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).

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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.

Design

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

Metro, TPOG 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). If required, critical design units can be 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: TBM Jacking frame 85% design; Launch Box Invert Slab 85% design; Santa Monica Bus

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Layover 100% design; Temporary Streets at both stations 100% design; and Traffic Control at Launch Box 100% design.

Final design is approximately 75% complete.

Major Contract Procurement

All construction contracts for the Project have been awarded.

Construction

Advanced Utility Relocations

Century City Constellation: LADWP Power civil work began in May 2017 and is 95% complete. AT&T duct bank and vault construction began in November 2017 and are anticipated to complete in September 2018. Cable pulling and splicing to follow for both utilities with an anticipated completion in 2019.

Wilshire/Rodeo: Southern California Gas (SCG) and AT&T work started on February 12, 2018, is ongoing and anticipated to complete in September 2018. TPOG is responsible for Traffic Control Plans for this scope of work.

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.
TBM's purchase order has been executed.

Geotechnical investigations in the City of Beverly Hills started in late 2017 and are ongoing. Seventeen cross-passage borings have been completed to date. Pre-construction surveys are ongoing. Geotechnical fault line (seismic) boring investigations started in May 2018, and 10 out of 10 have been completed. Metro will be requesting additional borings to complete the fault line investigation.

Site preparation work at the future Wilshire/Rodeo Station entrance started in May 2018.

Demolition of the 1940 Century Park East building and parking structure as well as the 1950 Century Park East parking structure have been completed. Oil line removal started in late May 2018 and is ongoing. Sound wall installation at 2040 Century Park East (construction staging area) is in progress.

Other major construction activities to begin in the near future are the soldier pile installation for the TBM launch box and the TBM tunnel shaft at the eastern end of the Century City Constellation Station.

Beverly Hills City Council approved the Memorandum of Agreement (MOA) governing remaining third party utility relocation work on November 22, 2017. Final MOA negotiations are ongoing with the City of Beverly Hills (COBH) for the C1120 Contract and are anticipated to complete in Summer 2018. The final COBH MOA for C1120 is scheduled to be presented at the COBH City Council meeting on August 21, 2018.

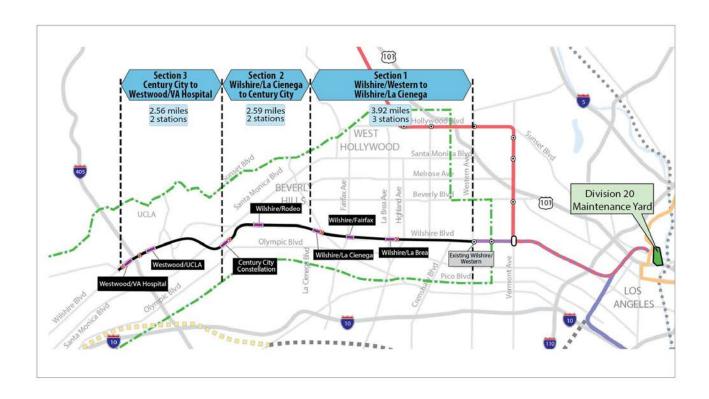
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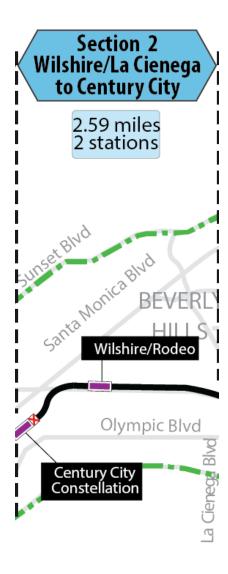
MANAGEMENT ISSUES

No management issues this period.

PROJECT ALIGNMENT BY SECTIONS



PROJECT ALIGNMENT SECTION 2



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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 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.

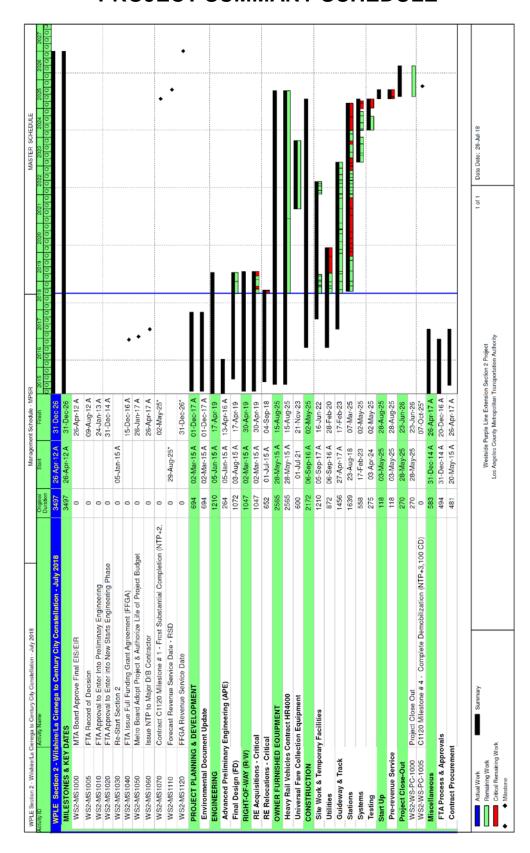
Start Up

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"; 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.

KEY MILESTONES SIX-MONTH LOOK AHEAD

	Milestone Date	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19
Submit 100% Design Package 2 - Remaining Utility Conflicts Wilshire/Rodeo Station	08/07/18						
Submit AFC Design - Santa Monica Bus Layover Facility	08/21/18						
TBM Temporary Power - Start Install Conduit & Substructure	08/22/18						
Start Demolition of ACE Gallery building at Wilshire/Rodeo Station	08/27/18						
Submit AFC Drawings - SOE Wilshire/Rodeo Station	08/30/18						
Submit IFC Drawings for Design Package 1 - Utility/Civil Design at Launch Box in Century City	09/14/18						
Third Party Utility Relocations Complete at Wilshire/Rodeo Station	09/30/18		Δ				
Begin Full Street Closure - Constellation Blvd	10/05/18						
Start Installation of Soldier Piles - Launch Box at Century City	10/08/18						
Start Construction Bus Layover Facility on Santa Monica Blvd.	10/21/18						
Start Installation of Soldier Piles - Tunnel Shaft in Century City	10/26/18						
Start Installation of Deck Panels - Launch Box at Century City	11/21/18						
Start Installation of Soldier Piles - Wilshire/Rodeo Station	12/10/18						
Delivery of Tunnel Boring Machines (TBMs)	01/25/19						

PROJECT SUMMARY SCHEDULE

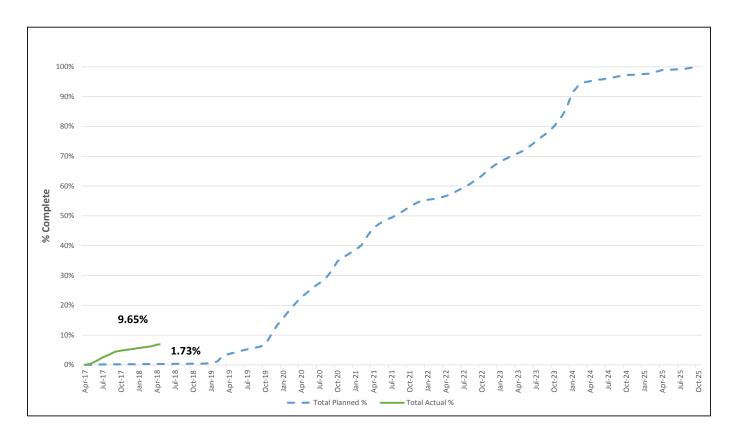


SCHEDULE MEASUREMENTS

	Status	Last Period	Change from Last Period	Comment
Forecast Revenue Service Date	8/29/2025	8/29/2025	None	
FFGA Revenue Service Date	12/31/2026	12/31/2026	None	
Final Design Progress:				
Contract C1120	75.14%	72.79%	2.35%	Final Design is currently scheduled to complete in 2nd Quarter 2019.
Construction Contracts Progress*:				
Contract C1120	9.65%	7.92%	1.73%	NTP issued on April 26, 2017.

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

OVERALL CONSTRUCTION PROGRESS CURVE



The actual overall construction progress is 9.65% versus a planned 1.73% through July 2018. 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.

MAJOR EQUIPMENT DELIVERY

	Submittal	Procurement	Delivery	Installation
C1120 DESIGN/BUILD*				
Tunnel Boring Machine	7/27/17A	8/14/2017A	1/25/19	6/28/19
Emergency Ventilation Fans	12/14/18	12/5/18	5/23/19	9/14/20
Station Elevators/Escalators	2/15/19	3/20/19	3/12/20	12/22/20
Track	3/8/19	4/10/19	8/1/19	10/27/21
Automatic Train Control	12/3/18	4/23/19	7/3/19	12/17/20
Traction Power Equipment	3/20/19	5/6/19	1/14/20	12/18/20
SCADA RTU System	12/3/18	4/23/19	7/3/19	5/11/21
Radio System	12/3/18	4/23/19	7/319	5/11/21
Heavy Rail Vehicles		Exercise Option #3 /	March 1, 2021	
Universal Fare System	TBD	TBD	TBD	June 2023**

^{*} Dates derived from TPOG's July 2018 Updated Schedule.

^{**} Forecast release date by TPOG to UFS contractor access at stations.

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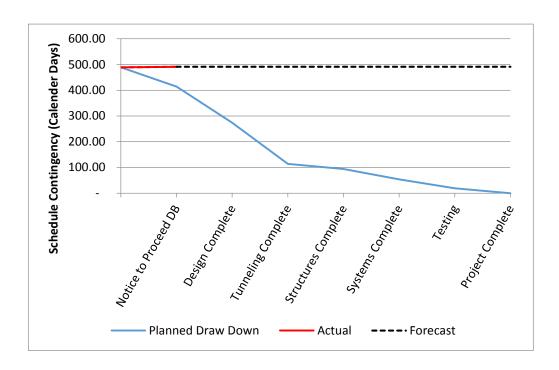
DESIGN BUILDER'S (C1120) LONG LEAD ITEM LIST

Currently under development.		

CRITICAL PATH NARRATIVE

The Critical Path for the Westside Purple Line Extension Project Section 2 begins with third party utility relocations at the future Century City Constellation (CCC) Station and is followed by the Contractor, Tutor Perini/O&G a Joint Venture (TPOG), required utility relocations in the same area. The path then follows into installation of soldier piles on the north side, then immediately on the south side, then proceeding into support beams and temporary street decking of the CCC Station. The critical path then flows into excavation below the deck, and then structural concrete for the station through the arched roof concrete. The path continues into the installation of the interior finishes and mechanical/electrical equipment. Simultaneously, systems installation work for Automatic Train Controls, Traction Power and Communications will be ongoing. It follows with connecting with Rail Operations Center (ROC) for TPOG's System Integration Testing to ROC and then complete Systems Integration Testing for the Heavy Rail Vehicles, Communications tie-ins and with the Wilshire/La Cienega Station to obtain FLS Certification and CPUC Safety Certification Verification. The Critical Path ends with 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) compared to the FFGA RSD.

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PROJECT COST STATUS

SCC	DESCRIPTION	ORIGINAL	CURRENT	BUDGET	COMMIT	ΓMENTS	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	-	306,924	1,177	24,177	-	328,836	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	434,990	-	443,071	-	410,368	143	240	-	443,071	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	-	-	-	-	-	-	-	-	-	-
40	SITEWORK & SPECIAL CONDITIONS	553,282	-	576,800	108	538,006	3,689	240,516	-	576,800	-
50	SYSTEMS	81,457	-	81,907	-	68,537	826	3,658	-	81,907	-
CONSTRUCTION SUBTOTAL (10-50)		1,416,169	-	1,430,614	108	1,323,835	5,835	268,591	-	1,430,614	-
60	ROW, LAND, EXISTING IMPROVEMENTS		-	426,396	-	230,081	490	151,837	-	426,396	-
70	VEHICLES	42,000	-	42,000	-	-	-	-	-	42,000	-
80	PROFESSIONAL SERVICES	374,878	-	375,974	28	179,784	7,312	137,157	-	375,974	-
	SUBTOTAL (10-80)	2,259,444	-	2,274,984	136	1,733,700	13,637	557,585	-	2,274,984	-
90	UNALLOCATED CONTINGENCY	177,176	-	161,636	-	-	-	-	-	161,636	-
100	FINANCE CHARGES	88,695	-	88,695	-	-	-	-	-	88,695	-
OTAL PROJECT 865522 (FFGA & NON-FFGA CONCURRENT ACTIVITIES)		2,525,314	-	2,525,314	136	1,733,700	13,637	557,585	-	2,525,314	-
ENVIRONMENTAL/PLANNING - 465518 & 465522		4,349	-	4,349	-	3,329	16	2,890	-	4,349	-
TOTAL PROJECT 465518 & 465522 (ENV / PLAN'G)		4,349	-	4,349	-	3,329	16	2,890	-	4,349	-
	TOTAL PROJECTS 465518, 465522 & 865522	2,529,664	-	2,529,664	136	1,737,029	13,653	560,474	-	2,529,664	-

PROJECT COST ANALYSIS

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 and Current Forecast

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

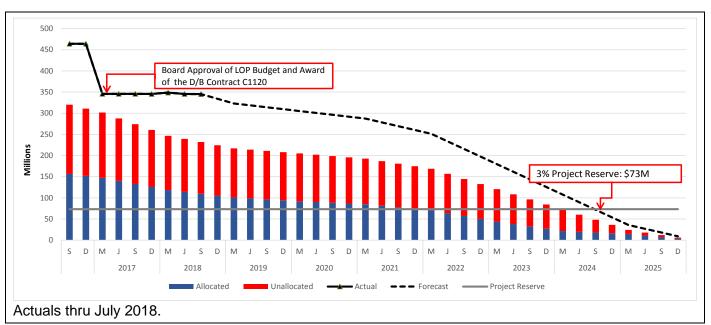
Commitments

The Commitments increased this period by \$0.1 million due to Executed Modifications for the Design/Build Contract C1120 and approved Work Orders for utility relocations. The \$1.7 billion in Commitments to date represents 68.7% of the Current Budget

Expenditures

The Expenditures increased this period by \$13.7 million primarily for costs associated with Design/Build Contract C1120, Metro Project Administration, Real Estate, City of Los Angeles and Memorandum of Agreement with the City of Beverly Hills. The \$560.5 million in Expenditures to date represents 22.2% of the Current Budget.

PROJECT COST CONTINGENCY DRAWDOWN



PROJECT 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 an August 29, 2025 Forecast Revenue Service Date (RSD).

The allocated contingency decreased this period by \$85K due to executed Contract Modifications for the Design/Build Contract C1120.

PROJECT COST CONTINGENCY DOLLARS IN THOUSANDS											
BOLLARS IN THOUSANDS	Original Contingency (Budget)	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)						
Unallocated Contingency	177,176.30	(15,540)	-	(15,540)	161,636						
Allocated Contingency	168,534	15,229	(85)	15,144	183,677						
Total Contingency	345,710	(312)	(85)	(397)	345,313						

RACE-CONSCIOUS DISADVANTAGED BUSINESS ENTERPRISE (RC-DBE) STATUS

Contract C1120

• RC-DBE Goal - Design

A numerically expressed percentage of funds apportioned to Design Contracts and is calculated based upon the relative availability of RC-DBE firms as compared to all firms in the relevant geographic market area.

25.00%

• Current RC-DBE Commitment - Design

\$14,731,914

Total RC-DBE Committed Dollars divided by Total Contract Value (25.31%) for Design or Construction.

Current RC-DBE Participation

\$10,328,186

Total amount paid to date to RC-DBEs divided by the amount paid to date to Prime.

(19.11%)

Fifteen (15) Design RC-DBE subcontractors have been identified.

RC-DBE Goal – Construction

A numerically expressed percentage of funds apportioned to Construction Contracts and is calculated based upon the relative availability of RC-DBE firms as compared to all firms in the relevant geographic market area.

17.00%

Current RC-DBE Commitment – Construction

\$80,736,122

Actual commitments as Construction work is awarded.

(6.22%)

• Current RC-DBE Participation

\$3,137,467

Total amount paid to date to RC-DBEs divided by the amount paid to date to Prime.

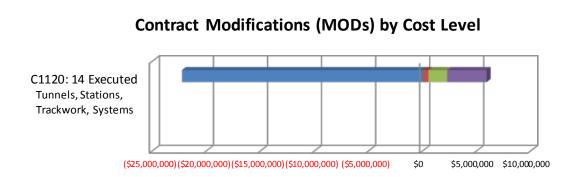
(1.36%)

Seven (7) Construction RC-DBE subcontractors have been identified.

PROJECT LABOR AGREEMENTS (PLA) STATUS

TPOG has committed to comply with Project Labor Agreements/Construction Careers Policy (PLA/CCP) requirements for the Project. Project Staff will monitor and report TPOG's progress toward meeting the goals of the PLA/CCP once construction begins.

SUMMARY OF CONTRACT MODIFICATIONS



	C1120: 14 Executed
■ Under \$100K	(22,259,898)
■ \$100K to \$250K	527,375
■ \$250K to \$1M	1,736,288
Over \$1M	3,650,000
Total Contract MODs	(16,346,235)
Contract Award Amount	1,376,500,000
% of Contract MODs	-1.19%

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

Fourteen (14) Contract Modifications (MODS) with a total value of <\$16.3> million have been executed since the award of C1120 Contract – Tunnels, Stations, Trackwork and Systems.

FINANCIAL/GRANT STATUS

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	\$200.000	\$1,045.545	88%	\$200.000	17%	\$185.912	16%
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	\$386.722	48%	\$55.712	7%	\$31.507	4%
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	\$711.545	\$1,737.029	68.7%	\$560.474	22.2%	\$522.181	20.6%

STATUS OF FUNDS ANTICIPATED

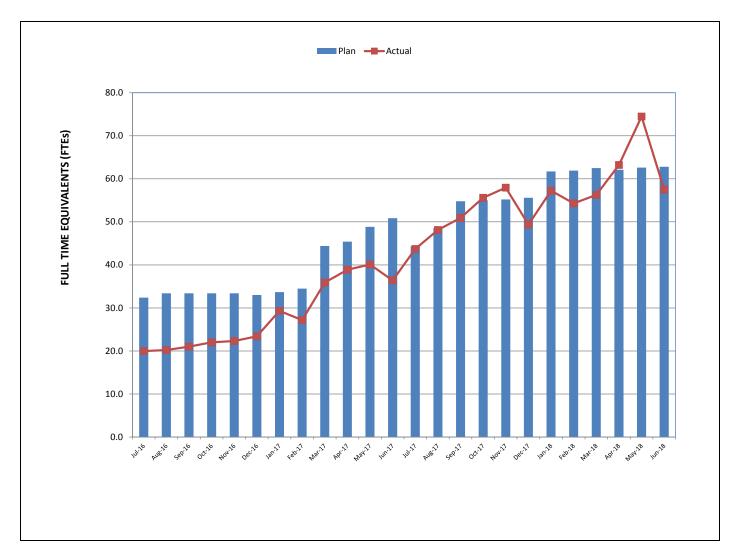
FEDERAL SECTION 5309 NEW STARTS: FTA grant CA-2016-047 for \$100.0 million was awarded by the FTA on December 15, 2016. FTA grant CA-2016-047 Amendment No. 1 for \$100.0 million was awarded by the FTA on September 22, 2017. Funds are available for drawdown.

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. \$207.0 million funds are available for drawdown.

MEASURE R: \$206.8 million have been allocated to the Project through FY19. Funds are available for drawdown.

STAFFING STATUS Total Project Staffing – FTEs

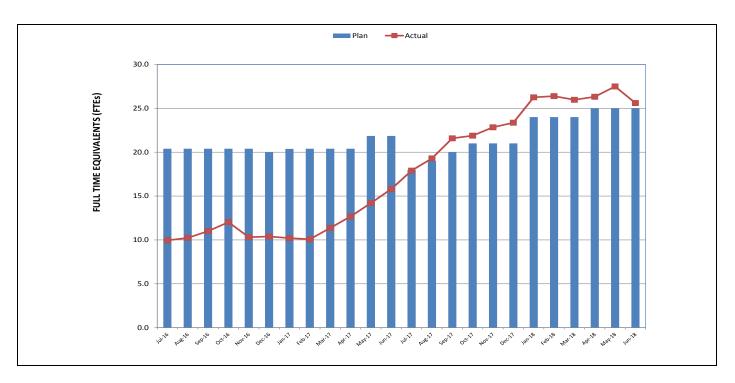


TOTAL PROJECT STAFFING

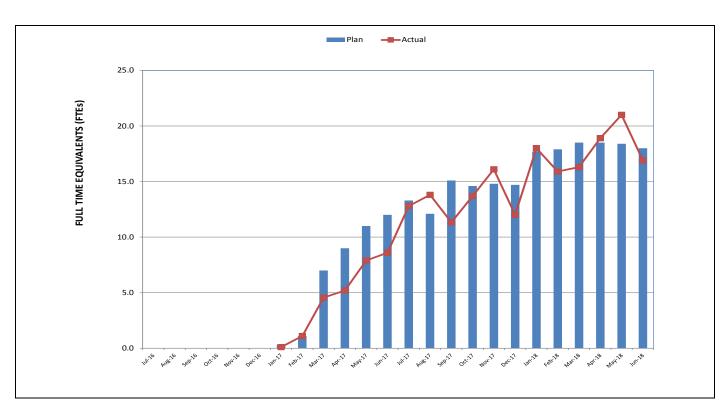
The overall FY18 Total Project Staffing Plan averages 57.3 FTEs per month.

For June 2018, there were a total of 25.6 FTEs for MTA's Project Administration Staff and 31.9 FTEs for Consulting Staff. The total project staffing for June 2018 was 57.5 FTEs.

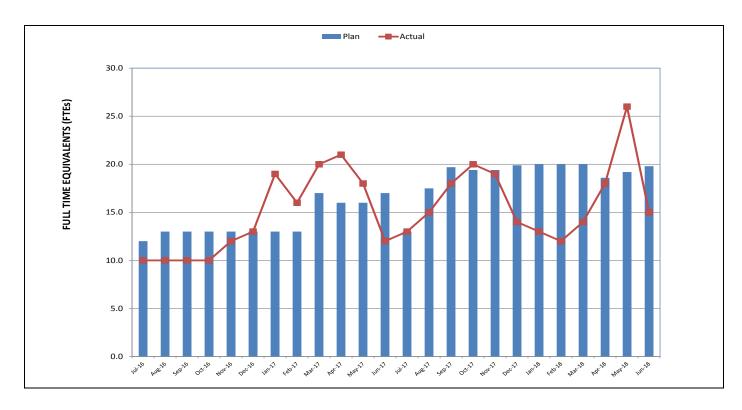
STAFFING STATUS (Continued) METRO STAFFING – FTEs



CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONSULTANT – FTEs



STAFFING STATUS (Continued) ENGINEERING MANAGEMENT SERVICES CONSULTANT – FTEs



REAL ESTATE STATUS

	Real Estate Status Summary													
Description	Number	Certified	Agreements	Condemnation	Reloc	Parcels								
Description	of Parcels	Certified	Completed Made		Signed	Filed	Required	Completed	Available					
Full Takes	3	3	3	3	1	2	21	21	3					
Part Takes	3	3	1	1	1	0	0	0	1					
TCE	3	3	2	2	1	1	1	1	2					
SSE	23	23	11	11	5	1	3	3	1					
Permanent Easements	1	0	0	0	0	0	0	0	0					
Total Parcels	33	32	17	17	8	4	25	25	7					

QUALITY ASSURANCE STATUS

- Attended weekly project staff and progress meetings with TPOG.
- Reviewed Metro and TPOG Daily Inspection Reports for scheduled activities at various locations for completeness and correctness.
- Reviewed TPOG nonconformance reports issued to its subcontractors.
- Participated at the Readiness Review construction meetings for the former ACE Gallery demolition and asbestos abatement at 9430 Wilshire Blvd. (TPOG, Silverado).
- Reviewed and accepted TPOG's action implementation regarding Quality Action Request C1120-QAR-2018-S03-002 for HDD's contractor.
- Working on establishing project documentation content in TPOG's quality records repository (Egnyte).
- Reviewed and provided comments on the following with a disposition of Approved as Noted:
 - Liquid Level Gages Installation Work Plan (ASC)
 - Precast Tunnel Lining Quality Control Documents (TPOG, Frontier-Kemper, G&C, Traylor Precast)
- Reviewed and provided comments on the following with a disposition of For Record Only:
 - o Geotechnical Instrumentation Calibration Sheets (ASC)
 - o Pavement Striping and Marking, Ennis Flint (TPOG, BC RENTALS)
- Reviewed the following with a disposition of Approved:
 - Installation Work Plan, Liquid Level Gage (ASC)
 - o Noise Control Plan, 9430 Wilshire Blvd. (ASC)
 - Vibration Control Plan (ASC)
- Reviewed the following with a disposition of Rejected:
 - Weld Procedures, SOE (TPOG)
 - o Pavement Striping and Marking, Ennis Flint (TPOG, BC RENTALS)
 - Concrete Mix Design, Cage Shop Drawings, Product Data for Standard Tunnel Lining (TPOG, Frontier-Kemper)
- Reviewed the following with a disposition of No Comments:
 - Geotechnical Waste Management Status Report, February 2018 (STV)

ENVIRONMENTAL STATUS

- Participated in various project pre-construction, 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 Metro, advanced utility relocations and TPOG construction staff 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 advanced utility relocation and TPOG coordination meetings and evaluated progress and schedules for environmental compliance and sustainability efforts.
- Provided responses to various TPOG submittals and requests for information related to environmental matters.
- Attended and provided guidance at various TPOG and advanced utility relocation preconstruction and construction meetings.
- Performed noise monitoring activities for advanced utility relocation and TPOG contractor work and submitted field reports.
- Performed biological surveys for nesting birds at various locations prior to construction activities.
- Finalized May 2018 noise monitoring reports for both the City of Los Angeles and the City of Beverly Hills.
- Finalized the 13th Quarterly Mitigation Measures Statues Report and submitted to the FTA.
- Remediated impacted soils encountered during demolition activities at 1940 Century Park East.

CONSTRUCTION RELATIONS STATUS

- Attended the following meetings: Construction Management, Advanced Utility Relocations, Construction Relations, Third Party Coordination, Beverly Hills Memorandum of Agreement, Beverly Hills and Century City Chamber of Commerce, and Century City Building and Property Manger meetings.
- Conducted project presentations at the Beverly Hills Monthly Community and Rodeo Station Stakeholders meetings, and met with other Beverly Hills businesses on a one-onone basis. Conducted follow up meetings with Century City stakeholders regarding street closure.
- Produced and distributed 10 pre-construction work notices for advanced utility relocations, demolition and Geotechnical Seismic Boring Study for Century City and Beverly Hills.
- Extensive outreach at community meetings and distribution of notices included door to door, one on one as well as digital and direct emails.
- Continued efforts of Eat Shop Play and Business Interruption Fund in Century City.
- Followed up with businesses after Eat Shop Play and Business Interruption Fund "Lunch and Learn" introduction event for Century City Businesses.
- Confirmed outreach regarding the full closure of Constellation Blvd.
- Updated Facebook/Twitter and website as needed.

CREATIVE SERVICES STATUS

Conducted community outreach and coordinated cultural partnerships.

SAFETY & SECURITY STATUS

- Third Party advanced utility relocation work continues. No injuries were reported during this
 period.
- Monitored Third Party advanced utility construction work activities to ensure contractor compliance with regulations and good business practices.
- Attended weekly Project Issues Standing Meetings.
- Attended weekly D/B Progress Meeting.
- Attended daily TPOG crew toolbox meetings for ongoing field work activities.
- Conducted LADWP Water & Power, Southern California Edison (SCE) and Southern California Gas (SCG) Injury and Illness Prevention Program (IIPP) reviews and site safety walks.
- Attended LADWP Water & Power, SCE, AT&T and SCG weekly progress meetings.
- Conducted Safety/Security Workshop and Coordination meetings with TPOG safety staff and defined over-the-shoulder review schedules.
- Conducted meetings with TPOG safety personnel to ensure pre-submittal compliance for adequate contractual construction safety staffing.
- Conducted safety reviews for quarterly and monthly project reports.
- Conducted project safety orientation for new project staff.
- Coordinated and attended TPOG project safety orientation for project staff.
- Conducted over-the-shoulder reviews on safety/security submittal drafts with TPOG safety staff.
- Conducted right-of-way (ROW) and worksite safety/security walks.
- Conducted formal TPOG Project Safety Submittals reviews.
- Attended TPOG coordination meeting to review Tunnel Rescue Team operations protocol development.
- Conducted safety walks, safety reviews and coordination with TPOG safety staff for:
 - Sound wall work activities
 - Geological investigation work activities
 - Traffic control support work activities
 - AAA parking structure demolition work activities
 - o K-Rail installation in the City of Beverly Hills
 - o Former Ace Gallery abatement and demolition work activities
- Conducted Safety/Security Workshop and Coordination meetings with TPOG safety staff and defined over-the-shoulder review schedules.
- TPOG Design (18,644 hours) and Construction (7,490 hours) completed 26,134 work-hours for the month of July 2018 with zero recordable incidents. Total Project to Date work-hours are 306,131 with zero recordable incidents.

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.
			11/17(A)	11/17(A)	Beverly Hills City Council approved MOA for remaining third party utility relocations on November 22, 2017.
			09/18	09/18	Metro continues to work with the City to establish an MOA for the C1120 Design/Build contract.
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	Letter of 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.
			09/18	09/18	Time Warner, Level 3 and Century Link have combined. Metro is currently working on a master joint agreement with all parties. SCE – Metro and SCE have initiated a new agreement. A draft is under review. Veolia (now known as Enwave) – In circulation for signatures with Enwave. Sprint – A draft of the Agreement has been submitted to Sprint, pending comments.
			11/17(A)	11/17(A)	Zayo and XO Communications, LLC – Agreements in circulation with XO for final execution.

ADVANCED UTILITY RELOCATION STATUS

Century City Constellation

- LADWP Power utility relocations are ongoing, and civil work is 95% complete. Cable pulling and splicing will follow after completion of civil work.
- AT&T duct bank and vault construction began in November 2017. Construction is anticipated to complete in September 2018 followed by cable pulling and splicing.

Wilshire/Rodeo

 AT&T and SCG work began on February 12, 2018 and is ongoing. Completion for both utilities including cable pulling and splicing is anticipated in September 2018.

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 Los Angeles Bureau of Engineering (BOE) and the Los Angeles Police Commission to obtain Peak Hour Exemptions and Nighttime Construction Variances.

- A nighttime noise variance permit for relocation of third party utilities on Constellation Boulevard is approved through December 31, 2018.
- Peak Hour Exemption application for the TBM launch box excavation on Constellation Boulevard was approved by BOE on January 30, 2018.

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 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 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
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)

Westside Purple Line Extension Section 2 Project		
Monthly Project Status Report		

July 2018

	governing remaining third party utility relocations
December 2017	Final Supplemental Environmental Impact Statement (FSEIS) was available to the public in the Federal Registry on December 1, 2017
January 2018	Completed all utility relocations within the Tunnel Boring Machine "Launch Box"
February 2018	Held Groundbreaking Ceremony on February 23, 2018
May 2018	Bureau of Engineering approved a nine-month street closure of Constellation Blvd. between Century Park East and Avenue of the Stars

Westside Purple Line Extension Section 2 Project Monthly Project Status Report

CONTRACT C1120 STATUS

Contract No. C1120 **Description: Purple Line Extension Design-Build** Contractor: Tutor Perini/O&G a Joint Venture (TPOG) Status as of: July 27, 2018 **Progress / Work Completed:** Major Activities (In Progress): - Final MOA negotiations with COBH for the C1120 Contract Demolition of 1940 Century Park East (Staging Area) Invert Slab/Launch Box/SOE 85% Design - Removal of oil lines at Launch Box Temporary Power SOE Launch Box 85% Design - Demolition of 1950 Century Park East (Staging Area) Standard Tunnel Liner 100% Design - Installation of noise barrier walls in Century City Trackwork 85% Design - Pothole and locate utilities by D/B Contractor in Century City - Civil work for third party utility relocations - Environmental assessments for proposed 15-month street closure in Century City Areas of Concern: **Major Activities Next Period:** Draft City of Beverly Hills (COBH) Memorandum of Agreement (MOA) for the - Ongoing 3rd party utility relocations C1120 Contract was presented at the COBH City Council meeting on - Wilshire/Rodeo Station SOE - AFC July 17, 2018. The final version is scheduled to be presented to the COBH $\hfill\Box$ - Wilshire/Rodeo Station Structure - 85% City Council on August 21, 2018. - Wilshire/Rodeo Station Architecture and MEP - 85% - Wilshire/Rodeo Station Restoration/Final Traffic Control Utility - 85% - Utility Design at Launch Box - 100% - Santa Monica Bus Layover - AFC - Temp Street/Utility/Traffic Control Design at both stations - 100% - Traffic Control at Launch Box - AFC□ Original Time Current Contract Forecast Variance CDs Extension Contract Dates **Schedule Summary:** 01/30/17 Date of Award: 04/26/17 04/26/17 Notice to Proceed Notice to Proceed: 04/26/17 Original Contract Duration: 3.100 CD MS 1 (NTP + 2950): 05/23/25 0 05/23/25 05/23/25 0 Substantial Completion Current Contract Duration: 3,100 CD MS 2 (NTP + 2600): Elapsed Time from NTP: 458 CD 06/07/24 06/07/24 06/07/24 Stations Available to UFS MS 3 (NTP + 2700): Ready for Systems 09/15/24 0 09/15/24 09/15/24 0 Integration Testing MS 4 (NTP + 3100): 10/20/25 10/20/25 Demobilization **Physical Percent Complete: Cost Summary:** \$ In millions 1. Award Value: 1,376.5 2. Executed Modifications: Physical completion: 9.65% (16.3)3. Approved Change Orders: 1.2 4. Current Contract Value (1+2+3): Note 1: Physical completion assessment reflects 1,361.4 work completed and work in progress. 5. Incurred Cost: 321.6

2: Physical completion includes Final Design.

CONSTRUCTION PHOTOGRAPHS



LADWP Power Utility Work in Century City



Sidewalk Panel Installation in Beverly Hills

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

Includes construction contracts. Cost associated with CONSTRUCTION

Guideways, Stations, Southwestern Yard, Sitework/Special

Conditions and Systems.

Includes purchase cost of parcels, easements, right-of-entry **RIGHT-OF-WAY**

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 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

Includes design engineering, project management assistance,

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 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

D/B 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** Earth Pressure Balance Machine EPBM 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

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

OCC 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

LIST OF ACRONYMS AND ABBREVIATIONS (Continued)

Project Manager

PMIP Project Management Implementation Plan
PMOC Project Management Oversight Consultant

PMP Project Management Plan P&P Policies & Procedures

PR Project Report

РМ

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
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

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