Los Angeles County Metropolitan Transportation Authority One Gateway Plaza Los Angeles, CA 90012-2952

213.922.2000 Tel metro.net

January 25, 2023

Metro

TO: DISTRIBUTION FROM: SAMEH GHALY SR. EXECUTIVE OFFICER/PROJECT MANAGEMENT

SUBJECT: CRENSHAW/LAX TRANSIT PROJECT DECEMBER 2022 QUARTERLY PROJECT STATUS REPORT

Attached herewith is the 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 December 2022.

If you have any questions regarding this report or its supporting information, please contact Brittany Zhuang, Director, Project Control at (213) 424-7512.

SG: ts

Crenshaw/LAX Transit Project QUARTERLY PROJECT STATUS REPORT

DECEMBER 2022



CRENSHAW/LAX TRANSIT PROJECT

QUARTERLY 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).

DECEMBER 2022

TABLE OF CONTENTS

	Page No
PROJECT OVERVIEW EXECUTIVE SUMMARY PROJECT UPDATE	
PROJECT SCHEDULE	
Project Summary Schedule Progress Summary	
PLANNED VS. ACTUAL PROGRESS	13
Key Milestones Six-Month Look Ahead Major Equipment Delivery Status	
CRITICAL PATH PROJECT SCHEDULE CONTINGENCY DRAWDOWN	
RISK MANAGEMENT NARRATIVE	17
PROJECT COST	
Project Cost Status & Analysis Cost Contingency Drawdown and Analysis	
SUMMARY OF CONTRACT MODIFICATIONS	21
DISADVANTAGED BUSINESS ENTERPRISE (DBE)	22
PROJECT LABOR AGREEMENT (PLA) FINANCIAL/GRANT	
Project Staffing	25-26
REAL ESTATE	27
QUALITY ASSURANCE	27
ENVIRONMENTAL	27
CONSTRUCTION AND COMMUNITY RELATIONS	28
CREATIVE SERVICES	28
SAFETY AND SECURITY	
Construction Contracts	
Contract C1217 CLAX Construction Punch-Out Work	30
Contract C1221 K-Line Paving and Improvements	31
CHRONOLOGY OF EVENTS	32-34

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 as part of the LAX/Metro Transit Center Station. 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 instreet, 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 alignment consists of three Segments A, B and C:

- Segment A stretches from south at C Line (Green), underground structure 1(UG1), aerial station at Century/Aviation to at grade Westchester/Veteran station including maintenance and vehicle storage facility.
- Segment B includes 3 at grade stations (Downtown Inglewood, Fairview Heights and Hyde Park) and underground structure 3 (UG3) to 48th street portal.
- Segment C includes the remaining north portion of the project from underground portal structure 4 (UG4), three underground stations Leimert Park, Martin Luther King and Exposition.

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 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 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.

<u>Contract C1217 Crenshaw/LAX Construction Punch-Out Work (funded with Metro Project 869512)</u> Metro added a contract (not funded with the LOP \$2,148M budget) for completing punch out work along the K-Line alignment that includes left turn gates at Crenshaw Blvd., Radio Fiber redundant system for underground structures and station, palm tree trimming close to the track, station signs, 6" waterline, map cases, 24" waterline, and step-up transformer replacement

Design-Build Contract C0988 Crenshaw/LAX Transit Corridor

This is the largest project contract that 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 systems work including train control, traction power supply substations and distribution, overhead catenary/contact rail, 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 the 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 includes 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 final P3010 car (22nd car) for Crenshaw/LAX project. All twenty-two (22) Crenshaw cars. KinkiSharyo International, LLC of Light Rail Vehicle Contract P3010 completed the onboard vehicle verification testing for K-Line revenue service.

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 Transit Project. ROC installation and testing were completed in February 2020. Metro has completed SCADA System Integration Test Phase 2 (SIT-2) tests. Metro Operations completed Pre-revenue Operations full simulation and K-Line started Revenue Service and opened to the public on October 7, 2022.

Fare Collection

The Universal Fare Collection System (UFCS) contractor Cubic and mainline contractor WSCC have completed installation work at all locations. Fare gates, swing gates, and ticket vending machines (TVMs) installation are complete including final testing SIT-2 verification of the Fare collection system from ROC and the system was activated during Revenue Service.

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 are not limited to, engineering, risk management, environmental, community relations, 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. The project continues to fall behind the dates reset in the non-compensable unilateral change order. WSCC in their final monthly schedule update in June 2022, reflects a WSCC Substantial Completion date of June 17, 2022, which Metro issued the certification of project substantial completion. All remaining open items are tracked and part of the project's final acceptance.

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 atgrade 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 the uncommitted fiscal year 2014 funding and \$55 million from the City of Los Angeles. Metro reached an 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, 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 oversite 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 communication, community leadership councils have been formed which represent geographic-based constituent groups along the Project.

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 (K Line) tie-in with the Metro Rail C Line (Green) was completed and tested.

Metro's Project Team is monitoring and coordinating any deficiencies identified during revenue service with operations, mainline contractor, and ROC management team. System Integration Testing Phase 2 (SIT-2) of SDADA and non-SCADA points for all systems are complete.

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 Revenue Readiness Plan (RRP) and critical path scheduling efforts are complete.

Metro Operations has completed Southwestern Yard (Division 16) rail activation and the mainline Crenshaw Project (K Line) alignment. Metro Management, Operations, WSCC Contractor, and California Public Utilities Commission (CPUC) are addressing any open issues as needed. The FTA/PMOC have completed the project "Readiness for Service" review process as per Oversight Procedure 54 (OP54) in collaboration with the Metro team. Metro operations has completed their readiness and started the K-Line passenger service on October 7th, 2022.

EXECUTIVE SUMMARY

The Project remains at achieved 99.98% 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)

The engineering support during construction is complete. WSCC continues to support the coordination and resolution of engineering issues including submittals, NCR's, and as-builts.

Construction Status

Design - Build Contract C0988 Mainline Contractor

WSCC continues working on the punch list and open items along the alignment which are being tracked in BIM-360. WSCC and Metro continue to coordinate with other agencies as needed. The remaining open items are listed and monitored, tracked, and planned to be resolved prior to the project final acceptance. Metro continues to track a project scorecard for all open items that are also being discussed during management meetings between Metro and WSCC. Progress on the installation and testing is proceeding as follows:

All open items are added to BIM-360 with priority for tracking and resolution. Weekly scorecards for the project are discussed during management meetings and summarized in Final Acceptance letter.

As o	As of 12/28/22								
1	Pre- Punchlist WALKS	Complete							
2	ALL BIM360 Items	48							
3	Submittals Required for FA	28							
4	LFAT, ILFAT, SIT-1 TESTS	Complete							
5	FLS ITEMS	Complete							
6	BIM360 TRACK ITEMS	6							
7	CPUC ITEMS	Complete							
8	Training, O&M Manuals, Redlines	1 Training, 6,755 As Builts							
9	Spare Parts	Complete							

Metro continues to address all the CPUC open items with only four (4) non safety critical items remaining to complete.

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 Schedule Metrics –	Mainline	Contractor
-------------------------	----------	------------

	Original Time Contract Extension Date (CD)		Current Contract Schedule	Actual (Contractor)	Variance (CD)
NTP	09/10/13				
Substantial Completion including SIT-1	09/08/18	459	12/11/19	6/17//22	-919

To date, the design and construction changes for WSCC related to base scope represent approximately 15% of the contract value which includes 4% funded by other Metro projects.

Key Management Concerns

No. 1: WSCC Construction Schedule Progress

Status/Action

WSCC has submitted their final Schedule for July 2022, which reflects Substantial Completion (SIT-1) date of June 17, 2022. There were discrepancies and open items (BIM 360) left to be completed by WSCC or their subcontractors and inspected by Metro prior to final acceptance. The schedule delays and impacts are being addressed as part of the Request for Equitable Adjustment (REA-2).

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 December 2022, there was a contingency drawdown of \$1.05 million which decreased the remaining contingency to \$3.7 million. The remaining contingency is 0.2% of the total project current forecast and 12% the of total project cost-to-go. Credit changes are being addressed concurrently with other changes

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

Status/Action

There are engineering support activities during construction and testing such as test reports, submittals, re-submittals, requests for information (RFI), Non-Compliance Report (NCR's), Fire Life Safety (FLS) issues, including new field issues that have impacted the field work and testing progress. All remaining open items are expected to be completed by project final acceptance.

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. The schedule delays and impacts are being addressed as part of the Request for Equitable Adjustment (REA-2).

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 Party Agencies. The permanent power energization issues have been resolved, utility company equipment has been energized, permanent distributed power is complete and temporary power is removed from all locations. This item is resolved.

No. 6: COVID-19 Impact on the 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 the impact of Coronavirus (COVID-19) on project progress is being monitored by WSCC and Metro. This item is being addressed as part of the REA-2.

No. 7: MSE Wall 202L Settlement and Movement

Status/Action

Construction activities around the Mechanically Stabilized Embarkment (MSE) Wall 202L movement were suspended pending a detailed analysis of the cause of movement and mitigation measures which were completed and train testing was allowed to resume in March 2021. This item is resolved.

No. 8: Emergency Management Panel (EMP) 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. This item is resolved.

No. 9: Progress Rate of Testing for Local Factory Acceptance and System Integration

Status/Action

The remaining required WSCC testing effort including LFAT, Commissioning and SIT-1 were critical and considered a significant part of the required scope of work. The actual production rate of successful testing did not support WSCC's Monthly Schedule Updates or the weekly projections. This item is resolved

No. 10: OCS balance weight anchor stainless steel rope damage and fraying

Status/Action

During the field inspection and joint walk between Metro and WSCC it was discovered that Overhead Catenary System (OCS) balance weight anchor ropes were damaged at various degrees. WSCC/LKC and their specialty subcontractors identified the cause and have developed a potentially permanent solution that was approved by HNTP (Engineer of Record) and accepted by Metro engineering. LKC has replaced the ropes and completed the implementation of the final solution. This item is resolved.

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

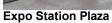
December 2022

PROJECT CONSTRUCTION PHOTOS



Downtown Inglewood Station







Hyde Park Station



MLK Station Plaza



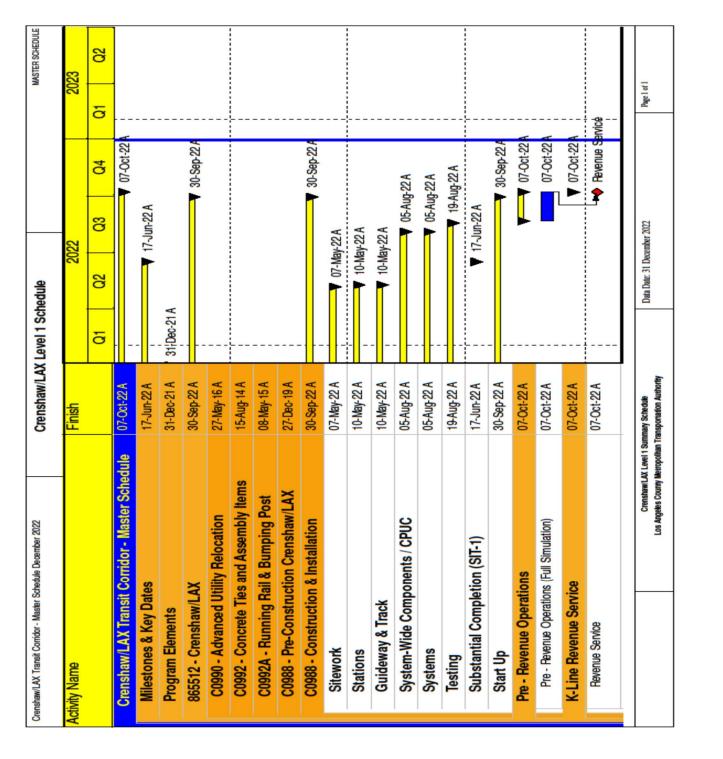
Leimert Park Station Plaza



Fairview Heights Station

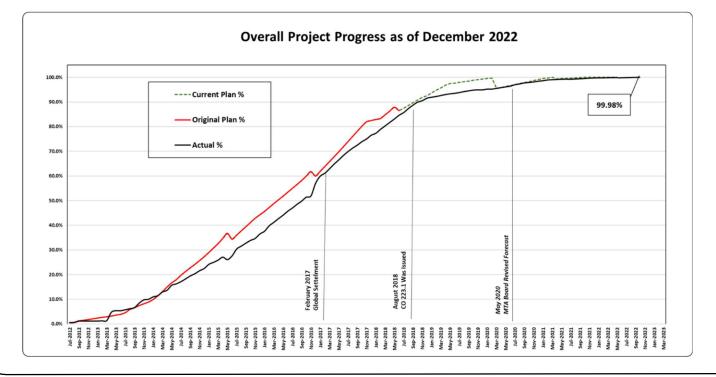
PROJECT UPDATE

Project Summary Schedule



Progress Summary			
	Status	Change from Last Period	Comment
Current Revenue Service:	5/24/21	NA	
Forecast Revenue Service:	10/7/22	0 days	Revenue Service Started
Final Design Progress:			
Contract C0988	100%	None	Design Completed
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	99.95%	0.00%	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	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23
C1221 - K-Line Paving & Improvements, Final Scope / Design *	01/31/23						
C1217 - CLAX Construction Punch-Out Work, UG Stations Signs *	02/15/23						
CLAX - California Public Utility Commission Non-Critical Open Items Complete *	03/31/23				٠		
Admini	ederal Transit stration) Consultant te		C0988 D C1217/C1	/B Contra 221 Close			

✤ K-Line (CLAX) Started carrying passenger on October 7th, 2022.

Major Equipment Delivery Status

Metro Supplied Equipment

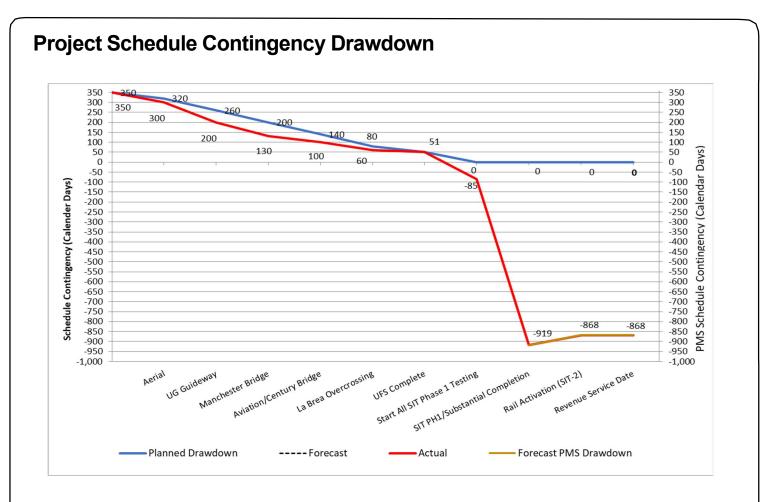
Equipment	Initial	Scheduled	Scheduled
	Procurement	Delivery	Installation
LRT Vehicles	(NTP) 8/20/12 A	Option 1 9/1/17 A	N/A
Ticket Vending Machines	1/30/18 A	2/28/19 A	Installed,
and Equipment		(Warehoused)	Activate 10/7/22

Mainline Contractor Equipment Delivery Requirements

Activity Name	Early Finish	Need Date		
C0988 - Remaining procurements items and replacement due to damage and quality issues are tracked separately under warranties.	As needed	NA		
C0988 - All areas of project (Segments A, B & C) are turned over to Metro operations equipment warranties, and maintenance are being coordinated.	As needed	NA		
C1217 – Procure 24" Water line	July 2023	May 2023		
C1217 – Procure Back Room Signs	January 2023	January 2023		
C1217 – Procure Left Turn Gates	February 2023	January 2023		
C1217 – Procure Step-up Transformer	March 2024	March 2024		

Crenshaw/LAX Transit Project Quarterly Project Status

1,	1							
;	1				 			
1	2				 			1
0					 			
0	.				 	=		
~					 	itica		
	<u> </u>				 ``	ty C	enue	
0					 u	Metro SIT Phase 2 (Safety Critical)	o Pre-Revenue Operations	
		6		/SCC ons,	 Substantial Completion	se 2 (Op Op	
		andiı		22. V stati		Phas	Metro	
0 		outst		17/2 und:	 tialC	o SIT Ph	ž	
4		ms, a		of 6/ rgroi	 stan	etro		
- -		stite		ion c inde	Subs	Σ		
1		idhli		plet of u	 			
1		t pur		com sell	 			
3		rojec		ntial an to	 			
ח		ete p		bstal , clea	 			
•		mple		g sul ems	 - Phase 1			
•		to co		suin; ist it t.	 łd - (
Þ		king		ro is nchl juest	(SIT			
n		wor		Meti g pu e req	ting			
t		nues		ects iinin of th	 n Tes			
n		conti		d refl ema val o	 ation			
7		6/17/22 and WSCC continues working to complete project punchlist items, outstanding final acceptance.		WSCC's July 2022 as-built Schedule is the last schedule submittal and reflects Metro issuing substantial completion of 6/17/22. WSCC schedule shows Final Acceptance is driven by WSCC finishing remaining punchlist items, clean to sell of underground stations, submit request of final acceptance and Metro review & approval of the request.	 CC Systems Integration Testing (SIT)			
-		Metro issued Project Substantial Completion on 6/17/22 and WSC submittals, trainings and as-builts to achieve the final acceptance.		mitta inish & ap	 ul su			
77		'22 ar accep		e sub CC fi	ster			
4		/17/		edule / WS o rev	 c sy			
2		i on 6 the i		t sch en by Aetr	 MSC			
י ח		etion iieve	••••••	e last drive nd N	 			
。 。		o ach		is th e is (Ice a	 			
		ial Co ilts t		dule tanc ptan	 			
<u>`</u>		Metro issued Project Substantial Completion on submittals, trainings and as-builts to achieve the		WSCC's July 2022 as-built Schedule is the last sch schedule shows Final Acceptance is driven b submit request of final acceptance and Met	 			
Þ		Subs and a		built al A inal	 			
n		oject ings a		2 as-l s Fin : of fi	 			
t		d Pro traini		, 2023 how: uest	 			
n		ssue :als, t		July Ile sl	 			
4		tro i mitt		cc's edu smit				



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.

Contract milestone No. 1 "Substantial Completion" certification for the project was issued on June 17, 2022. Metro is proceeding with System Integration Testing Phase II and completed safety critical points by September 30, 2022. Pre-revenue operations full simulation started on August 22, 2022 and K-Line put in service on October 7, 2022.

Time related issues are to be addressed as part of the Request for Equitable Adjustment resolution.

Risk Management Narrative

Summary of Risks

Within this reporting period no risk was closed. No new risk was added. There is a total of two (2) risks remaining to be managed in the next reporting period. Of the Two (2) risks, one (1) is scored as high (10 to 20 risk rating), one (1) as medium (4 to 9 risk rating), and no (0) risk as low (Less than 4 risk rating).

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

Risk	SCC	Risk	Risk
ID		Description	Rating
359	80	Extended Overhead or productivity loss claims exposure not covered by cost impacts in individual risks. REA claim was received on 8/19/2021. An amendment to the REA claim was received on 12/31/2021 and is being evaluated by the claim team. Metro & WSCC are Continuing to resolve small changes.	15

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

<u>Closed Risks</u>: No risks are closed in this period.

<u>Risk Score Changes</u>: No risk scores are changed this period.

<u>Actions in Next Reporting Cycle</u>: Continuous efforts in Risk Management will be made through the following actions: The remaining risks are cost related and are being addressed under separate negotiation process. No more Risk management report is needed

PROJECT COST Project Cost Analysis

scc	DESCRIPTION	ORIGINAL	CURREN	FBUDGET	СОММІ	IMENTS	EXPEND	ITURES	CURRENT	FORECAST	FORECAST
CODE		BUDGET	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
10	GUIDEWAYS	471,335,000	-	417,788,306	-	415,625,898	-	415,012,662	-	415,625,898	(2,162,408)
20	STATIONS	153,906,000	-	308,067,041	-	305,889,850	-	305,602,668	-	305,889,850	(2,177,191)
30	SUPPORT FACILITIES SOUTHWEST YARD	66,673,000	-	66,919,206	-	66,634,870	-	66,584,870	-	66,634,870	(284,336)
40	SITEWORK\SPECIAL CONDITIONS	235,576,000	-	404,953,359	-	419,324,639	24,840	410,573,525	-	419,324,639	14,371,279
50	SYSTEMS	125,132,000	-	175,073,936	-	172,616,656	24,444	167,728,787	(45,970)	172,616,656	(2,457,280)
	CONSTRUCTION SUBTOTAL (10-50)	1,052,622,000	-	1,372,801,849	-	1,380,091,912	49,284	1,365,502,512	(45,970)	1,380,091,912	7,290,064
60	RIGHT-OF-WAY	132,294,000	-	137,726,295	(48,835)	139,051,152	(38,735)	138,892,403	(77,329)	139,052,612	1,326,317
70	LRT VEHICLES	87,780,000	-	83,571,544	-	82,158,061	-	81,837,755	-	82,158,074	(1,413,470)
80	PROFESSIONAL SERVICES	273,147,000	-	501,844,251	-	512,473,423	615,929	501,757,453	1,171,187	517,448,838	15,604,587
	SUBTOTAL (10-80)	1,545,843,000	-	2,095,943,938	(48,835)	2,113,774,549	626,478	2,087,990,123	1,047,888	2,118,751,437	22,807,499
90	UNALLOCATED CONTINGENCY	177,157,000	-	26,507,031	-	-	-	-	(1,047,888)	3,699,532	(22,807,499)
100	FINANCE CHARGES	-	-	-	-	-	-	-	-	-	-
	TOTAL PROJECT 865512 (10-90)	1,723,000,000	-	2,122,450,969	(48,835)	2,113,774,549	626,478	2,087,990,123	0	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	-	20,022,881	-	20,022,881	-	20,022,881	-	20,022,881	-
1	OTAL PROJECTS 405512 & 465512 (ENV/PLANNING)	26,000,000	-	25,549,031	-	25,549,031	-	25,549,031	-	25,549,031	-
	TOTAL PROJECTs 405512, 465512 & 865512	1,749,000,000	•	2,148,000,000	(48,835)	2,139,323,580	626,478	2,113,539,154	0	2,148,000,000	(0)

1. Expenditures are Cumulative through December 30, 2022.

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 various services to assist in the management and oversight of the Project.

Commitments

Commitments decreased by \$0.05 million this period to \$2,139.3 million which represents 99.6% of the current budget. The minimal decrease is associated with decommitment adjustments of professional services.

Expenditures

Expenditures increased by \$0.6 million this period to \$2,113.5 million which represents 98.4% of the current budget. The total increase is for costs associated with professional services.

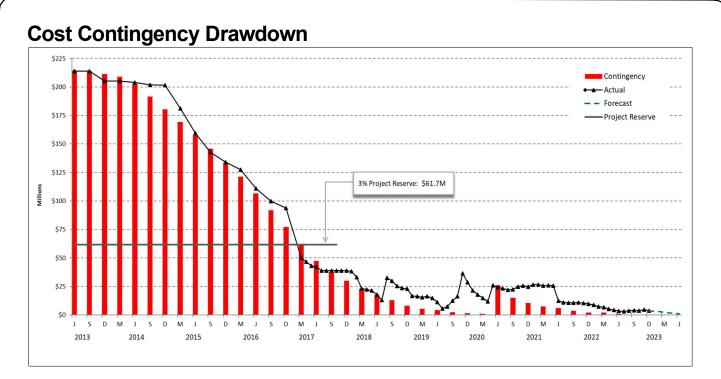
Current Forecast

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		
DECONTRICTION	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		4,391,226		4,391,226	-	4,391,226	(500,000)	
210152 CRENSHAW/LAX BUS TRANSFER FACILITY		-	2,200,000	-	2,200,000	-	2,200,000	-	2,200,000	-	
460303 AIRPORT METRO CONNECTOR		-	37,914,465	-	37,366,770	-	37,366,770	-	37,914,465	-	
500013 C/LAX LAWA SCOPE OF WORK		-	1,114,613		1,114,613		1,114,613	-	1,114,613	-	
405522 HIGHWAY PLANNING		-	105,457,668		105,457,668		105,402,636	-	105,457,668	-	
· · ·	TOTAL	-	151,898,007	-	150,850,312	-	150,795,281	-	151,398,007	(500,000)	



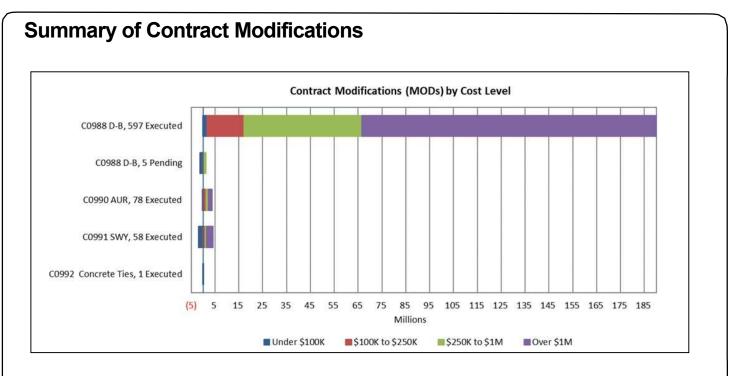
Cost Contingency Drawdown Analysis

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, \$1,047,888 was drawn down from contingency. The remaining total project contingency (allocated and unallocated) is \$3,699,532.

PROJECT COST CONTINGENCY (t UNITS IN DOLLARS	hrough 30-Dece	mber-2022)			
	Original Contingency	Previ ous Peri od	Current Period	To-Date	Remaining Contingency (Forecast)
Unallocated Contingency	173,500,000	(168,752,579)	(1,047,888)	(169,800,468)	3,699,532
Allocated Contingency	40,366,792	(40,366,792)	-	(40,366,792)	-
Total Contingency	213,866,792	(209,119,371)	(1,047,888)	(210,167,260)	3,699,532



	C0988	C0990	C0991	C0992	Total
	597 Executed	78 Executed	58 Executed	1 Executed	Total
Under \$100K	\$ 4,986	\$ (70,251)	\$ (1,918,854)	\$ 81,738	\$ (1,902,381)
\$100k to \$250K	\$ 15,530,314	\$ 1,280,184	\$ 875,202	\$ -	\$ 17,685,700
\$250K to \$1M	\$ 50,386,340	\$ 984,662	\$ 590,334	\$ -	\$ 51,961,337
Over \$1M	\$ 124,014,264	\$ 1,417,202	\$ 2,590,000	\$ -	\$ 128,021,466
Total Contract MODs	\$ 189,935,904	\$ 3,611,797	\$ 2,136,682	\$ 81,738	\$ 195,766,121
Contract Award Amount	\$ 1,272,632,356	\$ 7,827,500	\$ 172,312,695	\$ 2,161,297	\$ 1,454,933,848
% of Contract MODs	14.92%	46.14%	1.24%	3.78%	13.46%

Five hundred and ninety-seven (597) changes with a total value of \$189.94 million have been executed since the award of Contract C0988. There is additional two (2) changes with a total value of -\$0.20 million pending the administrative approval process.

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

Fifty-eight (58) changes with a total value of \$2.14 million have been executed since the award of Contract C0991.

One (1) change with a value of \$81,738 was executed for the 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 November 2022)

• 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 - Contract DBE Committed Dollars divided by Total Contract Value for Design or Construction.	\$29,700,639	(20.00%)
• Current DBE Participation - Total amount paid to date to DBEs divided by the amount paid to date to Prime.	\$30,428,742	(20.51%)
Twenty-Six (26) Design subcontractors hav	e 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	\$261,207,536	(20.00%)
Current DBE Commitment-Actual commitments as Construction work is awarded	\$324,491,922	(24.85%)
• Current DBE Participation - Total amount paid to date to DBEs divided by the amount paid to date to Prime (\$1,312,201,842)	\$373,935,065	(28.50%)

Three hundred eighty-five (385) Construction subcontractors have been identified to-date

PROJECT LABOR AGREEMENTS (PLA)

Contract C0988 Crenshaw/LAX Transit Corridor Design-Build

(Reported Data as of November 2022)

•	Targeted Worker Goal – Construction work to be performed by residents from Economically Disadvantaged Areas of LA County	40.00%
•	Targeted Worker Current Attainment	60.12%
•	Apprentice Worker Goal – Construction work to be performed by Apprentices	20.00%
•	Apprentice Worker Current Attainment	23.46%
•	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	10.29%

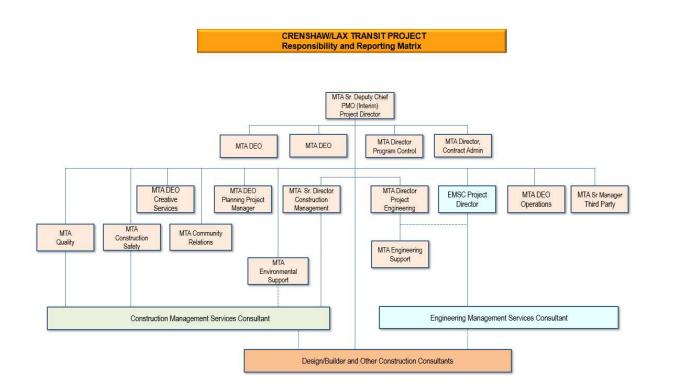
Crenshaw/LAX Transit Project Quarterly Project Status

FINANCIAL/GRANTS

(A)		OF FUNDS BY SO						
(A)								
v	(B)	(C)	(D)	(D/B)	(E)	(E/B)	(F)	(F/I
ORIGINAL	TOTAL	TOTAL	COMMITMENTS		EXPENDITURES		BILLED TO FUNDING	
BUDGET	ANTICIPATED	AVAILABLE	\$	%	\$	%	\$UURCE	%
68.200	137.100	137.100	137.100	100%	137.100	100%	137.100	1
8.600	8.563	8.563	8.563	100%	8.563	100%	8.563	1
20.000	103.307	103.307	103.307	100%	103.307	100%	103.307	1
1.200	1.200	1.200	1.200	100%	1.200	100%	1.200	1
-	13.904	13.904	13.904	100%	13.904	100%	13.904	1
36.522	36.600	36.600	36.600	100%	36.600	100%	36.600	1
0.178	0.179	0.179	0.178	100%	0.178	100%	0.179	1
201.200	128.950	128.950	128.950	100%	128.950	100%	128.950	1
-	49.529	49.529	49.529	100%	49.529	100%	49.529	1
545.900	545.900	545.900	545.900	100%	545.900	100%	545.900	1
								1
								•
52.400								
							54.300	1
	1.700	1.700	1.700	100%	1.700	100%		
148.900	454.562	454.562	454.562	100%	438.542	96%	430.983	
-	0.000	0.000	-	-	-	0%	-	
4.800	209.700	209.700	13.723	7%	4.850	2%	4.850	
	55.200	55.200	55.200	100%	55.200	100%	55.201	1
1,749.000	2,148.000	2,148.000	2,138.663	100%	2,109.985	98%	2,083.511	
BM.								
8	8.600 20.000 1.200 1.200 36.522 0.178 201.200 661.100 545.900 661.100 148.900 148.900 148.900 0.1749.000	ANTICIPATED 68.200 137.100 8.600 8.563 20.000 103.307 1.200 1.200 1.200 1.200 36.522 36.600 20.178 0.179 201.200 128.950 49.529 - 545.900 545.900 661.100 245.600 545.900 545.900 545.900 545.900 661.100 245.600 11.700 - 148.900 454.562 . 0.000 4.800 209.700 1,749.000 2,148.000 DEER 2022 - BM. OCTOBER 2011 FUNDING/EXPENDITUE	ANTICIPATED AVAILABLE 68.200 137.100 137.100 8.600 8.563 8.563 20.000 103.307 103.307 1.200 1.200 1.200 - 13.904 13.904 36.522 36.600 36.600 0.178 0.179 0.179 201.200 128.950 128.950 - 49.529 49.529 - 49.529 49.529 - 49.529 49.529 - 49.529 49.529 - 49.529 49.529 - 49.529 49.529 - 49.529 49.529 - 49.529 49.529 - 0.000 245.600 52.400 101.707 101.707 148.900 454.562 454.562 - 0.000 0.000 4.800 209.700 209.700 - 0.000 2,148.000 -<	ANTICIPATED AVAILABLE \$ 68.200 137.100 137.100 137.100 8.600 8.563 8.563 8.563 20.000 103.307 103.307 103.307 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 36.522 36.600 36.600 36.600 36.522 36.600 36.600 36.600 0.178 0.179 0.179 0.178 201.200 128.950 128.950 128.950 - 49.529 49.529 49.529 545.900 545.900 545.900 545.900 661.100 245.600 245.600 432.240 - 101.707 101.707 101.707 54.300 54.300 54.300 54.300 52.400 101.707 101.707 101.707 - 0.000 0.000 - - 0.000 0.000 -	ANTICIPATED AVAILABLE \$ % 68.200 137.100 137.100 137.100 100% 8.600 8.563 8.563 8.563 100% 20.000 103.307 103.307 103.307 100% 1.200 1.200 1.200 1.200 100% 36.522 36.600 36.600 36.600 100% 0.178 0.179 0.179 0.178 100% 201.200 128.950 128.950 128.950 100% - 49.529 49.529 49.529 100% 545.900 545.900 545.900 100% - 49.529 49.529 100% 545.900 545.900 545.900 100% - 0.000 245.600 432.240 176% - 0.000 54.300 54.300 100% - 0.000 0.000 - - - 0.000 0.000 - -	ANTICIPATED AVAILABLE \$ % \$ 68.200 137.100 137.100 137.100 137.100 137.100 8.600 8.563 8.563 8.563 100% 8.563 20.000 103.307 103.307 103.307 100% 1.200 1.200 1.200 1.200 1.200 1.200 1.200 - 13.904 13.904 13.904 100% 12.00 - 13.904 13.904 100% 13.904 13.904 36.522 36.600 36.600 36.600 100% 0.178 0.178 0.179 0.179 0.178 100% 0.178 201.200 128.950 128.950 128.950 100% 49.529 - 49.529 49.529 49.529 100% 49.529 545.900 545.900 545.900 100% 54.300 54.300 52.400 101.707 101.707 100.77 100% 438.542	ANTICIPATED AVAILABLE \$ % \$ % 68.200 137.100 137.100 137.100 100% 137.100 100% 8.600 8.563 8.563 8.563 100% 8.563 100% 20.000 103.307 103.307 103.307 100% 1.200 1.00% 1.200 1.200 1.200 1.200 100% 1.200 100% - 13.904 13.904 13.904 100% 13.904 100% 36.522 36.600 36.600 36.600 100% 36.600 100% 0.178 0.179 0.179 0.178 100% 1.28.950 100% 201.200 128.950 128.950 100% 49.529 100% 49.529 100% 545.900 545.900 545.900 100% 545.900 100% 54.300 100% 52.400 101.707 101.707 101.707 100% 1.700 100% <td< td=""><td>ANTICIPATED AVAILABLE \$ % \$ % \$ % \$ % \$</td></td<>	ANTICIPATED AVAILABLE \$ % \$ % \$ % \$ % \$

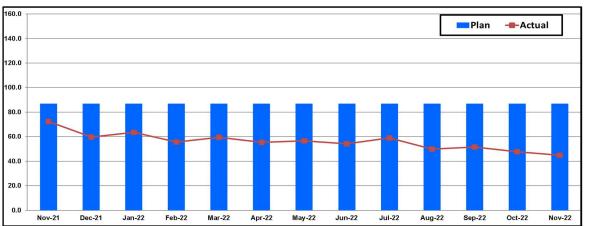
PROJECT ORGANIZATION AND STAFFING

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

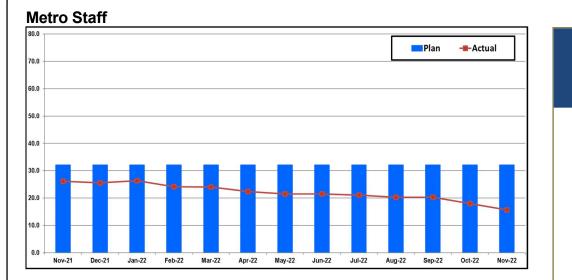


The project staffing charts have been updated with a revised FY23 staffing plan. The overall FY23 Total Project Staffing Plan averages 86.8 Full Time Equivalent (FTEs) per month consisting of 32.1 for Metro Agency staff, 44.5 for Construction Management Support Services Consultant and 10.2 for Design and Engineering Support Services Consulting staff.

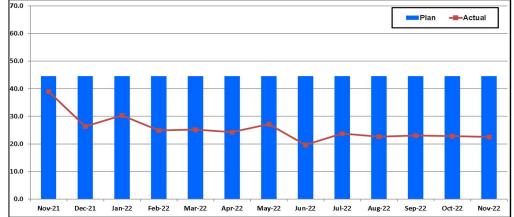
For December 2022, total project staffing were 35.1 FTEs for the month consisting of 14.4 FTEs for Metro's project administration staff, 14.6 FTEs for Construction Management Support Services Consultant and 6.1 FTEs for Design and Engineering Support Services Consulting staff.



Crenshaw/LAX Transit Project Quarterly Project Status



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

- Acquisition Settlement reached on remaining acquisition case Lornel 320 North Eucalyptus Avenue, Inglewood 90302 APN: 4020-021-003 – pending CEO approval.
- Relocation Final claims pending for 2 displaced businesses Bold and Beautiful and Youth Justice Coalition

QUALITY ASSURANCE

- WSCC Quality issued zero (0) Nonconformance Report (NCR) during this period.
- Metro Quality issued zero (0) Nonconformance Report (NCR) to WSCC during this period.
- WSCC Quality continued project walks <u>If-Needed</u> & BIM 360 process with Metro during this month.
- No CWP review and Readiness Review meetings were conducted during this month.
- Metro Quality participated in Internal Project Review Weekly Meetings.

ENVIRONMENTAL

- Noise and vibration monitoring by WSCC were concluded in July 2021. There was no Metro noise and vibration spot checks during this period.
- Weekly SWPPP inspections of all project areas by WSCC ended in Aug 2022 and spot checks by Metro to observe site conditions and report on performance of stormwater protection Best Management Practices (BMPs) and overall housekeeping are on-going.
- No fugitive dust complaints were received during the reporting period.
- EMS and Environmental Compliance Progress meetings were held during this reporting period on11/10/2022 and 15/15/2022.
- The Notice of Termination of the SWPPP was approved by the Waterboard as of 9/26/2022.
- LA Sanitation inspected the CLAX Project's IWW hookups on August 17th. Final permits were approved by LA Sanitation effective 07/01/2022.

CONSTRUCTION/COMMUNITY RELATIONS

- Ongoing outreach to stakeholders about the construction of foundation gates, construction
 of future Fairview Heights Station additional parking lot, and other Punch Out Work
 construction activity.
- Ongoing management of inquiries received on Project email and hot line.
- Assist in preparation for K Line Post-Construction Survey.
- Continued collaboration with Operations Team to prepare for stakeholder outreach to inform of K Line Operations Plan options.
- Key stakeholder outreach and briefings for the K Line Operational Plan options.

CREATIVE SERVICES

- Led Art and Signage-related coordination with Catch-All Contractor.
- Reviewed and responded to Art program and Signage close out submittals.
- Interim and permanent service plan wayfinding signage coordination.
- Led Metro Art participation in K Line opening events.
- Developed artwork related public communications materials.
- Ongoing Punch-Out Contract signage & customer information coordination.
- Ongoing QA/QC of station signage elements.

SAFETY and SECURITY

- WSCC has not conducted or participated in weekly safety walks due to no safety manager on site and no monthly safety walks being conducted.
- Metro Safety continues to support the Crenshaw/LAX Punch Out Work Contract # C1217 with Griffith Company.
- The weekly owners 9:00 am Tuesday scheduled progress meetings have been canceled.
- Participated in the weekly scheduled 7:00 am Wednesday corporate safety conference call to update the safety team on safety issues and current jobsite concerns.
- Monitored underground stations and alignment along the "K" line.
- Total Days Away (DART) Injury Rate: Eight (8) Days Away from Work (DART) Injuries is 0.14. The National Ave is 1.3.
- Project to Date Total Days Away Rate (561 Days Away from Work) is 12.2. (No National Published Rate).
- Metro Safety participated in the C/LAX Crenshaw TRC Abatement & Demo weekly progress updates meeting on 12/01/2022, 12/08/2022, 12/15/2022, (12/22/2022 and 12/29/2022 no conference call due to holiday).
- Contract C0988 (WSCC) completed 400.20 work hours with (0) recordable/Days Away from Work injury for the month of December 2022. Total Project to Date work hours is 11,431,963.12 with a total of one hundred and two (102) recordable incidents. The Project Recordable Rate is 1.78
- The Bureau of Labor Statistics (BLS) average recordable rate per 200,000 work hours is 2.4

			Contr	act C1	21	7 Status	
	Cre	nshaw,	/LAX -	Constru	ıcti	on Punch Out Work	
Design Consultant CM Consultant: St Contractor: Griffith	: Mott McD antec				Co	ntract No.: C1217 atus as of December 2022	
Progress/Work Com	oleted:				Ar	eas of Concern and Opportunities:	
 Notice of Award 8/25/22. Preconstruction Work needed in completed by 10 fiber, water line Procurement of and step-up tran 	neeting was support of K- /1/22 includ on Florence, emaining si	held on 8/ Line openi ing, tree tr , etc. gns, map c	/24/22 ing was imming, s	igns, radio	-	Completion of items listed under m Revenue Service are critical. Few ite but did not affect K-Line opening an added to Milestone 2, as part of an Availability of 24" waterline is a con Contractor is considering alternative availability	ems were not completed nd being considered and administrative change. ncern at this point.
 Schedule Assessmen SCHEDULE INTEGR (SECTION 01 29 78 Contract require for Metro appro Baseline schedu Contractor subr Milestone 1 & 2 prepared. 	ATION SYST) es a schedule oval within 1 le is approve nitted sched	e baseline 4 days afte ed ule update	to be subr er NTP. e for Octol	mitted per 22.	- - -	st Assessment: Contract to Griffith Company was av million. Schedule of Values (SECTION 01 29 submitted on 10/27/22 and is unde Pay application #1 for period 8/25/ for \$2,331,595.00.	73) Revision 3 was r review by Metro.
Schedule Summary:		Date	es/Calenda	ar Days	Со	st Summary:	<u>\$ in millions</u>
 Date Award: Notice to Proceet Original Substant Current Substant Elapsed Time from Elapsed Time Pert 	tial Complet tial Completi m NTP:	ion Duratio			1. 2. 3. 4. 5. 6.	Award Value: Executed Modifications: Approved Change Orders: Current Contract Value (1+2+3): Incurred Cost (Thru October 2022): Total Dollars paid Percentage:	\$ 6,777,065 \$ 0 \$ 28,792 \$ 6,777,065 \$ 2,331,595 34%
Contract Milestones	:				Со	nstruction Physical percentage comp	lete:
Milestone MS#1, Key items, Fire Hydrant, Left Turn gate radio Fiber, Map Case: Signs, Palm Trim		Current Contract 10/1/22	Forecast 10/31/22	Variance Calendar Days -30	-	Separate cash flow and contingence be developed and included later. Based on the current completed w complete.	
MS#2, Install24-inch waterline at Crenshaw MLK	6/1/23	6/1/23	6/1/23	0			
MS#3, Substantial Completion	NTP+ 600CD	4/16/24	4/16/24	0			

Design Consultant: IM Consultant: Sta		onald			Со	ntract No.: C1221		
Contractor: TBD					Sta	tus as of December 2022		
Progress/Work Comp	leted:				Are	as of Concern and Opportunities:		
o NTP in N	-	e: ne 2023. 023			-	Scope is being developed and could schedule affect. New scope items identified are bein Metro estimating.		
Schedule Assessment SCHEDULE INTEGRATI (SECTION 01 29 78) - Contract requires for Metro approv	ON SYSTEN	baseline	to be sub		- -	t Assessment: Budget is estimated between \$5 to \$ Budget is under review based on add		
- Schedule Summary:		Dat	tes/Calen	dar Days	Cos	t Summary:	<u>\$ in</u>	millions
 Date Award: Notice to Proceed Original Substanti Current Substanti Elapsed Time From Elapsed Time Pere 	ial Completi ial Completi m NTP:			TBD TBD 365 CD 365 CD 0 CD 0%	8. 9. 10. 11.	Award Value: Executed Modifications: Approved Change Orders: Current Contract Value (1+2+3): Incurred Cost (Thru October 2022): Total Dollars paid Percentage:	\$ \$ \$ \$	TBD 0 0 TBD 0 0%
Contract Milestones:					Cor	struction Physical percentage compl	ete:	
Milestone MS#1, Substantial	Original Contract TBD	Current Contract TBD	Forecast	Variance Calendar Days O	-	Separate cash flow and contingency curves will be developed and includ		
MS#1, Substantial Completion	TBD	TBD			-			

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.
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).

CHRONOLOGY OF EVENTS (continued)

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 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.
March 12, 2022	Partial substantial completion for Segments A and B was issued to the Crenshaw/LAX Transit Project Contract C0988 Contractor, Walsh-Shea Corridor Constructors.
March 30, 2022	Held closing event and celebrated the success of Business Solution Center, and Business Interruption Fund programs.
April 14, 2022	Held bid opening for Crenshaw Construction Punch Out Work Contract C1217.
June 13, 2022	All Emergency Drills are complete.
June 17, 2022	Substantial Completion issued Walsh-Shea Corridor Constructors, Contract C0988 Crenshaw/LAX Transit Project.
June 22, 2022	Held City Partners and Third-Party Collaborators VIP Event at Expo/Crenshaw Station.
June 25, 2022	Held Station Dedication at Leimert Park Station.

CHRONOLOGY OF EVENTS (continued)

June 30, 2022	Held bid opening for "re-bid" of Crenshaw Construction Punch Out Work Contract C1217
July 8, 2022	The Project (K Line) website <u>https://kline.metro.net</u> is live and available to the public
July 23, 2022	Held Station Dedication at Martin Luther King Station.
July 25, 2022	Started initial Pre-Revenue simulation.
August 6, 2022	Held Station Dedication at Hyde Park Station.
August 8, 2022	Award Contract C1217 Crenshaw Construction Punch Out Work to Griffith Company.
August 17, 2022	Los Angeles Sanitation inspected the Project's Industrial Wastewater hookups.
August 20, 2022	Held Station Dedication at Fair View Heights Station.
August 22, 2022	Started full Pre-Revenue simulation.
August 22, 2022 August 25, 2022	Started full Pre-Revenue simulation. Notice of Termination of the SWPPP submitted and certified by the Legally Responsible Person (LRP).
	Notice of Termination of the SWPPP submitted and certified by
August 25, 2022	Notice of Termination of the SWPPP submitted and certified by the Legally Responsible Person (LRP). Notice of Proceed issued to Griffith Company for contract C1217
August 25, 2022 August 25, 2022	Notice of Termination of the SWPPP submitted and certified by the Legally Responsible Person (LRP). Notice of Proceed issued to Griffith Company for contract C1217 CLAX – Construction Punch-Out Work. Metro Submitted Safety/Security Certification Verification Report (SCVR) to California Public Utility Commission (CPUC) and
August 25, 2022 August 25, 2022 September 13, 2022	Notice of Termination of the SWPPP submitted and certified by the Legally Responsible Person (LRP). Notice of Proceed issued to Griffith Company for contract C1217 CLAX – Construction Punch-Out Work. Metro Submitted Safety/Security Certification Verification Report (SCVR) to California Public Utility Commission (CPUC) and Metro CEO announced the Opening of the K-Line on 10/7/22.