Los Angeles County
Metropolitan Transportation Authority

Crenshaw/LAX Transit Project

MONTHLY PROJECT STATUS REPORT

JULY 2019

Metro®

CRENSHAW/LAX TRANSIT PROJECT

MONTHLY PROJECT STATUS REPORT

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JULY 2019

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PROJECT OVERVIEW

Project Background

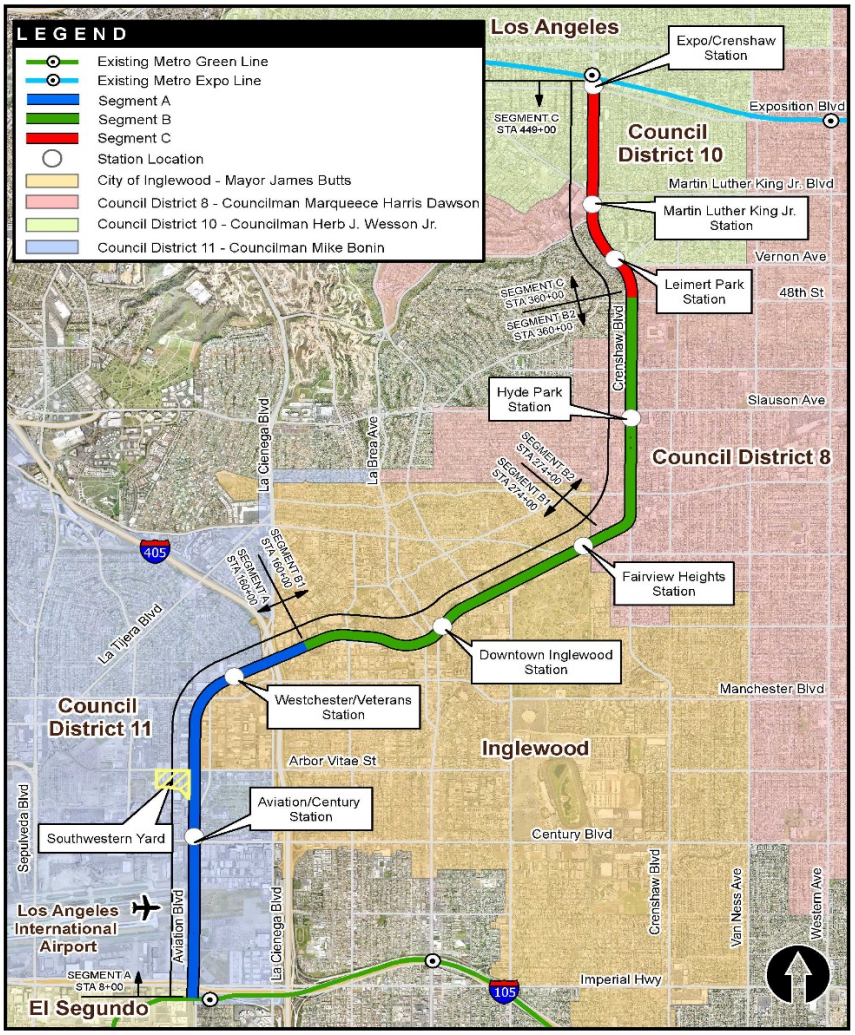
The Crenshaw/LAX Transit Project is a north/south corridor that serves the cities of Los Angeles, Inglewood, Hawthorne and El Segundo as well as portions of unincorporated Los Angeles County. The alignment extends 8.5 miles, from the intersection of Crenshaw and Exposition boulevards to a connection 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 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 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 at-grade 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 – September 2010
- Metro Board certification of Final EIS/EIR – September 2011
- FTA issuance of Record of Decision – December 2011
- TIFIA and TIGER II Grants approved September 2012



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 was 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 were 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 were included as part of this contract.

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 (at-grade, elevated and underground), grade separations including flyover structures, cut and cover trenching, tunneling and three park-n-ride facilities. The scope of work 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 constructed the Southwestern Yard and consolidated 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. Southwestern Yard is substantially complete and turned over by the contractor to Metro Operations.

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 including a bumping post for the Design-Build Contract C0991 Southwestern Yard.

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 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 lab software validation tests were performed prior to implementation on the P3010s. Vehicles software will be field verified and tested in coordination with Design-Build Contract C0988 Crenshaw/LAX Transit Corridor Contractor.

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 System Integration phase 2 testing (SIT-2), pre-revenue, safety drills and revenue service.

Fare Collection
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 completed manufacturing of the equipment and shipped to a local storage area where it is being stored until the Crenshaw/LAX Project stations become ready for its installation. UFS contractor and C0988 mainline contractor are coordinating the details required for preparation, access and installation at each station.

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 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 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.

Construction and Community Relations: 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 is coordinating the systems interface design, construction, testing, and commissioning while the Agency maintains revenue service on the operating 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.

EXECUTIVE SUMMARY

As of the end of July 2019 the Project has achieved 93.3% 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 (Mainline Contractor) –
Walsh-Shea Corridor Constructors (WSCC) final design is complete except for designs required for changes. WSCC continues design and engineering in support of construction, installation, and testing.

Design - Build Contract C0991 Southwestern Yard Contractor (Division 16) -
Hensel Phelps/Herzog JV (HPH) has substantially completed final design including design and engineering in support of construction and Contract closeout.

Construction Status

Mainline Contractor - WSCC continues construction along all areas of the alignment. The four at-grade stations structure concrete placements are substantially complete and finish work continues for these stations. All six bridge superstructures are substantially complete and continuing with finishes, systems installations and testing. The aerial station structure concrete placement is substantially complete. The three underground stations remain at various levels of completion with emphasis on electrical, mechanical, systems and finish work inside the stations and entrance structures.

Trackwork is nearing completion with wayside and OCS/OCR work continuing along the alignment. System work continues in the stations for traction power, communication and train control. WSCC and Metro continue to coordinate with DWP and SCE for power energization and other utilities (water, gas, communication, phone) at various locations.

Project is moving into the restoration phase of construction along Crenshaw BL.; road restoration of Crenshaw Bl. will be taking place in the Hyde Park neighborhood and will be performed in three phases of consecutive closures. Road restoration work will include the removal of concrete panels, underground utility improvements, back-fill and roadway paving.

Southwestern Yard (Division 16) – HPH has achieved Substantial Completion as of January 30, 2019 and temporary certification of occupancy was issued on February 15, 2019. The contractor continues working on final punch list items required for completion of the contract. Metro continues the closeout process for this contract.

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.

WSCC in late July, submitted a schedule update for the April 2019 period of performance. This update indicated the contractor has alleged additional 28 calendar days delay to their Substantial Completion date. Meetings have been held with contractor to address the alleged issues and potential contractor mitigation.

No schedule updates by WSCC have been submitted for the May 2019 thru June 2019 periods of performance. A combined May/June period of performance update is expected from the contractor by Mid-August.

Metro is assessing the effect of the alleged delays on the Project's schedule critical path.

WSCC Schedule Metrics – Mainline Contractor

	Original Contract Date/Duration	Time Extension (CD)	Current Contract Schedule	Forecast (Contractor)	Variance CD (Trending)
NTP	09/10/13				
Substantial Completion	09/08/18	459	12/11/19	3/30/20	-110 days

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 (Actual)	Completed

Project costs continue to track within budget and projected contingency limits. To date, the design and construction changes for WSCC related to base scope represent approximately 13.6% of the contract value with a potential to increase to 14.2%. For HPH, the changes represent 1.2% of the contract value with a potential to increase to 1.3% Detailed cost and budget information is provided later in this report.

Key Management Concerns

No. 1: WSCC Construction Schedule Progress

Status/Action
Metro is evaluating a potential 2020 date for revenue service based on the revised WSCC Contract Substantial Completion Milestone date of December 11, 2019. The contractor's latest schedule submittal, April 2019, reflects additional alleged delays of 28 calendar days since previous update for a 110-calendar's day total reported slippage. No schedule updates by WSCC have been submitted for the May 2019 thru June 2019 periods of performance. Metro's assessment is that progress thru July 2019 is continuing to slip behind schedule. This trend will continue unless mitigation measures are implemented by the contractor.

Progress on construction activities continue to slip based on WSCC's weekly six-week look ahead schedule. Efforts to stop the continuous schedule slippage may include resequencing of work, additional resources, selective overtime and weekend work. Coordination of field work needs to be strengthened in all areas of construction, including electrical, finishes, systems, motor control centers/communication interface cabinets, overhead catenary systems, overhead conductor rail, traction power, distributed power, train control installation, and testing. In addition to the above issues, elevator structural frames fabrication and installation are being delayed and progress on the elevator installation work is slower than contractor's plan.

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

Status/Action
Metro monitors and reports on the drawdown of contingency monthly. In July 2019 there was a drawdown of contingency of $6.0 million which reduced remaining contingency to $5.5 million. The remaining contingency is 0.3% of total project current forecast and 3.0% of total project cost-to-go.

Metro has identified another $60 million available in fiscal year 2020 for specific scope of work that is eligible to be reallocated to a non-Crenshaw/LAX Project. This is in addition to the $68 million made available in fiscal year 2019 for a combined total of $128 million. 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. Through the end of July 2019, there has been $68 million reallocated which allows the Project to use these funds for additional contractor modifications, increased third party requirements and professional services modifications to support a revised forecast completion schedule.

No. 3: WSCC Design/Engineering Support during Construction, Installation and Testing

Status/Action
Various elements of design support during construction are affecting almost all areas of construction and impacting the work progress without having a clear plan to improve performance in the field. These impacts include items such as the emergency fans seismic calculations submittals taking longer than planned creating potential delays to testing schedule and inefficient work progress. There are other engineering/design support activities that are impacting progress such as test procedures, power coordination studies, submittals, requests for information (RFI's), and deviation requests.

No. 4: WSCC Rework, Damaged and Incomplete work

Status/Action
Several areas of work along the alignment that is the responsibility of the contractor to perform has not been finished by the contractor due to incomplete, damaged or missing components. This has caused the contractor's progress to be less than planned, impacts the follow-on subcontractors work and creates inefficient performance. These issues also impact the contractor's progress payment amounts, slows down progress and pushes activities to be performed in parallel creating crewing availability issues. Metro continues to monitor the impacts on the contractor's schedule and has requested the contractor to mitigate their delays.

Contractor has been investigating and addressing blockage in conduit and systems pathways in underground stations and Metro has requested the contractor to reflect these forensic investigation activities and correction process in their schedule.

No. 5: 3rd Party Coordination and Impact on follow on activities

Status/Action
Multiple areas of work along the alignment are being affected due to coordination issues. Multiple items such as power and water services, plus other interfaces with gas, telephone, communication and city requirements are affecting work progress. Coordination of field activities and interface with 3rd parties need to be strengthened in all areas of remaining work.

Project Construction Photos

EXPOSITION/CRENSHAW STATION – Installing emergency fan cable feeds for Auxiliary Power Room.

LA BREA STATION – Placing grout in yellow paver joints.

LEIMERT PARK STATION – Continued installation of elevator frames 3 and 4 at the platform level.

WESTCHESTER/VETERANS STATION – Placing the ticket vending machine structure.

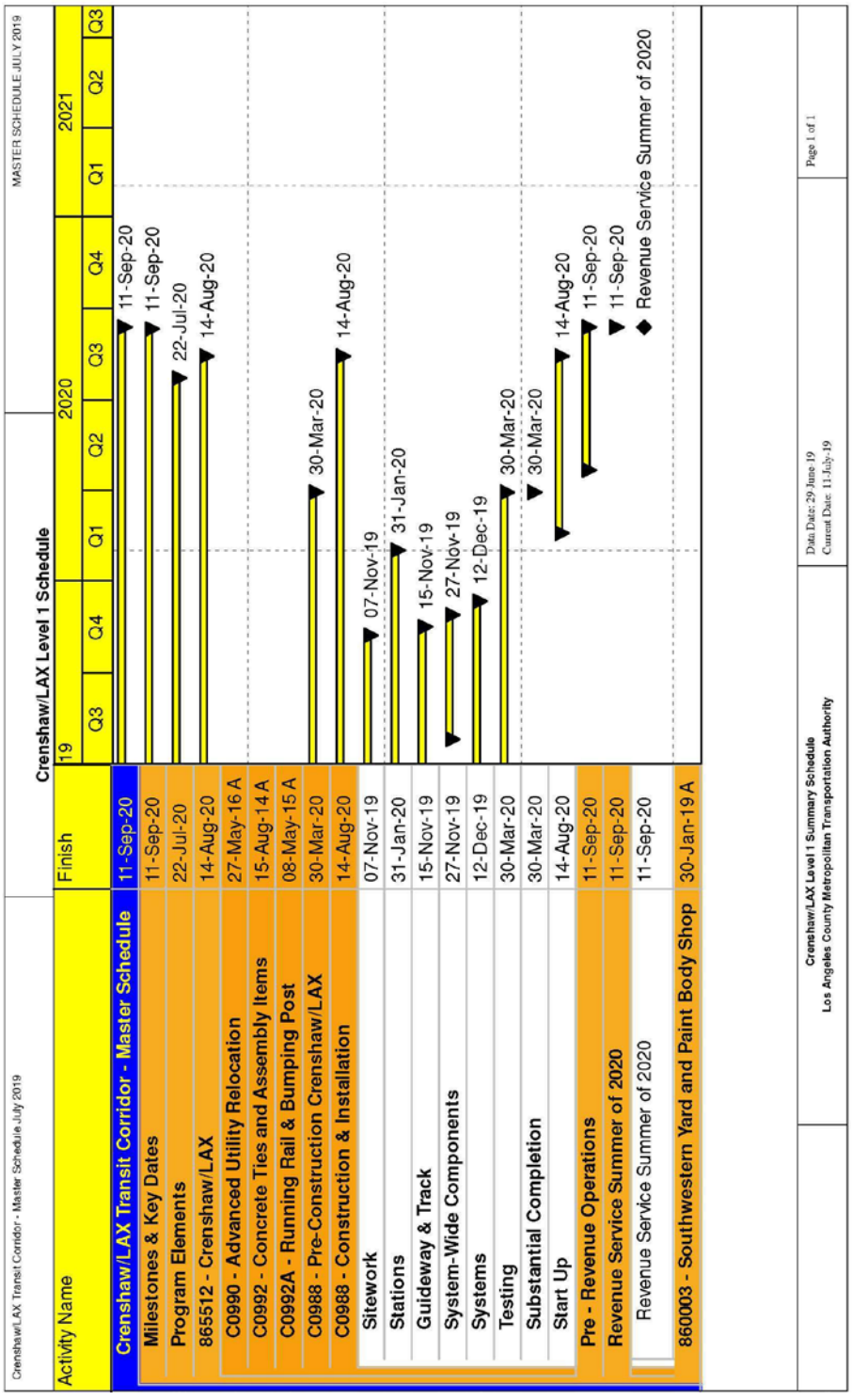
UG STRUCTURE #3 - Continued installation of overhead catenary rail brackets.

AVIATION/CENTURY STATION - Grading for the plaza and parking lot.

PROJECT UPDATE

PROJECT SCHEDULE

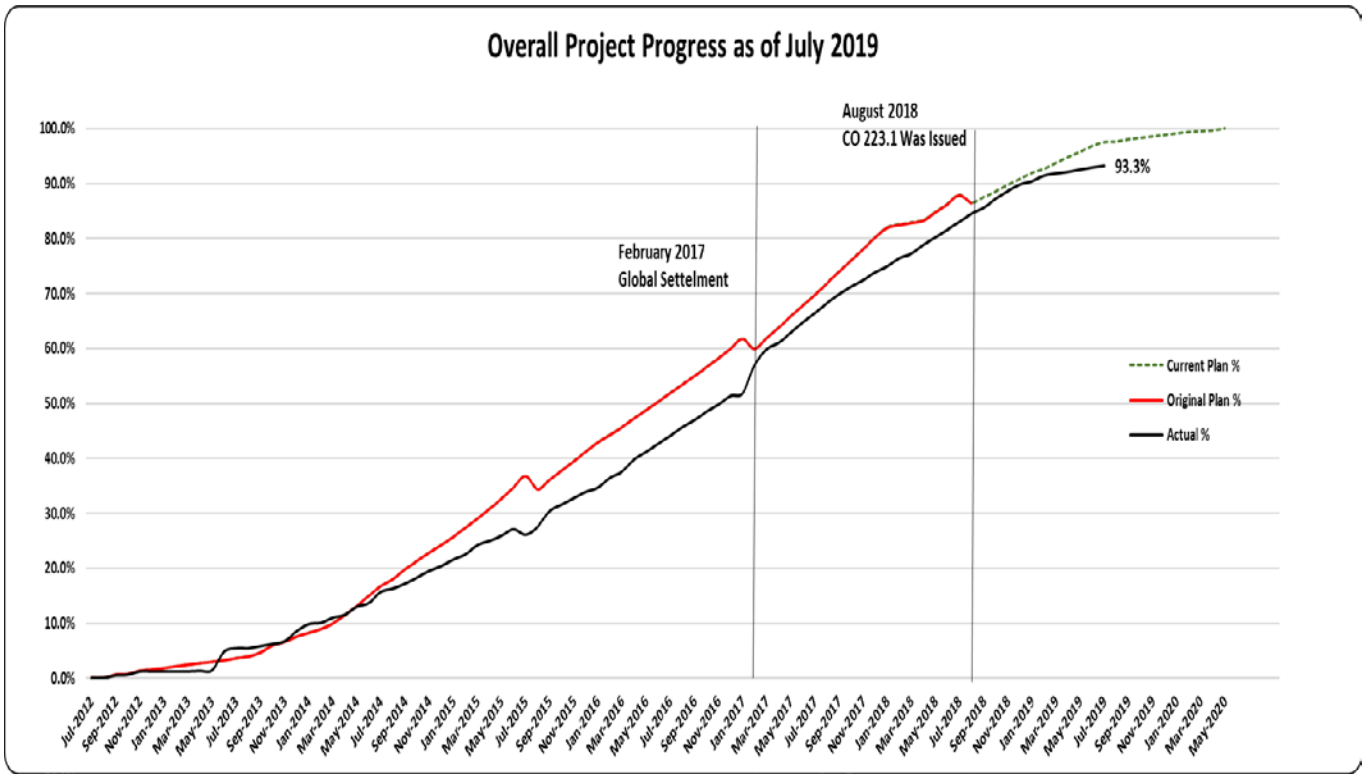
Project Summary Schedule



Progress Summary

	Status	Change from 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	99.8%	0.1%	Design Services During Construction Behind Schedule
Contract C0990	100%	None	Design Completed
Contract C0991	100%	None	Design Services During Construction Completed
Contract C0992	100%	None	Design Completed
Contract C0992A	100%	None	Design Completed
Construction Contracts Progress:			
Contract C0988	89.7%	0.7%	Behind Schedule
Contract C0990	100%	None	Completed
Contract C0991	100%	None	Completed
Contract C0992	100%	None	Completed
Contract C0992A	100%	None	Completed

Planned vs. Actual Progress



Key Milestones Six Month Look Ahead

	Milestone Date	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
TPSS-03 Permanent Power Drop - SCE - Install Equipment, Cable, Energize & Monitor	7/12/19 A	▽					
TPSS-06 Permanent Power Drop - SCE - Install Equipment, Cable, Energize & Monitor	7/12/19 A	▽					
TPSS-05 Permanent Power Drop - SCE - Install Equipment, Cable, Energize & Monitor	7/12/19 A	▽					
TPSS-01 & 02 Rectifier Transformer Energization	08/26/19		⬡				
TPSS-08 Permanent Power Drop - SCE - Install Equipment, Cable, Energize & Monitor	08/15/19		▽				
OCS Vehicle Required for Pre-Energization Tests PRE-SIT	08/22/19		⬡				
Contractual Milestone 3, Start All System Integration Tests (SIT-1), Contractual date	09/12/19			⬡			
Complete Green Line Cut-Over (Weekend Closures)	09/22/19			⬡			
Aux Power at 104th St - Permanent Power Drop - LADWP - Install Equipment, Cable, Energize & Monitor *	10/25/19				▽		
Aux Power at Victoria Ave - Permanent Power Drop - LADWP - Install Equipment, Cable, Energize & Monitor *	10/25/19				▽		
Ventilation Equipment - UG #3 Installation and Testing	10/30/19				⬡		
Aux Power at 60th St - Permanent Power Drop - LADWP - Install Equipment, Cable, Energize & Monitor *	11/07/19					▽	
Ventilation Equipment - UG #4 Installation and Testing *	11/15/19					⬡	
Ventilation Equipment - Leimert Station Installation and Testing *	11/15/19					⬡	
Ventilation Equipment - MLK Station Installation and Testing *	11/15/19					⬡	
Ventilation Equipment - Expo. Station Installation and Testing *	12/02/19						⬡

◆ MTA Staff

Ⓜ MTA Board Action

⧗ **FTA** (Federal Transit Administration)

▽ Utility Company

△ Other Agencies

▭ C0991 D/B Contractor

◯ Design Consultant

⬡ C0988 D/B Contractor

"A" following date is actual and completed

* New Date

Major Equipment Delivery

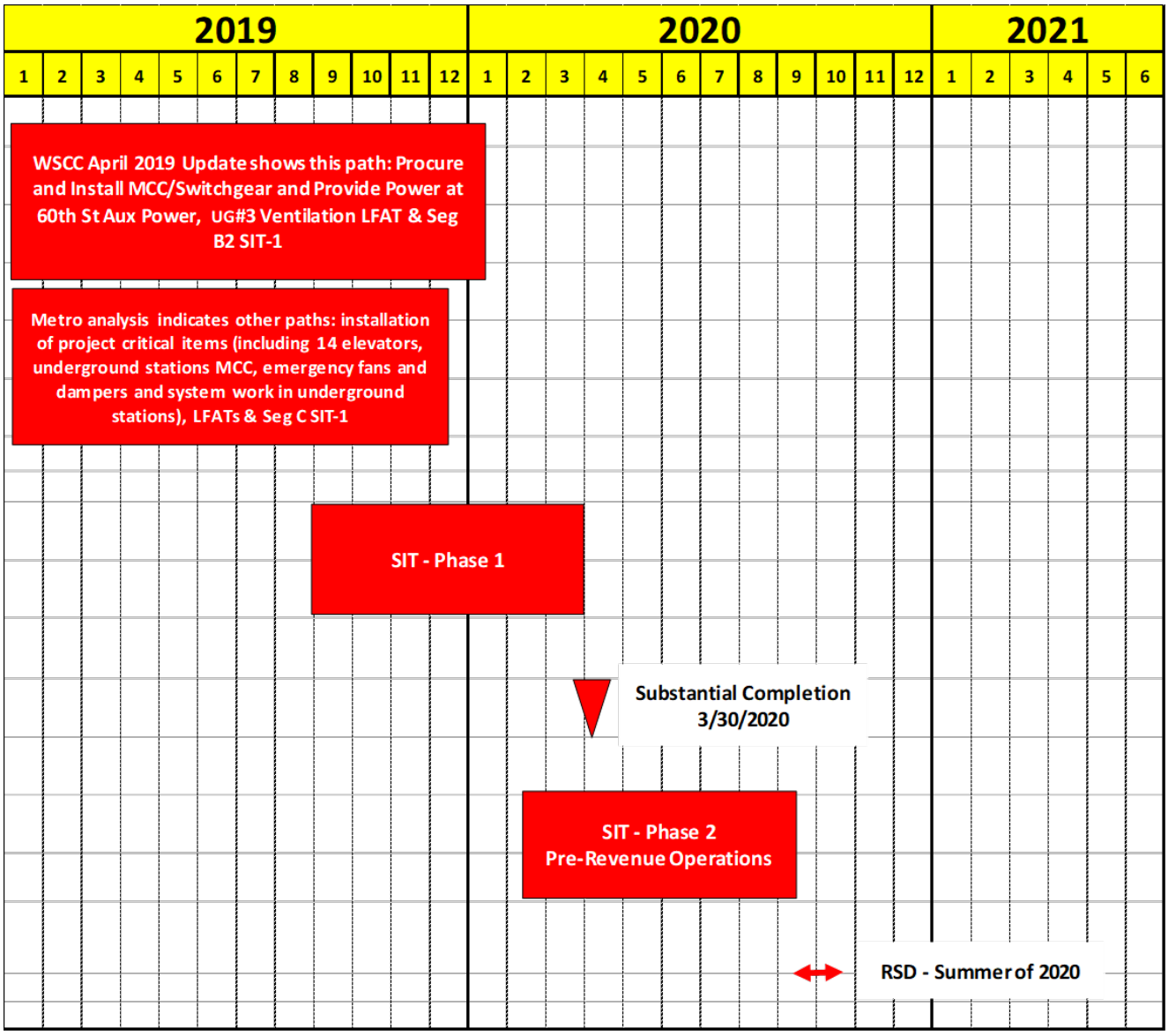
Metro Supplied Equipment

Equipment	Initial Procurement	Scheduled Delivery	Scheduled Installation
LRT Vehicles	(NTP) 8/20/12 A	Option 1 9/1/17 A	N/A
Ticket Vending Machines and Equipment	1/30/18 A	2/28/19 A (Warehoused)	5/1/2020 (Prior to RSD)

Mainline Contractor Equipment Delivery Requirements

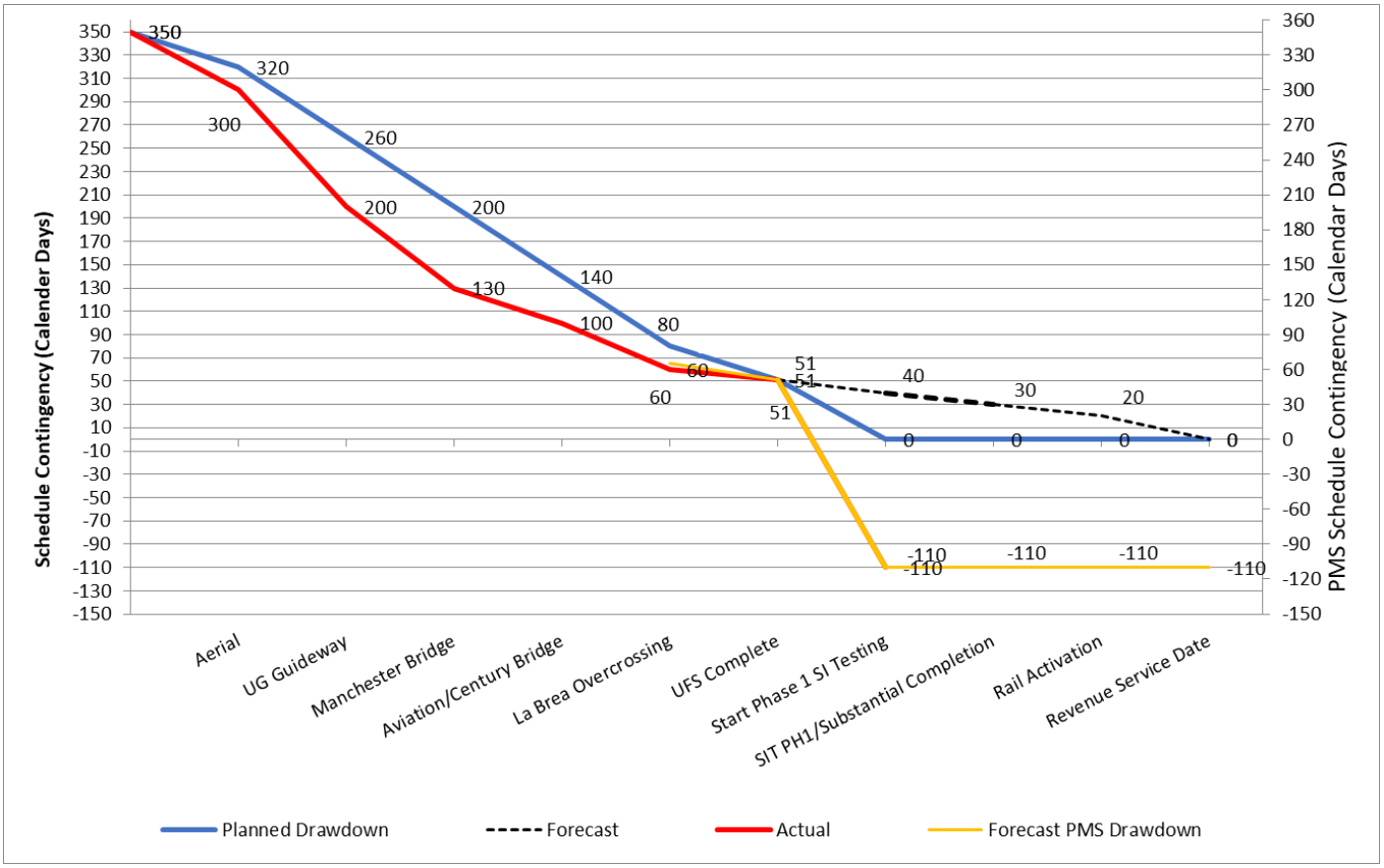
Activity Name	Early Finish	Need Date
Fab/Procure & Deliver Fans - UG #3	March 2019 A	April 2019
Fab/Procure & Deliver Fans - UG#4	March 2019 A	July 2019
Fab/Procure & Deliver Fans - UG #1	March 2019 A	August 2019
Fab/Procure & Deliver Emergency Ventilation Fans – Leimert Station	April 2019 A	June 2019
Fab/Procure & Deliver Emergency Ventilation Fans - MLK Station	May 2019 A	July 2019
Fab/Procure & Deliver Emergency Ventilation Fans - Expo. Station	July 2019 A	August 2019
Fabricate & Deliver Elevators - Aviation/Century Elevated Station	June 2019 A	June 2019
Fabricate & Deliver Elevators - Leimert Station	June 2019 A	June 2019
Fabricate Elevators - MLK Station	July 2019 A	July 2019
Fabricate Elevators - Expo. Station	July 2019 A	August 2019
Fabricate, Test & Deliver MCC's - Leimert Station	March 2019 A	June 2019
Fabricate, Test & Deliver MCC's - MLK Station	March 2019 A	June 2019
Fabricate, Test & Deliver MCC's - Expo Station	June 2019 A	July 2019
Fabricate, Test & Deliver MCC's - 104th Street	August 2019*	April 2019*
Fabricate, Test & Deliver MCC's - Victoria/60th Street	August 2019*	May 2019*
*Requires schedule mitigation by Mainline Contractor		

Critical Path



The critical path of the Project remains completing construction activities, then systems wiring and commissioning of communications, train control, OCS/OCR 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.

Project Schedule Contingency Drawdown



Metro issued in August 2018 a non-compensable unilateral change order to WSCC to extend their substantial completion milestone to December 11, 2019. Thus, performance measurement is now tracked against this new date.

The contractor last schedule update submitted was for period as of April 2019. They reported they are behind schedule, adding additional alleged delays reported for this period. Metro assessment is that WSCC is behind schedule by at least 110 calendar days. Metro expects that part of the alleged delay could be mitigated and Metro is meeting with WSCC to discuss detail schedule issues and possible path forward.

Metro is evaluating a potential 2020 date for revenue service based on the revised substantial completion milestone date.

Risk Management Narrative

Summary of Risks

Within this reporting period three risks were closed. Three additional new risks were identified and added. There is a total of thirty (30) risks to be managed in the next reporting period.

Of the thirty (30) risks, eleven (11) are scored as high (10 to 20 risk rating), seven (7) as medium (4 to 9 risk rating), and twelve (12) as low (1 to 3 risk rating).

Top 7 Risks: The table below shows the top project risks:

Risk ID	SCC	Risk Description	Risk Rating
369	20	Continued delay of fire rated conduit/cable installation.	20
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 December 11, 2019 - Substantial Completion.	18
359	80	Extended Overhead or productivity loss claims exposure not covered by cost impacts in individual risks.	18
362	50	Schedule activities that are critical to completion (Trackwork, OCR/OCS, TPSS Energization, Emergency Fans installation, Train Control wiring/testing and Communications equipment installation/wiring/testing).	16
372	20	WSCC Design/Engineering Support during Construction, Installation and Testing	15
373	20	WSCC Rework, Damaged and Incomplete work.	15
374	50	3rd Party coordination of civil work and street improvement additional scope work requirements	13
355	50	Issues with long lead delivery or improper planning for integration, testing and startup of Communication systems.	12
201	50	DB unable to obtain critical skilled specialty workers needed for complex systems, elevator testing, etc.	12
277	50	SCADA interface between ROC & field installations could impact Metro's SIT2. Workforce issue to perform testing.	11
354	50	Issues with energization of traction power. Auxiliary Power, DWP and Edison	11

Newly Identified Risks

- Three new risks were added to the risk register.

Closed Risks

- Three risks were closed in this period.

Risk Score Changes

- Risks score remained the same for top risk item (369) 20 risk rating and changed for item 201 from 9 to 12 risk rating.

Actions in Next Reporting Cycle

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

- Update the project risk register.

PROJECT COST

Project Cost Analysis

SCC CODE	DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		CURRENT BUDGET/ FORECAST VARIANCE
			PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
10	GUIDEWAYS	471,335,000	-	450,354,375	-	440,747,649	2,760,938	431,535,939	-	440,747,649	(9,606,726)
20	STATIONS, STOPS, TERMINALS, INTERMODAL	153,906,000	-	315,050,000	-	310,409,580	6,142,203	273,275,034	-	310,409,580	(4,640,420)
30	SUPPORT FACILITIES (SOUTHWEST YARD)	66,673,000	-	71,164,000	-	67,338,361	317,847	65,818,668	-	67,338,361	(3,825,639)
40	SITEWORK\SPECIAL CONDITIONS	235,576,000	-	395,798,361	3,584,186	407,105,700	4,408,580	349,898,094	4,035,210	407,556,724	11,758,363
50	SYSTEMS	125,132,000	-	169,436,000	68,259	174,913,423	2,730,332	126,776,834	68,259	174,913,423	5,477,423
	CONSTRUCTION SUBTOTAL (10-50)	1,052,622,000	-	1,401,802,736	3,652,445	1,400,514,714	16,359,901	1,247,304,568	4,103,469	1,400,965,739	(836,998)
60	RIGHT-OF-WAY	132,294,000	-	127,490,000	7,588	132,621,907	43,499	132,413,735	7,588	132,621,907	5,131,907
70	VEHICLES / BUSES	87,780,000	-	83,571,544	-	83,571,544	-	78,832,400	-	83,571,544	(0)
80	PROFESSIONAL SERVICES	273,147,000	-	368,734,466	1,810,135	409,349,228	3,625,042	363,029,831	1,845,028	409,384,195	40,649,730
	SUBTOTAL (10-80)	1,545,843,000	-	1,981,598,746	5,470,167	2,026,057,393	20,028,442	1,821,580,535	5,956,084.24	2,026,543,385	44,944,639
90	UNALLOCATED CONTINGENCY	177,157,000	-	50,401,254	-	-	-	-	(5,956,084)	5,456,615	(44,944,639)
	TOTAL PROJECT 865512 (10-100)	1,723,000,000	-	2,032,000,000	5,470,167	2,026,057,393	20,028,442	1,821,580,535	(0)	2,032,000,000	(0)
	ENVIRONMENTAL/PLANNING - 405512	5,526,150	-	5,526,150	-	5,526,150	-	5,526,150	-	5,526,150	-
	ENVIRONMENTAL/PLANNING - 465512	20,473,850	-	20,473,850	-	20,022,881	-	20,022,881	-	20,473,850	-
	TOTAL PROJECTS 405512 & 465512 (ENV / PLAN'G)	26,000,000	-	26,000,000	-	25,549,031	-	25,549,030.97	-	26,000,000	-
	TOTAL PROJECTS 405512, 465512 & 865512	1,749,000,000	-	2,058,000,000	5,470,167	2,051,606,424	20,028,442	1,847,129,566	(0)	2,058,000,000	(0)

1. Expenditures are Cumulative through August 2, 2019
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.

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:
  - 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 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 increased by $5.5 million this period to $2,051.6 million which represents 99.7% of the current budget. The total increase is related to design-build Contract C0988 Crenshaw/LAX Transit Corridor, real estate relocation and professional services. The total commitments include $150.2 million for the Southwestern Yard 49% allocation.

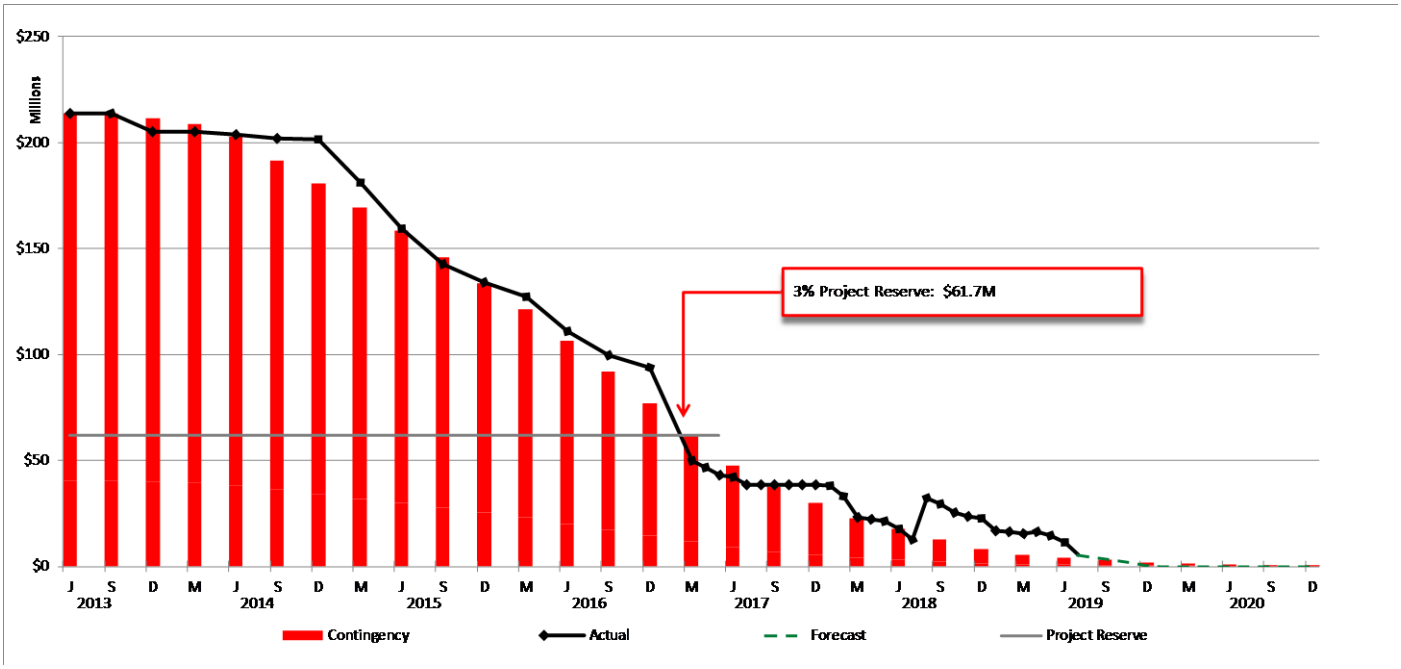
Expenditures:
Expenditures increased by $20.0 million this period to $1,847.1 million which represents 89.8% of the current budget. The increase is for costs associated with design-build Contract C0988 Crenshaw/LAX Transit Corridor, Contract C0991 Division 16: Southwestern Yard, and professional services. The cumulative expenditures to date include $143.1 million for the Southwestern Yard 49% allocation.

Current Forecast:
The total current forecast remains the same as the total current budget.

Non-Crenshaw/LAX Transit Project Funded Scope of Work
The costs shown in the table below are not part of Crenshaw/LAX Transit Project costs but are funded by other Metro projects using the services of the alignment design-builder (Contract C0988).

C0988 NON-CRENSHAW/LAX TRANSIT PROJECT FUNDED SCOPE OF WORK									
DESCRIPTION	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		FORECAST VARIANCE
	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
405556 SYSTEMWIDE TRANSIT PLANNING	-	320,035	-	320,035	-	320,035	-	320,035	-
210090/93 FARE GATE PROJECT	-	2,566,226	500,000	3,066,226	210,000	2,291,126	-	2,566,226	-
210152 CRENSHAW/LAX BUS TRANSFER FACILITY	-	2,200,000	-	2,200,000	89,832	493,166	-	2,200,000	-
460303 AIRPORT METRO CONNECTOR	-	37,914,465	25,248	37,072,922	112,608	37,047,674	-	37,914,465	-
500013 C/LAX LAWA SCOPE OF WORK	-	1,575,362	(532,695)	581,918	-	545,439	-	1,575,362	-
405522 HIGHWAY PLANNING	-	1,935,000	-	1,935,000	89,000	808,503	-	1,935,000	-
TOTAL	-	46,511,088	(7,447)	45,176,101	501,440	41,505,944	-	46,511,088	-

Cost Contingency Drawdown



Cost Contingency Drawdown Analysis

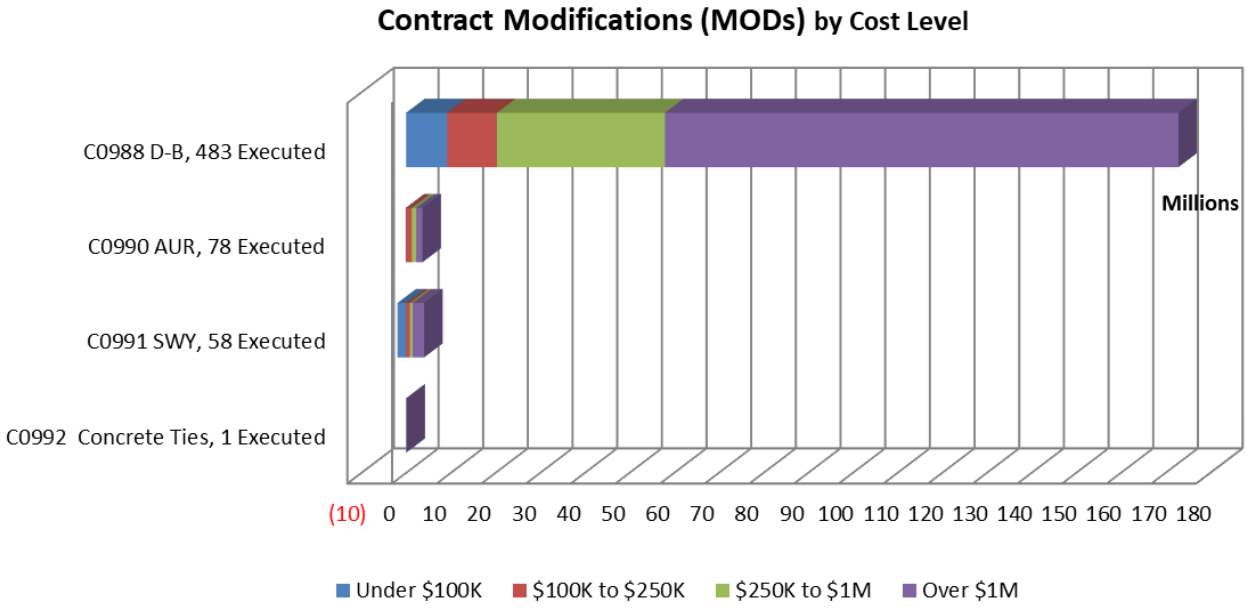
The project current budget of $2,058,000,000 includes a contingency amount of $213,866,792. The drawdown plan is correlated to anticipate risk trends and measures drawdowns moving forward.

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, $5,956,084 was drawn down from contingency. The remaining total project contingency (allocated and unallocated) is $5,456,614.

PROJECT COST CONTINGENCY (through 02-Aug-2019) **UNITS IN DOLLARS**					
	Original Contingency	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)
Unallocated Contingency	173,500,000	(162,087,302)	(5,956,084)	(168,043,386)	5,456,614
Allocated Contingency	40,366,792	(40,366,792)	-	(40,366,792)	-
Total Contingency	**213,866,792**	**(202,454,094)**	**(5,956,084)**	**(208,410,178)**	**5,456,614**

SUMMARY OF CONTRACT MODIFICATIONS



	C0988	C0990	C0991	C0992	Total
	483 Executed	78 Executed	58 Executed	1 Executed	
Under $100K	$ 9,182,194	$ (70,251)	$ (1,918,854)	$ 81,738	**$ 7,274,827**
$100k to $250K	$ 11,160,334	$ 1,280,184	$ 875,202	$ -	**$ 13,315,719**
$250K to $1M	$ 37,625,269	$ 984,662	$ 590,334	$ -	**$ 39,200,265**
Over $1M	$ 114,938,858	$ 1,417,202	$ 2,590,000	$ -	**$ 118,946,060**
Total Contract MODs	**$ 172,906,655**	**$ 3,611,797**	**$ 2,136,682**	**$ 81,738**	**$ 178,736,872**
Contract Award Amount	**$ 1,272,632,356**	**$ 7,827,500**	**$ 172,312,695**	**$ 2,161,297**	**$ 1,454,933,848**
% of Contract MODs	**13.59%**	**46.14%**	**1.24%**	**3.78%**	**12.28%**

Four hundred and eighty-three (483) changes with a total value of $172.91 million have been executed since award of Contract C0988. There are an additional twenty-four (24) changes with a total value of $4.08 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-eight (58) changes with a total value of $2.14 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)

Contract C0988 Crenshaw/LAX Transit Corridor Design-Build

(Reported Data as of July 2019)

- **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. **$25,157,579** **(20.00%)**

- **Current DBE Participation** – Total amount paid to date to DBEs divided by the amount paid to date to Prime. **$29,470,085** **(23.43%)**

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. **20.00%**

- **DBE Commitment** - Contract commitment divided by current contract value for Construction **$259,865,769** **(20.00%)**

- **Current DBE Commitment** - Actual commitments as Construction work is awarded **$285,200,235** **(21.95%)**

- **Current DBE Participation** - Total amount paid to date to DBEs divided by the amount paid to date to Prime **$299,768,233** **(26.23%)**

312 Construction subcontractors have been identified to-date.

DISADVANTAGED BUSINESS ENTERPRISE (DBE)

Contract C0991 Division 16: Southwestern Yard Design-Build
(Reported Data as of July 2019)

• **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.	**20.93%**	
• **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.	**$2,516,305**	**(21.46%)**

Ten (10) 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.	**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	**$32,335,537**	**(19.95%)**
• **Current DBE Participation** - Total amount paid to date to DBEs divided by the amount paid to date to Prime	**$32,041,013**	**(21.05%)**

Ninety-six (96) Construction subcontractors have been identified to-date

PROJECT LABOR AGREEMENTS (PLA)

Contract C0988 Crenshaw/LAX Transit Corridor Design-Build

(Reported Data as of June 2019)

• **Targeted Worker Goal** – Construction work to be performed by residents from Economically Disadvantaged Area of LA County	**40.00%**
• **Targeted Worker Current Attainment**	**60.00%**
• **Apprentice Worker Goal** – Construction work to be performed by Apprentices	**20.00%**
• **Apprentice Worker Current Attainment**	**23.51%**
• **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**	**11.86%**

PROJECT LABOR AGREEMENTS (PLA) STATUS

Contract C0991 Division 16: Southwestern Yard Design-Build

(Reported Data as of June 2019)

• **Targeted Worker Goal** – Construction work to be performed by residents from Economically Disadvantaged Area of LA County County	**40.00%**
• **Targeted Worker Current Attainment**	**49.43%**
• **Apprentice Worker Goal** – Construction work to be performed by Apprentices	**20.00%**
• **Apprentice Worker Current Attainment**	**29.89%**
• **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**	**11.86%**

FINANCIAL/GRANT

SOURCE	(A) ORIGINAL BUDGET	(B) TOTAL FUNDS ANTICIPATED	(C) TOTAL FUNDS AVAILABLE	(D) COMMITMENTS $	(D/B) %	(E) EXPENDITURES $	(E/B) %	(F) BILLED to FUNDING SOURCE $	(F/B) %
FEDERAL - CMAQ	68.2	104.0	54.0	104.0	100%	54.0	52%	54.0	52%
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%	91.2	91%	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	36.6	36.6	100%	36.6	72%	36.6	72%
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	529.3	529.3	529.3	100%	458.3	85%	448.3	85%
CITY CONTRIBUTION	52.4	101.7	101.7	95.3	85%	43.6	44%	40.7	44%
GENERAL FUNDS	0.0	54.3	54.3	54.3	100%	54.3	100%	54.3	100%
PROP C 25% HIGHWAY	148.9	379.1	379.1	379.1	100%	356.1	90%	347.3	90%
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	4.9	4.9	4.9	100%	4.9	100%	4.9	100%
TOTAL	1,749.0	2,058.0	2,008.0	2,051.6	99.0%	1,847.1	89.0%	1,825.5	88.0%

NOTE: Expenditures are cumulative through July 31, 2019

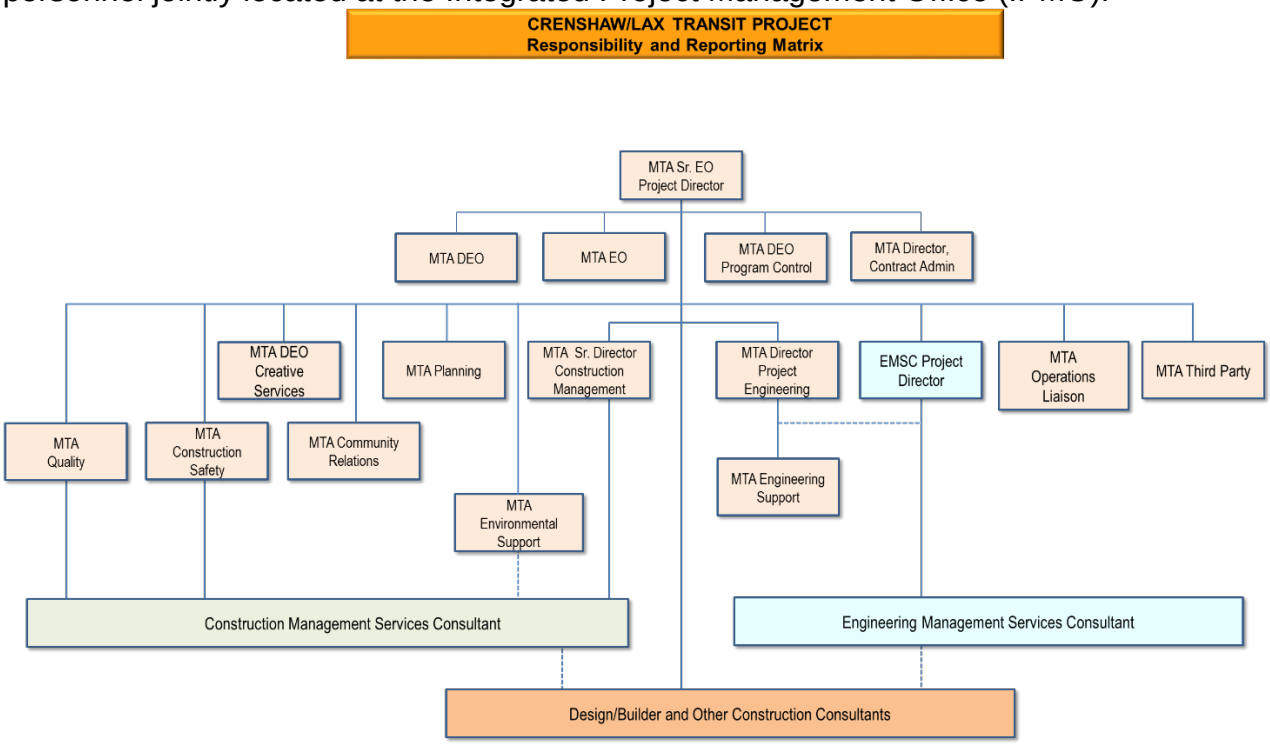
Original Budget based on Board approved October 2011 Funding/Expenditure Plan

Expenditures exclude $6.6 Million for State Board of Equalization decision to tax LRT vehicle deliveries since August 2016.
Metro is appealing decision but paid taxes to not include late fees.

Expenditures exclude $5.5 Million for various right-of-way and professional services cost being reallocated to other funding.

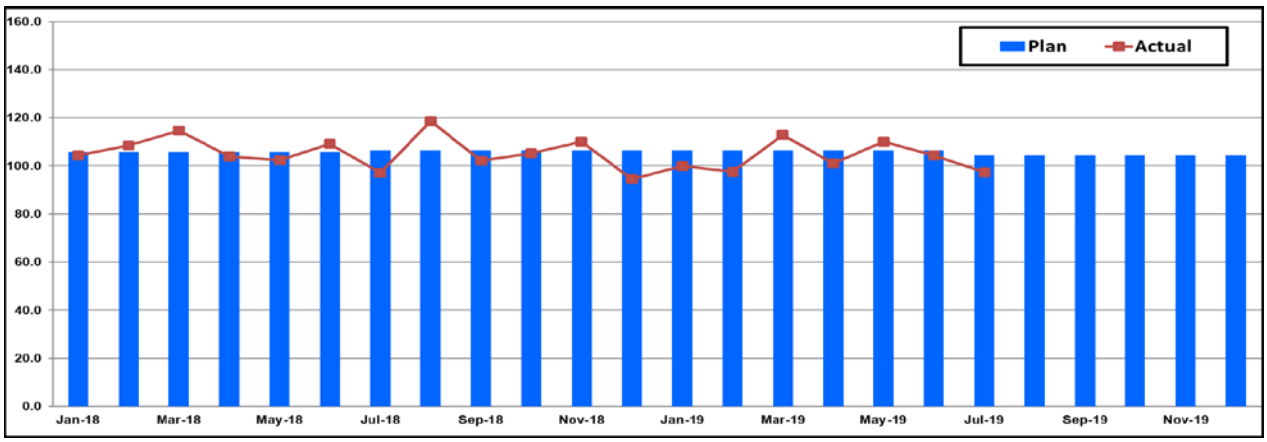
PROJECT ORGANIZATION AND STAFFING

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

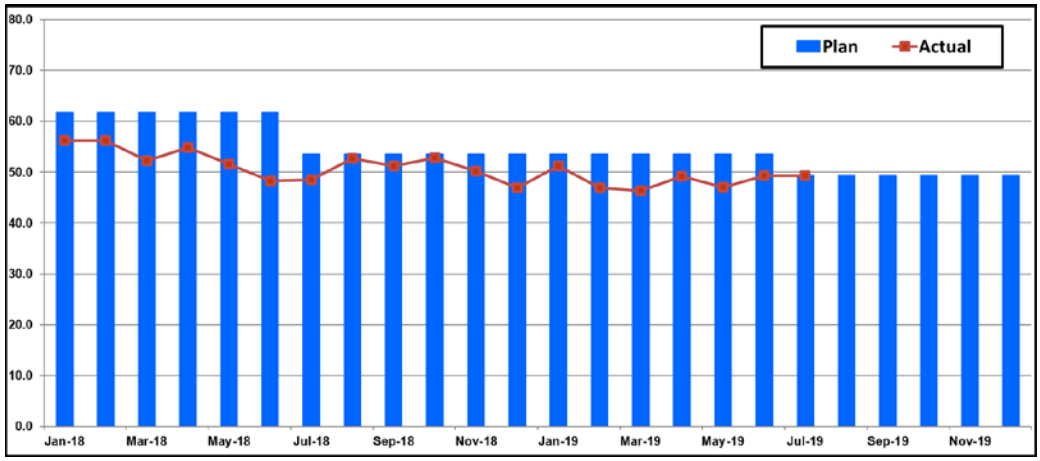


The overall FY19 Total Project Staffing Plan averages 106.5 Full Time Equivalent (FTEs) per month consisting of 53.5 for Metro Agency staff, 45.5 for Construction Management Support Services Consultant and 7.6 for Design and Engineering Support Services Consulting staff.

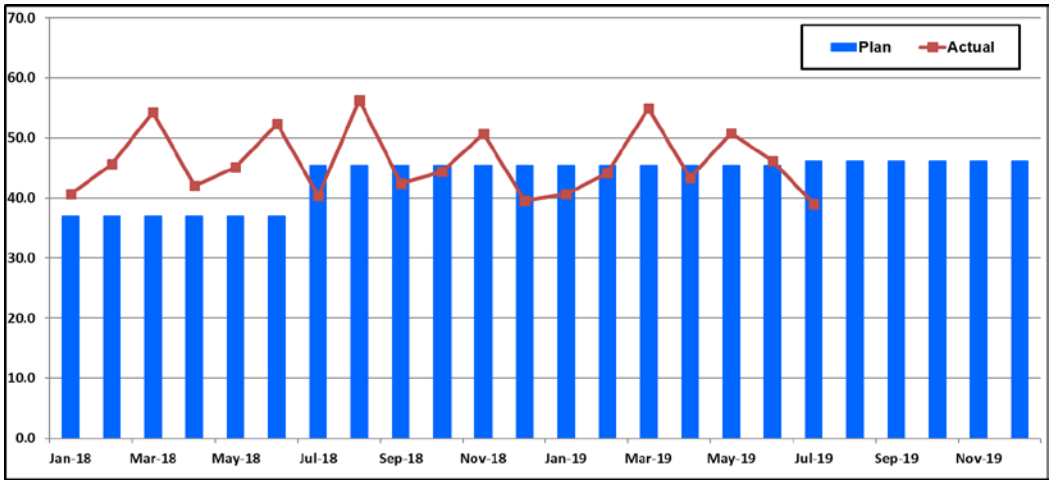
For July 2019, total project staffing were 97.4 FTEs for the month consisting of 49.3 FTEs for Metro's project administration staff, 39.0 FTEs for Construction Management Support Services Consultant and 9.1 FTEs for Design and Engineering Support Services Consulting staff.



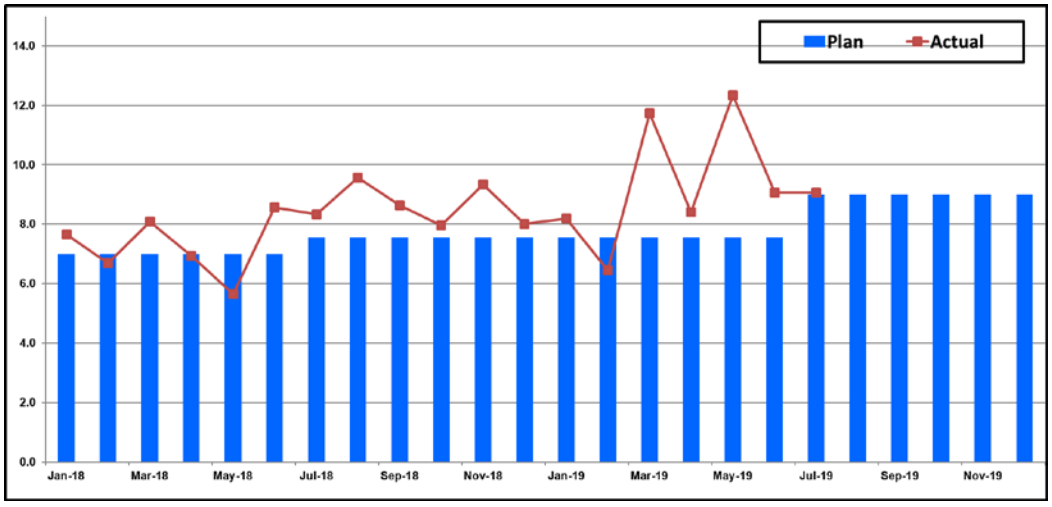
Metro Staff



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

- Metro is working on extending some temporary construction easements due to revised construction schedule.
- *Work requiring the last remaining parcel does not fall under WSCC's scope of work and will be constructed under a separate contract. Relocations for this parcel have been completed.*

QUALITY ASSURANCE

C0988 Crenshaw/LAX Transit Corridor Design Build

- WSCC issued five Non-Conformance Reports (NCR'S) during the month.
- Attended weekly Quality Team Meetings with WSCC Lead Quality personnel and City of Los Angeles Bureau of Contract Administration (ConAd).
- *Participated in Readiness Review Meeting for Architectural Concrete and UG3 Restoration.*
- Participated in Underground Structures Weekly Construction Performance, Systems Meeting and Technical Meetings.
- No Inspections scheduled for Metro's Independent Testing Lab (ITL).

ENVIRONMENTAL

C0988 Crenshaw/LAX Transit Corridor Design Build

- Noise and vibration spot checks continue to be conducted weekly at multiple sensitive locations and at locations of new activities along the project alignment.
- SWPPP inspections of all project areas are conducted weekly by WSCC and spot checks by Metro to observe site conditions and report on performance of stormwater protection Best Management Practices and overall housekeeping.
- *Conducted an EMS and Environmental Compliance Progress Meeting on 7/17/19 and 7/31/19.*
- *Contaminated soil hauling resumed at the Victoria Yard. The contractor appropriately profiled, managed and hauled the soil*.
- *Fugitive dust is a larger focus for inspections due to the warmer months. No violations were reported or witnessed.*

CONSTRUCTION RELATIONS

- Continued working with WSCC to minimize the impacts of lane and street closures along the Crenshaw/LAX alignment.
- Circulated public notice for project construction activities. The notices are distributed via-email, social media networks and hand delivered to key stakeholders.
- Continued coordination with WSCC to mitigate impacts to businesses and residents along the Crenshaw/LAX alignment.
- Ongoing coordination with WCSS and Metro Bus Operations to plan for bus detour routes to accommodate lane reductions and closures.
- Continued outreach to stakeholders in the LAX area regarding ongoing construction activities.
- Continued face to face outreach to key stakeholders and community organizations along the alignment.
- *Continued outreach for the UG3 (Hyde Park area) road restoration.*

CREATIVE SERVICES

- *Approved fabricator color proofs for porcelain enamel steel art panels. All color proofs for porcelain enamel steel art panels at stations have been approved for fabrication.*
- *Reviewed contractor qualifications for Glass Mosaic Tile Artwork Installation.*
- *Reviewed and provided comments on Shop Drawing Submittals for Station Signage for At-Grade Stations (Westchester/Veterans; Downtown Inglewood; Fairview Heights) and Underground Station (Leimert Park).*
- *Reviewed and provided comments on Signage Samples and Mock-ups.*

SAFETY AND SECURITY

- Conducted Monthly All Hands Safety and Security Meetings with WSCC to discuss narratives for Cal/OSHA ventilation for all three station boxes and tunnels, security /vandalism and ROW protection, track allocation, Teamwork and Partnering and Access and Egress.
- Monitored construction activities daily including weekends to ensure compliance with contract specifications.
- Participated in Safety Briefings/Safety Huddles at EXPO, MLK and Vernon Stations.
- Contract C0991 Hensel Phelps Project to date completed 518,946 work hours with 3 recordable injuries. Hensel Phelps and their subcontractors completed 14,113 work hours and zero (0) recordable injuries for the month of January 2019.
- Hensel Phelps submitted a Notice of Substantial Completion to Metro on January 30, 2019. They continued to work on punch list items.
- Total Days Away (DART) Injury Rate: Six (6) Days Away from Work (DART) Injuries is 0.1. The National Ave is 1.7.
- Project to Date – Total Days Away Rate (561 Days Away from Work) is 17.1. No National Published Rate.
- *Contract C0988 (WSCC) completed 111,547 work hours with one recordable injury for the month of July 2019. Total Project to Date work hours is 8,490,617 with a total of ninety-five (95) recordable incidents. The Project Recordable Rate is 2.23.*
  The Bureau of Labor Statistics (BLS) average recordable rate per 200,000 work hours is 2.5.

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.

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 (96th 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.
January 30, 2019	Substantial completion was achieved by the Southwestern Yard (Division 16) Contract C0991 Contractor, Hensel/Phelps/Herzog JV.

PROJECT COST STATUS – SOUTHWESTERN YARD

SCC CODE	DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		FORECAST VARIANCE
			PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
10	GUIDEWAYS	0	0	0	0	21,997	0	21,997	0	21,997	21,997
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	85,694,629	(180,219)	85,364,573	0	85,694,629	504,630
40	SITEWORK\SPECIAL CONDITIONS	35,932,000	0	38,273,000	0	40,009,941	291,779	37,445,751	0	40,009,941	1,736,941
50	SYSTEMS	25,784,616	0	32,991,000	0	34,392,804	237,378	32,985,042	0	34,392,804	1,401,804
	(10-50) CONSTRUCTION	147,263,451	0	156,453,999	0	160,119,371	348,938	155,817,363	0	160,119,371	3,665,372
60	RIGHT-OF-WAY	99,910,000	0	100,000,000	0	102,420,623	0	102,417,215	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	572,186	43,300,589	(643,478)	35,842,619	572,186	43,300,589	9,660,958
90	PROJECT CONTINGENCY	13,659,732	0	17,106,370	0	0	0	0	(572,186)	1,359,417	(15,746,953)
TOTAL		296,434,278	0	307,200,000	572,186	305,840,583	(294,540)	294,077,197	0	307,200,000	0

C0991 PAINT & BODY SHOP PROJECT										
DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		FORECAST VARIANCE
		PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
861301 DIV 22 PAINT & BODY SHOP	11,000,000	0	11,000,000	0	11,000,000	0	10,321,826	0	11,000,000	0

GRAND TOTAL	307,434,278	0	318,200,000	572,186	316,840,583	(294,540)	304,399,023	0	318,200,000	0

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH JUNE 28, 2019.

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.

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 2, 2019. The total commitments increased by $0.57 million to $316.84 million to date represents 99.57% of the current budget. The increase is for commitments associated with FIS adjustment to professional services.

Expenditures:
The expenditures are cumulative through August 2, 2019. The total expenditures decreased by $0.29 million to $304.40 million which represents 95.66% of the current budget. The decrease is for cost associated with design-build contract C0991 Division 16: Southwestern Yard and FIS adjustment to project administration, construction management support.