



Metro


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TO: DISTRIBUTION

FROM: KIMBERLY ONG 
EXECUTIVE OFFICER/PROJECT MANAGER

SUBJECT: WESTSIDE PURPLE LINE EXTENSION SECTION 3 PROJECT
MAY 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 May 27, 2022.

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

KO: VM
Enclosure

PURPLE (D LINE) EXTENSION PROJECT Section 3



Metro[®]

Purple (D Line) Extension Project

Section 3

MONTHLY PROJECT STATUS REPORT

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

May 2022

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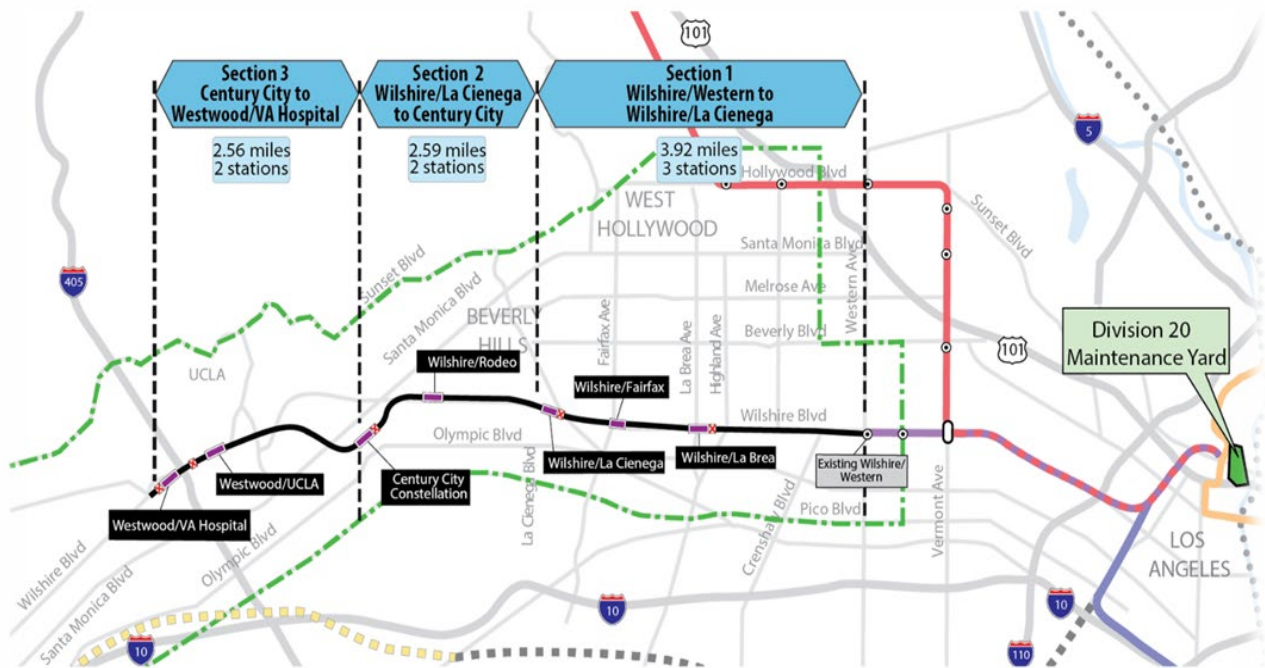
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PROJECT OVERVIEW

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 northside of Wilshire Boulevard and one-half entrance on the southside 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 has procured 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 May 2022, the Project achieved 38% 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 support of excavation piling 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 60, 60B, 70, 70C, 70D, 81, 82
 - AFC design is on-going for 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 41D (City of LA portion), 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), 55 (Part 3)*

DUs and APDUs submitted this reporting period:

- *APDU 41D (LA County portion), AFC*
- *APDU 90A, 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) have mined beyond the Westwood/UCLA station. TBM No. 1 has mined over 6,800 feet (51%). TBM No. 2 has mined over 5,700 feet (42%). Installation of instrumentation along the tunnel alignment continues. Segment production, including manufacture of the seismic steel linings, continues with overall 74% of linings cast.
- C1152 – Stations Contract:
Final design continues and is about 95% complete. At the Westwood/UCLA station, pile installation for Support of Excavation (SOE) continued in the Wilshire Blvd median; overall Westwood/UCLA station SOE is about 74% complete. Installation of dewatering wells and geotechnical instrumentation for monitoring ground movements duration station excavation continued. At Westwood/VA station, temporary decking installation at I-405 on/off ramps was completed. The VA steam tunnel relocation work continues, concrete walls for three of four vaults completed.
- Third Party Utility Relocations:
The LADWP power cutover to 10921 Wilshire Boulevard is expected to be complete in Fall 2022.

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 16.

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 18.

There is an open claim that is being evaluated.

- C1151 Western VA TTES Site Access Delay (Claim 1)

Key Management Concerns

Slower than planned tunneling production may impact C1152 work.

Project Construction Photos



BL Tunnel - Ring Erection (Ring 1069)



Westwood/UCLA Station
Dewatering Well Installation (DW 29)



Westwood/VA Station
Temporary Decking Installation at I-405 On/Off Ramps



Westwood/VA Station
Concrete Wall Placed for VA Steam Line Vault 400

PROJECT UPDATE

PROJECT SCHEDULE

Project Summary Schedule

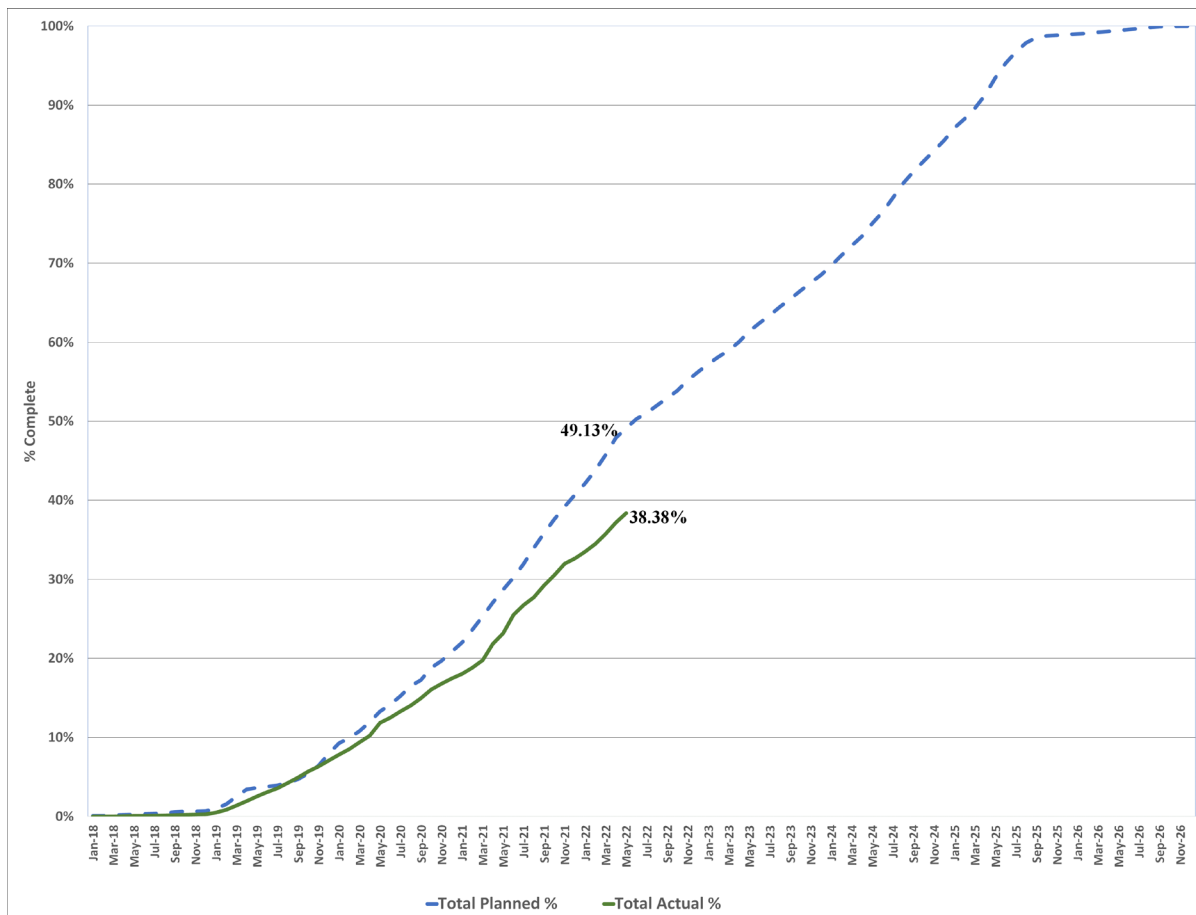
WPLE Section 3 Century City Constallation to VA Hospital - Current		WPLE Section 3 Level 1 Schedule					MASTER SCHEDULE						
Activity Name	Finish	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
WPLE Section 3 Century City Constallation to VA Hospita	2027	q	q	q	q	q	q	q	q	q	q	q	
PROJECT PLANNING & DEVELOPMENT	21-Dec-18 A	▼ 21-Dec-18 A											
ENGINEERING	31-Aug-22	▼ 31-Aug-22											
RIGHT-OF-WAY (ROW)	24-Feb-23	▼ 24-Feb-23											
OWNER FURNISHED EQUIPMENT	24-Apr-25	▼ 24-Apr-25											
CONSTRUCTION	13-May-26	▼ 13-May-26											
Utilities	16-Feb-21 A	▼ 16-Feb-21 A											
Guideway & Track	18-Jul-25	▼ 18-Jul-25											
Stations	07-Nov-25	▼ 07-Nov-25											
Systems	23-Oct-25	▼ 23-Oct-25											
Testing	13-May-26	▼ 13-May-26											
Start Up	2027	▼ 2027											
Dynamic Testing and System Integration Tests	2026	▼ 2026											
Test Running & Trial Operations	2027	▼ 2027											
Revenue Service Date - RSD	2027	▼ 2027											
Miscellaneous	2027	▼ 2027											
Metro Activities	2027	▼ 2027											
FTA Process & Approvals	16-Mar-20 A	▼ 16-Mar-20 A											

▼ Remaining Work ▼ Milestone ▼ Summary	Page 1 of 1 WPLE Section 3 Level 1 Summary Schedule Los Angeles County Metropolitan Transportation	Data Date: 01-June-22 Current Date: 03-June-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
Final Design Progress:			
Contract C1151	99%	0%	
Contract C1152	95%	2%	
Construction Contracts Progress:			
Contract C1151	76%	2%	
Contract C1152	18%	1%	
Contract C1153	100%	0%	Substantial Completion occurred on 6/30/19

Planned vs. Actual Progress



Key Milestones Six-Month Look Ahead

	Milestone Date	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
C1152 Submitted APDU 90A AFC, Tail Track Exit Shaft	5/31/22A	⬡					
C1152 Issue APDU 61A AFC, Mural Removal & New Art Wall	06/30/22		⬡				
C1152 Submit DU 81 AFC, Tunnels, Cross Passages & Tracks	06/30/22		⬡				
C1152 Issue APDU 41D IFC, Permanent Water Service to VA Station (LA County Portion)	06/30/22		⬡				
C1152 Issue APDU 61B IFC, Westwood VA Station N. Entrance & Ped Bridge	06/30/22		⬡				
C1152 Issue DU 60 AFC, VA Station	06/30/22		⬡				
C1152 Begin UCLA Station Temp Decking Work	07/16/22			⬡			
C1152 Issue DU 70 AFC, UCLA Station	07/22/22			⬡			
C1152 Complete All Final Design Packages	08/31/22				⬡		
C1152 Begins Rail / Track Procurement	08/15/22				⬡		
C1152 Complete VA Steam Tunnel Relocation	09/30/22					⬡	
C1151 BR Tunnel Reach Constellation Station	10/31/22						⬡
C1152 Begin Construction for BR & BL Tunnel Invert	10/31/22						⬡

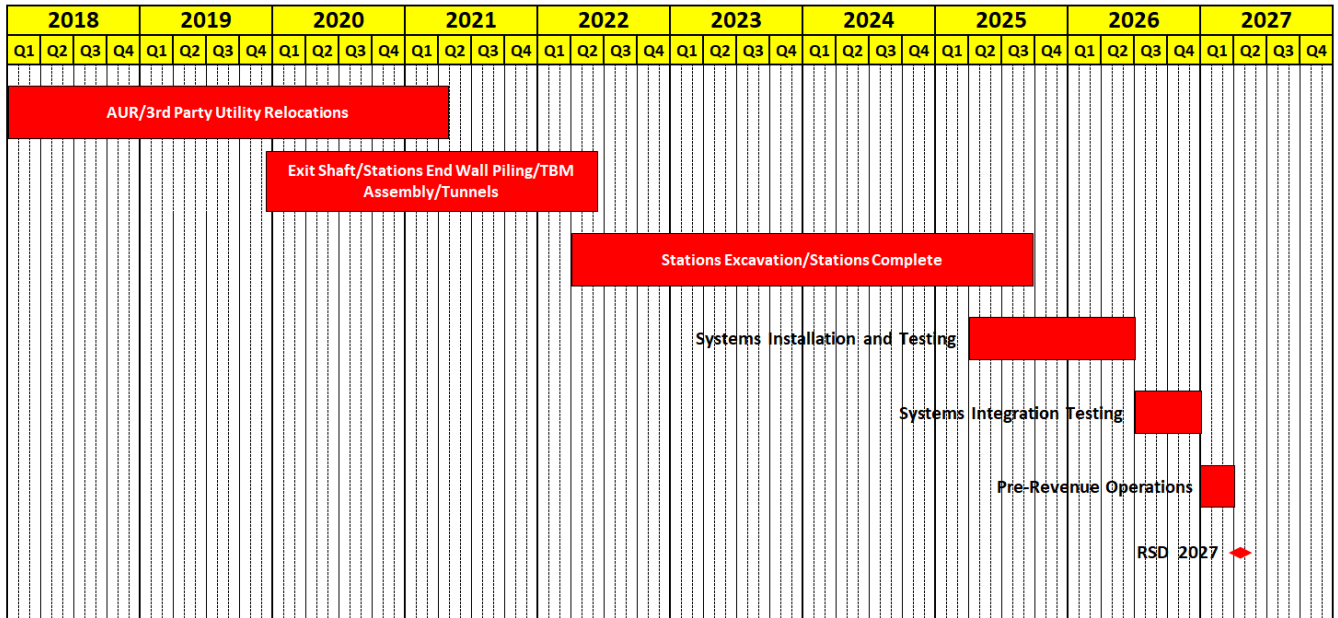
 MTA Staff
  MTA Board Action
  FTA (Federal Transit Administration)
  Other Agencies
  Contractor
  D/B Contractor

Major Equipment Delivery

	Submittal	Procurement	Delivery	Installation
C1152 Design/Build (Stations)*				
Emergency Ventilation Fans	12/13/22	12/14/22	08/21/23	10/24/24
Station Elevators	11/15/22	11/16/22	11/09/23	07/10/25
Station Escalators	11/15/22	11/16/22	11/09/23	07/31/25
Track – Running Rail	09/15/22	09/16/22	01/11/23	01/16/24
Traction Power Equipment	12/13/22	12/14/22	08/21/23	09/26/24
Automatic Train Control	12/13/22	12/14/22	08/21/23	05/20/25
SCADA RTU System	12/13/22	12/14/22	08/21/23	01/30/26
Radio System	12/13/22	12/14/22	08/21/23	01/30/26
Heavy Rail Vehicles***	<i>Vehicle Procurement - TBD</i>			
Universal Fare System**	TBD	TBD	TBD	2027

*Dates derived from TPOG’s April 2022 Schedule Update.
 **Forecast release date by TPOG to UFS Contractor access at stations.
 ***Metro supplied equipment.

Project Critical Path

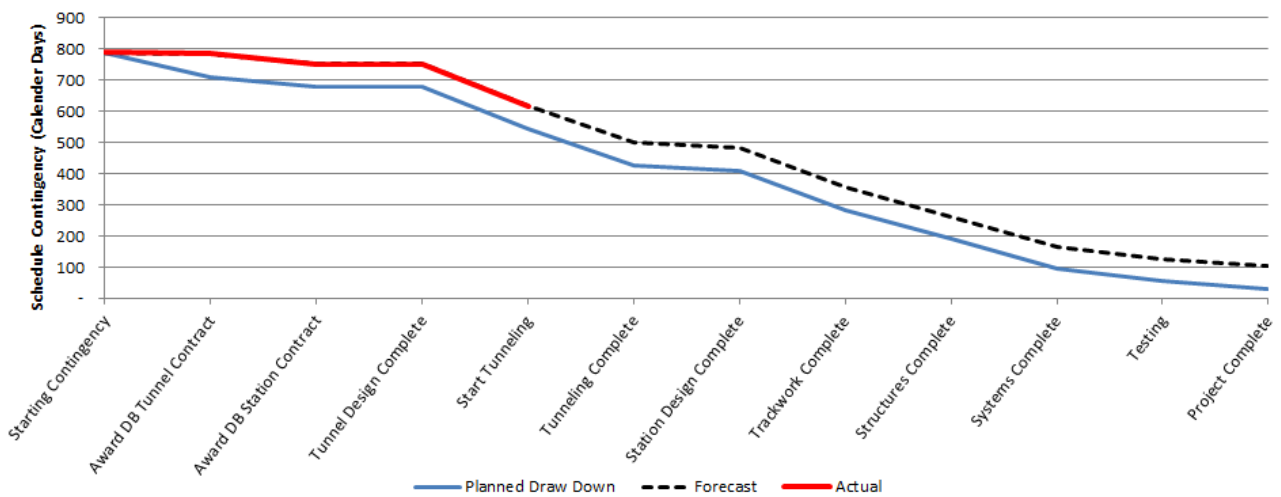


Project Schedule Contingency Drawdown Analysis

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	448,571	0	418,147	6,223	220,537	0	448,571	0
20	STATIONS, STOPS, TERMINALS, INTERMODAL	624,996	0	717,637	3	591,741	9,108	118,074	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	758,379	324	676,634	5,340	429,703	0	758,379	0
50	SYSTEMS	130,778	0	81,835	0	57,150	0	145	0	81,835	0
	CONSTRUCTION SUBTOTAL (10-50)	1,744,291	0	2,006,422	327	1,743,672	20,671	768,460	0	2,006,422	0
60	ROW, LAND, EXISTING IMPROVEMENTS	467,874	0	416,057	0	142,032	100	57,331	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	519,733	123	306,557	4,036	266,216	0	519,733	0
	SUBTOTAL (10-80)	2,758,350	0	2,986,018	449	2,191,262	24,807	1,092,007	0	2,986,018	0
90	UNALLOCATED CONTINGENCY	464,142	0	236,730	0	0	0	0	0	236,730	0
100	FINANCE CHARGES	387,375	0	387,375	0	0	0	0	0	387,375	0
	TOTAL PROJECTS 865523 (FFGA & Non-FFGA)	3,609,867	0	3,610,123	449	2,191,262	24,807	1,092,007	0	3,610,123	0
	ENVIRONMENTAL/PLANNING - 465523	1,131	0	875	0	875	0	875	0	875	0
	TOTAL PROJECTS 465523 (ENV/PLAN'G)	1,131	0	875	0	875	0	875	0	875	0
	TOTAL PROJECTS 465523 & 865523	3,610,998	0	3,610,998	449	2,192,137	24,807	1,092,882	0	3,610,998	0

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.

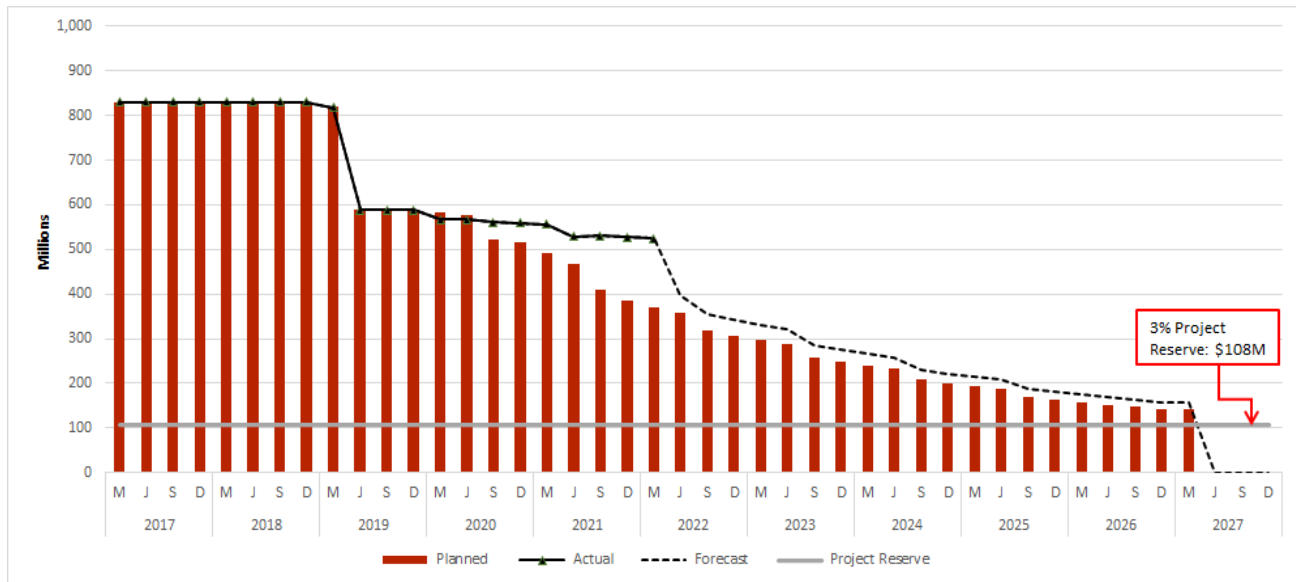
Commitments

The Commitments increased by \$0.4 million primarily due to Contract Modifications for Stations Contract C1152 and Environmental. The \$2.2 billion in Commitments to date represent 60.7% of the Current Budget.

Expenditures

The Expenditures increased by \$24.8 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 \$1.09 billion in Expenditures to date represent 30.3% 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 \$0.09M due to 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	(227,412)	-	(227,412)	236,730
Allocated Contingency	366,455	(82,812)	(91)	(82,903)	283,551
Total Contingency	830,597	(310,224)	(91)	(310,315)	520,281

Risk Management

Summary of Risks

During the quarterly risk register meeting, fourteen (14) new risks were identified, four (4) risks were closed, resulting in a total of seventy-seven (77) risks to be managed in the next quarter.

Of the seventy-seven (77) risks, five (5) are scored as high, forty-three (43) as medium, and twenty-nine (29) as low.

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

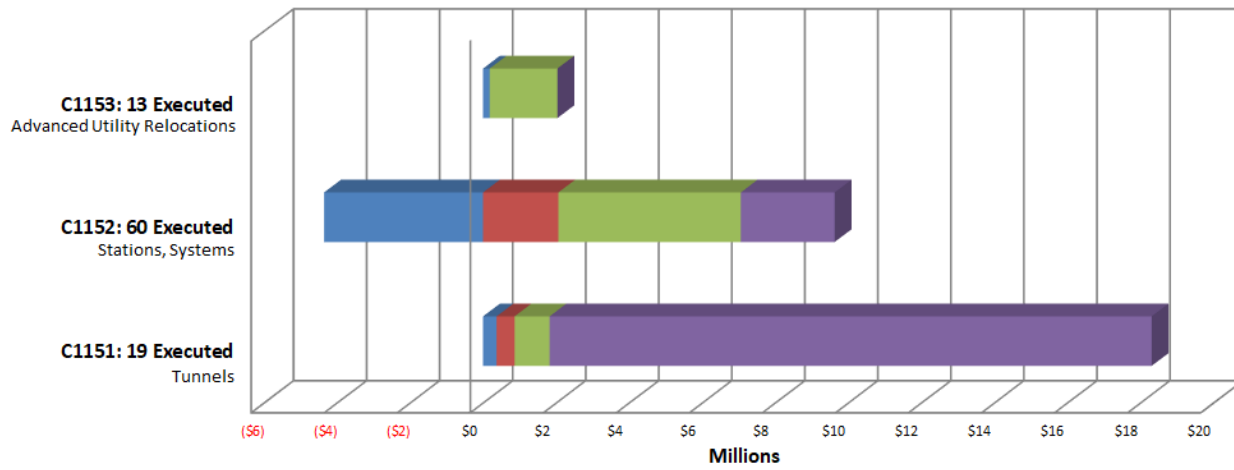
Top Five Risks

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.
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. (cross passages)	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.
372.3	Contractor may not carry out interventions to inspect the face and check the cutter head, and finally lead to machine breakdown.	10.5	1. Metro requires DB to provide TBM procedures and ensure DB Contractor to comply. 2. Contract Documents to require contractor to have qualified operators and programmers for TBM operations to be available at all times. - closed 3. Contractor to supply intervention schedule. (Contractor's schedule shows 6 "Maintenance & Inspection" stops, in which FKTP have carried out) 4. Verify that Herrenknecht addressed the Section 1 screw issue in their design of the Section 3 TBMs. - Complete 5. The TBM Work Plan and Intervention Plans, identify unplanned interventions dependent upon TBM performance and cutterhead wear. 6. Sepulveda dewatering wells installed as future mitigation.
PLE3-40	ROW negotiations in the alignment between Constellation and UCLA may require longer negotiations and result in schedule delay and increased project cost.	10.5	1. Finalize alignment and tunnel diameter to establish acquisition plan. [Completed 7/17/2017] 2. Subsurface easement (SSE) appraisal starts in early August, 2019 - closed 3. Obtain right of entry to allow C1151 contractor to access construction site prior to execution of easement transactions.
701.3	Tariffs potentially impact D/B contractors.	10.5	1. Monitor the market trend and assess the potential impact. 2. Review contract condition for any escalation clause to allow cost increase.

Summary of Contract Modifications

Contract Modifications (MODs) by Cost Level



	C1151 19 Executed	C1152 60 Executed	C1153 13 Executed	Total
■ Under \$100K	\$ 368,488	\$ (4,349,174)	\$ 181,291	\$ (3,799,395)
■ \$100K to \$250K	\$ 495,290	\$ 2,060,847	\$ -	\$ 2,556,137
■ \$250K to \$1M	\$ 958,487	\$ 4,996,796	\$ 1,855,558	\$ 7,810,841
■ Over \$1M	\$ 16,484,961	\$ 2,570,689	\$ -	\$ 19,055,650
Total Contract MODs	\$ 18,307,226	\$ 5,279,159	\$ 2,036,849	\$ 25,623,233
Contract Award Amount	\$ 410,002,000	\$ 1,363,620,000	\$ 11,439,000	\$ 1,785,061,000
% of Contract MODs	4.5%	0.4%	17.8%	1.4%

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

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

Sixty Contract Modifications (MODS) with a total value of \$5.3 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 May 2022:

DBE Goal – Design The percentage of funds apportioned to Design Contracts	11.19%
Current DBE Commitment Design Total DBE Committed Dollars divided by Total Contract Value for Design	\$3.19M 17.32%
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime	\$3.26M 18.98%

Six (6) Design DBE sub-consultants have been identified for Design.

DBE Goal – Construction The percentage of funds apportioned to Construction Contracts	17.10%
Current DBE Commitment Construction Contract commitment divided by current contract value for Construction	\$70.50M 17.76%
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime	\$53.56M 17.50%

Seventy-Five (75) Construction DBE sub-contractors have been identified to date.

Contract C1152

As of May 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 Contract Value for Design	\$14.45M 16.42%
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime	\$12.70M 18.09%

Eighteen (18) 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	\$54.38M 4.40%
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime	\$24.99M 6.44%

Fifteen (15) Construction DBE sub-contractors have been identified to date.

PROJECT LABOR AGREEMENTS (PLA)

As of April 2022

Contract C1151

Targeted Worker Goal Construction work to be performed by residents from Economically Disadvantaged Area of Los Angeles County	40.00%
Targeted Worker Current Attainment	40.65%
Apprentice Worker Goal Construction work to be performed by Apprentices	20.00%
Apprentice Worker Current Attainment	17.68%
Disadvantaged Worker Goal Construction work to be performed by Disadvantaged Workers	10.00%
Disadvantaged Worker Current Attainment	5.32%

Contract C1152

Targeted Worker Goal Construction work to be performed by residents from Economically Disadvantaged Area of Los Angeles County	40.00%
Targeted Worker Current Attainment	63.38%
Apprentice Worker Goal Construction work to be performed by Apprentices	20.00%
Apprentice Worker Current Attainment	10.22%
Disadvantaged Worker Goal Construction work to be performed by Disadvantaged Workers	10.00%
Disadvantaged Worker Current Attainment	17.10%

Contract C1153

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

FINANCIAL/GRANT

Status of Funds by Source*

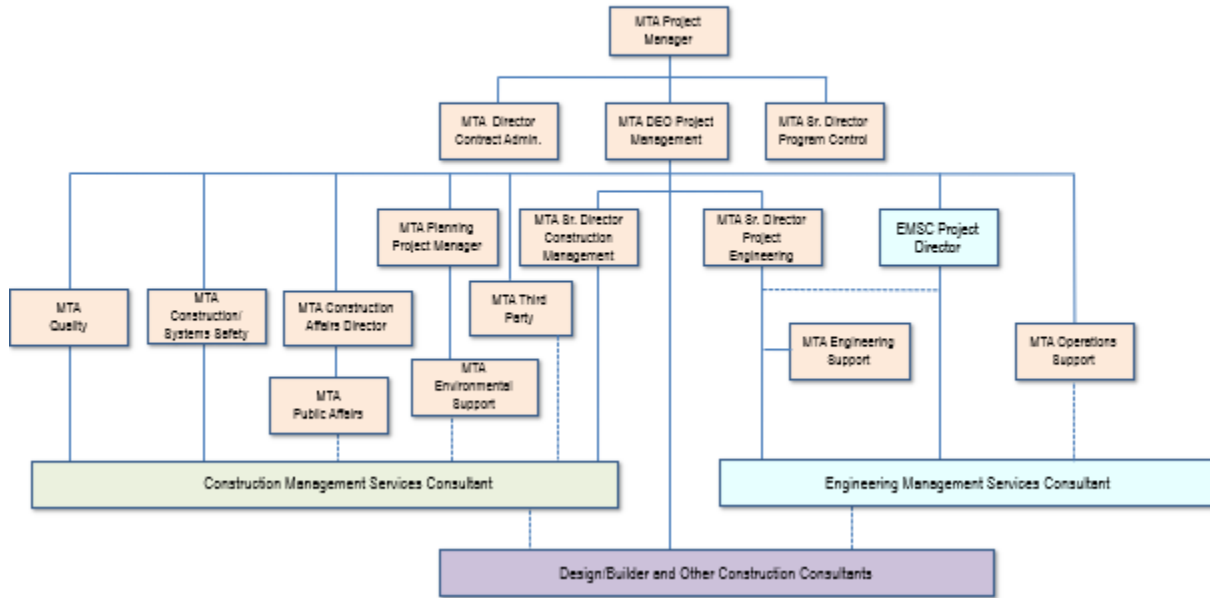
SOURCE	(A)	(B)	(C)	(D)	(D/B)	(E)	(E/B)	(F)	(F/B)
	ORIGINAL BUDGET	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	\$	%	\$	%	BILLED TO FUNDING SOURCE \$	%
FEDERAL - SECTION 5309 NEW STARTS	\$1,300.000	\$1,300.000	\$397.711	\$383.228	29%	\$383.228	29%	\$374.582	29%
FEDERAL - SECTION 5309 NEW STARTS (ARPA-CIG**)	\$0.000	\$93.438	\$0.000	\$0.000	0%	\$0.000	0%	\$0.000	0%
FEDERAL RSTP	\$93.048	\$93.048	\$0.000	\$0.000	0%	\$0.000	0%	\$0.000	0%
FEDERAL CMAQ	\$45.000	\$45.000	\$0.000	\$0.000	0%	\$0.000	0%	\$0.000	0%
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	\$746.639	99%	\$89.060	12%	\$30.352	4%
MEASURE M 35%	\$1,190.661	\$1,190.661	\$689.591	\$1,052.269	88%	\$610.593	51%	\$584.433	49%
STATE RIP	\$31.834	\$31.834	\$0.000	\$0.000	0%	\$0.000	0%	\$0.000	0%
TOTAL	\$3,610.998	\$3,610.998	\$1,596.957	\$2,192.137	60.7%	\$1,092.882	30.3%	\$999.368	27.7%

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).

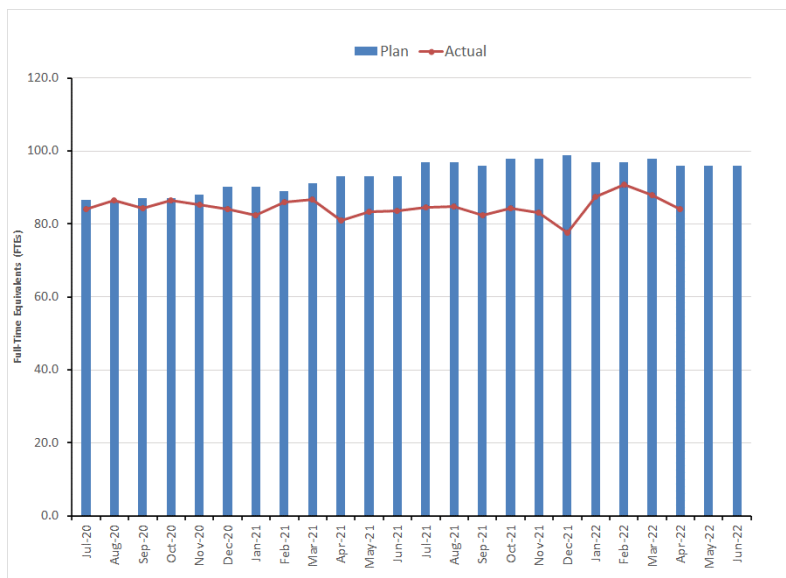
**Westside Purple Line Extension Section 3
 Responsibility and Reporting Matrix**



The overall FY22 Total Project Staffing Plan averages 97.0 FTEs per month.

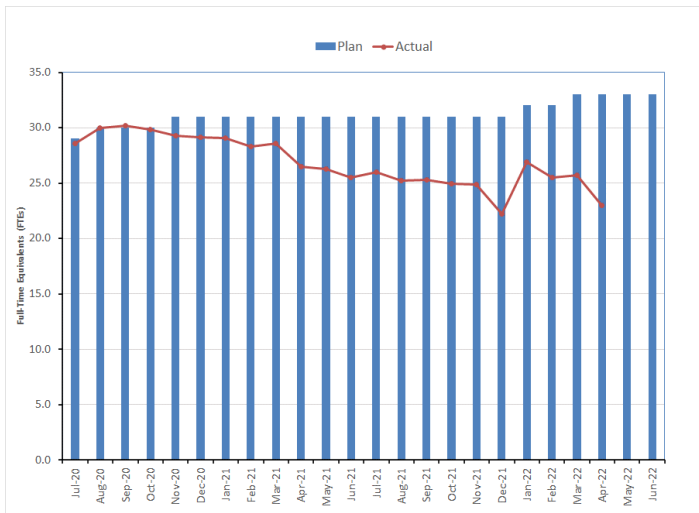
For April 2022, there were a total of 23.0 FTEs for MTA's Project Administration Staff and 61.1* FTEs for Consulting Staff. The total project staffing for April 2022 was 84.1 FTEs.

Total Project Staffing – Metro and Consultants



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

Metro Staff



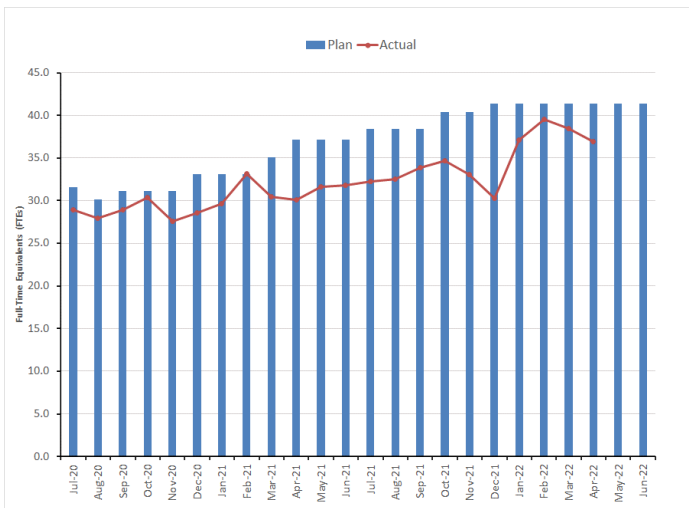
Staffing by Group

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

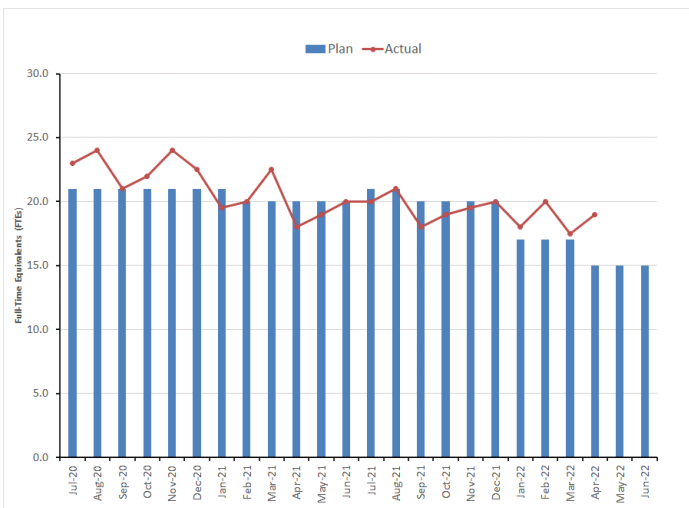
Metro staffing includes full time staff located in the IPMO as well as part-time support located at Gateway Headquarters.

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

CM Support Services Staff (Consultant)



Engineering Services Staff (Consultant)



REAL ESTATE

Real Estate Status Summary of all Rights											
# Properties	Properties	Description	Number of Project Parcels		Appraisals Completed	Offers Made	Agreements Signed	Condemnation Filed	Relocations		Parcels Available
			Certified						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	0	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
	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 Thirty Party)	1	1	N/A	N/A	1	0	0	0	1	
85		Total	96	96	80	79	29	64	3	0	81

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.
- Reviewed construction materials test reports, special inspection reports and Oversight Inspectors' Daily Reports. Provided review comments on C1151 and C1152 submittals and RFIs.
- *Metro audit of C1152 Stations Construction is in progress, interviews were held with TPOG managers.*
- Conducted **new assessment** and issued subsequent conforming or non-conforming items for following:
 - C1151(Tunnels Contract)
 - *Tunnel Instrumentation - UMP and MPBX*
 - *GR 01 35 35 - Water Pollution Control*
 - C1152 (Stations Contract)
 - *SOE - Welding (Bracing, struct) for deck support*
 - *VA Steam Tunnel - Cast in place concrete*
- Conducted **on-going monthly assessment** and issued subsequent conforming or non-conforming items for following:
 - C1151(Tunnels Contract)
 - *Tunnel Steel Lining Segments - Stud Welding at Traylor Precast Yard*
 - *Tunnel Lining Segment Fabrication, Storage and Transportation at Traylor Precast Plant*
 - *Traffic Control and Management*
 - *Tunnel Instrumentation preparation, installation, initializing and baseline reading prior to TBM mining operation*
 - *Assessment on TBM backfill ring grout*
 - C1152 (Stations Contract)
 - *SOE precast deck panel fabrication process*
 - *Traffic Control and Management*
 - *Installation of Steam Tunnel RCP Pipes and Vaults Construction Material Testing*

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.
- *Field review for General Administration Building proposed work and compliance with SHPO requirements.*
- *Inspection of water treatment plant compliance with permit requirements at tail exit shaft.*

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, and Westwood Village Improvement Association, and Westwood Building Managers meeting.*
- *Produced and distributed thirty (30) 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

- *Announced commission of ten artists for architecturally integrated station artworks.*
- *Presented art program update at the quarterly Sections 1, 2 and 3 Construction Update public webinar.*
- *Launched Call to Artists for design of temporary construction site visual mitigation banners.*
- *Executed contract with arts organization for the “Veterans Legacy Art Project” for Community Engagement and Design Services.*
- Ongoing oversight of 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 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 project safety staff conducted schedule, safety/security, and over-the-shoulder review meetings.
- 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 Safety hosted Monthly Safety and Security Meeting for Section 3 Westside Purple Line Extension Contractors on April 29, 2022 and May 27, 2022.*
- *Frontier-Kemper/Tutor Perini (FKTP-JV) reported Two (0) Recordable Injuries in May 2022.*
- *FKTP-JV reported 30,563 actual work hours through May 2022.*
 - *FKTP-JV submitted April 2022 Work Hour Report on June 7, 2022.*
 - *FKTP-JV corrections to the Monthly Work Hour Report consisted of indicating current 2022 recordable injuries in the actual month injuries occurred: January and April 2022.*
- *FKTP-JV Project to Date through May 2022, Contractor FKTP-JV Work Hours are 965,404.*
- *FKTP-JV Project to Date, Fifteen (15) Recordable Injuries and Five (5) Days Away from Work Injuries. The Recordable Injury Rate of 3.11. The Bureau of Labor Statistics reports the National Average Recordable Injury Rate is 2.4.*

Contract C1152 Stations, Trackwork, Systems, and Testing

- Metro 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 project safety staff conducted schedule, safety/security, and over-the-shoulder review meetings.
- *Metro Safety hosted April Monthly Safety and Security Meeting for Section 3 Westside-Purple Line Extension Contractors May 27, 2022.*
- Metro project safety staff conducted project Safety Orientation 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 TPOG-JV staff for oversight and support of all project field work activities.
- *Tutor Perini/O&G (TPOG-JV) has reported Zero (0) Recordable Injury status in May 2022.*
- *TPOG-JV reported 21,085 actual work hours through May 2022.*
- *TPOG-JV Project to Date through May 2022 Contractor TPOG-JV Work Hours is 945,459.*
- 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.