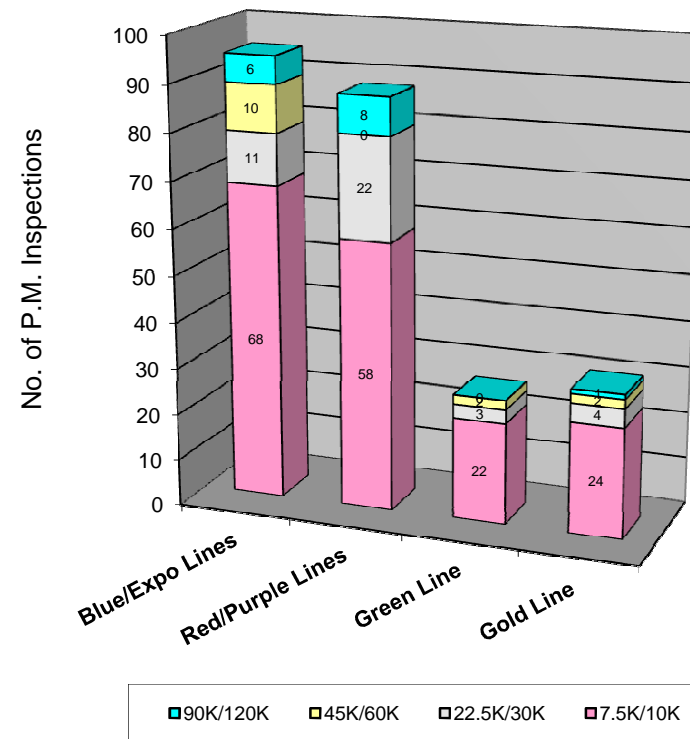


Preventive Maintenance Compliance October 2012

PM Compliance	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12
Blue/Expo Lines	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Red/Purple Lines	100%	100%	100%	100%	100%	100%	100%	100%	100%	*98%	100%	100%
Green Line	100%	96%	100%	100%	100%	100%	100%	96%	100%	100%	100%	100%
Gold Line	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

October 2012 Preventive Maintenance Inspections

No. of P.M. Inspections	5K/7.5K/10K	22.5K/30K	45K/60K	90K/120K	Totals
Blue/Expo Lines	68	11	10	6	95
Red/Purple Lines	58	22	0	8	88
Green Line	22	3	2	0	27
Gold Line	24	4	2	1	31
Totals:	172	40	14	15	241

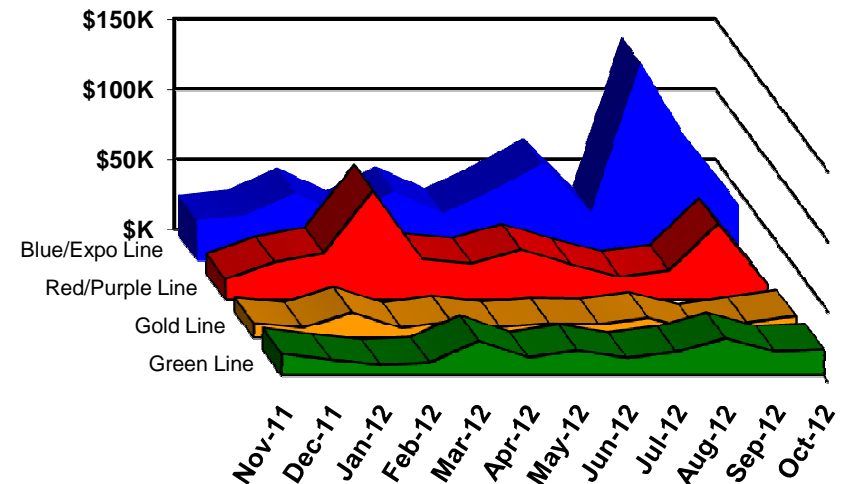


Vandalism & Graffiti Report

October 2012

	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Year-to-Date
Blue/Expo Line	\$29K	\$33K	\$49K	\$32K	\$49K	\$34K	\$50K	\$69K	\$35K	\$142K	\$83K	\$40K	\$644K
Red/Purple Line	\$14K	\$26K	\$33K	\$77K	\$28K	\$25K	\$35K	\$25K	\$16K	\$20K	\$54K	\$10K	\$366K
Green Line	\$15K	\$11K	\$8K	\$9K	\$25K	\$13K	\$18K	\$12K	\$17K	\$27K	\$17K	\$19K	\$190K
Gold Line	\$10K	\$7K	\$18K	\$7K	\$11K	\$7K	\$10K	\$9K	\$14K	\$5K	\$11K	\$15K	\$125K
Totals:	\$69K	\$77K	\$107K	\$125K	\$114K	\$79K	\$113K	\$116K	\$82K	\$194K	\$165K	\$84K	\$1,326K

October 2012 Vandalism & Graffiti - All Rail				
	Qty	Labor	Materials	Totals
Windows replaced	42	\$7,308	\$11,063	\$18,371
Vandal Shields	294	\$8,863	\$5,667	\$14,530
Seats Cleaned	736	\$2,283	\$0	\$2,283
Seats Replaced	420	\$13,231	\$13,809	\$27,040
Graffiti removal - other	891	\$12,922	\$1,200	\$14,122
Repainting panels	10	\$7,524	\$550	\$8,074
Totals	2,393	\$52,131	\$32,289	\$84,420



Graffiti Pictures October 2012

Blue Line



Green Line



Gold Line



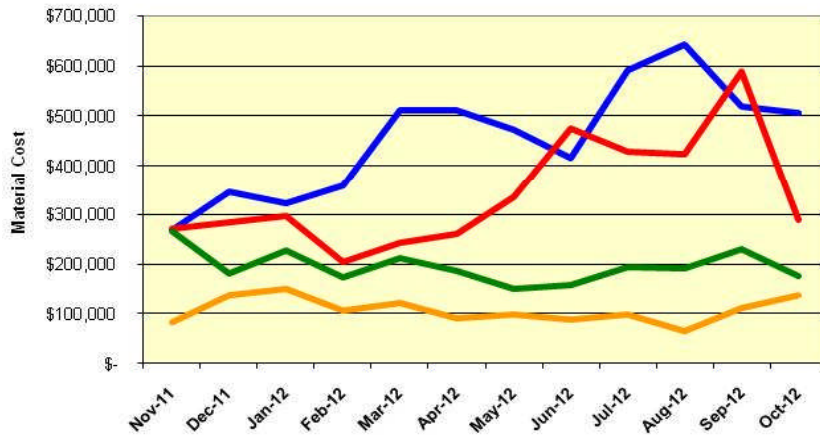
Material and Labor Costs

October 2012

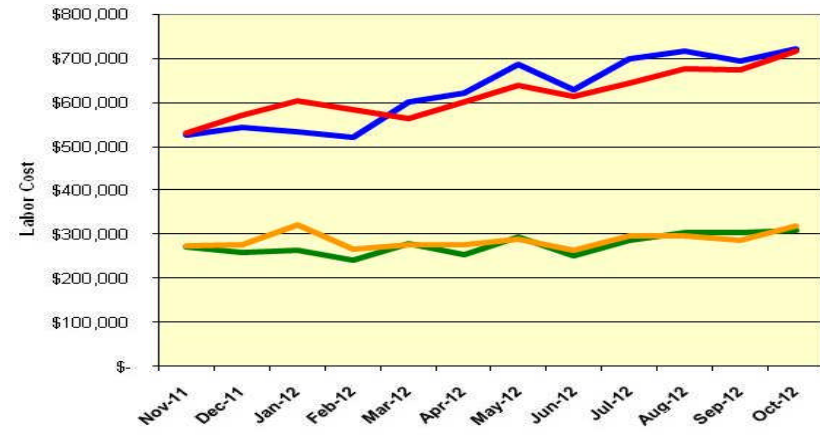
<u>MATERIALS</u>	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12
Blue/Expo Lines	\$ 268,760	\$ 346,891	\$ 322,169	\$ 359,911	\$ 510,512	\$ 511,185	\$ 473,281	\$ 414,601	\$ 591,928	\$ 643,006	\$ 520,023	\$ 506,591
Red/Purple Lines	\$ 272,291	\$ 285,916	\$ 296,353	\$ 205,225	\$ 244,902	\$ 260,532	\$ 335,824	\$ 474,908	\$ 428,864	\$ 424,173	\$ 587,362	\$ 289,365
Green Line	\$ 265,489	\$ 180,929	\$ 227,110	\$ 172,152	\$ 210,220	\$ 186,572	\$ 149,660	\$ 157,920	\$ 194,003	\$ 189,811	\$ 230,008	\$ 174,361
Gold Line	\$ 83,425	\$ 138,599	\$ 150,971	\$ 106,736	\$ 121,821	\$ 91,218	\$ 98,407	\$ 88,885	\$ 98,449	\$ 64,112	\$ 112,270	\$ 138,235
Totals	\$ 889,965	\$ 952,335	\$ 996,603	\$ 844,024	\$ 1,087,455	\$ 1,049,507	\$ 1,057,172	\$ 1,136,314	\$ 1,313,244	\$ 1,321,102	\$ 1,449,663	\$ 1,108,552

*

Material Costs



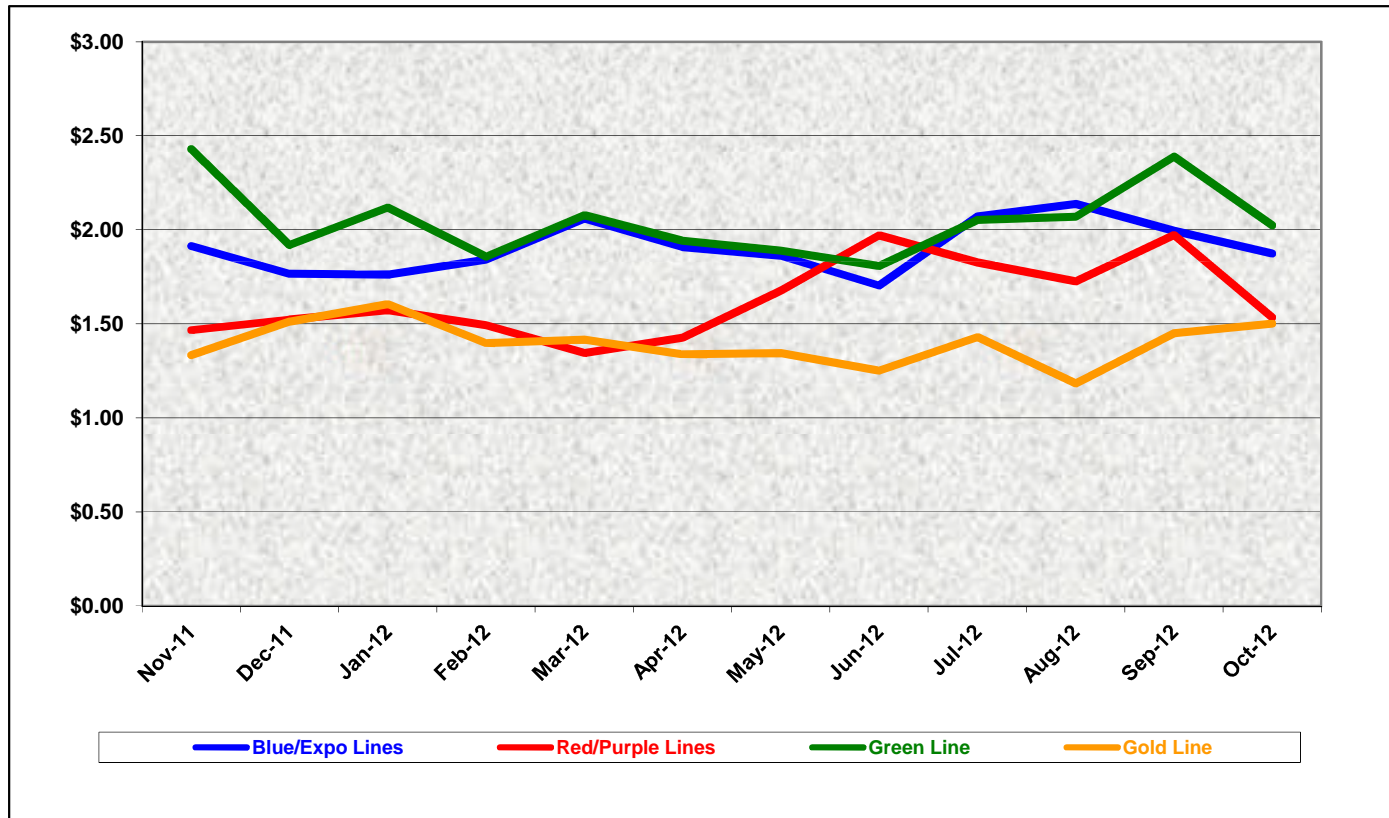
Labor Costs



<u>LABOR</u>	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12
Blue/Expo Lines	\$ 526,600	\$ 544,564	\$ 534,797	\$ 522,603	\$ 601,905	\$ 622,113	\$ 687,897	\$ 628,928	\$ 699,849	\$ 716,987	\$ 695,926	\$ 722,379
Red/Purple Lines	\$ 530,408	\$ 571,885	\$ 602,770	\$ 584,940	\$ 562,875	\$ 602,434	\$ 639,102	\$ 613,032	\$ 645,748	\$ 676,501	\$ 674,192	\$ 718,139
Green Line	\$ 272,603	\$ 259,198	\$ 262,563	\$ 241,042	\$ 278,653	\$ 253,643	\$ 293,492	\$ 251,094	\$ 286,110	\$ 304,066	\$ 304,487	\$ 309,399
Gold Line	\$ 274,017	\$ 276,926	\$ 321,152	\$ 267,372	\$ 277,944	\$ 276,975	\$ 290,375	\$ 264,536	\$ 296,565	\$ 296,078	\$ 286,489	\$ 318,284
Totals	\$1,603,628	\$1,652,573	\$1,721,282	\$1,615,957	\$1,721,377	\$1,755,165	\$1,910,866	\$1,757,590	\$1,928,272	\$1,993,632	\$1,961,094	\$2,068,201

Cost Per Mile October 2012

Cost per mile:	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12
Blue/Expo Lines	\$1.91	\$1.77	\$1.76	\$1.84	\$2.06	\$1.91	\$1.86	\$1.70	\$2.07	\$2.14	\$1.99	\$1.87
Red/Purple Lines	\$1.47	\$1.52	\$1.57	\$1.49	\$1.35	\$1.43	\$1.68	\$1.97	\$1.83	\$1.73	\$1.97	\$1.53
Green Line	\$2.43	\$1.92	\$2.12	\$1.86	\$2.08	\$1.94	\$1.89	\$1.81	\$2.05	\$2.07	\$2.39	\$2.02
Gold Line	\$1.33	\$1.51	\$1.61	\$1.40	\$1.42	\$1.34	\$1.34	\$1.25	\$1.43	\$1.18	\$1.45	\$1.50



ATU Absences vs. Overtime

October 2012

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	8.00	8.00	0.00	0.00	16.00
BER-BEAVEMENT	0.00	120.00	48.00	0.00	0.00	0.00	168.00
CTO-COMPENSATORY TIME OFF	0.00	430.50	422.00	123.82	160.00	24.00	1,160.32
CUT-EMPLOYEE LEAVES EARLY	0.00	0.67	0.00	0.81	0.50	0.00	1.98
CVA - CASUAL VACATION	0.00	124.50	440.00	0.00	179.50	0.00	744.00
DSL-DISABILITY LEAVE/LONG	0.00	520.00	184.00	240.00	368.00	0.00	1,312.00
EFH-EMG. FLOAT HOL.	0.00	0.00	72.00	40.00	56.00	0.00	168.00
ETO-EXCUSED TIME OFF	16.50	54.00	42.05	4.00	51.96	1.00	169.51
FMI-FAM IND INJURY	0.00	0.00	0.00	0.00	48.00	0.00	48.00
FML-FAMILY CARE LEAVE	0.00	588.00	216.00	192.00	48.00	0.00	1,044.00
FMS-FAMILY LEAVE SICK	0.00	366.80	32.00	88.00	24.00	0.00	510.80
HLF-HOLIDAY FLOATING	24.00	280.00	168.00	88.00	120.00	8.00	688.00
II-INDUSTRIAL INJURY	0.00	0.00	360.00	184.00	0.00	0.00	544.00
IIR-INDUS INJURY-REOCCUR.	0.00	184.00	0.00	0.00	0.00	0.00	184.00
JUR-JURY DUTY	0.00	80.00	8.00	0.00	24.00	0.00	112.00
LC1-LABOR CODE 233	4.00	211.00	207.60	80.00	88.00	0.00	590.60
MLN-MILITARY ABSENCE-UNPAID	0.00	0.00	32.00	0.00	0.00	0.00	32.00
OWP-OFF WITH PERMISSION	0.00	0.00	18.00	0.00	0.00	0.00	18.00
RTO-REQUESTED TIME OFF-NO PA	0.00	81.50	9.50	32.00	0.00	0.00	123.00
SCK-SICK PAY	0.00	249.00	168.00	60.00	72.00	8.00	557.00
SCW-SICK WITHOUT PAY	0.00	152.00	16.00	64.00	48.00	0.00	280.00
SPN-SCHOOL PARTNER NOT PAID	0.00	0.00	0.00	8.00	0.00	0.00	8.00
TAR-TARDY	0.00	3.34	2.60	4.22	0.26	0.05	10.47
VAC-VACATION	138.00	841.13	676.00	155.00	401.50	0.00	2,211.63
Total Absence Hours	183	4,286	3,130	1,372	1,690	41	10,701
Number of Work Force (assigned)	7	121	110	46	45	6	335
Full Work Force hours/month	1,213	20,969	19,063	7,972	7,799	1,040	58,056
Absence as a % of Work Force	15%	20%	16%	17%	22%	4%	18%
OVERTIME TYPE and HOURS	3940	3941	3942	3943	3944	3947	Total
CTB-COMPENSATORY TIME TO BANK	0	326	304	59	77	52	818
OTP-PREM OVERTIME	391	5200	5106	1130	1510	118	13456
WLO-Worked Lunch Overtime	13	146	200	82	89	11	540
Total	404	5673	5610	1272	1676	181	14814
Overtime as a % of Work Force	33%	27%	29%	16%	21%	17%	26%
UNCOVERED ABSENCES	3940	3941	3942	3943	3944	3947	Total
Absences FTE	1	25	18	8	10	0	62
OTP FTE	2	33	32	7	10	1	85
FTE Difference	-1	-8	-14	1	0	-1	-23



Rail Vehicle Engineering Project Summary

October 2012

Preparation of Engineering Technical Specifications	Tracking #	Status
Red Line AC Gear Box (Rev. 0)	A650/TS/026	FB 12-0024 issued and schedule to close 01/11/2013
MBL Battery Set	P865/P2020/TS/069	In developing process
Vital Relay Calibration P865/P2020	Sole Source	In Process
Windows glass and rubber glazing specification	P865-P2020/TS-066	Released to Procurement for bid - Waiting for Master Agreement (MA)
Friction Brake Kit Less Air Compressor Overhaul	P2000/TS/035 Rev 0	Released to Procurement for bid - SS was signed - Going to December 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 - Waiting for Master Agreement (MA)
Seat Insert	P865-P2020/TS/62	Released to Procurement - Awarded to Sardo
Red Line DC Gear Box (Rev. 0)	P650/TS/040	Released to Procurement for bid - Dealing with Flender
Vandal Shield for all lines	A650-P865-P2000-P2550/TS/012	Released to Procurement- Bid was opened on 07/31/12 - Waiting for Mini Board approval
Aux power supply equipment (APSE) - Static Inverter	P865-P2020/TS/065 Rev. 0 [2 Parts]	Released to Procurement for bid - Waiting for Master Agreement (MA)
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 Sing LED	P2000/TS/xx	Draft in process
Chevron springs	P865/P2020/TS/068 Rev. 0	Released to Procurement for bid - Waiting for Master Agreement (MA)
Filter-Fresh Air	P2550/TS/004	In review process
Filter-Return Air	P2550/TS/005	In review process
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
Bike Space		P2550 in prototype phase.
St. Louis LRV		P2000/P2550/A650 Fleet modification completed.
		Testing flooring for fire rating - investigating computability.
P2000 Overhaul Program		Status
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.		Base Line data confirmed and existing TWC test equipment mapped for performance. Systra on board - TWC calibration procedures completed.
Speed Sensors		Testing new speed sensors from Smith System
Friction Brake failure investigation		Metro technical team with Wabtec (OEM) ongoing investigation.
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 10% of the fleet - Recommend to replace all ATP antenna.
A650 Overhaul Program		Status
Midlife Overhaul Specification		Draft complete by Metro. In process of Consultant selection to complete.
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.



Rail Vehicle Engineering Project Summary (cont'd)

October 2012

	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
Lateral shock absorber		Investigating the failure of the resilient bushing.
	Expo	Status
Readiness		Metro-RFS Engineering is supporting qualification and test activities of vehicles and wayside.
ATP Certification		Mainline Testing Completed; waiting for final letter
P2000 Couple/un-couple issues		Investigation completed - Test was successful - Fleet modification in process.
Junction of Blue line and Expo line Testing		Safe Braking test completed at Culver City Station and report of successful test completed.
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.
Expo Frog Testing		Ensco Submitted Final Report on 09/07/12
ATP Cab Signal Mapping at the Junction and Expo Line Phase I Close out-Normal Run		Completed Normal Run , need to finish Reverse run for the entire Expo line and the Junction.
35 Cab Flips @ Culver City Platform and La Cianega Interlocking		Coordinate with Wayside to resolve the problems. GE vendor get involved to resolve a system design problem on E2C. (diode vs. no diode)

P2550 Vehicle Acceptance Program

October 2012

Vehicle Status Update:

- Project staff working with consultant to close out open items.
- Consultant is performing ATP bypass switch modification. To date, 5 cars have been completed.

Engineering Activities Update:

- Event recorder: Configuration finalized and event recorders activated. Software revision being installed for final qualification. To date, 31 cars have been completed.
- ATP/TWC Configuration: Testing system to finalize resolution. Consultant continues to test software/wiring remedies.

Project Management:

- Contract spares continue to be delivered to Metro and estimated to be 90% complete. All parts needed for day-to-day maintenance have been received. Critical parts needed for heavy repairs are beginning to arrive.
- Daily and bi-weekly meetings are scheduled with contractor management to address project issues.

QA-Warranty Program Projects Summary

October 2012

QA-WARRANTY ACTIVITIES

- On-Going, P2550 Car Mod Campaign / Testing Oversight, Component Reliability Trend Tracking
- On-Going, P2550 parts tracking: Contract Spares, Capital Spares, Warranty Spares & Metro Loaned Parts. Loaned parts turn-over in progress.
- On-Going, P2550 Warranty Claims Processing
- A650 Base Buy & Option Car Fleet Warranty Truck Frame Mod Campaign (55 of 220 Trucks modified to date). MRL Warranty Cost Avoidance savings accrued to date \$407,798.56.
- On-Going, Management's Special Interest Articulation / Cab Wiring Tightness Checks MBL & MGL P2000 Fleet Cars (34 of 52 completed). 9/25/12 Management decision to suspend Wire Tightness Inspections for the remainder of the 2000 fleet. (Mgt discontinued program)
- On-Going, Management's Special Interest 7.5K Supplemental Inspections & Articulation MBL & MGL P2000 Fleet Cars (46 of 52 completed)
- Special Interest CCTV Camera operational function inspections MRL (104 of 104 cars completed), MBL (44 of 92 cars completed), MGL (3 of 26 completed), MGD (50 of 50 cars completed)
- QA PMI Audits, Spot Checks & Surprise/Unannounced Audits performed (25)
- FAI's or equipment inspection/failure investigations (18)
- QA oversight, MBL & MGL Fleets, (25 of 92 LRV's) Truck Inspections, Journal Bearing Housing Inspections, Damper Inspections, Wheel Back-to-Back Measurements, Wheel Flange Measurements, Wheel Residual Mount Inspections.
- 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

October 2012

Training classes completed during the month of October 2012

Description	Course Hours	Student Count	Training Hours
<u>Blue & Expo Line Training - (P865/2020 & P2000 LRV):</u>			
RFS 2-WEEK RAIL INTRODUCTION	80	1	80
BLUE\EXPO ATP LOOP TEST UTE LOOP TESTER (P865/2020 & P2000)	2	11	22
RFS SIEMENS 2000 FRICTION BRAKES	48	12	576

Total Blue Line Training (Hours): 678

Red Line Training (Breda A650 HRV):

RFS BRED A 650 MTO SYSTEMS	24	6	144
RFS BRED A 650 VEHICLE INTRO	40	6	240

Total Red Line Training (Hours): 144

Total RFS Instruction for the month of October 2012 (Hours): 822

Other Instruction Activities

P2550 HRMM manual review			40
Hegencheidt Wheel True machine operation REVIEW			200
P2550 CCTV Operational Checks and Restructuring			104

Total Other Instruction Activities 240.0

Core Vehicle Training Completed: BLUE RED GREEN GOLD

Percentage of core vehicle training complete: 76.4% 90.3% 83.8% 83.8%

Siemens P2000 training complete: 44.0% N/A N/A N/A

Average Specialist Rail Experience Level in Years: 10.8 10.1 8.9 10.0

Core Training Completed

