

July 22, 2021

TO:

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FROM:

MICHAEL McKENNA

EXECUTIVE OFFICER/PROJECT MANAGER

SUBJECT:

WESTSIDE PURPLE LINE EXTENSION SECTION 2 PROJECT

Michael Mik-

JUNE 2021 QUARTERLY PROJECT STATUS REPORT

Enclosed herewith is the Quarterly 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 July 2, 2021.

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

MM: PB Enclosure

Westside Purple Line Extension Section 2 Project



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QUARTERLY PROJECT STATUS REPORT

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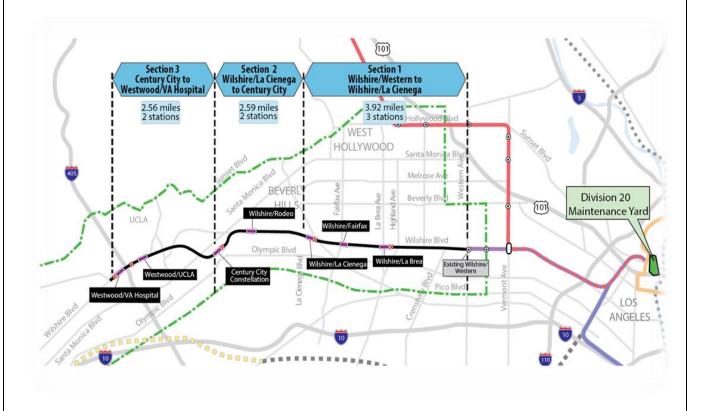
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PROJECT OVERVIEW

Project Background

The Westside Purple 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 Westside Purple 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 breaking distance will be provided at the interim terminus station.

Major Procurements

<u>Contract C1120 – Tunnels, Stations, Trackwork, Systems and Systems Integration Testing:</u> 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

Metro has procured a contract to provide 20 Heavy Rail Vehicles (HRV) necessary to operate the extension of the Purple Line. An additional contract will be procured for the Universal Fare System (UFS). The scope of the HRV contract includes design, manufacturing, testing and delivery of the vehicles. 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 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 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 planned for 2025.

On January 26, 2017, the Metro Board approved the Life of Project (LOP) Budget for the Westside Purple Line Extension Section 2 Project 865522 for \$2.4 billion excluding Finance Charges of \$88.7 million. 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 CMAQ (Congestion Mitigation & Air Quality)
- Measure R TIFIA Loan (Transportation Infrastructure Finance & Innovation Act)
- Measure R 35%
- State Capital Projects Loans

<u>Construction and Community Relations:</u> 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 June 2021, the Project reached 44% completion based on earned value measurements for design and construction. The focus of the Project continues to be completing final design and construction activities in Century City and Beverly Hill. All civil/structural packages are anticipated to be complete by July 2021 and all remaining system packages are anticipated to be complete in September 2021. The C1120 Design Build Contract is on schedule to substantially complete by May 2025 and demobilize by October 2025. The forecast Revenue Service Date (RSD) for the Project remains planned for 2025. The following is an overview of current design and construction activities.

Design Status

The Engineering Management Services team (WSP) continues 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 in order 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 abovementioned 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 are occurring 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 has submitted this month are: 100% - CCS Package 3 Volume 2F St Rest, Final Utility, and Traffic Control Design DU 2.3, 100% - Package 3 Volume 3B Systems Design DU 6.1, 100% - WRS Pavement Design DU 3.3, 100% - WRS Structural Walkway Calculations and Drawings (CO-00020.2, CN-00106.1) DU 3.1

Construction Status

Advanced Utility Relocations:

All advanced utility relocations are complete.

Century City Constellation Station:

TPOG completed the work to relocate the water line within the expanded street closure in mid-May 2020. TPOG's water line relocation work on Constellation Boulevard between Avenue of the Stars and Solar way is 99% complete. The remaining 1% consists of removing the abandoned temporary water line. This work is anticipated to be completed in July 2021.

TPOG has been working with City of Los Angeles, DOT and BOE to obtain permits for the re-alignment of the sanitary sewer and storm drain. The storm drain realignment will be located south of Santa Monica Blvd, along southbound lanes of Avenue of the Stars; the sanitary sewer realignment will be located along Constellation, west of Avenue of the Stars and through the intersection of Avenue of the Stars and Constellation. Permits from the City of Los Angeles are expected to be obtained by TPOG in summer of 2021, Construction work for the sanitary sewer and storm drain is expected to start in fall 2021. TPOG obtained a renewal on the project's nighttime noise variance permit for nighttime work. The permit was issued by the Los Angeles Police Commission through November 27, 2021.

Decking operations were substantially completed early and consequently Constellation Blvd. between Avenue of the Stars and Solar Way was opened one week earlier than required by the street closure permit. Deck panels are 98% complete, remaining deck panels have not been installed in order to provide additional ventilation through the openings.

Excavation of the TBM launch box was completed on November 1, 2019. Excavation of the remainder of the station box west of the TBM launch box is underway and is 24% complete.

Tunnels:

Tunneling operations began on April 30, 2020 with the launch of the BL TBM, "Ruth". "Ruth" has excavated 2103 feet (36% complete for Reach 5 and 18% complete overall) and erected 415 tunnel rings to date. Launch of the BR TBM "Harriet" began on July 20, 2020. "Harriet" has excavated 1850 feet (31% complete for Reach 5 and 16% complete overall) and erected 365 tunnel rings to date.

BL TBM was re-launched on February 22, 2021 after the completion of the installation of the conveyor belt system. The BL TBM had an unplanned stop underneath the Beverly Hills Unified School District's administration building for cutterhead inspection and maintenance. Maintenance work was completed on May 1, 2021, and BL TBM excavation resumed on May 11, 2021. Both TBM's have entered the first of two seismic lining sections.

Due to ongoing issues with the existing conveyor belt system, the Contractor has opted to replace the vertical conveyor belts in the shaft with a crane and muck boxes to address operational problems. The BR TBM excavation is currently paused to allow for the conversion and the BL TBM will soon follow.

As of this reporting period, 4,055 of 4,056 precast tunnel rings, and 423 of 437 special seismic rings that have been produced.

Wilshire/Rodeo Station:

Wilshire/Rodeo Station piling operations started on April 12, 2020 and was completed on May 13, 2020.

Installation of the temporary street decking over the future station box excavation began on May 5, 2020 and was substantially completed on June 6, 2020. Remaining deck panels to be installed are at the opening which is being utilized for removal of excavation material. The street closure of S. Reeves Dr. to support excavation ended June 15, 2021.

Excavation of the station box and entrance has been completed.

A total of 65 out of 77 canopy pipes have been installed on the west end of the BR and BL tunnels. The remaining canopy pipes are "shorter" pipe canopies that need to be grouted.

TPOG continues preparing the west bulkhead for the arrival of the TBMs, and the east bulkhead for relaunch of the TBMs. Work also continues on the permanent concrete invert slab. The first concrete placement for the invert slab occurred on May 20, 2021 and concrete formwork for the remainder of the invert continues. *The removal of bracing level 5 walers has commenced and is ongoing.*

Cost and Schedule Summary

For the C1120 Design/Build contract, Metro has received the Contractor's June 2021 schedule update, which reports the substantial completion date finishing 60 calendar days behind the May 23, 2025 contractual date. Slower than anticipated progress and ongoing issues with tunneling operations are causing the impact. The Project Team is concerned about the continued monthly schedule slippages and is closely monitoring these impacts. Future revisions to the contractor's means and methods and revised schedule logic, may have an impact on future updates. It is anticipated that the contractual completion date will be achieved.

The Critical Path (CP) of the Project commences with the completion of station excavation at Wilshire/Rodeo Station. It then follows into Wilshire/Rodeo concrete work then it proceeds into tunneling and walkway construction. Next, 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 15.

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	05/23/25	0

Project costs continue to track within budget and projected contingency limits. To date, the Current Budget and Current Forecast remain the same this period at \$2.5 billion.

There are currently ten (10) open claims that are being evaluated.

- WRS 21" Sanitary Sewer Relocation Design Only (Claim 7 Issue 4)
- Construction Vibration Control (Claim 10)
- AT&T Wilshire/Rodeo Appendage (Claim 12)
- Impact of Utility Relocation work at City of Beverly Hills due to MOA and other COBH Restrictions (Claim 13)
- Design and Installation of Two Additional TWC Loops (Claim 16)
- Revision to Grate Sizes and Appendage Locations at Wilshire/Rodeo Station (Claim 18)
- Mitigation Plan for Subsurface Settlement above BL Tunnel (Claim 19)
- Tunnel Access Shaft (TAS) Tower Crane Installation Delay (Claim 20)
- WRS Groundwater Inflows (Claim 21)
- COVID Impacts (Claim 22)

Detailed cost and budget information is provided on Page 17.

Key Management Concerns

No concerns to report at this time.

Project Construction Photos



U.S. Senator Alex Padilla Site Visit



BL Tunnel





Excavation Activities West of the Launch Box in Century City

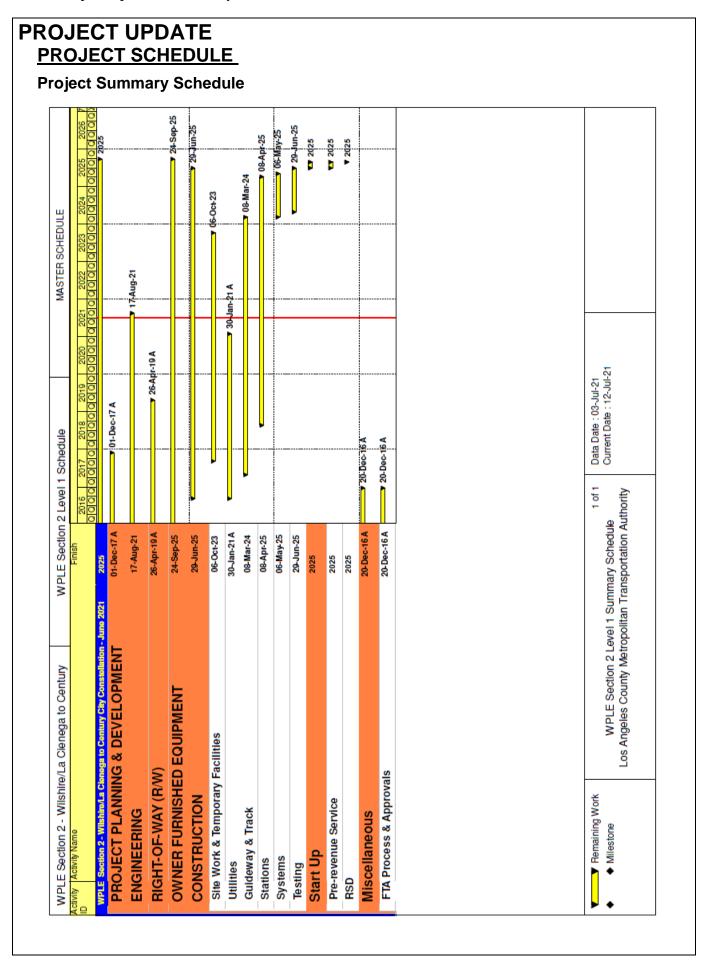








Wilshire/Rodeo Station Invert Slab Preparation

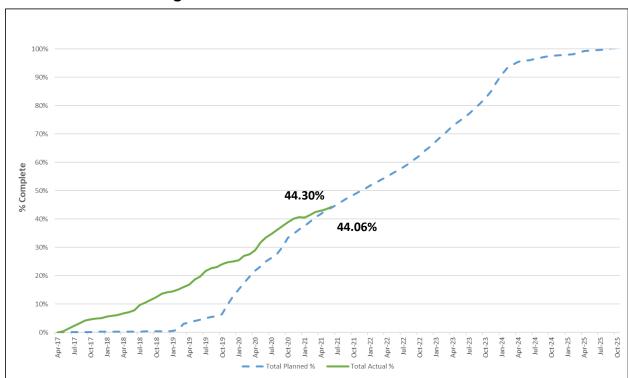


Progress Summary

	Status	Change from Last Period	Comment
Forecast Revenue Service Date	2025		
TIFIA Revenue Service Date	12/31/2026	None	
FFGA Revenue Service Date	12/31/2026	None	
Final Design Progress:			
Contract C1120	99.6%	0.0%	Civil/Structural Final Design (FD) is anticipated to complete in July 2021. Last FD System's package is planned for submission in September. There is no impact to Project Schedule.
Construction Contracts Progress:			
Contract C1120	44.3%	0.6%	

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

Planned vs. Actual Progress



The actual overall construction progress is 44.30% versus a planned of 44.06% through June 2021. The progress curves represent the physical progress of work performed to complete Contract C1120. The "Total Planned %" curve is based on the Contractor's late schedule dates from the approved baseline schedule.

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.

	Milestone Date	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21
Completed FRP invert slabs at Wilshire/ Rodeo Station (A1-B1)	06/30/21A	\bigcirc					
Start installation of BR special rings	07/01/21		\bigcirc				
Complete FRP invert slabs at Wilshire/ Rodeo Station (B1-E1)	07/23/21		\bigcirc				
Complete installation of 1st level of struts & w ales at Century City Constellation Station	07/29/21		\bigcirc				
Complete excavation and installation of bracing level 6 for TBM w alk-thru at Wilshire/ Rodeo Station (East)	08/12/21			\bigcirc			
Complete FRP exterior w alls invert to concourse level at Wilshire/ Rodeo Station (A7-A1) for TBM Walk Thru	08/25/21			\bigcirc			
Complete excavation of lift 2 at Century City Constellation Station	09/27/21				\bigcirc		
Complete 1st level walls at Wilshire/Rodeo Station	10/06/21					\bigcirc	
Complete installation of 2nd level struts & wales at Century City Constellation Station	10/11/21					\bigcirc	
Complete excavation of lift 3 at Century City Constellation Station	11/09/21						\bigcirc
MTA Staff MTA Board Action	FTA (Federal Transit	7	√ Utili	ty Compa	any		
Other Agencies Contractors	O Design Consultant	(C1 ⁻	120 D/B			
"A" follow ing date is actual and completed	* New						

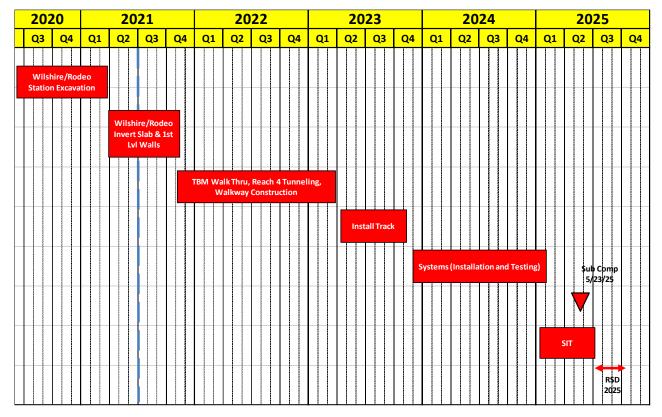
Major Equipment Delivery

	Submittal	Procurement	Delivery	Installation
C1120 DESIGN/BUILD*				
Tunnel Boring Machines	27-Jul-17(A)	14-Aug-17(A)	13-Sep-18(A)	26-Dec-19(A)
Emergency Ventilation Fans	22-Sep-21	23-Sep-21	15-Mar-22	11-Jul-22
Station Elevators/Escalators	26-Oct-21	24-Nov-21	16-Oct-23	3-May-24
Track - Running Rail	27-Oct-21	27-Oct-21	2-Feb-22	7-Nov-23
Traction Power Equipment	1-Dec-21	2-Dec-21	9-Aug-22	20-Feb-24
Automatic Train Control	2-Jul-21	2-Jul-21	7-Feb-22	5-Apr-24
Radio System	4-Jul-21	6-Jul-21	7-Feb-22	27-Apr-23
SCADA RTU System	2-Jul-21	2-Jul-21	7-Feb-22	27-Apr-23
Heavy Rail Vehicles	Reevalua	e option		
Universal Fare System***	TBD	TBD	TBD	June 2023**

^{*} Dates derived from TPOG's June 2021 Schedule.

^{**} Forecast release date by TPOG to UFS contractor access at stations.

Critical Path Project



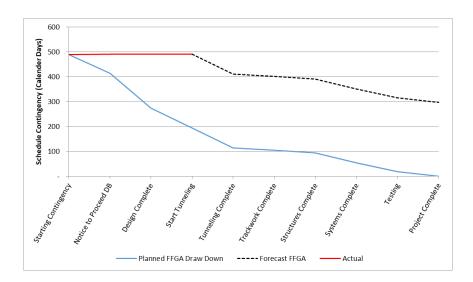
The Critical Path in June 2021 remained the same as shown last month.

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 2025.

The introduction of the PMS model axis reflects a proportional distribution of available float relative to the FFGA model. Based on the April 2020 actual start of TBM mining, schedule contingency appears to maintain a noticeable buffer from the FFGA model. This model will be updated when the TBM mining is complete.

With regard to the FFGA RSD, schedule float of sixteen (16) months has been maintained.



PROJECT COST

Project Cost Analysis – 865522

DOLLAR	DOLLARS IN THOUSANDS										
SCC	DESCRIPTION	ORIGINAL BUDGET	CURRENT	BUDGET	СОММІТ	MENTS	EXPEND	ITURES	CURRENT I	FORECAST	FORECAST/ BUDGET
CODE		BODGET	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
10	GUIDEWAY & TRACK ELEMENTS	346,440	9,250	330,952	1,301	313,914	5,456	144,908	9,250	330,952	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	434,990	37,225	492,470	836	443,702	7,820	151,715	37,225	492,470	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	-		-	-	-		-	-	-	-
40	SITEWORK & SPECIAL CONDITIONS	553,282	4,128	588,052	316	565,593	4,555	409,652	4,797	588,052	-
50	SYSTEMS	81,457	6,820	87,345	40	69,594	52	8,585	6,151	87,345	-
	CONSTRUCTION SUBTOTAL (10-50)	1,416,169	57,423	1,498,819	2,493	1,392,803	17,883	714,860	57,423	1,498,819	-
60	ROW, LAND, EXISTING IMPROVEMENTS	426,396		430,075	-	318,091	1	297,051	-	430,075	-
70	VEHICLES	42,000	-	42,000	-	-	-	-	-	42,000	-
80	PROFESSIONAL SERVICES	374,878	18,051	421,608	1,627	335,675	6,255	270,931	13,654	421,608	-
	SUBTOTAL (10-80)	2,259,444	75,473	2,392,502	4,120	2,046,569	24,138	1,282,842	71,077	2,392,502	-
90	UNALLOCATED CONTINGENCY	177,176	(75,473)	44,118	-	-		-	(71,077)	44,118	-
100	FINANCE CHARGES	88,695		88,695	-	-		-	-	88,695	-
TOTAL	PROJECT 865522 (FFGA & NON-FFGA CONCURRENT ACTIVITIES)	2,525,314		2,525,314	4,120	2,046,569	24,138	1,282,842	•	2,525,314	-
	ENVIRONMENTAL/PLANNING 465522	4,349	-	4,349	-	3,957	-	3,377	-	4,349	-
	TOTAL PROJECT 465522 (ENV / PLAN'G)	4,349	-	4,349	•	3,957	•	3,377	•	4,349	-
	TOTAL PROJECTS 465522 & 865522	2,529,664		2,529,664	4,120	2,050,526	24,138	1,286,219	-	2,529,664	-

Original Budget

Original Budget of \$2.5 billion reflects the Life of Project (LOP) budget approved by the Board on January 26, 2017, plus Finance Charges of \$88.7 million.

Current Budget

The Current Budget remains the same this period at \$2.5 billion; however, it reflects an annual Project budget change for cost elements and line items in accordance with the Program Management Department Policies and Procedures (PC02 Project Budget). The net increase of \$57.4 million for Construction is primarily due to the Design/Build Contract C1120. The Professional Services category was also increased by \$18.1 million primarily for ongoing work required by City of Los Angeles Master Cooperative Agreements, City of Beverly Hills Memorandum of Agreement, Engineering Management Support Services, Metro Project Administration, Construction Management Support Services, and continuation of the Design/Build Contract C1120. The net of \$75.5 million was transferred from Unallocated Contingency.

Current Forecast

The Current Forecast remains the same this period at \$2.5 billion. The net increase of \$57.4 million for Construction is primarily due to the Design/Build Contract C1120. The Professional Services category was increased by \$13.7 million primarily for ongoing work required by City of Los Angeles Master Cooperative Agreements, City of Beverly Hills Memorandum of Agreement, Metro Project Administration, and continuation of the Design/Build Contract C1120. The net of \$71.1 million was transferred from Unallocated Contingency.

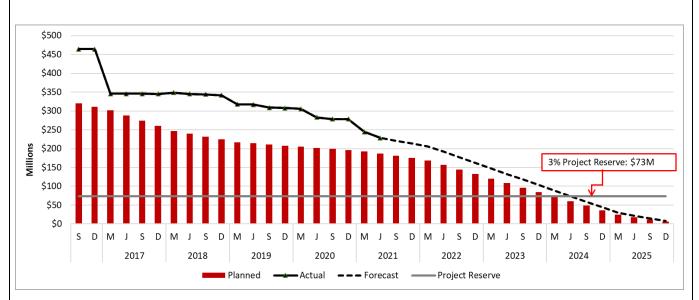
Commitments

The Commitments increased this period by \$4.1 million due to executed Modifications and Change Orders for the Design/Build Contract C1120, executed Modifications for Program Management Support Services. The \$2.1 billion in Commitments to date represent 81.1% of the Current Budget.

Expenditures

The Expenditures increased this period by \$24.1 million primarily for costs associated with Design/Build Contract C1120, Private Utilities, Environmental Services, Real Estate Acquisition, Metro Project Administration, Engineering Management Support Services, Construction Management Support Services, Legal Services, Quality Management Services, City of Beverly Hills Memorandum of Agreement and City of Los Angeles Master Cooperative Agreement. The \$1.3 billion in Expenditures to date represent 50.8% of the Current Budget.





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 2025 Forecast Revenue Service Date (RSD).

The Unallocated Contingency decreased by \$71.1 million due to the ongoing work required by City of Los Angeles Master Cooperative Agreements, City of Beverly Hills Memorandum of Agreement, Metro Project Administration, and a transfer of contingency for the Design/Build Contract C1120. The Allocated Contingency increased a net of \$53.3 million due to a transfer of contingency, executed Modifications and Change Orders 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	(61,982)	(71,077)	(133,058)	44,118			
Allocated Contingency	168,534	(39,658)	55,322	15,663	184,197			
Total Contingency	345,710	(101,640)	(15,755)	(117,395)	228,315			

Risk Management

Summary of Risks

During the quarterly risk register meeting that occurred on June 24, 2021, one (1) new risk was identified and one (1) risk was closed. There are a total of sixty-eight (68) risks to be managed in the next quarter.

New Risks Identified:

The two (2) new risks identified this period pertain to conveyor belt issues and staffing requirements.

Closed Risks:

One (1) risk closed this period. The risk was pertaining to TBM excavation delayed by Wilshire/Rodeo station excavation.

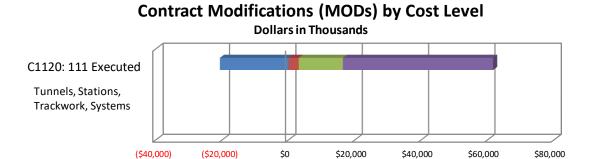
Of the sixty-eight (68) risks, two (2) are scored as high, thirty-two (32) scored as medium and thirty-four (34) are scored as low.

Top Five Risks

The table below shows the top five (5) Project risks identified after the risk register meeting.

Risk ID	Risk Description	Risk Score	Action Items
PLE2-136	COVID-19 Pandemic Impact	20.0	Evaluate the guidelines from State and local Government.
			2. Put contingency plans in place.
PLE2-135	CMSS difficulty finding key resources	10.0	
PLE2-102	Potential tunnel delays that are	9.0	1. If potential anomalies prove to be well casings then follow MMRP Con-53.
	encountered after November 2020.		
PLE2-24	Resource constraints at private utility	9.0	1. Maintain close coordination with utility companies and sequence utility work as
	companies delay schedule.		necessary.
PLE2-92	Coordination between contractors at the	9.0	1. Metro Operations to assist Metro Engineering.
	system interface point between Section		2. Perform system interface plan.
	1:2 causes delays and additional cost.		3. WSP to prepare agenda and set-up meeting.
			4. Ashok Kothari to initiate preparation of agenda and set-up meeting. Provide status by
			3/15/2020.
			5. A list of items to be considered was provided. Meeting needs to be conducted. Date
			pending for initial meeting.
			6. First internal meeting scheduled for 7/24/2020. 14 prelim items have been identified
			for discussion at meeting.

Summary of Contract Modifications



	C1120: 111 Executed
■ Under \$100K	(20,713)
■ \$100K to \$250K	3,035
■ \$250K to \$1M	13,296
Over \$1M	45,297
Total Contract MODs	40,916
Contract Award Amount	1,376,500
% of Contract MODs	2.97%

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

One hundred and eleven (111) Contract Modifications (MODS) with a total value of \$40.9 million have been executed since the award of C1120 Contract – Tunnels, Stations, Trackwork and Systems.

DISADVANTAGED BUSINESS ENTERPRISE (DBE)

As of May 2021:

DBE Goal – Design The percentage of funds apportioned to Design Contracts	25.31%
Current DBE Commitment Design Total DBE Committed Dollars divided by Total Contract Value for Design	\$18.4M 29.96%
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime	\$19.7M 34.89%

Twenty (20) Design DBE sub-consultants have been identified to date.

DBE Goal – Construction The percentage of funds apportioned to Construction Contracts	17.00%
Current DBE Commitment Construction Contract commitment divided by current contract value for Construction	\$149.5M 11.45%
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime	\$83.8M 13.24%

Forty-six (46) Construction DBE sub-contractors have been identified to date.

PROJECT LABOR AGREEMENTS (PLA)

As of May 2021:

Targeted Worker Goal	40.00%
Construction work to be performed by residents from Economically	
Disadvantaged Area in the United States	
Targeted Worker Current Attainment	40.71%
Apprentice Worker Goal	20.00%
Construction work to be performed by Apprentices	
Apprentice Worker Current Attainment	14.13%
Disadvantaged Worker Goal	10.00%
Construction work to be performed by disadvantaged workers	
Disadvantaged Worker Current Attainment	3.34%

FINANCIAL/GRANT

Status of Funds y Source

JUNE 2021

STATUS OF FUNDS BY SOURCE

SOURCE	(A) ORIGINAL BUDGET	(B) TOTAL FUNDS	(C) TOTAL FUNDS	(D) COMMIT	(D/B) MENTS	(E) EXPEI	(E/B) NDITURES	(F) BILLED TO SOURC	
		ANTICIPATED	AVAILABLE	\$	%	\$	%	\$	%
FEDERAL - SECTION 5309 NEW STARTS	\$1,187.000	\$1,187.000	\$500.000	\$1,057.536	89%	\$500.000	42%	\$469.456	40%
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	\$811.902	\$608.598	\$462.228	57%	\$255.457	31%	\$164.511	20%
STATE CAPITAL PROJECT LOANS	\$54.762	\$54.762	\$54.762	\$54.762	100%	\$54.762	100%	\$54.762	100%
TOTAL	\$2,529.664	\$2,529.664	\$1,639.360	\$2,050.526	81.1%	\$1,286.219	50.8%	\$1,164.729	46.0%

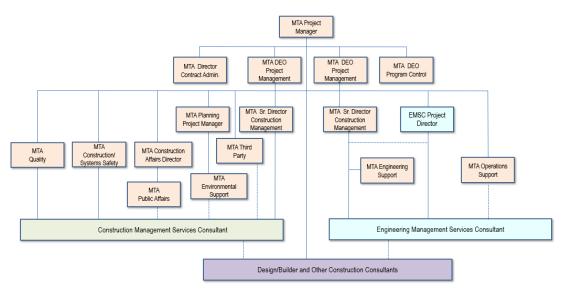
EXPENDITURES ARE CUMULATIVE THROUGH JUNE 30, 2021

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).

Westside Purple Line Extension Section 2 Responsibility and Reporting Matrix



The overall FY21 Total Project Staffing Plan averages 82.8 FTEs per month.

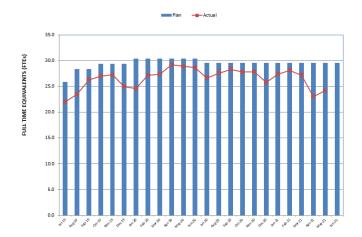
For May 2021, there were a total of 24.2 FTEs for MTA's Project Administration Staff and 52.1* FTEs for Consulting Staff. The total project staffing for May 2021 was 76.3 FTEs. Review of staffing plans is on-going to ensure staffing needs are appropriately managed.

Total Project Staffing – Metro and Consultants

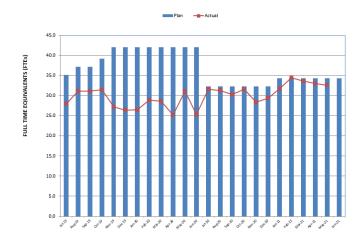


*Actuals include 4.5 FTEs related to Project Management Support Services (PMSS).

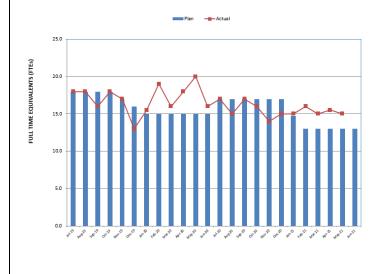




CM Support Services Staff (Consultant)



Engineering Services Staff (Consultant)



Staffing by Group

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

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

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

REAL ESTATE

Real Estate Status Summary									
Description	Number	Certified	Appraisals Completed	Offers Made	Agreements Signed	Condemnation Filed	Relocations		Parcels
Description	of Parcels						Required	Completed	Available
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
Total Parcels	32	32	32	32	21	13	25	25	32

- TPOG has possession of the former ACE Gallery property for construction staging and ultimately construction of the Wilshire/Rodeo Station entrance.
- TBM Launch Box site turnover to TPOG was issued on January 11, 2018, and access to the adjacent sidewalk was provided on January 16, 2018.
- AAA property and Gillis Family Partnership property turnover to TPOG was provided on January 26, 2018.
- TPOG gained possession of 2040 Century Park East (JMB parking lot) on February 24, 2018.
- TPOG gained possession of the three parcels (W-3001, W-3001-01 and W-3002) located at the Wilshire/Rodeo Construction Staging Area (North) on July 11, 2018.
- TPOG gained possession of the Wilshire/Rodeo Station footprint after completion of third-party utility relocations on October 18, 2018.
- TPOG gained possession of W-3604 and W-3604-1 (AT&T) on March 20, 2019.
- Settlement agreement reached for W-3603 (Gillis) for loss of goodwill.
- TPOG gained site access to Parcel W-3901 located on the Southeast corner of Constellation Boulevard and Century Park West 10250 Constellation Boulevard on September 27, 2019.
- The acquisition for Parcel W-3604 (Pacific Bell) was completed on November 21, 2019.
- Settlement agreement reached for Subsurface Easement Parcel W-3402 (GCIP Holdings II, LLC).
- TPOG gained possession of W-3801 for the Century City Constellation Station entrance on August 21, 2020.
- Parcel W-3903 under platform exhaust will be moved to public sidewalk.
 Requirement from Westfield has been decertified and reduces the total parcel number to 32.
- W-3801 available under right of entry agreement. Final agreement has been executed and escrow closed on February 18, 2021.
- Eight sub surface easements are in ongoing eminent domain lawsuits awaiting trial dates.

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.
- 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 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:
 - Utility Backfill Mix Design (100-E-100) Century City Constellation Station
 - Walls Methane Venting Shop Drawings Wilshire/Rodeo Station
 - Product Data Lagging Grout Station and Entrance SOE Century City Constellation Station

ENVIRONMENTAL

- Archeological/Paleontological monitoring for excavation activities at Wilshire/Rodeo Station and Century City/Constellation Station is on-going. Wilshire/Rodeo station box excavation activities are complete.
- 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.
- LAPD noise variance for construction operations in the City of LA has been extended through November 27, 2021.

CONSTRUCTION AND COMMUNITY RELATIONS

- Produced and distributed six (6) construction work notices including construction work updates in Beverly Hills and Century City, and monthly look ahead notices for Century City and Beverly Hills. Additional notices were produced for individual properties to distribute to their tenants regarding planned water shutdowns in Century City.
- Conducted monthly construction update project presentations via webinar for community and business stakeholders in Beverly Hills and quarterly meetings in Century City. Conducted multiple one-on-one stakeholder meetings in Century City regarding reopening of Constellation, traffic control updates, and upcoming sanitary sewer/storm drain relocations. Continued ongoing contact with commercial and residential stakeholders in Beverly Hills.
- Extensive outreach at community meetings and events including distribution of notices digital and direct emails and paid advertising. Limited to online outreach efforts only during COVID19 restrictions. Expanded door to door distribution in Beverly Hills.
- Participated in the following online internal meetings: Construction Management Weekly meetings, Construction Relations weekly meetings, Third Party Coordination, LADOT coordination, BOE and BSS coordination, Rodeo Station and Century City Construction Coordination weekly meetings.
- Continued efforts for Eat Shop Play and Business Interruption Fund in Century City and Beverly Hills. Updated Facebook/Twitter and website as needed.

CREATIVE SERVICES

- Outreach and coordination with area stakeholders
- Artwork fabrication and materials research
- Artist selection process underway

SAFETY & SECURITY

- TPOG reported two (2) Recordable Injuries in June 2021.
- Attended daily toolbox meetings, all hand safety meeting, 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, SCSR and H2S Safety Training for new Metro/Consultants and IPMO project staff.
- Hosted the June Monthly Safety and Security Meeting.
- 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.
- TPOG reported 69,503 actual work hours in June 2021.
 - TPOG-JV provided and included an updated tabulation correction of 1,151 Work Hours for previous months of 2021.
- TPOG Project to Date Work Hours are 2,099,819 with thirty-three (33) Recordable Injuries and eight (8) day's Away from Work Injuries.
- The Recordable Injury Rate is 3.14, 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

Westside Purple Line Extension Section 2 Project Quarterly Project Status Report

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 completed
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.

Westside Purple Line Extension Section 2 Project Quarterly Project Status Report

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.
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.
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	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.

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 Angles 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	Concreate 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.