

# Westside Purple Line Extension Section 2 Project



Metro®

# **Westside Purple Line Extension Section 2 Project**

## **MONTHLY PROJECT STATUS REPORT**

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**November 2019**

## TABLE OF CONTENTS

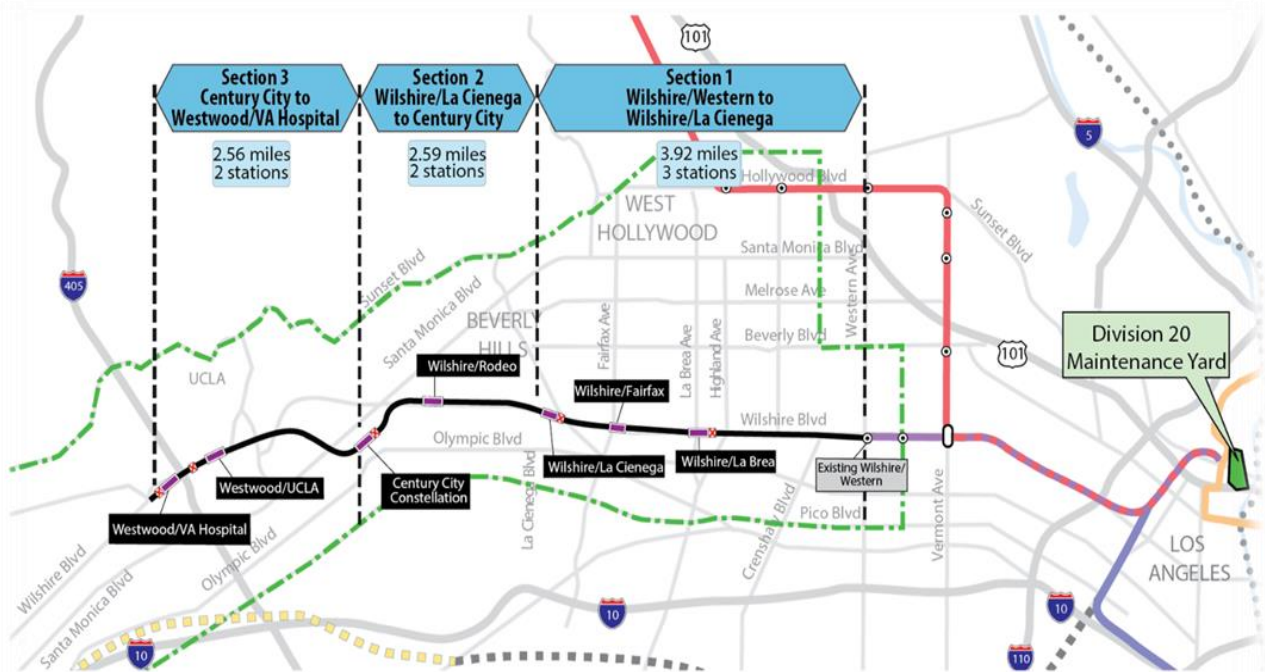
Project Overview.....	3
Executive Summary.....	6
Project Update .....	10
Project Schedule.....	10
Project Summary Schedule.....	10
Progress Summary .....	11
Planned vs. Actual Progress .....	11
Key Milestone Six-Month Look Ahead.....	12
Major Equipment Delivery .....	13
Critical Path .....	14
Project Schedule Contingency Drawdown.....	15
Project Cost.....	16
Project Cost Analysis.....	16
Cost Contingency Drawdown and Analysis.....	17
Risk Management.....	18
Summary of Contract Modifications.....	19
Disadvantaged Business Enterprise (DBE).....	20
Project Labor Agreements .....	21
Financial/Grant .....	22
Project Staffing .....	23
Real Estate .....	25
Quality Assurance .....	26
Environmental.....	27
Construction and Community Relations .....	28
Creative Services.....	28
Safety and Security .....	29
Appendix.....	30
Chronology of Events .....	30

## 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**

Contract C1120 – Tunnels, Stations, Trackwork, Systems and Systems Integration Testing: The procurement of this contract utilized a two-step approach with the submittal of qualification statements through a Request for Qualification (RFQ) process, prequalification of qualified proposers followed by the release of a Request for Proposals (RFP) soliciting technical and price proposals with an option at Metro's discretion for Best and Final Offers (BAFO).

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

### Metro Furnished Equipment

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

Construction and Community Relations: The Construction and Community Relations team is tasked with promoting the Project and performing public outreach within the community to keep stakeholders informed of construction activities occurring along the Project alignment. 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 November 2019, the Project achieved 25% 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 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

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: AFC of Tunnels and Cross Passages Geotechnical Instrumentation DU 4.2.1.*

## Construction Status

Century City Constellation Station Advanced Utility Relocations: LADWP Power began civil work in May 2017 and completed in December 2018. LADWP Power cable pulling and splicing is anticipated to be completed prior to the start of piling activities west of the TBM Launch Box. AT&T duct bank and vault construction began in November 2017 and completed in December 2018. Cable pulling and splicing for AT&T completed on September 27, 2019. Cable placing and splicing for LADWP Power for 34.5kv system is anticipated to complete in December of 2019. The 4.8kv system cabling placing/splicing and remaining cable removals are anticipated to complete by the first quarter of 2020.

*Metro has two permits to continue AUR work for AT&T and LADWP Power cable pulling and splicing work at Century City Constellation Station.*

- LAPD Commissioner's Office night time noise variance for work between Century Park East and Century Park West including Avenue of the Stars was issued from December 31, 2019 to June 30, 2020.
- 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 issued from December 31, 2019 to June 30, 2020.

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. *The excavation of the TBM launch box was completed on November 1, 2019.* Construction of the TBM launch box base slab has begun and is ongoing. Tunnel access shaft excavation is ongoing and has reached a depth of sixty-one (61) feet (approximately 65% complete). Geophysical testing is underway within the partially excavated shaft to confirm that there are no subsurface obstructions on the alignment near the shaft.

*Precast tunnel rings are being manufactured and 3,800 rings out of 4,100 have been produced as of November 27, 2019.*

*A request for an additional extension of the full closure of Constellation Boulevard will be presented to the Board of Public Works in December before the existing closure expires on December 20, 2019.*

*Piling for the Wilshire/Rodeo Station box excavation began on October 22, 2019 and the contractor demobilized on November 27, 2019 per the terms of the holiday moratorium. Metro's request for an exemption from the holiday moratorium was rejected by the Beverly Hills City Council in September 2019. Piling will resume in January 2019.*

The closure of North Canon Drive, which included installation of a sound wall and traffic improvements, was completed in October 2019. Potholing for underground utilities and utility relocations is ongoing.



Beverly Hills City Council approved the Memorandum of Agreement (MOA) governing remaining third-party utility relocations 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.

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 Contractor's November 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 14.

**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 is one claim "#3" outstanding which was submitted on September 13, 2019 for joint Trench Dimension of Encasement. It is currently being evaluated. Detailed cost and budget information is provided on Page 16.

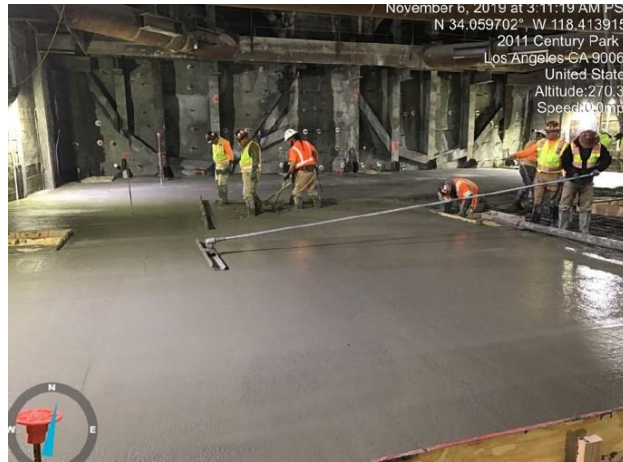
**Key Management Concerns**

No concerns to report at this time.

Project Construction Photos



TBM Launch Box Invert Slab in Century City



TBM Launch Box Invert Slab in Century City



Tunnel Access Shaft Excavation in Century City



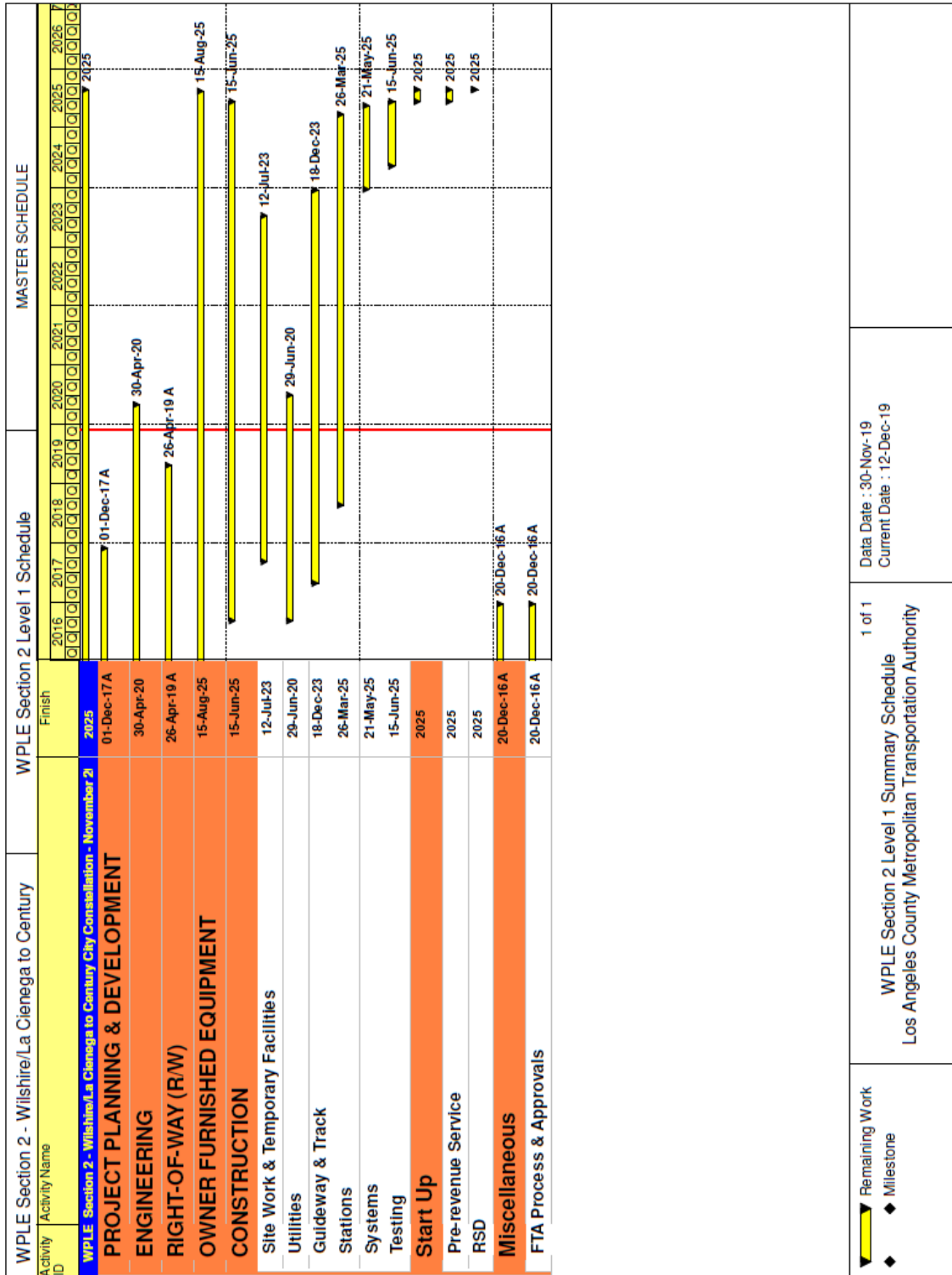
Wilshire/Rodeo Station Box Pile Installation in Beverly Hills



# PROJECT UPDATE

## PROJECT SCHEDULE

### Project Summary Schedule

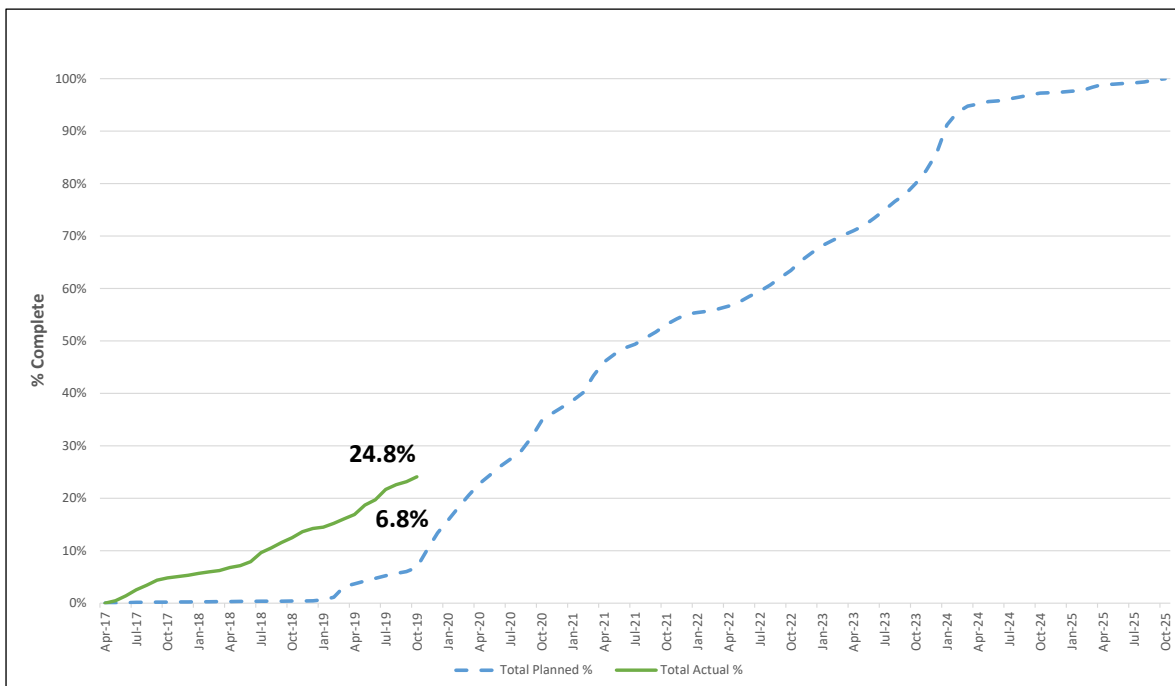


**Progress Summary**

	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	
<b>Final Design Progress:</b>			
Contract C1120	96.3%	0.9%	Civil/Structural Final Design is currently planned to complete early 2020. No impact to Project schedule.
<b>Construction Contracts Progress:</b>			
Contract C1120	24.8%	0.6%	

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











**Planned vs. Actual Progress**



*The actual overall construction progress is 24.8% versus a planned of 6.8% through November 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.

Key Milestone Six-Month Look Ahead

	Milestone Date	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20
Poured Launch Box Hammerhead Slab in Century City	11/01/2019 A						
COBH Holiday Moratorium Began	11/28/2019 A						
Complete Invert Pour at TBM Launch Box in Century City	12/16/19						
Expiration of 15 month Full Street Closure at Century City	12/20/19						
Finish Horizontal Directional Drilling for Oil Wells in Century City	12/24/19						
COBH Holiday Moratorium Ends	01/01/20						
Start Assembly of Tunnel Boring Machines (TBMs)	01/02/20						
Finish Excavation at Tunnel Shaft in Century City	02/18/20						
Complete Structural Mud Slab at Tunnel Shaft in Century City	03/03/20						
Complete Commission of BL Tunnel Boring Machine	04/06/20						



MTA Staff



MTA Board Action



FTA (Federal Transit Administration)



Utility Company



Other Agencies



Contractors



Design Consultant



C1120 D/B Contractor

"A" following date is actual and completed

\* New

Major Equipment Delivery

**MAJOR EQUIPMENT DELIVERY**

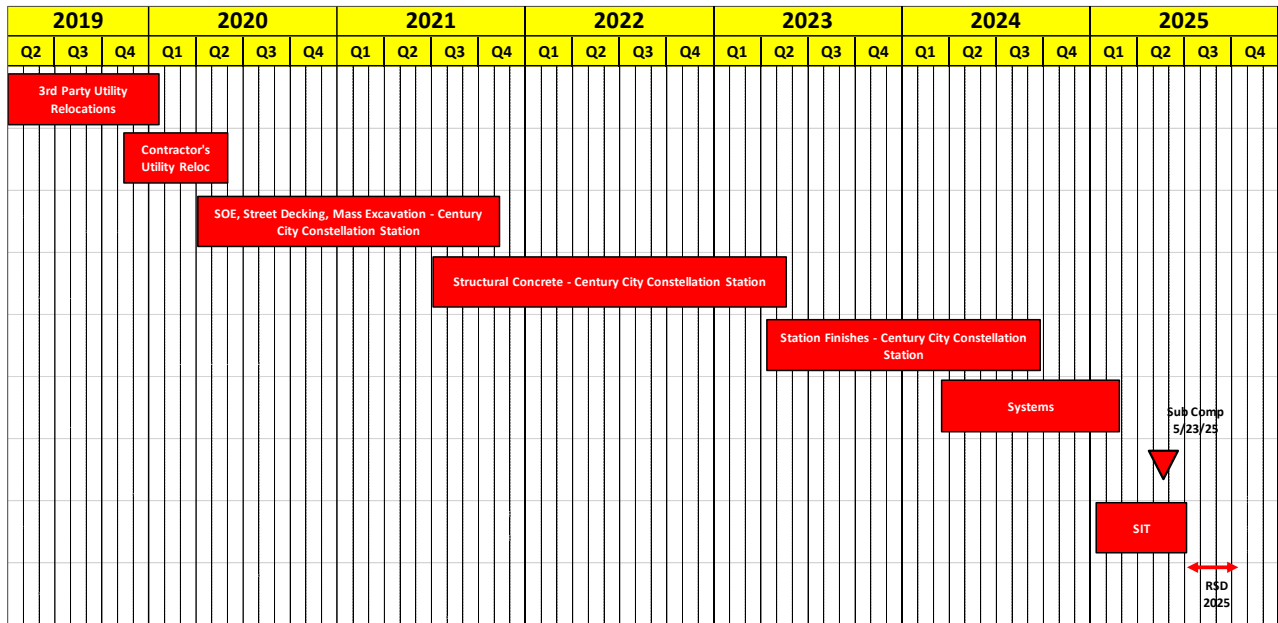
	Submittal	Procurement	Delivery	Installation
<b>C1120 DESIGN/BUILD*</b>				
Tunnel Boring Machines	7/27/17(A)	8/14/17(A)	9/13/18(A)	1Q 2020
Emergency Ventilation Fans	2Q 2020	3Q 2020	4Q 2020	2Q 2022
Station Elevators/Escalators	3Q 2020	3Q 2020	3Q 2021	1Q 2022
Track - Running Rail	3Q 2020	3Q 2020	4Q 2020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

\* Dates derived from TPOG's November 2019 Schedule.

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

\*\*\* Metro supplied equipment.

**Critical Path Project**



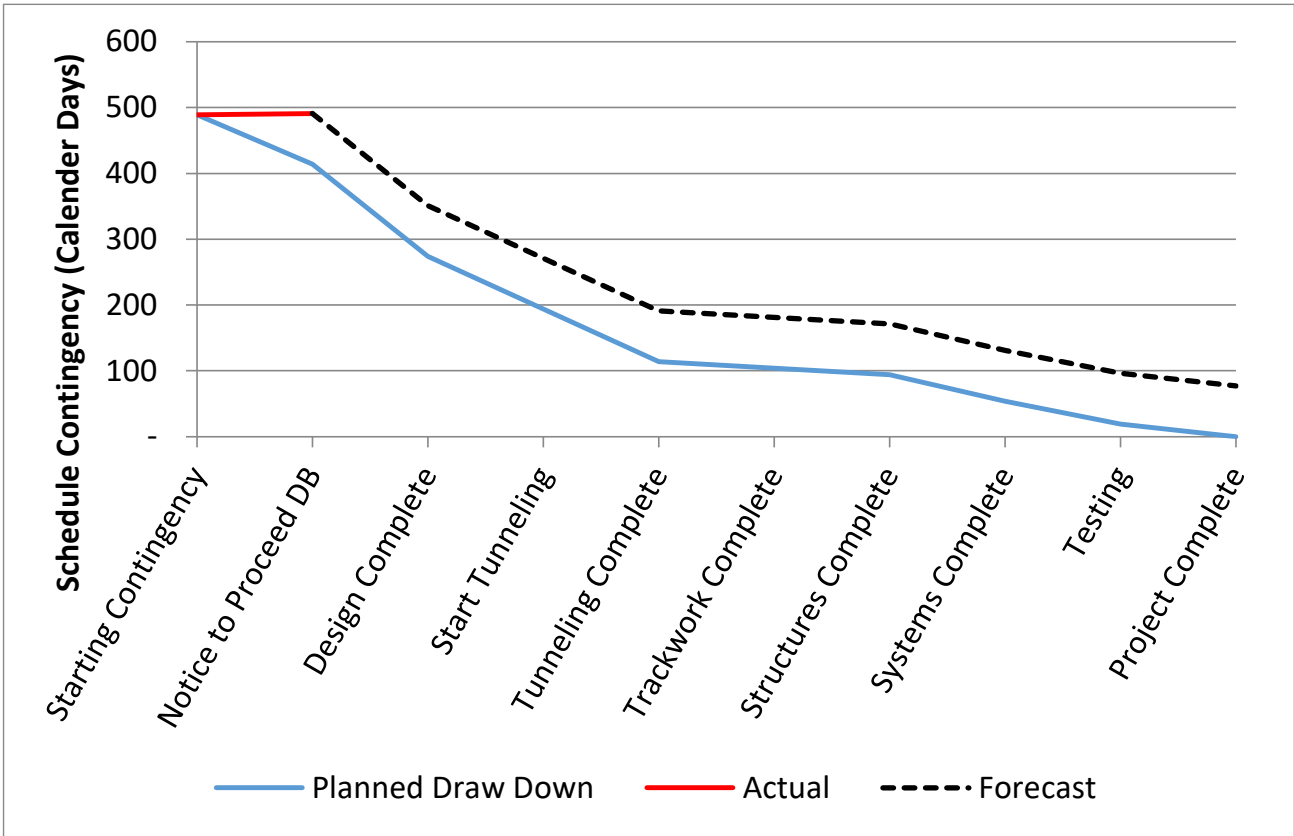
The Critical Path in November 2019 remained the same as portrayed in last month.

**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.

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





**PROJECT COST**

**Project Cost Analysis - 865522**

DOLLARS IN THOUSANDS

SCC CODE	DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		FORECAST/ BUDGET VARIANCE
			PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
10	GUIDEWAY & TRACK ELEMENTS	346,440	-	321,703	-	307,360	2,159	77,460	-	321,703	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	434,990	-	454,245	-	412,143	1,767	36,140	-	454,245	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	-	-	-	-	-	-	-	-	-	-
40	SITework & SPECIAL CONDITIONS	553,282	-	579,986	1,707	561,343	7,578	337,160	-	578,986	(1,000)
50	SYSTEMS	81,457	-	83,025	-	68,661	-	7,775	-	83,025	-
<b>CONSTRUCTION SUBTOTAL (10-50)</b>		<b>1,416,169</b>	<b>-</b>	<b>1,438,959</b>	<b>1,707</b>	<b>1,349,507</b>	<b>11,505</b>	<b>458,534</b>	<b>-</b>	<b>1,437,959</b>	<b>(1,000)</b>
60	ROW, LAND, EXISTING IMPROVEMENTS	426,396	-	426,396	-	285,525	11,927	235,927	-	430,075	3,678
70	VEHICLES	42,000	-	42,000	-	-	-	-	-	42,000	-
80	PROFESSIONAL SERVICES	374,878	-	388,042	1,730	258,280	3,786	198,652	-	388,042	-
<b>SUBTOTAL (10-80)</b>		<b>2,259,444</b>	<b>-</b>	<b>2,295,397</b>	<b>3,438</b>	<b>1,893,312</b>	<b>27,218</b>	<b>893,114</b>	<b>-</b>	<b>2,298,075</b>	<b>2,678</b>
90	UNALLOCATED CONTINGENCY	177,176	-	141,223	-	-	-	-	-	138,545	(2,678)
100	FINANCE CHARGES	88,695	-	88,695	-	-	-	-	-	88,695	-
<b>TOTAL PROJECT 865522 (FFGA &amp; NON-FFGA CONCURRENT ACTIVITIES)</b>		<b>2,525,314</b>	<b>-</b>	<b>2,525,314</b>	<b>3,438</b>	<b>1,893,312</b>	<b>27,218</b>	<b>893,114</b>	<b>-</b>	<b>2,525,314</b>	<b>-</b>
ENVIRONMENTAL/PLANNING 465522		4,349	-	4,349	-	3,957	20	3,335	-	4,349	-
<b>TOTAL PROJECT 465522 (ENV / PLAN'G)</b>		<b>4,349</b>	<b>-</b>	<b>4,349</b>	<b>-</b>	<b>3,957</b>	<b>20</b>	<b>3,335</b>	<b>-</b>	<b>4,349</b>	<b>-</b>
<b>TOTAL PROJECTS 465522 &amp; 865522</b>		<b>2,529,664</b>	<b>-</b>	<b>2,529,664</b>	<b>3,438</b>	<b>1,897,269</b>	<b>27,238</b>	<b>896,449</b>	<b>-</b>	<b>2,529,664</b>	<b>-</b>

**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.

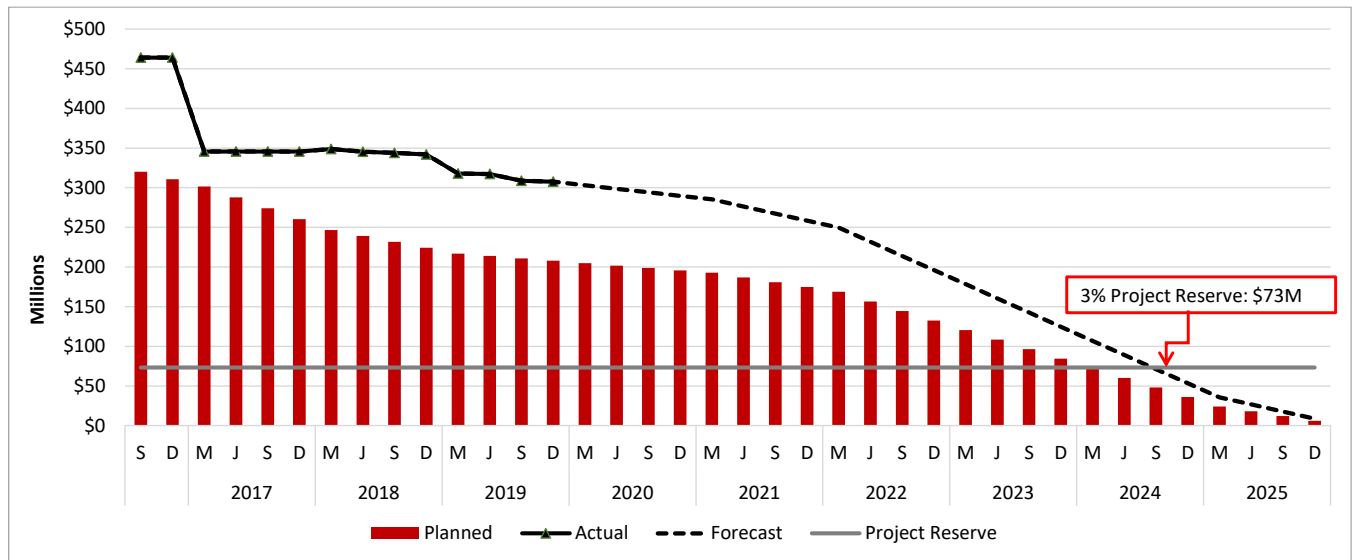
**Commitments**

*The Commitments increased this period by \$3.4 million due to an executed Contract Modification for the Design/Build Contract C1120, approved Work Orders for Third Party Private Utilities, and Board Approved FY20 Annual Work Plan for the City of Los Angeles (Master Cooperative Agreement). The \$1.9 billion in Commitments to date represents 75.0% of the Current Budget.*

**Expenditures**

*The Expenditures increased this period by \$27.2 million primarily for costs associated with Design/Build Contract C1120, Environmental Services, Third Party Private Utilities, Real Estate Acquisitions, Metro Project Administration, Engineering Management Support Services, Construction Management Support Services, Legal Services, City of Los Angeles Master Cooperative Agreement, and Memorandum of Agreement with the City of Beverly Hills. The \$896.4 million in Expenditures to date represents 35.4% of the Current Budget.*

### Cost Contingency Drawdown



### 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 \$11K due to an executed Modification 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	(38,632)	-	(38,632)	138,545
Allocated Contingency	168,534	530	(11)	520	169,053
<b>Total Contingency</b>	<b>345,710</b>	<b>(38,101)</b>	<b>(11)</b>	<b>(38,112)</b>	<b>307,598</b>

## Risk Management

### Summary of Risks

During the quarterly risk register meeting that occurred in October 2019, there were no active risks closed nor any new risks 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.

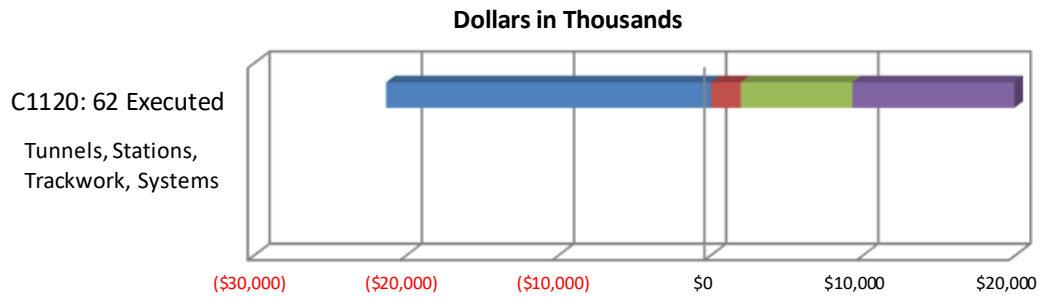
*The next WPLE Section 2 Project Risk Register quarterly update is scheduled for January 2020.*

### 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	1. Metro to complete property acquisition before the need date. 2. Building demolition to be part of DB contract. DB Contractor to start work as early as possible. 3. 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.
PLE2-23	Utility relocations by third 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 to monitor progress and mitigate any potential impacts to the Project schedule.
PLE2-6	Valuation of properties exceed budget.	12.0	1. Current project schedule accounts for additional time required for condemnation.
PLE2-70	Public protest to the Project causes delays.	12.0	1. Continue working collaboratively with the COLA and COBH to share information with stakeholders.
PLE-135	CMSS difficulty finding key resources (Mgmt. Personnel)	10.0	1. Temporarily assign additional responsibilities to existing staff until new staff is identified.

### Summary of Contract Modifications



	C1120: 62 Executed
■ Under \$100K	(21,341)
■ \$100K to \$250K	1,963
■ \$250K to \$1M	7,333
■ Over \$1M	10,639
<b>Total Contract MODs</b>	<b>(1,406)</b>
<b>Contract Award Amount</b>	<b>1,376,500</b>
<b>% of Contract MODs</b>	<b>-0.10%</b>

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

*Sixty-two (62) Contract Modifications (MODS) with a total value of <\$1.4> million have been executed since the award of C1120 Contract – Tunnels, Stations, Trackwork and Systems.*

## DISADVANTAGED BUSINESS ENTERPRISE (DBE)

*As of November 2019:*

<b>DBE Goal – Design</b> The percentage of funds apportioned to Design Contracts	25.31%
<b>Current DBE Commitment Design</b> Total DBE Committed Dollars divided by Total Contract Value for Design	\$16.9M 27.49%
<b>Current DBE Participation</b> Total amount paid to date to DBEs divided by the amount paid to date to Prime	\$17.8M 32.90%

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

<b>DBE Goal – Construction</b> The percentage of funds apportioned to Construction Contracts	17.00%
<b>Current DBE Commitment Construction</b> Contract commitment divided by current contract value for Construction	\$131.2M 10.05%
<b>Current DBE Participation</b> Total amount paid to date to DBEs divided by the amount paid to date to Prime:	\$41.8M 10.37%

Thirty-Three (33) Construction DBE sub-contractors have been identified to date.

## PROJECT LABOR AGREEMENTS (PLA)

*As of November 2019:*

<b>Targeted Worker Goal</b> Construction work to be performed by residents from Economically Disadvantaged Area in the United States	40.00%
<b>Targeted Worker Current Attainment</b>	46.40%
<b>Apprentice Worker Goal</b> Construction work to be performed by Apprentices	20.00%
<b>Apprentice Worker Current Attainment</b>	14.16%
<b>Disadvantaged Worker Goal</b> Construction work to be performed by disadvantaged workers	10.00%
<b>Disadvantaged Worker Current Attainment</b>	2.68%

## FINANCIAL/GRANT

### Status of Funds by Source

SOURCE	(A)	(B)	(C)	(D)	(D/B)	(E)	(E/B)	(F)	(F/B)
	ORIGINAL BUDGET	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS \$	%	EXPENDITURES \$	%	BILLED TO FUNDING SOURCE \$	%
FEDERAL - SECTION 5309 NEW STARTS	\$1,187.000	\$1,187.000	\$400.000	\$1,052.019	89%	\$342.657	29%	\$300.390	25%
FEDERAL CMAQ	\$169.000	\$169.000	\$169.000	\$109.627	65%	\$92.727	55%	\$102.166	60%
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	\$473.861	58%	\$199.303	25%	\$118.621	15%
STATE CAPITAL PROJECT LOANS	\$54.762	\$54.762	\$54.762	\$54.762	100%	\$54.762	100%	\$54.762	100%
<b>TOTAL</b>	<b>\$2,529.664</b>	<b>\$2,529.664</b>	<b>\$1,037.545</b>	<b>\$1,897.269</b>	<b>75.0%</b>	<b>\$896.449</b>	<b>35.4%</b>	<b>\$782.939</b>	<b>31.0%</b>

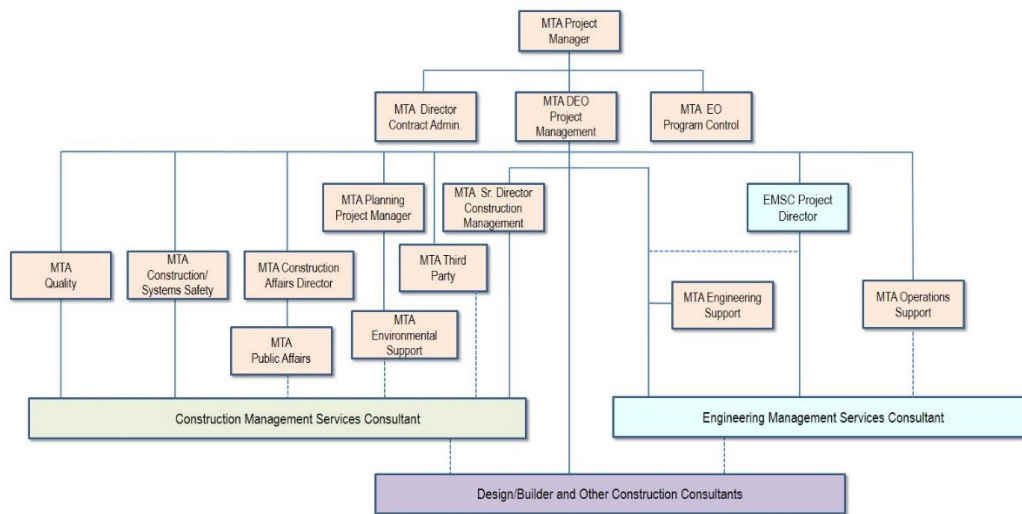
*EXPENDITURES ARE CUMULATIVE THROUGH NOVEMBER 30, 2019*

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).

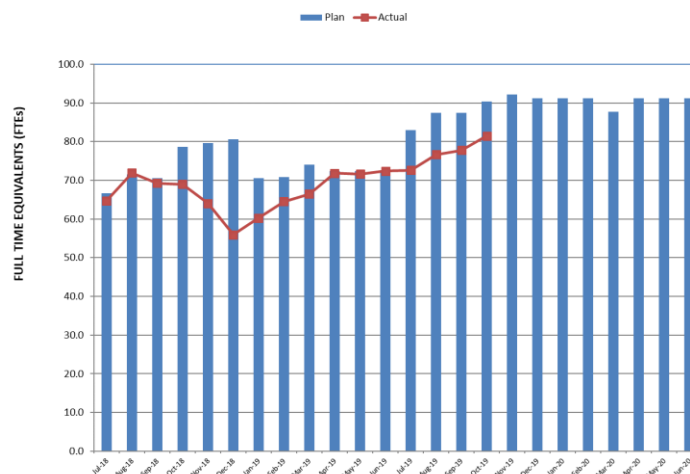
**Westside Purple Line Extension Section 2  
 Responsibility and Reporting Matrix**



The overall FY20 Total Project Staffing Plan averages 89.6 FTEs per month.

*For October 2019, there were a total of 27.2 FTEs for MTA's Project Administration Staff and 54.3\* FTEs for Consulting Staff. The total project staffing for October 2019 was 81.5 FTEs. Review of staffing plans is on-going to ensure staffing needs are appropriately managed.*

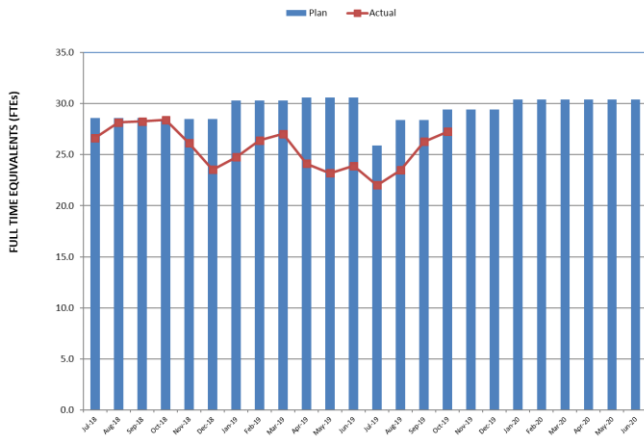
### Total Project Staffing – Metro and Consultants



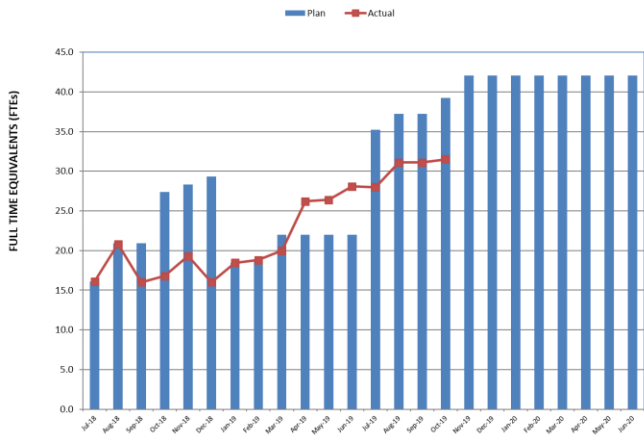
\*Actuals include 4.8 FTEs related to Project Management Support Services (PMSS).



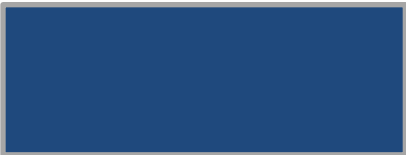
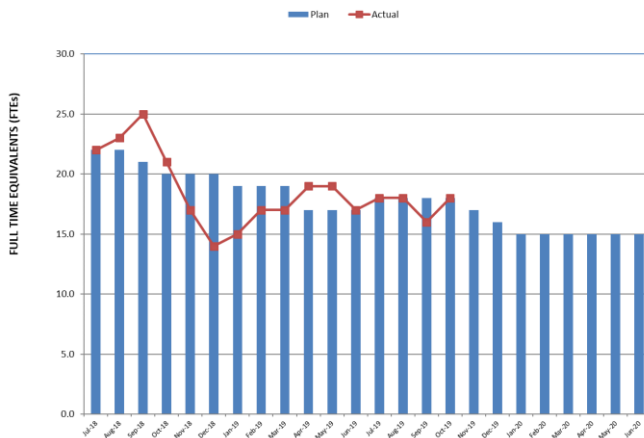
**Metro Staff**



**CM Support Services Staff (Consultant)**



**Engineering Services Staff (Consultant)**



**Staffing by Group**

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

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

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

## REAL ESTATE

<b>Real Estate Status Summary</b>									
Description	Number of Parcels	Certified	Appraisals Completed	Offers Made	Agreements Signed	Condemnation Filed	Relocations		Parcels Available
							Required	Completed	
Full Takes	3	3	3	3	1	2	21	21	3
Part Takes	3	3	3	3	2	0	0	0	2
TCE	3	3	3	3	2	1	1	1	3
SSE	23	23	23	23	13	11	3	3	13
Permanent Easements	1	1	0	0	0	0	0	0	0
<b>Total Parcels</b>	<b>33</b>	<b>33</b>	<b>32</b>	<b>32</b>	<b>18</b>	<b>14</b>	<b>25</b>	<b>25</b>	<b>21</b>

- 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.*

## QUALITY ASSURANCE

- Attended weekly Project staff meetings and progress meetings. Reviewed Daily Inspection Reports at various job locations as well as Twining Independent test laboratory.
- *Chaired weekly quality meetings with TPOG Quality Manager for the status, and corrective actions for NCRs issued by TPOG and Metro have been implemented in compliance with approved documentation; Quality Records III Quarter 2019 completeness; Metro Laboratory scope of work for project Quality Control.*
- *Conducted surveillance of Traylor Brothers facility to verify the test/tolerances verification on the demonstration ring for manufacturing of special segments for tunnel lining.*
- Reviewed the following with a disposition for record only:
  - *Product data Tunnel Special Liner Circumferential Join Dowel Project wide;*
  - *Strain Gages Installation Logs Century City Station Launch Box Tunnel Access Shaft (TAS).*
- Reviewed the following with a disposition of approved and or approved as noted:
  - *Special Segment Liner Quality Control Plan Project wide;*
  - *Special Segment Liner Independent Testing Laboratory Qualifications Project wide.*

## ENVIRONMENTAL

- *Archeological/Paleontological monitoring at the tunnel access shaft is on hold until excavation is scheduled to resume.*
- *All 34 MERV-16 filters were replaced at the Beverly Hills High School.*
- Noise mitigation measures (e.g. noise barriers) implemented for piling activities at Wilshire-Rodeo.
- 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

- *Attended the following meetings: Construction Management, Construction Relations, Third Party Coordination, LADOT, Rodeo Station Construction Coordination, Beverly Hills Chamber, Century City Chamber, Building and Property Manager Meetings in Beverly Hills and Century City.*
- *Conducted project presentations at the Beverly Hills Monthly Community Meeting, City of Beverly Hills Monthly Webinar, Monthly Wilshire/Rodeo business stakeholder meeting and one-on-one business owner meetings in Beverly Hills and Century City.*
- Produced and distributed four (4) construction work notices including work for advanced utility relocations, piling installation, utility work, installation of traffic signal, sidewalk and lane closures in Century City and Beverly Hills, and N. Canon Dr. closure in Beverly Hills.
- 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

- *Outreach to artist community regarding 2020 Artist Pool.*
- Outreach and coordination with area stakeholders.
- Continued coordination with City of Beverly Hills on Canon Wall mural.

## SAFETY & SECURITY

- *Tutor Perini/O&G (TPOG-JV) reported zero (0) Recordable Injury in November 2019.*
- Metro Safety staff attended daily tool box meetings, weekly crew all hand safety meeting, progress meetings, readiness reviews, and other project meetings to evaluate Contractor's Safety Program compliance with contract requirements.
- Metro/TPOG-JV project safety staff conducted schedule, safety/security and over-the-shoulder review meetings.
- Safety staff worked regularly with Program Management and Construction Relations staff to monitor issues related to public concerns regarding noise, traffic and public/construction interfaces as well as public interactions with the construction crews.
- Metro project safety staff conducted project Safety Orientation, SCSR and H2S Safety Training for new project staff.
- Conducted right-of-way (ROW) and safety / security walks, safety / security reviews and coordination with TPOG-JV staff for oversight and support of all project field work activities.
- *TPOG-JV reported 44,962 actual work hours through the end of November 2019.*
- *TPOG-JV Project to Date Work Hours are 1,000,202 with three (3) Recordable Injuries and two (2) Lost Time Injuries.*
- *The Recordable Injury Rate is .40. The Bureau of Labor Statistics reports the National Average Recordable Injury Rate is 2.5.*

## 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

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	<i>Poured invert slab at TBM launch box in Century City.</i>