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May 21, 2024

TO: DISTRIBUTION

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SUBJECT: WESTSIDE PURPLE LINE EXTENSION SECTION 2 PROJECT  
APRIL 2024 MONTHLY PROJECT STATUS REPORT

Enclosed herewith is the Monthly Project Status Report for the Westside Purple Line Extension Section 2 Project. This report contains the Los Angeles County Metropolitan Transportation Authority's (LACMTA) representation of the Westside Purple Line Extension Section 2 Project status for the period ending April 26, 2024.

If you have any questions regarding this report or its supporting information, please contact Michael Martin, Deputy Executive Officer, Program Control at (424) 551-4471.

MM: CW  
Enclosure

**PURPLE (D LINE) EXTENSION PROJECT** Section 2



**Metro**<sup>®</sup>

# **Purple (D Line) Extension Project Section 2**

## **MONTHLY PROJECT STATUS REPORT**

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

**April 2024**

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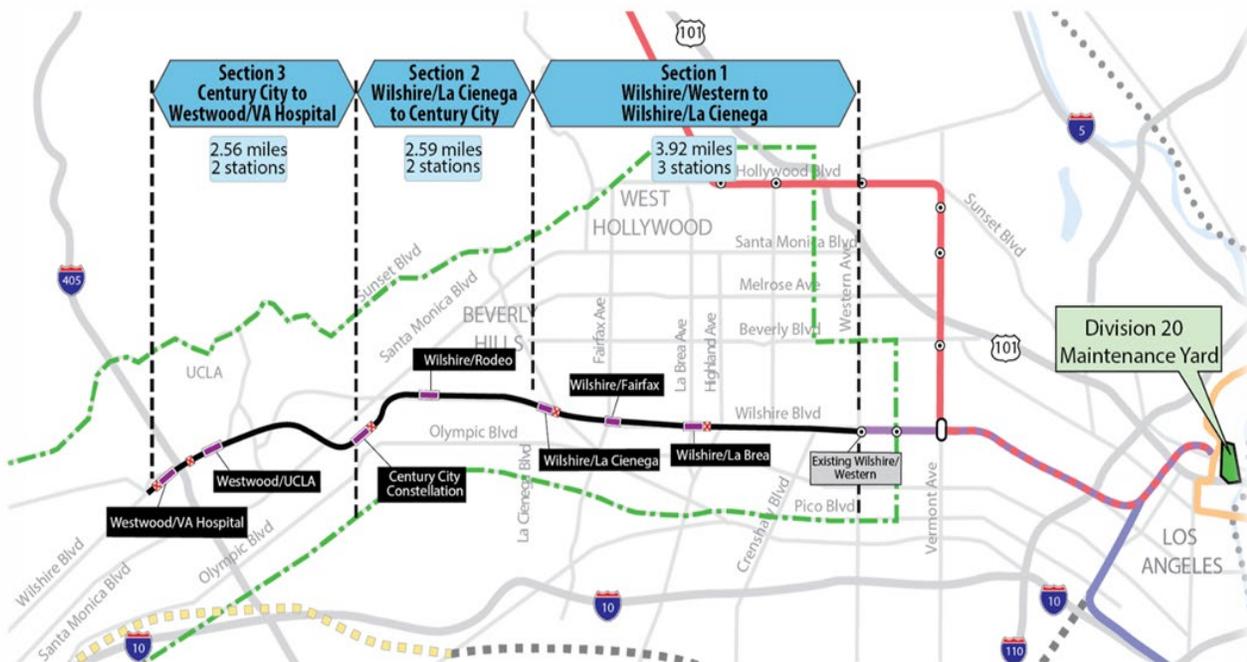
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## PROJECT OVERVIEW

### Monthly Project Background

The Purple (D Line) Extension Section 2 Project (Project) is the second of three sections to be designed and constructed as part of the Los Angeles County Metropolitan Transportation Authority's (LACMTA) Measure R Program. The program was approved by Los Angeles County voters in November 2008 and provides a half-cent sales tax to finance new transportation projects. In April 2012, the three sections of the Project were environmentally cleared and adopted by LACMTA Board of Directors.

Section 2 will extend the future Wilshire/La Cienega Station that is part of the Purple (D Line) Extension Section 1 Project currently under construction to Century City. The Project is located entirely underground, primarily following Wilshire Boulevard, and includes the design and construction of approximately 2.59 miles of double-track heavy rail, two new stations as well as the purchase of 20 heavy rail vehicles. The Wilshire/Rodeo Station is within the jurisdiction of City of Beverly Hills, and the Century City Constellation Station is within the jurisdiction of City of Los Angeles. 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 Wilshire/Rodeo Station box will be under the center of Wilshire Boulevard beginning just east of South Canon Drive and extending to El Camino Drive. The entrance will be on the southwest corner of Wilshire Boulevard and Reeves Drive.

The Century City Constellation Station box will be under the center of Constellation Boulevard between Century Park East and Solar Way. A double crossover will be located east of this station. The entrance will be on the northeast corner of Constellation Boulevard and Avenue of the Stars. In lieu of tail tracks, safe braking distance will be provided at the interim terminus station.

## **Major Procurements**

Contract C1120 – Tunnels, Stations, Trackwork, Systems and Systems Integration Testing: The procurement of this 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 with an option at Metro's discretion for Best and Final Offers (BAFO).

The Design/Build contract provides for final design and construction of the infrastructure along the 2.59-mile alignment. Contract scope includes demolition and removal of structures and clearing sites to facilitate construction operations. The structures to be constructed include twin bored tunnels complete with cross-passages and walkways including all mechanical, electrical, and finished work. A tunnel boring machine (TBM) launch shaft will be constructed at the Century City Constellation Station. Two underground stations are to be constructed with one double crossover location set east of the Century City Constellation (terminus) Station. Each station has a single entrance plaza 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 to the Wilshire/La Cienega Station (currently under construction), testing and commissioning.

### Metro Furnished Equipment

The option to purchase 20 Heavy Rail Vehicles (HRV) of the existing HR4000 contract will not be exercised. A new HRV procurement was issued in December 2022, bids were received in April 2023. In January 2024, Metro Board approved award of the HR5000 contract to Hyundai Rotem Company for the manufacturing and delivery of 182 heavy rail vehicles of which 20 will be used for the Purple (D Line) Extension Section 2 Project. The scope of the HRV contract includes design, manufacturing, testing and delivery of the vehicles. An additional contract has been 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 Purple (D Line) Extension Section 2 Project is being managed under the direction of an Integrated Project Management Office (IPMO). WSP Global (WSP) provides engineering and design support services, while Purple (D Line) 2 CM Partners, a Joint Venture provides construction management support services. An overview of staffing is provided under the Staffing section of this report. The program management team is also supported by Metro headquarters'

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

Project Schedule and Budget: The Revenue Service Date (RSD) is forecasted for 2026.

On January 26, 2017, the Metro Board approved the Life of Project (LOP) Budget for the Purple (D Line) Extension Section 2 Project 865522 for \$2.4 billion excluding Finance Charges of \$88.7 million. On July 27, 2023, a LOP budget amendment of \$134 million was approved by the Metro Board. A detailed Life of Project Budget forecast is included under the Project Cost Forecast section of this report.

Funding has been secured from a variety of sources to include:

- Federal – Section 5309 New Starts
- Federal – Section 5309 New Starts (ARPA-CIG)
- Federal CMAQ (Congestion Mitigation & Air Quality)
- Measure R – TIFIA Loan (Transportation Infrastructure Finance & Innovation Act)
- Measure R 35%
- State Capital Projects Loans

Construction and Community Relations: The Construction and Community Relations team is tasked with promoting the Project and performing public outreach within the community to keep stakeholders informed of construction activities occurring along the Project alignment.

The Project is also engaged in social media outreach and various marketing and advertising efforts designed to keep the public informed and excited about the Project. These efforts are aimed at promoting businesses that are affected by construction. An overview of monthly activities is presented in the Construction and Community Relations section of this report.

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 April 2024, the Project reached 68% completion based on earned value measurements for design and construction.* The focus of the Project continued to be completion of final design and construction activities in Century City and Beverly Hills. Final design base scope is anticipated to be completed by September 2024. The C1120 Design Build Contractor has a contractual substantial completion in May 2025 and demobilization in October 2025. The forecast Revenue Service Date (RSD) for the Project has been revised to Summer 2026. The following is an overview of current design and construction activities.

### Design Status

The Engineering Management Services team (WSP) continued to provide engineering services during construction as well as real estate support services. The team is also supporting Metro in reviewing final design submittals, responding to RFI's, and assisting in the preparation of change notices.

The design work has originally been identified into three distinct design unit packages. They are the following:

1. Design Package 1 – Utility/Civil Design at Launch Box in Century City
2. Design Package 2 – Remaining Utility Conflicts (Outside of Launch Box)
3. Design Package 3
  - (Volume 1) – Tunnel Reaches
  - (Volume 2) – Stations
  - (Volume 3) – Track & Systems

The design packages noted above have been broken out into discrete advanced design units/packages to facilitate and prioritize design deliverables.

Metro, Tutor Perini/O&G (TPOG) and STV have been working together to identify advanced partial design units for the above-mentioned design packages and proposed submittal dates to facilitate timely design review to support the Project schedule.

Each design unit package will be submitted and evaluated at each of the following phases: 60%, 85%, 100%, Approved for Construction (AFC) and Issued for Construction (IFC). Critical design units have been advanced as Advanced Partial Design Units (APDU's) to support ongoing construction activities.

Design progress meetings occur weekly related to the design unit packages. Weekly design task force meetings (by individual discipline) began at the end of March 2018 and are scheduled to continue through design completion. TPOG is continuing with the required contractual submittals.

Design related submittals of note that TPOG submitted for this month are:

- *IFC - DU 2.2 CCS Package 3 Volume 2C Station Architecture and MEP*
- *100% - APDU 3.3 WRS East EVS - APDG4*
- *IFC - APDU 2.5.1 DWP Water Main Relocation at CCS (PSA-0135)*
- *AFC - DU 2.1, 2.2, 2.3, APDU 2.5.4 CCCS Appendage 11 (CN-105)*
- *IFC - APDU 2.5.1 DWP Water Main Relocation at CCS (PSA-0135)*

- *AFC - DU 2.2 CCS Architecture & MEP - OPE Redesign*

Systems design is mostly complete and is consistently moving forward to support construction and testing activities.

## Construction Status

### Century City Constellation Station:

Installation of rebar and embedded conduits continued for concrete walls and floor slabs. *TPOG continued setting wall forms and placing concrete for the invert level interior walls GL 43.5 to GL 47. Preparation is ongoing for concrete placement for the exterior walls concourse to roof GL1 to GL12. Work continued for the concourse level with the installation of falsework, and concrete placement proceeded at CLS-19, CLS-20, and CLS-21, and CLS-22. Concrete was also placed at platform deck level from GL 35 to GL 40. TPOG placed concrete at exterior walls from invert to concourse from GL45-47, and interior walls from GL 42-45. TPOG continued stripping formwork for Concourse level slabs CLS-19, CLS-20, and CLS-21, and started stripping exterior walls from GL 1 through GL 8. TPOG started working on final invert slab at Interface Chamber, GL45-47.*

TPOG continued SOE removal in advance of concrete work at BL-4, GL 20 to GL 35 and BL-5, GL 19 to GL 35. TPOG started SOE removal at BL-5 Station Entrance.

PLE3 miners performed miscellaneous activities at the west end of the station in advance of removing excavated soil from PLE3 cross passages. TPOG has indicated that there are no anticipated schedule impacts to the Section 2 CCCS schedule. Coordination of access for the JMB construction site through the PLE2 work area continues.

### Tunnels:

On November 18, 2022, the BR (Harriet) Tunnel Boring Machine (TBM) completed excavation. The BL (Ruth)TBM completed excavation on January 12, 2023. Both TBMs have completed overall excavation and rest at the concrete end wall at the Purple Line Extension Section 1 interface. *BL Reach 5 tunnel invert cleaning, bolt tightening, and patching recessed holes in invert (i.e., bolt pockets, picking eye holes, and grouting holes) is complete except for the two (2) fault crossings and the Tunnel Access Shaft (approximately 78% complete overall). BR Reach 4 tunnel invert cleaning, bolt tightening, and patching recessed holes in invert (i.e., bolt pockets, picking eye holes, and grouting holes) continued throughout the month. BL Reach 4 tunnel invert cleaning, bolt tightening, and patching recessed holes in invert (i.e. bolt pockets, picking eye holes, and grouting holes) started towards the end of this month.*

There is a total of fifteen (15) Cross Passages in Reaches 4 and 5. One (1) will be constructed within the Tunnel Access Shaft and fourteen (14) will be constructed in the mined tunnels. *Excavation of all fourteen (14) SEM cross passages was completed in January 31, 2024. Final lining construction is ongoing in all seven (7) of the cross passages in Reach 5, with final concrete lining completed in two (2) cross passages and the remaining five (5) are in different stages of arched final lining activities. In Reach 4, TPOG continued final lining construction (waterproofing installation, invert & bulkhead activities) in CP-30, and 28 with four (4) completed from invert to bulkheads (CP-29, 31,32 and 33). No final lining work has started at CP-27.*

First stage tunnel invert was completed in the BL Reach 5 tunnel from the west side of the Wilshire/ Rodeo Station (Ring 1,148) to the east side of the Century City Constellation Station (Ring 1)

(approximately 5,740 feet). This does not include the two (2) fault crossings (Wilshire and Lasky) or the Tunnel Access Shaft. Overall completion for the BL Reach 5 first stage invert is 78%. *BL Reach 5 tunnel walkway activities (waterproofing, rebar, MEP conduits installation and concrete placement) started this month and is ongoing. Three (3) sections of the tunnel walkway have been placed; approximately 450 LF.*

*First stage tunnel invert activities (waterproofing, rebar, MEP conduits and concrete placement) continued in the BR Reach 4 tunnel from CP-27 (Ring 2,152) heading west towards the Wilshire/Rodeo Station East headwall (approximately 5,734 feet). Waterproofing, rebar and conduit installation was completed from Ring 2,152 to 1,162 at the end of this month while concrete placement was completed from Ring 2,152 to 1,288 (approximately 4,320 LF). Overall completion for the BR Reach 4 first stage invert is 75%. Remaining tunnel invert from Ring 2,152 to 2,303 will be worked on once the TBM has been removed.*

Wilshire/Rodeo Station:

Placement of concrete for the invert slab and platform level station walls and concourse level slabs are complete. Installation of waterproofing, rebar, formwork, and concrete continued this month for second level exterior walls. Overall progress for second level walls is 96% complete. Falsework at East and West Highbay walls to support the roof deck was completed this month. *Installation of Falsework at East of the Station started this month and is 10% complete. At the Invert Level, TPOG started to work on the door openings and equipment pads this month.*

*Installation of rebar for Entrance Stairs #3 and #4 was completed this month. Concrete was also placed for the structure. Installation of gas venting systems followed by the waterproofing system on the intermediate landing slab was completed this month while work for exterior walls continued. Installation of rebar and concrete placement for the intermediate landing slab started and was completed this month. Removal and demobilization of BL-2 struts started this month.*

*The installation of the gas venting, waterproofing system and invert slab concrete for the second level invert started this month for West EVS (Emergency Ventilation System)/Grating #9 appendage. The installation of rebar, formwork and floor drains for the second level invert started this month.*

*Installation of internal bracing and lagging, hanging of utilities, and excavation is complete for East UPE (Under Platform Exhaust)/Grating #3 appendage. The installation of the gas venting and waterproofing system for the invert slab is complete. Installation of gas venting, waterproofing system and rebar for exterior walls continued this month. Concrete for exterior walls started this month.*

*Installation of internal bracing and excavation to the bottom continued this month and is 60% complete.*

Infrastructure for permanent power construction for (SCE) is complete outside of the station box and is at 64% completion overall. The portion over the station box will be completed during final street restoration.

All twenty (20) dewatering wells continue to be operational around the WRS site.

**Cost and Schedule Summary**

For the C1120 Design/Build contract, Metro received the Contractor’s March 2024 schedule update, which reports the substantial completion date finishing 546 calendar days behind the May 23, 2025, contractual date. The Contractor has reported a loss of eleven (11) days to the overall Project this reporting period. The primary critical path associated with the forecasted delay to the Century City Constellation Station is followed closely by the secondary path which flows through tunnel finishing activities. Future revisions to the contractor’s means and methods, and revised schedule logic may have an impact on future updates. Based on the contractor’s re-sequenced schedule, and Metro’s evaluation of progress to date, the Project Master Schedule has been revised to reflect a forecast Revenue Service Date of Summer 2026.

The Critical Path (CP) goes through the Century City Station Invert Slab activities then proceeds into the Century City Station platform level concrete along with cross passages and track installation. It also includes Century City Station finishes, and systems installation and testing work (including installation of interior finishes and electrical equipment at both stations). A summary graphic of the critical path is found on Page 16.

**C1120 Design-Build Contract Schedule Metrics**

|                        | Original Contract Dates | Time Extension | Current Contract | Forecast   | Variance CDs |
|------------------------|-------------------------|----------------|------------------|------------|--------------|
| Notice to Proceed      | 04/26/17A               | 0              | 04/26/17A        |            | 0            |
| Substantial Completion | 05/23/25                | 0              | 05/23/25         | 05/26/2026 | 368          |

To date, the Current Budget and Current Forecast are \$2.7 billion. This reflects a Life of Project (LOP) budget amendment approved by Metro Board on July 27, 2023. Detailed cost and budget information is provided on Page 18. Project staff will continue to assess ongoing future Project risks, and the potential impact they may have on the LOP Budget and Project schedule, while continuing to manage those risks to control costs.

There are currently twenty-two (22) open claims. Fifteen (15) remain with TPOG to identify next steps, five (5) reside with Metro and two (2) are in preparation for Alternative Disputes Resolution (ADR).

1. Mitigation Plan for Subsurface Settlement above BL Tunnel (Claim 19)
2. WRS Groundwater Inflows (Claim 21)
3. COVID Impacts (Claim 22)
4. Wilshire/Rodeo Structural Changes (Claim 23)
5. Cutterhead Damage (Claim 28)
6. Resubmittal of 100% Submittal DU 6.1 Pkg 3, Volume 3B (Claim 29)
7. CCS Appendage Grating 15 (Claim 31)
8. CCS Emergency Stair 1 (Claim 33)
9. WRS East EVS Grating 4 Design (Claim 41)
10. WRS Emergency Exit 4 Design (Claim 42)
11. Unilateral CO No. 48 NPDES Construction Project Dewatering Permit (Claim 45)
12. Appendage Grating 10 Design (Claim 46)
13. Station Revised OPE Construction (Claim 47)
14. CCS Elevators 1 & 2 Additional Sheet – Framing (Claim 50)
15. Tunnel Suspension Delays (Claim 51)
16. Escalation of Metals (Claim 53)

17. Additional Ladders (Claim 54)
18. N. Canon Dr. Geo-Instrumentation (Claim 55)
19. CCS Cross-Over Ventilation Design (Claim 56)
20. WRS Entrance EMP/FA Equipment Relocation (Claim 57)
21. Additional Project Management for Extended Design Services (Claim 58)
22. Unilateral CO-58 RFC-100.2 (Part 3) WRS Delays (Claim 59)

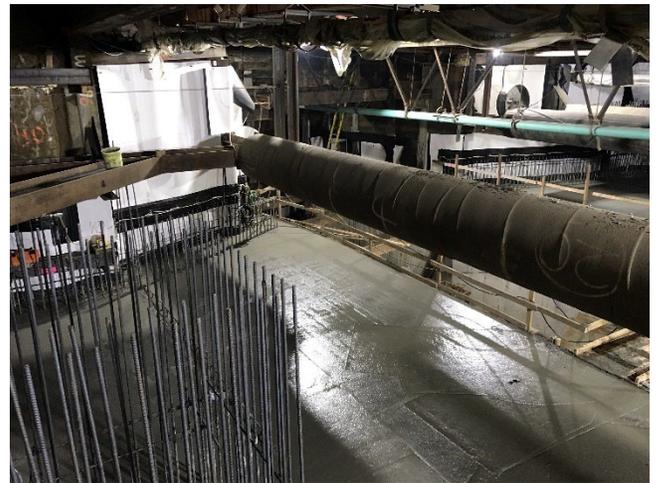
### **Key Management Concerns**

- The Project Recordable Injury Rate for this period is 2.74, which is higher than the national average of 2.4. TPOG reported one (1) recordable injury this period. TPOG is continuing to utilize a third-party consultant to provide safety oversight on both shifts.
- Cross passage excavation is complete. Final lining construction is progressing much slower than what was assumed in TPOG's baseline schedule.
- Opportunities to mitigate the delay to the critical path through Century City Constellation Station (CCCS) are not likely to substantially reduce the impact. TPOG's re-sequenced schedule did not result in a reduction of its previously reported delay. As a result, Metro is now forecasting a revised RSD of Summer 2026.
- TPOG has not submitted a revised plan indicating its means for TBM disassembly and mitigation of impacts to other construction activities in the tunnels.

Project Construction Photos



WRS Falsework East of the Station- Station Box



WRS West EVS Appendage- Invert Slab



Tunnel BL R5 Walkway Completed Concrete



Tunnel CP-36 Final Lining Activities



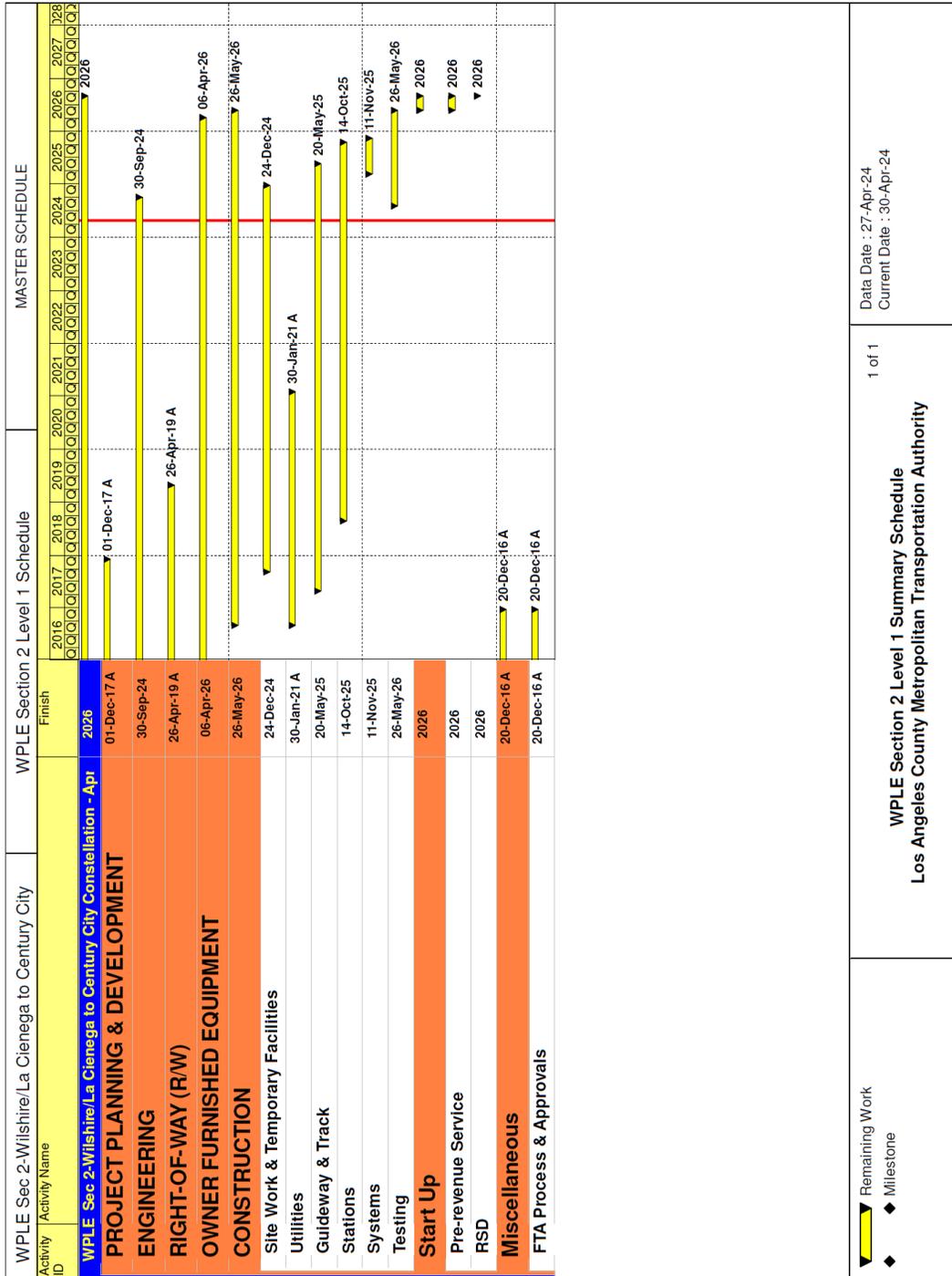
CCCS Concourse Level Looking East



CCCS Storm Drain Backfilling in Avenue of the Stars

# PROJECT UPDATE PROJECT SCHEDULE

## Project Summary Schedule



Remaining Work  
 Milestone

WPLE Section 2 Level 1 Summary Schedule  
 Los Angeles County Metropolitan Transportation Authority

Data Date : 27-Apr-24  
 Current Date : 30-Apr-24

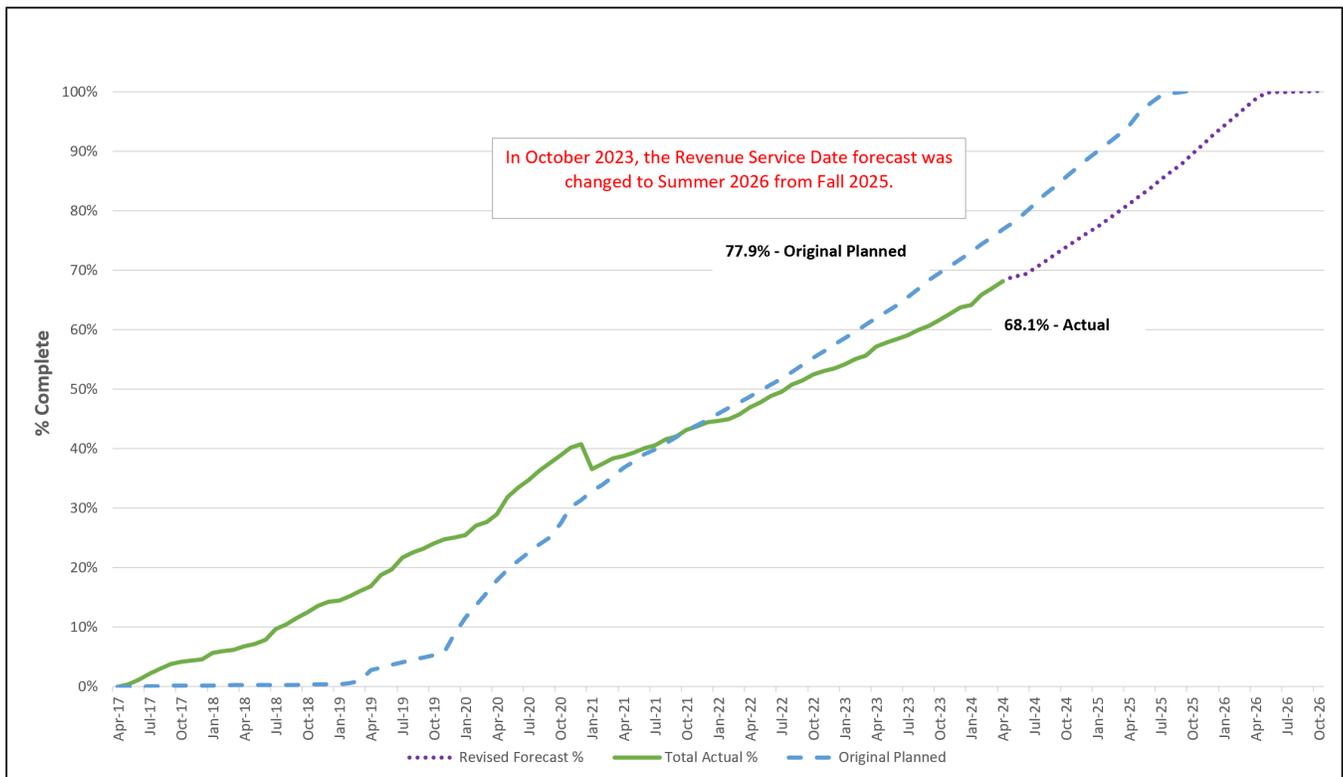
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**Progress Summary**

|   | Status     | Change from Last Period | Comment   |
|---|------------|-------------------------|---|
| Forecast Revenue Service Date           | 2026       | None                    | Forecast RSD - Summer 2026  |
| TIFIA Revenue Service Date              | 12/31/2026 | None                    |   |
| FFGA Revenue Service Date               | 12/31/2026 | None                    |   |
| <b>Final Design Progress:</b>           |            |                         |   |
| Contract C1120                          | 99.91%     | None                    | Final Design for Base scope is anticipated to be complete by September 2024. No impact to Project schedule. |
| <b>Construction Contracts Progress:</b> |            |                         |   |
| Contract C1120                          | 68.11%     | 1.22%                   |   |

**Note: Physical completion assessment reflects work completed and work in progress.**

**Planned vs. Actual Progress**



*The actual overall construction progress is 68.1% versus an original planned of 77.9% through April 2024. The progress curves represent the physical progress of work performed to complete Contract C1120. The physical progress percentage excludes non-construction items such as contractor's design and construction mobilization costs and all general requirement costs not tied specifically to a construction work effort.*

**Key Milestone Six-Month Look Ahead**

|   | Milestone Date | Apr-24   | May-24  | Jun-24  | Jul-24  | Aug-24  | Sep-24  |
|---|----------------|--|---|---|---|---|---|
| Completed first level exterior walls at Century City Constellation Station                | 04/26/24 A     |  |   |   |   |   |   |
| Complete concourse deck at Century City Constellation Station                             | 05/10/24       |  |  |   |   |   |   |
| Complete first level interior walls at Century City Constellation Station                 | 05/29/24       |  |  |   |   |   |   |
| Complete interior walls below platform at Century City Constellation Station              | 06/17/24       |  |   |  |   |   |   |
| Complete exterior walls intermediate landing to street at Wilshire/Rodeo Station entrance | 06/27/24       |  |   |  |   |   |   |
| Complete roof slab at Wilshire/Rodeo Station  | 07/15/24       |  |   |   |  |   |   |
| Complete interior walls below platform at Wilshire/Rodeo Station                          | 07/19/24       |  |   |   |  |   |   |
| Complete second level exterior walls at Century City Constellation Station                | 08/08/24       |  |   |   |   |    |   |
| Complete pile installation at Century City Constellation Station side structure 14        | 08/23/24       |  |   |   |   |  |   |
| Complete upper concourse deck at Century City Constellation Station                       | 09/06/24       |  |   |   |   |   |  |

 MTA Staff     
  MTA Board Action     
  FTA (Federal Transit)     
  Utility Company  
 Other Agencies     
  Contractors     
  Design Consultant     
  C1120 D/B  
 "A" following date is actual and completed     
 \* New

**Major Equipment Delivery**

**MAJOR EQUIPMENT DELIVERY**

|                                 | <b>Submittal</b>   | <b>Procurement</b> | <b>Delivery</b> | <b>Installation</b> |
|---------------------------------|--|--------------------|-----------------|---------------------|
| <b>C1120 DESIGN/BUILD*</b>      |  |                    |                 |                     |
| Tunnel Boring Machines          | 27-Jul-17(A)   | 14-Aug-17(A)       | 13-Sep-18(A)    | 26-Dec-19(A)        |
| Emergency Ventilation Fans      | 29-May-24  | 14-Feb-23(A)       | 11-Sep-24       | 5-Nov-24            |
| Station Elevators/Escalators    | 08-Feb-23(A)   | 14-Dec-22(A)       | 24-Apr-25       | 8-Apr-25            |
| Track - Running Rail            | 22-Aug-2(A)  | 1-May-23(A)        | 30-Apr-24(A)    | 8-May-25            |
| Traction Power Equipment        | 31-May-24  | 14-Apr-23(A)       | 9-Jan-25        | 23-Oct-25           |
| Automatic Train Control         | 11-Mar-22(A)   | 2-Mar-23(A)        | 21-May-24       | 11-Mar-25           |
| Radio System                    | 2-May-24   | 3-Oct-23(A)        | 15-Nov-24       | 30-Apr-25           |
| SCADA RTU System                | 11-Mar-22(A)   | 3-Oct-22(A)        | 29-May-24       | 30-Apr-25           |
|                                 |  |                    |                 |                     |
| <b>Heavy Rail Vehicles</b>      | HR5000 New HRV Procurement RFP was issued on December 5th, 2022 and bids received on April 17, 2023. Issue NTP in February 2024 and Pilot car delivery forecasted in May 2027. |                    |                 |                     |
|                                 |  |                    |                 |                     |
| <b>Universal Fare System***</b> | TBD  | TBD                | TBD             | Dec. 2025**         |
|                                 |  |                    |                 |                     |

\* Dates derived from TPOG's April 2024 Schedule.

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

\*\*\* Metro supplied equipment.

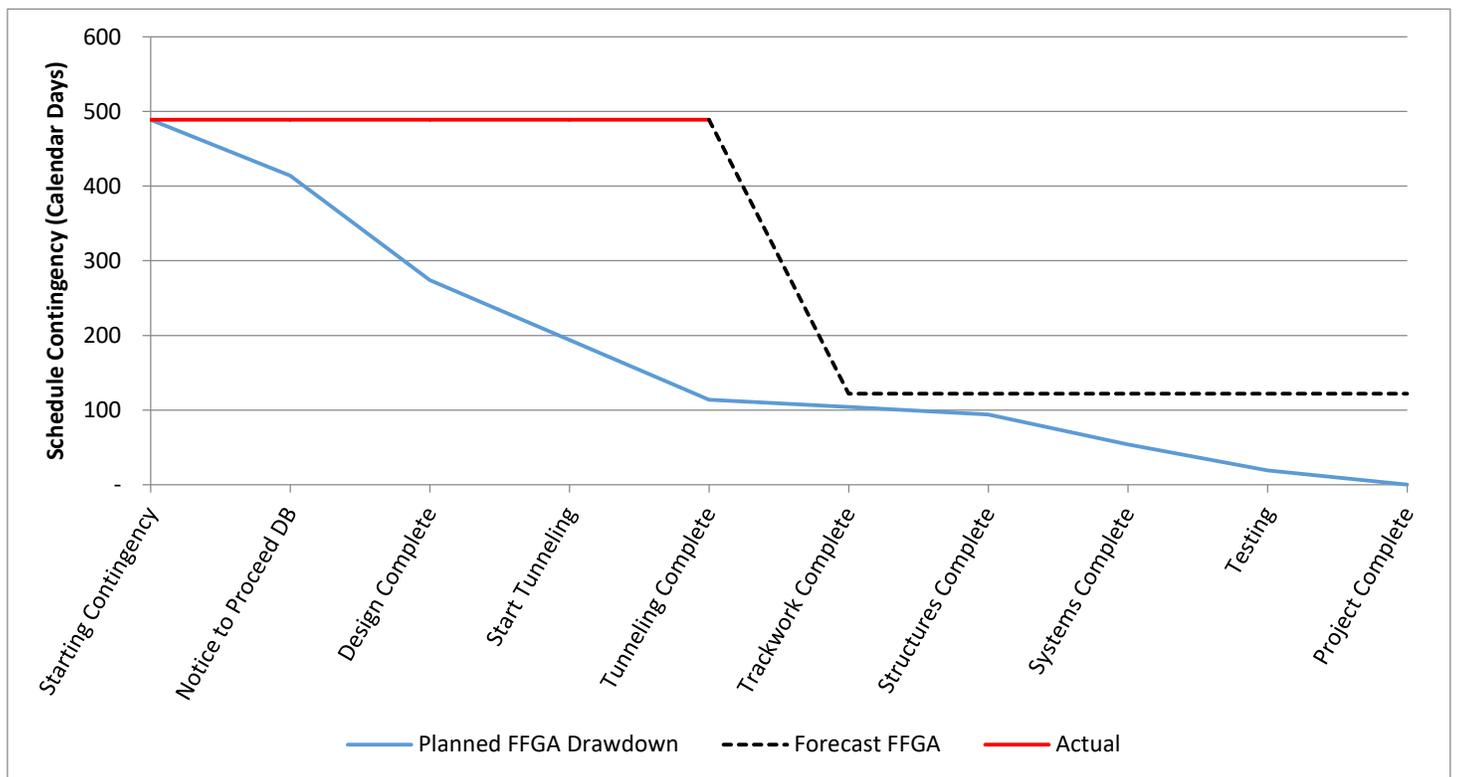


**Project Schedule Contingency Drawdown Analysis**

The project schedule contingency drawdown model provides a dual-axis perspective based upon the FFGA RSD of December 2026 and Metro’s Project Master Schedule (PMS) forecast of Summer 2026.

The introduction of the PMS model axis reflects a proportional distribution of available float relative to the FFGA model. Based on the January 2023 actual completion of tunneling. This model will be updated with actuals once trackwork is complete. The Forecast FFGA line depicted in black dashes below has been adjusted to account for the revised variance of 4 months between the revised forecast RSD and the FFGA RSD.

Regarding the FFGA RSD, a schedule float of sixteen (16) months has been maintained.



**PROJECT COST**

**Project Cost Analysis – 865522**

DOLLARS IN THOUSANDS

| SCC CODE  | DESCRIPTION                                    | ORIGINAL BUDGET  | CURRENT BUDGET |                  | COMMITMENTS |                  | EXPENDITURES  |                  | CURRENT FORECAST |                  | FORECAST/ BUDGET VARIANCE |
|---|--|------------------|----------------|------------------|-------------|------------------|---------------|------------------|------------------|------------------|---------------------------|
|   |  |                  | PERIOD         | TO DATE          | PERIOD      | TO DATE          | PERIOD        | TO DATE          | PERIOD           | TO DATE          |                           |
| 10  | GUIDEWAY & TRACK ELEMENTS                      | 346,440          | -              | 324,202          | -           | 318,552          | 1,185         | 231,788          | -                | 323,202          | (1,000)                   |
| 20  | STATIONS, STOPS, TERMINALS, INTERMODAL         | 434,990          | -              | 523,683          | 769         | 503,107          | 9,297         | 301,178          | -                | 523,683          | -                         |
| 30  | SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS | -                | -              | -                | -           | -                | -             | -                | -                | -                | -                         |
| 40  | SITWORK & SPECIAL CONDITIONS                   | 553,282          | -              | 628,792          | 9           | 616,049          | 2,217         | 522,840          | -                | 626,792          | (2,000)                   |
| 50  | SYSTEMS  | 81,457           | -              | 84,845           | -           | 74,114           | 476           | 20,297           | -                | 84,845           | -                         |
| <b>CONSTRUCTION SUBTOTAL (10-50)</b>                                    |  | <b>1,416,169</b> | <b>-</b>       | <b>1,561,523</b> | <b>778</b>  | <b>1,511,823</b> | <b>13,175</b> | <b>1,076,103</b> | <b>-</b>         | <b>1,558,523</b> | <b>(3,000)</b>            |
| 60  | ROW, LAND, EXISTING IMPROVEMENTS               | 426,396          | -              | 351,675          | -           | 318,091          | 1,204         | 301,207          | -                | 351,675          | -                         |
| 70  | VEHICLES                                       | 42,000           | -              | 42,000           | -           | -                | -             | -                | -                | 42,000           | -                         |
| 80  | PROFESSIONAL SERVICES                          | 374,878          | -              | 455,354          | 34          | 449,193          | 2,865         | 383,824          | -                | 493,429          | 38,075                    |
| <b>SUBTOTAL (10-80)</b>   |  | <b>2,259,444</b> | <b>-</b>       | <b>2,410,552</b> | <b>812</b>  | <b>2,279,107</b> | <b>17,245</b> | <b>1,761,134</b> | <b>-</b>         | <b>2,445,627</b> | <b>35,075</b>             |
| 90  | UNALLOCATED CONTINGENCY                        | 177,176          | -              | 160,068          | -           | -                | -             | -                | -                | 124,993          | (35,075)                  |
| 100   | FINANCE CHARGES                                | 88,695           | -              | 88,695           | -           | 29,192           | -             | 29,192           | -                | 88,695           | -                         |
| <b>TOTAL PROJECT 865522 (FFGA &amp; NON-FFGA CONCURRENT ACTIVITIES)</b> |  | <b>2,525,314</b> | <b>-</b>       | <b>2,659,314</b> | <b>812</b>  | <b>2,308,299</b> | <b>17,245</b> | <b>1,790,326</b> | <b>-</b>         | <b>2,659,314</b> | <b>-</b>                  |
| ENVIRONMENTAL/PLANNING 465522   |  | 4,349            | -              | 4,349            | -           | 3,982            | -             | 3,377            | -                | 4,349            | -                         |
| <b>TOTAL PROJECT 465522 (ENV / PLAN'G)</b>                              |  | <b>4,349</b>     | <b>-</b>       | <b>4,349</b>     | <b>-</b>    | <b>3,982</b>     | <b>-</b>      | <b>3,377</b>     | <b>-</b>         | <b>4,349</b>     | <b>-</b>                  |
| <b>TOTAL PROJECTS 465522 &amp; 865522</b>                               |  | <b>2,529,664</b> | <b>-</b>       | <b>2,663,664</b> | <b>812</b>  | <b>2,312,281</b> | <b>17,245</b> | <b>1,793,703</b> | <b>-</b>         | <b>2,663,664</b> | <b>-</b>                  |

NOTE: FINANCE CHARGES ARE MANAGED UNDER DEBT SERVICE - MEASURE R PROJECT NO. 660301

**Original Budget**

Original Budget of \$2.53 billion reflects the Life of Project (LOP) budget approved by the Board on January 26, 2017, plus Finance Charges of \$88.69 million.

**Current Budget**

Current Budget remains the same this period at \$2.66 billion.

**Current Forecast**

Current Forecast remains the same this period at \$2.66 billion.

**Commitments**

The Commitments increased this period by \$0.8 million mainly due to executed Contract Modifications for the Design/Build Contract C1120. The \$2.31 billion in Commitments to date represent 86.8% of the Current Budget.

**Expenditures**

The Expenditures increased this period by \$17.24 million primarily for costs associated with Design/Build Contract C1120, Third Party Utilities, Environmental Services, Real Estate Acquisition, Metro Project Administration, Engineering Management Support Services, Quality Management Support Services, Legal Support Services, City of Beverly Hills Memorandum of Agreement and City of Los Angeles Master Cooperative Agreement. The \$1.79 billion in Expenditures to date represent 67.3% of the Current Budget.

**Project Cost Analysis – 860522 (Beverly Hills North Entrance)**

DOLLARS IN THOUSANDS

| SCC CODE                             | DESCRIPTION                                    | ORIGINAL BUDGET | CURRENT BUDGET |               | COMMITMENTS |            | EXPENDITURES |           | CURRENT FORECAST |               | FORECAST/ BUDGET VARIANCE |
|--------------------------------------|--|-----------------|----------------|---------------|-------------|------------|--------------|-----------|------------------|---------------|---------------------------|
|                                      |  |                 | PERIOD         | TO DATE       | PERIOD      | TO DATE    | PERIOD       | TO DATE   | PERIOD           | TO DATE       |                           |
| 10                                   | GUIDEWAY & TRACK ELEMENTS                      | -               | -              | -             | -           | -          | -            | -         | -                | -             | -                         |
| 20                                   | STATIONS, STOPS, TERMINALS, INTERMODAL         | 27,350          | -              | 27,350        | -           | -          | -            | -         | -                | 27,350        | -                         |
| 30                                   | SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS | -               | -              | -             | -           | -          | -            | -         | -                | -             | -                         |
| 40                                   | SITework & SPECIAL CONDITIONS                  | -               | -              | -             | -           | -          | -            | -         | -                | -             | -                         |
| 50                                   | SYSTEMS  | -               | -              | -             | -           | -          | -            | -         | -                | -             | -                         |
| <b>CONSTRUCTION SUBTOTAL (10-50)</b> |  | <b>27,350</b>   | <b>-</b>       | <b>27,350</b> | <b>-</b>    | <b>-</b>   | <b>-</b>     | <b>-</b>  | <b>-</b>         | <b>27,350</b> | <b>-</b>                  |
| 60                                   | ROW, LAND, EXISTING IMPROVEMENTS               | -               | -              | -             | -           | -          | -            | -         | -                | -             | -                         |
| 70                                   | VEHICLES                                       | -               | -              | -             | -           | -          | -            | -         | -                | -             | -                         |
| 80                                   | PROFESSIONAL SERVICES                          | 1,900           | -              | 1,900         | -           | 371        | -            | 28        | -                | 1,900         | -                         |
| <b>SUBTOTAL (10-80)</b>              |  | <b>29,250</b>   | <b>-</b>       | <b>29,250</b> | <b>-</b>    | <b>371</b> | <b>-</b>     | <b>28</b> | <b>-</b>         | <b>29,250</b> | <b>-</b>                  |
| 90                                   | UNALLOCATED CONTINGENCY                        | -               | -              | -             | -           | -          | -            | -         | -                | -             | -                         |
| 100                                  | FINANCE CHARGES                                | -               | -              | -             | -           | -          | -            | -         | -                | -             | -                         |
| <b>TOTAL PROJECT 860522</b>          |  | <b>29,250</b>   | <b>-</b>       | <b>29,250</b> | <b>-</b>    | <b>371</b> | <b>-</b>     | <b>28</b> | <b>-</b>         | <b>29,250</b> | <b>-</b>                  |

**Original Budget**

Original Budget of \$29.3 million reflects the Life of Project (LOP) budget approved by the Board on May 26, 2022. This project satisfies the terms and conditions set forth in a Settlement Agreement executed by and between LA Metro and City of Beverly Hills on November 10, 2020. The Agreement requires Metro to assist the City in designing and constructing a new half entrance on the north side of the future Wilshire/Rodeo Station. This is a Non-Federal Funded Project, managed by the City of Beverly Hills. In addition to the LOP budget indicated above, the remainder of Metro’s contribution per the Settlement Agreement (approximately \$10M) is being paid by using contingency from the C1120 contract to cover the cost of changes to the Wilshire/Rodeo Station to facilitate the connection to the City’s new entrance.

**Current Budget and Current Forecast**

Current Budget and Current Forecast remain the same this period at \$29.25 million.

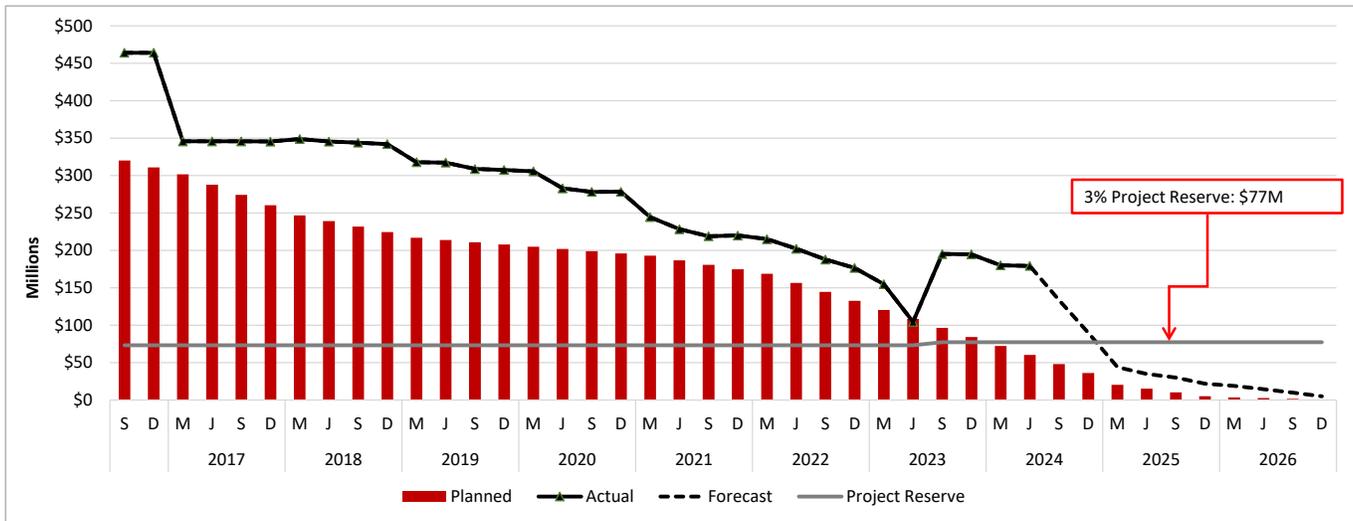
**Commitments**

Commitments remain the same this period at \$0.4 million. The \$0.37 million in Commitments to date represent 1.3% of the Current Budget.

**Expenditures**

Expenditure remains the same this period. The \$28 thousand in Expenditures to date represent less than 1% of the Current Budget.

**Cost Contingency Drawdown**



The above represents project contingency as of April 30, 2024

**Cost Contingency Drawdown Analysis**

The Original Budget of \$2.5 billion includes finance charges of \$88.7 million. It also includes a project cost contingency of \$345.7 million or 13.7% of the total project, which is based on the Life of Project (LOP) Budget approved by the Board in January 2017. An allocated contingency amount of \$168.5 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 revised 2026 Forecast Revenue Service Date (RSD).

*The Allocated Contingency decreased this period by \$0.8 million due to executed Contract Modifications for the Design/Build Contract C1120.*

| PROJECT COST CONTINGENCY |                                   |                  |                |                  |                                  |
|--------------------------|-----------------------------------|------------------|----------------|------------------|----------------------------------|
| DOLLARS IN THOUSANDS     |                                   |                  |                |                  |                                  |
|                          | Original Contingency (LOP Budget) | Previous Period  | Current Period | To-Date          | Remaining Contingency (Forecast) |
| Unallocated Contingency  | 177,176                           | (52,183)         | -              | (52,183)         | 124,993                          |
| Allocated Contingency    | 168,534                           | (113,390)        | (803)          | (114,193)        | 54,341                           |
| <b>Total Contingency</b> | <b>345,710</b>                    | <b>(165,573)</b> | <b>(803)</b>   | <b>(166,376)</b> | <b>179,334</b>                   |

Note: the above table includes FFGA and Non-FFGA contingency.

# Risk Management

## Summary of Risks

During the quarterly Risk Register update that occurred on April 16, 2024, four (4) new risks were identified, and four (4) risk were closed. There are a total of eighty (80) risks that are being tracked with four (4) risks scored as high, forty-six (46) scored as medium and thirty (30) scored as low to be managed in the next quarter.

Four (4) New Risks Identified:

| Risk ID   | Risk Description   | SCC | Risk Score |
|-----------|--|-----|------------|
| PLE2-10.3 | Delays to tunnel fit out.  | 10  | 6.0        |
| PLE2-50.5 | ROC Availability to Perform Tie-In                                       | 50  | 4.0        |
| PLE2-60.3 | Potential Claims by Property Owners Once Property is Turned Over         | 60  | 2.5        |
| PLE2-10.4 | Procurement Delay if Contractor Decides to Order Shorter Length of Rail. | 10  | 1.0        |

Four (4) Closed Risks:

| Risk ID   | Risk Description   | SCC | Risk Score |
|-----------|--|-----|------------|
| PLE2-10.1 | Potential that the x-passages excavations do not meet assumed production rate                    | 10  | 7.0        |
| PLE2-80.1 | The sequencing of x-passages excavations may be impacted due to Contractor resource availability | 80  | 3.5        |
| PLE2-20.4 | Section 3 TBM removal further delays Century City Constellation construction                     | 20  | 3.0        |
| PLE2-36   | Cal OSHA does not provide declassification after excavation is complete.                         | 10  | 2.0        |

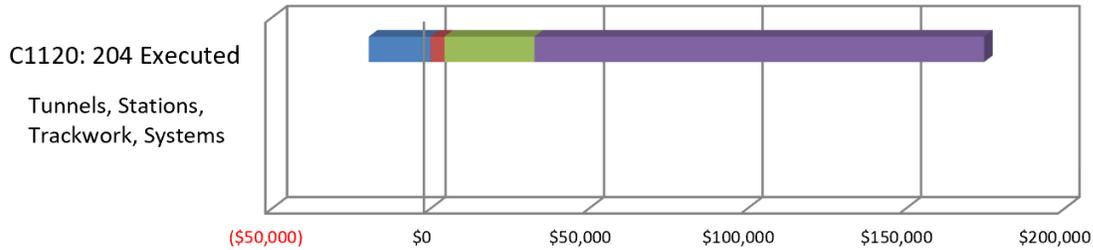
## Top Five Risks

The table below shows the top five (5) Project risks identified after the Risk Register update meeting:

| Risk ID   | Risk Description  | Risk | Action Items   |
|-----------|---|------|--|
| PLE2-70.1 | The schedule for the new vehicle procurement will likely not meet the FFGA requirement. | 15.0 | 1. Supporting consultant to assist with Heavy Rail RFP forecasted to go out in July 2022. RFP for new HRV contract is forecasted to go out in December 2022.<br>2. RFP went out on December 6, 2022 and bids received on April 17, 2023. |
| PLE2-20.5 | Inability to recover time lost at Century City Constellation Station                    | 13.5 | 1. Look for opportunities for potential mitigation of schedule delays along Century City schedule path.  |
| PLE2-40.3 | Delay to permanent power caused by new DWP changes to customer service agreements       | 10.0 |  |
| PLE2-60.1 | Requests to extend some temporary easements may be required                             | 10.0 |  |
| PLE2-24   | Resource constraints at private utility companies delay schedule.                       | 9.0  | 1. Maintain close coordination with utility companies and sequence utility work as necessary.  |

**Summary of Contract Modifications**

**Contract Modifications (MODs) by Cost Level**  
 Dollars in Thousands



|                              | <b>C1120: 204 Executed</b> |
|------------------------------|----------------------------|
| ■ Under \$100K               | (19,419)                   |
| ■ \$100K to \$250K           | 4,416                      |
| ■ \$250K to \$1M             | 28,379                     |
| ■ Over \$1M                  | 141,872                    |
| <b>Total Contract MODs</b>   | <b>155,248</b>             |
| <b>Contract Award Amount</b> | <b>1,376,500</b>           |
| <b>% of Contract MODs</b>    | <b>11.28%</b>              |

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

*Two hundred and two (204) Contract Modifications (MODs) with a total value of \$155.2 million have been executed since the award of C1120 Contract – Tunnels, Stations, Trackwork and Systems.*

## DISADVANTAGED BUSINESS ENTERPRISE (DBE)

|  |                   |
|--|-------------------|
| <b>DBE Commitment – Design</b> <sup>(1)</sup><br>The percentage of funds apportioned to Design Contracts                         | 25.31%            |
| <b>Current DBE Commitment Design</b> <sup>(1)</sup><br>Actual commitments as Design work is awarded                              | \$20.3M<br>26.19% |
| <b>Current DBE Participation</b> <sup>(2)</sup><br>Total amount paid to date to DBEs divided by the amount paid to date to Prime | \$22.3M<br>30.33% |

Twenty-one (21) Design DBE sub-consultants have been identified to date.

|  |                    |
|--|--------------------|
| <b>DBE Commitment – Construction</b> <sup>(1)</sup><br>The percentage of funds apportioned to Construction Contracts             | 17.00%             |
| <b>Current DBE Commitment Construction</b> <sup>(1)</sup><br>Actual commitments as Construction work is awarded                  | \$196.6M<br>13.44% |
| <b>Current DBE Participation</b> <sup>(2)</sup><br>Total amount paid to date to DBEs divided by the amount paid to date to Prime | \$157.9M<br>15.70% |

Fifty-Four (54) Construction DBE sub-contractors have been identified to date.

- (1) Date report prepared: May 2024 (when the report was run).
- (2) Data as of February 2024.

## PROJECT LABOR AGREEMENTS (PLA)

*As of March, 2024:*

|   |        |
|---|--------|
| <b>Targeted Worker Goal</b><br>Construction work to be performed by residents from Economically Disadvantaged Area in the United States | 40.00% |
| <b>Targeted Worker Current Attainment</b>   | 42.74% |
| <b>Apprentice Worker Goal</b><br>Construction work to be performed by Apprentices   | 20.00% |
| <b>Apprentice Worker Current Attainment</b>   | 17.30% |
| <b>Disadvantaged Worker Goal</b><br>Construction work to be performed by disadvantaged workers  | 10.00% |
| <b>Disadvantaged Worker Current Attainment</b>  | 8.96%  |

## FINANCIAL/GRANT

### Status of Funds Source

#### WESTSIDE PURPLE LINE EXTENSION - SECTION 2 (IN MILLIONS OF DOLLARS)

APRIL 2024

#### STATUS OF FUNDS BY SOURCE

| SOURCE   | (A)                | (B)                           | (C)                         | (D)                | (D/B)        | (E)                | (E/B)        | (F)                | (F/B)        |
|--|--------------------|-------------------------------|-----------------------------|--------------------|--------------|--------------------|--------------|--------------------|--------------|
|  | ORIGINAL<br>BUDGET | TOTAL<br>FUNDS<br>ANTICIPATED | TOTAL<br>FUNDS<br>AVAILABLE | \$                 | %            | \$                 | %            | \$                 | %            |
| FEDERAL - SECTION 5309 NEW STARTS              | \$1,187.000        | \$1,187.000                   | \$1,021.984                 | \$1,065.916        | 90%          | \$805.552          | 68%          | \$735.781          | 62%          |
| FEDERAL - SECTION 5309 NEW STARTS (ARPA-CIG**) | \$0.000            | \$58.418                      | \$58.418                    | \$58.418           | 100%         | \$58.418           | 100%         | \$58.418           | 100%         |
| FEDERAL CMAQ                                   | \$169.000          | \$169.000                     | \$169.000                   | \$169.000          | 100%         | \$169.000          | 100%         | \$169.000          | 100%         |
| MEASURE R - TIFIA LOAN                         | \$307.000          | \$307.000                     | \$307.000                   | \$307.000          | 100%         | \$307.000          | 100%         | \$307.000          | 100%         |
| MEASURE R 35%                                  | \$811.902          | \$887.484                     | \$608.598                   | \$657.185          | 74%          | \$398.971          | 45%          | \$351.205          | 40%          |
| STATE CAPITAL PROJECT LOANS                    | \$54.762           | \$54.762                      | \$54.762                    | \$54.762           | 100%         | \$54.762           | 100%         | \$54.762           | 100%         |
| <b>TOTAL</b>                                   | <b>\$2,529.664</b> | <b>\$2,663.664</b>            | <b>\$2,219.762</b>          | <b>\$2,312.281</b> | <b>86.8%</b> | <b>\$1,793.703</b> | <b>67.3%</b> | <b>\$1,676.166</b> | <b>62.9%</b> |

EXPENDITURES ARE CUMULATIVE THROUGH APRIL 30, 2024

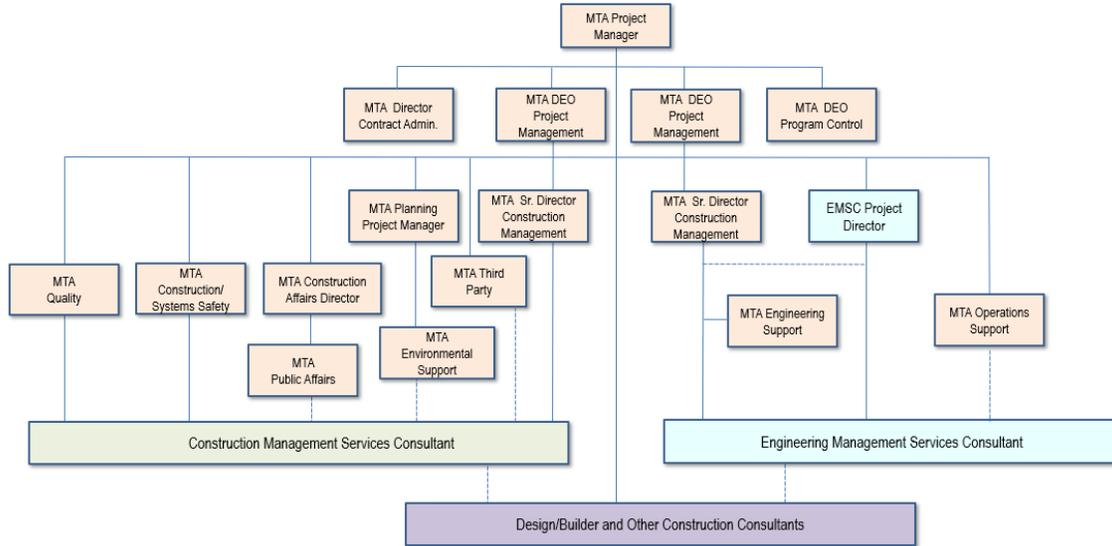
\*\*AMERICAN RESCUE PLAN ACT - CAPITAL INVESTMENTS PROGRAM (ARPA-CIG)

Original Budget based on 2017 Board approved LOP Budget, plus Finance Charges of \$88.7 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).

**Purple (D Line) Extension Project Section 2  
 Responsibility and Reporting Matrix**



The overall FY24 Total Project Staffing Plan averages 81.3 FTEs per month.

*For March 2024, there were a total of 24.1 FTEs for MTA's Project Administration Staff and 53.4\* FTEs for Consulting Staff. The total project staffing for February 2024 was 77.5 FTEs.*

### Total Project Staffing – Metro and Consultants



\*Actuals include 4.4 FTEs related to Project Management Support Services (PMSS).



## Staffing by Group

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

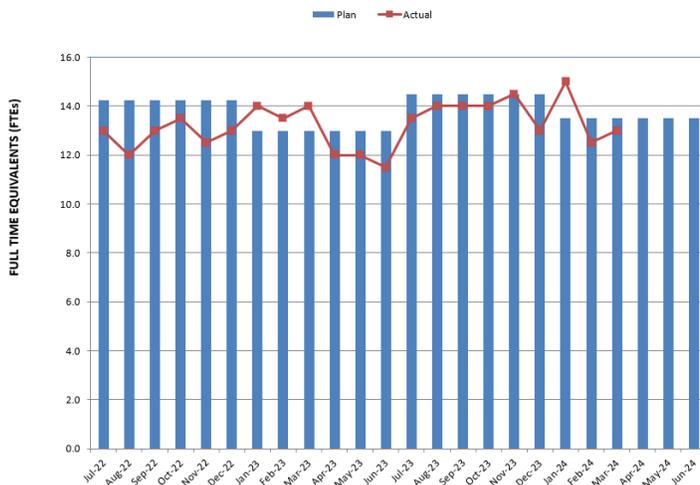
Metro staffing includes full time staff located in the IPMO as well as part-time support located at Gateway Headquarters.

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

## Metro Staff



## CM Support Services Staff (Consultant)



## Engineering Services Staff (Consultant)

## REAL ESTATE

### Real Estate Status Summary

| Description          | Number of Parcels | Certified | Appraisals Completed | Offers Made | Agreements Signed | Condemnation Filed | Relocations |           | Parcels Available |
|----------------------|-------------------|-----------|----------------------|-------------|-------------------|--------------------|-------------|-----------|-------------------|
|                      |                   |           |                      |             |                   |                    | Required    | Completed |                   |
| Full Takes           | 3                 | 3         | 3                    | 3           | 1                 | 2                  | 21          | 21        | 3                 |
| Part Takes           | 0                 | 0         | 0                    | 0           | 0                 | 0                  | 0           | 0         | 0                 |
| TCE                  | 3                 | 3         | 3                    | 3           | 2                 | 1                  | 1           | 1         | 3                 |
| SSE                  | 23                | 23        | 23                   | 23          | 15                | 9                  | 3           | 3         | 23                |
| Permanent Easements  | 3                 | 3         | 3                    | 3           | 3                 | 1                  | 0           | 0         | 3                 |
| <b>Total Parcels</b> | <b>32</b>         | <b>32</b> | <b>32</b>            | <b>32</b>   | <b>21</b>         | <b>13</b>          | <b>25</b>   | <b>25</b> | <b>32</b>         |

- Parcel W-3301: Award granted by Jury, pending signed final order of condemnation.
- Parcel W-3303: Settlement reached, pending final documentation.
- Parcel W-3304: Litigated settlement obtained, pending attorney recommendation. Will require Metro approval and FTA concurrence.
- Parcel W-3505: Settlement reached and agreement executed. Pending Stipulation for Entry of Judgment and Final Order of Condemnation.

## QUALITY ASSURANCE

- Attended weekly Project construction progress meetings.
- Reviewed construction submittals, inspection and assessment reports at various job locations, Twining Independent test laboratory reports (TPOG), Ninyo and Moore test laboratory reports (Metro) and invoices for the work performed by Ninyo and Moore and PQM.
- *Contributed to the development of Metro Quality Management Oversight Program and managed the implementation of the Project. Prepared QMO program project monthly report. Conducted QMO program Management Quarterly Review Meeting for 1<sup>st</sup> Quarter 2024.*
- Chaired weekly quality meetings with TPOG Quality Manager for the status, corrective actions, close out documents and verification actions for NCRs issued by Metro; quality control results for the current and upcoming works; planning activities of Metro laboratory materials verification testing and special processes construction assessments.
- Reviewed the following with a disposition for record only/approved/approved as noted:
  - *WRS East UPE 3 (South Canon) Rebar Shop Drawings*
  - *WRS East UPE 3 (South Canon) Waterproofing Drawings*
  - *CCS and WRS Electric Ceiling Mounted Heaters (EH-1) Shop Drawings and Product Data*

## **ENVIRONMENTAL**

- Reviewed and provided responses to various contractor submittals and requests for information related to environmental matters.
- Issued various QMO reports assessing implementation of environmental requirements.
- Participated in various Project coordination meetings and evaluated progress and schedules for environmental compliance and sustainability efforts.
- Provided environmental awareness training as needed.
- Conducted field environmental monitoring and spot check inspections for construction noise and vibration, stormwater and fugitive dust BMPs, and Metro's Green Construction Policy.
- Submitted Q1 2024 MMRP to the FTA on 04/30/2024.

## CONSTRUCTION AND COMMUNITY RELATIONS

- *Produced and distributed eight (8) construction work notices which include specific construction location updates, monthly Look Ahead summaries and weekly construction work updates.*
- *Conducted project presentation webinar for the monthly Beverly Hills Sections 1 & 2 Community Construction update meeting. Conducted the Wilshire Rodeo Monthly Stakeholder briefing. Conducted one-on-one stakeholder meetings in person and online with Property Managers and business owners and the Century City BID regarding traffic control, schedule updates, and construction coordination for PLE2 in Beverly Hills and Century City. Continued individual contact with commercial and residential stakeholders as needed.*
- *Extensive outreach for community meetings including distribution of digital notices, direct emails, postcard mailers, social media and paid online and print advertising. Primary outreach efforts are digital, with door-to-door outreach taking place in Beverly Hills for appendage work on South Beverly Drive, South Canon Dr, North Canon Dr., cross passages and other construction activities within the City of Beverly Hills. Maintained expanded footprint of door-to-door distribution of monthly notices and construction updates in the City of Beverly Hills.*
- Continued efforts on behalf of Eat Shop Play and Business Interruption Fund (BIF) in Century City and Beverly Hills. Updated Facebook/Twitter and website as needed.

## CREATIVE SERVICES

- *Participated in contractor's pre-proposal conference for prospective specialized art glass fabricators*
- Ongoing coordination with Marketing partners to develop materials for public surveys and findings for station naming Board Report.
- Continued management of artwork design development for integrated station artworks.
- Continued assessment of Project operating impacts to signage between sections and systemwide.
- Continued coordination with arts and cultural stakeholders.

## **SAFETY & SECURITY**

- *TPOG reported one (0) Recordable Injuries in April 2024.*
- Attended daily toolbox meetings, weekly crew all hand safety meetings, progress meetings, readiness reviews, and other project meetings to evaluate Contractor's Safety Program compliance with contract requirements.
- Worked 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.
- Conducted Project Safety Orientation, W-65 and Underground Safety Training for new Metro/Consultants and IPMO project staff.
- Conducted right-of-way (ROW) and Safety/Security walks, Safety/Security reviews and coordination with TPOG staff for oversight and support of all project field work activities.
- Metro/TPOG project safety staff conducted schedule, Safety / Security, and over-the-shoulder review meetings.
- *Metro Project Safety hosted the April Monthly Safety and Security Meeting on April 26, 2024.*
- *TPOG reported 102,903 actual work hours in April 2024.*
- *TPOG Project to Date Work Hours are 4,122,608 with fifty-five (55) Recordable Injuries and twelve (12) days Away from Work Injuries.*
- *The Recordable Injury Rate is 2.67. 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   |
| December 2014  | FTA approval to enter New Starts Engineering Phase   |
| March 2015     | Began Real Estate Acquisition  |
| May 2015       | Began Advanced Preliminary Engineering   |
| September 2015 | Issued RFQ for C1120 Design/Build contract   |
| October 2015   | Received RFQ responses for C1120 Design/Build contract   |
| May 2016       | Submitted draft FFGA application   |
| May 2016       | Submitted TIFIA loan application   |
| June 2016      | Submitted application to FTA requesting an FFGA  |
| June 2016      | Received RFP Proposals for Contract C1120  |
| September 2016 | Began telecom joint trench construction in Century City  |
| December 2016  | FTA executed FFGA  |
| December 2016  | Received TIFIA Loan  |
| January 2017   | NTP for Construction Management Support Services Contract  |
| January 2017   | Metro Board approved staff recommendation to award the Design/Build Contract C1120 to TPOG and approved Life-of-Project Budget |
| January 2017   | Issued C1120 Contract Award to TPOG  |
| April 2017     | Issued C1120 Contract NTP to TPOG  |
| May 2017       | Mobilized C1120 Contract Design and Construction Team  |
| August 2017    | Third party relocations started at Century City Constellation Station  |
| September 2017 | Third party relocations started at the Wilshire/Rodeo Station  |
| November 2017  | Beverly Hills City Council approved Memorandum of Agreement (MOA) governing remaining third-party utility relocations          |

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| December 2017  | Final Supplemental Environmental Impact Statement (FSEIS) was available to the public in the Federal Registry on December 1, 2017   |
| January 2018   | Completed all utility relocations within the Tunnel Boring Machine “Launch Box”   |
| February 2018  | Held Groundbreaking Ceremony on February 23, 2018   |
| May 2018       | Bureau of Engineering approved a nine-month street closure of Constellation Blvd. between Century Park East and Avenue of the Stars |
| September 2018 | Full street closure of Constellation Blvd. commenced  |
| September 2018 | Delivery of tunnel boring machines (TBMs) commenced   |
| October 2018   | Piling installation commenced at launch box in Century City   |
| October 2018   | Granted Wilshire/Rodeo Station footprint right-of-way (ROW) access to TPOG  |
| December 2018  | Completed all civil work for third parties at Century City Constellation Station  |
| December 2018  | Demolition of former Ace Gallery complete   |
| January 2019   | Completed soldier pile installation for the TBM launch box at the eastern end of the Century City Constellation Station             |
| January 2019   | Metro Board Approves City of Beverly Hills MOA for C1120 Contract   |
| February 2019  | City of Beverly Hills City Council Approves MOA for C1120 Contract  |
| March 2019     | Start of installation of deck beams for the TBM Launch Box  |
| May 2019       | Completed soldier pile installation for Tunnel Access Shaft in Century City   |
| June 2019      | TBM Unveiling Event   |
| June 2019      | Full Street Closure of Constellation Blvd. Extension Granted  |
| August 2019    | Completed Construction of Santa Monica Boulevard Bus Layover in Century City  |
| September 2019 | Metro’s request to lift the holiday moratorium for construction activities in Beverly Hills was rejected by the City Council        |
| October 2019   | Piling installation commenced for the Wilshire/Rodeo Station box.   |
| November 2019  | Poured invert slab at TBM launch box in Century City.   |
| December 2019  | An Additional 7-Month Full Street Closure of Constellation Blvd. was Granted by Los Angeles Board of Public Works.                  |
| December 2019  | Started TBM Assembly.   |

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| December 2019  | Motion for prejudgment possession for SSE under Beverly Hill High School was granted.   |
| January 2020   | Piling activities resumed at Wilshire/Rodeo Station after the holiday moratorium.   |
| January 2020   | A geophysical survey identified three oil wells located east of the Tunnel Access Shaft underneath Beverly Hills High School within the tunnel alignment.   |
| March 2020     | LADWP completed 4.8kv system cabling pulling and splicing, along with the remaining cable removals at Century City Constellation Station.   |
| March 2020     | Beverly Hills City Council approved a full street closure of Wilshire Boulevard (between Beverly Drive and Crescent Drive) for the duration of the “Safer at Home” orders due to the COVID-19 Pandemic. |
| March 2020     | Right of Entry Executed to Access BHUSD.  |
| April 2020     | Began tunneling operations of the BL Tunnel.  |
| April 2020     | Completed implementation of the Wilshire Boulevard closure (between Beverly Drive and Crescent Drive) for the duration of the “Safer at Home” orders due to the COVID-19 Pandemic.                      |
| May 2020       | Completed station box and entrance piling activities at Wilshire/Rodeo Station.   |
| June 2020      | Wilshire Boulevard reopened to traffic following completion of decking at Wilshire/Rodeo Station.   |
| July 2020      | Began tunneling operations of the BR Tunnel.  |
| August 2020    | Completed excavation of Tunnel Access Shaft.  |
| August 2020    | Access granted to contractor to W-3801 for the Century City Constellation Station entrance.   |
| September 2020 | Abandonment of the first legacy oil well was completed.   |
| September 2020 | BL TBM “Ruth” Breaks into Tunnel Access Shaft.  |
| September 2020 | TIFIA Loan Paid Off and Account Closed.   |
| October 2020   | The abandonment of the remaining oil wells has been completed.  |
| October 2020   | BR TBM “Harriet” Breaks into Tunnel Access Shaft.   |
| November 2020  | Settlement agreement reached with City of Beverly Hills ending city’s lawsuit against FTA and Metro.  |

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| November 2020 | Beverly Hills City Council approved Metro's holiday moratorium waiver request and work hours established by the Memorandum of Agreement (MOA). Construction of Wilshire/Rodeo Station will continue through New Year's Day.                    |
| November 2020 | City of Los Angeles approved additional closures east of Avenue of the Stars along Constellation Boulevard through January 2, 2021.  |
| December 2020 | First TBM clears all buildings under Beverly Hills High School campus.   |
| January 2021  | City of Los Angeles approved extension of street closure for decking and utility work between Avenue of the Stars and Solar Way to April 5, 2021, and weekend closures at the intersection of Constellation Boulevard and Avenue of the Stars. |
| February 2021 | Both TBMs have pushed through the Tunnel Access Shaft and the BL TBM "Ruth" is using conveyor belts for muck removal.  |
| March 2021    | Decking complete at Century City Constellation Station except for the twelve (12) remaining panels that are being utilized for additional ventilation openings.  |
| March 2021    | BL TBM (Ruth) excavation suspended after approximately 1,300 feet from eastern end of Century City Constellation Station due to unplanned maintenance to face of cutterhead and completion of repairs.   |
| March 2021    | Street restoration complete and Constellation Blvd. between Avenue of the Stars and Solar Way fully reopened earlier than planned.   |
| April 2021    | Permanent concrete work began at the Wilshire/Rodeo Station.   |
| May 2021      | Reopening of Constellation Blvd.   |
| May 2021      | Concrete placement for the first section of the invert slab at Wilshire/Rodeo station in Beverly Hills.  |
| May 2021      | TBM's resumed excavation after cutterhead inspection and maintenance for BL TBM and muck removal transitioning to conveyor belts for BR TBM.   |
| June 2021     | Switching from vertical conveyor belts to crane and muck boxes in the Tunnel Access Shaft.   |
| July 2021     | The conversion of the muck conveyance systems for both tunnels was completed on July 27, 2021.   |
| August 2021   | The first concrete placement for the first level Wilshire/Rodeo Station walls occurred during this period.   |
| August 2021   | Both BL and BR TBM have exited the first of two seismic lining sections this period.   |
| October 2021  | Both TBM's have exited the 2 <sup>nd</sup> seismic zone of the alignment.  |

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| October 2021   | Excavation of the Century City Constellation station entrance box has commenced.   |
| October 2021   | City of Beverly Hills approved the request for the Holiday Moratorium waiver allowing work to continue with adjusted hours and activities.   |
| December 2021  | Both TBM's reached the planned stopping point prior to break-in at Wilshire/Rodeo.   |
| January 2022   | BR TBM "Harriet" Breaks into Wilshire/Rodeo Station Box on January 12, and BL TBM "Ruth" Breaks into Wilshire/Rodeo Station Box on January 28.   |
| March 2022     | Both TBM's have begun excavation on reach 4 toward Wilshire/La Cienega Station. BL on March 2, 2022, and BR on March 29, 2022.   |
| April 2022     | On April 8, 2022, VCM notifies CRRC MA Corporation that Metro does not intend to exercise any of the available Options for the HR4000 Contract.  |
| May 2022       | Completed drilling for shoring beams on south side of Avenue of the Stars for Storm Drain.   |
| June 2022      | Completed membrane waterproofing on Concourse Walls (Entrance) – Wilshire/Rodeo Station.   |
| June 2022      | Began cross passage dewatering well installation along tunnel alignment.   |
| July 2022      | On July 29, 2022, a jury determined the amount of just compensation that Metro owes the Beverly Hills Unified School District (BHUSD) for the subsurface easements under the high school campus and the administration building. The verdict concludes all litigation between BHUSD and Metro. |
| August 2022    | Started formwork for Station Entrance Roof at Wilshire/Rodeo Station.  |
| September 2022 | Started work for SCE permanent power at Wilshire/Rodeo.  |
| September 2022 | Started Cross Passage 40 work in BL tunnel.  |
| October 2022   | Metro issued a Notice of Work Suspension on October 21, 2022, effective immediately until November 7, 2022, out of concern for TPOG's Safety performance.  |
| November 2022  | On November 4, 2022, Metro allowed production work to resume at the Century City Constellation and Wilshire/Rodeo stations. TBM tunneling production resumed on November 16, 2022. Work resumed for the BL tunnels and Cross Passages on November 18, 2022.                                    |
| November 2022  | On November 18, 2022, the BR TBM completed overall excavation and reached the Purple Line Extension Section 1 interface concrete end wall.   |

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| December 2022  | On December 6, 2022, HRV 5000 (New Heavy Rail Vehicle Contract) was issued.  |
| January 2023   | On January 12, 2023, the BL TBM completed overall excavation and reached the Purple Line Extension Section 1 interface concrete end wall.  |
| February 2023  | Completion of Wilshire/Rodeo Station Entrance Concourse Roof Deck.   |
| April 2023     | Completion of Wilshire/Rodeo Station Main Concourse Roof Deck.   |
| April 2023     | On April 17, 2023, bids were received for HRV5000 (New Heavy Rail Vehicle Contract).   |
| May 2023       | Completion of removal of temporary backfill for future passageway at Century City Constellation.   |
| June 2023      | TPOG has agreed to retain a third-party independent safety company to improve adherence to safety policies and procedures and to upgrade the culture of safety.                        |
| June 2023      | Concrete invert placement at Century City Constellation Station resumed on the east end of the station just west of the existing launch box slab which was completed in December 2019. |
| July 2023      | Began pile installation for first WRS Appendage structure (Emergency Ventilation Shaft #9 at Wilshire/Beverly).  |
| August 2023    | Completed excavation and initial lining of all seven (7) cross passages along Reach 5.   |
| September 2023 | Completed excavation of the station box at Century City Constellation Station.   |
| October 2023   | Completed concrete placement of Invert Slab at Century City Constellation Station.   |
| December 2023  | Started concourse level slab falsework at Century City Constellation Station.  |
| January 2024   | Completed concrete placement of East Concourse Level Slab at Wilshire/Rodeo Station (GL1-12).  |
| January 2024   | Began pile installation of TPSS Access Shaft at Wilshire/Rodeo Station.  |
| January 2024   | Completed excavation of all Cross Passages.  |
| January 2024   | Metro Board awards HR5000 Heavy Rail (HRV) Procurement to Hyundai Rotem Company.   |
| February 2024  | Completed concrete placement of concourse Level Slab at Wilshire/Rodeo Station.  |

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| February 2024     | Completed excavation of East UPE/Exhaust #3 appendage along S. Canon Dr.                 |
| March 2024        | Completed Concourse Level Invert Slab at Century City Constellation Station Entrance.    |
| March 2024        | Complete Reach 5 BL Tunnel 1 <sup>st</sup> Stage invert (Excluding Fault Zones and TAS). |
| <i>April 2024</i> | <i>Re-opened S. Canon Dr. full street closure.</i>                                       |
| <i>April 2024</i> | <i>Completed first Cross Passage (CP 40).</i>  |