



Board Report

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Agenda Number: 29.

CONSTRUCTION COMMITTEE APRIL 20, 2017

RECEIVE oral report by the Program Management Chief Officer.

DISCUSSION

- A. Update report covering the month of April 2017 by the Program Management Chief Officer; and
- B. At the January 2017 meeting, the Board authorized a one-year pilot program authorizing the CEO to negotiate and execute project-related agreements, including contract modification(s) up to the authorized Life of Project budget, to streamline project management of the four (4) major transit corridor projects (Crenshaw/LAX, Regional Connector, Westside Purple Line Extension Section 1 and 2 projects). In addition, staff was directed to provide monthly reports, that would include any pending project-related agreements, change orders/contract modifications and any significant changes to contingency.

Pursuant to the Board motion, staff has developed and begun reporting on cost contingency and contract change activity starting in the February 2017 Monthly Update to the Construction Committee. This new report includes a project cost contingency drawdown curve and allows the Board to see project-related and change activity. This report can be found in Attachment A.

At the conclusion of the one-year pilot program in January 2018, staff will report back to the Board on the time saved as result of this pilot program, and any lessons learned, and recommendations for the Board review and further direction.

ATTACHMENTS

Attachment A - Program Management Chief Officer's Report - April 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:
Discussion

Program Management Chief Officer's Report

Project Status Report

Presented By

Richard Clarke

Chief Program Management Officer











April 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 and February the contractor is forecasting a delay to the Project critical path. Delay mitigation strategy is being implemented by the project which will result in the schedule meeting contract Revenue Service Date (RSD) of October 30, 2019. The remaining cost contingency is below the 3% Project Reserve level.
Regional Connector			Board approved LOP budget increase. Schedule re-baselined.
Westside Purple Line Extension-Section 1			Overall construction progress is 16.7% complete.
Westside Purple Line Extension-Section 2			Contractor Notice to Award issued January 31, 2017. Notice to Proceed for the Design/Build contract is anticipated in April 2017.
Patsaouras Plaza			Schedule negotiations in progress to determine revised substantial completion date.

April 2017



On target



Possible problem



Major issue



Metro

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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 60% complete. However, heavy rains in January and February have impacted planned progress. Delay mitigation strategy is being implemented by the project which will result in the schedule meeting contract Revenue Service Date (RSD) of October 30, 2019.
- 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 contractor continues site excavation, underground utilities, and main shop foundation concrete.



Completed wall sections of Tunnel near airport runways



TBM trailing gear being pulled thru MLK Jr. Station

April 2017



On target



Possible problem



Major issue

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REGIONAL CONNECTOR TRANSIT CORRIDOR



BUDGET

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

* Includes Board approved LOP plus Planning and Finance costs.



SCHEDULE

	Current	Forecast
REVENUE	Dec 2021	Dec 2021
OPERATION		

- Overall Project Progress is 32%.
- TBM mining operations are underway; first pass under Japanese Village Plaza is complete.
- Continue utility hanging and excavation under 2nd/Spring.
- On schedule to receive TBM at Hope Station in late May.
- Flower Street work includes:
 - Deck beam and panel installation between 4th and 5th Streets;
 - Coordination of DWP power relocation at 6th/Flower; and
 - Preparing for 24" waterline cut-overs between 5th and 6th Streets.
- The TBM Recovery Shaft at 4th/Flower continues to be excavated and readied for arrival of the TBM in June.



Utility hanging under 2nd Street decking



HDPE placement at 2nd/Hope Station



Tunnel entrance at 1st/Central Station

April 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 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 16.7 % complete.
- Excavation for the Wilshire/La Brea Station that commenced on October 12, 2016 continues beneath the deck panels, which includes the hanging/relocation of existing utilities, dewatering discharge and the placement of walers and struts.
- 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.



Pipe Strut at Wilshire/La Brea Station



Placement of Deck Panel at Wilshire/Fairfax

April 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

- Notice to Proceed for the Design/Build contract is anticipated in April 2017.
- Construction of the telecom joint trench is proceeding at the Century City Constellation Station. Duct bank will complete in April 2017, cable pulling/splicing completion is anticipated in August 2017.
- Advanced utility relocations are anticipated to begin at the Wilshire/Rodeo Station in May 2017. Concurrence by the City of Beverly Hills on the utilities final design plans are underway.
- Negotiations for a Memorandum of Agreement(MOA) governing utility work began in March 2017.



Telecom Joint Trench Construction along Constellation Boulevard

April 2017



On target



Possible problem



Major issue

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PATSAOURAS PLAZA BUSWAY STATION

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

! SCHEDULE		
	Current	Forecast
SUBSTANTIAL COMPLETION	Dec 2017	Nov 2018

- Vignes On/Off ramp closed Jan 3, 2017 to allow for utility relocation and foundation work to start.
- Bridge overhead demolition, utility relocation, and foundation construction is ongoing.
- Ramirez St and Center St closures have been approved by City.
- Drilling subcontractor has been mobilized and drilling started March 16, 2017.
- Schedule negotiations in progress to determine revised substantial completion date due to delayed start



Aerial view of site



First pile drilling



Utility Relocation

April 2017



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro

Crenshaw/LAX Transit Project

Change Activity

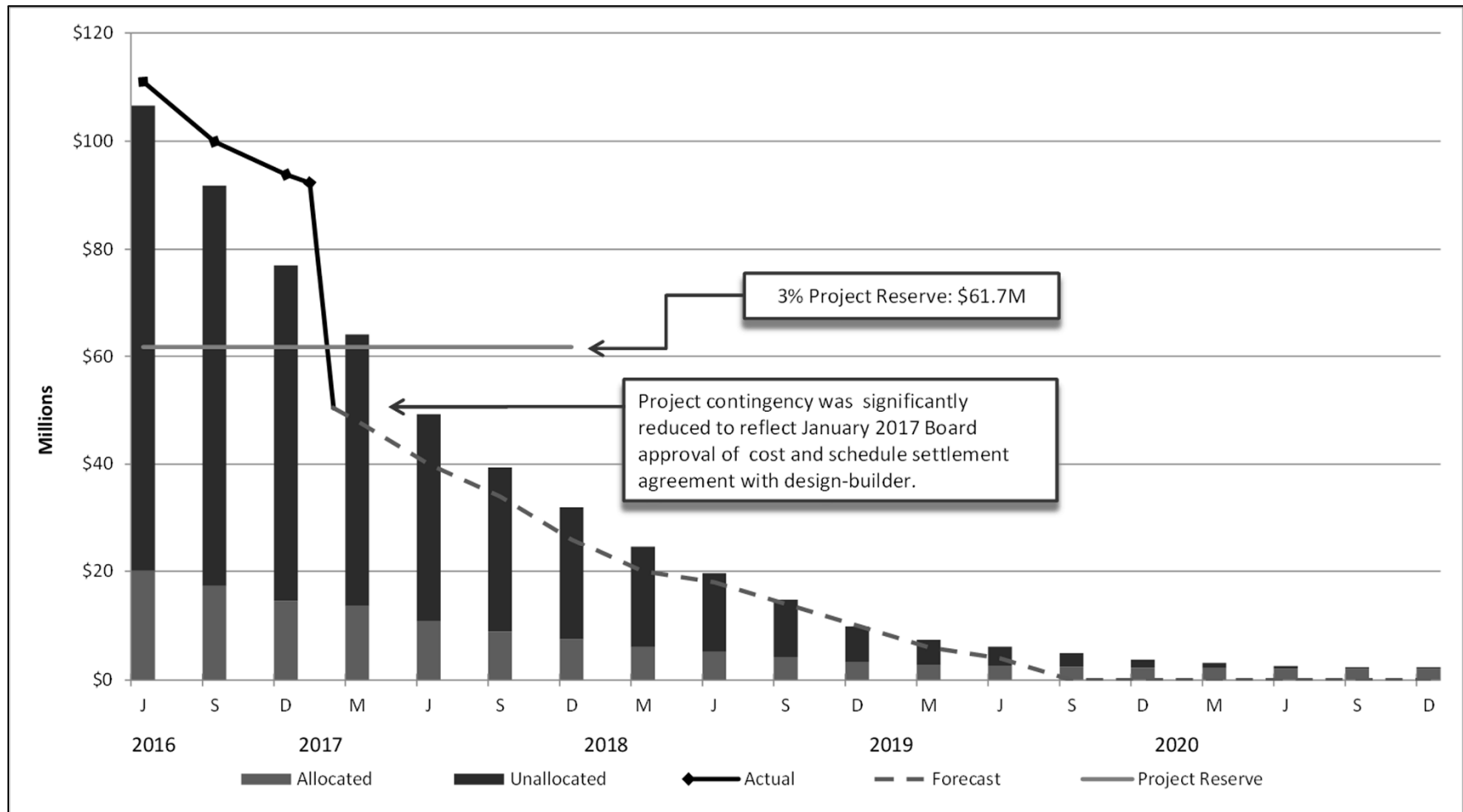
February 2017

Change Notice #	Description	Number of Mod/ Change Orders	Cost Value
TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS AND APPROVED CHANGE ORDERS		261	\$ 35,997,217
TOTAL PENDING MODIFICATIONS AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST		23	\$ 34,794,182
CONTRACT C0988			
MOD 00202.1	Turnback and Speed Restrictions		Less than \$1 million
MOD 00226	Maint. ROW Adj. Properties La Colina		Less than \$1 million
MOD 00240	Construction- Tree Well Brick Pavers		Less than \$1 million
MOD 00245.1	Crenshaw Landscaped Median Rendering		Less than \$1 million
MOD 00250	Clarify Rail Welding Inspection Req.		Less than \$1 million
MOD 00255	Extended Track - Construction		Less than \$2 million
MOD 00256	Black Diamond Vault 5436 Crenshaw Bl		Less than \$1 million
MOD 00257	Ballast Wall Extension at Eucalyptus		Less than \$1 million
MOD 00258	Claims and Disputes Settlement Agmt		Less than \$30 million
MOD 00234	LADOT Fiber Optic Cable Betterment		Less than \$1 million
CO 00046.4	Undergrd Fire Rated Conduit & Cable		Less than \$1 million
CO 00129	Elimination Crosver Sta 56+57.50		Credit Less than \$1 million
CO 00136	Relocate Qwest Pullbox at Hindry Ave		Less than \$1 million
CO 00140	Disp Remove Contam. Soil STA 182+25		Less than \$1 million
CO 00152	Radio System - Additional Tunnel Amp		Less than \$1 million
CO 00153	Radio System - Additional Head-End		Less than \$1 million
CO 00154	Radio System- UG1 Hot Standby Amplif		Less than \$1 million
CN 00229	Unsuitable Soils for Subgrade RW192		Less than \$1 million
CN 00231	Trash Removal at MSE Wall 111		Less than \$1 million
CN 00241	Update Station Customer Signage Cons		Less than \$1 million
CN 00278	Additional Curb Ramps at Westmount		Less than \$1 million
CN 00326	Segment C Design Revisions per LADOT		Less than \$1 million
CN 00340	Const. Intrusion Det. Access Ctrl In		Less than \$1 million
TOTAL MODIFICATIONS AND CHANGE ORDERS		284	\$ 70,791,399

Crenshaw/LAX Transit Project

Project Cost Contingency Drawdown

February 2017

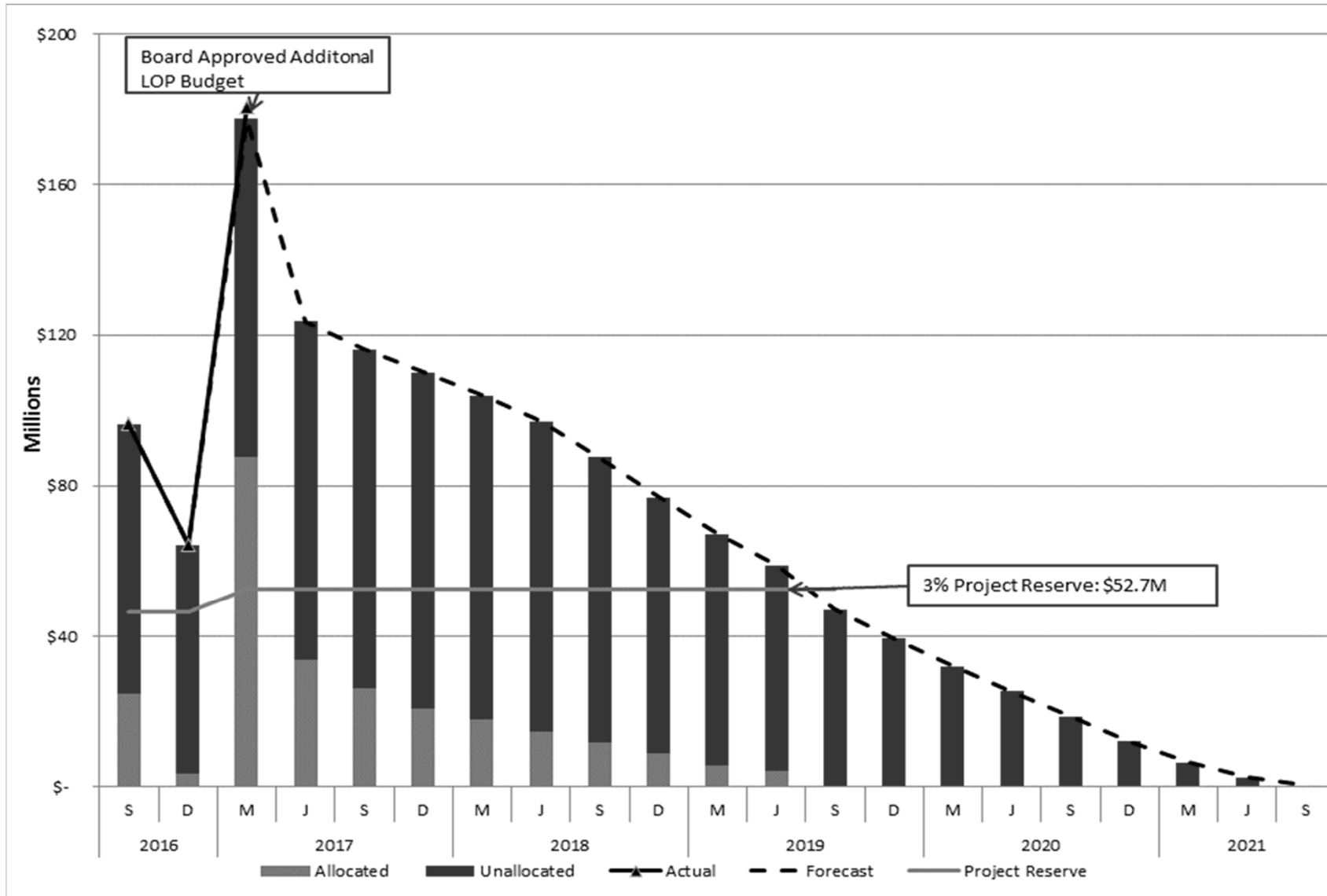


Regional Connector Change Activity

February 2017

Change Notice #	Description	Number of Mod/ Change Orders	Cost Value
	TOTAL VALUE OF ALL EXECUTED CONTRACT MODIFICATIONS AND CHANGE ORDERS:	75	\$ 127,416,098
	TOTAL PENDING MODIFICATIONS AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST:	34	\$ 82,701,742
	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
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
103.0	1st/Central Station HMI Units for Escalator Controllers		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
	Revise Communication Radio System SOW (Construction)		Less Than \$1 Million
	Infrastructure for Insite Wireless in Tunnels		Less Than \$1 Million
	Add Perforated Metal Dropped Ceiling at 2nd/Hope Station Plaza - Construction		Less Than \$1 Million
107.0	Delays and schedule mitigation measures, electrical and water utility relocation costs, add'l 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
111.0	Spray-on Acoustical Finishes Additional Quantities		Between \$1 and \$5 Million
113.0	Waterline Alignment Modifications on Flower		Less Than \$1 Million
114.0	DSC - Miscellaneous buried object in tie-back removal		Less Than \$1 Million
	Revised Emergency Walkways at Curves (30" to 35") - Construction		Less Than \$1 Million
115.0	Wayfind Signage @ 2nd/Hope Ped Bridge - Design Only		Less Than \$1 Million
	Utility Conflicts during Decking at 4th & Flower St.		Less Than \$1 Million
116.0	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
118.0	Extended Performance for Design		Between \$5 and \$10 Million
119.0	Metro Board Adopted Station Names		Less Than \$1 Million
	Elevator Hoistway Fascia Material Variance		Less Than \$1 Million
	TOTAL MODIFICATIONS/CHANGE ORDERS	109	\$ 210,117,840

Regional Connector Project Cost Contingency Drawdown



Westside Purple Line Extension – Section 1

Change Activity

February 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 AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST:		19	\$ 2,989,401
CONTRACT C1045		16	
CN-25.2	Revisions to Transit Passenger Information System (TPIS) Requirements		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-37.2	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 Subsystem Redundancy (Failover)		Less Than \$1 Million
CN-43.1	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		Less Than \$1 Million
CN-57	Additional Geotech Monitoring at La Cienega (Support of Deviation Request)		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
CN-60	Additional Vibration Monitoring		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: Motorized Sliding Gate		Less Than \$1 Million
TOTAL MODIFICATIONS/CHANGE ORDERS:		150	\$ 13,948,583

Westside Purple Line Extension – Section 1

Project Cost Contingency Drawdown

February 2017

