



Metro

Los Angeles County
Metropolitan Transportation Authority

One Gateway Plaza
Los Angeles, CA 90012-2952

213.922.2000 Tel
metro.net

May 20, 2021

TO: DISTRIBUTION

FROM: *for* SAMEH GHALY 
SR. EXECUTIVE OFFICER, PROJECT MANAGEMENT

SUBJECT: CRENSHAW/LAX TRANSIT PROJECT
APRIL 2021 MONTHLY PROJECT STATUS REPORT

Attached herewith is the Monthly Project Status Report for the Crenshaw/LAX Transit Project. This report contains the Los Angeles County Metropolitan Transportation Authority's (LACMTA) representation of the Crenshaw/LAX Transit Project status for the period ending April 30, 2021.

If you have any questions regarding this report or its supporting information, please contact Brittany Zhuang, Interim Director, Project Control at (213) 922-7354.

SG: ts

Enclosure

Crenshaw/LAX Transit Project



Metro®

CRENSHAW/LAX TRANSIT PROJECT

MONTHLY PROJECT STATUS REPORT

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

APRIL 2021

TABLE OF CONTENTS

	Page No.
Project Overview.....	1-6
Executive Summary	7-12
Project Update	
• Project Schedule	
Project Summary Schedule	13
Progress Summary	14
Planned vs. Actual Progress.....	14
Key Milestones Six-Month Look Ahead	15
Major Equipment Delivery Status	16
Critical Path	17
Project Schedule Contingency Drawdown.....	18
Risk Management Narrative	19
• Project Cost	
Project Cost Status & Analysis	20-21
Cost Contingency Drawdown and Analysis	22
Summary of Contract Modifications	23
Disadvantaged Business Enterprise (DBE).....	24
Project Labor Agreement.....	25
Financial/Grant	26
Project Staffing	27-28
Real Estate.....	29
Quality Assurance	29
Environmental	30
Construction and Community Relations	31
Creative Services	31
Safety and Security	32
Chronology of Events	33-34

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

April 2021

PROJECT OVERVIEW

Project Background

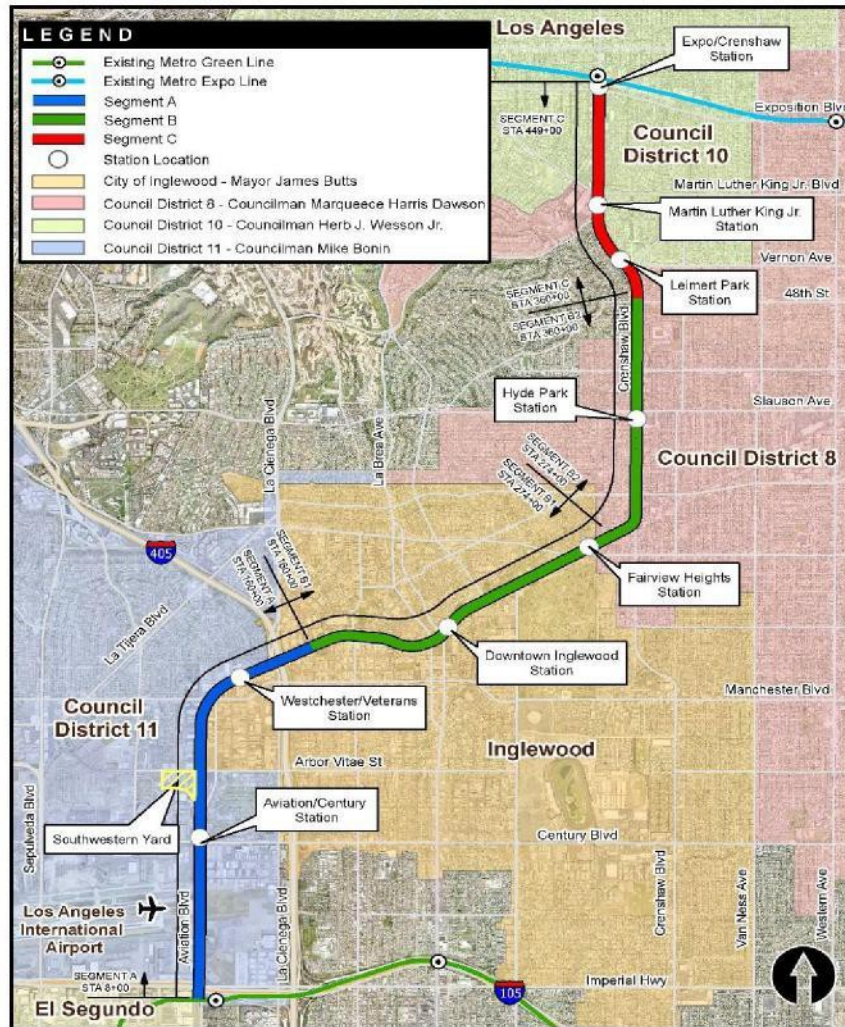
The Crenshaw/LAX Transit Project is a north/south light rail line that serves the cities of Los Angeles, Inglewood, Hawthorne and El Segundo as well as portions of unincorporated Los Angeles County. The alignment extends 8.5 miles, from the intersection of Crenshaw and Exposition Boulevards to a connection with the Metro Green Line south of the Aviation/LAX Station. The project provides major connections with the Los Angeles International Airport (LAX) as well as links to the C Line (Green), the E Line (Expo) 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 trackwork 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 Airport Metro Connector (AMC) project.

The alignment is comprised of a double-tracked rail line 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 duct bank infrastructure was built by Metro with the fiber replacement work and cut-over by FAA/LAWA. These duct banks contain fiber lines and power lines which belong to both LAWA and FAA. Since the track alignment is below grade at these crossings, the duct banks 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 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 light rail vehicles (LRT) yards, an Eastern Yard and a Southwestern Yard, are necessary. This contract constructed the Southwestern Yard which 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 complete and maintained by 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. Procurement completed and delivered to the project.

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. Procurement completed and delivered to the project.

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 two park-n-ride facilities. The scope of work includes all the necessary systems work including train control, traction power supply substations and distribution, overhead catenary, communications, and systems tie-in to the existing C Line (Green). The project delivery method for this contract was design-build utilizing a two-step best value procurement approach with submittal of qualification statements through an RFQ process, prequalification of qualified proposers followed by release of an RFP soliciting technical and price proposals with an option at Metro's discretion for Best and Final Offers (BAFO).

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 remaining six cars are for replacement of Metro's current fleet. The first

Option 1 P3010 car was delivered in May 2017. The final P3010 car (22nd car) for Crenshaw/LAX project was delivered in September 2017, completing the Option delivery for the Crenshaw Project. All twenty-two (22) Crenshaw cars are currently in revenue service on the C Line (Green) and A Line (Blue). In coordination with the mainline contractor, vehicle software field verification is done for the C Line (Green) tie-in, and Segment A, continued with Segment B1 and will follow for the remaining Segment C, as the areas become available for testing. An additional P3010 testing is identified for C line, that needs to be scheduled.

Rail Operations Center (ROC)

The existing functional operations at the ROC has 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 for Crenshaw/LAX Project.

ROC installation and testing was mostly completed in February 2020. SCADA software development is in final stages of coordination and completion pending completion of continued field testing. Metro has completed all System Integration Test Phase 2 (SIT-2) procedures and identified key personnel to manage and perform tests. Preparations are being made to start SIT-2 testing as soon as the CTS-Fiber backbone system is connected, tested by mainline contractor (Completed), relevant SIT-1 testing, and cross connects are complete by sub-system (including test reports). SIT-2 testing of completed systems, by location, could contractually start 45 days prior to SIT-1 scheduled completion and are being planned to start as location by location and subsystems prerequisites are completed. Coordination and planning weekly meeting are continuing by Metro Operations ROC team. Intrusion detection has been identified as the potential SIT-2 starting tests.

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 equipment has been manufactured and is stored locally until the Crenshaw/LAX Project stations are ready for installation to commence. UFS contractor and mainline contractor are continuing to coordinate the details required for preparation, access, and installation at each station. Field coordination and installation continued with the mainline contractor for the remaining stations. Installation of Ticket Vending Machines (TVM) and other fare gates, emergency swing gates and other fare collection equipment continued in all stations.

Program Management

The Walsh Shea Corridor Constructors (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. In addition, a Project Management Support Services (PMSS) consultant is

providing resources to supplement staff.

Project Schedule:

Metro issued in September 2018 a non-compensable unilateral change order (CO-223.1) to WSCC to extend their substantial completion milestone to December 11, 2019. Project continues to fall behind the dates reset in the non-compensable unilateral change order. There is still considerable work left to be completed by WSCC. This includes rework, prerequisite construction work to allow follow-on subcontractors to complete systems installation, local field acceptance tests and systems integration tests. Field issues are being addressed but continue to impact the schedule and any potential mitigation and recovery plans.

WSCC, in their March 2021 monthly schedule update, reflects a WSCC Substantial Completion forecast date of July 13, 2021. This Milestone date represents exclusion of activities that do not impact the completion of WSCC's System Integration Testing Phase 1 (SIT-1), such as street restoration, signage, and artwork. Metro is concerned that the current schedule forecast from WSCC continues to reflect slower than planned progress every month without effective mitigation efforts made by WSCC or their subcontractors. Metro is also concerned that WSCC is not applying enough needed resources and field force to complete the remaining prerequisite work including mechanical, electrical, plumbing including system installations and testing for timely completion. New issues are being identified as testing efforts continue.

Project Budget:

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 Westchester/Veterans as part of the baseline project. This Motion added \$135 million to the Life of Project (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 Standard Cost Code (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.

Due to the extension of the Project's Substantial Completion date to December 2020, the Metro Board of Directors action on May 28, 2020 increased the Life-of-Project Budget by \$90 million. The additional funding is required to provide funding for professional services that support the completion of the Project. The required support includes Metro staff and professional services consultants who provide various services to assist in the management and oversight of the Project.

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 to 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. The Crenshaw Project tie-in with the Metro Rail C Line (Green) was substantially completed and tested by August 2020. However, there are a few elements remaining to be finalized prior to the start of operation.

Metro's Project Team is coordinating progress with operations, mainline contractor, and ROC management team to ensure all requirements, including procedures, testing and test reports are in place to support upcoming System Integration Testing Phase 2 (SIT-2). Coordination weekly meetings are established to address and prepare for SIT-2 testing including test procedures, test plan, durations, and staffing requirements. Metro is planning to start SIT-2 and continuing to monitor progress of required pre-requisites

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 rail activation planning and scheduling efforts are underway. Metro Operations have completed Southwestern Yard (Division 16) rail activation and Metro Operations continues to provide support to the mainline contractor testing efforts as needed, including vehicles with operators for testing. Metro Management, Contractor and Operations have established bi-weekly coordination meetings to manage and support the Project testing.

EXECUTIVE SUMMARY

The Project has achieved 98.9 % completion based on earned value measurements for design and construction.

The following is an overview of current design and construction activities.

Design Status

Design - Build Contract C0988 (Mainline Contractor) –

Walsh-Shea Corridor Constructors (WSCC) continues design and engineering in support of construction, installation, testing and commissioning. The design/engineering support during construction is identified as a concern and potential risk in the project due to extensive repair, rework and field issues resolutions required (for more details see Key Concerns 3 and 4, affecting all areas of construction, finishes (cladding), electrical and mechanical installation, system's work and testing). WSCC has added design staff to support coordination and resolution of engineering issues including submittals, studies, re-design, NCR's, etc.

Construction Status

Design - Build Contract C0988 Mainline Contractor –

WSCC continues construction along all areas of the alignment. The four at-grade stations, underground structures (UG1, UG3 & UG4) and all six bridge superstructures including the aerial structure concrete placements are mostly completed and started acceptance process and continuing with finishes, systems installation, and testing. The three underground stations remain at various levels of completion with emphasis on electrical, mechanical, systems, finish work inside the stations, entrance structures and plaza finishes. WSCC is continuing with system's Local Field Acceptance Testing (LFAT), started Integrated LFAT (iLFAT), at various locations on the project. The WSCC commissioning agent continue the coordination and planning process for the underground structures, stations and aerial station mechanical (Emergency Ventilation Fans (EVF), Heating Ventilation and Air Conditioning (HVAC), Dampers, plumbing (Sump pumps, valves, Etc.) and electrical (Motor Control Center - MCC). The required start-up and commissioning procedures have been submitted, reviewed, and approved by Metro. WSCC/EEI commissioning agent is continuing day-by-day, start-up and functional testing of various mechanical, electrical, and plumbing including tunnel booster fans (TBF), ejection pumps, HVAC, EVF and various fans at the underground stations including UG1, UG3 and UG4.

Trackwork and OCS/OCR are mostly completed, including the rail damage repair and MSE wall-202 repairs. Issues with the track plinth gap proposed repair was accepted and repair work completed at UG3 and started at UG4. Above ground segments are energized and under WSCC track allocation control. Wayside train control installation is mostly complete along the alignment including in the underground stations and tunnels and are being connected to the Rail Operation Center (ROC). Remaining system installation, conduits and wiring mostly complete in the stations for traction power (completed), train control (completed) and various communication and continuing with systems LFAT's and SIT-1. WSCC and Metro continue to coordinate with utility companies (power, water, gas, and communication) at various locations including temporary power removal (completed).

- Finish work continues at all stations including tiles, ceiling panels, cladding, artwork, lighting, landscaping, end devices (Speakers, cameras, smoke detectors, etc.) and plaza work. Ceiling panels are continuing to be installed, but completion is pending verification of remaining above the ceiling seismic bracing (mostly complete), and the remaining items verification checklist. Speakers test results are being evaluated and may result in more rework, which are impacting the final perforated metal ceiling panels completion.
- All TPSS sites and Auxiliary power sites are energized.
- Elevator installations, including roofing are complete at all stations. Commissioning verification checklist is complete and continuing with elevators LFAT. Issues with stainless steel finishes is under evaluation.
- Testing of equipment and electrical systems is mostly complete including distributing permanent power to MCC's to various parts of the stations and equipment and turned over to commissioning agent. Issues are being identified and addressed during testing.
- All booster fan installations are mostly complete with wiring and termination in the underground structures including permanent distributed power availability, and control wiring. Start-up and functional testing of tunnel booster fans (TBF) at UG1, UG3 and UG4 has been performed and continuing with the air balance and movement testing. UG3 TBF air flow issues are under evaluation and potential corrective measures are being considered.
- Underground emergency ventilation fans (EVF) installation is mostly complete and pretesting and local control start-up is continuing. WSCC completed controls conduits, wiring and termination at Communication Interface Cabinets (CIC) at all underground stations and started the verification process and LFAT. Trouble shooting of issues and verification of wiring are continuing and preparations are being made to start testing from CIC (LFAT). LFAT started at Leimert Park station fans.
- Start-up and functional testing continues on completed fans and pumps, etc.
- Sump pumps and other related equipment are replaced, restored and are being testing. List of issues are being tracked and addressed as testing continues.
- Radio system installation including radiax, coaxial cable, antenna's and radio equipment installation is mostly complete in the underground stations and other underground structures. LFAT and System wide testing of radio system is continuing with signal testing, adjustments and rework as needed.
- P3010 contractor, completed onboard vehicle verification testing as planned for Segment A2 including Arbor Vitae street crossing and continuing train testing on segment B1.
- The fiber optic innerduct and fiber optic for CTS are installed and tested along the alignment. Fujitsu equipment have been energized tested and connected to fibers at C Line (Green) and the E Line (Expo). Metro is coordinating efforts with WSCC and LKC to verify that the cross-connect jumpers and devices connection of various systems to CTS in preparation for Metro's SIT-2 pre-testing.
- Coordination meeting at the ROC, Metro Operations and SIT-2 testing are being conducted bi-weekly in preparation to start SIT-2.

Cost and Schedule Summary

Metro Board of Directors action in May 2020 increased the Life-of-Project Budget by \$90 million.

The increase is required due to the forecast delay of Substantial Completion to December 2020. The additional funding is required to provide funding for professional services that support the completion of the Project. Detailed cost information is provided later in this report.

WSCC in their March 2021 monthly schedule update reflects a WSCC Substantial Completion forecast date of July 13, 2021. Metro is concerned that the current schedule forecast from WSCC, continues to slip and reflect slower than planned progress every month without effective mitigation efforts made by WSCC. Potential mitigation proposed by WSCC such as increased work crews, double shift and overtime, has not been fully implemented by WSCC. There are still considerable activities left to be completed by WSCC. This includes rework, prerequisite construction work to allow follow-on subcontractors to complete systems installation, local field acceptance tests and systems integration tests. This includes rework, prerequisite construction work to allow follow-on subcontractors to complete systems installation, local field acceptance tests and systems integration tests.

WSCC Schedule Metrics – Mainline Contractor

	Original Contract Date	Time Extension (CD)	Current Contract Schedule	Forecast (Contractor)	Variance CD
NTP	09/10/13				
Substantial Completion including SIT-1	09/08/18	459	12/11/19	7/13/21	-580 days

To date, the design and construction changes for WSCC related to base scope represent approximately 14.4% of the contract value. Metro has issued credit change orders which has reduced the percentage of changes per contract value. Metro anticipates future changes initiated by Metro will mostly be “credit” changes.

Key Management Concerns

No. 1: WSCC Construction Schedule Progress

Status/Action

WSCC has submitted a March 2021 Monthly Schedule Update which reflects a WSCC Substantial Completion (SIT-1) forecast date of July 13, 2021. Metro is concerned that the current schedule forecast from WSCC, continues to slip due to field issues and reflect slower than planned progress every month without effective mitigation efforts made by WSCC. Potential mitigation proposed by WSCC such as increased work crews, double shift and overtime, has not been fully implemented by WSCC or their subcontractors. There are still work activities and pre-requisites to testing left to be completed by WSCC. This includes rework and prerequisite construction work to allow follow-on subcontractors to complete systems work, local field acceptance tests and systems integration tests.

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

Status/Action

Metro monthly monitors and reports on the drawdown of contingency. In April 2021, there was a replenishment of \$349,698 which increased the remaining contingency to \$26 million. The remaining contingency is 1.24% of total project current forecast and 25.39% of total project cost-to-go.

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

Status/Action

There are engineering/design support activities during construction and testing (test procedures, test reports, submittals, re-submittals, requests for information, studies, NCR's, power coordination studies and deviation requests including field issues) that are impacting the field work progress. The impact is creating potential delays and inefficiencies to construction, systems work, testing, start-up, commissioning and LFAT. A full time HNTB (Engineer of Record) engineer is assigned to the Project to help manage and expedite issue resolution. New and unresolved existing issues including failed tests requiring investigation, trouble shooting, design support and resolution are continuing to affect progress in all areas of the project schedule including systems communication (Public Address, EMP orientation, Fire Alarm, Etc.), mechanical (Fans, Pumps, etc.) and electrical systems.

No. 4: WSCC Required Rework and Impact to Follow-on Subcontractors

Status/Action

Several areas of work along the alignment could not be completed due to damaged, incomplete, and missing components. This has impacted and slowed down progress on various stations systems work such as public address, radio, fire alarm systems and testing. There are still new issues identified, which are impacting planned follow-on work by subcontractors in the underground stations. WSCC's prerequisite work needs to be completed expeditiously to allow follow-on subcontractor work to be expedited to minimize effect of slow schedule progress. Other items such as issues with EMP screens (Resolved), MSE Wall-202L (Completed and site restored), delayed cladding procurement (Addressed and being deliver, but have quality issues), plinth gap (Being repaired), etc. are continuing to effect schedule progress. Impact of these issues have already caused and continue to cause schedule slippage and inefficiencies and potentially delays to tunneling activities and potentially the P3010 on-board equipment verification completion schedule. Other issues are being identified as testing continues.

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

Status/Action

Multiple areas of work along the alignment require close coordination with 3rd parties. Metro is working with WSCC to resolve any issues as quickly as possible. Issues related to permanent power energization have been resolved and utility company equipment has been energized. Permanent distributed power is mostly completed, and temporary power is removed from all underground stations.

No. 6: COVID-19 Impact on progress of the Project

Status/Action

Construction continues as an essential service under guidelines set forth by the City of Los Angeles. Safety protocols are continued to be required and monitored. Preventive measures have been implemented and impact of COVID-19 on project progress is being monitored by WSCC and Metro. WSCC continues to submit notifications of potential impacts to work. Each impact claim will be assessed consistent with Contract terms. Project experienced a surge in Dec-2020 and Jan-2021 with over 30 cases reported. Number of COVID-19 cases are trending down, with only few isolated cases reported in March 2021 and April 2021.

No. 7: MSE Wall 202L Settlement and Movement

Status/Action

Construction activities in the area of MSE Wall 202L movement were suspended pending detail analysis of the cause of movement and mitigation measures. The train control and vehicle testing were impacted by MSE Wall-202L movement which impacted any vehicle movement near the wall. The repair work (jet grouting) was completed in February 2021 and the restoration of AC-cap, ballast, track work, train control and OCS registration were also completed in March 2021. Train testing was allowed to resume in March 2021. WSCC is continuing to monitor the wall for any changes or movement (No issues reported).

No. 8: EMP Screen Display Omissions by WSCC

Status/Action

Several key components of EMP screen display of emergency hatch alarm and ventilation scenarios were omitted by WSCC. Metro and WSCC have worked together and have resolved all the safety concerns. Coordination efforts and development of required EMP screens are resolved expeditiously by redlining the drawings. Loading of the program is complete and EMP testing is continuing. Metro and WSCC/B&C have resolved EMP screen issues and proceeding with testing at this time. Other issues with EMP are being identified, recorded, and being addressed in the field.

No. 9: LFAT and SIT-1 Progress Rate of Testing

Status/Action

Remaining required WSCC testing effort including LFAT, Commissioning and SIT-1 is very critical and considered significant part of remaining scope of work. The actual production rate of successful testing does not support WSCC's Monthly Schedule Update or the weekly projections. Remaining required WSCC testing effort including electrical, mechanical, communication LFAT, iLFAT, Commissioning and SIT-1 are very critical. The actual production rate of successful testing does not support WSCC's Monthly Schedule Update. If the current rate of testing failures, cancelation, and retesting continues, WSCC will not meet their planned completion dates. The actual production rate of testing needs to increase significantly to support WSCC's Monthly Schedule Update and their projected production plan. There is no contingency plan in place for issues and required retesting if needed.

PROJECT CONSTRUCTION PHOTOS



AVIATION STATION – Station signs at the Aviation Station decorative fencing.



HINDRY STATION – Placing sealer caulking for the Hindry Station Columns (facing southwest).



PARK MESA – installing irrigation lines along the northbound median of Crenshaw Blvd. between 48th St. and 46th St.



LA BREA STATION –Excavating for the trees at the La Brea Plaza (facing west).



MLK STATION – Installing street light poles along the east side of the far south section of the plaza.

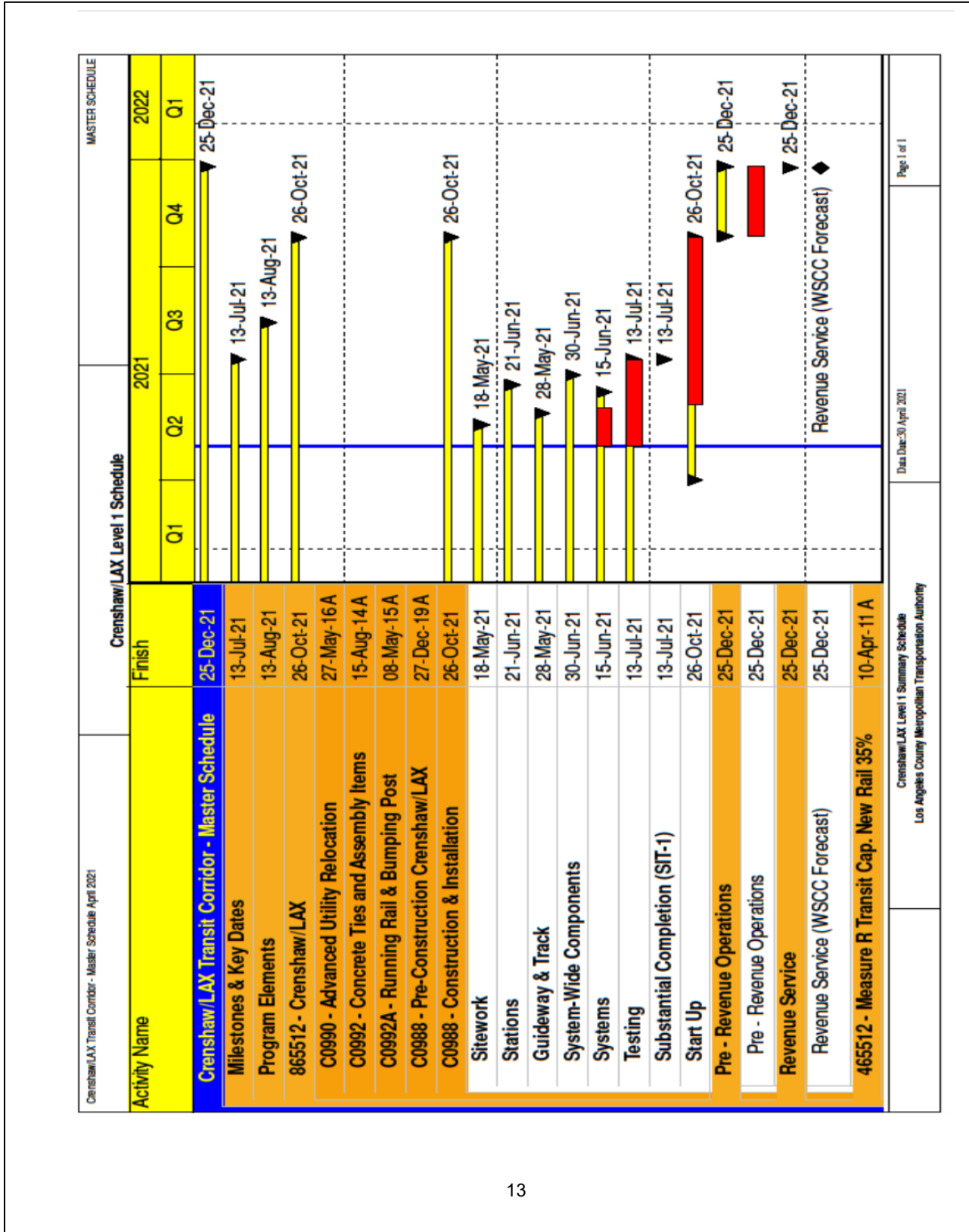


EXPO STATION – Continue assembling the Supervisor Room at the south end of the platform

PROJECT UPDATE

PROJECT SCHEDULE

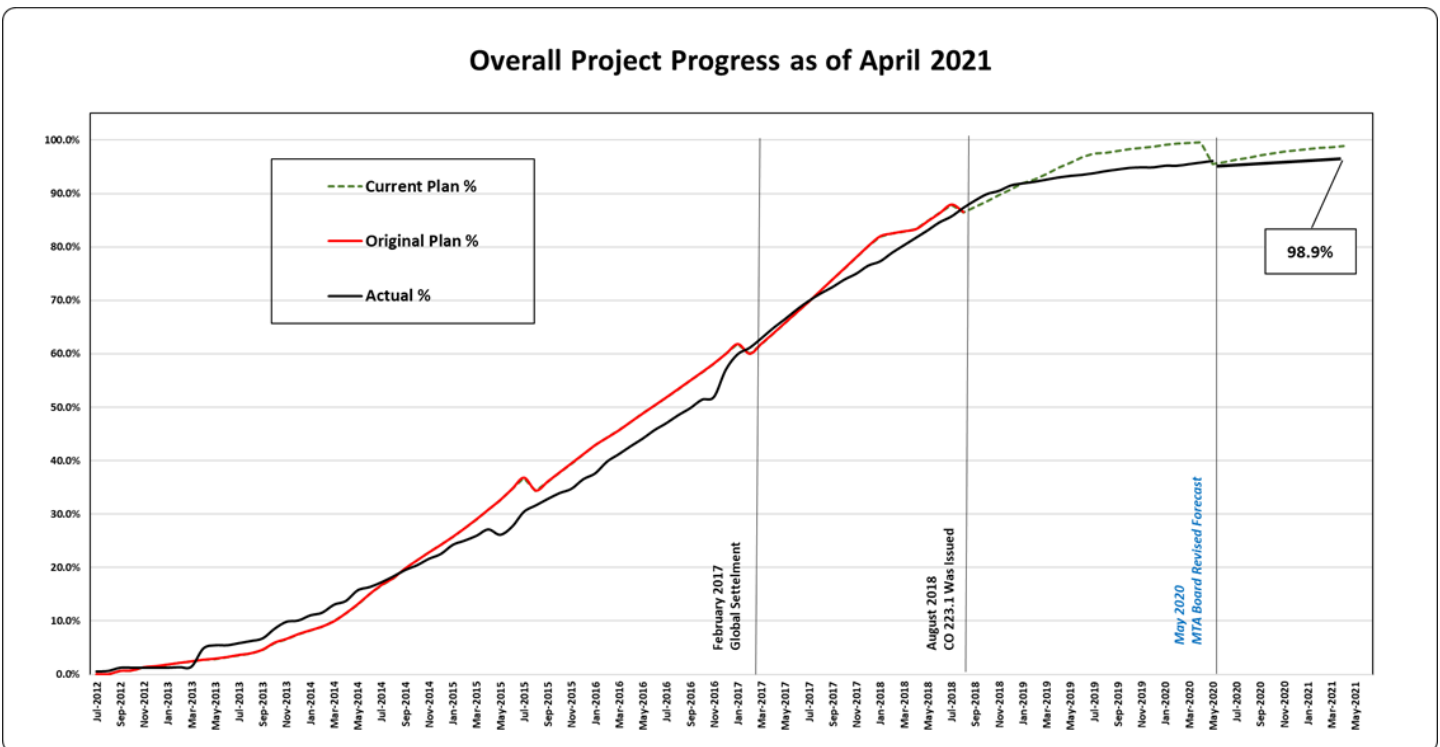
Project Summary Schedule – reflects (Forecast)



Progress Summary

	Status	Change from Last Period	Comment
Current Revenue Service:	5/24/21	NA	
Forecast Revenue Service:	12/25/21	-36 days	Forecast by Contractor
Final Design Progress:			
Contract C0988	99.8%	0.0%	Design Completed. Design Services During Construction Continues
Contract C0990	100%	None	Design Completed
Contract C0991	100%	None	Design Completed
Contract C0992	100%	None	Design Completed
Contract C0992A	100%	None	Design Completed
Construction Contracts Progress:			
Contract C0988	98.6%	0.1%	Behind Schedule (Adjusted)
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 Months Look-Ahead

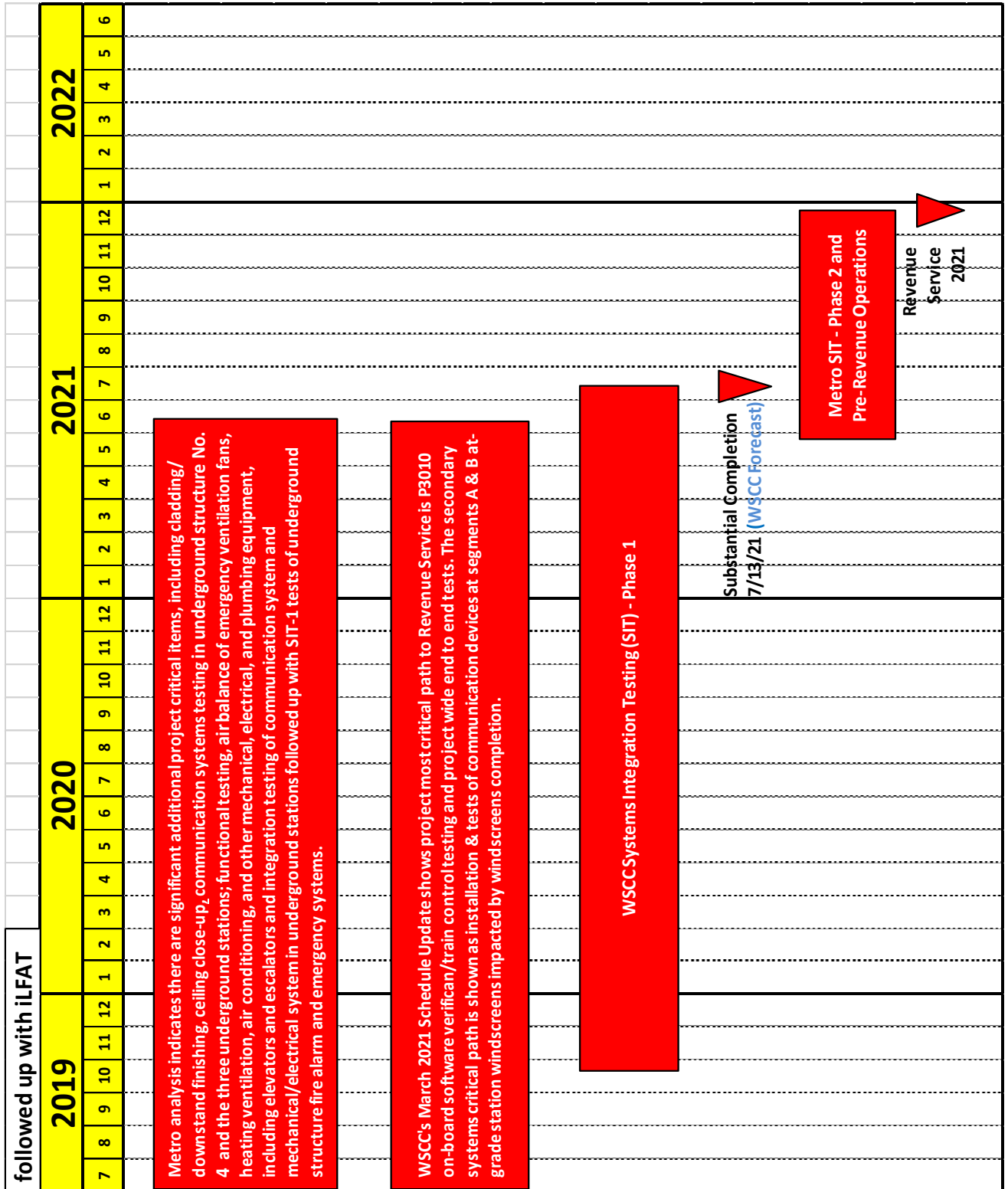
	Milestone Date	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21
Century/Aviation Station Equipment Start up *	4/29/21A	⬡					
Ventilation Equipment - Leimert Park Station Installation/Start up/LFAT *	05/11/21		⬡				
Ventilation Equipment - Expo. Station Installation/Start up/LFAT *	05/28/21		⬡				
Ventilation Equipment - MLK Station Installation/Start up/LFAT *	05/24/21		⬡				
Metro Start SIT-2 (45 days overlap with SIT-1)	05/30/21		◆				
Signage Installation - Wayside	06/03/21			⬡			
Radio Room Ready LFAT/SFAT - UG1, UG3, UG4	06/09/21			⬡			
Artwork Installation - All Stations	06/14/21			⬡			
Resolve all FLS tracking list	06/21/21			⬡			
Signage Installation - All Stations	07/02/21				⬡		
WSCC Systems Substantial Completion (SIT-1)	07/13/21				⬡		
WSCC Substantial Completion (Non-Systems)	07/13/21				⬡		

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

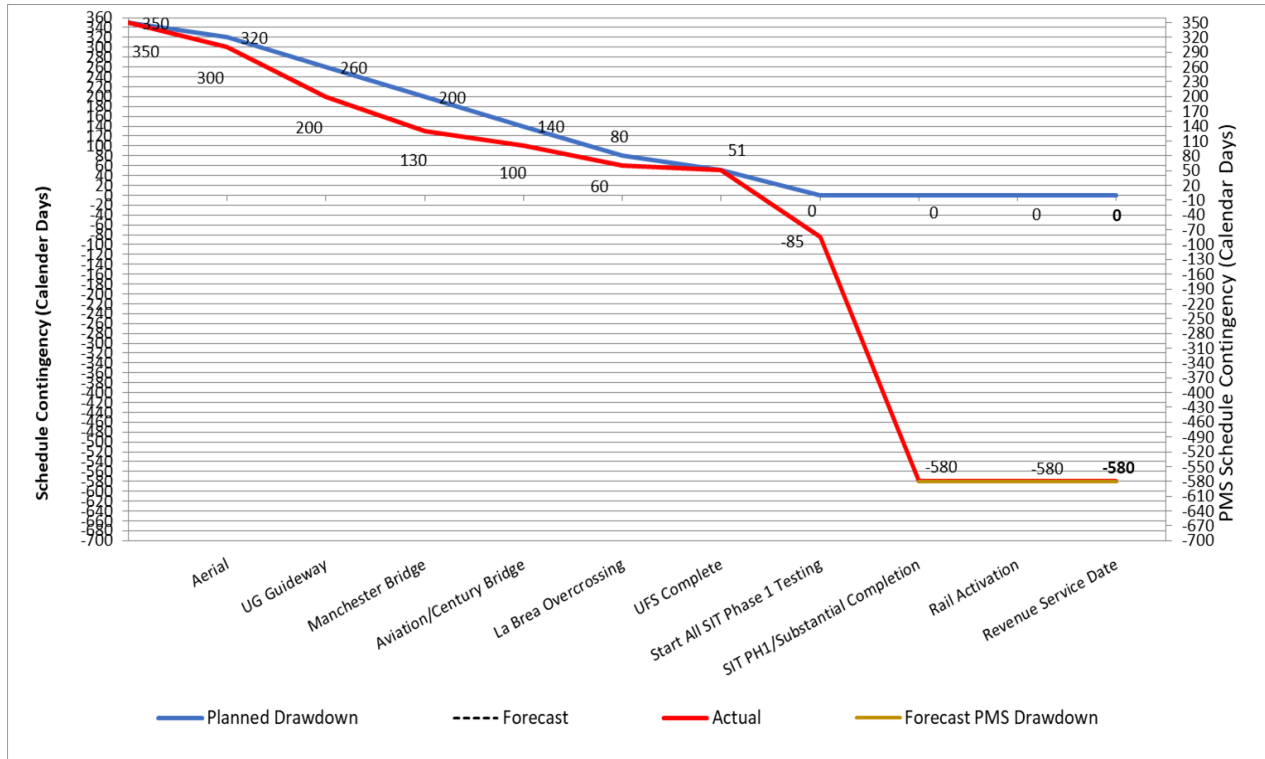
Major Equipment Delivery Status

<i>Metro Supplied Equipment</i>			
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)	In Progress (Prior to RSD)
<i>Mainline Contractor Equipment Delivery Requirements</i>			
Activity Name	Early Finish	Need Date	
Fabricate, Signage Century Station*	April 2021 A	September 2019	
Fabricate Supervisory Kiosk @ Expo Station*	April 2021 A	September 2019	
Fabricate, Signage Expo Station *	May 2021	September 2019	
Fabricate, Signage MLK Station *	May 2021	September 2019	
Fabricate, Signage LPK Station *	May 2021	September 2019	
Fabricate Station Finish Cladding MLK Station*	May 2021	September 2019	
Fabricate Station Finish Cladding LPK Station*	May 2021	September 2019	
Fabricate Station Finish Cladding Expo Station*	May 2021	September 2019	
Spare Parts (List is Being Developed	TBD	December 2020	
*Requires schedule mitigation by Mainline Contractor			
Expo: Exposition, MLK: Martin Luther King; LPK; Leimert Park			

CRITICAL PATH - reflects "Current WSCC Forecast"



Project Schedule Contingency Drawdown



Metro issued in August 2018 a non-compensable unilateral change order (223.1) to WSCC to extend their substantial completion milestone to December 11, 2019. Thus, performance measurement is now tracked against this date.

RISK MANAGEMENT NARRATIVE

Summary of Risks

Within this reporting period no risk was closed. No new risk was added. There is a total of eleven (11) risks remaining to be managed in the next reporting period.

Of the eleven (11) risks, seven (7) are scored as high (10 to 20 risk rating), three (3) as medium (4 to 9 risk rating), and one (1) as low (Less than 4 risk rating).

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

Risk ID	SCC	Risk Description	Risk Rating
359	80	Extended Overhead or productivity loss claims exposure not covered by cost impacts in individual risks.	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 Substantial Completion.	16
362	50	Schedule activities that are critical to completion: OCR/OCS (Done), TPSS and Auxiliary Power Energization (Done), Mechanical tests including HVAC/Emergency Fans/Tunnel Booster Fans/Plumbing etc. (Ongoing), Train Control wiring/testing (Ongoing, mostly done), Communication system testing, Speaker issues are under evaluation, Fire Alarm/mechanical interface relay and trouble shooting.	16
379	20	LFAT, Procedures and Testing Schedule and Rate of Testing Progress	15
380	20	SIT-1, Procedures and Testing Schedule and Rate of Testing Progress	15
373	20	WSSC Damaged, Repair, Rework and Incomplete work including tunnel conduits (Done), Track plate/plinths (Ongoing), Communication Fire Alarm System (Ongoing).	13
377	20	COVID-19 (Coronavirus) – Project Impact	10

Newly Identified Risks: There are no new items added to the risk register.

Closed Risks: No risk is closed in this period.

Risk Score Changes: No risk score is changed this period.

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		FORECAST VARIANCE
			PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
10	GUIDEWAYS	471,335,000	-	417,788,306	-	416,241,886	21,733	414,818,999	-	416,241,887	(1,546,419)
20	STATIONS	153,906,000	-	308,067,041	-	306,205,648	944,397	301,493,383	-	307,846,170	(220,870)
30	SUPPORT FACILITIES SOUTHWEST YARD	66,673,000	-	66,919,206	-	66,715,509	-	66,146,382	-	66,896,347	(22,860)
40	SITWORK/SPECIAL CONDITIONS	235,576,000	-	404,953,359	293,000	404,717,614	1,504,243	382,358,687	293,000	406,696,218	1,742,859
50	SYSTEMS	125,132,000	-	175,073,936	-	174,672,289	448,296	162,241,888	-	175,419,366	345,430
CONSTRUCTION SUBTOTAL (10-50)		1,052,622,000	-	1,372,801,849	293,000	1,368,552,946	2,918,669	1,327,059,339	293,000	1,373,099,989	298,140
60	RIGHT-OF-WAY	132,294,000	-	137,726,295	-	139,884,181	(1,500)	137,730,684	-	139,884,281	2,157,987
70	LRT VEHICLES	87,780,000	-	83,571,544	-	82,158,074	-	81,837,755	-	83,571,544	-
80	PROFESSIONAL SERVICES	273,147,000	-	501,844,251	380,271	471,841,201	2,528,710	446,909,929	(191,729)	499,879,132	(1,965,119)
SUBTOTAL (10-80)		1,545,843,000	-	2,095,943,938	673,271	2,062,436,402	5,445,879	1,993,537,708	101,271	2,096,434,946	491,007
90	UNALLOCATED CONTINGENCY	177,157,000	450,969	26,507,031	-	-	14	14	349,698	26,016,023	(491,007)
100	FINANCE CHARGES	-	-	-	-	-	-	-	-	-	-
TOTAL PROJECT 865512 (10-90)		1,723,000,000	450,969	2,122,450,969	673,271	2,062,436,402	5,445,893	1,993,537,722	450,969	2,122,450,969	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	(450,969)	20,022,881	-	20,022,881	-	20,022,881	(450,969)	20,022,881	-
TOTAL PROJECTS 405512 & 465512 (ENV / PLAN'G)		26,000,000	(450,969)	25,549,031	-	25,549,031	-	25,549,031	(450,969)	25,549,031	-
TOTAL PROJECTS 405512, 465512 & 865512		1,749,000,000	(0)	2,148,000,000	673,271	2,087,985,433	5,445,893	2,019,086,753	0	2,148,000,000	0

1. Expenditures are Cumulative through April 30, 2021.

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 but paid tax so as not to incur any late fees.

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

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:

In May 2020, the Board amended the LOP budget by \$90 million, increasing the Total LOP Current Budget to \$2,148 million. This action was necessary due to the extension of the Project's Substantial Completion date to December 2020 and revenue service to commence in 2021. The LOP budget was amended to provide additional funding for professional services that are required to support the completion of the Project. The required support includes Metro staff and professional services consultants who provide services to assist in the management and oversight of the Project.

Commitments:

Commitments increased by \$0.7 million this period to \$2,088.0 million which represents 97.2% of the current budget. The total increase is related to professional services.

Expenditures:

Expenditures increased by \$5.4 million this period to \$2,019.1 million which represents 94.0% of the current budget. The total increase is for costs associated with design-build Contract C0988 Crenshaw/LAX Transit Corridor and professional services.

Current Forecast

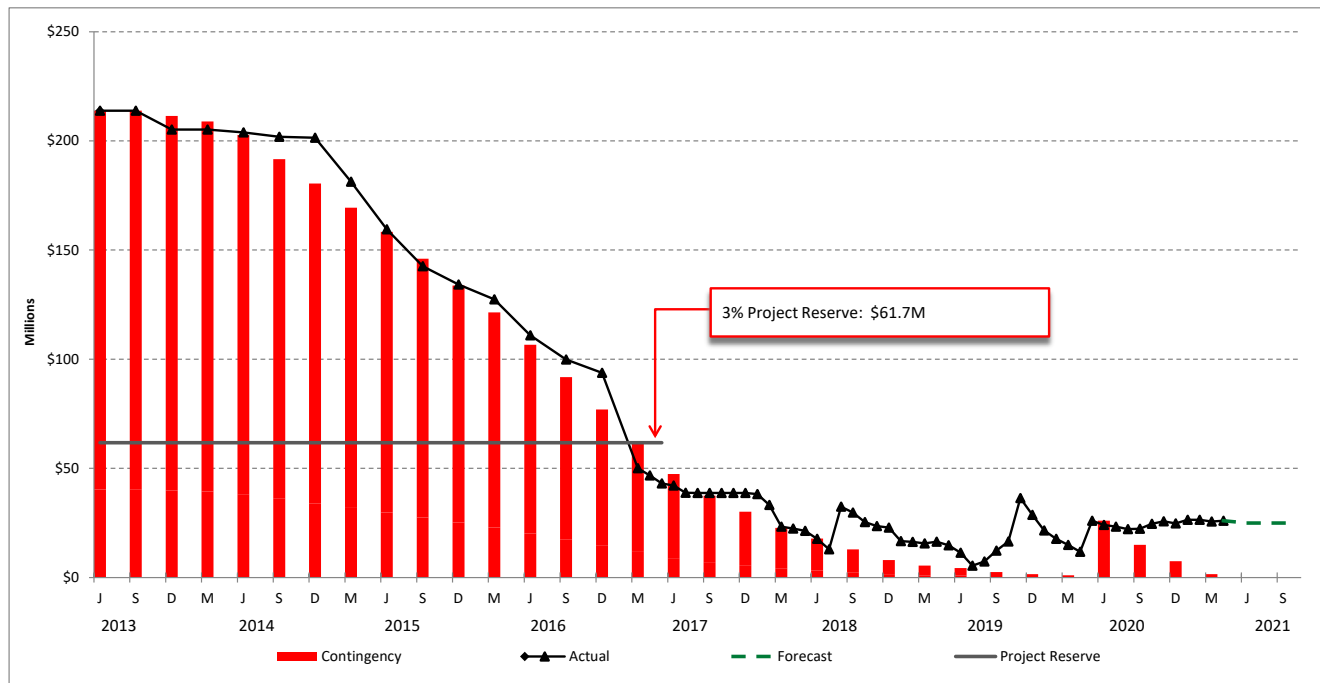
The total current forecast remains the same as the total current budget.

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
	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
405556 SYSTEMWIDE TRANSIT PLANNING	-	320,035	-	320,035	-	320,035	-	320,035	-
210090/93 FARE GATE PROJECT	-	4,891,226	-	4,891,226	29,800	4,285,426	-	4,891,226	-
210152 CRENSHAW/LAX BUS TRANSFER FACILITY	-	2,200,000	-	2,200,000	-	2,146,101	-	2,200,000	-
460303 AIRPORT METRO CONNECTOR	-	37,914,465	-	37,360,028	-	37,360,028	-	37,914,465	-
500013 C/LAX LAWA SCOPE OF WORK	-	581,918	-	581,918	-	551,292	-	581,918	-
405522 HIGHWAY PLANNING	-	105,457,668	-	105,457,668	-	105,402,636	-	105,457,668	-
TOTAL	-	151,365,312	-	150,810,875	29,800	150,065,518	-	151,365,312	-

Cost Contingency Drawdown



Cost Contingency Drawdown Analysis

In May 2020, the Board amended the LOP budget by \$90 million, increasing the Total LOP Current Budget to \$2,148 million. The increase included \$14.2 million for additional unallocated contingency. The drawdown plan is correlated to anticipate risk trends and measures drawdown moving forward.

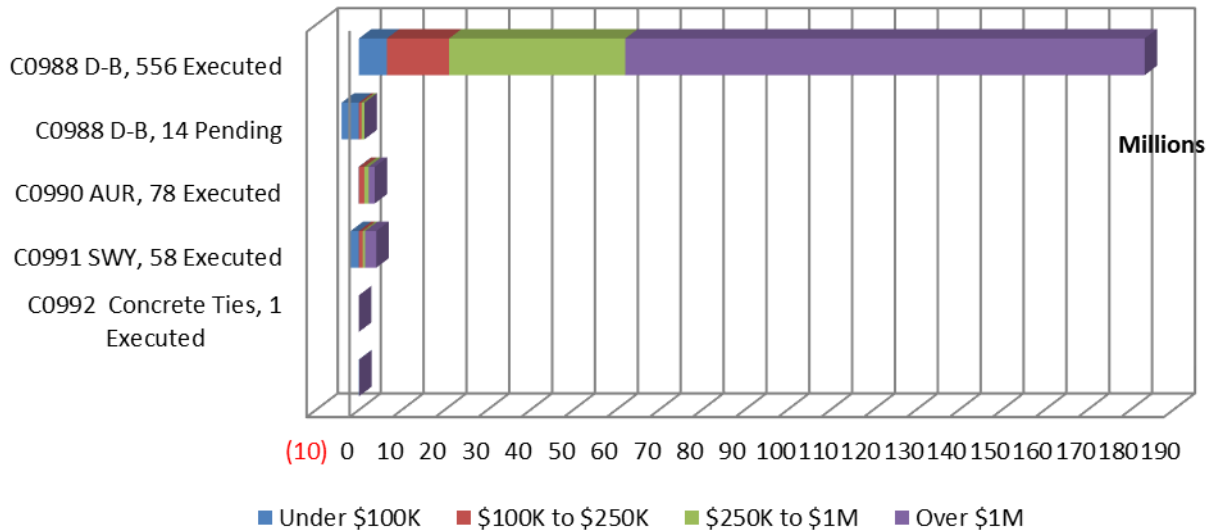
Included in the project contingency drawdown is a 3% project reserve threshold. The Board is to be notified when it becomes necessary to drawdown contingency below the project reserve line to cover project costs. This notification request was adopted by the Metro Board of Directors in September 2012. In February 2017, the project contingency drawdown curve went below the 3% project reserve level and the Board was notified.

This month, \$349,698 was replenished to contingency. The remaining total project contingency (allocated and unallocated) is \$26,016,023.

PROJECT COST CONTINGENCY (through 30-Apr-2021)					
UNITS IN DOLLARS					
	Original Contingency	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)
Unallocated Contingency	173,500,000	(147,833,676)	349,698	(147,483,978)	26,016,023
Allocated Contingency	40,366,792	(40,366,792)	-	(40,366,792)	-
Total Contingency	213,866,792	(188,200,468)	349,698	(187,850,769)	26,016,023

SUMMARY OF CONTRACT MODIFICATIONS

Contract Modifications (MODs) by Cost Level



	C0988	C0990	C0991	C0992	Total
	556 Executed	78 Executed	58 Executed	1 Executed	
Under \$100K	\$ 2,777,146	\$ (70,251)	\$ (1,918,854)	\$ 81,738	\$ 869,779
\$100k to \$250K	\$ 15,097,832	\$ 1,280,184	\$ 875,202	\$ -	\$ 17,253,218
\$250K to \$1M	\$ 41,122,558	\$ 984,662	\$ 590,334	\$ -	\$ 42,697,554
Over \$1M	\$ 121,191,340	\$ 1,417,202	\$ 2,590,000	\$ -	\$ 125,198,542
Total Contract MODs	\$ 180,188,876	\$ 3,611,797	\$ 2,136,682	\$ 81,738	\$ 186,019,093
Contract Award Amount	\$ 1,272,632,356	\$ 7,827,500	\$ 172,312,695	\$ 2,161,297	\$ 1,454,933,848
% of Contract MODs	14.16%	46.14%	1.24%	3.78%	12.79%

Five hundred and fifty-six (556) changes with a total value of \$180.1 million have been executed since award of Contract C0988. There are an additional ten (10) changes with a total credit value of \$2.1 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 March 2021)

- **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. **\$25,799,791 (20.00%)**
- **Current DBE Participation – Total amount** paid to date to DBEs divided by the amount paid to date to Prime. **\$30,289,562 (21.16%)**

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 **\$306,262,165 (23.34%)**
- **Current DBE Participation - Total** amount paid to date to DBEs divided by the amount paid to date to Prime (\$1,241,901,799) **\$352,336,611 (28.37%)**

Three Hundred Fifty-Five (355) Construction subcontractors have been identified to-date

PROJECT LABOR AGREEMENTS (PLA)

Contract C0988 Crenshaw/LAX Transit Corridor Design-Build

(Reported Data as of March 2021)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| • Targeted Worker Goal – Construction work to be performed by residents from Economically Disadvantaged Area of LA County | 40.00% |
| | 59.71% |
| • Targeted Worker Current Attainment | |
| • Apprentice Worker Goal – Construction work to be performed by Apprentices | 20.00% |
| • Apprentice Worker Current Attainment | 23.80% |
| • Disadvantaged Worker Goal – Construction work to be performed by Disadvantaged Workers whose primary place of residence is within LA County | 10.00% |
| • Disadvantaged Worker Current Attainment | 10.39% |

Crenshaw/LAX Transit Project Monthly Project Status Report

April 2021

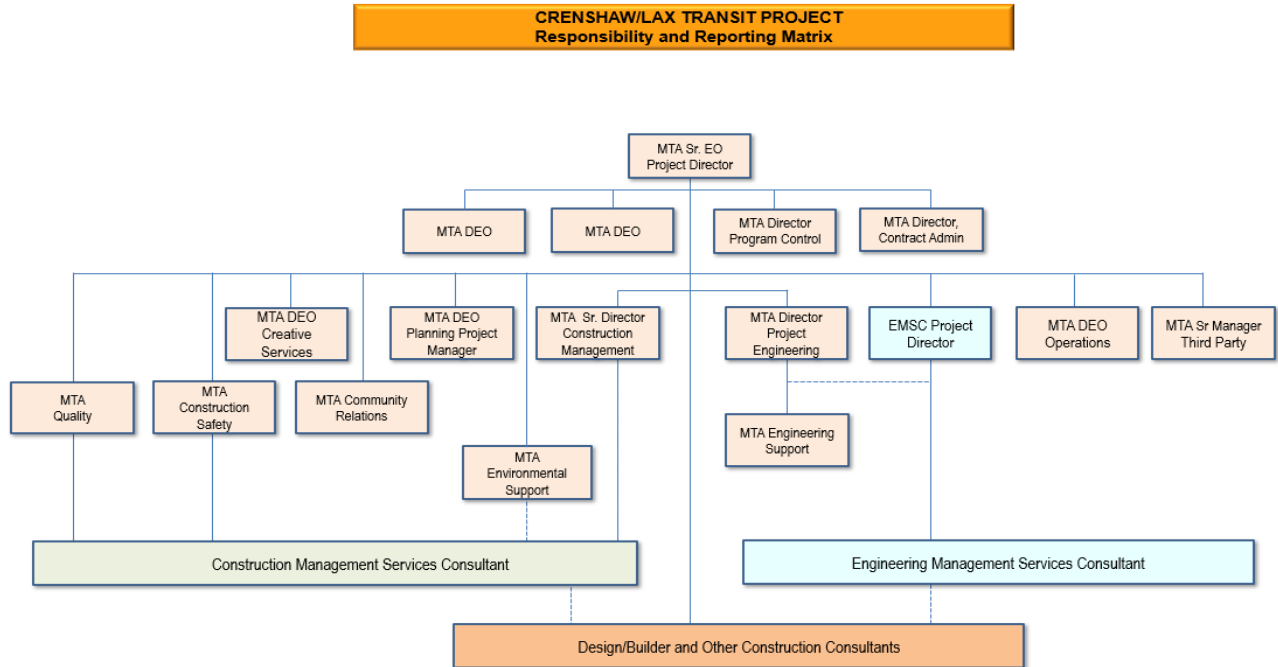
FINANCIAL/GRANTS

CRENSHAW \$M		STATUS OF FUNDS BY SOURCE								
APRIL 2021		(A)	(B)	(C)	(D)	(D/B)	(E)	(E/B)	(F)	(F/B)
SOURCE	ORIGINAL BUDGET	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS \$	%	EXPENDITURES \$	%	BILLED TO FUNDING SOURCE \$	%	
	FEDERAL - CMAQ	68.200	137.100	104.000	130.628	95%	129.508	94%	104.000	76%
FEDERAL - SECTION 5309 BUS CAPITAL	8.600	8.563	8.563	8.563	100%	8.563	100%	8.563	100%	
FEDERAL - REGIONAL STP	20.000	103.116	103.116	102.174	99%	100.481	97%	91.243	88%	
FEDERAL - ALTERNATIVE ANALYSIS	1.200	1.200	1.200	1.200	100%	1.200	100%	1.200	100%	
FEDERAL - TIGER II	-	13.904	13.904	13.904	100%	13.904	100%	13.904	100%	
STATE REGIONAL IMPROVEMENT PROG	36.522	36.600	36.600	36.600	100%	36.600	100%	36.600	100%	
STATE PPM	0.178	0.178	0.178	0.178	100%	0.178	100%	0.178	100%	
STATE PROP 1B PTMISEA	201.200	128.950	128.950	128.950	100%	128.950	100%	128.950	100%	
STATE PROP 1 B LOCAL PARTNERSHIP PROGRAM	-	49.529	49.529	49.529	100%	49.529	100%	49.529	100%	
MEASURE R - TIFIA LOAN	545.900	545.900	545.900	545.900	100%	545.900	100%	545.900	100%	
MEASURE R 35%	661.100	512.445	512.445	500.695	98%	491.509	96%	432.527	84%	
CITY CONTRIBUTION	52.400	101.707	101.707	60.707	60%	60.707	60%	60.707	60%	
GENERAL FUNDS		54.300	54.300	54.300	100%	54.300	100%	54.300	100%	
MISC. REVENUE		1.700	1.700	1.700	100%					
PROPOSITION C 25% HIGHWAY	148.900	392.758	392.758	392.907	100%	392.907	100%	392.907	100%	
PROPOSITION C 40% DISCRETIONARY	-	0.000	0.000	-	-	-	0%	-	0%	
PROPOSITION A 35% RAIL CAPITAL	4.800	4.850	4.850	4.850	100%	4.850	100%	4.850	100%	
MEASURE M		55.200	55.200	55.200	0%					
TOTAL	1,749.000	2,148.000	2,114.900	2,087.985	97%	2,019.086	94%	1,925.358	90%	

NOTES:
1 EXPENDITURES ARE CUMULATIVE THROUGH APRIL 30, 2021
2 TOTAL NEW LOP APPROVED IN MAY 2020 IS \$2,148M.
3 ORIGINAL BUDGET BASED ON BOARD APPROVED OCTOBER 2011 FUNDING/EXPENDITURE PLAN.
4 EXPENDITURES EXCLUDE \$6.6 MILLION FOR STATE BOARD OF EQUALIZATION DECISION TO TAX LRT VEHICLE DELIVERIES SINCE AUGUST 2016 (METRO APPEALING DECISION BUT PAID TAXES TO NOT INCLUDE LATE FEES).

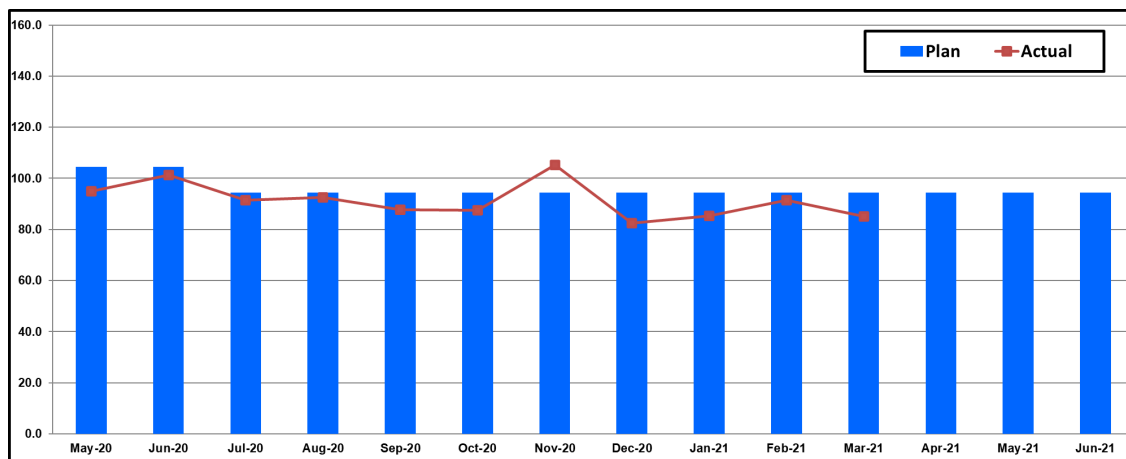
PROJECT ORGANIZATION AND STAFFING

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

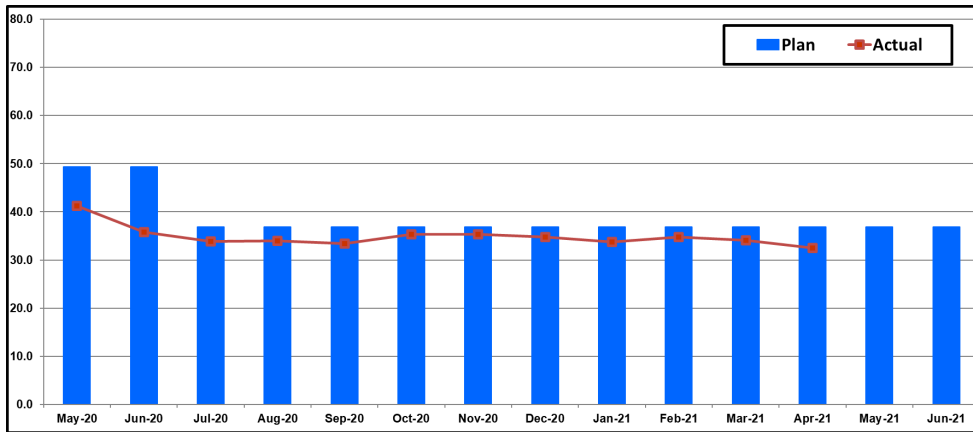


The project staffing charts have been updated with a revised FY21 staffing plan. The overall FY21 Total Project Staffing Plan averages 94.5 Full Time Equivalent (FTEs) per month consisting of 36.9 for Metro Agency staff, 46.3 for Construction Management Support Services Consultant and 11.3 for Design and Engineering Support Services Consulting staff.

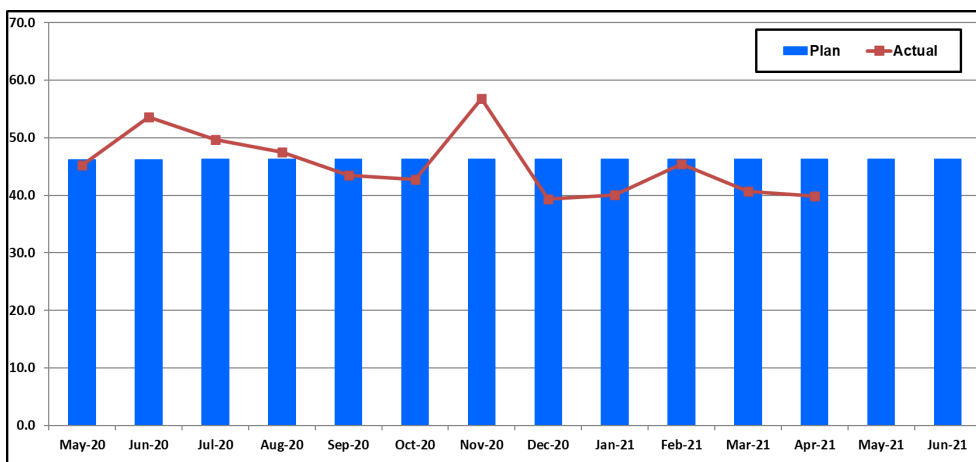
For April 2021, total project staffing were 82.4 FTEs for the month consisting of 32.6 FTEs for Metro’s project administration staff, 39.9 FTEs for Construction Management Support Services Consultant and 10.0 FTEs for Design and Engineering Support Services Consulting staff.



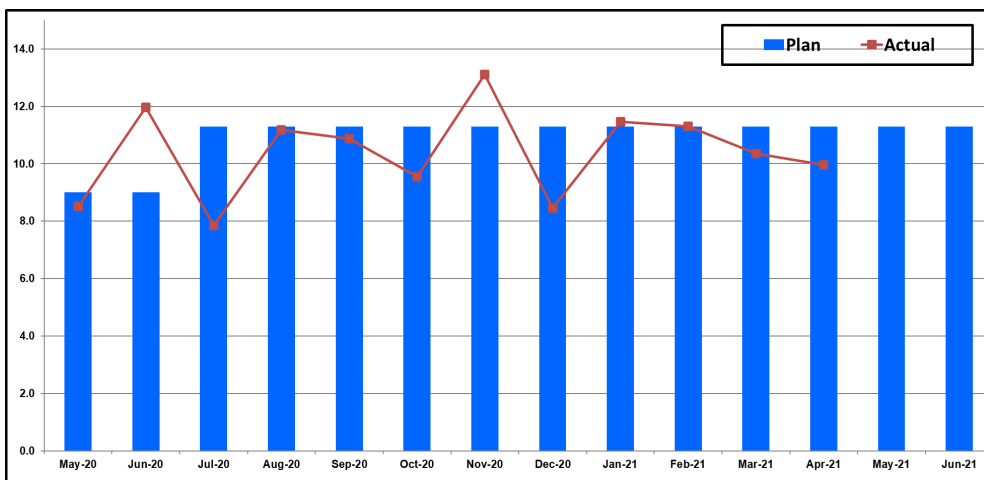
Metro Staff



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 has obtained Right-of-Entry (ROE) agreements for all properties requiring access due to revised construction schedule.
- There is 1 active condemnation.
- There are 3 active relocation cases with final relocation claims pending.
- Metro is working on initiating process for Street Vacations / Dedications.

QUALITY ASSURANCE

- Attended weekly Quality Team Meetings with WSCC Lead Quality personnel.
- Obtained weekly update for items related to City of Los Angeles Bureau of Contract Administration (ConAd).
- WSCC Quality issued one (1) Nonconformance Report (NCR) during this period.
- No new CWP reviews were conducted during this month.
- No new Metro Readiness Review meeting discussions were conducted during this month.
- Metro Quality participated in Internal Project Review Weekly Meetings.
- Metro Quality reviewed procedures and participated in project closeout meetings.
- Metro Quality started reviewing Quality Action Request (QAR) responses from WSCC Quality.
- Metro's Independent Testing Lab (ITL) was not scheduled to perform verification inspections/testing during this month.

ENVIRONMENTAL STATUS

- 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 were 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.
- No fugitive dust complaints were received during the reporting period.
- EMS and Environmental Compliance Progress meetings were held during this reporting period on 4/08/21 and 4/22/21.
- There were no qualifying rain events during this reporting period.
- There were no spot check nighttime noise monitoring performed by Metro during this reporting period due to decreased nighttime work

CONSTRUCTION/COMMUNITY RELATIONS

- Continued working with WSCC to minimize the impacts of full street and land closures along the Crenshaw/LAX Transit Project.
- Circulated bilingual public notice for project construction activities. The notices were distributed via-email, social media platforms, and hand delivered to stakeholders, and phone calls were made to stakeholders directly impacted by construction activities.
- Continued coordinating with WSCC to mitigate impacts to businesses and residents along the Crenshaw/LAX Transit Project.
- Ongoing coordination with WSCC and Metro Bus Operations to plan for bus detour routes to accommodate lane reductions and closures required to implement construction activities.
- Continued outreach to area stakeholders including the LAX area regarding ongoing construction activities, mitigation measures and train testing.
- Continued outreach to key stakeholders and community organizations via-phone calls, emails, and virtual briefings.
- Planning and organizing for upcoming virtual community construction update meetings and presentations.
- Ongoing virtual presentations to key stakeholder groups including a meeting with Phil Washington and Key Stakeholders.
- Ongoing coordination and partnership with first responders and city staff to address issues with homeless encampments, traffic plans and street closures.

CREATIVE SERVICES

- Participated in weekly Art Program and Signage coordination meetings with DB Contractor.
- Provided responses to multiple RFI, shop drawings, mock-up submittals and installation photos.
- Completed fabrication inspections for porcelain enamel steel artworks.
- Completed on site artwork installation inspections for glass mosaics and porcelain enamel steel artworks.

SAFETY AND SECURITY

- Conducted Monthly All Hands Safety & Security meeting with WSCC on 04/29/2021 and the following topics were discussed- Health, Safety and Security Staffing plan update, COVID- 19 reporting procedures and protocols, UG4 Ventilation, Energization/Start - Up/Back of House/HVAC, Track Allocation, and safety walk of MLK was performed.
- Participated in WSCC's daily briefings regarding lessons learned, participated in the weekly Monday Safety huddles/Safety briefings at EXPO, MLK and VERNON stations including, weekly progress/scheduled meetings where we discussed safety related issues.
- Participated in the 10:00 am Monday Internal Project Review conference call with Sameh Ghaly.
- Participated in the weekly owners 9:00 am Tuesday scheduled progress meetings.
- Participated in the weekly scheduled 7:00 am and 8:00 am Wednesday corporate safety conference call to update the safety team on safety issues and current jobsite updates.
- Monitored underground stations and alignment, participated in the weekly Monday, Wednesday, and Friday safety walks with WSCC Underground Safety Manager surveying construction activities daily including weekends to ensure compliance with contract specifications.
- 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 12.2. (No National Published Rate).
- Contract C0988 (WSCC) completed 83,878.96 work hours with (0) recordable/Days Away from Work injury for the month of April 2021. Total Project to Date work hours is 10,875,166.52 with a total of one hundred and two (102) recordable incidents. The Project Recordable Rate is 1.9
- The Bureau of Labor Statistics (BLS) average recordable rate per 200,000 work hours is 2.4.

Appendix A

CHRONOLOGY OF EVENTS

November 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 (96 th St. Station).
June 29, 2015	Issued Notice to Proceed to Hensel Phelps/Herzog JV, Contract C0991 Division 16: Southwestern Yard.
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.
May 28, 2020	The Board amended the Life-of-Project budget by \$90 million for a new total of \$2,148 million. The Project Schedule was revised to reflect a 2021 revenue service date.