Crenshaw/LAX Transit Project



CRENSHAW/LAX TRANSIT PROJECT

MONTHLY PROJECT STATUS REPORT

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AUGUST 2018

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PROJECT OVERVIEW

Project Background

The Crenshaw/LAX Transit Project 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.

Two additional stations, Leimert Park and Westchester/Veterans were funded by the City of Los Angeles and by Metro, and were approved to be part of the project by the Metro Board in May 2013. The Metro Board in July 2014 and again in May 2015, approved a revision to the project alignment to include accommodations to the alignment at 96th street so as to not preclude a future light rail Metro Rail station being developed as part of the Airport Metro Connector (AMC) project. The accommodations included shifting the ultimate track configuration to the west side of the alignment to confine all of the revised track-work on Metro right-of-way to mitigate potential cost exposure. These accommodations are not funded by the Crenshaw/LAX Transit Project but are paid for by the AMC project.

The alignment is comprised of a double-tracked right-of-way consisting of sections of atgrade in-street, at-grade within railroad right-of-way, aerial, and below-grade guideway sections, eight stations, park and ride facilities at two locations, utilities, landscaping, roadway improvements required by the project and a maintenance & storage facility (Southwestern Yard).

The Project configuration is based on years of planning and environmental work that is reflected in the following milestones:

- Major Investment Study 2003
- Metro Board approval of Alternative Analysis December 2009
- Initiation of Preliminary Engineering (PE) September 2010
- Metro Board certification of Final EIS/EIR September 2011
- FTA issuance of Record of Decision December 2011

Crenshaw/LAX Transit Project Monthly Project Status Report

PROJECT OVERVIEW (Continued)



Major Procurements

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.

PROJECT OVERVIEW (Continued)

Design-Build Contract C0988 Crenshaw/LAX Transit Corridor

This is the largest project contract which completes 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).

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.

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.

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.

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

PROJECT OVERVIEW (Continued)

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.

Rail Operations Center (ROC)

The existing functional operations at the ROC are being expanded to accommodate the central control functions associated with five new rail lines including Crenshaw/LAX Project. The Project is contributing \$3.5 million towards this expansion which is scheduled to be completed in time for Crenshaw/LAX Project revenue service.

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, to procure UFS equipment for the Crenshaw/LAX Project eight stations. The contractor commenced manufacturing of the equipment in February 2018 and will complete manufacturing of the equipment as scheduled by October 2018. The UFS equipment will be shipped to a local storage area where it will be stored until the Crenshaw/LAX Project stations become ready for its installation.

Program Management

The WSCC contract is being managed by a team of Metro and consultant personnel jointly located at the Integrated Project Management Office (IPMO). Mott MacDonald provides engineering and design support services while Stantec, Inc., provides construction management support services. An overview of staffing is provided under the Staffing section of this report. The on-site program management team is also supported by Metro Headquarters resources to include, but not limited to, engineering, risk management, environmental, quality management, operations, and creative services departments.

Project Schedule and Budget:

The Revenue Service Date (RSD) is forecast for summer of 2020.

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

With Metro Board approval on June 27, 2013, the additional \$135 million is included in the

PROJECT OVERVIEW (Continued)

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 Metro 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 Metro 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 Metro 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 drawdown 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 service as well as an increase in professional services for construction and project management oversight.

<u>Construction and Community Relations:</u> The Construction and Community Relations team is tasked with promoting the Project and performing public outreach within the community to keep stakeholders informed of construction activities occurring along the Project alignment. To facilitate the communication, community leadership councils have been formed which represent geographic-based constituent groups along the Project.

The Project is also engaged in social media outreach and various marketing and advertising efforts designed keep the public informed and excited about the Project. These efforts are aimed at promoting businesses that are affected by construction.

System Integration:

The Project's integration of three separate lines, each possessing distinct system technologies, presents significant challenges for both the Project and Metro. The Project will need to coordinate the systems interface design, construction and testing while the Agency maintains revenue service on two of the lines.

Rail Activation:

The Project and Metro Operations recognize the extensive planning required in preparation for rail activation of the new regional light rail service the Project will enable through the south Los Angeles area. Associated detailed planning and scheduling efforts to optimize the extensive efforts are underway.

Crenshaw/LAX Transit Project Monthly Project Status Report

EXECUTIVE SUMMARY

In August, the Project achieved 86% completion based on earned value measurements for design and construction. The focus of the Project continues with facilitating critical path construction activities. Work is trending behind schedule due to the alignment contractor's progress. The following is an overview of current design and construction activities.

Design Status

Design - Build Contract C0988 (Alignment) -

Walsh-Shea Corridor Constructors (WSCC) final design is complete with the exception of designs required for changes. WSCC continues design and engineering in support of construction.

Design - Build Contract C0991 Southwestern Yard (Division 16)

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. HPH continues design and engineering in support of construction.

Construction Status

Design- Build Contract C0988 (Alignment)

WSCC continues construction along all areas of the alignment. The four at-grade stations structure concrete placements are substantially completed. Finish work continues for these stations. The aerial station structure concrete placement is substantially complete. The three underground stations remain at various levels of completion with emphasis on work inside the stations and entrance structures.

All six bridge superstructures are substantially complete with the exception of the finishes and systems installations. Various construction efforts continue on the roadway section within the Park Mesa Heights area.

Trackwork installation is continuing in areas available along the alignment. The contractor has completed construction of 15 of 17 at-grade crossings. The contractor also is continuing overhead catenary and train control systems installation in the south end of the alignment. Restoration continues this month of the road over the three underground stations along Crenshaw Blvd. WSCC has completed two of three phases of the restoration effort and will commence in September the third phase at the Expo Station site.

<u>Design-Build Contract C0991 Southwestern Yard (Division 16)</u> – HPH continued with yard systems installation, trackwork including installing switch machines, storage tracks, turnouts, and overhead catenary system. HPH completed installation of train control bungalows, including setting generator on the pad, and also installed the traction power substation. HPH completed traction power substation high voltage cables to the buildings

EXECUTIVE SUMMARY (Continued)

including DWP wiring of vista switch and substation is ready to receive permanent power. The finish work activities continue for the structures in the yard including the main shop, material storage, carwash, and cleaning platform. The paint & body shop structural steel is installed and activities continue for exterior framing, roof, and electrical and plumbing.

Cost and Schedule Summary

Metro issued in August 2018 a non-compensable unilateral change order to WSCC to extend their substantial completion milestone to December 11, 2019. Metro is evaluating a potential 2020 date for revenue service based on the revised substantial completion milestone date.

Metro received late an August Schedule Update from WSCC. The schedule update reflected the change order dates. WSCC reported that they lost an additional 14 days in August. Metro assessment is that WSCC continues to be behind schedule.

The critical path of the project remains completing construction activities, then communications installations and field acceptance testing. The critical path then flows through Systems Integration Testing (SIT), Phase I (by WSCC) and then SIT Phase II (by Metro), leading to pre-revenue services and revenue service. A summary graphic of the critical path is found later in this report.

	Original Contract Date/Duration	Time Extension (CD)	Current Contract Schedule	Forecast (Metro PMS)	Variance CD (Trending)
NTP	09/10/13				
Substantial Completion	09/08/18	459	12/11/19	12/25/19	14 days

Walsh Shea Corridor Constructors (WSCC) Schedule Metrics – Mainline Contractor

Hensel Phelps/Herzog JV (HPH) Schedule Metrics – Southwestern Yard Contractor

	Original Contract Date/Duration	Time Extension (CD)	Current Contract Schedule	Forecast (Metro PMS)	Variance CD (Trending)
`NTP	06/29/15				
Substantial Completion	10/31/18	91	01/30/19	01/30/19	0 days

Project costs continue to track within budget and projected contingency limits. To date, the design and construction changes related to base scope represent approximately 11.5% of the contract value with a potential to increase to 14%. Detailed cost and budget information is provided later in this report.

EXECUTIVE SUMMARY (Continued)

Key Management Concerns

No. 1: WSCC Construction Schedule

Status/Action

Metro is evaluating a potential 2020 date for revenue service based on the revised substantial completion milestone date of December 11, 2019.

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

Status/Action

Metro monitors and reports on the drawdown of contingency on a monthly basis. Metro has identified funding available in fiscal year 2019 for specific scope of work that is eligible to be reallocated to a non-Crenshaw/LAX Project local funding source. Metro initiated in July 2018 reallocating the associated expenditures to date for this specific scope of work. This allows Metro to replenish a portion of the Crenshaw/LAX Project contingency. In August 2018, there was a reallocation of expenditures which increased remaining contingency to \$32.5 million. The remaining contingency is 1.6% of total project current forecast and 10.4% of total project cost-to-go.

CONSTRUCTION PHOTOGRAPHS



Removing street decking at Vernon Ave/Crenshaw Blvd .



Street restored at Leimert Park Station.



Southwestern Yard Main Shop Building.

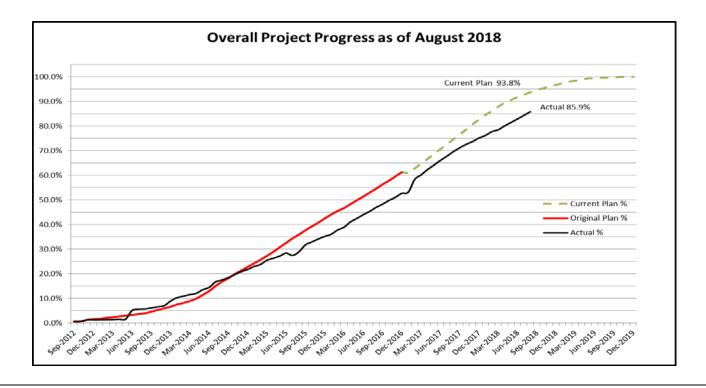
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19-Jun-20 19-Jun-20 12-Aug-19 19-Jun-20 16-Mar-18 19-Jun-20 05-Jul-19 05-Jun-19 10-Dec-19 11-Dec-19 11-Dec-19 19-Jun-20 30-Jan-19 30-Jan-19 30-Jan-19 29-Jun-15				17 2018 2019 2020 2021 2 03 04 01 02 03 04 03 03 04 03 03 04 03 03 04 03 03 04 <	2022 2023 2024 22 03 04 01 02 03 04 01 02 03 4
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19-Jun-20 05-Nov-19 05-Jul-19 05-Jul-19 07-Jun-19 10-Dec-19 11-Dec-19 11-Dec-19 11-Dec-12 11-Dec-12 11-Dec-13	C0988 - Pre-Construction Crenshaw/L/	AX	16-Mar-18	•	
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10-Dec-19 11-Dec-19 11-Dec-19 19-Jun-20 30-Jan-19 30-Jan-19 18-Dec-12 31-Oct-17 29-Jun-15	System-Wide Components		07-Jun-19	ļ	
11-Dec-19 11-Dec-19 19-Jun-20 30-Jan-19 30-Jan-19 30-Jan-19 18-Dec-12 18-Dec-12 31-Oct-17 29-Jun-15	Systems		10-Dec-19	•	
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19-Jun-20 30-Jan-19 30-Jan-19 18-Dec-12 31-Oct-17 29-Jun-15	Substantial Completion		11-Dec-19	•	
30-Jan-19 30-Jan-19 30-Jan-19 18-Dec-12 31-Oct-17 29-Jun-15	Start Up		19-Jun-20		
30-Jan-19 30-Jan-19 18-Dec-12 31-Oct-17 29-Jun-15	Revenue Service Date			1	
	Revenue Service Summer of 2020			Revenue Servic	Revenue Service Summer of 2020
E	860003 - Southwestern Yard and Paint I	Body Shop	30-Jan-19		
E	Milestone		30-Jan-19		
Procurement	Preliminary Engineering		18-Dec-12		
	Right of Way		31-Oct-17		
	Design Build Procurement		29-Jun-15		
Final Design 11-Jan-17	Final Design		11-Jan-17		
Construction & Installation 30-Jan-19	Construction & Installation		30-Jan-19		
		renshaw/LAX Level 1 Summ les County Metropolitan Trar		Data Date: 01-Sep-18 Current Date: 20-Sep-18	Revenue Service Summer of 2020
Date Crenshaw/LAX Level 1 Summary Schedule Page 1 of 1 Data Date: 01-Sep-18 Los Angeles County Metropolitan Transportation Authority					

PROJECT SUMMARY SCHEDULE

PROGRESS SUMMARY

		Change from	
	Status	Last Period	Comment
Current Revenue Service:	10/30/2019	0	
Forecast Revenue Service:	-	0	Revenue Service Summer of 2020
TIFIA Revenue Service:	10/30/2019	0	
Final Design Progress:			
Contract C0988	99.3%	0.1%	Design Services During Construction On Schedule
Contract C0990	100%	None	Design Completed
Contract C0991	96.9%	0.8%	Design Services During Construction On Schedule
Contract C0992	100%	None	Design Completed
Contract C0992A	100%	None	Design Completed
Construction Contracts Progress:			
Contract C0988	79.9%	1.4%	Behind Schedule
Contract C0990	100%	None	Completed
Contract C0991	85.5%	6.0%	Schedule Mitigation in Progress
Contract C0992	100%	None	Completed
Contract C0992A	100%	None	Completed

Planned vs. Actual Progress



KEY MILESTONES SIX- MONTH LOOK AHEAD

	Milestone Date	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19
Setup Form System & Pour plinth - UG #3 STA 274+25 to 296+92 (NB & SB Track)	08/30/18 A	\bigcirc					
Destress DF Track - STA 274+25 to 316+66 (Underground #3) - Seg. B2	08/17/18 A	\bigcirc					
HPH Comm Room Ready to Pull Cable - SWY Area - 988-2187	09/14/18		\bigcirc				
Install ATC Local Cable @ TC #4	09/19/18		\bigcirc				
Terminate CTS Rack & Panels @ Downtown Ingelwood	09/25/18		\bigcirc				
Install/Term SCADA Equipment in TPSS-03	09/27/18		\bigcirc				
Install HVAC - Zone 4B - TPSS Fan	10/02/18			\bigcirc			
Install Rail/Pour Plinth - Expo NB Track (STA 440+31 to 448+35)	10/24/18			\bigcirc			
Fab/Procure & Deliver Gas Fans - UG #1	10/31/18			\bigcirc			
SWY - Substantial Completion of Main Shop	11/01/18						
TPSS-01 Permanent Power Drop - SCE - Install Equipment, Cable, Energize & Monitor	11/20/18				\bigcirc		
Installation Ventilation Equipment - UG #3	12/28/18					\bigcirc	
Fabricate & Deliver - UG1 H2S Jet Fans	01/30/19						\bigcirc
SWY - Substantial Completion of Paint and Body Shop	01/30/19						
MTA Staff MTA Board Action	FTA (Fed Administr	eral Transit ation)		7 Utility C	ompany		
△ Other Agencies □ C0991 D/B Contractor	Design C	onsultant	\square	C0988 [D/B Contrac	tor	
A" following date is actual and completed	★ New						

MAJOR EQUIPMENT DELIVERY STATUS

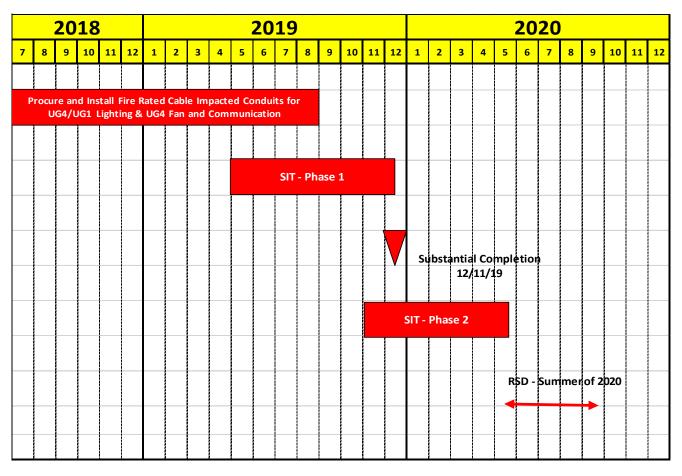
Metro Supplied Equipment

Equipment	Initial Procurement	Scheduled Delivery	Scheduled Installation
LRT Vehicles	(NTP) 08/20/2012	Option 1 9/1/2017	N/A
Ticket Vending Machines	01/30/2018	11/01/2018 (Warehoused)	9/12/2019

Design - Builder Equipment Delivery Requirements

Activity Name	Early Finish	Need Date
Fab/Procure & Deliver Station Emergency Ventilation Fans	31-Oct-18	05-May-19
Procure & Deliver UPS & Batteries - TC&C #3 Century	11-Oct-18	14-Feb-19
Fab/Procure & Deliver Jet Fans - UG #3, UG#4	31-Oct-18	13-Mar-19
Fab/Procure & Deliver Gas Fans - UG #1	31-Oct-18	23-May-19

CRITICAL PATH NARRATIVE Metro Project Schedule August 2018 (Summary Critical Path)



In the August 2018 schedule update, as with previous non-conforming schedule updates, the contractor shifted the critical path away from track construction work to material procurement for fire rated cable impacted work followed by construction of UG#4 tunnel and UG1 emergency lighting conduits impacted by fire rated cable. This work is followed by installing the booster fan conduit and wire impacted by fire rated cable at UG#4 cut & cover and Leimert Park station. The critical path continues through communications installations and field acceptance testing. The critical path then flows through SIT, pre-revenue services leading to revenue services.

The August 2018 Schedule Update incorporated milestones from Change Order 223.1 Non-Compensable Time Extension. Metro's review of the August 2018 Schedule Update raises concern that this submittal is not an accurate representation of the project's critical path. Contractor changed the critical path by inserting preferential logic and a longer than expected duration for construction of conduits and wire work impacted by fire rated cable throughout the alignment.

RISK MANAGEMENT NARRATIVE

Summary of Risks

Within this reporting period no active risks were closed and no new risks were identified. There is a total of thirty-seven (37) risks to be managed in the next reporting period.

Of the thirty-seven (37) risks, five (5) are scored as high, thirteen (13) as medium and nineteen (19) as low.

<u>Top 5 Risks</u>

The table below shows the top 5 project risks

Risk ID	SCC	Risk Description	Risk Rating
124	50	Main Line testing prior to pre-revenue operations may take longer than expected, resulting in increased Main Line Metro and Consultant costs and potential delay to May 1, 2019 - Substantial Completion.	18
359	40	Extended Overhead or productivity loss claims exposure not covered by cost impacts in individual risks.	18
362	30	Schedule activities that are critical to completion.	16
355	50	Issues with long lead delivery or improper planning for integration, testing and startup of Communication systems.	12
354	50	Issues with energization of traction power. DWP and Edison Issues	11

Newly Identified Risks

• No new risks were added to the risk register.

Closed Risks

• No risks were closed or removed from the risk register:

Risk Score Changes

• No risks scoring assessment were changed:

Actions in Next Reporting Cycle

Continuous efforts in Risk Management will be made through the following actions:

• Update the project risk register.

Crenshaw/LAX Transit Project Monthly Project Status Report

PROJECT COST STATUS

SCC	DESCRIPTION	ORIGINAL	CURREN	IT BUDGET	СОММІ	TMENTS	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	(672,221)	452,716,215	405,422	414,785,259	(672,221)	452,719,235	2,364,86
20	STATIONS, STOPS, TERMINALS, INTERMODAL	153,906,000	-	315,050,000	(10,391,476)	308,398,971	1,187,302	219,091,233	(10,391,476)	308,398,971	(6,651,02
30	SUPPORT FACILITIES (SOUTHWEST YARD)	66,673,000	-	71,164,000		68,132,352	500,586	57,971,524	-	71,164,000	-
40	SITEWORK\SPECIAL CONDITIONS	235,576,000	-	395,798,361	(10,829,658)	399,287,797	(4,954,252)	341,956,610	(10,829,658)	406,756,972	10,958,61
50	SYSTEMS	125,132,000	-	169,436,000	4,126,856	166,896,947	5,555,961	94,091,826	(721,000)	171,455,333	2,019,33
	CONSTRUCTION SUBTOTAL (10-50)	1,052,622,000	-	1,401,802,736	(17,766,499)	1,395,432,281	2,695,019	1,127,896,452	(22,614,355)	1,410,494,511	8,691,77
60	RIGHT-OF-WAY	132,294,000	-	127,490,000	179,310	124,964,831	617,644	125,141,856	513,233	125,298,865	(2,191,13
70	VEHICLES / BUSES	87,780,000	-	83,571,544		82,158,061	4,091,500	74,446,199		83,571,544	
80	PROFESSIONAL SERVICES	273,147,000		368,734,466	1,595,359	370,472,879	5,713,388	333,391,266	2,594,302	380,154,740	11,420,27
	SUBTOTAL (10-80)	1,545,843,000	-	1,981,598,746	(15,991,830)	1,973,028,053	13,117,551	1,660,875,773	(19,506,820)	1,999,519,661	17,920,9
90	UNALLOCATED CONTINGENCY	177,157,000	-	50,401,254	-	-		-	19,506,820	32,480,339	(17,920,9
	TOTAL PROJECT 865512 (10-100)	1,723,000,000	-	2,032,000,000	(15,991,830)	1,973,028,053	13,117,551	1,660,875,773	-	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	-
T01	AL 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	1,749,000,000		2,058,000,000	(15,991,830)	1,998,577,084	13,117,551	1,686,424,804		2,058,000,000	

1. Expenditures are Cumulative through August 31, 2018

2. Expenditures exclude \$6.6 million for State Board of Equalization (SBOE) decision to tax LRT Vehicle deliveries since August 2016. Metro is appealing the decision by the SBOE but paid tax so as not to incur any late fees.

3. Expenditures exclude \$5.5 million for various right-of-way and professional services costs that are being reallocated to other local funding.

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) Original Budget of \$1,749 million for the Crenshaw/LAX Transit Project.

Current Budget:

There have been two increases in the total LOP Current Budget to date:

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

The Board 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

PROJECT COST ANALYSIS (Continued)

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.

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 LOP Current Budget for the Southwestern Yard Project is included in the appendix section of this report.

The Current Budget allocation for Crenshaw/LAX Transit Project only, 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.

Commitments:

Commitments decreased by \$16.0 million this period to \$1,988.6 million which represents 97.1% of the current budget. The total decrease is related to design-build Contract C0988 Crenshaw/LAX Transit Corridor and Universal Fare System Equipment (UFS) executed modifications, Central Control, Real Estate and Professional Services' committed amount as well as unencumbering Contract C0988 modifications and change orders. The total commitments include \$145.3 million for the Southwestern Yard 49% allocation.

Expenditures:

Expenditures increased by \$13.1 million this period to \$1,686.4 million which represents 81.9% of the current budget. The increase is for costs associated with design-build Contract C0988 and Contract C0991 Division 16: Southwestern Yard, Metro project administration, IPMO field office lease and utilities, construction management support contract MC069 with STANTEC CONSULTING INC, legal services, Third Party Master Cooperative Agreements with City of Los Angeles, project management support contract AE35279 with KKCS/TRIUNITY, labor compliance monitoring and environmental consultant services. The cumulative expenditures to date includes \$132.8 million for the Southwestern Yard 49% allocation.

Current Forecast:

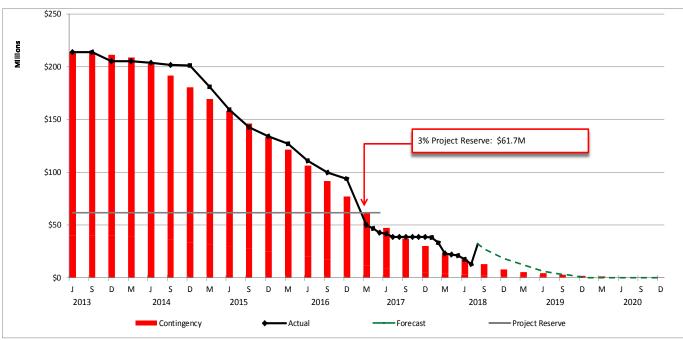
The total current forecast remains the same as the total current budget.

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	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST	
DESCRIPTION	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
405556 SYSTEMWIDE TRANSIT PLANNING	-	175,495	-	320,035	-	320,035	-	175,495	-
210090/93 FARE GATE PROJECT	-	2,566,226	-	2,566,226	-	1,018,526	-	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	-	37,047,674	34,081	36,379,674	-	37,914,465	-
500013 C/LAX LAWA SCOPE OF WORK	-	1,575,362	-	914,613	50,702	792,109	-	1,575,362	-
TOTAL	-	44,431,548	-	43,048,548	84,783	38,913,678	-	44,431,548	-



PROJECT COST CONTINGENCY DRAWDOWN

Through 27-Jul-2018

PROJECT COST CONTINGENCY DRAWDOWN ANALYSIS

The project current budget of \$2,058,000,000 includes a contingency amount of \$213,866,792. The drawdown plan is correlated to anticipate risk trends and measures drawdowns moving forward.

Included in the project contingency drawdown is a 3% project reserve threshold. 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.

This month, \$4,545,884 was drawn down from contingency and \$24,052,705 in expenditures was reallocated to another Metro project, resulting in a net increase of \$19,506,820 in contingency funds. The total contingency remaining has increased to \$32,480,339.

PROJECT CONTINGENCY DRAWDOWN ANALYSIS (Continued)

PROJECT COST CONTINGENCY (through 31-Aug-2018) UNITS IN DOLLARS										
	Original Contingency	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)					
Unallocated Contingency	173,500,000	(160,526,481)	19,506,820	(141,019,661)	32,480,339					
Allocated Contingency	40,366,792	(40,366,792)	-	(40,366,792)	-					
Total Contingency	213,866,792	(200,893,273)	19,506,820	(181,386,453)	32,480,339					

SUMMARY OF CONTRACT MODIFICATIONS



	ψ	7,020,049	(φ	70,231)	(Ψ	1,924,000)	÷	01,730
\$100k to \$250K	\$	10,314,497	\$	1,280,184	\$	539,625	\$	0
\$250K to \$1M	\$	31,481,736	\$	984,662	\$	306,334	\$	0
Over \$1M	\$	96,145,950	\$	1,417,202	\$	2,590,000	\$	0
Total Contract MODs	\$	145,770,732	\$	3,611,797	\$	1,511,279	\$	81,738
% of Contract MODs		11.45%		46.14%		0.88%		3.78%

Four hundred and twenty nine (429) changes with a total value of \$145.77 million have been executed since award of Contract C0988. There are an additional thirty (30) changes with a total credit value of \$0.21 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.

Fifty-one (51) changes with a total value of \$1.51 million have been executed since award of Contract C0991.

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

DISADVANTAGED BUSINESS ENTERPRISE (DBE) STATUS

(Reported Data as of July 2)	orridor Design- 018)	<u>Build</u>
 DBE Goal (Design) – A numerically expressed percentage of funds apportioned to Design Contracts and is calculated based upon the relative availability of DBE firms as compared to all firms in the relevant geographic market area. 	20.00%	
 Current DBE Commitment – Total DBE Committed Dollars divided by Total Contract Value for Design or Construction. 	\$24,892,683	(20.00%)
 Current DBE Participation – Total amount paid to date to DBEs divided by the amount paid to date to Prime. 	\$28,695,150	(25.21%)
Twenty-Six (26) Design subcontractors have bee	en identified to-da	ate
• DBE Goal (Construction) - A numerically expressed percentage of funds apportioned to Construction Contracts and is calculated based	20.00%	
upon the relative availability of DBE firms as compared to all firms in the relevant geographic market area.		
compared to all firms in the relevant	\$251,040,878	(20.00%)
compared to all firms in the relevant geographic market area. DBE Commitment - Contract commitment divided by current contract value for	\$251,040,878 \$257,764,090	(20.00%) (20.59%)
 compared to all firms in the relevant geographic market area. DBE Commitment - Contract commitment divided by current contract value for Construction. Current DBE Commitment - Actual commitments as Construction work is 		

PROJECT LABOR AGREEMENTS (PLA) STATUS

	Contract C0988 Crenshaw/LAX Transit Corridor De (Reported Data as of July 2018)	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	60.23%
•	Apprentice Worker Goal – Construction work to be performed by Apprentices	20.00%
	Apprentice Worker Current Attainment	23.25%
•	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	11.95%

DISADVANTAGED BUSINESS ENTERPRISE (DBE) STATUS

Contract C0991 Division 16: Southwestern Ya (Reported Data as of July 2018)	•	ild
 DBE Goal (Design) – A numerically expressed percentage of funds apportioned to Design Contracts and is calculated based upon the relative availability of DBE firms as compared to all firms in the relevant geographic market area. 	20.00%	
 Current DBE Commitment – Total DBE Committed Dollars divided by Total Contract Value for Design or Construction. 	\$2,467,837	(20.93%)
 Current DBE Participation – Total amount paid to date to DBEs divided by the amount paid to date to Prime. 	\$2,026,893	(18.65%)
Nine (9) Design subcontractors have been identified to-date	9	
• 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.	16.00%	
DBE Commitment - Contract commitment divided by current contract value for Construction.	\$25,930,837	(16.00%)
 Current DBE Commitment - Actual commitments as Construction work is awarded 	\$30,610,463	(18.89%)
Current DBE Participation - Total amount paid to date to DBEs divided by the amount paid to date to Prime	\$20,743,771	(17.60%)
Eighty-Five (85) Construction subcontractors have been	dentified to-dat	e.

PROJECT LABOR AGREEMENTS (PLA) STATUS

Contract C0991 Division 16: Southwestern Yard Design-Build (Reported Data as of July 2018)

•	Targeted Worker Goal – Construction work to be performed by residents from Economically	40.00%
	Targeted Worker Current Attainment	50.66%
•	Apprentice Worker Goal – Construction work to be performed by Apprentices	20.00%
	Apprentice Worker Current Attainment	27.52%
•	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	9.31%

Crenshaw/LAX Transit Project Monthly Project Status Report

FINANCIAL/GRANT STATUS

\$ in millions	(A) ORIGINAL	(B) TOTAL	(C) TOTAL	(D) COMMITM	(D/B) IENTS	(E) EXPENDI	(E/B) TURES	(F) BILLED to	(F/B) FUNDING
SOURCE	BUDGET	FUNDS ANTICIPATED	FUNDS AVAILABLE	\$	%	\$	%	\$	SOURCE %
FEDERAL - CMAQ	68.2	54.0	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	99.9	99.9	99.9	100%	99.9	100%	91.2	91%
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	129.0	129.0	129.0	100%	129.0	100%	129.0	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	530.3	530.3	530.3	100%	474.6	89%	462.5	87%
CITY CONTRIBUTION	52.4	101.7	40.0	42.3	42%	40.0	39%	34.0	33%
GENERAL FUNDS	0.0	53.0	53.0	53.0	100%	53.0	100%	51.8	98%
PROP C 25% HIGHWAY	148.9	383.9	383.9	383.9	100%	202.8	53%	202.8	53%
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%	4.9	10%	4.9	10%
TOTAL	1,749.0	2,058.0	1,968.8	1,998.6	97.0%	1,686.4	82.0%	1,658.5	81.0%

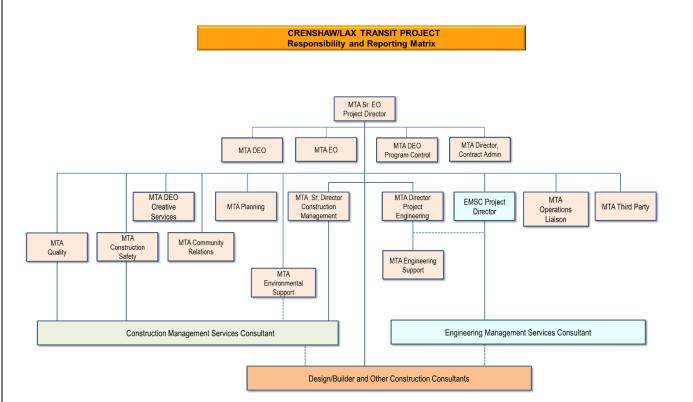
NOTE: Expenditures are cumulative through August 31, 2018

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

Expenditures exclude \$10.7 Mil awaiting State Board of Equalization decision whether to tax LRT vehicle deliveries and \$5.5 Mil for various right of way and professional services cost being reallocated to other local funding.

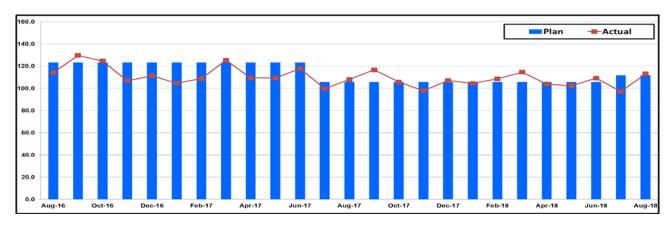
PROJECT ORGANIZATION AND STAFFING

The design-build contract is being managed by joint team of Metro and consultant personnel jointly located at the Integrated Project Management Office (IPMO).



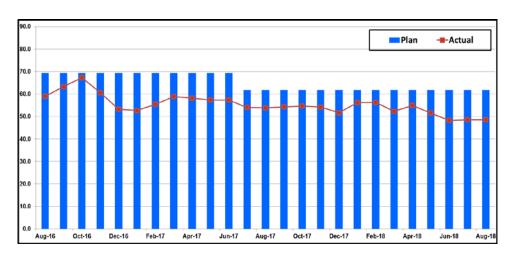
The overall FY19 Total Project Staffing Plan averages 111.7 Full Time Equivalent (FTEs) per month consisting of 67.7 for Metro Agency staff, 37.0 for Construction Management Support Services Consultant and 7.0 for Design and Engineering Support Services Consulting staff.

For August 2018, total project staffing were 113.1 FTEs for the month consisting of 48.5 FTEs for Metro's project administration staff, 56.3 FTEs for Construction Management Support Services Consultant and 8.3 FTEs for Design and Engineering Support Services Consulting staff.

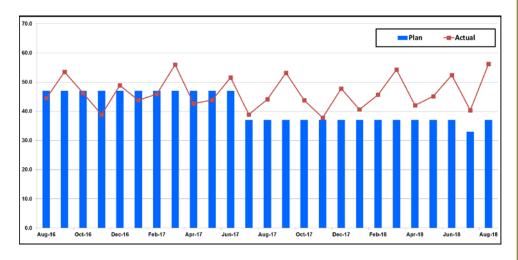


Crenshaw/LAX Transit Project Monthly Project Status Report

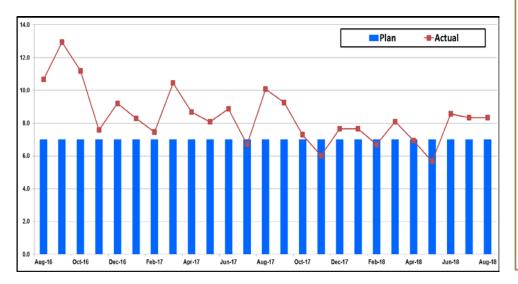
Metro Staff



CM Support Services Staff (Consultant)



Engineering Services Staff (Consultant)



Staffing by Group

The opposing graphs represent planned vs. actual staffing levels by group.

Metro staffing includes full time staff located in the IPMO as well as part-time support located at Gateway Headquarters.

Staffing plans are developed for each fiscal year based on project needs.

REAL ESTATE STATUS

- All parcels necessary to construct the guideway have been turned over to the Contractor.
- Work requiring the last remaining parcel does not fall under WSCC's scope of work and will constructed under a separate contract. Relocations for this parcel should be complete by 12/31/18.
- 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 nine (9) Nonconformance Reports (NCR's) during this period.
- Metro Quality participated in Readiness Review Meetings for the 48th Street Crossing and Installation of Overhead Conductor Rail System.

ENVIRONMENTAL STATUS

C0988 Crenshaw/LAX Transit Corridor Design Build

- Conducted weekly Noise and vibration spot checks at multiple sensitive locations and at locations of new activities along the project alignment.
- WSCC conducted weekly SWPPP inspections of all project areas and Metro conducted spot checks to observe site conditions and report on performance of stormwater protection Best Management Practices and overall housekeeping.
- Verified soil management practices for the stockpile locations, yards and alignment. Certified that soil being used for backfill in the UG4 restoration work was environmentally cleared for use.
- During the MLK restoration work, leaching oil was observed on August 11th where the abandoned Tesoro lines had previously been cut and capped to install the SOE at MLK. The oil was cleaned hauled off the Project appropriately. The Tesoro pipeline in the MLK closure was securely recapped on August 20th.
- Hauled off treated wood waste (TWW) bins from La Brea Yard and Aviation/104th.

CONSTRUCTION RELATIONS STATUS

- Circulated Crenshaw Blvd. restoration closure details via-email, social media networks, local publication and radio and hand delivered to key stakeholders.
- Circulated Construction Notices along the project area, via-email and posted on the project website in advance of required lane closures.
- Ongoing coordination with Metro Transit Safety and Security, WSCC, first responders and city/county agencies to address homeless encampments on Metro property.
- Ongoing coordination with Metro Bus Operations to plan for bus detour routes for restoration closures.
- Continued outreach to stakeholders in the LAX area regarding ongoing construction activities.

CREATIVE SERVICES STATUS

- Facilitated coordination between artists and fabrication firms.
- Responded to Requests for Change.
- Reviewed shop drawings for Porcelain Enameled Steel (PES) artwork panels and Notice of Design Change submittals.
- Reviewed Aviation Gate Signage submittal.
- Hosted art tour with Crenshaw Community Leadership Council (CLC) for community members.

SAFETY & SECURITY STATUS

- Conducted safety walk with WSCC Safety Manager and Metro Safety Staff to evaluate underground ventilation, access and egress (elevator), communication, lighting and emergency procedures.
- Safety staff to review restoration activities at MLK Station and Expo Station.
- Contract C0991 Hensel Phelps Project-to-Date completed 406,658 work hours with 3 recordable injuries. Hensel Phelps and their subcontractors completed 47,894 work hours and zero recordable injuries for the month of August 2018.
- Contract C0988 (WSCC) completed 168,813 work hours with zero recordable injuries for the month of August 2018. Total Project to Date work hours are 7,094,816 with a total of eighty-seven recordable incidents. The Project Recordable Rate is 2.4. The Bureau of Labor Statistics average recordable rate per 200,000 work hours is 2.8.
- Project-to-Date Total Days Away (DART) Injury Rate. Six Days Away from Work Injuries 0.1 (DART). The National Average is 1.7.
- Project-to-Date Total Days Away Rate 17.1 (561 Days Away from Work). No National Published Rate.

CHRONOLOGY OF EVENTS

October 2011	Board approved the Life-of-Project Budget of \$1.749 billion.
December 30, 2011	Received Record of Decision from FTA.
March 12, 2012	Received Statement of Qualifications 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.
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.
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.
August 21, 2014	Substantial Completion issued for Advanced Utility Relocations Contract C0990.
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.

CHRONOLOGY OF EVENTS (Continued)

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.
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).
April 6, 2017	The northbound tunnel boring machine completed mining with the hole thru at Leimert Park Station.
June 15, 2018	Restoration of the road over the three underground stations along Crenshaw Blvd. commenced at Leimert Park Station area and the at- grade transition section.

PROJECT COST STATUS – SOUTHWESTERN YARD

SCC	DESCRIPTION	ORIGINAL	CURRENT	BUDGET	COMMIT	MENTS	EXPEND	ITURES	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	40,000	0	40,000	0	40,000	40,000
20	STATIONS	0	0	0	0	0	0	0	0	0	0
30	SUPPORT FACILITIES (Y & S)	85,546,835	0	85,189,999	0	86,507,266	5,783,394	70,592,401	0	86,864,102	1,674,103
40	SITEWORK\SPECIAL CONDITIONS	35,932,000	0	38,273,000	0	40,700,956	(434,355)	32,498,842	0	43,832,604	5,559,604
50	SYSTEMS	25,784,616	0	32,991,000	0	33,190,119	1,055,104	27,049,297	0	33,190,119	199,119
	(10-50) CONSTRUCTION	147,263,451	0	156,453,999	0	160,438,341	6,404,143	130,180,541	0	163,926,825	7,472,826
60	RIGHT-OF-WAY	99,910,000	0	100,000,000	0	102,420,623	0	102,418,610	0	102,420,623	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	1,378	34,964,881	1,018,918	31,352,494	0	37,221,379	3,581,748
90	PROJECT CONTINGENCY	13,659,732	0	17,106,370	0	0	0	0	0	3,631,173	(13,475,197)
TOTAL	-	296,434,278	0	307,200,000	1,378	297,823,846	7,423,061	263,951,645	0	307,200,000	0
C0991	PAINT & BODY SHOP PROJECT										
DESC	RIPTION	ORIGINAL	CURRENT	BUDGET	COMMIT	MENTS	EXPEND	ITURES	CURRENT	FORECAST	FORECAST
DESC		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	3,903	10,933,903	252,370	5,499,095	0	11,000,000	0
GRAN	D TOTAL	307,434,278	0	318,200,000	5,281	308,757,749	7,675,431	269,450,739	0	318,200,000	0

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH AUGUST 31, 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 designbuild 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 and remain the same as total current budget.

Commitments:

The commitments are cumulative through August 31, 2018, with insignificant increased. The \$308.76 million in commitments to date represents 97.03% of the current budget.

Expenditures:

The expenditures are cumulative through August 31, 2018. The total expenditures increased by \$7.68 million which represents 84.68% of the current budget. The increase is for cost associated with designbuild contract C0991 Division 16: Southwestern Yard, Paint Body Shop, and project administration, construction management support Stantec Consulting, KKCS/TRUNITY and labor compliance.