



Board Report

File #: 2017-0733, **File Type:** Oral Report / Presentation

Agenda Number: 32.

CONSTRUCTION COMMITTEE NOVEMBER 16, 2017

**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 November 2017 by the Chief Program Management 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 Major Project Status Report - November 2017

Prepared by:

- **Master Schedule** - Julie Owen, DEO, Project Mgmt., (213)922-7313
- **Crenshaw/LAX** - Charles Beauvoir, EO Project Mgmt., (213) 299-3095
- **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
- **Blue Line Projects** - 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

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 19 days behind schedule and is required to mitigate schedule to maintain planned revenue service in October 2019.
Regional Connector			Project is proceeding consistent with schedule forecast and LOP budget as approved by the Board in January 2017.
Westside Purple Line Extension-Section 1			Project is 24% complete, no significant issues.
Westside Purple Line Extension-Section 2			Issued Notice to Proceed (NTP) to Tutor Perini/O&G a JV (TPOG) on April 26, 2017. Project is 4% 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 on September 15, 2017.
Patsaouras Plaza			Schedule negotiations in progress regarding revised substantial completion date of November 2018.
Willowbrook/Rosa Parks Station			Design activities progressed to 100% complete and in final reviews.

November 2017



On target



Possible problem



Major issue



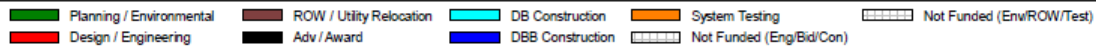
Metro 2

Construction Committee

Los Angeles County Metropolitan Transportation Authority

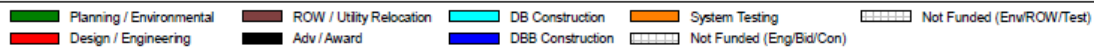
TRANSIT MASTER SCHEDULE (Page 1 of 2)

TASK filters: Code Cleanup, Name contains, Show on Master Schedule, WBS Categories_WBS			* 00 Master Program (By Phase) no contin													09-Oct-17		
Activity Name	PMIS Project Manager	Start	Finish	Original Budget	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
					2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Transit Projects																		
Environmental																		
North San Fernando Valley BRT Improvements	Cencic	04-Jan-17 A	09-Oct-24	\$180,000,000.00														
North Hollywood to Pasadena BRT	Richmai	30-Jan-15 A	24-Jul-23	\$267,000,000.00														
Orange Line Grade Separations	Patel	23-May-16 A	10-Jan-24	\$286,000,000.00														
East San Fernando Valley Transit Corridor	Davis	11-Oct-10 A	05-Nov-27	1,331,000,000.00														
Vermont BRT Corridor	Cencic	30-Jan-15 A	13-Jul-28	\$425,000,000.00														
Crenshaw Northern Extension	Moosavi	29-Dec-17	31-Jan-48	2,240,000,000.00														
West Santa Ana Transit Corridor	Pan	01-Oct-09 A	08-Mar-29	4,000,000,000.00														
Sepulveda Pass Phase 1 - Express Lanes	Wong	01-Nov-17	13-Oct-27	\$260,000,000.00														
South Bay Green Line Ext. Crenshaw Blvd in Torr	Khanna	23-Mar-17 A	29-Jan-32	\$891,000,000.00														
Sepulveda Pass Phase 2 & 3 - Transit Corridor	Zelmer	26-Apr-17 A	12-Aug-36	5,674,000,000.00														
Design																		
Airport Metro Connector	Zelmer	04-Oct-10 A	26-Jul-23	\$623,400,000.00														
Purple Line Extension Section 3	McKenna	29-Feb-16 A	03-Sep-26	3,478,000,000.00														
Gold Line Foothill Extension Phase 2B	Meade	02-Oct-13 A	28-Apr-27	1,406,870,758.00														
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	21-Dec-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	29-Aug-25	2,529,700,000.00														
Transit Facilities																		
Design																		
Willowbrooks/Rosa Parks Station Improvement	Lindholm	07-May-15 A	29-Mar-21	\$102,546,000.00														
Div 20 Portal/Turnback	Meade	16-May-16 A	10-Apr-24	\$475,000,000.00														



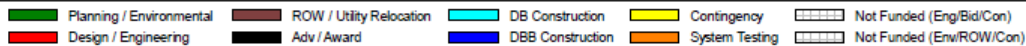
TRANSIT MASTER SCHEDULE (Page 2 of 2)

TASK filters: Code Cleanup, Name contains, Show on Master Schedule, WBS Categories_WBS				* 00 Master Program (By Phase) no contin													09-Oct-17	
Activity Name	PMIS Project Manager	Start	Finish	Original Budget	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
					2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Emergency Security Operations Center	Owens	17-Dec-13 A	23-Sep-21	\$112,700,000.00														
Regional Rail Projects	Owens	02-Sep-13 A	20-May-27	3,099,400,000.00														
Environmental	Owens	01-Dec-14 A	20-May-27	2,662,000,000.00														
Link Union Station	Owens	01-Dec-14 A	20-May-27	2,662,000,000.00														
Design	Owens	01-Apr-15 A	26-Oct-21	\$422,400,000.00														
Brighton to Roxford Double Track	Owens	01-Sep-15 A	27-Sep-21	\$186,600,000.00														
Lone Hill to CP White	Owens	03-May-16 A	26-Oct-21	\$82,000,000.00														
Rosecrans & Marquardt Grade Separation	Owens	01-Apr-15 A	19-Apr-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	11-Jan-19	\$0.00														
Construction Contract	Gurrola	31-Mar-14 A	11-Jan-19	\$0.00														
Patsouras Plaza	Gurrola	31-Mar-14 A	11-Jan-19	\$0.00														
State of Good Repair/Improvements		01-Jul-13 A	31-Mar-21	\$180,999,946.00														
Design	Danielans	13-Jun-16 A	31-Mar-21	\$11,078,366.00														
210 Freeway Barrier Rail	Danielans	13-Jun-16 A	31-Mar-21	\$11,078,366.00														
Procurement	Wei	21-Sep-15 A	03-Aug-20	\$118,990,580.00														
MBL Resignaling	Wei	21-Sep-15 A	03-Aug-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														



HIGHWAY MASTER SCHEDULE (Page 1 of 2)

		* 00 Hwy Master Program Schedule (By Pha)																	09-Oct-17	
Activity Name	PMIS Project Manager	Start	Finish	Original Budget	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032
Highway Projects				\$17,084,121,000.00																
Environmental				\$13,091,560,000.00																
I-710 South	Chaves	02-Jan-08 A	01-Mar-30	\$8,028,100,000.00																
SR-57/SR-60 Interchange Improvements	Jong	03-Jul-18	30-Sep-30	\$770,000,000.00																
I-105 Express Lane from I-405 to I-605	Amiri	01-May-17 A	29-Jun-29	\$175,000,000.00																
I-5 Corridor Improvements (I-605 to I-710)	Chaves	02-Jan-19	30-Jun-42	\$1,105,060,000.00																
I-605 Interchange Improvements	Various	01-Jun-16 A	15-Jan-30	\$673,300,000.00																
I-605/SR-91 Interchange Improvements	Various	01-Jun-16 A	01-Aug-25	\$143,300,000.00																
I-710/SR-91 Interchange Improvements	Various	01-Aug-17	15-Jan-30	\$530,000,000.00																
I-605 Corridor Improvements	Panuco	01-Oct-15 A	01-May-30	\$2,340,100,000.00																
I-605/I-5 Interchange Improvements	Panuco	01-Oct-15 A	01-Sep-27	\$1,108,100,000.00																
I-605/SR-60 Interchange Improvements	Panuco	31-Aug-16 A	01-May-30	\$1,232,000,000.00																
Design				\$1,251,080,000.00																
I-5 North Capacity Enhancement (SR-14 to Parker Rd.)	Antaramian	02-Jul-12 A	29-Jul-22	\$784,080,000.00																
SR-71 Gap Between I-10 to Rio Rancho Rd	Jong	17-Oct-16 A	01-Apr-24	\$295,000,000.00																
Countywide Soundwall Construction	Owen	15-Dec-10 A	18-Feb-21	\$156,800,000.00																
Package #11 - SR-170 from 101 to Sherman Way and	Owen	15-Dec-10 A	18-Feb-21	\$97,500,000.00																
Package #10 - SR-210 Fair Oaks, Lake and Baldwin t	Owen	02-Sep-14 A	17-Feb-21	\$59,300,000.00																
I-605 Hot Spots	Montez	01-Jun-14 A	01-Jul-21	\$15,200,000.00																
Arterial Intersections - Whittier	Montez	02-Jun-14 A	01-Jul-21	\$5,600,000.00																
Arterial Intersections - La Mirada	Montez	02-Jun-14 A	28-Feb-20	\$4,300,000.00																
Arterial Intersections - Cerritos	Montez	01-Jun-14 A	02-Mar-20	\$2,900,000.00																
Arterial Intersections - Bellflower	Montez	01-Jun-14 A	28-Feb-20	\$1,200,000.00																
Arterial Intersections - Long Beach	Montez	01-Jun-14 A	01-Jul-19	\$1,200,000.00																
Construction Contract				\$2,741,481,000.00																
I-5 North Capacity Enhancements SR-134 to SR-118	Subeh	01-Apr-98 A	15-Jun-20	\$853,900,000.00																



HIGHWAY MASTER SCHEDULE (Page 2 of 2)

09-Oct-17

* 00 Hwy Master Program Schedule (By Pha

Activity Name	PMIS Project Manager	Start	Finish	Original Budget	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032
					2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
SR-118 to SR-170 (Segment 1A)	Subeh	30-Jul-99 A	15-Jul-16 A	\$219,400,000.00																
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	Gau	01-Jan-96 A	01-Aug-22	\$1,887,581,000.00																
I-5 Carmenita Road Interchange	Gau	01-Jan-01 A	01-Mar-18	\$419,214,000.00																
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	29-Jul-19	\$323,285,000.00																
Shoemaker - Rosecrans (Segment 3)	Gau	01-Jan-96 A	03-Dec-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-96 A	01-Aug-22	\$631,124,000.00																

- Planning / Environmental
- Design / Engineering
- ROW / Utility Relocation
- Adv / Award
- DB Construction
- DBB Construction
- Contingency
- System Testing
- Not Funded (Eng/Bid/Con)
- Not Funded (Enw/ROW/Con)

CRENSHAW/LAX TRANSIT PROJECT

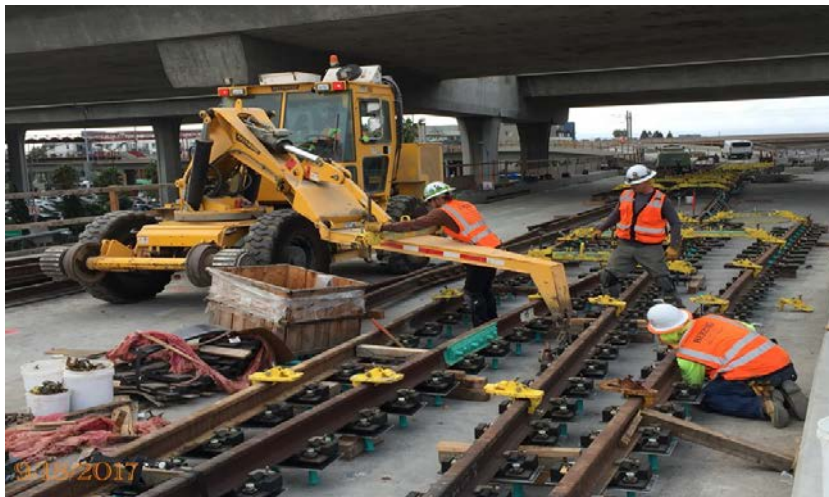
◆ BUDGET

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

◆ SCHEDULE

	Current	Forecast
REVENUE OPERATION	Oct 2019	Oct 2019

- Overall Project Progress is 73% complete; main line contractor needs to mitigate 19 day delay
- Contractor continues critical track work installation along southern area of alignment
- Canopy steel is installed at Downtown Inglewood and Fairview Heights at-grade stations and started at Aviation/Century Station
- Advancing interior construction of walls and concourse platform for the three underground stations and commenced entrance and roof sections at Expo/Crenshaw Station



Track work for switch on the Green Line "Y" underpass



Installing components for platform deck at Hyde Park Station

November 2017



On target



Possible problem



Major issue



Metro 7

Construction Committee

Los Angeles County Metropolitan Transportation Authority

REGIONAL CONNECTOR TRANSIT PROJECT

BUDGET

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

* Includes Board approved LOP plus finance costs.

- Overall Project Progress is 41 %
- Tunneling: Began the second bore and have mined successfully beneath the sensitive Japanese Village Plaza area
- Little Tokyo/Arts District Station: Under steady state until tunnel operations are completed
- Historic Broadway Station: Support of Excavation and utility support work continues
- Grand Av Arts/Bunker Hill Station: Work at concourse level and preparation for Tunnel Boring Machine (TBM) arrival continues
- Flower Street: Power relocations, support of excavation, pile installation, decking and excavation are ongoing

SCHEDULE

	Current	Forecast
REVENUE OPERATION	Dec 2021	Dec 2021



Preparation for shotcrete application at Grand Av Arts/Bunker Hill Station



Pile installation on Flower Street

November 2017



On target



Possible problem



Major issue



Metro 8

Construction Committee

Los Angeles County Metropolitan Transportation Authority

WESTSIDE PURPLE LINE EXTENSION – SECTION 1

BUDGET

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

* Includes Board approved LOP plus Finance costs.

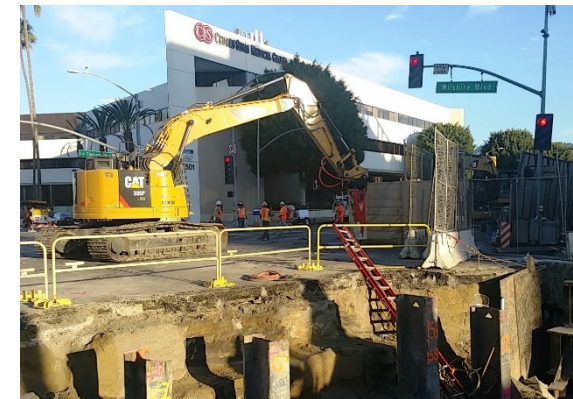
SCHEDULE

	Current	Forecast
REVENUE OPERATION	Oct 2024 (FFGA)	Nov 2023

- Overall Project Progress is 24% complete
- Sanitary sewer relocation started at the Wilshire/Western shaft area on the weekend of September 23, 2017. Support of Excavation (SOE) pile installation is anticipated to begin at the end of October 2017
- Excavation for the Wilshire/La Brea Station commenced on October 12, 2016 and continues beneath the deck panels. Station excavation is scheduled to complete by November 2017
- At the Wilshire/Fairfax Station, the hanging of utilities under the concrete deck panels is complete. Station excavation and the installation of walers and struts is on-going
- The Wilshire/La Cienega Station piling operation was completed on October 12, 2017. Street decking commenced on the weekend of October 6, 2017
- Tunnel Boring Machines (TBMs) are being prepared for delivery at the end of 2017. TBMs #1 & #2 have been accepted by the contractor. Tunneling is planned to start in 2018



Under Deck Excavation at Wilshire/La Brea Station



Wilshire/La Cienega Decking Operation

November 2017



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority

WESTSIDE PURPLE LINE EXTENSION – SECTION 2

BUDGET

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

* Includes Board approved LOP plus Finance costs.

SCHEDULE

	Current	Forecast
REVENUE OPERATION	Dec 2026 (FFGA)	Aug 2025

- Overall project progress is 4% complete
- Received 60% Design Package #1 (Utility/Civil Design at Launch Box) in August 2017 and returned it to TPOG on September 18, 2017, Approved As Noted (AAN)
- Received submittal of 60% Design Package #2 (Remaining Utility Conflicts) in September 2017 and returned it to TPOG on October 10, 2017, AAN
- Draft Supplemental Environmental Impact Statement (SEIS): Anticipate publication of Notice of Availability (NOA) in November 2017
- Century City Constellation: Cable pulling and splicing work is anticipated to complete in November 2017. Southern California Gas (SCG) and AT&T utility relocations are underway
- Wilshire/Rodeo: Southern California Edison (SCE) began relocation of power lines in September 2017. SCG and AT&T to follow once SCE relocations are complete
- Negotiations with the City of Beverly Hills for a Memorandum of Agreement (MOA) governing utility work began in March 2017 and is continuing



LADWP power relocation work in Century City

November 2017



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 10

WESTSIDE PURPLE LINE EXTENSION – SECTION 3

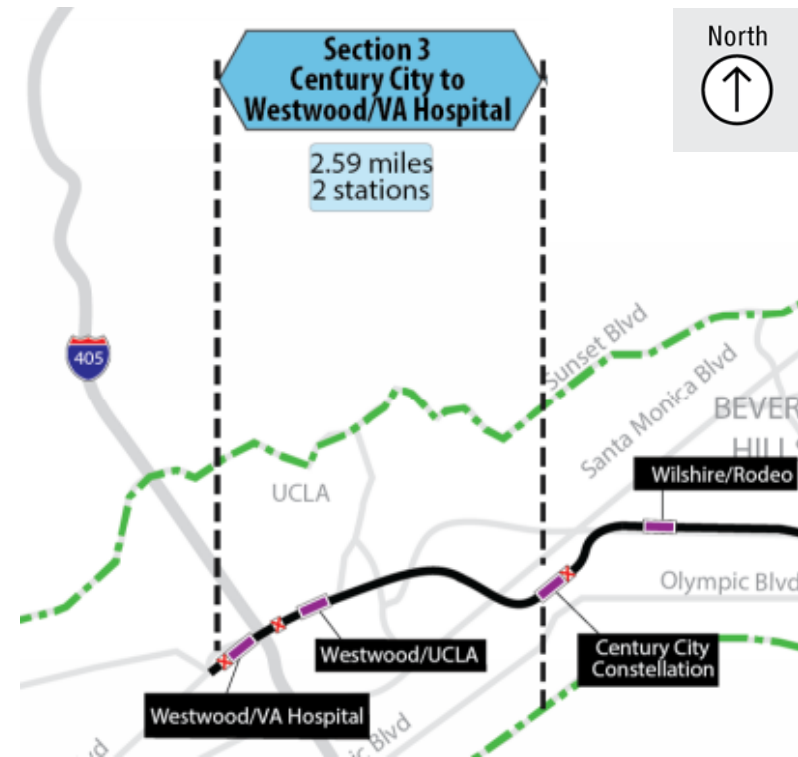
BUDGET

	Current	Forecast
TOTAL COST	TBD	\$3,478M

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) - Recommendation for award is anticipated in October 2017 and subsequent Notice to Proceed (NTP) in November 2017.
- C1151 Tunnel Contract - Technical proposals are due on November 13, 2017 and price proposals on January 29, 2018. Recommendation for award is anticipated in March 2018.
- C1152 Stations, Trackwork and Systems Contract - Request for Qualifications (RFQ)/Request for Proposals (RFP) was issued on September 15, 2017.
- C1153 Advanced Utility Relocations (AUR) Contract – Notice of Intent (NOI) to award was issued on October 2, 2017, and subsequent NTP is anticipated in November 2017.



November 2017



On target



Possible problem



Major issue



Metro

Construction Committee

Los Angeles County Metropolitan Transportation Authority

PATSAOURAS PLAZA BUSWAY STATION



BUDGET

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



SCHEDULE

	Current	Forecast
SUBSTANTIAL COMPLETION	Nov 2018	Nov 2018

- All bridge widening foundations complete. Pedestrian overcrossing and elevator foundations are ongoing
- Falsework on left and right sides ongoing
- Installation of bridge soffit, stem panels, post-tensioning, and deck drains and rebar ongoing
- Electrical and communication relocations
- Vignes Street on/off-ramp intermittent non-peak closures ongoing
- Center Street nighttime closures pending City approval
- Schedule negotiations with Executive Management in progress including revised baseline and TIA



Aerial view of site



Falsework

November 2017



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 12

WILLOWBROOK/ROSA PARKS STATION



BUDGET

	Current	Forecast
TOTAL COST	N/A	\$92.4M



SCHEDULE

	Current	Forecast
SUBSTANTIAL COMPLETION	Dec 2020	Dec 2020

- Early Start Phase (Project E) in bid period – scheduled to break ground December 2017
- Phase A and C at 100% design completion. Phase A in review by County, Phase C with Caltrans
- Pedestrian grade crossing documents submitted to Union Pacific (UP) and Public Utilities Commission PUC
- Phase A and C invitation for bids scheduled for late 2017
- In early coordination with Metro Operations on implementation of this and other Blue Line projects



South Platform Improvements



Central Plaza & Bus Bays



Main Plaza

November 2017



On target



Possible problem



Major issue



Metro 13

Construction Committee

Los Angeles County Metropolitan Transportation Authority

METRO BLUE LINE PROJECTS

Project Name

Project Name	Budget	Percent Completed	Forecast Completion	Status
• Station Refurbishment	\$30.4M	100%	Completed	OK
• Pedestrian Gates	\$30.2M	85%	March 2018	⚠️
• City of Long Beach Fare Gates Design (PE)	\$8M*	95%(PE)	Aug 2019	OK
• Blue Line Rehabilitation (OCS, Signals, Div. 11)	\$119M*	5%	April 2021	OK
Total: \$187.6M				



*Budget Estimate

November 2017



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro

Crenshaw/LAX Transit Project

Change Activity

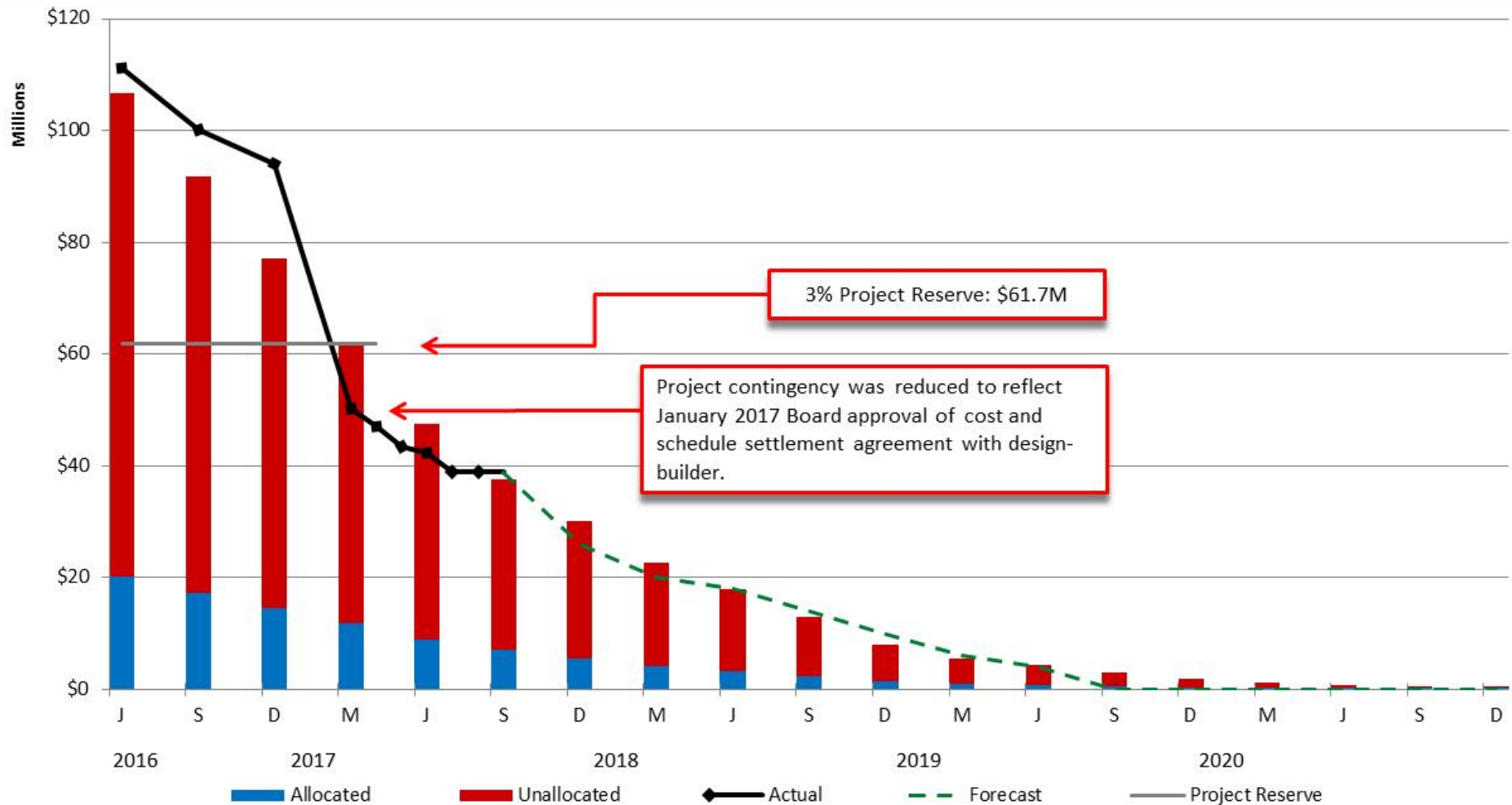
September 2017



Change Notice #	Description	Number of Mod/ Change Orders	Cost Value
TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS AND APPROVED CHANGE ORDERS		316	\$ 75,251,709
TOTAL PENDING MODIFICATIONS AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST		13	\$ 1,313,784
DESIGN BUILD - CONTRACT C0988			
MOD 00270	Unit Rates for Incidental Const Work		Less than \$1 million
MOD 00290	Asbestos Cement Pipe 63rd & Tesoro		Less than \$1 million
MOD 00312	Centinela and Eucalyptus Crossing Re		Less than \$3 million
MOD 00315	Addl Mod to Ped Light Fix-Slauson		Less than \$1 million
MOD 00316	Final Dsgn Black Diamond Vault Crens		Less than \$1 million
MOD 00317	Drive Test To Assess Radio Received		Less than \$1 million
MOD 00319	Claim 118 Resolution - Qwest Line		Less than \$1 million
MOD 00234	LADOT Fiber Optic Cable Betterment		Less than \$1 million
MOD 00304	BkChrg Metro pymnts to COLA TCO		Credit Less than \$2 million
MOD 00318	Install Black Street Lights & Signal		Credit Less than \$1 million
MOD 00320	Clean Agent Systems in the 3 TC& C		Less than \$1 million
CO 00046.5	Underground Conduit & Cable		Less than \$1 million
CO 00129	Elimination Crosver Sta 56+57.50		Credit Less than \$1 million
TOTAL MODIFICATIONS AND CHANGE ORDERS		329	\$ 76,565,493
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



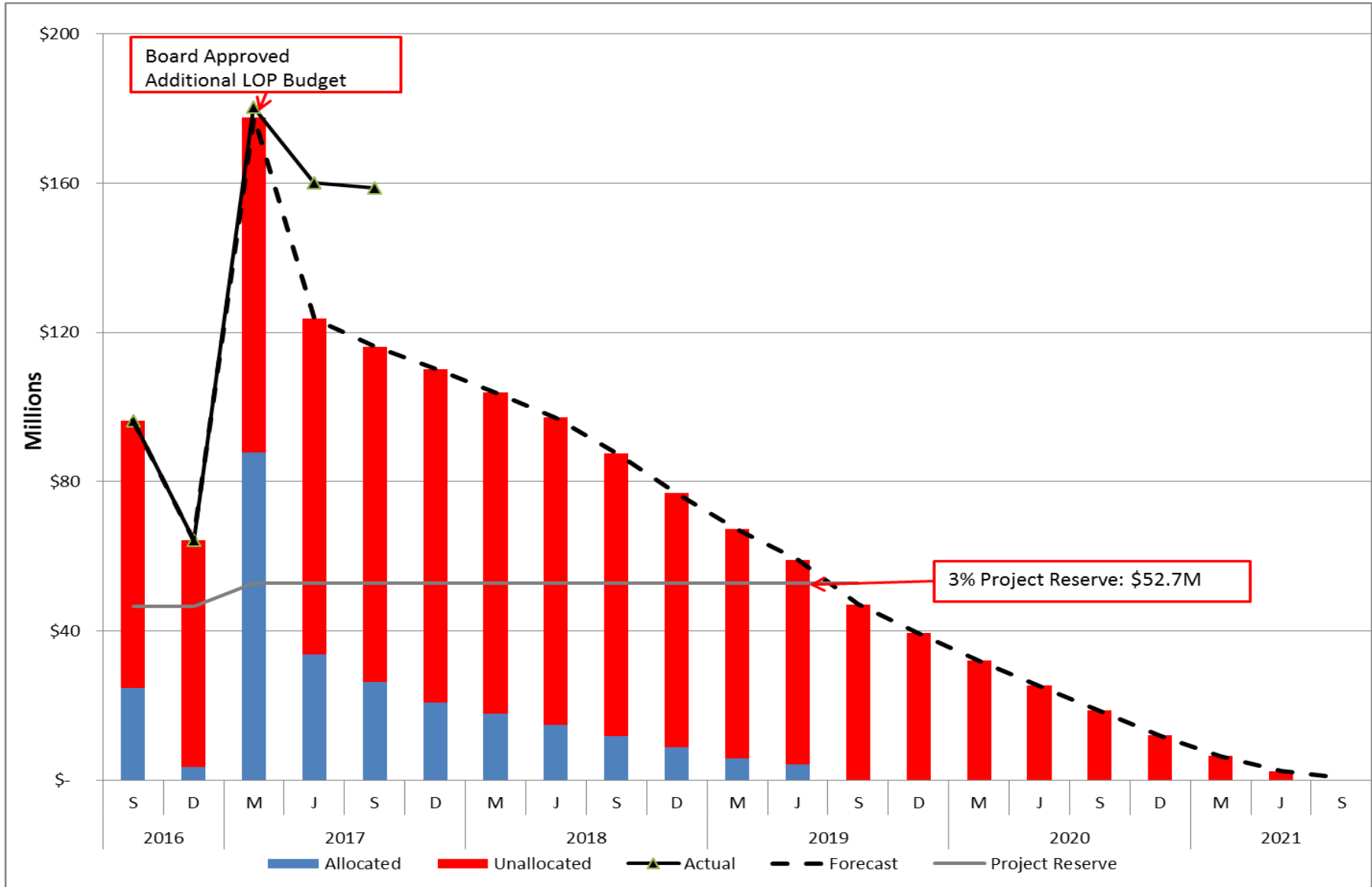
Regional Connector Change Activity

September 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:		100	\$ 149,806,743
TOTAL PENDING MODIFICATIONS AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST:		34	\$ 69,077,016
	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
TBD	Fully Coupled Dynamic Analysis for SEM Cavern		Less Than \$1 Million
50.0	Revisions to TPIS Requirements -Construction		Less Than \$1 Million
68.0	Flower Street Zanja Additional Potholing		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
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
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
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
122.0	Asbestos Abatement on Flower St. thru May 2017		Less Than \$1 Million
TBD	Insurance Claim		Less Than \$1 Million
130.00	10" Sewer Bypass at 1st/Alameda		Less Than \$1 Million
131.00	Backfilling Broken Compensation Grouting Pipes at JVP		Less Than \$1 Million
132.0	TBM Acceleration (24/7) to Flower St.		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
136.0	TBM Cutterhead Repairs Due to DSC		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	TBM failure - delays and repair		Between \$1 and \$5 Million
TBD	Add 'I Commonwealth Agreement (noise barrier)		Less Than \$1 Million
142.0	Labor to Replace TBM Screws 1, 2 &3		Less Than \$1 Million
143.0	Three-Shift Tunnel Boring Machine (TBM) Mining Operation		Less Than \$1 Million
144.00	Add 'I Gas Monitoring/Potential Gassy w/Special Conditions		Between \$1 and \$5 Million
TOTAL MODIFICATIONS AND CHANGE ORDERS		134	\$ 218,883,759
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

September 2017

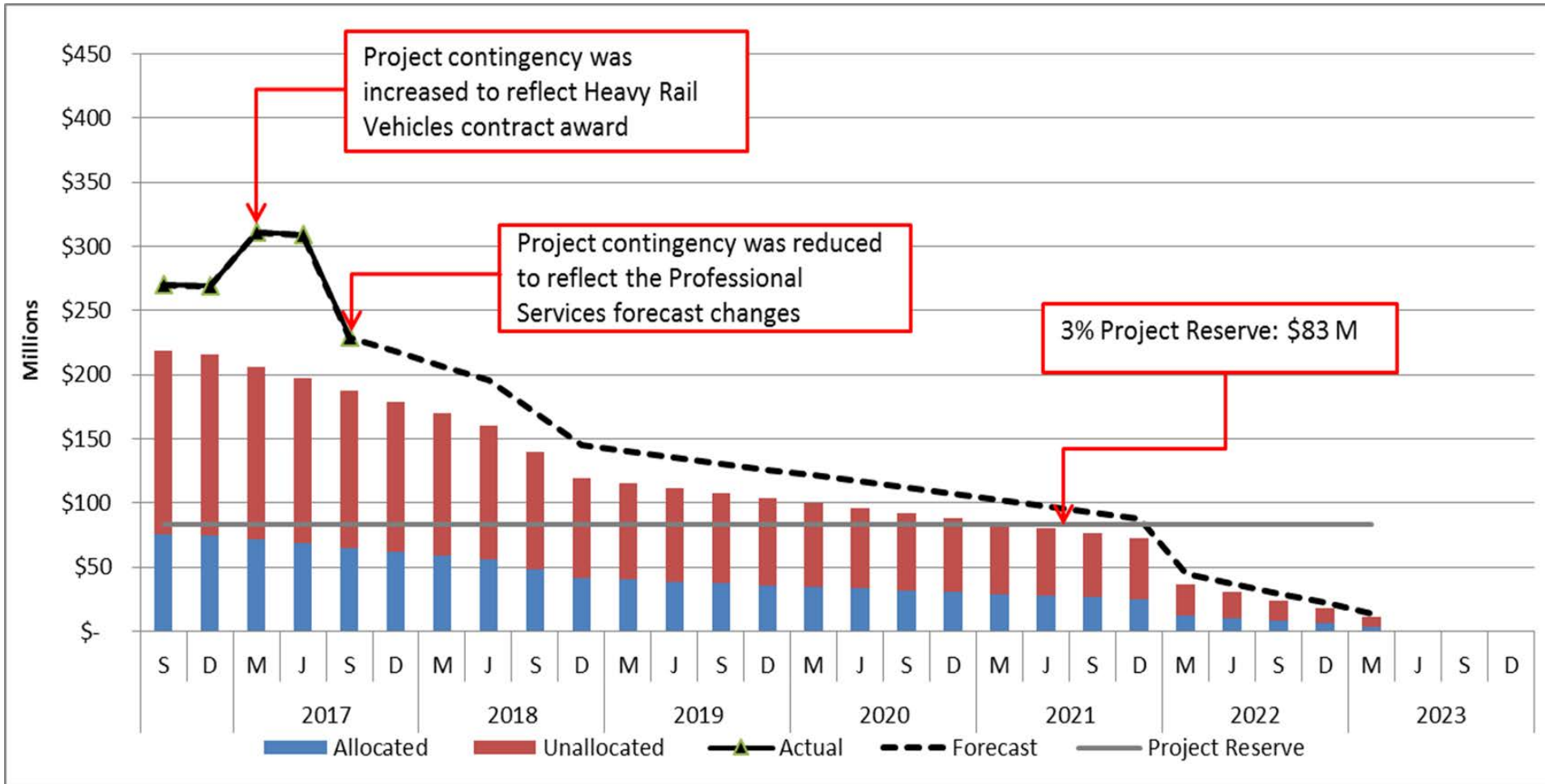
Change Activity



Change Notice #	Description	Number of Mod/Change Orders	Cost Value
TOTAL VALUE OF ALL EXECUTED CONTRACT MODIFICATIONS AND CHANGE ORDERS:		144	\$ 29,887,178
TOTAL PENDING MODIFICATIONS AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST:		46	More than \$15M
DESIGN/BUILD CONTRACT C1045		36	
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-43.2	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		Less Than \$1 Million
CN-72	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		Less Than \$1 Million
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	La Brea - Bracing Impacts Due to DWP Ductbank at La Brea Ave (ECI-004)		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	La Brea - Center Access Shaft - Design and Construction Costs		Less Than \$1 Million
CN-94	Fairfax - Negative Voltage-to-Rail Devise		Less Than \$1 Million
TBD	Fairfax - Piling Obstructions, Conflicts, Delays		Less Than \$1 Million
TBD	Station Address Signage (for Fire Dept Use)		Less Than \$1 Million
TBD	La Cienega - Rubberized Asphalt		Less Than \$1 Million
TBD	La Cienega - N-S SCE Line at Hamilton Dr. to Remain		Less Than \$1 Million
TBD	La Cienega - Piling Hours		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		Less Than \$1 Million
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	Betterment: Install Street Lights, Trees and Drip Irrigation for the City of LA		Less Than \$1 Million
CN-17	Support of Building Art Work		Less Than \$1 Million
CN-18	On-Site LIDs		Less Than \$1 Million
CN-19	Storm Drain - Differing Site Conditions		Less Than \$1 Million
CN-20	Hazardous Materials - Chalmers Pan Handle		Less Than \$1 Million
CN-21	Betterment: 6th Street Viaduct - Site Re-Grading, Ornamental Fenc, Etc.		Less Than \$1 Million
CN-24	UPDATED IT STANDARDS ON DATA DROPS AND OUTLETS		Less Than \$1 Million
TBD		190	
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		22	\$ 92,608,453
Construction Management Support Services - CONTRACT MC071			
TOTAL VALUE OF ALL EXECUTED CONTRACT MODIFICATIONS:		4	\$ 70,297,456
TOTAL PENDING MODIFICATIONS		0	
TOTAL MODIFICATIONS		4	\$ 70,297,456
OTHER - THIRD PARTY AGREEMENTS			
Annual work plan for Fiscal Year 2018 with the City of Beverly Hills, in an amount not-to-exceed			Between \$5M - \$10M
Annual work plan for Fiscal Year 2018 with the City of Los Angeles, in an amount not-to-exceed			Between \$1M - \$5M

Westside Purple Line Extension – Section 1

Project Cost Contingency Drawdown



Westside Purple Line Extension – Section 2

September 2017

Change Activity



Change Notice #	Description	Number of Mod/Change Orders	Cost Value
TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS AND APPROVED CHANGE ORDERS		1	\$ -
TOTAL PENDING MODIFICATIONS AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST:		12	More than \$15 Million
DESIGN/BUILD CONTRACT C1120			
CN-1.1	Century City Constellation Station West Ancillary & OPE Reconfiguration (Design)		Less Than \$1 Million
TBD	Century City Constellation Station West Ancillary & OPE Reconfiguration (Construction)		Less Than \$1 Million
CN-2.1	Geotechnical and Environmental Investigation Program		Less Than \$1 Million
CN-3	Century City Constellation Station: Main Entrance (Design)		Less Than \$1 Million
TBD	Century City Constellation Station: Main Entrance (Construction)		More Than \$15 Million
CN-4.1	Third Party Utility Final Design		Less Than \$1 Million
TBD	AT&T Building Demolition		Between \$1M - \$5 M
CN-6.1	Furnish Cradles for LADWP Power Vaults		Less Than \$1 Million
CN-7	Delete Four (4) boreholes at Cross-Passages		Less Than \$1 Million
CN-8	Additional Abatement at ACE Gallery		Less Than \$1 Million
CN-9	Traffic Control at WRS Station		Less Than \$1 Million
CN-10	Train Headway Revisions		Less Than \$1 Million
TOTAL MODIFICATIONS AND CHANGE ORDERS		13	\$ -
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			
City of Beverly Hills Advanced Utility Relocation (AUR) Memorandum of Agreement			TBD

Westside Purple Line Extension – Section 2

Project Cost Contingency Drawdown

