



Board Report

File #: 2017-0884, **File Type:** Oral Report / Presentation

Agenda Number: 29.

**CONSTRUCTION COMMITTEE
FEBRUARY 15, 2018**

**SUBJECT: PROGRAM MANAGEMENT MAJOR PROJECT STATUS
REPORT**

ACTION: RECEIVE ORAL REPORT

RECOMMENDATION

RECEIVE oral report on the Major Project Status by the Chief Program Management Officer.

DISCUSSION

- A. Update report covering the month of February 2018 by the Chief Program Management Officer; and
- B. At the January 2018 Board meeting, staff summarized the positive program results and impacts of the one-year pilot program, which the Board approved in January 2017, 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).

Also at the January 2018 meeting, the Board approved continuation and expansion of the authority delegation for LOP budget management on all transit and regional rail capital projects program-wide. Staff was further directed to provide quarterly reports and include details on change orders and modifications. The first quarterly of this detailed changes and modifications report to the Board will be issued by April 2018. In the interim, staff will continue reporting on project cost contingency and contract change activity, as shown in Attachment A.

ATTACHMENTS

Attachment A - Program Management Major Project Status Report - February 2018

Prepared by:

- **Master Schedule** - Julie Owen, DEO, Project Mgmt., (213) 922-7313
- **Crenshaw/LAX** - Charles Beauvoir, EO Project Mgmt., (213) 903-4113
- **Regional Connector** - Gary Baker, EO Project Mgmt., (213) 893-7191
- **Westside Purple Line Ext 1** - James Cohen, EO Project Mgmt., (213) 922-7911
- **Westside Purple Line Ext 2** - Michael McKenna, EO Project Mgmt., (213) 312-3132
- **Westside Purple Line Ext 3** - Michael McKenna, EO Project Mgmt., (213) 312-3132
- **Patsaouras Plaza Busway Station** - Timothy Lindholm, EO Project Engr., (213) 922-7297
- **Willowbrook/Rosa Park Station** - Timothy Lindholm, EO Project Engr., (213) 922-7297
- **The New Blue** - Androush Danielians, EO Project Engr (Interim)., (213) 922-7598
- **Presentation** - Yohana Jonathan, Departmental System Analyst, (213) 922-7592

Program Management Major Project Status Report

Presented By

Richard Clarke

Chief Program Management Officer

















February 2018

Construction Committee

Los Angeles County Metropolitan Transportation Authority



PROJECT BUDGET & SCHEDULE STATUS SUMMARY CHART

Project	Cost Performance	Schedule Performance	Comments
Crenshaw/LAX			The remaining cost contingency is below 2% of the total project budget (\$38 million in contingency remains). Contractor is 40 days behind schedule and is required to mitigate schedule to maintain planned revenue service in October 2019.
Regional Connector			Project is 45% complete and proceeding on schedule forecast and within Life of Project (LOP) budget.
Westside Purple Line Extension-Section 1			Project is 27% complete, no significant issues.
Westside Purple Line Extension-Section 2			Project is 5% complete with no significant issues.
Westside Purple Line Extension-Section 3			Requested entry into the Engineering Phase from the FTA in April 2017. Sent request for Letter of No Prejudice (LONP) for the tunnel contract to FTA in September 2017. Awaiting FTA approval.
Patsaouras Plaza			Project 46% complete with approved substantial completion date of December 2018.
Willowbrook/Rosa Parks Station			Design activities progressed to 100% complete and in final reviews.
Metro Blue Line Projects			Pedestrian Swing Gate project 90% complete. MBL Signal Rehab project has just started at 10% completion. City of Long Beach Fare Gates Design 100% complete.

February 2018



On target



Possible problem



Major issue



Metro 2

Construction Committee

Los Angeles County Metropolitan Transportation Authority

TRANSIT MASTER SCHEDULE (Page 1 of 2)

TASK filters: Code Cleanup_1, Name contains, Show on Master Schedule, WBS Categories_WBS				* 00 Master Program (By Phase) no contin													12-Jan-18	
Activity Name	PMIS Project Manager	Start	Finish	Original Budget	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Transit Projects		01-Mar-07 A	26-Jun-57	7,479,403,650.00														
Environmental		01-Mar-07 A	26-Jun-57	2,419,000,000.00														
North San Fernando Valley BRT Improvements	Cencic	04-Jan-17 A	02-Sep-25	\$180,000,000.00														
North Hollywood to Pasadena BRT	Richmai	30-Jan-15 A	02-Sep-25	\$267,000,000.00														
Orange Line Grade Separations	Patel	23-May-16 A	30-Jun-25	\$286,000,000.00														
East San Fernando Valley Transit Corridor	Davis	11-Oct-10 A	10-Jan-29	1,331,000,000.00														
Vermont BRT Corridor	Cencic	30-Jan-15 A	09-Nov-29	\$425,000,000.00														
Crenshaw Northern Extension	Moosavi	31-Jan-18	17-Jun-47	2,240,000,000.00														
West Santa Ana Transit Corridor	Pan	01-Oct-09 A	05-Jul-41	4,000,000,000.00														
Sepulveda Phase 1 - Express Lanes	Wong	20-Feb-18	10-Nov-26	\$260,000,000.00														
Sepulveda Phase 3 - Westwood to LAX	Mieger	26-Apr-17 A	26-Jun-57	3,865,000,000.00														
South Bay Green Line Ext. Crenshaw Blvd in Torr	Khanna	23-Mar-17 A	15-May-30	\$891,000,000.00														
Sepulveda Phase 2 - Transit Corridor	Zelmer	26-Apr-17 A	24-Apr-37	5,674,000,000.00														
Eastside Transit Corridor Phase 2 (1 Align)	Liu	01-Mar-07 A	08-Nov-35	3,000,000,000.00														
Design		04-Oct-10 A	28-Apr-27	2,030,270,758.00														
Airport Metro Connector	Zelmer	04-Oct-10 A	29-Dec-23	\$623,400,000.00														
Gold Line Foothill Extension Phase 2B	Meade	02-Oct-13 A	28-Apr-27	1,406,870,758.00														
Procurement																		
Purple Line Extension Section 3	McKenna	29-Feb-16 A	04-Mar-26	3,478,000,000.00														
Construction Contract																		
Crenshaw/LAX Transit Corridor	Beauvoir	01-Jul-09 A	30-Oct-19	2,058,000,000.00														
Regional Connector Transit Corridor	Baker	26-Jan-09 A	15-Nov-21	1,810,132,892.00														
Purple Line Extension Section 1	Cohen	01-Jun-07 A	29-Nov-23	3,154,300,000.00														
Purple Line Extension Section 2	McKenna	02-Mar-15 A	30-Aug-25	2,529,700,000.00														
Transit Facilities		07-May-15 A	18-Apr-23	\$577,546,000.00														

Planning / Environmental
 ROW / Utility Relocation
 DB Construction
 System Testing
 Not Funded (Env/ROW/Test)

Design / Engineering
 Adv / Award
 DBB Construction
 Not Funded (Eng/Bid/Con)

TRANSIT MASTER SCHEDULE (Page 2 of 2)

TASK filters: Code Cleanup_1, Name contains, Show on Master Schedule, WBS Categories_WBS				* 00 Master Program (By Phase) no contin												12-Jan-18		
Activity Name	PMIS Project Manager	Start	Finish	Original Budget	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Design		07-May-15 A	18-Apr-23	\$577,546,000.00														
Willowbrooks/Rosa Parks Station Improvement	Lindholm	07-May-15 A	31-Dec-20	\$102,546,000.00														
Div 20 Portal/Turnback	Meade	16-May-16 A	18-Apr-23	\$475,000,000.00														
Regional Rail Projects	Owens	02-Sep-13 A	24-Jun-27	3,099,400,000.00														
Environmental	Owens	01-Dec-14 A	24-Jun-27	2,662,000,000.00														
Link Union Station	Owens	01-Dec-14 A	24-Jun-27	2,662,000,000.00														
Design	Owens	01-Apr-15 A	02-May-22	\$422,400,000.00														
Brighton to Roxford Double Track	Owens	01-Sep-15 A	28-Jan-22	\$186,600,000.00														
Lone Hill to CP White	Owens	03-May-16 A	02-May-22	\$82,000,000.00														
Rosecrans & Marquardt Grade Separation	Owens	01-Apr-15 A	14-Sep-21	\$153,800,000.00														
Construction Contract	Owens	02-Sep-13 A	01-Jun-18	\$15,000,000.00														
Bob Hope Airport Station	Owens	02-Sep-13 A	01-Jun-18	\$15,000,000.00														
Bus Facilities Projects	Gurrola	31-Mar-14 A	21-Mar-19	\$0.00														
Construction Contract	Gurrola	31-Mar-14 A	21-Mar-19	\$0.00														
Patsouras Plaza	Gurrola	31-Mar-14 A	21-Mar-19	\$0.00														
Construction	Gurrola	31-Mar-14 A	21-Mar-19															
State of Good Repair/Improvements		01-Jul-13 A	31-Mar-23	\$180,999,946.00														
Design	Danielans	13-Jun-16 A	31-Mar-23	\$11,078,366.00														
210 Freeway Barrier Rail	Danielans	13-Jun-16 A	31-Mar-23	\$11,078,366.00														
Procurement	Wei	21-Sep-15 A	30-Apr-20	\$118,990,580.00														
MBL Resignaling	Wei	21-Sep-15 A	30-Apr-20	\$118,990,580.00														
Construction Contract		01-Jul-13 A	30-Mar-18	\$50,931,000.00														
Pershing Sq. Esc. Replace & New Canopy Project	Patel	11-May-15 A	31-Aug-17 A	\$20,756,000.00														
MBL Ped Safety Enhancement At-Grade Crossing	Chong	01-Jul-13 A	30-Mar-18	\$30,175,000.00														

Planning / Environmental
 ROW / Utility Relocation
 DB Construction
 System Testing
 Not Funded (Env/ROW/Test)

Design / Engineering
 Adv / Award
 DBB Construction
 Not Funded (Eng/Bid/Con)

HIGHWAY MASTER SCHEDULE (Page 2 of 2)

* 00 Hwy Master Program Schedule (By Pina)					12-Jan-18																			
Activity Name	Project Manager	Start	Finish	Latest Estimate	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035	
Countywide Soundwall Construction	Owen	15-Dec-10 A	17-Feb-21	\$156,800,000.00																				
Package #10 - SR-210 Fair Oaks, Lake and Baldwin to Sant	Owen	02-Sep-14 A	17-Feb-21	\$59,300,000.00																				
Package #11 - SR-170 from 101 to Sherman Way and I-405	Owen	15-Dec-10 A	21-Dec-20	\$97,500,000.00																				
Construction Contract		01-Jan-98 A	01-Aug-22	\$2,742,267,000.00																				
I-5 North Capacity Enhancements SR-134 to SR-118	Subeh	01-Apr-98 A	15-Jun-20	\$853,900,000.00																				
SR-118 to SR-170 (Segment 1A)	Subeh	30-Jul-99 A	15-Jul-16 A	\$219,400,000.00																				
Planning / Environmental	Subeh	30-Jul-99 A	29-Dec-00 A	\$219,400,000.00																				
Right of Way	Subeh	03-Jun-02 A	31-Mar-09 A																					
Design Engineering	Subeh	01-Jul-02 A	09-Oct-09 A																					
DBB Construction	Subeh	19-Jul-10 A	15-Jul-16 A																					
SR-170 to Buena Vista (Segments 2)	Subeh	01-Apr-98 A	16-Dec-15 A	\$94,700,000.00																				
Magnolia to SR-134 (Segment 4)	Subeh	01-Apr-98 A	18-Dec-19	\$137,400,000.00																				
Buena Vista to Magnolia (Segment 3)	Subeh	01-Apr-98 A	15-Jun-20	\$402,400,000.00																				
I-5 South Capacity Enhancements from I-605 to Orange Coun	Gau	01-Jan-98 A	01-Aug-22	\$1,888,367,000.00																				
I-5 Carmenita Road Interchange	Gau	01-Jan-01 A	20-Mar-18	\$420,000,000.00																				
Alondra (Segment 1)	Gau	01-Jan-01 A	19-May-16 A	\$114,071,000.00																				
Imperial Highway (Segment 4)	Gau	01-Jan-01 A	26-Jul-19	\$323,285,000.00																				
Shoemaker - Rosecrans (Segment 3)	Gau	01-Jan-98 A	28-Nov-18	\$188,216,000.00																				
Florence (Segment 5)	Gau	01-Jan-01 A	30-Jul-20	\$211,671,000.00																				
Valley View (Segment 2)	Gau	01-Jan-98 A	01-Aug-22	\$631,124,000.00																				

Planning / Environmental
 ROW / Utility Relocation
 DB Construction
 Remaining Program Duration
 System Testing
 Not Fu...

Design / Engineering
 Adv / Award
 DBB Construction
 Contingency
 Not Funded (Eng/Bid/Con)

CRENSHAW/LAX TRANSIT PROJECT

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

◇ SCHEDULE	Current	Forecast
REVENUE OPERATION	Oct 2019	Oct 2019

- Overall Project Progress is 77% complete; contractor needs to mitigate 40 days schedule delay
- Major initial interface effort commenced on January 26, 2018 for the Green Line tie-in to Crenshaw/LAX Line. Planned closure from January 26 to April 7, 2018 of Green Line at Aviation Station to end of line.
- Contractor continues critical track work installation along southern area of alignment
- Contractor continues concrete wall and roof placements for cut-and-cover tunnel and the three underground stations along Crenshaw Boulevard
- The Southwestern Yard Maintenance Facility is progressing ahead of schedule



Backfilling continues on main line near LAX Airport runways



Concourse level columns and walls at Leimert Park Station

February 2018



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 7

REGIONAL CONNECTOR TRANSIT PROJECT

OK BUDGET

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

* Includes Board approved LOP plus finance costs.

OK SCHEDULE

	Current Dec 2021	Forecast Dec 2021
REVENUE		
OPERATION		

- Overall Project Progress is 45%
- Tunneling: Second tunnel completed; dismantling of the Tunnel Boring Machine (TBM) underway
- Little Tokyo/Arts District Station: Under steady state; construction resuming after removal of TBM
- Historic Broadway Station: Underpinning of LA Times Building, and excavation continue under steady state
- Grand Av Arts/Bunker Hill Station: Permanent invert and wall construction underway
- Flower Street: Utility relocations, support of excavation, decking and excavation continue; moveable noise and visual barriers erected at four locations



Excavation of 20" waterline on Central Avenue



Tieback installation at Historic Broadway Station

February 2018



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 8

WESTSIDE PURPLE LINE EXTENSION – SECTION 1

OK BUDGET

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

* Includes Board approved LOP plus Finance costs.

OK SCHEDULE

	Current	Forecast
REVENUE OPERATION	Oct 2024 (FFGA)	Nov 2023

- Overall Project Progress is 27% complete.
- Support of Excavation (SOE) pile installation began at the Wilshire/Western Retrieval Shaft in December 2017. Decking in this area is anticipated to start in February 2018.
- Wilshire/La Brea Station dewatering activities, grounding grid installation and HDPE installation are on going. Station structural concrete activities are scheduled to begin in January 2018.
- At the Wilshire/Fairfax Station, station excavation and the installation of walers and struts are on-going.
- Street decking at Wilshire/La Cienega Station commenced on the weekend of October 6, 2017. This operation was completed on January 8, 2018.
- Tunnel Boring Machines (TBMs) were delivered to Los Angeles in December 2017 and will be taken to the contractor’s Riverside storage site until needed. Tunneling is planned to start in August of 2018.



Wilshire/La Brea Station



Wilshire/La Cienega Decking Operation

February 2018



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 9

WESTSIDE PURPLE LINE EXTENSION – SECTION 2

OK BUDGET

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

* Includes Board approved LOP plus Finance costs.

OK SCHEDULE

	Current	Forecast
REVENUE OPERATION	Dec 2026 (FFGA)	Aug 2025

- Overall project progress is 5% complete.
- Design progress is 47% complete.
- Century City Constellation: Southern California Gas (SCG) completed work in November 2017. AT&T and LADWP (Power) utility relocations are underway.
- Wilshire/Rodeo: Southern California Edison (SCE) civil work completed in November 2017, and cable pulling and splicing completed in January 2018. SCG and AT&T began in late January 2018.
- Negotiations with the City of Beverly Hills (COBH) for an MOA for the C1120 Contract began in August 2017 and are anticipated to complete by April 2018.



AT&T CA manhole Installation in Century City

February 2018



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 10

WESTSIDE PURPLE LINE EXTENSION – SECTION 3

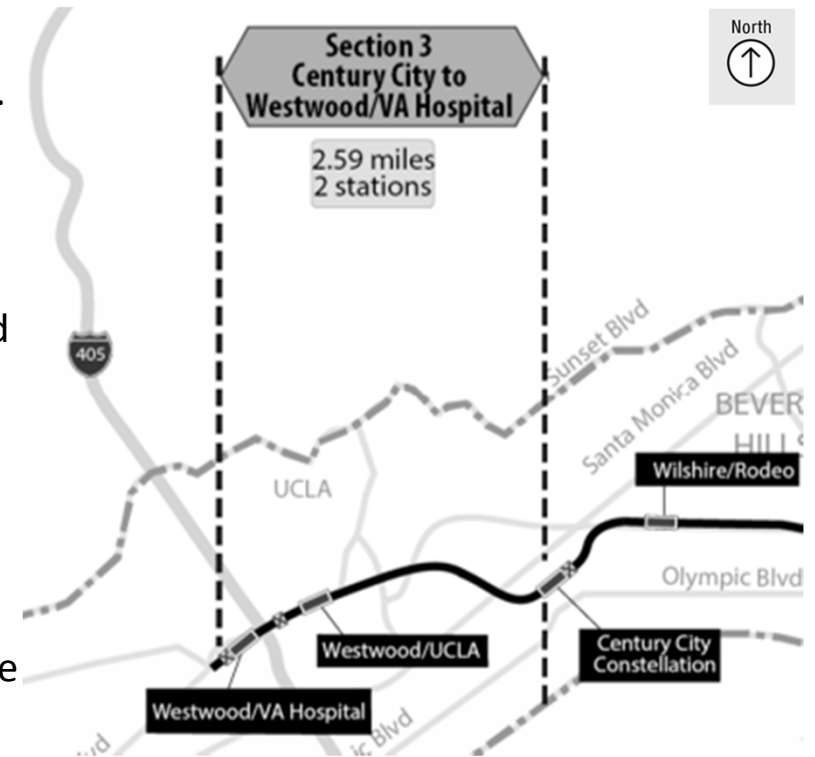
OK BUDGET

	Current	Forecast
TOTAL COST	TBD	\$3,478M

OK SCHEDULE

	Current	Forecast
REVENUE OPERATION	TBD	March 2026

- Request for Letter of No Prejudice (LONP) for the Tunnel Contract was submitted to the FTA on September 11, 2017.
- Construction Management Support Services (CMSS) Contract was executed on November 29, 2017.
- C1151 Tunnel Contract - Technical proposals were received on November 13, 2017, and price proposals are anticipated in early 2018.
- C1152 Stations, Trackwork and Systems Contract - Request for Qualifications (RFQ)/Request for Proposals (RFP) was issued on September 15, 2017. Qualifications from respondents were received on November 20, 2017.
- C1153 Advanced Utility Relocations (AUR) Contract – Notice to Proceed (NTP) was issued on January 2, 2018.



February 2018



On target



Possible problem



Major issue



Metro 11

Construction Committee

Los Angeles County Metropolitan Transportation Authority

PATSAOURAS PLAZA BUSWAY STATION

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

◇ SCHEDULE		
	Current	Forecast
SUBSTANTIAL COMPLETION	Nov 2018	Dec 2018

- Native bone find requires Native American monitoring of construction activities
- Pedestrian overcrossing design complete, elevator foundations pending redesign due to garage conflict
- All bridge falsework complete and concrete pours pending Caltrans FW certification
- Installation of bridge post-tensioning, deck drains and rebar complete
- Vignes Street on/off-ramp intermittent non-peak closures ongoing
- Falsework over Center Street complete, concrete pour to be scheduled for nighttime work
- Working with contractor to expedite negotiated project schedule delays and request for changes



Aerial view of project site



Bridge Deck – Left Side

February 2018



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 12

WILLOWBROOK/ROSA PARKS STATION

OK BUDGET		
	Current	Forecast
TOTAL COST	N/A	\$92.4M

OK SCHEDULE		
	Current	Forecast
SUBSTANTIAL COMPLETION	Dec 2020	Dec 2020

- Early Start Phase (Package E) Construction mobilization has begun. Construction expected to start February.
- Package A and C at 100% design completion. Bid to be released to the public Mid-January. Package includes provisions for the closure of the Blue Line (the New Blue).
- Pedestrian grade crossing documents submitted to Union Pacific (UP) and Public Utilities Commission (PUC).



South Platform Improvements



Central Plaza & Bus Bays



Main Plaza

February 2018



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 13

THE NEW BLUE

<u>Project Name</u>	Budget	Percent Completed	Forecast Completion	Status
• Pedestrian Gates	\$31.4M	90%	March 2018	OK
• City of Long Beach Fare Gates Design (Design)	\$6M	100%(Design)	Feb 2018	OK
• Blue Line Signal Rehabilitation (OCS, Signals, Div. 11)	\$119M*	10%	April 2021	OK
Total: \$156.4M				

Project Status

- **Pedestrian gates**
 - Construction completed within Cities of Long Beach and Compton
 - Construction within County of LA 90% complete
 - Working with LADOT on temporary Street closures and traffic control plan approvals
- **MBL Signal Rehab Design at 100%**
- **City of Long Beach Fare Gates Design** (Design)
 - Design completed on 5th and Wardlow stations.



*Budget Estimate

February 2018



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro

Crenshaw/LAX Transit Project

Change Activity

December 2017

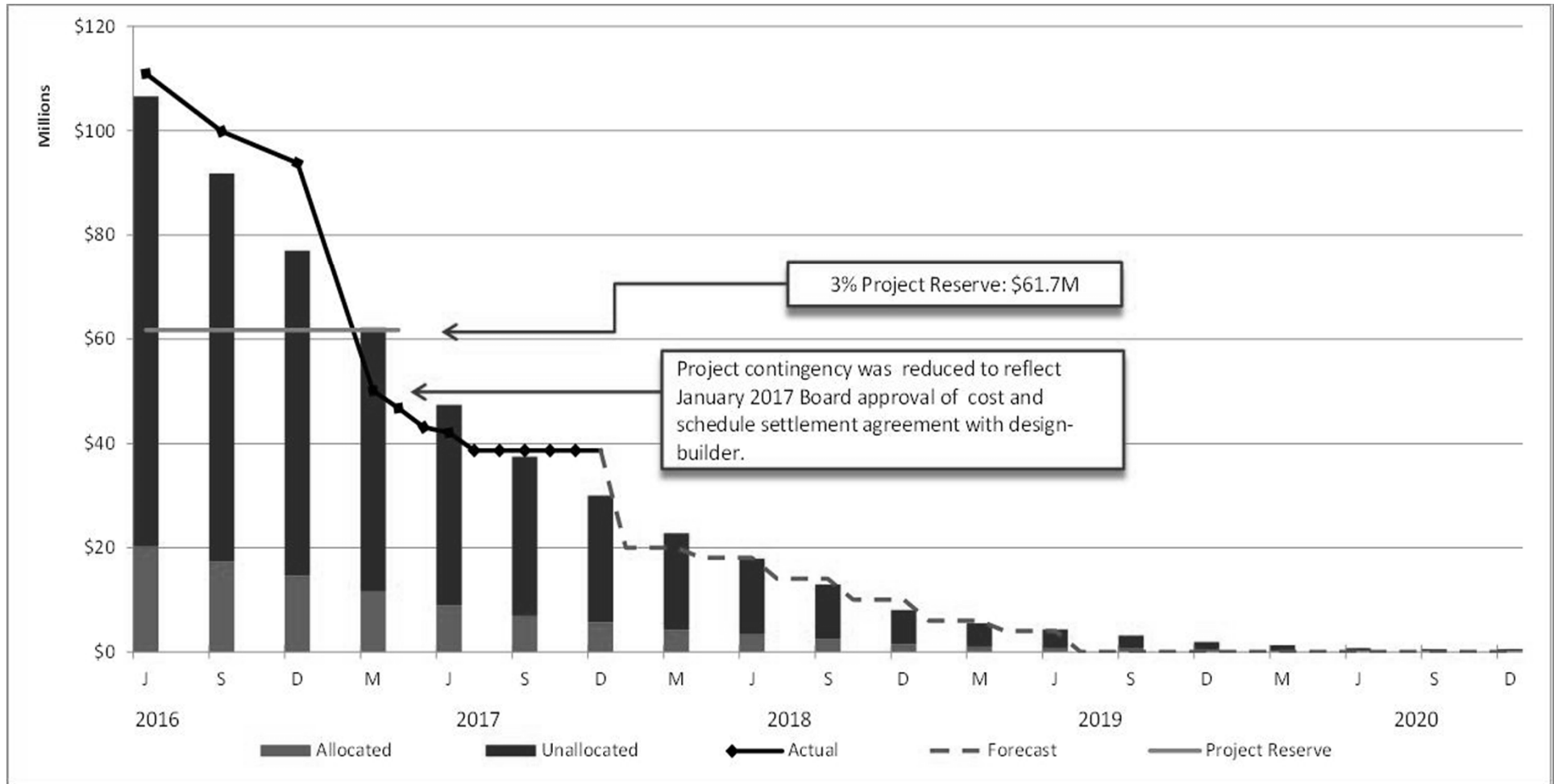


Change Notice #	Description	Number of Mod/ Change Orders	Cost Value
TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS AND APPROVED CHANGE ORDERS		346	\$ 79,350,210
TOTAL PENDING MODIFICATIONS AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST		21	\$ 2,486,952
DESIGN BUILD - CONTRACT C0988			
MOD ISSUED	Asbestos Cement Pipe 63rd & Tesoro		Less than \$1 million
MOD ISSUED	Claim 118 Resolution - Qwest Line		Less than \$1 million
MOD ISSUED	Clean Agent Systems in the 3 TC& C		Less than \$3 million
MOD ISSUED	Addl Dsgn MLK Paver Underlayment		Less than \$1 million
MOD ISSUED	ATC Wayside Signal Numbering Rev		Less than \$1 million
MOD ISSUED	Revised ROW Lines at HS-1001, Arbor		Less than \$1 million
MOD ISSUED	Cable Transmission System - Construc		Less than \$1 million
MOD ISSUED	Radio Redundancy Radio Rooms		Less than \$1 million
MOD ISSUED	Construction Hindry Widening & Reloc		Less than \$1 million
MOD ISSUED	Radio System - Additional Tunnel Amp		Less than \$1 million
MOD ISSUED	Radio System - Additional Head-End		Less than \$1 million
MOD ISSUED	Radio System- UG1 Hot Standby Amplif		Less than \$1 million
MOD IN PROCESS	BkChrg Metro pymnts to COLA TCO		Credit Less than \$1.1 million
MOD IN PROCESS	Composite Utility Plan Revisions		Less than \$1 million
MOD IN PROCESS	MRDC- Full Height End of Platform		Less than \$1 million
MOD IN PROCESS	Unsuitable Soil for Subgrade Century		Less than \$1 million
CO IN PROCESS	Underground Conduit & Cable		Less than \$1 million
CO IN PROCESS	Elimination Crosver Sta 56+57.50		Credit Less than \$1 million
CO IN PROCESS	Underground Station Emergency Vent		Less than \$1 million
CO IN PROCESS	MLK Station Plaza Concrete Pav-Const		Less than \$1 million
CO IN PROCESS	Left Turn at Slauson Crossing Gate		Less than \$1 million
TOTAL MODIFICATIONS AND CHANGE ORDERS		367	\$ 81,837,162
PROFESSIONAL SERVICES CONTRACTS			
Design Support Services During Construction - CONTRACT E0117			
TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS		42	\$ 59,217,720
TOTAL PENDING MODIFICATIONS		0	\$ -
TOTAL MODIFICATIONS		42	\$ 59,217,720
Construction Management Support Services - CONTRACT MC069			
TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS		18	\$ 69,484,775
TOTAL PENDING MODIFICATIONS		0	\$ -
TOTAL MODIFICATIONS		18	\$ 69,484,775

Crenshaw/LAX Transit Project

Project Cost Contingency Drawdown

December 2017



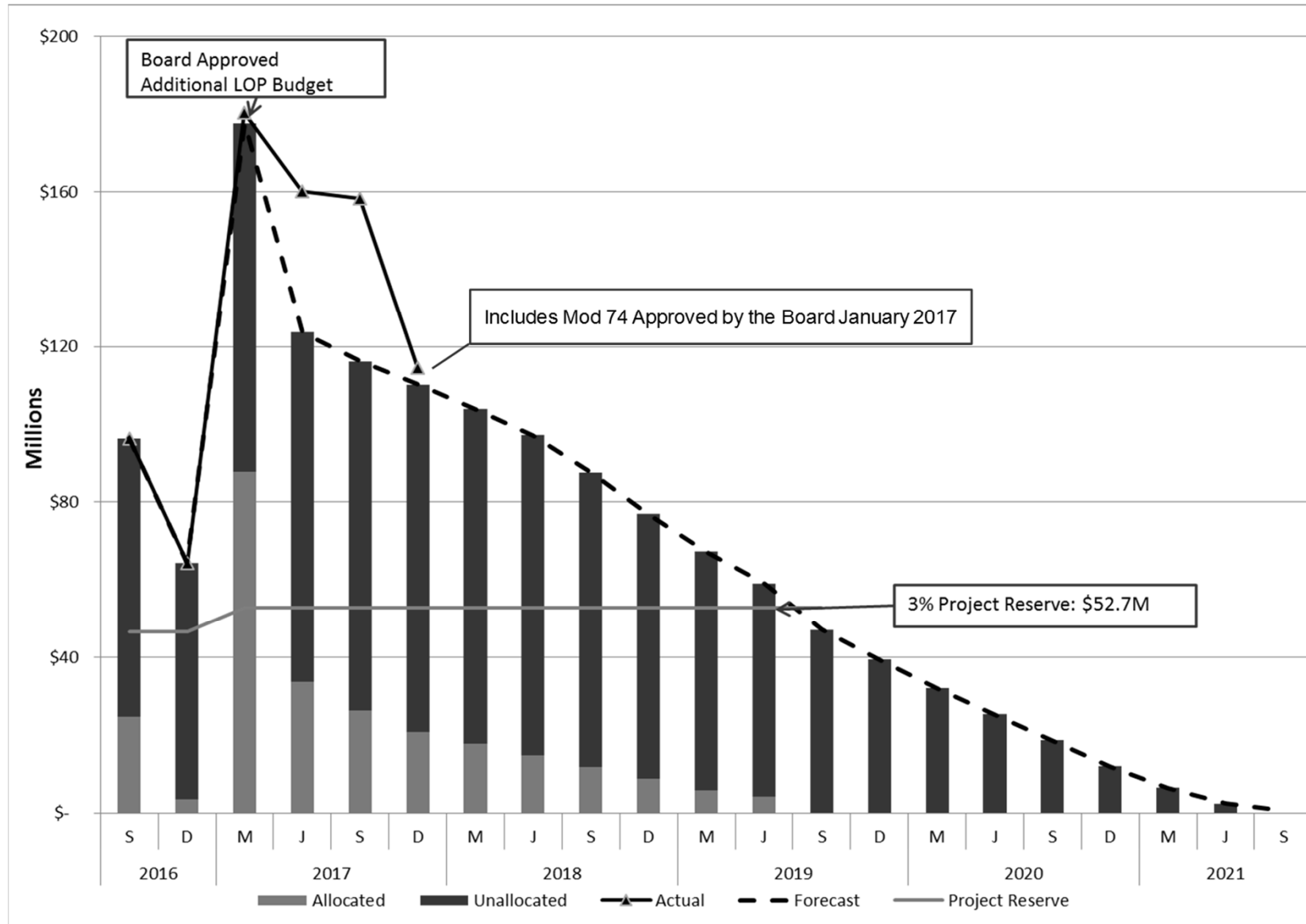
Regional Connector Change Activity

December 2017



Change Notice #	Description	Number of Mod/Change Orders	Cost Value
DESIGN BUILD CONTRACT (C0980)			
TOTAL VALUE OF ALL EXECUTED CONTRACT MODIFICATIONS AND CHANGE ORDERS:		107	\$ 194,371,183
TOTAL PENDING MODIFICATIONS AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST:		32	\$ 30,182,806
	1st/Alameda Bumpout (Construction)		Less Than \$1 Million
TBD	Flower Street Modification: future 2-way Traffic /Bumpout/Ped Lighting (Construction Only)		Between \$1 and \$5 Million
TBD	Revise Metro Rail Station Signage and Incorporate Metro Underground Station Signage (Construction)		Less Than \$1 Million
TBD	Add Wye Junction Fan Plant - Construction		Between \$10 and \$15 Million
68.0	Flower Street Zanja Additional Potholing		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
TBD	Add One Add 'I VHF Radio Operational Channel - Construction		Less Than \$1 Million
106.0	Revisions to Metro Optical Network Switch		Less Than \$1 Million
TBD	Revise Communication Radio System SOW (Construction)		Less Than \$1 Million
TBD	Add Perforated Metal Dropped Ceiling at 2nd/Hope Station Plaza - Construction		Less Than \$1 Million
111.0	Spray-on Acoustical Finishes Additional Quantities		Between \$1 and \$5 Million
TBD	Revised Emergency Walkways at Curves (30" to 35") - Construction		Less Than \$1 Million
121.0	Utility Conflicts during Decking at 4th & Flower St.		Less Than \$1 Million
TBD	Insurance Claim - JVP Compensation Grout Line		Less Than \$1 Million
130.0	10" Sewer Bypass at 1st/Alameda		Less Than \$1 Million
131.0	Backfilling Broken Compensation Grouting Pipes at JVP		Less Than \$1 Million
133.0	Deleting OCS Work at 7th Metro (CREDIT)		Less Than \$1 Million
134.0	2nd/Broadway - LA Times Communication Line Realignment Due to Differing Site Conditions		Less Than \$1 Million
137.0	Revise SOE and Train Control and Mechanical Rooms (Charles Dunn SOE DSC)		Less Than \$1 Million
138.0	LADWP Switch Room Requirements for 1st and Central Station - Design Only		Less Than \$1 Million
TBD	Add 'I Commonwealth Agreement (noise barrier)		Less Than \$1 Million
146.0	Add 'I Gas Monitoring/Potential Gassy w/Special Conditions		Between \$1 and \$5 Million
148.0	Platform Stand-Alone Validators		Less Than \$1 Million
151.0	Differing Site Conditions - Time		Between \$1 and \$5 Million
TBD	Differing Site Conditions - Labor		Between \$1 and \$5 Million
TBD	DWP Vault Support (5) on Flower		Less Than \$1 Million
153.0	Additional UPS System for Regional Connector Radio Racks at 7th Metro -Design Only		Less Than \$1 Million
TBD	Additional UPS System for Regional Connector Radio Racks at 7th Metro -Construction		Less Than \$1 Million
158.0	2nd & Broadway Station Revised Overbuild Design Parameters		Between \$1 and \$5 Million
160.0	Support for Building LADWP Manholes on Flower St		Less Than \$1 Million
161.0	Flower St Traffic Control for LADWP Cable Pulling		Less Than \$1 Million
	TOTAL MODIFICATIONS AND CHANGE ORDERS	139	\$ 224,553,989
PROFESSIONAL SERVICES CONTRACT			
Design Support Services During Construction (E0119)			
TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS		12	\$ 44,629,810
TOTAL PENDING MODIFICATIONS ROUGH ORDER OF MAGNITUDE COST		0	\$ -
TOTAL MODIFICATIONS		12	\$ 44,629,810
Construction Management Support Services (MC070)			
TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS		5	\$ 35,630,672
TOTAL PENDING MODIFICATIONS ROUGH ORDER OF MAGNITUDE COST		0	\$ -
TOTAL MODIFICATIONS		5	\$ 35,630,672

Regional Connector Project Cost Contingency Drawdown



Westside Purple Line Extension – Section 1

Change Activity

December 2017

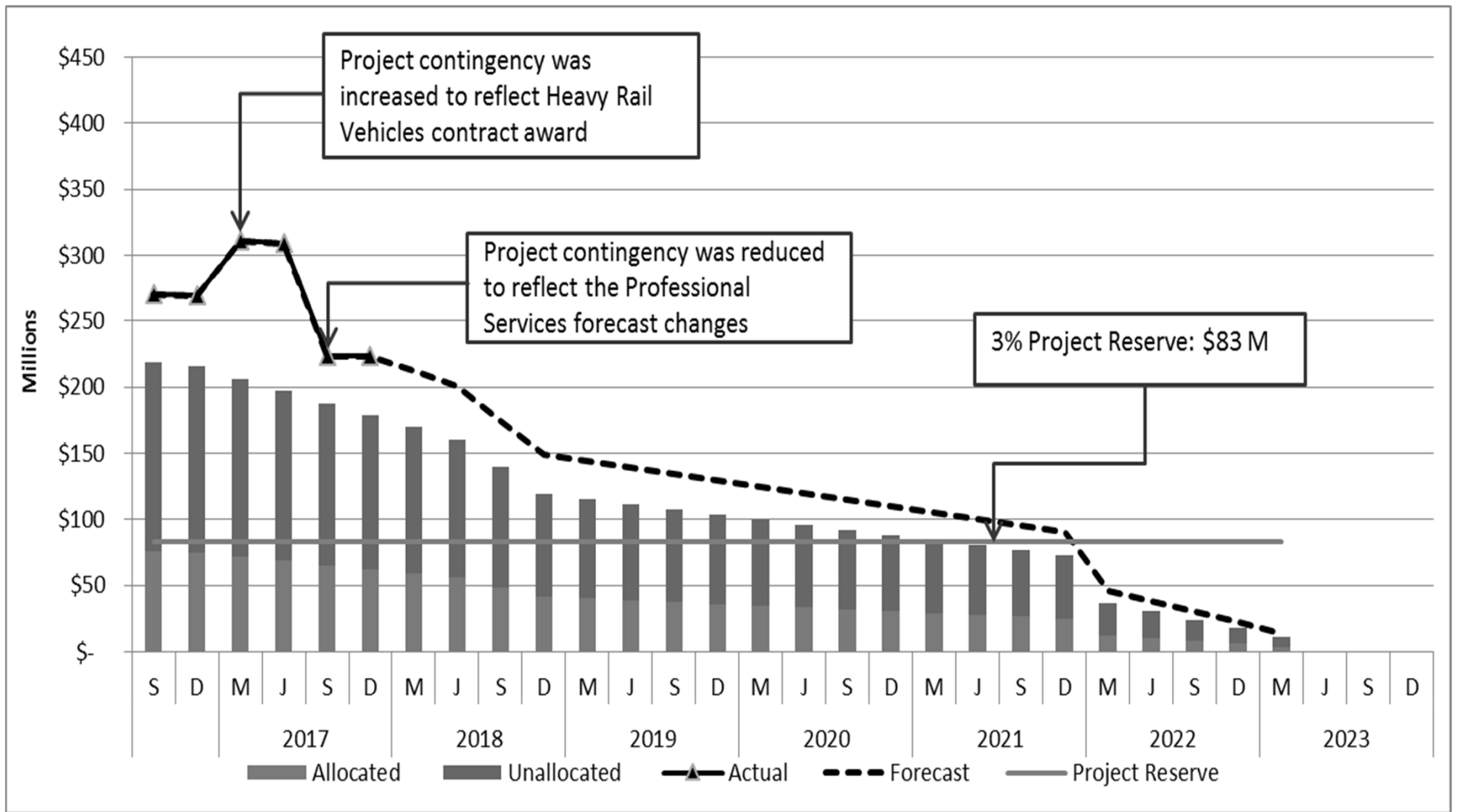


Change Notice #	Description	Number of Mod/Change Orders	Cost Value
TOTAL VALUE OF ALL EXECUTED CONTRACT MODIFICATIONS AND CHANGE ORDERS:		150	\$ 30,042,654
TOTAL PENDING MODIFICATIONS AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST:		47	More than \$15M
DESIGN/BUILD CONTRACT C1045			
		37	
CN-26	Betterment City of Beverly Hills - Median Reconstruction at San Vicente Blvd		Less Than \$1 Million
CN-32	Pin Station (Identifier) Changes		Less Than \$1 Million
CN-42.3	Radio Subsystem Redundancy		Between \$1M - \$5M
CN-43.4	Isolate Track Circuits at Wilshire/Western		Less Than \$1 Million
CN-47.2	Stainless Steel Enclosure for TVM and PTEL		Less Than \$1 Million
CN-56	Implement City of Beverly Hills Memorandum of Agreement (MOA)		Between \$10M - \$15M
CN-63	La Brea- Additional Instrumentation Requested by BOE		Less Than \$1 Million
CN-64.1	Additional SOE Design Work - La Brea Station		Less Than \$1 Million
CN-65.1	Additional SOE Design Work for Fairfax Station Due to Deviation Request for Building Settlement		Less Than \$1 Million
CN-66	Additional Dewatering Treatment & Discharge Costs at La Brea		Less Than \$1 Million
CN-67	Tactile Guidance (Construction and Plaza Material Change)		Less Than \$1 Million
CN-68	Increased Ventilation of Station Ancillary Rooms		Between \$1M - \$5M
CN-72.1	Stations - Art Related Changes		Less Than \$1 Million
CN-76	Additional SOE Design Work for La Cienega Station Due to Deviation Request for Building Settlement		Less Than \$1 Million
CN-77	Additional Interpretation for Building Settlement		Less Than \$1 Million
CN-78	Fairfax - DWP Ductbank Conflict with Deck Beams		Less Than \$1 Million
CN-79	Wilshire/Western - Permit Approval and Inspection for Access Shaft		Less Than \$1 Million
CN-80.1	Stand by Generator Enclosure Aesthetic Improvements at La Cienega		Less Than \$1 Million
CN-81	Additional Instrumentation (Project Wide) as Required by LABOE and STS EOR		Less Than \$1 Million
CN-82	Additional Geotechnical Instrumentation at Western		Less Than \$1 Million
CN-83	Additional Dewatering Treatment & Discharge Impacts at Western		Between \$1M - \$5M
CN-84	Additional SOE Design Work for the Western Shaft Due to Deviation Request for Building Settlement		Less Than \$1 Million
CN-85	La Brea Utility hanging Changes for Sewer and Storm Drains		Less Than \$1 Million
CN-87	Power Duct Bank Conflict at La Brea (ECI-4)		Less Than \$1 Million
CN-88	TCE Slab Demolition and Removal at the Western Shaft		Less Than \$1 Million
CN-89	La Cienega-Removal of AT&T Abandoned Cables		Less Than \$1 Million
CN-91	La Brea-DWP Conflict and Impacts to Cap Beam Walkers 28 & 29		Less Than \$1 Million
CN-92	La Cienega - Impacts from Delayed SCE Lines/MH Abandonment		Less Than \$1 Million
CN-93	Center Muck Shaft at La Brea (ECI-4)		Less Than \$1 Million
CN-94.1	Negative Rail-to-Ground Voltage Device at Fairfax Station		Less Than \$1 Million
CN-96	La Cienega - TPSS Room Changes for SCE (Design and Construction)		Less Than \$1 Million
CN-98	Implement Wireless - Stations and Tunnels		Less Than \$1 Million
CN-99	Oil Well Horizontal Investigation in Lieu of TBM Probe-Ahead		Between \$1M - \$5M
TBD	Fairfax - Piling Obstructions, Conflicts, Delays		Less Than \$1 Million
TBD	La Cienega Tail Track FLS Issues		Less Than \$1 Million
TBD	La Cienega - Additional Settlement markers at Saban Corners		Less Than \$1 Million
TBD	Crossover Exit Doors at Stations (La Brea, La Cienega)		Less Than \$1 Million
DESIGN/BUILD CONTRACT C1078			
		10	
CN-11	Schedule Impacts Due to Third Party		Between \$1M - \$5M
CN-12	Betterment - Motorized Sliding Gate for the City of LA		Less Than \$1 Million
CN-13	AST Leak Detection and Remote Lubrication Fill/Extract Station		Less Than \$1 Million
CN-16	Additional Street/Pedestrian Lights, Trees and Irrigation		Between \$1M - \$5M
CN-18	Storm Drain - Differing Site Conditions		Less Than \$1 Million
TBD	Support of Building Art Work		Less Than \$1 Million
TBD	On-Site LIDS		Less Than \$1 Million
TBD	Hazardous Materials - Chalmers Pan Handle		Less Than \$1 Million
TBD	Betterment: 6th Street Viaduct - Site Re-Grading, Ornamental Fenc, Etc.		Less Than \$1 Million
TBD	Updated IT Standards on Data Drops and Outlets		Less Than \$1 Million
TBD	TOTAL MODIFICATIONS AND CHANGE ORDERS	197	
PROFESSIONAL SERVICES CONTRACTS			
Design Support Services During Construction - CONTRACT PS43502000			
TOTAL VALUE OF ALL EXECUTED CONTRACT MODIFICATIONS:		22	\$ 92,608,453
TOTAL PENDING MODIFICATIONS		0	
TOTAL MODIFICATIONS AND CHANGE ORDERS		22	
Construction Management Support Services - CONTRACT MC071			
TOTAL VALUE OF ALL EXECUTED CONTRACT MODIFICATIONS:		4	\$ 70,297,456
TOTAL PENDING MODIFICATIONS		0	
TOTAL MODIFICATIONS AND CHANGE ORDERS		4	

Westside Purple Line Extension – Section 1

Project Cost Contingency Drawdown

December 2017



Westside Purple Line Extension – Section 2

Change Activity

December 2017



Change Notice #	Description	Number of Mod/Change Orders	Cost Value
TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS AND APPROVED CHANGE ORDERS		5	\$ 196,211
TOTAL PENDING MODIFICATIONS AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST:		9	Less Than \$1 Million
DESIGN/BUILD CONTRACT C1120			
CN-3.1	Century City Constellation Station: Main Entrance (Design)		Less Than \$1 Million
CN-7	Deletion of Cross Passage Geotech Borings		Less Than \$1 Million
CN-8	Additional Abatement at Former ACE Gallery Site		Less Than \$1 Million
CN-9	Century City Constellation Station Trackwork Extension		Less Than \$1 Million
CN-10	Worksite Traffic Control for SCG & AT&T Advanced Utility Relocation		Between \$1M - \$5 M
CN-11	Substitution of Precast for Steel Special Tunnel Lining (Value Engineering)		Less Than \$1 Million
TBD	Century City Constellation Station West Ancillary & OPE Reconfiguration (Construction)		Less Than \$1 Million
TBD	Century City Constellation Station: Main Entrance (Construction)		More Than \$15 Million
TBD	AT&T Building Demolition		Between \$1M - \$5 M
TOTAL MODIFICATIONS AND CHANGE ORDERS		14	\$ -
PROFESSIONAL SERVICES CONTRACT			
Design Support Services During Construction			
TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS		0	\$ -
TOTAL PENDING MODIFICATIONS		0	\$ -
TOTAL MODIFICATIONS		0	\$ -
Construction Management Support Services			
TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS		0	\$ -
TOTAL PENDING MODIFICATIONS		0	\$ -
TOTAL MODIFICATIONS		0	\$ -
OTHER - THIRD PARTY AGREEMENTS			

Westside Purple Line Extension – Section 2

Project Cost Contingency Drawdown

December 2017

