Crenshaw/LAX Transit Project



CRENSHAW/LAX TRANSIT PROJECT

MONTHLY PROJECT STATUS REPORT

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PROJECT SUMMARY

LOCATION: Crenshaw B DESIGN/CONSULTANT:	-	Line	CONSTRUCTION MANAGEMENT CONSULTANT: Stantec CONTRACTOR: Walsh-Shea Corridor Constructors (WSCC)							
PROJECT PHOTO: Aviat falsework span 4 to 7.	tion/Century S	Station underp	bass	WORK COMPLETED PAST MONTH:						
				 o Continued final design. o Continued excavation for UG#1 near LAX airport runways. o Continued falsework installation for bridge decking at Century Station . o Continued pile installation at UG#4 on Crenshaw Blvd. o Continued support of utilities and execavation at Vernon Station. o Continued tier three strut installation for bridge over 1-405. o Continued real estate acquisitions with emphasis on remaining partial-takes and temporary construction easements. o Southwestern Yard contractor continues early contract submittals. 						
EXPENDITURE STATUS (\$ In Millions)				SCHEDULE ASSESSMENT	Ī					
ACTIVITIES	CURRENT BUDGET	EXPENDED AMOUNT	PERCENT EXPENDED	MAJOR SCHEDULE ACTIVITIES	PRIOR PLAN	CURRENT PLAN	VARIANCE WEEKS			
				Environmental						
DESIGN	\$ 136.7	\$ 108.1	79.1%	FEIS/FEIR	Sep-11	Sep-11	Complete			
				Record of Decision	Dec-11	Dec-11	Complete			
RIGHT-OF-WAY	\$ 127.4	\$ 104.3	81.9%							
CONSTRUCTION	\$ 1,353.1	\$ 393.5	29.1%	Design Preliminary Engineering	Complete					
	. ,			Final Design	Sep-15		4.7 months behind			
OTHER	\$ 440.8	\$ 118.7	26.9%	.						
TOTAL	\$ 2,058.0	\$ 724.6	35.2%	Right-of-Way	Jan-15	lan-15	Complete			
Note: cost expended as o		-	55.270	Full-take parcels available Part-take and TCE parcels	Sep-15		3.5 months behind			
	-			Construction						
AREAS OF CONCERN				D-B Notice to Proceed	Sep-13	Sep-13	Complete			
				D-B Substantial Complete	Oct-18	Jan-19	3 months behind			
 Third party relocations p Design-builder's ability to 			uction.	Revenue Service Date	Oct-19		On schedule*			
o Timely review of WSCC o 96th street station cost a	's design subm	ittals by City of		Revenue Gervice Date	001-19	000-19				
			5.	The D-B Substantial Complete prior plan was modified by a 35 day concurrent delay contract modification in March 2015.						
				*Note: Current Revenue Service Date includes a reduction in contingency.						
ROW ACQUISITION	PLAN	ACQUIRED	REMAINING	CRITICAL ACTIVITIES / 3 N	IONTH LOO	K AHEAD				
FULL TAKES	35	35	0	 o Excavate to invert at Expo Station. o Excavate to 2nd tier struts and walers at MLK Station. o Commence MSE retaining walls at Downtown/Inglewood Station. o Continue tier 1 bracing/excavation to tier 2 at Leimert Park Station. o Continue working on Century, Imperial, La Brea, Manchester and I-405 aerial structures. o Complete pile installation at UG#4 on Crenshaw Blvd. o Complete pile installation for UG#3 on Crenshaw Blvd. o Commence falsework for green line superstruture. 						
PARTIAL TAKES	26	20	6							
	12	12	0							
TEMPORARY EASEMENTS	12	12	0	o Commence laisework for g	green nne su	perstruture.				

PROJECT OVERVIEW

Construction

Contract C0990 - The advanced utility relocations contractor, Metro Builders and Engineers Group, LTD was substantially completed on August 21, 2014. Contract is now in close-out phase. *Metro and Metro Builders and Engineers Group have agreed to mediation in November 2015 to have positions heard on outstanding claims.*

Design- Build Contract C0988 – The design-builder, Walsh-Shea Corridor Constructors (WSCC) continues final design with preparation of required contract submittals. The designer is completing design for the most critical items that support the commencement of construction in the various areas of the project. Construction efforts by the design-builder continued along all major areas.

Design- Build Contract C0991 – The design-builder, Hensel Phelps / Herzog JV was issued a notice-to-proceed on June 29, 2015. *The design-builder continues work in August on early contract required submittals.*

Right-of-Way

There are a total of 74 parcels; one more parcel was added in October 2013 which was originally an encroachment. There are 35 full takes, 27 partial takes and 12 temporary construction easements (TCE's). There have been 67 parcels acquired through August 2015. Thirty-five full takes and 32 part takes/ temporary construction easements have been provided to design-builder WSCC.

Metro has acquired all full takes required for the construction of the Project. Focus now is on completing the acquisition of part-takes and entering into agreements for temporary construction easements that are required for the Project. As the design-builder continues design, they have identified some additional TCE's and partial takes that may be required. Metro will work with the design-builder regarding any additional parcel acquisitions that may be required. These additional parcels may be required for street restoration or other non-critical scope of work.

Systems

Metro 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. Metro 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. A full build-out of a combined BOC/ROC is also being planned under a Phase 2

PROJECT OVERVIEW (Continued)

approach on land to be acquired by Metro as a separate Capital Improvement Project near Division 20.

Final design of the ROC Reconfiguration Plan was completed and issued for review on February 28, 2014. The initial ROC reconfiguration effort will be for Exposition Phase II and Foothill Gold Line Projects. Crenshaw/LAX Transit Project ROC reconfiguration will be initiated in June 2017 and completed by February 2019.

Program Management

In May 2013, the Board approved a Motion that amended the fiscal year 2014 Proposed Metro Budget to include funding for an underground station at Leimert Park Village and an at-grade station at Hindry as part of the baseline project. This Motion added \$135 million to the LOP budget which included \$80 million in uncommitted fiscal year 2014 funding and \$55 million from the City of Los Angeles. Metro reached agreement with the City of Los Angeles to cover the incremental cost of the stations above the \$80 million identified in fiscal year 2014 funding which the Metro Board approved in May 2013.

With board approval on June 27, 2013, the additional \$135 million is included in the sources of funds chart as well as the additional \$160.1 million for the increased cost of the base work. All recommendations were approved by the Board on June 27, 2013 except that change order authority was maintained at \$500,000. This board action amended the life of project budget to \$2,058 million.

The Board approved on May 28, 2015 an increase in the amount of funding that the Crenshaw/LAX Project is contributing toward the total cost of the Southwestern Yard Project. An additional \$10.8 million is required to be funded by drawdown from the Unallocated Contingency Current Budget SCC 90 and added to the Southwestern Yard Current Budget SCC 30. The current budget includes the 49% cost allocation share that the project is responsible for paying which includes funding of the design and construction for the Southwestern Yard. This amount is revised to \$150.2 million out of a new total of \$307.2 million adopted by the Board.

The amount of funding available for the Crenshaw/LAX Transit Corridor Project, excluding the Southwestern Yard \$150.2 million allocation and Environmental/Planning budget of \$26.0 million is \$1,881.8 million.

The LOP budget is funded by various sources of funds which include local, state and federal funding. The TIFIA Loan is categorized under local funds as the loan is secured by a pledge of Measure R local sales tax funds. The funding percentages are as follows: local funding 79.9%, state funding 8.8% and federal funding 11.3%.

The project commitments thru August 2015 are \$1,753.7 million or 85.3% of the Current Budget. The project commitments decreased this month as some of the commitments were reassigned to the 51% portion of the Southwestern Yard Project. The project expenditures thru August

PROJECT OVERVIEW (Continued)

2015 are \$724.6 million or 35.2% of the Current Budget.

The current period expenditures are for design-builders monthly design and construction costs as well as right-of-way and professional services costs. The expenditures to date also include the Southwestern Yard expenditures that are part of the 49% cost allocation share that the Project is responsible for paying for.

The forecast of the available project schedule contingency was reduced this month by two calendar days. The design-builder included in their August 2015 Schedule Update Narrative a projected delay of an additional two days. The total forecast delay to the design-builder's substantial completion milestone is 95 calendar days. Metro continues to meet with the design-builder to discuss the schedule and review any potential mitigation opportunities available to the design-builder to mitigate a projected schedule slippage. At this early stage of the project there are opportunities to reduce the potential delays.

MANAGEMENT ISSUES

Concern No. 1: Execution of 3% Local Match funding agreement with the City of Inglewood.

<u>Status/Action</u> Metro and the City of Inglewood continue to work through various issues and may have solutions to outstanding issues so an agreement can be executed in the future.

Concern No. 2: Timely future reviews of WSCC final design submittals by City of Los Angeles.

Status/Action Metro is coordinating with all third party agencies in advance of WSCC final design submittals to ensure that timely review requirements will be met to support WSCC's current schedule submittal dates. The final design submittals will be submitted for review by third parties according to the most critical submittals to ensure the third party agencies are reviewing the most important designs first. Also, along with the concern above is the potential for third party agencies review comments leading to potential change requests outside of the original design signed off by the agencies during the preliminary engineering phase of the project. Metro will take action and strictly monitor the review comments from the agencies.

Concern No. 3: Additional scope of work for the design-builder to accommodate the Los Angeles World Airports (LAWA) Specific Plan Amendment Study (SPAS).

Status/Action The scope of work is for Metro to undertake a parallel design effort and construct changes in the vicinity of the Aviation/Century Station to accommodate elements of the SPAS. The Crenshaw/LAX Transit Project obtained Metro Board authorization to Proceed in December 2013 with the required future design or construction effort. Four changes have been executed with WSCC, three for design and one for construction. Metro is also working with LAWA on additional changes that may be considered by the Metro Board of Directors in the near future. The existing and any potential new changes to WSCC are not funded by the Crenshaw/LAX Transit Project but are funded by other funding sources.

Concern No. 4: Relocations of utilities by outside third parties required to be performed in advance of the main Crenshaw/LAX Design Build Contractor's work.

<u>Status/Action</u> Metro continues to work closely with various third party agencies and have set up weekly meetings to address all known remaining utility relocation work. The emphasis is to have the relocations of utilities performed in advance of when WSCC will be performing work in the same location.

MANAGEMENT ISSUES (Continued)

Concern No. 5: Design-builders design submittal schedule

Status/Action WSCC continues to submit design submittals later than planned. WSCC is submitting submittals in advance of the construction need date but may potentially be at risk of late design submittals impacting future start of various construction activities. Metro has been working closely with WSCC and the cities to address the submittal schedule changes so as not to impact the project schedule critical path. Metro and the cities have also accelerated submittals specified as critical by WSCC so as not to impact construction.

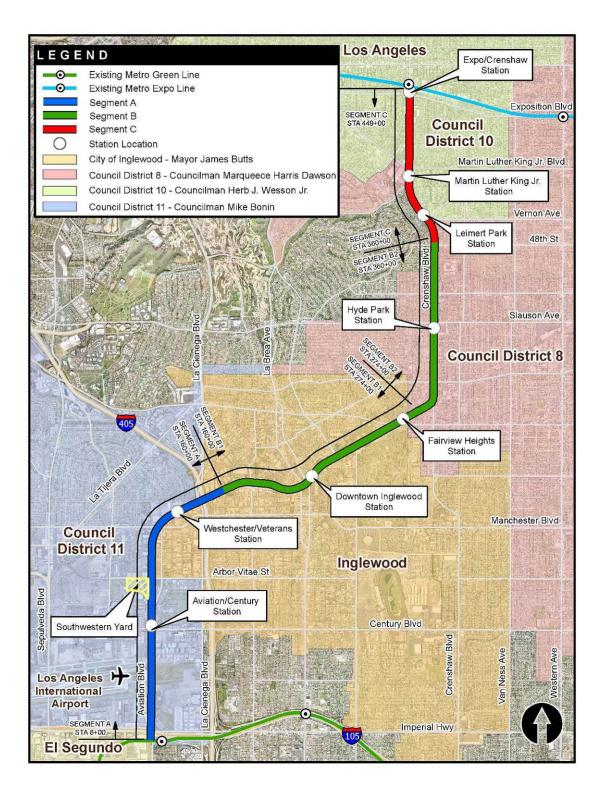
Concern No. 6: Design-builders construction schedule

<u>Status/Action</u> The design-builder included in their August 2015 Schedule Update Narrative a projected delay of an additional two days. The total delay to the design-builder's substantial completion milestone is 95 calendar days.

Concern No. 7: Cost and schedule impacts on the Crenshaw/LAX Transit Project to accommodate the future Airport Metro Connector Transit Station at 96th Street.

Status/Action In May 2015, the Metro Board approved Design Option 3 implementing changes required to the design-builder's design to accommodate the ultimate track configuration required for the future Airport Metro Connector Transit Station. Metro continues to work with the design-builder to minimize the impact to current design as well as any construction impacts.

PROJECT ALIGNMENT



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, eight stations, park and ride facilities at three locations, utilities, landscaping, roadway improvements required by the project and a maintenance & storage facility (Southwestern Yard).

The scope of work for the three construction contracts and two owner-supplied equipment 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 includes relocating three (3) existing duct banks that feed various NAVAIDS on the south airfield complex. New ductbank infrastructure will be built by Metro 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 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 was bid-build Invitation for Bid (IFB).

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 eight 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. The project delivery method for this contract was 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 Metro's discretion for best and final offers (BAFO).

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 Metro 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 was a two-step design-build IFB approach.

Owner-Supplied Equipment - Contract C0992 Crenshaw/LAX Concrete Ties and Assembly Items

Metro added a contract for procuring owner-supplied equipment for the Design-Build Contract C0988 Crenshaw/LAX Transit Corridor Contractor. The equipment within the contract scope of work includes concrete ties and assembly items.

The project delivery method for this contract was bid-build IFB approach.

Owner-Supplied Equipment - Contract C0992A Crenshaw/LAX Rail and Bumping Posts Procurement

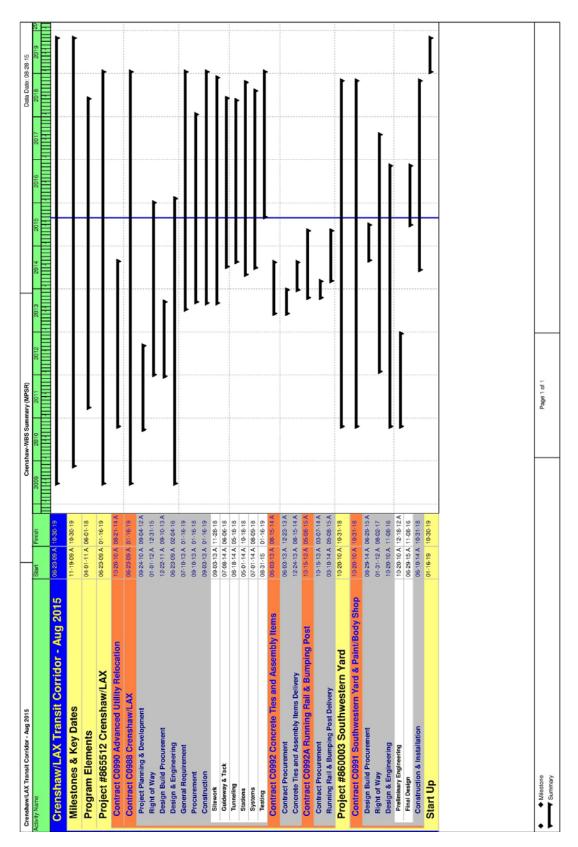
Metro added a contract for rebidding the procurement of running rail and bumping posts for the Design-Build Contract C0988 Crenshaw/LAX Transit Corridor Contractor.

The project delivery method for this contract was bid-build IFB approach.

KEY MILESTONES SIX- MONTH LOOK AHEAD

	Milestone Date	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16
Contract C0988 Submit Approved for Construction - OCS	08/03/15A						
Contract C0988 Submit Approved for Construction - 3D Model	08/14/15A	WIELDER T					
Contract C0988 Submit Approved for Construction - TPSS	08/18/15A						
Contract C0988 Submit Approved for Construction - COMM	08/26/15A						
Contract C0988 Start MSE Wall - Approach to Aviation / Century	08/31/15						
Contract C0988 Start MSE Wall - Approach to La Brea	08/31/15						
Contract C0988 Submit Approved for Construction - Seg B	09/01/15		Û				
Contract C0988 Start MSE Wall - Aerial Structure #1	09/10/15		Û				
Contract C0988 Start Shoring - Underground Structure #3	09/14/15		Û				
Contract C0988 Complete Excavation & Mud Slab - Expo	10/09/15			une Orten			
Contract C0988 Start Base Invert Slab - Expo	10/15/15						
Contract C0988 Submit Approved for Construction - Seg A	10/16/15						
Contract C0988 Complete Soldier Pile - UG #4	10/19/15						
Contract C0988 Start Decking - UG #4 Cut & Cover	10/19/15						
Contract C0988 Start MSE Wall - Manchester Bridge	10/22/15						
Contract C0988 TPSS-10 Permanent Power Drop (power for TBM)	10/30/15						
Contract C0988 Complete Excavation - UG#1	11/16/15						
Contract C0988 Start MSE Wall - I-405 Bridge	11/18/15						
Contract C0988 Expo Station Ready for TBM Machine	11/23/15						
Contract C0988 Install TBM Muck Handling System	11/24/15						
Contract C0988 Complete Superstructure - La Brea Bridge	11/25/15						
Contract C0988 Start Florence / Hindry Station	11/30/15						
Contract C0988 Submit Approved for Construction - Seg C	12/01/15						
Contract C0988 Complete 111th St Bridge Superstructure	12/01/15						
Contract C0988 Start Assemble EPBM	12/18/15						
Contract C0988 Complete Excavation & Mud Slab - MLK	12/23/15					un Onte	
Contract C0988 Complete Excavation - Vernon	01/14/16						
Contract C0988 Start TPSS-09 Permanent Power Drop	01/16/16						
Contract C0988 Start TPSS-03 Permanent Power Drop	01/19/16	1					

10

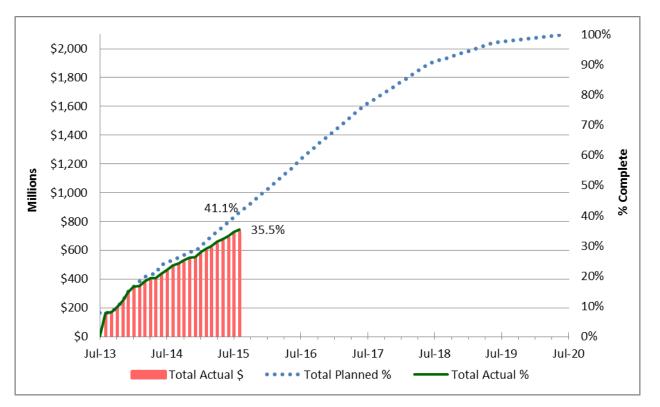


PROJECT SUMMARY SCHEDULE

August 2015

SCHEDULE MEASUREMENTS

		Change from Last	
	Status	Period	Comment
Current Revenue Service:	10/30/2019	None	
Forecast Revenue Service:	10/30/2019	None	
TIFIA Revenue Service:	10/30/2019	None	
Final Design Progress:			
Contract C0988	95.6%	0.8%	Behind Schedule
Contract C0990	100%	None	Design Completed
Contract C0991	-	-	P.E Completed only
Contract C0992	100%	None	Design Completed
Contract C0992A	100%	None	Design Completed
Construction Contracts Progress:			
Contract C0988	20.5%	1.3%	Behind Schedule
Contract C0990	100%	0%	Substantially Completed
Contract C0991	0%	-	NTP on Jun 29, 2015
Contract C0992	100%	0%	Substantially Completed
Contract C0992A	100%	0%	Substantially Completed
Cumulative To Date Progress:	37.1%	1.0%	



OVERALL CONSTRUCTION PROGRESS CURVE STATUS

The above planned progress curve is based on the planned expenditure of the life-of-project budget including the C0988 design-builder, other project contractors and all other components of the budget. The cumulative overall project planned progress through August 2015 is 41%. The cumulative overall actual progress through August 2015 is 35%.

MAJOR EQUIPMENT DELIVERY STATUS

Tunnel Boring Machine

WSCC, the design-builder for Contract C0988, will procure the tunnel boring machine (TBM) and equipment.

	Baseline	Jul-15	Aug-15	Monthly Variance
Submit Final Design Details for TBM	01/03/14	04/01/15A	04/01/15A	
Fabricate & Deliver TBM	09/22/14	11/21/14A	11/21/14A	
Procure & Deliver TBM Rolling Stock & Accessories	06/23/14	03/02/15A	03/02/15A	
TBM SB Tunnel Launch at Expo	04/28/15	01/28/16	02/02/16	-5
TBM SB Break through at Vernon	09/17/15	06/10/16	06/09/16	1
TBM NB Tunnel Launch at Expo	10/29/15	07/20/16	07/25/16	-5
TBM NB Break through at Vernon	03/21/16	11/30/16	12/05/16	-5

Light Rail Vehicles

The Board approved exercising Option 1 of Contract P3010 with Kinkisharyo International to provide light rail vehicles (LRV) for the Crenshaw/LAX project. By exercising this option prior to August 20, 2013, the Project avoided price escalation costs. The total number of vehicles in the option is 28 which include 20 LRVs for the Crenshaw/LAX project and two additional cars for spares.

The first two pilot cars for the initial order of cars (non-option) were ready on July 7, 2015; then four cars will be delivered every month starting from Aug 2015 with the last group of cars to be delivered on Jan 2017.

Mobilization of Option 1 will commence after completion of the initial order. First delivery of Option 1 cars will be February 2017 and the last of the cars in September 2017.

Ticket Vending Machines

Procurement of the ticket vending machines will commence after the design-builder completes final design and the total requirements for the project are known.

Concrete Ties and Assembly Items

All 19,936 concrete ties that have been delivered to the job site are not Buy America compliant. The contractor will be removing the ties and delivering new ties to the job site that are Buy America compliant. The ties will be delivered in time so as not to impact the C0988 design-build contractor's construction schedule.

Running Rail & Bumping Post

All required running rail & bumping post have been delivered to the job site.

DESIGN-BUILDER'S (C0988) LONG LEAD ITEM LIST

	50300, EC			7 1
Item	Initiate Procurement	Submittal Needed By	Delivery	Installation Date
Tunnel Boring Machine	Executed	Complete	Completed	9/1/2015
Stations- Elevators	Executed	3/25/2015	Pits 10/5/15	Pits 10/5/15
Stations- Escalators	Selected	5/22/2015	7/1/2016	10/5/2016
Track- Special Trackwork	Selected	3/21/2015	10/26/2015	11/12/2015
Track- Restraining Rail and Grade Crossing Ties	4/13/2015	5/1/2015	2/10/2016	4/1/2016
TPSS- Substation 1	4/8/2015	5/23/2015	4/2/2016	6/1/2016
TPSS- Substation 2	6/8/2015	7/23/2015	6/2/2016	8/1/2016
TPSS- Substation 3	8/10/2015	9/24/2015	8/4/2016	10/3/2016
TPSS- Substation 5	10/8/2015	11/22/2015	10/2/2016	12/1/2016
TPSS- Substation 6	1/7/2016	2/21/2016	1/1/2017	3/2/2017
TPSS-Substation 7	3/7/2016	4/21/2016	3/2/2017	5/1/2017
TPSS-Substation 7	1/7/2016		1/1/2017	3/2/2017
		2/21/2016		
TPSS- Substation 9	12/9/2016	1/23/2016	12/3/2016	2/1/2017
Train Houses	3/1/2015	5/30/2015	3/27/2017	5/1/2017
OCS Poles	3/1/2015	5/30/2015	6/27/2016	8/1/2016
Traffic Signal Poles	3/15/2015	4/15/2015	8/1/2015	6/1/2015
LED Lighting Figures	3/15/2015	4/15/2015	8/1/2015	3/1/2016
Jet Fan- UG3	5/5/2016	4/7/2016	12/31/2016	3/1/2017
Jet Fan- UG4	11/5/2016	1/4/2017	7/3/2017	9/1/2017
Artwork- Century	1/6/2016	3/6/2016	9/2/2016	11/1/2016
Artwork- Hindry	1/6/2016	3/6/2016	9/2/2016	11/1/2016
Artwork- La Brea	11/6/2015	1/5/2016	7/3/2016	9/1/2016
Artwork- West	4/7/2016	6/6/2016	12/3/2016	2/1/2017
Artwork- Slauson	10/5/2016	12/4/2016	6/2/2017	8/1/2017
Artwork-Vernon Concourse	2/4/2017	4/5/2017	10/2/2017	12/1/2017
Artwork- Vernon Plaza	10/5/2016	12/4/2016	6/2/2017	8/1/2017
Artwork- MLK Concourse	2/4/2017	4/5/2017	10/2/2017	12/1/2017
Artwork- MLK Plaza	4/7/2017	6/6/2017	12/3/2017	2/1/2018
Artwork- Expo Concourse	7/5/2017	9/3/2017	3/2/2018	5/1/2018
Artwork- Expo Plaza	7/5/2017	9/3/2017	3/2/2018	5/1/2018
TVM- Century	N/A	7/5/2015	1/1/2016	3/1/2016
	N/A N/A			1
TVM- Hindry		4/5/2016	10/2/2016	12/1/2016
TVM- La Brea	N/A	9/3/2016	3/2/2017	5/1/2017
TVM-West	N/A	7/4/2016	12/31/2016	3/1/2017
TVM-Slauson	N/A	11/3/2016	5/2/2017	7/1/2017
TVM- Vernon	N/A	2/3/2017	8/2/2017	10/1/2017
TVM- MLK	N/A	3/6/2017	9/2/2017	11/1/2017
TVM- Expo	N/A	5/6/2017	11/2/2017	1/1/2018
Trees and Landscaping- La Brea	8/6/2015	10/5/2015	4/2/2016	6/1/2016
Irrigation and Landscape Planting- MLK	2/4/2017	4/5/2017	10/2/2017	12/1/2017
Landscape- West Park and Ride	8/6/2015	10/5/2015	4/2/2016	6/1/2016
Traffic Signal Controllers- Market and Florence	9/3/2014	11/2/2014	5/1/2015	6/30/2015
Traffic Signal Controllers- Locust Bus Bay and Florence	9/10/2014	11/9/2014	5/8/2015	7/7/2015
Traffic Signal Controllers- 111th and Aviation	3/11/2015	5/10/2015	11/6/2015	1/5/2016
Traffic Signal Controllers- Imperial and Aviation	11/26/2015	1/25/2015	7/23/2016	9/21/2016
Traffic Signal Controllers- Florence and High	4/17/2015	6/16/2015	12/13/2015	2/11/2016
Traffic Signal Controllers- Centinela and Florence	5/8/2015	7/7/2015	1/3/2016	3/3/2016
Traffic Signal Controllers- West and 71st	5/8/2015	7/7/2015	1/3/2016	3/3/2016
Traffic Signal Controllers- Hindry and Florence	1/1/2016	3/1/2016	8/28/2016	10/27/2016
Traffic Signal Controllers- La Brea and Florence	2/6/2016	4/6/2016	10/3/2016	12/2/2016
Traffic Signal Controllers- 104th and Aviation	9/30/2015	11/29/2015	5/27/2016	7/26/2016
Traffic Signal Controllers- Oak and Florence	3/5/2015	5/4/2015	10/31/2015	12/30/2015
Traffic Signal Controllers- Cedar and Florence	3/5/2015	5/4/2015	10/31/2015	12/30/2015
Traffic Signal Controllers- Eucalyptus and Florence	3/5/2015	5/4/2015	10/31/2015	12/30/2015
Traffic Signal Controllers- Ivy Florence and Cable	3/5/2015	5/4/2015	10/31/2015	12/30/2015
Traffic Signal Controllers-Century and Aviation	3/5/2015	5/4/2015	10/31/2015	12/30/2015
Traffic Signal Controllers- La Cienega and Florence	8/1/2016	5/4/2015	10/31/2015	12/30/2015
SF6 Gas Insulated Switches * Metro top/bottom	3/13/2015	6/1/2015	8/2/2016	10/1/2016

CRITICAL PATH NARRATIVE

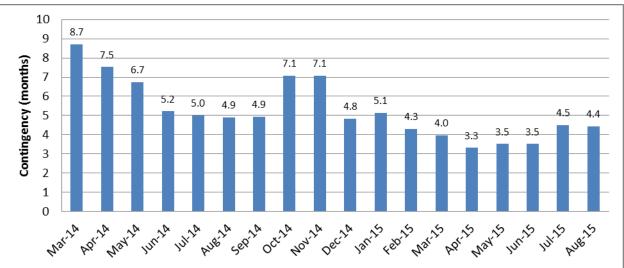
Critical Path:

The longest path to project substantial completion begins with final design of the Design/Build Contract #C0988 Crenshaw/LAX Transit Corridor.

The most critical and longest path starts with the Expo Station support of excavation (SOE) and decking, excavation & invert construction; TBM mining operation; cross passage excavation, tunnel invert and walkway construction; track and system installation, while the MLK station SOE and decking, excavation & invert construction, OCS/Traction power and Train Control/Communication System installation follow closely as the secondary critical path.

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.

The current critical path indicates Milestone 1 - Contract Substantial Completion date is Jan 16, 2019, which is 95 calendar days behind the current contract date.



PROJECT SCHEDULE CONTINGENCY DRAWDOWN

PROJECT SCHEDULE CONTINGENCY DRAWDOWN ANALYSIS

The project schedule contingency drawdown is based on the revenue service date of October 30, 2019. The change of LOP Contingency is due to design-builder reforecast of their substantial completion milestone.

PROJECT COST STATUS

COST REPORT BY ELEMENT PERIOD: AUGUST 2015 UNITS IN DOLLARS											
SCC	DESCRIPTION	ORIGINAL	CURREN	IT BUDGET	COMMI	TMENTS	EXPEND	DITURES	CURRENT	FORECAST	FORECAST
CODE	DESCRIPTION	BUDGET	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
10	GUIDEWAYS	471,335,000	-	452,500,001	-	442,535,942	4,834,791	73,978,271	-	450, 354, 375	(2,145,626)
20	STATIONS	153,906,000	-	316,050,000	-	301,494,334	7,533,244	101,364,611	-	315,050,000	(1,000,000)
30	SOUTHWESTERN YARD	66,673,000	-	73,245,544	(21,755,938)	64,164,000	(41,276)	-	(15,409,094)	71,164,000	(2,081,544)
40	SITEWORK\SPECIAL CONDITIONS	235,576,000	-	348,565,999		358,292,404	4,138,462	217,083,925	-	370,714,613	22,148,614
50	SYSTEMS	125,132,000	-	169,311,000		150,342,667	271,621	1,061,882	-	169,436,000	125,000
10-50	CONSTRUCTION	1,052,622,000	-	1,359,672,544	(21,755,938)	1,316,829,346	16,736,843	393,488,688	(15,409,094)	1,376,718,988	17,046,444
60	RIGHT-OF-WAY	132,294,000	-	127,400,000	(5,896,947)	107,952,045	(5,256,037)	104,284,011	(80,000)	127,490,000	90,000.00
70	LRT VEHICLES	87,780,000	-	82,100,000	-	82,050,901	-	11,452,422	-	82,100,000	-
80	PROFESSIONAL SERVICES	273,147,000	-	300,093,178	10,278,493	221,364,096	1,204,597	189,833,509	15,489,094	333,091,998	32,998,820
90	UNALLOCATED CONTINGENCY	177,157,000	-	162,734,278	-	-	-	-	-	112,599,014	(50, 135, 264)
	865512 - SUBTOTAL	1,723,000,000	-	2,032,000,000	(17,374,392)	1,728,196,389	12,685,403	699,058,630	-	2,032,000,000	-
	ENVIRONMENTAL/PLANNING-405512	5,526,150	-	5,526,150	-	5,526,150	-	5,526,150	-	5,526,150	-
	ENVIRONMENTAL/PLANNING-465512	20,473,850	-	20,473,850	-	20,023,237	-	20,023,237	-	20,473,850	-
	405512 & 465512 - SUBTOTAL	26,000,000	-	26,000,000	-	25,549,388	-	25,549,388	-	26,000,000	-
	405512, 465512 and 865512 - TOTAL	1,749,000,000	-	2,058,000,000	(17,374,392)	1,753,745,776	12,685,403	724,608,018	-	2,058,000,000	-
NOTE: EXPENDITURES ARE CUMULATIVE THROUGH 29-AUG-2015.											

PROJECT COST ANALYSIS

The project numbers 405512, 465512, 865512, and 860003 are internal to Metro and are used to differentiate between environmental/planning and construction components of the project.

Original Budget:

The Board in October 2011 established the Life-of-Project (LOP) budget of \$1,749 million for the Crenshaw/LAX Transit Project.

Current Budget:

There have been two increases in the LOP to date:

- The Board in December 2012 approved an increase of \$13.9 million for a new LOP total of \$1,762.9 million. The Unallocated Contingency Standard Cost Category (SCC) 90 budget line item was increased by the \$13.9 million for a new total of \$191.1 million.
- The Board in June 2013 approved an increase of \$295.1 million for a new LOP total of \$2,058.0 million. The total increase was based on two actions:
 - o Increase LOP base project scope in the amount of \$160.1 million, and
 - Increase LOP to include the options for Crenshaw/Vernon Station (Leimert Park Village) and Florence/Hindry Station in the amount of \$135.0 million.

The Board during May approved an increase in the amount of funding that the Crenshaw/LAX project is contributing toward the total cost of the Southwestern Yard Project. An additional \$10.8 million is required to be funded by drawdown from the Unallocated Contingency Current Budget SCC 90 and added to the Southwestern Yard Current Budget SCC 30. The current budget includes the 49% cost allocation share that the project is responsible for paying which includes funding of the design and construction for the Southwestern Yard. This amount is revised to

PROJECT COST ANALYSIS (Continued)

\$150.2 million out of a new total of \$307.2 million adopted by the Board. The \$150.2 million is spread among the SCC 30, 40, 60, 80 and 90 in the Cost Report by Element table above.

A project cost status chart depicting the adopted budget for Southwestern Yard Project is included this month in the appendix section of this report.

The amount of funding available for the Crenshaw/LAX Transit Project, excluding the Southwestern Yard Project \$150.2 million allocation and Environmental/Planning budget of \$26.0 million, has been revised to \$1,881.8 million.

Current Forecast:

The total project current forecast is \$2,058 million. Within the SCC codes, there was a reallocation of forecast for SCC-30 shifting final design cost for the Southwestern Yard and design-builder cost to SCC-80 per FTA guidelines.

Commitments:

The commitments are cumulative through August 29, 2015. The total commitments decreased by \$17.4 million this period primarily due to the following:

- SCC-30 (Southwestern Yard) has decreased by \$21.8 million due to purchase order decommitments and accounting adjustments for third party scope of work with Los Angeles Department of Water & Power and HHS Construction Inc. which was committed with the 51% portion of the project funds for the Southwestern Yard. Also, the final design scope of work for Contract C0991 Crenshaw/LAX Southwestern Yard was re-categorized to SCC-80.
- SCC-60 (Right-Of-Way) has a decreased of \$5.9 million due to de-commitments and accounting adjustments for real estate acquisition which was paid from the 51% portion of the project funds for the Southwestern Yard. The total commitment of \$108.0 million includes \$47.4 million for the Southwestern Yard 49% allocation.
- SCC-80 (Professional Services) has increased of \$10.3 for costs associated with design-build Contract C0988 Crenshaw/LAX Transit Corridor, Metro project administration, non-federal community relations, construction management support with PMA Consultants and re- categorization of Contract C0991 Crenshaw/LAX Southwestern Yard design scope of work from SCC-30. The total commitment of \$221.4 million includes \$15.3 million for the Southwestern Yard 49% allocation.

The \$1,753.7 million in commitments to date represents 85.3% of the current budget.

Expenditures:

The expenditures are cumulative through August 29, 2015. The total expenditures increased by \$12.7 million this period due to the following:

- SCC-10 (Guideways) has increased by \$4.8 million for costs associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor.
- SCC-20 (Stations, Stops, Terminals, Intermodal) has increased by \$7.5 million for costs associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor.

PROJECT COST ANALYSIS (Continued)

- SCC-40 (Sitework and Special Conditions) has increased by \$4.1 million for costs associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor, third party scope of work with Los Angeles Department of Water & Power, Cable Engineering Services, Tesoro Logistics LP and Metro Art Program.
- SCC-50 (Systems) has increased \$0.3 million for costs associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor.
- SCC-60 (Right-Of-Way) has a decreased \$5.2 million due to de-commitments and accounting adjustments for real estate acquisition which was paid from the 51% portion of the project funds for the Southwestern Yard. The total expenditure of \$104.3 million includes \$47.4 million for the Southwestern Yard 49% allocation
- SCC-80 (Professional Services) has increased by \$1.2 million for costs associated with design-build Contract C0988 Crenshaw/LAX Transit Corridor, Engineering and Design Contract E0117, Metro project administration, IPMO field office lease and utilities, nonfederal community relations, construction management support services, legal services, permit fees, third party coordination by City of Los Angeles, printing services, signage and graphics, material lab testing services, labor compliance monitoring and environmental consultant services. The total expenditure of \$189.8 million includes \$0.1 million for the Southwestern Yard 49% allocation.

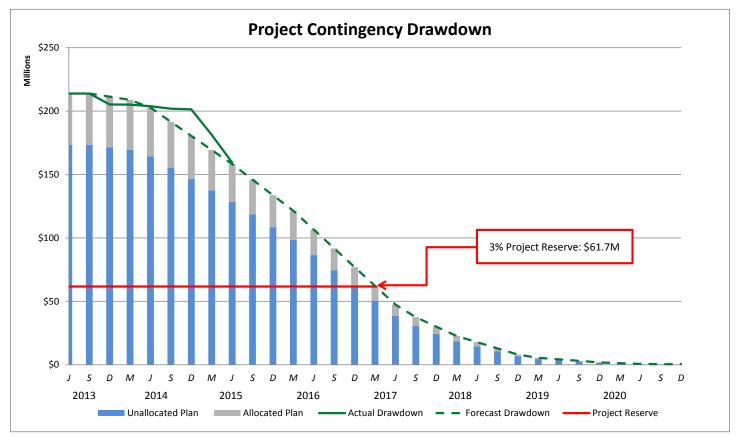
The \$724.6 million in expenditures to date represents 35.2% of the current budget.

Non-Crenshaw/LAX Transit Project Funded Scope of Work

The costs shown in the table below are not part of Crenshaw/LAX Transit Project costs but are funded by other Metro projects using the services of the design-builder (Contract C0988).

C0988 NON-CRENSHAW/LAX TRANSIT PROJECT FUNDED SCOPE OF WORK										
DESCRIPTION	ORIGINAL	CURREN	IT BUDGET	COMMI	TMENTS	EXPEND	DITURES	CURRENT	FORECAST	FORECAST
DESCRIPTION	BUDGET	PERIOD	TO DATE	PERIOD	T O DAT E	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
210090 FARE GATE PROJECT	2,310,000	-	2,549,000	-	2,482,746	-	172,746	-	2,549,000	239,000
460303 AIRPORT METRO CONNECTOR	366,400	-	1,007,778	17,334	1,025,112	32,069	975,709	17,334	1,025,112	658,712
500013 C/LAX LAWA SCOPE OF WORK	1,575,362	-	1,575,362	-	531,125	-	228,387	-	1,575,362	-
TOTAL	4,251,762	-	5,132,140	17,334	4,038,983	32,069	1,376,842	17,334	5,149,474	897,712

PROJECT CONTINGENCY DRAWDOWN



Through 29-Aug-2015

PROJECT CONTINGENCY DRAWDOWN ANALYSIS

The project current budget of \$2,058,000,000 includes an "unallocated contingency" amount of \$173,500,000 which is included as a separate Standard Cost Category (SCC) element. Also included within the current budget is an "allocated contingency" of \$40,366,792 which is allocated, where applicable, to specific contracts within each SCC element. The allocated contingency is not broken out separately in the current budget, as this amount covers anticipated but unknown contract modifications issued by Metro. The total project cost contingency is \$213,866,792 or 10.4%.

Included in the project contingency drawdown is a 3% project reserve line. The Board is to be notified when it becomes necessary to drawdown contingency below the project reserve line to cover project costs. This notification request was adopted by the Metro Board of Directors in September 2012.

The project contingency drawdown curve is based on an October 2019 revenue service date.

PROJECT CONTINGENCY DRAWDOWN ANALYSIS (Continued)

There have been a cumulative drawdown of \$54,344,199 or 25.5% for both allocated and unallocated contingency through June 2015. The cumulative to date contingency drawdown is reported quarterly with the next drawdown to be reported through September 2015. The drawdown of allocated contingency for additional costs associated with the design-builder's (Contract C0988) executed modification is tracked monthly but is reported quarterly in this report. The cumulative drawdown of contingency is shown in the table below:

PROJECT CONTINGENCY DRAWDOWN (through 29-Aug-2015)								
	Original	Drawdown	Drawdown	Drawdown	Forecast			
	Contingency	Previous	Current	To-Date	Remaining			
	Budget	Period	Period		Contingency			
Unallocated Contingency	173,500,000	(47,403,435)	-	(47,403,435)	126,096,565			
Allocated Contingency	40,366,792	(6,940,764)	-	(6,940,764)	33,426,028			
Total Contingency	213,866,792	(54,344,199)	-	(54,344,199)	159,522,593			

DISADVANTAGED BUSINESS ENTERPRISE (DBE) STATUS

Contract C0988 Crenshaw/LAX Transit Corridor Design-Build

(Reported Data as of August 15, 2015)

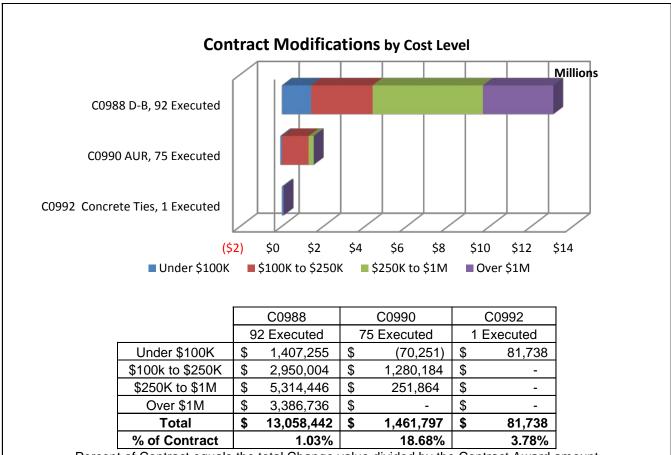
- DBE Goal Design 20%
- Current DBE Commitment \$20,232,929 (21.49%)
- Current DBE Participation \$21,293,347 (24.18%)
- Twenty (20) Design subcontractors have been identified to-date
- DBE Goal Construction 20%
- DBE Commitment \$236,116,671 (20%)
- Current DBE Commitment \$106,926,562 (9.07%)
- Current DBE Participation \$75,188,601 (25.35%)
- Fifty-Six (56) Construction subcontractors have been identified to-date.

PROJECT LABOR AGREEMENTS (PLA) STATUS

Contract C0988 Crenshaw/LAX Transit Corridor Design-Build

(Reported Data as of July 18, 2015)

Targeted Worker Goal –	40.00%
Targeted Worker Current Participation -	59.09%
Apprentice Worker Goal -	20.00%
Apprentice Worker Current Participation -	17.87%
Disadvantaged Worker Goal -	10.00%
Disadvantaged Worker Current Participation	10.59%



SUMMARY OF CONTRACT MODIFICATIONS

Percent of Contract equals the total Change value divided by the Contract Award amount

Ninty-two (92) changes with a total value of \$13.06 million have been executed since execution of Contract C0988. There are additional seven (7) changes with a total value of \$0.11 million are pending the administrative approval process.

Seventy-five (75) changes with a total value of \$1.46 million have been executed since execution of Contract C0990.

One change with a value of \$81,738 has also been executed since execution of Contract C0992.

C0992

C0992 \$

Total

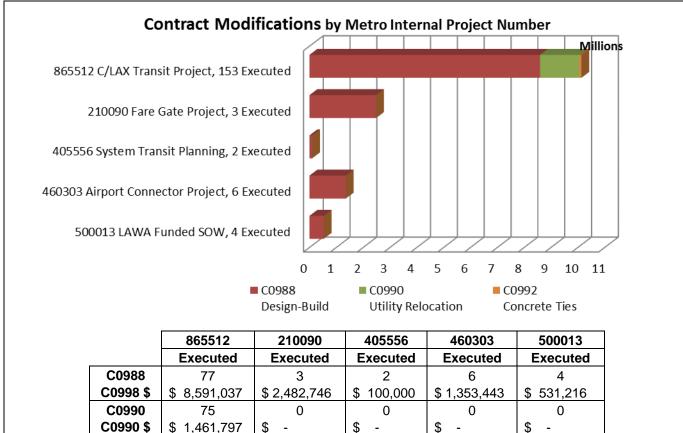
1

153

\$

81,738

SUMMARY OF CONTRACT MODIFICATIONS



Total \$ \$ 10,134,572 | \$ 2,482,746 | \$ 100,000 | \$ 1,353,443 | \$ 531,216One hundred and fifty three (153) changes with a total value of \$10.13 million have been
executed for Project 865512 Crenshaw/LAX Transit Project. There are additional seven (7)
changes with a total value of \$0.11 million pending the administrative approval process.

\$ -

0

3

\$

-

0

2

0

6

-

\$

0

4

-

\$

Three (3) changes with a value of \$2.48 million have been executed for Project 210090 Fare Gate Project.

Two (2) changes with a value of \$100,000 have been executed for Project 405556 System Transit Planning.

Six (6) changes with a value of \$1.35 million have been executed for Project 460303 Airport Connector Project.

Four (4) changes with a total value of \$0.53 million have been executed for Project 500013 Crenshaw/LAX LAWA Statement of Work.

FINANCIAL/GRANT STATUS

\$ in millions	(A) ORIGINAL	(B) TOTAL	(C) TOTAL	(D) (D/B) COMMITMENTS		(E) (E/B) EXPENDITURES		(F) (F/B) BILLED to FUNDING	
SOURCE	BUDGET	FUNDS ANTICIPATED	FUNDS AVAILABLE	\$	%	\$	%	\$	SOURCE %
FEDERAL - CMAQ	68.2	54.0	30.0	54.0	100%	30.0	56%	30.0	56%
FEDERAL - SECTION 5309 BUS CAPT	8.6	8.6	8.6	8.6	100%	8.1	95%	8.1	95%
FEDERAL - REGIONAL STP	20.0	120.9	73.7	120.9	100%	73.7	61%	38.4	32%
FEDERAL - ALTERNATIVE ANALYSIS	1.2	1.2	1.2	1.2	100%	1.2	100%	1.2	100%
FEDERAL - TIGER II	0.0	13.9	13.9	13.9	100%	13.9	100%	13.9	100%
FEDERAL REGIONAL IMPROV PROG	34.3	34.4	0.0	34.4	100%	0.0	0%	0.0	0%
STATE REGIONAL IMPROVEMENT PROG	2.2	2.2	2.2	2.2	100%	2.2	100%	2.2	100%
STATE PPM	0.178	0.178	0.178	0.178	100%	0.178	100%	0.178	100%
STATE PROP 1B PTMISEA	201.2	128.6	128.6	128.6	100%	128.6	100%	128.6	100%
STATE PROP 1 B LOCAL PARTNER PROG	0.0	49.5	49.5	49.5	100%	49.5	100%	49.5	100%
MEASURE R - TIFIA LOAN	545.9	545.9	337.4	545.9	100%	191.9	35%	153.1	28%
MEASURE R	661.1	661.1	387.7	661.1	100%	216.9	33%	216.9	33%
OTHER FUNDS*	52.4	187.5	13.0	0.0	0%	0.0	0%	0.0	0%
PROP C 25% HIGHWAY	148.9	189.5	3.6	82.9	44%	3.6	2%	3.6	2%
PROP C 40% DISCRETIONARY	0.0	10.2	0.0	0.0	0%	0.0	0%	0.0	0%
PROP A 35% RAIL CAPITAL	4.8	50.4	4.9	50.4	0%	4.9	0%	4.9	10%
TOTAL	1,749.0	2,058.0	1,054.4	1,753.7	85.3%	724.6	35.2%	650.5	31.6%

NOTE: Expenditures are cumulative through August 2015.

Original Budget based on Board approved October 2011 Funding/Expenditure Plan

Total Funds Anticipated based on Board approved June 2013 Revised Funding

* Other funds include: Local Agency Funds (\$107.470), CNG Tax Credit (\$54.000) and 3rd Party Lease Contingency (\$26.000)

STATUS OF FUNDS ANTICIPATED

FEDERAL – CMAQ: Metro submitted to FTA in October 2013 a draft grant application of \$30M for review. FTA has reviewed the application and allowed Metro to formally submit the grant application in July 2014. Grant was approved in December 2014. Funds are available for drawdown. Metro submitted to FTA in January 2015 a grant application of \$24M for approval. Grant approval is on hold until the California Public Employees' Pension Reform Act (PEPRA) issue with the department of labor is resolved.

FEDERAL – RSTP: FTA approved a grant of \$45M in May 2014 to fund the project rail cars. Funds are available for drawdown. Metro submitted to FTA in October 2013 a draft grant application of \$28.2M for review. FTA has reviewed the application and allowed Metro to formally submit the grant application in July 2014. Grant was approved in December 2014. Funds are available for drawdown.

STATE PROP 1B – PTMISEA: An allocation request for \$12M was approved in May 2012 and funds are available for drawdown. In March 2013, allocation requests of \$11.4M and \$98.9M were submitted to Caltrans. The \$11.4M allocation request was approved in June 2013. Funds are available for drawdown. The \$98.9M allocation request was approved on February 6, 2014. Funds are available for drawdown. A new allocation request of \$6.170M was submitted in June 2014 to Caltrans for approval. The allocation request was approved on February 4, 2015. Funds are available for drawdown.

STATE PROP 1B LP: An allocation request of \$49.5M was submitted in April 2013 and approved in July 2013. The allocation request was executed by Caltrans in December 2013. Funds are available for drawdown.

MEASURE R – TIFIA LOAN (Transportation Infrastructure Finance & Innovation Act): Application for a loan of \$545.9 M was submitted to the US Department of Transportation (DOT) in November 2011. Loan agreement was executed on September 12, 2012. Funds are available for drawdown.

MEASURE R: \$377.4M has been allocated to the project through FY2015. Funds are available for drawdown.

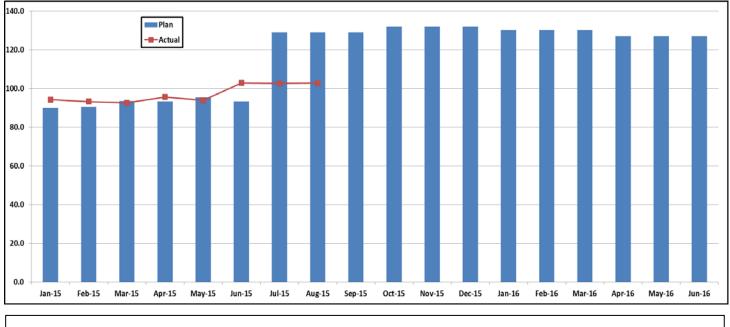
OTHER FUNDS: City of LA: Based on the funding agreement between Metro and the City of LA. \$13M is available for drawdown through FY2016.

PROP C 25% HIGHWAY: \$3.8M has been allocated to the project based on the June 2014 TIFIA Financial Model Funding Plan. Funds are available for drawdown.

PROP A 35% RAIL CAPITAL: \$4.8M has been allocated to the project based on the June 2014 TIFIA Financial Model.

STAFFING STATUS





Notes:

1. FTE = Full Time Equivalent

2. Staffing levels include the Southwestern Yard Project.

3. Actual staffing levels are cumulative through August 2015.

TOTAL PROJECT STAFFING

With the start of the 2016 fiscal year in July; the staffing for the Southwestern Yard Project is also included along with the Crenshaw/LAX Project for Metro and the Construction Management and Engineering Services consultants.

The planned staffing includes 11 new positions that were authorized by the Board in July 2015. Actual staffing will continue to be less than plan until new positions are filled throughout fiscal year 2016 and planned construction work increases with corresponding increases is staffing requirements.

The next three charts show actual staffing versus planned staffing for the three major project participants.

0.0

Jan-15

Feb-15

Mar-15

Apr-15

May-15

Jun-15

Jul-15

STAFFING STATUS (Continued) METRO STAFFING – FTES

CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONSULTANT – FTES

Sep-15

Oct-15

Nov-15

Dec-15

Jan-16

Feb-16

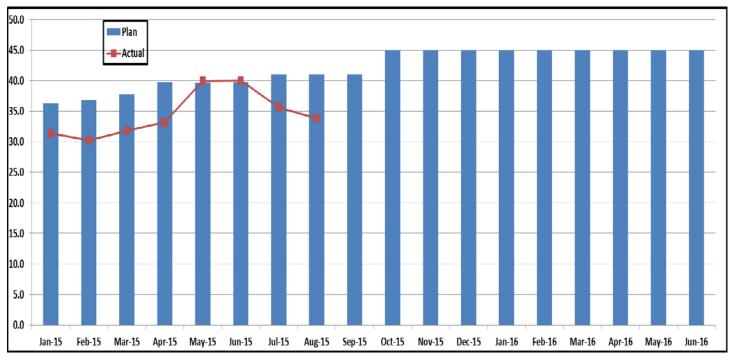
Mar-16

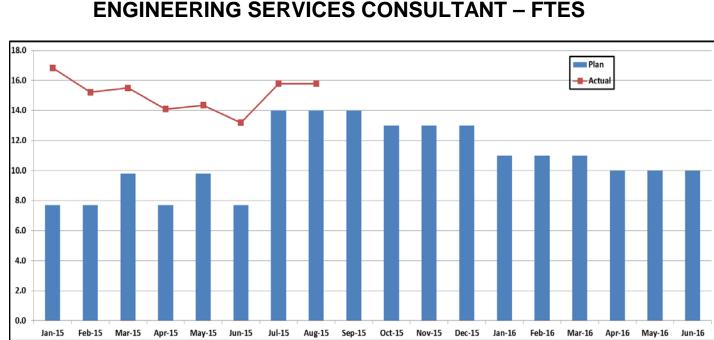
Apr-16

May-16

Jun-16

Aug-15





STAFFING STATUS (Continued) ENGINEERING SERVICES CONSULTANT – FTES

REAL ESTATE STATUS

Contract No.	Number of Parcels	Certified	Decertified	Appraisals Complete	Offers Made	Agreements Signed	Condemnations Filed	Relocations Complete	Parcels Available to WSCC
C0988 C/LAX Transit C		:							
Crenshaw Subdivision									
Full Takes	12	12		12	12	12	5	12	12
Part Takes (PT or SE)	10	9	1	9	9	4	4		9
TCE	10	10		10	10	9	5		10
Subtotal Parcels	32	31	1	31	31	25	14	12	31
Harbor Subdivision									
Full Takes	16	14		15	15	15	6	13	15
Part Takes (PT or SE)	18	17	2	18	16	7	5		11
TCE	3	2	1	2	2		2		2
Subtotal Parcels	37	33	3	35	33	22	13	13	28
Total CR/HS Parcels:	69	64	4	66	64	47	27	25	59
Southwestern Yard									
Full Takes	8	8		8	8	6	4	4	8
Part Takes	0								
TCE	0								
Subtotal Parcels:	8	8	0	8	8		4	4	8
Total SW Parcels:	8	8	0	8	8	6	4	4	8
C0990 C/LAX Advance	Utility Reloc	ations:			1	r			
Total Parcels:	0								
Total Project Parcels	77	72	4	74	76	53	31	29	67

• **76** parcels were certified originally. **4** were decertified due to changes in design and **1** property was added.

- **67** parcels acquired: **35** full takes (including HS-2706) and **32** part takes/Temporary Construction Easement (TCE) provided to WSCC.
- HS-1904-1 and 1907-1 (TCEs for the underground pedestrian easement) have been obtained and turned over to the contractor. The remaining TCE and part takes in these two parcels are anticipated to be turned over in September pending final agreement with owner and acceptance of street easements by the City of Inglewood.

QUALITY ASSURANCE STATUS

C0988 Crenshaw/LAX Transit Corridor Design-Build Contract

- Attended weekly Quality Staff Meetings with City of Los Angeles, Los Angeles Bureau of Contract Administration, HNTB, and WSCC Lead Quality personnel.
- WSCC Quality issued and resolved a Stop Work Order (SWO) this month. The SWO was related to Subcontractor Quality issues associated with the I-405 Bridge Structures.
- WSCC Quality Assurance issued four NCR's during the month. The issues were related to driven pile discrepancies at Manchester, column drain lines at the Green Line, La Brea rock pocket and seized coupler at the I-405 Bridge Shaft.
- WSCC Quality conducted a training class on the Project Sharepoint System.
- Metro Independent Testing Verifications in the field continued with concrete and soil compaction testing.
- The City of Los Angeles (ConAd Group) issued one Notice of Nonconforming Conditions (NNC) during the month. The issue was a failure to obtain an Overload Permit for the movement of a crane on City streets.
- Production in Sloan, Nevada has started on the MSE wall panels. The first panel delivery is scheduled for mid-September 2015.
- Production of the tunnel liner segments in Shafter, CA is in the planning stages.
- Participated in Construction Work Package Reviews and related Readiness Reviews for LAWA storm sewer and 30 inch FAA casting work.
- Began preparation for the Annual Metro Audit of WSCC Project activities scheduled to start in late September and conclude in October 2015.

ENVIRONMENTAL STATUS

C0988 Crenshaw/LAX Transit Corridor Design Build

- Reviewed and commented on the following Contractor Submittals:
 - Weekly Noise Monitoring Data for Expo Station, MLK Station, Vernon Station, La Brea Station and Century Station
 - o Green Construction Plan Monthly Report
 - Sustainability Plan Monthly Reports
 - o Weekly Storm Water Pollution Prevent Plan (SWPPP) inspection reports
 - o Weekly Fugitive Dust Inspection Reports
 - o Various Construction Work Plans
- Continue to document compliance with the Project Mitigation Monitoring and Reporting Plan (MMRP).
- WSCC conducted soil sampling to determine the extent of soil contamination associated with the Underground Storage Tanks (USTs) at CR-3701. On August 4, 2015, sampling results were submitted to the RWQCB.
- During the removal of two Underground Storage Tanks (USTs) at Parcel HS-2101 and Parcel HS-2206 nine additional tanks were discovered. All eleven tanks were removed and two closed in-place by filling with concrete slurry. On August 20, 2015 the LACDPW referred the case to the RWQCB. Metro received a "Directive to Take Corrective Action" from the RWQCB.
- Coordinated additional Phase 2 soil investigation at Victoria Yard and parcel CR-2802.
- Coordinated removal 10" Tesoro Oil pipeline in conflict with Vernon Station and UG #4.
- Prepared Quarterly Mitigation Measures Status Report for FTA.
- Attended meetings with the Seeds of Carver to develop courses on the history of the Los Angeles Flood Control Infrastructure, maintaining and reuse of surface rain water and preserving underground aquifers in the Los Angeles basin.

CONSTRUCTION RELATIONS STATUS

- Prepared outreach materials for the 40-day UG4 closure.
- Held briefing for businesses impacted by construction on Crenshaw Blvd. and Vernon.
- Continued outreach on 21-day Exposition to Coliseum Street closure.
- Held briefings for Federal and State Officials on construction progress in the Hyde Park neighborhood.
- Gave project tours to Acting FTA Administrator and Congresswoman Roybal-Allard's Chief of Staff.
- Conducted outreach to LAWA stakeholders on sewer relocation on Cargo Road.
- Coordinated with the City of Inglewood regarding night/weekend closures of La Brea and La Cienega.
- Continued outreach to businesses on Crenshaw Blvd. between Vernon and 48th St.
- Reviewed noise and vibration monitoring data and locations to ensure accuracy.
- Promoted TBM Artwork and Naming contests at local schools.
- Produced Blast emails and social media posts regarding Eat, Shop, Play Crenshaw and submitted weekly project update articles to the LA Sentinel.
- Participated in the following: Business Interruption Fund Workshop, Crenshaw Business Meeting, OASIS Community Meeting, Technical Assistance Panel for Leimert Park, TBM Video Shoot, Leimert Park BID, High School Artist Workshop, CD 8 Field Staff Briefing, TBM Workshop, County Strategic Plan Public Input Session, Meet the Buyer's Event; UG4 Crenshaw Business Meeting, State/Federal Elected Officials Briefing, AADAP Community Fundraising Event, CD 8 Community Town Hall Meeting, Taste of Soul Planning Meeting, Inglewood ABC Block Club Meeting and West Angeles CDC P.O.W.E.R. Community Fair.

SYSTEMWIDE DESIGN AND ART PROGRAM STATUS

- Responded to RFIs and submittal drawings.
- Continued to refine project artwork opportunities.
- Participated in Systemwide Design integration reviews and presentations.
- Continued work with a non-profit arts education organization for construction phase artworks developed by local youths to be installed in three locations in the City of Los Angeles and the City of Inglewood.
- Engaged in station artist outreach for youth photography participation in artwork development.
- Provided artwork samples to Design Builder for use in developing art fabricator bidding documents.

SAFETY & SECURITY STATUS

- Participated in weekly progress meetings with WSCC's Management and Construction Management Team to discuss safety/security related issues and construction schedules.
- Monitored construction activities on a daily basis including nights and weekends to ensure compliance with contract specifications.
- Conducted bi-weekly Site Safety Sweeps to enhance overall safety awareness. Several safety hazards observed and corrected immediately.
- Conducted All Hands Safety Meeting. WSCC's Executive Management participated in discussions on Drug and Alcohol Policy and Close-Out Access and Egress of underground stations and tunnels. Discussed Fencing Plan resolutions for work being performed in construction zones.
- Reviewed WSCC's safety submittals (La Brea and Florence False Bridge Work and UG4 CWP) to ensure compliance with construction specifications.
- Attended Walsh/Shea's Cal OSHA Pre-Job Meeting for the Vernon Station on July 9th.
- Attended Walsh/Shea's Readiness Review Meeting for the MSE Wall on July 16th.
- Walsh/Shea reported 103,328 work hours and no recordable incidents for the month of August 2015. Total Project-to-Date work hours are 1,527,008 and thirteen recordable incidents. The Project Incident Rate is 1.7. The Bureau of Labor Statistics (BLS) average recordable rate per 200,000 work-hours is 3.2.

Third Party	Type of Agreement	Forecast Execution Date	Required Need Date	Status/ Comments
City of Los Angeles	Amendment to Master Cooperative Agreement	N/A	N/A	Parties will work under 2003 MCA.
City of Inglewood	Master Cooperative Agreement	12/15	N/A	Executed Letter of Agreement April 2012. Metro working on outstanding issues.
Los Angeles Department of Water and Power	Amendment to Memorandum of Understanding	N/A	N/A	Metro and LADWP will work under 2002 Utility Cooperative Agreement which remains in effect.
Los Angeles County Public Works	Letter of Agreement	4/11	3/12	Executed
Caltrans	Amendment	8/11	3/12	Executed
Private Utilities	LOA, MOU or UCA	5/11 to 5 / 13	N/A	Metro is working with affected third party utilities under work orders unless license agreements dictate relocation by utility company. No additional agreements required.

ADVANCED UTILITY RELOCATION STATUS

• Tesoro Oil – design completed for 8" gas line. Construction should commence in September 2015 and complete by November 2015.

Crenshaw/LAX Transit Project Peak Hour & Nighttime Construction Variances for the City of LA

- Metro has permit variances for nighttime and early morning construction for Segments A thru E.
- All permits have to be renewed every six months from date of issuance by the Los Angeles Police Commission.



CPUC CROSSING SUMMARY

• The CPUC has approved all packages.

Application	Location	Туре	City				
A1211018	Eucalytpus Avenue	Grade Crossing	Inglewood				
A1211018	Centinela Avenue	Grade Crossing	Inglewood				
A1211018	Pedestrian Crossing	Grade Separated (Underpass)	Inglewood				
41010000	Och Church	Oranda Oranada a	la sela con a d				
A1212030	Oak Street	Grade Crossing	Inglewood				
A1212030	Cedar Avenue	Grade Crossing	Inglewood				
A1212030	Ivy Avenue	Grade Crossing	Inglewood				
A1212030	High Street	Grade Crossing	Inglewood				
A1212029	Arbor Vitae Street	Grade Crossing	Inglewood				
A1212029	Hindry Avenue	Grade Crossing	Inglewood				
A1212029	Pedestrian Crossing at Florence/West station	Grade Crossing	Inglewood				
A1212029	West Boulevard	Grade Crossing	Los Angeles/Inglewood				
A1212029	Brynhurst Avenue	Grade Crossing	Los Angeles				
A1301012	West 59th Street	Grade Crossing	Los Angeles				
A1301012	Slauson Avenue	Grade Crossing	Los Angeles				
A1301012	West 57th Street	Grade Crossing	Los Angeles				
A1301012	West 54th Street	Grade Crossing	Los Angeles				
A1301012	West 52nd Street	Grade Crossing	Los Angeles				
A1301012	West 50th Street	Grade Crossing	Los Angeles				
A1301012	West 48th Street	Grade Crossing	Los Angeles				
A1302025	Hornet Way	Grade Separation	El Segundo				
A1302025	Aviation Boulevard	Grade Separation	Los Angeles				
A1302025	I-105 Freeway	Grade Separation	Los Angeles				
A1302025	Imperial Highway	Grade Separation	Los Angeles				
A1302025	111th Street	Grade Separation	Los Angeles				
A1302025	104th Street	Grade Separation	Los Angeles				
A1302025	Century Boulevard	Grade Separation	Los Angeles				
A1302025	Manchester Avenue	Grade Separation	Inglewood				
A1302025	La Cienega Boulevard	Grade Separation	Inglewood				
A1302025	I-405 Freeway	Grade Separation	Inglewood				
A1302025	Hyde Park Boulevard	Grade Separation	Inglewood				
A1302025	La Brea Avenue	Grade Separation	Inglewood				
A1302025	Pedestrian Crossing at La Brea-Florence Station (East)	Grade Crossing	Inglewood				
A1302025	Pedestrian Crossing at La Brea-Florence Station (West)	Grade Crossing	Inglewood				
= Highlighted grade crossing/grade separations have been approved.							

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.

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 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.
December 6, 2012	Received proposals for Contract C0988 C/LAX Transit Corridor.
February 22, 2013	Issued Amendment No. 8 requesting Best and Final Offers (BAFO) for Contract C0988 C/LAX Transit Corridor.
March 15, 2013	Received BAFO's for Contract C0988 C/LA Transit Corridor.
May 23, 2013	Board amended the Agency's FY14 Proposed Budget to include funding of \$80 million for an underground station at Leimert Park Village as part of the baseline project.
June 27,2013	The Board awarded Contract C0988 Crenshaw/LAX Transit Corridor to Walsh-Shea Corridor Constructors.
July 10, 2013	Issued notice of award to Walsh-Shea Corridor Constructors, Contract C0988 Crenshaw/LAX Transit Corridor.

CHRONOLOGY OF EVENTS (Continued)

August 1, 2013	United States Department of Transportation approves Metro's request to increase the Crenshaw/LAX Project Budget to \$2,058 million.
August 8, 2013	Issued notice of execution of the contract was issued to Walsh-Shea Corridor Constructors, Contract C0988 Crenshaw/LAX Transit Corridor.
September 10, 2013	Issued Notice to Proceed to Walsh-Shea Corridor Constructors, Contract C0988 Crenshaw/LAX Transit Project.
December 5, 2013	The Board approved Memorandum of Understanding with the Los Angeles World Airports for a parallel design and possible construction modifications near Aviation/Century Station to accommodate elements of LAWA's SPAS.
December 5, 2013	The Board awarded Contract C0992 with Rocla Concrete Tie, Inc; for the procurement of concrete ties and assembly items.
January 21, 2014	A Groundbreaking Ceremony was held at the Crenshaw/Exposition Station.
January 23, 2014	The Board awarded Contract C0992A Rail and Bumping Posts to LB Foster Rail Technologies Corp.
July 25, 2014	Century Crunch" – weekend demolition of the defunct Century railroad bridge at the intersection of Century Blvd. and Aviation.
August 21, 2014	Substantial Completion issued for Advanced Utility Relocations Contract C0990.
August 29, 2014	Released Invitation for Bid for Contract C0991 Crenshaw/LAX Southwestern Yard (Division 16) Maintenance Facility.
September 19, 2014	CPUC has approved all five (5) grade crossing applications and no further actions are required.
January 22, 2015	Received Technical and Price Bids for the Southwestern Yard (Division 16) Maintenance Facility.
March 25, 2015	Opened Price Bids for the Southwestern Yard (Division 16) Maintenance Facility.

CHRONOLOGY OF EVENTS (Continued)

May 28, 2015	The Board awarded Contract C0991 Division 16: Southwestern Yard to Hensel Phelps/Herzog JV. Also increased by \$22.0 million the Life of Project Budget for the Southwestern Yard Project to a new amount of \$307.2 million.
May 28, 2015	The Board approved Design Option 3 for the track alignment to accommodate the future Metro Connector Transit Station (96 th St. Station).
June 29, 2015	Issued Notice to Proceed to Hensel Phelps/Herzog JV, Contract C0991 Division 16: SouthwesternYard.
July 23,2015	The Board approved the Official and Operational Names of the eight stations.

CONTRACT C0988 STATUS

Crenshaw/LAX Transit Corridor

DE Design Contractory Hotak M								
PE Design Contractor: Hatch Me CM Consultant: Stantec	ott MacDo	onald (Hivi	Contract No.: C0988					
Contractor: - Walsh Shea Corrie	lor Const	ructors (V	VSCC)		Status as of Aug 28, 2015	· Same		
Progress/Work Completed: Design			Areas of Concern: - Possible cobbles and boulders found during	ng excavation at Expo and				
- Submitted Segment A Final Design Segment A Approved for Constructio				ed	MLK station.			
- Submitted Segment C Final Design	on Local Si	treets.	Station.		 Contaminated materials (weathered gasol TPH) discovered at Expo site. 	ine with high levels of		
- Submitted Approved for Construction	n on Tractio				- Segment A guideway work may be impact			
 Submitted Approved for Construction Submitted Approved for Construction 		unication			westward shifting of the LRT tracts in Guide	eway at Segment A for the		
		iumouton.			future 96th Street Station. - Street package decision by the city family	reviews may impact the		
Construction	. .		10 "1		start of the Park Mesa street work.	iono may impact the		
 Continued potholing along the Grad Continued geotechnical monitoring 				IG#3	- Relocation of gas line which conflicts with	west piles at UG #4 may		
- Continued with SWPPP Implementa	ation – Segr	ments A, B	& C.		delay the start of decking work.Contractor's schedule does not accurately	forecast its work efforts.		
 Continued soil excavation at Vernor Completed Utility Relocation/Protection 			•		,			
- Commenced leveling pad work at th			walls.					
- Commenced OCS foundation const			•					
 Completed pile caps at the Manches Commenced column construction at 			Ie.					
- Completed falsework erection at the	Century B	ridge.	, ,					
 Commenced superstructure construint Completed pile cap construction of a 				-				
- Completed pile cap construction of - Completed abutment 10 Stem work								
- Commenced superstructure work at		y Bridge.						
 Commenced bracing installation at Commenced abutment stem wall at 		Bridae.						
- Completed pile cap construction at t	he 111th B	ridge						
 Completed pile cap construction at t Commenced abutment stem construction 			o Tio-In					
- Commenced column work at the Gr								
Schedule Assessment:					Cost Assessment:			
Metro's assessment of the contractor		update is t	hat they a	re behind	The current construction contract cost forecast is \$1,282.84 million			
on meeting interim design milestones	i.				and is within the Board authorized budget.			
Contractor's Aug 2015 schedule upda					The Contractor submitted their 24th payment application in the approved amount of \$14,978,743.14.			
Substantial Completion is 95 calenda	r days behi	nd the curr	ent contra	ct date.				
					*Please note that not all executed modifica included in the Contractor current payment	tions may have been application.		
Schedule Summary:					Cost Summary:	\$ In millions		
1. Date of Award:		08/01/13			1. Award Value:	1,272.63		
2. Notice to Proceed:		09/10/13			2. Executed Modifications:	10.21		
 Original Substantial Completion D 	uration.	1824			 Approved Change Orders: 			
5		1954			 Approved Change Orders. Current Contract Value (1 + 2 + 3): 	1,282.84		
						,		
5. Elapsed Time from NTP:		717		Calendar	5. Incurred Cost:	443.74		
	Original	Current		Day	PERCENT COM from 9/10/13 to 08			
Milestones	Contract	Contract	Forecast	Variance				
Milestone 1 - Contract Substantial Completion	09/08/18	10/13/18	01/16/19	-95		95.6%		
	03/09/18	04/12/10	07/09/18	-87	Design			
Milestone 2 - UFS Completion	03/09/18	04/13/18	07/09/18	-87	20.5%			
Milestone 3 - Commence SIT Phase I	06/09/18	07/14/18	10/19/18	-97	Construction			
Milestone 4 - Const./Turnover Parcels	12/04/15	12/04/15	12/02/15	2	Tatal Insurred			
SW-0101, 0102, 0103	12/04/15	12/04/15	12/02/15	2	Total Incurred 34.6%			
Milestone 5 - Const./Turnover Parcels SW-0002, 0003, 0004, 0104	06/05/17	06/05/17	04/10/17	56				
Milestone 6 - Const./Turnover Parcels	08/01/17	08/01/17	06/28/17	34	0.0% 20.0% 40.0% 60. Percent Complet			
SW-0001	00/01/17	00/01/17	00/20/17	34		-		
					Construction physical percent con mobilization and general requirem			
				1	moonization and general requirem	5/110		

CONTRACT C0990 STATUS

Crenshaw/LAX Advanced Utility Relocations

PE Design Contractor: Hatch CM Consultant: Stantec Contractor: - Metro Builders a				Contract No.: C0990 Status as of Aug 28, 2015	
Progress/Work Completed: - The construction was substantial	ly completed on Aug	21, 2014		Areas of Concern:	
Schedule Assessment: Metro has agreed to grant a total or result of lost production due to sar methodology for sewer line work a work hour restriction to 67th & Cree	ndy soil conditions and t 59th & Crenshaw, a	d revised ir	nstallation	Cost Assessment: The current construction contract of Board authorized budget. The unpaid amount is the scope do remaining balance of provisional si	eletion from the base contract and
Schedule Summary:				Cost Summary:	\$ In millions
1. Date of Award:	05/30/12			1. Award Value:	7.83
2. Notice to Proceed:	07/17/12			2. Executed Modifications:	0.97
3. Original Substantial Completion	Duration: 365			3. Approved Change Orders:	0.49
4. Current Substantial Completion	Duration: 468			4. Current Contract Value (1 + 2 ·	+ 3): 9.29
5. Elapsed Time from NTP:	753			5. Incurred Cost:	9.12
Milestones	Original Current Contract Contract	Forecast	Calendar Day Variance		NT COMPLETE /17/12 to 8/21/14
Milestone 1 - Contract Substantial Completion	07/17/13 11/18/13	08/21/14	-276	Design	
				Construction	99%
				Total Incurred	98%
				Cost 0% 20% 40%	
					t Complete Progress
				Construction physical per mobilization and general	

CONTRACT C0991 STATUS

Southwestern Yard

Contractor: - Hensel Pholps / Herzog JV Status as of Aug 28, 2015 Progress/Mox Completed: - Contractor is working on early contract required submittals. - Initial pro-contract required submittals. - Right-of-Way to be provided by Metro to design - build contractor by 12/07/15 - Right-of-Way to be provided by Metro to design - build contractor by 12/07/15 - Right-of-Way to be provided by Metro to design - build contractor by 12/07/15 - Contract to Hensel Pholps / Herzog JV was awarded for \$172.3 millions and approved by Metro. Schedule Summary: 1. Date of Award: 2. Notice to Proceed: 2. Notice to Proceed: 2. Subtantial Completion Duration: 1. 220 5. Elapsed Time from NTP: 6. Contract Change Orders: 5. Contract Value (1 + 2 + 3): 1. Current Contract Value (1 + 2 + 3): 1. Incurred Cost: 5. Incu	PE Design Contractor: Hatch Mott MacDonald (HMM) CM Consultant: Stantec					Contract No.: C0991			5 411
- Right -of-Way to be provided by Metro to design -build contractor by 12/07/15 - Contract to Hensel Phelps / Herzog JV was awarded for \$172.3 million - First pay application will be submitted once 120 day schedule is subm and approved by Metro. - First pay application will be submitted once 120 day schedule is subm and approved by Metro. - First pay application will be submitted once 120 day schedule is subm and approved by Metro. - First pay application will be submitted once 120 day schedule is subm and approved by Metro. - First pay application will be submitted once 120 day schedule is subm and approved by Metro. - First pay application will be submitted once 120 day schedule is subm and approved by Metro. - First pay application will be submitted once 120 day schedule is subm and approved by Metro. - First pay application will be submitted once 120 day schedule is subm and approved by Metro. - First pay application will be submitted once 120 day schedule is subm and approved by Metro. - First pay application will be submitted once 120 day schedule is subm and approved by Metro. - First pay application will be submitted once 120 day schedule is subm and approved by Metro. - First pay application will be submitted once 120 day schedule is subm - A ward Value: 172.30 - Elapsed Time from NTP: - 60 - 12.20 - 5. First pay applications: - 0.00 - Contract Value (1 + 2 + 3): - 172.30 - 1	Progress/Work Completed: - Contractor is working on early contr - Initial 120 Day schedule is approved - Searching for IPMO location within - Initial pre-construction meeting held	act required d. two mile rad with key st	dius of cons takeholders	struction sit	te.	Are	as of Concern:	3, 2015	
1. Date of Award: 28-May-15 1. Award Value: 172.30 2. Notice to Proceed: 29-Jun-15 2. Executed Modifications: 0.00 3. Original Substantial Completion Duration: 1,220 3. Approved Change Orders: 0.00 4. Current Substantial Completion Duration: 1,220 4. Current Contract Value (1 + 2 + 3): 172.30 5. Elapsed Time from NTP: 60 5. Incurred Cost: 5.71 Variance Milestones Original Contract Current Forecast Calendar Day Variance MS#1 Yard and Main Shop Design Completion 26-Oct-16 26-Oct-16 26-Oct-16 26-Oct-16 0 MS#2 Main Shop Communication Room Completion 15-Jan-18 15-Jan-18 0 0 0% 0% 0% 0% MS#4 Southwestern Yard Substantial Completion 30-Apr-18 30-Apr-18 0 0% 0% 0% 0% 0% 0% 0% 0% 10% 0%		tro to desig	ın -build cor	ntractor by	12/07/15.	- C - F	ontract to Hensel Phe rst pay application wil		
1. Date of Award: 28-May-15 1. Award Value: 172.30 2. Notice to Proceed: 29-Jun-15 2. Executed Modifications: 0.00 3. Original Substantial Completion Duration: 1,220 3. Approved Change Orders: 0.00 4. Current Substantial Completion Duration: 1,220 4. Current Contract Value (1 + 2 + 3): 172.30 5. Elapsed Time from NTP: 60 5. Incurred Cost: 5.71 Variance Milestones Original Contract Current Contract Calendar Day Variance MS#1 Yard and Main Shop Design 26-Oct-16 26-Oct-16 26-Oct-16 26-Oct-16 0 MS#2 Main Shop Communication Room Completion 15-Jan-18 15-Jan-18 0 0 0 MS#4 Southwestern Yard Substantial Completion 30-Apr-18 30-Apr-18 0 <th>Schedule Summary:</th> <th></th> <th></th> <th></th> <th></th> <th>Cos</th> <th>t Summary:</th> <th></th> <th>\$ In millions</th>	Schedule Summary:					Cos	t Summary:		\$ In millions
2. Notice to Proceed: 29-Jun-15 2. Executed Modifications: 0.00 3. Original Substantial Completion Duration: 1,220 3. Approved Change Orders: 0.00 4. Current Substantial Completion Duration: 1,220 5. Elapsed Time from NTP: 60 4. Current Contract Value (1 + 2 + 3): 172.30 5. Elapsed Time from NTP: 60 5. Incurred Cost: 5.71 PERCENT COMPLETE Milestones Cortract Current Forecast Day Variance MS#1 Yard and Main Shop Design 26-Oct-16 26-Oct-16 26-Oct-16 0 MS#3 Main Shop Communication Room 15-Jan-18 15-Jan-18 0 0 MS#3 Main Shop Substantial 30-Apr-18 30-Apr-18 0 0 MS#4 Southwestern Yard Substantial 31-Oct-18 31-Oct-18 0 0 MS#4 Southwestern Yard Substantial 31-Oct-18 31-Oct-18 0 0 0 0% 0% 60% 80% 10% 0 0% 0%	•		28-May-15				-		
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MS#1 Yard and Main Shop Design Completion 26-Oct-16 26-Oct-16 26-Oct-16 26-Oct-16 0 MS#2 Main Shop Communication Room Completion 15-Jan-18 15-Jan-18 0 0 MS#3 Main Shop Substantial Completion 30-Apr-18 30-Apr-18 0-Apr-18 0 MS#4 Southwestern Yard Substantial Completion 31-Oct-18 31-Oct-18 31-Oct-18 0 MS#4 Southwestern Yard Substantial Completion 31-Oct-18 31-Oct-18 0 0	Milestones			Forecast	Day				/15
Completion Image: Completion Image: Completion Design 4.4% Image: Completion MS#2 Main Shop Communication Room 15-Jan-18 15-Jan-18 15-Jan-18 0 MS#3 Main Shop Substantial 30-Apr-18 30-Apr-18 30-Apr-18 0 Completion 31-Oct-18 31-Oct-18 31-Oct-18 0 MS#4 Southwestern Yard Substantial 31-Oct-18 31-Oct-18 0 MS#4 Southwestern Yard Substantial 31-Oct-18 31-Oct-18 0 MS#4 Southwestern Yard Substantial 31-Oct-18 0 0% 0% MS#4 Southwestern Yard Substantial 31-Oct-18 0 0% 20% 40% 60% 80% 100%	MS#1 Yard and Main Shop Design								
MS#3 Main Shop Substantial Completion 30-Apr-18 30-Apr-18 0 Construction 0.0% 0.0% MS#4 Southwestern Yard Substantial Completion 31-Oct-18 31-Oct-18 31-Oct-18 0 Total Incurred Cost 0.0% 0.0% 0.0% MS#4 Southwestern Yard Substantial Completion 31-Oct-18 31-Oct-18 0 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	MS#2 Main Shop Communication Room				-		Design 4.4	%	
MS#4 Southwestern Yard Substantial Completion 31-Oct-18 31-Oct-18 0 Total Incurred 0% 20% 40% 60% 80% 100%	MS#3 Main Shop Substantial	30-Apr-18	30-Apr-18	30-Apr-18	0		Construction 0.0%		
Percent Complete Progress	MS#4 Southwestern Yard Substantial	31-Oct-18	31-Oct-18	31-Oct-18	0	Т	Cost	20% 40% 60%	
Construction physical percent complete excludes mobilization and general requirements								n physical percent complete	

CONTRACT C0992 STATUS

Concrete Ties

CM Consultant: Stantec					Contract No.: C0992		
Contractor: Rocla Concrete Tie Inc. Progress/Work Completed: - All 19,936 concrete ties that have been delivered to the job site are not Buy America compliant. The contractor will be removing the ties and delivering new ties to the job site that are Buy America compliant. The ties will be delivered in time so as not to impact the C0988 design-build contractor's construction schedule.					Status as of Aug 28, 2015 Areas of Concern: - Compliance with Buy America requirement unde	r review by FTA.	
Schedule Assessment: Metro has agreed to grant a 15 cale limited access to the yard due to the (BNSF),which was beyond the reaso All concrete ties have been delivered	operation o onable contr	f Burlingtor ol of RCTI.	n Northern				
 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: 			12/10/13 12/23/13 220 235 235	3) 5	Cost Summary:\$ In mi1. Award Value:2. Executed Modifications:3. Approved Change Orders:4. Current Contract Value (1 + 2 + 3):5. Incurred Cost:	llions 2.16 0.09 2.25 2.25	
Milestones Milestone 1 - Contract Substantial Completion	Original Contract 07/31/14	Current Contract 08/15/14	Forecast 08/15/14	Calendar Day Variance 0 0 0 0 0 0 0 0	PERCENT COMPLE from 12/23/2013 to 8/15/1 Delivered Shipped Total Incurred Cost 0% 20% 40% 60% Percent Complete Pro	4 100% 100% 80% 100%	
					Construction physical percent complete mobilization and general requirements	-	

CONTRACT C0992A STATUS

Running Rail and Bumping Posts

PE Design Contractor: Hatch CM Consultant: Stantec Contractor: LB Foster Rail Ter			IM)		Contract No.: C0992A Status as of Aug 28, 2015
Progress/Work Completed: - All 115RE SS Blank Stick Rails h - All 115RE HH rail have been deli - All Bumping Posts have been deli	ave been del vered to job s	ivered to th	-		Areas of Concern:
Schedule Assessment: All running rails and bumping posts schedule.	: have been d	elivered ah		Cost Assessment: The current contract cost is \$5,2 million and has been completely paid to contractor.	
Cabadula Cummanu					Cont Cummony francisco
Schedule Summary: 1. Date of Award:			01/23/14		Cost Summary: \$ In millions 1. Award Value: 5.2
 Date of Award. Notice to Proceed: 			03/07/14		2. Executed Modifications:
 Original Substantial Completion 	Duration:		300		3. Approved Change Orders:
4. Current Substantial Completion			558		4. Current Contract Value (1 + 2 + 3): - 5.2
 5. Elapsed Time from NTP: 	Duration.		448		5. Incurred Cost: 5.2
Milestones	Original Contract	Current Contract	Forecast	Calendar Day Variance	PERCENT COMPLETE from 3/7/2014 to 05/29/15
Milestone 1 - Contract Substantial	12/31/14	09/30/15	05/08/15	145	
Completion					Construction 100%
				0	
				0	
				0	Total Incurred Cost
				0	0% 20% 40% 60% 80% 100%
				0	Percent Complete Progress
					Construction physical percent complete excludes mobilization and general requirements



GREEN LINE - Underpass Bent 1A Column Formwork Placement.



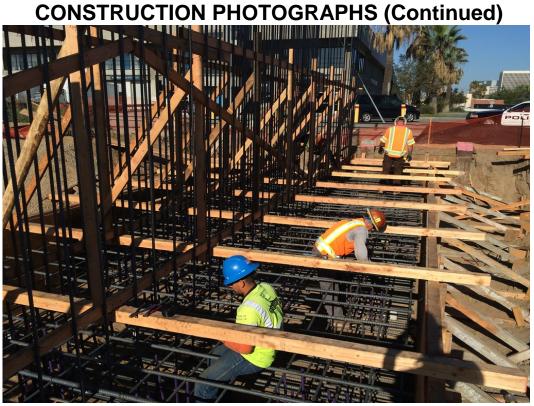
GREEN LINE - Underpass Abutment 6 Footing.



AVIATION/CENTURY STATION – Underpass Girder Stem and Overhang Formwork Placement.



AVIATION/CENTURY STATION - Underpass Falsework Span 4 to 7.



AVIATION/CENTURY – Underpass abutment 1 footing debris removal and epoxy U-bar tying.



MANCHESTER AVENUE - Underpass abutment 1 footing steel placement.



I-405 Underpass Bent 3 CIDH Concrete Pour.



CENTINELA – Utility potholing on the north end.



LEIMERT PARK STATION - Installation of T-packs and look outs for Tier 1 support.



LEIMERT PARK STATION – Lagging operation at the station.



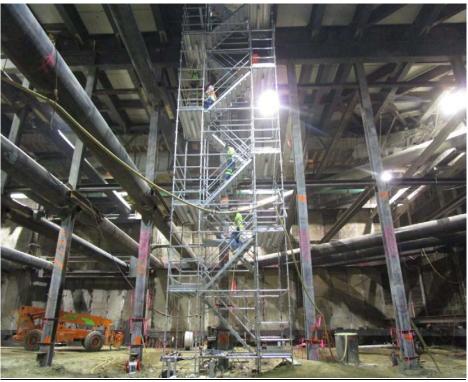
MARTIN LUTHER KING JR. STATION – Mid span strut support.



MARTIN LUTHER KING JR. STATION – Strut Installation at the station.



EXPOSITION STATION – Tier 3 excavation in the north-west portion of the north station box.



EXPOSITION STATION – Stair tower in operation.

PROJECT COST STATUS – SOUTHWESTERN YARD

SCC	DESCRIPTION	ORIGINAL	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		FORECAST
CODE	DESCRIPTION	BUDGET	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
10	GUIDEWAYS	0	0	0	0	0	0	0	0	0	0
20	STATIONS	0	0	0	0	0	0	0	0	0	0
30	SUPPORT FACILITIES (Y & S)	85,546,835	0	85,546,835	0	86,532,695	0	0	0	86,889,531	(1,342,696)
40	SITEWORK\SPECIAL CONDITIONS	35,932,000	0	35,932,000	(6,515,938)	31,173,000	(0)	41,276	484,062	38,273,000	(2,341,000)
50	SYSTEMS	32,933,700	0	32,933,700	0	32,991,000	0	0	0	32,991,000	(57,300)
	(10-50) CONSTRUCTION	154,412,535	0	154,412,535	(6,515,938)	150,696,695	(0)	41,276	484,062	158,153,531	(3,740,996)
60	RIGHT-OF-WAY	100,080,000	0	100,080,000	0	91,236,457	(0)	90,953,927	(80,000)	100,000,000	80,000
70	VEHICLES	0	0	0	0	0	0	0	0	0	0
80	PROFESSIONAL SERVICES	35,601,095	0	35,601,095	(2,514,965)	19,019,516	395,810	3,889,177	(528,962)	31,815,199	3,785,896
90	PROJECT CONTINGENCY	17,106,370	0	17,106,370	0	0	0	0	124,900	17,231,270	(124,900)
TOTAI	L	307,200,000	0	307,200,000	(9,030,903)	260,952,668	395,809	94,884,379	0	307,200,000	(0)
C0991	1 PAINT & BODY SHOP PROJECT										1
DESC	CRIPTION	ORIGINAL		FBUDGET		TMENTS		DITURES		FORECAST	FORECAST
		BUDGET	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
86130	1 DIV 22 PAINT & BODY SHOP	11,000,000	0	11,000,000	0	6,914,926	402	193,045	0	11,000,000	0
			-		()						
FKO J	IECT GRAND TOTAL	318,200,000	0	318,200,000	(9,030,903)	267,867,594	396,212	95,077,425	0	318,200,000	(0)

PROJECT COST ANALYSIS

The project number 865512, 860003 and 861301 are internal to Metro and are used to differentiate between various components of the project.

Original Budget:

The Board in May 2015 established the Life-of-Project (LOP) budget of \$307.2 million for the Southwestern Yard Project.

Current Budget:

The Board in May 2015 approved an increase for the funding for the Southwestern Yard by \$22.0 million to increase the Life-of-Project (LOP) budget to \$307.2 million to allow for the award of design-build Contract C0991 Southwestern Yard Project. Of the total \$307.2 million, \$150.2 million is funded in the Crenshaw/LAX Transit Project life of project budget which includes the original 49% allocation amount of \$139.4 million plus a new \$10.8 million reduction from the Crenshaw/LAX Transit Project contingency line item in the budget. There is no increase in the LOP for the Crenshaw/LAX Transit Project. The original 51% share associated with future Green Line related extensions in an amount of \$145.8 million was increased by \$11.2 million for a new total of \$157.0 million.

In addition to the \$307.2 million there is another \$11.0 million that is the budget for the paint and body shop, under another Metro internal cost project number, which funding was approved by a prior agreement for a paint and body shop to support the Green Line shops and was required for the award of the design-build Contract C0991 Southwestern Yard Project.

The grand total of the combined cost is \$318.2 million.

PROJECT COST ANALYSIS (Continued)

Current Forecast:

The project forecast of \$318.2 million is maintained for month ending September 17, 2015. There is no forecast variance between the budget and forecast.

Although there are no variances with total current forecast, there are forecast increases and decreases within each individual line item to reflect actual contract that was awarded to Hensel Phelps / Herzog JV and distribution of the contract and commitments between three project numbers 865512, 860003 and 861301.

Commitments:

The commitments are cumulative through September 17, 2015. Total commitment was reduced to \$267.9 to reflect a reallocation between the 49% and 51% cost sharing.

Expenditures:

The expenditures are cumulative through September 17, 2015. The total expenditures increased by \$0.4 million for this period. The expenditure is up to \$95.1 million so far which represents 29.9% of the project budget which includes main yard and the paint and body shop.

COST AND BUDGET TERMINOLOGY

Project Cost Descriptions -					
ORIGINAL BUDGET	The Original Project Budget as established by the Metropolitan Transportation Authority (Metro) Board on October 27, 2011.				
CURRENT BUDGET	The Original Budget plus all budget amendments approved by formal Metro 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 Metro 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 Metro for contractor or consultant invoices, third party invoices, staff salaries, real estate and other expenses that is reported in Metro'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 Elemen	t 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 Metro as a direct result of project activities. This includes cost sharing construction items, insurance premium rebates, and the like.				

APPENDIX

LIST OF ACRONYMS

ACE ADA ADR AFC ALJ AMC APM ATC ATC ATSAC BAFO BID BIM BLS BNSF BOC CADD CALTRANS CARB CCTV CD CD CD CD CD CD CD CD CD CD CD CD CD	California Air Resources Control Board Closed Circuit Television Calendar Day Council District Contract Data Requirement List Categorical Exemption California Environmental Quality Act
CFR CIDH	Code of Federal Regulations Cast in Drilled Hole
CIP CLC	Cast in Place Community Leadership Council
CM CMAQ CMU	Construction Manager Congestion Mitigation and Air Quality Improvement Program Concrete Masonry Unit
CN CO	Change Notice Change Order
COI COLA	City of Inglewood City of Los Angles
СРМ	Critical Path Method
CPUC CR	California Public Utilities Commission
	Camera Ready Cultural Resources Monitoring and Mitigation Plan
CSM	Cutter Soil Mixing
CSP	Cost and Schedule Proposal
CSPP	Construction Safety Phasing Plan

CTBCement Treated BaseCTCCalifornia Transportation CommissionCUDContract Unit DescriptionCWPConstruction Work PlanDBDesign BuildDBDesign Build Business EnterpriseDDRDesign Deviation ReportDOTDepartment of TransportationDRBDispute Review BoardDWPDepartment of Water and PowerE&OEqual Employment OpportunityEIREnvironmental Impact ReportEISEnvironmental Impact StatementENCEquipment Noise CertificationEPAEnvironmental Site AssessmentFAAFederal Aviation AdministrationFARFederal Aviation AdministrationFARFederal Aviation AdministrationFARFederal Acquisition RegulationFAAFederal Acquisition RegulationFAAFederal Acquisition RegulationFAAFederal Emergency Management AgencyFFGAFull Funding Grant AgreementFISFinal DesignFLSRFire Life Safety ReportFONSIFinding of No Significant Impact ReportFSEISFinal Supplemental Environmental Impact StatementFAAFederal Rairoad AdministrationFSEIRFinal Supplemental Environmental Impact ReportFDSIFinal Supplemental Environmental Impact ReportFDSIFinal Supplemental Environmental Impact ReportFSEISFinal Supplemental Environmental Impact ReportFSEIRFinal Supplemental Environmental Impact ReportFSEIS		
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FARFederal Acquisition RegulationFATFactory Acceptance TestingFCBCFaith Central Bible ChurchFDFinal DesignFEIRFinal Environmental Impact ReportFEISFinal Environmental Impact StatementFEMAFederal Emergency Management AgencyFFGAFull Funding Grant AgreementFISFinancial Information SystemFLSRFire Life Safety ReportFONSIFinding of No Significant Impact ReportFSEIRFinal Supplemental Environmental Impact ReportFSEIRFinal Supplemental Environmental Impact StatementFTAFederal Transit AdministrationFTEFull Time EquivalentGBRGeotechnical Baseline ReportGDSRGeotechnical Design Summary ReportGFEGood Faith EffortHDPEHigh Density PolyethyleneHMMHatch Mott MacDonaldHNTBHoward, Needles, Tammen and Bergendoff	ESA	Environmental Site Assessment
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FFGAFull Funding Grant AgreementFISFinancial Information SystemFLSRFire Life Safety ReportFONSIFinding of No Significant ImpactFRAFederal Railroad AdministrationFSEIRFinal Supplemental Environmental Impact ReportFSEISFinal Supplemental Environmental Impact StatementFTAFederal Transit AdministrationFTEFull Time EquivalentGBRGeotechnical Baseline ReportGDRGeotechnical Data ReportGDSRGeotechnical Design Summary ReportGFEGood Faith EffortHDPEHigh Density PolyethyleneHMMHatch Mott MacDonaldHNTBHoward, Needles, Tammen and Bergendoff	FEIS	Final Environmental Impact Statement
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FRAFederal Railroad AdministrationFSEIRFinal Supplemental Environmental Impact ReportFSEISFinal Supplemental Environmental Impact StatementFTAFederal Transit AdministrationFTEFull Time EquivalentGBRGeotechnical Baseline ReportGDRGeotechnical Data ReportGDSRGeotechnical Design Summary ReportGFEGood Faith EffortHDPEHigh Density PolyethyleneHMMHatch Mott MacDonaldHNTBHoward, Needles, Tammen and Bergendoff	FLSR	Fire Life Safety Report
FSEIRFinal Supplemental Environmental Impact ReportFSEISFinal Supplemental Environmental Impact StatementFTAFederal Transit AdministrationFTEFull Time EquivalentGBRGeotechnical Baseline ReportGDRGeotechnical Data ReportGDSRGeotechnical Design Summary ReportGFEGood Faith EffortHDPEHigh Density PolyethyleneHMMHatch Mott MacDonaldHNTBHoward, Needles, Tammen and Bergendoff	FONSI	Finding of No Significant Impact
FSEISFinal Supplemental Environmental Impact StatementFTAFederal Transit AdministrationFTEFull Time EquivalentGBRGeotechnical Baseline ReportGDRGeotechnical Data ReportGDSRGeotechnical Design Summary ReportGFEGood Faith EffortHDPEHigh Density PolyethyleneHMMHatch Mott MacDonaldHNTBHoward, Needles, Tammen and Bergendoff	FRA	
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GDRGeotechnical Data ReportGDSRGeotechnical Design Summary ReportGFEGood Faith EffortHDPEHigh Density PolyethyleneHMMHatch Mott MacDonaldHNTBHoward, Needles, Tammen and Bergendoff	FTE	Full Time Equivalent
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HNTB Howard, Needles, Tammen and Bergendoff		
HPH Hensel Phelps/Herzog Joint Venture		
	HPH	Hensel Phelps/Herzog Joint Venture

APPENDIX

IFB	Invitation for Bid
IFC	Issued for Construction
IPMO	Integrated Project Management Office
ITF	Intermodal Transportation Facility
JHA	Job Hazard Analysis
JV	Joint Venture
LA	Los Angeles
LABOE	Los Angeles Bureau of Engineering
LABOS	Los Angeles Bureau of Sanitation
LABSL	Los Angeles Bureau of Street Lighting
LACO	Los Angeles County
LACFCD	Los Angeles County Flood Control District
LACMTA	Los Angeles County Metropolitan Transportation Authority
LACSD	Los Angeles Sanitation Department
LADOT	Los Angeles Department of Transportation
LADPW	Los Angeles Department of Public Works
LADWP	Los Angeles Department of Water and Power
LAFD	Los Angeles Fire Department
LAUSD	Los Angeles Unified School District
LAWA	Los Angeles World Airports
	Los Angeles International Airport
	Limited Notice To Proceed
LOA LONP	Letter of Agreement
LONP	Letter Of No Prejudice Life-of-Project
LPA	Locally Preferred Alternative
	Light Rail Transit
LRTP	Long Range Transportation Plan
LRV	Light Rail Vehicle
MBE	Metro Builders and Engineers Group, Ltd
MCA	Master Cooperative Agreement
MGL	Metro Green Line
MIC	Microbiologically Influenced Corrosion Control System
MIS	Major Investment Study
MMRP	Mitigation Monitoring Reporting Plan
MOA	Memorandum of Agreement
MOS	Minimum Operating Segment
MOU	Memorandum of Understanding
MPS	Master Program Schedule
MPSR	Monthly Project Status Report
MSDS	Material Safety Data Sheet
MSF	Maintenance & Storage Facility

N/A	Not Applicable
NAVAIDS	Navigational Aid Systems
NEPA	National Environmental Protection Act
NFPA	National Fire Protection Association
NNC	Notice of Noncompliance
NOD	Notice of Determination
NPDES	National Pollution Discharge Elimination System
NTE	Not to Exceed
NTP	Notice To Proceed
OCC	Operations Control Center
OCS	Overhead Catenary System
OSHA	Occupational Health and Safety Administration
OTS	Over the Shoulder
PA/VMS	Public Address/Visual Messaging Sign
PDQM	Project Design Quality Manual
PE	Preliminary Engineering
PEER	Permit Engineering Evaluation Report
PID	Photo Ionization Detector
PIP	Project Implementation Plan
PLA	Project Labor Agreement
PM	Project Manager
PMIP	Project Management Implementation Plan
PMMP	Paleontological Monitoring and Mitigation Plan
PMOC	Project Management Oversight Consultant
PMP	Project Management Plan
P&P	Policies & Procedures
POD	Project Oriented Discussions
PQPM	Project Quality Program Manual
PR	Project Report
PSR	Project Study Report
	Public Transportation Modernization, Improvement and Service
PTMISEA	Enhancement
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
REAP	Rain Event Action Plans
RFC	Request for Change
RFI	Request for Information

RFMP	Rail Fleet Management Plan
RFP	Request For Proposals
RFQ	Request For Qualifications
RHA	Risk Hazard Analysis
RLPE	Red Light Photo Enforcement
ROC	Rail Operations Center
ROD	Record Of Decision
ROE	Right of Entry
ROM	Rough Order of Magnitude
ROW	Right-Of-Way
RPZ	Runway Protection Zone
RSD	Revenue Service Date
RSTP	Regional Surface Transportation Program
RTIP	Regional Transportation Improvement Program
SAV	Stand Alone Validator
SCADA	Supervisory Control and Data Acquisition
SCAQMD	Southern California Air Quality Management District
SCC	Standard Cost Category
SCE	Southern California Edison
SCG	Southern California Gas Company
SCRRA	Southern California Regional Rail Authority
SHA	State Highway Account
SHPO	State Historic Preservation Office
SIT	System Integration Testing
SOE	Support of Excavation
SOP	Standard Operating Procedure
SOQ	Statement of Qualification
SOV	Schedule Of Value
SOW	Statement Of Work
SPAS	Specific Plan Amendment Study
SPP	Special Permitting Process
SSMP	Safety and Security Management Plan
STB STIP	Surface Transportation Board
STP	State Transportation Improvement Program
STV	Surface Transportation Program STV Group
SWPP	Storm Water Prevention Plan
SWY	Southwestern Yard (Division 16)
TBD	To Be Determined
TBM	Tunnel Boring Machine
TCC	Train Control/Communications
TCE	Temporary Construction Easement

TCRP	Traffic Congestion Relief Program
TIFIA	Transportation Infrastructure Finance and Innovation Act
TIGER	Transportation Investment Generating Economic Recovery
TOD	Transit Oriented Development
TPSS	Traction Power Substation
TRACS	Transit Automatic Control System
TSC	Traffic Signal Conduit
TSL	Temporary Street Lighting
TSM	
-	Transportation System Management
TVA	Threat Vulnerability Analysis
TVM	Ticket Vending Machine
UBC	Uniform Building Code
UFS	Universal Fare System
UG	Underground
UOM	Unit of Measure
USDOT	United States Department Of Transportation
UST	Underground Storage Tank
VE	Value Engineering
WBS	Work Breakdown Structure
WP	Work Package
WSCC	Walsh/Shea Corridor Constructor
WTCP	Work Traffic Control Plan
YOE	Year of Expenditure
IUE	i cai ui Lypenuluie