# Westside Purple Line Extension Section 2 Project



# WESTSIDE PURPLE LINE EXTENSION SECTION 2 PROJECT

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).

**AUGUST 2017** 

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## **PROJECT OVERVIEW & STATUS**

Section 2 of the Westside Purple Line Extension Project is the second of three sections to be designed and constructed as part of the Los Angeles County Metropolitan Transportation Authority (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 the Century City area. 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 and two new stations as well as the purchase of 20 heavy rail vehicles. 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.

#### <u>Design</u>

The Engineering Management Services (EMS) team 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 supporting Metro in reviewing final design submittals, responding to RFI's, and assisting in the preparation of change notices.

The C1120 Contractor, Tutor Perini/O&G a Joint Venture (TPOG), has mobilized the final design team, STV.

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)
- Design Package 3 (Volume 1) Tunnel Reaches Design Package 3 (Volume 2) – Stations Design Package 3 (Volume 3) – Track & Systems

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). If required, critical design units can be advanced as Advanced Partial Design Units (APDU's) to support ongoing construction activities.

TPOG submitted for review the Tunnel Boring Machines (TBMs) preconstruction initial design demonstrating that the TBMs meet the Project's specifications. Design progress meetings are occurring weekly related to the design unit packages. Contractor is continuing with the required contractual submittals. Other design related submittals that the Contractor has submitted this period are: Design Unit Review Packages and Work Plans (8/1/2017); Support of Excavation Design Approach Report (8/10/2017); Design Package 1 – Utility/Civil Design at Launch Box in Century City 60% Design (8/22/2017); and CAD-REVIT (8/23/2017). Design Package 2 – Remaining Utility Conflicts (Outside of Launch Box) to be submitted next period.

TPOG's 120-Day schedule is currently being utilized for progress and payment purposes. Baseline CPM Schedule was submitted in August 2017; however, it was rejected and requires

resubmittal. Next Baseline CPM Schedule submittal is planned in September 2017.

#### Major Contract Procurement

All construction contracts for the Project have been awarded.

#### **Construction**

#### **Advanced Utility Relocations**

Century City Constellation: Telecom joint trench civil work completed in June 2017. Cable pulling and splicing work is anticipated to complete in September 2017. LADWP Water inside TBM launch box construction was completed in June 2017. LADWP Power construction began in May 2017. SCG and AT&T utility relocations are underway.

Wilshire/Rodeo: SCE will begin its relocation of power lines in September 2017, to be followed by SCG and AT&T once SCE construction is complete.

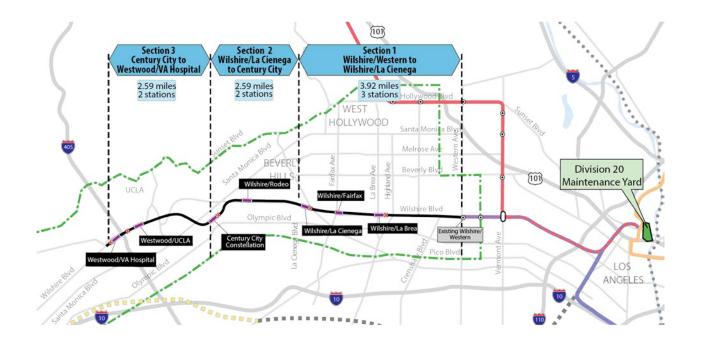
#### **Contract C1120 – Tunnels, Stations, Trackwork and Systems (Design/Build)** Contract award was issued on January 31, 2017 and Notice to Proceed on April 26, 2017.

TBMs purchase order has been executed.

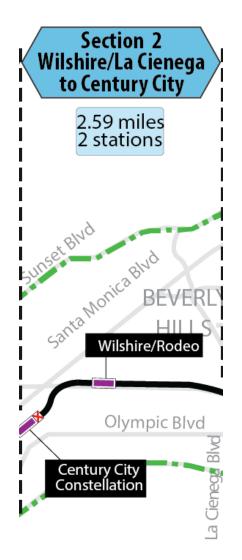
## MANAGEMENT ISSUES

No management issues this period.

## **PROJECT ALIGNMENT by SECTIONS**



#### **PROJECT ALIGNMENT SECTION 2**



## **BASE PROJECT SCOPE**

Section 2 of the Westside Purple Line Extension Project is the second of three sections to be designed and constructed as part of the Los Angeles County Metropolitan Transportation Authority (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.

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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.

#### <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 launch (TBM) 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.

## **BASE PROJECT SCOPE (Continued)**

#### Metro Furnished Equipment

Metro has procured a separate contract to provide the 20 Heavy Rail Vehicles (HRV) and will procure a separate contract for the Universal Fare System (UFS) necessary to operate the Purple Line. 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 stations and system testing.

#### 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"; 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.

## **KEY MILESTONES SIX-MONTH LOOK AHEAD**

	Milestone Date	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18
Third party utility construction begins at Wilshire/Rodeo - SCE	09/05/17	$\triangle$					
Submit 60% Design Package 2 - Remaining Utility Conflicts (Outside of Launch Box)	09/14/17						
Third party utility construction complete at Century City Constellation - SCG (inside Launch Box)	09/25/17	$\triangle$					
Third party utility construction begins at Century City Constellation - SCG (outside Launch Box)	09/26/17	$\triangle$					
Third party utility cable pulling & splicing completes at Century City Constellation -Telecom	09/29/17	$\triangle$					
Third party utility construction begins at Century City Constellation - AT&T	10/04/17		$\triangle$				
Submit 85% Design Package 1 - Utility/Civil Design at Launch Box in Century City	10/13/17						
Complete SEIS	11/03/17			•			
Submit 85% Design Package 2 - Remaining Utility Conflicts (Outside of Launch Box)	11/14/17						
Submit 100% Design Package 1 - Utility/Civil Design at Launch Box in Century City	12/05/17						
Third party utility construction complete at Century City Constellation - AT&T	01/17/18					$\triangle$	
Third party utility cable pulling & splicing complete at Wilshire/Rodeo - SCE	01/31/18					$\triangle$	
Third party utility construction begins at Wilshire/Rodeo - SCG	02/01/18						$\triangle$
Third party utility construction begins at Wilshire/Rodeo - AT&T	02/01/18						$\triangle$
Submit 60% Design Package 3 - Volumes 1, 2, 3	02/05/18						
Submit 100% Design Package 2 - Remaining Utility Conflicts (Outside of Launch Box)	02/05/18						

٠ ٠ • h MASTER SCHEDULE Data Date: 02-Sep-17 of 1 ٠ Westside Purple Line Extension Section 2 Project Los Angeles County Metropolitan Transportation Authority Management Schedule - MPSR 09-Aug-12 A 24-Jan-13 A 20-May-15 A 26-Apr-17 A 31-Dec-14 A 15-Dec-16 A 13-Apr-16 A 15-Aug-25 07-Aug-26 07-Oct-25\* 26-Apr-12 A 26-Jan-17 A 26-Apr-17 A 25-Oct-19 06-Nov-18 25-Aug-18 20-Dec-16 A 31-Dec-26\* 06-Nov-18 21-Nov-23 29-Dec-23 31-Dec-14 A 26-Apr-17 A 23-May-25\* 03-Nov-17 03-Nov-17 25-Oct-19 15-Aug-25 23-May-25 08-Feb-24 01-Apr-20 01-Mar-24 26-Mar-25 23-May-25 20-Dec-24 28-Aug-25 28-Aug-25 07-Aug-26 Dec-26 31-Dec-26 05-Jan-15 A 02-Mar-15 A 03-Aug-15 A 31-Dec-14 A 05-Jan-15 A 02-Mar-15 A 02-Mar-15 A 02-Mar-15 A 28-May-15 A 05-Jan-15 A 01-Jul-15 A 28-May-15 A 06-Sep-16 A 05-Sep-17 06-Sep-16 A 27-Apr-17 A 26-Apr-12 A 03-Jan-22 25-Apr-19 22-Apr-24 29-Aug-25\* 04-Mar-24 01-Jul-21 19-Jun-25 19-Jun-25 14-Jul-25 14-Jul-25 26-1 1210 1072 2565 2565 600 500 2186 1626 1715 1485 170 497 677 677 264 <mark>929</mark> 929 647 895 311 7 270 270 583 494 481 3497 0 0 0 0 0 4 0 0 0 0 0 0 0 Contract C1120 Milestone #1 - Substantial Completion (NTP+2,950 CD Project Close Out C1120 Milestone # 4 - Complete Demobilization (NTP+3,100 CD) Metro Board Adopt Project & Authorize Life of Project Budget FTA Approval to Enter into New Starts Engineering Phase FTA Approval to Enter Into Preliminary Engineering FTA Issue Full Funding Grant Agreement (FFGA) Current Schedule Forecast Revenue Service Date - RSD Issue NTP to Major D/B Contractor MTA Board Approve Final EIS/EIR FFGA Revenue Service Date FTA Record of Decision Advanced Preliminary Engineering (APE) WPLE Section 2 - Wilshire/La Cienega to Century City Co Re-Start Section 2 **PROJECT PLANNING & DEVELOPMENT** Summary Heavy Rail Vehicles Contract HR4000 Universal Fare Collection Equipment Section 2 - Wilshire/La Ciene Environmental Document Update OWNER FURNISHED EQUIPMENT SCADA Software and Equipment Site Work & Temporary Facilities AILESTONES & KEY DATES FTA Process & Approvals RE Acquisitions - Critical **RE Relocations - Critical** Critical Remaining Work Contract Procurement RIGHT-OF-WAY (R/W) Pre-revenue Service WS2-WS-PC-1000 WS2-WS-PC-1005 Guideway & Track Remaining Work Final Design (FD) Project Close-Out CONSTRUCTION Actual Work ENGINEERING Miscellaneous WS2-MS1010 WS2-MS1120 WS2-MS1000 WS2-MS1005 WS2-MS1020 WS2-MS1030 WS2-MS1040 WS2-MS1050 WS2-MS1060 WS2-MS1070 WS2-MS1110 Milestone Systems Stations Utilities Start Up Testing WPLE

#### **PROJECT SUMMARY SCHEDULE**

#### SCHEDULE MEASUREMENTS

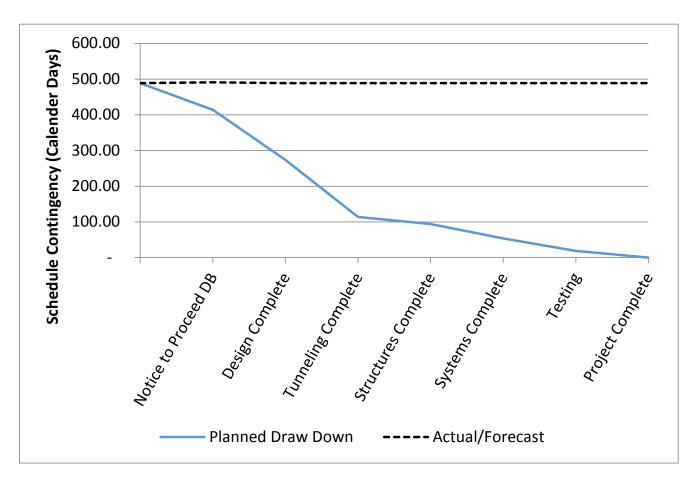
## **OVERALL CONSTRUCTION PROGRESS CURVE**

#### MAJOR EQUIPMENT DELIVERY

## DESIGN BUILDER'S (C1120) LONG LEAD ITEM LIST

## **CRITICAL PATH NARRATIVE**

The Critical Path begins with the procurement process for the C1120 Design/Build (D/B) contract, mobilization of the design team for the contractor, and the start of final design for station boxes and tunnels. The Design/Build contractor begins installation of soldier piles, first on the north side of the Century City Constellation Station box, and then on the south side. Temporary street decking is then installed, the station structural box is excavated, and invert concrete is placed. Concurrently with this is the procurement and assembly of the tunnel boring machines (TBM). The path continues with tunneling and then street decking, station box excavation and concrete invert at the Wilshire/Rodeo Station. The path then follows into systems integration and testing and pre-revenue operations.



## PROJECT SCHEDULE CONTINGENCY DRAWDOWN

## **PROJECT SCHEDULE CONTINGENCY DRAWDOWN ANALYSIS**

The project schedule contingency drawdown curve is based on an August 29, 2025 Forecast Revenue Service Date (RSD).

## **PROJECT COST STATUS**

SCC CODE	DESCRIPTION		CURRENT BUDGET		COMMITMENTS		EXPENDITURES		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	-	346,440	-	329,943	7,475	12,650	-	346,440	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	434,990	-	434,990	-	410,368	-	41	-	434,990	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	-	-	-	-	-	-	-	-	-	-
40	SITEWORK & SPECIAL CONDITIONS	553,282	-	553,282	1,538	522,215	32,950	123,119	-	553,282	-
50	SYSTEMS	81,457	-	81,457	-	68,537	-	-	-	81,457	-
	CONSTRUCTION SUBTOTAL (10-50)	1,416,169	-	1,416,169	1,538	1,331,063	40,425	135,810	-	1,416,169	-
60	ROW, LAND, EXISTING IMPROVEMENTS	426,396	-	426,396	-	166,839	263	128,620	-	426,396	-
70	VEHICLES	42,000	-	42,000	-	-	-	-	-	42,000	-
80	PROFESSIONAL SERVICES	374,878	-	374,878	-	167,592	7,827	78,680	-	374,878	-
	SUBTOTAL (10-80)	2,259,444	-	2,259,444	1,538	1,665,494	48,514	343,110	-	2,259,444	-
90	UNALLOCATED CONTINGENCY	177,176	-	177,176	-	-	-	-	-	177,176	-
100	FINANCE CHARGES	88,695	-	88,695	-	-	-	-	-	88,695	-
DTAL PR	OJECT 865522 (FFGA & NON-FFGA CONCURRENT ACTIVITIES)	2,525,314	-	2,525,314	1,538	1,665,494	48,514	343,110	-	2,525,314	-
	ENVIRONMENTAL/PLANNING - 465518 & 465522		-	4,349	-	2,203	101	2,108	-	4,349	-
	TOTAL PROJECT 465518 & 465522 (ENV / PLAN'G)	4,349	-	4,349	-	2,203	101	2,108	-	4,349	-
	TOTAL PROJECTS 465518, 465522 & 865522	2,529,664	-	2,529,664	1,538	1,667,697	48,615	345,219		2,529,664	-

## **PROJECT COST ANALYSIS**

#### **Original Budget, Current Budget and Forecast**

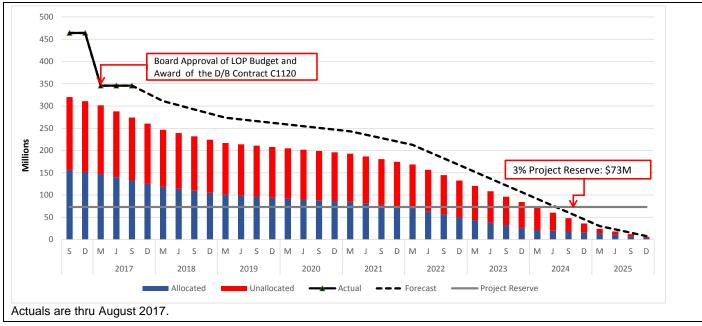
The Original Budget, Current Budget and Forecast of \$2.5 billion reflect the Life of Project (LOP) budget approved by the Board on January 26, 2017, plus Finance Charges of \$88.7 million.

#### Commitments

The Commitments increased this period by \$1.5 million due to executed task orders for environmental services. The \$1.7 billion in Commitments to date represents 65.9% of the Current Budget.

#### Expenditures

The Expenditures increased this period by \$48.6 million primarily for costs associated with Design/Build Contract C1120, Private Utilities, Real Estate Acquisitions, Metro Project Administration, Construction Management Support Services, and Master Cooperative Agreement with the City of Los Angeles. The \$345.2 million in Expenditures to date represents 13.6% of the Current Budget.



#### PROJECT COST CONTINGENCY DRAWDOWN

## PROJECT COST CONTINGENCY DRAWDOWN ANALYSIS

The Current Budget of \$2.5 billion includes finance charges totaling \$88.7 million. It also includes a project cost contingency of \$345.7 million or 13.7% of the total project, which is based upon 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 where 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 an August 29, 2025 Forecast Revenue Service Date (RSD).

The project contingency remained unchanged this period.

PROJECT COST CONTINGENCY DOLLARS IN THOUSANDS					
	Original Contingency (Budget)	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)
Unallocated Contingency	177,176	0	0	0	177,176
Allocated Contingency	168,534	0	0	0	168,534
Total Contingency	345,710	0	0	0	345,710

#### DISADVANTAGED BUSINESS ENTERPRISE (DBE)

None to report at this time.

## **PROJECT LABOR AGREEMENTS (PLA) STATUS**

The Contractor has committed to comply with PLA/CCP requirements for the Project. Project Staff will monitor and report the contractor's progress toward meeting the goals of the PLA/CCP once construction begins.

#### SUMMARY OF CONTRACT MODIFICATIONS

No Contract Modifications (MODs) have been executed since the award of Contract C1120– Tunnels, Stations, Trackwork, and Systems to Tutor Perini/O&G, a Joint Venture.

## **FINANCIAL/GRANT STATUS**

		(IN MILLIONS (	OF DOLLARS)						
SOURCE	(A) ORIGINAL BUDGET	(B) TOTAL FUNDS	(C) TOTAL FUNDS	(D) COMMIT	(D/B) MENTS	(E) EXPEN	(E/B) NDITURES	(F) BILLED TO SOURC	
		ANTICIPATED	AVAILABLE	\$	%	\$	%	\$	%
FEDERAL - SECTION 5309 NEW STARTS	\$1,187.000	\$1,187.000	\$100.000	\$1,045.545	88%	\$140.580	12%	\$88.428	7%
FEDERAL CMAQ	\$169.000	\$169.000	\$43.000	\$43.000	25%	\$22.703	13%	\$22.703	13%
MEASURE R - TIFIA LOAN	\$307.000	\$307.000	\$146.000	\$307.000	100%	\$0.000	0%	\$0.000	0%
MEASURE R 35%	\$811.902	\$811.902	\$145.783	\$217.390	27%	\$127.174	16%	\$56.265	7%
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	\$489.545	\$1,667.697	65.9%	\$345.219	13.6%	\$222.158	8.8%

## STATUS OF FUNDS ANTICIPATED

**FEDERAL SECTION 5309 NEW STARTS:** FTA grant CA-2016-047 for \$100.0 million was awarded by the FTA on December 15, 2016. Funds are available for drawdown. *FTA grant CA-2016-047 Amendment No. 1 for \$100.0 million was submitted in July 2017and pending award.* 

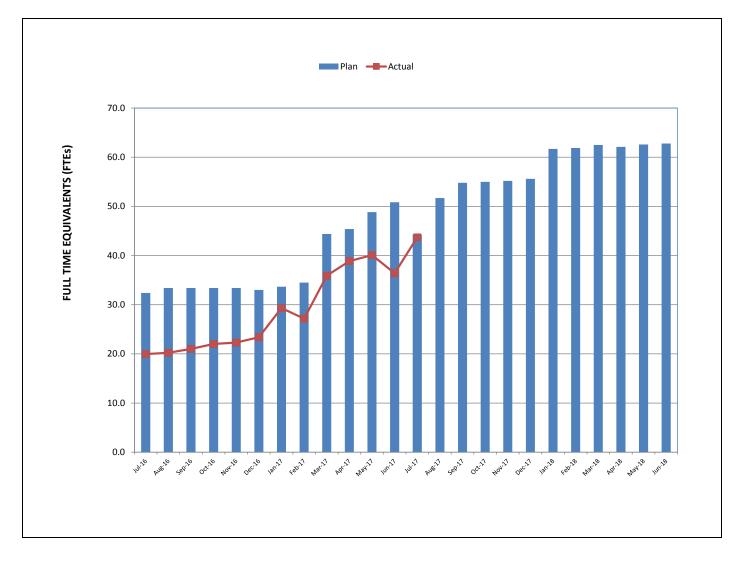
**CMAQ (Congestion Mitigation & Air Quality):** FTA grant CA-2016-2045 for \$43.0 million was awarded by the FTA on December 15, 2016. Funds are available for drawdown.

**MEASURE R – TIFIA LOAN (Transportation Infrastructure Finance & Innovation Act):** TIFIA Loan was executed on December 20, 2016 for \$307.0 million. \$146 million funds are available for drawdown. First disbursement is planned for November 2017.

**MEASURE R:** \$145.8 million have been allocated to the Project through FY18. Funds are available for drawdown.

## **STAFFING STATUS**

Total Project Staffing – FTEs



## **TOTAL PROJECT STAFFING**

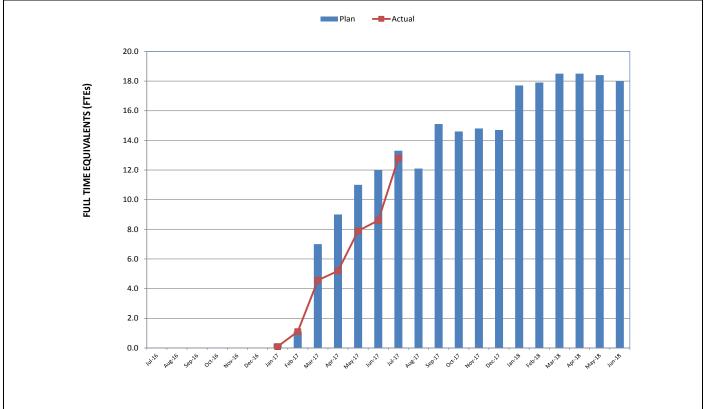
The overall FY18 Total Project Staffing Plan averages 57.3 FTEs per month.

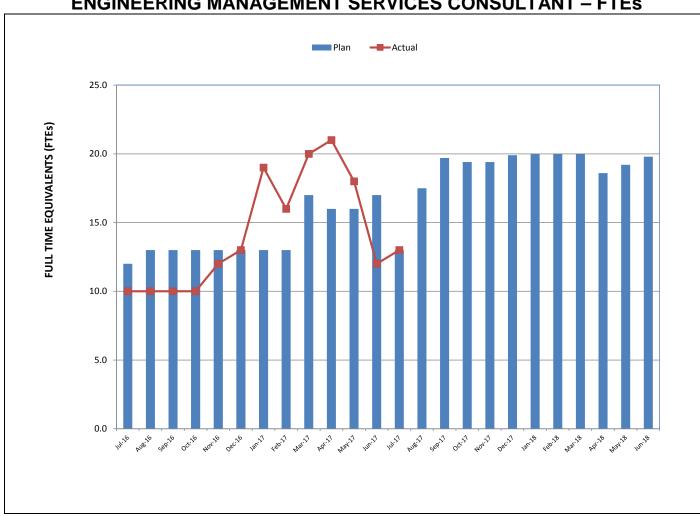
For July 2017, there were a total of 17.9 FTEs for MTA's Project Administration Staff and 25.8 FTEs for Consulting Staff. The total project staffing for July 2017 was 43.7 FTEs.



# **STAFFING STATUS (Continued)**

#### CONSTRUCTION MANAGEMENT SUPPORT **SERVICES CONSULTANT – FTEs**





#### STAFFING STATUS (Continued) ENGINEERING MANAGEMENT SERVICES CONSULTANT – FTEs

## **REAL ESTATE STATUS**

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	11	1	
Part Takes	3	1	1	1	0	0	0	0	0	
TCE	3	3	1	1	0	1	1	0	0	
SSE	23	1	1	1	0	1	3	0	0	
Permanent Easements	1	0	0	0	0	0	0	0	0	
Total Parcels	33	8	6	6	1	4	25	11	1	

## QUALITY ASSURANCE STATUS

- Attended weekly project staff meetings and progress meetings with the C1120 contractor.
- Reviewed and provided comments on quality related submittals such as the Project Design Quality Manual. The disposition was rejected, revised and resubmitted.
- Received and approved Design Quality and Project Quality Manager resumes.

## **ENVIRONMENTAL STATUS**

- Performed daily noise monitoring activities at Century City Constellation Station for advanced utility relocation work and submitted daily field reports.
- Participated in various project pre-construction and advanced utility relocation meetings and reported on environmental compliance with local, state and federal regulations, specifications and EIR.
- Provided environmental awareness training to utility construction crew as required.
- Conducted field environmental monitoring and spot check inspections for construction noise, stormwater and dust BMPs, cultural resources and Metro's Green Construction Policy.
- Participated in various C1120 contract coordination meetings and evaluated progress and schedules for environmental compliance and sustainability efforts.
- The Federal Transit Administration (FTA) reviewed the 8<sup>th</sup> Quarter Mitigation Measures Status Report (MMSR) and determined report to be compliant with the mitigation requirements of OP 20.
- FTA reviewed and provided comment on 9<sup>th</sup> Quarter MMSR. Will conduct comment resolution meeting with FTA in September 2017.
- Finalized June 2017 Noise Monitoring Report. July 2017 Noise Monitoring Report in review.
- Submitted Noise Control and Monitoring Plan and Haul Route to City of Beverly Hills for SCE utility relocation permit. Permit has been approved.
- Attended and provided environmental guidance at SCE utility relocation construction kickoff meeting with SCE and City of Beverly Hills staff.
- Commenced asbestos and lead paint abatement of former Ace Gallery at 9430 Wilshire Blvd.

## CONSTRUCTION RELATIONS STATUS

- Attended the following meetings: Construction Management, Advanced Utility Relocations, Construction Relations, Environmental Mitigations, Third Party Workshop, Marketing, Social Media and Bus Relocations and Stops.
- Conducted online and door-door outreach for community meetings and potholing/geotechnical investigation work.
- Addressed Traffic control complaints related to utility work on Constellation and turn restrictions during SCE work at the Rodeo Station.
- Updated Facebook/Twitter and website as needed.
- Produced and distributed two pre-construction work notices for advance utility relocations.
- Made project presentations at the following: Bank of America Building, Beverly Hills Chamber of Commerce, Century City Building Managers.

## **CREATIVE SERVICES STATUS**

- Conducted Community outreach and coordinated cultural partnerships.
- Refined artwork opportunities with Metro Planning staff.

## **SAFETY & SECURITY STATUS**

- Third party advanced utility relocation work continues. *No injuries reported during August 2017.*
- Monitored Third party advance utility construction work activities to insure contractor compliance with regulations and good business practices.
- Attended LADWP Water and Power Field Tool-Box Safety Meetings and conducted site safety walks.
- Attended weekly Project Issues Standing Meetings.
- Conducted Safety Workshop and coordination meetings with TPOG-JV safety staff and defined over-the- shoulder review schedules.
- Met with the D/B Contractor safety personnel to insure pre-submittal compliance for adequate contractual construction safety staffing.
- Conducted project safety orientation for new Metro/Consultants and IPMO project staff.
- Continued ongoing project safety and security administrative requirements.
- Conducted over-the-shoulder reviews on safety/security submittal drafts with TPOG-JV safety staff.
- Conducted right-of-way (ROW) and worksite safety walks.
- TPOG-JV design work completed 7,359 worked-hours for May 2017; 10,297 workedhours for June 2017 and 15,646 worked-hours for July 2017 with zero recordable incidents.
- Total Project to Date work-hours are 34,727 and zero recordable incidents.
- Injury and work hour statistics were submitted as noted above. Note that injury and work hour statistics are contractually required to be submitted by the 10<sup>th</sup> of every month. August Injury and work hour statistics will be provided in next month's report.
- Reviewed formal TPOG-JV Project Safety Submittals.

## THIRD PARTY AGREEMENT STATUS

No.	Third Party	Type of Agreement	Forecast Execution Date	Required Need Date	Status/ Comments
1	City of Los Angeles (LA)	Master Cooperative Agreement	N/A	N/A	Parties will work under 2003 MCA.
2	City of Beverly Hills (COBH)	Memorandum of Agreement	03/17(A)	03/17(A)	Reimbursement Agreement was executed in March 2017.
			06/17(A)	06/17(A)	Beverly Hills City Council approved the construction permit for SCE work in June 2017. Other utility relocation construction permits will be processed as needed.
			03/18	04/18	Metro continues to work with the City to establish an MOA for the C1120 Design/Build contract. Required Need Date reflects turnover date to C1120 contractor for station footprint availability.
3	Los Angeles Department of Water and Power (LADWP)- Water & Power	Master Cooperative Agreement	N/A	N/A	Metro and LADWP will continue to work under the terms of the previous Master Cooperative Agreement.
4	Los Angeles County Public Works Flood Control	Master Cooperative Agreement	N/A	N/A	Executed.
5	Private Utilities	Utility Cooperative Agreement	N/A	N/A	AT&T, Pac Bell, SBC, MCI, Verizon, Southern California Gas Company (SCGC), TCG Los Angeles – Metro is working under existing agreements.
			11/17	11/17	Level 3 – Metro and Level 3 have initiated a new agreement. Currently, awaiting comments from Level 3. Time Warner Pacific West LLC, D/B/A Time Warner Cable – County Counsel to respond to Time Warner's latest comments. SCE – Metro and SCE have initiated a new agreement. A draft is under review. Veolia – A draft agreement has been submitted to Veolia for review and comment. Sprint – A draft of the Agreement submitted has been submitted to Sprint, pending comments.
			11/17	11/17	Zayo, XO Communications, LLC – the agreements have been finalized and will be presented to the Board.

## ADVANCED UTILITY RELOCATION STATUS

#### Century City Constellation

- Completion of Telecom joint trench cable pulling and splicing work is anticipated by September 2017.
- LADWP Power utility relocations are ongoing.
- Southern California Gas advanced utility relocations inside the TBM launch box are ongoing.
- AT&T advanced utility relocations will begin in October 2017.

#### Wilshire/Rodeo

 Advanced third party utility relocations will begin with the relocation of SCE facilities in September 2017.

#### PEAK HOUR AND NIGHTTIME CONSTRUCTION VARIANCES

Metro is actively pursuing extended hour variances/exemptions to accommodate the Project's needs. Metro staff is working with the City of Beverly Hills, City of Los Angeles Bureau of Engineering and the Los Angeles Police Commission to obtain Peak Hour Exemptions and Nighttime Construction Variances.

- Peak Hour Exemption application is in progress for the TBM launch box excavation on Constellation Boulevard.
- A peak hour exemption for the LADWP Water relocation has been approved from May 15, 2017 to August 17, 2017. Construction work completed in June 2017.
- A Peak Hour Exemption application for AT&T relocations on Constellation Boulevard has been approved from August 23, 2017 to November 17, 2017.
- A Nighttime noise variance permit for relocation of third party utilities on Constellation Boulevard is approved through October 2017. Application for extension of noise variance submitted at the end of August 2017 to LAPD Commissioner's office.

## **CHRONOLOGY OF EVENTS**

August 2012	FTA Record of Decision
January 2013	FTA approval to enter to Preliminary Engineering
December 2014	FTA approval to enter to 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 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 Tutor Perini/O&G, a Joint Venture (TPOG) and approved Life-of-Project Budget
January 2017	Issued C1120 Contract Award TPOG
April 2017	Issued C1120 Contract NTP to TPOG
May 2017	Mobilized C1120 Contract Design and Construction Team

CONTRACT	Г С1120 S <sup>.</sup>	ΤΑΤ	JS					
Description: Purple Line Extension Design-Build	Contract No. C1120							
Contractor: Tutor Perini/O&G a Joint Venture	Status as of: September 1, 2017							
Progress / Work Completed: - Submitted 60% Dsgn Pkg 1 - Utility/Civil Design at Launch Box - BIM Implementation plan submitted for review - Contract Data Requirements (CDLR) list submitted for review - SOE Design Approach submitted for review - Baseline CPM schedule submitted for review - Construction Project Quality Program Manual submitted for review	Major Activities (In Progress): - Continue final design development - Baseline CPM schedule preparation - Prepare/Submit TBM Excavation/Support Plan - Prepare/Submit Noise Monitoring Plan Submittal - Prepare/Submit Vibration Monitoring Plan Submittal - Prepare/Submit Safety Management Plan Submittal							
Areas of Concern: - None	Major Activities Next Period: - Preconstruction Conference with CALOSHA to discuss permits underground safety requirements - Partnering Task Force Kick-off Meeting with Paradyne, MTA, TP - Targeting November 2017 for demolition of former ACE Gallery - COBH review of Support of Excavation (SOE) Design Memorandu				, TPOG y			
Schedule Summary:		Original Contract Dates	Time Extension	Current Contract	Forecast	Variance CDs		
Date of Award:         01/31/17           Notice to Proceed:         04/26/17	Notice to Proceed (Estimated)	04/26/17	0	04/26/17	04/26/17	0		
Original Contract Duration: 3,100 CD Current Contract Duration: 3,100 CD	MS 1 (NTP + 2950): Substantial Completion	05/24/25	0	05/24/25	05/24/25	0		
Elapsed Time from NTP: 129 CD	MS 2 (NTP + 2600): Stations Available	06/08/24	0	06/08/24	06/08/24	0		
	MS 3 (NTP + 2700): Ready for Systems Integration Testing	09/16/24	0	09/16/24	09/16/24	0		
	MS 4 (NTP + 3100): Demobilization	10/21/25	0	10/21/25	10/21/25	0		
Physical Percent Complete:	Cost Summa 1. Award Value: 2. Executed Modil	-	,	\$	In milli 1,376.5			
<ul> <li>Physical completion: 3.40%</li> <li>* Note 1: Physical completion assessment reflects work completed and work in progress.</li> <li>2: Physical completion includes Final Design.</li> </ul>	<ol> <li>Executed Modif</li> <li>Approved Chang</li> <li>Current Contract</li> <li>Incurred Cost:</li> </ol>	ge Orders:			0.0 0.0 1,376.5 169.8			



## **CONSTRUCTION PHOTOGRAPHS**



LADWP power work in Century City

#### COST AND BUDGET TERMINOLOGY

#### **Project Cost Descriptions**

ORIGINAL BUDGET	The Original Project Budget as authorized by the Metropolitan Transportation Authority (Metro) Board.
CURRENT BUDGET	The Original Budget plus all budget amendments approved by formal Metro Board action. Also referred to as Approved Budget.
COMMITMENTS	The total of actual contracts awarded, executed change orders or amendments, and approved work orders of Master Cooperative Agreements, offers accepted for purchase of real estate, and other Metro actions which have been spent or result in the obligation of specific expenditures at a future time.
EXPENDITURES	The total dollar amount of funds expended by Metro for contractor or consultant services, third party services, staff salaries, real estate and other expenses that is reported in Metro's Financial Information System (FIS).
CURRENT FORECAST	The best estimate of the final cost of the Project when all checks have been issued and the Project is closed out. Current Forecast is composed of actual costs incurred to date, the best estimate of work remaining and a current risk assessment for each budgeted cost item.

#### **Cost Report by Element Descriptions**

CONSTRUCTION	Includes construction contracts. Cost associated with Guideways, Stations, Southwestern Yard, Sitework/Special Conditions and Systems.
RIGHT-OF-WAY	Includes purchase cost of parcels, easements, right-of-entry permits, escrow fees, contracted real estate appraisals and tenant relocation.
VEHICLES	Includes the purchase of Heavy Rail Vehicles and spare parts for the Project.
PROFESSIONAL SERVICES	Includes design engineering, project management assistance, construction management support services, legal counsel, agency staff costs, and other specialty consultants.
CONTINGENCY	A fund established at the beginning of a project to provide for anticipated but unknown additional costs that may arise during the course of the Project.
PROJECT REVENUE	Includes all revenue received by Metro as a direct result of project activities. This includes cost sharing construction items, insurance premium rebates, and the like.

#### LIST OF ACRONYMS AND ABBREVIATIONS

ATC       Automatic Traini Control         ATSAC       Automated Traffic Surveillance and Control         BAFO       Best and Final Offer         BIM       Building Information Modeling         BNSF       Burlington Northern Santa Fe Railway Company         BRT       Bus Rapid Transit         CADD       Computer Aided Drafting and Design         CALTRANS       California Department of Transportation         CCTV       Closed Circuit Television         CD       Calendar Day         CEQA       California Environmental Quality Act         CM       Construction Manager         CMAQ       Congestion Mitigation and Air Quality Improvement Program         CMSC       Construction Management Support Services Consultant         CN       Change Notice         CO       Change Notice         CO       Change Order         COBH       City of Los Angeles         CPM       Critical Path Method         CPUC       California Public Utilities Commission         CR       Camera Ready         CRMMP       Cultural Resource Monitoring and Mitigation Plan         CSPP       Construction Safety Phasing Plan         CTC       California Transportation         D/B       Desig		LIST OF ACTON TWIS AND ABBREVIATIONS
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## LIST OF ACRONYMS AND ABBREVIATIONS (Continued)

FTA	Federal Transit Administration
FTE	Full Time Equivalent
GBR	Geotechnical Baseline Report
GDSR	Geotechnical Design Summary Report
HRT	Heavy Rail Transit
HRV	Heavy Rail Vehicle
IFB	Invitation for Bid
IPMO	Integrated Project Management Office
JV	Joint-Venture
LA	Los Angeles
LABOE	Los Angeles Bureau of Engineering
LABOS	Los Angeles Bureau of Sanitation
LABSL	Los Angeles Bureau of Street Lighting
LACFCD	Los Angeles County Flood Control District
LACMTA	Los Angeles County Metropolitan Transportation Authority
LADOT	Los Angeles Department of Transportation
LADPW	Los Angeles Department of Public Works
LADWP	Los Angeles Department of Water and Power
LAUSD	Los Angeles Unified School District
LAWA	Los Angeles World Airports
LAX	Los Angeles International Airport
LNTP	Limited Notice To Proceed
LONP	Letter Of No Prejudice
LOP	Life-of-Project
LPA	Locally Preferred Alternative
LRTP	Long Range Transportation Plan
MCA	Master Cooperative Agreement
MIS	Major Investment Study
MMRP	Mitigation Monitoring and Reporting Plan
MOU	Memorandum of Understanding
MPSR	Monthly Project Status Report
N/A	Not Applicable
NEPA	National Environmental Protection Act
NOD	Notice of Determination
NPDES	National Pollution Discharge Elimination System
NTE	Not to Exceed
NTP	Notice To Proceed
000	Operations Control Center
OSHA	Occupational Health and Safety Administration
PA/VMS	Public Address/Visual Messaging Sign
PE	Preliminary Engineering
PEER	Permit Engineering Evaluation Report
PIP	Project Implementation Plan
PLA	Project Labor Agreement
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## LIST OF ACRONYMS AND ABBREVIATIONS (Continued)

	ACICONTINIS AND ADDICE VIA HONS (CON
PM	Project Manager
PMIP	Project Management Implementation Plan
PMOC	Project Management Oversight Consultant
PMP	Project Management Plan
P&P	Policies & Procedures
PR	Project Report
PRMMP	Paleontological Resource Monitoring Mitigation Plan
PSR	Project Study Report
QA	Quality Assurance
QAR	Quality Assurance Report
QC	Quality Control
QPSR	Quarterly Project Status Report
QTIB	Qualified Transit Improvement Bonds
RAMP	Real Estate Acquisition Management Plan
RCHAR	Rail Crossing Hazards Analysis Report
RCMP	Risk Assessment Management Plan
RFC	Request For Change
RFP	Request For Proposals
RFSC	Request for Special Consideration
RHA	Risk Hazard Analysis
ROC	Rail Operations Center
ROD	Record Of Decision
ROM	Rough Order of Magnitude
ROW	Right-Of-Way
RPZ	Runway Protection Zone
RSD	Revenue Service Date
SAV	Stand Alone Validator
SCAQMD	Southern California Air Quality Management District
SCADA	Supervisory Control and Data Acquisition
SCC	Standard Cost Category
SCE	Southern California Edison
SCG	Southern California Gas Company
SCRRA	Southern California Regional Rail Authority
SHA	State Highway Account
SHPO	State Historic Preservation Office
SIT	System Integration Testing
SOQ	Statement of Qualification
SOV	Schedule Of Value
SOW	Statement Of Work
SP	Special Provision
SSMP	Safety and Security Management Plan
STB	Surface Transportation Board
STIP	State Transportation Improvement Program
STP	Surface Transportation Program

## LIST OF ACRONYMS AND ABBREVIATIONS (Continued)

STV	STV Group
SWPPP	Storm Water Pollution Prevention Plan
TBD	To Be Determined
ТВМ	Tunnel Boring Machine
TCE	Temporary Construction Easement
TCRP	Traffic Congestion Relief Program
TIFIA	Transportation Infrastructure Finance and Innovation Act
TIGER	Transportation Investment Generating Economic Recovery
TPOG	Tutor Perini/O&G a Joint Venture
TPSS	Traction Power Substation
TRACS	Transit Automatic Control System
TVA	Threat Vulnerability Analysis
TVM	Ticket Vending Machine
UFS	Universal Fare System
USDOT	United States Department Of Transportation
VE	Value Engineering
WBS	Work Breakdown Structure
WP	Work Package
YOE	Year of Expenditure