

Metro Gold Line Eastside Extension



METRO GOLD LINE EASTSIDE EXTENSION

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.

DECEMBER 2009

TABLE OF CONTENTS

	Page No.
Project Overview & Status.....	1
Management Issues.....	1
Project Status	
• Project Cost Status.....	2-3
• Financial/Grant Status.....	4
• Environmental.....	5
• Community Relations.....	5
• Quality Assurance.....	5
• Safety.....	5
Contract C0803 Status	6
Contract C0893 Status	7
Contract P2550 Status	8
Construction Photographs	9
Appendices.....	10-13

PROJECT OVERVIEW & STATUS

The Metro Gold Line Eastside Extension Project is a six-mile, dual track light rail system with eight new stations and one station modification. The system originates at Union Station in downtown Los Angeles, where it connects with the Pasadena Gold Line, traveling generally east to Pomona and Atlantic Boulevards. The system travels over the State Route 101 Freeway and traverses the existing 1st Street Bridge over the Los Angeles River. The system travels south on Alameda Street and then east on 1st Street with two stations at Alameda and Utah Streets. East of the Los Angeles River and 1st and Utah Streets, the alignment transitions to tunnel for approximately 1.7 miles, and continues beneath 1st Street to underground stations at 1st Street and Boyle Avenue and 1st Street and Soto Street. The alignment returns to the surface near the intersection of 1st Street and Lorena Streets, then jogs to the south, transitioning to follow 3rd Street with stations at Indiana Street, Ford Boulevard, Mednik Avenue and Pomona and Atlantic Boulevards.

Metro's consultant, ARINC, is close to completing the integration software updates into the new SCADA system, as required, to correct testing issues. ARINC continues developing user and training manuals, and has continued supporting Metro staff with the remaining Phase II Systems Integration Testing. Phase II testing is scheduled to complete next period and the expanded SCADA system is expected to be fully operational by the end of the first quarter 2010.

Award of Contract C0933, Division 21 Body Repair Shop, is expected to occur next period.

The C0803 contractor completed the design of the first phase of the pedestrian barrier fencing which will be installed between the tracks to deter jaywalking. The remaining barrier fencing design is scheduled to complete next period.

The C0803 contractor continues working on completing open items throughout the alignment, including the underground stations.

ELRTC and Metro staff have continued the process to establish parameters and measurement criteria to conduct the system assurance reliability testing, as required by the contract.

The C0893 Atlantic/Pomona Parking Structure contractor has completed the suspended slab at levels 3 and 4, as well as post-tensioning. Construction crews poured the spandrels at all levels on the west side of the structure and also poured the third lift of the elevator structure. The semicircular ramp foundation has been completed. The CMU retention wall work has begun. The contractor began conduit and equipment installation in the electrical and mechanical rooms. Backfill and grading of parking lot "A" has resumed after a brief interruption, due to wet conditions caused by rain.

MANAGEMENT ISSUES

No Management Issues for the period ending December 2009.

PROJECT COST STATUS

COST REPORT BY ELEMENT ORIGINAL SCOPE ACTIVITIES DOLLARS IN THOUSANDS

ELE- MENT	DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		BUDGET / FORECAST VARIANCE
			PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
C	CONSTRUCTION	633,221	-	650,702	567	660,885	577	629,511	-	650,702	-
S	SPECIAL CONDITIONS	19,494	-	57,032	527	54,170	957	46,154	-	57,032	-
R	RIGHT-OF-WAY	40,358	-	37,681	-	37,779	-	37,048	-	37,681	-
P	PROFESSIONAL SERVICES	135,304	-	135,860	-	138,023	868	133,186	-	135,860	-
PC	PROJECT CONTINGENCY	60,254	-	7,401	-	-	-	-	-	7,401	-
PR	PROJECT REVENUE	(4,617)	-	(4,662)	-	(4,662)	-	(4,662)	-	(4,662)	-
SUBTOTAL		884,014	-	884,014	1,094	886,195	2,402	841,237	-	884,014	-
PF	PROJECT FINANCE COST	14,800	-	14,800	(60)	9,492	(60)	9,492	-	14,800	-
TOTAL		898,814	-	898,814	1,034	895,686	2,342	850,729	-	898,814	-

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH NOVEMBER 2009

PROJECT COST ANALYSIS

Original Budget

The Full Funding Grant Agreement (FFGA) was adopted June 1, 2004 in the amount of \$898.8 million. The Original Budget reflects the adopted FFGA.

Current Budget and Current Forecast

The Current Budget and Forecast remain the same at \$898.8 million.

Commitments

The Commitments increased by \$1.0 million this period primarily for executed modifications associated with Contract C0803 – Tunnels, Stations, Trackwork and Systems, and Metro Systems Integration Oversight/Pre-Revenue Operations. The \$895.7 million in Commitments to date represents 99.7% of the Original Budget.

Expenditures

Expenditures are cumulative through November 2009. The Expenditures increased by a total of \$2.3 million this period. In the Construction element there was an increase of \$0.6 million for costs associated with Contract C0803 – Tunnel, Stations, Trackwork and Systems, and the Light Rail Vehicles. In the Special Conditions element there was an increase of \$1.0 million for costs associated with 3rd Party Master Cooperative Agreements with the City of LA, water & power utility expenses, Metro Systems Integration Oversight/Pre-Revenue Operations, and SCADA. In the Professional Services element there was an increase of \$0.9 million for costs associated with Metro Project Administration, Design Support During Construction, and Construction Management Services. In the Project Finance Cost element there was a decrease of \$0.1 million that reflects interest income received. The November 2009 invoice for Contract C0803 in the amount of \$1.2 million was posted in the Metro's Financial Information System (FIS) on December 16, 2009 and will be reflected in the next reporting period. The \$850.7 million in Expenditures to date represents 94.7% of the Original Budget.

PROJECT COST STATUS

COST REPORT BY ELEMENT CONCURRENT NON-FFGA PROJECT ACTIVITIES DOLLARS IN THOUSANDS

ELEM- MENT	DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		BUDGET / FORECAST VARIANCE
			PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
C	CONSTRUCTION	18,000	-	49,649	18	46,039	1,233	40,402	-	49,649	-
S	SPECIAL CONDITIONS	-	-	3,244	-	2,634	3	2,553	-	3,244	-
R	RIGHT-OF-WAY	-	-	648	-	349	19	226	-	648	-
P	PROFESSIONAL SERVICES	-	-	4,307	175	4,417	327	3,830	-	4,307	-
PC	PROJECT CONTINGENCY	-	-	2,143	-	-	-	-	-	2,143	-
PR	PROJECT REVENUE	-	-	(4,087)	-	(4,909)	(391)	(669)	-	(4,087)	-
SUBTOTAL		18,000	-	55,903	193	48,530	1,192	46,341	-	55,903	-
PF	PROJECT FINANCE COST	-	-	-	-	-	-	-	-	-	-
TOTAL		18,000	-	55,903	193	48,530	1,192	46,341	-	55,903	-

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH NOVEMBER 2009

PROJECT COST ANALYSIS

Original Budget

The Metro Board adopted the Original Budget of \$18.0 million on March 24, 2005.

Current Budget and Current Forecast

The Current Budget and Forecast remain the same at \$55.9 million.

Commitments

The Commitments increased by \$0.2 million primarily for executed modifications associated with Contract C0803 – Tunnel, Stations, Trackwork and Systems. The \$48.5 million in Commitments to date represents 86.8% of the Current Budget.

Expenditures

Expenditures are cumulative through November 2009. The Expenditures increased by \$1.2 million this period primarily for costs associated with the Rail Safety Enhancements, construction of the Pomona/Atlantic Parking Structure and Metro Project Administration. The Project Revenue Cost element reflects a credit of \$0.4 million for revenues collected from the City of Los Angeles for betterments performed by Eastside LRT Constructors. The November 2009 invoice for Contract C0803 in the amount of \$0.4 million was posted in the Metro's Financial Information System (FIS) on December 16, 2009 and will be reflected in the next reporting period. The \$46.3 million in Expenditures to date represents 82.9% of the Current Budget.

FINANCIAL/GRANT STATUS – ORIGINAL SCOPE ACTIVITIES

DECEMBER 2009

STATUS OF FUNDS BY SOURCE

SOURCE	(A) ORIGINAL BUDGET	(B) TOTAL FUNDS ANTICIPATED	(C) TOTAL FUNDS AVAILABLE	(D) COMMITMENTS \$	(D/B) %	(E) EXPENDITURES \$	(E/B) %	(F) BILLED TO FUNDING SOURCE \$	(F/B) %
FEDERAL - SECTION 5309 NEW START	\$490.700	\$490.700	\$481.117	\$490.700	100%	\$447.947	91% (1)	\$446.811	91%
FED - SECTION 5309 FIXED GUIDEWAY	\$23.100	\$12.000	\$12.000	\$12.000	100%	\$12.000	100%	\$12.000	100%
FEDERAL - CMAQ	\$10.300	\$10.300	\$10.276	\$10.276	100%	\$10.276	100%	\$10.276	100%
REGIONAL IMPROVEMENT PROG - FED	\$179.600	\$4.600	\$4.600	\$4.600	100%	\$4.600	100%	\$4.600	100%
REGIONAL IMP PROG - STATE	\$0.600	\$175.600	\$175.600	\$175.600	100%	\$175.600	100%	\$175.600	100%
STATE TCRP	\$45.000	\$45.000	\$45.000	\$45.000	100%	\$45.000	100%	\$45.000	100%
PROP A 35% / PROP C 40%/PROP 25%	\$124.614	\$135.714	\$135.714	\$137.919	102%	\$135.714	100%	\$135.714	100%
LEASE REVENUES	\$10.100	\$10.100	\$10.100	\$10.100	100%	\$10.100	100%	\$10.100	100%
ACCRUALS									
SUB-TOTAL	\$884.014	\$884.014	\$874.407	\$886.195	100%	\$841.237	95%	\$840.101	95%
PROP A / PROP C (INTEREST COST)	\$14.800	\$14.800	\$9.492	\$9.492	64%	\$9.492	64%	\$9.052	61%
TOTAL	\$898.814	\$898.814	\$883.899	\$895.687	100%	\$850.729	95%	\$849.153	94%

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH NOVEMBER 2009.

(1) BILLED EXPENDITURES IN EXCESS OF FUNDS AVAILABILITY ARE TEMPORARILY FUNDED THROUGH BRIDGE FINANCING.

FINANCIAL/GRANT STATUS
CONCURRENT NON-FFGA PROJECT ACTIVITIES

DECEMBER 2009

STATUS OF FUNDS BY SOURCE

SOURCE	(A) APPROVED BUDGET	(B) TOTAL FUNDS ANTICIPATED (1)	(C) TOTAL FUNDS AVAILABLE	(D) COMMITMENTS \$	(D/B) %	(E) EXPENDITURES \$	(E/B) %	(F) BILLED TO FUNDING SOURCE \$	(F/B) %
PROP C 40%	\$14.000	\$22.400	\$22.400	\$22.400	100%	\$22.254	99%	\$16.318	73%
PROP C 10%	\$4.000	\$4.300	\$4.300	\$2.044		\$0.001		\$0.001	
STATE TCR	\$0.000	\$24.086	\$24.086	\$24.086	100%	\$24.086	100%	\$24.086	100%
PROP A 35%	\$0.000	\$5.117	\$5.117	\$0.000	0%	\$0.000	0%	\$0.000	0%
TOTAL	\$18.000	\$55.903	\$55.903	\$48.530	87%	\$46.341	83%	\$40.405	72%

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH NOVEMBER 2009.

ENVIRONMENTAL STATUS

- Metro scheduled a dedication ceremony for the Evergreen Memorial Wall.
- Reviewed the draft Noise and Vibration Measurement Report submitted by ATS.

COMMUNITY RELATIONS STATUS

- No activity for December 2009.

QUALITY ASSURANCE STATUS

- Monitored Pomona/Atlantic parking structure activities.

SAFETY STATUS

- Participated in weekly Track Allocation Meetings.
- Monitored construction activities on a daily basis, including weekends, to ensure safety compliance with Contract Specification.
- ELRTC and their subcontractors reported zero incidents and 11,274 work hours for the month of December 2009. A total of forty-three (43) recordable incidents have occurred Project-to-Date. Total Project-to-Date work hours are 4,377,904. Injury Rates for Recordable incidents are 2.0; well below the published incident rate of 5.3 for recordable cases.

Description: Tunnel, Stations, Trackwork & Systems		Contract No. C0803					
Contractor: Eastside LRT Constructors		Status as of: January 1, 2010					
Progress/Work Completed: * Submitted Train Control and Overhead Catenary System "as-builts" * Final cleanup throughout the alignment * Achieved Substantial Completion, Milestone # 1		Major Activities (In Progress): * Resolution of open items throughout the alignment * Rail Safety Enhancements work * "As-built" submittals * Continue SCADA system support * Systems reliability demonstration test * Vacate staging area 3b					
Areas of Concern: None		Major Activities Next Period: * Complete open items work * Complete "as-built" submittals * Deliver spare parts and tools to Metro warehouse * Demobilize * Continue systems reliability demonstration test					
Schedule Summary:			Original Contract Dates	Time Extension	Current Contract	Forecast	Variance CDs
Date of Award:	06/01/04	Notice to Proceed	07/01/04	0	07/01/04	07/01/04	0
Notice to Proceed:	07/01/04	Milestone 1 - Contract Completion. Complete all systems integration testing and ready for MTA's pre-revenue operation testing.	12/31/08	91	04/01/09	11/15/09	-228
Original Contract Duration:	1795 CD	Milestone 3 - Complete Universal Fare System Equipment area.	04/30/08	255	01/10/09	01/30/09	-20
Current Contract Duration:	1887 CD	Milestone 5 - Vacate all staging areas and turn over to MTA.	05/30/09	92	08/30/09	02/22/10	-176
Elapsed Time from NTP:	2011 CD	Milestone 6 - Complete design and construction of Option D work.	09/28/04	0	09/28/04	09/28/04	0
Option D Contract duration	90 CD Complete						
Physical Percent Complete:		Cost Summary: \$ In millions					
Physical completion * as of this reporting period is: 100%		1. Award Value: 600.45					
		2. Executed Modifications: 18.15					
		3. Approved Change Orders: 0.00					
		4. Current Contract Value (1+2+3): 618.60					
		5. Incurred Cost: 604.70					
* Note: Physical completion assessment reflects work completed and work in progress.							

CONTRACT C0893 STATUS

Description: Pomona Atlantic Parking Structure Contractor: W. M. Klorman Construction Corp.		Contract No. C0893 Status as of: January 1, 2010					
Progress/Work Completed: * Poured level 3, area "C" shear walls and columns * Poured level 4, area "A" columns * Poured suspended slab in area "C" at level 3 and in area "A" at level 4 (roof) * Cured and stripped suspended slab deck at levels 3 and 4 * Post tensioned suspended slab deck at levels 3 and 4 * Poured spandrels at all levels on the west side of the structure * Finished erection of CMU walls on the west end of the structure * Poured vehicular ramp foundations * Delivered elevator equipment Areas of Concern: * The contractor communicated to Metro that the contract completion will be impacted due to additional scope of work from Metro and Third Parties. Metro requested a time impact analysis from the contractor.		Major Activities (In Progress): * Vehicular ramp CMU retention walls * Spandrel rebar and forms at the east side of the structure * Install elevator guides and hoist * Backfill and grading at lot "A" * Elevator structure roof * Install equipment at the electrical and mechanical rooms * Continued fabrication of stairs, screens and security equipment Major Activities Next Period: * Complete vehicular ramp * Complete spandrels at all levels * Lot "A" underground utilities, curb, gutters and swale * Begin lot "B" construction * Elevator cab * Steel stairs and canopies * Fire sprinklers * Lighting					
Schedule Summary: Date of Award: 12/15/08 Notice to Proceed: 01/14/09 Original Contract Duration: 400 CD Current Contract Duration: 400 CD Elapsed Time from NTP: 353 CD			Original Contract Dates	Time Extension	Current Contract	Forecast	Variance CDs
		Notice to Proceed	01/14/09	0	01/14/09	01/14/09	0
		Milestone 1 - Substantial Completion	02/18/10	0	02/18/10	02/18/10	0
Physical Percent Complete: Physical completion as of 12/31/09: 76.0% * * Note: Physical completion assessment reflects work completed and work in progress.		Cost Summary: \$ In millions 1. Award Value: 8.15 2. Executed Modifications: 0.13 3. Approved Change Orders: 0.00 4. Current Contract Value (1+2+3): 8.28 5. Incurred Cost: 6.06					

CONTRACT P2550 STATUS

Description: 2550 Rail Vehicle Program Contractor: AnsaldoBreda, Italy (AB)		Contract No. P2550 Status as of: January 1, 2010				
Progress/Work Completed: 1. As of December 2009 twenty-nine vehicles have been accepted by MTA. 2. Vehicle final assembly work continues in Pittsburg, CA. 3. Shipment of foreign and domestic parts for final assembly continue to arrive in Pittsburg, CA. 4. Several Engineering meetings with AB and its subcontractors have been held during the period to evaluate progress and to close open items. 5. Vehicle No. 731 is the next vehicle to be accepted. 6. Metro Management endorsed a plan to locate all P2550 vehicles at MGD and transfer all P2000 vehicles presently at MGD to MBL.		Major Activities (In Progress): 1. AnsaldoBreda's manufacturing plants in Pistoia and Naples, Italy are completing the last four carshells for shipment to USA by December 31, 2009. Pittsburg plant continues vehicle assembly work. 2. Testing of Vehicle 731 is ongoing in Los Angeles for next vehicle acceptance. 3. Daily/weekly project meetings are held to close open items. 4. AnsaldoBreda Italy has delivered 96 carshells (48 cars) to Pittsburg.				
		Major Activities Next Period: 1. Several Technical Progress meetings will be held to emphasize the urgency of resolution of remaining critical items for final acceptance of vehicles. The Project Team went to Italy for a technical meeting from October 26th - November 6th.				
			Quantity	Contract Total Quantity	Balance Due	
		Notice to Proceed 6/6/2003A				
		Vehicles Assembled (in US)		48	50	2
Vehicles at Commissioning Sites - MGD and MBL		33	50	17		
Vehicles Accepted for Revenue Service by Metro		29	50	21		
Schedule Summary: Date of Award: 04/24/03 Notice to Proceed: 06/06/03 Original Contract Duration: 1442 CD Elapsed Time from NTP: 2310 CD <						

CONSTRUCTION PHOTOGRAPHS



Construction of exterior ramp for the Pomona/Atlantic Parking Structure.



Fabrication of the pedestrian barrier fencing.

APPENDIX

COST AND BUDGET TERMINOLOGY

ESTIMATED PROJECT COSTS: Estimated project costs are based upon the current project cost estimates that are produced during the engineering design phase.

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

RIGHT-OF-WAY: Includes real estate appraisals, purchase cost of parcels, easements, right-of-entry permits, escrow fees, and tenant relocation.

UTILITY/AGENCY FORCE ACCOUNT: Includes work by outside agencies and utilities in design coordination and review.

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

AFE	Authorization For Expenditure
ATC	Automatic Train Control
CADD	Computer Aided Drafting and Design
CALTRANS	California Department of Transportation
CD	Calendar Day
CM	Construction Manager
CMAQ	Congestion Mitigation Air Quality
CN	Change Notice
CO	Change Order
CNFPFA	Concurrent Non-FFGA Project Activities
CPM	Critical Path Method
CPUC	California Public Utilities Commission
CR	Camera Ready
CTC	California Transportation Commission
CUD	Contract Unit Description
DB	Design/Build
DBB	Design/Bid/Build
DD	Design Development
DOT	Department of Transportation
DWP	Department of Water and Power
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPBM	Earth Pressure Balance Machine
ESP	Eastside LRT Partners
FAR	Federal Acquisition Regulation
FD	Final Design
FEIS	Final Environmental Impact Statement
FEIR	Final Environmental Impact Report
FFGA	Full Funding Grant Agreement
FIS	Financial Information System
FSEIR	Final Supplemental Environmental Impact Report
FSEIS	Final Supplemental Environmental Impact Statement
FTA	Federal Transit Administration
FTE	Full Time Equivalent
GDSR	Geotechnical Design Summary Report
IFB	Invitation for Bid
IPO	Integrated Project Office
JV	Joint Venture
LA	Los Angeles
LABOE	Los Angeles Bureau of Engineering
LACFCD	Los Angeles County Flood Control District
LACMTA	Los Angeles County Metropolitan Transportation Authority
LADOT	Los Angeles Department of Transportation

APPENDIX
LIST OF ACRONYMS (Continued)

LADPW	Los Angeles Department of Public Works
LADWP	Los Angeles Department of Water and Power
LAUSD	Los Angeles Unified School District
LNTP	Limited Notice To Proceed
LONP	Letter Of No Prejudice
LRT	Light Rail Transit
L RTP	Long Range Transportation Plan
LRV	Light Rail Vehicle
MIS	Major Investment Study
MPSR	Monthly Project Status Report
N/A	Not Applicable
NEPA	National Environmental Protection Act
NPDES	National Pollution Discharge Elimination System
NTE	Not to Exceed
NTP	Notice To Proceed
OCIP	Owner-Controlled Insurance Program
P3	Primavera Project Planner® (scheduling software)
PC	Project Control
PE	Preliminary Engineering
PEER	Permit Engineering Evaluation Report
PGL	Pasadena Gold Line
PIP	Project Implementation Plan
PM	Project Manager
PMA	Project Management Assistance
PMIP	Project Management Implementation Plan
PMOC	Project Management Oversight Consultant
PMP	Project Management Plan (manual)
P&P	Policies & Procedures
PR	Project Report
PSR	Project Study Report
QA	Quality Assurance
QAR	Quality Assurance Report
QC	Quality Control
QPSR	Quarterly Project Status Report
RAC	Review Advisory Committee
RAG	Rail Activation Group
RFC	Request For Change
RFP	Request For Proposal
ROD	Record Of Decision
ROD	Revenue Operations Date
ROM	Rough Order of Magnitude

**APPENDIX
LIST OF ACRONYMS (Continued)**

ROW	Right-Of-Way
SCAQMD	Southern California Air Quality Management District
SCE	Southern California Edison
SCRRA	Southern California Regional Rail Authority
SHA	State Highway Account
SHPO	State Historic Preservation Office
SIT	System Integration Testing
SOV	Schedule Of Value
SOW	Statement Of Work
SP	Special Provision
STIP	State Transportation Improvement Program
STP	Surface Transportation Program
TBD	To Be Determined
TBM	Tunnel Boring Machine
TCRP	Traffic Congestion Relief Program
TPSS	Traction Power Substation
TRACS	Transit Automatic Control System
UFS	Universal Fare System
USDOT	U.S. Department Of Transportation
VE	Value Engineering
WBS	Work Breakdown Structure
WP	Work Package