Crenshaw/LAX Transit Project



CRENSHAW/LAX TRANSIT PROJECT

MONTHLY PROJECT STATUS REPORT

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

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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 is 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 is closed out.

Design- Build Contract C0988 (Alignment) – The design-builder, Walsh-Shea Corridor Constructors (WSCC) continues engineering in support of construction.

Construction efforts by the design-builder continued along all areas of the alignment. Underground work continues at the north end of the project. The contractor has substantially completed the twin tunnels. The three underground stations remain at various levels of completion with work continuing on concourse floor and wall concrete placements. Contractor also continues the roof concrete placements at Expo Station and side entrance concrete placements at all three underground stations.

Three of the four at-grade stations structure concrete placements are substantially completed with canopy, entrance, and finish work underway. The aerial station structure concrete placement is substantially complete with canopy installed and entrance and finish work underway.

The underground shallow tunnel structure in front of the south runways of LAX along Aviation Boulevard is substantially completed. The shallow tunnel box structure south of Leimert Park Station and the shallow tunnel box structure south of Park Mesa Heights are both in various stages of construction.

All six bridge superstructures are substantially complete with the exception of the finishes and systems installations. Work has been completed on the mechanically stabilized earth (MSE) walls and continues for right-of-way at-grade work. Various construction efforts continue on the roadway section within the Park Mesa Heights area.

Trackwork installation is continuing in areas available along the southern area of alignment. The contractor has completed construction of six of 17 at-grade crossings.

Design- Build Contract C0991 Southwestern Yard (Division 16) – The design-builder, Hensel Phelps / Herzog JV (HPH) substantially completed final design and submission of submittals required for construction on October 26, 2016. Design for the future expansion of the main shop was issued as a preliminary engineering package for Metro's use in the future. Design and engineering is continuing in support of construction.

PROJECT OVERVIEW (Continued)

The contractor has completed the main shop slab on grade, metal decking installation, and CMU walls, and is continuing with roof construction. Installation of exterior/interior framing, drywall, electrical, mechanical, plumbing activities continues in the main shop. The slab on grade was placed, structural steel erected and CMU wall constructed within the material storage building. Construction continued on the car wash and car cleaning footings, grade beams, underground conduits and piping, pit construction and installation of the carwash prefabricated structure. The train control, communication, TPSS ductbank, underground utilities, and OCS foundations installations are proceeding from west to east. The installation of the turnouts in the yard and the Main Shop embedded tracks commenced this month.

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 2018. 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 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.

PROJECT OVERVIEW (Continued)

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.

Although there is no change to the Total LOP Current Budget there was a reallocation for changes to the SCC elements within the Current Budget in April 2017. The reallocation was required due to the draw down to date of the SCC 90 Allocated Contingency for changes issued to the design-build contractor, additional relocations of utilities by third parties, additional legal services and special services as well as an increase in professional services for construction and project management oversight.

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 and state funding 91.3%, (includes Measure R TIFIA Loan), and federal funding is 8.7%.

The project commitments thru January 2018 are \$1,979.9 million or 96.2% of the Current Budget. The project expenditures thru January 2018 are \$1,537.6 million or 74.7% 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.

PROJECT OVERVIEW (Continued)

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 remaining 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.

Metro has not received a January 2018 schedule update from WSCC. Therefore, Metro continues to show a 40-calendar day delay to WSCC's Contract Milestone #1 Substantial Completion date of May 1, 2019. WSCC continues to explore mitigation opportunities along the alignment where the current impact of 40 days can be mitigated.

MANAGEMENT ISSUES

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

<u>Status/Action</u> There are a few remaining final design submittals that are required to be submitted by the Contractor for City of Los Angeles review. Metro meets with the Contractor several times a week on design submittal status and works with the Contractor and City to resolve outstanding issues. 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

<u>Status/Action</u> WSCC submitted a "Completion Schedule" which was subsequently reviewed and approved by Metro on December 16, 2016. This schedule represents a rebaseling 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.

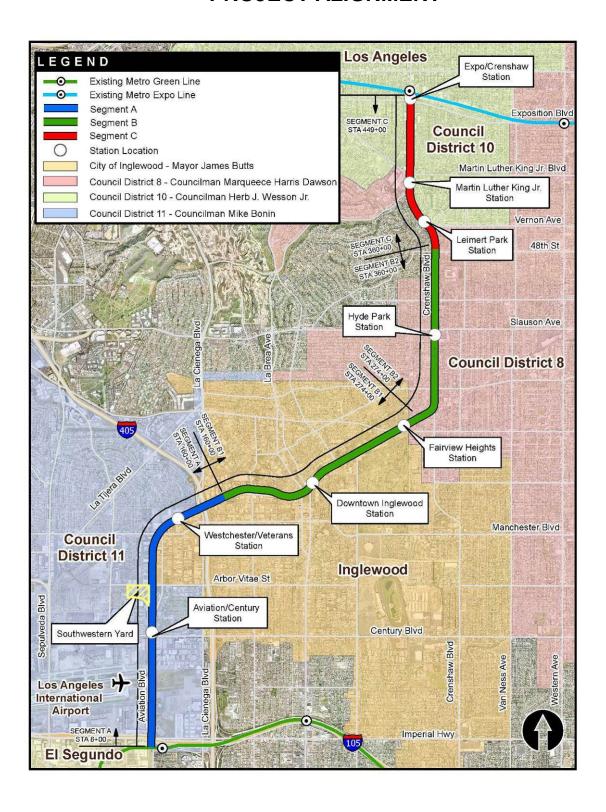
Metro has not received a January 2018 schedule update from WSCC. Therefore, Metro continues to show a 40-calendar day delay to WSCC's Contract Milestone #1 Substantial Completion date of May 1, 2019.

Concern No. 3: Remaining Unallocated Contingency is less than 2% of Total Project Budget.

Status/Action

Metro monitors and reports on the drawdown of unallocated contingency on a monthly basis. Staff continues to evaluate the potential uses of the remaining unallocated contingency. There was a re-allocation of expenditures and forecast costs in October 2017 for local and non-federal activities which are reported below the line. This month, additional costs have been included below the line. As part of Metro's fiscal year budgeting process a new internal Metro project, "Crenshaw/LAX Locally Funded Activities" for tracking these costs will be active commencing in July 2018.

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, prequalification 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.

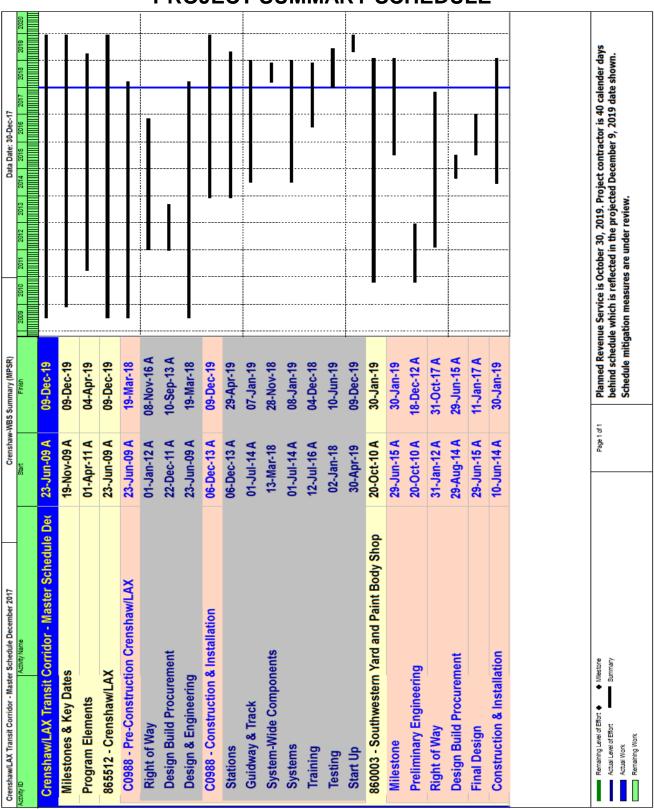
Start Up

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

Activity ID	Activity Name	Milestone Date	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18
988-TW-9684	Construct Ballasted Track (Arbor Rail Pile STA 103+50 to STA 75+20) - Seg. A	15-Nov-17 A	•					
988-SCE-T1050	TPSS-01 Permanent Power Drop - SCE - Procurement of Cable and Equipmen	30-Dec-17						
988-CT-84975	Bridge Emergency Walkway - Aviation / Century Bridge	01-Jan-18		4				
991-SLT1090	Install South Yard Lead Track	02-Jan-18		Δ				
988-CT-33000	Turnover to Track (sta. 9+00 to 16+64) - Aerial Structure #1	02-Jan-18						
988-CT-23700	Turnover to Track - 111th St Bridge	09-Jan-18						
991-APM1120	Metro LAWA Final Acceptance	10-Jan-18		Δ				
988-IFC-TCC02	I-Face: TC&C Room Ready for systems @ A02 Aviation/Century TC&C #3	16-Jan-18						
988-TW-1400	Destress DF Track - STA 27+15 to 28+20 - 111th St. Bridge - Seg. A	17-Jan-18						
988-IFC-ATC01	I-Face: Track Complete @ A01 (6+00 to 43+50)	17-Jan-18						
991-TW-30160	Construct Turnouts TO-43	11-Jan-18		Δ				
988-CT-5659	Ductbank - Manhole / Vault / Pad / Pull Box - TPSS-07/ Aux. Power (Future)	18-Jan-18						
988-CT-69535	F/R/P Columns Sequence 3 - MLK	19-Jan-18						
988-MOD-2780	TPSS No.2 Upgrade from 1.5 MW to 2.0 MW	26-Jan-18						
988-SCE-T1170	TPSS-03 Permanent Power Drop - SCE - Utility Install Infrastructure and conduit	08-Feb-18						
988-TW-2100	Construct Ballasted Track - Arbor Rail Pile STA 103+50 to 118+58 Manchester - Seg. A	08-Feb-18						
988-ATC-03300	Rough-In for Wayside Equipment @ A03 (85+90 to 130+00)	08-Mar-18						
988-ATC-01400	Install ATC Local Cable @ TC&C #1	12-Mar-18						
988-TW-9683	Construct Ballasted Track - STA 256+09 to 274+25 (High to Brynhurst)	27-Mar-18						
988-MOD-3180	Deluge System at Expo Crossover	29-Mar-18						
988-ATC-02750	Ground Bonds & Signals @ A02 (43+50 to 85+90)	02-Apr-18						
988-ATC-TIA5-3000	96th Street - Additional ATC Local Cable at TC&C #3	10-Apr-18						
988-ATC-03400	Install ATC Local Cable @ TC #4	18-Apr-18						
988-CT-50980	Turnover to Track - U-Trench #3	26-Apr-18						
988-CT-89148	Escalator Finishes - Aviation / Century	14-May-18						
988-CT-9189	Backup Power (TPSS) - TPSS-04	18-May-18						
988-CT-91808	Erect Elevator 1 & 2 Framing - Plaza - Expo	18-May-18						
988-FAT-01A50	ATC: Field Acceptance Testing @ Aviation TC&C #1 Continental (6+00 to 43+50)	23-May-18						4

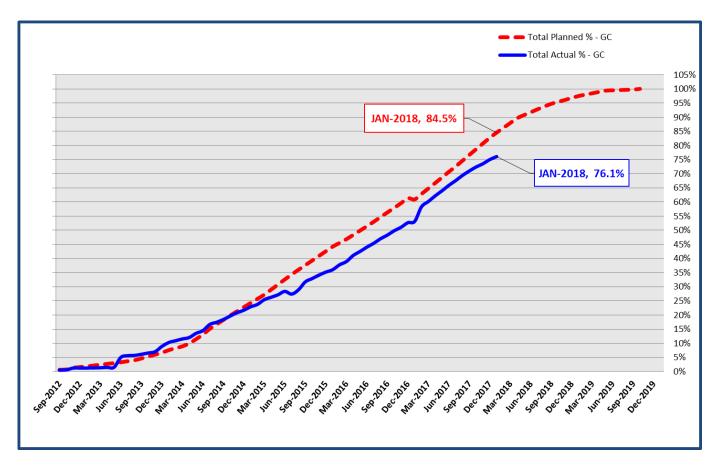
PROJECT SUMMARY SCHEDULE



SCHEDULE MEASUREMENTS

		Change	
		from	
	.	Last	
	Status	Period	Comment
Current Revenue Service:	10/30/2019	0	
Forecast Revenue Service:	12/08/2019	0	Behind Schedule
TIFIA Revenue Service:	10/30/2019	0	
Final Design Progress:			
Contract C0988	98.9%	0.1%	Behind Schedule
Contract C0990	100%	None	Design Completed
Contract C0991	90.0%	0.7%	On Schedule
Contract C0992	100%	None	Design Completed
Contract C0992A	100%	None	Design Completed
Construction Contracts Progress:			
Contract C0988	69.9%	0.7%	Behind Schedule
Contract C0990	100%	None	Substantially Completed
Contract C0991	50.7%	3.8%	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 76.1% versus a planned progress of 84.5% through January 2018. 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 includes forecast for the alignment design-builder and includes the Southwestern Yard design-builder progress effort.

MAJOR EQUIPMENT DELIVERY STATUS

Light Rail Vehicles

The Board approved exercising Option 1 of Contract P3010 with KinkiSharyo International (KI) 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 Option 1 P3010 car was delivered in May 2017. The final P3010 car (22nd car) was delivered in September 2017, completing the Option delivery for the Crenshaw Project. All twenty-two Crenshaw cars are currently in revenue service on the Green and Blue Lines. KinkiSharyo/ASTS still needs to work on the Cutover (revenue service) software development to include Crenshaw's final alignment, track profiles, and berthing locations. Once completed, a series of software validation tests will need to be performed prior to implementation on the P3010s.

Universal Fare System Equipment

A notice-to-proceed was issued on January 30, 2018 to the existing Metro Universal Fare System (UFS) contractor, Cubic Transportation Systems, Inc., to procure UFS equipment for the Crenshaw/LAX Project eight stations. The contractor will commence manufacturing of the equipment and will prepare for the installation of the fare equipment upon station availability. A manufacturing and installation schedule will be submitted by the UFS contractor in February 2018. The design-builder contractor (WSCC) has a Contract Milestone No. 2 "Complete UFS Station Areas" which is planned to be complete by November 1, 2018. The UFS contractor's installation schedule will be coordinated with the availability of each of the stations access areas.

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

Area	Activity ID	Activity Name	Start	Need Date
Overhead Catenary (OCS)	988-PRC-O0060	OCS: Purchase/Deliver Hardware & Insulators	04-Jan-17 A	13-Feb-18
Procurement	988-PR-024149	Canopy Steel Spine Frame - Material/Fabrication (Store Off Site) - Hyde Park Station	27-Feb-17 A	8-May-18
Procurement	988-PR- 11724129	Catwalk and Tiedowns - Material/Fabrication (Store Off Site) - Hyde Park Station	27-Feb-17 A	8-May-18
Procurement	988-PR- 01724029	Catwalk and Tiedowns - Material/Fabrication (Store Off Site) - Westchester/ Veterans Station	30-Jan-17 A	10-May-18
Procurement	988-PR- 11724079	Elevator Canopy - Material/Fabrication (Store Off Site) - Century Station	01-Feb-17 A	31-May-18
Procurement	988-PR-084239	Entry Canopy Frame - Material/Fabrication (Store Off Site) - Expo Station	03-Apr-17 A	14-Sep-18
Procurement	988-PR- 11724219	Elevator Canopy - Material/Fabrication (Store Off Site) - Expo Station	03-Apr-17 A	14-Sep-18
Procurement	988-PR- 11724179	Elevator Canopy - Material/Fabrication (Store Off Site) - MLK Station	03-Apr-17 A	23-Oct-18
Procurement	988-PR-94199	Entry Canopy Frame - Material/Fabrication (Store Off Site) - MLK Station	03-Apr-17 A	6-Nov-18
Procurement	988-PR-1024149	Entry Canopy Frame - Material/Fabrication (Store Off Site) - Leimert Park Station	03-Apr-17 A	13-Nov-18
Procurement	988-PR- 11724159	Elevator Canopy - Material/Fabrication (Store Off Site) - Leimert Park Station	03-Apr-17 A	13-Nov-18
Procurement	988-PR- 11724019	Entry Canopy Frame - Material/Fabrication (Store Off Site) - Century Station	01-Feb-17 A	21-Nov-18
Procurement - Communication System	988-PRC-C0010	Procure/Deliver CTS Wire & Cable	21-Jun-17 A	24-Apr-18
Procurement - Communication System	988-PRC-C0009	Procure/Deliver IDS Wire & Cable	21-Jun-17 A	9-May-18
Procurement - Communication System	988-PRC-C0008	Procure/Deliver Fire Alarm Wire & Cable	21-Jun-17 A	9-May-18

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Procurement - Communication System	988-PRC-C0075	Procure Equip. & Components for Portal Surveillance	21-Jun-17 A	9-May-18
Procurement - Communication System	988-PRC-C0070	Procure Equip. & Components for Telephone	21-Jun-17 A	9-May-18
Procurement - Communication System	988-PRC-C0065	Procure Equip. & Components for Seismic Detection	21-Jun-17 A	9-May-18
Procurement - Communication System	988-PRC-C0060	Procure Equip. & Components for SCADA	21-Jun-17 A	9-May-18
Procurement - Communication System	988-PRC-C0055	Procure Equip. & Components for Radio	21-Jun-17 A	9-May-18
Procurement - Communication System	988-PRC-C0045	Procure Equip. & Components for Intrusion Detection	21-Jun-17 A	9-May-18
Procurement - Communication System	988-PRC-C0040	Procure Equip. & Components for Gas Detection	21-Jun-17 A	9-May-18
Procurement - Communication System	988-PRC-C0030	Procure Equip. & Components for EMP	21-Jun-17 A	9-May-18
Procurement - Communication System	988-PRC-C0016	Procure/Deliver TVM Wire & Cable	21-Jun-17 A	9-May-18
Procurement - Communication System	988-PRC-C0014	Procure/Deliver Radio Wire & Cable	21-Jun-17 A	9-May-18
Procurement - Communication System	988-PRC-C0013	Procure/Deliver CCTV Wire & Cable	21-Jun-17 A	9-May-18
Procurement - Communication System	988-PRC-C0012	Procure/Deliver PA/VMS Wire & Cable	21-Jun-17 A	9-May-18
Procurement - Communication System	988-PRC-C0011	Procure/Deliver Telephone Wire & Cable	21-Jun-17 A	9-May-18
Procurement - Communication System	988-PRC-C1010	Mfgr/Test/Ship Complete Comm Racks - 48th Street Radio House	27-Oct-17 A	10-Jul-18
Procurement - Communication System	988-PRC-C0810	Mfgr/Test/Ship Complete Comm Racks - UG3 Radio Room	27-Oct-17 A	10-Jul-18
Procurement - Communication System	988-PRC-C0018	Procure/Deliver ETS/TT Cable	21-Jun-17 A	8-Aug-18

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Procurement - Communication System	988-PRC-C0085	Procure & Deliver UPS & Batteries - TC&C #10 Leimert Park	21-Jun-17 A	28-Aug-18
Procurement - Communication System	988-PRC-C1110	Mfgr/Test/Ship Complete Comm Racks - TC&C #10 Leimert Park	27-Oct-17 A	28-Aug-18
Procurement - Communication System	988-PRC-C1310	Mfgr/Test/Ship Complete Comm Racks -TC&C #12 EXPO	27-Oct-17 A	29-Aug-18
Procurement - Communication System	988-PRC-C1210	Mfgr/Test/Ship Complete Comm Racks -TC&C #11 MLK	27-Oct-17 A	29-Aug-18
Procurement - Communication System	988-PRC-C0210	Mfgr/Test/Ship Complete Comm Racks - UG1 Radio Room	27-Oct-17 A	10-Sep-18
Procurement - Communication System	988-PRC-C0082	Procure & Deliver UPS & Batteries - TC&C #4 Arbor	21-Jun-17 A	26-Sep-18
Procurement - Communication System	988-PRC-C0380	Deliver & Receive Telephone Equip TC&C #3 Century	24-Feb-17 A	28-Sep-18
Procurement - Communication System	988-PRC-C0360	Deliver & Receive PA Equip TC&C #3 Century	13-Feb-17 A	2-Oct-18
Procurement - Communication System	988-PRC-C0017	Procure/Deliver Comm Wire & Cable	21-Jun-17 A	2-Oct-18
Procurement - Communication System	988-PRC-C0330	Deliver & Receive CCTV Equip TC&C #3 Century	24-Feb-17 A	4-Oct-18
Procurement - Communication System	988-PRC-C0280	Deliver & Receive Telephone Equip UG1 Radio Room	24-Feb-17 A	4-Oct-18
Procurement - Communication System	988-PRC-C0084	Procure & Deliver UPS & Batteries - TC&C #9 Hyde Park	21-Jun-17 A	12-Nov-18
Procurement - Communication System	988-PRC-C0087	Procure & Deliver UPS & Batteries - TC&C #12 EXPO	21-Jun-17 A	15-Nov-18
Procurement - Communication System	988-PRC-C0086	Procure & Deliver UPS & Batteries - TC&C #11 MLK	21-Jun-17 A	15-Nov-18
Procurement - Communication System	988-PRC-C0083	Procure & Deliver UPS & Batteries - TC&C #8 Fairview Heights	21-Jun-17 A	15-Nov-18
Procurement - Communication System	988-PRC-C0081	Procure & Deliver UPS & Batteries - TC&C #3 Century	21-Jun-17 A	15-Nov-18

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Site/Civil	988-PR-6965	Fab/Procure & Deliver Electrical Manholes, Vaults, Pads - Tunnel	01-Feb-17 A	21-Jun-18
Stations	988-PR-4700	Fabricate & Deliver Elevators	04-Apr-16 A	1-Apr-18
Stations	988-PR-30521	Fabricate & Deliver Structural Steel Canopy for Westchester/Veterans Station	26-Jan-17 A	4-May-18
Stations	988-PR-30541	Fabricate & Deliver Structural Steel Canopy for Hyde Park Station	27-Feb-17 A	8-May-18
Stations	988-PR-4800	Escalators - Materials & Fabrication & OP Manual/ Maint. Ctl. Program - Leimert Park Station	02-May-16 A	2-Jun-18
Stations	988-PR- 11724621	Metro Orders/Fabricates Underground Station Tile Artwork	30-Jun-17 A	12-Nov-18
Stations	988-PR- 11724591	Escalators - Materials & Fabrication & OP Manual/ Maint. Ctl. Program - Aviation / Century	04-Sep-17 A	21-Nov-18
Traction Power	988-PR-6555	Fabricate & Deliver Medium Voltage Cable	03-Apr-17 A	11-Jan-18
Traction Power	988-PR-6955	Fabricate & Deliver Low Voltage Cable - Cut & Fill	03-Apr-17 A	11-Jan-18
Traction Power	988-PRC-T0100	Mfgr/Assemble/Wire Substation - TPSS-01	13-Jun-17 A	22-Jan-18
Traction Power	988-PRC-T0200	Mfgr/Assemble/Wire Substation - TPSS-02	10-Jul-17 A	29-Jan-18
Traction Power	988-PR-6765	Fabricate & Deliver Low Voltage Cable (Project Wide)	01-Aug-17 A	5-Feb-18
Traction Power	988-PRC-T0300	Mfgr/Assemble/Wire Substation - TPSS-03	04-Sep-17 A	26-Feb-18
Traction Power	988-PR-6505	Fabricate & Deliver Dry Type Transformers - TPSS	16-Feb-17 A	5-Mar-18
Traction Power	988-PR-6485	Fabricate & Deliver MCC - TPSS	16-Feb-17 A	7-Mar-18
Traction Power	988-PR-6545	Fabricate & Deliver TPSS Generator	07-Aug-17 A	7-Mar-18
Traction Power	988-PRC-T0800	Mfgr/Assemble/Wire Substation - TPSS-08	02-Oct-17 A	14-Mar-18
Traction Power	988-PR-6925	Fabricate & Deliver Panelboards - TPSS	16-Feb-17 A	23-Mar-18
Traction Power	988-PR-6495	Fabricate & Deliver Panelboards - Underground Stations	16-Feb-17 A	25-Apr-18
Traction Power	988-PR-6605	Fabricate & Deliver Cable Tray in Stations	21-Mar-17 A	9-May-18

CRITICAL PATH NARRATIVE

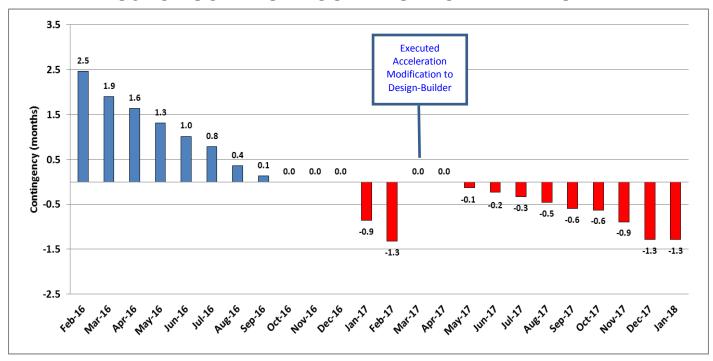
Critical Path:

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.

Metro has not received a January 2018 schedule update from WSCC. Therefore, Metro continues to show a 40 calendar day delay to WSCC's Contract Milestone #1 Substantial Completion date of May 1, 2019. The critical path continues with the track construction at Segment "A" (Green Line to Arbor Vitae), followed by ballasted track construction from Arbor Vitae to Oak Street, La Brea to Brynhurst, and Brynhurst to 48th Street. Track and OCS installation in the bored tunnel follows thereafter.

The current critical path then continues with WSCC systems integration testing, phase 1 and Metro's systems integration testing, phases 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 December 8, 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.

Metro has not received a January 2018 schedule update from WSCC. Therefore, Metro continues to show a 40 calendar day delay to WSCC's Contract Milestone #1 Substantial Completion date of May 1, 2019.

PROJECT COST STATUS

SCC	DESCRIPTION	ORIGINAL	CURREN	IT BUDGET	COMM	ITMENTS	EXPEN	DITURES	CURRENT	FORECAST	CURRENT BUDGET/
CODE	DESCRIPTION	BUDGET	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	FORECAST VARIANCE
10	GUIDEWAYS	471,335,000	-	450,354,375	-	450,882,396	4,879,557	393,577,624	-	450,885,416	531,042
20	STATIONS, STOPS, TERMINALS, INTERMODAL	153,906,000	-	315,050,000	(1)	315,662,242	3,574,363	185,889,997	-	315,662,242	612,242
30	SUPPORT FACILITIES (SOUTHWEST YARD)	66,673,000	-	71,164,000	-	71,053,330	1,465,275	42,987,263	-	71,164,000	-
40	SITEWORK\SPECIAL CONDITIONS	235,576,000	-	395,798,361	117,265	399,212,326	2,293,740	327,135,045	165,907	406,789,753	10,991,391
50	SYSTEMS	125,132,000	-	169,436,000	(167,632)	158,076,708	4,605,693	61,499,779	-	166,054,934	(3,381,066)
	CONSTRUCTION SUBTOTAL (10-50)	1,052,622,000	-	1,401,802,736	(50,368)	1,394,887,001	16,818,627	1,011,089,708	165,907	1,410,556,346	8,753,610
60	RIGHT-OF-WAY	132,294,000	-	127,490,000	225,342	124,737,398	214,109	124,584,105	225,342	124,737,510	(2,752,490)
70	VEHICLES / BUSES	87,780,000	-	83,571,544	-	82,050,901	(2,812,269)	70,247,539	-	83,571,544	-
80	PROFESSIONAL SERVICES	273,147,000	-	368,734,466	(16,173)	352,709,867	4,196,517	306,125,394	116,477	374,923,291	6,188,826
	SUBTOTAL (10-80)	1,545,843,000	-	1,981,598,746	158,802	1,954,385,168	18,416,984	1,512,046,746	507,726	1,993,788,691	12,189,945
90	UNALLOCATED CONTINGENCY	177,157,000	-	50,401,254	-	-	-	-	(507,726)	38,211,309	(12,189,945)
	TOTAL PROJECT 865512 (10-100)	1,723,000,000	-	2,032,000,000	158,802	1,954,385,168	18,416,984	1,512,046,746	-	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	-	20,022,881	-	20,022,881	-	20,473,850	-
TO	TAL PROJECTS 405512 & 465512 (ENV / PLAN'G)	26,000,000	-	26,000,000	-	25,549,031	-	25,549,031	-	26,000,000	-
	TOTAL PROJECTS 405512, 465512 & 865512		-	2,058,000,000	158,802	1,979,934,199	18,416,984	1,537,595,777	-	2,058,000,000	-

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH FEBRUARY 2, 2018

PROJECT COST ANALYSIS

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

Original Budget:

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

Current Budget:

There have been two increases in the LOP to date:

- The Board in December 2012 approved an increase of \$13.9 million for a new LOP total of \$1,762.9 million. The Unallocated Contingency Standard Cost Category (SCC) 90 budget line item was increased by the \$13.9 million for a new total of \$191.1 million.
- The Board in June 2013 approved an increase of \$295.1 million for a new LOP total of \$2,058.0 million. The total increase was based on two actions:
 - o Increase LOP base project scope in the amount of \$160.1 million, and
 - o 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 in May 2015 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 was 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 was revised to \$150.2 million.

PROJECT COST ANALYSIS (Continued)

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 Current Budget allocation for the Crenshaw/LAX Transit Project, excluding the Southwestern Yard Project \$150.2 million 49% allocation and the Environmental/Planning Current Budget of \$26.0 million is \$1,881.8 million.

Although there is no change to the Total LOP Current Budget there was a reallocation for changes to the SCC elements within the Current Budget in April 2017. The reallocation was required due to the draw down to date of the SCC 90 Allocated Contingency for changes issued to the design-build contractor, additional relocations of utilities by third parties, additional legal services and special services as well as an increase in professional services for construction and project management oversight.

Current Forecast:

The total project current forecast is \$2,058 million. However, there was a reallocation of forecast within the SCC-40 (Sitework and Special Conditions) and SCC-50 (Systems).

Commitments:

The commitments are cumulative through February 2, 2018. The total commitments increased by \$0.2 million this period primarily due to the following:

- SCC-40 (Sitework and Special Conditions) has increased by \$0.1 million for executed modifications associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor.
- SCC-50 (Systems) has a net decreased of \$0.2 million due to de-commitment of Purchase Order funds for cancelled change orders associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor.
- SCC-60 (Right-of-Way) has increased \$0.2 million for cost associated with real estate relocation. The total commitment of \$124.7 million includes \$53.3 million for the Southwestern Yard 49% allocation.
- SCC-80 (Professional Services) has increased \$0.1 million for project management support contract AE35279 with KKCS/TRIUNITY. The total commitment of \$352.7 million includes \$23.0 million for the Southwestern Yard 49% allocation.

The \$1,979.8 million in commitments to date represents 96.2% of the current budget.

PROJECT COST ANALYSIS (Continued)

Expenditures:

The expenditures are cumulative through February 2, 2018. The total expenditures increased by \$18.4 million this period due to the following:

- SCC-10 (Guideways) has increased by \$4.9 million for costs associated with the designbuild Contract C0988 Crenshaw/LAX Transit Corridor.
- SCC-20 (Stations, Stops, Terminals, Intermodal) has increased by \$3.6 million for costs associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor.
- SCC-30 (Southwestern Yard) has increased by \$1.4 million for costs associated with the design-build Contract C0991 Division 16: Southwestern Yard (Design/Build).
- SCC-40 (Sitework and Special Conditions) has increased by \$2.3 million for costs associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor.
- SCC-50 (Systems) has increased \$4.6 million for costs associated with the design-build Contract C0988 Crenshaw/LAX Transit Corridor.
- SCC-60 (Right-of-Way) has increased \$0.2 million for cost associated with real estate relocation. The total expenditure of \$124.6 million includes \$53.3 million for the Southwestern Yard 49% allocation.
- SCC-70 (Vehicles) has decreased by \$2.8 million due to Accounts Payable adjustments for costs associated with P3010 Contract with KINKISHARYO INTERNATIONAL, LLC. to procure 22 light rail vehicles.
- SCC-80 (Professional Services) has increased by \$4.2 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, project management support, labor compliance monitoring and environmental
 consultant services. The total expenditure of \$306.1 million includes \$17.9 million for the
 Southwestern Yard 49% allocation.

The \$1,537.6 million in expenditures to date represents 74.7% of the current budget.

Crenshaw/LAX Transit Locally Funded Activities

The costs shown in the table below are part of Crenshaw/LAX Transit Project locally funded activities' costs, which are being reported below the line and will be re-allocated to a new FY19 "Crenshaw/LAX Locally Funded Activities" project. The project will be active commencing July 2018.

SCC	DESCRIPTION	ORIGINAL	CURRENT BUDGET		СОММП	MENTS	EXPENDITURES		CURRENT	CURRENT FORECAST	
CODE		BUDGET	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
60	RIGHT-OF-WAY	-	•	-	-	3,867,395	-	3,867,395	•	3,867,395	(3,867,395)
70	VEHICLES / BUSES *1					10,699,000		10,699,000		10,699,000	(10,699,000)
80	PROFESSIONAL SERVICES	-	-	-	113,493	4,419,494	80,703	1,524,491	111,569	4,830,467	(4,830,467)
	SUBTOTAL (10-80)	-	,	-	113,493	18,985,889	80,703	16,090,886	111,569	19,396,862	(19,396,862)
	TOTAL	-	,	-	113,493	18,985,889	80,703	16,090,886	111,569	19,396,862	(19,396,862)
NOTE: EXPENDITURES ARE CUMULATIVE THROUGH FEBRUARY 2, 2018											

Note: The \$10.7 million under SCC 70 LRT Vehicles is for State Board of Equalization (SBOE) to tax LRT vehicle deliveries since August 2016. Metro is appealing the decision by the SBOE but is paying the tax so as not to incur any late fees.

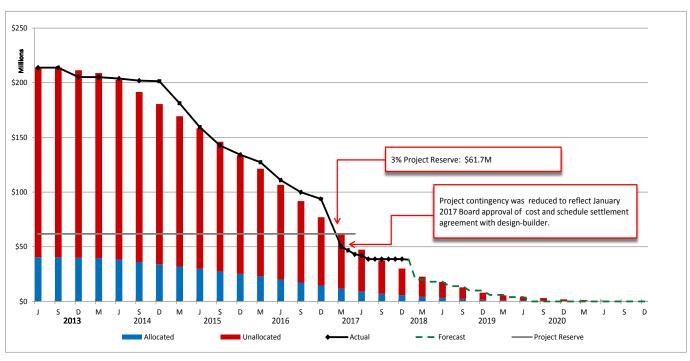
PROJECT COST ANALYSIS (Continued)

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)

DESCRIPTION	CURREN	T BUDGET	COMMITMENTS		EXPENDITURES		CURRENT FORECAST		FORECAST
DESCRIFTION	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
405556 SYSTEMWIDE TRANSIT PLANNING	-	175,495	90,000	320,035	-	175,495	-	175,495	-
210090/93 FARE GATE PROJECT	-	2,566,226	-	2,566,226	-	252,726	-	2,566,226	-
210152 CRENSHAW/LAX BUS TRANSFER FACILITY	-	2,200,000	-	2,200,000	-	403,334	-	2,200,000	-
460303 AIRPORT METRO CONNECTOR	-	37,914,465	-	35,794,171	107,535	34,238,625	-	37,914,465	-
500013 C/LAX LAWA SCOPE OF WORK	-	1,575,362	332,695	863,911	-	408,712	-	1,575,362	-
TOTAL	-	44,431,548	422,695	41,744,343	107,535	35,478,892	-	44,431,548	-

PROJECT COST CONTINGENCY DRAWDOWN



Through 02-Feb-2018

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.

In February 2017, the project contingency drawdown curve went below the 3% project reserve level and the Board was notified.

The project contingency drawdown curve is based on an October 2019 revenue service date. In February 2017, the forecast drawdown curve was revised.

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PROJECT CONTINGENCY DRAWDOWN ANALYSIS (Continued)

There has been a cumulative drawdown of \$175,655,483 or 82.1% for both allocated and unallocated contingency through January 2018.

- The unallocated contingency decreased by \$507,726 for executed modifications for designbuild contract C0988 Crenshaw/LAX Transit Corridor, third party utility relocation scope of work with Los Angeles Department of Water and Power, miscellaneous real estate expenditures and executed modifications with KKCS/TRIUNITY Contract AE35279 CWO04 for additional project control and estimating support.
- There is no allocated contingency remaining as of February 2017 month-end reporting.

PROJECT COST CONTINGENCY (through 02-Feb-2018) UNITS IN DOLLARS									
	Original				Remaining				
	Contingency	Previous	Current	To-Date	Contingency				
	(Budget)	Period	Period		(Forecast)				
Unallocated Contingency	173,500,000	(134,780,965)	(507,726)	(135,288,691)	38,211,309				
Allocated Contingency	40,366,792	(40,366,792)	-	(40,366,792)	-				
Total Contingency	213,866,792	(175,147,757)	(507,726)	(175,655,483)	38,211,309				

DISADVANTAGED BUSINESS ENTERPRISE (DBE) STATUS

Contract C0988 Crenshaw/LAX Transit Corridor Design-Build

(Reported Data as of December 2017)

	DBE Goal (Design) – A numerically expressed	
•	percentage of funds apportioned to Design	20.00%

Contracts and is calculated based upon the relative availability of DBE firms as compared to all firms in the relevant geographic market area.

Current DBE Commitment – Total DBE
 Committed Dollars divided by Total Contract
 Value for Design or Construction.

 \$23,524,103

• Current DBE Participation – Total amount \$28,174,768 (25.72%) paid to date to DBEs divided by the amount

Twenty-Six (26) Design subcontractors have been identified to-date

DBE Goal (Construction) - A numerically expressed percentage of funds apportioned to Construction Contracts and is calculated based

upon the relative availability of DBE firms as compared to all firms in the relevant geographic market area.

DBE Commitment - Contract commitment \$251,067,446 (20.00%)

divided by current contract value for Construction.

paid to date to Prime.

Current DBE Commitment - Actual \$244,540,250 (19.48%)

 commitments as Construction work is awarded.

Current DBE Participation - Total amount \$218,703,192 (25.22%)

paid to date to DBEs divided by the amount paid to date to Prime

234 Construction subcontractors have been identified to-date.

PROJECT LABOR AGREEMENTS (PLA) STATUS

	Contract C0988 Crenshaw/LAX Transit Corridor De (Reported Data as of December 2017)	esign-Build
•	Targeted Worker Goal – Construction work to be performed by residents from Economically Disadvantaged Area of LA County	40.00%
	Targeted Worker Current Attainment	59.71%
•	Apprentice Worker Goal – Construction work to be performed by Apprentices	20.00%
	Apprentice Worker Current Attainment	22.80%
•	Disadvantaged Worker Goal – Construction work to be performed by Disadvantaged Workers whose primary place of residence is within LA County	10.00%
	Disadvantaged Worker Current Attainment	12.41%

DISADVANTAGED BUSINESS ENTERPRISE (DBE) STATUS

Contract C0991 Division 16: Southwestern Yard Design-Build

(Reported Data as of December 2017)

•	DBE Goal (Design) – A numerically expressed						
•	percentage of funds apportioned to Design Contracts	20.00%					
	and is calculated based upon the relative availability						
	of DBE firms as compared to all firms in the relevant						
	geographic market area.						

Current DBE Commitment – Total DBE Committed
 Dollars divided by Total Contract Value for Design or \$2,467,837 (20.93%)
 Construction.

 Current DBE Participation – Total amount paid to date to DBEs divided by the amount paid to date to \$1,865,052 (18.44%)
 Prime.

Nine (9) Design subcontractors have been identified to-date

DBE Goal (Construction) - A numerically expressed percentage of funds apportioned to Construction Contracts and is calculated based upon the relative availability of DBE firms as compared to all firms in the relevant geographic market area.

DBE Commitment - Contract commitment divided by \$25,930,837 (16.00%) current contract value for Construction.

• Current DBE Commitment - Actual commitments \$22,400,572 (13.82%) as Construction work is awarded

Current DBE Participation - Total amount paid to \$10,255,909 (14.37%) date to DBEs divided by the amount paid to date to

Forty-six (46) Construction subcontractors have been identified to-date.

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9.47%

PROJECT LABOR AGREEMENTS (PLA) STATUS

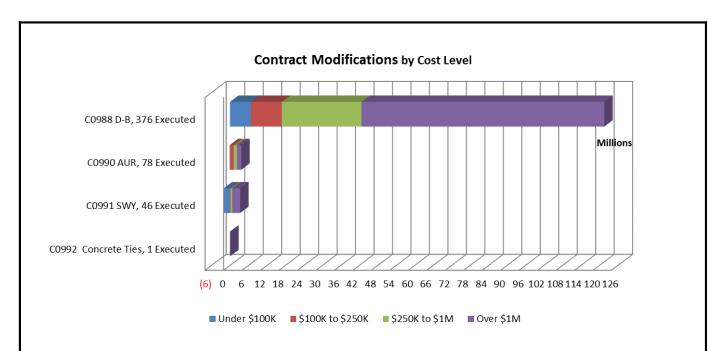
Contract C0991 Division 16: Southwestern Yard Design-Build

(Reported Data as of December 2017)

•	Targeted Worker Goal – Construction work to be performed by residents from Economically	40.00%
	Targeted Worker Current Attainment	51.97%
•	Apprentice Worker Goal – Construction work to be performed by Apprentices	20.00%
	Apprentice Worker Current Attainment	23.93%
•	Disadvantaged Worker Goal – Construction work to be performed by Disadvantaged Workers whose primary place of residence is within LA County	10.00%

Disadvantaged Worker Current Attainment

SUMMARY OF CONTRACT MODIFICATIONS



	C0988		C0990	C0991			C0992	
	376 Executed	78 Executed		1	46 Executed	1 Executed		
Under \$100K	\$ 6,818,314.36	(\$	70,250.91)	(\$	2,021,457.02)	\$	81,738.00	
\$100k to \$250K	\$ 10,009,320.42	\$	1,280,183.74	\$	215,390.00	\$	0.00	
\$250K to \$1M	\$ 25,896,361.58	\$	984,662.39	\$	523,914.00	\$	0.00	
Over \$1M	\$ 78,865,658.81	\$	1,417,201.61	\$	2,590,000.00	\$	0.00	
Total Contract MODs	\$ 121,589,655.17	\$	3,611,796.83	\$	1,307,846.98	\$	81,738.00	
% of Contract MODs	9.55%		46.14%		0.76%	0.76%		

Three hundred and seventy-six (376) changes with a total value of \$121.59 million have been executed since award of Contract C0988. There are an additional thirty-eight (38) changes with a total value of \$2.56 million pending the administrative approval process.

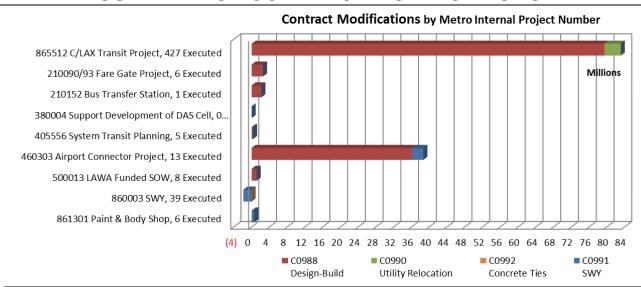
Seventy-eight (78) changes with a total value of \$3.61 million have been executed for completed Contract C0990.

Forty-six (46) changes with a total value of \$1.31 million have been executed since award of Contract C0991. There are an additional three (3) changes with a total value of \$0.08 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	210090/93	210152	405556	460303	500013	860003	861301	
	Executed	Executed	Executed	Executed	Executed	Executed	Executed	Executed	
C0988 - QTY	348	6	1	5	11	8	0	0	
C0998 - \$	79,431,526	2,566,226	2,200,000	320,035	36,069,273	1,134,613	0	0	
C0990 - QTY	78	0	0	0	0	0	0	0	
C0990 - \$	3,611,797	0	0	0	0	0	0	0	
C0991 - QTY	0	0	0	0	2	0	39	6	
C0991 - \$	0	0	0	0	2,598,580	0	(1,853,293)	585,760	
C0992 - QTY	1	0	0	0	0	0	0	0	
C0992 - \$	81,738	0	0	0	0	0	0	0	
Total - QTY	427	6	1	5	13	8	39	6	
Total - \$	83,125,061	2,566,226	2,200,000	320,035	38,667,853	1,134,613	(1,853,293)	585,760	

Four hundred and twenty-seven (427) changes with a total value of \$83.13 million have been executed for Project 865512 Crenshaw/LAX Transit Project. There are an additional thirty-nine (39) changes with a total value of \$5.46 million pending the administrative approval process.

Six (6) changes with a value of \$2.57 million have been executed for Project 210090/93 Fare Gate Project.

One (1) change with a value of \$2.20 million has been executed for Project 210152 Bus Transfer Station Project.

Five (5) changes with a value of \$0.32 million have been executed for Project 405556 System Transit Planning.

Thirteen (13) changes with a value of \$38.67 million have been executed for Project 460303 Airport Metro Connector Project. There are an additional three (3) changes with a total value of \$0.004 million pending the administrative approval process

Eight (8) changes with a total value of \$1.13 million have been executed for Project 500013 Crenshaw/LAX LAWA Statement of Work.

Thirty-nine (39) changes with a credit value of \$1.85 million have been executed for Project 860003 Southwestern Yard project. There are additional four (4) changes with a total value of \$0.03 million pending the administrative approval process.

Six (6) changes with a value of \$0.59 million have been executed for Project 861301 Southwestern Yard Paint and Body Shop. There are additional two (2) changes with a total value of \$0.08 million pending the administrative approval process.

FINANCIAL/GRANT STATUS

\$ in millions

ψ πτημικοπο	(A) ORIGINAL	(B) TOTAL	(C) TOTAL	(D) COMMITM	(D/B) MENTS	(E) EXPENDI	(E/B) TURES		BILLED to FUNDING	
SOURCE	BUDGET	FUNDS ANTICIPATED	FUNDS AVAILABLE	\$	%	\$	%	\$	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	105.9	105.9	105.9	100%	89.9	85%	89.9	85%	
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	9.1	36.6	100%	9.1	25%	9.1	25%	
STATE PPM	0.178	0.178	0.178	0.178	100%	0.178	100%	0.178	100%	
STATE PROP 1B PTMISEA	201.2	128.9	128.9	128.9	100%	128.9	100%	128.9	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	529.3	529.3	100%	471.2	89%	471.2	89%	
OTHER FUNDS*	52.4	160.5	87.0	82.4	62%	50.8	32%	50.8	32%	
PROP C 25% HIGHWAY	148.9	373.1	373.1	373.1	95%	82.7	22%	82.7	22%	
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	100%	31.7	63%	4.9	10%	
TOTAL	1,749.0	2,058.0	1,956.9	1,979.9	96.2%	1,537.5	74.7%	1,510.8	69.0%	

NOTE: Expenditures are cumulative through February 2, 2018

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. \$54M of CMAQ Funds for construction have been spent as of June 2016.

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. \$28.2M of RSTP Funds for construction have been spent as of June 2016.

STATE PROP 1B – PTMISEA: \$128.5M of original PTMISEA Funds and \$432.6K have been spent as of October 2017.

STATE PROP 1B LP: \$49.5M of PROP 1B SLPP Funds for construction have been spent as of June 2016.

STATE PROP RIP: \$6.88 of RIP Funds executed by Caltrans in January 2018 and is 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. *Funds have been spent fully drawn as of August 2016.*

MEASURE R: \$529.3M of Measure R Funds have been committed for this project. Funds are budgeted annually based on cashflow needs.

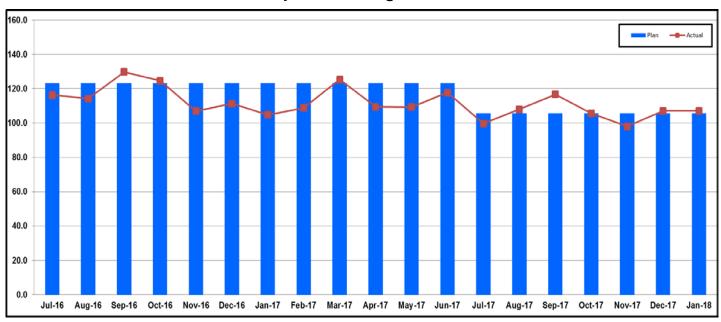
OTHER FUNDS: City of LA: Based on the funding agreement between Metro and the City of LA. \$28M is available for drawdown through FY2018. \$53M of General Funds have been committed for this Project. Funds are budgeted annually based on cashflow needs.

PROP C 25% HIGHWAY: \$378.1M of PROP C 25% Funds have been committed for this Project. Funds are budgeted annually based on cashflow needs.

PROP A 35% RAIL CAPITAL: \$50.4M of PROP A 35% Funds have been committed for this Project. Funds are budgeted annually based on cashflow needs.

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 2018.

TOTAL PROJECT STAFFING

The overall FY18 Total Project Staffing Plan averages 105.7 Full Time Equivalent (FTEs) per month consisting of 61.7 for Metro Agency staff, 37.0 for Construction Management Support Services Consultant and 7.0 for Design and Engineering Support Services Consulting staff.

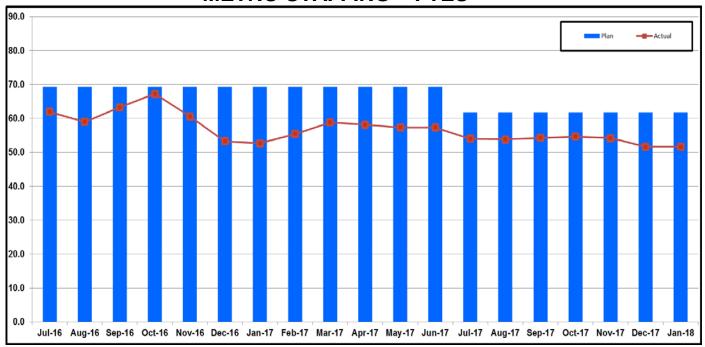
For January 2018, total project staffing were 107.0 FTEs for the month consisting of 51.7 FTEs for Metro's project administration staff, 47.7 FTEs for Construction Management Support Services Consultant and 7.6 FTEs for Design and Engineering Support Services Consulting staff.

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

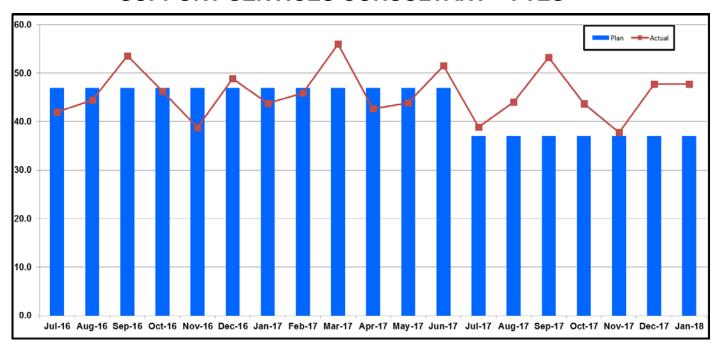
Crenshaw/LAX Transit Project
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STAFFING STATUS (Continued) METRO STAFFING – FTES



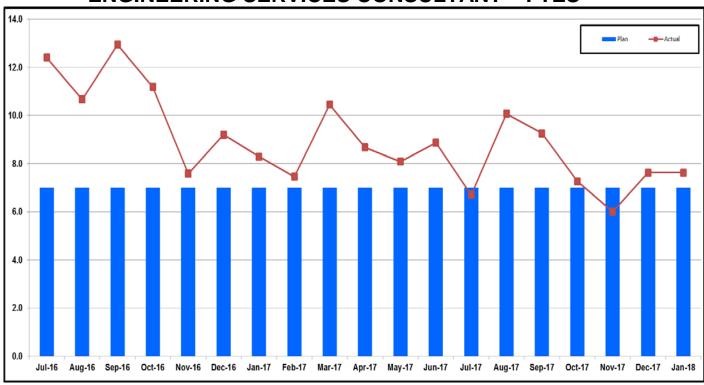
CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONSULTANT – FTES



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STAFFING STATUS (Continued) ENGINEERING SERVICES CONSULTANT – FTES



Crenshaw/LAX Transit Project Monthly Project Status Report

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	3	6		9	
TCE	10	9	1	10	10	1	8		9	
Subtotal Parcels	32	30	2	31	31	11	19	12	30	
Crenshaw Subdivision Additi	Crenshaw Subdivision Additional Parcels:									
Full Takes										
Part Takes	1	1		1	1	1	1			
TCE										
Subtotal Parcels:	1	1		1	1	1	1			
Total Crenshaw Parcels	33	31	2	32	32	12	20	12	30	
Harbor Subdivision										
Full Takes	15	15		15	15	8	7	12	15	
Part Takes (PT or SE)	18	16	2	18	17	8	10		15	
TCE	3	2	1	2	2		2		2	
Subtotal Parcels	36	33	3	35	34	16	19	12	32	
Harbor Subdivision Additiona	al Parcels:									
Full Takes	3	2	1	2	1			1	1	
Part Takes	4	2	2	2	2	2			2	
TCE	3	3		3	3	3			3	
Subtotal Parcels:	10	7	3	7	6	5		1	6	
Total Harbor Subdivision Parcels	46	40	6	42	40	21	19	13	38	
Total CR/HS Parcels:	79	71	8	74	72	33	39	25	68	
Southwestern Yard										
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	82	80	37	43	32	76	

- All parcels necessary to construct the guideway have been turned over to the Contractor.
- Work requiring the remaining 3 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 and WSCC Lead Quality personnel.
- WSCC Quality issued Six (6) Nonconformance Reports (NCR's) during this period.
- Metro Quality participated in Readiness Review Meetings for handrail installation in tunnel.

ENVIRONMENTAL STATUS

C0988 Crenshaw/LAX Transit Corridor Design Build

- Reviewed and commented on the following Contractor Submittals:
 - Weekly Noise and Vibration Monitoring Data for station and alignment construction
 - Weekly Storm Water Pollution Prevent Plan (SWPPP) inspection reports
 - Weekly Fugitive Dust Inspection Reports
 - o Various Construction Work Plans and Submittals
 - Quarterly Noise Control Plans
 - Bellanca Abatement Closure Report
 - Monthly MMRP Reports
- Conducted Contractor Cultural Awareness Training.
- Participated in Environmental Management System (EMS) meetings with design builder.
- Conducted site visits along the ROW for environmental compliance including soil stockpile areas, UG1, UG3, UG4, B1 and A guideways and laydown yards.
- Conducted night time noise monitoring at UG3 operations on multiple days in January 2018.
- Conducted night time noise monitoring at UG4 on multiple days in January 2018.
- Conducted night time noise monitoring at Crenshaw/Slauson on 1/26.
- Conducted night time noise monitoring at Vernon Station on 1/13 and 1/17.
- Conducted night time noise monitoring at Manchester Bridge on 1/4 and 1/11.
- Conducted night time noise monitoring at MLK Station on multiple days in January 2018.
- Conducted night time noise monitoring at I405 Bridge on 1/2 and 1/30.
- Metro notified WSCC they are required to submit a SCAQMD notification with a Procedure 5 work plan concerning conduit piping with potential asbestos containing material encountered during trench excavation at the West/Redondo work area.

CONSTRUCTION RELATIONS STATUS

- Began preliminary outreach to key stakeholders concerning restoration work in the northern portion of the alignment.
- Construction Relations and Environmental are coordinating outreach concerning soil contamination at Hi-Tech Cleaners site.
- Construction Update Community Meeting was held at Crenshaw Yoga and Dance on January 31, 2018.
- Working with WSCC to minimize the impacts of the closure of 71st at West Blvd. for one month.

SYSTEMWIDE DESIGN AND ART PROGRAM STATUS

- Facilitated coordination between artists and fabrication firms.
- Provided design review comments for NDCs and shop drawings.
- Reviewed porcelain enamel steel artwork fabrication proofs.

SAFETY & SECURITY STATUS

- Participated in weekly progress meetings with Construction Management Team to discuss safety/security/quality related issues.
- Attended WSCC's and Metro Progress Meeting to discuss safety concerns and the six week look ahead work schedule.
- Attended the WSCC's weekly Safety Tool-Box Meetings.
- Monitored construction activities on a daily basis including weekend safety "spotchecks" to ensure compliance with contract specifications.
- Monitored UG4 station boxes and tunnels including tunnel cross passages, observed installation/preparation for canopy at Slauson Station.
- Conducted Monthly All Hands Safety and Security Meeting on January 24, 2018 to discuss WSCC's Safety Staffing Plan, teamwork/partnering, accident investigation, elevator status and UG3.
- Conducted safety walk with WSCC Safety Manager on January 8, 2018 to monitor ventilation at UG3.
- Reviewed WSCC's Safety and Security Staffing Plan.
- Attended UG3 Backfill Readiness Review Meetings on January 11, 2018.
- Participated in Safety Sidebar Review Meeting on January 16, 2018 to discuss brass in brass out, lighting and ventilation/dust control at UG3.
- Conducted Rail Safety Training Brown Bag for Green Line Tie In on January 16, 2018.
- Contract C0990 Metro Builders Advanced Utility Relocation completed 360,287 work hours with four recordable incidents. This contract is closed out.
- Contract C0991 Hensel Phelps Project-to-Date completed 265,909 work hours with 3 recordable injuries. Hensel Phelps and their subcontractors completed 23,674 (HPH is confirming hours) work hours and zero recordable injuries for the month of January 2018.
- Contract C0988 (WSCC) completed 103,003 work hours with one recordable injury for the month of January 2018. Total Project to Date work hours are 5,088,091 with a total of seventy-five recordable incidents. The Project Recordable Rate is 2.8. The Bureau of Labor Statistics average recordable rate per 200,000 work hours is 2.9.

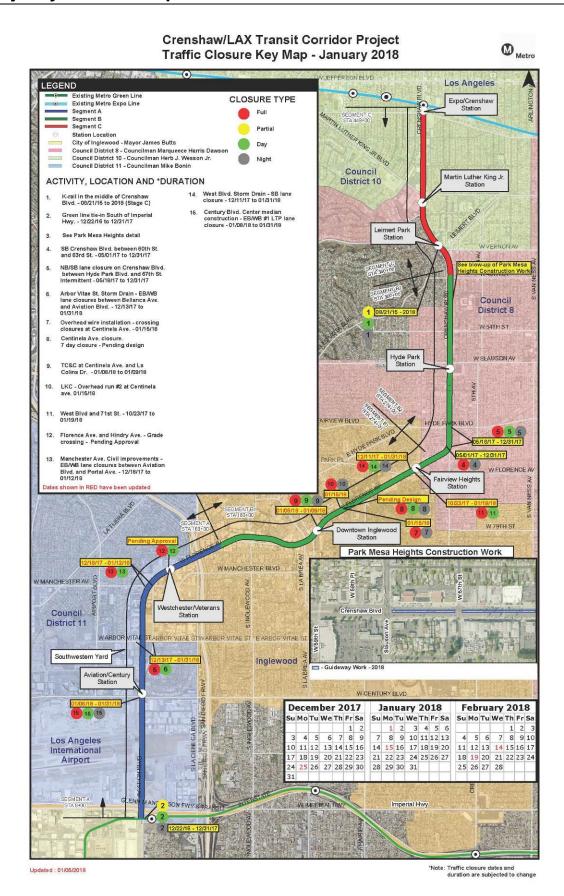
THIRD PARTY AGREEMENT STATUS

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



Crenshaw/LAX Transit Project	January
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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.

Crenshaw/LAX Transit Project	January 2018
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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.

Crenshaw/LAX Transit Project
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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.
April 6, 2017	The northbound 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					Contract No.: C0988	
Contractor: - Walsh Shea Corridor Constructors (WSCC)					Status as of February 03, 2018	040
Progress/Work Completed: Construction Completed twin tunnel cross passage electrical and concrete work. Continued wall, concourse,floors and roof concrete placements at Expo, MLK Jr and Leimert Park stations. Continued wall and roof placements at underground structure #3 and wall placements at #4. Continued civil construction work within Park Mesa Heights area. Continued accommodations for future 96th Street Station. Continued finishing work for Green line tie-in structure.				Areas of Concern: Timely submittal of WSCC's design sub Los Angeles. WSCC's ability to mitigate potential sch substantial completion milestone of Mag	edule delay to their	
WSCC is looking at several options to Metro's assessment is that WSCC is r Metro has not received a January 20 continues to show a 40 calendar day	Schedule Assessment: WSCC's December 2017 schedule update reflects a 40 days delay to Milestone 1. WSCC is looking at several options to mitigate the forecast delay. Metro's assessment is that WSCC is responsible to mitigate the 40 days. Metro has not received a January 2018 update from WSCC. Therefore, Metro continues to show a 40 calendar day delay to WSCC's Contract Milestone #1 Substantial Completion date of May 1, 2019.				Cost Assessment: The current construction contract cost for \$1,393,336,162.04 and is within the Board. The Contractor submitted their 54th paym approved amount of \$13,389,209.78 Please note that not all executed modifica in the Contractor current payment application	I authorized budget. nent application in the tions may have been included
Schedule Summary:					Cost Summary:	\$ In millions
Date of Award:		08/01/13			Award Value:	1,272.63
Notice to Proceed:		09/10/13			Executed Modifications:	113.97
Original Substantial Completion E	Ouration:	1824			Approved Change Orders:	7.75
Current Substantial Completion E		2059			4. Current Contract Value (1 + 2 + 3):	1,394.35
Elapsed Time from NTP:		1607	78.0%		5. Incurred Cost:	1,049.84
Milestones	Original Contract	Current Contract	Forecast	Calendar Day Variance	PERCENT COI	MPLETE
Milestone 1 - Contract Substantial Completion	09/08/18	05/01/19	06/10/19	-40		
Milestone 2 - UFS Completion	03/09/18	11/01/18	10/10/18	22	Design	98.8%
Milestone 3 - Commence SIT Phase I	06/09/18	02/01/19	03/12/19	-39	Construction	69.9%
Milestone 5A - Const./Turnover Parcels SW-0002, 0003, 0004, 0104 (South)	06/05/17	06/05/17	06/05/17A	0	Total Incurred Cost	75.3%
Milestone 5B - Const./Turnover Parcels SW-0002, 0003, 0004, 0104(North)	06/05/17	06/11/17	06/11/17A	0	0.0% 20.0% 40.0% 60	0.0% 80.0% 100.0%
Milestone 6 - Const./Turnover Parcels SW-0001	08/01/17	08/01/17	07/10/17A	0	Percent Comple	ete Progress
Milestone 7 - Provide Access for Division 16 Southwestern Yard	01/23/16	01/23/16	02/22/16A	-30	Construction physical percent co mobilization and general requirer	

CONTRACT C0990 STATUS

Crenshaw/LAX Advanced Utility Relocations

PE Design Contractor: Hat CM Consultant: Stantec					Contract No.: C0990	MAIN
Contractor: - Metro Builders and Engineers Group LTD					Status: Completed	
Progress/Work Completed - The construction was substar - Board authorized in March a s - Contract is closed out.	itially comp	leted on Au with the co	igust 21, 20 [.] ntractor.	14	Areas of Concern:	
Schedule Assessment					Cost Assessment:	
Schedule Assessment: - Metro granted substantial cor 2014, which is 276 calender da		Metro Build	lers on Augu	ıst 21,	- The final contract is \$11,316,140.00 and I to contractor.	nas been completely paid
- The settlement with the contra	actor settle	d all time is	sues.		* A modification in process for credit of unu	sed provisional sums in
					the amount of \$123,156.85.	
Schedule Summary:					Cost Summary:	\$ In millions
Date of Award:		05/30/12			1. Award Value:	7.83
2. Notice to Proceed:		07/17/12			2. Executed Modifications:*	3.49
3. Original Substantial Comple					3. Approved Change Orders:	-
4. Current Substantial Comple	tion Duration				4. Current Contract Value (1 + 2 + 3):	11.32
5. Elapsed Time from NTP:		753			5. Incurred Cost:	11.32
				Calendar	PERCENT COM	PLETE
Milestones	Original Contract	Current Contract	Forecast	Day Variance	from 7/17/12 to 8/	
Milestone 1 - Contract Substantial	07/17/13	11/18/13	08/21/14A	-276	0%	
Completion					Design U%	
					Construction	100%
					Construction	
					Total Incurred Cost	100%
					7 / /	
					0% 20% 40% 60 Percent Complete	
				 	Construction physical percent com	-
					mobilization and general requirem	

CONTRACT C0991 STATUS

Southwestern Yard

PE Design Contractor: Hatch M CM Consultant: Stantec	,				Contract No.: C0991	- Canal				
Contractor: - Hensel Phelps / H	lerzog JV		Status as of February 03, 2018							
Progress/Work Completed:			Areas of Concern:							
. Completed 2nd level of roof concrete plants	acement for m	nain shop.	Yard leads were completed and turned over to WSCC.							
 Continued with electrical and communic storm drain, sewer and fire water lines. 	ation signaling	g and TPSS	* No concerns at this time.							
 Completed exterior skin framing installa around the structure. 	tion for materi	ial storage b								
Continued car wash and car cleaning for erected the carwash prefabricated structure. Continued embeded track in the main significant continued.	ture.	ade beams a								
Continued with main shop CMU wall conmechanical, plumbing and started the results.										
Continued the OCS and light pole found	ation construc	ction, workin								
Started turnout construction on the west	side of the pr	roject.								
Schedule Assessment:			Cost Assessment:							
. Interface coordination between HPH, W proactively to address and to minimize a			. The current construction contract cost forecas \$173,737,773.67 is within the Board authorize							
. Work is progressing ahead of schedule			The Contractor submitted their 30th payment application in the approved amount of \$5,776,349.72							
. All phase II access dates were achieved	ahead of tim	e.	amount of \$5,770,549.72							
. HPH has stated that there is a potential	to complete e	earlier than J								
					 Please note that not all executed modification in the Contractor current payment application. 	s may have been included				
Schedule Summary:					Cost Summary:	\$ In millions				
Date of Award:		28-May-15			Award Value:	172.31				
2. Notice to Proceed:		29-Jun-15			2. Executed Modifications:	1.19				
Original Substantial Completion Dura	ation:	1,220			3. Approved Change Orders:	0.14				
4. Current Substantial Completion Dura	ition:	1,311			4. Current Contract Value (1 + 2 + 3):	173.64				
5. Elapsed Time from NTP:		950	72.5%		5. Incurred Cost (thru January 2018):	98.44				
				Calendar						
Milestere	Original	Current	Foreset	Day	PERCENT COMPL from 06/29/15 to 02,					
Milestones MS#1 Yard and Main Shop Design	Contract 26-Oct-16	Contract 26-Oct-16	Forecast	Variance 0						
Completion MS#2 Main Shop Communication	 		26-Oct-16 A		Design	90.0%				
Room Completion	15-Jan-18	16-Apr-18	11-Apr-18	5] ₂₀				
MS#3 Main Shop Substantial Completion	30-Apr-18	30-Jul-18	30-Jul-18	0	Construction	7%				
MS#4 Southwestern Yard Substantial Completion	31-Oct-18	30-Jan-19	30-Jan-19	0	Total Incurred	56.7%				
Completion					Cost					
					0.0% 20.0% 40.0% 60.0% Percent Complete Po					
					Construction physical percent com	plete excludes				
					mobilization and general requirements					

CONTRACT C0992 STATUS

Concrete Ties

PE Design Contractor: Hatch CM Consultant: Stantec Contractor: Rocla Concrete)	Contract No.: C0992 Status: Completed					
Progress/Work Completed: - All 19,936 concrete ties have ber (Contract C0988) Contract is closed out.	en received	onsite by t	he design-b	uilder	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 complete to contractor.	ely paid		
Schedule Summary:					Cost Summary: \$ In millions			
Date of Award:			12/10/13		1. Award Value: 2.16			
Notice to Proceed:			12/23/13		2. Executed Modifications: 0.09			
Original Substantial Completio	n Duration		220		Approved Change Orders:			
Current Substantial Completion			235		4. Current Contract Value (1 + 2 + 3): - 2.25			
5. Elapsed Time from NTP:			235		5. Incurred Cost: 2.25			
Milestones Milestone 1 - Contract Substantial	Original Contract	Contract	Forecast	Calendar Day Variance	PERCENT COMPLETE from 12/23/2013 to 8/15/14			
Completion	07/31/14	08/15/14	08/15/14A	0	Delivered 100%			
				0				
				0	Shipped 100%			
				0	Total Incurred Cost			
				0	0% 50% 100%			
				0	Percent Complete Progress			
					Construction physical percent complete excludes mobilization and general requirements			

CONTRACT C0992A STATUS

Running Rail and Bumping Posts

PE Design Contractor: Hatch M CM Consultant: Stantec Contractor: LB Foster Rail Tech		orp	Contract No.: C0992A Status: Completed					
Progress/Work Completed: - All 115RE SS Blank Stick Rails have - All 115RE HI rail have been delivered: - All Bumping Posts have been delivered: - Contract is closed out.	ve been del ered to job s	ivered to th			Areas of Concern:			
Schedule Assessment: All running rails and bumping posts w	vere deliver	ed ahead c	Cost Assessment: The final contract cost is \$5,2 million and has been completely paid to contractor.	t				
Schedule Summary:					Cost Summary: \$ In millions			
Date of Award:			01/23/14		1. Award Value: 5.2			
Notice to Proceed:			03/07/14		Executed Modifications:			
Notice to Proceed. Original Substantial Completion D	uration:		300		Executed Modifications. Approved Change Orders:			
Current Substantial Completion D			558		4. Current Contract Value (1 + 2 + 3): 5.2			
Current Substantial Completion B Elapsed Time from NTP:	urauon.		448		5. Incurred Cost: 5.2			
Milestones	Original Contract	Current Contract	Forecast	Calendar Day Variance	from 3/7/2014 to 05/29/15			
Milestone 1 - Contract Substantial Completion	12/31/14	09/30/15	05/08/15A	145				
Completion				0	Construction 100)%		
				0	Total Incurred Cost	0%		
				0				
				0	0% 20% 40% 60% 80% 100% Percent Complete Progress			
					Construction physical percent complete excludes mobilization and general requirements			

CONSTRUCTION PHOTOGRAPHS



Initial set-up in progress for Green Line tie-in.



Setting overhead catenary system poles – south end.



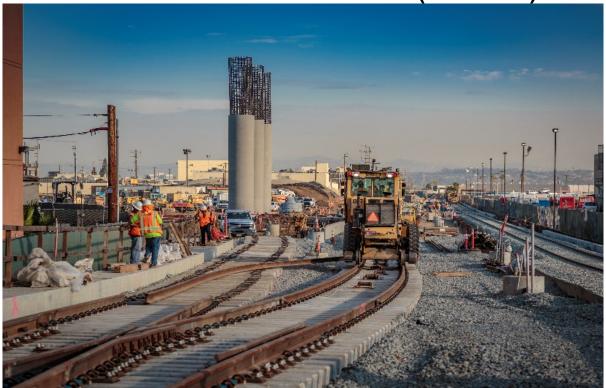
111th Street Bridge – Tamping top ballast on track.



Aviation/Century Station.



Aviation/Century Bridge - Pulling string and labeling conduit in the service building TC&C.



Trackwork at 96th



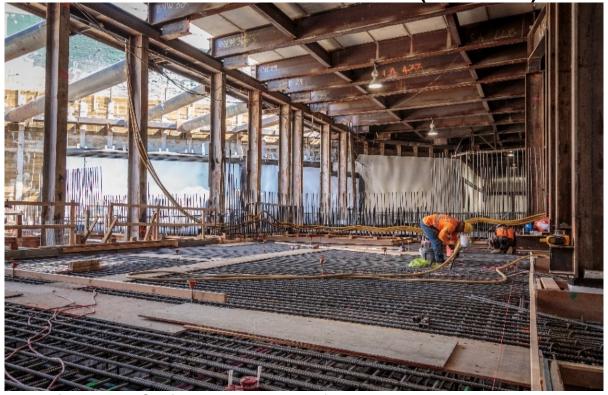
Westchester/Veterans Station.



UG#3 – Removal of formwork from walls along the north U-section.



UG#3.



Leimert Park Station – Installing rebar for concourse concrete placement.



MLK Jr. Station – Installing rebar for concourse concrete placement.



Exposition/Crenshaw Station – Installing rebar for roof section K-6.



Tunnel.

APPENDIX

PROJECT COST STATUS – SOUTHWESTERN YARD

SCC	DESCRIPTION	ORIGINAL	CURREN	T BUDGET	COMMI	TMENTS	EXPEN	DITURES	CURRENT	FORECAST	FORECAST
CODE	DESCRIPTION	BUDGET	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
10	GUIDEWAYS	0	0	0	0	0	0	0	0	0	0
20	STATIONS	0	0	0	0	0	0	0	0	0	0
30	SUPPORT FACILITIES (Y & S)	85,546,835	0	85,189,999	85,522	85,454,839	5,169,597	38,591,457	85,522	85,811,675	621,676
40	SITEWORK\SPECIAL CONDITIONS	35,932,000	0	38,273,000	0	40,340,448	615,357	27,571,409	0	40,551,118	2,278,118
50	SYSTEMS	25,784,616	0	32,991,000	0	33,115,119	974,175	15,881,145	0	33,115,119	124,119
	(10-50) CONSTRUCTION	147,263,451	0	156,453,999	85,522	158,910,407	6,759,130	82,044,011	85,522	159,477,913	3,023,914
60	RIGHT-OF-WAY	99,910,000	0	100,000,000	0	102,474,206	0	102,418,610	0	102,420,624	2,420,623
70	VEHICLES	0	0	0	0	0	0	0	0	0	0
80	PROFESSIONAL SERVICES	35,601,095	0	33,639,631	(224,869)	32,961,966	536,195	27,228,668	(24,869)	36,024,646	2,385,015
90	PROJECT CONTINGENCY	13,659,732	0	17,106,370	0	0	0	0	(60,652)	9,276,817	(7,829,553)
TOTAL	-	296,434,278	0	307,200,000	(139,348)	294,346,578	7,295,324	211,691,288	(0)	307,200,000	(0)

C0991 PAINT & BODY SHOP PROJECT										
DESCRIPTION ORIGIN		CURREN	TBUDGET	COMMIT	MENTS	EXPEND	DITURES	TURES CURRENT FORECAST		FORECAST
DESCRIPTION	BUDGET	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
861301 DIV 22 PAINT & BODY SHOP	11,000,000	0	11,000,000	220,249	9,979,402	73,249	3,352,650	0	11,000,000	0

	GRAND TOTAL	307,434,278	0	318,200,000	80,901	304,325,980	7,368,573	215,043,938	(0)	318,200,000	(0)
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NOTE: EXPENDITURES ARE CUMULATIVE THROUGH February 3, 2018.

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 current project forecast is \$318.20 million. However, there was a reallocation of forecast within the SCC-30 (Support Facilities), SCC-80 (Professional Services), and SCC-90 (Project Contingency).

Commitments:

The commitments are cumulative through February 3, 2018.

Total commitments increased by \$0.08 million for this period due to the following:

- SCC-30
 - Hensel Phelps/Herzog JV commitments increase by \$0.30 million.
- SCC-40
 - No change to commitments to report.
- SCC-50
 - No change to commitments to report.
- SCC-60
 - No change to commitments to report.
- SCC-80
 - Professional services such as legal, construction management and labor commitment decrease by \$0.22 million due to internal FIS adjustments.

The \$304.32 million in commitments to date represents 95.6% of the current budget.

Expenditures:

The expenditures are cumulative through February 3, 2018.

The total expenditures increased by \$7.37 million for this period due to the following:

- SCC-30
 - Hensel Phelps/Herzog JV expenditure increase by \$5.24 million.
- SCC-40
 - Hensel Phelps/Herzog JV expenditure increased by \$0.62 million.
- SCC-50
 - Hensel Phelps/Herzog JV expenditure increase by \$0.97 million.
- SCC-60
 - No change to Right-of-Way expenditure.
- SCC-80
 - Hensel Phelps/Herzog JV, agency expenditure and professional services expenditure increase by \$0.54 million.

The \$215.04 million in expenditures to date represents 67.58% 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 Includes design engineering, project management assistance,

SERVICES construction management support services, legal counsel,

agency staff costs, and other specialty consultants.

CONTINGENCY A fund established at the beginning of a project to provide for

anticipated but unknown additional costs that may arise during

the course of the project.

PROJECT REVENUE Includes all revenue receivable to the Metro as a direct result

of project activities. This includes cost sharing construction

items, insurance premium rebates, and the like.