QUARTERLY PROJECT STATUS REPORT

2550 Rail Vehicle Program

December 2005





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.

TABLE OF CONTENTS

	Page No
Project Overview	1
Management Issues	2
Project Status	
Schedule	3
o Key Milestones Six-Month Lookahead	
o Summary Schedule	4
o 50-Car Buy Contract Delivery Schedule	5
o Schedule Narrative	6-7
Project Cost Status	8
Fiscal Year Cashflow	9
Change Control Status	10
Financial/Grant Status	11
Rail Car Delivery	12
Annendices	13-14

PROJECT OVERVIEW

The 2550 Light Rail vehicle base contract for the 50 LRV cars is with Ansaldobreda, S.p.A. of Pistoia and Naples, Italy. 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.

This 2550 Light Rail Vehicle Project is being managed by an innovative Integrated Project Team consisting of four uniquely experienced MTA in-house management staff. This approach was commissioned to not only increase direct staff accountability for the quality and reliability of the resulting LRV but to increase management efficiency by reduced reliance on expensive non- accountable consultants both in management and oversight.

Project accomplishments through the period ending December 2005 included:

- **1.** The Metro Integrated Project Team (IPT) conducted the final subassembly First Article with Ansaldobreda staff at Pistoia, and Naples, Italy in November 2005. The IPT also discussed the status of Contract submittals, reviews and approvals, specific design issues and the Buy America interim audit directed by the IPT.
- **2.** Ansaldobreda mobilization and staffing for the Pittsburg, California plant continued. The Contractor is planning to start operations in the first quarter of calendar 2006 with one shift working 5-days per week.
- **3.** Assembly of carshells in the Pistoia, Italy plant continued with the goal to ship these vehicles to the USA by the first quarter of calendar 2006, the end of next period.
- **4.** Major vehicle sub-assemblies in the Pistoia, Italy plant continued preparation for shipment to the Pittsburg, California plant in the first quarter of calendar 2006, early next year.
- **5.** Ansaldobreda Testing Engineers continue in Los Angeles with proof-of-design with LRV-701 and LRV 702. LRV 701 has successfully operated on the Pasadena Gold Line, the Metro Green line, and the Metro Blue Line. LRV 701 has also successfully traversed the 6-7% grade of the Green Line/Blue Line connector and effectively completed preliminary roll-back tests.
- **6.** The proof-of-design testing noted above has provided the IPT with confidence that the MTA will receive from Ansaldobreda a light rail vehicle that is efficient, reliable and more easily maintainable than the existing light rail fleet. Detailed inspection by the IPT during this testing has revealed no major system problems but have numerous comments on minor corrections necessary for acceptance.
- **7.** Ansaldobreda Engineers completed most of the work to achieve completion of Contract Milestone No. 5A, 6A, 7A and 8A. Also, engineering work on the remaining Contract Milestones continued this period moving towards completion in the first quarter of calendar 2006.

MANAGEMENT ISSUES

Concern No. 1: The FTA expressed its concern about Ansaldobreda's Buy America compliance.

Status/Action: The IPT continues to conduct and finalize the mid-Contract Buy America audit it commissioned earlier in 2005. This is not a requirement of either the Contract or the FFGA but was and is considered by the IPT to be a prudent action to confirm Ansaldobreda's compliance with the Contract's Buy America provision. The audit will complete in the first quarter of calendar 2006 after final assembly commences in Pittsburg, California. The IPT, as always, continued to direct and admonish Ansaldobreda in person and in writing that Buy-America compliance is both fundamental and mandatory.

Concern No. 2: Documentation submittals are close to complete. However, several submittals continue lagging behind the contract schedule.

Status/Action: Ansaldobreda is making an effort to "catch-up" through the efforts of their documentation consultant.

Concern No. 3: Delays in the mobilization of the Pittsburg, California facility and of shipments to that facility from Italy have impacted the Contract delivery schedule. Although Ansaldobreda has suggested revised delivery schedules none of these revisions have sufficient schedule recovery to be acceptable to the IPT.

<u>Status/Action:</u> The IPT continues to work with Ansaldobreda to devise an acceptable mitigation schedule. To date only the original Contract schedule is impacted and there will be no impact to the ROD of any existing construction project. The delivery dates in the Contract are subject to Liquidated Damages and these monetary amounts will be levied and collected from future billings from Ansaldobreda.

Concern No. 4: The car-borne signaling system is a concern to the IPT based upon the MTA's experience with the same firm, US&S, on the previous LRV procurement.. The concern is not with the hardware but with the software development by US&S.

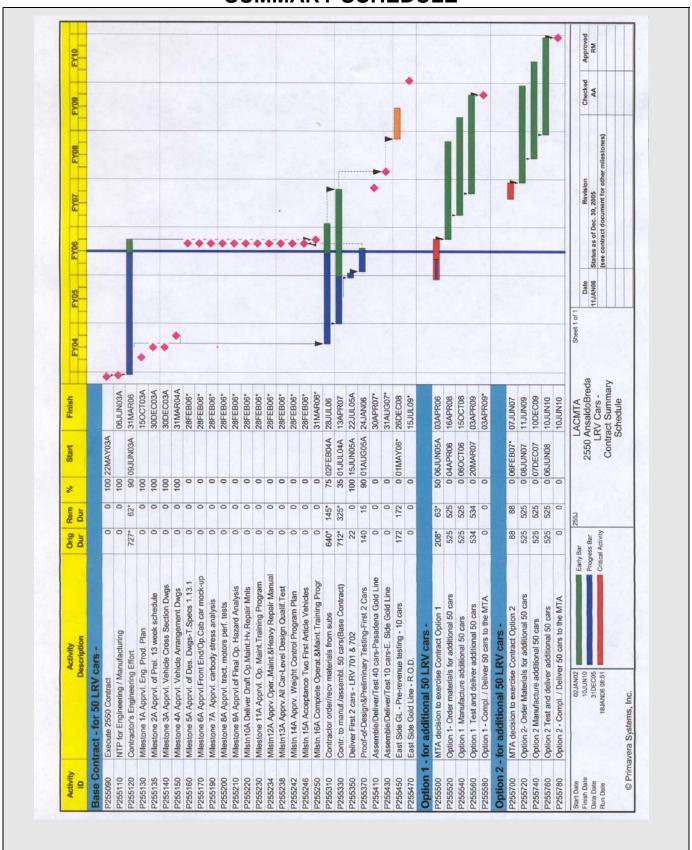
<u>Status/Action:</u> On the 2550 Contract, US&S is a wholly-owned subcontractor of Ansaldobreda instead of totally separate contractor as they were on the previous LRV procurement. This provides Ansaldobreda and the IPT with a much greater level of manageability over US&S. Nonetheless, the concern remains and requires amplified oversight by the IPT.

KEY MILESTONE SCHEDULE SIX-MONTH LOOKAHEAD

	Milestone	Dog 05	lon 06	Ech 06	Mor OG	Apr 06	Mov 06
Pittsburg, California plant ready for full car assembly operations.	Date 12/30/05A	Dec-05	Jan-06	reb-06	Mar-06	Apr-06	May-06
LRV 701 successful completion of preliminary roll-back test.	12/30/05A	0					
5A-Approval of All Drawings Per Section 1.13.1 of Tech Specs	2/28/06*			0			
6A-Approval of Front End and Operator Cab Car Mock-up	2/28/06*			0			
7A-Approval of Carbody Stress Analysis and Compression Test Reports	2/28/06*			0			
8A-Approval of Traction Motors Performance Tests	2/28/06*			0			
9A-Approval of Final Operation Hazard Analysis	2/28/06*			0			
10A-Deliver Draft Operator Maintenance Heavy Repair Manual	2/28/06*			0			
11A-Approval of Operator Maintenance Training Program	2/28/06*			0			
12A-Approval of Operation, Maintenance Heavy Repair Manual	2/28/06*			0			
13A Approval of all Car-Level Design Qualification Test	2/28/06*			0			
14A-Approve Weight Control Program Plan	2/28/06*			0			
15A-Acceptance of Two First Article Vehicles	2/28/06*			0			
Shipment of LRV Cars 703 and 704 components from Italy plant to California plant.	2/28/06*			0			
16A-Completion of Operations and Maintenance Training Programs	3/21/06*				0		

△ Other Agencies * New Date	TA Board Approval

SUMMARY SCHEDULE



50-CAR BUY CONTRACT DELIVERY SCHEDULE

METRO PASADENA GOLD LINE

FISCAL YEAR	VEHICLE NUMBERS	MONTHS AFTER JUNE 6, 2003 NTP	DELIVERY DATE	ACTUAL DELIVERY DATE
05	701	24 MONTHS	6/05	6/15/05A
	702	24 MONTHS	6/05	7/22/05A
06	703	26 MONTHS	8/05	
	704	27 MONTHS	9/05	
	705 & 706	28 MONTHS	10/05	
	707 & 708	29 MONTHS	11/05	
	709 & 710	30 MONTHS	12/05	
	711 & 712	31 MONTHS	1/06	
	713 & 714	32 MONTHS	2/06	
	715 & 716	33 MONTHS	3/06	
	717 & 718	34 MONTHS	4/06	
	719 & 720	35 MONTHS	5/06	
	721 & 722	36 MONTHS	6/06	
07	723 & 724	37 MONTHS	7/06	
	725 & 726	38 MONTHS	8/06	
	727 & 728	39 MONTHS	9/06	
	729 & 730	40 MONTHS	10/06	
	731, 732 & 733	41 MONTHS	11/06	
	734, 735 & 736	42 MONTHS	12/06	
	737, 738 & 739	43 MONTHS	1/07	
	740	44 MONTHS	2/07	

METRO GOLD LINE EASTSIDE EXTENSION

FISCAL YEAR	VEHICLE NUMBERS	MONTHS AFTER JUNE 6, 2003 NTP	DELIVERY DATE
07	741 & 742	44 MONTHS	2/07
	743, 744 & 745	45 MONTHS	3/07
	746, 747 & 748	46 MONTHS	4/07
	749 & 750	47 MONTHS	5/07
		48 MONTHS	6/07

SCHEDULE NARRATIVE

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

The 2550 contract contains two options, which, if exercised, would extend the contract up to another two years each. The options will only be awarded subject to adequate funding and LACMTA 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 April 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. Extensions to these Option "windows" are in process.

The original delivery rate planned by the contractor was two LRVs per month. The schedule was re-negotiated so that after the original delivery of the first two cars in July 2005, the Contractor could use the following two months (August/September 2005) for mitigating any early production problems. The contractor then would accelerate the production rate to three LRVs per month in order to compensate for any early production delays. The revised delivery dates in the contract have liquidated damages assessments that can be imposed for late LRV car deliveries.

Status as of the end of December 2005 is as follows:

On the technical side, the Contractor has completed Milestone Nos. 1A, 2A, 3A, and 4A. Work on completing Contract Milestone Nos. 5A, 6A, 7A and 8A is very advanced; however, until final submittal of Contract documentation is received by LACMTA, these Milestones cannot be considered complete. The Contractor continues advancing the engineering and design on the remaining Contract Milestones. Completion of these Contract Milestones is over six months behind schedule. LACMTA has requested a revised plan from the Contractor showing any mitigation efforts that can be implemented.

On the production phase, the scaled LRV model was delivered in April 2005 and the first LRV (701) was delivered in Los Angeles on June 15, 2005. The second LRV (702) was delivered in Los Angeles on July 22, 2005. These two vehicles are completing Proof-of-Design and Preliminary Testing under the supervision of Ansaldobreda engineers. Delivery of remaining LRVs is six months behind the original Contract delivery dates. The Contractor is planning to mitigate this delay by increasing the contractual vehicle delivery from two cars to three or four cars per month at some point. LACMTA has requested a recovery schedule from the Contractor. One draft proposed revised schedule was received but returned as insufficient to be acceptable to LACMTA. At this point, there is no schedule impact to Rail Operations or other LACMTA projects.

SCHEDULE NARRATIVE

Ansaldobreda will ship its first two vehicles, 701 and 702, from LACMTA facilities in Los Angeles to the Ansaldobreda Pittsburg, California facility for disassembly and remanufacture to the 2550 production configuration and then deliver both to LACMTA for final acceptance testing. The remaining 48 vehicles from the original 50 vehicle order will be partially assembled in the Pistoia, Italy plant and sub-assemblies will be shipped to the Ansaldobreda Pittsburg, California plant for final assembly, testing and delivery to Los Angeles.

The majority of the materials and components needed for the original order have been procured. The Contractor has received sufficient material at the Pistoia plant to support the current production plan. The first sub-assemblies are now forecast to ship to the USA in the first quarter of calendar 2006. Vehicle shells for one quarter of the vehicles are complete and undergoing final testing.

Floor modifications to the Pittsburg, California assembly plant have been completed. The majority of heavy tools and equipment have been installed and in operating condition. These include the truck line and press, vehicle weight scales, tugs and overhead cranes. The plant is ready to start receiving sub-assemblies from Italy. The Contractor has completed the mobilization phase of this plant. Plant administrative staff is available and qualified technicians from the local area are being hired to support the production plan. The Contractor initially is planning to operate one shift per day, five days per week.

PROJECT COST STATUS

ELEMENT	LRV PROJECT BUDGET FOR 800151 (PASADENA)	LRV PROJECT BUDGET FOR 800088 (EASTSIDE)	TOTAL LRV PROJECT BUDGET	COMMENTS
Base Buy 50 LRVs	\$119,734,000	\$29,933,500	\$149,667,500	40 LRVs for the Pasadena Gold Line and 10 LRVs for the Eastside Line
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	\$3,174,773	\$15,873,867	
Subtotals	\$139,690,031	\$34,922,507	\$174,612,538	
Rail Consultant	\$6,870,830	\$1,717,707	\$8,588,537	Contract PS 8310-1267 for Rail Consultant staff technical services
Contingency	\$343,542	\$85,885	\$429,427	
Subtotals	\$7,214,372	\$1,803,592	\$9,017,964	
LACMTA Staff	\$6,014,602	\$1,577,798	\$7,592,400	LACMTA staff on the Integrated Project Team
TOTALS	\$152,919,004	\$38,303,898	\$191,222,902	

12/30/05

^{*} To be revised to show reduction in awarded Contractor value resulting from a sales tax exemption on rail cars (Granted by the California State Board of Equalization)

FISCAL YEAR CASH FLOW

r														
Mos After	Contract Table A	Contract Table A	Contract Table B	Contract Table B	Contract Table C	Contract Table C					Metro	P2550	Metro	i
	Contract Milestone Payments	Contract Milestone Payments	individual Vehicle Milestone Payments		Spare Parts Delivery Milestone Payments	0	PASADENA MILESTONE PAYMENT	PASADENA FISCAL YEAR	EASTSIDE MILESTONE PAYMENT	EASTSIDE FISCAL YEAR	P2550 TOTALS	Sched Payment	NO. P2550 TOTALS	_
4 - 2	80% PGL)	20% ESG	[40 LRVs PG	110 LKVaESGL] SO	\$0.00 PGL]	\$0 \$0 \$0	SOS	SO	SOS	TOTALS	SO SO	Jul-03 Aug-03	50	FY03
6 4	08.00	08	SS	05	8.08	800	05 05		0.5		08	Sep-03		FY04
- 40				80	8	80						Nov-03		
6 (A)	\$22,121,755	\$5,530,4		80	\$0	200	\$22,121,755		\$5,530,439		\$27,652,194	Dec-03		
- 80	7 SA	800		000	8 8	0\$	8 8		0\$		80	Feb-04		
0 5	80			0,00	88	\$0	0\$		S S		80	Mar-04		
2 = 2	80			08	88	8 8 8					80	May-04		i
12 (A)	\$5,530,439	\$1,382,6		200	05	80	\$5,530,439	\$27,652,194	\$1,382,610	\$6,913,049	\$6,913,049	Jun-04	\$34,565,243	FY04
2 4	n Gr			0\$	88	8 8	8 %		88		000	Aug-04		2
15	05			0\$	88	0\$	0\$		8.8		80	Sep-04		
17	N 98			OF OS	G G	8 8	08		8 8		08	Nov-04		
18	80			80	80	\$0	80		\$0		80	Dec-04		
19	0,5	08		0\$	8 8	3, 3	05		0\$		80	Jan-05		
21	80			80	S	8	80		0\$		So	Mar-05		
22	\$1,659,132	\$414,7		\$0	88	8.8	\$1,659,132		\$414,783		\$2,073,915	Apr-05		
24	\$6,636,527	S	\$1,238,8	\$309,705	3 3	3 3	\$7,875,345	\$12,852,740	\$1,968,836	\$3,213,185	\$9,844,181	Jun-05	\$16,065,925	FY05
25	\$6,636,527		\$1,057,420	\$264,355	88	08 6	\$7,693,946		\$1,923,487		\$9,617,433	Jul-05		FY06
27	\$3,318,263			\$60,835	\$7,256,937	\$1,814,234	\$10,818,539		\$2,704,635		\$13,523,174	Sep-05		
	0\$			\$87,381	88		\$349,523		\$87,381		\$436,904	Oct-05		
30 28	\$11,060,878	\$ \$2,765,219	\$216,792	\$54,198	3 8	3 8	\$1,765,315		\$441,329		\$2,206,644	Dec-05		
34	25			\$92,911	SS	\$0	\$371,645		\$92,911		\$464,556	Jan-06		
32	W &		\$703,471	\$175,868	3 5	9, 9	\$103,471		\$175,868		\$879,339	Mar-06		
3 %	S S			\$358,372	S	0%	\$1,433,490		\$358,372		\$1,791,862	Apr-06	\$15,319,315 FY05 RO	0
35	S .	08		\$336,251	000	0,0	\$1,345,003	244 222 38E	\$336,251	C44 OKE FOR	\$1,681,253	May-06	\$39,958,666 FY06	Ē
37	808			\$800,070	08	0\$	\$3,200,281	000,333,444	\$800,070	080,000,116	\$4,000,351	Jul-06	-	FY07
38	SF 6	0\$		\$800,070	0,00	0\$	\$3,200,281		\$800,070		\$4,000,351	Aug-06		
40 %	n Ga			\$816,661	os os	os Sos	\$3,266,645		\$816,661		\$4,083,307	oct-0e		
41	80			\$750,296	05	\$0	\$3,001,184		\$750,296		\$3,751,481	Nov-06		
42	36		\$2,912,697	\$728,174	05	0\$	\$2,912,697		\$728,174		\$3,640,872	Dec-06		
4 4	3			\$694,992	808	80	\$2,779,968		\$694,992	No. of Street, or other Persons	\$3,474,960	Feb-07		
45	05	0\$		\$678,401	08	\$00	\$2,713,603		\$678,401		\$3,392,004	Mar-07		
46	A 6		\$2,315,412	\$578,853	0,0	0, 5	\$2,315,412	The second	\$578,853		\$2,894,265	Apr-07	\$9,457,051 FY06 RO	
48	S SA		\$2	\$600,974	80	Sos	\$2,403,897	\$33,138,394	\$600,974	\$8,284,599	\$3,004,872	Jun-07	Name of	Ę
1	\$66,365,266	\$16,591,316	\$44,243,510	\$11,060,878	\$7,256,937	\$1,814,234	\$117,865,713	\$117,865,713	\$29,466,428	\$29,466,428	\$147,332,141	TOTALS	\$147,332,141	O CK
3														

CHANGE CONTROL STATUS

		Α		В		С	D=A+B+C		Е	F=D+E
				Approved			Obligated		Poten	ntial
ſ	Description	Award Amount	Execu	uted Changes	LN	TPs (NTE)	Total Approved Amount		Pending	Total Potential Value
			#	\$	#	\$		#	\$	
		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
	TOTAL	0	0	0	0	0	0	0	0	0

There are no Changes this reporting period.

FINANCIAL/GRANT STATUS

DECEMBER 2005

STATUS OF FUNDS BY SOURCE

in \$ millions

	(A)	(B)	(C)	(D)	(D/B)	(E)	(E/B)	(F)	(F/B)
	ORIGINAL	TOTAL	TOTAL	COMMITM	IENTS	EXPENDIT	URES	BILLED to F	
SOURCE	BUDGET	FUNDS	FUNDS	_		_		SOUR	
		ANTICIPATED	AVAILABLE	\$	%	\$	%	\$	%
FEDERAL - STIP	71.1	42.0	15.4	42.0	100%	15.4	37%	15.4	37%
FED-SEC 5309 FIXED GUIDEWAY	38.3	25.9	25.9	25.9	100%	23.7	91%	20.9	80%
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%
STATE STIP	6.0	35.2	29.2	29.9	85%	0.0	0%	0.0	0%
STATE STA	15.6	15.6	14.2	15.6	100%	8.2	52%	7.2	46%
PROP A 35% BONDS		12.3							
UNBILLED ACRUALS									
TOTAL	152.9	152.9	106.6	135.3	89%	47.3	31%	43.5	28%

⁽¹⁾ Based on June 2003 Regional Programming Funding Plan.

STATUS OF FUNDS ANTICIPATED

STIP FEDERAL/STATE: LACMTA submitted a request for a STIP allocation of \$29,159.000 to the CTC for consideration at their July 2005 meeting. The supplemental agreement was executed on August 8, 2005. Funds are available for drawdown.

FEDERAL SECTION 5309: LACMTA submitted a grant application for \$10,742,000 to the FTA for approval. FTA approved the grant on December 8, 2004. The funds are available for drawdown.

FEDERAL RSTP: A grant application for \$7,700,000 was executed on April 7, 2005. Funds are available for drawdown.

FEDERAL CMAQ: A grant application for \$14,200,000 was submitted to FTA for approval. The grant agreement was executed on August 25, 2005. Funds are available for drawdown.

Note: Expenditures are cumulative through November 2005.

The 2550 Rail Vehicle Program consists of 40 light rail vehicles and associated costs.

RAIL CAR TESTING



Night Testing of the 2550 LRV 701 on the Metro Blue Line.

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 (LACMTA 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

CMAQ Congestion Mitigation Air Quality

CN Change Notice CO Change Order

CTC California Transportation Commission

FTA Federal Transit Administration

FY Fiscal Year

LACMTA Los Angeles County Metropolitan Transportation Authority

LNTP Limited Notice To Proceed

LRV Light Rail Vehicle

MGLEE Metro Gold Line Eastside Extension

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