



**Metro**

October 21, 2022

**TO:** DISTRIBUTION

**FROM:** KIMBERLY ONG *KO*  
EXECUTIVE OFFICER/PROJECT MANAGER

**SUBJECT:** WESTSIDE PURPLE LINE EXTENSION SECTION 3 PROJECT  
AUGUST 2022 MONTHLY PROJECT STATUS REPORT

Enclosed herewith is the Monthly Project Status Report for the Westside Purple Line Extension Section 3 Project. This report contains the Los Angeles County Metropolitan Transportation Authority's (LACMTA) representation of the Westside Purple Line Extension Section 3 Project status for the period ending September 30, 2022.

If you have any questions regarding this report or its supporting information, please contact Marvin Li, Deputy Executive Officer, Program Control at (424) 551-4523.

KO: mym  
Enclosure

PURPLE (D LINE) EXTENSION PROJECT Section 3



Metro®

# **Purple (D Line) Extension Project**

## **Section 3**

### **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).

**September 2022**

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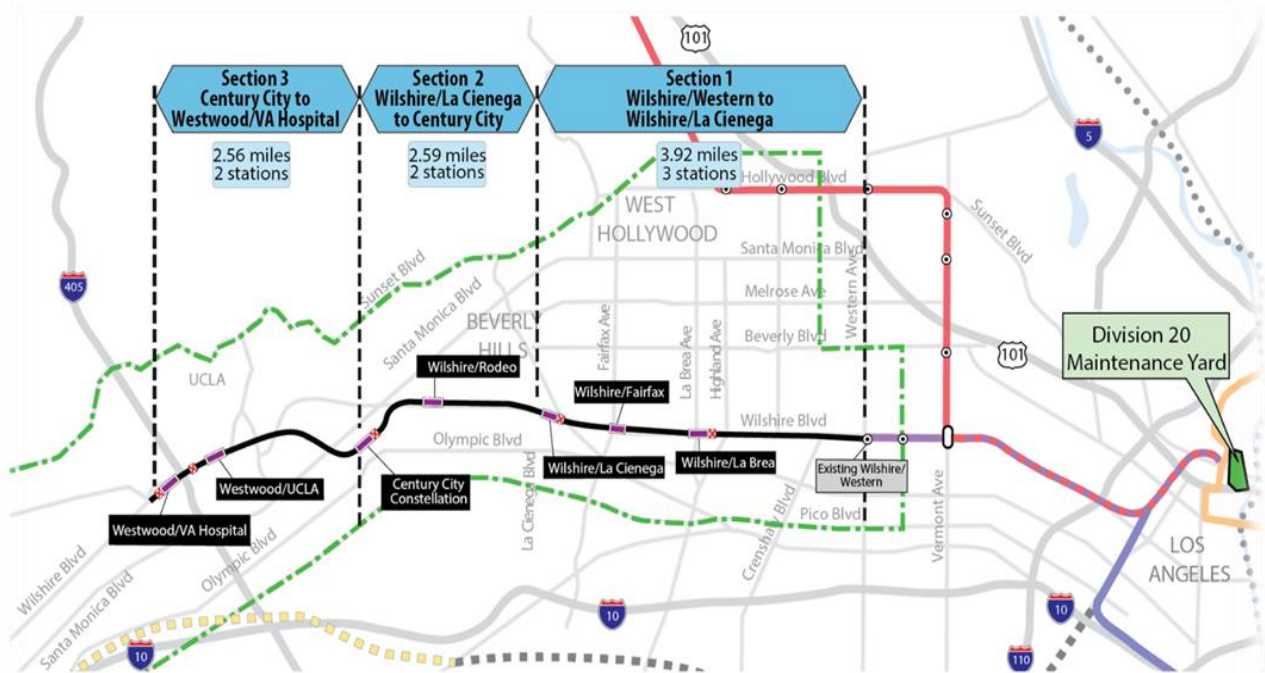
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## PROJECT OVERVIEW

### Project Background

The Westside Purple Line Extension Section 3 Project (Project) is the third of three sections to be designed and constructed as part of the Los Angeles County Metropolitan Transportation Authority's (Metro) Measure R and Measure M Programs. The Measure R and Measure M Programs were approved by Los Angeles County voters in November 2008 and in November 2016, respectively, and provide in total a one-cent sales tax to finance new transportation projects. In April 2012, the three sections of the Project were environmentally cleared and adopted by Metro Board of Directors.

Section 3 will extend to Westwood from the future Century City Constellation Station that is part of the Westside Purple Line Extension Section 2 Project and currently under construction. The Project is located entirely underground, primarily following Wilshire Boulevard, and includes the design and construction of approximately 2.56 miles of double-track heavy rail, two new stations as well as the purchase of 16 heavy rail vehicles. The Westwood/UCLA Station is within the jurisdiction of the City of Los Angeles, and the Westwood/Veterans Administration (VA) Hospital Station is within the jurisdiction of the unincorporated area of Los Angeles County. The Project also includes train controls, signals, traffic controls, communications, traction power supply and distribution, fare collection systems and equipment, acquisition of right-of-way, and utility relocations.



The Westwood/UCLA Station box will be under Wilshire Boulevard beginning west of Westwood Boulevard and extending to the east of Veteran Avenue. The station will have three entrances, two full entrances on the north side of Wilshire Boulevard and one-half entrance on the south side of Wilshire Boulevard. The two full entrances will be located at Wilshire Boulevard and Gayley Avenue, and at Wilshire and Westwood Boulevards. The half entrance will be located at Wilshire and Westwood Boulevards.

The Westwood/VA Hospital Station box will be under the VA south campus, beginning west of the I-405 Freeway and extending west of Bonsall Avenue. The station will be equipped with double crossovers, one at each end of the station. The station entrance will be south of Wilshire Boulevard and east of Bonsall Avenue.

### **Major Procurements**

Contract C1151 – Tunnels: The procurement of this design/build contract utilized a competitive negotiated procurement process to select a contractor that was determined to have met all the requirements set forth in the Request for Proposals (RFP) with a technically acceptable, “Lowest Evaluated Price” selection process. In June 2018, the Board authorized to award the C1151 Tunnels contract, subject to the FTA approval of the Letter of No Prejudice (LONP). The contract was awarded to Frontier-Kemper/Tutor Perini, JV (FKTP) on November 30, 2018, after receiving the LONP from the FTA. Notice to Proceed (NTP) was issued on January 15, 2019.

The design/build contract provides for final design and construction of the twin bored tunnels, complete with cross-passages, along the 2.56-mile alignment. Contract scope includes demolition and removal of structures and clearing sites to facilitate construction operations. A tunnel boring machine (TBM) launch shaft will be constructed at the westerly end of the Westwood/VA Hospital Station. Upon substantial completion, FKTP will turn over all temporary lighting and ventilation to the follow-on contractor (Contract C1152).

Contract C1152 – Stations, Trackwork, Systems and Systems Integration Testing: The procurement of this design/build contract utilized a two-step approach with the submittal of qualification statements through a Request for Qualification (RFQ) process, prequalification of qualified proposers followed by the release of a Request for Proposals (RFP) soliciting technical and price proposals on a Best Value selection process with an option at Metro’s discretion for Best and Final Offers (BAFO). In February 2019, the Board authorized the CEO to award the C1152 Stations, Trackwork, Systems, and Systems Integration Testing contract to Tutor Perini/O&G, JV (TPOG), subject to the FTA approval of a Full Funding Grant Agreement (FFGA). After the February Board action, FTA issued an LONP on April 18, 2019, that allows contract award to occur prior to receipt of an FFGA. The Board approved award of the C1152 contract at the May 2019 Board Meeting, and the Contract was awarded on May 28, 2019. Notice to Proceed was issued on July 15, 2019, with a commencement date of July 16, 2019.

The Design/Build contract provides for final design and construction of the infrastructure along the 2.56-mile alignment. Contract scope includes demolition and removal of structures and clearing sites to facilitate construction operations. The twin bored tunnels will be complete with walkways including all mechanical, electrical, and finished work. Two underground stations are to be constructed, with the Westwood/VA Hospital Station having two double crossovers, one at each end of the station. Each station will be equipped with stairs, escalators, and elevators which meet ADA requirements. The scope of work also includes all architectural finishes, mechanical and electrical systems and equipment including train control, traction power, communications, trackwork, system tie-in at the future Century City Constellation Station, testing and commissioning.

Contract C1153 – Advanced Utility Relocations: The work scope of this firm fixed price contract included the relocation of existing LADWP power and water utilities within the construction limits of the Westwood/UCLA Station. Metro issued Notice of Intent (NOI) to award to Steve Bubalo Construction Company (SBCC) on October 2, 2017 and NTP on January 2, 2018. SBCC was responsible for working in streets, procuring materials, and coordinating with the utility owner. SBCC constructed new facilities in accordance with the utility plans and specifications, provided traffic control, restored streets, and supported utility crews installing cabling and during cut-over of the existing utilities. SBCC achieved contract substantial completion on June 30, 2019 and Contract Final Acceptance was issued by Metro on April 13, 2020.

Contract C1204 - Shuttle and Valet Services During Construction of the Westwood/VA Station: The work scope for this firm fixed price contract includes providing shuttle and valet services to the West Los Angeles Veterans Affairs (VA) Medical Center during the decommission of Parking Lot 42 and buildout of the replacement parking structure. The Request for Proposal (RFP) was issued on January 15, 2021. Contract awarded to Everpark Inc. December 6, 2021 and NTP issued with shuttle and valet service to transferred to Everpark Inc. on January 03, 2022.

#### Metro Furnished Equipment

Metro to procure a contract to provide 16 Heavy Rail Vehicles (HRV) necessary to operate the extension of the Purple Line. The scope of the HRV contract includes design, manufacturing, testing and delivery of the vehicles. An additional contract will be procured for the Universal Fare System (UFS). The scope of the UFS contract will include design, fabrication, and installation of equipment at the two new stations and system testing.

#### **Program Management**

The Westside Purple Line Extension Section 3 Project is being managed under the direction of an Integrated Project Management Office (IPMO). WSP Global (WSP) provides engineering and design support services, while MPPC Partners, a Joint Venture provides construction management support services. The on-site program management team is also supported by Metro headquarters' resources and includes, but not limited to,

engineering, risk management, environmental, quality management, operations, and creative services departments.

Project Schedule and Budget: The Revenue Service Date (RSD) is planned for 2027.

In June 2018, the Board authorized to establish the Life of Project (LOP) Budget for the Tunnels portion of the Project. In February 2019, the Board amended the LOP Budget to include the Stations portion of the Project. The LOP Budget for the Westside Purple Line Extension Section 3 Project is \$3.2 billion excluding Finance Charges of \$387.4 million. A detailed LOP Budget forecast is included under the Budget and Cost Forecast section of this report.

Funding is projected from a variety of sources to include:

- Federal - Section 5309 New Starts
- Federal - Section 5309 New Starts (ARPA-CIG)
- Federal – RSTP (Regional Surface Transportation Program)
- Federal - CMAQ (Congestion Mitigation & Air Quality)
- Local Agency Contributions
- TCRP
- Measure R 35%
- Measure M 35%
- State RIP

Start Up: The commencement of pre-revenue operations will be determined by Metro. Generally, all systems integration testing will have been completed and passed. All testing will be required to include and pass a “stress test” of maximum operational service levels to be acceptable. Pre-Revenue Operations include train runs, especially those involving multiple trains on the integrated and fully operational extension; rehearsal of expected revenue operations scenarios; abnormal and emergency scenarios in which random combinations of system interactions are tested and equipment “burned-in”; and training of emergency services as well as Metro personnel who will operate and maintain the extension. Activities occurring during Pre-Revenue Operations are carried out by a designated Metro Project Rail Activation Group.



## EXECUTIVE SUMMARY

*In September 2022, the Project achieved 43% completion to-date based on earned value measurements for the overall Project. The current focus of the Project is production mining in both BR and BL tunnels, continuing final design for Contract C1152 (Stations, Trackwork, Systems and Systems Integration Testing), utility relocations including the steam tunnel relocation at Westwood/VA Station, and temporary road decking for the Westwood/UCLA station.*

Contract C1151 has a substantial completion date of February 2023 and scheduled to demobilize by May 2023, per Contract Modification 2. Contract C1152 has a substantial completion date of June 2026 and scheduled to demobilize by December 2026 in support of Revenue Service in 2027.

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

### Design Status

- The Engineering Management Services team continues to provide engineering services during construction, real estate support services, supporting Metro in reviewing the C1152 Stations final design submittals and the C1151 and C1152 review of submittals, responding to RFIs, and assisting in the preparation and review of Changes.
- C1151 – Tunnels Contract: The design work for this contract is substantially complete. Metro has Approved for Construction for all of the design unit packages.
- C1152 – Stations Contract: The list of the various design unit (DU) packages is listed below:
  - DU 40: VA Station Temporary Works
    - APDU 41 (41A, 41B, 41D)
    - APDU 42
    - APDU 43 (43A)
    - APDU 44 (44A, 44B)
    - APDU 45
    - APDU 46
  - DU 50: UCLA Station Temporary Works
    - APDU 51 (51A, 51B, 51C)
    - APDU 52, 52A, 52B
    - APDU 53
    - APDU 54
    - APDU 55
  - DU 60: VA Station

- APDU 61 (61A, 61B)
- DU 60 (60, 60A, 60B)
- DU 70: UCLA Station
  - DU 70 (70, 70A, 70B, 70C, 70D)
- DU 81: Tunnels/Cross Passages and Track
- DU 82: Systems
- DU 90: Tail Track Exit Shaft and Western VA Staging Area (APDU 90A/90B)

Final design for the various design packages is on-going. Design unit packages progress to date:

- DUs 60, 70, 81, 82:
  - 100% design is on-going for DUs 70A, 70B
  - *AFC design is on-going for DU 60A, 60B, 70, 70C, 81, 82*
  - *IFC is on-going for DU 60, APDU 61A/61B*
- DU 90:
  - IFC is on-going for APDUs 90A, 90B
- APDUs 41, 42, 43, 44, 45, 51, 52, 53, 54:
  - *100% design is on-going for APDUs 53, 55 (Parts 3)*
  - AFC design is on-going for APDUs 52A, 52B, 55 (Parts 1, 2, & 4)
  - IFC is on-going for APDUs 41A, 41D (LA County portion), 54 (Parts 2, 3 & 4), 55 (Part 3)

Metro has Issued for Construction the following design packages:

- APDUs 41B, 42, 43, 44, 45, 46
- APDUs 51A, 51B, 51C, 52

DUs and APDUs submitted this reporting period:

- *APDU 41D, 100% (City of LA portion)*
- *APDU 55 (Part 3), AFC (Resubmittal)*
- *APDU 61A/61B, AFC*
- *DU 60, AFC*

### Construction Status

- C1153 – Advanced Utility Relocations: (Complete)  
Substantial completion occurred on June 30, 2019 and the contract is 100% complete. The City of Los Angeles’ Bureau of Contract Administration signed-off on all punch list items on July 31, 2019. SBCC completed all punch list items and submitted 100% billing for all remaining items. SBCC submitted request for Certificate of Final Acceptance and release of retention on April 12, 2020 and Final Acceptance was issued by Metro on April 13, 2020. Metro has issued a contract modification to close the balance of provisional sums and final payment and the release of retention was processed to the contractor. Metro issued the final release of retention check and SBCC issued “Unconditional Waiver and Release on Final Payment” on July 16, 2020.
- C1151 – Tunnels Contract:  
Both Tunnel Boring Machines (TBMs) continue mining east of Westwood/UCLA station. TBM No. 1 has mined over 9,502 feet (70%). TBM No. 2 has mined over 9,225 feet (68%). Installation of instrumentation along the tunnel alignment continues. Segment production, including manufacture of the seismic steel linings, continues with overall 93% of linings cast.
- C1152 – Stations Contract:  
Final design continues and is about 97% complete. At the Westwood/UCLA station, road decking continues at Wilshire Blvd. – 24 of 77 (31%) deck beams installed and 216 of 701 (31%) road deck panels have been installed. At Westwood/VA station, installation of temporary site access bridge across future station location is complete. Installation of dewatering wells and instrumentation continues. Spoils continue to be exported from site from east & west stockpiles. The VA steam tunnel relocation work at continues including Mechanical, Electrical, and Plumbing fit-out for the relocated line (approximately 30%), and construction of the redundant steam and condensate lines.
- Third Party Utility Relocations:  
The LADWP power cutover to 10921 Wilshire Boulevard is expected to be complete in Winter 2023.

**Cost and Schedule Summary**

Metro has issued Contract Modification 2 to the C1151 Tunnels contractor for extending Substantial Completion by 95 calendar days. Mitigation efforts are being evaluated to improve on the Substantial Completion date and not to impact the C1152 Stations contractor. It is anticipated that the forecast revenue service date can be achieved.

The Critical Path (CP) of the Project includes third party utility relocations, C1152’s Contractor required utility relocations, followed by both stations’ support of excavation, street decking, station structural box excavations, and structural concrete for the stations. Next it flows into installation of the interior finishes and electrical equipment, followed by systems, testing and pre-revenue operations. A summary graphic of the critical path is found on Page 17.

**C1151 Tunnels**

	Original Contract Dates	Time Extension	Current Contract	Forecast	Variance CDs
Notice to Proceed	01/15/19A	0	01/15/19A		0
Substantial Completion	11/15/22	95	02/18/23	02/18/23	0

**C1152 Stations, Trackwork, Systems, and Testing**

	Original Contract Dates	Time Extension	Current Contract	Forecast	Variance CDs
Notice to Proceed	7/16/19A	0	7/16/19A		0
Substantial Completion	6/08/26	0	6/08/26	6/08/26	0

Project costs continue to track within budget and projected contingency limits. The Current Budget and Current Forecast remain the same this period at \$3.6 billion. Detailed cost and budget information is provided on Page 19.

The following claims that are being evaluated:

- C1151 – Tunnels
  - NOIC 03 – STV 3<sup>rd</sup> Party Delay Claim (Design Submittal Review)
  - NOIC 04 – RFC-026 Gravel Seam Impact BR Tunnel Rings 399 to 486
- C1152 – Stations, Trackwork, Systems, and Testing
  - NOIC 01 & 02 – General Requirement Items (Insurance & Bond Cost)
  - NOIC 03 – Reserve right for time extension under unilateral change orders
  - NOIC 04 – Delay impact due to utilities relocation at Wilshire & Gayley
  - NOIC 05 – VA grade separated pedestrian connection reconfiguration

- NOIC 06 – RFC-019 Design cost regarding TTES reconfiguration
- NOIC 07 – RFC-020 Design cost regarding TTES Vane Implementation
- NOIC 08 – RFC-011 Time impact on design management related to CO-001 thru CO-030
- NOIC 09 – RFC-011 Additional time & compensation for CO-15.5

**Key Management Concerns**

Slower than planned tunneling production may impact C1152 work.

Project Construction Photos



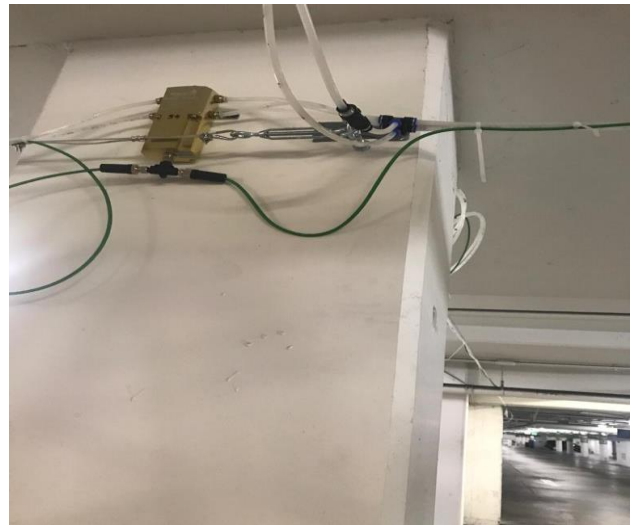
VA Steam Tunnel Relocation: Installing Pipe Racks



VA Steam Tunnel Relocation:  
Vault 200 Redundant Pipes Installed



Tunnel: Secondary Grouting on Ring #1857



Westfield Mall – Array B Liquid Level  
Installation

# PROJECT UPDATE

## PROJECT SCHEDULE

### Project Summary Schedule

WPLE Section 3 Century City Constallation to VA Hospital - September 2022		WPLE Section 3 Level 1 Schedule					MASTER SCHEDULE						
Activity Name	Finish	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
<b>WPLE Section 3 Century City Constallation to VA Hospita</b>	05-Dec-26	[Gantt bar from 2018 to 2026]											
<b>PROJECT PLANNING &amp; DEVELOPMENT</b>	21-Dec-18 A	[Gantt bar from 2018 to 2018]											
<b>ENGINEERING</b>	05-Dec-22	[Gantt bar from 2018 to 2022]											
<b>RIGHT-OF-WAY (ROW)</b>	24-Feb-23	[Gantt bar from 2018 to 2023]											
<b>OWNER FURNISHED EQUIPMENT</b>	24-Apr-25	[Gantt bar from 2020 to 2025]											
<b>CONSTRUCTION</b>	13-May-26	[Gantt bar from 2018 to 2026]											
Utilities	16-Feb-21 A	[Gantt bar from 2018 to 2022]											
Guideway & Track	08-Jul-25	[Gantt bar from 2019 to 2025]											
Stations	29-Oct-25	[Gantt bar from 2020 to 2025]											
Systems	13-Oct-25	[Gantt bar from 2020 to 2025]											
Testing	13-May-26	[Gantt bar from 2025 to 2026]											
<b>Start Up</b>	2027	[Gantt bar from 2026 to 2027]											
Dynamic Testing and System Integration Tests	2026	[Gantt bar from 2026 to 2026]											
Test Running & Trial Operations	2027	[Gantt bar from 2027 to 2027]											
Revenue Service Date - RSD	2027	[Gantt bar from 2027 to 2027]											
<b>Miscellaneous</b>	2027	[Gantt bar from 2026 to 2027]											
Metro Activities	2027	[Gantt bar from 2026 to 2027]											
FTA Process & Approvals	16-Mar-20 A	[Gantt bar from 2018 to 2020]											

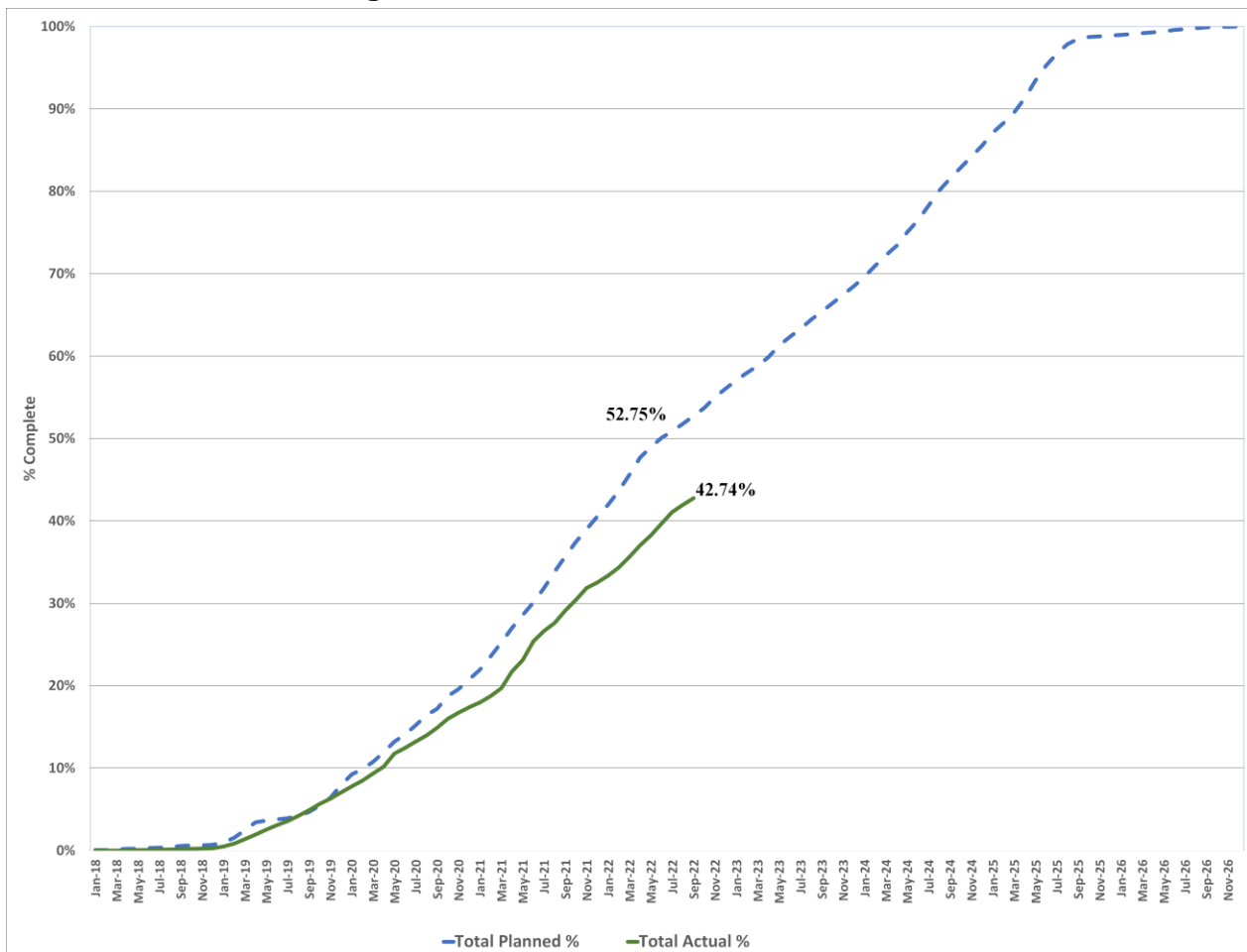
  

<ul style="list-style-type: none"> <li> Remaining Work</li> <li> Milestone</li> <li> Summary</li> </ul>	Page 1 of 1 WPLE Section 3 Level 1 Summary Schedule Los Angeles County Metropolitan Transportation	Data Date: 01-Oct-22 Current Date: 03-Oct-22
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### Progress Summary

	Status	Change from Last Period	Comment
Forecast Revenue Service	2027		
FFGA Revenue Service	2028		FFGA was awarded in March 2020
<b>Final Design Progress:</b>			
Contract C1151	99%	0%	
Contract C1152	97%	0.23%	
<b>Construction Contracts Progress:</b>			
Contract C1151	84%	1%	
Contract C1152	21%	0.58%	
Contract C1153	100%	0%	Substantial Completion occurred on 6/30/19



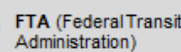

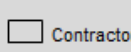
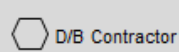
### Planned vs. Actual Progress





**Key Milestones Six-Month Look Ahead**

	Milestone Date	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23
C1152 Submitted APDU 61A AFC, Mural Removal & New Art Wall	9/15/22A	⬡					
C1152 Submitted DU 60 AFC, VA Station	9/30/22A	⬡					
C1152 Issue APDU 61B IFC, Westwood VA Station N. Entrance & Ped Bridge	10/14/22		⬡				
C1152 Submit DU 81 AFC, Tunnels, Cross Passages & Tracks	10/28/22		⬡				
C1152 Begin Construction for BR & BL Tunnel Invert	10/31/22		⬡				
C1152 Issue DU 70 AFC, UCLA Station	11/05/22			⬡			
C1152 Begin UCLA SOE Stage 3 Work	11/07/22			⬡			
C1152 Begin UCLA Mass Excavation Work	11/07/22			⬡			
C1152 Begins Rail / Track Procurement	11/17/22			⬡			
C1152 Issue DU 82 IFC, System Design	12/05/22				⬡		
C1152 Complete All Final Design Packages	12/05/22				⬡		
C1151 BR Tunnel Reach Constellation Station	12/20/22				⬡		
C1152 Complete UCLA SOE Stage 3 Work	01/11/23					⬡	
C1152 Complete Permanent Power Service Duct Bank Construction	02/14/23						⬡

 MTA Staff 
  MTA Board Action 
  FTA (Federal Transit Administration) 
  Other Agencies 
  Contractor 
  D/B Contractor

**Major Equipment Delivery**

	<b>Submittal</b>	<b>Procurement</b>	<b>Delivery</b>	<b>Installation</b>
<b>C1152 Design/Build (Stations)*</b>				
Emergency Ventilation Fans	04/03/23	04/04/23	12/11/23	12/12/24
Station Elevators	03/17/23	03/20/23	03/12/24	08/26/25
Station Escalators	03/17/23	03/20/23	03/12/24	09/17/25
Track – Running Rail	01/20/23	01/23/23	05/12/23	05/02/24
Traction Power Equipment	04/03/23	04/04/23	12/11/23	11/19/24
Automatic Train Control	04/03/23	04/04/23	12/11/23	07/08/25
SCADA RTU System	04/03/23	04/04/23	12/11/23	03/18/26
Radio System	04/03/23	04/04/23	12/11/23	03/18/26
<b>Heavy Rail Vehicles***</b>	<i>Vehicle Procurement - TBD</i>			
<b>Universal Fare System**</b>	TBD	TBD	TBD	2027

\*Dates derived from TPOG's August 2022 Schedule Updates.

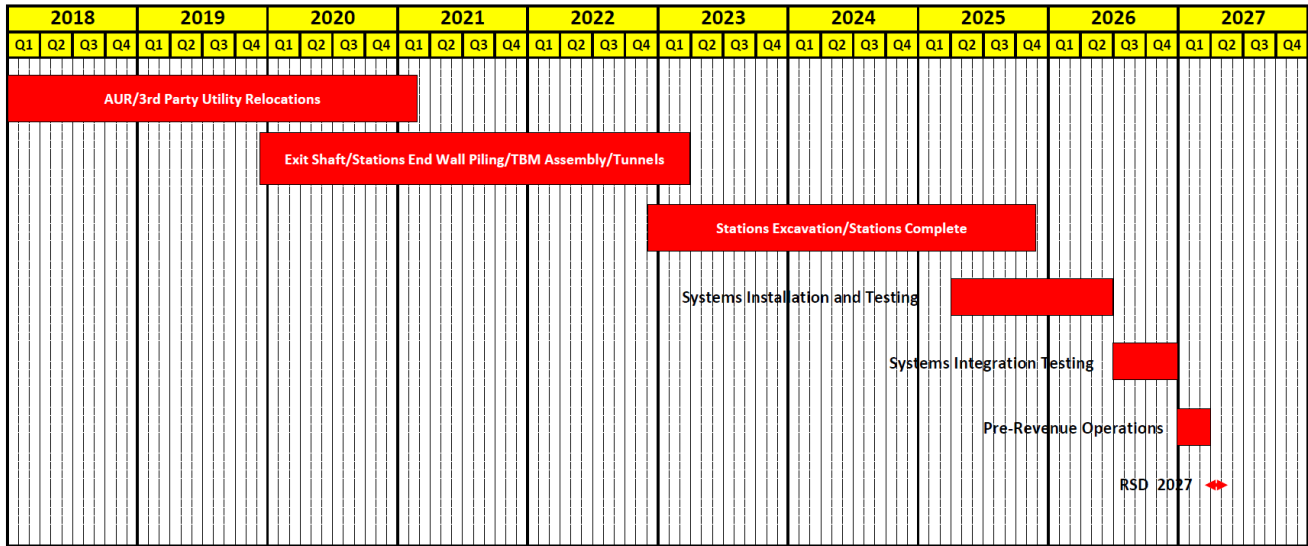
\*\*Forecast release date by TPOG to UFS Contractor access at stations.

\*\*\*Metro supplied equipment.

Project Critical Path

Metro Project Schedule Current Update  
 (Summary of Critical Path)

10/3/2022

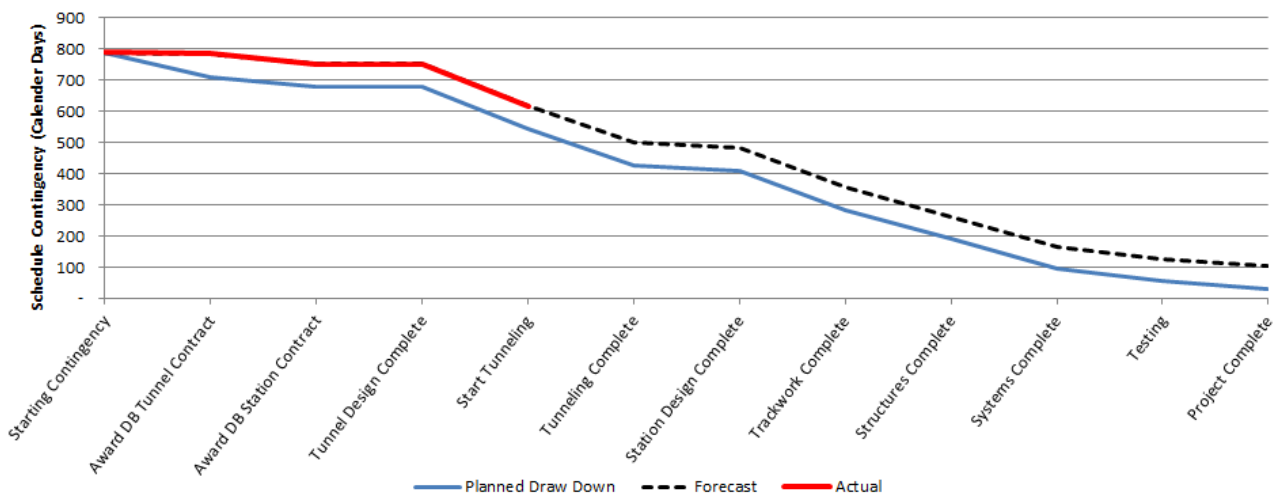


### Project Schedule Contingency Drawdown Analysis

The project schedule contingency drawdown model provides a dual-axis perspective based upon the FFGA RSD of December 2028 and Metro’s Project Master Schedule (PMS) forecast of 2027.

The introduction of the PMS model axis reflects a proportional distribution of available float relative to the FFGA model.

With regards to the FFGA RSD, schedule float of twenty-one (21) months has been maintained.



## PROJECT COST

### Project Cost Analysis

DOLLARS IN THOUSANDS

SCC CODE	DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		CURRENT BUDGET/ FORECAST VARIANCE
			PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
10	GUIDEWAYS & TRACK ELEMENTS	490,712	0	448,271	0	418,147	6,673	248,725	0	448,271	0
20	STATIONS, STOPS, TERMINALS, INTERMODAL	624,995	0	717,637	0	595,241	2,300	144,907	0	717,637	0
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	0	0	0	0	0	0	0	0	0	0
40	SITWORK & SPECIAL CONDITIONS	497,805	0	759,008	-28	677,235	5,308	450,199	0	759,008	0
50	SYSTEMS	130,778	0	81,835	0	57,157	0	145	0	81,835	0
	<b>CONSTRUCTION SUBTOTAL (10-50)</b>	<b>1,744,291</b>	<b>0</b>	<b>2,006,751</b>	<b>-28</b>	<b>1,747,781</b>	<b>14,281</b>	<b>843,976</b>	<b>0</b>	<b>2,006,751</b>	<b>0</b>
60	ROW, LAND, EXISTING IMPROVEMENTS	467,874	0	416,057	0	74,272	443	59,971	0	416,057	0
70	VEHICLES	38,092	0	43,806	0	0	0	0	0	43,806	0
80	PROFESSIONAL SERVICES	508,093	0	533,151	18,209	337,630	3,929	284,259	0	533,151	0
	<b>SUBTOTAL (10-80)</b>	<b>2,758,350</b>	<b>0</b>	<b>2,999,765</b>	<b>18,181</b>	<b>2,159,683</b>	<b>18,653</b>	<b>1,188,206</b>	<b>0</b>	<b>2,999,765</b>	<b>0</b>
90	UNALLOCATED CONTINGENCY	464,142	0	222,983	0	0	0	0	0	222,983	0
100	FINANCE CHARGES	387,375	0	387,375	0	0	0	0	0	387,375	0
	<b>TOTAL PROJECTS 865523 (FFGA &amp; Non-FFGA)</b>	<b>3,609,867</b>	<b>0</b>	<b>3,610,123</b>	<b>18,181</b>	<b>2,159,683</b>	<b>18,653</b>	<b>1,188,206</b>	<b>0</b>	<b>3,610,123</b>	<b>0</b>
	ENVIRONMENTAL/PLANNING - 465523	1,131	0	875	0	875	0	875	0	875	0
	<b>TOTAL PROJECTS 465523 (ENV/PLAN'G)</b>	<b>1,131</b>	<b>0</b>	<b>875</b>	<b>0</b>	<b>875</b>	<b>0</b>	<b>875</b>	<b>0</b>	<b>875</b>	<b>0</b>
	<b>TOTAL PROJECTS 465523 &amp; 865523</b>	<b>3,610,998</b>	<b>0</b>	<b>3,610,998</b>	<b>18,181</b>	<b>2,160,558</b>	<b>18,653</b>	<b>1,189,081</b>	<b>0</b>	<b>3,610,998</b>	<b>0</b>

### Original Budget

Original Budget of \$3.6 billion reflects the Life of Project (LOP) budget approved by the Board on February 28, 2019, plus Finance Charges of \$387.4 million.

### Current Budget and Current Forecast

The Current Budget and Current Forecast remains the same this period at \$3.6 billion.

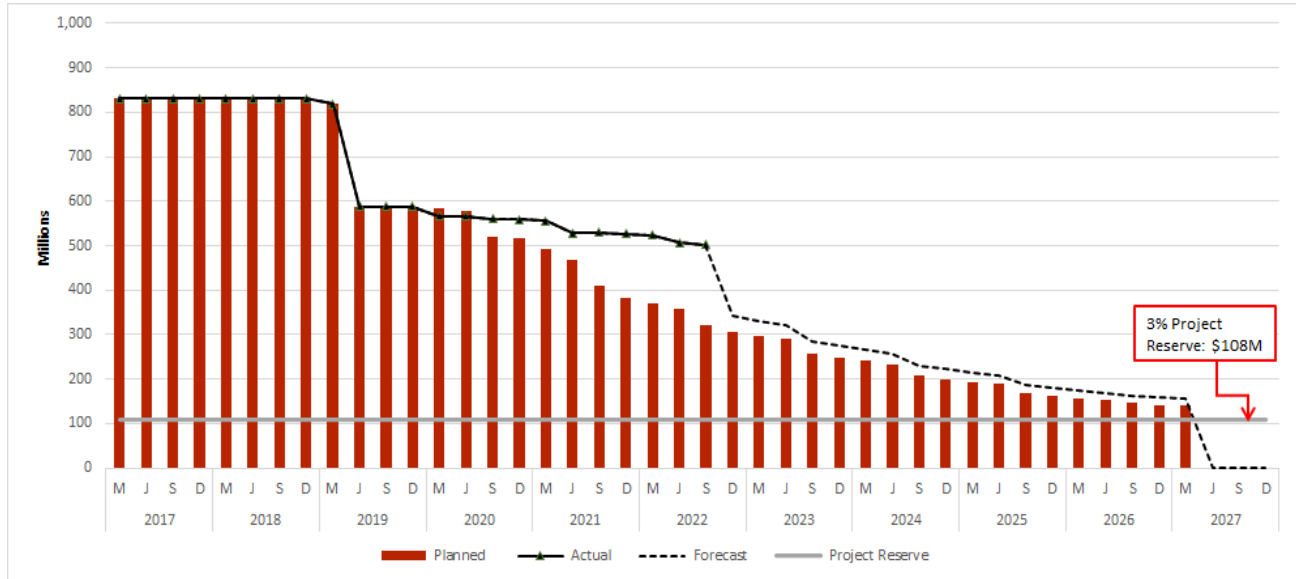
### Commitments

*The Commitments increased by \$18.2 million primarily due to Contract Modifications for Stations Contract C1152, Construction Management Support Services and Project Management Support Services, Change Orders for Stations Contract C1152 and Purchase Orders for Legal Services. The \$2.2 billion in Commitments to date represent 59.8% of the Current Budget.*

### Expenditures

*The Expenditures increased by \$18.7 million primarily due to costs associated with the Tunnels Contract C1151, Stations Contract C1152, VA Shuttle and Valet Services Contract 1204, Metro Project Administration, Engineering Management Support Services, Construction Management Support Services, Project Management Support Services, Environmental Support Services, Quality Assurance Support Services, Legal Services, ROW Agreement, appraisal and acquisition fees, Engineering Design Services, and Third Party Master Cooperative Agreements. The \$1.2 billion in Expenditures to date represent 32.9% of the Current Budget.*

### Cost Contingency Drawdown



### Cost Contingency Drawdown Analysis

The Original Budget of \$3.6 billion includes finance charges of \$387.4 million. It also includes a project cost contingency of \$830.6 million or 23.1% of the total project, which is based on the amended Life of Project (LOP) Budget approved by the Board in February 2019. An allocated contingency amount of \$366.5 million is included in the total cost contingency. The allocated contingency is an amount to cover anticipated but unknown contract modifications issued by Metro [when applicable to specific contracts within each Standard Cost Category (SCC)].

A 3% project reserve threshold is included in the project cost contingency drawdown. Metro’s Board is to be notified when it becomes necessary to drawdown contingency below the project reserve threshold to cover project costs. This process was adopted by the Metro Board of Directors in September 2012.

The project cost contingency drawdown curve is based on a 2027 Forecast Revenue Service Date (RSD).

*The allocated contingency decreased this period by \$0.7M due to approved Contract Change Orders and executed Contract Modifications for Stations Contract C1152.*

PROJECT COST CONTINGENCY					
DOLLARS IN THOUSANDS					
	Original Contingency (Budget)	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)
Unallocated Contingency	464,142	(241,159)	-	(241,159)	222,983
Allocated Contingency	366,455	(86,842)	(682)	(87,524)	278,931
<b>Total Contingency</b>	<b>830,597</b>	<b>(328,001)</b>	<b>(682)</b>	<b>(328,683)</b>	<b>501,914</b>

## Risk Management

### Summary of Risks

During the quarterly risk register meeting, four (4) new risks were identified, three (3) risks were closed, resulting in a total of seventy-eight (78) risks to be managed in the next quarter.

Of the seventy-eight (78) risks, eight (8) are scored as high, forty-three (43) as medium, and twenty-seven (27) as low.

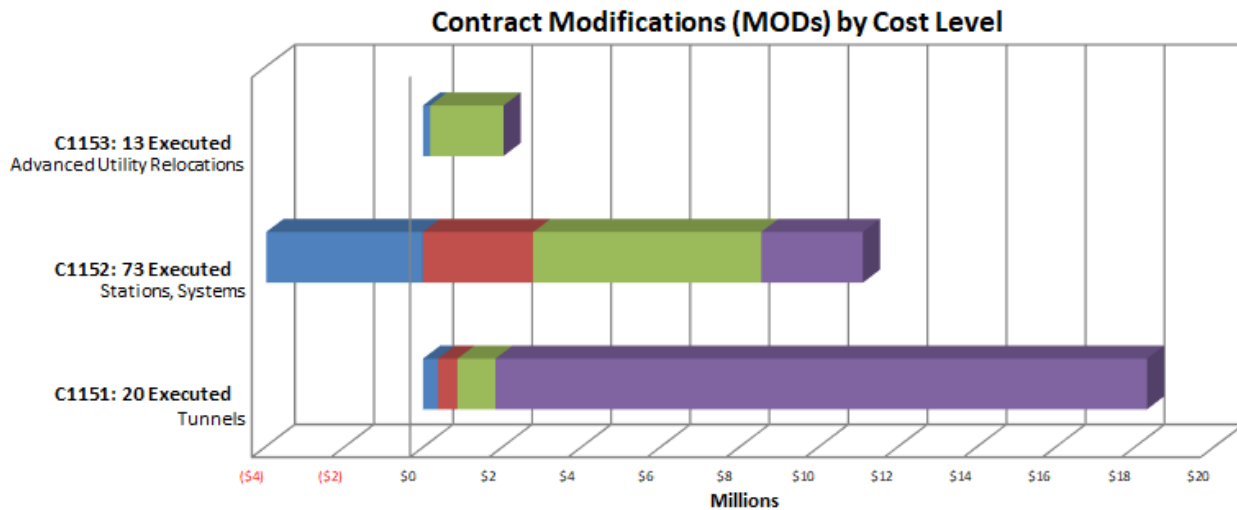
The next WPLE Section 3 Project Risk Register quarterly update is scheduled for December 2022.

### Top Five Risks

The table below shows the top five (5) project risks.

Risk ID	Risk Description	Risk Score	Action Items
90.4	Covid 19 pandemic impact o Supply chain delay o Material cost increase	20.0	1. Evaluate the guideline from the State and local government 2. Putting contingency plan in place.
653.30	Delay of contract turnover from tunnels to stations.	20.0	1. Review scope, ROW, procurement methodology, NEPA action, LONP to identify schedule risks. - closed 2. Received LONP and 130c documents. - closed 3. Review schedule interface between tunnels and stations contracts. 4. Setup regular collaboration meeting. 5. Monitor the tunneling and station excavation progress and seek opportunities for schedule recovery. 6. Review RFC 23 Schedule from C1151 (Complete) 7. TPOG (Station) to submit an integrated schedule with FKTP (Tunnel) Contract to show the interface.
10.001	Cross passage work coordination between 2 contractors - C1151 & C1152	14.0	1. C1152 to re-evaluate and re-sequencing the schedule to interface with C1151 cross passage construction. 2. C1151 to prepare a revised RFC 23.
PLE3-210	Adjacent property development Impacts UCLA Station Design and Construction	14.0	1. Working with the property developer to resolve any design issues for their future development versus the UCLA station design. 2. Ground improvement near the UCLA station (Complete 09/22/22)
400.3	Additional measures may be needed if ground improvement does not work as intended or if further investigation by Contractor shows different conditions from baseline requiring a different ground improvement design/method. <b>(cross passages)</b>	13.5	1. Specify the potential requirements in the contract document. - closed 2. Review requirement for deep cross passages. 3. Geotech Boring is in progress. The risk will be evaluated once the boring data is available. 4. Evaluate the option for the raised Tunnel profile. 5. WSP is revising the baseline report. 6. Require construction plan & schedule from contractor for the cross passages. 7. Draft document received from FKTP but are considered unacceptable by Metro.

Summary of Contract Modifications



	C1151 20 Executed	C1152 73 Executed	C1153 13 Executed	Total
Under \$100K	\$ 379,733	\$ (3,961,568)	\$ 181,291	\$ (3,400,544)
\$100K to \$250K	\$ 495,290	\$ 2,787,645	\$ -	\$ 3,282,935
\$250K to \$1M	\$ 958,487	\$ 5,769,493	\$ 1,855,558	\$ 8,583,538
Over \$1M	\$ 16,484,961	\$ 2,570,689	\$ -	\$ 19,055,650
<b>Total Contract MODs</b>	<b>\$ 18,318,471</b>	<b>\$ 7,166,259</b>	<b>\$ 2,036,849</b>	<b>\$ 27,521,579</b>
<b>Contract Award Amount</b>	<b>\$ 410,002,000</b>	<b>\$ 1,363,620,000</b>	<b>\$ 11,439,000</b>	<b>\$ 1,785,061,000</b>
<b>% of Contract MODs</b>	<b>4.5%</b>	<b>0.5%</b>	<b>17.8%</b>	<b>1.5%</b>

Percent of Contract MODs equals the Total Contract MODs divided by the Contract Award Amount.

Twenty Contract Modifications (MODS) with a total value of \$18.3 million have been executed since the award of C1151 Contract for Tunnels.

Seventy-three Contract Modifications (MODS) with a total value of \$7.2 million have been executed since the award of C1152 Contract for Stations.

Thirteen Contract Modifications (MODS) with a total value of \$2.0 million have been executed since the award of C1153 Contract for Advanced Utility Relocations.



## DISADVANTAGED BUSINESS ENTERPRISE (DBE)

### Contract C1151

As of September 2022:

• DBE Goal (Design) The percentage of funds apportioned to Design Contracts	11.19%
• Current DBE Commitment Design - The DBE Committed Dollars divided by Total Contract Value for Design	\$3,171,391 (17.22%)
• Current DBE Participation - Total amount paid to date to DBEs divided by the amount paid to date to Prime.	\$3,150,490 (18.15%)

Six (6) Design DBE subcontractors have been identified for Design

• DBE Commitment (Construction) - The percentage of funds apportioned to Construction Contracts	17.10%
• Current DBE Commitment Construction - Contract commitment divided by current contract value for Construction	\$71,331,370 (17.97%)
• Current DBE Participation - Total amount paid to date to DBEs divided by the amount paid to date to Prime	\$68,309,014 (20.47%)

Seventy-Five (75) Construction DBE subcontractors have been identified to-date

**Contract C1152**

As of September 2022:

• DBE Goal - Design The percentage of funds apportioned to Design Contracts	19.25%
• Current DBE Commitment Design Total DBE Committed Dollars divided by Total Value for Design	\$15,222,779 (17.30%)
• Current DBE Participation– Total amount paid to date to DBEs divided by the amount paid to date to Prime.	\$13,099,092 (18.25%)

Nineteen (19) Design DBE subcontractors have been identified for Design

• DBE Goal Construction. The percentage of funds apportioned to Construction Contracts	21.00%
• Current DBE Commitment Construction - Contract commitment divided by current contract value for Construction	\$51,954,487 (4.20%)
• Current DBE Participation- Total amount paid to date to DBEs divided by the amount paid to date to Prime	\$30,221,335 (7.18%)

Nineteen (19) Construction DBE subcontractors have been identified to-date

## PROJECT LABOR AGREEMENTS (PLA)

As of September 2022

### Contract C1151

<b>Targeted Worker Goal</b> Construction work to be performed by residents from Economically Disadvantaged Area of Los Angeles County	40.00%
<b>Targeted Worker Current Attainment</b>	42.33%
<b>Apprentice Worker Goal</b> Construction work to be performed by Apprentices	20.00%
<b>Apprentice Worker Current Attainment</b>	16.75%
<b>Disadvantaged Worker Goal</b> Construction work to be performed by Disadvantaged Workers	10.00%
<b>Disadvantaged Worker Current Attainment</b>	7.82%

### Contract C1152

<b>Targeted Worker Goal</b> Construction work to be performed by residents from Economically Disadvantaged Area of Los Angeles County	40.00%
<b>Targeted Worker Current Attainment</b>	62.77%
<b>Apprentice Worker Goal</b> Construction work to be performed by Apprentices	20.00%
<b>Apprentice Worker Current Attainment</b>	11.20%
<b>Disadvantaged Worker Goal</b> Construction work to be performed by Disadvantaged Workers	10.00%
<b>Disadvantaged Worker Current Attainment</b>	17.23%

**Contract C1153**

<b>Targeted Worker Goal</b> Construction work to be performed by residents from Economically Disadvantaged Areas in the United States	40.00%
<b>Targeted Worker Current Attainment (Final)</b>	47.64%
<b>Apprentice Worker Goal</b> Construction work to be performed by Apprentices	20.00%
<b>Apprentice Worker Current Attainment (Final)</b>	21.18%
<b>Disadvantaged Worker Goal</b> Construction work to be performed by disadvantaged workers	10.00%
<b>Disadvantaged Worker Current Attainment (Final)</b>	12.07%

## FINANCIAL/GRANT

### Status of Funds by Source\*

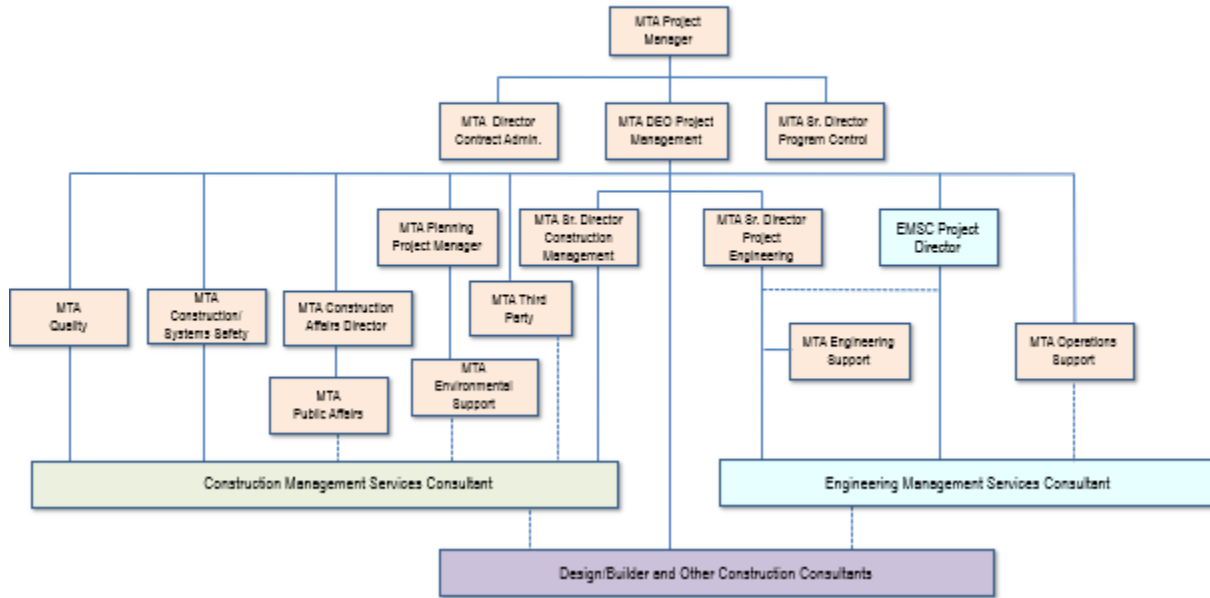
SOURCE	(A)	(B)	(C)	(D)	(D/B)	(E)	(E/B)	(F)	(F/B)
	ORIGINAL BUDGET	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS \$	%	EXPENDITURES \$	%	BILLED TO FUNDING SOURCE \$	%
FEDERAL - SECTION 5309 NEW STARTS	\$1,300.000	\$1,300.000	\$397.711	\$383.228	29%	\$383.228	29%	\$374.582	29%
FEDERAL - SECTION 5309 NEW STARTS (ARPA-CIG**)	\$0.000	\$93.438	\$93.438	\$93.438	100%	\$93.438	100%	\$93.438	100%
FEDERAL STBG	\$93.048	\$93.048	\$70.000	\$18.266	20%	\$17.738	19%	\$0.085	0%
FEDERAL CMAQ	\$45.000	\$45.000	\$45.000	\$22.450	50%	\$22.450	50%	\$22.450	50%
LOCAL AGENCY	\$96.391	\$96.391	\$0.000	\$0.000	0%	\$0.000	0%	\$0.000	0%
TCRP	\$10.001	\$10.001	\$10.001	\$10.001	100%	\$10.001	100%	\$10.001	100%
MEASURE R 35%	\$844.063	\$750.625	\$499.654	\$599.810	80%	\$46.943	6%	\$30.352	4%
MEASURE M 35%	\$1,190.661	\$1,190.661	\$689.591	\$1,033.365	87%	\$615.283	52%	\$520.711	44%
STATE RIP	\$31.834	\$31.834	\$0.000	\$0.000	0%	\$0.000	0%	\$0.000	0%
<b>TOTAL</b>	<b>\$3,610.998</b>	<b>\$3,610.998</b>	<b>\$1,805.395</b>	<b>\$2,160.558</b>	<b>59.8%</b>	<b>\$1,189.081</b>	<b>32.9%</b>	<b>\$1,051.619</b>	<b>29.1%</b>

Original Budget based on 2019 Board approved LOP Budget, plus Finance Charges of \$387.4 million.

## PROJECT ORGANIZATION AND STAFFING

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

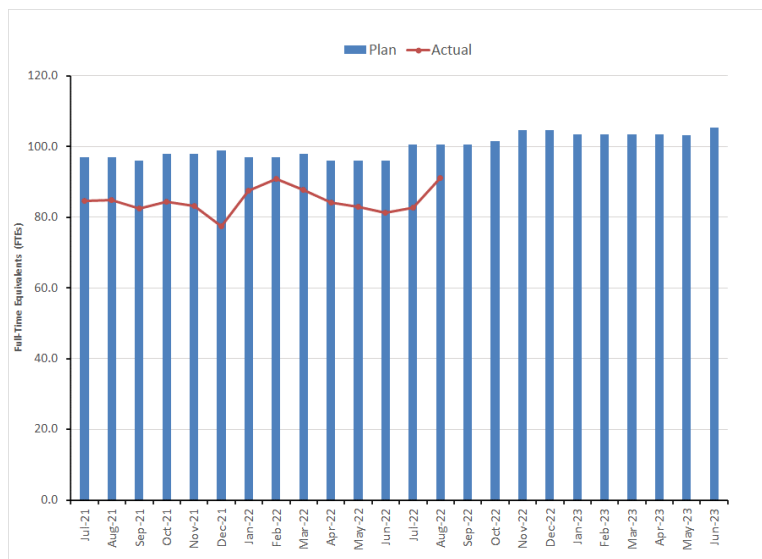
**Westside Purple Line Extension Section 3  
Responsibility and Reporting Matrix**



The overall FY23 Total Project Staffing Plan averages 102.90 FTEs per month.

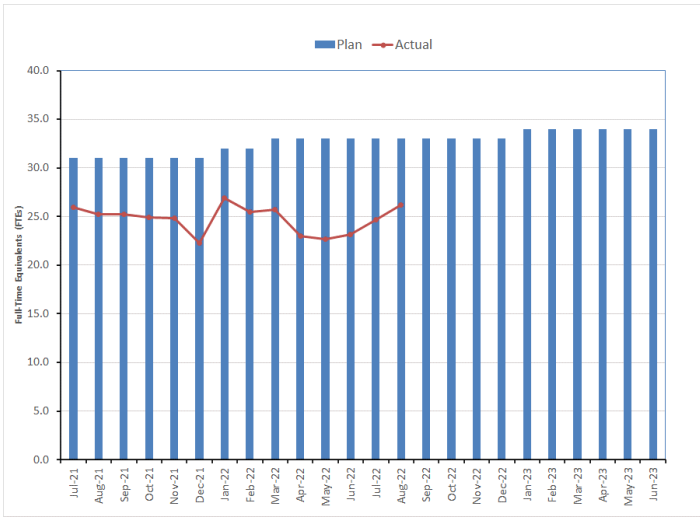
For August 2022, there were a total of 26.2 FTEs for MTA's Project Administration Staff and 64.8\* FTEs for Consulting Staff. The total project staffing for August 2022 was 91.0 FTEs.

### Total Project Staffing – Metro and Consultants

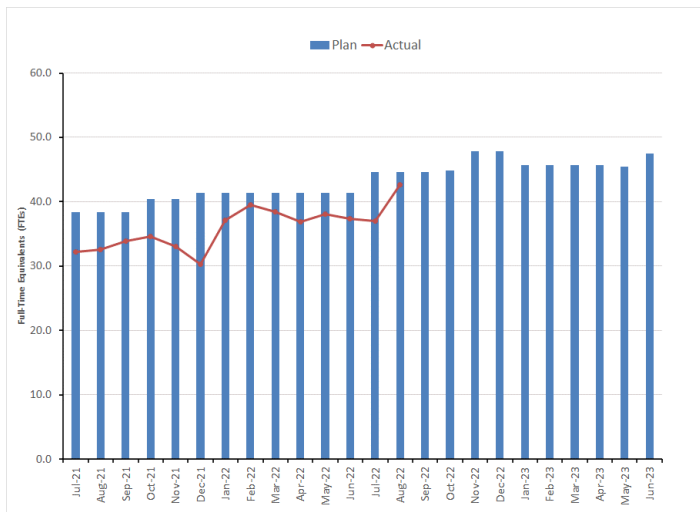


\*Actuals include 5.2 FTEs related to Project Management Support Services (PMSS).

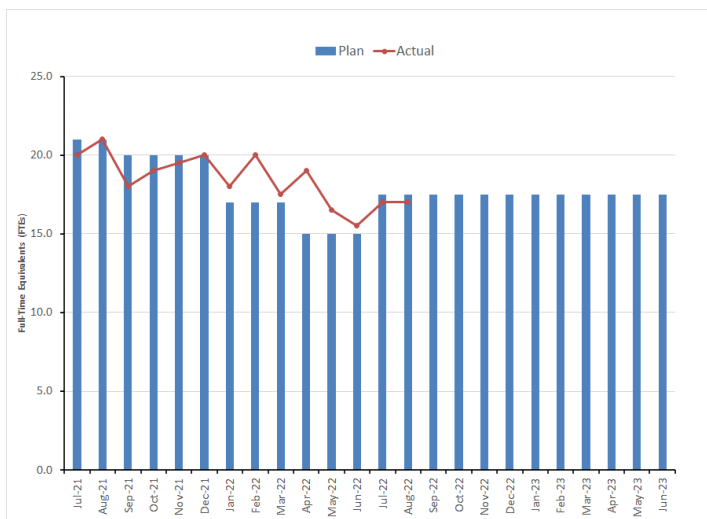
### Metro Staff



### 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

Real Estate Status Summary of all Rights											
# Properties	Properties	Description	Number of Project Parcels	Certified	Appraisals Completed	Offers Made	Agreements Signed	Condemnation Filed	Relocations		Parcels Available
									Required	Completed	
85	Westfield Mall (2)	SSE	2	2	1	1	0	1	0	0	0
		TCE	1	1							
	WW Med	SSE	1	1	1	1	0	1	2	0	0
		SE	1	1							
		TCE	1	1							
	10900	SSE	1	1	1	1	0	0	1	0	0
		SE	1	1							
		TCE	1	1							
	UCLA	PE (SE & SSE)	1	1	0	0	0	0	0	0	1
		SSE	1	1							
		SE	1	1							
		TCE	1	1							
	GSA	SSE	1	1	1	1	1	0	0	0	1
			1	1							
	VA	PE (SE & SSE)	1	1	1	1	1	0	0	0	1
SSE		1	1								
SE		1	1								
TCE		1	1								
SSE Only (75)	SSE	75	75	75	75	26	62	0	0	75	
Public street (2)	SSE (CPU code)	2	2	N/A	N/A	N/A	N/A	N/A	N/A	2	
Caltrans	JUA (handled by Third Party)	1	1	N/A	N/A	1	0	0	0	1	
85	<b>Total</b>		<b>96</b>	<b>96</b>	<b>80</b>	<b>80</b>	<b>29</b>	<b>64</b>	<b>3</b>	<b>0</b>	<b>81</b>

Real Estate certifications are substantially complete.

The following parcels are available to the Contractors:

- C1151 Tunnel Contract
  - VA Staging Area (W-5401)
  - Caltrans (W-5301)
  - UCLA Lot 36 End Wall Piling (W-5101-4)
  
- C1152 Station Contract
  - UCLA Lot 36 Staging Areas (W-5101 through W-5101-6)
  - VA Staging Area (W-5401-3 includes Lot 42)



## QUALITY ASSURANCE

- Attended weekly project staff meetings for C1151 Tunnels, C1152 Stations, and weekly progress meetings with FKTP & TPOG.
- Held QA/QC meetings with C1151 FKTP and C1152 TPOG Quality Teams.
- Attended C1152 Readiness Review Meeting - Steam and Condensate Piping
- Reviewed construction materials test reports, special inspection reports and Oversight Inspectors' Daily Reports. Provided review comments on C1151 and C1152 submittals and RFIs.
- Conducted **new assessment** and issued subsequent conforming or non-conforming items for following:
  - C1151 (Tunnels Contract)
    - Environmental GR 01 74 19 Waste Management
  - C1152 (Stations Contract)
    - VA station Steam tunnel, fabrication of steel pipe / Superior Pipes, and pipe support racks / Lowers
    - Geotechnical Instrumentation Installation
    - Environmental GR 01 35 35 Wastewater
    - Weekend Closure Traffic Management for UCLA Decking Installation Operation
- Conducted **on-going monthly assessment** and issued subsequent conforming or non-conforming items for following:
  - C1151(Tunnels Contract)
    - Tunnel special steel lining segments - stud welding at Traylor Precast yard
    - Tunnel lining segment fabrication, material testing, batch plant inspection, segment storage and transportation at Traylor Precast plant
    - Tunnel instrumentation preparation, installation, initialize and baseline reading
  - C1152 (Stations Contract)
    - SOE (UCLA) – Fabrication and installation of deck support components, field welding of cap beams and soldier piles splicing
    - VA Station and UCLA Station SOE – Shop Welding (Struts, Wales, bracing) at TPOG Fontana Yard

## ENVIRONMENTAL

- Conducted field environmental monitoring and inspections for environmental compliance and VA/UCLA MOA's for FKTP and TPOG.
- Participated in contract construction progress meetings with FKTP and TPOG.
- Monitored vibration levels of sensitive properties during ground improvement work at Wilshire/Gayley.
- Abatement of asbestos containing utilities during decking operations.
- Paleontological monitoring during excavations at UCLA.

## **CONSTRUCTION AND COMMUNITY RELATIONS**

- Attended the following meetings: Construction Management meetings for the Tunnels and Stations contracts, LA DOT, VA Coordination, LA BOE, Tishman Speyer coordination, UCLA, Westwood Medical Plaza coordination, Bus Agency Coordination, Westwood Village Improvement Association, and Westwood Building Managers meeting.
- Produced and distributed 40 construction work notices for Westwood/UCLA work activities, Westwood/VA work activities, and instrumentation along the tunnel alignment.
- Continued coordination with major stakeholder groups including Council District 5, UCLA, Westwood Village, and West LA VA Campus.
- Updated Facebook/Twitter and Metro.net as needed.

## **CREATIVE SERVICES**

- Launched Veterans Legacy Art Project workshops with veterans, led by community-based arts organization, Piece by Piece.
- Managed artist design development for integrated station artworks.
- Participated in comment resolution meetings to assist in overall design coordination.
- Continued assessment of Project operating impacts to signage between sections and systemwide.

## SAFETY AND SECURITY

### Contract C1151 Tunnels

- Metro Project Safety staff attended weekly Toolbox Meetings, Progress Meetings, readiness reviews, and other project meetings to evaluate Contractors Safety Program compliance with contract requirements.
- Metro / FKTP-JV project safety staff conducted schedule, safety / security and over-the-shoulder review meetings.
- Metro Project Safety staff worked regularly with Program Management and Construction Relations staff to monitor issues related to public concerns regarding noise, traffic and public/construction interfaces as well as public interactions with the construction crews.
- Metro Project Safety staff conducted project Safety Orientation, SCSR and H2S Safety Training for new Metro/Consultants and IPMO project staff.
- Metro Project Safety staff conducted right-of-way (ROW) and safety / security walks, safety/security reviews, and coordination with FKTP-JV staff for oversight and support of all project field work activities.
- Metro Project Safety hosted the September Monthly Safety and Security Meeting for Section 3 Westside-Purple Line Extension Contractors on September 30<sup>th</sup>, 2022.
- Frontier-Kemper-TutorPerini (FKTP-JV) reported One (1) Recordable Injuries in September 2022.
- FKTP-JV reported 41,340 actual work hours through September 2022.
  - FKTP-JV provided and included an updated tabulation correction of 3,386 Work Hours for previous months of 2022.
- FKTP-JV Project to Date through September 2022, Contractor FKTP-JV Work Hours are 1,144,204.
- FKTP-JV Project to Date, there are Sixteen (16) Recordable Injuries and Seven (7) Days Away from Work Injuries. The Recordable Injury Rate of 2.80. The Bureau of Labor Statistics reports the National Average Recordable Injury Rate is 2.4.

Contract C1152 Stations, Trackwork, Systems, and Testing

- Metro Project Safety staff attended weekly Toolbox Meetings, Progress Meetings, readiness reviews, and other project meetings to evaluate Contractors Safety Program compliance with contract requirements.
- Metro/ TPOG-JV project safety staff conducted schedule, safety/security, and over-the-shoulder review meetings.
- Metro Project Safety hosted the September Monthly Safety and Security Meeting for Section 3 Westside-Purple Line Extension Contractors on September 30<sup>th</sup>, 2022.
- Metro Project Safety staff conducted project Safety Orientation for new Metro / Consultants and IPMO project staff.
- Metro Project Safety conducted right-of-way (ROW) and safety/security walks, safety/security reviews, and coordination with TPOG-JV staff for oversight and support of all project field work activities.
- TutorPerini-O&G (TPOG-JV) reported Zero (0) Recordable Injuries in September 2022.
- TPOG-JV reported 18,694 actual work hours through September 2022.
- TPOG-JV Project to Date through September 2022 Contractor TPOG-JV Work Hours is 1,028,283.
- TPOG-JV Project to Date, there are Zero (0) Recordable Injuries and Zero (0) Days Away from Work Injuries. The Recordable Injury Rate of 0.0. The Bureau of Labor Statistics reports the National Average Recordable Injury Rate is 2.4.

## APPENDIX

### CHRONOLOGY OF EVENTS

January 2011	FTA approval to enter Preliminary Engineering
August 2012	FTA Record of Decision
April 2017	Issued RFQ for C1151 Tunnels Design/Build Contract
May 2017	Issued IFB for C1153 AUR Contract
September 2017	Issued RFQ for C1152 Stations, Trackwork, Systems & Testing Design/Build Contract
January 2018	Issued NTP for C1153 AUR Contract
April 2018	C1153 Contractor commenced work
August 2018	FTA approval to enter New Starts Engineering Phase
September 2018	Received FTA approval for Letter of No Prejudice for C1151 Tunnels Contract
November 2018	Issued Contract Award for C1151 Tunnels Contract
December 2018	FTA completed environmental review of 23 CFR §771.130 (c)
January 2019	Issued NTP for C1151 Tunnels Contract
April 2019	Received FTA's Letter of No Prejudice for C1152 Stations Contract
May 2019	Issued Contract Award for C1152 Stations Contract
June 2019	C1153 AUR Contract achieved Substantial Completion
July 2019	Issued NTP for C1152 Stations Contract
September 2019	FKTP began SCE Ductbank Construction
December 2019	Partial VA Site Access Given for Tree Removal
January 2020	Access to Tail Track Exit Shaft & Western Staging Area
February 2020	UCLA Lot 36 Access Given to TPOG
March 2020	FTA Executed FFGA

June 2020	FKTP Completed SCE Ductbank Construction
July 2020	Began TBM Assembly in the Tail Track Exit Shaft
October 2020	TBM #1 Began Initial Tunnel Operations on October 23, 2020
November 2020	Access to VA Campus Lot 42
December 2020	Installation of Starter Gantry for TBM #1 (BR)
January 2021	TBM #1 (BR) Bore the first 415 feet. Permeation Grouting at Sepulveda started in January.
February 2021	Removal of Starter Gentry for TBM #1 (BR)
March 2021	Installation of Starter Gentry and Cradle for TBM #2 (BL). Start Utilities Relocation in VA
April 2021	Commission TBM #2 (BL) Starter Gentry & Start Boring. SOE Piling at VA started in April
May 2021	Storm Drain and Sanitary Sewer in VA completed in May
June 2021	West Endwall at VA completed in June
July 2021	Removal of Starter Gantry for TBM #2 (BL)
August 2021	UCLA Station SOE Pile Installation Started (Install West to East) TBM #1 (BR) resumed full-mode mining.
September 2021	East Endwall at Westwood/VA Hospital Station completed. Permeation grouting work underneath Sepulveda Blvd completed.
October 2021	Install Soldier Piles Wilshire North - Stage 1 East - Gayley to Westwood.
November 2021	TBM #1 (BR) completed continuous mining underneath I-405 freeway and 96" MWD feeder. TBM #2 (BL) resumed full-mode mining.
December 2021	Contract C1204 – Shuttle and Valet Services During Construction of the Westwood/VA Station awarded to Everpark Inc. and NTP issued.
January 2022	BL TBM and BR TBM completed mining through the Westwood/VA Station and proceeding to the Westwood/UCLA Station. VA steam tunnel relocation work initiated.
February 2022	Concrete placement for the Construction on VA steam tunnel concrete cradle initiated. BR TBM reached the Westwood/UCLA Station, and the BL TBM completed the I-405/Sepulveda crossing.