



Board Report

File #: 2017-0109, **File Type:** Informational Report

Agenda Number: 12

**CONSTRUCTION COMMITTEE
MARCH 16, 2017**

RECEIVE AND FILE report by the Program Management Chief Officer.

DISCUSSION

Receive update report covering the month of March 2017 (attachment A) by the Program Management Chief Officer.

ATTACHMENTS

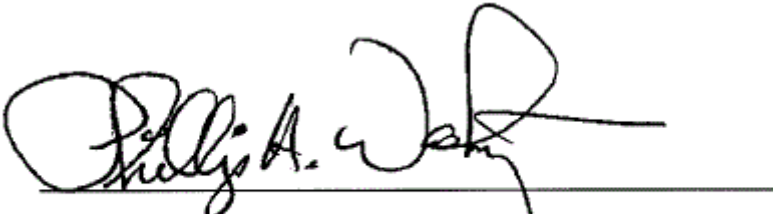
Attachment A - Program Management Chief Officer's Report - March 2017

Prepared by:

- **Crenshaw/LAX** - Charles Beauvoir, Deputy Executive Officer, Project Mgmt., (213)299-3095
- **Regional Connector** - Gary Baker, Deputy Executive Officer, Project Mgmt., (213)893-7191
- **Westside Purple Line Ext 1** - James Cohen, DEO Project Mgmt., (213)922-7911
- **Westside Purple Line Ext 2** - Michael McKenna, EO Project Mgmt., (213)312-3132
- **Patsaouras Plaza Busway Station** - Timothy Lindholm, EO Project Engr., (213)922-7297
- **Presentation** - Yohana Jonathan, Departmental System Analyst, (213)922-7592

Reviewed by:

Richard Clarke, Chief Program Management Officer, (213)922-7557



Phillip A. Washington
Chief Executive Officer

Program Management Chief Officer's Report

Project Status Report

Presented By

Richard Clarke

Chief Program Management Officer











March 2017

Construction Committee

Los Angeles County Metropolitan Transportation Authority



PROJECT BUDGET & SCHEDULE STATUS SUMMARY CHART

Project	Cost Performance	Schedule Performance	Comments
Crenshaw/LAX			Due to heavy rains in January the design-builder is forecasting a four week delay to the Project critical path. With limited schedule contingency available Metro and design-builder are discussing potential schedule mitigations. The remaining cost contingency is approaching the 3% Project Reserve level.
Regional Connector			Board approved LOP increase. Schedule re-baselined.
Westside Purple Line Extension-Section 1			Overall construction progress is 15.5% complete versus 9.3% planned.
Westside Purple Line Extension-Section 2			CMSS awarded on December 2, 2016. FFGA executed by FTA on December 15, 2016, and TIFIA loan obtained on December 20, 2016.
Patsaouras Plaza			Demolition activities has started. Utility relocation and foundation work started in January 2017 with major construction work in February 2017. Schedule negotiations in progress to determine revised substantial completion date.

March 2017



On target



Possible problem



Major issue



Metro

Construction Committee

Los Angeles County Metropolitan Transportation Authority

CRENSHAW/LAX TRANSIT PROJECT

◇ BUDGET	Current	Forecast
TOTAL COST	\$2,058M	\$2,058M

◇ SCHEDULE	Current	Forecast
REVENUE OPERATION	Oct 2019	Nov 2019

- Overall project progress is nearing 60% complete. However, heavy rains in January impacted planned progress. Schedule mitigation measures are under discussion with design-builder.
- Harriet holed through at MLK Jr. Station and mining of final section to Leimert Park Station is on schedule.
- All six underground structures on schedule.
- Street widening continues in Park Mesa Heights area.
- Southwestern Yard design-builder continues site excavation, underground utilities, and main shop foundation concrete.



Special trackwork has commenced in Inglewood right-of-way HDPE liner installation at north portal near Leimert Park

March 2017



On target



Possible problem



Major issue

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REGIONAL CONNECTOR TRANSIT CORRIDOR

OK BUDGET		
	Current	Forecast
TOTAL COST	\$1,810M	\$1,810M

* Includes Board approved LOP plus Planning and Finance costs.

OK SCHEDULE		
	Current	Forecast
REVENUE OPERATION	2021	2021

- Overall Project Progress is 31%, Construction is 27% and Final Design is 96% complete
- TBM mining operations have been initiated
- Pile installation, decking and utility hanging continue under 2nd/Broadway Station Area
- At the 2nd/Hope Station Box, the last portions of excavation are underway to allow for placement of the invert which will extend through mid-May
- On Flower Street, deck beam and panel installation continues on weekends; utility hanging, water line and power relocation continues Monday through Friday
- The TBM Recovery Shaft at 4th/Flower continues to be excavated and readied for arrival of the TBM in June



TBM mining underway



Installation of deck beams on Flower Street

March 2017



On target



Possible problem



Major issue

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WESTSIDE PURPLE LINE EXTENSION – SECTION 1

OK BUDGET

	Current	Forecast
TOTAL COST*	\$3,154M	\$3,154M

* Includes Board approved LOP plus Planning and Finance costs.

OK SCHEDULE

	Current	Forecast
REVENUE OPERATION	Oct 2024 FFGA	Nov 2023

Overall Project Progress is 15.5 % complete vs. 9.3% planned

Tunnels, Stations, Trackwork and Systems Design-Build Contract

- Excavation for the Wilshire/La Brea Station that started on October 12, 2016 continues beneath the concrete deck.
- The Wilshire/Fairfax pile installation operation completed on February 8, 2017. Wilshire/Fairfax Station decking commenced on the weekend of February 11, 2017. There are 18 weekend closures planned for this operation.
- The installation of the sound wall and instrumentation is on-going at Wilshire/La Cienega Station. The Wilshire/La Cienega Station piling operation is scheduled to start in March 2017.
- The jet grouting operation along Wilshire Boulevard at the cross passages continues. This work along the tunnel section from Wilshire/La Brea to Wilshire/Western is scheduled to continue through July 2017.
- Tunnel Boring Machines (TBMs) are being fabricated for delivery at the end of 2017. Tunneling is planned to start in 2018.



Excavation at Wilshire/La Brea Station



Wilshire/Fairfax Decking – Stage 1 Excavation Area

March 2017



On target



Possible problem



Major issue

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Los Angeles County Metropolitan Transportation Authority



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WESTSIDE PURPLE LINE EXTENSION – SECTION 2

BUDGET

	Current	Forecast
TOTAL COST	\$2,530M	\$2,530M

* Includes Board approved LOP plus Planning and Finance costs.

SCHEDULE

	Current	Forecast
REVENUE OPERATION	Dec 2026	Aug 2025

- On January 31, 2017, the Notice of Award was issued for the Design/Build contract (C1120) for the final design and construction of the Project. Notice to Proceed is anticipated by April 2017.
- Construction of the telecom joint trench is proceeding at the Century City Constellation Station. Duct bank completion is anticipated in April 2017, followed by cable pulling/splicing in August 2017.
- AT&T and LADWP Power design plans for the same area have been approved by LABOE.
- Advanced utility relocations are anticipated to begin at the Wilshire/Rodeo Station in April 2017. Concurrence by the City of Beverly Hills on the utilities final design plans are underway.
- Property acquisitions needed for construction staging are underway.



Telecom Joint Trench Construction along Constellation Boulevard

March 2017



On target



Possible problem



Major issue


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PATSAOURAS PLAZA BUSWAY STATION

 BUDGET	Current	Forecast
TOTAL COST	\$39.7M	\$39.7M

 SCHEDULE	Current	Forecast
SUBSTANTIAL COMPLETION	Dec 2017	TBD

- Vignes On/Off ramp closed Jan 3, 2017 to allow for utility relocation and foundation work to start.
- Bridge overhead demolition and utility relocation is ongoing.
- Ramirez St and Center St closures will be approved by DOT by the end of February.
- Drilling subcontractor mobilization delayed until March due to weather issues.
- ADL remediation ongoing, although progress slowed by wet weather
- Schedule negotiations in progress to determine revised substantial completion date



Vignes Closure



Edge of Deck Removal



Utility Relocation



Industrial Waste Tanks

March 2017



On target



Possible problem



Major issue

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Los Angeles County Metropolitan Transportation Authority



Metro

Crenshaw/LAX

Pending Change Order

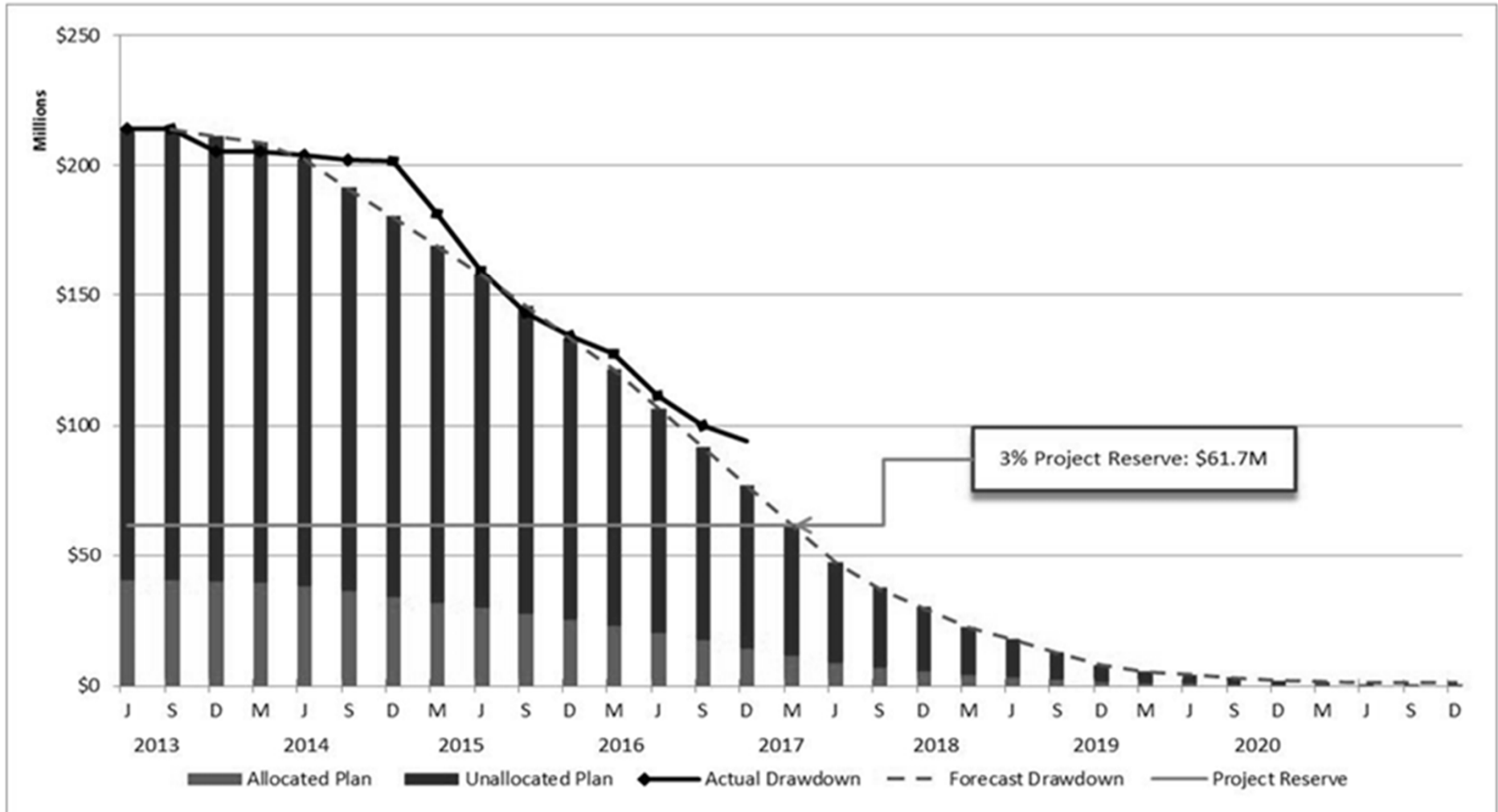
January 2017

Change Notice #	Description	Number of Mod/ Change Orders	Cost Value
TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS AND APPROVED CHANGE ORDERS		239	\$31,207,340
TOTAL PENDING MODIFICATIONS AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST		30	\$3,712,794
CONTRACT C0988			
MOD 00201	Design Deluge System at Expo Crossover		Less than \$1 million
MOD 00202.1	Turnback and Speed Restrictions		Less than \$1 million
MOD 00222	Non-Compliance DBE Req. Assesm Agrmt		Less than \$1 million
CO 00129	Elimination Crossover Sta 56+57.50		Less than \$1 million
MOD 00224.1	Pedestrian Lights Slauson Station		Less than \$1 million
CO 00137	TPSS #10 Build-Out & LADWP Power		Less than \$1 million
MOD 00225	Contaminated Soil Testing & Remvl		Less than \$1 million
MOD 00226	Maint. ROW Adj. Properties La Colina		Less than \$1 million
MOD 00229	Century & Aviation Unknown 8" Utilit		Less than \$1 million
CO 00064.2	Crenshaw Landscaped Median Rendering		Less than \$1 million
MOD 00198.1	Station Signage Revision (ADA)		Less than \$1 million
MOD 00234	LADOT Fiber Optic Cable Betterment		Less than \$1 million
MOD 00240	Construction- Tree Well Brick Pavers		Less than \$1 million
MOD 00181	TPSS No. 1 New Power Transmission		Less than \$1 million
MOD 00219.1	Qwest Potholing-Sta214+00 to STA 257		Less than \$1 million
MOD 00242	Grade Crossings Bell Noise Reduction		Less than \$1 million
MOD 00245	Crenshaw Landscaped Median Rendering		Less than \$1 million
CO 00136	Relocate Qwest Pullbox at Hindry Ave		Less than \$1 million
CN 00229	Unsuitable Soils for Subgrade RW192		Less than \$1 million
CN 00238	Centinela Crossing Tree Preser-Const		Less than \$1 million
CN 00239	Centinela Crossings/Eucalyptus-Const		Less than \$1 million
CN 00241	Update Station Customer Signage Cons		Less than \$1 million
CN 00231	Trash Removal at MSE Wall 111		Less than \$1 million
CN 00278	Additional Curb Ramps at Westmount		Less than \$1 million
CN 00293	Asbestos Cement Pipe Aviation & 111		Less than \$1 million
CN 00322	Metro Specification Rev Rail Welding		Less than \$1 million
CN 00325	Clarify Rail Welding Inspection Req.		Less than \$1 million
CN 00326	Segment C Design Revisions per LADOT		Less than \$1 million
CN 00328	Black Diamond Vault 5436 Crenshaw Bl		Less than \$1 million
CN 00333	Abandoned 8" and 10" Oil Pipeline		Less than \$1 million
TOTAL MODIFICATIONS AND CHANGE ORDERS		269	\$34,920,134

Crenshaw/LAX

January 2017

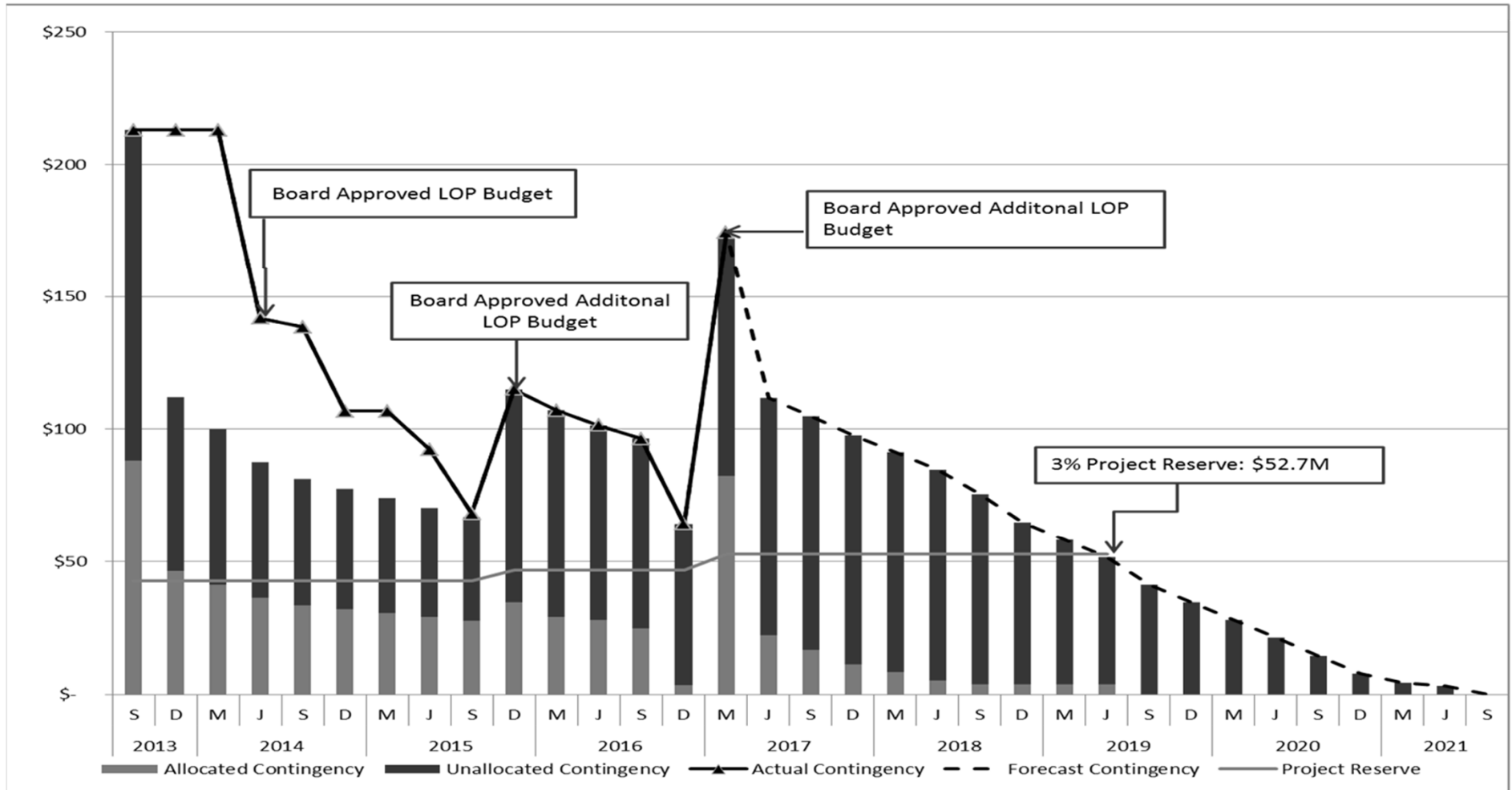
Project Cost Contingency Drawdown



Regional Connector Pending Change Order

Change Notice #	Description	Number of Mod/Change Orders	Cost Value
	TOTAL VALUE OF ALL EXECUTED CONTRACT MODIFICATIONS AND CHANGE ORDERS:	83	\$ 126,269,665
	TOTAL PENDING MODIFICATIONS ROUGH ORDER OF MAGNITUDE COST:	33	\$ 77,114,009
	1st/Alameda Bumpout (Construction)		Less Than \$1 Million
	Flower Street Modification: future 2-way Traffic /Bumpout/Ped Lighting (Construction Only)		Between \$1 and \$5 Million
	Revise Metro Rail Station Signage and Incorporate Metro Underground Station Signage (Construction)		Less Than \$1 Million
	Add Wye Junction Fan Plant - Construction		Between \$10 and \$15 Million
	Fully Coupled Dynamic Analysis for SEM Cavern		Less Than \$1 Million
50.0	Revisions to TPIS Requirements -Construction		Less Than \$1 Million
66.0	Commonwealth Agreement Provisions		Less Than \$1 Million
68.0	Flower Street Zanja Additional Potholing		Less Than \$1 Million
72.0	Relocate Zayo Ductbank at 2nd/Broadway		Less Than \$1 Million
78.0	ATT Ductbank Relocation @ Hewitt		Less Than \$1 Million
79.0	Deputy Grading Inspector 2nd/Broadway Station SOE		Less Than \$1 Million
86.0	Flower Maintenance of Traffic (MOT) West Piles		Less Than \$1 Million
87.0	Support Veolia 24" Chilled Water Pipes at 2nd/Hope Station		Less Than \$1 Million
99.0	Option 3 Pedestrian Bridge Revisions / Broad Coordination (Construction)		Between \$1 and \$5 Million
91.2	Option 3 Pedestrian Bridge Revisions / Broad Coordination (Design)		Less Than \$1 Million
103.0	1st/Central Station HMI Units for Escalator Controllers		Less Than \$1 Million
104.0	Add One Add 'I VHF Radio Operational Channel - Design Only		Less Than \$1 Million
	Add One Add 'I VHF Radio Operational Channel - Construction		Less Than \$1 Million
105.0	Revise Flower SOE to Construct TBM Retrieval Pit (Construction)		Between \$1 and \$5 Million
106.0	Revisions to Metro Optical Network Switch		Less Than \$1 Million
107.0	Delays and schedule mitigation measures, electrical and water utility relocation costs, add 'I fire life safety engineering and other design and construction changes		More than \$15 Million
108.0	Revision to Wye Junction Fan Plant Design		Less Than \$1 Million
109.0	Testing & Repair of insulation Joints (Waterline)		Less Than \$1 Million
	Revise Communication Radio System SOW (Construction)		Less Than \$1 Million
111.0	Spray-on Acoustical Finishes Additional Quantities		Between \$1 and \$5 Million
112.0	DSC -Pea gravel in waterline trench		Less Than \$1 Million
	DSC - Miscellaneous buried object in tie-back removal		Less Than \$1 Million
	Infrastructure for Insite Wireless in Tunnels		Less Than \$1 Million
	2nd St. Mid Block T.C. Revisions/Relocate Traffic Controller @ 2nd/Spring		Less Than \$1 Million
117.0	Broadway Power Utility Vault Steel Bases (Cradles)		Less Than \$1 Million
	Add Perforated Metal Dropped Ceiling at 2nd/Hope Station Plaza - Construction		Less Than \$1 Million
	Waterline Alignment Modifications on Flower		Less Than \$1 Million
	Revised Emergency Walkways at Curves (30" to 35") - Construction		Less Than \$1 Million
	TOTAL MODIFICATIONS/CHANGE ORDERS	116	\$ 203,383,674

Regional Connector Project Cost Contingency Drawdown



Westside Purple Line Ext. Section 1 Pending Change Order

January 2017

Change Notice #	Description	Number of Mod/ Change Orders	Cost Value
TOTAL VALUE OF ALL EXECUTED CONTRACT MODIFICATIONS AND CHANGE ORDERS:		131	\$ 10,959,182
TOTAL PENDING MODIFICATIONS ROUGH ORDER OF MAGNITUDE COST:		18	\$ 2,989,401
CONTRACT C1045		15	
CN-25	Metro Furnished Equipment Tpis		Less Than \$1 Million
CN-26	Betterment: Median Reconstruction At San Vicente Blvd		Less Than \$1 Million
CN-31.1	Station Canopy Changes		Less Than \$1 Million
CN-32	Pin Station (Identifier) Changes		Less Than \$1 Million
CN-37.1	Rev Metro Furnished Fujitsu 9500 Equipment To Be Furnished By Contractor		Less Than \$1 Million
CN-39	Revisions To Metro Station Signage Standards		Less Than \$1 Million
CN-42.2	Radio System Redundancy		Less Than \$1 Million
CN-43	Isolate Track Circuits At Western		Less Than \$1 Million
CN-46	Plaza Level Elevator Canopy Changes		Less Than \$1 Million
CN-48.1	Bike Enclosure Electrical Power & Communication Additions		Less Than \$1 Million
CN-53	Additional Material Testing - Deck Panels		Less Than \$1 Million
CN-54	Additional Geotech Monitoring At Fairfax (Support Of Deviation Request)		Less Than \$1 Million
CN-57	LA Cienega - Additional Extensometer Monitors		Less Than \$1 Million
CN-58	Civil - DU4 Tree Change, DU4 Bike Share Paving, All STA - Auth Pkg Sgns		Less Than \$1 Million
CN-59	La Cienega Permit Fees		Less Than \$1 Million
CONTRACT C1078		3	
CN-8	Relocation Of 8-Inch Sanitary Sewer		Less Than \$1 Million
CN-11	Schedule Impacts Due To Third Party		Less Than \$1 Million
CN-12	Betterment: City of LA Motorized Access Gate		Less Than \$1 Million
TOTAL MODIFICATIONS/CHANGE ORDERS:		149	\$ 13,948,583

Westside Purple Line Ext. Section 1 Project Cost Contingency Drawdown

January 2017

