

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).

JANUARY 2017

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PROJECT SUMMARY

LOCATION: Crenshaw Blvd at Exposition to Green Line DESIGN/CONSULTANT: Mott MacDonald				CONSTRUCTION MANAGEMENT CONSULTANT: Stantec CONTRACTORS: Walsh-Shea Corridor Constructors (Alignment) and Hensel Phelps / Herzog (Southwestern Yard)			
PROJECT PHOTO: Started siding special trackwork				WORK COMPLETED PAST MONTH:			
				- o Continued mining of north bound tunnel to MLK Jr. Station - o Continued concrete placement for south bound tunnel invert. - o Continued interior walls at Expo Structure. - o Continued exterior walls at MLK Jr. Station. - o Continued lower walls at Leimert Park Station. - o Continued street work at Park Mesa at-grade area. - o Continued excavation and concrete placement at UG#3 and UG#4. - o Continued construction of Green Line superstructure. - o Continued erection of falsework for construction of I-405 bridge. - o Continued construction of Manchester bridge superstructure. - o Commenced siding special trackwork in Segment B1. - o Continued SWY underground utilities (storm drain, sewer lines). - o Continued SWY main shop pits and foundation construction.			
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	\$ 126.5	92.6%	Environmental			
				FEIS/FEIR	Sep-11	Sep-11	Complete
RIGHT-OF-WAY	\$ 127.4	\$ 121.6	95.4%	Record of Decision	Dec-11	Dec-11	Complete
				Design			
CONSTRUCTION	\$ 1,353.1	\$ 727.9	53.8%	Preliminary Engineering	Nov-11	Nov-11	Complete
				Final Design	Sep-15	May-17	20.5 months behind
OTHER	\$ 440.8	\$ 169.5	38.5%	Right-of-Way			
				Full-take parcels available	Jan-15	Jan-15	Complete (base scope)
TOTAL	\$ 2,058.0	\$ 1,145.5	55.7%	Part-take and TCE parcels	Sep-15	Apr-16	Complete (base scope)
Note: Cost expended as of Jan. 27, 2017.				Construction			
AREAS OF CONCERN - o Timely submission of remaining WSCC's design submittals and review by City of Los Angeles. - o Ability of north bound TBM to meet production rate forecast in design-builder's Completion Schedule. - o Substantial heavy rains in January impacted progress of remaining at-grade excavation along the alignment critical path. Southwestern Yard construction site also impacted. - o Design-builder's ability to mitigate schedule delays.				D-B Notice to Proceed	Sep-13	Sep-13	Complete
				*D-B Substantial Complete	May-19	May-19	3.5 weeks behind
				**Revenue Service Date	Oct-19	Oct-19	3.5 weeks behind
				*Agreement approved for cost and schedule impacts revised the D-B Contractor's Substantial Completion Milestone to May 1, 2019.			
				** Revenue Service Date includes no schedule contingency.			
ROW ACQUISITION	PLAN	ACQUIRED	REMAINING	CRITICAL ACTIVITIES / 3 MONTH LOOK AHEAD			
FULL TAKES	37	36	1	- o Complete Green Line superstructure. - o Continue ballast wall construction at 96th Street. - o Continue trackwork installation in Segment B1. - o Continue Park Mesa at-grade area street work. - o Continue UG#3 and UG#4 excavation and concrete work. - o Complete north bound tunnel mining. - o Complete SWY remaining design reconciliation.			
PARTIAL TAKES	27	26	1				
TEMPORARY EASEMENTS	15	14	1				
TOTAL PARCELS	79	76	3				

PROJECT OVERVIEW

Contract Closeout

Contract C0990 - The advanced utility relocations contract with Metro Builders and Engineers Group, LTD was substantially completed on August 21, 2014. The Metro Board authorized a final settlement in March 2016 on all remaining issues. A final payment was issued to the contractor in April 2016. *The contract is closed out.*

Contract C0992 – The concrete ties contract with Rocla Concrete Tie Inc., was substantially completed on August 15, 2014. The contractor was paid in full and the contract was closed out.

Contract C0992A – The running rail and bumping posts contract with LB Foster Rail Technology Corp was substantially completed on May 8, 2015. The contractor was paid in full and the contract was closed out.

Design- Build Contract C0988 (Alignment) – The design-builder, Walsh-Shea Corridor Constructors (WSCC) continues remaining base final design and change work. Construction efforts by the design-builder continued along all major areas. *The contractor progress was impacted this month due to heavy rains. Along the critical path, construction of 96th Street area infrastructure, work was impacted. Contractor was able to work in other areas of the project including mining the north bound tunnel, underground stations, aerial, and at-grade stations. A key component of the project was the start of special trackwork in the City of Inglewood area of the alignment.*

Design- Build Contract C0991 Southwestern Yard (Division 16) – The design-builder, Hensel Phelps / Herzog JV substantially completed final design and submission of submittals required for construction on October 26, 2016 and continue reconciliation of remaining design for future expansion of main shop design, Arbor Vitae street widening and lighting design. *The contractor continues critical path work such as structural excavation and concrete placement of main shop building service and inspection pits, deep foundations and blow down pits including electrical conduits. Contractor also continued with work on underground storm drain and sewer lines.*

Right-of-Way

Metro added in January 2016, two full takes and five part-takes/TCE's required for the construction of the Project. There are now a total of 79 parcels (eight have been decertified). There are 37 full takes, 27 partial takes and 15 temporary construction easements (TCE's). *There have been 76 parcels acquired through January 2017. Thirty-six full takes, 26 part-takes and 14 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 course of action is to expand the existing functional operations at the ROC to support the new five new

PROJECT OVERVIEW (Continued)

rail lines and extensions including Foothill Ext., Expo II, Crenshaw/LAX, Regional Connector and Purple Extension Projects. The existing ROC service control and closed circuit television monitoring areas are being expanded and reconfigured for each new rail line extension. The supporting facilities and electrical\communication systems are also expanded and upgraded accordingly to suit the needs of the growing Metro operations. The ROC Reconfiguration Plan will be updated to suit the central control needs of each upcoming new rail line extension. Metro will prepare a design update for the Crenshaw/LAX Project. All work for the ROC is planned to be completed concurrently with the C0988 design-builder scope work to ensure continuity of the systems effort.

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%, (includes Measure R TIFIA Loan), state funding 10.5% and federal funding 9.6%.

PROJECT OVERVIEW (Continued)

The project commitments thru January 2017 are \$1,897.5 million or 92.2% of the Current Budget. The project expenditures thru January 2017 are \$1,145.5 million or 55.7% of the Current Budget.

The current period expenditures are for Contract C0988 design-builders monthly 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 Metro internal project number. The total costs for the Southwestern Yard project is included in the Appendix.

In December 2016, the C0988 design-builder submitted a "Completion Schedule" which was subsequently reviewed and approved by Metro on December 16, 2016. This schedule represents a re-baseline of WSCC's Contract Schedule which reflects their means and methods for completing construction and testing during the next three years with a commitment to complete on time to support Metro's planned revenue operations in the fall of 2019. The approved Completion Schedule resets WSCC's Contract Milestone #1 Substantial Completion to May 1, 2019 (pending Metro Board action on critical cost and schedule impacts agreement in January 2017).

This month the project schedule reflects a 27 calendar day delay to the design-builder's substantial completion milestone date of May 1, 2019. Since there is no schedule contingency this impacts the projected forecast date of October 2019 for commencing revenue operations. The design-builder and metro are in the process of developing and then implementing mitigation measures to eliminate the projected delay.

MANAGEMENT ISSUES

Concern No. 1: Timely future reviews of WSCC final design submittals by City of Los Angeles.

Status/Action There are a few remaining final design submittals that are required to be submitted by the Contractor for City of Los Angeles review. Metro will continue to take action and strictly monitor the review comments from the agencies and work with the contractor to ensure submittals are coordinated, quality checked and submitted within necessary timeline for reviews.

Concern No. 2: Design-builders construction schedule

Status/Action WSCC submitted a "Completion Schedule" which was subsequently reviewed and approved by Metro on December 16, 2016. This schedule represents a re-baselining of WSCC's Contract schedule which reflects their means and methods for completing construction and testing during the next three years with a commitment to complete on time to support Metro's planned revenue operations in the fall of 2019. The approved Completion Schedule resets WSCC's Contract Milestone #1 Substantial Completion to May 1, 2019 (pending Board action of Global Settlement Agreement in January 2017). *This month the design-builder's schedule reflects a 27 calendar day delay to the May 1, 2019 substantial completion milestone. The design-builder and Metro are in the process of developing and then implementing mitigation measures to eliminate the projected delay.*

Concern No. 3: *(Closed)* 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. The Metro Board approved \$7.4 million for the direct construction costs for FY17, which was required to commence construction to prevent any additional schedule delay impact to the Project. *Metro Board of Directors in January 2017 approved an action to increase the funding up to \$36.0 million for the construction and schedule delay costs for the accommodation scope of work. The scope of work associated with the accommodations is not funded by the Crenshaw/LAX Transit Project but is funded by other funding sources.*

Concern No. 4: Design-builder's ability to meet their planned tunneling productivity rate.

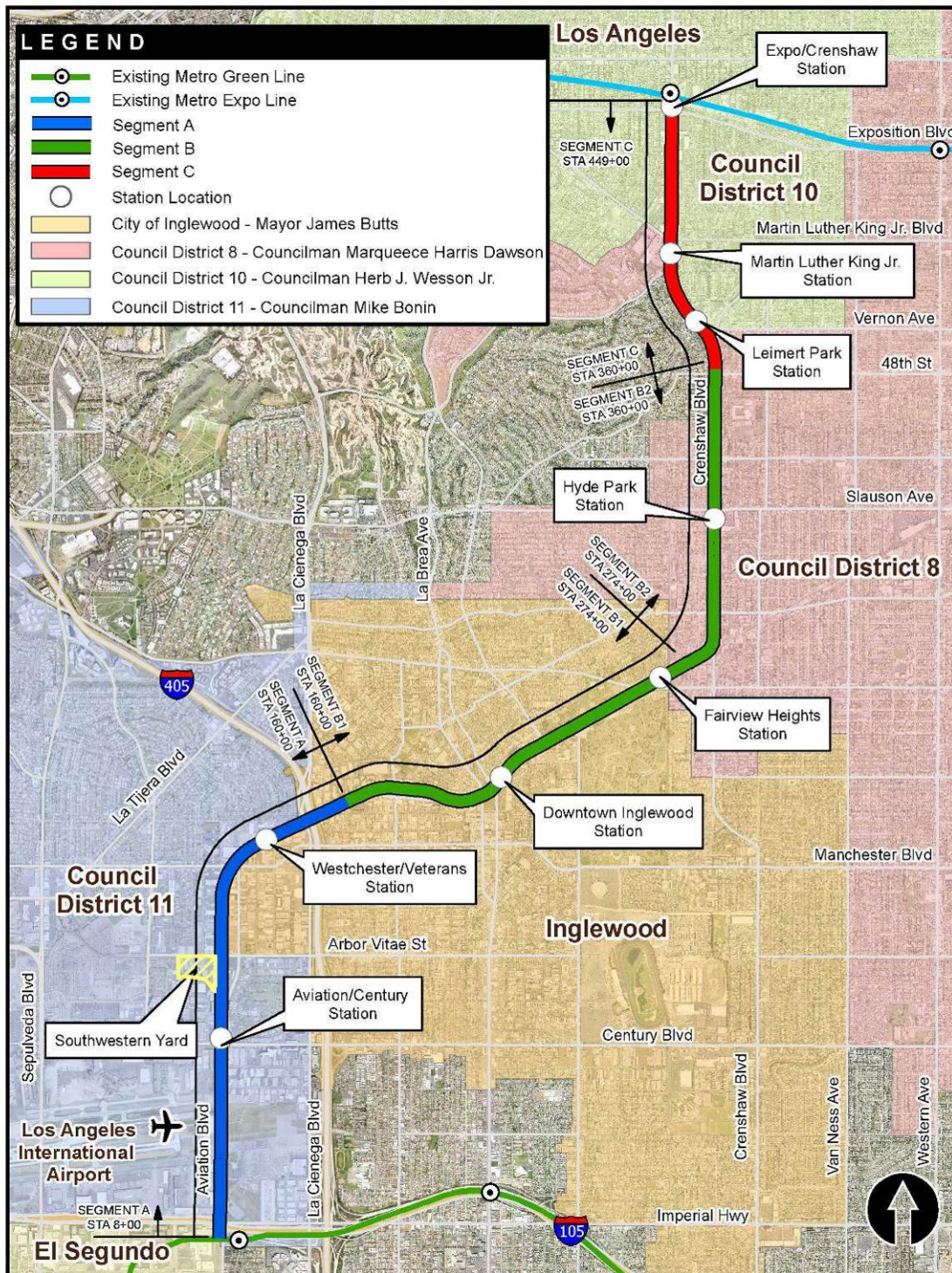
Status/Action *The contractor commenced mining the north bound tunnel on November 29, 2016. Thru January 2017, WSCC has achieved an average of 62 feet per work day (three shifts). Metro anticipates that WSCC will achieve by April 10, 2017, the hole through at the Leimert Park Station.*

MANAGEMENT ISSUES

Concern No. 5: *Substantial rain in January 2017 impacted construction progress.*

Status/Action *Substantial heavy rain impacted the construction progress for the remaining at-grade excavation along the alignment. Metro and WSCC are exploring mitigation measures that can be implemented to mitigate the impact to the critical path activities.*

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.

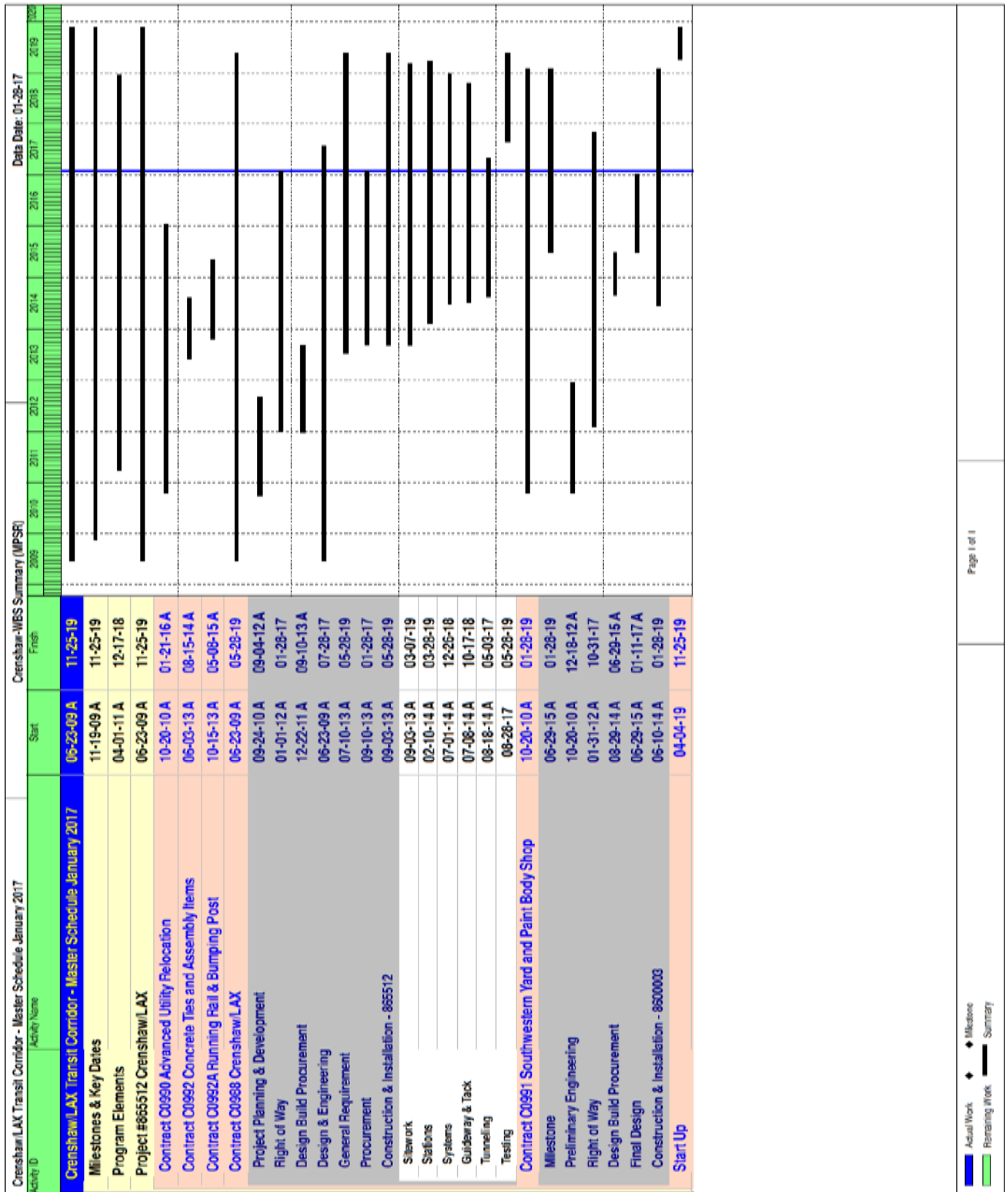
Start Up

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	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17
988-CT-1500	F/R/P OCS Foundations - UG #1	30-Jan-17						
988-CT-11115	OCS Foundations - I-405 to La Brea	01-Feb-17						
988-CT-84935	F/R/P OCS Foundation - Bridge - Aviation / Century Bridge	07-Feb-17						
988-CT-84975	Bridge Emergency Walkway - Aviation / Century Bridge	10-Feb-17						
988-CT-4759	TBM Breakthru @ MLK Station - NB	10-Feb-17						
988-SCE-T1050	TPSS-01 Permanent Power Drop - SCE - Procurement of Cable and Equipment	16-Feb-17						
988-CT-13495	Ballast Wall - Rebar Walls - I-405 to La Brea	20-Feb-17						
988-CT-79176	EL - OCS Foundation - Aerial Structure #1	20-Feb-17						
988-MOD-3180	Deluge System at Expo Crossover	24-Feb-17						
988-MOD-2780	TPSS No.2 Upgrade from 1.5 MW to 2.0 MW	24-Feb-17						
988-CT-79179	EL - Bridge Emergency Walkway - Aerial Structure #1	14-Mar-17						
988-CT-9959	Ductbank - Excavate - TPSS-02	27-Mar-17						
988-CT-1171517	Frame 1: Pour Deck - I-405 Bridge	30-Mar-17						
988-CT-14400	Excavate & FRP Elevator Pit - Aviation / Century	03-Apr-17						
988-CT-4300	Excavate Foundations - TC&C #3	04-Apr-17						
988-CT-5580	TBM Breakthru @ Leimert Park Station - NB	05-Apr-17						
991-PR-01380	Fab/Deliver Structural Steel	13-Apr-17				△		
988-CT-1168553	Erect Structural Steel Canopy (Platform & Pavillion) - Downtown Inglewood Station	14-Apr-17						
988-CT-14500	Construct Escalator Foundations - Aviation / Century	17-Apr-17						
988-CT-10519	Ductbank - Excavate - TPSS-03	04-May-17						
988-CT-1170033	Excavate for TC&C #9 Room - Hyde Park Station	05-May-17						
988-CT-86095	Post-Tension - I-405 Bridge	17-May-17						
988-CT-19100	OCS Foundations - Manchester to I-405	22-May-17						
988-CT-23000	Pour Foundations & Slab - TPSS-01	01-Jun-17						
988-CT-1168713	Art Work Installation - Downtown Inglewood Station (Porcelain Enamel Steel)	05-Jun-17						
988-CT-7429	OCS Grounding - Cable - Manchester to I-405	06-Jun-17						
988-CT-46577	Ballast Wall - F/R/P Footings - 54th to 48th	13-Jun-17						
988-CT-97658	Form Concourse Column 7 (CL 15-22) - Expo	27-Jun-17						
 MTA Staff  MTA Board Action  Walsh Shea Corridor Constructors  Hensel Phelps			"A" following date is actual and completed					

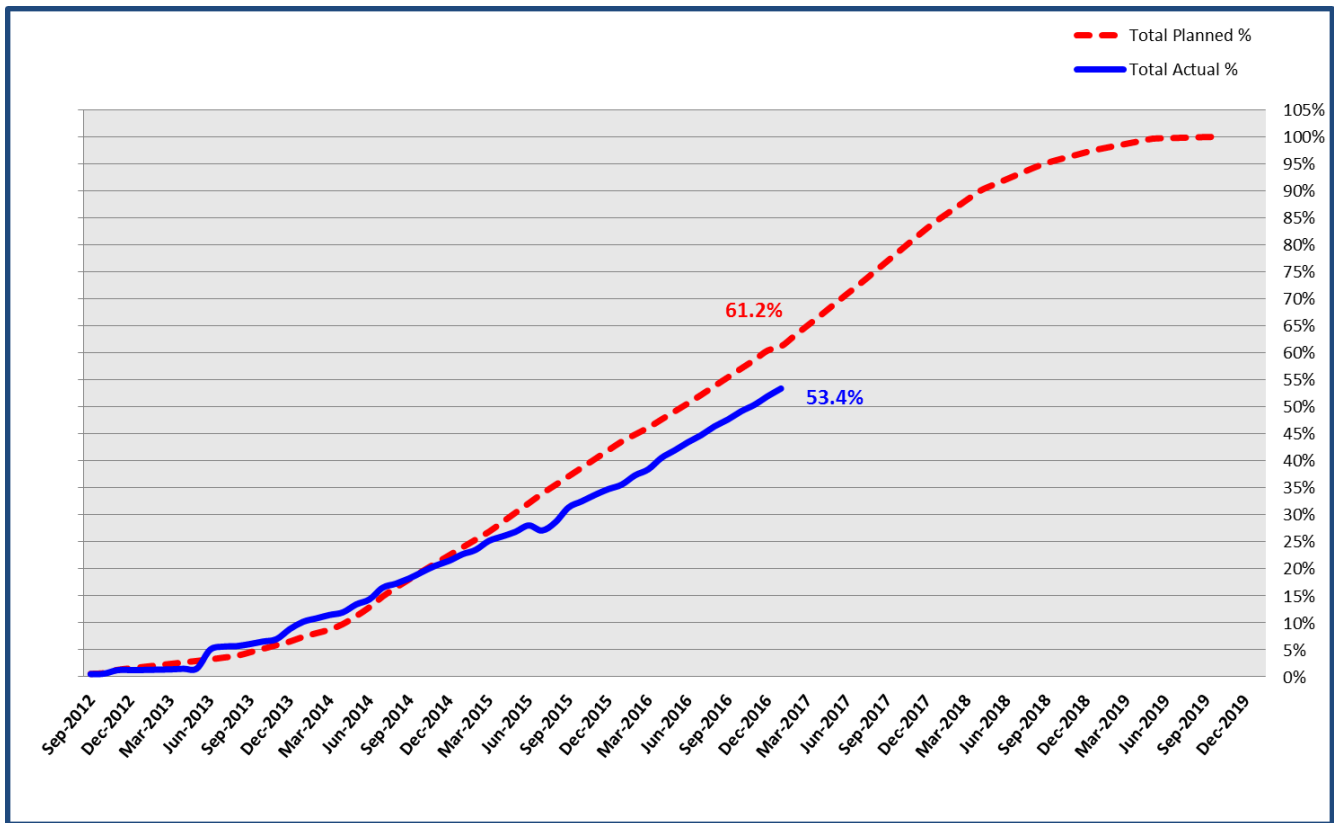
PROJECT SUMMARY SCHEDULE



SCHEDULE MEASUREMENTS

	Status	Change from Last Period	Comment
Current Revenue Service:	10/30/2019	0	
Forecast Revenue Service:	11/25/2019	-27	Delay due to heavy rain. Mitigation measures being developed.
TIFIA Revenue Service:	10/30/2019	0	
Final Design Progress:			
Contract C0988	98.0%	0.1%	Behind Schedule
Contract C0990	100%	None	Design Completed
Contract C0991	76.6%	1.4%	On Schedule
Contract C0992	100%	None	Design Completed
Contract C0992A	100%	None	Design Completed
Construction Contracts Progress:			
Contract C0988	51.7%	4.6%	Revised Milestones - On Schedule
Contract C0990	100%	None	Substantially Completed
Contract C0991	4.9%	1.0%	On Schedule
Contract C0992	100%	None	Substantially Completed
Contract C0992A	100%	None	Substantially Completed

OVERALL CONSTRUCTION PROGRESS CURVE STATUS



The actual overall construction progress is 53.4% versus a planned progress of 61.2% through January 2017. The progress curves represent a composite percentage for the physical progress of work performed to complete the project's construction contracts, including, but not limited to the alignment design-build (C0988), advance utility relocation (C0990), Southwestern Yard design-build (C0991), and two equipment procurement contracts-concrete ties (C0992) and running rail (C0992A).

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

The progress curve was revised this period to include revised forecast for the alignment design-builder and to also include the Southwestern Yard design-builder progress effort.

MAJOR EQUIPMENT DELIVERY STATUS

Tunnel Boring Machine

WSCC, the design-builder for Contract C0988, will procure the tunnel boring machine (TBM) and equipment. Following are the major milestone dates for TBM:

	Baseline	Dec-16	Jan-17	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	04/27/16A	04/27/16A	
TBM SB Break through at Leimert Park	09/17/15	10/17/16	10/20/16A	
TBM NB Tunnel Launch at Expo	10/29/15	12/06/16	11/29/16A	
TBM NB Break through at Leimert Park	03/21/16	04/05/17	04/05/17	

Light Rail Vehicles

The Board approved exercising Option 1 of Contract P3010 with Kinki Sharyo 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.

Mobilization of Option 1 will commence after completion of the initial order. The delivery date of the first option 1 cars is under review.

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. Initiated change notice to the existing TVM contractor in December with a planned notice to proceed by August 2017.

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

Activity ID	Activity Name	Start	Finish
988-PR-3034	Fabricate & Deliver HCR / Sheet Waterproofing (X Passage) - UG #4	12-28-15 A	03-03-17
988-PRC-T0010	TPSS: Procure/Deliver DC Feeder Cable	09-28-16 A	04-13-17
988-PRC-A0010	Procure/Deliver ATC Wire & Cable -Wayside	09-23-16 A	04-20-17
988-PR-4300	Fabricate & Delivery of Special Trackwork	09-22-15 A	04-12-17
988-PRC-X5510	ATC: Procure & Deliver Crossing Equipment @ A05 "Brynhurst" (273+20)	05-27-16 A	03-24-17
988-PRC-X5410	ATC: Procure & Deliver Crossing Equipment @ A05 "West Blvd" (268+70)	05-27-16 A	03-24-17
988-PRC-X5310	ATC: Procure & Deliver Ped Crossing Equipment @ A05 " Fairview Heights" (264+00)	05-27-16 A	03-24-17
988-PRC-X5210	ATC: Procure & Deliver Crossing Equipment @ A05 "High" (256+00)	05-27-16 A	03-24-17
988-PRC-X5110	ATC: Procure & Deliver Crossing Equipment @ A05 "Centinella" (225+00)	05-27-16 A	03-24-17
988-PRC-X4510	ATC: Procure & Deliver Crossing Equipment @ A04 "Ivy" (189+38)	05-27-16 A	03-24-17
988-PRC-X4410	ATC: Procure & Deliver Crossing Equipment @ A04 "Eucalyptus" (182+40)	05-27-16 A	03-24-17
988-PRC-X4310	ATC: Procure & Deliver Crossing Equipment @ A04 "Cedar" (167+10)	05-27-16 A	03-24-17
988-PRC-X4210	ATC: Procure & Deliver Crossing Equipment @ A04 "Oak" (161+00)	05-27-16 A	03-24-17
988-PRC-X4110	ATC: Procure & Deliver Crossing Equipment @ A04 "Hindry" (135+30)	05-27-16 A	03-24-17
988-PRC-X3110	ATC: Procure & Deliver Crossing Equipment @ A03 "Arbor" (93+00)	05-27-16 A	03-24-17
988-PR-4800	Fabricate Escalators	05-02-16 A	01-22-18
988-PR-4700	Fabricate & Deliver Elevators	04-04-16 A	01-09-18
988-PR-6915	Fab/Procure & Deliver Electrical Manholes, Vaults, Pads - TPSS	03-14-16 A	03-03-17
988-PRC-O0070	OCS: Purchase/Deliver Conductor Bar Hardware	01-04-17 A	03-24-17
988-PRC-O0060	OCS: Purchase/Deliver Hardware & Insulators	01-04-17 A	04-21-17
988-PR-6505	Fabricate & Deliver Dry Type Transformers - TPSS	01-30-17	03-24-17
988-PR-6565	Fabricate & Deliver Low Voltage Cable - Expo	01-30-17	03-24-17
988-PR-6705	Fabricate & Deliver Dry Type Transformers - Century	01-30-17	03-24-17
988-PR-6715	Fabricate & Deliver Dry Type Transformers - Vernon	01-30-17	03-24-17
988-PR-6725	Fabricate & Deliver Dry Type Transformers - MLK	01-30-17	03-24-17
988-PR-6735	Fabricate & Deliver Dry Type Transformers - Expo	01-30-17	03-24-17

**Crenshaw/LAX Transit Project
Monthly Project Status Report**

January 2017

988-PR-6745	Fabricate & Deliver Low Voltage Cable - MLK	01-30-17	03-24-17
988-PR-6755	Fabricate & Deliver Low Voltage Cable - Vernon	01-30-17	03-24-17
988-PR-6925	Fabricate & Deliver Panelboards - TPSS	01-30-17	03-24-17
988-PR-6955	Fabricate & Deliver Low Voltage Cable - Cut & Fill	01-30-17	03-24-17
988-PR-6965	Fab/Procure & Deliver Electrical Manholes, Vaults, Pads - Tunnel	01-30-17	04-21-17
988-PRC-T0020	TPSS: Procure/Deliver Power & Control Wire & Cable	01-30-17	05-19-17
988-PRC-O0095	OCS: Purchase/Deliver Special Tooling	01-30-17	06-19-17
988-PRC-O0090	OCS: Purchase/Deliver Spare Parts	01-30-17	06-19-17
988-PR-6485	Fabricate & Deliver MCC - TPSS	01-30-17	08-11-17
988-PR-6775	Fabricate & Deliver MCC - Expo	01-30-17	08-11-17
988-PR-6785	Fabricate & Deliver MCC - MLK	01-30-17	08-11-17
988-PR-6795	Fabricate & Deliver MCC - Vernon	01-30-17	08-11-17
988-PR-3300	Fabricate & Deliver Electrical Switchboards - TPSS	01-30-17	09-29-17
988-PRC-O0030	OCS: Manufacture / Deliver Switches & Surge Arrestors	02-13-17	07-03-17
988-PR-6370	Fab/Procure & Deliver Station Emergency Ventilation Fans	02-18-17	12-14-17
988-PR-6875	Fabricate & Deliver Interior Light Fixtures - Expo	02-20-17	04-28-17
988-PR-6895	Fabricate & Deliver Interior Light Fixtures - MLK	02-20-17	04-28-17
988-PR-6905	Fabricate & Deliver Interior Light Fixtures - Vernon	02-20-17	04-28-17
988-PR-6975	Fabricate & Deliver Interior Light Fixtures - Tunnel	02-20-17	04-28-17
988-PR-6885	Fabricate & Deliver Exterior Light Fixtures - Hyde Park Station	02-20-17	05-26-17
988-PR-6615	Fabricate & Deliver Unit Substations - Expo	02-20-17	08-08-17
988-PR-6805	Fabricate & Deliver Unit Substations - MLK	02-20-17	08-08-17
988-PR-6815	Fabricate & Deliver Unit Substations - Vernon	02-20-17	08-08-17
988-PR-6835	Fabricate & Deliver Electrical Switchboards - Expo	02-20-17	10-27-17
988-PR-6845	Fabricate & Deliver Electrical Switchboards - MLK	02-20-17	10-27-17
988-PR-6855	Fabricate & Deliver Electrical Switchboards - Vernon	02-20-17	10-27-17
988-PRC-O0020	OCS: Manufacture / Deliver Poles	02-21-17	08-24-17
988-PR-6375	Fab/Procure & Deliver Jet Fans - UG #3, UG#4	02-28-17	12-04-17

CRITICAL PATH NARRATIVE

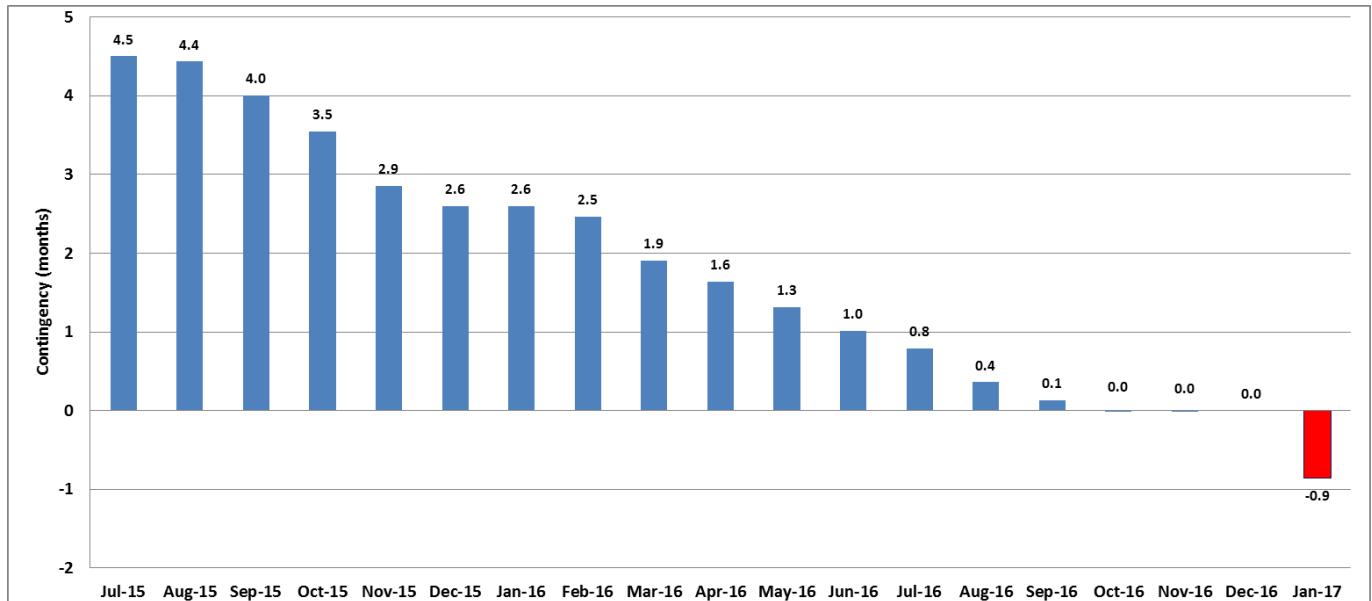
Critical Path:

With the addition of construction activities for the accommodations to support a future LRT station at 96th Street in the approved Completion Schedule the project's critical path changed in December 2016. The critical path for the project as shown in the design-builder's Completion Schedule has shifted from the tunnel boring machine mining operations and tunnel concreting activities to the accommodations construction activities to support a future LRT station at 96th Street.

The revised critical path activities include the construction of 96th Street infrastructure, all ballasted walls and operator relief platform in Segment A, trackwork, systems work, and automatic train control (ATC) field acceptance testing at train control and communication (TC&C) room No. 3. The ATC field acceptance testing then continues for Segments B and C. The critical path continues with design-builder's systems integration testing, phase 1, leading to the design-builder's substantial completion milestone.

The critical path continues with Metro's systems integration testing, phase 2 and Metro's pre-revenue operations. The critical path completes with the commencement of revenue operations.

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.

Metro received and approved a revised baseline schedule (Completion Schedule) from the C0988 design-builder in December 2016. With the extension of time for the design-builders Substantial Completion Milestone to May 1, 2019 and a Metro/design-builder commitment to achieving an October 30, 2019 revenue operations date, no planned schedule contingency exists in the revised baseline schedule.

Due to heavy rain in January 2017, the design-builders submitted a schedule update that forecast a 27-day delay to their substantial completion milestone date of May 1, 2019. The design-builder and Metro are in the process of developing and then implementing mitigation measures to eliminate the projected delay.

PROJECT COST STATUS

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	-	443,119,255	13,533,534	276,010,335	-	450,354,375	(2,145,626)
20	STATIONS	153,906,000	-	316,050,000	260,150	304,257,429	4,365,483	140,074,585	-	315,050,000	(1,000,000)
30	SUPPORT FACILITIES SOUTHWEST YARD	66,673,000	-	73,245,544	-	71,053,330	245,410	21,484,053	-	71,164,000	(2,081,544)
40	SITEWORK/SPECIAL CONDITIONS	235,576,000	-	348,565,999	146,759	376,459,371	4,034,200	274,784,850	(703,458)	385,992,640	37,426,641
50	SYSTEMS	125,132,000	-	169,311,000	93,000	152,772,828	1,084,989	15,541,449	-	169,436,000	125,000
CONSTRUCTION SUBTOTAL (10-50)		1,052,622,000	-	1,359,672,544	499,909	1,347,662,213	23,263,616	727,895,273	(703,458)	1,391,997,015	32,324,471
60	RIGHT-OF-WAY	132,294,000	-	127,400,000	-	123,422,228	3,453	121,577,008	-	127,490,000	90,000.00
70	LRT VEHICLES	87,780,000	-	82,100,000	-	82,050,901	-	7,218,655	-	83,571,544	1,471,544
80	PROFESSIONAL SERVICES	273,147,000	-	300,093,178	1,063,087	318,778,646	3,286,914	263,294,136	1,713,333	359,157,116	59,063,938
SUBTOTAL (10-80)		1,545,843,000	-	1,869,265,722	1,562,996	1,871,913,988	26,553,983	1,119,985,072	1,009,875	1,962,215,675	92,949,953
90	UNALLOCATED CONTINGENCY	177,157,000	-	162,734,278	-	-	-	-	(1,009,875)	69,784,325	(92,949,953)
TOTAL PROJECT 865512 (10-100)		1,723,000,000	-	2,032,000,000	1,562,996	1,871,913,988	26,553,983	1,119,985,072	-	2,032,000,000	-
ENVIRONMENTAL/PLANNING - 405512		5,526,150	-	5,526,150	-	5,526,150	-	5,526,150	-	5,526,150	-
ENVIRONMENTAL/PLANNING - 465512		20,473,850	-	20,473,850	-	20,023,237	-	20,023,237	-	20,473,850	-
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	1,562,996	1,897,463,376	26,553,983	1,145,534,460	-	2,058,000,000	-

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH 27-JAN-2017.

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 49% allocation and Environmental/Planning budget of \$26.0 million, has been revised to \$1,881.8 million.

Current Forecast:

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

Commitments:

The commitments are cumulative through January 27, 2017. The total commitments increased by \$1.6 million this period primarily due to the following:

- SCC-20 (Stations, Stops, Terminals, Intermodal) has increased by \$0.3 million due to executed modifications associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor.
- SCC-40 (Sitework and Special Conditions) has increased by \$0.1 million due to executed modifications associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor.
- SCC-50 (Systems) has increased \$0.1 million for costs associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor
- SCC-80 (Professional Services) has increased of \$1.1 million due to executed modifications associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor, legal services, tunnel advisory panel services and environmental consultant services. The total commitment of \$318.8 million includes \$20.0 million for the Southwestern Yard 49% allocation.

The \$1,897.5 million in commitments to date represents 92.2% of the current budget.

Expenditures:

The expenditures are cumulative through January 27, 2017. The total expenditures increased by \$26.6 million this period due to the following:

- SCC-10 (Guideways) has increased by \$13.5 million for costs associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor.
- SCC-20 (Stations, Stops, Terminals, Intermodal) has increased by \$4.4 million for costs associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor.
- SCC-30 (Southwestern Yard) has increased by \$0.3 million for costs associated with the design-build Contract C0991 Division 16: Southwestern Yard (Design/Build).

PROJECT COST ANALYSIS (Continued)

- SCC-40 (Sitework and Special Conditions) has increased by \$4.0 million for costs associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor and Metro Art Program.
- SCC-50 (Systems) has increased \$1.1 million for costs associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor.
- SCC-80 (Professional Services) has increased by \$3.3 million for costs associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor, Engineering and Design Contract E0117, 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, environmental consultant services, miscellaneous specialty services and labor compliance monitoring services. The total expenditure of \$263.3 million includes \$13.1 million for the Southwestern Yard 49% allocation.

The \$1,145.5 million in expenditures to date represents 55.7% 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 alignment design-builder (Contract C0988)

C0988 NON-CRENSHAW/LAX TRANSIT PROJECT FUNDED SCOPE OF WORK										
DESCRIPTION		CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT		FORECAST
		PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
405556 SYSTEMWIDE TRANSIT PLANNING		-	139,236	-	139,236	-	139,236	-	139,236	-
210090/93 FARE GATE PROJECT		-	2,482,746	-	2,482,746	-	172,746	-	2,482,746	-
210152 CRENSHAW/LAX BUS TRANSFER FACILITY		-	2,200,000	-	-	-	-	-	2,200,000	-
460303 AIRPORT METRO CONNECTOR		-	3,763,844	-	3,763,844	-	2,182,405	-	3,763,844	-
500013 C/LAX LAWA SCOPE OF WORK		-	1,575,362	-	531,125	-	408,712	-	1,575,362	-
TOTAL		-	10,161,188	-	6,916,950	-	2,903,100	-	10,161,188	-

PROJECT CONTINGENCY DRAWDOWN ANALYSIS (Continued)

There has been a cumulative drawdown of \$121,624,879 or 56.9% for both allocated and unallocated contingency through January 2017.

- The unallocated contingency decreased by \$1,009,875 for executed modifications for the design-build contract C0988 Crenshaw/LAX Transit Corridor, professional services contract PS2879 with HILL INTERNATIONAL, INC., contract PS12251 with BCA WATSON RICE LLP and environmental services contract EN078 with AECOM TECHNICAL SERVICES, INC.
- The allocated contingency decreased by \$511,618 due to executed modifications for design-build contract C0988 Crenshaw/LAX Transit Corridor.

PROJECT COST CONTINGENCY (through 27-Jan-2017)					
UNITS IN DOLLARS					
	Original Contingency (Budget)	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)
Unallocated Contingency	173,500,000	(102,705,800)	(1,009,875)	(103,715,675)	69,784,325
Allocated Contingency	40,366,792	(17,397,579)	(511,618)	(17,909,197)	22,457,595
Total Contingency	213,866,792	(120,103,379)	(1,521,493)	(121,624,871)	92,241,921

DISADVANTAGED BUSINESS ENTERPRISE (DBE) STATUS

Contract C0988 Crenshaw/LAX Transit Corridor Design-Build

(Reported Data as of January, 2017)

- DBE Goal – Design 20.00%
- Current DBE Commitment \$22,828,902 (20.00%)
- Current DBE Participation \$26,893,551 (26.15%)
- Twenty-one (21) Design subcontractors have been identified to-date

- DBE Goal – Construction 20.00%
- DBE Commitment \$239,237,446 (20.00%)
- Current DBE Commitment \$219,472,361 (18.35%)
- Current DBE Participation \$155,399,043 (26.04%)
- One Hundred Forty-Eight (148) 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, 2017)

- Targeted Worker Goal – 40.00%
- Targeted Worker Current Participation - 58.60%

- Apprentice Worker Goal - 20.00%
- Apprentice Worker Current Participation - 20.71%

- Disadvantaged Worker Goal - 10.00%
- Disadvantaged Worker Current Participation 12.79%

DISADVANTAGED BUSINESS ENTERPRISE (DBE) STATUS

Contract C0991 Division 16: Southwestern Yard Design-Build

(Reported Data as of December, 2016)

- DBE Goal – Design 20.00%
- Current DBE Commitment \$2,383,718 (20.93%)
- Current DBE Participation \$1,457,680 (18.10%)
- Six (6) Design subcontractors have been identified to-date

- DBE Goal – Construction 16.00%
- DBE Commitment \$25,181,760 (16.00%)
- Current DBE Commitment \$12,677,781 (8.06%)
- Current DBE Participation \$ 2,111,907 (10.77%)
- Fourteen (14) Construction subcontractors have been identified to-date.

PROJECT LABOR AGREEMENTS (PLA) STATUS

Contract C0991 Division 16: Southwestern Yard Design-Build

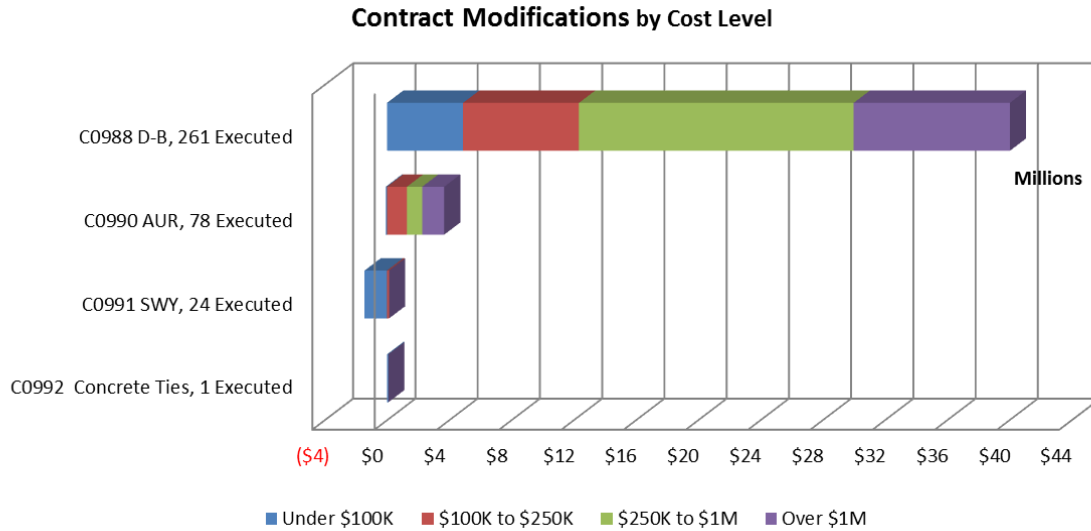
(Reported Data as of December 15, 2016 for January 2017 Report)

- Targeted Worker Goal – 40.00%
- Targeted Worker Current Participation - 49.82%

- Apprentice Worker Goal - 20.00%
- Apprentice Worker Current Participation - 21.33%

- Disadvantaged Worker Goal - 10.00%
- Disadvantaged Worker Current Participation 9.12%

SUMMARY OF CONTRACT MODIFICATIONS



	C0988	C0990	C0991	C0992
	261 Executed	78 Executed	24 Executed	1 Executed
Under \$100K	\$ 4,888,627	\$ (70,251)	\$ (1,434,210)	\$ 81,738
\$100k to \$250K	\$ 7,448,417	\$ 1,280,184	\$ 130,000	\$ -
\$250K to \$1M	\$ 17,654,081	\$ 984,662	\$ -	\$ -
Over \$1M	\$ 10,039,556	\$ 1,417,202	\$ -	\$ -
Total Contract MODs	\$ 40,030,681	\$ 3,611,797	\$ (1,304,210)	\$ 81,738
% of Contract MODs	3.15%	46.14%	-0.76%	3.78%

Two hundred and sixty one (261) changes with a total value of \$40.03 million have been executed since award of Contract C0988. There are an additional thirty four (34) changes with a total value of \$4.45 million pending the administrative approval process.

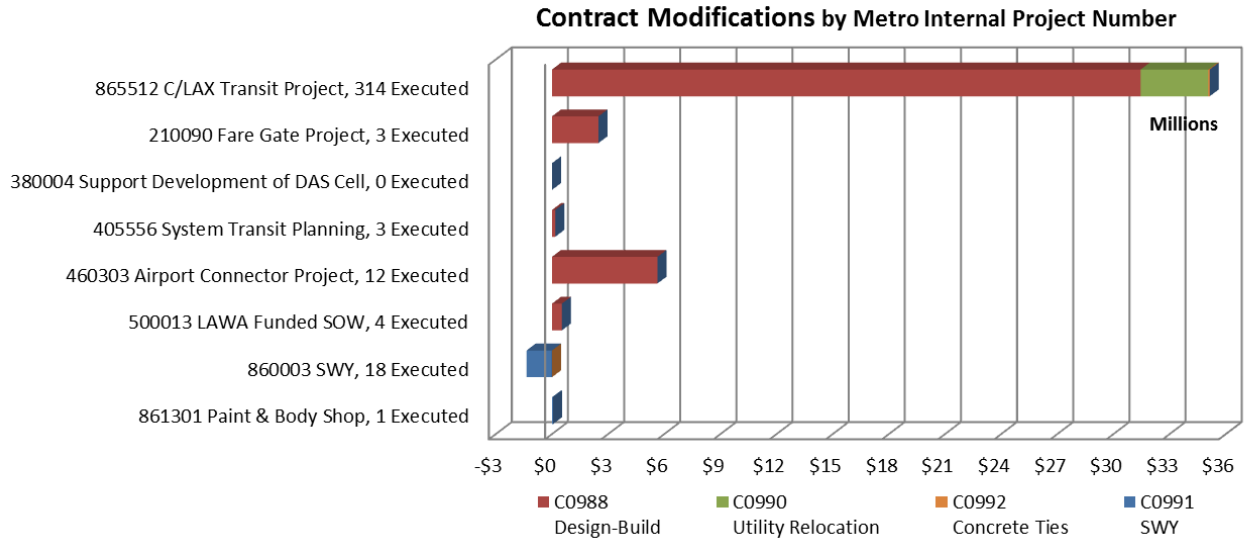
Seventy-eight (78) changes with a total value of \$3.61 million have been executed for completed Contract C0990.

Twenty four (24) changes with a total value of \$1.30 million credits have been executed since award of Contract C0991. There are an additional ten (10) changes with a total value of \$1.70 million pending the administrative approval process.

One (1) change with a value of \$81,738 was executed for completed Contract C0992.

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

SUMMARY OF CONTRACT MODIFICATIONS



	865512	210090	380004	405556	460303	500013	860003	861301
	Executed	Executed	Executed	Executed	Executed	Executed	Executed	Executed
C0988 - QTY	239	3	0	3	12	4	0	0
C0988 - \$	\$ 31,207,340	\$ 2,482,746	\$ -	\$ 175,495	\$ 5,633,884	\$ 531,216	\$ -	\$ -
C0990 - QTY	78	0	0	0	0	0	0	0
C0990 - \$	\$ 3,611,797	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C0991 - QTY	0	0	0	0	0	0	21	3
C0991 - \$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,371,606)	\$ 67,396
C0992 - QTY	1	0	0	0	0	0	0	0
C0992 - \$	\$ 81,738	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total - QTY	318	3	0	3	12	4	21	3
Total - \$	\$ 34,900,875	\$ 2,482,746	\$ -	\$ 175,495	\$ 5,633,884	\$ 531,216	\$ (1,371,606)	\$ 67,396

Three hundred and eighteen (318) changes with a total value of \$34.90 million have been executed for Project 865512 Crenshaw/LAX Transit Project. There are an additional thirty two (32) changes with a total value of \$3.71 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. There is an additional one (1) change with a total value of \$0.39 million pending the administrative approval process.

No changes have been executed for Project 380004 Support Development of DAS Cell Project. There is an additional one (1) change with a total value of \$0.35 million pending the administrative approval process.

Three (3) changes with a value of \$0.18 million have been executed for Project 405556 System Transit Planning.

Twelve (12) changes with a value of \$5.63 million have been executed for Project 460303 Airport Metro Connector Project.

Four (4) changes with a total value of \$0.53 million have been executed for Project 500013 Crenshaw/LAX LAWA Statement of Work. There is an additional one (1) change with a total value of \$1.30 million pending the administrative approval process.

SUMMARY OF CONTRACT MODIFICATIONS (Continued)

Twenty one (21) changes with a value of \$1.37 million credit have been executed for Project 860003 Southwestern Yard. There are an additional nine (9) changes with a total value of \$0.40 million pending the administrative approval process.

Three (3) changes with a value of \$67,396 has been executed for Project 861301 Southwestern Yard Paint and Body Shop.

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	102.2	73.7	102.2	100%	61.6	60%	41.7	41%
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%
STATE REGIONAL IMPROVEMENT PROG	36.5	36.6	2.2	36.6	100%	2.2	6%	2.2	6%
STATE PPM	0.178	0.178	0.178	0.178	100%	0.178	100%	0.178	100%
STATE PROP 1B PTMISEA	201.2	128.6	128.6	128.6	100%	128.6	100%	128.6	100%
STATE PROP 1 B LOCAL PARTNER PROG	0.0	49.5	49.5	49.5	100%	49.5	100%	49.5	100%
MEASURE R - TIFIA LOAN	545.9	545.9	545.9	545.9	100%	545.9	100%	545.9	100%
MEASURE R	661.1	529.3	446.7	529.3	100%	250.0	47%	248.7	47%
OTHER FUNDS*	52.4	187.5	19.0	28.5	15%	19.0	10%	19.0	10%
PROP C 25% HIGHWAY	148.9	350.2	6.0	348.6	100%	6.0	2%	3.7	2%
PROP C 40% DISCRETIONARY	0.0	0.0	0.0	0.0	0%	0.0	0%	0.0	0%
PROP A 35% RAIL CAPITAL	4.8	50.4	50.4	50.4	0%	4.9	0%	4.9	10%
TOTAL	1,749.0	2,058.0	1,399.9	1,897.5	92.2%	1,145.5	55.7%	1,122.1	54.5%

NOTE: Expenditures are cumulative through January 31, 2017.

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

Total Funds Anticipated based on August 2016 Funding Plan

* 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.

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.

MEASURE R: \$446.7M has been allocated to the project through FY2017. Funds are available for drawdown.

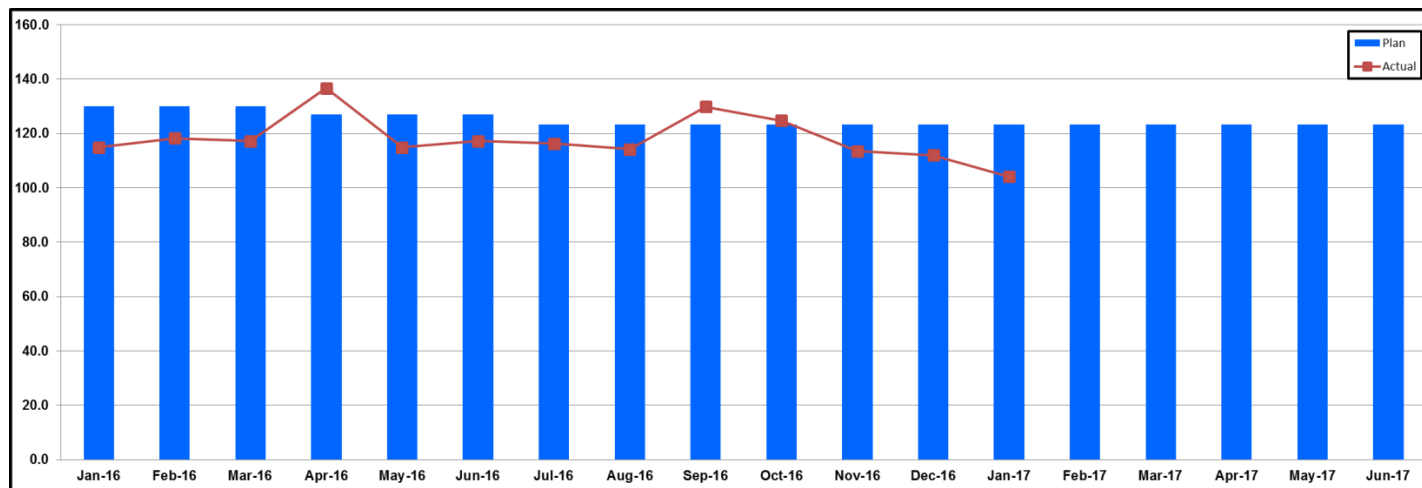
OTHER FUNDS: City of LA: Based on the funding agreement between Metro and the City of LA. \$19M is available for drawdown through FY2017.

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 January 2017.

TOTAL PROJECT STAFFING

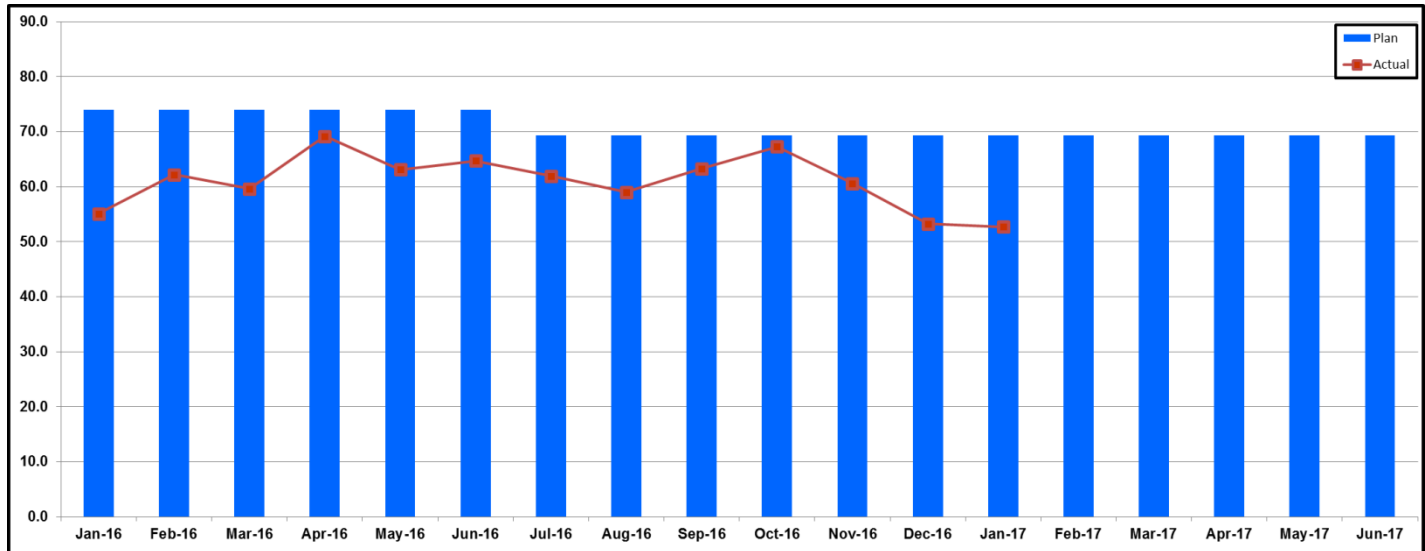
The overall FY17 Total Project Staffing Plan averages 123.3 Full Time Equivalent (FTEs) per month consisting of 69.3 for Metro Agency staff, 47.0 for Construction Management Support Services Consultant and 7.0 for Design and Engineering Support Services Consulting staff.

For January 2017, total project staffing were 104.2 FTEs for the month consisting of 52.7 FTEs for Metro's project administration staff, 43.8 FTEs for Construction Management Support Services Consultant and 7.7 FTEs for Design and Engineering Support Services Consulting staff.

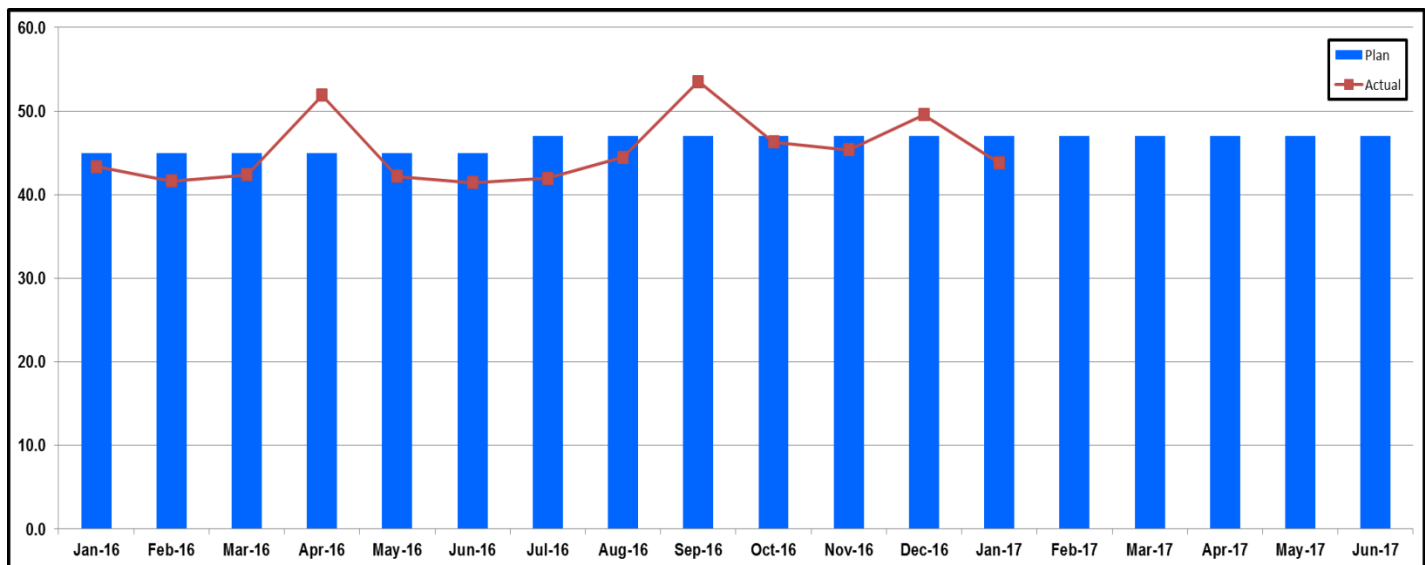
The next three charts show actual staffing versus planned staffing for the three major project participants.

STAFFING STATUS (Continued)

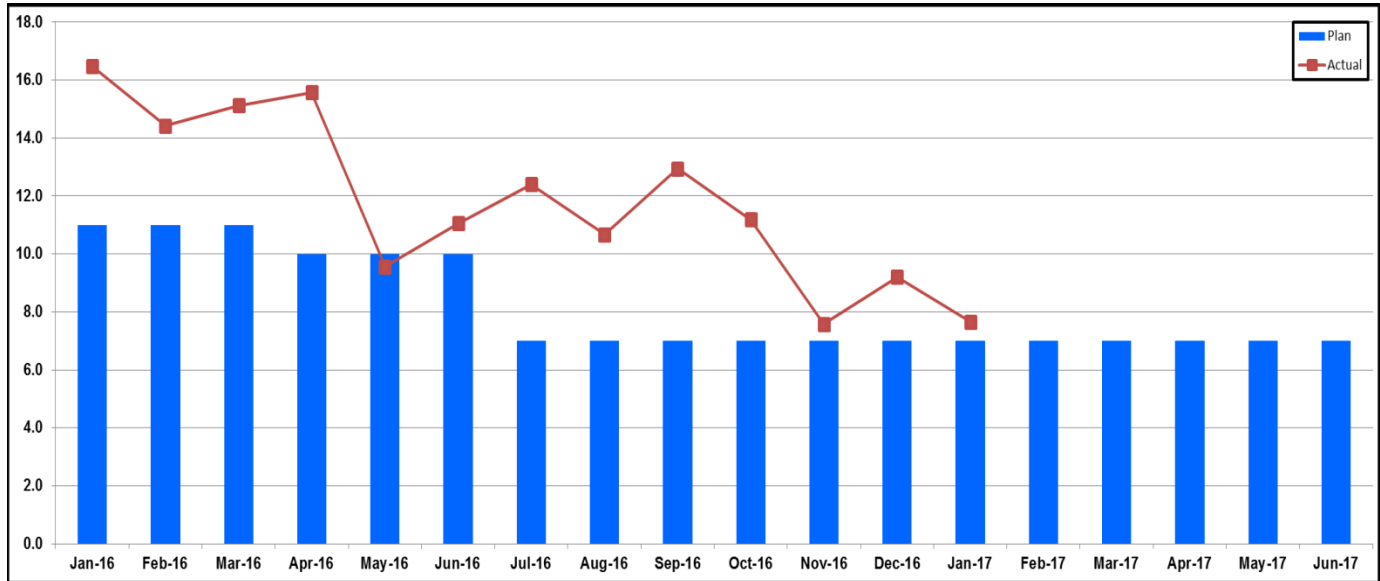
METRO STAFFING – FTES



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 WSSC
C0988 C/LAX Transit Corridor (D-B):									
<i>Crenshaw Subdivision</i>									
Full Takes	12	12		12	12	7	5	12	12
Part Takes (PT or SE)	10	9	1	9	9	3	6		9
TCE	10	9	1	10	10	1	8		9
Subtotal Parcels	32	30	2	31	31	11	19	12	30
<i>Crenshaw Subdivision Additional Parcels:</i>									
Full Takes									
Part Takes	1	1		1	1	1			
TCE									
Subtotal Parcels:	1	1		1	1	1			
Total Crenshaw Parcels	33	31	2	32	32	12	19	12	30
<i>Harbor Subdivision</i>									
Full Takes	15	15		15	15	8	7	12	15
Part Takes (PT or SE)	18	16	2	18	17	7	10		15
TCE	3	2	1	2	2		2		2
Subtotal Parcels	36	33	3	35	34	15	19	12	32
<i>Harbor Subdivision Additional Parcels:</i>									
Full Takes	3	2	1	1				1	1
Part Takes	4	2	2	2	2	2			2
TCE	3	3		3	3	3			3
Subtotal Parcels:	10	7	3	6	5	5		1	6
Total Harbor Subdivision Parcels	46	40	6	41	39	20	19	13	38
Total CR/HS Parcels:	79	71	8	73	71	32	38	25	68
<i>Southwestern Yard</i>									
Full Takes	8	8		8	8	4	4	7	8
Part Takes									
TCE									
Subtotal Parcels:	8	8		8	8	4	4	7	8
Total SW Parcels:	8	8		8	8	4	4	7	8
Total Project Parcels	87	79	8	81	79	36	42	32	76

- All parcels necessary to construct the guideway have been turned over to the Contractor.
- Work requiring the remaining parcels is not on the critical path and will be used to construct ADA, sidewalk, and other civil improvements.
- Efforts continue to closeout court cases on the various condemned properties.

QUALITY ASSURANCE STATUS

C0988 Crenshaw/LAX Transit Corridor Design-Build Contract

- Attended weekly Quality Staff Meetings with City of Los Angeles, Los Angeles Bureau of Contract Administration, HNTB, and WSCC Lead Quality personnel.
- *WSCC Quality issued three (3) Nonconformance Reports (NCR's) during this month.*
- *WSCC Quality closed three (3) NCR's during this month.*
- *WSCC Quality conducted a training session on Mitigation of Traffic (MOT), refresher training on SharePoint database and a training session for new employees.*
- *HNTB Design Quality Control reviewed sixteen (16) NDC's, two (2) RFC's, six (6) AFC's and one (1) design package.*
- *Metro Independent Testing Lab (ITL) conducted soil split sampling for verification testing of material for use on Mechanically Stabilized Earth (MSE) Walls and tested and provided test results on MSE Backfill and was provided #8 flash welded tie samples by Metro for ultimate splice testing.*
- *Metro Quality participated in Readiness Review meetings for City of Inglewood Water Line Installation, Ballasted Trackwork and Special Trackwork Construction and Direct Fixation Bottom Up/Top Down Construction.*

ENVIRONMENTAL STATUS

C0988 Crenshaw/LAX Transit Corridor Design Build

- Reviewed and commented on the following Contractor Submittals:
 - o Weekly Noise and Vibration Monitoring Data for station and alignment construction
 - o Green Construction Policy 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 and Submittals
 - o Quarterly Noise Control Plan updates
 - o Waste Management Plan
- Conducted Contractor Cultural Awareness Training.
- Coordinated cultural monitoring (Archaeological, Paleontological and Native American Monitoring).
- *Prepared 4th Quarter 2016 Mitigation Measures Status Report.*
- *Coordinated removal of contaminated soil encountered near Eucalyptus Avenue and Florence Blvd.*
- *Conducted Green Construction Policy implementation audit.*

CONSTRUCTION RELATIONS STATUS

- *Working closely with Metro Environmental to ensure proper noise mitigation measures are being taken in the Hyde Park community (UG3).*
- *Met with LADOT to explore restriping options in Park Mesa Heights.*
- *Working with Media Relations to plan an event to celebrate the completion of tunneling.*
- *Conducted outreach on the 21-day closures of sidewalk and on-street parking in Park Mesa Heights.*
- *Planning a community meeting with residents of La Colina Avenue in Inglewood to discuss landscaping and fencing plans.*

SYSTEMWIDE DESIGN AND ART PROGRAM STATUS

- Continued to review and respond to submittals.
- Worked with artists to refine designs for submission to fabricators.
- *Facilitated coordination between artists and fabrication firms.*

SAFETY & SECURITY STATUS

- Participated in weekly progress meetings with WSCC's Management and Construction Management Team to discuss safety/security/quality related issues and the six-week construction schedule.
- Participated in WSCC's weekly Safety Tool-Box Meetings and Executive Safety and Security Committee Meeting.
- Monitored construction activities on a daily basis including weekends to ensure compliance with contract specifications.
- *Participated in WSCC's Readiness Review for Ballasted Trackwork and Special Trackwork construction.*
- *Monitored TBM, tunnel cross-passage #3 and underground stations construction activities.*
- *Reviewed safety submittals for the cross passage phase 1 and at-grade crossings.*
- *Contract C0990 Metro Builders Advanced Utility Relocation completed 369,287 manhours and four recordable incidents. This contract is closed out.*
- *Contract C0991 Hensel Phelps Project-to-Date completed 25,744 work hours with zero recordable incidents. They completed 879 work hours for the month of January with zero recordable incidents.*
- *Contract C0988 (WSCC) completed 128,457 work hours with zero recordable incidents and four first aid cases for the month of January 2017. Total Project-to-Date work hours are 3,695,898 and a total of forty-six recordable incidents. The project Recordable Rate is 2.4. The Bureau of Labor Statistics (BLS) average recordable rate per 200,000 work-hours is 2.8.*

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	8/16	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.

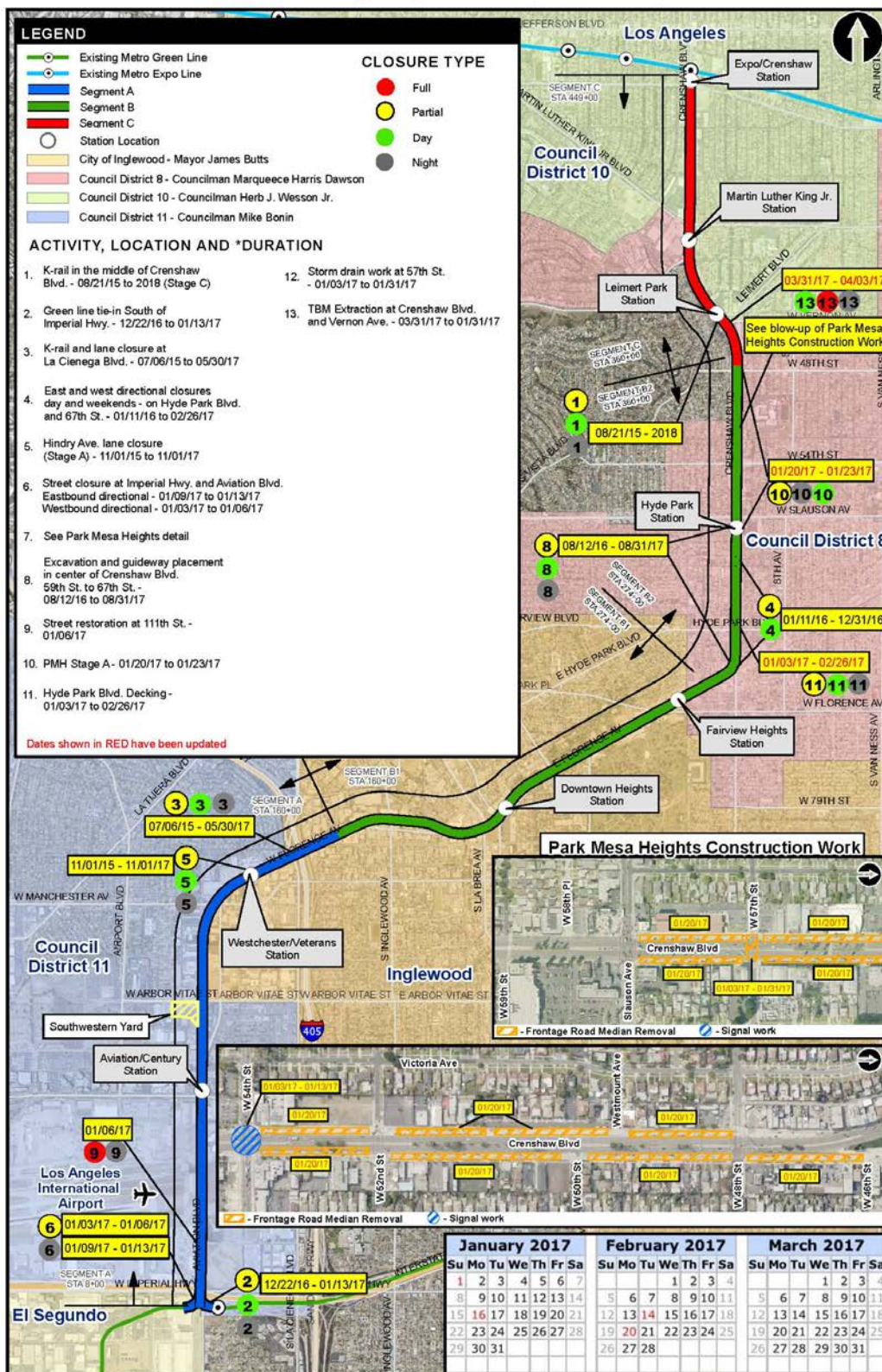
CPUC CROSSING SUMMARY STATUS

- The CPUC has approved all packages.
- LACMTA filed a response on March 25, 2016 in response to a petition that was filed by a community member, Chandra V. Mosley, to modify the CPUC Decision that approved seven at-grade crossings on Crenshaw Blvd, located from 48th St. to 59th St.
- Metro attended the Prehearing regarding the petition on May 24, 2016.
- The scoping document (Ruling) was issued on July 1, 2016 by the Administrative Law Judge Scoping which set forth the procedural schedule and address the scope of the proceeding.
- Metro filed a brief on August 5, 2016 and a Reply Brief on August 15, 2016.
- Administrative Law Judge is reviewing the submitted Briefs and will issue a Proposed Decision.

Crenshaw/LAX Transit Project Monthly Project Status Report

January 2017

Crenshaw/LAX Transit Corridor Project Traffic Closure Key Map - January - February 2017



Updated: 01/05/2017

*Note: Traffic closure dates and durations are subjected to change

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.

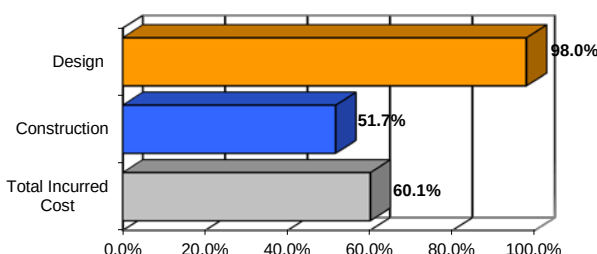
CHRONOLOGY OF EVENTS (Continued)

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.

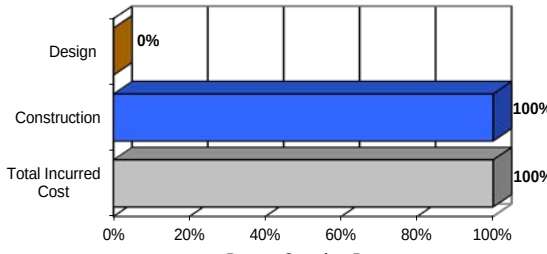
CHRONOLOGY OF EVENTS (Continued)

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.
April 27, 2016	The Tunnel Boring Machine was launched and drilling from north to south of the alignment started.
May 7, 2016	Held Halfway There Community Celebration at Leimert Park marking the halfway point of the project.
May 27, 2016	Held Groundbreaking Ceremony for the Southwestern Yard (Division 16).
October 20,2016	The southbound tunnel boring machine completed mining with the hole thru at Leimert Park Station.

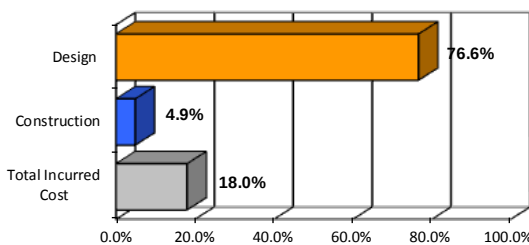
CONTRACT C0988 STATUS
Crenshaw/LAX Transit Corridor

PE Design Contractor: Hatch Mott (HM) CM Consultant: Stantec Contractor: - Walsh Shea Corridor Constructors (WSCC)				Contract No.: C0988 Status as of January 28, 2017																																											
Progress/Work Completed: Construction - Continued north bound tunnel mining. - Continue south bound invert concreting. - Continued excavation and lagging at UG #4. - Continued Excavation and lagging and decking at UG #3. - Continued the construction of Ballast Wall in Seg B1. - Continued OCS foundation construction in segment B1. - Continued work at the Pedestrian Underpass. - Continued erection of I-405 Bridge Falsework - Continued construction of the platform deck at La Brea Station - Continued waterproofing and U-Walls at UG #1 - Continued construction of the Cut & Cover Walls & Roof. - Continued construction of Green Line Superstructure				Areas of Concern: - Design-builder's ability to mitigate schedule delays. - Timely submittal of WSCC's design submittals and review by City of Los Angeles.																																											
Schedule Assessment: - Design-builder forecast a delay of 27 days due to heavy rains during the month. The contractor's critical path was impacted and they are forecasting a delay to the substantial completion milestone. - Metro has requested a mitigation plan from the contractor.				Cost Assessment: - The current construction contract cost forecast is \$1,362,242,986.97 and is within the Board authorized budget. - The Contractor submitted their 41st payment application in the approved amount of \$20,317,922.10 *Please note that not all executed modifications may have been included in the Contractor current payment application.																																											
Schedule Summary: <table><tr><td>1. Date of Award:</td><td>08/01/13</td></tr><tr><td>2. Notice to Proceed:</td><td>09/10/13</td></tr><tr><td>3. Original Substantial Completion Duration:</td><td>1824</td></tr><tr><td>4. Current Substantial Completion Duration:</td><td>2059</td></tr><tr><td>5. Elapsed Time from NTP:</td><td>1236 60.0%</td></tr></table>				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:	2059	5. Elapsed Time from NTP:	1236 60.0%	Cost Summary: \$ In millions <table><tr><td>1. Award Value:</td><td>1,272.63</td></tr><tr><td>2. Executed Modifications:</td><td>31.35</td></tr><tr><td>3. Approved Change Orders:</td><td>8.68</td></tr><tr><td>4. Current Contract Value (1 + 2 + 3):</td><td>1,312.66</td></tr><tr><td>5. Incurred Cost:</td><td>818.10</td></tr></table>				1. Award Value:	1,272.63	2. Executed Modifications:	31.35	3. Approved Change Orders:	8.68	4. Current Contract Value (1 + 2 + 3):	1,312.66	5. Incurred Cost:	818.10																				
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Milestones	Original Contract	Current Contract	Forecast	Calendar Day Variance																																											
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CONTRACT C0990 STATUS
Crenshaw/LAX Advanced Utility Relocations

PE Design Contractor: Hatch Mott (HM) CM Consultant: Stantec Contractor: - Metro Builders and Engineers Group LTD					Contract No.: C0990 Status: Completed																																												
Progress/Work Completed: - The construction was substantially completed on August 21, 2014 - Board authorized in March a settlement with the contractor. - Contract is closed out.					Areas of Concern:																																												
Schedule Assessment: - Metro granted substantial completion to Metro Builders on August 21, 2014, which is 276 calendar days behind. - The settlement with the contractor settled all time issues.					Cost Assessment: - The final contract is \$11,316,140.00 and has been completely paid to contractor. * A modification in process for credit of unused provisional sums in the amount of \$123,156.85.																																												
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: 1. Award Value: 7.83 2. Executed Modifications: 3.49 3. Approved Change Orders: - 4. Current Contract Value (1 + 2 + 3): 11.32 5. Incurred Cost: 11.32																																												
<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  Construction physical percent complete excludes mobilization and general requirements				
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Milestone 1 - Contract Substantial Completion	07/17/13	11/18/13	08/21/14A	-276																																													

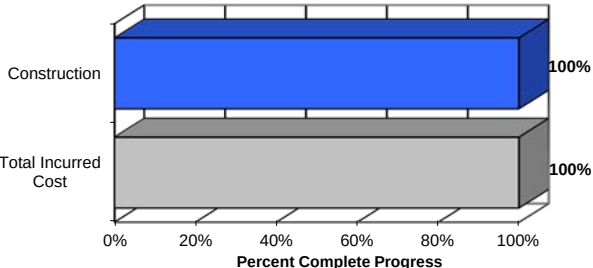
CONTRACT C0991 STATUS
Southwestern Yard

PE Design Contractor: Hatch Mott (HM) CM Consultant: Stantec Contractor: - Hensel Phelps / Herzog JV				Contract No.: C0991 Status as of January 28, 2017																														
Progress/Work Completed: - Continued main shop pits and foundation construction. - Performed rain/flooding clean up on site. - Bellanca revocable permit for south section is progressing as planned.				Areas of Concern: 8" water line (Asbestos) under Bellanca is affecting Main Shop foundations construction and needs to be relocated. Design is finalized and field work scheduled to start in February 2017. - DWP power relocation started in January and planned to complete in February 2017.																														
Schedule Assessment: - MOD #02 was executed extending milestones 2, 3, 4 by 90 calendar days as shown on the schedule milestone section below. - MOD #06 was also executed to adjust the contract rain days allowance measurement. - C0991 contract critical path runs through construction for the main shop facility to milestone 2 and 3. - Interface coordination between HPH, WSCC, City, 3rd Parties are being managed proactively to address and to minimize any impact on the project cost and Schedule. - Risk Register for SWY was expanded as part of the overall Crenshaw/LAX project risk process. - Assessment, no delay to the milestones is expected. - Metro is working on potential early site access for the remaining sites.				Cost Assessment: - The current construction contract cost forecast is \$171,008,485.09 is within the Board authorized budget. - The Contractor submitted their 18th payment application in the approved amount of \$1,716,489.38 *Please note that not all executed modifications may have been included in the Contractor current payment application.																														
Schedule Summary: <table><tr><td>1. Date of Award:</td><td>28-May-15</td><td></td></tr><tr><td>2. Notice to Proceed:</td><td>29-Jun-15</td><td></td></tr><tr><td>3. Original Substantial Completion Duration:</td><td>1,220</td><td></td></tr><tr><td>4. Current Substantial Completion Duration:</td><td>1,311</td><td></td></tr><tr><td>5. Elapsed Time from NTP:</td><td>579</td><td>44.2%</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:	579	44.2%	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>(1.33)</td></tr><tr><td>3. Approved Change Orders:</td><td>0.03</td></tr><tr><td>4. Current Contract Value (1 + 2 + 3):</td><td>171.01</td></tr><tr><td>5. Incurred Cost (thru January 2017):</td><td>30.74</td></tr></table>					\$ In millions	1. Award Value:	172.31	2. Executed Modifications:	(1.33)	3. Approved Change Orders:	0.03	4. Current Contract Value (1 + 2 + 3):	171.01	5. Incurred Cost (thru January 2017):	30.74
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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	26-Oct-16	0																														
MS#2 Main Shop Communication Room Completion	15-Jan-18	16-Apr-18	6-Apr-18	10																														
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MS#4 Southwestern Yard Substantial Completion	31-Oct-18	30-Jan-19	29-Jan-19	1																														

CONTRACT C0992 STATUS
Concrete Ties

PE Design Contractor: Hatch Mott (HM) CM Consultant: Stantec Contractor: Rocla Concrete Tie Inc.					Contract No.: C0992 Status: Completed 																																												
Progress/Work Completed: - All 19,936 concrete ties have been received onsite by the design-builder (Contract C0988). - Contract is closed out.					Areas of Concern:																																												
Schedule Assessment: All concrete ties were delivered to job site by August 15, 2014.					Cost Assessment: The final 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% 50% 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 (HM) CM Consultant: Stantec Contractor: LB Foster Rail Technology Corp					Contract No.: C0992A Status: Completed																																												
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. - Contract is closed out.					Areas of Concern: .																																												
Schedule Assessment: All running rails and bumping posts were delivered ahead of the schedule.					Cost Assessment: The final 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>0</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					0	PERCENT COMPLETE <i>from 3/7/2014 to 05/29/15</i>  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 – Frame 1: Deck concrete cure.



UG#1 -C&C Tunnel STA 45+00 to 50+00.

CONSTRUCTION PHOTOGRAPHS (Continued)



AVIATION/CENTURY BRIDGE – Concrete placement complete for both approach slabs at abutment 1.



WESTCHESTER STATION – Concrete placement for the northbound platform's stem walls, shear walls and engaged columns.

CONSTRUCTION PHOTOGRAPHS (Continued)



(AG-5) I-405 Bridge – View of AG-5 from the I-405.



(AG-6) LA BREA BRIDGE –. Crews worked on placing the Asphalt cap.

CONSTRUCTION PHOTOGRAPHS (Continued)



UG#3 – Installation of rebar for U-channel walls at south portal.



UG#4 – Installation of rebar for invert section I-27 at north portal.

CONSTRUCTION PHOTOGRAPHS (Continued)



MARTIN LUTHER KING JR. STATION – Placement of lower wall section LW-4.



TUNNELING – Preparing SB Tunnel for invert.

CONSTRUCTION PHOTOGRAPHS (Continued)



TUNNELING – Installation of electrical conduits and SB Tunnel Invert rebar



TUNNELING – Removing muck from TBM advance.

CONSTRUCTION PHOTOGRAPHS (Continued)



Bottom ballast being placed and start of ballasted special track work.

APPENDIX

PROJECT COST STATUS – SOUTHWESTERN YARD

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	614,590	1,945,420	0	86,889,531	1,699,532
40	SITWORK\SPECIAL CONDITIONS	35,932,000	0	38,273,000	0	38,781,286	245,410	21,195,928	0	38,273,000	0
50	SYSTEMS	25,784,616	0	32,991,000	0	32,991,000	0	429,750	0	32,991,000	0
	(10-50) CONSTRUCTION	147,263,451	0	156,453,999	0	158,304,981	860,000	23,571,098	0	158,153,531	1,699,532
60	RIGHT-OF-WAY	99,910,000	0	100,000,000	0	103,450,614	267	103,362,164	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	(552,314)	28,524,522	395,781	20,815,108	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	(552,314)	290,280,116	1,256,048	147,748,370	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	12,329	9,355,921	12,329	2,576,797	0	11,000,000	0

GRAND TOTAL	307,434,278	0	318,200,000	(539,985)	299,636,037	1,268,377	150,325,167	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 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 LOP 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 budget is \$318.2 million.

APPENDIX

PROJECT COST ANALYSIS (Continued)

Current Forecast: The forecast is under review.

Commitments:

The commitments are cumulative through January 28, 2017.

Total commitments decreased by \$0.54 million for this period due to the following:

- SCC-40
 - o No change for December/January.
- SCC-60
 - o No change for December/January.
- SCC-80
 - o Labor compliance commitment decreased by \$0.67 million and moved to 865512, other professional services such as legal, construction management and labor increased \$0.13 million for December/January.

The \$299.64 million in commitments to date represents 94.17% of the current budget.

Expenditures:

The expenditures are cumulative through January 28, 2017.

The total expenditures increased by \$1.27 million for this period due to the following:

- SCC-30
 - o Hensel Phelps/Herzog JV expenditure increase by \$0.61 million for December/January.
- SCC-40
 - o Hensel Phelps/Herzog JV expenditure increase by \$0.25 million for December/January.
- SCC-60
 - o No change for December/January.
- SCC-80
 - o Hensel Phelps/Herzog JV, agency expenditure and professional services expenditure increase by \$0.41 million for December/January.

The \$150.33 million in expenditures to date represents 47.24% 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.