# Crenshaw/LAX Transit Corridor



# CRENSHAW/LAX TRANSIT CORRIDOR PROJECT

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).

**DECEMBER 2011** 

## **TABLE OF CONTENTS**

	Page No.
Project Overview	1-2
Management Issues	3
Project Alignment	4
Base Project Scope	5-6
Project Status	
Project Schedule	
o Key Milestones Six-Month Look Ahead	7
o Project Summary Schedule	8
o Critical Path Narrative	9
Project Cost	
o Project Cost – 865512	10
o Project Cost Analysis	10
Financial/Grant	
o Financial/Grant – 865512	11
o Status of Funds Anticipated	12
Staffing	
o Total Project Staffing	13
o MTA Staffing	14
o Construction Management Support Services Consultant	14
o Engineering Services Consultant	15
Real Estate	16
Quality Assurance	17
Environmental	17
Construction Relations	17
Art Development	18
Safety & Security	18
Third Party Agreement	18
California Public Utilities Commission (CPUC) Summary	19

## **TABLE OF CONTENTS** (Continued)

	Page No.
Federal Aviation Administration/Los Angeles World Airports Summary	20
Chronology of Events	21
Construction Contracts	
o Contract C0988 Status	22
o Contract C0990 Status	23
o Contract C0991 Status	24
Alignment Illustrations	25-27
Construction Photographs	28
Appendices	
Cost and Budget Terminology	29
List of Acronyms	30-32

#### **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.

Within the CEQA lawsuit filing period (30 days), which ended October 24, 2011 one legal petition was filed. An administrative record is currently being prepared. FTA has moved the action to Federal Court.

The FEIS/FEIR was reviewed by the California transportation Commission (CTC) and they adopted the required resolution for future funding consideration on December 15, 2011.

The Record of Decision (ROD) was received from the FTA on December 30, 2011. With the receipt of ROD, advance utility relocations can commence by third parties, right-of-way properties certified by the project can be acquired by MTA and additional agreements that require the ROD can be put in place. Construction is authorized through closing of the TIFIA loan scheduled for July 31, 2012.

#### **Design**

The baseline preliminary engineering effort is complete. The design consultant submitted the final preliminary engineering drawing deliverables for Facilities and Systems in November 2011. Continuing advanced utility relocation design to support issuance of first construction contract in January 2012. Early design efforts for the Southwestern Yard have commenced.

The Board requested completion of a preliminary design for an underground station at Crenshaw Boulevard/ Vernon/Avenue in the Leimert Park area and has been added to the Preliminary Engineering scope of work. This optional station will be added as a bid option in the design-build contract. A further Board Motion was adopted at the December Board Meeting to adopt a bid option for an at-grade station at Florence/Hindry.

As part of the Preliminary Engineering work scope for the design consultant, work continues on preparing procurement documents for Contract C0990 Crenshaw/LAX Advanced Utility Relocations and the design-build alignment Contract C0988 Crenshaw/LAX Transit Corridor.

#### Third Party Agreement

Staff continues to coordinate outstanding design issues with FAA, LAWA, LADOT, LABOE, DWP, City of Inglewood, Caltrans and CPUC on a weekly basis. Working on finalizing all agreements, where appropriate, with third parties.

### PROJECT OVERVIEW (Continued)

#### Right-of-Way

Developed a Real Estate Acquisition Management Plan and commenced Preliminary Engineering real estate actions such as development of a Relocation Plan. In addition, 26 of 50 parcels have been certified and appraisals have been completed for 15 parcels. Additional appraisals have been ordered.

A term sheet has been negotiated between BNSF Railway Company to cease rail operations and abandon its interest in the five-mile Crenshaw Segment of the Harbor Branch right-of-way. The term sheet was approved at the November MTA Board Construction Committee in November 2011 and the full Board in December 2011 subject to receipt of Record of Decision. With receipt of ROD in December 2011, offers can now be made on right-of-way parcels certified by the project. An agreement between BNSF and Metro has been prepared and will be ready for execution in January 2012.

#### **Program Management**

The Board approved the Life-of-Project (LOP) budget of \$1,749 million in October 2011. The LOP includes \$26 million for the environmental/planning scope of work and \$1,723 million for the preliminary engineering and construction scope of work. The Original Budget for the Construction effort includes a 49% cost allocation share that the Crenshaw/LAX project is responsible for paying for the design and construction of the Southwestern Yard. The Crenshaw/LAX project does not include funding associated with the Paint and Body shop at Division 22 which is funded by a separate project number but this scope of work will be bid and constructed by the Southwestern Yard design-build contractor.

The project commitments to date are \$62.5 million or 3.6% of the Original Budget. The project expenditures to date are \$46.3 million or 2.6% of the Original Budget. The expenditures to date are for Environmental/Planning and Preliminary Engineering planned and scheduled work.

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.

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. A follow-up three-day Risk Assessment Workshop is planned in January 2012.

#### MANAGEMENT ISSUES

**Concern No. 1:** Complete definition of FAA/LAWA south runway construction requirements for procurement documents. Also, confirm decisions required on civil infrastructure to be built by MTA and fiber installation by FAA/LAWA. Written concept approval was received from LAWA in December on the utility relocation work scope.

<u>Status/Action</u> Regular meetings are being held with the local FAA/LAWA offices to resolve outstanding issues. Notifications of Proposed Construction Alterations (7460 form) are being processed "on airfield" through the local FAA office to expedite signoff.

**Concern No. 2:** Execute Agreement with BNSF Railway Company to cease rail operations and abandon its interest in the Crenshaw Segment portion of the Harbor Branch right-of-way per Term Sheet.

Status/Action Received Construction Committee approval of Term Sheet at November 17, 2011 meeting, and MTA Board approval at December 15, 2011 Board Meeting. With the receipt of a Record of Decision from FTA on December 30, 2012, MTA has prepared the final agreement based on the negotiated term sheet to BNSF and has reached agreement with BNSF to proceed with execution in January 2012.

**Concern No. 3:** MTA Board to determine if Westchester Station will be included as a bid option to the Design-Build Contract C0988 Crenshaw/LAX Transit Corridor.

Status/Action A motion was presented and adopted at the December 15, 2011 Board Meeting, (which approved the inclusion of the Westchester Station, at-grade near Florence/Hindry as a bid option during the construction procurement. Preparing preliminary engineering design to include as option to design-build Contract C0988 Crenshaw/LAX Transit Corridor.

#### **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. 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 to below-grade segment from Exposition Boulevard to 39<sup>th</sup> Street;
- 2) La Brea Avenue Grade Separation changed from aerial to below-grade;
- 3) Partially covered trench adjacent to LAX as an interim condition; and
- 4) Cost sharing of a maintenance & storage facility near LAX (Arbor Vitae/Bellanca) called Southwestern Yard.

Additional engineering refinements developed through Preliminary Engineering are being reviewed for environmental compliance. These include abandonment of the BNSF track that includes realignment of LRT tracks and demolition of two existing BNSF bridge structures; and additional right-of-way acquisitions with the majority being small partial takings and temporary construction easements.

The two proposed optional stations, Crenshaw/Vernon (Leimert Park Village) and Westchester (Florence/Hindry), are not included in the LPA. However, a bid option will be included in the design-build contract for constructing the Crenshaw/Vernon Station as well as an additional bid option to cover a Westchester at-grade station without parking facilities near Florence/Hindry. Both station options are being reviewed for environmental compliance.

With Board approval of a base Project Definition and certification of the Final Environmental Impact Report on September 22, 2011, the project team will continue with pre-construction activities. To accomplish the final design and construction of the project, the following contracts are being prepared to implement the project scope of work.

### **BASE PROJECT SCOPE (Continued)**

#### Contract C0990 Crenshaw/LAX Advanced Utility Relocations

The design of several early utility relocations was advanced sufficiently 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. 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 Information 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, and communications. Two optional stations will be included as bid options.

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, prequalification of qualified proposers followed by release of a RFP soliciting technical and price proposals.

#### **Design-Build Contract C0991 Southwestern Yard**

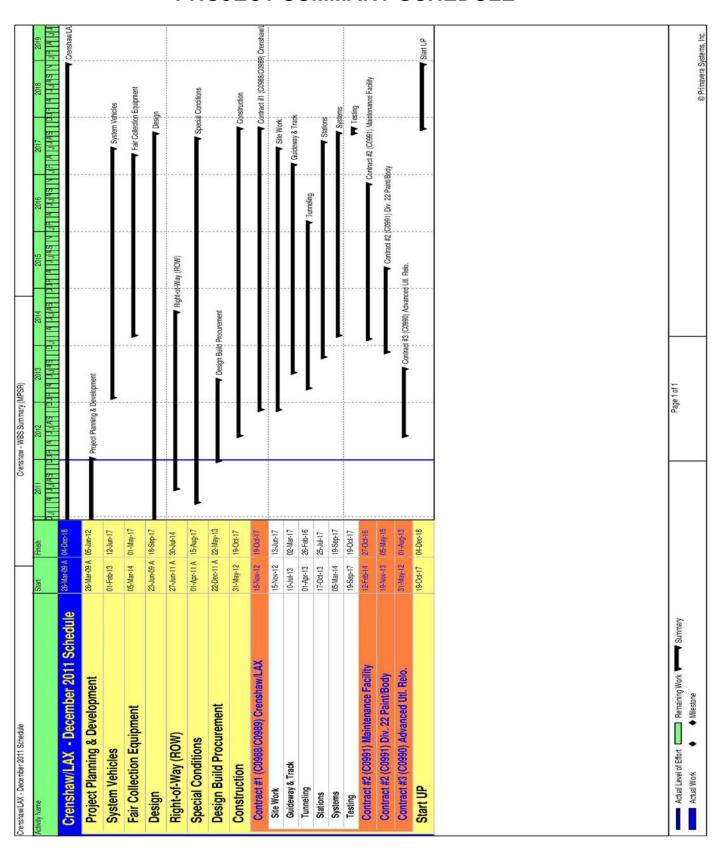
The Board-adopted 2009 Long Range Transportation Plan (LRTP) for Los Angeles County envisioned one new central Light Rail Transit (LRT) Maintenance facility to be used by all projects. Since the LRTP adoption, substantial progress on light rail system planning and development, including more accurate 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. This contract will also include constructing a paint and body shop at the existing Metro Green Line maintenance facility in Hawthorne (Division 22).

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

## **KEY MILESTONES SIX- MONTH LOOK AHEAD**

	Milestone Date	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12
Receive Record of Decision from FTA	12/30/11A	FTA	0411 12	1 00 12	Wai 12	7 12	may 12
Issue Request for Qualification Contract C0988 "D-B Transit Corridor"	12/23/11A	<b>•</b>					
Receive Final Preliminary Engineering Cost Estimate	11/15/2011A						
Commence Early Utility Relocations by Third Parties	01/20/12		Δ				
Complete Base Project PE Design	02/01/12			0			
Approve Agreement with BNSF for Abandonment of RR Tracks	01/31/12		M				
Issue Information for Bid Contract C0990 "Adv. Util. Relocation"	01/17/12		<b>♦</b>				
Complete Industry Review	01/05/12		<b>♦</b>				
Issue Request for Proposals Contract C0988 "D-B Transit Corridor"	3/16/12*				<b>•</b>		
Approve Design Consultant Phase III Support	01/27/12		M				
Receive Bids Contract C0990 "Adv. Util. Relocation"	03/08/12						
MTA Staff MTA Board Action	FTA (Federal	Transportation	on Authority)				
Other Agencies Contractors	HMM Des	ign					
"A" following date is actual and completed	<b>★</b> New						

#### PROJECT SUMMARY SCHEDULE



#### **CRITICAL PATH NARRATIVE**

#### **Critical Path:**

The longest path to project substantial completion begins with the Procurement cycle; Award/NTP of the Design/Build Contract #1 Crenshaw/LAX Transit Corridor.

Upon award, 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 prior to the TBMs arrival, assembling and testing.

The critical path then flows to remaining construction elements; tunneling, guideway construction, station construction, and systems installation. Critical work concludes with systems integration testing and acceptance.

26.0

1,749.0

25.3

46.3

2.7

# Crenshaw/LAX Transit Corridor Project Quarterly Project Status Report

#### PROJECT COST STATUS - 865512

UNITS	T REPORT BY ELEMENT SIN										
ELE-	DESCRIPTION	ORIGINAL CUR	IGINAL CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		FORECAST
MENT	DESCRIPTION	BUDGET	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
С	CONSTRUCTION	1,133.6	-	1,133.6	0.3	4.1	-	-		1,132.8	(0.7
R	RIGHT-OF-WAY	68.7	-	68.7	-	-	-	-		67.6	(1.0
٧	VEHICLES / BUSES	87.8	-	87.8	-	-	-	-	-	87.8	-
Р	PROFESSIONAL SERVICES	258.1	-	258.1	1.1	32.4	2.7	21.0	-	260.7	2.6
PC	PROJECT CONTINGENCY	174.8	-	174.8	-	-	-	-	-	173.9	(0.8
PF	PROJECT FINANCE COST	-	-	-	-	-	-	-	-	-	-
	865512 - SUBTOTAL	1,723.0	-	1,723.0	1.4	36.5	2.7	21.0	-	1,723.0	-

NOTE: 865512 EXPENDITURES ARE CUMULATIVE THROUGH NOVEMBER 2011.

26.0

1,749.0

#### **PROJECT COST ANALYSIS**

1,749.0

1.4

26.0

62.5

#### **Original Budget and Current Budget:**

The Board in October established the Life-of-Project (LOP) budget of \$1,749 million for the Crenshaw/LAX Transit Corridor Project. The Original Budget includes in the Construction Element the 49% estimated cost allocation share that the Crenshaw/LAX project is responsible for paying for the design and construction of the Southwestern Yard.

**Current Forecast:** The total project forecast is \$1,749 million.

#### **Commitments:**

**EP** ENVIRONMENTAL/PLANNING

405512, 465512 & 865512 - TOTAL

The cumulative commitments through December 2011 are \$62.5 million. The commitments increased by \$1.4 million this period. In the Construction element there was an increase of \$0.3 million mainly for third party scope of work. In the Professional Services element there was an increase of \$1.1 million primarily for executed contract modifications associated with the construction management support services, community relations program, and miscellaneous specialty services. The \$62.5 million in commitments to date represents 3.6% of the current budget.

#### **Expenditures:**

The expenditures are cumulative through November 2011. In the Professional Services element there was an increase of \$2.7 million for costs associated with the preliminary engineering design contract E0117, tunnel advisory panel services, field office lease and related expenses, construction management support services, community outreach program, and Metro project administration. In addition, there has been a total of \$25.3 million expenditures related to the Environmental/Planning Phase. The \$46.3 million in expenditures to date represents 2.6% of the current budget.

#### FINANCIAL/GRANT STATUS - 865512

\$ in millions	(A)	(B)	(C)	(D)	(D/B)	(E)	(E/B)	(F)	(F/B)
	ORIGINAL	TOTAL	TOTAL	COMMITT	` '	EXPENDI	` '		FUNDING
SOURCE	BUDGET	FUNDS ANTICIPATED	FUNDS AVAILABLE	\$	%	\$	%	\$	SOURCE %
		AVIIGIAID	AVAILAGE	Ψ	70	Ψ	70	Ψ	70
FEDERAL - CMAQ	68.2	68.2							
REGIONAL IMPROVEMENT PROG	36.7	36.7	22	2.2	6%	22	6%	0.179	
FEDERAL - SECTION 5309 BUS CAPT	8.6	8.6	8.6	8.6	100%	8.6	100%	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%
STATE PROP 1B PTMSEA	201.2	201.2		20.4		4.2			
FEDERAL - TIFIA LOAN (Measure R)	545.9	545.9							
MEASURE R	661.1	661.1	26.0	26.0		26.0		12.3	
LOCAL AGENCY FUNDS	52.4	52.4							
PROP C 25% HIGHWAY	148.9	148.9	4.1	4.1		4.1		2.4	
PROP A 35% RAIL CAPITAL	4.8	4.8							
TOTAL	1,749.0	1,749.0	42.1	62.5	3.6%	46.3	26%	23.2	1.3%

NOTE: Expenditures are cumulative through November 2011. Original Budget based on Board approved October 2011 Funding/Expenditure Plan

#### STATUS OF FUNDS ANTICIPATED

**FEDERAL SECTION 5309 BUS CAPITAL:** FTA approved Metro 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:** \$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 TIFIA LOAN (Measure R)** (Transportation Infrastructure Finance & Innovation Act): Application for a loan of \$545.9M will be submitted to the US Department of Transportation (DOT) in November 2011. On January 25, 2011 Metro will make a presentation to the TIFIA Office on the projects description, financial capacity, and other related items.

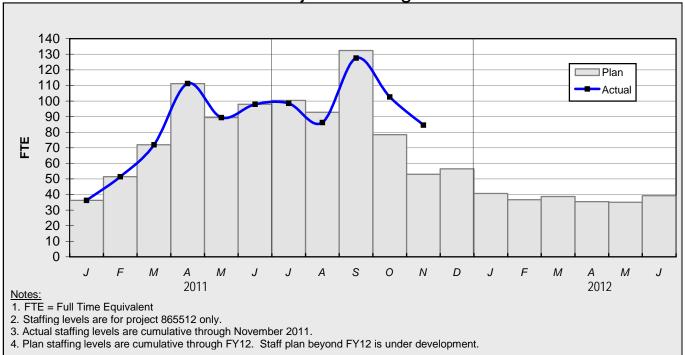
**STATE PROP 1B – PTMISEA:** A request for an allocation of \$38.4M was submitted to the State on June 1, 2011. Approval is pending bond funds availability.

**MEASURE R:** \$26.0M has been allocated to the project and is available for drawdown.

**PROP C 25% HIGHWAY:** \$4.1M has been allocated to the project and is available for drawdown.

#### **STAFFING STATUS**

Total Project Staffing – FTES



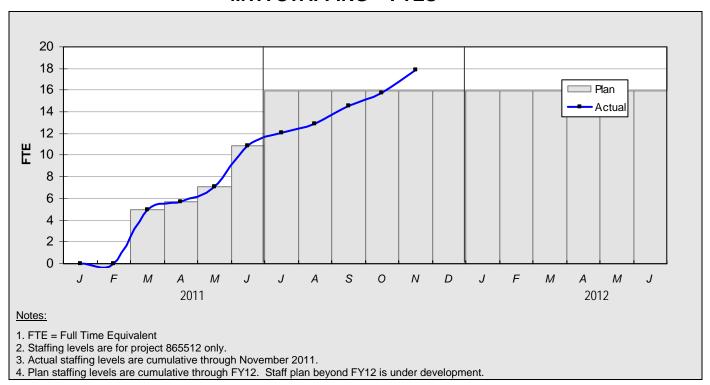
#### **TOTAL PROJECT STAFFING**

The overall FY12 Total Project Staffing plan averages 61.6 FTE's per month.

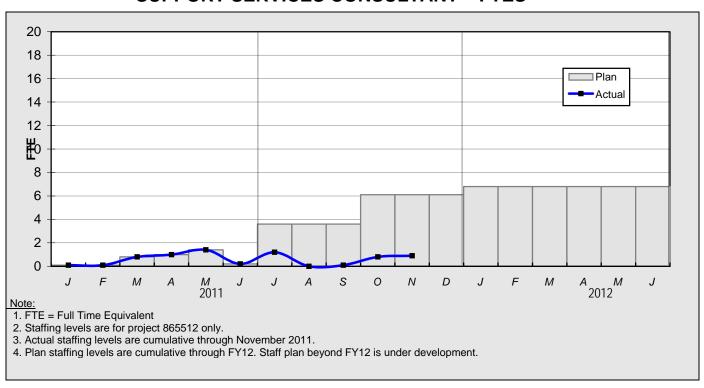
For November 2011, there were a total of 17.9 FTE's for MTA's Project Administration staff and 66.7 FTE's for consulting staff. The total project staffing was 84.6 FTE's for November 2011.

Project staffing beyond FY12 is under development.

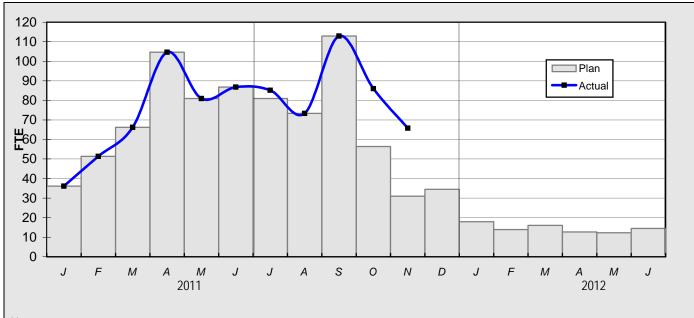
# STAFFING STATUS (Continued) MTA STAFFING – FTES



## CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONSULTANT – FTES



# 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 November 2011.
- 4. Plan staffing levels are cumulative through FY12 for Phase II only and were re-baselined based on contract modifications. Staff plan beyond FY12 is under development.

#### **REAL ESTATE STATUS**

	Number of		Appraisals	Just Comp.	Offers	Agreements	Condemnation	Relocations	Parcels
Contract No.	Parcels	Certified	Complete	Approved	Made	Signed	Filed	Complete	Available
00000 O/I AV Turner	it O - mild - m (D	D)							
C0988 C/LAX Trans	it Corridor (D	)-B): 							
Full Takes	9	7							
Part Takes	8	,							
TCE	0								
Subtotal Parcels	17	7							
Relocations	15								
Harbor Subdivision									
Full Takes	14	12							
Part Takes	9								
TCE	2								
Subtotal Parcels	25	12							
Relocations	34								
Total Parcels:	42	19							
C0991Southweste	ern Yard (D-B	3):							
Full Takes	8	7							
Part Takes	0								
TCE	0								
Total Parcels:	8	7							
Relocations	4								
C0990 C/LAX Advance		ations:							
Total Parcels:	0								
Total Project Parcels	50	26							

- Received draft Relocation Plan prepared by Epic Land Solutions and provided a copy to the PMOC. Real estate acquisition dates are being reviewed against the relocation plan.
- Appraisal of 15 parcels completed; additional appraisals ordered.
- Fifteen environmental investigations underway for additional partial takings and temporary construction easements identified through engineering refinements in the Preliminary Engineering phase.
- Soliciting for acquisition and relocation consultants for initial acquisition parcels.

#### **QUALITY ASSURANCE STATUS**

- Reviewed multiple revised specification sections.
- Reviewed Harbor Segment PE submittal.
- Prepared draft Quality Management Plan for Crenshaw/LAX Project.
- Continued development of revised Quality specification sections.

### **ENVIRONMENTAL STATUS**

The Record of Decision for the FEIS was received on December 30, 3011.

#### **CONSTRUCTION RELATIONS STATUS**

 Continued to respond to community questions concerning future project activities and attended meetings with property owners.

#### **ART DEVELOPMENT STATUS**

- Participated in station design team meetings.
- Participated in one community workshop.
- Coordinated Crenshaw/LAX video artist selection process; preparation of scope and draft script for video content.

#### **SAFETY & SECURITY STATUS**

- Conducted safety/security meetings with Metro, LAPD, and IPMO staff.
- Finalized AED first aid and other medical procedures for the IPMO staff.
- Conducted reviews of Contract Safety/Security specifications.
- Submitted the (SSMP) Safety and Security Management Plan to FTA for approval.
- Received the Underground Classification from Cal/OSHA Mining & Tunneling.
- A final Threat Vulnerability Analysis Report is in progress.

#### THIRD PARTY AGREEMENT STATUS

Third Party	Type of Agreement	Forecast Executio n Date	Required Need Date	Status/ Comments
City of Los Angeles	Master cooperative Agreement	03/12	03/12	Negotiations taking place with City.
Los Angeles World Airports	Letter of Agreement	03/12	03/12	Discussions in progress.
City of Inglewood	Master Cooperative Agreement	03/12	03/12	Interim LOA expected to be executed by January 2012. MCA is still under discussion
Los Angeles Department of Water and Power	Memorandum of Understanding	02/12	03/12	Metro 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 02/12	03/12	Discussions continuing with Third Party entities.

#### **CPUC CROSSING SUMMARY**

Package	PE Consultant submits RCHAP* to MTA	MTA submits RCHAP* to CPUC	Field Diagnostic Meeting	CPUC Preliminary Recommendations to MTA	Revise Package and Submit to PUC for Commission Resolutions	Submit Formal Application (if required) to PUC	CPUC Approval
1	01/26/12	02/02/12	02/2/12 - 4/2/12	07/02/12	07/20/12	09/12/12	11/12/12
2	01/26/12	02/02/12	02/2/12 - 4/2/12	07/02/12	07/20/12	09/12/12	11/12/12
3	01/26/12	02/02/12	02/2/12 - 4/2/12	07/02/12	07/20/12	09/12/12	11/12/12
4	01/26/12	02/02/12	02/2/12 - 4/2/12	07/02/12	07/20/12	09/12/12	11/12/12
5	01/26/12	02/02/12	02/2/12 - 4/2/12	07/02/12	07/20/12	09/12/12	11/12/12

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

Project follows CPU General Order No. 164-D as agreed to by MTA and the CPUC. The CPUC Crossing Summary adheres to the steps outlined in G.O. 164-D.

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

MTA is including 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. MTA continues to work with the FAA and LAWA to secure a formal Notification of Proposed Construction Alteration (Form 7460) approval for the partially covered configuration from FAA, and is working on an additional 7460 permit application to define construction phasing requirements for procurement documents.

## **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.

## **CONTRACT C0988 STATUS**

Crenshaw/LAX Transit Corridor

PE Design Contractor: Hatch M Contractor: - TBD	lott MacDonald (HMM)	Contract No.: C0988  Status as of: December 30, 2011					
Progress/Work Completed: - Industry review was initiated in Aug January 5, 2012 Request for Qualifications was rele	gust 2011 and will continue until	Areas of Concern:					
Schedule Assessment:		Cost Assessment:					
Schedule Summary:  1. Date of Award:  2. Notice to Proceed:  3. Original Substantial Completion I  4. Current Substantial Completion I  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 Current Contract Contract Variation (	Variable   Variable					
		Percent Complete Progress  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: - TBD					Contract No.: C Status as of: De		1	MAIL
Progress/Work Completed: - HMM is proceeding with completing advertising this contract in late Jan		equired to s	support		Areas of Concer			
Schedule Assessment:					Cost Assessmen	nt:		
Schedule Summary:  1. Date of Award: 2. Notice to Proceed: 3. Original Substantial Completion E 4. Current Substantial Completion E 5. Elapsed Time from NTP:					Cost Summary:  1. Award Value:  2. Executed Modi  3. Approved Char  4. Current Contra  5. Incurred Cost:	nge Orders:	\$ In 0 + 3):	00's
Milestones	Original Contract	Current Contract	Forecast	Calendar Day Variance  0  0  0  0  0  0  0	Desig Constructio Total Incurre Cost	from 0% 00 0% 00% 4	ENT COMPLE	80% 100%
						ıction physical pei ation and general		e excludes

### **CONTRACT C0991 STATUS**

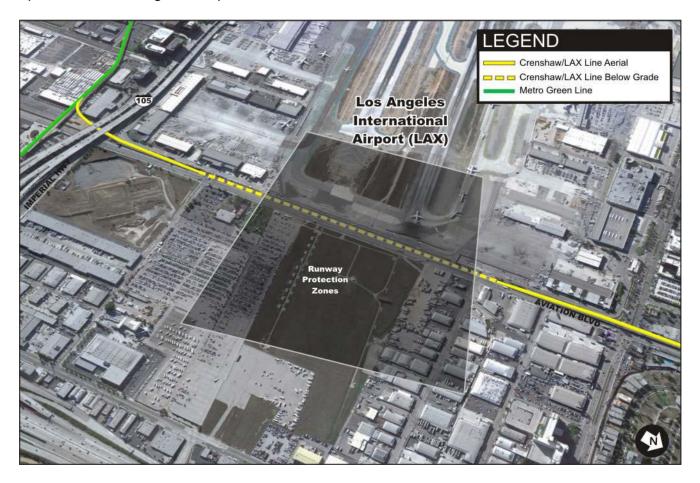
Southwestern Yard

PE Design Contractor: Hatch Mott MacDonald (HMM) Contractor: - TBD				Contract No.: C0991 Status as of: December 30, 2011		
Progress/Work Completed: - HMM is continuing design to suppor December 2012.	t advertising this con	tract in		Areas of Concern:		
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 Current Contract	Forecast	Calendar Day Variance  0  0  0  0  0  0  0	Design  Construction  Total Incurred Cost	80% 100% is	
				Construction physical percent complete excludes mobilization and general requirements		

#### **ALIGNMENT ILLUSTRATIONS**



Rendering of portal for the below-grade Crenshaw/Exposition Station that is adjacent to the operation of the at-grade Exposition Line.



Below-grade trench alignment along Aviation Boulevard, adjacent to LAX south runways.

## **ALIGNMENT ILLUSTRATIONS (Continued)**



Typical Aerial Station.

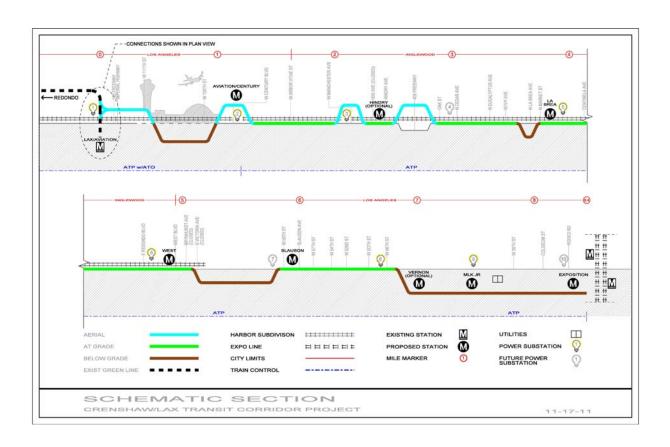


Typical at-grade station in-street.

## **ALIGNMENT ILLUSTRATIONS (Continued)**



Platform on typical at-grade station in-street.



December 2011

## **CONSTRUCTION PHOTOGRAPHS**

• Construction photographs will be included once construction commences in 2012.

# 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. The Original Budget plus all budget amendments approved by

CURRENT BUDGET

The Original Budget plus all budget amendments approved by formal MTA Board action. Also referred to as Approved.

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 Includes design engineering, project management assistance,

SERVICES 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 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

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

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

HMM Hatch Mott MacDonald

IFB Invitation for Bid

IPMO Integrated Project Management 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

#### **APPENDIX**

### LIST OF ACRONYMS (Continued)

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

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

PA/VMS Public Address/Visual Messaging Sign

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 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
RCMP Risk Assessment Management Plan

RFC Request For Change RFP Request For Proposals RFQ Request For Qualifications

#### **APPENDIX**

### LIST OF ACRONYMS (Continued)

RLPE Red Light Photo Enforcement ROCC Rail Operations Control Center

ROD Record Of Decision

ROM Rough Order of Magnitude RSD Revenue Service Date

ROW Right-Of-Way

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

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

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