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).

FEBRUARY 2017

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Westside Purple Line Extension Section 2 Project Monthly Project Status Report

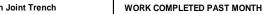
PROJECT SUMMARY

LOCATION: Los Angeles / Beverly Hills
DESIGN CONSULTANT: Parsons Brinkerhoff

CM CONSULTANT: AECOM, Saferwork, Morgner, TEC (PL2CM)

CONTRACTOR: Tutor Perini / O&G (TPOG)

Century City Constellation Joint Trench





Century City Constellation

- -Continuation of joint trench construction
- -Joint trench design plans and worksite traffic control plans submitted and approved

Wilshire/Rodeo

- -Received City of Beverly Hills (COBH) staff concurrence on final design plans for SCE relocation $\,$
- -Submitted to COBH staff final worksite traffic controls plans for SCG & AT&T relocations

EXPENDITURE STATUS (\$ In Millions)				SCHEDULE ASSESSMEN	IT					
ACTIVITIES	CURRENT BUDGET	EXPENDED AMOUNT	PERCENT EXPENDED	MAJOR SCHEDULE ACTIVITIES	PRIOR PLAN	CURRENT PLAN	VARIANCE WEEKS			
DESIGN	\$153.5	\$40.3	26.3%	Environmental FEIS / FEIR		09/06/17				
RIGHT-OF-WAY	\$426.4	\$83.3	19.5%	Design						
CONSTRUCTION	\$1,416.2	\$4.3	0.3%	Approval to Enter into PE Final Design Complete	N/A	01/24/13 10/25/19	Complete			
OTHER	\$533.6	\$12.6	2.4%	Right-of-Way		10/23/19				
TOTAL	\$2,529.7	\$140.5	5.6%	All parcels available		11/19/19				
AREAS OF CONCERN				Construction - Main Desi	gn / Build C	04/28/17 10/23/25	Pending			
				2024.0		10/20/20				
ROW ACQUISITION	PLAN	AVAILABLE	REMAINING	CRITICAL ACTIVITIES / 3	MONTH LC	OK AHEAD				
PERMANENT PARCELS	34	0	34	-Award NTP to C1120 contract -Obtain construction permits from COBH for 3rd party construction at Wilshire/Rodeo						
TEMPORARY PARCELS	3	0	3	-Complete joint trench duc -Commence cable pulling a	t bank const	ruction				
TOTAL PARCELS	37	0	37							

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.

Design

The Engineering Management Services (EMS) team continues to provide design support for the Advanced Utility Relocation (AUR) work in Century City. Completed conformed technical documents in addition to providing real estate support services.

Major Contract Procurement

The recommendation to award the C1120 was presented to the Board at the January 26, 2017 Metro Board Meeting. The Board of Directors approved staff's recommendation to award to Tutor Perini/O & G, a Joint Venture (TPOG) and authorized the Chief Executive Officer (CEO) to award the 102-month firm fixed contract, subject to the resolution of any timely protests. Notice of Award for Contract C1120 was issued January 31, 2017 and Notice to Proceed is anticipated in April 2017.

Construction

Construction of the telecom joint trench is proceeding in Century City. Duct bank work is planned to complete in April 2017 and cable pulling/splicing completion is anticipated in August 2017.

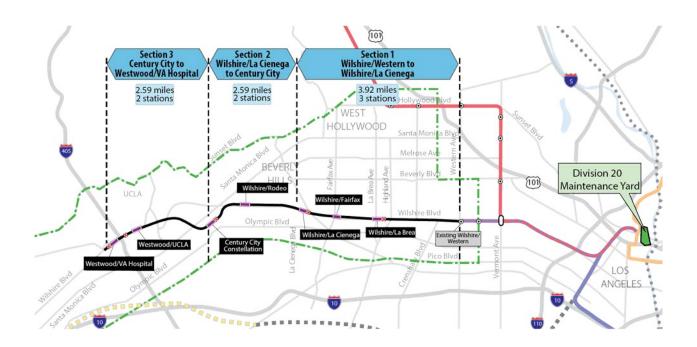
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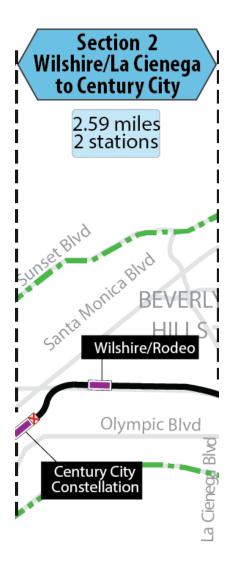
MANAGEMENT ISSUES

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> 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 finish work. A tunnel boring launch (TBM) shaft will be constructed at the Century City Constellation Station. Two underground stations are to be constructed, one double crossover location, which is located east of the Century City Constellation Station which is the 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, 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 will procure separate contracts to provide the 20 Heavy Rail Vehicles (HRV) and 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 includes design, fabrication and installation of equipment at the two stations and system testing.

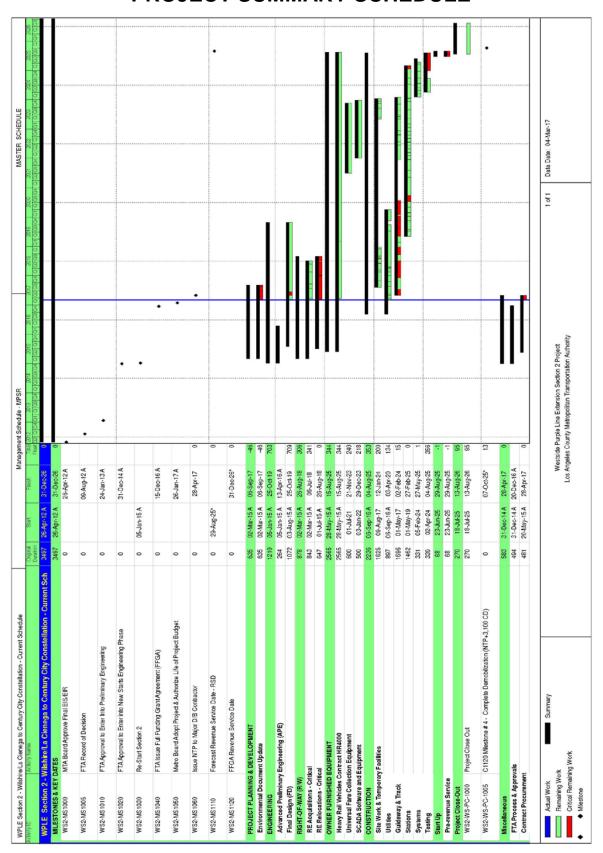
Start Up

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; as well as abnormal and emergency scenarios in which random combinations of system interactions are tested; equipment "burned-in"; and training of Metro personnel who will operate and maintain the extension and for emergency services personnel. Activities occurring during Pre-Revenue Operations are carried out by a designated Metro Project Rail Activation Group.

KEY MILESTONES SIX-MONTH LOOK AHEAD

	_		T	ı .		T	
	Milestone Date	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17
DWP Power utility relocations at Century City Constellation begins	03/27/17	Δ					
Obtain construction permit from COBH for 3rd party utility relocation construction	04/20/17		Δ				
Joint trench (ducts and vaults) completion at Century City Constellation	04/28/17		\triangle				
Issue NTP to C1120 Contractor	04/28/17		•				
Third party utility construction start at Century City Constellation - SCG	05/08/17			Δ			
Third party utility construction start at Wilshire/Rodeo - SCE	05/25/17			\triangle			
Third party utility construction start at Century City Constellation - DWP Water	07/11/17					\triangle	
Third party utility construction start at Century City Constellation - DWP Power	07/11/17					\triangle	
Third party utility cable pulling & splicing complete at Century City Constellation -Time Warner	08/24/17						\triangle
◆ MTA Staff MTA Board Action	FTA (Federa Administrati						
△ Other Agencies							

PROJECT SUMMARY SCHEDULE



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SCHEDULE MEASUREMENTS

OVERALL CONSTRUCTION PROGRESS CURVE

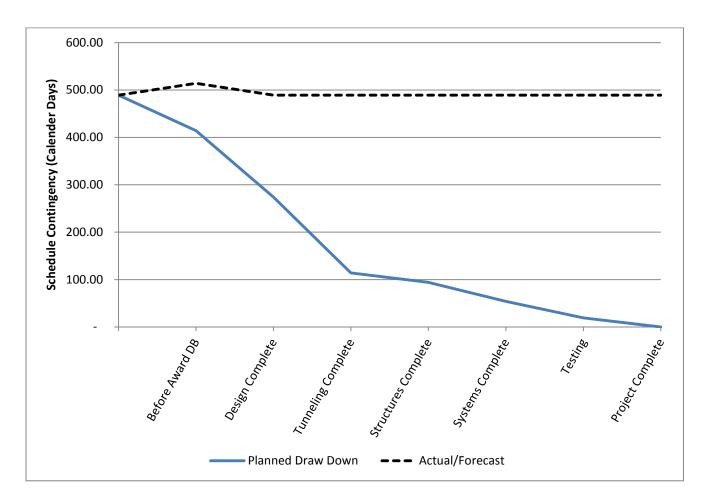
MAJOR EQUIPMENT DELIVERY

DESIGN BUILDER'S (C1120) LONG LEAD ITEM LIST

CRITICAL PATH NARRATIVE

The Critical Path begins with the procurement process for the C1120 Design/Build 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 machine (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 Revenue Service Date (RSD).

PROJECT COST STATUS

SCC CODE	DESCRIPTION	ORIGINAL BUDGET	CURRENT	BUDGET	СОММІТ	ГМЕНТЅ	EXPENDITURES		CURRENT FORECAST		FORECAST/ BUDGET
CODE		DUDGET	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
10	GUIDEWAY & TRACK ELEMENTS	346,440	-	346,440	-	329,943	-	-	-	346,440	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	434,990	-	434,990	-	410,368	-	-	-	434,990	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	-	-	-	-	-	-	-	-	-	-
40	SITEWORK & SPECIAL CONDITIONS		-	553,282	15,000	517,948	3,054	4,271	-	553,282	-
50	0 SYSTEMS		-	81,457	-	68,537	-	-	-	81,457	-
	CONSTRUCTION SUBTOTAL (10-50)		-	1,416,169	15,000	1,326,796	3,054	4,271	-	1,416,169	-
60	ROW, LAND, EXISTING IMPROVEMENTS		-	426,396	-	166,839.29	29	83,288	-	426,396	-
70	VEHICLES	42,000	-	42,000	-	-	-	-	-	42,000	-
80	PROFESSIONAL SERVICES	374,878	-	374,878	-	167,592	795	51,550	-	374,878	-
	SUBTOTAL (10-80)	2,259,444	-	2,259,444	15,000	1,661,227	3,878	139,109	-	2,259,444	-
90	UNALLOCATED CONTINGENCY	177,176	-	177,176	-	-	-	-	-	177,176	-
100	100 FINANCE CHARGES		-	88,695	-	-	-	-	-	88,695	-
OTAL PROJECT 865522 (FFGA & NON-FFGA CONCURRENT ACTIVITIES)		2,525,314	-	2,525,314	15,000	1,661,227	3,878	139,109	-	2,525,314	-
ENVIRONMENTAL/PLANNING - 465518 & 465522		4,349	-	4,349	-	1,793	96	1,379	-	4,349	-
TOTAL PROJECT 465518 & 465522 (ENV / PLAN'G)		4,349	-	4,349	-	1,793	96	1,379	-	4,349	-
	TOTAL PROJECTS 465518, 465522 & 865522		-	2,529,664	15,000	1,663,019	3,974	140,488	-	2,529,664	

PROJECT COST ANALYSIS

Original Budget, Current Budget and Forecast

The Original Budget, Current Budget and Forecast 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.

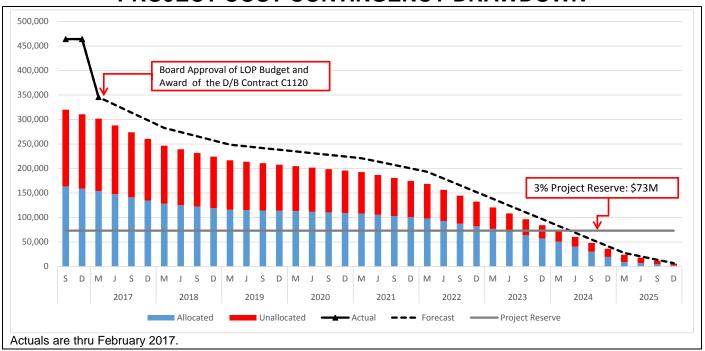
Commitments

The Commitments increased this period by \$15.0 million primarily due to design and construction services by LADWP. The \$1.7 billion in Commitments to date represents 65.7% of the Current Budget.

Expenditures

The Expenditures increased this period by \$3.9 million this period primarily for costs associated with the Design/Build Contract Proposal Stipend Agreements, Engineering Management Services, and Metro Project Administration. The \$140.5 million in Expenditures to date represents 5.6% 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 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. Included in the total cost contingency is an allocated contingency amount of \$168.5 million. 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).

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)

To be provided after NTP is issued for Contract C1120.

PROJECT LABOR AGREEMENTS (PLA) STATUS

To be provided after NTP is issued for Contract C1120.

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SUMMARY OF CONTRACT MODIFICATIONS

To be provided after NTP is issued for C1120 Contract.

FINANCIAL/GRANT STATUS

COLIDOE	(A) ORIGINAL	(B) TOTAL	(C) TOTAL	(D) COMM	(D/B) ITMENTS	(E) EXPE	(E/B) ENDITURES	(F) BILLED TO	
SOURCE	BUDGET	FUNDS ANTICIPATED	FUNDS AVAILABLE	\$	%	\$	%	SOURC \$	Æ %
FEDERAL - SECTION 5309 NEW STARTS	\$1,187.000	\$1,187.000	\$100.000	\$1,043.956	88%	\$58.205	5%	\$54.362	5%
FEDERAL CMAQ	\$169.000	\$169.000	\$43.000	\$43.000	25%	\$0.000	0%	\$0.000	0%
MEASURE R - TIFIA LOAN	\$307.000	\$307.000	\$307.000	\$307.000	100%	\$0.000	0%	\$0.000	0%
MEASURE R 35%	\$757.402	\$757.402	\$119.862	\$214.301	28%	\$27.521	4%	\$25.517	3%
LOCAL AGENCY FUNDS	\$54.500	\$54.500	\$0.000	\$0.000	0%	\$0.000	0%	\$0.000	0%
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	\$624.624	\$1,663.019	65.7%	\$140.488	5.6%	\$134.641	5.3%

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.

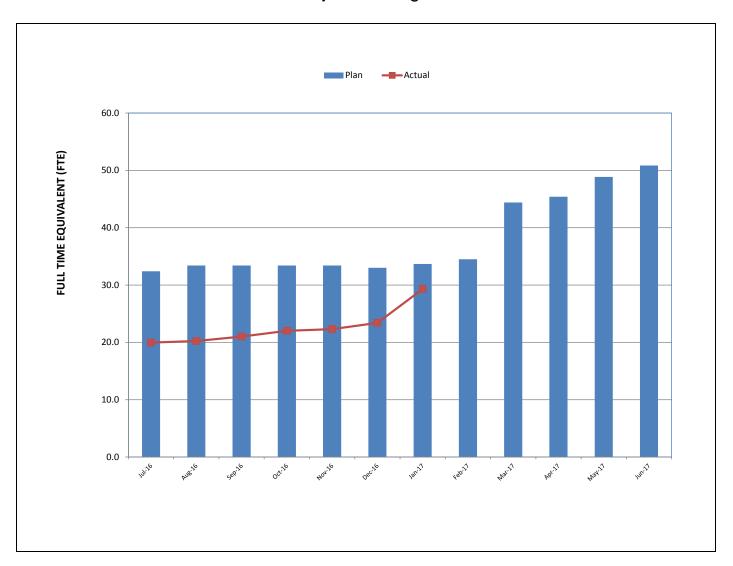
CMAQ (Congestion Mitigation & Air Quality): FTA grant CA-2016-2045 for \$43.0 million was awarded by the FTA on December 15, 2016. Funds are available for drawdown.

MEASURE R – TIFIA LOAN (Transportation Infrastructure Finance & Innovation Act): TIFIA Loan was executed on December 20, 2016 for \$307.0 million. First disbursement is planned for FY17.

MEASURE R: \$119.9 million have been allocated to the Project through FY16. Funds are available for drawdown.

STAFFING STATUS

Total Project Staffing – FTEs

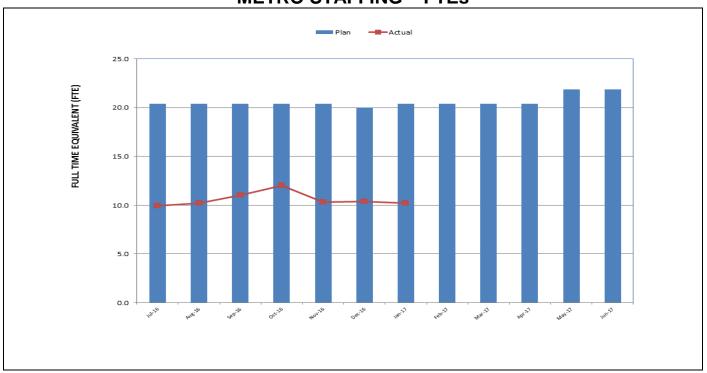


TOTAL PROJECT STAFFING

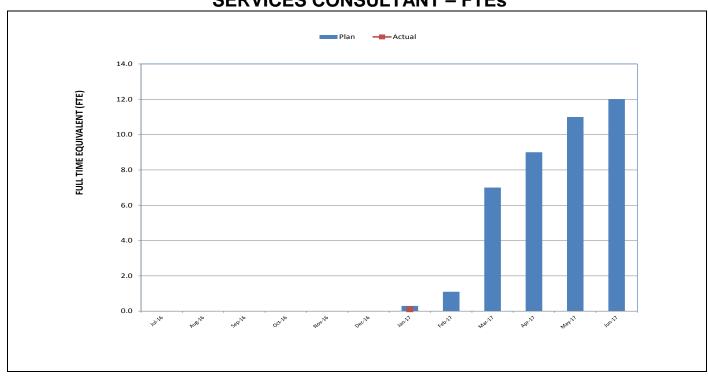
The overall FY17 Total Project Staffing Plan averages 38.1 FTEs per month.

For January 2017, there were a total of 10.2 FTEs for MTA's Project Administration Staff and 19.1 FTEs for Consulting Staff. The total project staffing for January 2017 was 29.3 FTEs.

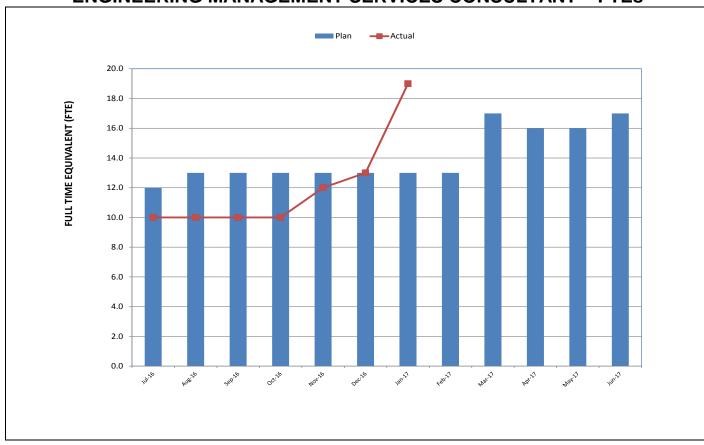
STAFFING STATUS (Continued) METRO STAFFING – FTEs



CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONSULTANT – FTEs



STAFFING STATUS (Continued) ENGINEERING MANAGEMENT SERVICES CONSULTANT – FTEs



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REAL ESTATE STATUS

	Real Estate Status Summary									
	Number	0	Appraisals	Offers	Agreements	Condemnation	Reloc	Parcels		
Description	of Parcels	Certified	Completed	Made	Signed	Filed	Required	Completed	Available	
Full Takes	3	3	3	3	1	1	19	2	0	
Part Takes	2	1	1	1	0	0	1	0	0	
TCE	3	3	1	1	0	0	6	0	0	
SSE	25	0	0	0	0	0	0	0	0	
Permanent Easements	2	0	0	0	0	0	0	0	0	
Surface										
Easements	2	0	0	0	0	0	0	0	0	
Total Parcels	37	7	5	5	1	1	26	2	0	

QUALITY ASSURANCE STATUS

None to report at this time.

ENVIRONMENTAL STATUS

- Performed daily noise monitoring activities at Century City Constellation Station for utility relocation work and submitted daily field reports.
- Completed December 2016 Noise Monitoring Report for Century City Constellation Station.
- Submitted Q7 Mitigation Measures Status Report (MMSR) to FTA.
- Provided environmental awareness training to construction crew as required.
- Participated in weekly project construction meetings and reported on environmental compliance with local, state and federal regulations & specifications and EIR.
- Met with City of Beverly Hills (COBH) officials to coordinate and collaborate on upcoming Ambient Noise Study for Wilshire/Rodeo Station.
- Obtained encroachment permit from COBH for Ambient Noise Study. Installed monitors and began study at Rodeo Station.
- Worked on noise and dust/emissions FAQ sheets to be uploaded to PLE website.

CONSTRUCTION RELATIONS STATUS

- Produced and distributed three pre-construction work notices for advance utility relocations and two notices for community meetings.
- Made Project presentations at the following: Pre-Construction Community Meeting, Beverly Hill Chamber of Commerce Government Affairs Meeting, City of Beverly Hills Community Meeting, Sirtaj Hotel, Beverly Hills, Sun American Building Management, Century City, Bank of America building owner, Beverly Hills and Beverly Hills Chamber "My Beverly Hills" launch event.
- Visited and updated businesses and residences at future station locations to discuss advanced utility relocations and noise monitoring equipment installation.
- Conducted outreach to residents and businesses prior to community meeting.
- Attended the following meetings: Construction Management, Advanced Utility Relocations, Construction Relations, Environmental Mitigations, Third Party Workshop, Marketing, Social Media and Bus Relocations and Stops.
- Updated social media as needed.

CREATIVE SERVICES STATUS

 Provided input on Century City Constellation Station portal configuration with systemwide design staff.

SAFETY & SECURITY STATUS

- Third party contract work is being completed in the field. No injuries were reported during February 2017.
- Third party construction work is being monitored to document contractor compliance with regulations and good business practices.
- Injury and work hour statistics will be tracked once the Design/Builders is onboard.

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	5/17	5/17	Beverly Hills City Council authorized the City Manager to execute the reimbursement agreement on March 1, 2016 and it was presented to the Metro Board and approved at the September 2016 Board. Negotiations for a Memorandum of Agreement (MOA) governing utility work began in March 2017.
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	5/17	5/17	Level 3 - Metro and Level 3 have initiated a new agreement. Currently, awaiting comments from Level 3. Time Warner Cable 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 - Draft of Agreement submitted to Sprint, currently pend in comments.
			N/A	N/A	AT&T, Pac Bell, SBC, MCI, Verizon, Southern California Gas Company (SCGC), TCG Los Angeles - Metro is working with affected third party utilities under existing agreements.
			05/17	05/17	Zayo, XO Communications, LLC - The agreement has been finalized and will be presented to the Metro Board.

ADVANCED UTILITY RELOCATION STATUS

Century City Constellation AUR

- Telecommunication relocation is underway. Completion of infrastructure work is currently planned for April 2017 and cable pulling and splicing in August 2017.
- LADWP Power relocations anticipated to begin in April 2017.

Wilshire/Rodeo AUR

• City of Beverly Hills (COBH) Council permit approval for SCE relocations anticipated in April 2017 and construction to begin in May 2017.

PEAK HOUR AND NIGHTTIME CONSTRUCTION VARIANCES

Metro is actively pursuing extended hour variances/exemptions to accommodate the Project 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. Currents efforts include the Peak Hour Exemption (PHE) for full closure of Constellation Boulevard.

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 Commenced 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 Contract C1120 and

approved Life-of-Project Budget

January 2017 Issued C1120 Contract Award

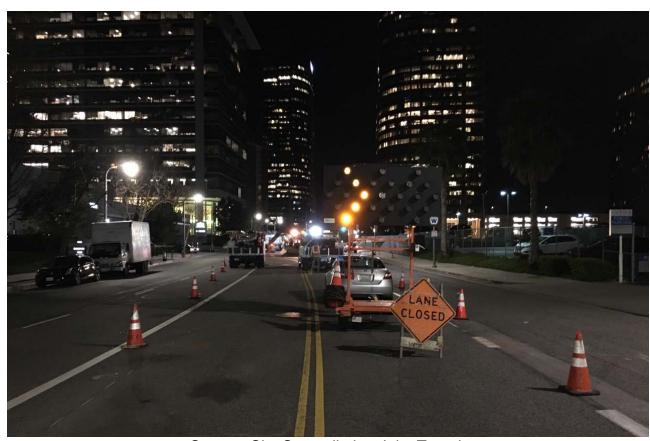
CONTRACT C1120 STATUS

Description: Purple Line Extension Design-Build	Contract No. C1120								
Contractor: Tutor Perini (O&G) a Joint Venture	Status as of: February 28, 2016								
Progress / Work Completed:	Major Activiti	ies (In I	Progress	s):					
Areas of Concern:	Major Activiti	ies Nex	t Period	l:					
Schedule Summary:		Original Contract Dates	Time Extension	Current Contract	Forecast	Variance CDs			
Date of Award: 01/31/17 Notice to Proceed:	Notice to Proceed (Estimated)	04/28/17	0	04/28/17	04/28/17	0			
Original Contract Duration: 0 CD Current Contract Duration: 0 CD	MS 1 (NTP + 2950): Substantial Completion	05/26/25	0	05/26/25	05/26/25	0			
Elapsed Time from NTP: 0 CD	MS 2 (NTP + 2600): Stations Available	06/10/24	0	06/10/24	06/10/24	0			
	MS 3 (NTP + 2700): Ready for Systems Integration Testing	09/18/24	0	09/18/24	09/18/24	0			
	MS 4 (NTP + 3100): Demobilization	10/23/25	0	10/23/25	10/23/25	0			
Physical Percent Complete:	Cost Summa	ry:		\$	In milli	ons			
	1. Award Value:				1,376.5				
Physical completion: 0%	Executed Modif Approved Change				0.0				
* Note: Physical completion assessment reflects	 Approved Chang Current Contract 		+2+3).		0.0 1,376.5				
work completed and work in progress.	Incurred Cost:	. value (1-	1 0 j.		0.0				

CONSTRUCTION PHOTOGRAPHS



Century City Constellation Joint Trench



Century City Constellation Joint Trench

APPENDIX 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.

APPENDIX

LIST OF ACRONYMS AND ABBREVIATIONS

ATC Automatic Train 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 CMSSC Construction Management Support Services Consultant

CN Change Notice
CO Change Order
COBH City of Beverly Hills
COLA 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 Commission

CUD Contract Unit Description

DB Design Build
DBB Design Bid Build

Department of Transportation DOT Department of Water and Power **DWP Environmental Impact Report** EIR **Environmental Impact Statement** EIS **Engineering Management Services EMS EPBM** Earth Pressure Balance Machine FAA Federal Aviation Administration FAR Federal Acquisition Regulation

FD Final Design

FEIS Final Environmental Impact Statement FEIR Final Environmental Impact Report

FIS Financial Information System

FLSR Fire Life Safety Report

FONSI Finding of No Significant Impact FRA Federal Railroad Administration

FSEIR Final Supplemental Environmental Impact Report FSEIS Final Supplemental Environmental Impact Statement

APPENDIX

LIST OF ACRONYMS (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 Air

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

OCC Operations Control Center

OSHA Occupational Health and Safety Administration

PA/VMS Public Address/Visual Messaging Sign

PE Preliminary Engineering

APPENDIX

LIST OF ACRONYMS (Continued)

PEER Permit Engineering Evaluation Report

PIP Project Implementation Plan PLA Project Labor Agreement

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

Westside Purple Line Extension Section 2 Project
Monthly Project Status Report

February 2017

APPENDIX

LIST OF ACRONYMS (Continued)

SP Special Provision

SSMP Safety and Security Management Plan

STB Surface Transportation Board

STIP State Transportation Improvement Program

STP Surface Transportation Program

STV STV Group

SWPPP Storm Water Pollution Prevention Plan

TBD To Be Determined
TBM 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

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