# Westside Purple Line Extension Section 2 Project



## Westside Purple Line Extension Section 2 Project

QUARTERLY 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). Quarterly

**March 2019** 

### TABLE OF CONTENTS

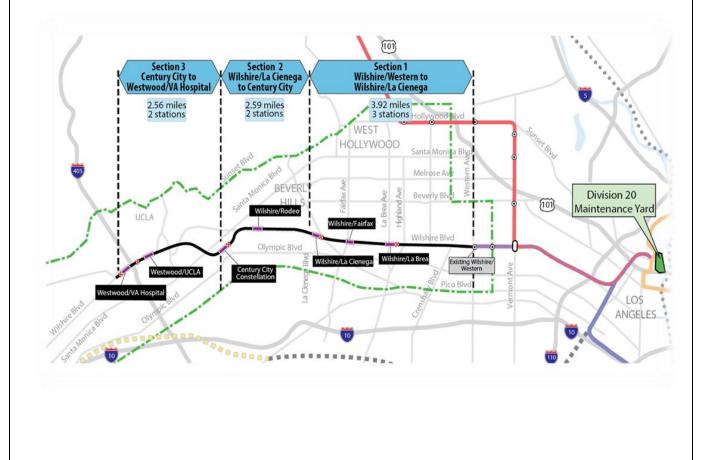
Executive Summary4Project Update8Project Schedule8Project Summary Schedule8Progress Summary9Planned vs. Actual Progress9Key Milestones Six-Month Look Ahead10Major Equipment Delivery11Critical Path12Project Schedule Contingency Drawdown13Project Cost14
Project Schedule8Project Summary Schedule8Progress Summary9Planned vs. Actual Progress9Key Milestones Six-Month Look Ahead10Major Equipment Delivery11Critical Path12Project Schedule Contingency Drawdown13Project Cost14
Project Summary Schedule8Progress Summary9Planned vs. Actual Progress9Key Milestones Six-Month Look Ahead10Major Equipment Delivery11Critical Path12Project Schedule Contingency Drawdown13Project Cost14
Progress Summary       9         Planned vs. Actual Progress       9         Key Milestones Six-Month Look Ahead       10         Major Equipment Delivery       11         Critical Path       12         Project Schedule Contingency Drawdown       13         Project Cost       14
Planned vs. Actual Progress       9         Key Milestones Six-Month Look Ahead       10         Major Equipment Delivery       11         Critical Path       12         Project Schedule Contingency Drawdown       13         Project Cost       14
Key Milestones Six-Month Look Ahead10Major Equipment Delivery11Critical Path12Project Schedule Contingency Drawdown13Project Cost14
Major Equipment Delivery       11         Critical Path       12         Project Schedule Contingency Drawdown       13         Project Cost       14
Critical Path
Project Schedule Contingency Drawdown
Project Cost 14
Project Cost Analysis14
Cost Contingency Drawdown and Analysis15
Risk Management16
Summary of Contract Modifications 17
Disadvantaged Business Enterprise (DBE)18
Project Labor Agreements 19
Financial/Grant
Project Staffing
Real Estate
Quality Assurance
Environmental
Construction and Community Relations
Creative Services
Safety and Security
Appendix
Chronology of Events

### **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</u> <u>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. 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 Relation section of this report.

<u>Start Up:</u> 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 March 2019, the Project achieved 16% 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 pertaining to the TBM launch box and muck bin. Demolition activities are ongoing in the City of 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 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 Relocation (AUR) work in Century City and Beverly Hills 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: Wilshire/Rodeo Station Site Utility Investigation Report 100%; Geotechnical and Instrumentation Plan; Wilshire/Rodeo Station Structural 100%; Century City Constellation Station SOE 85%; and the Vehicle Clearance Report 100%.* 

#### **Construction Status**

Century City Constellation 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 each utility began in late January 2019 and anticipate completion in Fall 2019.

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

- LAPD Commissioner's Office night time noise variance for work between Century Park East and Century Park West as well as Avenue of the Stars from December 30, 2018 to June 30, 2019.
- LABOE and LADOT peak hour exemption from January 14, 2019 to July 9, 2019 on Constellation Boulevard between Century Park East and Century Park West as well as southbound on Avenue of the Stars.

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. *Precast tunnel rings are being manufactured and approximately 32% have been produced.* 

Pre-construction surveys are ongoing. Geotechnical fault line (seismic) boring investigations started in May 2018, and all 20 have been completed as of March 14, 2019.

Demolition of the AT&T parking structure commenced in December 2018 and is completed. The turnover of this site to TPOG occurred on March 20, 2019.

Soldier pile installation for the TBM launch box at the eastern end of the Century City Constellation Station commenced on October 15, 2018 and completed on January 11, 2019. *Excavation of the TBM launch box and construction of the tunnel muck bin started this period. Installation of deck beams for the TBM launch box commenced on March 15, 2019, and 24 of the required 30 deck beams have been completed as of March 29, 2019. Installation of the temporary street deck panels for the TBM launch box have commenced and are ongoing.* 

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

In the City of Beverly Hills, demolition of North Canon properties has commenced in preparation of the site being used a construction staging yard.

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) Memorandum of Agreement (MOA) for the C1120 Contract on January 24, 2019. COBH City Council's approved the MOA on February 19, 2019.

Negotiations with the City of Beverly Hills (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 March 2019 schedule update, which reports that the project remains on schedule to complete according to the contract's 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. TPOG has submitted a revised CP that is currently being reviewed and analyzed by the Project team. Once the team has done their due diligence the CP will be modified.

	COntract		Current Contract Foreca		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

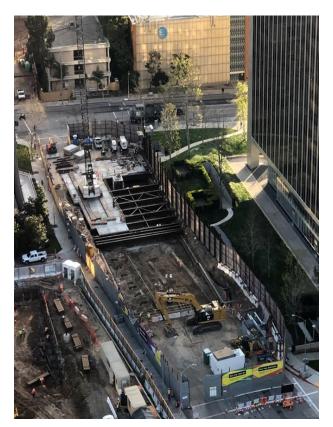
#### C1120 Design-Build Contract Schedule Metrics

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**



TBM Launch Box Overview in Century City



Installation of Deck Beams in Century City



Installation of Temporary Deck Panels in Century City



Demolition of North Canon Properties in Beverly Hills



Demolition of North Canon Properties in Beverly Hills

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#### **PROJECT UPDATE PROJECT SCHEDULE Project Summary Schedule** 15<mark>-Aug-25</mark> 29-Aug-2 7 23-May-25 T 23-May-25 2025 2025 T 28-Apr-25 2025 T 03-Mai-25 ٥ ۲ MASTER SCHEDULE 29-Mair-23 ■ 19-Jul-22 28-Feb-20 23-May-19 30-Apr-19 Data Date : 02-Feb-19 Current Date : 19-Feb-19 01-Dec-17 WPLE Section 2 Level 1 Schedule 20-Dec-15A 7 20-Dec-167 1 of 1 Los Angeles County Metropolitan Transportation Authority WPLE Section 2 Level 1 Summary Schedule 20-Dec-16A 01-Dec-17 A 20-Dec-16A 23-May-19 15-Aug-25 19-Jul-22 28-Apr-25 29-Aug-25 30-Apr-19 23-May-25 28-Feb-20 29-Mar-23 03-Mar-25 23-May-25 2025 2025 2025 L S L **PROJECT PLANNING & DEVELOPMENT** WPLE Section 2 - Wilshire/La Cienega to Century ega to Century City Con: **OWNER FURNISHED EQUIPMENT** Site Work & Temporary Facilities **RIGHT-OF-WAY (R/W)** FTA Process & Approvals Section 2 - Wilshire/La Clar CONSTRUCTION Remaining Work Pre-revenue Service Guideway & Track ENGINEERING Miscellaneous Milestone Activity Name Start Up Utilities Systems Stations Testing RSD WPLE ctivity

#### Westside Purple Line Extension Section 2 Project Quarterly Project Status Report

#### **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	91.9%	0.7%	Civil/Structral Final Design is currently scheduled to complete in 2nd Quarter 2019.
<b>Construction Contracts Progress:</b>			
Contract C1120	16.1%	0.9%	

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

#### 100% 80% 70% 60% % Complete 10% 30% 20% 16.08% 10% 3.17% Jul-18 Oct-18 an-19 Apr-19 Jul-19 Oct-19 Jul-20 vpr-18 Oct-20 an-21 Apr-21 Jul-21 Oct-21 an-22 an-23 Apr-23 Jul-23 Oct-23 an-24 vpr-24 Jul-24 an-25 Oct-22 an-Apr-- Total Planned % Total Actual %

#### Planned vs. Actual Progress

*The actual overall construction progress is 16.08% versus a planned of 3.17% through March 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 Milestones

	Milestone Date	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19
Started Excavation - TBM Launch Box in Century City	3/13/19A	$\bigcirc$					
Completed Geotech Seismic Borings	3/14/19A	$\bigcirc$					
Started Installation of Deck Panels - TBM Launch Box in Century City	3/15/19A	$\bigcirc$					
Released AT&T Site to TPOG	3/20/19A						
Start Installation of Soldier Piles - Tunnel Shaft in Century City	04/08/19		$\bigcirc$				
LADWP Energize TBM Temp Pow er Substation			$\bigtriangledown$				
Start Excavation - Tunnel Shaft in Century City	05/20/19			$\bigcirc$			
Approve IFC Drawings for Design Package 2 - Utility/Civil Design at Wilshire/Rodeo Station	06/07/19				$\bigcirc$		
Start TPOG Utility Relocation - Wilshire/Rodeo Station	06/13/19				$\bigcirc$		
Approve IFC Draw ings - Wilshire/Rodeo Station SOE	06/28/19				$\bigcirc$		
Approve IFC Drawings for Design Package 3 Vol 1 Tunnel & Century City Constellation Structure	07/29/19					$\bigcirc$	
Approve IFC Drawings for Design Package 3 Vol 2 Century City Constellation Station	07/29/19					$\bigcirc$	
Start Horizontal Directional Drilling for Oil Wells at Century City Constellation Station	08/01/19						$\bigcirc$
Complete Santa Monica Bus Layover Facility	08/30/19						$\bigcirc$
MTA Staff MTA Board Action		ederal Tra stration)	ansit	7 Utility	Compan	у	
△ Other Agencies □ Contractors	O Design (	Consultan	t (	C112	0 D/B Co	ntractor	
"A" following date is actual and completed	★ <sub>New</sub>						

**Major Equipment Delivery** 

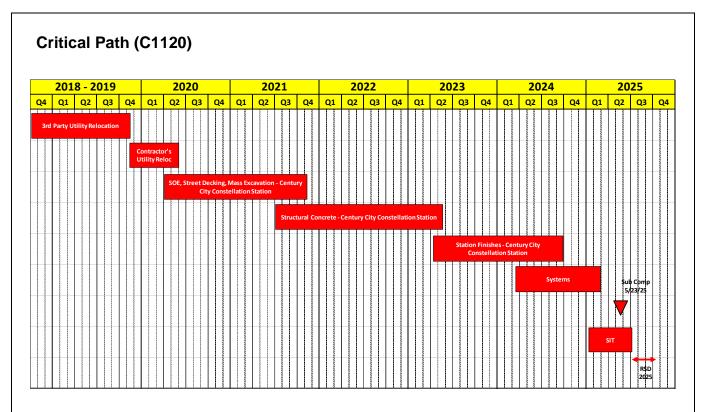
### MAJOR EQUIPMENT DELIVERY

	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	3Q 2019	3Q 2019	1Q 2020	4Q 2021
Station Elevators/Escalators	3Q 2019	3Q 2019	3Q 2020	2Q 2021
Track - Running Rail	3Q 2019	4Q 2019	1Q 2020	3Q 2022
Traction Power Equipment	4Q 2019	4Q 2019	3Q 2020	4Q 2021
Automatic Train Control	2Q 2019	4Q 2019	4Q 2019	4Q 2021
Radio System	2Q 2019	4Q 2019	4Q 2019	1Q 2022
SCADA RTU System	2Q 2019	4Q 2019	4Q 2019	1Q 2022
Heavy Rail Vehicles***	E	xercise Option #3	March 1, 202	1
Universal Fare System***	TBD	TBD	TBD	June 2023**

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

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

\*\*\* Metro supplied equipment



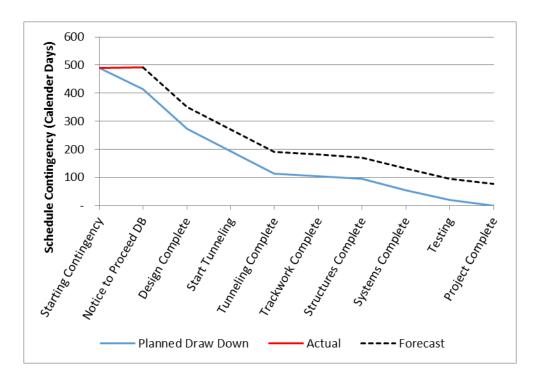
The Critical Path in March 2019 remained the same as portrayed in February 2018.

#### Project Schedule Contingency Drawdown Analysis

The project schedule contingency drawdown model provides a dual-axis perspective based upon the FFGA RSD of December 2026 and Metro's Project Master Schedule (PMS) forecast of summer 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		CURRENT	BUDGET	СОММІТ	IMENTS	EXPEND	ITURES	CURRENT	FORECAST	FORECAST/ BUDGET
CODE		BUDGET	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
10	GUIDEWAY & TRACK ELEMENTS	346,440	-	328,836	132	307,056	4,046	42,682	(7,133)	321,703	(7,133)
20	STATIONS, STOPS, TERMINALS, INTERMODAL	434,990	-	443,071	-	410,368	173	13,334	11,174	454,245	11,174
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	-	-	-	-	-	-	-	•	-	-
40	SITEWORK & SPECIAL CONDITIONS	553,282	-	576,800	533	545,563	4,102	288,479	3,186	579,986	3,186
50	50 SYSTEMS		-	81,907	-	68,537	415	7,362	1,118	83,025	1,118
	CONSTRUCTION SUBTOTAL (10-50)		-	1,430,614	665	1,331,524	8,735	351,858	8,345	1,438,959	8,345
60	60 ROW, LAND, EXISTING IMPROVEMENTS		-	426,396	-	230,081	215	160,042	-	426,396	-
70	70 VEHICLES		-	42,000	-	-	-	-	•	42,000	-
80	80 PROFESSIONAL SERVICES		-	375,974	1,622	238,724	4,374	169,928	12,068	388,042	12,068
	SUBTOTAL (10-80)	2,259,444	-	2,274,984	2,287	1,800,329	13,324	681,828	20,413	2,295,397	20,413
90	UNALLOCATED CONTINGENCY	177,176	-	161,636	-	-	-	-	(20,413)	141,223	(20,413)
100	FINANCE CHARGES	88,695	-	88,695	-	-	-	-	•	88,695	-
DTAL PI	ROJECT 865522 (FFGA & NON-FFGA CONCURRENT ACTIVITIES)	2,525,314	-	2,525,314	2,287	1,800,329	13,324	681,828	-	2,525,314	-
	ENVIRONMENTAL/PLANNING - 465518 & 465522	4,349	-	4,349	-	3,770	7	3,126	-	4,349	-
	TOTAL PROJECT 465518 & 465522 (ENV / PLAN'G)	4,349	-	4,349	•	3,770	7	3,126		4,349	-
	TOTAL PROJECTS 465518, 465522 & 865522	2,529,664	•	2,529,664	2,287	1,804,099	13,331	684,953	-	2,529,664	-

#### **Original Budget**

The Original Budget 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.

#### **Current Forecast**

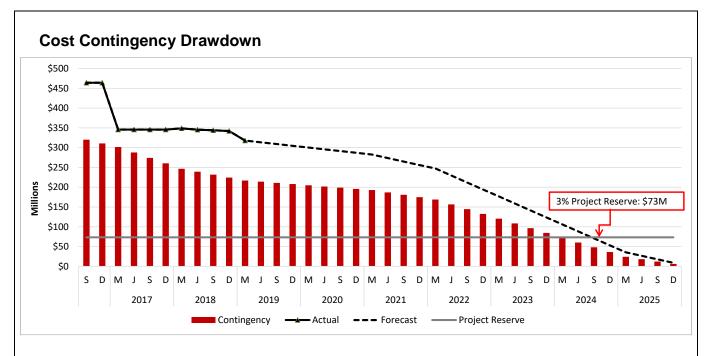
The Current Forecast remains the same this period at \$2.5 billion. However, the net increase of \$8.3 million for Construction is primarily for continuation of Third Party Utility Relocations and Environmental Services. The Professional Services category was increased by \$12.1 million primarily due to ongoing work required by the City of Los Angeles Master Cooperative Agreements and the City of Beverly Hills Memorandum of Agreement. The net of \$20.4 million was transferred from the Unallocated Contingency.

#### Commitments

The Commitments increased this period by \$2.3 million mainly due approved work order for 3rd Party Utility Relocations, executed modifications and a Change Order for the Design/Build Contract C1120. The \$1.8 billion in Commitments to date represents 71.3% of the Current Budget.

#### Expenditures

The Expenditures increased this period by \$13.3 million primarily for costs associated with Design/Build Contract C1120, Third Party Utility Relocations, Environmental Services, Real Estate Acquisitions, Metro Project Administration, Engineering Management Services, Construction Management Services, Master Cooperative Agreement with the City of Los Angeles and Memorandum of Agreement with the City of Beverly Hills. The \$685.0 million in Expenditures to date represents 27.1% of the Current Budget.



#### **Cost Contingency Drawdown Analysis**

The Current 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 this period by \$20.4 million primarily for Third Party Utility Relocations, Environmental Services, Master Cooperative Agreements and Memorandum of Agreement. The allocated contingency decreased this period by \$1.9 million due to executed Contract Modifications and a Change Order for the Design/Build Contract C1120.

PROJECT COST CONTINGENCY POLLARS IN THOUSANDS										
	Original Contingency (Budget)	Previous Period	Current To-Date Period		Remaining Contingency (Forecast)					
Unallocated Contingency	177,176	(15,540)	(20,413)	(35,953)	141,223					
Allocated Contingency	168,534	10,030	(1,879)	8,150	176,684					
Total Contingency	345,710	(5,511)	(22,292)	(27,803)	317,907					

### **Risk Management**

#### Summary of Risks

Within this reporting period no active risks were closed, and two (2) new risks identified leaving a total of sixty-four (64) risks to be managed in the next reporting period.

Of the sixty-four (64) risks, four (4) are scored as high, twenty-four (24) as medium and thirty-six (36) as low.

The next WPLE Section 2 Project Risk Register update is scheduled for April 10, 2019.

#### **Top Five Risks**

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

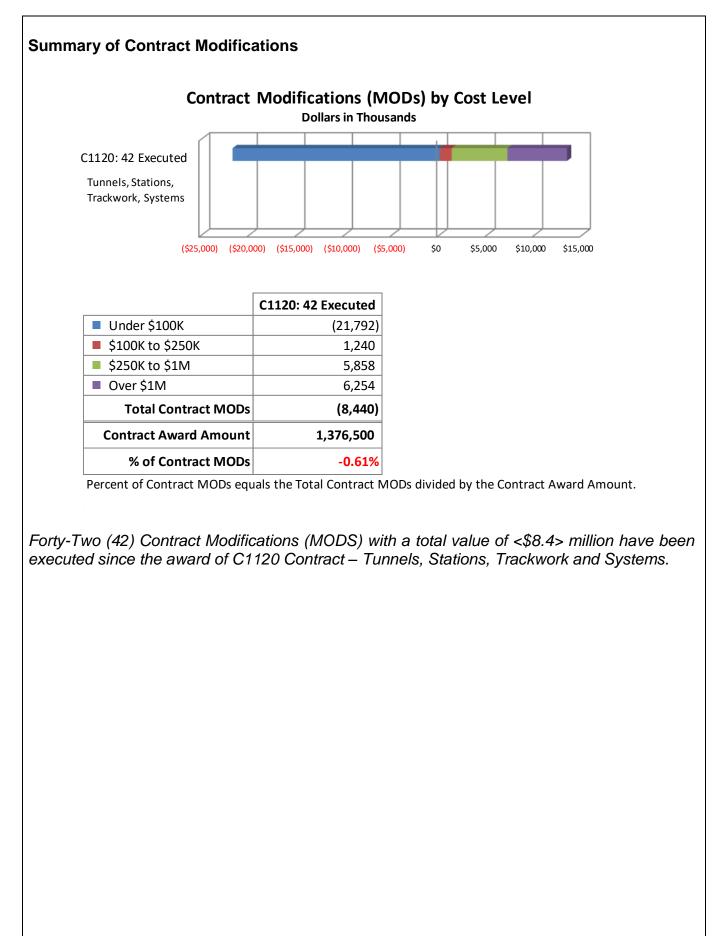
RiskID	Risk Description	Risk Score	Action Items
PLE2-54	Turnover of property to DB contractor is delayed beyond the dates stipulated in the Contract	15.0	<ol> <li>Metro to complete property acquisition before the need date.</li> </ol>
	Documents.		<ol> <li>Building demolition to be part of DB contract.</li> <li>DB Contractor to start work as early as possible.</li> </ol>
PLE2-6	Acquisition of property is delayed due to condemnation and/or legal battle.	14.0	1. Current project schedule accounts for additional time required for condemnation.
PLE2-23	3rd party utility relocations delay construction.	12.0	<ol> <li>Work with COLA and COBH and utility owners to expedite obtaining permits, and complete design and construction on schedule.</li> <li>Metro is working more closely with DWP and AT&amp;T to monitor progress and mitigate any potential impacts to the Project schedule.</li> </ol>
PLE2-70	Public protest to the Project causes delays.	12.0	1. Continue working collaboratively with the COLA and COBH and communities.
PLE2-24	Resource constraints at private utility companies delay schedule.	9.0	<ol> <li>Maintain close coordination with utility companies and sequence utility work as necessary.</li> </ol>

#### Newly Identified Risks

RiskID	Risk Description	Risk Score	Action Items
PLE2-97	Government shutdown impacts Environmental approval for additional 6 mos closure for contractor's proposed extension.	6.0	1. New Risk
PLE2-98	Appropriations Bill impacts execution of vehicle option.	2.5	1. Monitor the Federal Government action on Appropriations Bill.

### Closed Risks

No closed risks identified this reporting period.



#### **DISADVANTAGED BUSINESS ENTERPRISE (DBE)** DBE Goal – Design ٠ A numerically expressed percentage of funds apportioned to Design 25.31% Contracts and is calculated based upon the relative availability of DBE firms as compared to all firms in the relevant geographic market area. Current DBE Commitment – Design • \$15,144,515 Total DBE Committed Dollars divided by Total Contract Value for (25.31%)Design or Construction. Current DBE Participation ٠ \$16.220.246 Total amount paid to date to DBEs divided by the amount paid to date (31.22%) to Prime. Twenty (20) Design DBE subcontractors have been identified to-date. **DBE Goal – Construction** • A numerically expressed percentage of funds apportioned to 17.00% Construction Contracts and is calculated based upon the relative availability of DBE firms as compared to all firms in the relevant geographic market area. Current DBE Commitment – Construction \$117.518.758\* (9.00%)Actual commitments as Construction work is awarded. Current DBE Participation \$15,125,409 Total amount paid to date to DBEs divided by the amount paid to date (4.79%)to Prime. Twenty-two (22) Construction DBE subcontractors have been identified to-date.

\* Last month's Construction Commitments were reported as \$221,997,018, however, it should have reflected Commitments as Construction is awarded \$117,518,758. It has been corrected this period.

## PROJECT LABOR AGREEMENTS (PLA)

<b>Targeted Worker Goal</b> – Construction work to be performed by residents from Economically Disadvantaged Area of Los Angeles County	40.00%
Targeted Worker Current Attainment	51.36%
<b>Apprentice Worker Goal</b> – Construction work to be performed by Apprentices	20.00%
Apprentice Worker Current Attainment	1 <b>3.9</b> 5%
<b>Disadvantaged Worker Goal</b> – Construction work to be performed by Disadvantaged Workers	10.00%
Disadvantaged Worker Current Attainment	4.26%

### FINANCIAL/GRANT

#### Status of Funds by Source

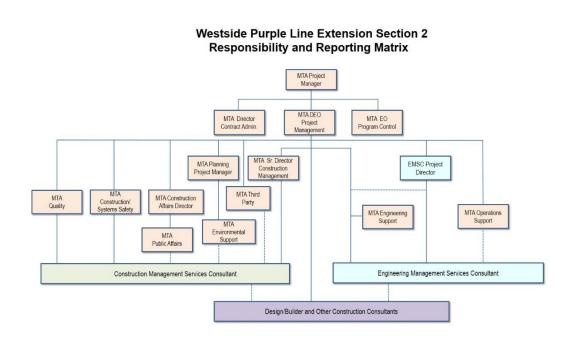
SOURCE	(A) ORIGINAL BUDGET	(B) TOTAL FUNDS ANTICIPATED	(C) TOTAL FUNDS AVAILABLE	(D) COMMIT \$	(D/B) MENTS %	(E) EXPEN \$	(E/B) NDITURES %	(F) BILLED TO SOURC \$	
FEDERAL - SECTION 5309 NEW STARTS	\$1,187.000	\$1,187.000	\$300.000	\$1,055.871	89%	\$289.408	24%	\$230.824	19%
FEDERAL CMAQ	\$169.000	\$169.000	\$43.000	\$43.000	25%	\$43.000	25%	\$43.000	25%
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	\$443.466	55%	\$90.783	11%	\$80.401	10%
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	\$811.545	\$1,804.099	71.3%	\$684.953	27.1%	\$615.987	24.4%

EXPENDITURES ARE CUMULATIVE THROUGH MARCH 2019

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

### **PROJECT ORGANIZATION AND STAFFING**

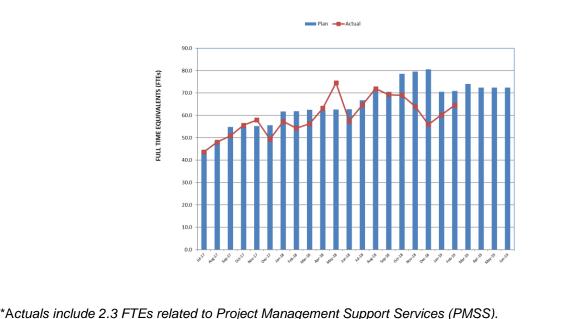
The design-build contract is being managed by a joint team of Metro and consultant personnel jointly located at the Integrated Project Management Office (IPMO).



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

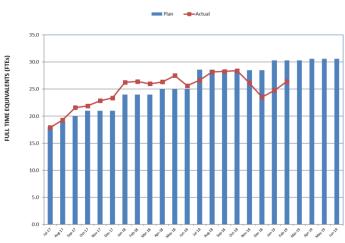
For February 2019, there were a total of 26.4 FTEs for MTA's Project Administration Staff and 38.1\* FTEs for Consulting Staff. The total project staffing for February 2019 was 64.5 FTEs. The downward-trending shortfall in staffing has not impacted Metro's ability to effectively manage the Project. Review of staffing plans is on-going to ensure staffing needs are appropriately managed.

#### Total Project Staffing – Metro and Consultants

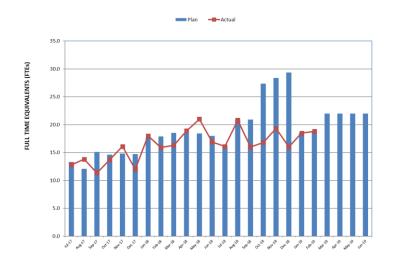


#### Westside Purple Line Extension Section 2 Project Quarterly Project Status Report

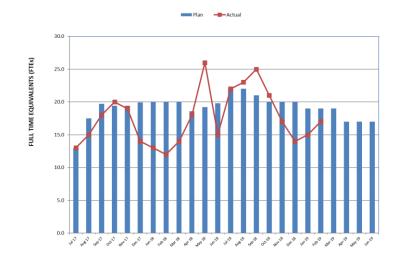




### CM Support Services Staff (Consultant)



### **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 of Parcels	Certified	Appraisais Complete	Offers Made	Agreement s Signed	Condemnatio n Filed		Relocations quired Completed					
Full Takes	3	3	3	3	1	2	21	21	3				
Part Takes	3	3	2	2	1	0	0	0	1				
TCE	3	3	3	3	1	1	1	1	2				
SSE	23	23	23	23	11	8	3	3	9				
Permanent Easements	1	1	0	0	0	0	0	0	0				
Total Parcels	33	33	31	31	14	11	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.
- Access date to TPOG for W-3604 and W-3604-1 (AT&T) was on March 20, 2019.

### QUALITY ASSURANCE

- Attended weekly project staff meetings and progress meetings with TPOG; reviewed Daily Inspection Reports by TPOG and Metro inspectors for completeness and correctness at various job locations as well as Twining Laboratory independent test reports.
- Worked with TPOG on:
  - Outstanding nonconformance reports status and corrective actions for the currently opened NCRs issued by TPOG to their subcontractors and NCRs issued by Metro to TPOG;
  - Outstanding quality records for 2018 and 1 quarter 2019 submission;
  - Water treatment plant working drawings;
  - Welders qualification records log;
  - Instrumentation calibration data log.
- Reviewed the following with a disposition For Record only:
  - Welding Procedures (WRS);
  - Product Data Temp Ventilation Box Fans (CCS);
  - Quality records for 2018;
  - Steel Mill Certifications Piles Muck Bin (CCS).
- Reviewed the following with a disposition of Approved or Approved as Noted:
  - CWP Potholing for Sewer and Water Relocation (WRS);
  - CWP Excavation to Invert Launch Box (CCS).

### ENVIRONMENTAL

- 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.
- Finalized December 2018 noise monitoring reports for the City of Los Angeles and City of Beverly Hills.

### **CONSTRUCTION AND COMMUNITY RELATIONS**

- Attended the following meetings: Construction Management, Advanced Utility Relocations, Construction Relations, Third Party Coordination, LADOT, BOE, LAPD, Beverly Hills Chamber and Century City Chamber meetings, Building and Property Manager meetings in Beverly Hills and Century City.
- Conducted project presentations at the Beverly Hills Monthly 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 closure 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.
- Produced and distributed six construction work notices including work for advanced utility relocation, bus layover updates, demolition, temporary sidewalk and lane closures in Century City and Beverly Hills.

### **CREATIVE SERVICES**

• Conducted outreach and coordinated cultural partnerships.

### SAFETY & SECURITY

- TPOG-JV (D/B) work continues. No injuries were reported during March 2019.
  - TPOG-JV recordable incident on Jan. 23<sup>rd</sup>, 2019; employee walking on an uneven surface slipped and straining his right knee, is now classified as days away from work recordable Incident. TPOG-JV is no longer capable to accommodate the employee's restricted work status.
- Conducted project safety orientation for new Metro / Consultants and IPMO project staff.
- Attended advanced utility relocation (AUR) and design built (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.
- TPOG-JV Design (13,814 Hr.'s) / Construction (26,062 Hr.'s) work completed 39,876 work-hours for the month of March 2019 with no recordable incidents. Total Project to Date work-hours are 616,460 with one recordable work incident.

### APPENDIX CHRONOLOGY OF EVENTS

January 2011	FTA approval to enter Preliminary Engineering
August 2012	FTA Record of Decision
December 2014	FTA approval to enter New Starts Engineering Phase
March 2015	Began Real Estate Acquisition
May 2015	Began Advanced Preliminary Engineering
September 2015	Issued RFQ for C1120 Design/Build contract
October 2015	Received RFQ responses for C1120 Design/Build contract
May 2016	Submitted draft FFGA application
May 2016	Submitted TIFIA loan application
June 2016	Submitted application to FTA requesting an FFGA
June 2016	Received RFP Proposals for Contract C1120
September 2016	Began telecom joint trench construction in Century City
December 2016	FTA executed FFGA
December 2016	Received TIFIA Loan
January 2017	NTP for Construction Management Support Services Contract
January 2017	Metro Board approved staff recommendation to award the Design/Build Contract C1120 to TPOG and approved Life-of-Project Budget
January 2017	Issued C1120 Contract Award to TPOG
April 2017	Issued C1120 Contract NTP to TPOG
May 2017	Mobilized C1120 Contract Design and Construction Team
August 2017	Third party relocations started at Century City Constellation Station
September 2017	Third party relocations started at the Wilshire/Rodeo Station
November 2017	Beverly Hills City Council approved Memorandum of Agreement (MOA) governing remaining third party utility relocations

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December 2017	Final Supplemental Environmental Impact Statement (FSEIS) was available to the public in the Federal Registry on December 1, 2017
January 2018	Completed all utility relocations within the Tunnel Boring Machine "Launch Box"
February 2018	Held Groundbreaking Ceremony on February 23, 2018
May 2018	Bureau of Engineering approved a nine-month street closure of Constellation Blvd. between Century Park East and Avenue of the Stars
September 2018	Full street closure of Constellation Blvd. commenced
September 2018	Delivery of tunnel boring machines (TBMs) commenced
October 2018	Piling installation commenced at launch box in Century City
October 2018	Granted Wilshire/Rodeo Station footprint right-of-way (ROW) access to TPOG
December 2018	Completed all civil work for third parties at Century City Constellation Station
December 2018	Demolition of former Ace Gallery completed
January 2019	Completed soldier pile installation for the TBM launch box at the eastern end of the Century City Constellation Station
March 2019	Start of installation of deck beams for the TBM launch box