# Westside Purple Line Extension Section 2 Project



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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).

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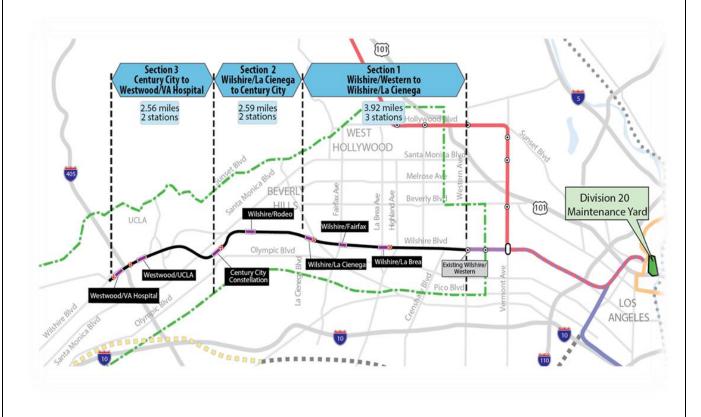
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#### **PROJECT OVERVIEW**

#### **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 Budget and 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. To facilitate the communication, community leadership councils have been formed which represent geographic-based constituent groups 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 July 2019, the Project achieved 22% completion based on earned value measurements for design and construction. The focus of the Project continues to be completing final design, third party utility relocations, and construction activities in Century City and Beverly Hills. The C1120 Design Build Contract is on schedule to substantially complete by May 2025 and demobilized 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 design support for the Advanced Utility Relocations (AUR) work in Century City 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 been identified into three distinct design unit packages. They are:

- 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

Metro, Tutor Perini/O&G (TPOG), a Joint Venture 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: Geotechnical Data Report for Tunnels; Century City Constellation Station and Wilshire/Rodeo Station Structural Design, 100%; Special Tunnel Liner, AFC; and Street Restoration, Final Utility and Traffic Control at Century City Constellation Station, 100%.

#### **Construction Status**

Century City Constellation Station Advanced Utility Relocations: LADWP Power civil work began in May 2017 and completed in December 2018. AT&T duct bank and vault construction began in November 2017 and completed in December 2018. Cable pulling and splicing for both AT&T and LADWP is anticipated to complete prior to the start of piling activities west of the TBM Launch Box.

Metro received two permits to continue AUR work for AT&T and LADWP power cable pulling and splicing work at Century City Constellation Station. The two permits are the following:

- LAPD Commissioner's Office night time noise variance for work between Century Park East and Century Park West including Avenue of the Stars from June 30, 2019 to December 31, 2019
- LABOE and LADOT peak hour exemption permit work on Constellation Boulevard between Century Park East and Century Park West as well as southbound on Avenue of the Stars was issued from July 10, 2019 to December 31, 2019.

Contract C1120 – Tunnels, Stations, Trackwork and Systems (Design/Build): Contract award was issued on January 31, 2017 and Notice to Proceed on April 26, 2017. The TBM purchase order was executed in May 2017. Peak Hour Exemption application for TBM launch box excavation on Constellation Boulevard was approved by LABOE on January 30, 2018.

Excavation of the TBM launch box, along with the construction of the tunnel muck bin started in March 2019 and is ongoing. Sound wall pile installation at the AT&T property was completed this period. The excavation of the TBM launch box has reached a depth of sixty-four (64) feet during this period; installation of the fourth level of bracing has commenced and is ongoing. Tunnel shaft excavation has commenced this period and is ongoing. Excavation at the tunnel shaft has reached a depth of nineteen (19) feet and is ongoing.

Precast tunnel rings are being manufactured and 2,639 rings out of 4,100 have been produced as of July 27, 2019.

LABOE granted an extension for the full street closure of Constellation Boulevard until December 2019.

Santa Monica bus layover construction is ongoing with an anticipated completion in August 2019.

Demolition of the North Canon properties was completed on April 2, 2019 and site preparation for the construction staging yard is ongoing. Potholing for underground utilities and preparation for wet utility relocations is ongoing. Sound wall pile installation was completed this period.

Beverly Hills City Council approved the Memorandum of Agreement (MOA) governing remaining third-party utility relocation work on November 22, 2017. The final MOA for the C1120 contract was approved at the Beverly Hills City Council Meeting on August 21, 2018.

Metro Board of Directors approved the modified City of Beverly Hills (COBH) MOA for the C1120 Contract on January 24, 2019. COBH City Council's approved the MOA on February 19, 2019.

Negotiations with the COBH for a settlement agreement to end the city's lawsuit against FTA and Metro are ongoing.

#### **Cost and Schedule Summary**

For the C1120 Design/Build contract, Metro has received the July 2019 schedule update, which reports that the project remains on schedule to complete according to the contract's contractual substantial completion date of May 23, 2025.

The Critical Path (CP) of the Project remains the same running through third party utility relocations at Century City Constellation Station, Contractor's required utility relocations, then followed by SOE, street decking, mass excavation and structural concrete for the station. Next it flows into installation of the interior finishes and electrical equipment, followed by systems, testing and pre-revenue operations. A summary graphic of the critical path is found on Page 12.

#### 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 no existing claims on the Project. Detailed cost and budget information is provided on Page 14.

#### **Key Management Concerns**

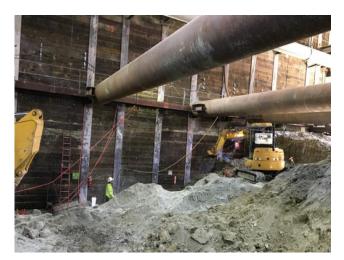
No concerns to report at this time.

### **Project Construction Photos**





Tunnel Shaft Excavation in Century City





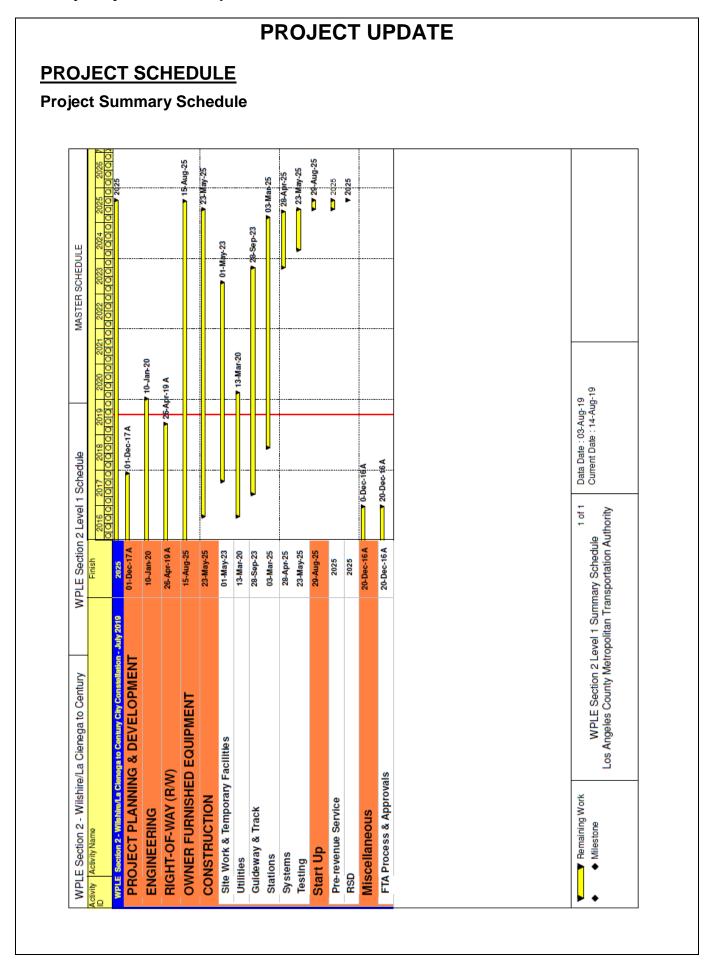
TBM Launch Box Excavation in Century City



Santa Monica Boulevard Bus Layover in Century City



AT&T Staging Yard Sound Wall Pile Installation in Century City

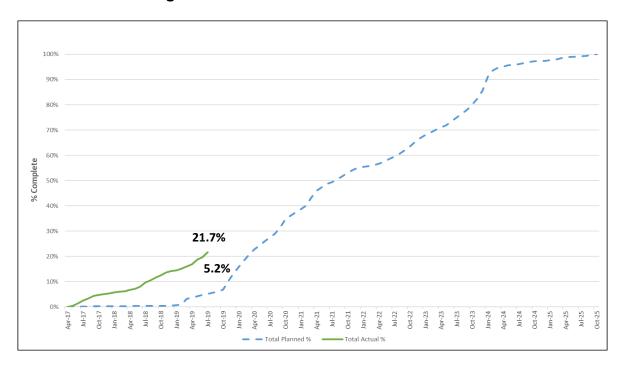


#### **Progress Summary**

	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	94.6%	0.3%	Civil/Structural Final Design is currently planned to complete by year end. No impact to Project schedule.
<b>Construction Contracts Progress:</b>			
Contract C1120	21.7%	2.0%	

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

#### **Planned vs. Actual Progress**



The actual overall construction progress is 21.7% versus a planned of 5.2% through July 2019. 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.

Start Excavation - Tunnel Shaft in Century City  7/10/19A  OB/07/19  Submit 100% Package 3 Vol 3 Systems  08/07/19  OB/07/19  OB/07/19  OB/07/19  OB/07/19  OB/07/19  OB/07/19  Start Horizontal Directional Drilling for Oil Wells - Century City  Start Launch Box Invert Slab - Century City  10/07/19  Start Installation of Soldier Files - Wilshire/Rodeo Station  10/21/19  TPOG Receives Station Footprint West of the TBM Launch Box  11/07/19  Start COBH Holiday Moratorium  11/28/19  Start Assembly of TBM  12/09/19  Complete IFC Design for Package 3 Vol. 3 Systems  12/11/19  Expiration of Constellation Bivd Street Closure Extension  MTA Staff  MTA Board Action  TFA (Federal Transit Administration)  Other Agencies  Contractors  Design Consultant  C1120 D/B Contractor  *New		Milestone Date	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-1
Complete Santa Monica Bus Layover Facility  Start Horizontal Directional Drilling for Oil Wells - Century City  Start Horizontal Directional Drilling for Oil Wells - Century O9/23/19  Start Launch Box Invert Slab - Century City  10/07/19  Start Installation of Soldier Piles - Wilshire/Rodeo Station 10/21/19  TPOG Receives Station Footprint West of the TBM Launch Box  11/07/19  Start COBH Holiday Moratorium 11/28/19  Start Assembly of TBM 12/09/19  Complete IFC Design for Package 3 Vol. 3 Systems 12/11/19  Expiration of Constellation Blvd Street Closure Extension  MTA Staff  MTA Board Action  TFA (Federal Transit Administration)  Utility Company  Contractor	Start Excavation - Tunnel Shaft in Century City	7/10/19A						
Start Horizontal Directional Drilling for Oil Wells - Century City  Start Launch Box Invert Slab - Century City  10/07/19  Start Installation of Soldier Piles - Wilshire/Rodeo Station  10/21/19  TPOG Receives Station Footprint West of the TBM Launch Box  Start COBH Holiday Moratorium  11/28/19  Start Assembly of TBM  12/09/19  Complete IFC Design for Package 3 Vol. 3 Systems  12/11/19  Expiration of Constellation Blvd Street Closure Extension  TA Staff  MTA Board Action  TA (Federal Transit Administration)  Company  Contractors  Design Consultant  C1120 D/B Contractor	Submit 100% Package 3 Vol 3 Systems	08/07/19		$\bigcirc$				
Start Launch Box Invert Slab - Century City  Start Launch Box Invert Slab - Century City  Start Installation of Soldier Piles - Wilshire/Rodeo Station  TPOG Receives Station Footprint West of the TBM Launch Box  Start COBH Holiday Moratorium  11/28/19  Start Assembly of TBM  12/09/19  Complete IFC Design for Package 3 Vol. 3 Systems  12/11/19  Expiration of Constellation Blvd Street Closure Extension  MTA Staff  MTA Board Action  FTA (Federal Transit Administration)  Utility Company  Contractor	Complete Santa Monica Bus Layover Facility	08/16/19		$\bigcirc$				
Start Installation of Soldier Piles - Wilshire/Rodeo Station  10/21/19  TPOG Receives Station Footprint West of the TBM Launch Box  11/07/19  Start COBH Holiday Moratorium  11/28/19  Start Assembly of TBM  12/09/19  Complete IFC Design for Package 3 Vol. 3 Systems  12/11/19  Expiration of Constellation Blvd Street Closure Extension  TFTA (Federal Transit Administration)  WITA Staff  MITA Board Action  Design Consultant  C1120 D/B Contractor		09/23/19			$\bigcirc$			
TPOG Receives Station Footprint West of the TBM Launch Box  Start COBH Holiday Moratorium  11/28/19  Complete IFC Design for Package 3 Vol. 3 Systems  12/11/19  Expiration of Constellation Blvd Street Closure Extension  TFTA (Federal Transit Administration)  WITA Staff  MTA Board Action  TFTA (Federal Transit Administration)  Utility Company  Contractor	Start Launch Box Invert Slab - Century City	10/07/19						
Start COBH Holiday Moratorium  11/28/19  Start Assembly of TBM  12/09/19  Complete IFC Design for Package 3 Vol. 3 Systems  12/11/19  Expiration of Constellation Blvd Street Closure Extension  TA Staff  MTA Staff  MTA Board Action  TA (Federal Transit Administration)  Utility Company  Cother Agencies  Contractors  Design Consultant  C1120 D/B Contractor	Start Installation of Soldier Piles - Wilshire/Rodeo Station	10/21/19				$\bigcirc$		
Start Assembly of TBM  12/09/19  Complete IFC Design for Package 3 Vol. 3 Systems  12/11/19  Expiration of Constellation Blvd Street Closure Extension  MTA Staff  MTA Board Action  FTA (Federal Transit Administration)  Utility Company  Contractor  Design Consultant  C1120 D/B Contractor		11/07/19					•	
Complete IFC Design for Package 3 Vol. 3 Systems  12/11/19  Expiration of Constellation Blvd Street Closure Extension  12/20/19  MTA Staff  MTA Staff  MTA Board Action  FTA (Federal Transit Administration)  Utility Company  Contractors  Design Consultant  C1120 D/B Contractor	Start COBH Holiday Moratorium	11/28/19					Δ	
Expiration of Constellation Blvd Street Closure Extension  12/20/19  MTA Staff  MTA Board Action  FTA (Federal Transit Administration)  Utility Company  Other Agencies  Contractors  Design Consultant  C1120 D/B Contractor	Start Assembly of TBM	12/09/19						$\bigcirc$
♠ MTA Staff       MTA Board Action       ★ FTA (Federal Transit Administration)       ✓ Utility Company         ♠ Other Agencies       Contractors       ○ Design Consultant       ○ C1120 D/B Contractor	Complete IFC Design for Package 3 Vol. 3 Systems	12/11/19						$\bigcirc$
Administration) V State Scriptury  Administration) V State Scriptury  Design Consultant C C1120 D/B Contractor	Expiration of Constellation Blvd Street Closure Extension	12/20/19						Δ
	△ Other Agencies ☐ Contractors	Adminis  Design (	stration)	\	,			

#### **Major Equipment Delivery**

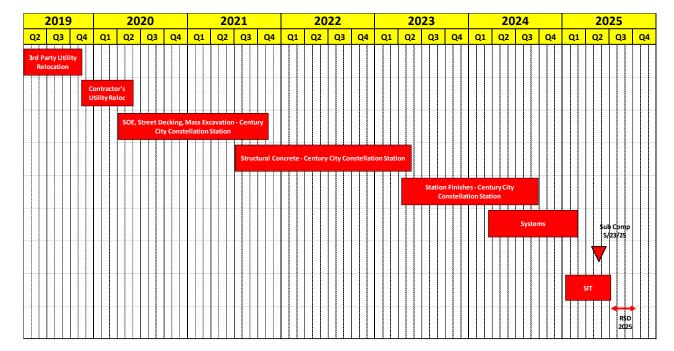
	Submittal	Procurement	Delivery	Installation
C1120 DESIGN/BUILD*				
Tunnel Boring Machines	7/27/17(A)	8/14/17(A)	9/13/18(A)	4Q 2019
Emergency Ventilation Fans	1Q 2020	1Q 2020	3Q 2020	1Q 2022
Station Elevators/Escalators	2Q 2019	2Q 2019	2Q 2021	3Q 2021
Track - Running Rail	1Q 2020	2Q 2020	3Q 2020	2Q 2022
Traction Power Equipment	2Q 2020	2Q 2020	1Q 2021	1Q 2022
Automatic Train Control	2Q 2019	3Q 2019	2Q 2020	1Q 2022
Radio System	3Q 2019	3Q 2019	2Q 2020	4Q 2021
SCADA RTU System	2Q 2019	2Q 2019	2Q 2020	4Q 2021
Heavy Rail Vehicles***	Е	xercise Option #3	March 1, 202	1
Universal Fare System***	TBD	TBD	TBD	June 2023**

<sup>\*</sup> Dates derived from TPOG's July 2019 Schedule.

<sup>\*\*</sup> Forecast release date by TPOG to UFS contractor access at stations.

<sup>\*\*\*</sup> Metro supplied equipment.

#### **Critical Path Project**



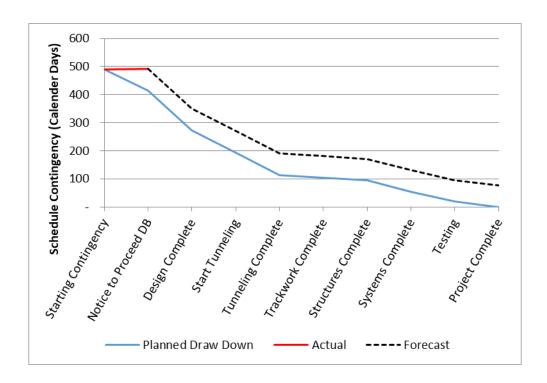
The Critical Path in July 2019 remained the same as portrayed in June 2019.

#### **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.

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



#### PROJECT COST

#### **Project Cost Analysis - 865522**

SCC	SCC DESCRIPTION		CURRENT	BUDGET	СОММІТ	TMENTS	EXPEND	ITURES	CURRENT	FORECAST	FORECAST/ BUDGET
JODE		BUDGET	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
10	GUIDEWAY & TRACK ELEMENTS	346,440	-	321,703	304	307,360	3,858	65,902	-	321,703	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	434,990	-	454,245	1	410,368	1,466	22,289	-	454,245	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	1	-	-	1	-	-	-	-	-	-
40	SITEWORK & SPECIAL CONDITIONS	553,282	-	579,986	1	553,673	5,498	308,694	-	579,986	-
50	SYSTEMS	81,457	-	83,025	1	68,661	139	7,775	-	83,025	-
	CONSTRUCTION SUBTOTAL (10-50)	1,416,169		1,438,959	304	1,340,062	10,961	404,661	-	1,438,959	-
60	ROW, LAND, EXISTING IMPROVEMENTS	426,396	-	426,396	51,765	281,846	139	205,435	-	426,396	-
70	VEHICLES	42,000	-	42,000		-	-	-	-	42,000	-
80	PROFESSIONAL SERVICES	374,878	-	388,042	12,018	250,746	4,294	185,964	-	388,042	-
	SUBTOTAL (10-80)	2,259,444		2,295,397	64,087	1,872,654	15,393	796,060	-	2,295,397	-
90	UNALLOCATED CONTINGENCY	177,176	-	141,223	-	-	-	-	-	141,223	-
100	FINANCE CHARGES	88,695	-	88,695		-	-	-	-	88,695	-
OTAL PR	OJECT 865522 (FFGA & NON-FFGA CONCURRENT ACTIVITIES)	2,525,314	-	2,525,314	64,087	1,872,654	15,393	796,060	-	2,525,314	-
	ENVIRONMENTAL/PLANNING - 465518 & 465522	4,349	-	4,349	187	3,957	6	3,493	-	4,349	-
	TOTAL PROJECT 465518 & 465522 (ENV / PLAN'G)	4,349		4,349	187	3,957	6	3,493		4,349	-
	TOTAL PROJECTS 465518, 465522 & 865522	2,529,664		2,529,664	64,274	1,876,611	15,399	799,553		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 and Current Forecast**

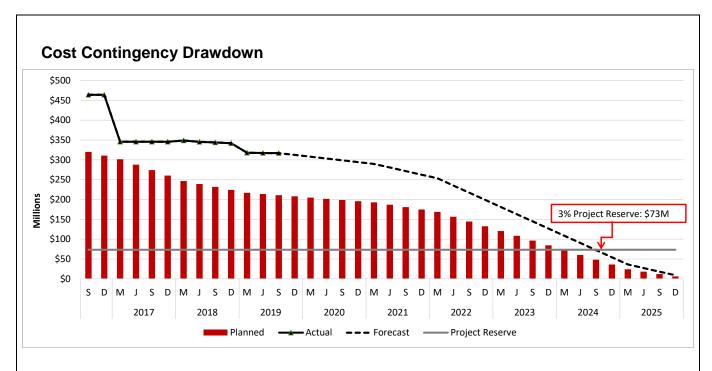
Current Budget and Current Forecast remain the same this period at \$2.5 billion.

#### Commitments

The Commitments increased this period by \$64.3 million mainly due to an executed Change Order for the Design/Build Contract C1120, approved Contract Modifications for Project Management Support Services, forecasted acquisitions and continuation of Metro Professional Services. The \$1.9 billion in Commitments to date represents 74.2% of the Current Budget.

#### **Expenditures**

The Expenditures increased this period by \$15.4 million primarily for costs associated with Design/Build Contract C1120, Third Party Private Utilities, Real Estate Acquisitions, Metro Project Administration, Engineering Management Services, Construction Management Services, Legal Services, Master Cooperative Agreement with the City of Los Angeles and Memorandum of Agreement with the City of Beverly Hills. The \$799.6 million in Expenditures to date represents 31.6% 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 allocated contingency decreased this period by \$0.3 million due to an executed Change Order 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	(35,953)	1	(35,953)	141,223			
Allocated Contingency	168,534	7,523	(304)	7,219	175,753			
Total Contingency	345,710	(28,430)	(304)	(28,734)	316,976			

## **Risk Management**

#### **Summary of Risks**

During the quarterly reporting period that occurred in July 2019, two (2) active risks were closed and three (3) new risk identified. There is a total of sixty-four (64) risks to be managed in the next quarter.

Of the sixty-four (64) risks, five (5) are scored as high, twenty-one (21) are scored as medium and thirty-eight (38) as low.

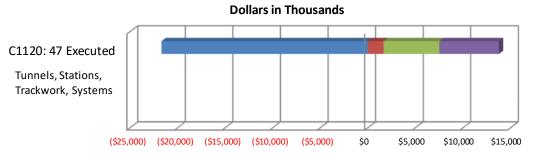
#### **Top Five Risks**

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

Risk ID	Risk Description	Risk Score	Action Items
PLE2-54	Turnover of remaining property to DB contractor is delayed beyond the need dates in the Contractor's current schedule.	15.0	<ol> <li>Metro to complete property acquisition before the need date.</li> <li>Building demolition to be part of DB contract. DB Contractor to start work as early as possible.</li> <li>Task force to be created to look into issue. Look at utilities and identify potential opportunities, e.g., area(s) where contractor can work given partial access to site.</li> </ol>
PLE2-23	Utility relocations by 3rd parties delay construction.	12.0	1. Work with COLA and COBH and utility owners to expedite obtaining permits, and complete design and construction on schedule.  2. Metro is working more closely with DWP and AT&T to monitor progress and mitigate any potential impacts to the Project schedule.
PLE2-6	Valuation of properties exceed budget.	12.0	Current project schedule accounts for additional time required for condemnation.
PLE2-70	Public protest to the Project causes delays.	12.0	Continue working collaboratively with the COLA and COBH to share information with stakeholders.
PLE-135	CMSS difficulty finding key resources (Mgmt. Personnel)	10.0	Temporarily assign additional responsibilities to existing staff until new staff is identified.

#### **Summary of Contract Modifications**

## Contract Modifications (MODs) by Cost Level



	C1120: 47 Executed
■ Under \$100K	(21,706)
■ \$100K to \$250K	1,651
■ \$250K to \$1M	5,858
Over \$1M	6,254
Total Contract MODs	(7,943)
Contract Award Amount	1,376,500
% of Contract MODs	-0.58%

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

Forty-Seven (47) Contract Modifications (MODS) with a total value of <\$7.9> million have been executed since the award of C1120 Contract – Tunnels, Stations, Trackwork and Systems.

# **DISADVANTAGED BUSINESS ENTERPRISE (DBE)**

#### As of July 2019:

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	\$16.8M 27.22%
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime	\$17.3M 32.83%

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	\$120M 9.21%
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime:	\$30.0M 8.45%

Twenty-two (22) Construction DBE sub-contractors have been identified to date.

# PROJECT LABOR AGREEMENTS (PLA)

#### As of June 2019:

Targeted Worker Goal Construction work to be performed by residents from Economically Disadvantaged Area in the United States	40.00%
Targeted Worker Current Attainment	49.96%
Apprentice Worker Goal Construction work to be performed by Apprentices	20.00%
Apprentice Worker Current Attainment	13.36%
Disadvantaged Worker Goal Construction work to be performed by disadvantaged workers	10.00%
Disadvantaged Worker Current Attainment	3.87%

### FINANCIAL/GRANT

#### **Status of Funds by Source**

SOURCE	(A) ORIGINAL BUDGET	(B) TOTAL FUNDS ANTICIPATED	(C) TOTAL FUNDS AVAILABLE	(D) COMMIT \$	(D/B) MENTS %	(E) EXPEI \$	(E/B) NDITURES %	(F) BILLED TO SOURC \$	
FEDERAL - SECTION 5309 NEW STARTS	\$1,187.000	\$1,187.000	\$300.000	\$1,048.581	88%	\$318.236	27%	\$267.673	23%
FEDERAL CMAQ	\$169.000	\$169.000	\$68.000	\$105.105	62%	\$68.000	40%	\$78.102	46%
MEASURE R - TIFIA LOAN	\$307.000	\$307.000	\$207.000	\$207.000	67%	\$207.000	67%	\$207.000	67%
MEASURE R 35%	\$811.902	\$811.902	\$206.783	\$461.163	57%	\$151.555	19%	\$109.281	13%
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	\$836.545	\$1,876.611	74.2%	\$799.553	31.6%	\$716.818	28.3%

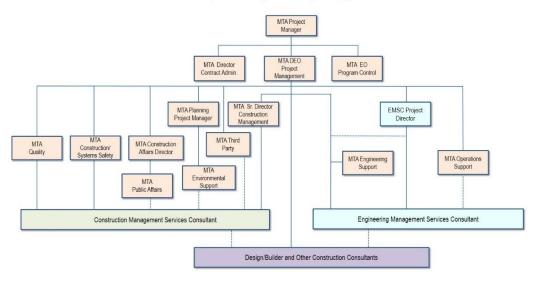
EXPENDITURES ARE CUMULATIVE THROUGH July 31, 2019

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).

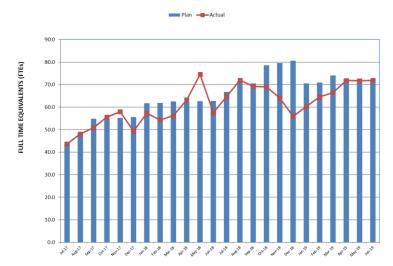
#### Westside Purple Line Extension Section 2 Responsibility and Reporting Matrix



The overall FY19 Total Project Staffing Plan averages 73.3 FTEs per month.

For June 2019, there were a total of 23.9 FTEs for MTA's Project Administration Staff and 48.0\* FTEs for Consulting Staff. The total project staffing for June 2019 was 71.9 FTEs. Review of staffing plans is on-going to ensure staffing needs are appropriately managed.

#### Total Project Staffing – Metro and Consultants

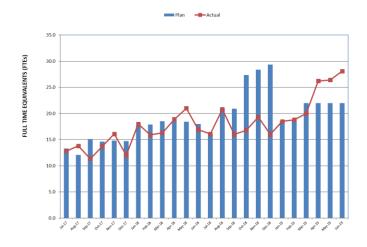


\*Actuals include 2.9 FTEs related to Project Management Support Services (PMSS). Please note, FTE count for CWO-011 (DEOD Compliance) is not included in June 2019.

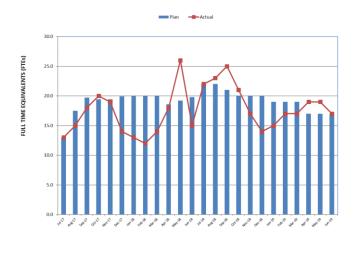




#### **CM Support Services Staff (Consultant)**



#### **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	Offers	Agreements	Condemnation	Reloc	Parcels		
Description	of Parcels	Certified	Completed	Made	Signed	Filed	Required	Completed	Available	
Full Takes	3	3	3	3	1	2	21	21	3	
Part Takes	3	3	3	3	1	0	0	0	1	
TCE	3	3	3	3	1	1	1	1	2	
SSE	23	23	23	23	11	6	3	3	9	
Permanent Easements	1	1	0	0	0	0	0	0	0	
Total Parcels	33	33	32	32	14	9	25	25	15	

- 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 for loss of goodwill.

#### **QUALITY ASSURANCE**

- Attended weekly Project staff meetings and progress meetings with the TPOG and reviewed Daily Inspection Reports by TPOG and Metro inspectors for the scheduled activities for completeness and correctness at various job locations as well as Twining Independent test laboratory Inspection Reports for the current construction work activity.
- Weekly quality meetings with TPOG Quality Manager to confirm quality inspections are scheduled, performed and documented; corrective actions are in compliance with approved documentation; quality records are collected and transmitted for Metro records for the work elements at TBM Launch Box in Century City.
- Reviewed the following with a disposition For Record only:
  - Permanent Storm Drain COBH;
  - Product data 6000psi Concrete Mix Design.
- Reviewed the following with a disposition of Approved and/or Approved as Noted:
  - CWP Tunnel Shaft Excavation CCS LB;
  - CWP Soldier Pile Installation WRS SOE.

#### **ENVIRONMENTAL**

- Submitted Mitigation Measures Status Report for the period of April through June 2019 to FTA.
- Completed installation of MERV 16-Rated Filters at the Beverly Hills High School temporary classrooms.
- Participated in various Project coordination meetings and evaluated progress and schedules for environmental compliance and sustainability efforts.
- Provided environmental awareness training as needed for Metro staff and TPOG construction staff.
- Conducted field environmental monitoring and spot check inspections for construction noise and vibration, stormwater and fugitive dust BMPs, and Metro's Green Construction Policy.
- Reviewed and provided responses to various contractor submittals and requests for information related to environmental matters.

#### **CONSTRUCTION AND COMMUNITY RELATIONS**

- Produced and distributed eight (8) construction work notices including work for advanced utility relocations, utility work, bus layover updates and lane closures in Century City and Beverly Hills.
- Attended the following meetings: Construction Management, Advanced Utility Relocations, Construction Relations, Third Party Coordination, LADOT, BOE, Beverly Hills Chamber and Century City Chamber meetings, BHHS Construction Coordination meetings, Building and Property Manager meetings in Beverly Hills and Century City.
- Conducted project presentations at the Beverly Hills Monthly Community Meeting, Section 2 Quarterly Community Meeting, Monthly Wilshire/Rodeo business stakeholder meeting and one-on-one business owner meetings. Conducted follow up meetings with Century City stakeholders regarding street closures and ongoing construction.
- Extensive outreach at community meetings and events including distribution of notices door to door, postcard mailings, digital and direct emails and paid advertising.
- 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**

Continued coordination with City of Beverly Hills on Canon Wall mural.

#### **SAFETY & SECURITY**

- TPOG-JV work continues. No injuries were reported during July 2019.
- Conducted project safety orientation for new Metro / Consultants and IPMO project staff.
- Attended advanced utility relocation (AUR) and design build (D/B) progress, readiness review, schedule, safety/security, partnering, and over-the-shoulder review meetings.
- Conducted right-of-way (ROW) and safety / security walks, safety / security reviews and coordination with TOPG-JV Safety staff for oversight and support on all project field work activities.
- Metro Construction Safety hosted Monthly All Hands Safety Meeting on July 26, 2019.
- TPOG-JV Design (10,162 Hr.'s) / Construction (38,412 Hr.'s) work completed 48,574 work-hours for the month of July 2019.
- Total Project to Date work-hours are 811,538 with one (1) recordable day's away from work incident.
- The Bureau of Labor Statistics reports that the National Average Recordable Injury Rate is 2.5 for heavy civil construction projects
  - The Total Project Contractor Recordable Injury Rate is 0.246.

Note: Total Project to Date work-hours have been adjusted to reflect an additional 3,498 hours due to adjusting hours for the months of February and April of 2019.

# 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 Monthly 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 shaft in Century City
June 2019	TBM Unveiling Event
June 2019	Full Street Closure of Constellation Blvd. Extension Granted