Crenshaw/LAX Transit Project



CRENSHAW/LAX TRANSIT PROJECT

MONTHLY PROJECT STATUS REPORT

THE PREPARATION OF THIS DOCUMENT HAS BEEN FINANCED IN PART THROUGH A GRANT FROM THE U. S. DEPARTMENT OF TRANSPORTATION, FEDERAL TRANSIT ADMINISTRATION (FTA).

JULY 2015

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PROJECT SUMMARY

LOCATION: Crenshaw DESIGN/CONSULTANT:			Line	CONSTRUCTION MANAGE CONTRACTOR: Walsh-Sh			
PROJECT PHOTO: Gree Placement.	en Line – Und	erpass Bent 2	A Column	WORK COMPLETED PAST	MONTH:		
				 Continued final design. Completed pile installation Continued falsework install Completed decking for 104 guideway No. 1 near LAX rur Continued pile installation : Continued support of utilitities Completed utility support uitility Continued tier two strut installevel at Expo Station. Issued notice to proceed for Continued real estate acquates and temporary construct 	lation for brid hth Street gra ways. at UG#4 on 0 es and execa nder deck at tallation and or Division 16 uisitions with	ge decking de separat Crenshaw E vation at V MLK Statio began exca :: Southwes emphasis c	at Century Station . ion at underground Blvd. ernon Station. m. avation to tier three stern Yard.
EXPENDITURE STATUS (\$ In Millions)	;			SCHEDULE ASSESSMENT	-		
ACTIVITIES	CURRENT BUDGET	EXPENDED AMOUNT	PERCENT EXPENDED	MAJOR SCHEDULE ACTIVITIES	PRIOR PLAN	CURRENT PLAN	VARIANCE WEEKS
DEGLON	4 100 7	• • • • • •	70.400	Environmental	0 (1	0.44	
DESIGN	\$ 136.7	\$ 107.1	78.4%	FEIS/FEIR Record of Decision	Sep-11 Dec-11	•	Complete Complete
RIGHT-OF-WAY	\$ 127.4	\$ 109.5	86.0%		Dec-11	Dec-11	Complete
CONSTRUCTION	\$ 1,353.1	\$ 376.8	27.8%	Design Preliminary Engineering	Nov-11	Nov-11	Complete
	φ 1,000.1	φ 0/0.0	21.070	Final Design	Sep-15		4 months behind
OTHER	\$ 440.8	\$ 118.5	26.9%	Right-of-Way			
TOTAL	\$ 2,058.0	\$ 711.9	34.6%	Full-take parcels available	Jan-15	Jan-15	Complete
Note: cost expended as o	f August 1, 20 ⁻	15.		Part-take and ICE parcels	Sep-15	Nov-15	2 months behind
					0 40	0 40	Osmalata
AREAS OF CONCERN				D-B Notice to Proceed	Sep-13		Complete
o Third party relocations p			uction.	D-B Substantial Complete	Oct-18		3 months behind
 o Design-builder's ability t o Timely review of WSCC 			l os Angeles	Revenue Service Date	Oct-19	Oct-19	On schedule [*]
o 96th street station cost a				The D-B Substantial Complete po contract modification in March 20		odified by a	35 day concurrent delay
				*Note: Current Revenue Service	Date includes	a reduction ir	n contingency.
ROW ACQUISITION	PLAN	ACQUIRED	REMAINING	CRITICAL ACTIVITIES / 3 M	IONTH LOO	K AHEAD	
FULL TAKES	35	35	0	 Continue excavation to ne. Commence construction o Continue working on Centra aerial structures. 	f bridge over	i-405.	
PARTIAL TAKES	27	17	10	 o Continue pile installation a o Commence pile installation o Continue excavation of UC 	n for UG#3 or	n Crenshav	v Blvd
TEMPORARY EASEMENTS	12	11	1			,	

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 is seeking mediation with the contractor to resolve 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. They have commenced in July work 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 63 parcels acquired through June 2015. Thirty-five full takes and 28 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 July 2015 are \$1,771.1 million or 86.1% of the Current Budget. The project expenditures thru July 2015 are \$711.9 million or 34.6% of the Current Budget.

PROJECT OVERVIEW (Continued)

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 increased this month by 30 calendar days. The increase is contributable to the design-builders' mitigation of 30 calendar days due to their re-sequencing of various scope of work. The design-builder indicates in their monthly report that the mitigation was 43 days but they lost 13 days in July due to less than planned progress for excavation, walers and struts work at the Expo/Crenshaw Station.

MANAGEMENT ISSUES

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

Status/Action 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.

Status/Action 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.

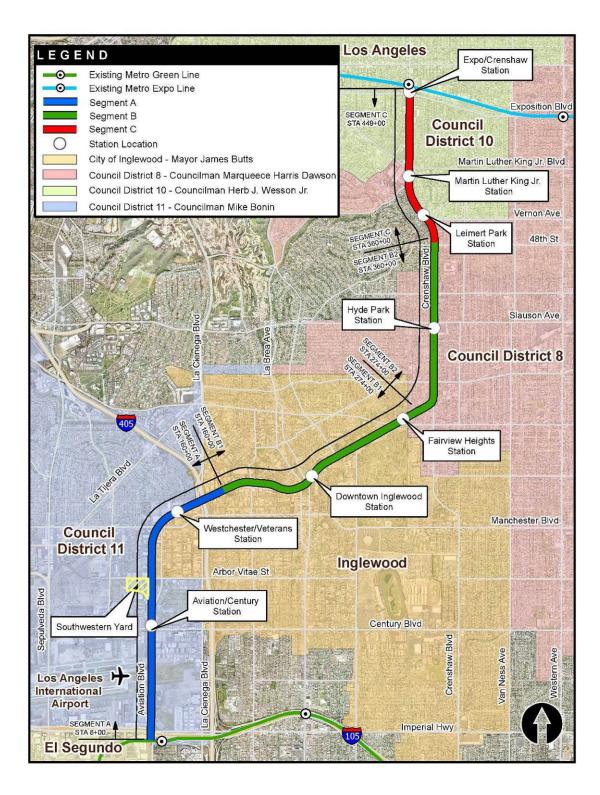
Concern No. 6: Design-builders construction schedule

Status/Action The design-builder included in their July 2015 Schedule Update Narrative that there was a reduction of 30 days to their project schedule delay forecast to substantial completion milestone. The reduction is contributable to the design-builders' mitigation of 30 calendar days due to their re-sequencing of various scope of work. The design-builder indicates in their monthly report that the mitigation was 43 days but they lost in July, 13 days due to excavation, walers and struts progress at Expo/Crenshaw Station. Total design-builder delay to their substantial completion milestone is 93 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.

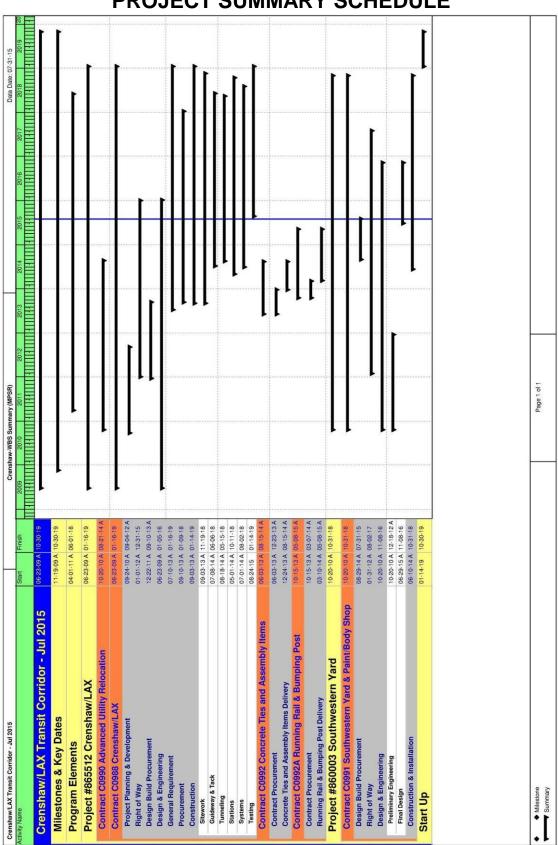
The project delivery method for this contract was bid-build IFB approach.

KEY MILESTONES SIX- MONTH LOOK AHEAD

	Milestone Date	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15
Contract C0988 Complete CIDH Piles - Manchester Bridge	07/21/15A						
Contract C0988 Complete Abutment Footing - 111th St Bridge	07/30/15A						
Contract C0988 Start CIDH Piles - I-405 Bridge	07/30/15A						
Contract C0988 Submit Approved for Construction - Seg B	08/04/15						
Contract C0988 Submit Approved for Construction - OCS	08/04/15						
Contract C0988 Submit Approved for Construction - TPSS	08/10/15						
Contract C0988 Start MSE Wall - Aerial Structure #1	08/13/15						
Contract C0988 Start MSE Wall - Approach to La Brea	08/17/15						
Contract C0988 Submit Approved for Construction - COMM	08/20/15						
Contract C0988 Start Shoring - Underground Structure #3	08/26/15						
Contract C0988 Start MSE Wall - Approach to Aviation / Century	08/28/15						
Contract C0988 Complete Soldier Pile - UG #4	09/08/15						
Contract C0988 Submit Approved for Construction - Seg A	09/18/15						
Contract C0988 Submit Approved for Construction - 3D Model	09/18/15						
Contract C0988 Start MSE Wall - Manchester Bridge	09/25/15						
Contract C0988 Complete Excavation & Mud Slab - Expo	10/06/15						
Contract C0988 Start Base Invert Slab - Expo	10/12/15						
Contract C0988 Start Decking - UG #4 Cut & Cover	10/18/15						
Contract C0988 Complete Excavation - UG#1	10/19/15						
Contract C0988 Start Florence / Hindry Station	10/26/15						
Contract C0988 Start MSE Wall - I-405 Bridge	10/29/15						
Contract C0988 Submit Approved for Construction - Seg C	11/02/15					WIELD THE A	
Contract C0988 Complete 111th St Bridge	11/02/15					WIELD STRA	
Contract C0988 Complete Superstructure - La Brea Bridge	11/06/15					WIELD STRA	
Contract C0988 Complete Excavation & Mud Slab - MLK	11/17/15					WIELD STRA	
Contract C0988 Expo Station Ready for TBM Machine	11/18/15					WIELD STRA	
Contract C0988 Install TBM Muck Handling System	11/19/15					WIELD STRA	
Contract C0988 Start Assemble EPBM	12/15/15						

"A" following date is actual and completed

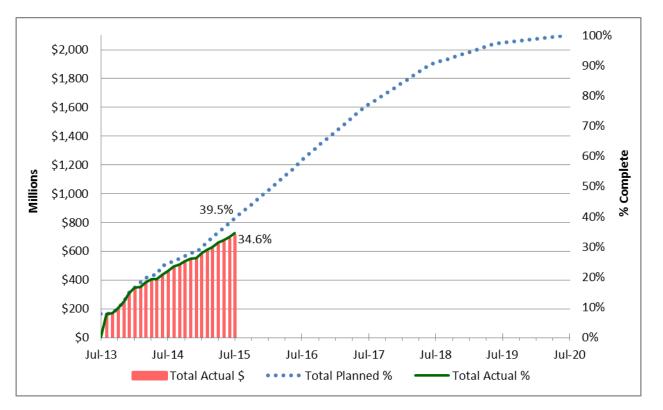
△ Other



PROJECT SUMMARY SCHEDULE

SCHEDULE MEASUREMENTS

		Chang e 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	94.8%	1.4%	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	19.2%	1.5%	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:	36.1%	0.5%	



OVERALL CONSTRUCTION PROGRESS CURVE STATUS

The above planned progress curve is based on planned expenditures by the design-build contractor in the C0988 baseline schedule and planned expenditures projected by all other Crenshaw/LAX contracts. The actual are overall project expenditures cumulative through July 31, 2015.

The cumulative overall project expenditures by July 2015 is \$711.9 million, which is 34.6% of the total project adopted budget of \$2,058 million, while the planned overall project progress by July 2015 is 39.5%.

MAJOR EQUIPMENT DELIVERY STATUS

Tunnel Boring Machine

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

Following are the major milestone dates for TBM procurement:

	Baseline	Jun-15	Jul-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	01/14/16	01/28/16	-14
TBM SB Break through at Vernon	09/17/15	06/01/16	06/10/16	-9
TBM NB Tunnel Launch at Expo	10/29/15	07/15/16	07/20/16	-5
TBM NB Break through at Vernon	03/21/16	12/02/16	11/30/16	3

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 required concrete ties have been delivered to the job site.

Running Rail & Bumping Post

All required running rail & bumping post have been delivered to the job site as follows:

- SDI 115RE SS Rail Delivery 7/16/2014
- Evraz 115RE HH Rail Delivery 8/11/2014
- Bumping Post Delivery 5/8/2015

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

	50300) LO	NO LLAD		
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			3/2/2017	
	3/7/2016	4/21/2016		5/1/2017
TPSS- Substation 8	1/7/2016	2/21/2016	1/1/2017	3/2/2017
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- Stadsoff	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
TVM- Hindry	N/A	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

CRITICAL PATH NARRATIVE

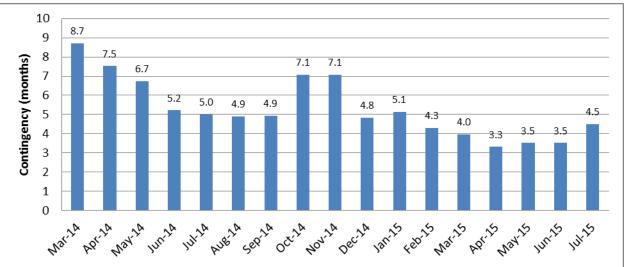
Critical Path:

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 14, 2019, which is 93 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

SCC	DECODIDITION	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	(398, 497)	442,535,942	3,794,250	69,143,479	-	450, 354, 375	(2,145,62
20	STATIONS	153,906,000	-	316,050,000	-	301,494,334	11,025,753	93,831,367	-	315,050,000	(1,000,00
30	SOUTHWESTERN YARD	66,673,000	-	73,245,544	79,370,015	85,919,938	41,276	41,276	13,327,550	86,573,094	13,327,550
40	SITEWORK\SPECIAL CONDITIONS	235,576,000	-	348,565,999	5,065,058	358,292,404	3,813,176	212,945,463	-	370,714,613	22,148,614
50	SYSTEMS	125,132,000	-	169,311,000	-	150,342,667	295,603	790,261	-	169,436,000	125,000
10-50	CONSTRUCTION	1,052,622,000	-	1,359,672,544	84,036,576	1,338,585,284	18,970,057	376,751,845	13,327,550.00	1,392,128,082	32,455,538
60	RIGHT-OF-WAY	132,294,000	-	127,400,000	-	113,848,992	744,056	109,540,048	170,000.00	127,570,000	170,000.00
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	1,733,708	211,085,604	6,849,873	188,628,912	467,239	317,602,903.94	17,509,726
90	UNALLOCATED CONTINGENCY	177,157,000	-	162,734,278	-	-	-	-	(13,964,789)	112,599,014.05	(50,135,264
	865512 & 860003 - SUBTOTAL	1,723,000,000	-	2,032,000,000	85,770,284	1,745,570,781	26,563,987	686,373,227	-	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, 865512 & 860003 - TOTAL	1.749.000.000	-	2,058,000,000	85,770,284	1,771,120,168	26,563,987	711,922,614		2,058,000,000	-

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. There is no current forecast variance with the current budget.

Commitments:

The commitments are cumulative through August 1, 2015. The total commitments increased by \$85.8 million this period primarily due to the following:

- SCC-10 (Guideways) has decreased by \$0.4 million due to purchase order decommitments and re-alignment to other SCC codes related to the design-build Contract C0988 Crenshaw/LAX Transit Corridor.
- SCC-30 (Southwestern Yard) has increased by \$79.4 million due to executed contract C0991 Division 16: Southwestern Yard (Design/Build).
- SCC-40 (Sitework and Special Conditions) has increased by \$5.1 million due to executed due to executed modifications associated with design-build Contract C0988 Crenshaw/LAX Transit Corridor, Metro Art Program, third party scope of work with The Gas Company, QWEST and Tesoro Logistics LP.
- SCC-80 (Professional Services) has increased of \$1.7 for costs associated with nonfederal community relations, legal services, coordination services by City of Los Angeles and environmental consultant services. The total commitment of \$211.1 million includes \$6.3 million for the Southwestern Yard.

The \$1,771.1 million in commitments to date represents 86.1% of the current budget.

Expenditures:

The expenditures are cumulative through August 1, 2015. The total expenditures increased by \$26.6 million this period due to the following:

- SCC-10 (Guideways) has increased by \$3.8 million for costs associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor.
- SCC-20 (Stations, Stops, Terminals, Intermodal) has increased by \$11.0 million for costs associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor.
- SCC-40 (Sitework and Special Conditions) has increased by \$3.8 million for costs associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor, Metro Art Program and third party scope of work with Los Angeles Department of Water & Power, Cable Engineering Services, Qwest and California-American Water Company.

PROJECT COST ANALYSIS (Continued)

- 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 increased \$0.8 million for costs associated with the real estate appraisal, acquisition and relocation. The total expenditure of \$109.5 million includes \$53.3 million for the Southwestern Yard.
- SCC-80 (Professional Services) has increased by \$6.9 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, tunnel advisory panel services, third party coordination by City of Los Angeles, project management support services, material lab testing services, community relations, labor compliance monitoring and environmental consultant services. The total expenditure of \$188.6 million includes \$3.5 million for the Southwestern Yard

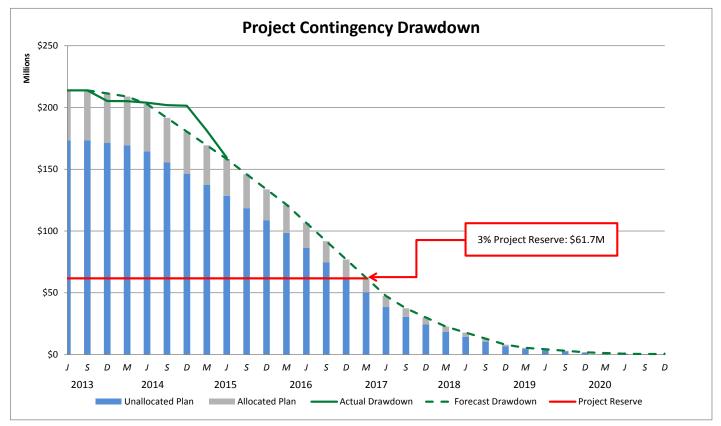
The \$711.9 million in expenditures to date represents 34.6% of the current budget.

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 TRA	ANSIT PROJE	CT FUNDE	D SCOPE OF	WORK						
DESCRIPTION		CURREN	T BUDGET	COMMI	TMENTS	EXPEN	DITURES	CURRENT	FORECAST	FORECAST
DESCRIPTION	BUDGET	PERIOD	TO DATE	PERIOD	TO DATE	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	641,378	1,007,778		1,007,778	32,069	975,709	-	1,007,778	641,378
500013 C/LAX LAWA SCOPE OF WORK	1,575,362	-	1,575,362		531,125	-	228,387	-	1,575,362	-
TOTAL	4,251,762	641,378	5,132,140		4,021,649	32,069	1,376,842	•	5,132,140	880,378

PROJECT CONTINGENCY DRAWDOWN



Through 01-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 DRAWDO	WN (through 0	1-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

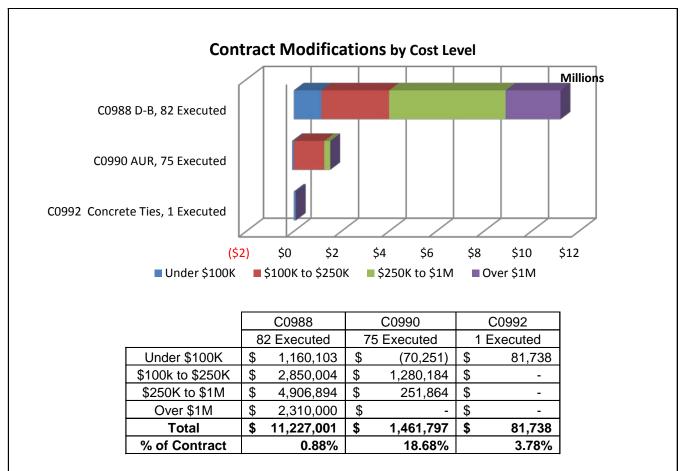
- DBE Goal Design 23.82%
- Current DBE Commitment \$20,232,929 (21.49%)
- Current DBE Participation \$20,173,805 (23.53%)
- Twenty (20) Design subcontractors have been identified to-date
- DBE Goal Construction 20%
- Current DBE Commitment \$236,116,671 (20%)
- Current DBE Participation \$71,399,669 (26.46%)
- Fifty-Five (55) Construction subcontractors have been identified to-date.

PROJECT LABOR AGREEMENTS (PLA) STATUS

Contract C0988 Crenshaw/LAX Transit Corridor Design-Build

(Reporting Data as of June 20, 2015)

Targeted Worker Goal –	40.00%
Targeted Worker Current Participation -	59.98%
Apprentice Worker Goal -	20.00%
Apprentice Worker Current Participation -	17.91%
Disadvantaged Worker Goal -	10.00%
Disadvantaged Worker Current Participation	10.85%



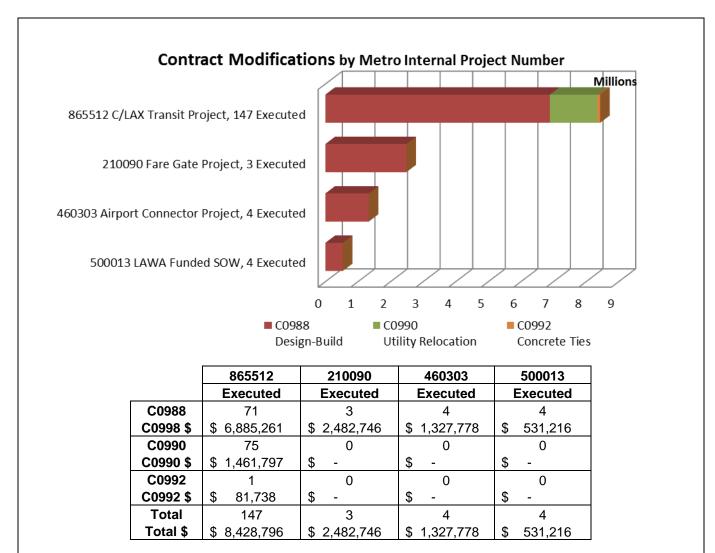
SUMMARY OF CONTRACT MODIFICATIONS

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

Eight-two (82) changes with a total value of \$11.23 million have been executed since execution of Contract C0988. There are additional ten (10) changes with a total value of 0.81 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.



SUMMARY OF CONTRACT MODIFICATIONS

One hundred and forty seven (147) changes with a total value of \$8.43 million have been executed for Project 865512 Crenshaw/LAX Transit Project. There are additional eight (8) changes with a total value of \$0.79 million pending the administrative approval process.

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

Four (4) changes with a value of \$1.04 million have been executed for Project 460303 Airport Connector Project. There is additional two (2) changes with a total value of \$0.3 million pending the administrative approval process.

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) COMMITM	(D/B) IENTS	(E) EXPENDI	(E/B) TURES	(F) BILLED to	(F/B) 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	73.7	61%	54.4	45%	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	545.9	545.9	100%	198.4	36%	153.1	28%
MEASURE R	661.1	661.1	377.5	661.1	100%	216.9	33%	216.9	33%
OTHER FUNDS*	52.4	187.5	0.0	0.0	0%	0.0	0%	0.0	0%
PROP C 25% HIGHWAY	148.9	189.5	3.6	147.5	78%	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	1,239.7	1,771.1	86.1%	711.9	34.6%	650.5	31.6%

NOTE: Expenditures are cumulative through July 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.*

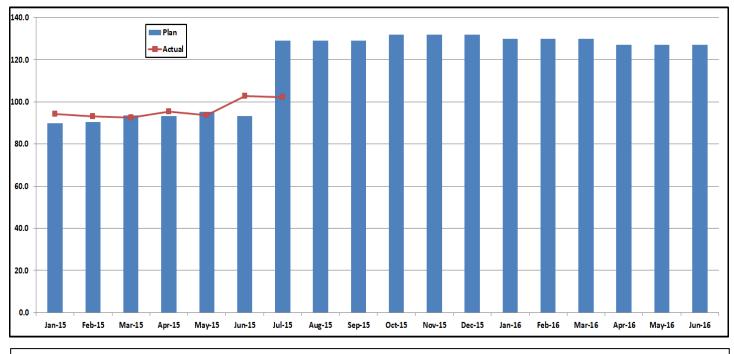
MEASURE R: \$377.4M has been allocated to the project through FY2015. Funds are available for drawdown.

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 July 2015.

TOTAL PROJECT STAFFING

Starting with the July 2015 report, 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 shown is higher than the previous month as these are the FTE's budgeted within Metro's financial information system for fiscal year 2016. 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

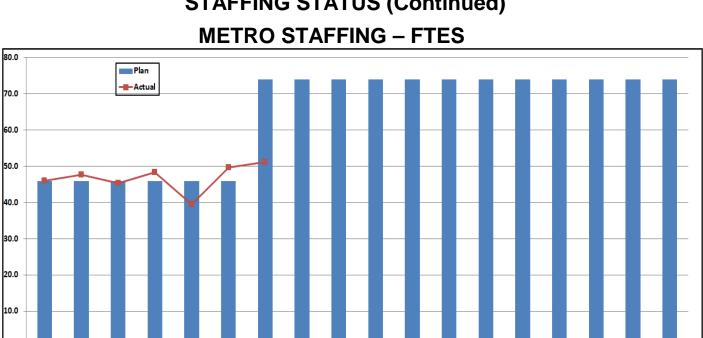
Apr-15

May-15

Jun-15

Jul-15

Aug-15



CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONSULTANT – FTES

Sep-15

Oct-15

Nov-15

Dec-15

Jan-16

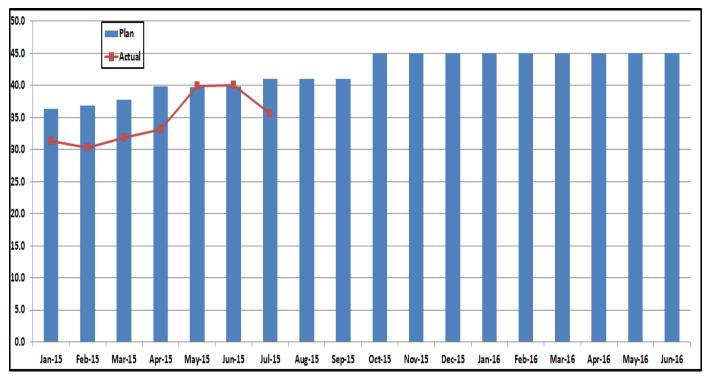
Feb-16

Mar-16

Apr-16

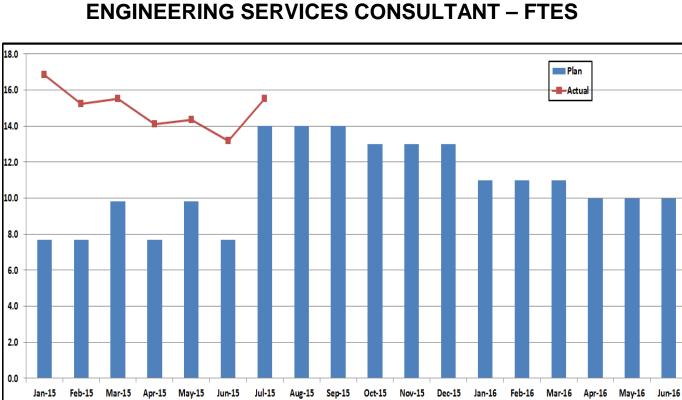
May-16

Jun-16



STAFFING STATUS (Continued)

July 2015



STAFFING STATUS (Continued) ENGINEERING SERVICES CONSULTANT – FTES

REAL ESTATE STATUS

	Number				0.11				Parcels
Contract No.	of Parcels	Certified	Decertified	Appraisals Complete	Offers Made	Agreements Signed	Condemnations Filed	Relocations Complete	Available to WSCC
C0988 C/LAX Transit Corridor (D-B):									
Crenshaw Subdivision	1	1			1		[
Full Takes	12	12		12	12	12	0	12	12
Part Takes (PT or SE)	10	9	1	9	9	4	5		9
TCE	10	10		10	10	9	3		10
Subtotal Parcels	32	31	1	31	31	24	8	12	31
Harbor Subdivision									
Full Takes	16	14		15	15	15	3	13	15
Part Takes (PT or SE)	18	17	2	18	16	7	5		8
TCE	3	2	1	2	2		2		1
Subtotal Parcels	37	33	3	35	33	22	10	13	24
Total CR/HS Parcels:	69	64	4	66	64	46	18	25	55
Southwestern Yard									
Full Takes	8	8		8	8	6	2	4	8
Part Takes	0								
TCE	0								
Subtotal Parcels:	8	8	0	8	8		2	4	8
Total SW Parcels:	8	8	0	8	8	6	2	4	8
C0990 C/LAX Advance Utility Relocations:									
Total Parcels:	0								
Total Project Parcels	77	72	4	73	74	49	21	29	63

- **63** parcels acquired: **35** full takes (including HS-2706) and **28** part takes/Temporary Construction Easement (TCE) provided to WSCC.
- Agreement signed for HS-1903. Waiting for escrow close in August for handover.
- 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 August 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.
- No Nonconformance Reports (NCR) were issued during the month by Metro Quality
- WSCC Quality Assurance issued ten NCR's during the month. Five were related to pile damages or pile discrepancies at three different locations.
- WSCC Quality Assurance completed one audit during the month covering Procurement Control and Material Receiving efforts.
- Metro Independent Testing Verifications continued with oversight reviews of welding, concrete sampling and pile material verification testing.
- CSI-Hanson, the precast tunnel liner fabricator, will be visited once the production lines have been established and Quality Control practices have been better defined.
- Pre-Cast Management, the MSE wall fabricator, is ready to start the casting of wall panels. An onsite visit of the facility and production/inspection practices will occur in August.
- Approved two WSCC QC Inspectors for night shift responsibilities.
- Participated in Construction Work Package Reviews and related Readiness Reviews for UG 1 waler installation, MSE wall construction, Expo mud slab, jet grout repair and OCS CIDH construction.
- Started planning for the Annual Metro Audit of WSCC Project activities.

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 Reports
 - 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
- Encountered petroleum hydrocarbon contaminated soil during MLK Station excavation. Approximately 4,465 tons of petroleum hydrocarbon contaminated was transported and disposed.
- On June 27, 2015, LAFD issued Metro a "No Future Action" letter regarding Underground Storage Tank SW-0103 Dollar Rental Car.
- WSCC conducted soil sampling to determine the extent of soil contamination associated with the Underground Storage Tanks (USTs) at CR-3701. On July 2, 2015, Metro received a letter from the RWQCB with a directive to take corrective action.
- 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. On July 10, 2015, the RWQCB issued Metro a "No Future Action" letter for Parcel 2206.
- 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.
- Reviewed SUSMP/LID Reports for the City of Los Angeles and City of Inglewood.
- Prepared quarterly report for Risk Management summarizing environmental conditions.
- Prepared Quarterly Mitigation Measures Status Report for FTA.
- Attended Contractor Weekly Progress meetings, Environmental Task-Force Meetings and various over-the-shoulder submittal meetings with Contractor.

CONSTRUCTION RELATIONS STATUS

- Held meeting with LA City Councilman Marqueece Harris-Dawson on construction.
- Disseminated the new approved station names to the community and project team.
- Began outreach on 21-day closure of Crenshaw Blvd. scheduled for mid-September.
- Coordinated outreach with LAWA to airport users regarding two week closure of Century at Aviation.
- Conducted outreach to cargo carriers regarding work on Century Blvd. and 111 St.
- Began outreach to Vernon Avenue stakeholders regarding 10-day closure of Vernon.
- Resolved noise and dust complaints related to work at Crenshaw/Vernon.
- Conducted outreach to businesses on Crenshaw between Vernon and 48th Street.
- Conducted outreach to commercial stakeholders on Bellanca Ave. on rail welding.
- Coordinated outreach with LAWA regarding two week closures of Century/Aviation.
- Responded to complaints regarding dust and noise in the Florence/La Brea area.
- Responded to stakeholder concerns regarding the proposed 40-day UG4 closure.
- Conducted construction update community meeting at Lincoln Memorial Church.
- Participated in Envisioning Crenshaw/LAX Transit Project event sponsored by Board Chair Mark Ridley-Thomas.
- Promoted TBM Artwork and Naming contests at local schools with the CLC.
- Prepared press release related to Century Blvd. nightly closures.
- Submitted weekly project update articles to the LA Sentinel.
- Produced Blast emails and social media posts regarding Eat, Shop, Play Crenshaw.

SYSTEMWIDE DESIGN AND ART PROGRAM STATUS

- Responded to RFIs and submittal drawings.
- Continued to refine project artwork opportunities.
- Conducted Art Program presentation for community stakeholders.
- Continued work with a non-profile 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.
- Participated in Systemwide Design integration reviews and presentations.

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.
- Conducted Self-Rescue Training for the Environmental Group (Paleontologists/Archeologists).
- 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 92,174 work hours and no recordable incidents for the month of July 2015. Total Project-to-Date work hours are 1,515,854 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 3.8.

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	8/15	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 in progress for 8" gas line. Construction should commence in July 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				
A1212030	Oak Street	Grade Crossing	Inglewood				
A1212030	Cedar Avenue	Grade Crossing	Inglewood				
A1212030	Ivy Avenue	Grade Crossing	Inglewood				
A1212030	High Street	Grade Crossing	Inglewood				
A1212030		Grade crossing	ingicwood				
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

CM Concultants Stanton	lott MacDo	onald (HM	Contract No.: C0988			
CM Consultant: Stantec Contractor: - Walsh Shea Corri	dor Const	ructors (V	Status as of Jul 31, 2015			
Progress/Work Completed:						
Progress/Work Completed: Design - Submitted Segment A Approved for Segment A Approved for Constructio - Submitted Segment B Approved fo - Submitted Segment C Approved fo Construction - Continued potholing along the Grace - Continued geotechnical monitoring - Continued geotechnical monitoring - Continued with SWPPP Implement - Completed Welding of continuous F - Completed welding of continuous F - Continued soil excavation at Verno - Completed abutment stem wall wor - Completed column work at the Cern - Continued falsework erection at the - Completed pile cap construction at - Commenced column work at the G	on on Local 3 r Construction r Construction de Crossing, at Vernon, 1 ation – Segr Rail at Flore n, MLK & E2 rk at La Brea that Jury Blvd. B e Century Br the Century the Century the Century ts at 111th B the 111th B at the Greer	Streets. on on Statio on on UG S , UG #3 & I MLK, Expo ments A, B nce/Redon vpo Station a Bridge. ridge. gBridge. y Bridge. y Bridge. y Bridge. aridge n Line Tie-li	 Status as of Jul 31, 2015 Areas of Concern: BOE approval process for SOE design Possible cobbles and boulders found during excavation at Expo and MLK station. Contaminated materials (weathered gasoline with high levels of TPH) discovered at Expo site. Segment A guideway work may be impacted by implementation of a westward shifting of the LRT tracts in Guideway at Segment A for the future 96th Street Station. Street package approval by the city family reviews may impact the start of the Park Mesa street work. Installation of Hobas pipe settlement monitoring instrument required by BOE may slow down the Expo station excavation. Relocation of gas line which conflicts with west piles at UG #4 may delay the start of decking work. Contractor's schedule does not accurately forecast its work efforts. 			
Schedule Assessment: Metro's assessment of the contracto on meeting interim design milestone Contractor's Jul 2015 schedule upda Substantial Completion is 93 calenda	s. ite indicates	Milestone	1 - Contrac	ct	Cost Assessment: The current construction contract cost for and is within the Board authorized budget The Contractor submitted their 23rd paym approved amount of \$16,618,548.82. *Please note that not all executed modific included in the Contractor current payment	nent application in the ations may have been
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CONTRACT C0990 STATUS

Crenshaw/LAX Advanced Utility Relocations

PE Design Contractor: Hatch CM Consultant: Stantec Contractor: - Metro Builders a					Contract No	o.: C0990 f Jul 31, 2015	
Progress/Work Completed: - The construction was substantial	ly completed	d on Aug 2	21, 2014	Areas of Co	ncern:		
result of lost production due to sar methodology for sewer line work a	Metro has agreed to grant a total of 124 calendar day time extension as a result of lost production due to sandy soil conditions and revised installation methodology for sewer line work at 59th & Crenshaw, and traffic control and work hour restriction to 67th & Crenshaw.					sment: onstruction contract cost is \$ zed budget. mount is the scope deletion f ance of provisional sums .	
Schedule Summary:					Cost Summa	ıry:	\$ In millions
1. Date of Award:		05/30/12			1. Award Va	lue:	7.83
2. Notice to Proceed:		07/17/12			2. Executed	Modifications:	0.97
3. Original Substantial Completion	n Duration:	365			3. Approved	Change Orders:	0.49
4. Current Substantial Completion	n Duration:	468			4. Current C	ontract Value (1 + 2 + 3):	9.29
5. Elapsed Time from NTP:		753			5. Incurred (Cost:	9.12
Milestones	Original Contract	Current Contract	Forecast	Calendar Day Variance		PERCENT CON from 7/17/12 to 8	
Milestone 1 - Contract Substantial Completion	07/17/13	11/18/13	08/21/14	-276	Design	0%	
					Ű		
					Construction		99%
					Total Incurred Cost		98%
						₩ 20% 40% 60 Percent Comple	0% 80% 100% te Progress
					~	onstruction physical percent cor	
						obilization and general requiren	

CONTRACT C0991 STATUS

Southwestern Yard

PE Design Contractor: Hatch M CM Consultant: Stantec		onald (HM	M)		Contract No.: C0991	
CM Consultant: Stantec Contractor: - Hensel Phelps / Herzog JV Progress/Work Completed: - Contractor is working on early contract required submittals. - Preparing initial 120 Day schedule. - Searching for IPMO location within two mile radius of construction site. - Initial pre-construction meeting held with key stakeholders. - Design workshop #1 meeting was held with key stakeholders.					Status as of July 31, 2015 Areas of Concern: - None.	
Schedule Assessment: - Right -of-Way to be provided by Me	tro to desig	n -build coi	ntractor by	12/07/15.	Cost Assessment: - Contract to Hensel Phelps / Herzog JV was awa - First pay application will be submitted once 120 and approved by Metro.	day schedule is submitted
Schedule Summary:					Cost Summary:	\$ In millions
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 D	ouration:	1,220			3. Approved Change Orders:	0.00
4. Current Substantial Completion D	uration:	1,220			4. Current Contract Value (1 + 2 + 3):	172.30
5. Elapsed Time from NTP:		32			5. Incurred Cost:	0.00
Milestones	Original Contract	Current Contract	Forecast	Calendar Day Variance	PERCENT COMPLETE	
MS#1 Yard and Main Shop Design	26-Oct-16	26-Oct-16	26-Oct-16	0		
Completion MS#2 Main Shop Communication Room Completion	15-Jan-18	15-Jan-18		0	Design 0%	
MS#3 Main Shop Substantial Completion	30-Apr-18	30-Apr-18	30-Apr-18	0	Construction 0%	
MS#4 Southwestern Yard Substantial Completion	31-Oct-18	31-Oct-18	31-Oct-18	0	Total Incurred Cost 0% 20% 40% 60%	80% 100%
					Percent Complete Pro Construction physical percent compl mobilization and general requiremen	ete excludes

CONTRACT C0992 STATUS

Concrete Ties

PE Design Contractor: Hatch I CM Consultant: Stantec Contractor: Rocla Concrete Ti		onald (HM	Contract No.: C0992 Status as of Jul 31, 2015			
Progress/Work Completed: - All 19,936 concrete ties have beer (Contract C0988). - Contract is in close-out pending re		,	0		Areas of Concern: - Compliance with Buy America requirement und	der 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 reas All concrete ties have been delivered	e operation o onable contro	f Burlingtor ol of RCTI.	n Northern		Cost Assessment: The current construction contract cost is \$2.2 completely paid to contractor.	5 million and has been
 Schedule Summary: Date of Award: Notice to Proceed: Original Substantial Completion Current Substantial Completion Elapsed Time from NTP: 			12/10/13 12/23/13 220 235 235	5) ;	Cost Summary:\$ In m1. Award Value:2. Executed Modifications:3. Approved Change Orders:4. Current Contract Value (1 + 2 + 3):5. Incurred Cost:	nillions 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	PERCENT COMPL Irom 12/23/2013 to 8/15 Delivered Shipped Total Incurred O% 20% 40% 60% Percent Complete P	5/14 100% 100% 80% 100%
					Construction physical percent completion and general requirement	

CONTRACT C0992A STATUS

Running Rail and Bumping Posts

PE Design Contractor: Hatch N CM Consultant: Stantec Contractor: LB Foster Rail Tec			Contract No.: C0992A Status as of Jul 31, 2015		
Progress/Work Completed: - All 115RE SS Blank Stick Rails ha - All 115RE HH rail have been deliv - All Bumping Posts have been deliv	ive been deli ered to job s	ivered to th	-		Areas of Concern:
Schedule Assessment:					Cost Assessment:
All running rails and bumping posts schedule.	have been d	elivered af	nead of the		The current contract cost is \$5,2 million and has been completely paid to contractor.
Schedule Summary:					Cost Summary: \$ In millions
 Date of Award: Notice to Proceed: Original Substantial Completion I Current Substantial Completion I Elapsed Time from NTP: 			01/23/14 03/07/14 300 558 448		1. Award Value:5.22. Executed Modifications:
Milestones Milestone 1 - Contract Substantial Completion	Original Contract 12/31/14	Current Contract 09/30/15	Forecast 05/08/15	Calendar Day Variance 145	from 3/7/2014 to 05/29/15
				0 0 0	Construction Total Incurred Cost
				0	0% 20% 40% 60% 80% 100% Percent Complete Progress Construction physical percent complete excludes mobilization and general requirements





GREEN LINE - Underpass Bent 2A Column Concrete Placement.



111TH STREET – Installing form kickers for Abutment #1 footer.



CENTURY/AVIATION – Falsework and rolling soffit



ARBOR VITAE (near Southwestern Yard Site) - Herzog Threading CWR onto Stockpile.



MANCHESTER UNDERPASS – Bent 2 CIDH Rebar Cage Dobit Placement and Debris Removal



LA BREA – Abutment #1 stripped wall.



VERNON – Installation of lagging along the west wall within the station box.



VERNON – Excavation of station box looking south.



VERNON STATION - Welding of stiffener plates.



VERNON STATION -On going excavation operations.



MLK STATION – Welding of northwest corner strut.



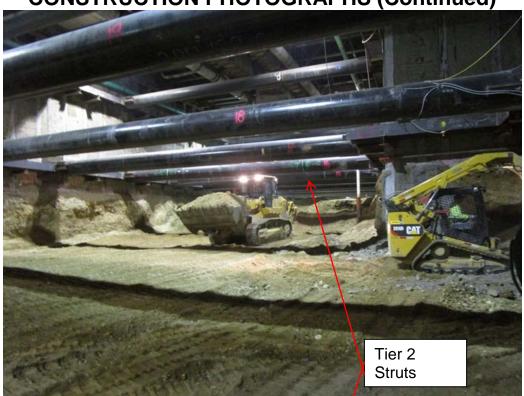
MLK STATION – Lowering of struts into the MLK station box.



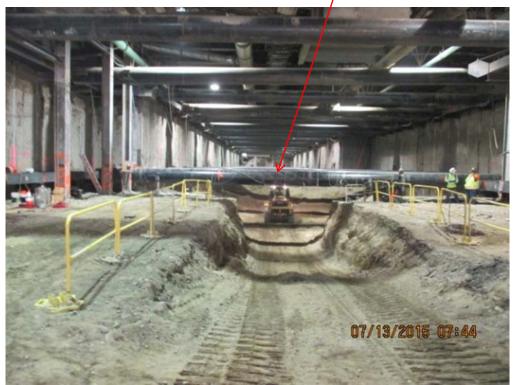
MLK STATION - Struts staged/in-work and excavation operations.



EXPOSITION STATION – Timber lagging operation at south headwall.



EXPOSITION STATION – Excavating in the south end of the station beneath Tier 2 pipe struts (40-feet of excavation).



EXPOSITION STATION – Excavation of trough within the Expo station box looking south.

PROJECT COST STATUS – SOUTHWESTERN YARD

SCC	DESCRIPTION	ORIGINAL	AL 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	86,532,695	86,532,695	0	0	1,342,696	86,889,531	0
40	SITEWORK\SPECIAL CONDITIONS	35,932,000	0	35,932,000	31,139,015	37,688,938	41,276	41,276	1,856,938	37,788,938	0
50	SYSTEMS	32,933,700	0	32,933,700	32,991,000	32,991,000	0	0	57,300	32,991,000	0
	(10-50) CONSTRUCTION	154,412,535	0	154,412,535	150,662,710	157,212,633	41,276	41,276	3,256,934	157,669,469	0
60	RIGHT-OF-WAY	100,080,000	0	100,080,000	80,000	91,236,457	0	90,953,927	0	100,080,000	0
70	VEHICLES	0	0	0	0	0	0	0	0	0	0
80	PROFESSIONAL SERVICES	35,601,095	0	35,601,095	15,193,985	21,534,481	54,723	3,493,367	(3,256,934)	32,344,161	0
90	PROJECT CONTINGENCY	17,106,370	0	17,106,370	0	0	0	0	0	17,106,370	0
TOTAL		307,200,000	0	307,200,000	165,936,695	269,983,571	95,999	94,488,570	0	307,200,000	0
C0991	PAINT & BODY SHOP PROJECT										
DESCRIPTION		ORIGINAL	CURREN	RENT BUDGET COMMITMENTS		EXPENDITURES		CURRENT FORECAST		FORECAS1	
		BUDGET	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
861301 DIV 22 PAINT & BODY SHOP		11,000,000	0	11,000,000	6,376,000	6,914,926	0	192,643	0	11,000,000	0
PROI	ECT GRAND TOTAL	318,200,000	0	318 200 000	172 312 695	276,898,497	95,999	94,681,213	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 August 1, 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.

Commitments:

The commitments are cumulative through August 1, 2015.

Total commitment is up to \$276.9 million and the major increase is due to contact that has been awarded to Hensel Phelps / Herzog JV for the amount of \$172.3 million, DWP for \$6.2 million and HHS Construction, Inc. for utility relocation for the amount of \$0.4 million.

Expenditures:

The expenditures are cumulative through August 1, 2015. The total expenditures increased by \$0.1 million for this period. The expenditure is up to \$94.7 million so far which represents 29.8% 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 Element Descriptions -				
CONSTRUCTION	Includes construction contracts. Cost associated with Guideways, Stations, Southwestern Yard, Sitework/Special. Conditions and Systems.			
RIGHT-OF-WAY	Includes purchase cost of parcels, easements, right-of-entry permits, escrow fees, contracted real estate appraisals and tenant relocation.			
VEHICLES	Includes the purchase of LRT vehicles and spare parts for the project.			
PROFESSIONAL SERVICES	Includes design engineering, project management assistance, construction management support services, legal counsel, agency staff costs, and other specialty consultants.			
CONTINGENCY	A fund established at the beginning of a project to provide for anticipated but unknown additional costs that may arise during the course of the project.			
PROJECT REVENUE	Includes all revenue receivable to the Metro as a direct result of project activities. This includes cost sharing construction items, insurance premium rebates, and the like.			

APPENDIX

LIST OF ACRONYMS

ACEAdvanced Conceptual EngineeringADAAmericans with Disabilities ActADRAlternative Dispute ResolutionAFCApproved for ConstructionALJAdministrative Law JudgeAMCAirport Metro ConnectorAPMAutomated People MoverATCAlternative Technical ConceptATCAutomatic Train ControlATSACAutomated Traffic Surveillance and ControlBAFOBest and Final OfferBIDBusiness Improvement DevelopmentBIMBuilding Information ModelingBLSBureau of Labor StatisticsBNSFBurlington Northern Santa Fe Railway CompanyBOCBoc California Department of TransportationCARBCalifornia Air Resources Control BoardCTVClosed Circuit TelevisionCDCalendar DayCDContract Data Requirement ListCECategorical ExemptionCEQACalifornia Environmental Quality Act	
CFRCode of Federal RegulationsCIDHCast in Drilled Hole	
CIP Cast in Place CLC Community Leadership Council	
CM Construction Manager	
CMAQ Congestion Mitigation and Air Quality Improvement Pro CMU Concrete Masonry Unit	ogram
CN Change Notice	
CO Change Order COI City of Inglewood	
COLA City of Los Angles	
CPM Critical Path Method	
CPUC California Public Utilities Commission	
CR Camera Ready CRMMP Cultural Resources Monitoring and Mitigation Plan	
CRMMP Cultural Resources Monitoring and Mitigation Plan CSM Cutter Soil Mixing	
CSP Cost and Schedule Proposal	
CSPP Construction Safety Phasing Plan	

OTD	
CTB	Cement Treated Base
CTC	California Transportation Commission
CUD	Contract Unit Description
CWP	Construction Work Plan
DB	Design Build
DBB	Design Bid Build
DBE	Disadvantaged Business Enterprise
DDR	Design Deviation Report
DOT	Department of Transportation
DRB	Dispute Review Board
DWP	Department of Water and Power
E&O	Error and Omission
EEO	Equal Employment Opportunity
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ENC	Equipment Noise Certification
EPA	Environmental Protection Agency
EPBM	Earth Pressure Balance Machine
ESA	Environmental Site Assessment
FAA	Federal Aviation Administration
FAR	Federal Acquisition Regulation
FAT	Factory Acceptance Testing
FCBC	Faith Central Bible Church
FD	Final Design
FEIR	Final Environmental Impact Report
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FFGA	Full Funding Grant Agreement
FIS	Financial Information System
FLSR	Fire Life Safety Report
FONSI	Finding of No Significant Impact
FRA	Federal Railroad Administration
FSEIR	Final Supplemental Environmental Impact Report
FSEIS	Final Supplemental Environmental Impact Statement
FTA	Federal Transit Administration
FTE	Full Time Equivalent
GBR	Geotechnical Baseline Report
GDR	Geotechnical Data Report
GDSR	Geotechnical Design Summary Report
GFE	Good Faith Effort
HDPE	High Density Polyethylene
HMM	Hatch Mott MacDonald
HNTB	Howard, Needles, Tammen and Bergendoff
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
LAX	Los Angeles International Airport
LNTP	Limited Notice To Proceed
LOA	Letter of Agreement
LONP	Letter Of No Prejudice
LOP	Life-of-Project
LPA	Locally Preferred Alternative
	Light Rail Transit
LRTP	Long Range Transportation Plan
	Light Rail Vehicle
MBE	Metro Builders and Engineers Group, Ltd
MCA MGL	Master Cooperative Agreement Metro Green Line
MIC	
MIS	Microbiologically Influenced Corrosion Control System
MMRP	Major Investment Study Mitigation Monitoring Reporting Plan
MOA	Memorandum of Agreement
MOA	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
	Maintenance & Otorage 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 RFP RFQ RHA RLPE ROC ROD ROE ROM ROW RPZ RSD RSTP RTIP SAV SCADA SCAQMD SCC SCE SCG SCRRA SHA SHPO SCC SCE SCG SCRRA SHA SHPO SIT SOE SOP SOQ SOV SOV SOV SOV SOV SOV SOV SOV SOV SOV	Rail Fleet Management Plan Request For Proposals Request For Qualifications Risk Hazard Analysis Red Light Photo Enforcement Rail Operations Center Record Of Decision Right of Entry Rough Order of Magnitude Right-Of-Way Runway Protection Zone Revenue Service Date Regional Surface Transportation Program Regional Transportation Improvement Program Stand Alone Validator Supervisory Control and Data Acquisition Southern California Air Quality Management District Standard Cost Category Southern California Regional Rail Authority State Highway Account State Historic Preservation Office System Integration Testing Support of Excavation Standard Operating Procedure Statement of Qualification Schedule Of Value Statement Of Work Specific Plan Amendment Study Special Permitting Process Safety and Security Management Plan Surface Transportation Improvement Program Surface Transportation Program Strate Transportation Program Strate Transportation Program Strate Transportation Program Strate Transportation Program Strate Transportation Program StrV Group Storm Water Prevention Plan Southwester Yard (Division 16)
STP	
	•
	To Be Determined
TBM	Tunnel Boring Machine
TCC	Train Control/Communications
TCE	Temporary Construction Easement

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