



## Board Report

File #: 2018-0113, File Type: Oral Report / Presentation

Agenda Number: 32.

### CONSTRUCTION COMMITTEE APRIL 12, 2018

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

**ACTION: RECEIVE ORAL REPORT**

#### RECOMMENDATION

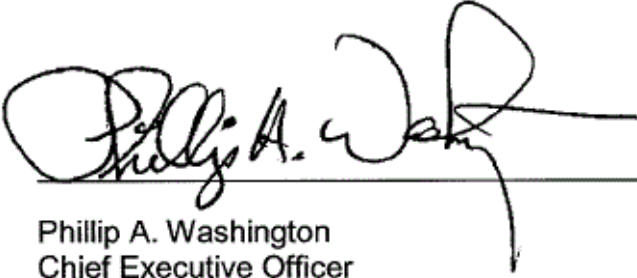
RECEIVE oral report on the Major Project Status by the Chief Program Management Officer.

#### DISCUSSION

- A. Update report covering the month of April 2018 by the Chief Program Management Officer; and
- B. At the January 26, 2018 Board meeting, the Board approved the continuation and expansion of the authority delegation within Life of Project (LOP) budget management on all Transit and Regional Rail Capital Projects program-wide. Staff is directed to provide quarterly reports on change orders and modifications that are above \$500,000. The first quarterly report to the Board is included in Attachment A.

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., (213) 922-7598
- **Presentation** - Yohana Jonathan, Departmental System Analyst, (213) 922-7592



Phillip A. Washington  
Chief Executive Officer

# Program Management Major Project Status Report

Presented By

**Richard Clarke**

Chief Program Management Officer

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April 2018

Construction Committee

Los Angeles County Metropolitan Transportation Authority



# PROJECT BUDGET & SCHEDULE STATUS SUMMARY CHART

Project	Cost Performance	Schedule Performance	Comments
Crenshaw/LAX			Project is 79% complete. The remaining cost contingency is below 2% of the total project budget (\$33.2 million in contingency remains). Contractor is 56 days behind schedule. Metro and contractor are working together to implement mitigation strategies to maintain planned revenue service in October 2019.
Regional Connector			Project is 49% complete and proceeding on schedule and cost forecast is within Life of Project budget.
Westside Purple Line Extension-Section 1			Project is 31% complete.
Westside Purple Line Extension-Section 2			Project is 6% complete with no significant issues.
Westside Purple Line Extension-Section 3			<ul style="list-style-type: none"> <li>FTA approval for Entry into Engineering is expected in Spring 2018.</li> <li>FTA approval for LONP is also expected in Spring 2018.</li> <li>Award of Contract C1151 Tunnel is anticipated in April 2018.</li> </ul>
Patsaouras Plaza			Project is 54% complete with approved substantial completion date of December 2018.
Willowbrook/Rosa Parks Station			Design activities are complete. Early Start Phase (Package E) contract awarded, second contract (Package A and C) in procurement process.
Metro Blue Line Projects			<p>Pedestrian Swing Gate project 95% complete. Experiencing delays from Union Pacific Rail Road. MBL Signal Rehab project 85% design work is in progress.</p> <p>MBL System and Track Refurbishment IFB issued 2/27. Bids are due 3/6</p> <p>City of Long Beach Fare Gates infrastructure design 100% complete for two stations.</p>

April 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													13-Mar-18	
Activity Name	PMIS Project Manager	Start	Finish	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032
<b>Transit Projects</b>																		
<b>Environmental</b>																		
North San Fernando Valley BRT Improvements	Cencic	04-Jan-17 A	30-Jun-25															
North Hollywood to Pasadena BRT	Richmai	30-Jan-15 A	02-Sep-25															
Orange Line Grade Separations	Patel	23-May-16 A	30-Jun-25															
East San Fernando Valley Transit Corridor	Davis	11-Oct-10 A	06-Jul-29															
Vermont BRT Corridor	Cencic	30-Jan-15 A	06-Nov-29															
Crenshaw Northern Extension	Moosavi	16-Mar-18	17-Jun-47															
West Santa Ana Transit Corridor	Pan	01-Oct-09 A	09-Nov-28															
Sepulveda Phase 1 - Express Lanes	Wong	05-Mar-18	15-Jul-26															
Sepulveda Phase 2 - Transit Corridor	Zelmer	26-Apr-17 A	24-Nov-36															
Sepulveda Phase 3 - Westwood to LAX	Mieger	26-Apr-17 A	26-Jun-57															
South Bay Green Line Ext. Crenshaw Blvd in Tor	Khanna	23-Mar-17 A	15-May-30															
Eastside Transit Corridor Phase 2 (1 Align)	Liu	01-Mar-07 A	08-Nov-35															
<b>Design</b>																		
Airport Metro Connector	Zelmer	04-Oct-10 A	29-Dec-23															
<b>Procurement</b>																		
Purple Line Extension Section 3	McKenna	29-Feb-16 A	04-Mar-26															
Gold Line Foothill Extension Phase 2B	Meade	02-Oct-13 A	25-Mar-27															
<b>Construction Contract</b>																		
Crenshaw/LAX Transit Corridor	Beauvoir	01-Jul-09 A	06-Dec-19															
Regional Connector Transit Corridor	Baker	26-Jan-09 A	12-Dec-21															
Purple Line Extension Section 1	Cohen	01-Jun-07 A	29-Nov-23															
Purple Line Extension Section 2	McKenna	02-Mar-15 A	30-Aug-25															
<b>Transit Facilities</b>																		
<b>Design</b>																		
Div 20 Portal/Turnback	Meade	16-May-16 A	16-Jun-23															
<b>Construction Contract</b>																		
	Lindholm	07-May-15 A	30-Dec-20															

■ 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)

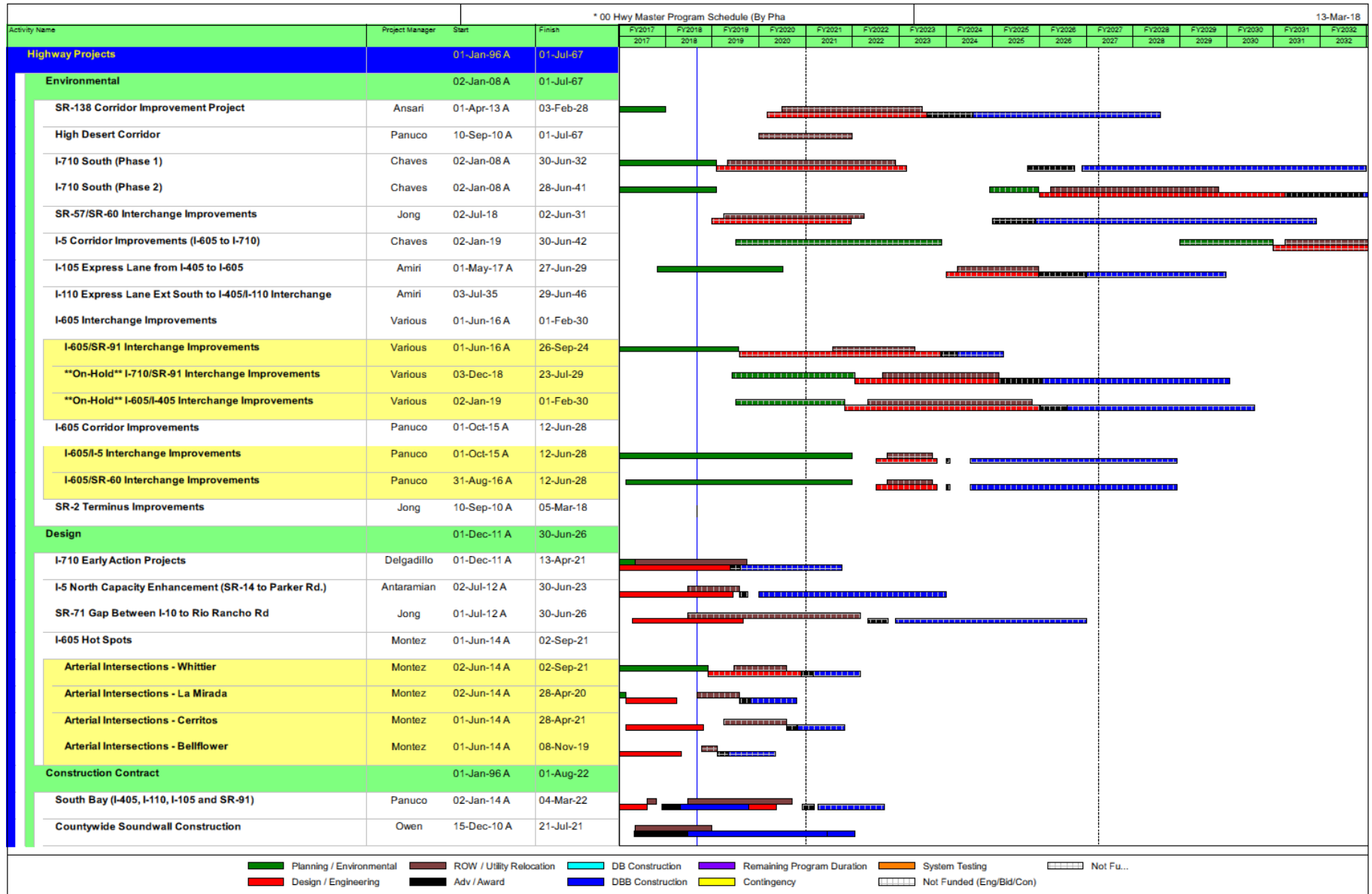
# TRANSIT MASTER SCHEDULE (Page 2 of 2)

TASK filters: Code Cleanup_1, Name contains, Show on Master Schedule, WBS Categories_WBS				* 00 Master Program (By Phase) no contin													13-Mar-18	
Activity Name	PMS Project Manager	Start	Finish	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032
				2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Willowbrooks/Rosa Parks Station Improvement	Lindholm	07-May-15 A	30-Dec-20															
<b>Regional Rail Projects</b>	Owens	02-Sep-13 A	24-Jun-27															
<b>Environmental</b>	Owens	01-Dec-14 A	24-Jun-27															
Link Union Station	Owens	01-Dec-14 A	24-Jun-27															
<b>Design</b>	Owens	01-Apr-15 A	02-May-22															
Brighton to Roxford Double Track	Owens	01-Sep-15 A	16-Mar-22															
Lone Hill to CP White	Owens	03-May-16 A	02-May-22															
Rosecrans & Marquardt Grade Separation	Owens	01-Apr-15 A	10-Dec-21															
<b>Construction Contract</b>	Owens	02-Sep-13 A	01-Jun-18															
Bob Hope Airport Station	Owens	02-Sep-13 A	01-Jun-18															
<b>Bus Facilities Projects</b>	Gurrola	31-Mar-14 A	14-Feb-19															
<b>Construction Contract</b>	Gurrola	31-Mar-14 A	14-Feb-19															
Patsouras Plaza	Gurrola	31-Mar-14 A	14-Feb-19															
<b>State of Good Repair/Improvements</b>		01-Jul-13 A	28-Jun-19															
<b>Design</b>	Danielans	13-Jun-16 A	28-Jun-19															
210 Freeway Barrier Rail	Danielans	13-Jun-16 A	28-Jun-19															
<b>Construction Contract</b>		01-Jul-13 A	30-Mar-18															
Pershing Sq. Esc. Replace & New Canopy Project	Patel	11-May-15 A	31-Aug-17 A															
MBL Ped Safety Enhancement At-Grade Crossing	Chong	01-Jul-13 A	30-Mar-18															
<b>Small Capital</b>	Joshi	14-Jul-15 A	07-Mar-22															
<b>Design</b>	Joshi	01-Mar-16 A	07-Mar-22															
Eastside Access Improvement Project	Joshi	01-Mar-16 A	07-Mar-22															
<b>Procurement</b>	Joshi	14-Jul-15 A	28-Feb-20															
Rail to Rail	Joshi	14-Jul-15 A	28-Feb-20															

■ Planning / Environmental   
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■ Design / Engineering   
 ■ Adv / Award   
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  Not Funded (Eng/Bid/Con)

# HIGHWAY MASTER SCHEDULE (Page 1 of 2)



# HIGHWAY MASTER SCHEDULE (Page 2 of 2)


				* 00 Hwy Master Program Schedule (By Pha)													13-Mar-18		
Activity Name	Project Manager	Start	Finish	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
<b>I-5 North Capacity Enhancements SR-134 to SR-118</b>	Subeh	01-Apr-98 A	15-Jun-20																
SR-118 to SR-170 (Segment 1A)	Subeh	30-Jul-99 A	15-Jul-16 A																
SR-170 to Buena Vista (Segments 2)	Subeh	01-Apr-98 A	16-Dec-15 A																
Magnolia to SR-134 (Segment 4)	Subeh	01-Apr-98 A	18-Dec-19																
Buena Vista to Magnolia (Segment 3)	Subeh	01-Apr-98 A	15-Jun-20																
<b>I-5 South Capacity Enhancements from I-605 to Orange Cour</b>	Gau	01-Jan-96 A	01-Aug-22																
I-5 Carmenita Road Interchange	Gau	01-Jan-01 A	20-Mar-18																
Alondra (Segment 1)	Gau	01-Jan-01 A	19-May-16 A																
Imperial Highway (Segment 4)	Gau	01-Jan-01 A	26-Jul-19																
Shoemaker - Rosecrans (Segment 3)	Gau	01-Jan-96 A	28-Nov-18																
Florence (Segment 5)	Gau	01-Jan-01 A	30-Jul-20																
Valley View (Segment 2)	Gau	01-Jan-96 A	01-Aug-22																


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

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



# CRENSHAW/LAX TRANSIT PROJECT

 <b>BUDGET</b>		
	Current	Forecast
TOTAL COST	\$2,058M	\$2,058M

 <b>SCHEDULE</b>		
	Current	Forecast
REVENUE OPERATION	Oct 2019	Oct 2019

- Overall Project Progress is 79% complete; contractor needs to mitigate 56 day schedule delay
- The Green Line tie-in to Crenshaw/LAX Line is anticipated to be completed on schedule
- Contractor continues critical track work installation along southern area of alignment
- Contractor continues concrete wall and roof placements for cut-and-cover tunnels and the three underground stations along Crenshaw Boulevard
- The Southwestern Yard Maintenance Facility is progressing on schedule



Main shop building looking southwest



Green Line tie-in to Crenshaw track work and catenary

April 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 budget plus finance costs.		

OK SCHEDULE		
	Current	Forecast
REVENUE OPERATION	Dec 2021	Dec 2021

- Overall Project Progress is 49%
- Underground:** Cross passages excavated; preparation for invert and walkways installation is ongoing
- Little Tokyo/Arts District Station:** Permanent station construction re-mobilizing
- Historic Broadway Station:** Underpinning of LA Times Building in progress; station box and ancillary area excavation continues under steady state
- Grand Av Arts/Bunker Hill Station:** Permanent structural concrete construction continues
- Flower Street:** Utility relocations, support of excavation, decking and excavation continues



Drilling and Installing Canopy Pipes for SEM Cavern at Broadway Station



Utility support installation for DWP Power and Storm Drain Box on Flower St

April 2018



On target



Possible problem



Major issue

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Los Angeles County Metropolitan Transportation Authority



Metro 8

# WESTSIDE PURPLE LINE EXTENSION – SECTION 1

## OK BUDGET

	Current	Forecast
<b>TOTAL COST*</b>	<b>\$3,154M</b>	<b>\$3,154M</b>

\* Includes Board approved LOP budget plus finance costs.

## OK SCHEDULE

	Current	Forecast
<b>REVENUE OPERATION</b>	<b>Oct 2024 (FFGA)</b>	<b>Nov 2023</b>

- Overall Project Progress is 31% complete.
- At the Wilshire/Western Retrieval Shaft, the 10-day closure for street decking was completed February 26, 2018. Installation of the water treatment system, dewatering wells and instrumentation is on-going.
- Concrete placement at the Wilshire/La Brea Station invert slab has commenced. Vertical conveyor construction at the south shaft site is underway, as well as continued installation of invert rebar and embeds.
- At the Wilshire/Fairfax Station, station excavation and the installation of walers and struts continues, along with the installation of the ventilation system.
- Station excavation under the concrete deck at Wilshire/La Cienega Station is underway. Installation of the dewatering system and the utility hanging effort continue.
- Tunnel Boring Machines (TBMs) were delivered to Los Angeles in December 2017. All of the TBM components are at the contractor's Riverside staging area. Tunneling is planned to start in August 2018.



Wilshire/La Brea Station



Wilshire/Fairfax Station

April 2018



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 9

# WESTSIDE PURPLE LINE EXTENSION – SECTION 2

## BUDGET

	Current	Forecast
<b>TOTAL COST*</b>	<b>\$2,530M</b>	<b>\$2,530M</b>

\* Includes Board approved LOP budget plus finance costs.

## SCHEDULE

	Current	Forecast
<b>REVENUE OPERATION</b>	<b>Dec 2026 (FFGA)</b>	<b>Aug 2025</b>

- Overall project progress is 6% complete.
- Final design progress is 53% complete.
- Century City Constellation: AT&T and LADWP (Power) utility relocations are ongoing.
- Wilshire/Rodeo: Southern California Gas (SCG) and AT&T utility relocations are ongoing.
- Negotiations with the City of Beverly Hills (COBH) for a Memorandum Of Agreement (MOA) for the C1120 Contract began in August 2017 and are anticipated to complete by April 2018.



AT&T Conduit Installation in Century City

April 2018



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



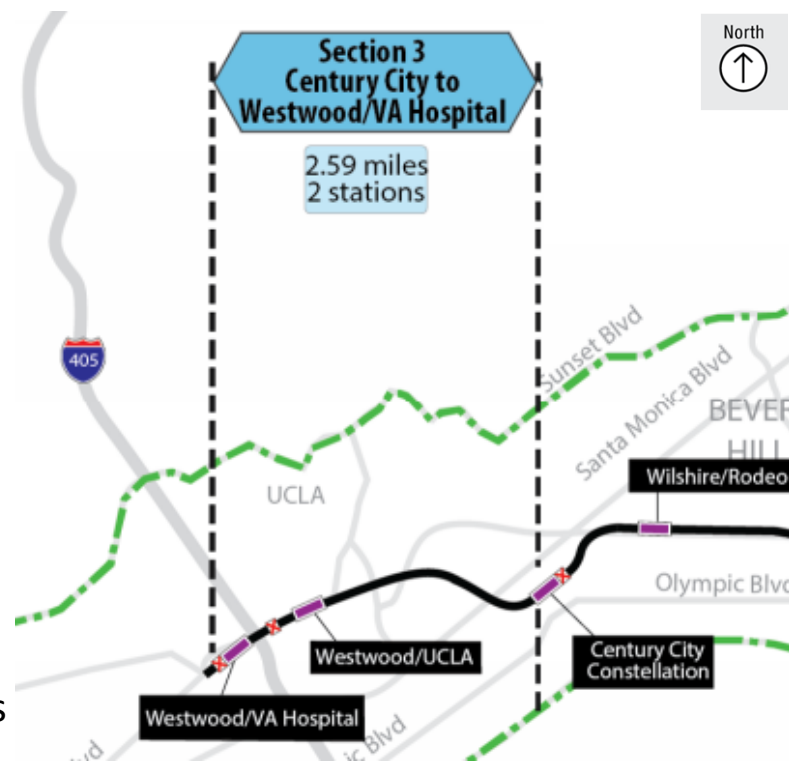
Metro 10

# WESTSIDE PURPLE LINE EXTENSION – SECTION 3

OK BUDGET		
TOTAL COST	Current	Forecast
	TBD	\$3,587M

OK SCHEDULE		
REVENUE OPERATION	Current	Forecast
	TBD	2026

- FTA approval for Entry into Engineering and Letter of No Prejudice (LONP) for the Tunnel Contract are expected in Spring 2018.
- C1151 Tunnel Contract – Technical proposals were received on November 13, 2017. Price proposals are due on April 6, 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. Price Proposals are due on May 21, 2018.
- C1153 Advanced Utility Relocations (AUR) Contract – Kick off meeting was conducted in January 2018. Construction is scheduled to begin in April 2018.



April 2018



On target



Possible problem



Major issue





Metro 11

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# PATSAOURAS PLAZA BUSWAY STATION

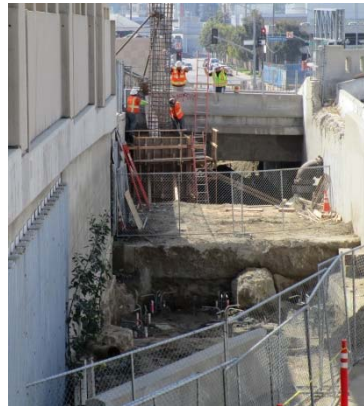
 BUDGET	Current	Forecast
TOTAL COST	\$39.7M	\$39.7M

 SCHEDULE	Current	Forecast
SUBSTANTIAL COMPLETION	Dec 2018	Feb 2019

- Overall project progress is 54% complete
- All concrete deck pours completed, on 28-day curing period and deck post-tension ongoing
- Falsework removal to follow
- Elevator foundations started at south end of bus plaza
- Human bones continue to be discovered, Native American monitor and coroner involved (no delay yet)
- Vignes Street on/off-ramp intermittent non-peak closures ongoing
- Reviewed Project Status concerns with contractor, contractor has been responsive with submittals



View of project site



Elevator Foundations



Bridge Deck

April 2018



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	July 2020	July 2020

- Early Start Phase (Package E) Construction mobilization has begun.
- Package A and C at 100% design completion. Procurement of this contract is underway. Package includes provisions for the closure of the Blue Line (the New Blue).
- Pedestrian grade crossing documents submitted to Union Pacific and Public Utilities Commission.
- Staff planning to bring Life of Project Budget request to Board in May 2018.



South Platform Improvements



Central Plaza & Bus Bays



Main Plaza

April 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
▪ <b>Pedestrian Gates</b>	\$31.4M	95%	June 2018	◆
▪ <b>City of Long Beach Fare Gates Design</b>	\$6M*	100%(Design)	Mar 2018	OK
▪ <b>Blue Line Signal Rehabilitation</b> (OCS, Signals, Div. 11)	\$119M	14%	Aug 2019	OK
▪ <b>Blue Line Track and System Refurbishment</b> (Track, Turnouts, OCS and includes 2 Stations Fare Gates Phase I)	\$90.8M	N/A	Aug 2019	OK
<b>Total: \$247.2M</b>				

## Project Status

- **Pedestrian Gates**
  - Construction completed within Cities of Long Beach and Compton
  - Construction within City and County of LA 95% complete
  - Two crossings in the City of LA were inspected by CPUC and commissioning in late February.
  - Schedule for commissioning four more crossings within the County of LA in March
  - 13 crossings completed pending on UPRR work to open.
- **City of Long Beach Fare Gates Design**
  - Design completed on 5<sup>th</sup> and Wardlow Stations
- **MBL Signal Rehab 85% Design in Progress**
- **MBL Track and System Refurb IFB Feb 18**



\*Budget Estimate

April 2018

OK On target

Possible problem

! Major issue

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Los Angeles County Metropolitan Transportation Authority





# Crenshaw/LAX Transit Project

## Change Activity

February 2018

### APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (December 1, 2017 - February 28, 2018)

MOD/CHANGE #	DESCRIPTION	Submission Date	Approval Date	Amount
<b>DESIGN BUILD CONTRACT C0988</b>				
MOD-00345	Oil Water Separator at UG Stations: The sump pump discharge from the Underground Stations requires treatment to meet the City of Los Angeles Department of Public Works Bureau of Sanitation Industrial Waste Management Division discharge limits.	1/12/2018	2/8/2018	\$1,299,995
CO-00153.1	Radio System - Additional Head-end Equipment: Relocate the Uplink above ground antennas from their original proposed location at the TPSS #8 site to their new location above ground at the CLAX Exposition Station. Provide all of the necessary detailed design, material, equipment, and labor for a complete installation.	2/5/2018	2/16/2018	\$862,138
CO-00176.1	Underground Station Emergency Vent: This change order is issued to clarify to WSCC and its subcontractors exactly which elements of the three (3) underground stations' emergency ventilation fan and damper work Metro believes to be impacted by the UL 2196 delisting and includes authorization to begin procurement of materials and immediate construction thereof.	2/2/2018	2/15/2018	\$800,000
CO-00180.1	Cable Transmission System - Construction: Construct the Cable Transmission System capable of multiple service types including E-Line, E-LAN, and E-Tree. The CTS fiber optic backbone consisting of two 144 strand fiber cables form the data transmission infrastructure for the FW 9500 nodes. Each FW 9500 node is to be configured to transmit data over both 144 strand fiber cables. Each 144 strand fiber cable is to be connected to the fiber cable at the Exposition/Crenshaw station and the Green Line/Aviation station to provide a redundant pathway for C/LAX data transmissions to ROC.	2/2/2018	2/14/2018	\$1,180,296
CO-00204	Radio Redundancy Radio Rooms: Contractor shall provide labor, materials and equipment to construct two new radio rooms at Underground Guideways UG1 and UG-3.	2/5/2018	2/15/2018	\$846,316

# Crenshaw/LAX Transit Project

## Change Activity

February 2018

### PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K

MOD/CHANGE #	DESCRIPTION	Rough Order of Magnitude Cost
<b>DESIGN BUILD CONTRACT C0988</b>		
MOD-00304	<u>Back Charge for Metro payments to COLA for in scope of contract TCO Services:</u> This credit change is to back charge WSCC for Traffic Control Officers (TCO) for the period of January 2014 thru June 30, 2017 (paid by Metro to LADOT per the Master Cooperative Agreement with City of Los Angeles.)	Credit between \$1M and \$5M
MOD-00354	<u>COLA Request to Replace Concrete Street Light and Signal Poles with Steel Poles - MLK area:</u> Revise street lighting design for Segment C limits between 48th St to Exposition Blvd per LABSL comments on the Segment C 85%-2 Street Lighting Design. Restore steel 15 ft. /40 ft. Davit pedestrian/street lights poles, and remove/replace concrete street light poles with steel 40 ft. Davit light poles.	Between \$1M and \$5M
CO-00129	<u>Elimination Crossover Sta 56+57.50:</u> Design builder shall eliminate the crossover at Sta. 56+57.50, north of 104th (or sought of Aviation/Century Station) and provide a credit to Metro labor, material and equipment, testing and commissioning to furnish and install crossover.	Credit between \$500K - \$1M
CO-00152.1	<u>Radio System - Additional Tunnel Amplifiers:</u> Provide radio amplifiers in certain UG3 and UG4 tunnels crosspassages as shown in the Metro approved design prepared by WSCC.	Between \$500K - \$1M
CO-00202	<u>Crenshaw Median Landscaping &amp; Maintenance:</u> Construct drought-resistant landscaping with a drip irrigation system in the median of Crenshaw Blvd., on both sides of the LRT Guideway within the Park Mesa Heights Area from 60th Street to Vernon Ave, in lieu of the originally designed hardscape median (striped AC pavement) per the latest revised landscape & irrigation plans & details for Segments B-2 & C.	Between \$1M and \$5M

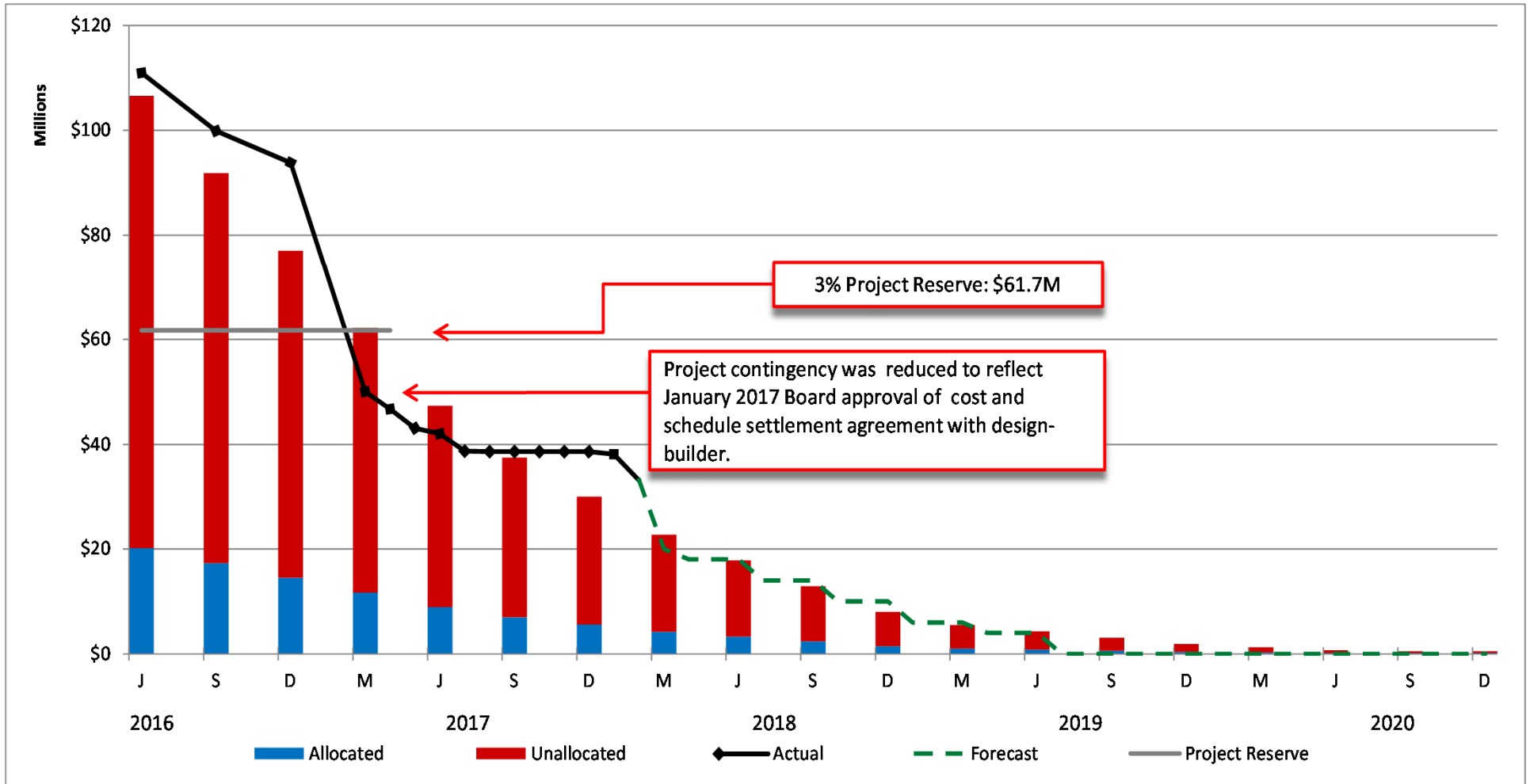
### PROFESSIONAL SERVICES CONTRACTS

<b>Design Support Services During Construction Contract E0117</b>		
MOD-00044	<u>Extend Crenshaw/LAX Phase III DSDC and Commence Phase IV System Activation:</u> It is critical that there is no disruption in Phase III design service during construction and Phase IV "System Activation." The Revenue Service Date (RSD) is October 2019 and close out is through 2020.	Between \$5M and \$10M

# Crenshaw/LAX Transit Project

## Project Cost Contingency Drawdown

February 2018



# Regional Connector Change Activity

February 2018



**APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (December 1, 2017 - February 28, 2018)**

MOD/CHANGE #	DESCRIPTION	SUBMISSION DATE	APPROVAL DATE	AMOUNT
<b>DESIGN BUILD CONTRACT C0980</b>				
C0980-MOD-00101.1	<u>ADDITIONAL WORK DUE TO COMMONWEALTH AGREEMENT:</u> Contractor shall design and construct enhanced construction barriers and enclosed fence and gate structures referred to as Work Stations Contractor Work Areas 1, 2, 3, and 4 in the executed Settlement Agreement dated June 30, 2015; including permits, design, and artwork coordination with representatives of FSP and Metro that are in addition to the base Contract Scope of Work.	1/9/2018	1/25/2018	\$951,000
<b>PROFESSIONAL SERVICES CONTRACTS</b>				
<b>Design Support Services During Construction Contract E0119</b>				
E0119-Mod-0026.1	<u>FY2019 FUNDING FOR DESIGN SUPPORT DURING CONSTRUCTION:</u> Additional effort required for FY19 for design services during construction.	N/A	2/1/2018	\$4,446,988
<b>Construction Management Support Services Contract MC070</b>				
MC070-MOD-00015	<u>FY2019 FUNDING FOR CONSTRUCTION MANAGEMENT SUPPORT SERVICES:</u> Additional effort required for FY19 for construction management support services.	N/A	2/8/2018	\$10,652,889
<b>OTHER AGREEMENTS</b>				
<b>Letter Agreements</b>				
1	Letter Agreement with City of Los Angeles for Sewer near Tunnels on Flower Street east of 4th Street	1/11/2018	1/12/2018	\$1,000,000

# Regional Connector Change Activity

February 2018

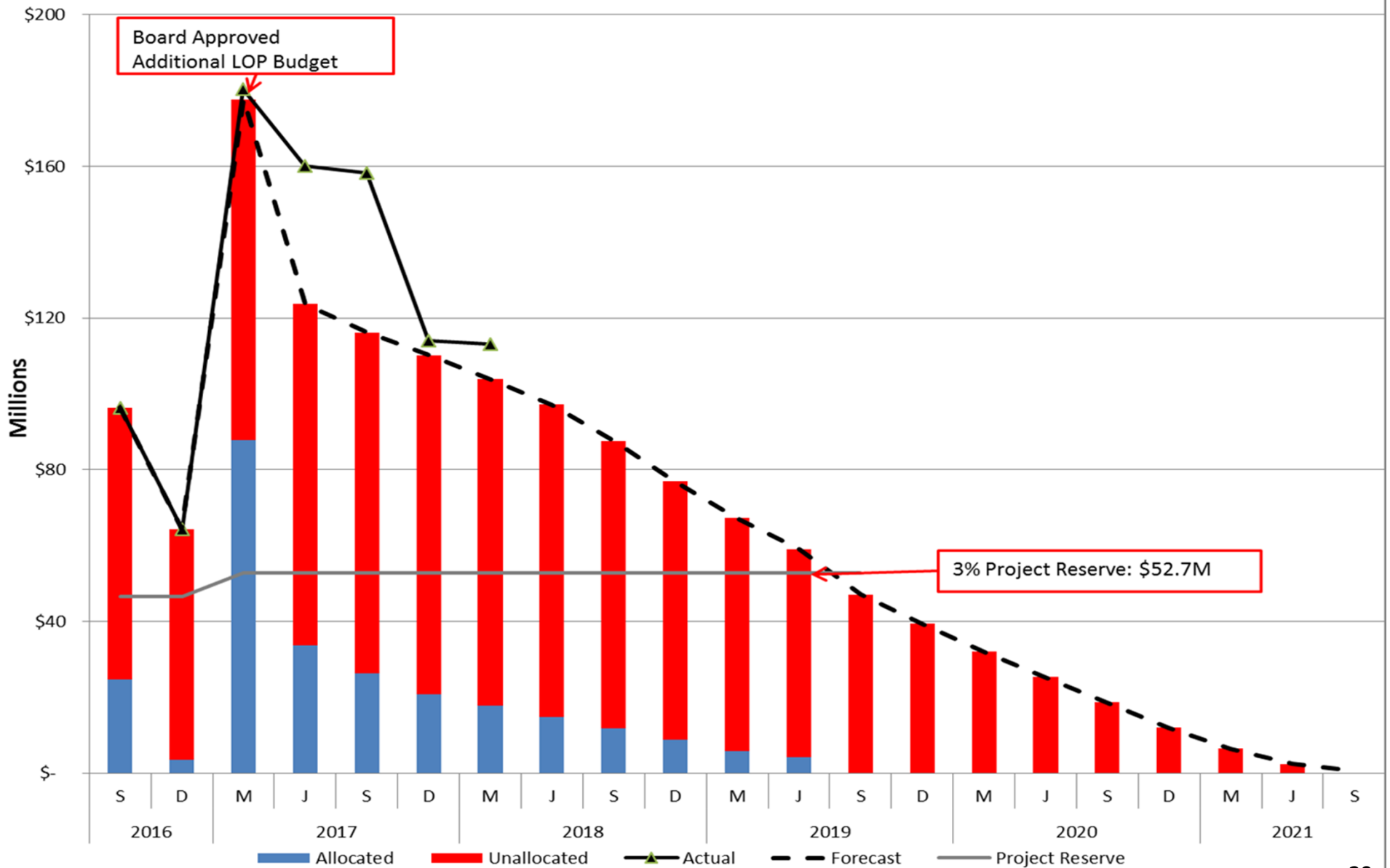


**PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K**

CHANGE NOTICE #	DESCRIPTION	ROUGH ORDER OF MAGNITUDE COST
<b>DESIGN BUILD CONTRACT C0980</b>		
C0980-CN-00099	<b><u>REVISE 2ND/HOPE STATION PEDESTRIAN- CONSTRUCTION:</u></b> Construct the 2nd/Hope Pedestrian Bridge in accordance with revised design.	Between \$1 and \$5 Million
C0980-CN-00106.1	<b><u>REVISIONS TO METRO COMMUNICATIONS SYSTEMS:</u></b> This change eliminates the Fujitsu Flashwave 9500 as a Metro-Furnished Good. Contractor shall procure the Optical Network switch using Native Ethernet (10GB); re-configure the existing Gold Line Eastside Cable Transmission System (CTS) to operate via the communications room at Location 61A of Division 20; and relocate the existing Little Tokyo CTS node and associated circuits to the communications room at Location 61A of Division 20.	Between \$500K and less than \$1M
C0980-CN-00111	<b><u>ADDITIONAL ACOUSTICAL TREATMENTS FOR AREAS NOT SPECIFIED IN THE PROJECT:</u></b> Construct additional acoustical treatments in all stations beyond what was indicated in the Contract Documents. This change includes approximately 92,471 SF of additional acoustical treatments.	Between \$1 and \$5 Million
C0980-CN-00145	<b><u>ADD WYE JUNCTION FAN PLANT - CONSTRUCTION:</u></b> Construct an additional fan plant at the 1st & Alameda Junction (also referred to as the "wye") based on the following approved MODs: C0980-MOD 0033/CN 00053.2 Add "Wye" Junction Fan Plant Design Only and C0980-MOD 0087/CN-00108 Revision to Wye Junction Fan Plant Design. This work also includes the elimination of the previously designed eight tunnel booster fans with all associated mechanical, electrical and system components.	Between \$10 and \$15 Million
C0980-CN-000148	<b><u>PLATFORM STAND-ALONE VALIDATORS:</u></b> Contractor shall modify the Stations to accommodate installation of six (6) Stand-Alone Validators (SAVs) on the platforms. Provide and install communication conduit, with pull strings, from each SAV to the TC&C room. Provide and install power conduit and cable, from each SAV to the East and West power panels. Provide additional 20-amp 1-pole breakers and/or reassign spare breakers as indicated. Contractor shall allow for a load of 35 Watts per SAV; Accommodate SAV base opening 6" wide by 4" deep for power and communication conduits; Metro will furnish and install SAVs in a similar manner as for other UFS equipment.	Between \$500K and less than \$1M
C0980-CN-00158	<b><u>2ND AND BROADWAY STATION REVISED OVERBUILD DESIGN PARAMETERS (DESIGN AND CONSTRUCTION):</u></b> Contractor shall provide all necessary labor, materials, and supervision to redesign various components of the 2nd and Broadway Station, and to design and construct an overbuild load transfer system in accordance with the Revised Overbuild Loading Parameters to accommodate future development by Tribune, including relocation of the emergency stairways, ventilation shafts/ducts and other elements as needed to accommodate the Overbuild Structure Load Transfer System.	Between \$1 and \$5 Million
C0980-CN-00166	<b><u>LEFT TUNNEL TUNNEL BORING MACHINE DIFFERING SITE CONDITIONS:</u></b> Resolution of all impacts due to Differing Site Conditions experienced during mining of the Left Tunnel.	Between \$5 and \$10 Million

# Regional Connector

## Project Cost Contingency Drawdown



# Westside Purple Line Extension – Section 1 Change Activity

February 2018



- No Approved Modifications/Changes to Report This Period

PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K		
MOD/CHANGE #	DESCRIPTION	Rough Order of Magnitude Cost
<b>DESIGN BUILD CONTRACT C1045</b>		
CN-42.3	<b>Radio Subsystem Redundancy:</b> Procure and install a complete switching network to allow failover switching on Westside Purple Line Extension (WPLE) Sections 1 and 2 including redundancy of the radio system. Metro has revised the radio system to avoid a Single Point of Failure of the primary radio system.	Between \$500K - \$1M
CN-56	<b>Implement CoBH MoA:</b> This Change will compensate the Design-Build Contractor for revised work hours, holiday schedule and additional mitigation measures required by the Memorandum of Understanding (MOA). Work is currently being performed under the terms of the MOA with the City of Beverly Hills (CoBH).	More than \$15M
CN-63	<b>La Brea - Additional Instrumentation Requested by BOE:</b> Provides new/revised criteria that the Contactor must now use for the design and evaluation of the Support of Excavation (SOE) for the Wilshire/La Brea Station. Given the larger than expected settlement predictions, LABOE has requested additional instrumentation to be installed.	Between \$1M - \$5M
CN-64.1	<b>La Brea - Impacts from Metro SOE Deviation Request:</b> Provides new/revised criteria that the Contactor must now use for the design and evaluation of the Support of Excavation (SOE) for the Wilshire/La Brea Station.	Between \$500K - \$1M
CN-65.1	<b>Fairfax - Impacts from Metro SOE Deviation Request:</b> Provides new/revised criteria that the Contactor must now use for the design and evaluation of the Support of Excavation (SOE) for the Wilshire/Fairfax Station.	Between \$500K - \$1M
CN-66	<b>La Brea - Additional Dewatering Treatment and Discharge Costs:</b> The Contractor has encountered two different 'Differing Site Conditions' (DSC) that have resulted in additional costs to operate and maintain the dewatering systems.	Between \$1M - \$5M
CN-67.1	<b>Tactile Guidance: Construction and Plaza Material Change:</b> This change was requested by Metro Systemwide Planning in coordination with Metro ADA. Two tone tiles to be installed at all three stations to ensure sufficient contrast to meet ADA requirements.	Between \$500K - \$1M
CN-68	<b>Increased Ventilation of Station Ancillary Rooms:</b> Change to increase the ventilation requirements at the station stairs and corridor areas to accommodate surrounding soils.	Between \$1M - \$5M
CN-72.1	<b>Stations - Art Related Changes:</b> Installation of LED lighting at the plaza level (edge of the art glass) to reduce the foot-candle requirements and art area. This change will reduce the cost of installation and Storage of Work.	Between \$500K - \$1M
CN-77	<b>Additional Interpretation for Building Settlement - Project Wide:</b> The additional instrumentation required by Metro and LABOE will require additional reporting and analysis by the contractor. This change will accommodate the additional analysis and reporting.	Between \$1M - \$5M

# Westside Purple Line Extension – Section 1 Change Activity

February 2018



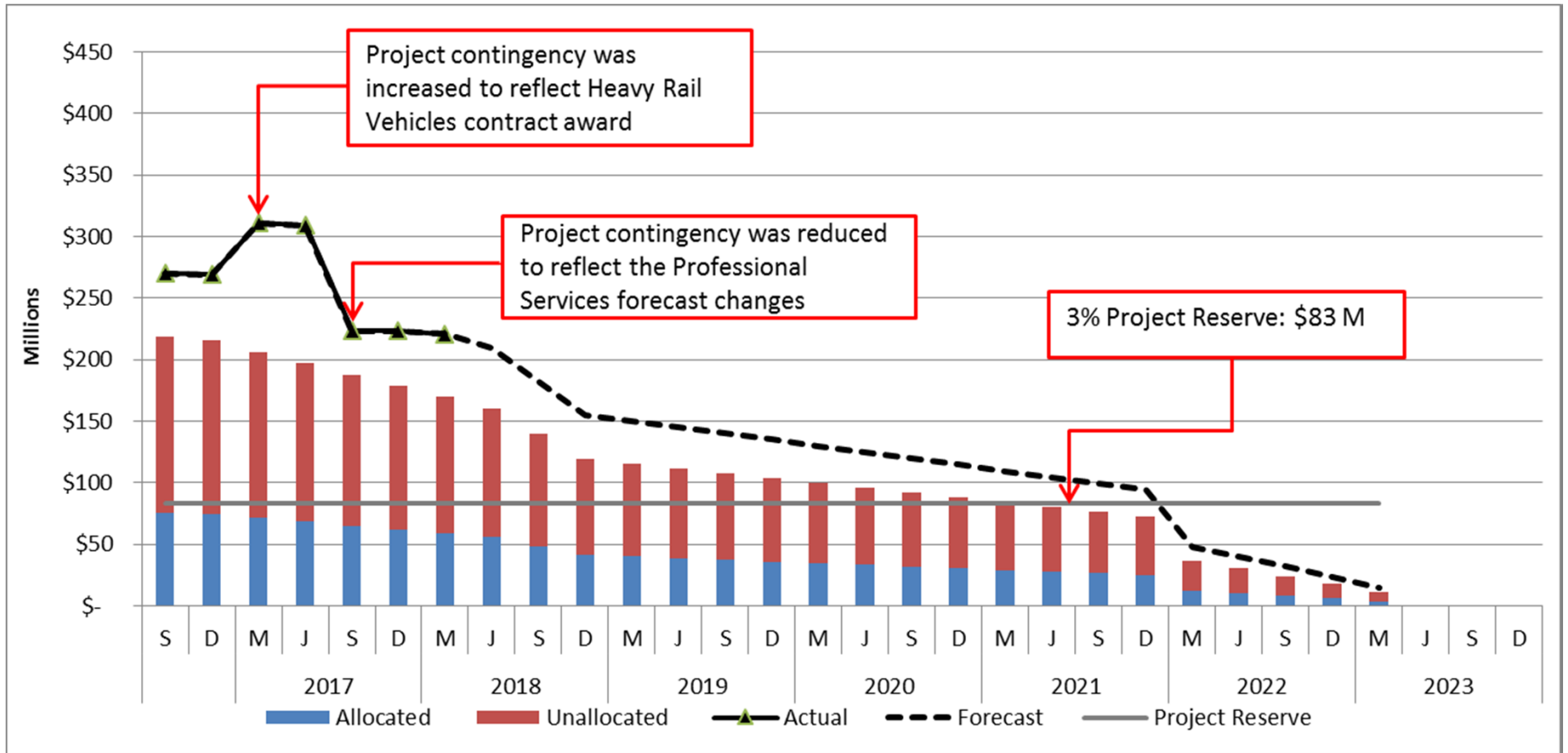
PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K		
MOD/CHANGE #	DESCRIPTION	Rough Order of Magnitude Cost
<b>DESIGN BUILD CONTRACT C1045</b>		
CN-78	<b>Fairfax - DWP Ductbank Conflicts with Deck Beams:</b> The location of LADWP ductbanks at Wilshire/Fairfax Station were higher than what was indicated on the as-built drawings. This change accommodates the mitigation efforts needed to remediate the higher ductbank.	Between \$500K - \$1M
CN-79	<b>Western - Property Status Change (Fee to TCE) Impacts, Parcel W-0103:</b> Accommodates the change in parcel handoff status from a 'Fee Take' to a 'Temporary Construction Easement' (TCE).	Between \$500K - \$1M
CN-83	<b>Western - Additional Dewatering and Treatment:</b> To accommodate the higher than expected groundwater inflows experienced at the Wilshire/Western shaft.	Between \$1M - \$5M
CN-84	<b>Western – Impacts from Metro SOE Deviation Request:</b> Provides new/revised criteria that the Contactor must now use for the design and evaluation of the Support of Excavation (SOE) for the Wilshire/Western Retrieval Shaft.	Between \$500K - \$1M
CN-85	<b>La Brea - BOE Additional Utility Hanging Requirements:</b> Accommodates additional utility supports required by LABOE for the Sewer and Storm Drain Lines at the Wilshire/La Brea Station.	Between \$500K - \$1M
CN-87	<b>La Brea - Bracing Impacts due to DWP ductbank (ECI-004):</b> Accommodates the re-installation of four struts at Wilshire/La Brea Station due to conflicts with the existing electrical ductbanks.	Between \$1M - \$5M
CN-93	<b>La Brea - Center Access Shaft - Design and Construction Costs (incl ECI-003):</b> Construction of a central muck shaft on Wilshire Blvd at La Brea Station to help increase station excavation rates and facilitate material placement.	Between \$500K - \$1M
CN-98	<b>Implement Wireless - Stations and Tunnels:</b> Provisions for the installation of Cellular Service on the WPLE Section 1 Project.	Between \$500K - \$1M
CN-99	<b>Oil Well Horizontal Investigation in lieu of TBM Probe-ahead:</b> Change to accommodate horizontal directional drilling to locate abandoned oil wells.	Between \$1M - \$5M
CN-102	<b>Golder Gas Investigation and Report:</b> Change to accommodate additional Geotechnical field work, analysis and investigation.	Between \$500K - \$1M
<b>CONTRACT C1078 (Div 20 MOW/NRV Bldg)</b>		
CN-11	<b>Schedule Impacts from Arcadis Work (includes Chalmers Impacts):</b> Change to accommodate construction schedule extension due to site impacts.	Between \$1M - \$5M
CN-16	<b>Install Street Lights Both Sides, Trees and Drip Irrigation:</b> Site restoration in accordance with LABOE requirements.	Between \$500K - \$1M
CN-22	<b>Hazardous Materials - Chalmers Pan Handle</b>	Between \$500K - \$1M
CN-24	<b>Support of Building Art Work:</b> Change accommodates the selected artwork, now designed, to be installed on the west and north walls of the new Metro Building.	Between \$500K - \$1M



# Westside Purple Line Extension – Section 1

## Project Cost Contingency Drawdown

February 2018



# Westside Purple Line Extension – Section 2

## Change Activity

February 2018



### APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (December 1, 2017 - February 28, 2018)

MOD/CHANGE #	DESCRIPTION	Submission Date	Approval Date	Amount
<b>DESIGN BUILD CONTRACT C1120</b>				
MOD-00005	Alternative for a Precast Steel Special Lining: Allow the use of a concrete precast lining for the Special Lining Section in both the BR and BL tunnels as an alternative to the steel lining indicated in the Contract Documents. The Contractor shall design, furnish and install a Special Lining Section consisting of post-tensioned precast concrete segments. This was a VE proposal submitted by the contractor and accepted by Metro.	1/11/2018	1/26/2018	Credit \$22,279,221
CO-00002	Worksite Traffic Control for SCG & AT&T Advanced Utility Relocations: Southern California Gas (SCG) and AT&T are scheduled to perform AUR at the same time within close proximity of each other. The project master schedule assumes each utility would provide their own traffic control. However, the overlap in traffic control areas can cause conflicts and both utilities are concerned that one utility's traffic control efforts may interfere with the other's work. To mitigate this and to expedite the work, both utilities have agreed to allow the C1120 Contractor (TPOG) to provide the overall traffic control. WSP has designed the traffic control plans and obtained City of Beverly Hills approval, and TPOG will implement the traffic control plans per WSP's design. Metro issued this <u>Unilateral</u> Change to formally direct the Contractor to commence work and invoice for work performed while both parties continue evaluating the Scope of Work and continue negotiations. Once the Scope of Work and pricing is agreed upon, Metro intends to issue a Contract Modification.	N/A	1/24/2018	\$2,242,400.00
CO-00003	Century City Constellation Station: Main Entrance (Design): Information on the main entrance at the Century City Constellation Station that was provided in the Contract Documents at the time of the RFP was based on a standard entrance configuration on the property at 1950 Avenue of the Stars in the location given in the Final EIS/EIR. The property owner was known to be planning a development, but hadn't informed Metro of its final configuration. Since then, the property owner has begun planning for its development and has been working with Metro to coordinate a station entrance that supports both the needs of the Project and the development. That coordination resulted in issuance of CN-3 in June 2017. Subsequently, the developer revised its plan necessitating changes to the proposed station entrance configuration for coordination purposes. In addition to reconfiguring the main entrance, the appendages associated with the east ancillary module that were located on 1950 Avenue of the Stars have also been reconfigured to better manage the special constraints of the development footprint of the site. Metro issued this <u>Unilateral</u> Change to formally direct the Contractor to commence work and invoice for work performed while both parties continue evaluating the Scope of Work and continue negotiations. Once the Scope of Work and pricing is agreed upon, Metro intends to issue a Contract Modification.	N/A	2/2/2018	\$983,114.00

### OTHER AGREEMENTS

N/A	Temporary Right of Access Agreement (ROA) for 2040 Century Park East: Approval of the ROA allowed LACMTA to turn the property over to the Project's contractor in February 2018. Without the ROA, access would have be delayed until after acquisition of the temporary construction easement is completed, which is anticipated to take several months. The terms of the ROA have been structured to provide LACMTA, and its contractor, appropriate use of the property while protecting and securing the owner's interests. (Refer to Board Box dated 1/9/18).	N/A	1/9/2018	\$750,000.00
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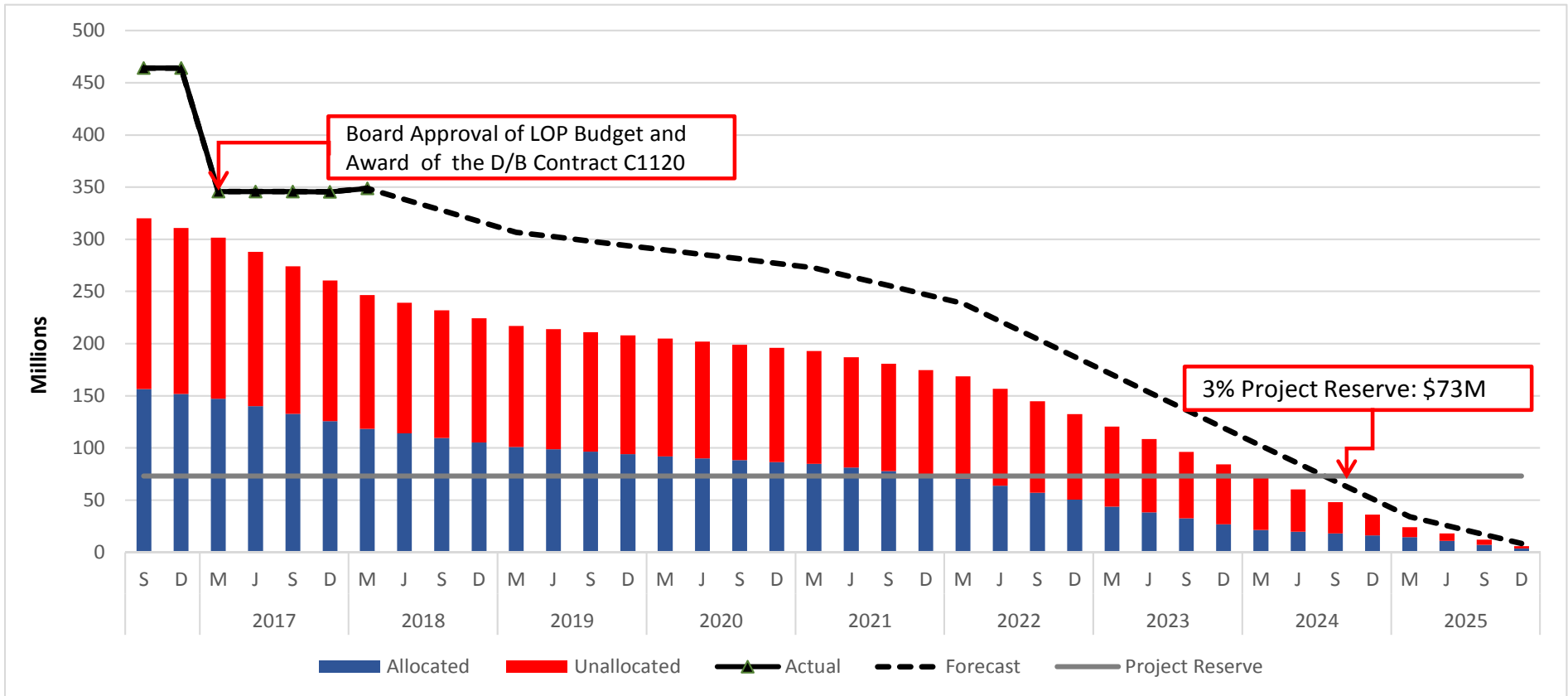
### PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K

MOD/CHANGE #	DESCRIPTION	Rough Order of Magnitude Cost
<b>DESIGN BUILD CONTRACT C1120</b>		
CN-00014	Field Office Tenant Improvements at Former AAA Building (1950 Century Park East): The Project acquired the property located at 1950 Century Park East which was owned by the Automobile Club of Southern California ("AAA"). The office building will be used by the construction management team as its field office during the period of construction, as such, it will require tenant improvements to accommodate the team.	Between \$1M and \$5M

# Westside Purple Line Extension – Section 2

## Project Cost Contingency Drawdown

February 2018



# Metro Blue Line Signal System Rehabilitation Change Activity

February 2018



PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K		
MOD/CHANGE #	DESCRIPTION	Rough Order of Magnitude Cost
<b>DESIGN BUILD CONTRACT C1081</b>		
CN 02 (mod number not yet assigned)	Non-Vital Relays Replacements and Implementations of the Aspect Configurations - This CN is for modifications on the Train Control scope to include the replacement of the existing non-vital relays for the existing interlockings and to complete the aspect configurations modifications for the entire Blue Line. Contract Documents Affected: Scope Modifications to Section 01 11 00 Scope of Work Drawings Nos. TC-100 thru TC-1 20 and TC-122 thru TC-140	Between \$1M and \$5M
CN 03 (mod number not yet assigned)	OCS Work Scope in Los Angeles Central Business District – This CN is for Modifications on the Overhead Catenary System (OCS) scope to include: 1) The replacement of the contact wire(s) for the MBL/Expo Junction 2) Lowering of the conductor wire at Flower Venice crossing 3) Replace existing OCS under the 1-10 structure to OCR The Los Angeles Central Business District (CBD) from intersection of Flower and Venice to the intersection of Flower/18th Street and the	Between \$1M and \$5M