



# **Rail Fleet Services Monthly Report April 2012**

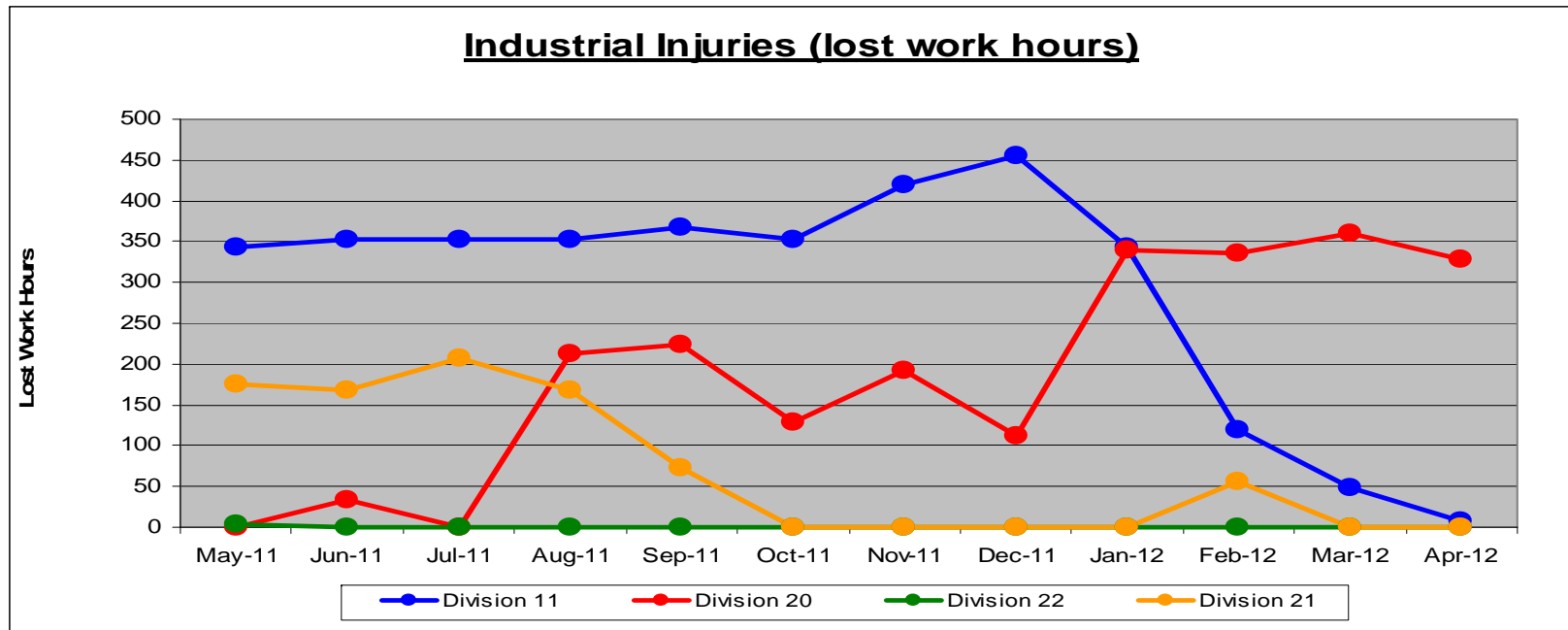


**Metro**

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# Industrial Injuries – Lost Work Hours April 2012



	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	Year to Date
Division 11	344	352	352	352	368	352	420	456	344	120	49	8	3,517
Division 20	0	34	0	213	224	128	192	112	340	336	360	328	2,267
Division 22	3	0	0	0	0	0	0	0	0	0	0	0	3
Division 21	176	168	208	168	72	0	0	0	0	56	0	0	848
Totals	523	554	560	733	664	480	612	568	684	512	409	336	6,635

# Rail Vehicle Accidents & Major Incidents

## April 2012

Repair Costs	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	Totals
Blue/Expo Line	\$4,844	\$189	\$0	\$395	\$7,337	\$888	\$16,188	\$1,199	\$4,704	\$5,087	\$18,570	\$2,675	\$62,076
Red/Purple Line	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,115	\$1,115
Green Line	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$989	\$989
Gold Line	\$0	\$5,458	\$3,763	\$2,567	\$0	\$320	\$0	\$0	\$0	\$0	\$4,134	\$0	\$16,242
Totals	\$4,844	\$5,647	\$3,763	\$2,962	\$7,337	\$1,208	\$16,188	\$1,199	\$4,704	\$5,087	\$22,704	\$4,779	\$80,422

Rail Vehicle Accident Costs - April 2012				
Metro Blue Main Line				
Date	Incident #	Problem code	Incident Description	Cost
4/14/2012	2165927	Train vs. Pedestrian	A 10-72 was reported at 20th Street grade crossing on lead cab (150).	\$975.00
4/19/2012	2167917	Train vs. Pedestrian	A 10-72 was reported at Imperial Station.	\$850.00
				<b>1,825.00</b>
Expo Line				
4/19/2012	2168284	Train vs. Vehicle	Train No. 96 operator reported a 10-73 at Crenshaw Boulevard on Track No. 3.	<b>\$850.00</b>
				<b>\$850.00</b>
Metro Green Line				
4/4/2012	2161829	Derailment	A 10-75 occurred on hi-rail vehicle (track) over switch 41 at the Green Line Yard.	<b>\$989.00</b>
				<b>\$989.00</b>
Metro Red Line				
4/27/2012	2172052	Derailment	A 10-75 occurred on hi-rail vehicle 14-0035 at North Hollywood between Switch 7B and 7A.	<b>\$1,115.00</b>
				<b>\$1,115.00</b>
			<b>GRAND TOTAL</b>	<b>\$4,779.00</b>
(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 April 2012

<b>Blue/Expo Line Fleet Size: 92</b>			
	<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	64	118%

Late Pullouts: 3 \*

Monthly Mileage: 594,154 miles

<b>Red/Purple Line Fleet Size: 104</b>			
	<u>Vehicles</u>	<u>Average</u>	<u>% Up</u>
<u>Pull Out</u>	<u>Required</u>	<u>Available</u>	<u>(Down)</u>
Weekday:	74	81	109%
Weekend:	55	68	124%

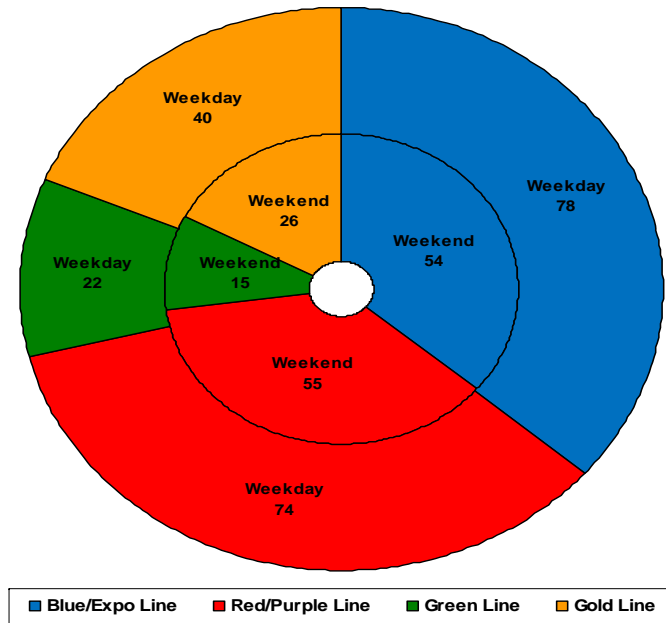
Late Pullouts: 0 \*

Monthly Mileage: 605,102 miles

<b>Green Line Fleet Size: 29</b>			
	<u>Vehicles</u>	<u>Average</u>	<u>% Up</u>
<u>Pull Out</u>	<u>Required</u>	<u>Available</u>	<u>(Down)</u>
Weekday:	22	24	108%
Weekend:	15	19	127%

Late Pullouts: 0 \*

Monthly Mileage: 226,627 miles



<b>Gold Line Fleet Size: 50</b>			
<u>P2550 Fleet Size: 48</u>			
<u>P2000 Fleet Size: 2</u>			
	<u>Vehicles</u>	<u>Average</u>	<u>% Up</u>
<u>Pull Out</u>	<u>Required</u>	<u>Available</u>	<u>(Down)</u>
Weekday:	40	42	106%
Weekend:	26	41	157%

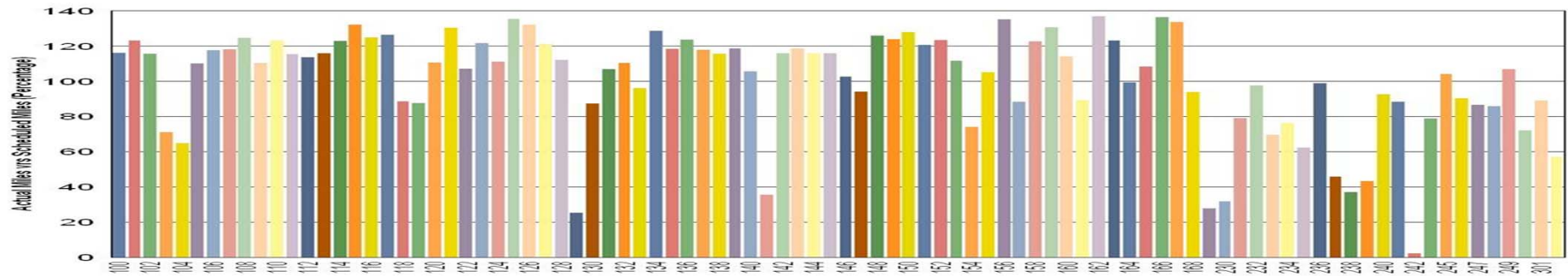
Late Pullouts: 0 \*

Monthly Mileage: 275,255 miles

\* Due to a vehicle related problem

# Vehicle Utilization April 2012

## Metro Blue/Expo Line Fleet



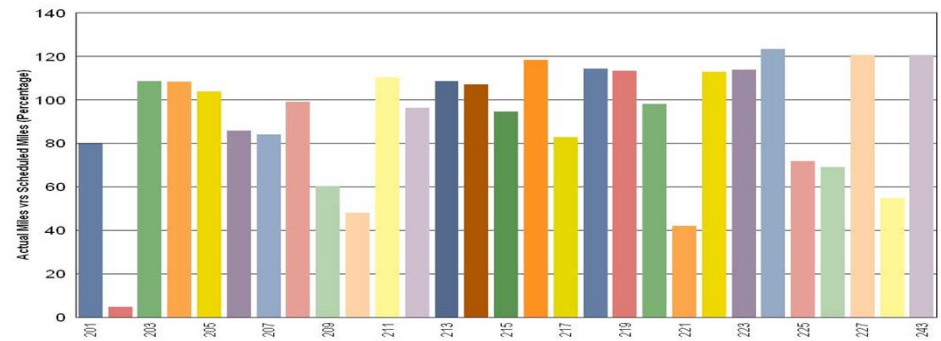
### Blue/Expo Line:

- 129 Vehicle out of service due to running repair and propulsion faults.
- 141 Vehicle out of service due to a brake overhaul.
- 229 Vehicle 229 (originated at Gold Line) was out of service for Expo modification and body work.
- 230 Vehicle 230 (originated at Gold Line) was out of service for Expo modification and body work.
- 238 Vehicle out of service due to running repair and propulsion faults.
- 242 Vehicle out of service due to running repair, friction brakes, and propulsion faults.

### Green Line:

- 202 Vehicle out of service due to a propulsion problem and overspeed.

## Metro Green Line



# Vehicle Utilization

## April 2012

### Red/Purple Line:

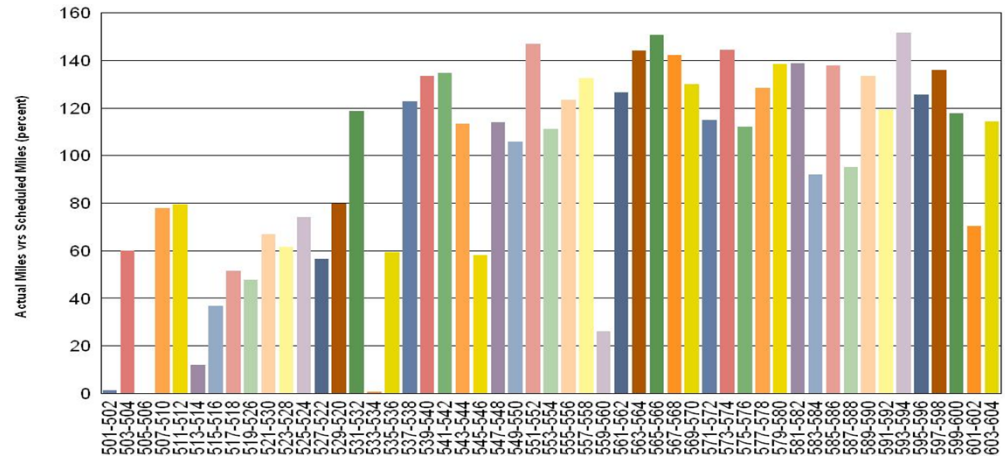
Explanation for under-used vehicles:

- 501-502 This vehicle had 3 burnt high voltage cable that were spliced but showed signs of over-temp. Staff had to re-run the entire cables again.
- 505-506 Vehicle out of service due to refurbishment.
- 513-514 Vehicle was out of service due to several propulsion failures and gearbox replacement (2) at different intervals.
- 515-516 Vehicle out of service due to ATO Problems.
- 533-534 Vehicle down due to an emergency brake problem and is waiting on a LVPS for replacement.
- 559-560 Vehicle is a multi-time repeater for ATP problems. This problem was intermittent therefore we could not replicate during several attempts in the shop and on the mainline. Vehicle is now fixed.

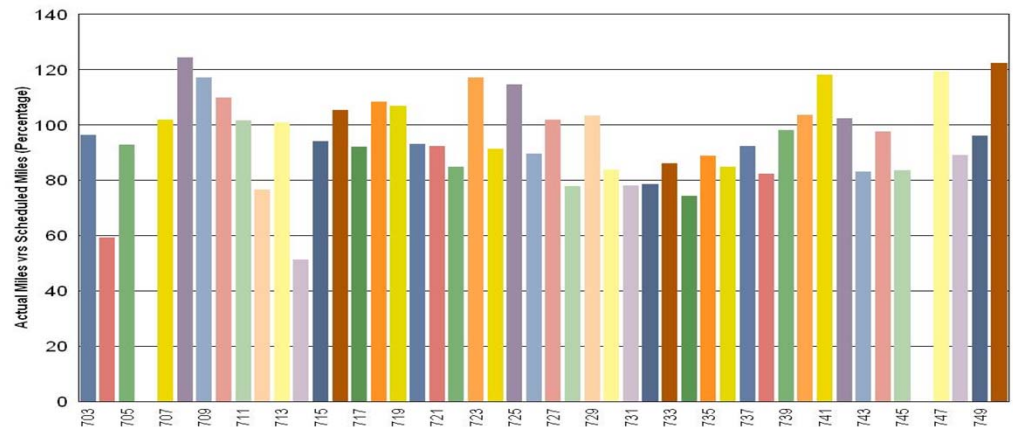
### Gold Line:

- 706 Vehicle remains out of service and is awaiting parts delivery for repairs and inspection.
- 746 Vehicle out of service due to several burned wires, pins, and a connector in the 208VDC power supply circuit. Unit currently awaiting parts delivery.

### Metro Red/Purple Line

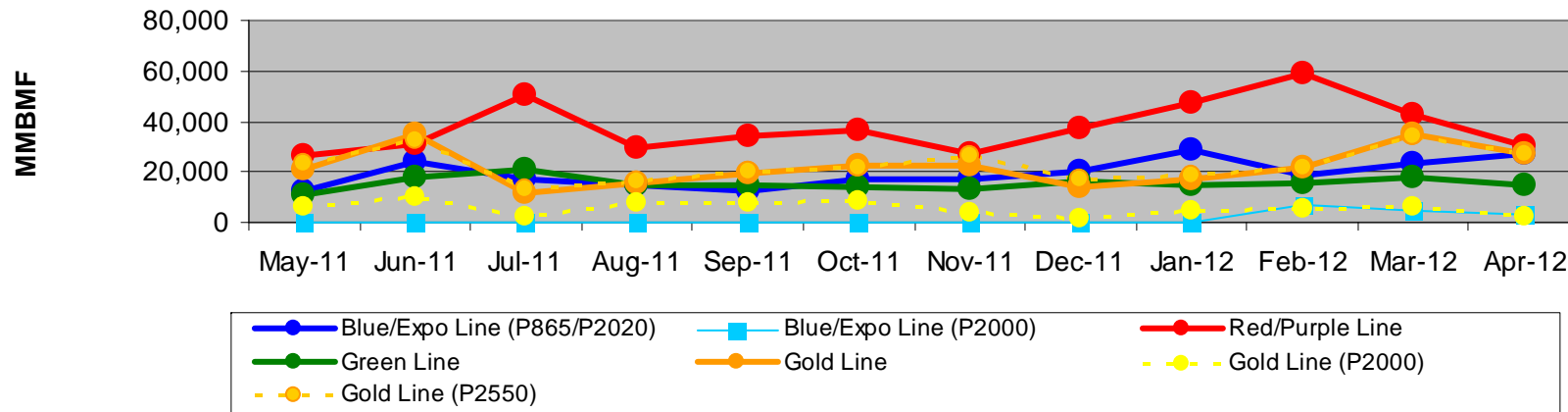


### Metro Gold Line



# Mean Miles Between Failures (Major) Year to Date

## Mean Miles Between Major Failures (12 months)

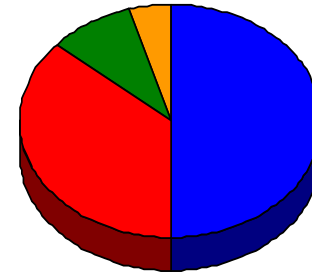


	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12
Blue/Expo Line (P865/P2020)	12,557	24,050	17,123	14,425	12,679	17,397	17,322	20,187	28,614	18,322	22,943	27,235
Blue/Expo Line (P2000)	0	0	0	0	0	0	0	0	0	7,210	4,520	2,809
Red/Purple Line	26,084	30,932	50,099	29,298	34,535	36,745	27,358	37,551	47,660	58,828	42,883	30,255
Green Line	10,882	18,177	20,877	14,482	14,740	14,148	13,029	16,379	14,448	15,895	18,092	15,108
Gold Line	20,776	34,792	11,668	15,906	19,647	22,773	22,340	13,743	17,298	21,981	35,279	27,526
Gold Line (P2000)	6,377	10,351	2,153	8,019	7,872	8,887	3,509	1,639	4,638	5,215	5,907	2,311
Gold Line (P2550)	23,394	32,767	13,095	16,370	20,553	22,032	26,107	16,769	18,986	21,546	34,541	27,526



# Repeat Failures April 2012

**Metro Blue Line:** 11 Repeat Failures  
**Expo Line:** 0 Repeat Failures  
**Metro Red Line:** 8 Repeat Failures  
**Metro Green Line:** 2 Repeat Failures  
**Metro Gold Line:** 1 Repeat Failures



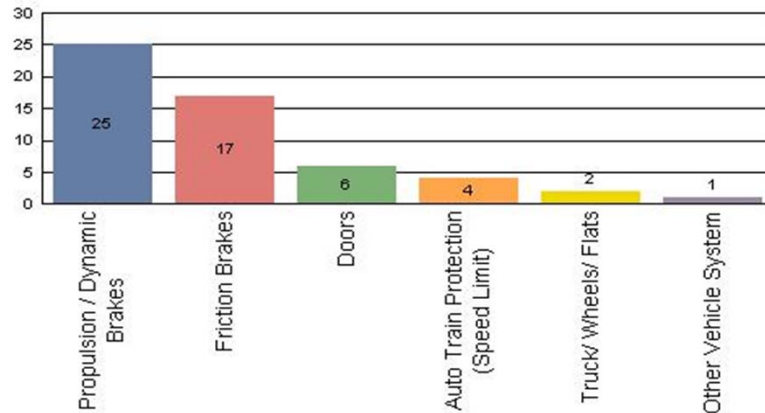
■ Blue Line    ■ Expo Line    ■ Red Line  
■ Green Line    ■ Gold Line

Repeater Car Details - April 2012										
System	Blue Line		Expo Line		Red Line		Green Line		Gold Line	
	Car #	Repeats	Car #	Repeats	Car #	Repeats	Car #	Repeats	Car #	Repeats
ATO	104	1			560	1	215	1		
Doors	101	1			509	2				
	236	1			596	1				
	241	1								
Friction Brakes	233	1			537	1				
HSCB Trip					527	1				
HVAC	237	1							704	1
PA/Intercom	235	1								
	240	3								
Propulsion/Dynamic Brake	250	1			545	1	213	1		
					547	1				
TOTALS	11		0		8		2		1	

# Major Incidents April 2012

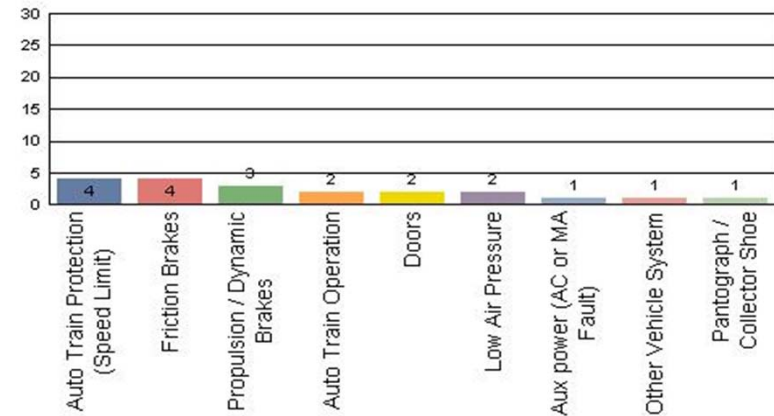
## Metro Blue/Expo Line

Top Incident Categories



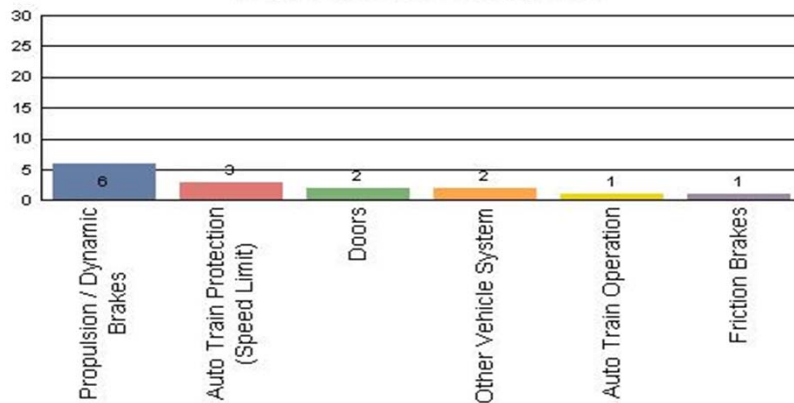
## Metro Red/Purple Line

Top Incident Categories



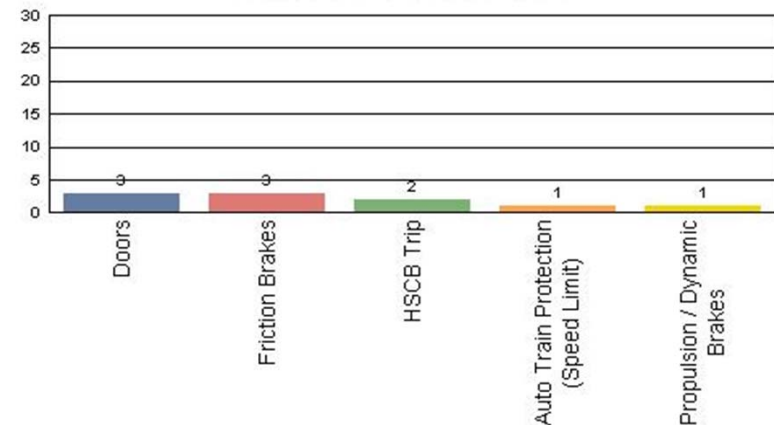
## Metro Green Line

Top Incident Categories



## Metro Gold Line

Top Incident Categories



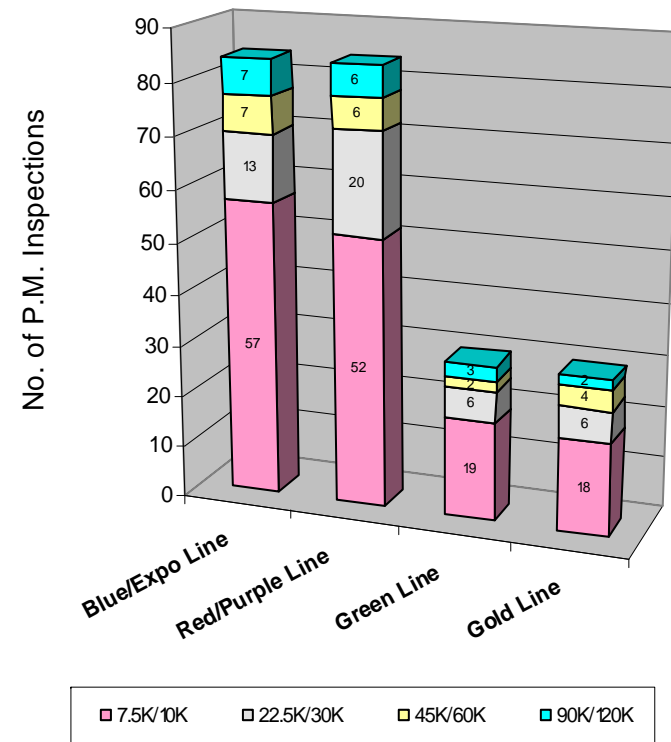
# Preventive Maintenance Compliance

## April 2012

PM Compliance	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12
Blue/Expo Line	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Red/Purple Line	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Green Line	100%	100%	100%	100%	100%	100%	100%	96%	100%	100%	100%	100%
Gold Line	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

April 2012 Preventive Maintenance Inspections

No. of P.M. Inspections	7.5K/10K	22.5K/30K	45K/60K	90K/120K	Totals
Blue/Expo Line	57	13	7	7	84
Red/Purple Line	52	20	6	6	84
Green Line	19	6	2	3	30
Gold Line	18	6	4	2	30
Totals:	146	45	19	18	228

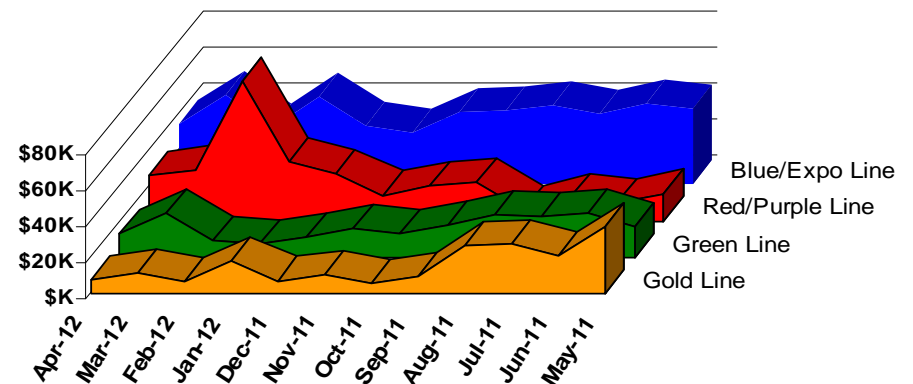


# Vandalism & Graffiti Report

## April 2012

	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	Year-to-Date
Blue/Expo Line	\$42K	\$45K	\$39K	\$44K	\$41K	\$41K	\$29K	\$33K	\$49K	\$32K	\$49K	\$34K	\$478K
Red/Purple Line	\$15K	\$10K	\$13K	\$6K	\$21K	\$20K	\$14K	\$26K	\$33K	\$77K	\$28K	\$25K	\$289K
Green Line	\$16K	\$24K	\$22K	\$23K	\$17K	\$13K	\$15K	\$11K	\$8K	\$9K	\$25K	\$13K	\$197K
Gold Line	\$37K	\$21K	\$28K	\$26K	\$9K	\$5K	\$10K	\$7K	\$18K	\$7K	\$11K	\$7K	\$187K
Totals:	\$111K	\$100K	\$102K	\$99K	\$89K	\$78K	\$69K	\$77K	\$107K	\$125K	\$114K	\$79K	\$1,151K

April 2012 Vandalism & Graffiti - All Rail				
	Qty	Labor	Materials	Totals
Windows replaced	10	\$3,087	\$3,894	\$6,981
Vandal Shields	497	\$14,491	\$5,434	\$19,925
Seats Cleaned	961	\$2,567	\$0	\$2,567
Seats Replaced	238	\$7,498	\$6,041	\$13,539
Graffiti removal - other	736	\$18,047	\$2,498	\$20,545
Repainting panels	2	\$14,364	\$1,452	\$15,816
Totals	2,444	\$60,054	\$19,319	\$79,373



# Graffiti Pictures

## April 2012

Blue Line



Green Line



Gold Line

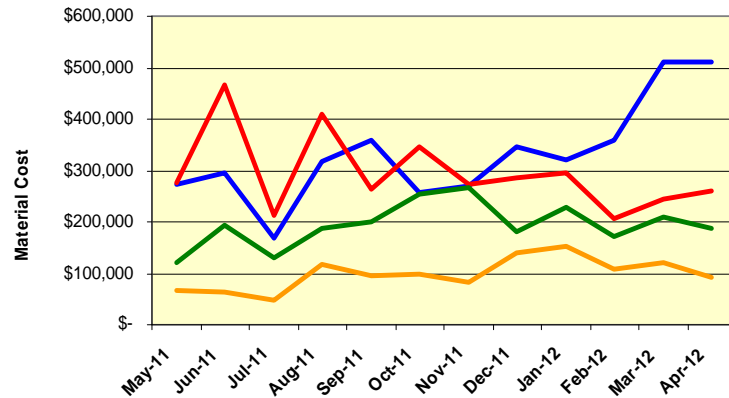


# Material and Labor Costs

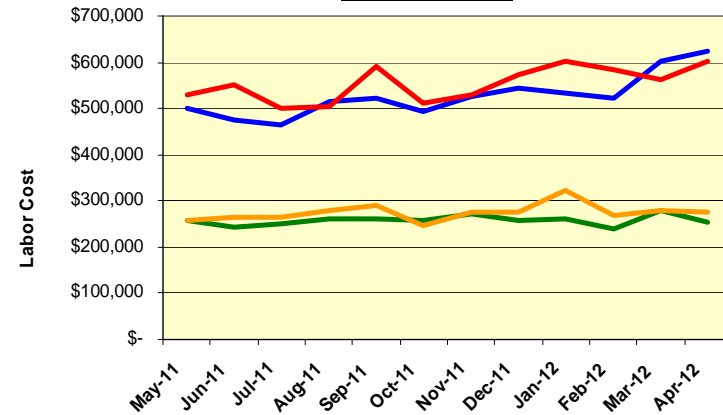
## April 2012

MATERIALS	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12
Blue/Expo Line	\$ 272,272	\$ 294,179	\$ 167,328	\$ 318,296	\$ 359,508	\$ 256,152	\$ 268,760	\$ 346,891	\$ 322,169	\$ 359,911	\$ 510,512	\$ 511,185
Red/Purple Line	\$ 277,113	\$ 466,346	\$ 212,074	\$ 410,299	\$ 263,808	\$ 344,563	\$ 272,291	\$ 285,916	\$ 296,353	\$ 205,225	\$ 244,902	\$ 260,532
Green Line	\$ 121,859	\$ 194,750	\$ 129,976	\$ 187,997	\$ 198,811	\$ 254,691	\$ 265,489	\$ 180,929	\$ 227,110	\$ 172,152	\$ 210,220	\$ 186,572
Gold Line	\$ 67,967	\$ 64,397	\$ 47,760	\$ 118,401	\$ 94,967	\$ 98,380	\$ 83,425	\$ 138,599	\$ 150,971	\$ 106,736	\$ 121,821	\$ 91,218
Totals	\$ 739,212	\$ 1,019,672	\$ 557,138	\$ 1,034,993	\$ 917,095	\$ 953,786	\$ 889,965	\$ 952,335	\$ 996,603	\$ 844,024	\$ 1,087,455	\$ 1,049,507

**Material Costs**



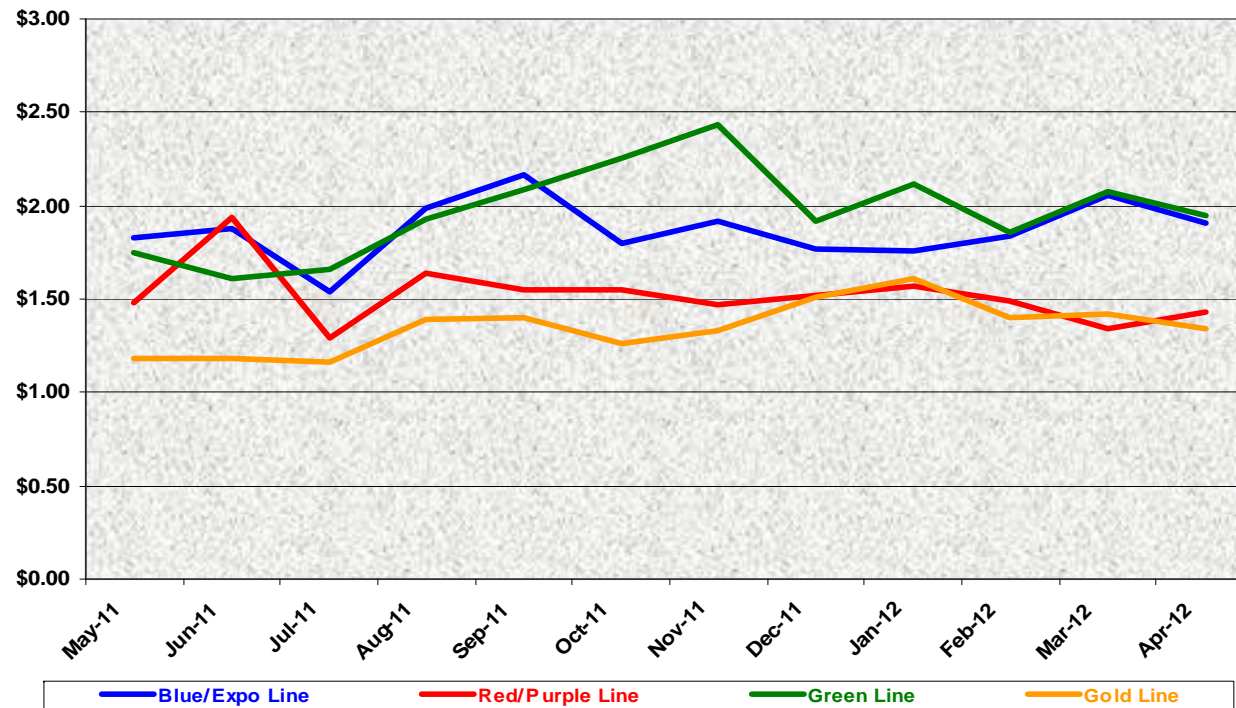
**Labor Costs**



LABOR	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12
Blue/Expo Line	\$ 500,263	\$ 475,354	\$ 464,468	\$ 513,406	\$ 520,526	\$ 493,739	\$ 526,600	\$ 544,564	\$ 534,797	\$ 522,603	\$ 601,905	\$ 622,113
Red/Purple Line	\$ 531,171	\$ 550,464	\$ 500,504	\$ 504,785	\$ 589,986	\$ 510,944	\$ 530,408	\$ 571,885	\$ 602,770	\$ 584,940	\$ 562,875	\$ 602,434
Green Line	\$ 257,678	\$ 243,969	\$ 250,617	\$ 259,629	\$ 261,796	\$ 256,610	\$ 272,603	\$ 259,198	\$ 262,563	\$ 241,042	\$ 278,653	\$ 253,643
Gold Line	\$ 257,114	\$ 264,854	\$ 265,256	\$ 280,715	\$ 289,048	\$ 246,890	\$ 274,017	\$ 276,926	\$ 321,152	\$ 267,372	\$ 277,944	\$ 276,975
Totals	\$ 1,546,225	\$ 1,534,641	\$ 1,480,845	\$ 1,558,535	\$ 1,661,357	\$ 1,508,183	\$ 1,603,628	\$ 1,652,573	\$ 1,721,282	\$ 1,615,957	\$ 1,721,377	\$ 1,755,165

# Cost Per Mile April 2012

Cost per mile:	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	Average
Blue/Expo Line	\$1.83	\$1.88	\$1.54	\$1.99	\$2.17	\$1.80	\$1.91	\$1.77	\$1.76	\$1.84	\$2.06	\$1.91	\$1.87
Red/Purple Line	\$1.48	\$1.93	\$1.29	\$1.64	\$1.55	\$1.55	\$1.47	\$1.52	\$1.57	\$1.49	\$1.35	\$1.43	\$1.52
Green Line	\$1.74	\$1.61	\$1.66	\$1.93	\$2.08	\$2.26	\$2.43	\$1.92	\$2.12	\$1.86	\$2.08	\$1.94	\$1.97
Gold Line	\$1.18	\$1.18	\$1.17	\$1.39	\$1.40	\$1.26	\$1.33	\$1.51	\$1.61	\$1.40	\$1.42	\$1.34	\$1.35



No facility costs are included

# Absences vs. Overtime

## April 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	1.02	0.00	0.00	0.00	0.00	1.02
CTO-COMPENSATORY TIME OFF	0.00	576.50	384.00	55.50	154.00	12.00	1,182.00
CUT-EMPLOYEE LEAVES EARLY	1.50	1.47	0.50	0.00	0.50	0.00	3.97
CVA - CASUAL VACATION	0.00	72.00	436.00	12.00	112.00	0.00	632.00
DSL-DISABILITY LEAVE/LONG	0.00	688.00	400.00	0.00	328.00	0.00	1,416.00
EFH-EMG. FLOAT HOL.	0.00	0.00	40.00	16.00	8.00	0.00	64.00
ETO-EXCUSED TIME OFF	37.50	67.47	19.57	4.50	35.03	6.50	170.57
FMI-FAM IND INJURY	0.00	176.00	0.00	0.00	0.00	0.00	176.00
FML-FAMILY CARE LEAVE	168.00	268.00	182.00	281.73	560.00	0.00	1,459.73
FMS-FAMILY LEAVE SICK	50.40	32.00	80.00	41.20	190.00	0.00	393.60
HLF-HOLIDAY FLOATING	40.00	176.00	216.00	88.00	120.00	8.00	648.00
II-INDUSTRIAL INJURY	0.00	8.00	328.00	0.00	0.00	0.00	336.00
JUR-JURY DUTY	0.00	40.00	176.00	0.00	32.00	0.00	248.00
LC1-LABOR CODE 233	16.00	266.00	247.92	204.00	192.00	0.00	925.92
MLN-MILITARY ABSENCE-UNPAID	0.00	0.00	168.00	0.00	0.00	0.00	168.00
OWP-OFF WITH PERMISSION	0.00	0.00	8.00	4.38	8.00	0.00	20.38
RTO-REQUESTED TIME OFF-NO PA	0.00	16.00	0.00	16.00	0.00	0.00	32.00
SCK-SICK PAY	16.00	138.00	112.00	100.00	96.00	0.00	462.00
SCW-SICK WITHOUT PAY	0.00	56.00	16.00	36.00	0.00	0.00	108.00
TAR-TARDY	1.50	2.70	0.50	2.56	0.81	0.00	8.07
VAC-VACATION	64.00	730.67	260.00	420.00	92.00	0.00	1,566.67
VAC-VACATION WHILE SICK	0.00	0.00	40.00	0.00	0.00	0.00	40.00
<b>Total Absence Hours</b>	<b>395</b>	<b>3,316</b>	<b>3,114</b>	<b>1,282</b>	<b>1,928</b>	<b>27</b>	<b>10,062</b>
Number of Work Force (assigned)	33	116	108	47	52	5	361
Full Work Force hours/month	5,719	20,103	18,716	8,145	9,012	867	62,561
<b>Absence as a % of Work Force</b>	<b>7%</b>	<b>16%</b>	<b>17%</b>	<b>16%</b>	<b>21%</b>	<b>3%</b>	<b>16%</b>
OVERTIME TYPE and HOURS	3940	3941	3942	3943	3944	3947	Total
CTB-COMPENSATORY TIME TO BAN	0	75	112	24	143	24	378
OTP-PREM OVERTIME	922	4022	3636	1230	1074	80	10964
WLO-Worked Lunch Overtime	2	75	166	75	77	2	396
<b>Total</b>	<b>924</b>	<b>4172</b>	<b>3914</b>	<b>1329</b>	<b>1294</b>	<b>106</b>	<b>11738</b>
<b>Overtime as a % of Work Force</b>	<b>16%</b>	<b>21%</b>	<b>21%</b>	<b>16%</b>	<b>14%</b>	<b>12%</b>	<b>19%</b>
UNCOVERED ABSENCES	3940	3941	3942	3943	3944	3947	Total
Absences FTE	2	19	18	7	11	0	58
OTP FTE	5	24	23	8	7	1	68
<b>FTE Difference</b>	<b>-3</b>	<b>-5</b>	<b>-5</b>	<b>-1</b>	<b>4</b>	<b>-1</b>	<b>-10</b>



# Rail Vehicle Engineering Project Summary

## April 2012

Preparation of Engineering Technical Specifications	Tracking #	Status
Red Line AC Gear Box (Rev. 0)	A650/TS/026	Draft in process
Powered Axle Overhaul SOW	P2000 SOW	Released - Next Board meeting report
Vital Relay Calibration	P865-P2020/TS/061	In Revising Process
Windows glass and rubber glazing specification	P865-P2020/TS-xx	Draft in Progress - CH2M
Friction Brake Kit Less Air Compressor Overhaul	P2000/TS/035 Rev 0	Released to Procurement for bid
Center Truck Friction Brake Disc	P2000-TS-020 rev. 01	Released to Procurement for bid
A650 Battery Specification	A650/TS/39	Released to Procurement for bid
Powered Axle Overhaul SOW	P865-P2020/TS/xx	Draft in Progress - CH2M
Seat Insert	P865-P2020/TS/62	Released to Procurement for bid
Red Line DC Gear Box (Rev. 0)	P650/TS/040	Released to Procurement for bid
Vandal Shield for all lines	A650-P865-P2000-P2550/TS/012	Released to Procurement for bid
Aux power supply equipment (APSE) - Static Inverter	P865-P2020/TS/xx	In review by Metro - CH2M
Tire kit specification	P865-P2020/TS/xx	Draft in process
Red Line (Base Buy) DC Traction Motor	P650/TS/041	Draft in Review Progress
<b>General - All Lines</b>		<b>Status</b>
Roadway Worker Protection		CPUC/Installing ProTran1 Device-P865/P2020/P2000/P2550 completed, A650 in process
New Radios installed to replace old radios		Meeting 3/7/2012-Contract awarded, prototype by mid April.
Bike Space		P2000/P2550/A650 Fleet modification completed - P865/P2020 in process.
<b>P2000 Overhaul Program</b>		<b>Status</b>
Master Controller - Bombardier Refurbish		Ongoing Program
Wheel flats		LB Foster prototype - Gill applicator testing
New LED Destination Signs		Luminator Prototype approved - In process of developing spec for bid
RSS and EOSS Bundle Cables/Connectors - Glenair		In Progress
Handicap Seat Modification using Velcro		In Progress
CCH possible replacement (Focon)		Send information to Focon
<b>P865/P2020 Program</b>		<b>Status</b>
Static Inverter - Transtechnik		Inverter running in revenue service for testing - Passed final inspection/Approved.
Remotely reset CB1 Breaker		Prototype was successfully tested. Procuring parts for fleet modification.
"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 in fabrication for fleet modification.
Traction Motor Cleaning Procedure		Completed
HVAC Compressor Overhaul		In Progress - CH2M
<b>P3010</b>		<b>Status</b>
78 New Light Rail Vehicle		Solicitation completed
<b>P2000 Gold to Green</b>		<b>Status</b>
Signal package conversion (Gold to green)		On-hold
<b>A650 Overhaul Program</b>		<b>Status</b>
Midlife Overhaul Specification		Draft complete by Metro. In process of Consultant selection to complete.
HPT Upgrade		Wabtec Proposal received - Production run prototype by mid May
AB New Traction Motor Mount		AB for Fleet Modification in progress. A total of sixty (60) 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
Door Operator Gearbox and Rollers Overhaul		In Progress - Vapor.
H-4 electronic units		Unit upgrade - Fleet issues (Wabtec)
<b>P2550</b>		<b>Status</b>
Vehicle Acceptance		Forty eight cars have been Final Accepted. Received car 701-Not functional.
3P Flip Up Seat Finger Guard		Submitted SS to Procurement - Testori
Find alternative Vendor for Reverse Engineer PCB Boards P2550		In Progress
Compressor Dessicant Material		In Progress

# P2550 Vehicle Acceptance Program

## April 2012

### **Vehicle Status Update:**

- Metro has received 48 cars with all 48 being final accepted.
- Car 701 has been shipped to Los Angeles; awaiting for delivery of Gateway Communication Board to complete assembly and then begin commissioning activities.

### **Engineering Activities Update:**

- Event recorder: Configuration continues to be finalized; however, on-site support from contractor and supplier is required to resolve final technical issues. Faiveley-France is targeted to be on site in near future to expedite qualification and provide training.
- Decelerometer Failures: Supplier completed internal qualification to replace those on the fleet.

### **Production Car Status – Pittsburgh:**

- Car 701- Reconfiguration of car is in process. This car is now targeted to ship to Los Angeles by June 2012.

### **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 scheduled to begin arriving in Q2 2012.
- Daily and bi-weekly meetings are scheduled with contractor management to address project issues.

# QA-Warranty Program Projects Summary

## April 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.
- On-Going, P2550 warranty claims.
- On-Going, A650 Base Buy & Option car fleet warranty – Truck Frame Modification Campaign (42 Trucks of 232 modified to date). A MRL Cost Avoidance savings accrued to date \$219,856.00.
- On-Going MBL P865/P2020 69-car fleet 7.5K PMI supplemental inspection checks (46 of 69 vehicles completed by QA).
- QA First Article Inspections/ Investigations (5) conducted.
- QA PMI Audits & QA Spot Checks performed (3).
- CCTV Video Downloads – 18 hours.
- Technical support, Expo Line ATP/TWC Project, Cab Signal, TWC Over Speed No Power readiness testing.
- Warranty-QA interest oversight & tracking: Overhauls / Mod Programs, (A650/P2000/P2020/865) 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).
- On-Going HR Manpower & TCU Chairman, discussions Equipment Record Specialist (ERS) roster separation (Bus from Rail).
- QA-Warranty's Share Drive Admin, archive all reports & records.

# RFS Instruction Department Activities

## April 2012

### Training classes completed during the month of April 2012

Description	Course Hours	Student Count	Training Hours
<b><u>Blue &amp; Expo Line Training - (P865/2020 &amp; P2000 LRV):</u></b>			
RFS SIEMENS MAINLINE DUTY, DEAD TOW AND VEHICLE RECOVERY	8	7	56
<b>Total Blue Line Training (Hours):</b>			<b>56</b>
<b><u>Red Line Training (Breda A650 HRV):</u></b>			
REFRIGERANT RECOVERY SYSTEMS (608)	16	6	96
RFS BRED A650 HVAC REFRESHER	24	6	144
<b>Total Red Line Training (Hours):</b>			<b>240</b>
<b><u>Gold Line Training (P2550 LRVs):</u></b>			
Supervisors' CCTV Download Training	1	5	5
<b>Total Gold Line Training (Hours):</b>			<b>5</b>
<b><u>Total RFS Instruction for the month of April 2012 (Hours):</u></b>			<b><u>301.0</u></b>
<b><u>Other Instruction Activities</u></b>			
P2550 HRMM manual review			80
P2000 class preparations and preparing for Instruction Duties			160
Assisting Blue\Expo Maintenance with failure investigations			40
Moving back to the Green Line			16
ATP Predeparture Training preparation			32
Red Line Technical Support & class preparations			80
<b><u>Total Other Instruction Activities</u></b>			<b><u>408.0</u></b>

### Core Vehicle Training Completed: BLUE RED GREEN GOLD

<b>Percentage of core vehicle training complete:</b>	<b>81.5%</b>	<b>99.5%</b>	<b>97.2%</b>	<b>93.9%</b>
Siemens P2000 training complete:	40.0%	N/A	N/A	N/A

**Average Specialist Rail Experience Level in Years: 10.9 10.7 9.5 10.2**

### Core Training Completed

