

# **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 FUNDS FROM THE STATE OF CALIFORNIA.

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## **PROJECT OVERVIEW**

The base contract for the first fifty LRV cars is with AnsaldoBreda, S.p.A. of Naples, Italy. This contractor is one of several leading manufacturer of both heavy and light rail vehicles. AnsaldoBreda plans to dedicate one entire assembly line to the production of the 2550 light rail vehicles for the MTA. In the past, AnsaldoBreda satisfactorily designed, manufactured, and delivered one hundred-four A650 heavy rail vehicles that are presently in use on the MTA's Metro Red Line.

The 2550 contract also includes two 50-LRV pre-priced options for future growth, expansions, and new lines. These options will require future Board approval in order to become a binding contract requirement.

## **MANAGEMENT ISSUES**

**Concern No. 1:** The compatibility of the carborne ATP and TWC with the wayside equipment of MTA's on the three operating light rail lines is a requirement of the Contract. Very early, pre-schematic, review of the AnsaldoBreda subcontractor's approach is considered essential although not specifically scheduled within the Contract.

**Status/Action** The MTA's Integrated Project Team (IPT) met with the Contractor, AnsaldoBreda and the subcontractor, United Switch and Signal, at AnsaldoBreda offices in New York during the week of December 15-17, 2003. Detailed discussions were held among the technical staff with a concluding agreement to have the MTA and the Contractor/subcontractor capture actual system data in Los Angeles on the three operating lines during the week of January 12-16, 2004.

**Concern No. 2:** AnsaldoBreda and its subcontractor have not yet executed the tire/wheel and axle subcontract.





**Status/Action** The MTA IPT is gathering data from other agencies that have used this subcontractor that will be provided to AnsaldoBreda for use in its final negotiations with the subcontractor.

**Concern No. 3:** Continuous design reviews by the IPT of the Project indicate that AnsaldoBreda is current with the required design elements. However, the quality and completeness of the CDRLs and contract document submittals has been somewhat inconsistent, necessitating time spent on IPT comments and AnsaldoBreda re-submittals.

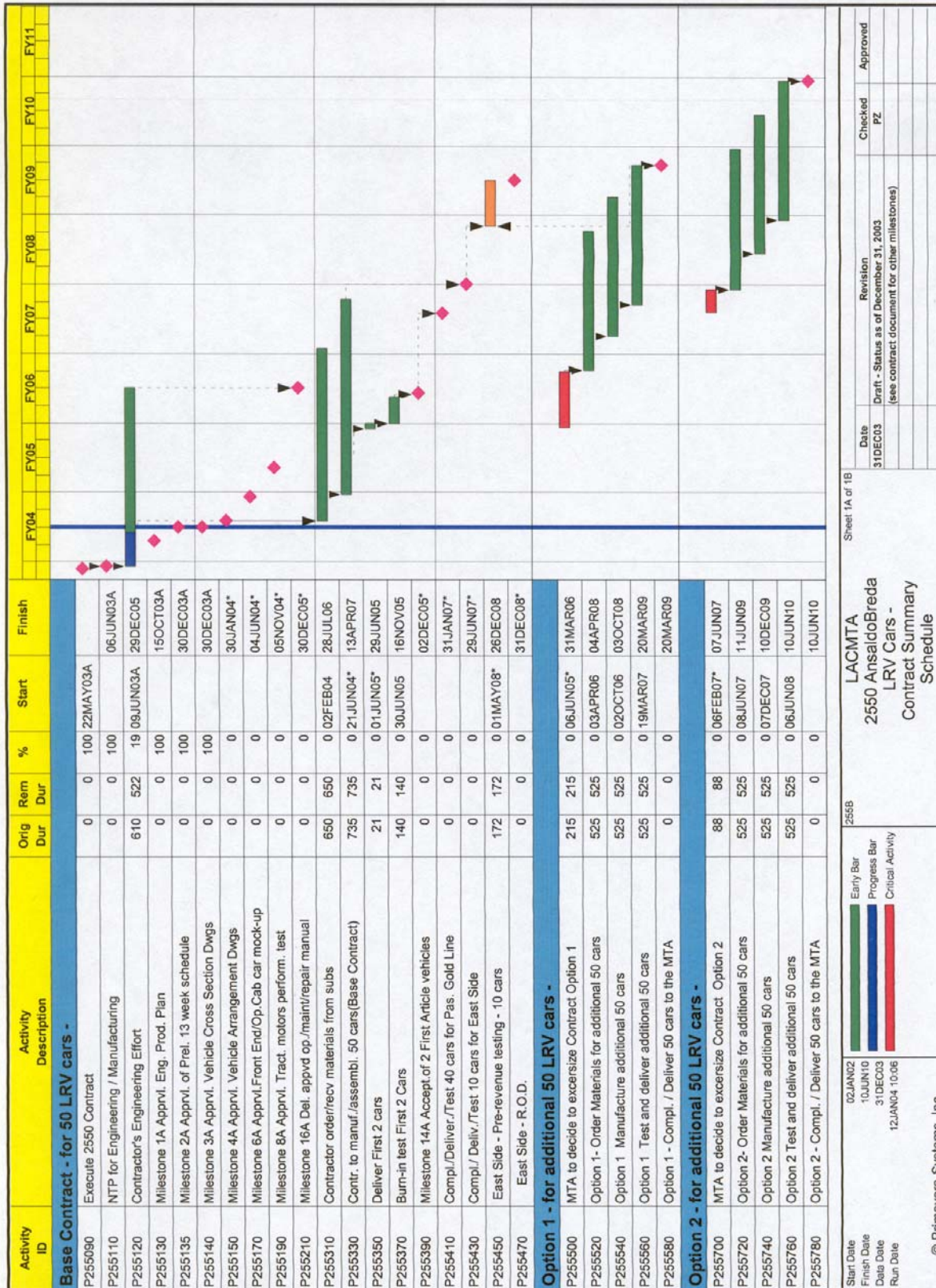
**Status/Action** Detailed discussions with AnsaldoBreda have been conducted regarding the completeness of the CDRL and contract document submittals. AnsaldoBreda pledged to expedite the document preparation and improve the quality of the contract submittals. To emphasize the importance, the MTA has previously withheld the payment of affected contract milestones pending receipt of improved submittals.

**KEY MILESTONE SCHEDULE SIX-MONTH LOOKAHEAD**

	Milestone Date	Dec-03	Jan-04	Feb-04	Mar-04	Apr-04	May-04
4A-Approval of Contractor General Vehicle Arrangement	1/2/04		○				
5A-Approval of Contractors Dwgs at 1.13.1 of Tech Specs	5/7/04						○

 MTA Staff Milestone	 AnsaldoBreda, S.p.A Deliverables	<b>FTA</b> FTA Approval
 Other Agencies	* New Date	 MTA Board Approval

SUMMARY SCHEDULE



**50-CAR BUY DELIVERY SCHEDULE  
METRO PASADENA GOLD LINE**

<b>FISCAL YEAR</b>	<b>VEHICLE NUMBERS</b>	<b>MONTHS AFTER JUNE 6, 2003 NTP</b>	<b>DELIVERY DATE</b>
05	1 & 2	24 MONTHS	6/05
06	3 & 4	25 MONTHS	7/05
	5 & 6	26 MONTHS	8/05
	7 & 8	27 MONTHS	9/05
	9 & 10	28 MONTHS	10/05
	11 & 12	29 MONTHS	11/05
	13 & 14	30 MONTHS	12/05
	15 & 16	31 MONTHS	1/06
	17 & 18	32 MONTHS	2/06
	19 & 20	33 MONTHS	3/06
	21 & 22	34 MONTHS	4/06
	23 & 24	35 MONTHS	5/06
	25 & 26	36 MONTHS	6/06
07	27 & 28	37 MONTHS	7/06
	29 & 30	38 MONTHS	8/06
	31 & 32	39 MONTHS	9/06
	33 & 34	40 MONTHS	10/06
	35 & 36	41 MONTHS	11/06
	37 & 38	42 MONTHS	12/06
	39 & 40	43 MONTHS	1/07

**METRO GOLD LINE EASTSIDE EXTENSION**

<b>FISCAL YEAR</b>	<b>VEHICLE NUMBERS</b>	<b>MONTHS AFTER JUNE 6, 2003 NTP</b>	<b>DELIVERY DATE</b>
07	41 & 42	44 MONTHS	2/07
	43 & 44	45 MONTHS	3/07
	45 & 46	46 MONTHS	4/07
	47 & 48	47 MONTHS	5/07
	49 & 50	48 MONTHS	6/07

## **SCHEDULE NARRATIVE**

Notice to proceed was given June 6, 2003. The base contract engineering effort will take approximately two years and the delivery of the first two cars is scheduled for June 2005. The 50 cars base contract delivery will be divided between the Metro Pasadena Gold Line (40 cars) the Metro Gold Line Eastside Extension (10 cars). The last (fiftieth) base contract LRV is scheduled for delivery in 48-months after NTP, or at approximately June 2007.

The delivery rate planned by the contractor is two LRVs per month. The require delivery dates in the contract have liquidated damages assessments that can be imposed for late deliveries.

The 2550 contract contains two options, which, if exercised, would extend the contract another two years each or sooner. The options will only be awarded subject to adequate funding and MTA Board approval.

Option No. 1 for 50 LRVs may be exercised at 24 months after NTP, but no later than 34 months after the Base Order Notice to Proceed or approximately March 2006. Option No. 2 for 50 LRVs may be exercised at 42 months after NTP, but no later than 48 months after the Base Order Notice to Proceed or approximately June 2007.

As of December 2003, the Contractor completed milestones 1A, 2A and 3A. Physical completion as of December 2003 is 19%.



**PROJECT COST STATUS**

<b>ELEMENT</b>	<b>LRV PROJECT BUDGET FOR 800151 (PASADENA)</b>	<b>LRV PROJECT BUDGET FOR 800088 (EASTSIDE)</b>	<b>TOTAL LRV PROJECT BUDGET</b>	<b>COMMENTS</b>
<b>Base Buy 50 LRVs</b>	\$119,734,00	\$29,933,500	\$149,667,500	40 LRVs for the Pasadena Gold Line and 10 LRVs for the Eastside Line
<b>Base Buy Spare Parts</b>	\$5,849,886	\$1,462,471	\$7,312,357	
<b>Base Buy Special Tools &amp; Test Equip</b>	\$1,407,051	\$351,763	\$1,758,814	
Subtotals	\$126,990,937	\$31,747,734	\$158,738,671	
<b>Contingency</b>	\$12,699,094	\$3,174,773	\$15,873,867	.
<b>Subtotals</b>	<b>\$139,690,031</b>	<b>\$34,922,507</b>	<b>\$174,612,538</b>	
<b>Rail Consultant</b>				
<b>Rail Consultant</b>	\$6,870,830	\$1,717,707	\$8,588,537	Contract PS 8310-1267 for Rail Consultant staff technical services
<b>Contingency</b>	\$343,542	\$85,885	\$429,427	
<b>Subtotals</b>	<b>\$7,214,372</b>	<b>\$1,803,592</b>	<b>\$9,017,964</b>	
<b>MTA Staff</b>				
<b>MTA Staff</b>	\$6,014,602	\$1,577,798	\$7,592,400	MTA staff on the Integrated Project Team
<b>TOTALS</b>	<b>\$152,919,004</b>	<b>\$38,303,898</b>	<b>\$191,222,902</b>	

12/30/03

FISCAL YEAR CASH FLOW

Metro CONTRACT NO. P2550, LIGHT RAIL VEHICLES  
TOTAL CONTRACT VALUE \$168,738,674 \$146,640,805 [per MODIFICATION NO. 2, Calif Sales Tax Exemption]  
LARRY KELSEY '16 JANUARY 2004 Rev 1 (Supersedes 19 DECEMBER 2003 Rev 0) [Next Revision Due March 19, 2004]

**MILESTONE PAYMENT CASHFLOW SCHEDULE BY PROJECT, MONTH, & FISCAL YEAR**  
[THIS FORECAST BASED UPON CONTRACT AMENDMENTS 1 & 2 AND OTHER CIRCUMSTANCES KNOWN AT THIS TIME.]

Payment Date	Mos After June 6 2003 (FY04) NTP	Table A Contract Milestone Payments		Table B Individual Vehicle Milestone Payments		Table C Spare Parts Delivery Milestone Payments		PASADENA TOTAL Milestone Payments		PASADENA FISCAL YEAR SUBTOTALS		EASTSIDE TOTAL Milestone Payments		EASTSIDE FISCAL YEAR SUBTOTALS		TOTALS		FY
		[80% PGL]	[20% ESGL]	[10 LRVs PGL]	[10 LRVs ESGL]	[80% PGL]	[20% ESGL]	[20% ESGL]										
Jul-03	1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	FY03
Aug-03	2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$
Sep-03	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Oct-03	4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Nov-03	5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Dec-03	6	\$21,015,667	\$5,253,918	\$0	\$0	\$0	\$0	\$0	\$0	\$21,015,667	\$5,253,918	\$0	\$0	\$0	\$0	\$0	\$0	
Jan-04	7	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Feb-04	8	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Mar-04	9	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Apr-04	10	\$6,636,526	\$1,659,132	\$0	\$0	\$0	\$0	\$0	\$0	\$6,636,526	\$1,659,132	\$0	\$0	\$0	\$0	\$0	\$0	
May-04	11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Jun-04	12	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Jul-04	13	\$5,530,439	\$1,382,610	\$0	\$0	\$0	\$0	\$0	\$0	\$5,530,439	\$1,382,610	\$0	\$0	\$0	\$0	\$0	\$0	FY04
Aug-04	14	\$3,318,263	\$820,566	\$8,487	\$2,122	\$8,487	\$2,122	\$0	\$0	\$3,406,750	\$822,732	\$851,686	\$22,122	\$0	\$0	\$0	\$0	
Sep-04	15	\$0	\$0	\$8,487	\$2,122	\$8,487	\$2,122	\$0	\$0	\$8,487	\$2,122	\$0	\$0	\$0	\$0	\$0	\$0	
Oct-04	16	\$3,318,263	\$820,566	\$8,487	\$2,122	\$8,487	\$2,122	\$0	\$0	\$3,406,750	\$822,732	\$851,686	\$22,122	\$0	\$0	\$0	\$0	
Nov-04	17	\$3,318,263	\$820,566	\$8,487	\$2,122	\$8,487	\$2,122	\$0	\$0	\$3,406,750	\$822,732	\$851,686	\$22,122	\$0	\$0	\$0	\$0	
Dec-04	18	\$0	\$0	\$8,487	\$2,122	\$8,487	\$2,122	\$0	\$0	\$8,487	\$2,122	\$0	\$0	\$0	\$0	\$0	\$0	
Jan-05	19	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Feb-05	20	\$6,636,526	\$1,659,132	\$0	\$0	\$0	\$0	\$0	\$0	\$6,636,526	\$1,659,132	\$0	\$0	\$0	\$0	\$0	\$0	
Mar-05	21	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Apr-05	22	\$1,106,066	\$276,522	\$39,946	\$8,487	\$39,946	\$8,487	\$0	\$0	\$1,465,039	\$365,006	\$0	\$0	\$0	\$0	\$0	\$0	
May-05	23	\$0	\$0	\$53,043	\$13,261	\$53,043	\$13,261	\$0	\$0	\$53,043	\$13,261	\$0	\$0	\$0	\$0	\$0	\$0	
Jun-05	24	\$0	\$0	\$74,262	\$18,565	\$74,262	\$18,565	\$0	\$0	\$74,262	\$18,565	\$0	\$0	\$0	\$0	\$0	\$0	
Jul-05	25	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	FY05
Aug-05	26	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Sep-05	27	\$3,318,263	\$820,566	\$132,730	\$33,183	\$132,730	\$33,183	\$3,828,468	\$907,117	\$4,225,756	\$1,066,439	\$862,749	\$278,822	\$0	\$0	\$0	\$0	
Oct-05	28	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Nov-05	29	\$1,060,876	\$276,522	\$73,356	\$18,565	\$73,356	\$18,565	\$0	\$0	\$1,106,066	\$276,522	\$0	\$0	\$0	\$0	\$0	\$0	
Dec-05	30	\$1,060,876	\$276,522	\$73,356	\$18,565	\$73,356	\$18,565	\$0	\$0	\$1,106,066	\$276,522	\$0	\$0	\$0	\$0	\$0	\$0	
Jan-06	31	\$1,060,876	\$276,522	\$73,356	\$18,565	\$73,356	\$18,565	\$0	\$0	\$1,106,066	\$276,522	\$0	\$0	\$0	\$0	\$0	\$0	
Feb-06	32	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Mar-06	33	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Apr-06	34	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
May-06	35	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Jun-06	36	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Jul-06	37	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	FY06
Aug-06	38	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Sep-06	39	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Oct-06	40	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Nov-06	41	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Dec-06	42	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Jan-07	43	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Feb-07	44	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Mar-07	45	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Apr-07	46	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
May-07	47	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Jun-07	48	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
TOTALS		\$66,365,242	\$16,591,320	\$44,249,510	\$11,060,978	\$7,256,937	\$1,814,234	\$117,965,709	\$29,486,432	\$24,466,663	\$9,883,144	\$49,415,717	\$32,767,652	\$5,116,666	\$29,486,432	\$147,332,141	\$0	2003

**CHANGE CONTROL STATUS**

Description	A	B		C		D=A+B+C	E		F=D+E
	Award Amount	Approved		Obligated		Total Approved Amount	Potential		Total Potential Value
		Executed Changes		LNTPs (NTE)			Pending		
		#	\$	#	\$		#	\$	
	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	0	0	0	0	0	0	0	0	0

There are no Changes this reporting period.

**FINANCIAL/GRANT STATUS**

DECEMBER 2003 STATUS OF FUNDS BY SOURCE									
SOURCE	(A) ORIGINAL BUDGET	(B) TOTAL FUNDS ANTICIPATED	(C) TOTAL FUNDS AVAILABLE	(D) (D/B) COMMITMENTS		(E) (E/B) EXPENDITURES		(F) (F/B) BILLED to FUNDING SOURCE	
				\$	%	\$	%	\$	%
FEDERAL - STIP	40.0	40.0	0.0	40.0	100%	0.0	0%	0.0	0%
FED-SEC 5309 FIXED GUIDEWAY	38.4	38.4	0.0	38.4	100%	0.0	0%	0.0	0%
FEDERAL - RSTP/CMAQ	7.7	7.7	0.0	7.7	100%	0.0	0%	0.0	0%
STATE STIP	51.3	51.3	0.0	31.4	61%	0.0	0%	0.0	0%
STATE STA	15.5	15.5	0.0	15.5	100%	0.0	0%	0.0	0%
UNBILLED ACRUALS			10.4			10.4			
<b>TOTAL</b>	<b>152.9</b>	<b>152.9</b>	<b>10.4</b>	<b>133.0</b>	<b>87%</b>	<b>10.4</b>	<b>7%</b>	<b>0.0</b>	<b>0%</b>

in \$ millions

(1) Based on June 2003 Regional Programming Funding Plan.  
Note: Expenditures are cumulative through November 2003.  
The 2550 Rail Vehicle Program consists of 40 light rail vehicles and associated costs.

**STATUS OF FUNDS ANTICIPATED**

**STATE STIP:** At the August 2003 California Transportation Commission (CTC) Meeting, the CTC did not act on the \$17.5 million funding allocation requested by MTA. This request has been added to the STIP pending allocation list.

Due to the current State financial condition, the funds will most likely be approved after FY05.

**FEDERAL SECTION 5309:** MTA submitted a grant application of \$10,750,000 to the FTA in May 2003. MTA is expecting environmental clearance in January 2004 prior to formal submittal of the grant.

## **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 LACMTA 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 LACMTA's Accounting department for contractor or consultant invoices, third party invoices, staff salaries, and closing payments for escrow accounts that is reported in LACMTA'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 (MTA 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**

CMAC	Congestion Mitigation Air Quality
CN	Change Notice
CO	Change Order
CTC	California Transportation Commission
ESGL	Eastside Gold Line
FTA	Federal Transit Administration
FY	Fiscal Year
LNTP	Limited Notice To Proceed
LRV	Light Rail Vehicle
MTA	Metropolitan Transportation Authority
N/A	Not Applicable
NTE	Not to Exceed
NTP	Notice To Proceed
PGL	Pasadena Gold Line
QPSR	Quarterly Project Status Report
SSPP	System Safety Program Plan
STIP	State Transportation Improvement Program
TBD	To Be Determined