

# Metro Rail Operations Report

## September 2008

# Metro Rail – Weekday Boarding Trends

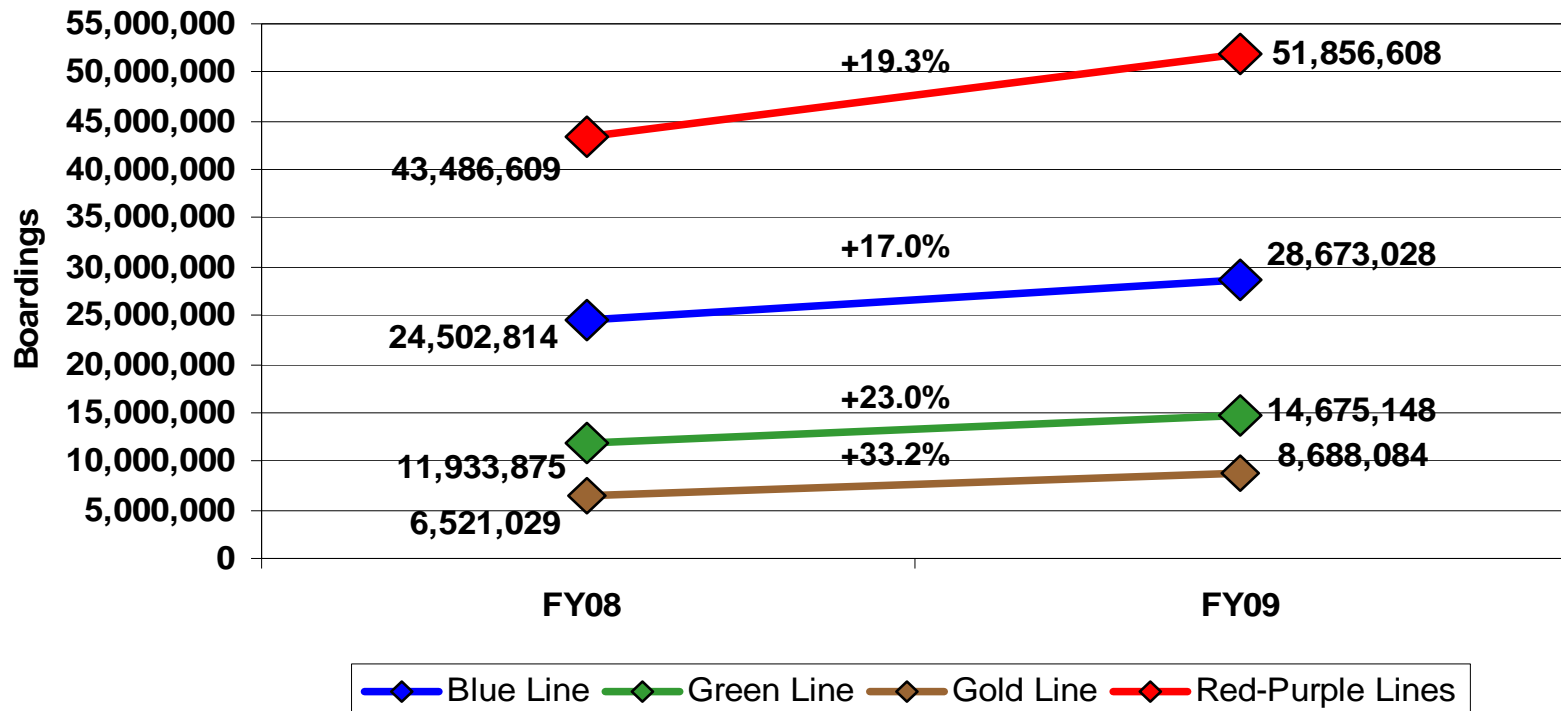
	July 2008	FY08	%
– Blue Line	86,596	75,427	14.8%
– Green Line	46,527	38,091	22.1%
– Gold Line	27,019	20,347	32.8%
– Red/Purple Lines	<u>159,439</u>	<u>134,448</u>	<u>18.6%</u>
– Total Rail System	319,581	268,313	19.1%

\* All time weekday boarding records on all lines.



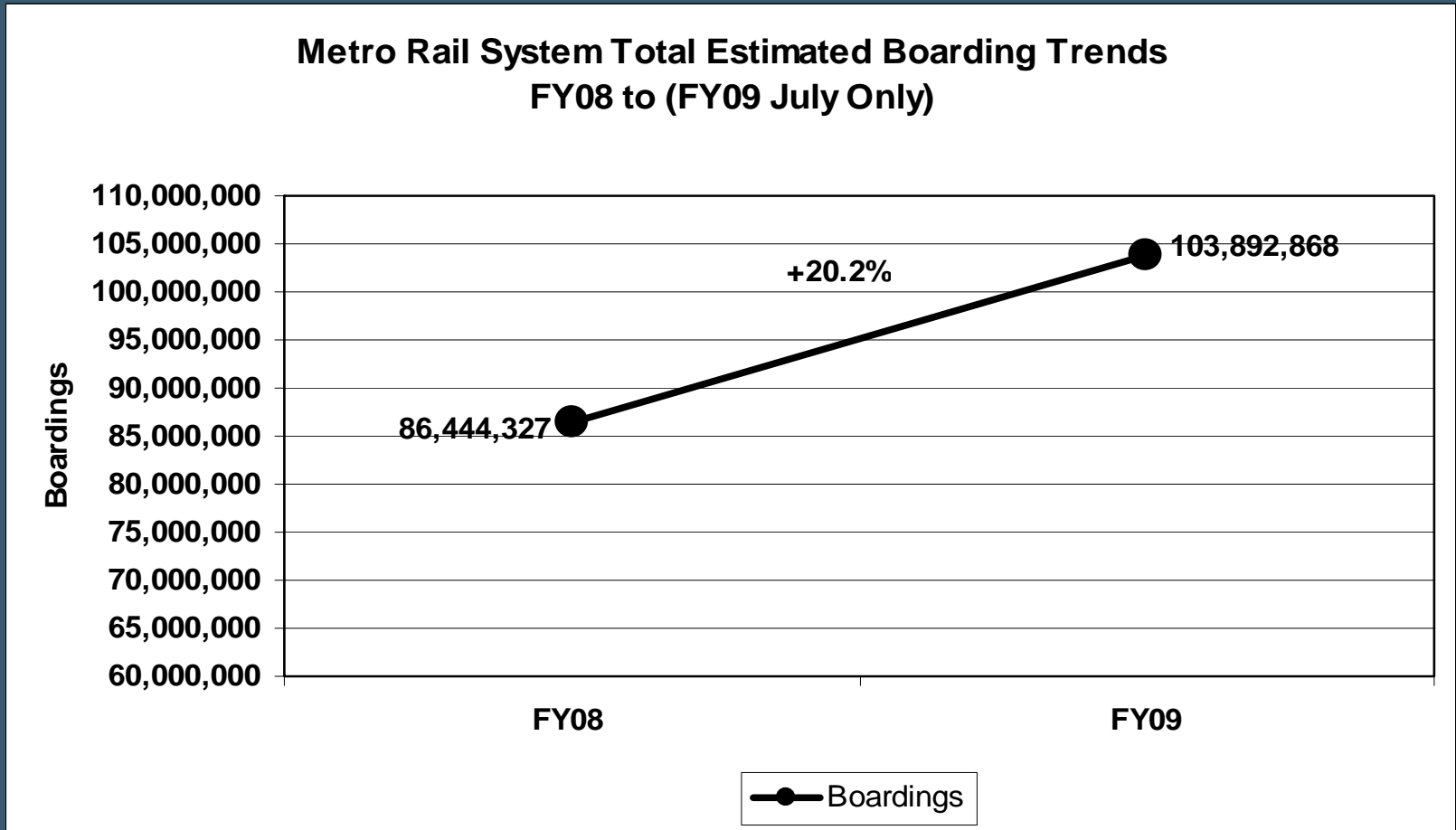
# Metro Rail – FY09 Boarding Trends

Metro Rail Total Estimated Boarding Trends  
FY08 (Complete) to FY09 (July Only)



# Metro Rail – FY09 Boarding Trends

If July boarding estimates are extended for the year:



# Six AnsaldoBreda Cars In Service



# Gold Line Eastside Extension Preparation

- Rail Activation Team is Fully Engaged
- Live Testing will begin in January
- Pre-Revenue will Begin May 1<sup>st</sup>
- ROD on June 26th
- Rail Transportation Instruction is currently training the first of three Train Operator Classes (8-week courses)

# Rebuilding Engineering Efforts

- Blue and Red Rail Vehicles
- Red/Green Scada Replacement
- Upgrading Radio System
- Blue Line Systems Replacements

# Rail Rebuilding Programs

- The complete overhaul of 30 Heavy Rail Subway Cars and 69 Light Rail Cars, Including Propulsion, HVAC, Auxiliary Power, Friction Brakes, Train Control, Air Compressors, & Door Controls
- Traction Motor Overhauls
- Gearbox Overhauls



## Consumables

- Seat Cleaning
- Air Filters
- Brake Pads
- Carbon Strips
- Collector Shoes
- Gear Oil
- Florescent Bulbs





# METRO RAIL SCADA SYSTEMS

## RED LINE



<b>OPENED</b>	<b>1993</b>
<b>STATIONS</b>	<b>16 (ALL UNDERGROUND)</b>
<b>NUMBER OF MILES</b>	<b>17.4</b>
<b>FLEET SIZE</b>	<b>104</b>
<b>TOTAL ANNUAL BOARDINGS</b>	<b>44 MILLION</b>
<b>COST OF RAIL SYSTEM</b>	<b>4.5 BILLION</b>
<b>SCADA SUPPLIER</b>	<b>ARINC</b>
<b>SUBSYSTEMS MONITORED AND CONTROLLED</b>	<b>TRAIN CONTROL, TRACTON POWER, EMERGENCY VENTILATION, FIRE/WATER PROTECTION, GAS DETECTION, STATION FACILITIES</b>

## GREEN LINE

<b>OPENED</b>	<b>1995</b>
<b>STATIONS</b>	<b>14</b>
<b>NUMBER OF MILES</b>	<b>20</b>
<b>FLEET SIZE</b>	<b>34</b>
<b>TOTAL ANNUAL BOARDINGS</b>	<b>12 MILLION</b>
<b>COST OF RAIL SYSTEM</b>	<b>718 MILLION</b>
<b>CENTRAL ATC SUPPLIER</b>	<b>UNION SWITCH &amp; SIGNAL</b>
<b>SUBSYSTEMS MONITORED AND CONTROLLED</b>	<b>TRAIN CONTROL</b>



# Meet FCC Mandate to Narrowband by 2013

- **32 Radio Channels**
  - 6 Metro Operations, 8 LAFD, 6 LAPD, 4 LASD, 3 Metro Security
- **353 Transmitter**
- **379 Receiver**
- **90 Miles of MRL Radio Antenna System**
- **450 Mobile Radio Units**
- **1,375 Portable Radio Units**

# Metro Blue Line Systems Rehabilitation

- **Traction Power**
  - Replacement of 20 traction substations
  - Rehabilitation of trolley wire systems in downtown LA and Long Beach
- **Train Control**
  - Upgrade of entire cab signal territory (c. 17 miles) from relay to solid-state train control
- **Systemwide**
  - Cut in of up to four additional interlockings
  - Scope includes track, train control & OCS



# Rail Operations – Blue Line Grade Crossings

- **August 15-16-17 – Grade crossing rehabilitation at 55<sup>th</sup> St. Single track operations between Washington and Florence throughout the weekend; 20-minute headways (completed).**
- **September 19-20-21 – Grade crossing rehabilitation at 41<sup>st</sup> St. Single track operations between Washington and Florence throughout the weekend; 20-minute headways.**
- **October 17-18-19 – Grade crossing rehabilitation at 92<sup>nd</sup> St. Single track operations between Imperial and Florence throughout the weekend; 20-minute headways.**