

Crenshaw/LAX Transit Project



Metro®

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).

FEBRUARY 2016

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PROJECT SUMMARY

LOCATION: Crenshaw Blvd at Exposition to Green Line DESIGN/CONSULTANT: Hatch Mott				CONSTRUCTION MANAGEMENT CONSULTANT: Stantec CONTRACTOR: Walsh-Shea Corridor Constructors (WSCC)			
PROJECT PHOTO: Greenline underpass falsework and rolling soffit continue.				WORK COMPLETED PAST MONTH:			
				- o Design-builder continues final design. - o Continued Tier 2 bracing installation for UG#1 near LAX airport runways. - o Continued superstructure construction for Century bridge. - o Continued offsite tunnel segment production. - o TBM was lowered into the Expo Station and assembly started. - o Continued CIDH pile installation for bridge over I-405. - o Continued superstructure construction for the La Brea bridge. - o Continued pot holing at Park Mesa area. - o Continued soil excavation at Leimert Park and MLK Stations - o Continued invert slab placement at Expo/Crenshaw Station. - o Continued real estate acquisitions with emphasis on remaining partial-takes and temporary construction easements. - o Southwestern Yard design-builder continued design.			
EXPENDITURE STATUS (\$ In Millions)				SCHEDULE ASSESSMENT			
ACTIVITIES	CURRENT BUDGET	EXPENDED AMOUNT	PERCENT EXPENDED	MAJOR SCHEDULE ACTIVITIES	PRIOR PLAN	CURRENT PLAN	VARIANCE WEEKS
DESIGN	\$ 136.7	\$ 116.7	85.4%	Environmental			
				FEIS/FEIR	Sep-11	Sep-11	Complete
				Record of Decision	Dec-11	Dec-11	Complete
RIGHT-OF-WAY	\$ 127.4	\$ 111.3	87.3%	Design			
CONSTRUCTION	\$ 1,353.1	\$ 499.5	36.9%	Preliminary Engineering	Nov-11	Nov-11	Complete
				Final Design	Sep-15	Jun-16	9.4 months behind
OTHER	\$ 440.8	\$ 137.2	31.1%	Right-of-Way			
TOTAL	\$ 2,058.0	\$ 864.6	42.0%	Full-take parcels available	Jan-15	Jan-15	Complete
Note: cost expended as of February 27, 2016.				Part-take and TCE parcels	Sep-15	Mar-16	6.5 months behind
				Construction			
				D-B Notice to Proceed	Sep-13	Sep-13	Complete
				D-B Substantial Complete	Oct-18	Mar-19	4.7 months behind
				Revenue Service Date	Oct-19	Oct-19	On schedule*
AREAS OF CONCERN				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.			
o Design-builder's ability to mitigate schedule delays. o Timely review of WSCC's design submittals by City of Los Angeles. o 96th street station cost and schedule potential impacts.							
ROW ACQUISITION	PLAN	ACQUIRED	REMAINING	CRITICAL ACTIVITIES / 3 MONTH LOOK AHEAD			
FULL TAKES	37	35	2	- o Launch TBM at Expo/Crenshaw Station. - o Complete excavation at MLK and Leimert Park Stations. - o Commence work on Park Mesa area. - o Commence concrete placement for walls/roof at UG#1. - o Commence invert concrete placement at MLK Station. - o Southwestern Yard design-builder to commence construction in May.			
PARTIAL TAKES	27	23	4				
TEMPORARY EASEMENTS	15	12	3				
TOTAL PARCELS	79	70	9				

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.

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. *A major construction activity was the lowering and start of the assembly of the tunnel boring machine inside the Expo/Crenshaw Station. This is in preparation for the start of tunnel boring in April 2016.*

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 on final design and anticipates starting construction in May 2016.*

Right-of-Way

Metro added in January 2019, two full takes and five part-takes/TCE's required for the construction of the Project. There are now a total of 79 parcels (four have been decertified). There are 37 full takes, 27 partial takes and 15 temporary construction easements (TCE's). There have been 70 parcels acquired through February 2016. Thirty-five full takes, 23 part-takes and 12 TCE's have been provided to the design-builder WSCC.

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

PROJECT OVERVIEW (Continued)

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 February 2016 are \$1,803.6 million or 87.6% of the Current Budget. The project expenditures thru February 2016 are \$864.6 million or 42.0% of the Current Budget.

PROJECT OVERVIEW (Continued)

The current period expenditures are for design-builders monthly design and construction costs and professional services costs such as construction management and administrative staffing. 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 51% cost allocation is reported within another internal project number and the total costs for the Southwestern Yard project is included in the Appendix.

This month the project schedule reflects a four-calendar day reduction in project contingency due to the design-builder reporting a loss of four-calendar days for the placement of invert concrete at Expo/Crenshaw Station in their February 2016 Schedule update. With this additional loss of four days, Metro is reporting a projected 155 calendar day delay to the design-builder's contract substantial completion milestone (2019).

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: **(Closed)** 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. *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.* Four changes have been executed with WSCC, three for design and one for construction. *The parallel design effort and construction changes were suspended and no additional work to accommodate LAWA SPAS is required at this location. The focus now is to accommodate the future Airport Metro Connector Transit Station at a future 96th Street Station which is a separate management issue.*

MANAGEMENT ISSUES (Continued)

Concern No. 4: Design-builders design submittal schedule

Status/Action 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. WSCC is now scheduled to issue their last submittal in June 2016. WSCC is approximately 97% complete and will continue design services during the construction phase.

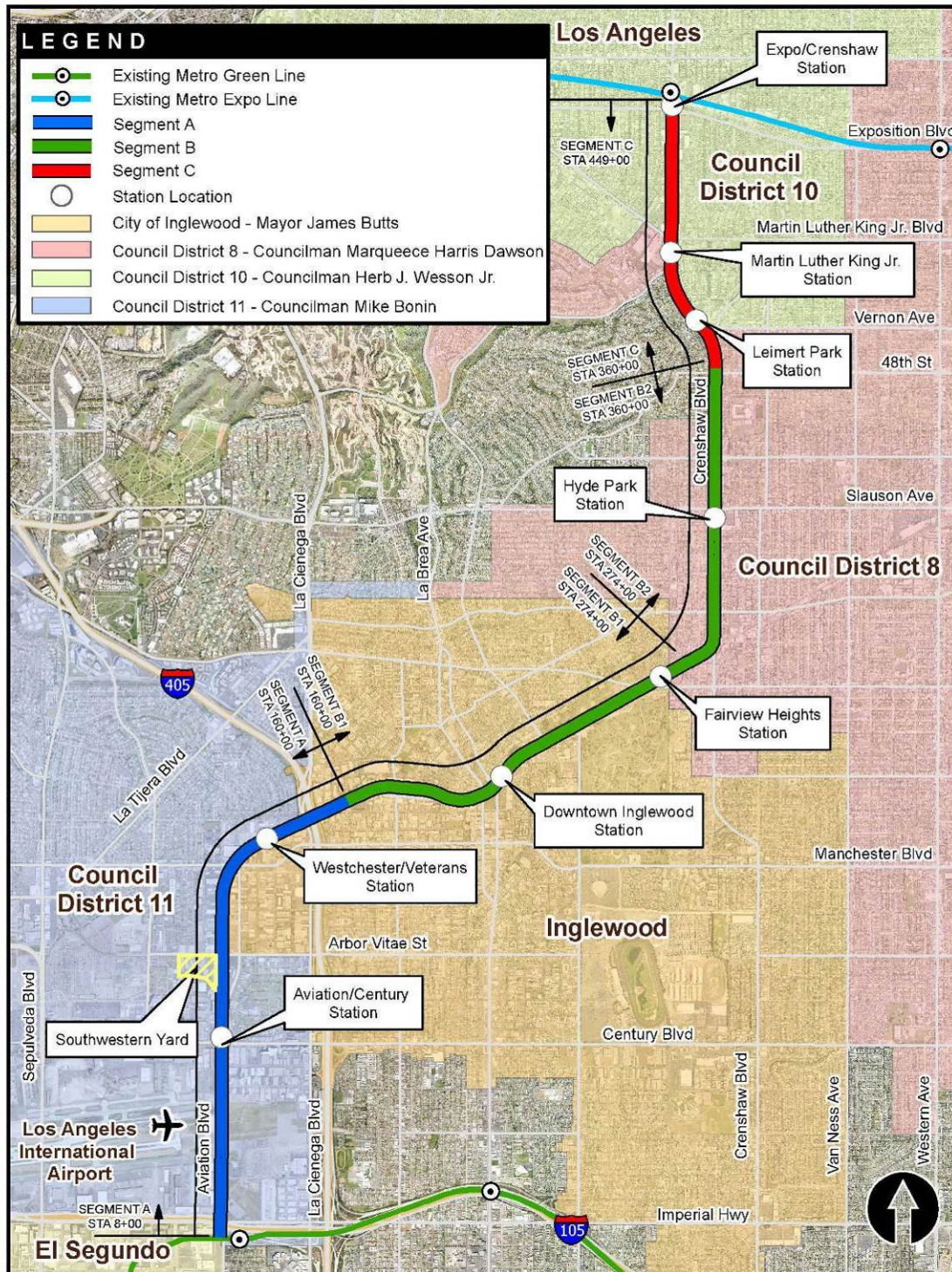
Concern No. 5: Design-builders construction schedule

Status/Action *This month the project schedule reflects a four (4) day reduction in project contingency due to the design-builder reporting a loss of four-calendar days for the placement of invert concrete at Expo/Crenshaw Station in their February 2016 Schedule update. With this additional loss of four days, Metro is reporting a projected 155 calendar day delay to the design-builder's contract substantial completion milestone (2019).*

Concern No. 6: 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. A comprehensive modification is being negotiated with WSCC to finalize cost and schedule impacts. *Any modifications to WSCC for this scope of work are not funded by the Crenshaw/LAX Transit Project but are funded by other funding sources.*

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.

Start Up

The commencement of pre-revenue operations will be determined by Metro Operations. The design-builder will have completed Phase I systems integration testing (SIT) and Metro will have subsequently completed and passed Phase II SIT. Metro may conduct some Phase II SIT efforts concurrently with the start of pre-revenue operations at the discretion of Metro Operations. All testing will be required to include and pass a "stress test" of maximum operational service levels to be acceptable. Pre-revenue operations includes: 1) train runs, especially those involving multiple trains, on the integrated and fully operational extension; 2) rehearsal of expected revenue operations scenarios; 3) as well as abnormal and emergency scenarios in which random combinations of system interactions are tested; 4) equipment "burned-in"; and 5) training of metro personnel who will eventually operate and maintain the extension and for emergency services personnel. Activities occurring during pre-revenue operations are carried out by a designated Metro Project Rail Activation Group.

KEY MILESTONES SIX- MONTH LOOK AHEAD

	Milestone Date	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16
Contract C0988 Start Station Platform Excavation - Florence / West	02/18/16A						
Contract C0988 Expo Station Ready for TBM Machine Setup	02/25/16A						
Contract C0988 Start Platform Level Lower Wall - Expo	02/29/16						
Contract C0991 Demo Early Access Date	03/08/16		△				
Contract C0988 Complete & Submit Design - 96th Street	03/18/16						
Contract C0988 Start Plaza - Florence / Hindry	03/21/16						
Contract C0988 Complete Superstructure - La Brea Bridge	03/28/16						
Contract C0988 Complete Assemble EPBM	03/31/16						
Contract C0988 TBM SB Launch @ Expo Station	04/01/16						
Contract C0988 Start Roadway Construction - Park Mesa	04/05/16						
Contract C0988 Complete Excavation - UG #1	04/18/16						
Contract C0988 Start MSE Wall - 111th St Bridge	04/19/16						
Contract C0988 Complete Excavation & Mud Slab - Vernon	04/20/16						
Contract C0988 Complete Excavation & Mud Slab - MLK	04/20/16						
Contract C0988 Start Excavation - UG #3	04/26/16						
Contract C0988 Complete & Submit Design - Seg A	04/28/16						
Contract C0988 Start Invert Slab - MLK	04/29/16						
Contract C0988 Start MSE Wall - I-405 Bridge	05/02/16						
Contract C0988 Start Platform Level Walls - MLK	05/09/16						
Contract C0988 Start Platform - Aviation / Century Station	05/11/16						
Contract C0988 Start Platform - Florence / La Brea Station	05/24/16						
Contract C0988 Complete Platform Level Lower Wall - Expo	06/17/16						
Contract C0988 Start Plaza - Aviation / Century	06/21/16						
Contract C0988 Complete Excavation - UG #4 U Section	06/23/16						
Contract C0988 Complete & Submit Design - Seg C	06/27/16						
Contract C0988 Complete 111th St Bridge	06/27/16						
Contract C0988 Complete La Brea Bridge	06/28/16						
Contract C0988 Complete TBM SB Tunnel @ Vernon	07/05/16						
Contract C0988 Complete Superstructure - Aviation / Century Bridge	07/06/16						
Contract C0988 Complete Retaining Wall RW3 - Aviation / Century	07/18/16						
Contract C0988 Start Ballasted Track - Segment A	07/19/16						



MTA Staff



MTA Board Action



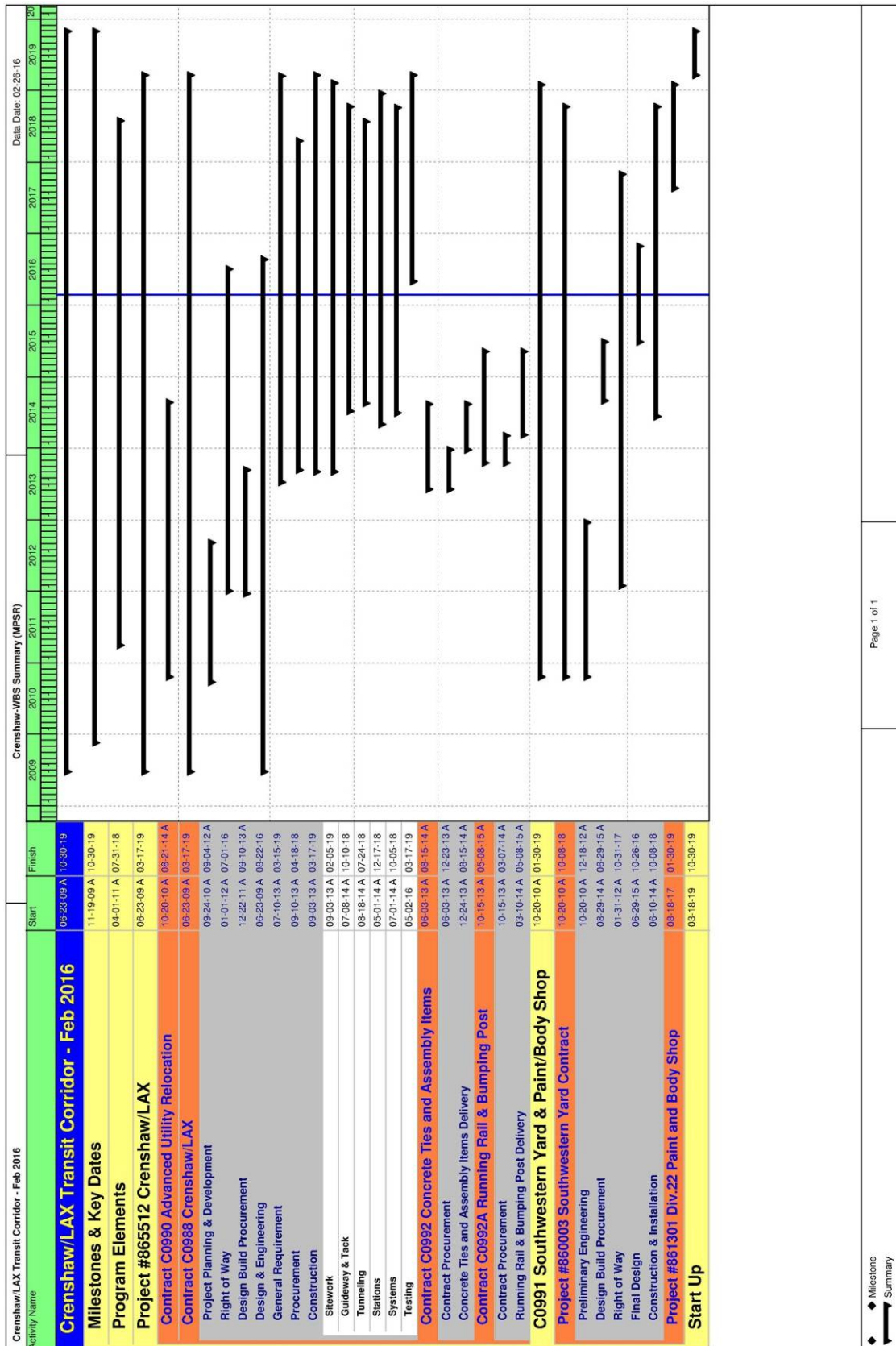
Walsh



Other

"A" following date is actual and completed

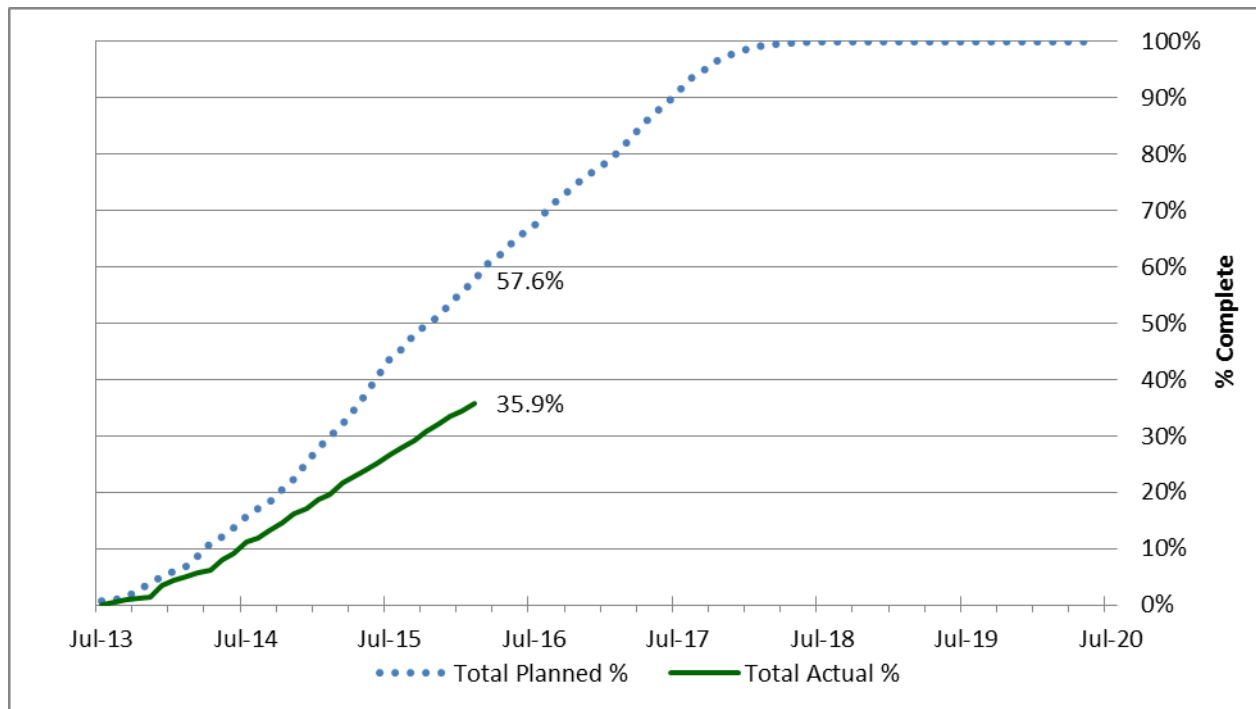
PROJECT SUMMARY SCHEDULE



SCHEDULE MEASUREMENTS

	Status	Change from Last 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	97.0%	0.1%	Behind Schedule
Contract C0990	100%	None	Design Completed
Contract C0991	25.63%	0%	Baseline Schedule Approved
Contract C0992	100%	None	Design Completed
Contract C0992A	100%	None	Design Completed
Construction Contracts Progress:			
Contract C0988	28.9%	1.6%	Behind Schedule
Contract C0990	100%	0%	Substantially Completed
Contract C0991	0%	-	Baseline Schedule Approved
Contract C0992	100%	0%	Substantially Completed
Contract C0992A	100%	0%	Substantially Completed

OVERALL CONSTRUCTION PROGRESS CURVE STATUS



The actual overall construction progress is 35.9% versus a planned progress of 57.6% through February 2016. The progress curves represent a composite percentage for the physical progress of work performed to complete the project's construction contracts, including the major design-build (C0988), advance utility relocation (C0990), and two equipment procurement contracts-concrete ties (C0992) and running rail (C0992A). The Southwestern Yard Contract C0991 is excluded in the composite percentage but since the baseline schedule was just approved in late December 2015, it will be included in a future Report.

The physical progress percentage excludes non-construction items such as contractor's early design and construction mobilization costs and all general requirement costs not tied specifically to a construction work effort.

MAJOR EQUIPMENT DELIVERY STATUS

Tunnel Boring Machine

WSSC, 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	Jan-16	Feb-16	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	03/31/16	04/01/16	-1
TBM SB Break through at Vernon	09/17/15	08/01/16	08/02/16	-1
TBM NB Tunnel Launch at Expo	10/29/15	09/14/16	09/15/16	-1
TBM NB Break through at Vernon	03/21/16	01/26/17	01/27/17	-1

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. 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 have been delivered to the job.

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

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 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-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
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
SF6 Gas Insulated Switches * Metro top/bottom	3/13/2015	6/1/2015	8/2/2016	10/1/2016

CRITICAL PATH NARRATIVE

Critical Path:

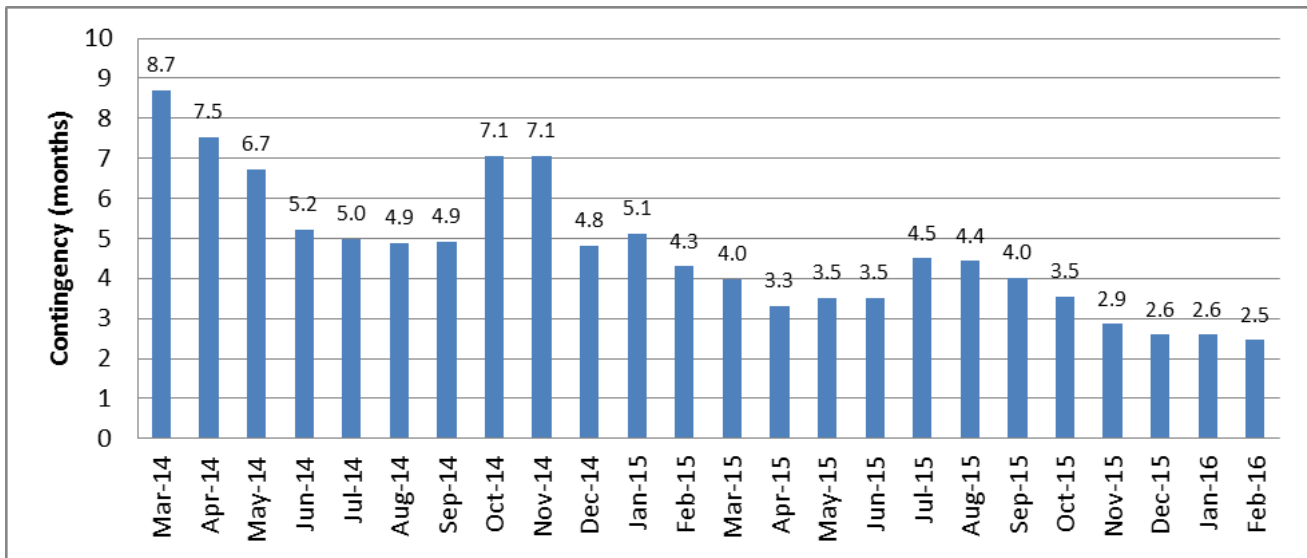
The longest path to project substantial completion begins with final design of the Design/Build Contract #C0988 Crenshaw/LAX Transit Corridor.

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 March 17, 2019, which is 155 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.

Metro this month reduced the forecast of the available project contingency by four (4) calendar days. This four (4) calendar days is the delay in the contractor's schedule for the Expo/Crenshaw station construction efforts which has been the critical path since the beginning of the design-build contract (September 2013).

The total contingency remaining is 2.5 months.

PROJECT COST STATUS

UNITS IN DOLLARS

SCC CODE	DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		CURRENT BUDGET/FORECAST VARIANCE
			PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
10	GUIDEWAYS	471,335,000	-	452,500,001	-	443,245,043	10,860,210	126,532,396	-	450,354,375	(2,145,626)
20	STATIONS, STOPS, TERMINALS, INTERMODAL	153,906,000	-	316,050,000	-	301,776,720	1,150,723	121,433,263	-	315,050,000	(1,000,000)
30	SUPPORT FACILITIES (SOUTHWEST YARD)	66,673,000	-	73,245,544	-	71,053,330	2,378,069	10,973,020	-	71,164,000	(2,081,544)
40	SITEWORK/SPECIAL CONDITIONS	235,576,000	-	348,565,999	264,709	363,284,210	3,081,459	238,322,060	58,843	374,600,832	26,034,833
50	SYSTEMS	125,132,000	-	169,311,000	-	152,322,830	373,390	2,207,337	-	169,436,000	125,000
	CONSTRUCTION SUBTOTAL (10-50)	1,052,622,000	-	1,359,672,544	264,709	1,331,682,133	17,843,852	499,468,076	58,843	1,380,605,207	20,932,663
60	RIGHT-OF-WAY	132,294,000	-	127,400,000	-	113,578,644	89,231	111,251,125	-	127,490,000	90,000
70	VEHICLES / BUSES	87,780,000	-	82,100,000	-	82,050,901	204,276	11,656,698	1,471,544	83,571,544	1,471,544
80	PROFESSIONAL SERVICES	273,147,000	-	300,093,178	1,821,636	250,734,543	2,825,727	216,661,977	2,569,250	341,603,082	41,509,904
	SUBTOTAL (10-80)	1,545,843,000	-	1,869,265,722	2,086,344	1,778,046,220	20,963,085	839,037,876	4,099,637	1,933,269,833	64,004,111
90	UNALLOCATED CONTINGENCY	177,157,000	-	162,734,278	-	-	-	-	(4,099,637)	98,730,167	(64,004,111)
100	FINANCE CHARGES	-	-	-	-	-	-	-	-	-	-
	TOTAL PROJECT 865512 (10-100)	1,723,000,000	-	2,032,000,000	2,086,344	1,778,046,220	20,963,085	839,037,876	-	2,032,000,000	(0)
	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	-
	TOTAL PROJECTS 405512 & 465512 (ENV / PLAN'G)	26,000,000	-	26,000,000	-	25,549,388	-	25,549,388	-	26,000,000	-
	TOTAL PROJECTS 405512, 465512 & 865512	1,749,000,000	-	2,058,000,000	2,086,344	1,803,595,608	20,963,085	864,587,263	-	2,058,000,000	(0)

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH FEBRUARY 27, 2016.

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:
 - 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 re-allocation 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 February 27, 2016. The total commitments increased by \$2.1 million this period primarily due to the following:

- SCC-40 (Sitework and Special Conditions) has increased by \$0.3 million due to executed modifications associated with design-build Contract C0988 Crenshaw/LAX Transit Corridor.
- SCC-80 (Professional Services) has increased of \$1.8 million due to executed contract modifications with the design-build Contract C0988 Crenshaw/LAX Transit Corridor, third party coordination by Los Angeles City Departments and audit services with BCA Watson Rice LLP for contract C0988 change orders. The total commitment of \$250.7 million includes \$20.0 million for the Southwestern Yard 49% allocation.

The \$1,803.6 million in commitments to date represents 87.6% of the current budget.

Expenditures:

The expenditures are cumulative through February 27, 2016. The total expenditures increased by \$20.9 million this period due to the following:

- SCC-10 (Guideways) has increased by \$10.9 million for costs associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor.
- SCC-20 (Stations, Stops, Terminals, Intermodal) has increased by \$1.1 million for costs associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor.
- SCC-30 (Southwestern Yard) has increased by \$2.4 million for costs associated with Contract C0991 Division 16: Southwestern Yard (Design/Build) and third party utility relocation scope of work with HHS Construction Inc.
- SCC-40 (Sitework and Special Conditions) has increased by \$3.1 million for costs associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor, third party utility relocation with Tesoro Logistics LP and Metro Art Program.
- SCC-50 (Systems) has increased \$0.4 million for costs associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor.

PROJECT COST ANALYSIS (Continued)

- SCC-70 (Vehicles) has increased \$0.2 million for costs associated with exercising Option 1 of the P3010 Contract with KINKISHARYO INTERNATIONAL, LLC. To procure 22 light rail vehicles.
- SCC-80 (Professional Services) has increased by \$2.8 million for costs associated with Contract C0988 Crenshaw/LAX Transit Corridor, Contract C0991 Division 16: Southwestern Yard (Design/Build), Metro project administration, IPMO field office lease and utilities, construction management support services, legal services, third party coordination by Los Angeles City Departments, project management assistance support and environmental consultant services. The total expenditure of \$216.7 million includes \$6.7 million for the Southwestern Yard 49% allocation.

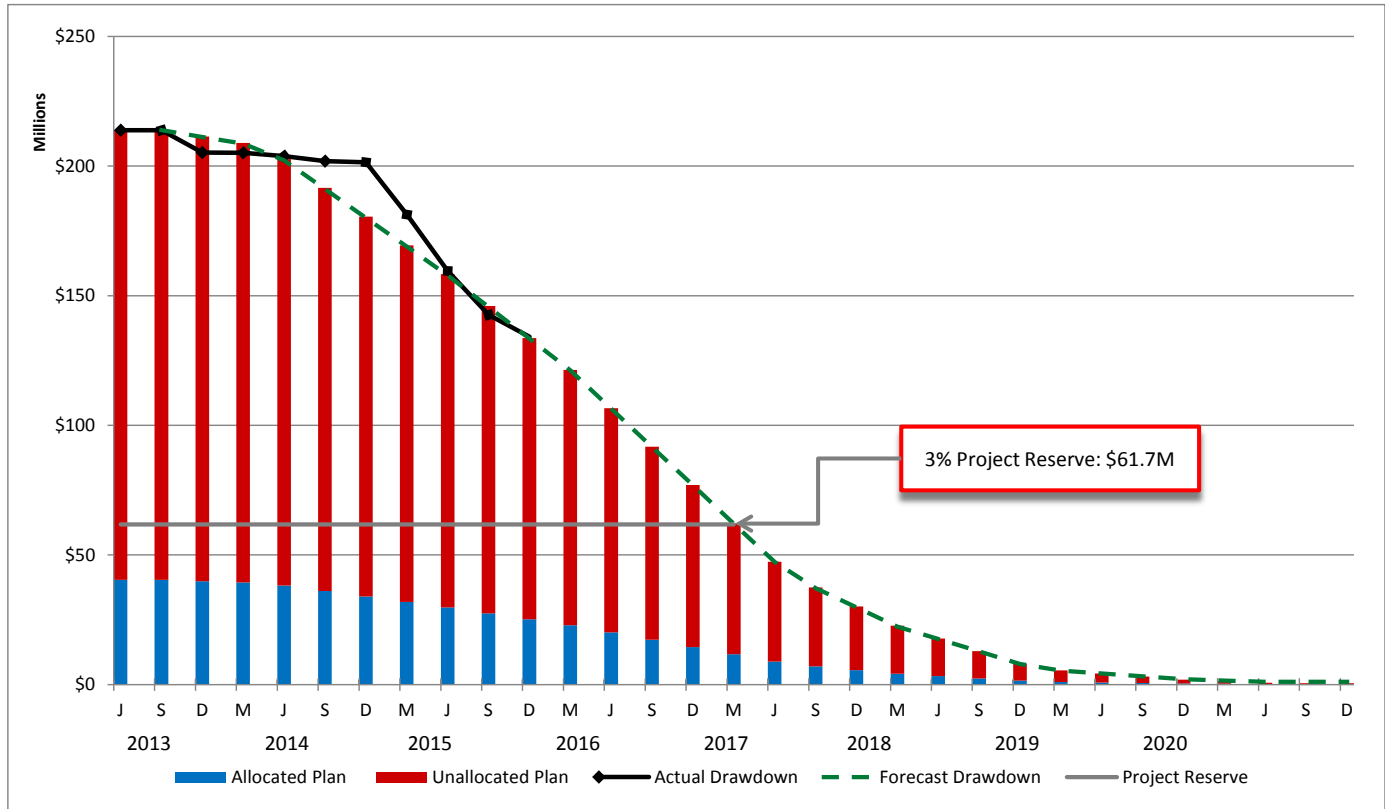
The \$864.6 million in expenditures to date represents 42.0% of the current budget.

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 BUDGET	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT	FORECAST	FORECAST
		PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
405556 SYSTEMWIDE TRANSIT PLANNING	139,236	-	139,236	89,236	139,236	90,412	90,412	-	139,236	-
210090 FARE GATE PROJECT	2,310,000	-	2,482,746	-	2,482,746	-	172,746	-	2,482,746	-
460303 AIRPORT METRO CONNECTOR	366,400	1,140,635	3,001,555	-	1,860,920	827,157	1,834,935	1,555	3,001,555	-
500013 C/LAX LAWA SCOPE OF WORK	1,575,362	-	1,575,362	-	531,125	-	228,387	-	1,575,362	-
TOTAL	4,390,998	1,140,635	7,198,899	89,236	5,014,027	917,569	2,326,480	1,555	7,198,899	-

PROJECT COST CONTINGENCY DRAWDOWN



Through 27-Feb-2016

PROJECT COST 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.

PROJECT CONTINGENCY DRAWDOWN ANALYSIS (Continued)

There has been a cumulative drawdown of \$85,417,594 or 39.9% for both allocated and unallocated contingency through February 2016.

- The unallocated contingency decreased by \$4,099,637 due to executed contract modifications for the design-build contract C0988 Crenshaw/LAX Transit Corridor, executed Fiscal Year 2016 annual work order with Los Angeles City departments and increase cost of \$1,471,544 for escalation as part of executing option 1 for the vehicle contract P3010 with KINKISHARYO INTERNATIONAL, LLC.
- Allocated contingency was decreased by \$100,119 due to executed contract modifications for the design-build contract C0988 Crenshaw/LAX Transit Corridor.

PROJECT COST CONTINGENCY (through 27-Feb-2016)

UNITS IN DOLLARS

	Original Contingency (Budget)	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)
Unallocated Contingency	173,500,000	(70,670,196)	(4,099,637)	(74,769,833)	98,730,167
Allocated Contingency	40,366,792	(10,547,641)	(100,119)	(10,647,760)	29,719,032
Total Contingency	213,866,792	(81,217,838)	(4,199,756)	(85,417,594)	128,449,198

DISADVANTAGED BUSINESS ENTERPRISE (DBE) STATUS

Contract C0988 Crenshaw/LAX Transit Corridor Design-Build

(Reported Data as of January 15, 2016)

- DBE Goal – Design 20%
- Current DBE Commitment \$20,252,929 (20.59%)
- Current DBE Participation \$23,738,198 (25.76%)
- Twenty (20) Design subcontractors have been identified to-date

- DBE Goal – Construction 20%
- DBE Commitment \$236,116,671 (20%)
- Current DBE Commitment \$113,700,317 (9.60%)
- Current DBE Participation \$95,626,294 (24.62%)
- Sixty-three (63) Construction subcontractors have been identified to-date.

PROJECT LABOR AGREEMENTS (PLA) STATUS

Contract C0988 Crenshaw/LAX Transit Corridor Design-Build

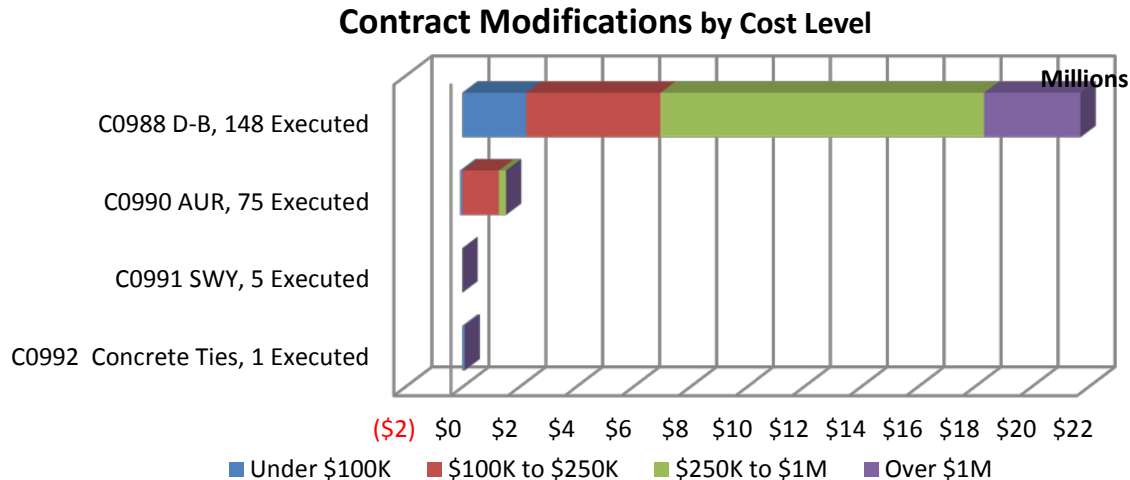
(Reported Data as of January 16, 2016)

- Targeted Worker Goal – 40.00%
- Targeted Worker Current Participation - 59.11%

- Apprentice Worker Goal - 20.00%
- Apprentice Worker Current Participation - 18.20%

- Disadvantaged Worker Goal - 10.00%
- Disadvantaged Worker Current Participation 11.48%

SUMMARY OF CONTRACT MODIFICATIONS



	C0988	C0990	C0991	C0992
	148 Executed	75 Executed	5 Executed	1 Executed
Under \$100K	\$ 2,235,629	\$ (70,251)	\$ -	\$ 81,738
\$100k to \$250K	\$ 4,720,975	\$ 1,280,184	\$ -	\$ -
\$250K to \$1M	\$ 11,377,683	\$ 251,864	\$ -	\$ -
Over \$1M	\$ 3,386,736	\$ -	\$ -	\$ -
Total	\$ 21,721,023	\$ 1,461,797	\$ -	\$ 81,738
% of Contract	1.71%	18.68%	0.00%	3.78%

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

One hundred and forty eight (148) changes with a total value of \$21.72 million have been executed since execution of Contract C0988. There are an additional fourteen (14) changes with a total value of \$1.12 million are pending the administrative approval process.

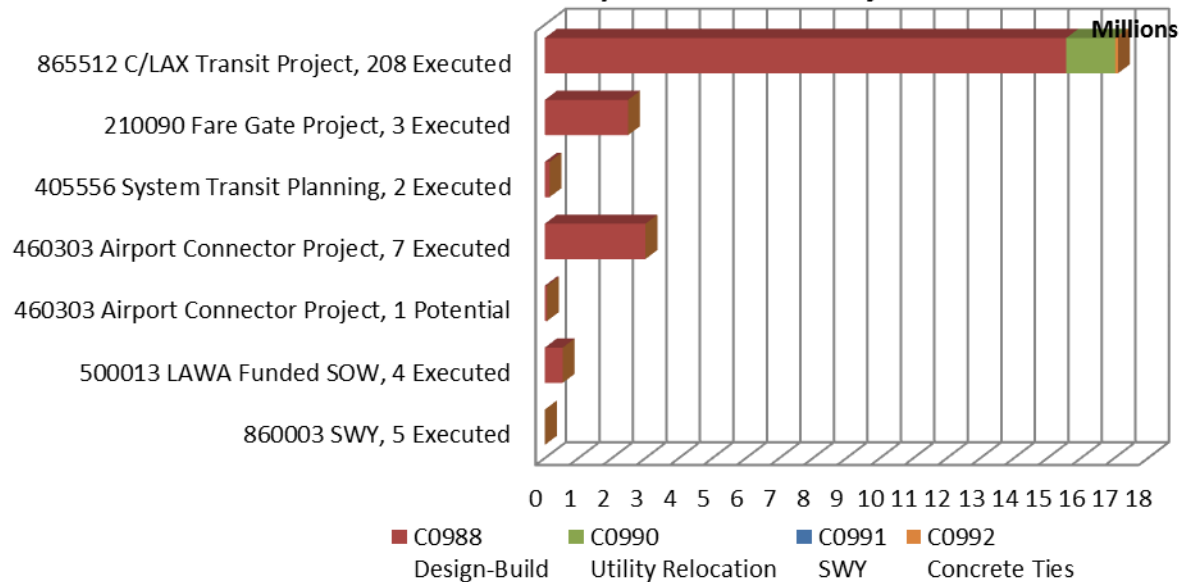
Seventy-five (75) changes with a total value of \$1.46 million have been executed since execution of Contract C0990.

Five (5) no-cost changes have been executed since execution of Contract C0991.

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

SUMMARY OF CONTRACT MODIFICATIONS

Contract Modifications by Metro Internal Project Number



	865512	210090	405556	460303	500013	860003
	Executed	Executed	Executed	Executed	Executed	Executed
C0988	132	3	2	7	4	0
C0988 \$	\$ 15,566,270	\$ 2,482,746	\$ 139,236	\$ 3,001,555	\$ 531,216	\$ -
C0990	75	0	0	0	0	0
C0990 \$	\$ 1,461,797	\$ -	\$ -	\$ -	\$ -	\$ -
C0991	0	0	0	0	0	5
C0991 \$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C0992	1	0	0	0	0	0
C0992 \$	\$ 81,738	\$ -	\$ -	\$ -	\$ -	\$ -
Total	208	3	2	7	4	5
Total \$	\$ 17,109,805	\$ 2,482,746	\$ 139,236	\$ 3,001,555	\$ 531,216	\$ -

Two hundred and eight (208) changes with a total value of \$17.11 million have been executed for Project 865512 Crenshaw/LAX Transit Project. There are an additional thirteen (13) changes with a total value of \$1.51 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. Two (2) changes with a value of \$139,236 have been executed for Project 405556 System Transit Planning.

Seven (7) changes with a value of \$3.00 million have been executed for Project 460303 Airport Metro Connector Project. There is an additional change with a total value of \$65,132 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. Five (5) no-cost changes have been executed for Project 860003 Southwestern Yard.

FINANCIAL/GRANT STATUS

\$ in millions

SOURCE	(A) ORIGINAL BUDGET	(B) TOTAL FUNDS ANTICIPATED	(C) TOTAL FUNDS AVAILABLE	(D) COMMITMENTS \$	(D/B) %	(E) EXPENDITURES \$	(E/B) %	(F) BILLED to \$	(F/B) FUNDING SOURCE %
FEDERAL - CMAQ	68.2	54.0	54.0	54.0	100%	54.0	100%	54.0	100%
FEDERAL - SECTION 5309 BUS CAPT	8.6	8.6	8.6	8.6	100%	8.6	100%	8.6	100%
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	331.1	545.9	100%	319.3	58%	279.4	51%
MEASURE R	661.1	661.1	502.8	661.1	100%	196.9	30%	153.7	23%
OTHER FUNDS*	52.4	187.5	13.0	13.0	7%	8.0	4%	8.0	4%
PROP C 25% HIGHWAY	148.9	189.5	3.7	119.7	63%	3.7	2%	3.7	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	1,187.3	1,803.6	87.6%	864.6	42.0%	746.2	36.3%

NOTE: Expenditures are cumulative through February 2016.

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 was approved on September 23, 2015. Funds are available for drawdown.

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. *Metro will apply to FTA for a grant application of \$24.0M in July 2016.*

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 \$545.9M was submitted to the US Department of Transportation (DOT) in November 2011. Loan agreement was executed on September 12, 2012. A total of \$331.1M has been disbursed through November 2015.

MEASURE R: \$502.753M has been allocated to the project through FY2016. Funds are available for drawdown.

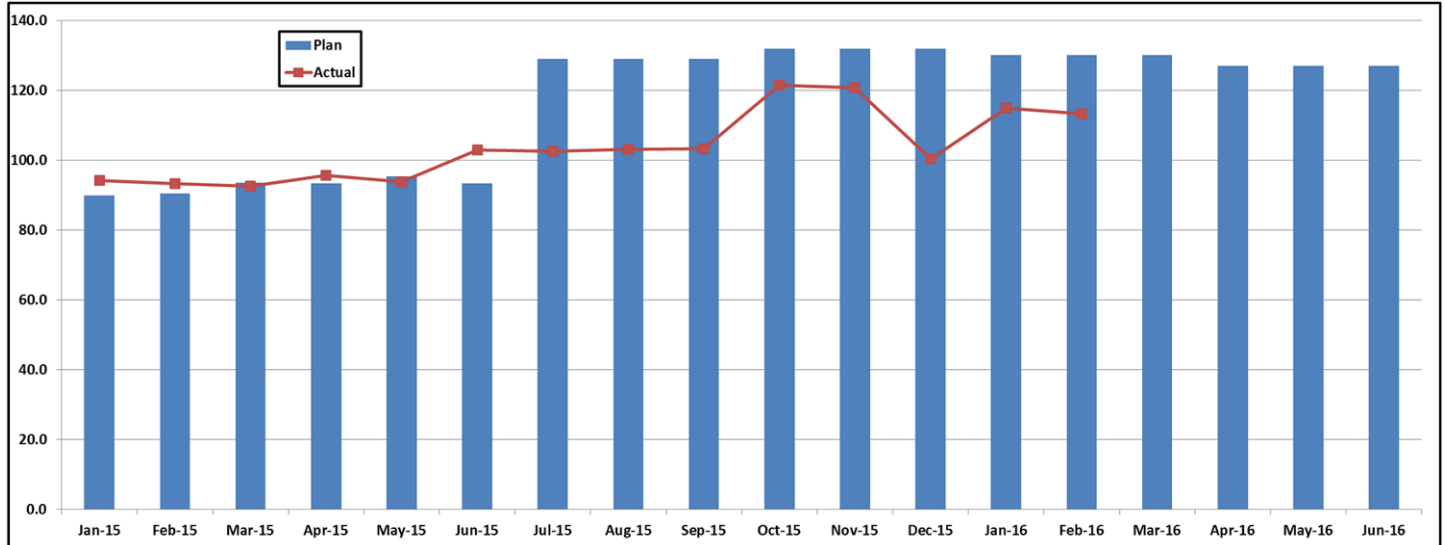
OTHER FUNDS: City of LA: Based on the funding agreement between Metro and the City of LA. \$13M is available for drawdown through FY2016.

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

Total Project Staffing – FTES



Notes:

1. FTE = Full Time Equivalent
2. Staffing levels include the Southwestern Yard Project.
3. Actual staffing levels are cumulative through February 2016.

TOTAL PROJECT STAFFING

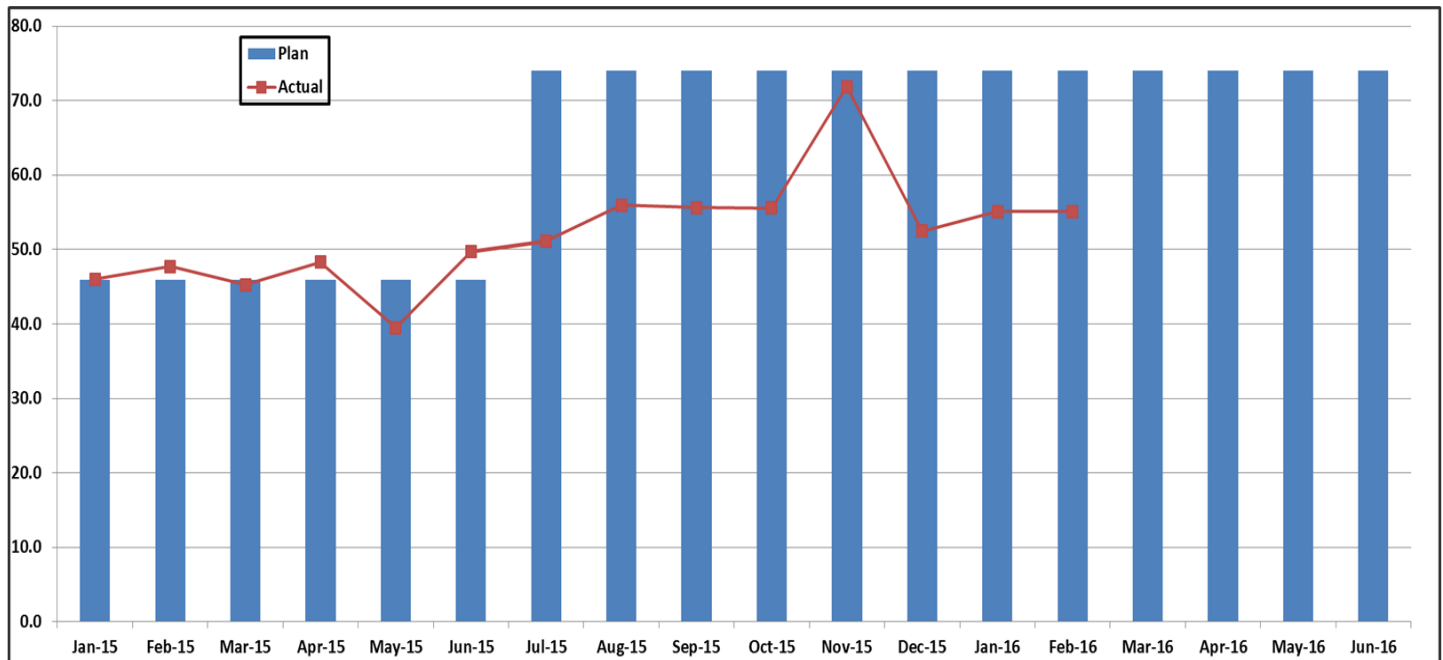
With the start of the 2016 fiscal year in July; the staffing for the Southwestern Yard Project is also included along with the Crenshaw/LAX Project for Metro and the Construction Management and Engineering Services consultants.

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 in staffing requirements.

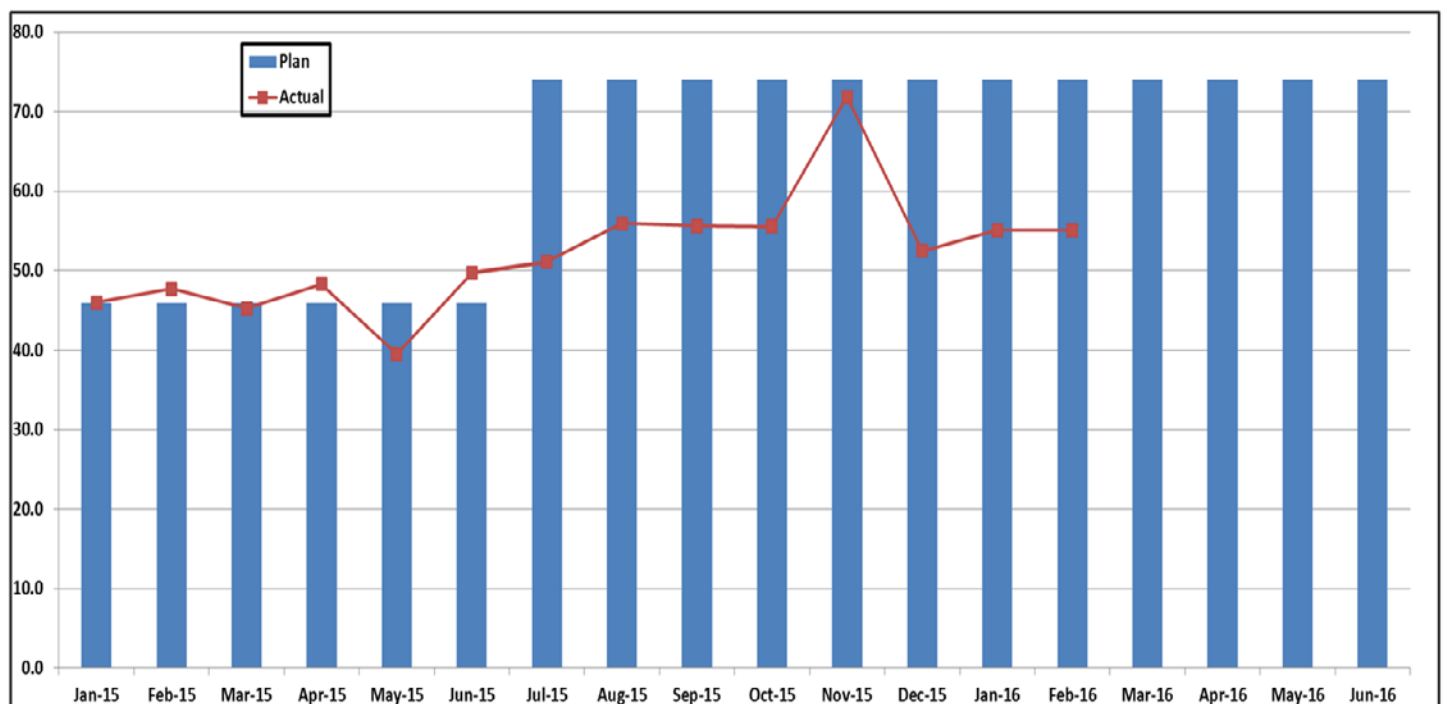
The next three charts show actual staffing versus planned staffing for the three major project participants.

STAFFING STATUS (Continued)

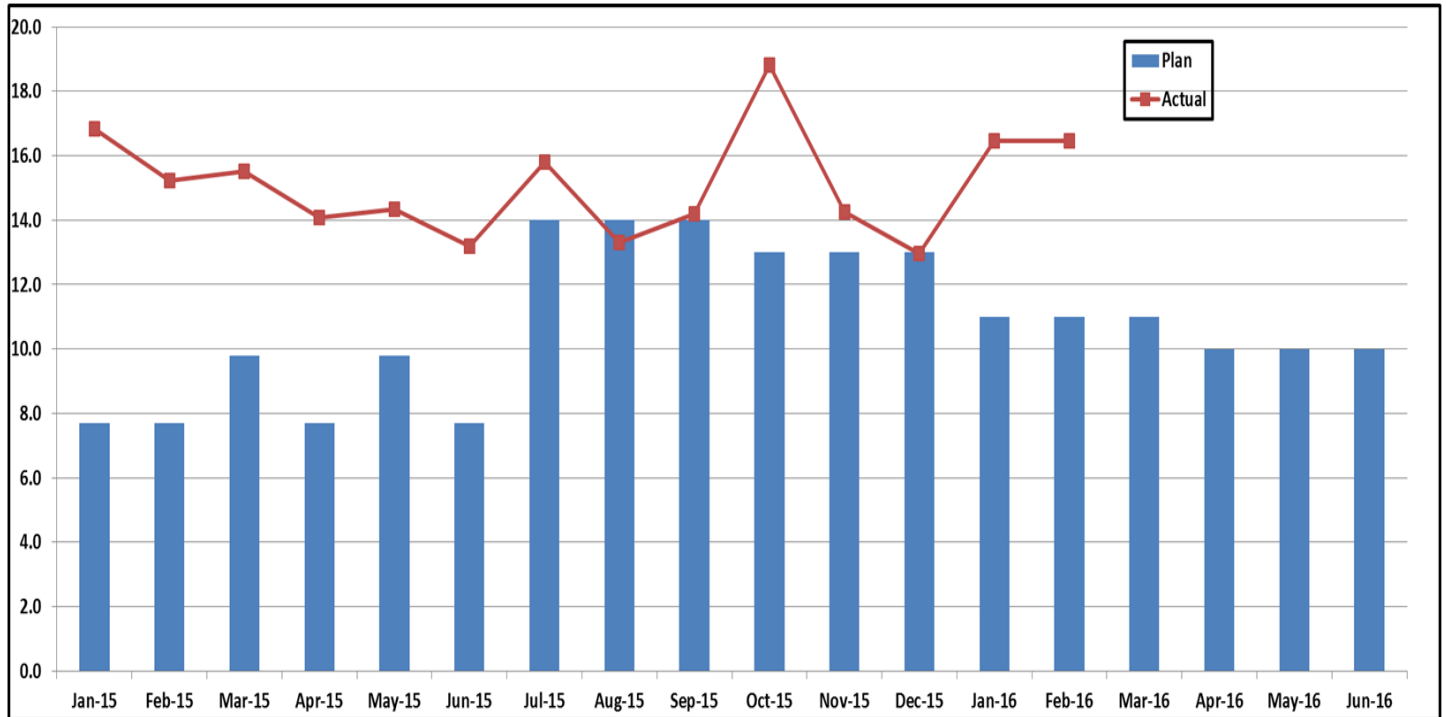
METRO STAFFING – FTES



CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONSULTANT – FTES



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 Corridor (D-B):									
Crenshaw Subdivision									
Full Takes	12	12		12	12	7	5	12	12
Part Takes (PT or SE)	10	9	1	9	9	2	6		9
TCE	10	10		10	10	1	8		9
Subtotal Parcels	32	31	1	31	31	10	19	12	30
Crenshaw Subdivision Additional Parcels:									
Full Takes	0	0							
Part Takes	1	1							
TCE	0	0							
Subtotal Parcels:	1	1	0	0	0	0	0	0	0
Total Crenshaw Parcels	33	32	1	31	31	10	19	12	30
Harbor Subdivision									
Full Takes	15	14		15	15	8	7	12	15
Part Takes (PT or SE)	18	16	2	18	16	7	9		14
TCE	3	2	1	2	2		2	1	2
Subtotal Parcels	36	32	3	35	33	15	18	13	31
Harbor Subdivision Additional Parcels:									
Full Takes	2	2							
Part Takes	1	1							
TCE	3	3		3	3	1			1
Subtotal Parcels:	6	6	0	3	3	1	0	0	1
Total Harbor Subdivision Parcels	42	38	3	38	36	16	18	13	32
Total CR/HS Parcels:	75	70	4	69	67	26	37	25	62
Southwestern Yard									
Full Takes	8	8		8	8	4	4	7	8
Part Takes	0								
TCE	0								
Subtotal Parcels:	8	8	0	8	8	3	4	7	8
Total SW Parcels:	8	8	0	8	8	3	4	7	8
Total Project Parcels	83	78	4	75	73	29	41	32	70

- **75** parcels were certified originally. **1** additional parcel was acquired but not certified due to voluntary sale. **7** additional parcels (CR-2901, HS-0805, HS-1001-2, HS-1401-1, HS-2301, HS-2701-1, and HS-2703-1) have been added for a new total of **83** Project Parcels. **4** parcels were decertified due to changes in design.
- **70** parcels acquired: **35** full takes and **35** part takes/Temporary Construction Easement (TCE) provided to WSCC.

Reported as of February 29, 2016

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 Control issued five (5) Nonconformance Reports (NCR's) and two Potential Nonconformance Reports (PNCR's) while closing out one older NCR. The 5 NCR's include (a) missing deck drain for the Manchester Bridge, (b) Segment B Ballast Wall thickness issue, (c) EXPO Catch Basin Frame material issue, (d) EXPO bent column dowels, and (e) EXPO invert slab with missing form savers. The 2 PNCR's include (1) 111th Bridge with surface defects and (2) LAWA 18 inch sewer ponding issue.
- No new NCR's were issued during the month by Metro.
- ConAd issued a Notice of Noncompliance (NNC) during the month for SWPPP control issues on the Project.
- WSCC issued a follow-up surveillance report on Pre-Cast Management, Sloan, NV (the supplier of MSE Wall Panels). No Findings or Observations were noted.
- WSCC issued an audit report on the WSCC NCR Processes (no issues identified) and a surveillance report on the construction of the La Brea Soffit and Stem Walls (One Observation noted which has been closed).
- Metro Quality reviewed and approved the resume of two additional WSCC Inspectors (a Structural Inspector and an Electrical Inspector).
- Metro Quality participated in Readiness Review Meetings for (a) Tunnel Seal Construction, (b) TBM Lowering, (c) UG – 1 Lower Bracing Removal and (d) La Brea Bridge Deck Pre-Pour activities.
- Metro Quality issued a close-out letter to WSCC to complete the 2015 Annual Audit of WSCC Project activities. As a result of the audit, Metro Quality started follow-on surveillances of field documentation to ensure that the latest approved documents are being utilized.
- Metro's Independent Test Lab (ITL) continues to provide oversight evaluations of concrete testing.

ENVIRONMENTAL STATUS

C0988 Crenshaw/LAX Transit Corridor Design Build

- Reviewed and commented on the following Contractor Submittals:
 - o Weekly Noise Monitoring Data for Expo Station, MLK Station, Vernon Station, La Brea Station and Century Station
 - o Green Construction Plan Monthly Report
 - o 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). *Compliance for February 2016 Mitigation Measures will be documented in the Tenth Quarter Mitigation Monitoring and Reporting Report (January – March 2016) to be submitted in April 2016.*
- *Metro obtained a UST closure permit for Underground Storage Tank CR-4503 Permit No. SR003041 from LAFD. On January 29, 2016, the UST was removed under supervision of LAFD. Metro will submit a UST Closure Report to LAFD in March 2016.*
- *During the excavation of the pedestrian undercrossing at the Faithful Central Bible Church, WSCC encountered a previously unknown Underground Storage Tank (UST). Metro submitted a UST Closure Report to Angeles County Department of Public Works (LACDPW) for review. On February 18, 2016 the LACDPW referred the case to the RWQCB.*
- *Coordinated with Ardent, environmental consultant on Parcel SW-0104 located at 5600 W. Arbor Vitae Street, for operation of a soil remediation system. Ardent completed the in-situ chemical oxidation pilot test in February 2016. Design of the remediation system is scheduled to be completed in March 2016 with installation and operation during the final quarter of 2016.*
- *Coordinated tree removal permit applications for the City of Los Angeles for Phase II Sidewalk Trees from 48th Street to 67th Street. A total of 124 sidewalk trees were removed during last two weeks of February 2016.*
- *Coordinated the removal of a private property tree on Oak Street in February 2016.*
- *A partial tibia bone of an adult *Bison antiquus* (extinct ancient bison) was discovered on February 16, 2016 in the northern portion of MLK Station at an elevation 58 feet. The finding was reported to FTA and will be curated with the other artifacts discovered along the project alignment.*

CONSTRUCTION RELATIONS STATUS

- *Hosted a community meeting on February 17th in the City of Inglewood to discuss with residents and businesses the purchase of the Union Equity Buildings.*
- *Participated in the CLC Quarterly Meeting on February 2 which included performances by local organizations that received drums from the Tree to Drum Project.*
- *Continue to work with Bus Operations and WSCC in preparation for Stage B for UG3 and on the location of bus stops and access issues.*
- *Held follow-up meetings with LADOT and CD8 to discuss temporary and long-term parking at Park Mesa Heights.*
- *Conducted small group meetings with businesses and residents between 48th St. and Slauson Avenue in Park Mesa Heights on the proposed construction schedule.*

SYSTEMWIDE DESIGN AND ART PROGRAM STATUS

- Responded to RFIs and submittal drawings.
- Finalized designs 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.
- Worked with Design Builder to refine artwork technical requirements and schedule.
- Worked with artists to refine their designs for submission to fabricators.
- *Reviewed and accepted final designs from four artists.*
- Participated in Systemwide Design integration reviews and presentations.
- Worked with Design Builder to clarify technical requirements for porcelain enamel fabricators.
- Provided art program update to community stakeholders.
- Reviewed and provided comments on signage submittal drawing packages.

SAFETY & SECURITY STATUS

- Participated in weekly progress meetings with WSCC's Management and Construction Management Team to discuss safety/security/quality 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 Walks with WSCC's Safety personnel to enhance overall safety awareness. Minor safety hazards observed and corrected immediately.
- *Participated in WSCC's weekly Safety Tool-Box Meetings and Executive and sub-contractor Safety Committee Meetings.*
- *Participated in project tours at the Expo Yard (above and below ground) for Executive Management, FTA personnel and UCLA Engineering Students.*
- Conducted underground orientation for Self-Rescuer Training.
- *Walsh/Shea reported 115,497 work hours and two day-away incidents for the month of February 2016. Total Project-to-Date work hours are 2,226,701 and nineteen 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 AGREEMENT STATUS

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	2/16	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.

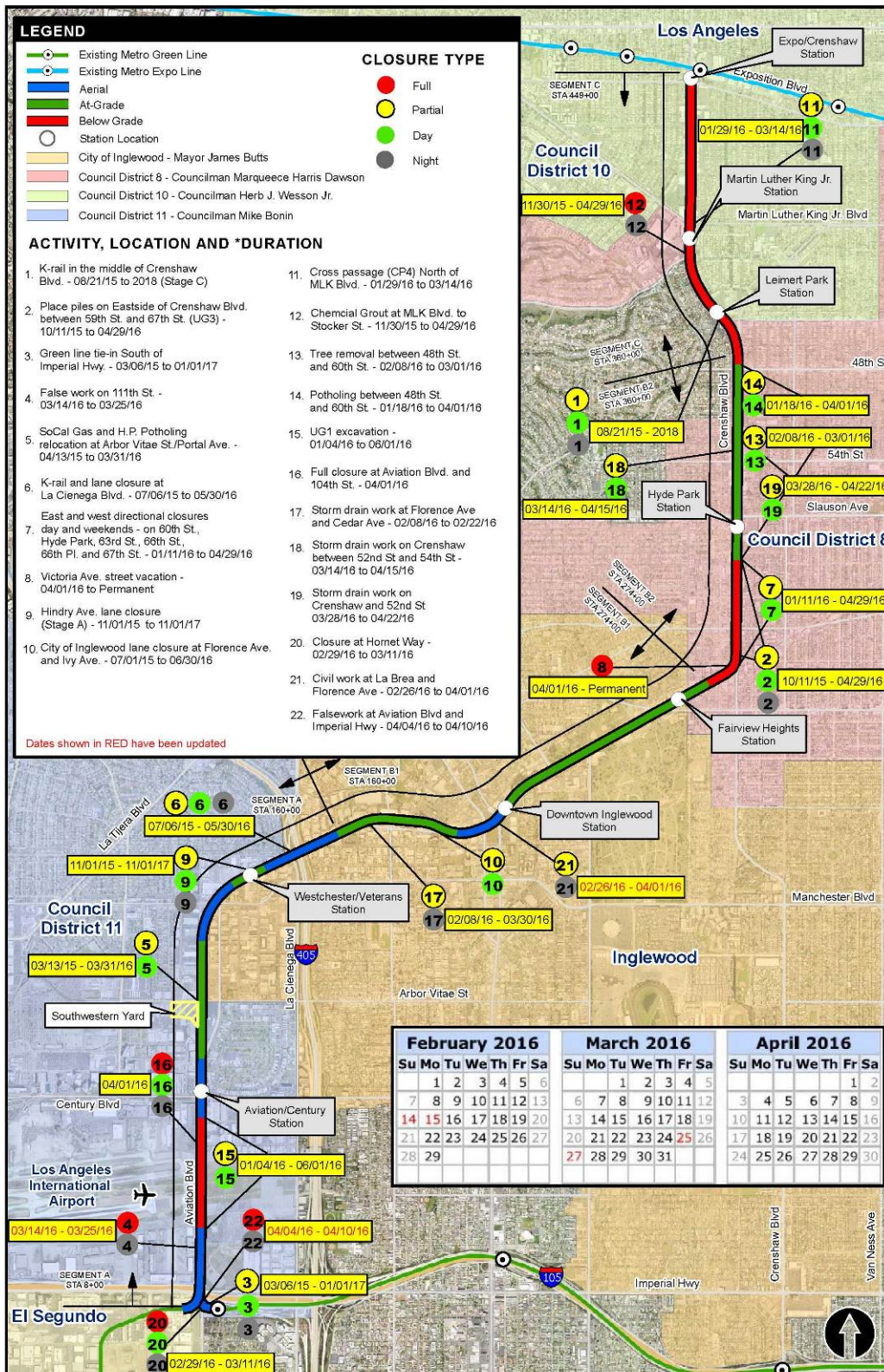
ADVANCED UTILITY RELOCATION STATUS

- Tesoro Oil – design completed for 8” gas line. Construction was completed in January 2016.

CPUC CROSSING SUMMARY STATUS

- The CPUC has approved all packages.

Crenshaw/LAX Transit Corridor Project Traffic Closure Key Map - February - April 2016



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.

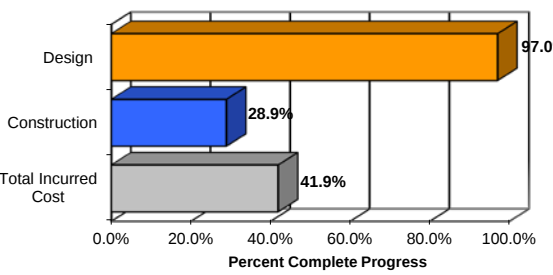
CHRONOLOGY OF EVENTS (Continued)

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.

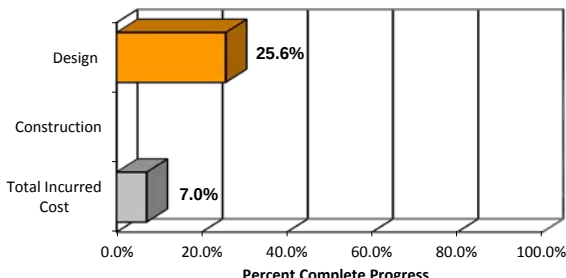
CONTRACT C0988 STATUS
Crenshaw/LAX Transit Corridor

PE Design Contractor: Hatch Mott MacDonald (HMM) CM Consultant: Stantec Contractor: - Walsh Shea Corridor Constructors (WSCC)	Contract No.: C0988 Status as of February 26, 2015																																									
Progress/Work Completed: Construction - Continued potholing along the Grade Crossing, Park Mesa & UG #3 . - Continued geotechnical monitoring at Vernon, MLK, Expo, UG#4, #3 & #1. - Continued with SWPPP Implementation – Segments A, B & C. - Continued the TBM assembly at the Bellanca Yard. - Commenced TBM Lowering and Assembly. - Commenced removing struts & walers and lower walls at Expo Station. - Continued waterproofing, invert slab & invert conduit & plumbing construction at Expo Station. - Continued soil excavation & SOE installation at Vernon & MLK Station. - Continued Jet Grouting for Cross Passage #4. - Continued excavation & utility hanging at UG #4. - Commenced installing bracing tier 1 at UG#4. - Continued SOE Installation at UG #3. - Continued construction of Ballast Wall in Seg B1. - Continued superstructure work at the La Brea bridge. - Commenced excavation at West Station. - Continued MSE wall panel erection/back fill at La Brea East Wall. - Continued OCS foundation construction on segment B1. - Continued structural concrete work at the Pedestrian Underpass. - Continued abutment wall installation at I-405 Bridge. - Continued subgrade guideway cut of Segment A. - Continued excavation, bracing installation, mud slab, waterproofing , protective slab & Invert slab at UG #1. - Continued falsework construction at the Green Line Tie-In. - Continued Green Line MSE Wall excavation, level pad & panel setting and backfill.	Areas of Concern: - Possible cobbles and boulders found during excavation at Expo and MLK station. - Station excavation impacted by excessive water inflow at EXPO Station. - 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. - Park Mesa Heights street work behind schedule. - Contractor's schedule does not accurately forecast its work efforts.																																									
Schedule Assessment: Contractor's Feb 2016 schedule update indicates Milestone 1 - Contract Substantial Completion is 155 calendar days behind the current contract date. Note 1: Design-builder incorrectly showed turnover of the parcels completing Milestone #4 on February 15, 2016. These parcels were not turnover to Metro as required by contract.	Cost Assessment: The current construction contract cost forecast is \$1,291.83 million and is within the Board authorized budget. The Contractor submitted their 30th payment application in the approved amount of \$17,040,488.67. *Please note that not all executed modifications may have been included in the Contractor current payment application.																																									
Schedule Summary: 1. Date of Award: 08/01/13 2. Notice to Proceed: 09/10/13 3. Original Substantial Completion Duration: 1824 4. Current Substantial Completion Duration: 2014 5. Elapsed Time from NTP: 899 44.6%	Cost Summary: \$ In millions 1. Award Value: 1,272.63 2. Executed Modifications: 16.65 3. Approved Change Orders: 2.55 4. Current Contract Value (1 + 2 + 3): 1,291.83 5. Incurred Cost: 540.99																																									
<table><thead><tr><th>Milestones</th><th>Original Contract</th><th>Current Contract</th><th>Forecast</th><th>Calendar Day Variance</th></tr></thead><tbody><tr><td>Milestone 1 - Contract Substantial Completion</td><td>09/08/18</td><td>10/13/18</td><td>03/17/19</td><td>-155</td></tr><tr><td>Milestone 2 - UFS Completion</td><td>03/09/18</td><td>04/13/18</td><td>09/05/18</td><td>-145</td></tr><tr><td>Milestone 3 - Commence SIT Phase I</td><td>06/09/18</td><td>07/14/18</td><td>12/18/18</td><td>-157</td></tr><tr><td>Milestone 4 - Const./Turnover Parcels SW-0101, 0102, 0103</td><td>12/04/15</td><td>03/04/16</td><td>N/A</td><td>N/A</td></tr><tr><td>Milestone 5 - Const./Turnover Parcels SW-0002, 0003, 0004, 0104</td><td>06/05/17</td><td>06/05/17</td><td>N/A</td><td>N/A</td></tr><tr><td>Milestone 6 - Const./Turnover Parcels SW-0001</td><td>08/01/17</td><td>08/01/17</td><td>N/A</td><td>N/A</td></tr><tr><td>Milestone 7 - Provide Access for Division 16 Southwestern Yard D-B</td><td>01/23/16</td><td>01/23/16</td><td>N/A</td><td>N/A</td></tr></tbody></table>	Milestones	Original Contract	Current Contract	Forecast	Calendar Day Variance	Milestone 1 - Contract Substantial Completion	09/08/18	10/13/18	03/17/19	-155	Milestone 2 - UFS Completion	03/09/18	04/13/18	09/05/18	-145	Milestone 3 - Commence SIT Phase I	06/09/18	07/14/18	12/18/18	-157	Milestone 4 - Const./Turnover Parcels SW-0101, 0102, 0103	12/04/15	03/04/16	N/A	N/A	Milestone 5 - Const./Turnover Parcels SW-0002, 0003, 0004, 0104	06/05/17	06/05/17	N/A	N/A	Milestone 6 - Const./Turnover Parcels SW-0001	08/01/17	08/01/17	N/A	N/A	Milestone 7 - Provide Access for Division 16 Southwestern Yard D-B	01/23/16	01/23/16	N/A	N/A	PERCENT COMPLETE from 9/10/13 to 2/26/16  Percent Complete Progress Construction physical percent complete excludes mobilization and general requirements	
Milestones	Original Contract	Current Contract	Forecast	Calendar Day Variance																																						
Milestone 1 - Contract Substantial Completion	09/08/18	10/13/18	03/17/19	-155																																						
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Milestone 4 - Const./Turnover Parcels SW-0101, 0102, 0103	12/04/15	03/04/16	N/A	N/A																																						
Milestone 5 - Const./Turnover Parcels SW-0002, 0003, 0004, 0104	06/05/17	06/05/17	N/A	N/A																																						
Milestone 6 - Const./Turnover Parcels SW-0001	08/01/17	08/01/17	N/A	N/A																																						
Milestone 7 - Provide Access for Division 16 Southwestern Yard D-B	01/23/16	01/23/16	N/A	N/A																																						

CONTRACT C0990 STATUS
Crenshaw/LAX Advanced Utility Relocations

PE Design Contractor: Hatch Mott MacDonald (HMM) CM Consultant: Stantec Contractor: - Metro Builders and Engineers Group LTD				Contract No.: C0990 Status as of February 26, 2015																																																	
Progress/Work Completed: - The construction was substantially completed on Aug 21, 2014				Areas of Concern:																																																	
Schedule Assessment: 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. . Metro granted substantial completion to Metro Builders, the Advanced Utility Contractor on August 21, 2014, which is 276 calendar days behind.				Cost Assessment: The current construction contract cost is \$9.29 million and within the Board authorized budget. The unpaid amount is the scope deletion from the base contract and remaining balance of provisional sums .																																																	
Schedule Summary: 1. Date of Award: 05/30/12 2. Notice to Proceed: 07/17/12 3. Original Substantial Completion Duration: 365 4. Current Substantial Completion Duration: 468 5. Elapsed Time from NTP: 753				Cost Summary: \$ In millions 1. Award Value: 7.83 2. Executed Modifications: 0.97 3. Approved Change Orders: 0.49 4. Current Contract Value (1 + 2 + 3): 9.29 5. Incurred Cost: 9.12																																																	
<table><thead><tr><th>Milestones</th><th>Original Contract</th><th>Current Contract</th><th>Forecast</th><th>Calendar Day Variance</th></tr></thead><tbody><tr><td>Milestone 1 - Contract Substantial Completion</td><td>07/17/13</td><td>11/18/13</td><td>08/21/14A</td><td>-276</td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></tbody></table>				Milestones	Original Contract	Current Contract	Forecast	Calendar Day Variance	Milestone 1 - Contract Substantial Completion	07/17/13	11/18/13	08/21/14A	-276																															PERCENT COMPLETE from 7/17/12 to 8/21/14 <table><thead><tr><th>Category</th><th>Percent Complete</th></tr></thead><tbody><tr><td>Design</td><td>0%</td></tr><tr><td>Construction</td><td>99%</td></tr><tr><td>Total Incurred Cost</td><td>98%</td></tr></tbody></table> Construction physical percent complete excludes mobilization and general requirements		Category	Percent Complete	Design	0%	Construction	99%	Total Incurred Cost	98%
Milestones	Original Contract	Current Contract	Forecast	Calendar Day Variance																																																	
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CONTRACT C0991 STATUS
Southwestern Yard

PE Design Contractor: Hatch Mott MacDonald (HMM) CM Consultant: Stantec Contractor: - Hensel Phelps / Herzog JV					Contract No.: C0991 Status as of February 26, 2015																													
Progress/Work Completed: - Design submittal 60% of APDU 1 was submitted on November 1, 2015. - Baseline schedule was submitted on November 16th and was approved as noted on December 11, 2015. - Design submittal 85% of APDU 1 was submitted on January 8, 2016, and was rejected on February 2, 2016. - Design submittal 60% of APDU 2 was submitted on January 28, 2016, and 60% Design Comment Resolution Meeting was planned for March 9 and 10.					Areas of Concern: - Contractor is behind in submitting their monthly schedule update and invoicing.																													
Schedule Assessment: - Change Order # CO-0004 was issued extending contract duration by 90 calendar days. New substantial completion date is 01/30/2019. - Contractor is very late in submitting their schedule progress updates for period ending January 2016 and February 2016.					Cost Assessment: - Contract to Hensel Phelps / Herzog JV was awarded for \$172.3 million. - December 2015 pay application for \$2.85 million has been approved by Metro. - January 2016 pay application has been approved by Metro for submittal.																													
Schedule Summary: <table><tr><td>1. Date of Award:</td><td>28-May-15</td></tr><tr><td>2. Notice to Proceed:</td><td>29-Jun-15</td></tr><tr><td>3. Original Substantial Completion Duration:</td><td>1,220</td></tr><tr><td>4. Current Substantial Completion Duration:</td><td>1,311</td></tr><tr><td>5. Elapsed Time from NTP:</td><td>242</td></tr></table>					1. Date of Award:	28-May-15	2. Notice to Proceed:	29-Jun-15	3. Original Substantial Completion Duration:	1,220	4. Current Substantial Completion Duration:	1,311	5. Elapsed Time from NTP:	242	Cost Summary: <table><tr><td></td><td>\$ In millions</td></tr><tr><td>1. Award Value:</td><td>172.31</td></tr><tr><td>2. Executed Modifications:</td><td>0.00</td></tr><tr><td>3. Approved Change Orders:</td><td>0.00</td></tr><tr><td>4. Current Contract Value (1 + 2 + 3):</td><td>172.31</td></tr><tr><td>5. Incurred Cost (thru Dec 2015):</td><td>12.11</td></tr></table>						\$ In millions	1. Award Value:	172.31	2. Executed Modifications:	0.00	3. Approved Change Orders:	0.00	4. Current Contract Value (1 + 2 + 3):	172.31	5. Incurred Cost (thru Dec 2015):	12.11			
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Milestones	Original Contract	Current Contract	Forecast	Calendar Day Variance																														
MS#1 Yard and Main Shop Design Completion	26-Oct-16	26-Oct-16	12-Oct-16	14																														
MS#2 Main Shop Communication Room Completion	15-Jan-18	16-Apr-18	3-Apr-18	13																														
MS#3 Main Shop Substantial Completion	30-Apr-18	30-Jul-18	30-Jul-18	0																														
MS#4 Southwestern Yard Substantial Completion	31-Oct-18	30-Jan-19	28-Jan-19	2																														

CONTRACT C0992 STATUS
Concrete Ties

PE Design Contractor: Hatch Mott MacDonald (HMM) CM Consultant: Stantec Contractor: Rocla Concrete Tie Inc.					Contract No.: C0992 Status as of February 26, 2015																																												
Progress/Work Completed: - All 19,936 concrete ties have been received onsite by the design-builder (Contract C0988). - Contract is in close-out.					Areas of Concern:																																												
Schedule Assessment: All concrete ties have been delivered to job site by August 15, 2014.					Cost Assessment: The current construction contract cost is \$2.25 million and has been completely paid to contractor.																																												
Schedule Summary: 1. Date of Award: 12/10/13 2. Notice to Proceed: 12/23/13 3. Original Substantial Completion Duration: 220 4. Current Substantial Completion Duration: 235 5. Elapsed Time from NTP: 235					Cost Summary: \$ In millions 1. Award Value: 2.16 2. Executed Modifications: 0.09 3. Approved Change Orders: 4. Current Contract Value (1 + 2 + 3): -2.25 5. Incurred Cost: 2.25																																												
<table><thead><tr><th>Milestones</th><th>Original Contract</th><th>Current Contract</th><th>Forecast</th><th>Calendar Day Variance</th></tr></thead><tbody><tr><td>Milestone 1 - Contract Substantial Completion</td><td>07/31/14</td><td>08/15/14</td><td>08/15/14A</td><td>0</td></tr><tr><td></td><td></td><td></td><td></td><td>0</td></tr><tr><td></td><td></td><td></td><td></td><td>0</td></tr><tr><td></td><td></td><td></td><td></td><td>0</td></tr><tr><td></td><td></td><td></td><td></td><td>0</td></tr><tr><td></td><td></td><td></td><td></td><td>0</td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></tbody></table>					Milestones	Original Contract	Current Contract	Forecast	Calendar Day Variance	Milestone 1 - Contract Substantial Completion	07/31/14	08/15/14	08/15/14A	0					0					0					0					0					0						PERCENT COMPLETE from 12/23/2013 to 8/15/14 Delivered 100% Shipped 100% Total Incurred Cost 100% 0% 20% 40% 60% 80% 100% Percent Complete Progress Construction physical percent complete excludes mobilization and general requirements				
Milestones	Original Contract	Current Contract	Forecast	Calendar Day Variance																																													
Milestone 1 - Contract Substantial Completion	07/31/14	08/15/14	08/15/14A	0																																													
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CONTRACT C0992A STATUS
Running Rail and Bumping Posts

PE Design Contractor: Hatch Mott MacDonald (HMM) CM Consultant: Stantec Contractor: LB Foster Rail Technology Corp					Contract No.: C0992A Status as of February 26, 2015																																												
Progress/Work Completed: - All 115RE SS Blank Stick Rails have been delivered to the job site. - All 115RE HH rail have been delivered to job site. - All Bumping Posts have been delivered to job site on 5/8/2015.					Areas of Concern: .																																												
Schedule Assessment: All running rails and bumping posts have been delivered ahead of the schedule.					Cost Assessment: The current contract cost is \$5,2 million and has been completely paid to contractor.																																												
Schedule Summary: 1. Date of Award: 01/23/14 2. Notice to Proceed: 03/07/14 3. Original Substantial Completion Duration: 300 4. Current Substantial Completion Duration: 558 5. Elapsed Time from NTP: 448					Cost Summary: \$ In millions 1. Award Value: 5.2 2. Executed Modifications: 3. Approved Change Orders: 4. Current Contract Value (1 + 2 + 3): - 5.2 5. Incurred Cost: 5.2																																												
<table><thead><tr><th>Milestones</th><th>Original Contract</th><th>Current Contract</th><th>Forecast</th><th>Calendar Day Variance</th></tr></thead><tbody><tr><td>Milestone 1 - Contract Substantial Completion</td><td>12/31/14</td><td>09/30/15</td><td>05/08/15A</td><td>145</td></tr><tr><td></td><td></td><td></td><td></td><td>0</td></tr><tr><td></td><td></td><td></td><td></td><td>0</td></tr><tr><td></td><td></td><td></td><td></td><td>0</td></tr><tr><td></td><td></td><td></td><td></td><td>0</td></tr><tr><td></td><td></td><td></td><td></td><td>0</td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></tbody></table>					Milestones	Original Contract	Current Contract	Forecast	Calendar Day Variance	Milestone 1 - Contract Substantial Completion	12/31/14	09/30/15	05/08/15A	145					0					0					0					0					0						PERCENT COMPLETE from 3/7/2014 to 05/29/15 Construction 100% Total Incurred Cost 100% 0% 20% 40% 60% 80% 100% Percent Complete Progress Construction physical percent complete excludes mobilization and general requirements				
Milestones	Original Contract	Current Contract	Forecast	Calendar Day Variance																																													
Milestone 1 - Contract Substantial Completion	12/31/14	09/30/15	05/08/15A	145																																													
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CONSTRUCTION PHOTOGRAPHS



GREENLINE UNDERPASS – Falsework and rolling soffit continue



CONSTRUCTION PHOTOGRAPHS (Continued)



**MECHANICALLY STABILIZED EMBANKMENT
(MSE) Wall 17L&R - Precast panel erection**



UG1 – Installing waterproof membrane

CONSTRUCTION PHOTOGRAPHS (Continued)



MSE WALL 202L&R - Crews continue to work on subgrade preparation, leveling pads, precast panel erection, strap placement and embankment backfill.



LEIMERT PARK STATION – Tier-2 strut installation looking east

CONSTRUCTION PHOTOGRAPHS (Continued)



EXPOSITION/CRENSHAW STATION – Rebar installation and preparation for invert concrete placement

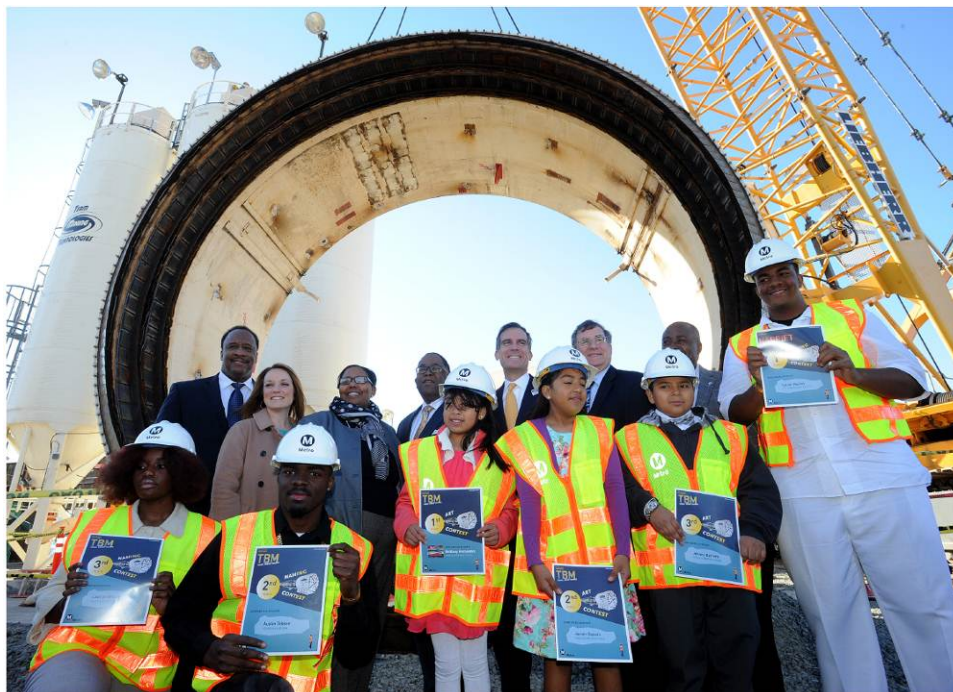


EXPOSITION/CRENSHAW STATION – Attaching Tunnel Boring Machine (TBM) cutter head to the front shield.

CONSTRUCTION PHOTOGRAPHS (Continued)



EXPOSITION/CRENSHAW STATION – Lowering of mid-shield of Tunnel Boring Machine (TBM) into Expo station



EXPOSITION/CRENSHAW STATION – Student winners of the TBM Artwork and Naming Contest with their teachers and City officials from Inglewood and Los Angeles

CONSTRUCTION PHOTOGRAPHS (Continued)



EXPOSITION/CRENSHAW STATION – The First, Second and Third Place winners of the TBM Artwork Contest

CONSTRUCTION PHOTOGRAPHS (Continued)



Crenshaw/LAX Tree-to-Drum Project donated the first 40 drums from the displaced trees along Crenshaw Boulevard to local community arts, music and dance organizations during the Community Leadership Council (CLC) meeting on February 22, 2016.



EXPOSITION/CRENSHAW STATION - UCLA students on a tour of the station

APPENDIX

PROJECT COST STATUS – SOUTHWESTERN YARD

UNITS IN DOLLARS

SCC CODE	DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		FORECAST VARIANCE
			PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
10	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	85,189,999	0	86,532,695	0	0	0	86,889,531	1,699,532
40	SITWORK/SPECIAL CONDITIONS	35,932,000	0	38,273,000	8,724	38,525,629	2,723,096	11,359,323	0	38,273,000	0
50	SYSTEMS	25,784,616	0	32,991,000	0	32,991,000	0	0	0	32,991,000	0
	(10-50) CONSTRUCTION	147,263,451	0	156,453,999	8,724	158,049,324	2,723,096	11,359,323	0	158,153,531	1,699,532
60	RIGHT-OF-WAY	99,910,000	0	100,000,000	8,805,000	99,850,831	8,805,000	99,758,927	0	100,000,000	(0)
70	VEHICLES	0	0	0	0	0	0	0	0	0	0
80	PROFESSIONAL SERVICES	35,601,095	0	33,639,631	808,221	25,757,383	(1,251,082)	11,315,921	0	31,815,199	(1,824,432)
90	PROJECT CONTINGENCY	13,659,732	0	17,106,370	0	0	0	0	0	17,231,270	124,900
TOTAL		296,434,278	0	307,200,000	9,621,945	283,657,538	10,277,014	122,434,170	0	307,200,000	0

C0991 PAINT & BODY SHOP PROJECT

DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		FORECAST VARIANCE
		PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
861301 DIV 22 PAINT & BODY SHOP	11,000,000	0	11,000,000	0	6,915,732	0	193,448	0	11,000,000	0

PROJECT GRAND TOTAL	307,434,278	0	318,200,000	9,621,945	290,573,270	10,277,014	122,627,618	0	318,200,000	0
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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.

APPENDIX

PROJECT COST ANALYSIS (Continued)

Current Forecast:

There were no changes this month.

Commitments:

The commitments are cumulative through February 27, 2016.

Total commitments increased by \$9.6 million for this period due to the following:

- SCC-60
 - o Real estate acquisition commitment increased by \$8.8 million to DTG Operations Inc.
- SCC-80
 - o Construction management commitment increased by \$0.9 million to Stantec Consulting.

The \$290.6 million in commitments to date represents 91.3% of the current budget.

Expenditures:

The expenditures are cumulative through February 27, 2016.

The total expenditures increased by \$10.3 million for this period due to the following:

- SCC-40
 - o Contractor's Hensel Philips/Herzog JV expenditure of \$2.3 million.
 - o Accounting adjustment, increase of expenditure to the project by \$0.39 million which should be reversed out in by accounting by next month reporting period.
- SCC-60
 - o Real estate acquisition increase by \$8.8 million by DTG Operations Inc.
- SCC-80
 - o Agency expenditure increase by \$0.09 million for February.
 - o Contractor's Hensel Philips/Herzog JV expenditure of \$1.2 million.
 - o Legal services \$0.03 million to Demetriou, Del Guercio, Springe & Francis, LLC.
 - o Accounting adjustment, decrease of expenditure to the project by \$2.6 million which was reversed out in by accounting from previous month reporting period.

The \$122.6 million in expenditures to date represents 38.5% of the current budget.

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.