QUARTERLY PROJECT STATUS REPORT

# 2550 Rail Vehicle Program

## March 2010





## **2550 RAIL VEHICLE PROGRAM**

## QUARTERLY PROJECT STATUS REPORT

THE PREPARATION OF THIS DOCUMENT HAS BEEN FINANCED IN PART THROUGH A GRANT FROM THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL TRANSIT ADMINISTRATION (FTA), UNDER THE FEDERAL TRANSIT ACT OF 1964, AS AMENDED AND WITH FUNDS FROM THE STATE OF CALIFORNIA

March 2010

#### **TABLE OF CONTENTS**

	Page No.		
Project Overview	. 1		
Management Issues	. 2		
Project Status			
• Schedules			
• P2550 Vehicle Contract & Proposed Delivery Schedule	3		
Schedule Issues as of April 2, 2010	4		
Project Budget Status	5		
• Financial/Grant Status	6		
Current Photos	7		
Appendices	. 8-9		

#### PROJECT OVERVIEW

The 2550 Light Rail Vehicle Base Contract for a Base order of 50 LRVs was awarded to Ansaldobreda, S.p.A. of Pistoia and Naples, Italy (A.B.). The 2550 Contract also includes two 50-LRV pre-priced options for future growth, expansions, and new lines. Per MTA Board Action in September 2009, staff was tasked to extend the expiration dates of both options to October 31, 2009, and finalize exercise of the options by that date. Ansaldobreda, however, declined to accept Metro conditions for the options and the options expired. As of March 31, 2010, thirty-two vehicles have been Conditionally Accepted for operation on the Metro Gold Line.

Project accomplishments for this period:

- 1. As of March 31, 2010, Metro Conditionally Accepted thirty-two (32) vehicles for operation on Metro Gold Line. Accepted vehicles have been operating in revenue service since March 2008. However, some operational issues have been discovered as a result of experience gained in actual revenue operation. AB has addressed all operational issues as they have been encountered. As of to date the P2550 fleet has accumulated over 1,400,000 miles of revenue service.
- 2. As of March 31, 2010, Metro has received a total of thirty-six (36) vehicles in Los Angeles from the Pittsburg, CA Final Assembly Plant. Due to limited space at Metro Gold Line Shop (MGDL), three vehicles are stored at Metro Blue Line (MBL) and will be transferred to MGDL in due course. Metro Management decided that all P2550 vehicles would operate at MGDL. Therefore, all future P2550 shipments will be made to the MGDL and all existing P2000 vehicles will be transferred from MGDL to MBL during the next twelve months.
- 3. Numerous meetings (daily, weekly and monthly) have been held with AB engineers during the period to determine the status, to close engineering open items and improve revenue operational issues. The work is ongoing.
- 4. Negotiations were finalized with AB and they agreed to pay \$15M to MTA in consideration for not correcting the overweight condition of the cars and the trainline compatibility. Other changes and waivers were also finalized. Discussions are on-going with FTA regarding Contract Modification No. 17 which documented the results of the negotiations.
- 5. Liquidated Damages. Under the Contract, AB is obligated to reimburse MTA for delivery delays up to a maximum of \$14,677,487 (10% of the total contract price). To date, over \$11M has been withheld from AB progress payments to compensate for delays.

#### **MANAGEMENT ISSUES**

**Concern No. 1:** Resolution of remaining open items on Conditionally Accepted vehicles and vehicle configuration finalization.

**Status/Action No. 1:** The Project Team is working closely with AB to address all field observed issues to insure vehicle revenue service reliability. Several project meetings with AB were held during the period to address remaining open technical issues and to close remaining open items. The work is on-going.

#### P2550 LIGHT RAIL VEHICLE CONTRACT & PROPOSED DELIVERY SCHEDULE

No. Of Cars	VEHICLE NUMBER	CONTRACT DELIVERY REQUIREMENT - MONTHS AFTER JUNE 6, 2003 NTP	CONTRACT REQUIRED DELIVERY DATE (End of Month)	UNAPPROVED DELIVERY SCHEDULE	ACTUAL DATE OF ARRIVAL AT METRO	CONDITIONAL ACCEPTANCE DATE	FINAL ACCEPTANCE DATE
1	701	24 MONTHS	JUNE/05	6/15/05	6/11/05	SEE NOTE 1	
2	702	24 MONTHS	JUNE/05	7/22/05	7/26/05	SEE NOTE 1	
3	705	26 MONTHS	AUGUST/05	10/31/06	1/09/07	SEE NOTES	
						1 & 2	
4	704	27 MONTHS	SEPTEMBER/05	11/30/06	1/30/07	8/6/08	
5	706	28 MONTHS	OCTOBER/05	12/31/06	2/28/07	3/5/08	
6	707	28 MONTHS	OCTOBER/05	12/31/06	5/31/07	SEE NOTES 1&2	
7	708	29 MONTHS	NOVEMBER/05	1/31/07	6/20/07	3/5/08	
8	709	29 MONTHS	NOVEMBER/05	1/31/07	7/31/07	4/16/09	
9	710	30 MONTHS	DECEMBER/05	2/28/07	8/30/07	6/13/08	
10	711	30 MONTHS	DECEMBER/05	2/28/07	5/30/08	7/15/08	
11	712	31 MONTHS	JANUARY/06	3/31/07	6/06/08	8/29/08	
12	713	31 MONTHS	JANUARY/06	3/31/07	6/24/08	11/25/08	
13	714	32 MONTHS	FEBRUARY/06	4/30/07	7/22/08	11/12/08	
14	715	32 MONTHS	FEBRUARY/06	4/30/07	8/5/08	10/31/08	
15	716	33 MONTHS	MARCH/06	4/30/07	8/26/08	3/31/09	
16	717	33 MONTHS	MARCH/06	5/31/07	9/23/08	10/24/08	
17	718	34 MONTHS	APRIL/06	5/31/07	9/30/08	11/20/08	
18	719	34 MONTHS	APRIL/06	5/31/07	11/6/08	3/23/09	
19	720	35 MONTHS	MAY/06	6/30/07	11/13/08	12/12/08	
20	721	35 MONTHS	MAY/06	6/30/07	11/19/08	12/23/08	
21	722	36 MONTHS	JUNE/06	6/30/07	12/2/08	1/23/09	
22	723	36 MONTHS	JUNE/06	7/31/07	12/16/08	2/20/09	
23	724	37 MONTHS	JULY/O6	7/31/07	1/8/09	1/31/09	
24	725	37 MONTHS	JULY/O6	7/31/07	1/28/09	2/27/09	
25	726	38 MONTHS	AUGUST/06	8/31/07	3/20/09	4/30/09	
26	727	38 MONTHS	AUGUST/06	8/31/07	4/9/09	5/19/09	
27	728	39 MONTHS	SEPTEMBER/06	8/31/07	5/1/09	5/29/09	
28	729	39 MONTHS	SEPTEMBER/06	9/30/07	5/20/09	6/23/09	
29	730	40 MONTHS	OCTOBER/06	9/30/07	5/29/09	6/29/09	
30	731	40 MONTHS	OCTOBER/06	9/30/07	6/12/09	12/20/09	
31	732	41 MONTHS	NOVEMBER/06	10/31/07	6/30/09		
32	733	41 MONTHS	NOVEMBER/06	10/31/07	7/31/09	12/31/09	
33	734	41 MONTHS	NOVEMBER/06	10/31/07	8/21/09	2/8/10	
34	735	42 MONTHS	DECEMBER/06	11/30/07	10/21/09		
35	736	42 MONTHS	DECEMBER/06	11/30/07	12/2/09	2/3/10	
36	737	42 MONTHS	DECEMBER/06	12/31/07	1/7/10	2/23/10	
37	738	43 MONTHS	JANUARY/07	12/31/07	2/4/10		
38	739	43 MONTHS	JANUARY/07	1/31/08	3/4/10		
39		43 MONTHS	JANUARY/07	1/31/08			
40		44 MONTHS	FEBRUARY/07	2/28/08			
41		44 MONTHS	FEBRUARY/07	2/28/08			
42		44 MONTHS	FEBRUARY/07	3/31/08			
43		45 MONTHS	MARCH/07	3/31/08			
44		45 MONTHS	MARCH/07	4/30/08			
45		45 MONTHS	MARCH/07	4/30/08			
46		46 MONTHS	APRIL/07	5/31/08			
47		46 MONTHS	APRIL/07	5/31/08			
48		46 MONTHS	APRIL/07	6/30/08			
49		47 MONTHS	MAY/07	6/30/08			
50		47 MONTHS	MAY/07	7/31/08			
			•				

NOTE 1: Vehicles 701, 702, 705 and 707 were returned to AB in Pittsburg for repair/upgrade.

NOTE 2: Vehicle 707 was returned to Los Angeles after repair/upgrade on 2/27/2009 and vehicle 705 was returned on 6/17/09.

#### **SCHEDULE ISSUES**

Notice to Proceed was given June 6, 2003. The base contract engineering and assembly effort for the first vehicle was scheduled to take approximately two years and delivery of the first two cars was scheduled for June 2005. The 50 car base contract funding was divided between Metro (40 cars) and the FTA (10 cars). The last (fiftieth) base contract LRV was scheduled for delivery 48-months after NTP, or approximately May 2007.

Status as of this writing follows:

A total of thirty-six (36) cars have been delivered and to date, thirty-two (32) of them have been conditionally accepted by MTA.

The remaining known time critical issue that needs to be resolved to achieve the final Acceptance was the 4,000 Mile Test:

• 4000 Mile Operational Test. In order to complete the design review and approval cycle, the P2550 specification requires a 4000 mile revenue simulated test run of a 3 cars consist. AB proposed that the subject test requirement be waived by Metro, in part because the P2550 has accumulated over 1,400,000 miles of revenue service and that all vehicle failures discovered have been or will be addressed. Metro granted such waiver subject to further commercial negotiation. This item will be closed.

#### **PROJECT BUDGET STATUS**

ELEMENT	LRV PROJECT BUDGET FOR 800151 (40 LRV'S)	LRV PROJECT BUDGET FOR 800088 (10 LRV'S)	TOTAL LRV PROJECT BUDGET	COMMENTS		
Base Buy 50 LRVs	\$119,734,000	\$29,933,500	\$149,667,500			
Base Buy Spare Parts	\$5,849,886	\$1,462,471	\$7,312,357			
Base Buy Special Tools & Test Equip	\$1,407,051	\$351,763	\$1,758,814			
Subtotals	\$126,990,937	\$31,747,734	\$158,738,671			
Contingency	\$12,699,094 *-3,110,093 \$9,589,001	\$3,174,773 <u>*-777,523</u> \$2,397,250	\$15,873,867 *-3,887,616 \$11,986,251			
Subtotals	\$139,690,031	\$34,922,507	\$174,612,538			
Rail Consultant	\$6,870,830 *+3,110,093 \$1,717,707 *+777,523		\$8,588,537 *+3,887,616	Contract PS 8310-1267 for Rail Consultant staff technical services		
Contingency	\$343,542	\$85,885	\$429,427			
Subtotals *\$10,324,465 *\$2,581,115		*\$2,581,115	*\$12,905,580			
MTA Staff	A Staff \$6,014,602 \$1,577,79		\$7,592,400			
TOTALS	\$152,919,004	\$38,303,898	\$191,222,902			

To be revised to show reduction in awarded Contractor value resulting from a sales tax exemption on rail cars and spare parts (Granted by the California State Board of Equalization).

Fiscal Year Cashflow Table (Milestone Payment) is currently under review.

Note: Change increase of \$1.2M is under negotiation for extending LTK Rail Consultant Contract thru 6/2011.

<sup>\*</sup> Revision due to extension and increase to Rail Consultant Contract approved at the July 2008 MTA Board Meeting.

#### FINANCIAL/GRANT STATUS

#### **MARCH 2010**

#### STATUS OF FUNDS BY SOURCE

in \$ millions

	(A)	(B)	(C)	(D)	(D/B)	(E)	(E/B)	(F)	(F/B)
	ORIGINAL	TOTAL	TOTAL	COMMITMENTS		<b>EXPENDITURES</b>		BILLED to FUNDING	
SOURCE	BUDGET	FUNDS	FUNDS					SOURCE	
		ANTICIPATED	AVAILABLE	\$	%	\$	%	\$	%
FEDERAL - STIP	71.1	15.4	15.4	15.4	100%	15.4	100%	15.4	100%
FEDERAL - STIF	7 1.1	13.4	13.4	13.4	100 /6	13.4	10076	13.4	10076
FED-SEC 5309 FIXED GUIDEWAY	38.3	25.9	25.9	25.9	100%	25.9	100%	25.9	100%
FEDERAL - RSTP	7.7	7.7	7.7	7.7	100%	0.0	0%	0.0	0%
FEDERAL - CMAQ	14.2	14.2	14.2	14.2	100%	0.0	0%	0.0	0%
FEDERAL - CIVIAQ	14.2	14.2	14.2	14.2	10076	0.0	0 70	0.0	078
STATE STIP	6.0	61.7	61.7	59.8	97%	40.5	66%	37.6	63%
STATE STA	15.6	15.6	15.6	15.6	100%	8.6	55%	8.6	55%
PROPOSITION A 35% BONDS	0.0	12.3	0.0	0.0	0%	0.0	0%	0.0	0%
PROPOSITION A 35% BOINDS	0.0	12.3	0.0	0.0	076	0.0	U /0	0.0	070
UNBILLED ACRUALS									
TOTAL	152.0	152.0	140 6	120.6	010/	00.4	E00/	07 F	5 <b>7</b> 0/
TOTAL	152.9	152.9	140.6	138.6	91%	90.4	59%	87.5	57%

<sup>(1)</sup> Based on September 06 Regional Programming Funding Plan.

Note: Expenditures are cumulative through February 2010.

### STATUS OF FUNDS ANTICIPATED

**STIP STATE:** LACMTA requests for STIP allocation have been approved. \$61.73 million is available for drawdown.

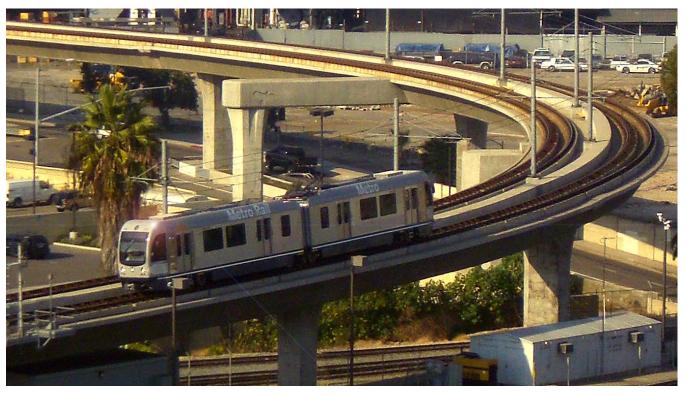
**FEDERAL SECTION 5309:** LACMTA grant applications have been approved. \$25.9 million in section 5309 funds were approved. Funds have been drawdown.

**FEDERAL RSTP:** A grant agreement for \$7.7 million was executed on April 7, 2005. Funds are available for drawdown.

**FEDERAL CMAQ:** A grant agreement for \$14.2 million was executed on August 25, 2005. Funds are available for drawdown.

The 2550 Rail Vehicle Program consists of 40 light rail vehicles (LRV) and associated costs. The remaining 10 LRV's and associated costs under

#### **CURRENT PHOTOS**



2550 LRV Coming Around the Curve into Union Station.



2550 LRV at Metro Gold Line Yard with Decals for LA Olympic Bid.

# APPENDIX COST AND BUDGET TERMINOLOGY

**COMMITMENTS**: The total of actual contract awards, executed change orders or amendments, approved work orders of Master Cooperative Agreements, offers accepted for purchase of real estate, and other Metro actions that will result in specific expenditures at a future time.

**INCURRED COST**: The total value of work performed to date of services received and acquired materials or properties.

**EXPENDITURES**: The total dollar amount of checks written by Metro's Accounting department for contractor or consultant invoices, third party invoices, staff salaries, and closing payments for escrow accounts that is reported in Metro's Financial Information System (FIS).

**CONSTRUCTION**: Includes guideways, yards and shops, systems equipment, stations, and vehicles.

**PROFESSIONAL SERVICES**: Includes general engineering, construction management services, consultant design support services during construction, legal counsel, and agency (Metro staff) costs.

**CONTINGENCY**: A fund established at the beginning of a project to provide for anticipated but unknown additional costs that may arise during the course of the project.

**SPECIAL CONDITIONS**: Includes utilities relocation, environmental compliance and mitigation, master cooperative agreements, insurance program, artwork, systems integration testing and pre-revenue operations.

## **APPENDIX**

#### LIST OF ACRONYMS

**ATP** Automatic Train Protection

CN Change NoticeCO Change Order

CMAQ Congestion Mitigation & Air QualityCTC California Transportation Commission

FFGA Full Funding Grant Agreement FIS Financial Information System FTA Federal Transit Administration

FY Fiscal Year

**HVAC** Heating, Ventilation, Air Conditioning

**LACMTA** Los Angeles County Metropolitan Transportation Authority (Metro)

**LNTP** Limited Notice To Proceed

LRV Light Rail Vehicle

**METRO** Los Angeles County Metropolitan Transportation Authority

**MGLEE** Metro Gold Line Eastside Extension

N/ANTENot to ExceedNTPNotice To ProceedPGLPasadena Gold Line

**PMOC** Project Management Oversight Consultant

**QPSR** Quarterly Project Status Report

**RSTP** Regional Surface Transportation Program

**SSPP** System Safety Program Plan

**STIP** State Transportation Improvement Program

**TBD** To Be Determined

TWC Train to Wayside Communications
US&S Formerly Union Switch and Signal