

# Rail Fleet Services Monthly Report November 2013



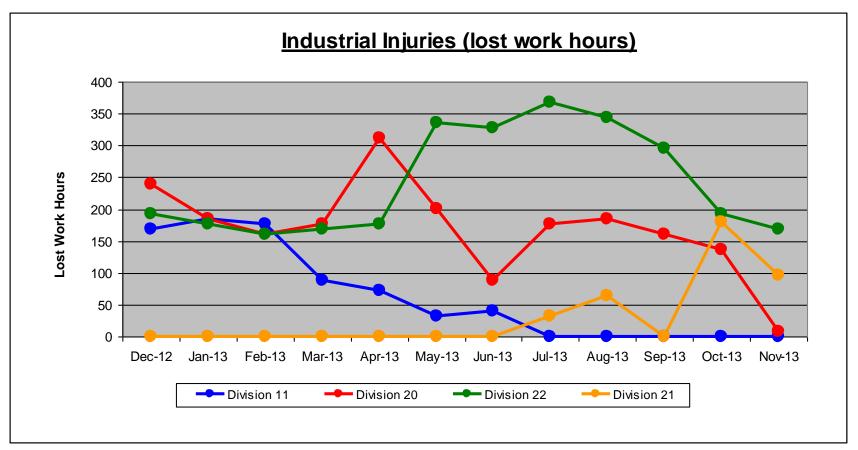
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### Industrial Injuries – Lost Work Hours November 2013

	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	12-Month Period
<b>Division 11</b>	168	184	176	88	72	32	40	0	0	0	0	0	760
Division 20	240	184	160	176	312	200	88	176	184	160	136	8	2,024
Division 22	192	176	160	168	176	336	328	368	344	296	192	168	2,904
Division 21	0	0	0	0	0	0	0	32	64	0	180	96	372
Totals	600	544	496	432	560	568	456	576	592	456	508	272	6,060





## Rail Vehicle Accidents & Major Incidents November 2013

Repair Costs	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	12-Month Period
Blue/Expo Line	\$5,262	\$18,740	\$3,288	\$2,959	\$237,017	\$11,700	\$4,926	\$14,951	\$2,338	\$3,700	\$11,475	\$13,838	\$330,194
Red/Purple Line	\$0	\$2,244	\$0	\$0	\$4,165	\$0	\$0	\$0	\$1,358	\$0	\$0	\$0	\$7,767
Green Line	\$503	\$202	\$126	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$831
Gold Line	\$0	\$176	\$0	\$0	\$0	\$261	\$8,220	\$0	\$537	\$0	\$0	\$0	\$9,194
Totals	\$5,765	\$21,362	\$3,414	\$2,959	\$241,182	\$11,961	\$13,146	\$14,951	\$4,233	\$3,700	\$11,475	\$13,838	\$347,986

		Rail Vel	hicle Accident Costs - November 2013		
Date	Incident #	Problem Code	Incident Description		Cost
Metro Blue	Line				
11/12/13	2387036	Train vs. Object	A 10-71 was reported for Car 121 making contact with shopping cart on approach to Florence Station.	\$	2,090
11/22/13	2390877	Train vs. Vehicle	A 10-73 was reported at 10th and Long Beach, no injuries, auto fled the scene.	\$	859
11/25/13	2391647	Train vs. Object	A 10-71 was reported for incident involved train vs bicycle: Train # 103, N/B Track 1 Gage Grade Crossing.	\$	-
11/26/13	2392341	Train vs. Object	Incident involved train vs bicycle at Gage Grade XX.	\$	-
			Total	\$	2,949
Metro Expo					
11/14/13	2387963	Train vs. Vehicle	A 10-73 was reported at Intersection of Pico and Flower .	\$	2,292
11/27/13	2392738	Train vs. Vehicle	A 10-73 was reported at Southbound Track 2 Flower and 10 Freeway.	\$	8,597
	•		Total	\$	10,889
Metro Gold	Line				
11/21/13	2390628	Train vs. Pedestrian	A 10-72 was reported at 1st Street Bridge.	\$	-
			Total	\$	-
			Grand Total	\$	13,838
(10-71) =	Train vs. Obje	ct, (10-72) = Train vs. Pe	edestrian, (10-73) = Train vs. Vehicle (10-74) = Train vs. MTA Vehicle, (10-75) =	Dera	ailment

**Note**: Repair costs are only the expenses captured during the time period of the report. Actual costs may be significantly higher, if repairs are spread out over several months.



### Service Delivery November 2013

#### **Blue/Expo Line Fleet Size: 92**

	<u>Vehicles</u>	<u>Average</u>	<u>% Up</u>
Pull Out	<b>Required</b>	<u>Available</u>	(Down)
Weekday:	78	80	103%
Weekend:	60	67	112%

Late Pullouts: 2\*

Monthly Mileage: 654,809

#### Red/Purple Line Fleet Size: 104

	<u>Vehicles</u>	<u>Average</u>	<u>% Up</u>
Pull Out	<b>Required</b>	<u>Available</u>	(Down)
Weekday:	74	83	112%
Weekend:	55	77	140%

Late Pullouts: 0\*

Monthly Mileage: 636,268

#### **Green Line Fleet Size: 29**

	<u>Vehicles</u>	<u>Average</u>	<u>% Up</u>
Pull Out	<b>Required</b>	<u>Available</u>	(Down)
Weekday:	22	23	105%
Weekend:	14	18	129%

Late Pullouts: 0\*

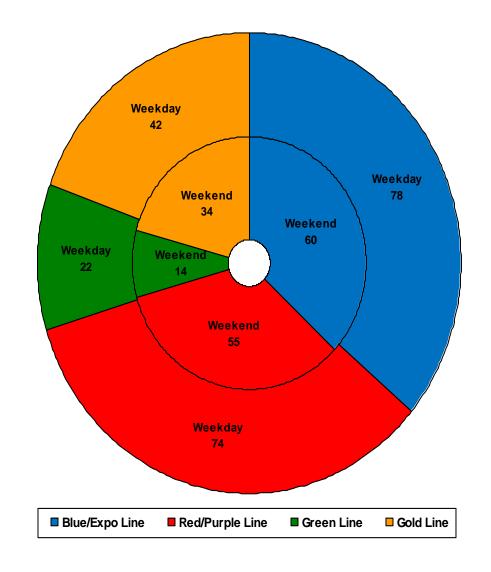
Monthly Mileage: 226,798

#### **Gold Line Fleet Size: 50**

	<u>Vehicles</u>	<u>Average</u>	<u>% Up</u>
Pull Out	<b>Required</b>	<u>Available</u>	(Down)
Weekday:	42	44	105%
Weekend:**	34	40	118%
Late Pulloute: 0*			

Late Pullouts: 0

Monthly Mileage: 321,676

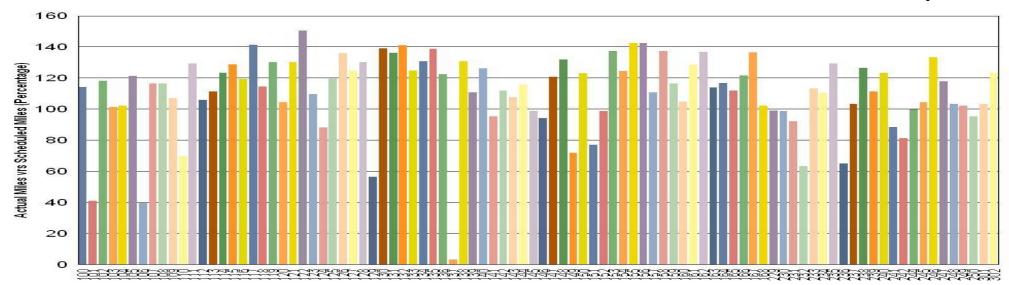




**Metro** 

### Vehicle Utilization November 2013

#### Metro Blue/Expo Line



#### **Blue/Expo Line:**

Car # 106 Out of service for interior graffiti abatement and exterior painting.

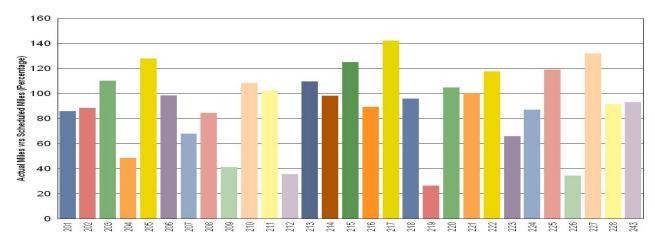
Car # 137 Out of service for major accident repair.

#### **Metro Green Line**

#### **Green Line:**

Car # 212 Out of service for a friction brake overhaul and wheel true for flats. Car # 219 Out of service for 90K and open work orders.

Car # 226 Out of service for graffiti abatement.





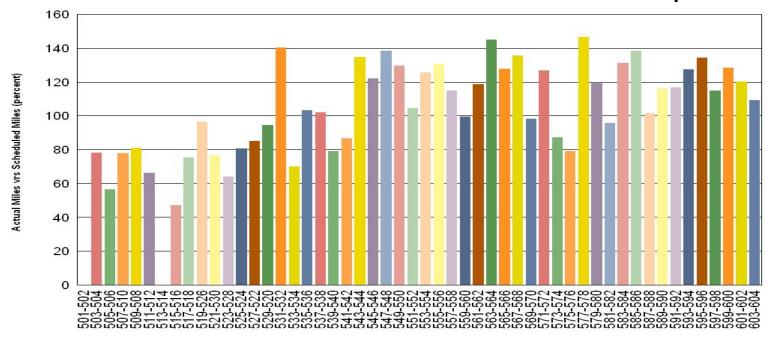
### Vehicle Utilization November 2013

#### **Metro Red/Purple Line**

**Metro Gold Line** 

#### **Red/Purple Line:**

Car # 501-502 Out of service for floor repairing.
Car # 513-514 Out of service for floor repairing.



#### **Gold Line:**

Car # 729 Out of service due to a wheel diameter sensing problem. Car # 732 Out of service due to damage, waiting for parts, and traction motor wiring repair.

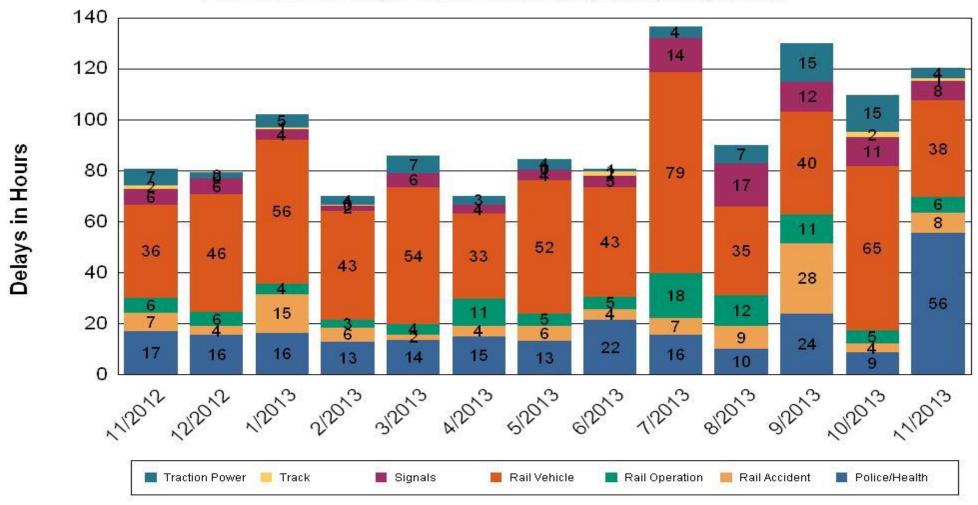


### 

### All Train Delay Incidents November 2013

### **All Train Delays**

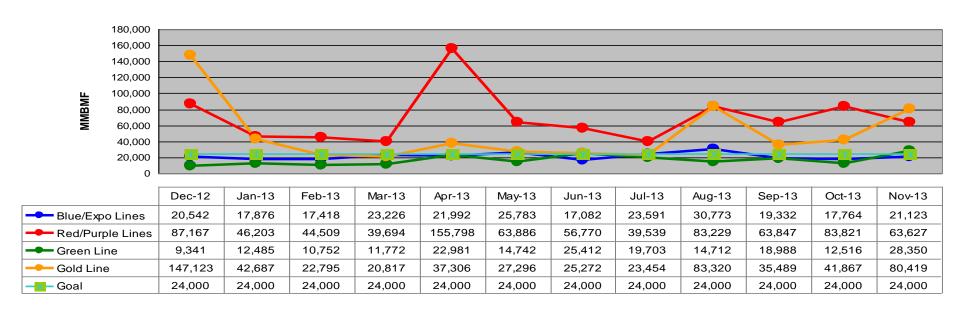
Totals Include the delay to all trains involved (not just the primary incident)



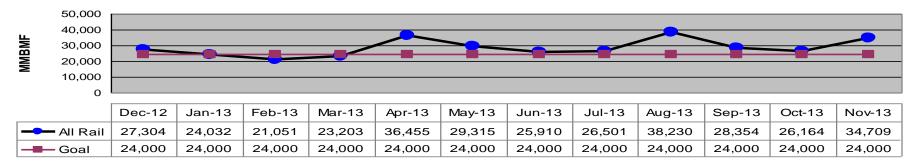


### Mean Miles Between Failures (Major) Year to Date

#### Mean Miles Between Major Failures (by line)



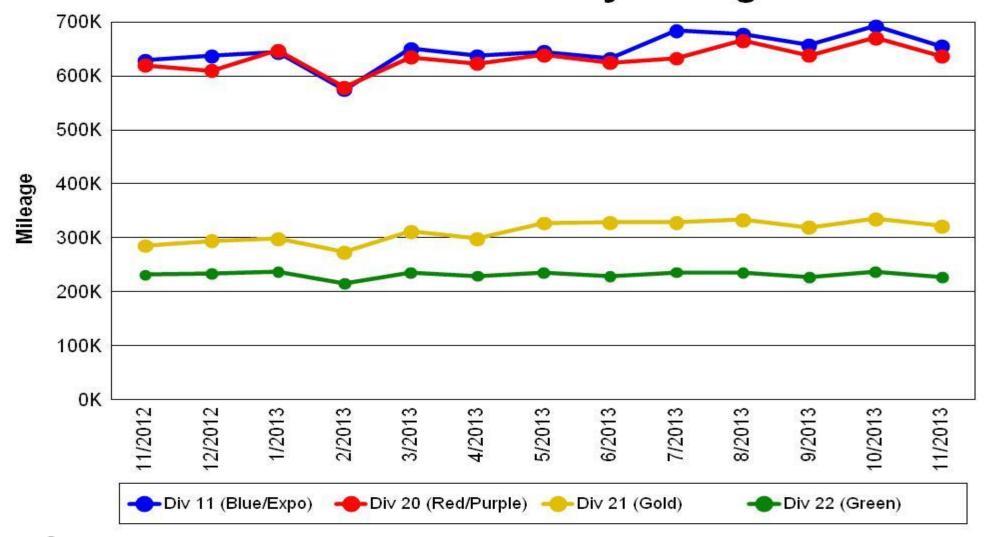
#### Mean Miles Between Major Failures (all)





### Mileage Between Data Range (by month) November 2013

### Rail Division Monthly Mileage

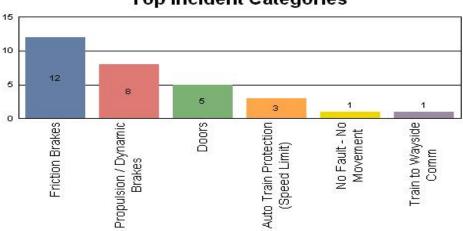




### **Major Incidents November 2013**

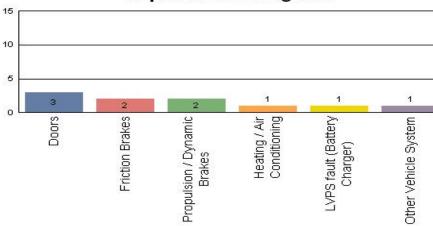
#### **Metro Blue/Expo Line**

#### **Top Incident Categories**



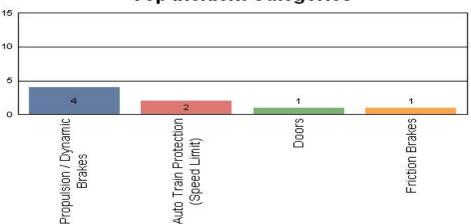
#### **Metro Red/Purple Line**

#### **Top Incident Categories**



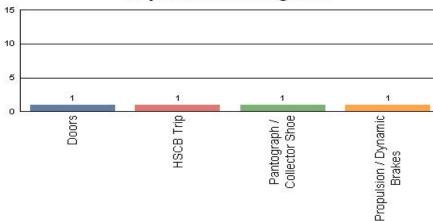
#### **Metro Green Line**

#### **Top Incident Categories**



#### **Metro Gold Line**

#### **Top Incident Categories**





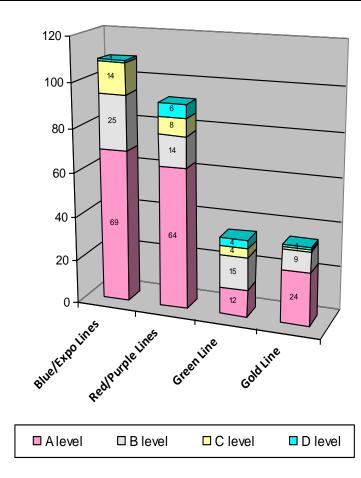
**Major Incident**: When a train does not complete its scheduled run or is more than 5 minutes late of its scheduled arrival time.

# Preventive Maintenance Compliance November 2013

PM Compliance	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13
Blue/Expo Lines	100%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Red/Purple Lines	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
<b>Green Line</b>	100%	100%	100%	100%	100%	91%	100%	100%	100%	100%	96%	92%
<b>Gold Line</b>	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Number of Preventive Maintenance Inspections - November 2013												
Line	A level	B level	C level	D level	Totals							
Blue/Expo Lines	69	25	14	1	109							
Red/Purple Lines	64	14	8	6	92							
Green Line	12	15	4	4	35							
Gold Line	24	9	1	1	35							
Totals:	169	63	27	12	271							

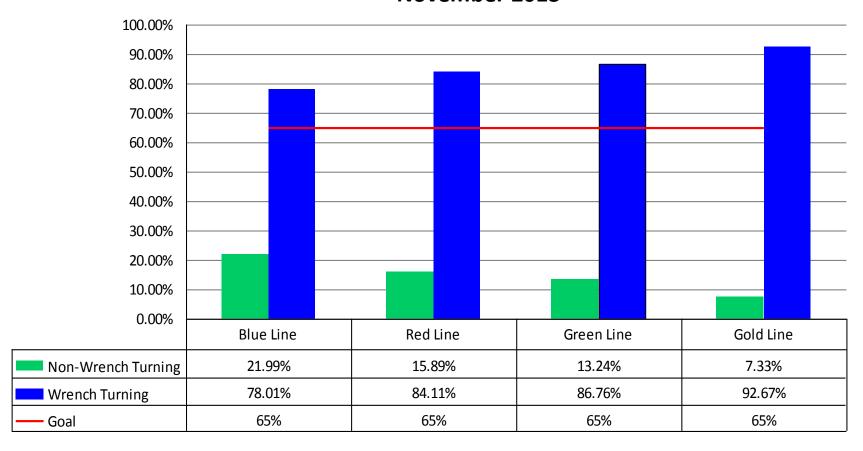
Explanation of PN	Inspection levels	Miles								
Line	Туре	A level	B level	C level	D level					
Blue/Expo Lines	P865/P2020	5,000	15,000	30,000	60,000					
Blue/Expo Lines	P2000	7,500	22,500	45,000	90,000					
Red/Purple Lines	A650	7,500	22,500	45,000	90,000					
Green Line	P2000	7,500	22,500	45,000	90,000					
Gold Line	P2550	10,000	30,000	60,000	120,000					





# RFS Wrench Turning November 2013

RFS - Wrench Turning November 2013

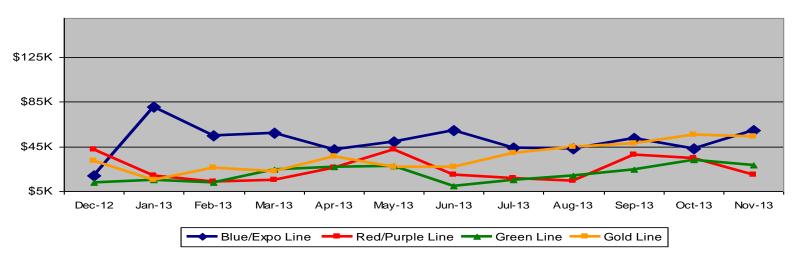




### Vandalism & Graffiti Report November 2013

#### **Graffiti Costs**

	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	12-Month Period
Blue/Expo Line	\$19K	\$81K	\$55K	\$57K	\$42K	\$49K	\$59K	\$44K	\$43K	\$53K	\$43K	\$60K	\$605K
Red/Purple Line	\$42K	\$19K	\$13K	\$15K	\$26K	\$42K	\$19K	\$16K	\$14K	\$37K	\$35K	\$20K	\$300K
Green Line	\$13K	\$15K	\$13K	\$24K	\$27K	\$28K	\$10K	\$15K	\$19K	\$24K	\$33K	\$28K	\$250K
Gold Line	\$32K	\$15K	\$26K	\$23K	\$36K	\$27K	\$27K	\$39K	\$44K	\$48K	\$56K	\$54K	\$427K
Totals:	\$106K	\$130K	\$108K	\$119K	\$131K	\$146K	\$116K	\$115K	\$121K	\$162K	\$167K	\$162K	\$1,582K



November 2013 Vandalism & Graffiti - All Rail								
	Qty	Labor	Materials	Totals				
Windows replaced	182	\$19,152	\$26,624	\$45,776				
Vandal Shields	809	\$24,739	\$11,512	\$36,251				
Seats Cleaned	466	\$2,865	\$0	\$2,865				
Seats Replaced	178	\$5,607	\$5,711	\$11,318				
Graffiti removal - other	1,098	\$25,844	\$1,000	\$26,844				
Repainting panels	465	\$33,705	\$4,955	\$38,660				
Totals	3,198	\$111,912	\$49,802	\$161,714				

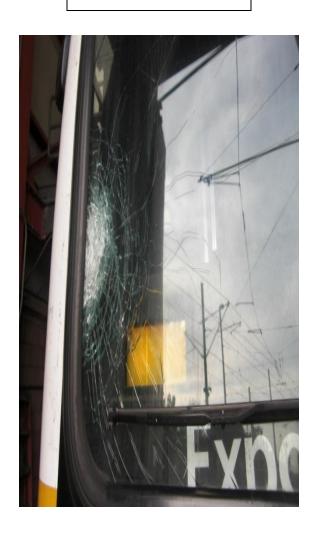


# **Graffiti Pictures November 2013**

**Blue Line** 







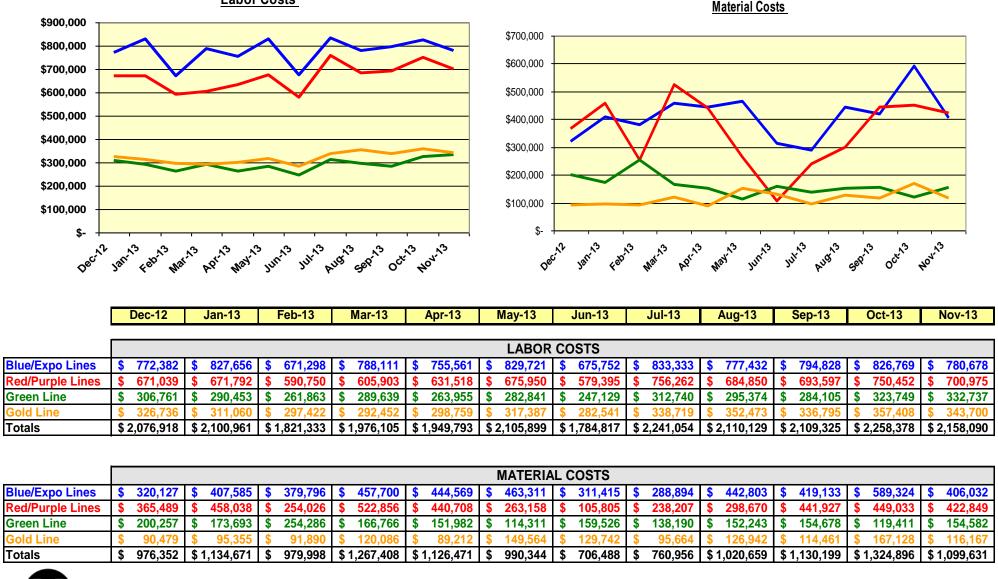






### Labor and Material Costs November 2013

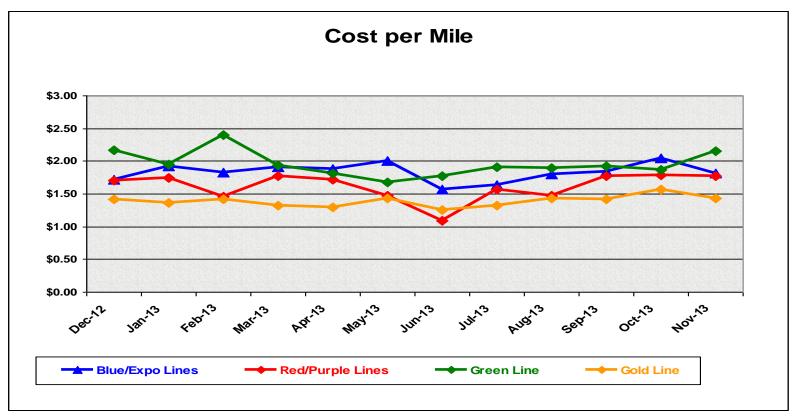
**Labor Costs** 





### Cost Per Mile November 2013

Cost per mile:	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13
Blue/Expo Lines	\$1.72	\$1.92	\$1.83	\$1.92	\$1.88	\$2.01	\$1.56	\$1.64	\$1.80	\$1.85	\$2.04	\$1.81
Red/Purple Lines	\$1.70	\$1.75	\$1.46	\$1.78	\$1.72	\$1.47	\$1.10	\$1.57	\$1.48	\$1.78	\$1.79	\$1.77
Green Line	\$2.17	\$1.96	\$2.40	\$1.94	\$1.81	\$1.68	\$1.78	\$1.91	\$1.90	\$1.93	\$1.86	\$2.15
Gold Line	\$1.42	\$1.36	\$1.42	\$1.32	\$1.30	\$1.43	\$1.25	\$1.32	\$1.44	\$1.41	\$1.57	\$1.43





# ATU Absences vs. Overtime November 2013

	3940	3941	3942	3943	3944	3947	Total
ABSENCE TYPE and HOURS	Admin.	Blue	Red	Green	Gold	Expo	Total
BER-BEREAVEMENT	24	16	72	48	16	_	176
CTO-COMPENSATORY TIME OFF	8	325	328	59	128	2	850
CUT-EMPLOYEE LEAVES EARLY	-	1	-	1	-	_	2
CVA - CASUAL VACATION	-	122	332	66	240	_	760
DSL-DISABILITY LEAVE/LONG	-	432	240	-	_	_	672
EFH-EMG. FLOAT HOL.	-	8	72	8	8	_	96
ETO-EXCUSED TIME OFF	2	68	63	20	52	1	205
FMI-FAM IND INJURY	-	-	-	-	32	_	32
FML-FAMILY CARE LEAVE	-	191	100	351	72	_	714
FMS-FAMILY LEAVE SICK	-	48	80	15	32	_	176
HLF-HOLIDAY FLOATING	24	352	328	88	184	48	1,024
HNP-HOLIDAY NOT PAID	-	-	-	-	8	_	8
HOL-HOLIDAY LEGAL	72	544	592	128	168	32	1,536
II-INDUSTRIAL INJURY	-	-	8	-	_	_	8
IPD-INJURED PARTIAL DAY	-	_	8	-	_	_	8
JUR-JURY DUTY	-	24	16	-	24	_	64
LC1-LABOR CODE 233	8	144	117	48	_	_	317
LTI-OCCPIL/LONGTRM INJ LEAVE	-	-	-	168	96	_	264
MLN-MILITARY ABSENCE-UNPAID	-	24	-	-	-	_	24
OWP-OFF WITH PERMISSION	-	-	8	-	_	_	8
RTO-REQUESTED TIME OFF-NO PAY	-	24	-	-	_	_	24
SCK-SICK PAY	-	256	88	64	88	_	496
SCW-SICK WITHOUT PAY	-	224	16	56	28	_	324
SPN-SCHOOL PARTNER NOT PAID	-	-	-	-	8	_	8
SUS-DISCIPLINARY SUSPENSION	-	8	-	32	-	_	40
TAR-TARDY	-	2	1	1	2	0	7
UNP-UNION BUS PAID	-	-	-	8	_	_	8
VAC-VACATION	64	820	652	486	293	16	2,330
Total Absence Hours	202	3,633	3,121	1,646	1,478	99	10,180
ATU Number of Work Force (assigned)	9	120	111	47	48	5	340
Full Work Force hours/month	1,560	20,796	19,236	8,145	8,318	867	58,922
Absence as a % of Work Force	13%	17%	16%	20%	18%	11%	17%

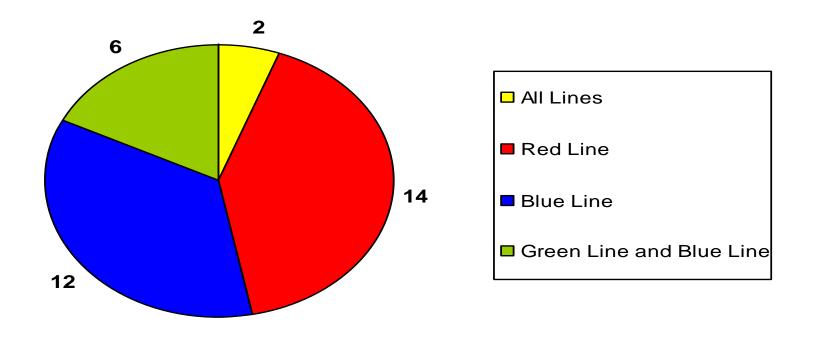
	3940	3941	3942	3943	3944	3947	
OVERTIME TYPE and HOURS	Admin.	Blue	Red	Green	Gold	Expo	Total
CTB-COMPENSATORY TIME TO BANK	12	141	219	46	88	_	505
OTP-PREM OVERTIME	650	5,741	5,714	2,421	1,922	271	16,720
WLO-Worked Lunch Overtime	85	166	174	143	96	10	673
Total Overtime Hours	747	6,048	6,106	2,609	2,106	281	17,898
Overtime as a % of Work Force	48%	29%	32%	32%	25%	32%	30%
FTE Calculation - Absence & OT Hours	3940	3941	3942	3943	3944	3947	Total
Absences FTE	1	21	18	9	9	1	59
OTP FTE	4	35	35	15	12	2	103
FTE Difference	-3	-14	-17	-6	-3	-1	-44



Note: Overtime also covers other required activities.

### Rail Vehicle Engineering Project Summary November 2013

# Engineering Technical Specifications 100% Completion - Total of 34 November 2013

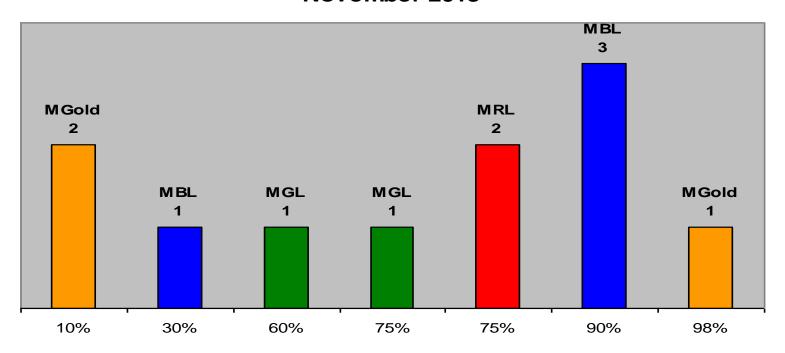




Details of specifications are available upon request.

### Rail Vehicle Engineering Project Summary (cont'd) November 2013

Engineering Technical Specifications
Less than 100% Completion - Total of 11
November 2013

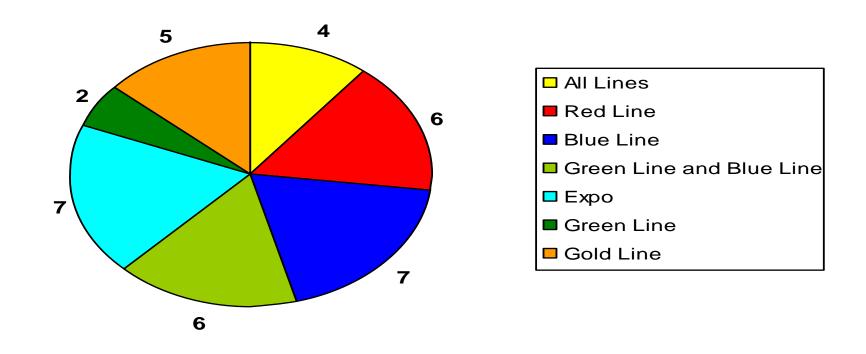


Details of specifications are available upon request.



### Rail Vehicle Engineering Project Summary (cont'd) November 2013

# Engineering Projects 100% Completion - Total of 37 November 2013

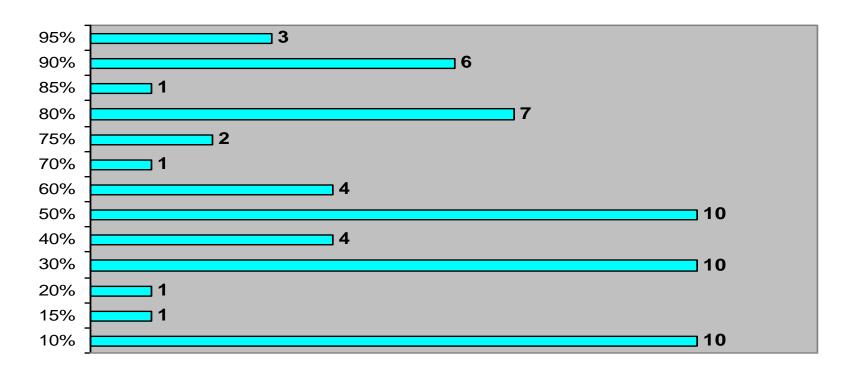


Details of projects are available upon request.



### Rail Vehicle Engineering Project Summary (cont'd) November 2013

Engineering Projects
Less than 100% Completion - Total of 60 - All Lines
November 2013



Details of projects are available upon request.



### QA-Warranty Activities November 2013

- QA PMI Audits, Spot Checks, Unannounced Audits performed (24)
- On-Going, P2550 parts tracking: Contract Spares, Capital Spares, Metro Loaned Parts status to ABI
- On-Going, Division Warranty Parts Claims Processing
- P2550 Traction Motor Junction Box Overheated lugs repairs in progress
- P2550 (Lamellar Seal) Truck Resilient Pin Bushing fleet failure declared (Action pending ABI)
- P2550 34 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 (143 of 216 Trucks modified to date). MRL Warranty Cost Avoidance savings accrued to date
   \$2.15 million.
- SmartDrive test installation in progress MBL
- MBL journal bearing replacement program in progress
- On-Going Warranty-QA interest oversight & tracking: Overhauls / Mod Programs,
   (A650/P2000/P2020/865/P2550) Propulsion System, Master Controllers, Capacitor Banks,
   Air Compressors, Aux Power, Couplers, Gearboxes, Articulation Diaphragms, Friction
   Brakes, HPT's, Brake Resistor Grids, T/M's, MA's, HVAC, Doors, A/C Motors (Blowers & Evaporators)

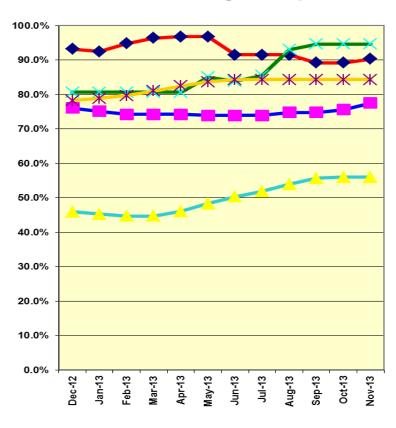


## RFS Instruction Department Activities November 2013

#### **Training classes completed during the month of November 2013**

Description	Course Hours	Student Count	Training Hours	_				
Blue & Expo Line Training - (P865/2020 & P2000 LRV):								
RFS PROTRAN1 TRAINING	1	36	36					
WAYSIDE WORKER PROTECTION	4	25	100					
HAZARD COMMUNICATION FOR EMPLOYEES	2	12	24					
RFS 865/2020 PROPULSION	96	7	672					
Total Blue Line	Training	(Hours):	832	-				
10111.2.100 210		().						
Red Line Training (Breda A650 HRV):								
RFS PROTRAN1 TRAINING	1	63	63					
WAYSIDE WORKER PROTECTION	4	59	236					
DRUG AND ALCOHOL (SAFETY SENSITIVE)	2	1	2					
RFS BREDA 650 TRANSRAIL LVPS	8	8	64					
RFS BREDA 650 PROPULSION GE	40	8	320					
RFS BREDA 650 MTO SYSTEMS	24	8	192					
RFS BREDA 650 VEHICLE INTRO	8	8	64					
Total Red Line	Training	(Hours):	941	=				
Groon Line Training (Bassa LBVs)								
Green Line Training (P2000 LRVs): RFS PROTRAN1 TRAINING	1	1	1					
WAYSIDE WORKER PROTECTION	4	3	1 12					
WAYSIDE WORKER PROTECTION	4	3	12					
Total Green Line	Training	(Hours):	13	-				
Gold Line Training (P2550 LRVs):								
RFS PROTRAN1 TRAINING	1	20	20					
WAYSIDE WORKER PROTECTION	4	18	72					
Total Gold Line	Training	(Hours):	92	-				
Total RFS Instruction for the month of Novem	937							
•								
Other Instruction Activities								
Insructor Vacation & Holidays			104					
P865/P2020 Vehicle Course Preparation			40					
A650 Vehicle Course Preparation			32					
•								
WWPPreparation			8					
ProTran1 Preparation			8					
<b>Total Other Instruction Activities</b>	_		<u>192.0</u>					
Core Vehicle Training Completed:	BLUE	RED	<u>GREEN</u>	GOLD				
Percentage of core vehicle training complete:	77.5%	90.3%	94.6%	84.3%				
Siemens P2000 training complete:		90.3% N/A	94.6% N/A	04.3% N/A				
Siemens P2000 training complete.	30.0%	IN/A	IN/A	IN/A				
Average Specialist Rail Experience Level in Years	11.5	9.8	9.6	10.3				

#### **Core Training Completed**





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