Los Angeles County
Metropolitan Transportation Authority

Crenshaw/LAX Transit Corridor

MONTHLY PROJECT STATUS REPORT

OCTOBER 2012

Metro®

CRENSHAW/LAX
TRANSIT CORRIDOR PROJECT

MONTHLY 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).

OCTOBER 2012

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PROJECT OVERVIEW

Planning/Environmental

The Board approved the Project Definition and certified the Final Environmental Impact Report (FEIR) in September 2011. In addition, the Board authorized the Chief Executive Officer (CEO) to file a Notice of Determination, adopt the Finding of Fact and Statement of overriding Considerations, and the Mitigation Monitoring & Reporting Plan. The Record of Decision (ROD) was received from the FTA on December 30, 2011.

MTA worked with the FTA to include changes due to design refinements post ROD that are being evaluated in a supplemental environmental assessment to the FEIS as well as a CEQA addendum to the environmental documents. The circulation of the Supplemental Environmental Assessment commenced on July 2, 2012 and was completed on August 2, 2012. Preparation of a FONSI was completed and approved by FTA on September 4, 2012. ***The CEQA addendum is under review by MTA prior to submitting to MTA Board for approval and filing of NOD.***

Noise variances on all five construction segments have been approved by the Los Angeles Police Commission. ***Noise variances have to be renewed every six months; renewal is in process on the first four segments.*** See page 24 for map of noise variance segments.

Two potential changes in the base work are being evaluated as to the level of environmental clearance that may be required. These includes changing from a pedestrian crossing to a pedestrian undercrossing west of Eucalyptus Avenue and changing the La Brea LRT Underpass to an LRT Overpass that provides significant improvements to the LA Brea Station while also reducing cost.

Design

The baseline preliminary engineering effort for the main alignment is complete. The design consultant submitted the final preliminary engineering drawing deliverables for Facilities and Systems in November 2011 and completed technical documents for the design-build main alignment Contract C0988 Crenshaw/LAX Transit Corridor. The Contract is now in a best value procurement phase as discussed in section below.

The preliminary engineering effort for the Southwestern Yard continues with completion of design anticipated by December 2012. The next step will be to issue a design-build Invitation for Bid (IFB) contract package in February 2013. See page 32 for a rendering of the potential design of the Southwestern Yard.

Major Contract Procurement

The Request for Proposals for the design-build main alignment Contract C0988 Crenshaw/LAX Transit Corridor was released on June 22, 2012. The proposers submitted on or before August 15, 2012 an outline of written Alternative Technical Concepts (ATC's). ***Detailed ATC's have been submitted by proposers and a final disposition was issued on October 30, 2012 with 37 ATCs approved to move forward by the proposers.*** The planned proposal due date is ***December 6, 2012*** with award anticipated in February 2013

PROJECT OVERVIEW (Continued)

if Metro determines a best value source selection can be made on the submitted technical and price proposals without the necessity to solicit Best and Final Offers (BAFO).

Third Party Agreements and Advanced Utility Relocations

Staff continues to coordinate outstanding design issues with FAA, LAWA, LADOT, LABOE, LABSL, DWP, City of Inglewood, Caltrans and CPUC on a regular basis. ***MTA is working on finalizing all remaining agreements or amendments to existing agreements, where appropriate, with the third parties by February 2013.*** The majority of third parties have commenced advanced utility relocations – see page 23 for status.

Construction

The first construction contract, Contract C0990 Crenshaw/LAX Advanced Utility Relocations, was awarded to Metro Builders and Engineers Group, LTD and a notice to proceed was issued on July 17, 2012. The contractor continued to prepare and submit key submittals and after approval by MTA, construction will commence ***November*** 2012 and continue through July 2013. See the Contract C0990 Status sheet at end of report for more information.

Right-of-Way

The updated Real Estate Acquisition Management Plan (RAMP) and Relocation Plan were completed on October 24, 2012. MTA requested and FTA has approved increasing the threshold value for property acquisitions from $500,000 to $1.5 Million. There are a total of 76 parcels. There are 66 parcels certified which include 34 full takes, 22 partial takes and 10 temporary construction easements (TCE's). Remaining required appraisals will be ordered in November 2012. Seventeen offers have been made and two agreements have been signed.

Systems

MTA staff initiated a study to explore possible alternative layouts to accommodate the central control functions associated with new project needs, such as Crenshaw/LAX project, ***within the existing ROC facility as an interim measure. The MTA has determined that the best interim course of action is to expand the existing functional operations at the ROC under a Phase 1 approach to support five new rail lines and extensions including the Crenshaw/LAX Project. The existing ROC will be expanded and will reconfigure the existing ROC service control and closed circuit television monitoring areas to increase overall space requirements by approximately 22 percent. Comments were received from the PMOC team and are being addressed by MTA's Engineering Group with an updated report due out in mid-November. A full buildout of a combined BOC/ROC is also being planned under a Phase 2 approach on land to be acquired by MTA as a separate CIP near Division 20.***

PROJECT OVERVIEW (Continued)

Program Management

The Board approved the Life-of-Project (LOP) budget of $1,749 million in October 2011. The LOP Budget includes $26 million for the environmental/planning scope of work and $1,723 million for the design and construction scope of work. The Original Budget for the Construction effort includes a 48.89% or $139.4 million allocation share that the Crenshaw/LAX project is responsible for paying for the design and construction of the Southwestern Yard. The remaining funding for the Southwestern Yard is committed by systemwide funding and other Measure R Projects that will utilize the consolidated maintenance facility. ***Board action is planned in December 2012 to increase the LOP from $1,749 million to $1,762.9 million with conversion of unallocated Tiger grant funds approved by FTA to be used for construction expenditures on the project. Proposition C 25% funds will be re-programmed to a project reserve contingency.***

The LOP budget is funded by various sources of funds which include federal grant, state and local funds. The TIFIA Loan is categorized under local funds as the loan is secured by a pledge of Measure R local sales tax funds. The federal percentage of the total funding is 6% with state and local 94%.

The project commitments to date are $99.2 million or 5.7% of the Original Budget. The project expenditures to date are $71.9 million or 4.1% of the Original Budget. The expenditures to date are for environmental/planning, preliminary engineering, third party work, right-of-way and professional services.

The project master schedule has been developed and includes the Revenue Service Date forecast of December 2018. The baseline schedule will be updated monthly and status reported against planned work. ***The forecast for revenue service will be updated upon award of the design-build main alignment Contract C0988 Crenshaw/LAX Transit Corridor and a board decision on bid options in the RFP (See Management Concern No. 4).***

A Risk Register has been developed for the project and is being updated monthly to reflect the issues/risks identified to date, which includes new risks as well as risks resolved. ***An update to the Risk and Contingency Management Plan was completed in July 2012. The next formal risk assessment workshop will take place after the award of the design-build main alignment contract is awarded.***

A Risk Management Quarterly Progress Report was issued this month. The Report will continue to be updated quarterly until the design-build main alignment contract is awarded at which time the Report will be produced monthly.

Metro has been coordinating with the U.S. Department of Transportation (USDOT) on a TIGER Project Delivery Initiative. This initiative is to look at best practices and lessons learned on major transit projects.

MANAGEMENT ISSUES

Concern No. 1: Complete definition of FAA/LAWA south runway construction requirements for procurement documents and file 7460-1 form for signoff on constructability. Also, confirm decisions required on civil infrastructure to be built by MTA and fiber installation by FAA/LAWA.

Status/Action A construction safety phasing plan (CSPP) for the advance utility work was approved on south runways 25R and 25L by FAA on April 26, 2012. MTA is complying with the conditions that include insurance provisions, payment bonds and indemnification which have been incorporated into the advance utility contract**.** The Advance Utility Contractor has proposed changes to the CSPP that have been submitted and are under review by FAA/LAWA. With the upcoming holiday moratorium period, utility relocation activities adjacent to the south runways will be deferred until January 2013 with no impact on schedule or cost. A CSPP has also been completed and submitted to FAA for the new Design-Build Contract C0988 to be in place prior to contact award.

Concern No. 2: Some right-of-way parcels for the Southwestern Yard have required relocations that currently support car rental facilities including Dollar Rent-A-Car and Avis Rent-A-Car may take considerably longer than planned.

Status/Action Although the Southwestern Yard is not on the project critical path, staff has evaluated schedule impacts to the start of construction and procurement options on how MTA could move forward to minimize delays to schedule. Relocation consultants have been brought on board by MTA to work directly with the car rental companies. ***LAWA continues to work directly with Dollar/Thrifty Rent-A-Car for use of the former surface parking lot facilities near 111th Street and La Cienega Blvd. as a relocation site for Dollar/Thrifty Rent-A-Car and is finalizing a land lease agreement.*** Dollar/Thrifty is moving forward with plans to relocate its facilities by 2014***.*** A timeline to complete the environmental process and relocation is estimated by Dollar at 18 months; or approximately December 31, 2013.

Concern No. 3: Current estimate on the Southwestern Yard exceeds the project budget allocation for the maintenance facility.

Status/Action An in-progress design submittal was distributed for review in July 2012. Costs have been re-evaluated following completion of an in-progress cost estimate in late July 2012, and are more in line with budget targets. A final design submittal and cost estimate is planned for ***December*** 2012.

MANAGEMENT ISSUES (Continued)

Concern No. 4: Reduction in schedule contingency in master schedule due to the longer procurement process for developing the Request for Proposals for design-build Contract C0988 Transit Corridor.

Status/Action ***Initially the master schedule maintained the FTA requested schedule contingency of approximately 20%. However, with the best value procurement of the design-build Contract on the schedule critical path, the delay in issuance of the Request for Proposal (Part II) and the extended procurement period from November 6, 2012 to December 6, 2012 has reduced the required schedule contingency to only 10%. This action was taken, instead of rescheduling the forecast of revenue service, until MTA awards the design-build contract, makes a decision on several bid options in the RFP and establishes the baseline revenue service date.*** Two schedules for contract award are projected: February 2013 or May 2013 if a competitive range cannot be established with initial proposals and Best and Final Offers (BAFO) are deemed necessary. ***In order to increase schedule contingency, the forecast for revenue service date at time of contract award is expected to move into the first half of 2019.***

Concern No. 5: The California Public Utilities Commission (CPUC) has suspended General Order 164-D process for approval of grade crossing improvements and has directed MTA to adopt a formal application process with public hearings as required. The project has a number of controversial crossings that have the potential for increased construction cost.

Status/Action ***MTA is preparing formal crossing applications with the initial application to be filed in November 2012 for three crossings located in the City of Inglewood: Eucalyptus Avenue, a pedestrian undercrossing west of Eucalyptus Avenue and Centinela Avenue. Other application filings will continue through the end of the year.***

PROJECT ALIGNMENT

BASE PROJECT SCOPE

The Crenshaw/LAX Transit Corridor is a north/south corridor that serves the cities of Los Angeles, Inglewood, Hawthorne and El Segundo as well as portions of unincorporated Los Angeles County. The alignment extends 8.5 miles, from the intersection of Crenshaw and Exposition Boulevards to a connection with the Metro Green Line at the Aviation/LAX Station. The project provides major connections with the Los Angeles International Airport (LAX) as well as links to the Metro Green Line, the Exposition Line and countywide bus network. The Board adopted a light rail system as the Locally Preferred Alternative (LPA) in December 2009.

The alignment is comprised of a double-tracked right-of-way consisting of sections of at-grade in-street, at-grade within railroad right-of-way, aerial, and below-grade guideway sections, six stations, park and ride facilities at three locations, utilities, landscaping, roadway improvements required by the project and a maintenance & storage facility (Southwestern Yard). During preliminary engineering, scope modifications were incorporated as part of the project and adopted by the MTA Board as part of the Project Budget. These changes, resulting from consultations with agencies such as the Public Utility Commission, Los Angeles Department of Transportation, and Federal Aviation Authority, included:

1) At-grade changed to below-grade segment from Exposition Boulevard to 39th Street;
2) La Brea Avenue Grade Separation changed from aerial to below-grade;
3) Fully cut and cover segment changed to partially covered trench adjacent to LAX as an interim condition; and
4) Cost sharing of a consolidated maintenance & storage facility near LAX (Arbor Vitae/Bellanca) called Southwestern Yard.

Additional engineering refinements developed through Preliminary Engineering have been addressed through an environmental addendum ***with a FONSI signed by FTA on September 4, 2012.*** These include demolition of two existing BNSF bridge structures that allow for realignment of the LRT tracks and significant cost savings; and additional right-of-way acquisitions with the majority being small partial takings and temporary construction easements for grade crossing safety improvements, sidewalk and bus bay modifications.

Two additional changes are also being considered, a pedestrian undercrossing west of Eucalyptus Avenue and changing from a LRT underpass to a LRT overpass over La Brea Avenue. FTA has agreed to clear these additional changes under a 130 C process.

The two proposed optional stations, Crenshaw/Vernon (Leimert Park Village) and Westchester (Florence/Hindry), are not included in the adopted base project. However, a bid option will be included in the design-build contract for constructing an in-street underground Crenshaw/Vernon Station just north of Vernon Avenue that includes two options for station entrances as well as an additional bid option to cover a Westchester at-grade station without parking facilities near Florence/Hindry. The Crenshaw/Vernon in street station option is a

BASE PROJECT SCOPE (Continued)

change from the off-street station location cleared with the FEIS/FEIR. This alternative in-street location is being addressed through a supplemental environmental assessment for NEPA and a separate CEQA addendum. The Florence/Hindry Station option was previously cleared with the FEIS/FEIR but has been renamed from Manchester at-grade to Florence/Hindry.

The scope of work for the three major construction contracts is shown below.

Contract C0990 Crenshaw/LAX Advanced Utility Relocations

The design of several early utility relocations was advanced sufficiently into final design to allow for bidding of critical early utility relocations. This contract will include relocating three (3) existing duct banks that feed various NAVAIDS on the south airfield complex. New ductbank infrastructure will be built by MTA with the fiber replacement work and cut-over by FAA/LAWA. These ductbanks contain fiber lines and power lines which belong to both LAWA and FAA. Since the new track alignment is below grade at these crossings, the ductbanks have to be relocated in advance to allow for the construction of the track alignment. In addition, other wet utilities along the Harbor Branch and Crenshaw Boulevard segments of the corridor that can be relocated in advance are included as part of this contract.

The project delivery method for this contract is bid-build Invitation for Bid (IFB) approach.

Design-Build Contract C0988 Crenshaw/LAX Transit Corridor

This is the largest project contract which will complete final design and construction of the infrastructure required along the corridor alignment. The structures required to be constructed are six baseline stations, grade separations including flyover structures, cut and cover trenching, tunneling and three park-n-ride facilities. The scope of work will include all the necessary systems work including train control, traction power supply substations and distribution, overhead catenary, communications, and systems tie-in to the existing Metro Green Line. Two optional stations will be included as bid options as well as additional fire suppression measures in tunnel/cut and cover segments. Street improvements at the Slauson intersection have been added to the base work for which Metro will continue to seek partial reimbursement from the City of Los Angeles.

The project delivery method for this contract is design-build utilizing a two step best value procurement approach with submittal of qualification statements through a RFQ process, pre-qualification of qualified proposers followed by release of a RFP soliciting technical and price proposals with an option at MTA's discretion for best and final offers (BAFO).

BASE PROJECT SCOPE (Continued)

Design-Build Contract C0991 Southwestern Yard

The Board-adopted 2009 Long Range Transportation Plan (LRTP) for Los Angeles County envisioned one new central Light Rail Transit (LRT) Maintenance facility to be used by all projects. Since the LRTP adoption, substantial progress on light rail system planning and development, including more accurate vehicle assignments, cost estimates, and functional requirements, has led MTA to conclude that two new LRT yards, an Eastern Yard and a Southwestern Yard, are necessary. This contract will construct the Southwestern Yard which will consolidate maintenance facility requirements for this project as well as the operating Metro Green Line, proposed South Bay Metro Green Line Extension and proposed Metro Green Line to LAX. The cost of constructing the Southwestern Yard will be proportionately split among the four projects.

The project delivery method for this contract is design-build Invitation for Bid (IFB) approach. MTA is considering a two-step approach for issuing notice-to-proceed (NTP) to the design-builder; first NTP is to commence final design and then follow with NTP to commence construction.

KEY MILESTONES SIX- MONTH LOOK AHEAD

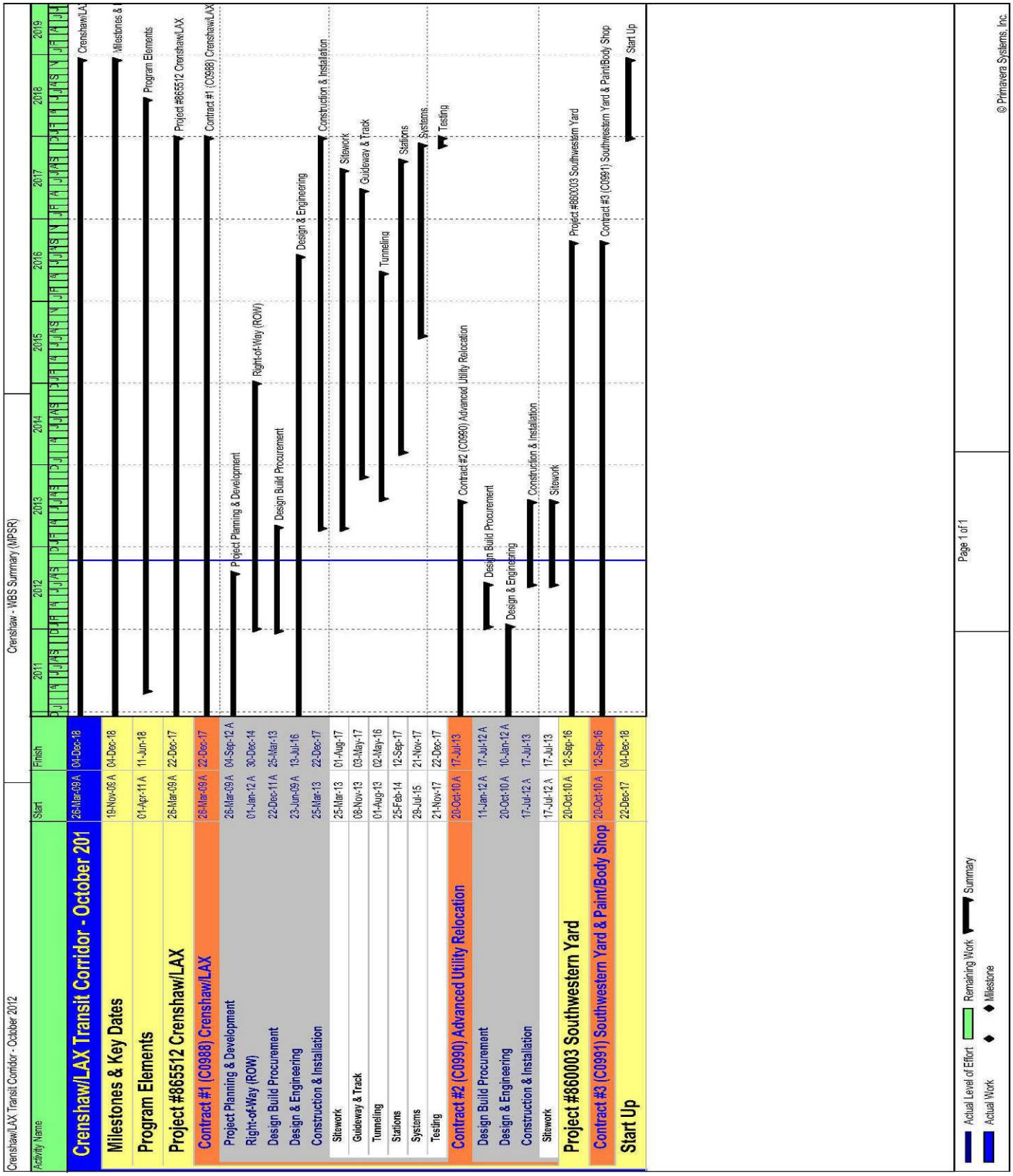
	Milestone Date	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13
Contract C0988 Technical & Price Proposals Due	12/06/12*			▭			
Contract C0988 Board Approval	02/28/13*					Ⓜ	
Contract C0988 Notice-to-Proceed	03/25/13*						◆
Contract C0991 Southwestern Yard Issue for Bid	02/25/13*					◆	

◆ MTA Staff Ⓜ MTA Board Action **FTA** (Federal Transportation Authority)

△ Other Agencies ▭ Contractors ⬭ HMM Design

"A" following date is actual and completed * New

PROJECT SUMMARY SCHEDULE



CRITICAL PATH NARRATIVE

Critical Path:
The longest path to project substantial completion continues with the solicitation of the Design/Build Contract #1 Crenshaw/LAX Transit Corridor.

Upon notice to proceed to C0988 contractor, the critical path moves through final design for the alignment and completing shop drawings to begin procurement of the tunnel boring machines (TBMs). The TBMs are a long lead item and as packages of final design are approved for construction, work will commence on the alignment construction activities prior to the TBMs arrival, assembly and testing.

The critical path then flows to remaining construction elements; tunneling, guideway construction, station construction, and systems installation. Critical work concludes with phase I systems integration testing by the C0988 contractor, phase 2 systems integration testing by MTA and then pre-revenue operations.

PROJECT COST STATUS

COST REPORT BY ELEMENT
UNITS IN MILLIONS

SCC CODE	DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		FORECAST VARIANCE
			PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
10-50	CONSTRUCTION	1,052.6	-	1,052.6	-	11.3	0.4	1.5	-	1,052.6	-
60	RIGHT-OF-WAY	132.3	-	132.3	0.2	5.3	4.8	7.2	-	132.3	-
70	VEHICLES / BUSES	87.8	-	87.8	-	-	-	-	-	87.8	-
80	PROFESSIONAL SERVICES	273.1	-	273.1	3.5	56.6	1.4	37.7	-	273.1	-
90	UNALLOCATED CONTINGENCY	177.2	-	177.2	-	-	-	-	-	177.2	-
100	FINANCE CHARGES	-	-	-	-	-	-	-	-	-	-
	865512 - SUBTOTAL	1,723.0	-	1,723.0	3.7	73.2	6.6	46.4	-	1,723.0	-
	ENVIRONMENTAL/PLANNING-405512	5.5	-	5.5	-	5.5	-	5.5	-	5.5	-
	ENVIRONMENTAL/PLANNING-465512	20.5	-	20.5	-	20.5	-	20.0	-	20.5	-
	405512 & 465512 - SUBTOTAL	26.0	-	26.0	-	26.0	-	25.5	-	26.0	-
	405512, 465512 & 865512 - TOTAL	1,749.0	-	1,749.0	3.7	99.2	6.6	71.9	-	1,749.0	-

Note-1: 405512, 465512, and 865512 are internal MTA project numbers to differentiate between environmental/planning and construction components of the project. Project numbers 405512 and 465512 may not have any further commitments or expenditures.
Note-2: Project 865512 expenditures are cumulative through September 2012.

PROJECT COST ANALYSIS

Original Budget and Current Budget:
The Board in October 2011 established the Life-of-Project (LOP) budget of $1,749 million for the Crenshaw/LAX Transit Corridor Project. The budget includes the 49% cost allocation share that the Project is responsible for paying for the design and construction of the Southwestern Yard. The breakout by FTA's Standard Cost Categories (SCC) above has been revised to allocate the Southwestern Yard cost to all appropriate cost elements instead of only within the Construction element.

Current Forecast: The total project forecast is $1,749 million. Board action is planned in December 2012 to increase the LOP to $1,762.9 million with conversion of unallocated Tiger grant funds to be used for construction expenditures on the project.

Commitments:
The commitments are cumulative through October 2012. The total commitments increased by $3.7 million this period. In the Right-Of-Way element there was an increase of $0.2 million for appraisal, environmental, and relocation scope of work. In the Professional Services element there was an increase of $3.5 million primarily for executed contract modifications associated with the engineering and design contract E0117, project administration, and community relations charges. The $99.2 million in commitments to date represents 5.7% of the current budget.

PROJECT COST ANALYSIS (Continued)

Expenditures:
The expenditures are cumulative through September 2012. The total expenditures increased by $6.6 million this period. In the construction element there was an increase of $0.4 million for third party scope of work with Los Angeles City and AT&T California. In the Right-Of-Way element there was an increase of $4.8 million for cost associated with appraisal, acquisition, and the BNSF railway abandonment. In the Professional Services element there was an increase of $1.4 million for costs associated with engineering and design contract E0117, MTA project administration, IPMO field office lease, legal services, and miscellaneous specialty services. The $71.9 million in expenditures to date represents 4.1% of the current budget.

FINANCIAL/GRANT STATUS

$ in millions

SOURCE	(A) ORIGINAL BUDGET	(B) TOTAL FUNDS ANTICIPATED	(C) TOTAL FUNDS AVAILABLE	(D) COMMITMENTS $	(D/B) COMMITMENTS %	(E) EXPENDITURES $	(E/B) EXPENDITURES %	(F) BILLED to FUNDING SOURCE $	(F/B) BILLED to FUNDING SOURCE %
FEDERAL - CMAQ	68.2	68.2							
FEDERAL - SECTION 5309 BUS CAPT	8.6	8.6	8.6	7.1	83%	7.1	83%	7.1	83%
FEDERAL - REGIONAL STP	20.0	20.0					0%		0%
FEDERAL - ALTERNATIVE ANALYSIS	1.2	1.2	1.2	1.2	100%	1.2	100%	1.2	100%
FEDERAL - TIGER II		13.9	13.9	13.9	100%	4.1	29%	4.1	29%
STATE REGIONAL IMPROVEMENT PROG	36.7	36.7	2.4	2.4	6%	2.4	6%	2.4	6%
STATE PROP 1B PTMISEA	201.2	201.2	12.0	12.0	6%	11.6	6%	11.6	6%
MEASURE R - TIFIA LOAN	545.9	545.9	545.9						
MEASURE R	661.1	661.1	347.1	59.3	9%	42.2	6%	41.8	6%
LOCAL AGENCY FUNDS	52.4	52.4							
PROP C 25% HIGHWAY	148.9	135.0	3.8	3.3	2%	3.3	2%	3.3	2%
PROP A 35% RAIL CAPITAL	4.8	4.8							
TOTAL	1,749.0	1,749.0	934.9	99.2	5.7%	71.9	4.1%	71.5	4.1%

NOTE: Expenditures are cumulative through September 2012.

STATUS OF FUNDS ANTICIPATED

FEDERAL SECTION 5309 BUS CAPITAL: FTA approved MTA Grant on July 6, 2010 for a total of $8.6M for bus and related facilities Preliminary Engineering effort. Funds are available for drawdown.

REGIONAL IMPROVEMENT PROGRAM: $178.6K was allocated by the State during the Planning Stage of the Project (FY07). $2.2M was allocated by the California Transportation Commission on January 28, 2011 for Preliminary Engineering work.

FEDERAL ALTERNATIVE ANALYSIS: $1.2M was approved by FTA under the Alternative Analysis Program. Funds have been drawn down.

FEDERAL TIGER II: Federal Tiger ll funds of ***$13,903,535*** was executed on September 28, 2012. Funds are available for drawdown.

FEDERAL TIFIA LOAN (Measure R) (**Transportation Infrastructure Finance & Innovation Act):** Application for a loan of $545.9M was submitted to the US Department of Transportation (DOT) in November 2011. On January 25, 2012 MTA made a presentation to the TIFIA Office on the projects description, financial capacity, and other related items. Negotiations between USDOT and MTA continue on the terms and conditions of the TIFTA loan. TIFIA Office has requested additional clarification and negotiations are continuing. Metro met with FTA on August 1, 2012 in Washington D.C. to finalize the loan agreement. ***Loan agreement was executed on September 12, 2012.*** The current financial plan is to drawdown funds not prior than FY16.

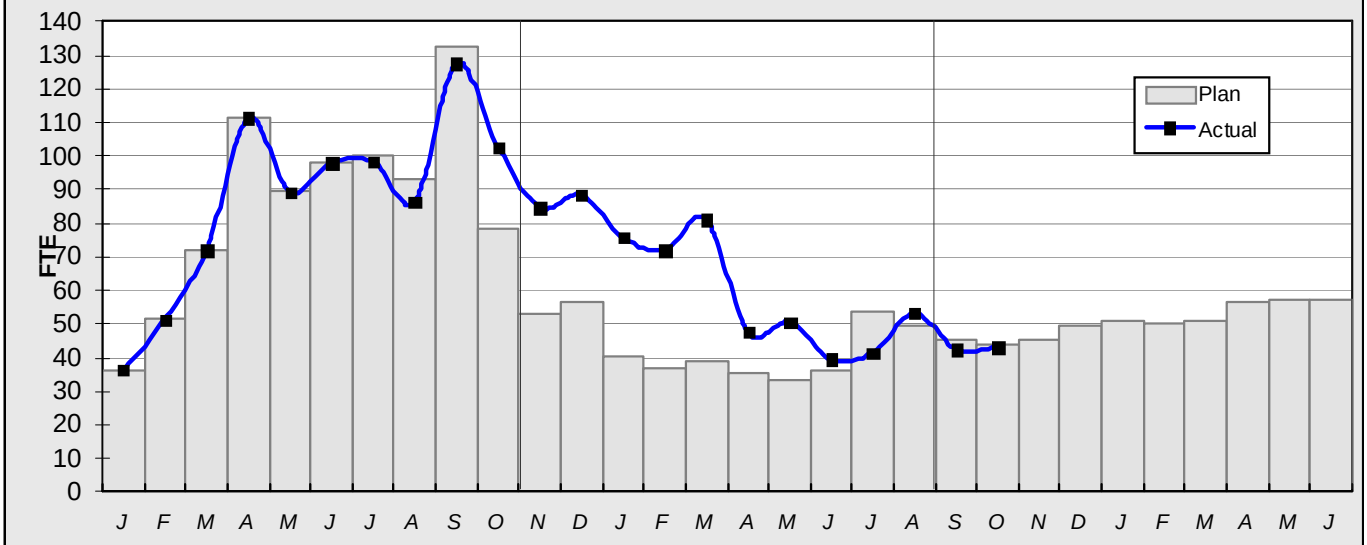
STATE PROP 1B – PTMISEA: A request for an allocation of $38.4M was submitted to the State on June 1, 2011. A revised allocation request for $12M was submitted in February 2012. This revised amount will fund ROW and final design activities. The revised allocation was approved in May 2012 and funds are available for drawdown. An additional funding allocation request of $160M was submitted to Caltrans in March 2012. ***Approval is not expected until Spring 2013.***

MEASURE R: $53.4M has been allocated to the project based on the January 2012 Funding Plan. Funds are available for drawdown. An additional $293.7M for FY13 has been allocated to the project based on the proposed May 2012 Measure R Extension Long Range Plan.

PROP C 25% HIGHWAY: $3.8M has been allocated to the project based on the January 2012 Funding Plan. Funds are available for drawdown.

STAFFING STATUS

Total Project Staffing – FTES



Notes:
1. FTE = Full Time Equivalent
2. Staffing levels are for project 865512 only.
3. Actual staffing levels are cumulative through October 2012.

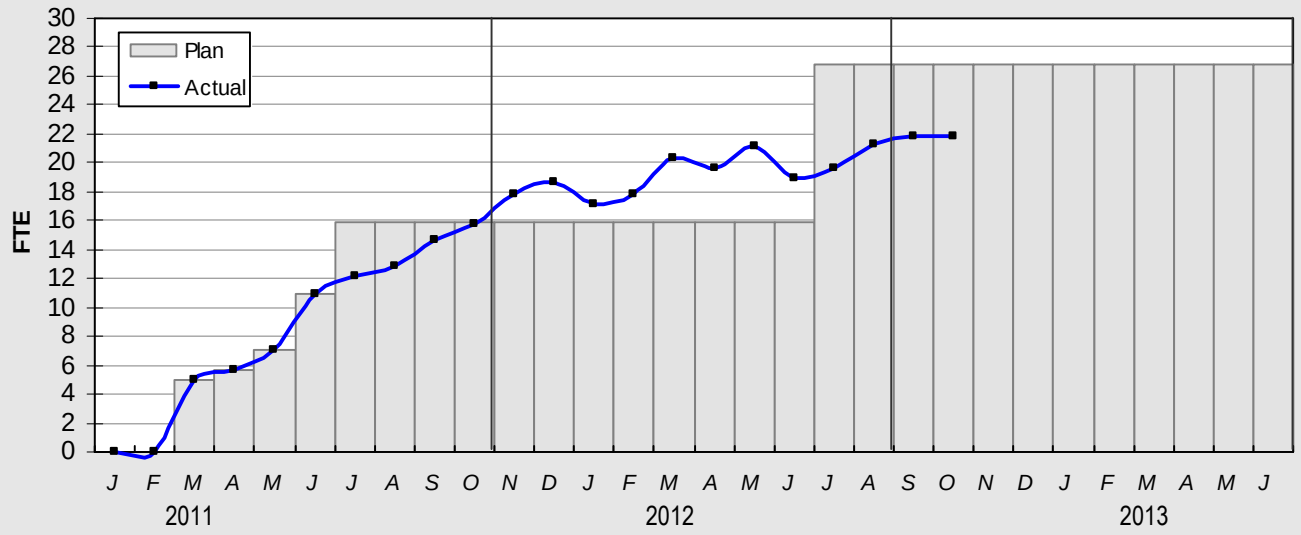
TOTAL PROJECT STAFFING

The overall FY13 Total Project Staffing plan averages 50.8 FTE's per month.

For October 2012, there were a total of 21.8 FTE's for MTA's Project Administration staff and 21.2 FTE's for consulting staff. The total project staffing was 43.0 FTE's for October 2012.

STAFFING STATUS (Continued)

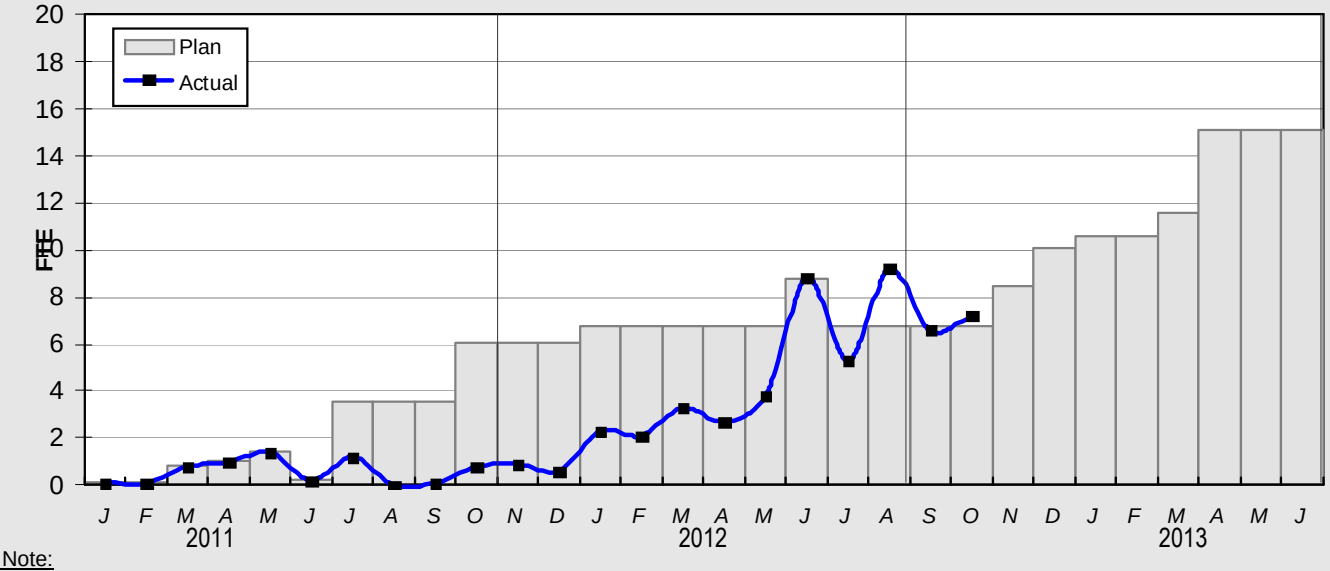
MTA STAFFING – FTES



Notes:

1. FTE = Full Time Equivalent
2. Staffing levels are for project 865512 only.
3. Actual staffing levels are cumulative through October 2012.

CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONSULTANT – FTES

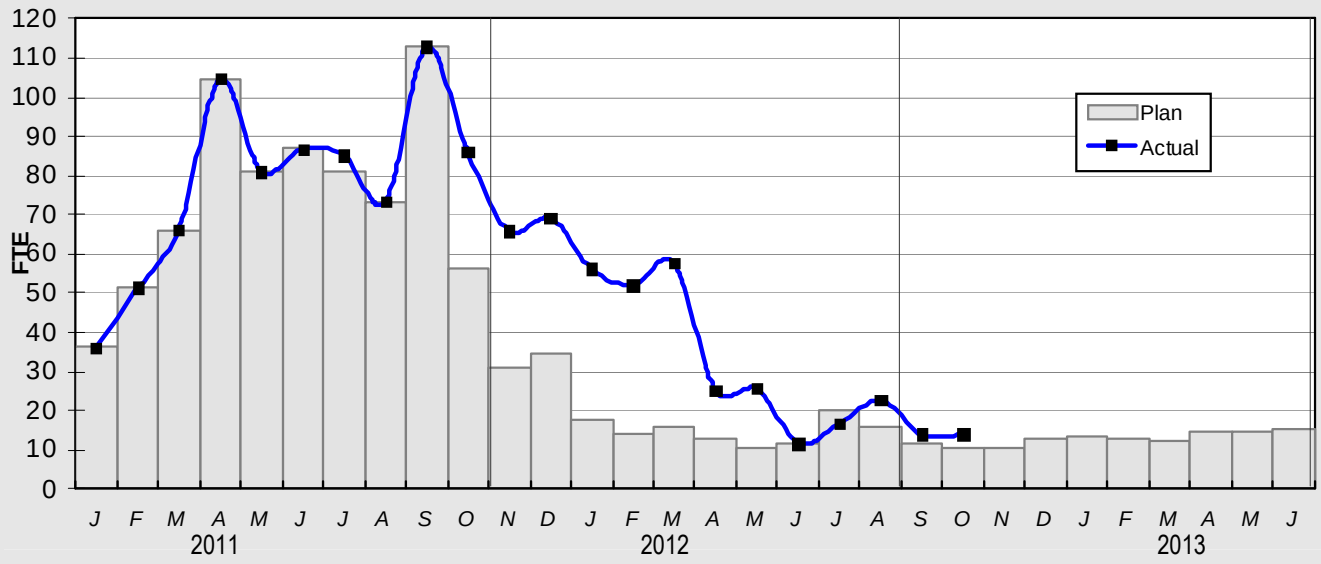


Note:

1. FTE = Full Time Equivalent
2. Staffing levels are for project 865512 only.
3. Actual staffing levels are cumulative through October 2012.

STAFFING STATUS (Continued)

ENGINEERING SERVICES CONSULTANT - FTES



Notes:
1. FTE = Full Time Equivalent
2. Staffing levels are for project 865512 only.
3. Actual staffing levels are cumulative through October 2012.

REAL ESTATE STATUS

Contract No.	Number of Parcels	Certified	Appraisals in Process	Offers Made	Agreements Signed	Condemnation Filed	Relocations Complete	Parcels Available
C0988 C/LAX Transit Corridor (D-B):								
Crenshaw								
Full Takes	12	12	8	4	2	1		
Part Takes (PT or SE)	10	8						
TCE	10	8						
Subtotal Parcels	**32**	**28**	**8**	**4**	**2**	**1**	**0**	**0**
Relocations	15							
Harbor Subdivision								
Full Takes	15	14	14	10				
Part Takes (PT or SE)	18	14	2					
TCE	3	2						
Subtotal Parcels	**36**	**30**	**16**	**10**	**0**	**0**	**0**	**0**
Relocations	34							
Total HS/CR Parcels:	**68**	**58**	**24**	**14**	**2**	**1**	**0**	**0**
C0991Southwestern Yard (D-B):								
Full Takes	8	8	7	3				
Part Takes	0							
TCE	0							
Total Parcels:	**8**	**8**	**7**	**3**	**0**	**0**	**0**	**0**
Relocations	4							
C0990 C/LAX Advance Utility Relocations:								
Total Parcels:	**0**							
Total Project Parcels	**76**	**66**	**31**	**17**	**2**	**1**	**0**	**0**

- ***31*** appraisals in various stages of completion.
- 36 environmental investigations underway.
- 41 owner and tenant relocations in various stages.
- Update to the March 2012 RAMP will be submitted by ***October 31st,*** and will include responses to the PMOC comments dated May 5, 2012.
- Seventeen offers have been made to property owners.
- Two agreements have been signed.

QUALITY ASSURANCE STATUS

Crenshaw/LAX Transit Corridor Project

- ***Answered questions from proposers on quality issues.***
- ***Completed revision of specification sections.***

C0990 Advanced Utility Relocations

- Attended weekly coordination meeting with Contractor.

C0991 Southwest Yard

- ***Attended Pre-Final Submittal Workshop.***
- ***Reviewed Crenshaw Deviation Request 2012-4.01 – Special Track Transition***

ENVIRONMENTAL STATUS

Advanced Utilities Meeting

- ***Reviewed and revised Hazardous Materials Health and Safety Plan.***
- ***Provided consultation on Stormwater, sampling and archaeological requirements.***
- ***Filed NOI for SWPPP.***
- ***Submitted EPA ID# to DTSC.***
- ***Provided Stormwater BMP oversight and soil sampling.***
- ***Reviewed and commented on the Sewage Spill Plan.***

SW Yard

- ***Provided comments on the LEED issues for the facility and acid car wash system.***
- Provided oversight of real estate's work on the Phase II Hazardous Materials assessment work.
- Provided advice on how to handle hazardous materials issues in the RFP.

Large Project Effort

- ***Responded to bidder's questions on the RFP.***
- ***Advised on the issue of disposing of rail equipment to rail fans.***
- ***Monitored railroad signaling equipment removal for archaeological issues.***
- ***Submitted the CEQA Addendum to Legal Staff, discussed comment with TAHA.***
- ***Facilitated soil quantity/disposal issues – Schedule E.***

CONSTRUCTION RELATIONS STATUS

- ***Participated in project briefings with the Office of Councilmember Herb Wesson, Jr., Mayor's Office and business owner on Exposition Blvd.***
- ***Participated in Advanced Utility Relocation Contractor Meetings and Pre-Construction Meeting.***
- ***Participated in Annual Taste of Soul Festival.***
- ***Participated in Crenshaw Leadership Council's Economic Development POD Meeting and technical meeting with Faithful Central Bible Church.***
- ***Coordinate tour of Expo Line with developer and potential business owner of Winchell's Donuts.***
- ***Participated in alignment tour with members of Crenshaw Leadership Council, Mayor's Office and Office of Director and Supervisor Mark-Ridley Thomas.***

ART DEVELOPMENT STATUS

- Review and comment on station design/design build documents.
- Review and comment on system signage design/design build documents.
- ***Coordinated Crenshaw/LAX video project.***

SAFETY & SECURITY STATUS

- ***Participated in Metro's IPO Meetings to discuss safety related issues and project schedule.***
- ***Participated in Pre-Construction Meetings and reviewed Contractor's excavation/trench plan.***
- ***Monitored Contractor's construction activities.***

THIRD PARTY AGREEMENT STATUS

Third Party	Type of Agreement	Forecast Execution Date	Required Need Date	Status/ Comments
City of Los Angeles	Amendment to Master Cooperative Agreement	12/12	02/13	Negotiations taking place with City; updated language on remaining terms developed and under review by MTA.
City of Inglewood	Master Cooperative Agreement	12/12	02/13	Interim LOA was executed on April 17, 2012. Held meeting on April 25, 2012 to negotiate MCA; negotiations; both parties appear to be in basic agreement on the MCA.
Los Angeles Department of Water and Power	Amendment to Memorandum of Understanding	12/12	02/13	MTA addressed comments; LADWP to review
Los Angeles County Public Works	Letter of Agreement	04/11	03/12	Executed
Caltrans	Amendment	08/11	03/12	Executed
Private Utilities	LOA, MOU or UCA	05/11 to 02/13	02/13	Discussions continuing with Third Party entities.

ADVANCED UTILITY RELOCATION STATUS

- Relocation of Qwest cable lines in progress.
- Relocation of high pressure gas lines in progress at Exposition Station site.
- Relocation of AT&T conduits, manholes and cables completed at MLK station site and design completed at La Brea Avenue.
- Relocation of communication lines completed at Manchester Avenue and Arbor Vitae.
- Relocation of DWP-Power conduits, and cables completed at Manchester Avenue; and in progress at Exposition Station site.
- Preparation for advance relocation of DWP-Power conduits, manholes and conduits in progress at MLK Station site.
- Design in progress by DWP-Water for advance relocation of eleven (11) water lines along Crenshaw Boulevard. Construction Schedule in progress.
- Design in progress by SCE for advance relocation of fiber crossings and pole supports along the Harbor Subdivision; and overhead power/line/feed at La Brea Station.
- ***Design in progress to relocate aerial communication lines at 96th St. south of Arbor Vitae.***
- ***Design in progress to relocate aerial DWP-Power lines near 96th St. south of Arbor Vitae.***

LEGEND
Existing Metro Rail & Stations
Metro Rail Expo (under const)
Future Purple Line Extension
At-Grade
Aerial
Below Grade
Station Location
Crenshaw/LAX Tranist Corridor Project
Request for Nighttime Construction and Noise Variance
Segments A - E for the City of Los Angeles
Los Angeles
Culver City
Inglewood
Lennox
El Segundo
Hawthorne
Gardena
Los Angeles International Airport
Crenshaw/Exposition Station
Segment A - Exposition Blvd to MLK Blvd
Crenshaw/MLK Station
Segment B - MLK Blvd to 48th St
Optional Crenshaw/ Vernon Station
Segment C - 48th St to 59th St
Crenshaw/Slauson Station
Segment D - 59th St to West Blvd
Florence/West Station
Florence/La Brea Station
Optional Aviation/Manchester Station (At-Grade)
Aviation/Century Station
Segment E - Manchester Ave to 116th St
Southwestern Yard
Pico Blvd
Venice Blvd
W 18th St
Santa Monica Frwy
Adams Blvd
Washington Blvd
Exposition Blvd
Martin Luther King Jr Blvd
Vernon Ave
W 54th St
Slauson Ave
Gage Ave
Florence Ave
Manchester Blvd
Arbor Vitae St
Century Blvd
Imperial Hwy
Rosecrans Ave
Marine Ave
Overland Ave
Jefferson Blvd
La Cienega Blvd
Sepulveda Blvd
La Brea Ave
La Tijera Blvd
Aviation Blvd
Crenshaw Blvd
Van Ness Ave
Western Ave
Hawthorne Blvd
Prairie Ave
Pershing Dr
Main St
405
10
105

CPUC CROSSING SUMMARY

Package	PE Consultant submits RCHAR* to MTA	MTA submits RCHAR* to CPUC	Field Diagnostic Meeting	CPUC Preliminary Recommendations to MTA	Revise RCHAR* & Submit to PUC for Additional Technical Evaluation	Submit Formal Application to PUC	CPUC Approval
1	1/26/2012A	2/6/2012A	03/28/12 - 3/30/12A	8/1/2012A	9/24/12A	Nov12/Jan13	03/15/13
2	1/26/2012A	2/6/2012A	03/28/12 - 3/30/12A	8/1/2012A	9/24/12A	Nov12/Jan13	03/15/13
3	1/26/2012A	2/6/2012A	03/28/12 - 3/30/12A	8/1/2012A	9/24/12A	Nov12/Jan13	03/15/13
4	1/26/2012A	2/6/2012A	03/28/12 - 3/30/12A	8/1/2012A	9/24/12A	Nov12/Jan13	03/15/13
5	1/26/2012A	2/6/2012A	03/28/12 - 3/30/12A	8/1/2012A	9/24/12A	Nov12/Jan13	03/15/13

(*) Rail Crossing Hazard Analysis Report (RCHAR)

Package Description	
1 Harbor Subdivision At Grade	
Centinela Av 25-FA	
Ivy Avenue 27-FA	
Eucalyptus Avenue 28-FA	
North Cedar Avenue 29-FA	
Oak Street 30-FA	
Arbor Vitae Street 36-FA	
2 Harbor Subdivision At Grade	
Victoria Avenue 21-88B	
Brynhurst Avenue 22-88B	
West Boulevard 23-FA	
Redondo (Closure)	
Hindry 34-FA	
La Brea Station Pedestrian Crossing	
High Street	
3 Harbor Subdivision Grade Separation	
La Brea Street 26-88B	
San Diego (SR 405) UP 32-164D	
La Cienega Boulevard 33-88B	
Manchester (SR105) 35-88B	
Century Boulevard UP37-164D	
104th Street 38 (87?)-88B	
111th Street 39-88B	
Imperial Highway 40-164D	
I-405	
West Hyde Park	
4 Crenshaw At Grade	
West 48th Strret 5FA	
West 50th Street 6-FA	
West 52nd Street 7-FA	
West 54th Street 8-FA	
West 57th Street 9-FA	
Crenshaw Boulevard/West 59th Street 11-FA	
Slauson Avenue 10-FA	
5 Crenshaw Grade Separation	
Rodeo Road 2-FA	
Rodeo Place 3-FA	
Coliseum Street 4-FA	
Crenshaw Boulevard/West 60th Street 13-16	
Crenshaw Boulevard/West 63rd Street 14-16	
Crenshaw Boulevard/West 66th Street 16-16	
Crenshaw Boulevard/West 66th Place 17-1	
Crenshaw Boulevard/West 67th Street 18-16	
Hyde Park Boulevard 31-88B	
Crenshaw Boulevard/West Vernon Avenue	
Crenshaw Boulevard/West 43rd Place	
Crenshaw Boulevard/West 43rd Street	
Crenshaw Boulevard/West Stocker Street	
Crenshaw Boulevard/West Martin Luther King Boulevard	
Crenshaw Boulevard/West Mall Entrance	
Crenshaw Boulevard/West 39th Street	
Crenshaw Boulevard/West Coliseum Place	

CPUC General Order No. 164-D process has been suspended by Commission. Project has been directed to file formal applications.

FEDERAL AVIATION ADMINISTRATION (FAA)/ LOS ANGELES WORLD AIRPORTS (LAWA) SUMMARY STATUS

- MTA has included in the base scope a partially covered trench configuration as an interim condition which allows MTA to keep the overall project budget at $1,749 million. The preliminary engineering design includes a partially covered trench which includes provisions to allow for a future 1,600 foot covered trench section. FAA approved a formal Notification of Proposed Construction Alteration (Form 7460-1) for the partially covered configuration on February 29, 2012. Metro has filed an additional 7460-1 permit application on March 1, 2012 to define construction phasing requirements and time of day limitations for construction. These requirements have been incorporated into the RFP technical documents. MTA has completed a construction safety phasing plan including a safety phasing plan check list and performance requirements for protection of airport operations as recommended by FAA staff to expedite approval. This was provided as a guideline to proposers in Contract C0988 Amendment No. 4 to the RFP released in September 2012.

CHRONOLOGY OF EVENTS

2003	Major Investment Study
April 2007	Board authorized the CEO to award Contract PS 4330-1968 to complete environmental clearance and conceptual engineering.
December 2009	Board adopted the LRT Alternative as the Locally preferred Alternative and received and filed the Crenshaw Transit Corridor DEIS/DEIR.
December 2009	Board authorized the CEO to award Contract No. EO117 for Phase I, Advanced Conceptual Engineering.
September 2010	Board authorized the CEO to exercise option with Contract No. EO117 for Phase II Preliminary Engineering.
April 2011	Board adopted the Arbor Vitae/Bellanca (Site 14) LPA for the Maintenance Facility Site
July 2011	Board approved Southwestern Yard cost allocation.
September 2011	Board approved Project Definition and certified Final Environmental Impact Report
October 2011	Board approved the Life-of-Project Budget of $1.749 billion.
December 15, 2011	CTC reviewed the FEIS/FEIR and adopted the required resolution for future funding consideration.
December 23, 2011	Request for Qualifications for Contract C0988 C/LAX Transit Corridor was released to Industry.
December 30, 2011	Received Record of Decision from FTA.
February 10, 2012	Released Invitation for Bid for Contract C0990 Crenshaw/LAX Advanced Utility Relocations.
March 12, 2012	Received Statement of Qualifications for Contract C0988 C/LAX Transit Corridor.
April 26, 2012	Board authorized the CEO to exercise option with Contract No. E0117 for Phase III Design Services During Construction.

CHRONOLOGY OF EVENTS (Continued)

May 16, 2012	Notification of pre-qualified proposers for Contract C0988 C/LAX Transit Corridor.
May 30, 2012	Awarded Contract No. C0990 C/LAX Advanced Utility Relocations to Metro Builders and Engineers Group LTD.
June 4, 2012	Event held to announce beginning of the advanced utility relocation work.
June 22, 2012	Released Request for Proposals for Contract C0988 C/LAX Transit Corridor.
August 24, 2012	Received approval from the Surface Transportation Board regarding BNSF Railway Company abandonment along five-mile Crenshaw Segment of the Harbor Branch ROW.
September 4, 2012	Preparation of a FONSI for Supplemental Environmental Assessment to the FEIS was approved by FTA.
September 28, 2012	Completed abandonment process with BNSF.
September 28, 2012	TIFIA and TIGER II Grants approved.

CONTRACT C0988 STATUS

Crenshaw/LAX Transit Corridor

PE Design Contractor: Hatch Mott MacDonald (HMM)
Contractor: - TBD

Contract No.: C0988

Status as of: November 2, 2012

Progress/Work Completed:
- Issued Request for Qualification (RFQ) in December 2011.
- Received Statement of Qualifications in March 2012.
- Notices for pre-qualified teams issued May 2012.
- Issued Request for Proposals (RFP) in June 2012.
- Proposers submitted final Alternate Technical Concepts (ATC's) in September 2012.
- Supplemental Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) issued in September 2012.
- Alternate Technical Concepts (ATC) completed September 2012.

Areas of Concern:
- A forecasted delay in the procurement phase of the contracting process will impact NTP issuance. To maintain a RSD of 12/4/18 the schedule contingency has been impacted falling below the FTA preferred schedule contingency. See mgmt. issues for further details.

Schedule Assessment:

Cost Assessment:

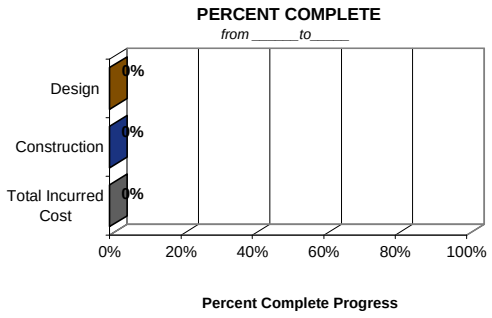
Schedule Summary:

1. Date of Award:
2. Notice to Proceed:
3. Original Substantial Completion Duration:
4. Current Substantial Completion Duration:
5. Elapsed Time from NTP:

Cost Summary: **$ In 000's**

1. Award Value:
2. Executed Modifications:
3. Approved Change Orders:
4. Current Contract Value (1 + 2 + 3): -
5. Incurred Cost:

Milestones	Original Contract	Current Contract	Forecast	Calendar Day Variance
				0
				0
				0
				0
				0
				0



Construction physical percent complete excludes mobilization and general requirements

CONTRACT C0990 STATUS

Crenshaw/LAX Advanced Utility Relocations

PE Design Contractor: Hatch Mott MacDonald (HMM)
Contractor: - Metro Builders and Engineers Group LTD

Contract No.: C0990

Status as of: November 2, 2012

Progress/Work Completed:
- Awarded contract May 30, 2012.
- NTP issued July 2012.
- Contractor continued development of construction work plans, traffic control plans, to begin City and DWP utility relocations.

Areas of Concern:
- LAWA imposed work moratorium on LAWA utility relocations will delay the start of this work till the new year. No impact to contract completion expected.

Schedule Assessment:

Cost Assessment:

Schedule Summary:

1. Date of Award:	05/30/12
2. Notice to Proceed:	07/17/12
3. Original Substantial Completion Duration:	365
4. Current Substantial Completion Duration:	365
5. Elapsed Time from NTP:	108

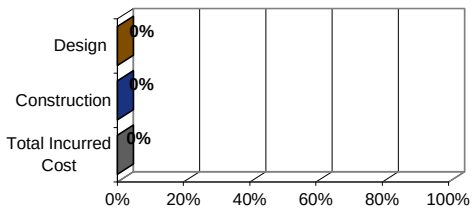
Cost Summary: **$ In 000's**

1. Award Value:	7.83
2. Executed Modifications:	0.00
3. Approved Change Orders:	0.00
4. Current Contract Value (1 + 2 + 3):	7.83
5. Incurred Cost:	0.00

Milestones	Original Contract	Current Contract	Forecast	Calendar Day Variance
Milestone 1 - Contract Substantial Completion	07/17/13	07/17/13	07/17/13	0

PERCENT COMPLETE

from July 17, 2012 to November 2, 2012



Percent Complete Progress

Construction physical percent complete excludes mobilization and general requirements

CONTRACT C0991 STATUS

Southwestern Yard

PE Design Contractor: Hatch Mott MacDonald (HMM)
Contractor: - TBD

Contract No.: C0991

Status as of: November 2, 2012

Progress/Work Completed:
- HMM is continuing design to support advertising this contract in February 2013.
- Incorporating value engineering and cost reduction strategies.
- Pre-final PE drawings completed October 2012. Currently in review with comments being incorporated. Final PE drawing package delivery slated for December 2012.
- LAWA commitment to car rental lease agreements.

Areas of Concern:
- Car rental relocation right-of-way property acquisitions and condemnation process.

Schedule Assessment:

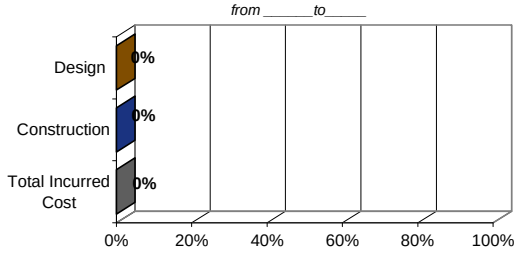
Cost Assessment:

Schedule Summary:
1. Date of Award:
2. Notice to Proceed:
3. Original Substantial Completion Duration:
4. Current Substantial Completion Duration:
5. Elapsed Time from NTP:

Cost Summary: **$ In 000's**
1. Award Value:
2. Executed Modifications:
3. Approved Change Orders:
4. Current Contract Value (1 + 2 + 3): -
5. Incurred Cost:

Milestones	Original Contract	Current Contract	Forecast	Calendar Day Variance
				0
				0
				0
				0
				0
				0

PERCENT COMPLETE
from _____to_____



Percent Complete Progress

Construction physical percent complete excludes mobilization and general requirements

ALIGNMENT ILLUSTRATIONS

Rendering of proposed design of Southwestern Yard.

CONSTRUCTION PHOTOGRAPHS

Track removal on Harbor Subdivision south of Imperial Highway.

Crews locating utilities near 59th Street.

APPENDIX

COST AND BUDGET TERMINOLOGY

Project Cost Descriptions -

ORIGINAL BUDGET	The Original Project Budget as established by the Metropolitan Transportation Authority (MTA) Board on October 27, 2011.
CURRENT BUDGET	The Original Budget plus all budget amendments approved by formal MTA Board action. Also referred to as Approved Budget.
COMMITMENTS	The total of actual contracts awarded, executed change orders or amendments, approved work orders of Master Cooperative Agreements, offers accepted for purchase of real estate, and other MTA actions which have been spent or result in the obligation of specific expenditures at a future time.
EXPENDITURES	The total dollar amount of funds expended by MTA for contractor or consultant invoices, third party invoices, staff salaries, real estate and other expenses that is reported in MTA's Financial Information System (FIS).
CURRENT FORECAST	The best estimate of the final cost of the project when all checks have been issued and the project is closed out. Current Forecast is composed of actual costs incurred to date, the best estimate of work remaining and a current risk assessment for each budgeted cost item.

Cost Report by Element Descriptions -

CONSTRUCTION	Includes construction contracts. Cost associated with Guideways, Stations, Southwestern Yard, Sitework/Special . Conditions and Systems.
RIGHT-OF-WAY	Includes purchase cost of parcels, easements, right-of-entry permits, escrow fees, contracted real estate appraisals and tenant relocation.
VEHICLES	Includes the purchase of LRT vehicles and spare parts for the project.
PROFESSIONAL SERVICES	Includes design engineering, project management assistance, construction management support services, legal counsel, agency staff costs, and other specialty consultants.
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.
PROJECT REVENUE	Includes all revenue receivable to the MTA as a direct result of project activities. This includes cost sharing construction items, insurance premium rebates, and the like.

APPENDIX

LIST OF ACRONYMS

ATC	Automatic Train Control
ATSAC	Automated Traffic Surveillance and Control
BAFO	Best and Final Offer
BIM	Building Information Modeling
BNSF	Burlington Northern Santa Fe Railway Company
CADD	Computer Aided Drafting and Design
CALTRANS	California Department of Transportation
CCTV	Closed Circuit Television
CD	Calendar Day
CM	Construction Manager
CMAQ	Congestion Mitigation and Air Quality Improvement Program
CN	Change Notice
CO	Change Order
CPM	Critical Path Method
CPUC	California Public Utilities Commission
CR	Camera Ready
CSPP	Construction Safety Phasing Plan
CTC	California Transportation Commission
CUD	Contract Unit Description
DB	Design Build
DBB	Design Bid Build
DOT	Department of Transportation
DWP	Department of Water and Power
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPBM	Earth Pressure Balance Machine
FAA	Federal Aviation Administration
FAR	Federal Acquisition Regulation
FD	Final Design
FEIS	Final Environmental Impact Statement
FEIR	Final Environmental Impact Report
FIS	Financial Information System
FLSR	Fire Life Safety Report
FRA	Federal Railroad Administration
FSEIR	Final Supplemental Environmental Impact Report
FSEIS	Final Supplemental Environmental Impact Statement
FTA	Federal Transit Administration
FTE	Full Time Equivalent
GBR	Geotechnical Baseline Report
GDSR	Geotechnical Design Summary Report
HMM	Hatch Mott MacDonald

APPENDIX

LIST OF ACRONYMS (Continued)

IFB	Invitation for Bid
IPMO	Integrated Project Management Office
ITS	Intelligent Transportation System
JPO	Joint Program Office
JV	Joint Venture
LA	Los Angeles
LABOE	Los Angeles Bureau of Engineering
LABOS	Los Angeles Bureau of Sanitation
LACFCD	Los Angeles County Flood Control District
LACMTA	Los Angeles County Metropolitan Transportation Authority
LADOT	Los Angeles Department of Transportation
LADPW	Los Angeles Department of Public Works
LADWP	Los Angeles Department of Water and Power
LAUSD	Los Angeles Unified School District
LAWA	Los Angeles World Airports
LAX	Los Angeles International Airport
LNTP	Limited Notice To Proceed
LONP	Letter Of No Prejudice
LPA	Locally Preferred Alternative
LRT	Light Rail Transit
LRTP	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
OCS	Overhead Cantenary System
OSHA	Occupational Health and Safety Administration
PA/VMS	Public Address/Visual Messaging Sign
PE	Preliminary Engineering
PEER	Permit Engineering Evaluation Report
PGL	Pasadena Gold Line
PIP	Project Implementation Plan
PLA	Project Labor Agreement
PM	Project Manager
PMIP	Project Management Implementation Plan
PMOC	Project Management Oversight Consultant
PMP	Project Management Plan

APPENDIX

LIST OF ACRONYMS (Continued)

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
QTIB	Qualified Transit Improvement Bonds
RAMP	Real Estate Acquisition Management Plan
RCHAR	Rail Crossing Hazards Analysis Report
RCMP	Risk Assessment Management Plan
RFC	Request For Change
RFP	Request For Proposals
RFSC	Request for Special Consideration
RHA	Risk Hazard Analysis
RLPE	Red Light Photo Enforcement
ROCC	Rail Operations Control Center
ROD	Record Of Decision
ROM	Rough Order of Magnitude
ROW	Right-Of-Way
RPZ	Runway Protection Zone
RSD	Revenue Service Date
SAV	Stand Alone Validator
SCAQMD	Southern California Air Quality Management District
SCADA	Supervisory Control and Data Acquisition
SCC	Standard Cost Category
SCE	Southern California Edison
SCRRA	Southern California Regional Rail Authority
SHA	State Highway Account
SHPO	State Historic Preservation Office
SIT	System Integration Testing
SOQ	Statement of Qualification
SOV	Schedule Of Value
SOW	Statement Of Work
SP	Special Provision
SSMP	Safety and Security Management Plan
STB	Surface Transportation Board
STIP	State Transportation Improvement Program
STP	Surface Transportation Program
STV	STV Group

APPENDIX

LIST OF ACRONYMS (Continued)

TBD	To Be Determined
TBM	Tunnel Boring Machine
TCRP	Traffic Congestion Relief Program
TIFIA	Transportation Infrastructure Finance and Innovation Act
TIGER	Transportation Investment Generating Economic Recovery
TPSS	Traction Power Substation
TRACS	Transit Automatic Control System
TVA	Threat Vulnerability Analysis
TVM	Ticket Vending Machine
UFS	Universal Fare System
USDOT	United States Department Of Transportation
VE	Value Engineering
WBS	Work Breakdown Structure
WP	Work Package
YOE	Year of Expenditure