

# **Program Management Major Project Status Report**

Presented By

**Richard Clarke**

Chief Program Management Officer

---















**October 2017**

**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 15 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 revised LOP budget as approved by the Board in January 2017.
Westside Purple Line Extension-Section 1			Project is 23% 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 3% complete, 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) 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.

October 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: Show on Master Schedule, WBS Categories_WBS Summary.				* 00 Master Program (By Phase) no contin													22-Sep-17	
Activity Name	PMIS Project Manager	Start	Finish	Original Budget	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
<b>Transit Projects</b>		<b>01-Mar-07 A</b>	<b>31-Jan-48</b>	<b>\$33,614,403,650</b>														
<b>Environmental</b>		<b>01-Mar-07 A</b>	<b>31-Jan-48</b>	<b>\$18,554,000,000</b>														
North San Fernando Valley BRT Improvements	Cencic	04-Jan-17 A	09-Oct-24	\$180,000,000														
North Hollywood to Pasadena BRT	Richmai	30-Jan-15 A	24-Jul-23	\$267,000,000														
Orange Line Grade Separations	Patel	23-May-16 A	10-Jan-24	\$286,000,000														
East San Fernando Valley Transit Corridor	Davis	11-Oct-10 A	05-Nov-27	\$1,331,000,000														
Vermont BRT Corridor	Cencic	30-Jan-15 A	13-Jul-28	\$425,000,000														
Crenshaw Northern Extension	Moosavi	29-Dec-17	31-Jan-48	\$2,240,000,000														
West Santa Ana Transit Corridor	Pan	01-Oct-09 A	08-Mar-29	\$4,000,000,000														
Sepulveda Pass Phase 1 - Express Lanes	Wong	01-Nov-17	13-Oct-27	\$260,000,000														
South Bay Green Line Ext. Crenshaw Blvd in Torr	Khanna	23-Mar-17 A	29-Jan-32	\$891,000,000														
Sepulveda Pass Phase 2 & 3 - Transit Corridor	Zelmer	26-Apr-17 A	12-Aug-36	\$5,674,000,000														
Eastside Transit Corridor Phase 2 (1 Align)	Liu	01-Mar-07 A	06-Apr-35	\$3,000,000,000														
<b>Design</b>		<b>04-Oct-10 A</b>	<b>28-Apr-27</b>	<b>\$5,508,270,758</b>														
Airport Metro Connector	Zelmer	04-Oct-10 A	26-Jul-23	\$623,400,000														
Purple Line Extension Section 3	McKenna	29-Feb-16 A	03-Sep-26	\$3,478,000,000														
Gold Line Foothill Extension Phase 2B	Meade	02-Oct-13 A	28-Apr-27	\$1,406,870,758														
<b>Construction Contract</b>		<b>01-Jun-07 A</b>	<b>31-Dec-26</b>	<b>\$9,552,132,892</b>														
Crenshaw/LAX Transit Corridor	Beauvoir	01-Jul-09 A	30-Oct-19	\$2,058,000,000														
Regional Connector Transit Corridor	Baker	26-Jan-09 A	24-Feb-23	\$1,810,132,892														
Purple Line Extension Section 1	Cohen	01-Jun-07 A	31-Oct-24	\$3,154,300,000														
Purple Line Extension Section 2	McKenna	02-Mar-15 A	31-Dec-26	\$2,529,700,000														
<b>Transit Facilities</b>		<b>17-Dec-13 A</b>	<b>10-Apr-24</b>	<b>\$690,246,000</b>														
<b>Design</b>		<b>17-Dec-13 A</b>	<b>10-Apr-24</b>	<b>\$690,246,000</b>														
Willowbrooks/Rosa Parks Station Improvement	Lindholm	07-May-15 A	29-Mar-21	\$102,546,000														

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

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

# TRANSIT MASTER SCHEDULE (Page 2 of 2)

TASK filters: Show on Master Schedule, WBS Categories, WBS Summary.			* 00 Master Program (By Phase) no contin													22-Sep-17		
Activity Name	PMIS Project Manager	Start	Finish	Original Budget	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Div 20 Portal/Turnback	Meade	16-May-16 A	10-Apr-24	\$475,000,000														
Emergency Security Operations Center	Owens	17-Dec-13 A	23-Sep-21	\$112,700,000														
<b>Regional Rail Projects</b>	<b>Owens</b>	<b>02-Sep-13 A</b>	<b>20-May-27</b>	<b>\$3,099,400,000</b>														
<b>Environmental</b>	Owens	01-Dec-14 A	20-May-27	\$2,662,000,000														
Link Union Station	Owens	01-Dec-14 A	20-May-27	\$2,662,000,000														
<b>Design</b>	Owens	01-Apr-15 A	26-Oct-21	\$422,400,000														
Brighton to Roxford Double Track	Owens	01-Sep-15 A	27-Sep-21	\$186,600,000														
Lone Hill to CP White	Owens	03-May-16 A	26-Oct-21	\$82,000,000														
Rosecrans & Marquardt Grade Separation	Owens	01-Apr-15 A	19-Apr-21	\$153,800,000														
<b>Construction Contract</b>	Owens	02-Sep-13 A	01-Jun-18	\$15,000,000														
Bob Hope Airport Station	Owens	02-Sep-13 A	01-Jun-18	\$15,000,000														
<b>Bus Facilities Projects</b>	<b>Gurrola</b>	<b>31-Mar-14 A</b>	<b>28-Feb-19</b>	<b>\$0</b>														
<b>Construction Contract</b>	Gurrola	31-Mar-14 A	28-Feb-19	\$0														
Patsouras Plaza	Gurrola	31-Mar-14 A	28-Feb-19	\$0														
<b>State of Good Repair/Improvements</b>		<b>01-Jul-13 A</b>	<b>31-Mar-21</b>	<b>\$180,999,946</b>														
<b>Design</b>	Danielans	13-Jun-16 A	31-Mar-21	\$11,078,366														
210 Freeway Barrier Rail	Danielans	13-Jun-16 A	31-Mar-21	\$11,078,366														
<b>Procurement</b>	Wei	21-Sep-15 A	03-Aug-20	\$118,990,580														
MBL Resignaling	Wei	21-Sep-15 A	03-Aug-20	\$118,990,580														
<b>Construction Contract</b>		01-Jul-13 A	30-Mar-18	\$50,931,000														
Pershing Sq. Esc. Replace & New Canopy Project	Patel	11-May-15 A	31-Aug-17 A	\$20,756,000														
MBL Ped Safety Enhancement At-Grade Crossing	Chong	01-Jul-13 A	30-Mar-18	\$30,175,000														

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

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

# HIGHWAY MASTER SCHEDULE (Page 1 of 2)

Activity Name	PMIS Project Manager	* 00 Hwy Master Program Schedule (By Pha)		Original Budget	22-Sep-17															
		Start	Finish		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		
<b>Highway Projects</b>		<b>01-Jan-96 A</b>	<b>28-Jun-47</b>	<b>\$18,197,321,000</b>																
<b>Environmental</b>		<b>02-Jan-08 A</b>	<b>28-Jun-47</b>	<b>\$14,219,960,000</b>																
I-710 South	Chaves	02-Jan-08 A	01-Mar-30	\$8,028,100,000																
SR-57/SR-60 Interchange Improvements	Jong	03-Jul-18	30-Sep-30	\$770,000,000																
I-105 Express Lane from I-405 to I-605	Amiri	01-May-17 A	29-Jun-29	\$175,000,000																
I-5 Corridor Improvements (I-605 to I-710)	Chaves	02-Jan-19	30-Jun-42	\$1,105,060,000																
I-405/I-110 Interchange HOV Direct Connectors	Panuco	01-Jun-32	30-Jun-44	\$250,000,000																
I-110 Express Lane Ext South to I-405/I-110 Interchange	Amiri	01-Jul-36	31-Dec-46	\$280,000,000																
I-605/I-10 Interchange	Jong	01-Jul-33	28-Jun-47	\$598,400,000																
I-605 Interchange Improvements	Various	01-Jun-16 A	15-Jan-30	\$673,300,000																
I-605/SR-91 Interchange Improvements	Various	01-Jun-16 A	01-Aug-25	\$143,300,000																
I-710/SR-91 Interchange Improvements	Various	01-Aug-17	15-Jan-30	\$530,000,000																
I-605 Corridor Improvements	Panuco	01-Oct-15 A	01-May-30	\$2,340,100,000																
I-605/I-5 Interchange Improvements	Panuco	01-Oct-15 A	01-Sep-27	\$1,108,100,000																
I-605/SR-60 Interchange Improvements	Panuco	31-Aug-16 A	01-May-30	\$1,232,000,000																
<b>Design</b>		<b>15-Dec-10 A</b>	<b>01-Apr-24</b>	<b>\$1,235,880,000</b>																
I-5 North Capacity Enhancement (SR-14 to Parker Rd.)	Antaramian	02-Jul-12 A	29-Jul-22	\$784,080,000																
SR-71 Gap Between I-10 to Rio Rancho Rd	Jong	17-Oct-16 A	01-Apr-24	\$295,000,000																
Countywide Soundwall Construction	Owen	15-Dec-10 A	18-Feb-21	\$156,800,000																
Package #11 - SR-170 from 101 to Sherman Way and I-405	Owen	15-Dec-10 A	18-Feb-21	\$97,500,000																
Package #10 - SR-210 Fair Oaks, Lake and Baldwin to Santa Anita	Owen	02-Sep-14 A	17-Feb-21	\$59,300,000																
<b>Construction Contract</b>		<b>01-Jan-96 A</b>	<b>01-Aug-22</b>	<b>\$2,741,481,000</b>																
I-5 North Capacity Enhancements SR-134 to SR-118	Subeh	01-Apr-98 A	15-Jun-20	\$853,900,000																
SR-118 to SR-170 (Segment 1A)	Subeh	30-Jul-99 A	15-Jul-16 A	\$219,400,000																
SR-170 to Buena Vista (Segments 2)	Subeh	01-Apr-98 A	16-Dec-15 A	\$94,700,000																
Magnolia to SR-134 (Segment 4)	Subeh	01-Apr-98 A	18-Dec-19	\$137,400,000																

Planning / Environmental   
  ROW / Utility Relocation   
  DB Construction   
  Contingency   
  Not Funded (Eng/Bid/Con)

Design / Engineering   
  Adv / Award   
  DBB Construction   
  System Testing   
  Not Funded (Enw/ROW/Con)

# HIGHWAY MASTER SCHEDULE (Page 2 of 2)

Activity Name	* 00 Hwy Master Program Schedule (By Pha)														22-Sep-17			
	PMIS Proj 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
Buena Vista to Magnolia (Segment 3)	Subeh	01-Apr-96 A	15-Jun-20	\$402,400,000														
I-5 South Capacity Enhancements from I-605 to Orange County Line	Gau	01-Jan-96 A	01-Aug-22	\$1,887,581,000														
I-5 Carmenita Road Interchange	Gau	01-Jan-01 A	01-Mar-18	\$419,214,000														
Alondra (Segment 1)	Gau	01-Jan-01 A	19-May-16 A	\$114,071,000														
Imperial Highway (Segment 4)	Gau	01-Jan-01 A	01-Apr-19	\$323,285,000														
Shoemaker - Rosecrans (Segment 3)	Gau	01-Jan-96 A	03-Dec-18	\$188,216,000														
Florence (Segment 5)	Gau	01-Jan-01 A	30-Jul-20	\$211,671,000														
Valley View (Segment 2)	Gau	01-Jan-96 A	01-Aug-22	\$631,124,000														

Planning / Environmental   
  ROW / Utility Relocation   
  DB Construction   
  Contingency   
  Not Funded (Eng/Bid/Con)

Design / Engineering   
  Adv / Award   
  DBB Construction   
  System Testing   
  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 72% complete; main line contractor needs to mitigate 15 day delay
- Contractor continues trackwork installation along southern area of alignment
- Canopy steel is install at two at-grade stations
- Commenced concrete placement of first station roof section at Expo/Crenshaw Station
- Southwestern Yard contractor is ahead of schedule constructing main shop and other facilities



Aerial view of UG#3 north of Hyde Park Blvd.



Switch for crossover at Aviation/Century Bridge.

October 2017



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 7

# REGIONAL CONNECTOR TRANSIT CORRIDOR



## BUDGET

	Current	Forecast
<b>TOTAL COST</b>	<b>\$1,810M</b>	<b>\$1,810M</b>

\* Includes Board approved LOP plus finance costs.



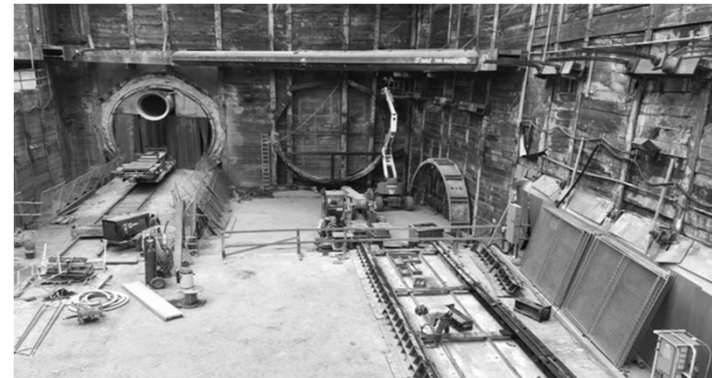
## SCHEDULE

	Current Dec 2021	Forecast Dec 2021
<b>REVENUE</b>		
<b>OPERATION</b>		

- Overall Project Progress is 40%
- Tunneling operations: Tunnel Boring Machines (TBM) second bore launched successfully; now moving through mixed alluvium sector
- 1<sup>st</sup>/Central (future Little Tokyo Station) is under steady state until tunnel operations are completed
- Historic Broadway Station is also under steady state; support of excavation and 126" storm drain replacement continues
- Grand Ave Arts/Bunker Hill Station concourse level invert installation, and tunnel eye and track installation began in preparation for second bore;
- Flower Street power relocations, support of excavation, pile installation, decking and excavation ongoing



Excavation and utilities support in preparation for deck beam installation



Tunnel eye and track installation at Grand Av Arts/Bunker Hill Station

October 2017



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

\* Includes Board approved LOP plus Finance costs.

## **OK** SCHEDULE

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

- Overall Project Progress is 23% 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 in 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 December 2017
- At the Wilshire/Fairfax Station, the hanging of utilities under the concrete deck panels is ongoing. Station excavation and the installation of walers and struts continues
- The Wilshire/La Cienega Station piling operation commenced on March 20, 2017. Stage 2 piling along the north side of Wilshire Boulevard, which began on July 15, 2017, continues. Street decking is scheduled to start 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



WPLE Section 1 TBMs

**October 2017**  
**Construction Committee**

Los Angeles County Metropolitan Transportation Authority



On target



Possible problem



Major issue



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 plus Finance costs.

## SCHEDULE

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

- Overall project progress is 3% complete.
- Received 60% Design Package #1 (Utility/Civil Design at Launch Box) in August 2017 and comments returned in September 2017.
- Received submittal of 60% Design Package #2 (Remaining Utility Conflicts) in September 2017. Review underway.
- 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 September 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

**October 2017**



On target



Possible problem



Major issue

**Construction Committee**

Los Angeles County Metropolitan Transportation Authority



**Metro** 10

# WESTSIDE PURPLE LINE EXTENSION – SECTION 3

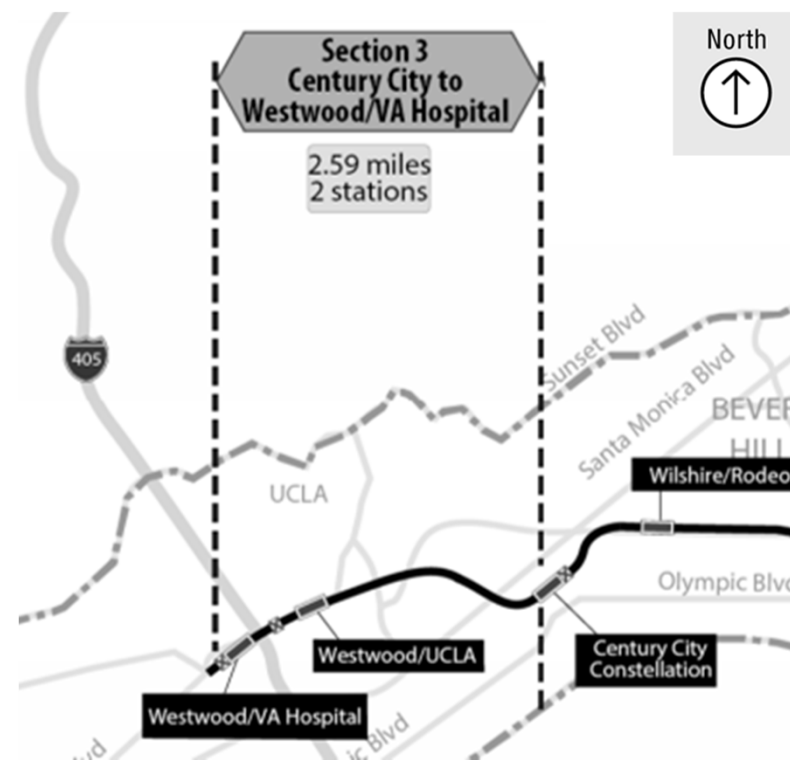
## OK BUDGET

	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) - 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 October 27, 2017 and price proposals on January 29, 2018. Recommendation for award is anticipated in March 2018
- C1153 Advanced Utility Relocations (AUR) Contract - Recommendation for award is anticipated in October 2017 and subsequent NTP in November 2017
- C1152 Stations, Trackwork and Systems Contract - Request for Qualifications (RFQ)/Request for Proposals (RFP) was issued on September 15, 2017



October 2017



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro

# PATSAOURAS PLAZA BUSWAY STATION

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

◇ SCHEDULE		
	Current	Forecast
SUBSTANTIAL COMPLETION	Nov 2018	Nov 2018

- All drilled foundations were completed in July 2017. Column construction is ongoing
- First concrete pour for bridge abutment completed August 2017. Falsework on north and south sides ongoing
- Sanitary sewer and storm drain relocations were completed in August 2017
- Ramirez Street closure is complete. Vignes Street on/off-ramp reopen on September 15, 2017. There will be intermittent non-peak closures in September/October 2017
- Schedule negotiations in progress for revised substantial completion date due to weather and design delays



Aerial view of site



Completed bridge column



Bent 4 Foundation

October 2017



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 (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 B at 100% design completion and in early coordination for Peer review with CalTrans
- Phase A and C invitation for bids scheduled for late 2017



South Platform Improvements



Central Plaza & Bus Bays



Main Plaza

October 2017



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 13

# METRO BLUE LINE PROJECTS

<u>Project Name</u>	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*		Aug 2021**	
<b>Total: \$186.6M</b>				



\*Budget Estimate    \*\*Project Closeout

October 2017



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro

# Crenshaw/LAX Transit Project

## Change Activity

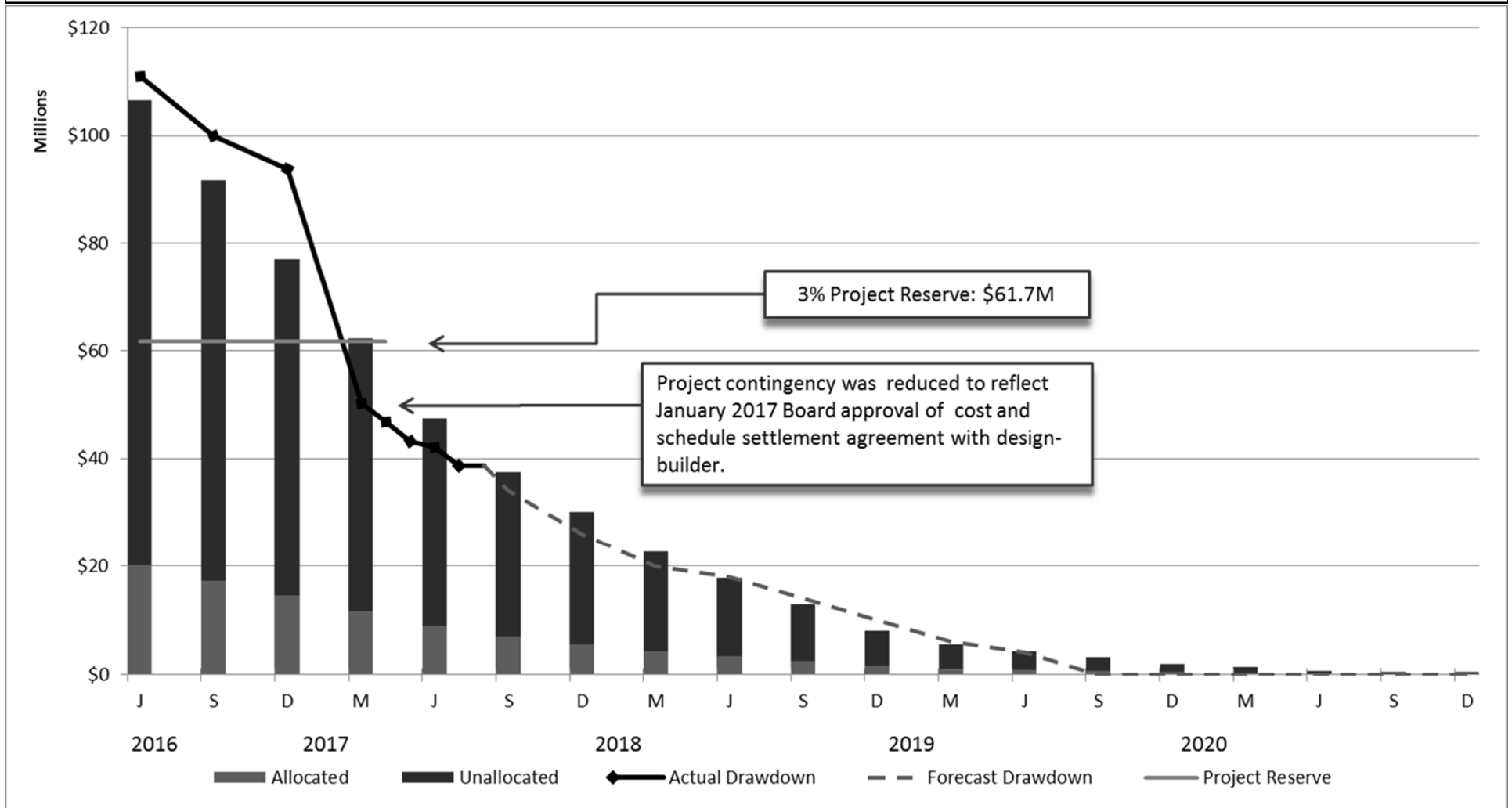
August 2017

Change Notice #	Description	Number of Mod/ Change Orders	Cost Value
<b>DESIGN BUILD - CONTRACT C0988</b>			
<b>TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS AND APPROVED CHANGE ORDERS</b>		<b>305</b>	<b>\$ 74,053,056</b>
<b>TOTAL PENDING MODIFICATIONS AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST</b>		<b>18</b>	<b>\$ 1,704,479</b>
MOD 00256	Black Diamond Vault 5436 Crenshaw Bl		Less than \$1 million
MOD 00269	Remove Trees over MWD Easement		Less than \$1 million
MOD 00270	Unit Rates for Incidental Const Work		Less than \$1 million
MOD 00293	Asbestos Cement Pipe 63rd & Tesoro		Less than \$1 million
MOD 00294.1	Station Entrance Artwork - Design		Less than \$1 million
MOD 00298	Design- Delete Tree Well Brick Pavers		Less than \$1 million
MOD 00302	LABSL Added Light Pole Centry-Design		Less than \$1 million
MOD 00305	Extend 104th St. Deck Lid-Construct		Credit Less than \$1 million
MOD 00306	Settlement of Calim 36, 79, 79.1, 97		Less than \$1 million
MOD 00308	Florence/West Park-and-Ride Parking		Less than \$1 million
MOD 00309	Delete Onyxworks Network		Credit Less than \$1 million
MOD 00311	Unforeseen Concrete at 104th Bridge		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 00312	Centinela and Eucalyptus Crossing Re		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
CO 00178	COLA Roadway & Curb Rev Construction		Less than \$1 million
<b>TOTAL MODIFICATIONS AND CHANGE ORDERS</b>		<b>323</b>	<b>\$ 75,757,535</b>
<b>PROFESSIONAL SERVICES CONTRACT</b>			
<b>Design Support Services During Construction - CONTRACT E0117</b>			
<b>TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS</b>		<b>42</b>	<b>\$ 59,217,720</b>
<b>TOTAL PENDING MODIFICATIONS ROUGH ORDER OF MAGNITUDE COST</b>		<b>0</b>	<b>\$ -</b>
<b>TOTAL MODIFICATIONS</b>		<b>42</b>	<b>\$ 59,217,720</b>
<b>Construction Management Support Services - CONTRACT MC069</b>			
<b>TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS</b>		<b>18</b>	<b>\$ 69,484,775</b>
<b>TOTAL PENDING MODIFICATIONS ROUGH ORDER OF MAGNITUDE COST</b>		<b>0</b>	<b>\$ -</b>
<b>TOTAL MODIFICATIONS</b>		<b>18</b>	<b>\$ -</b>

# Crenshaw/LAX Transit Project

## Project Cost Contingency Drawdown

August 2017



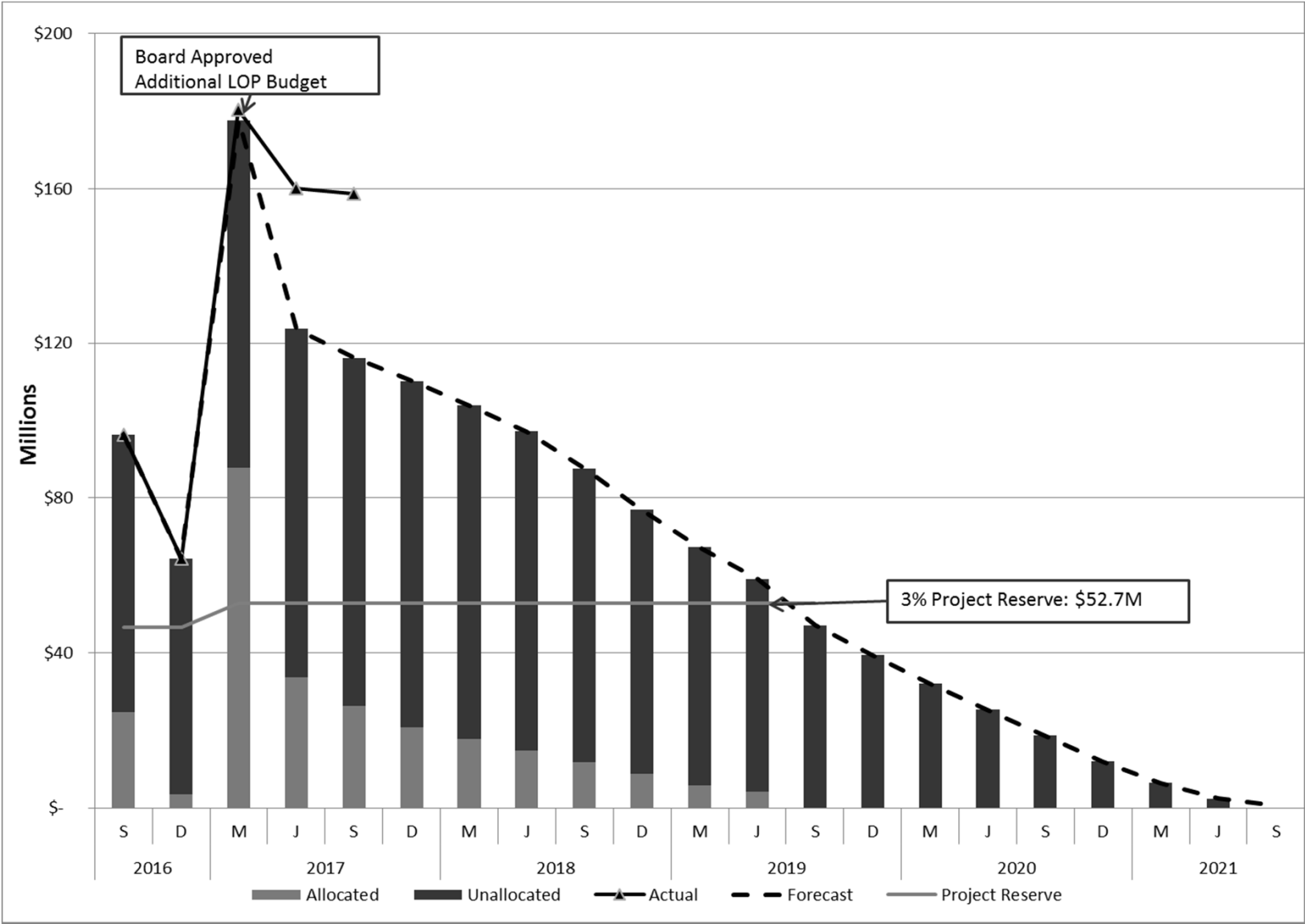


# Regional Connector Change Activity

August 2017

Change Notice #	Description	Number of Mod/ Change Orders	Cost Value
<b>DESIGN BUILD CONTRACT (C0980)</b>			
TOTAL VALUE OF ALL EXECUTED CONTRACT MODIFICATIONS AND CHANGE ORDERS:		92	\$ 149,322,791
TOTAL PENDING MODIFICATIONS AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST:		35	\$ 68,121,247
	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 Zarja Additional Potholing		Less Than \$1 Million
78.0	ATT Dredbank Relocation @ Hewitt		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'l 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	Infrastructure for Insite Wireless in Tunnels		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'l 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
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
139.0	Flower Street - C0981 Power Vault MH 470 Support Frame		Less Than \$1 Million
140.0	Flower St. Road Settlement Temp Repair and Monitoring		Less Than \$1 Million
TBD	TBM failure - delays and repair		Between \$1 and \$5 Million
TBD	Add 1 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		Between \$1 and \$5 Million
144.0	Design Mod for Acoustical Treatment in Stations		Less Than \$1 Million
<b>TOTAL MODIFICATIONS AND CHANGE ORDERS</b>		<b>127</b>	<b>\$ 217,444,038</b>
<b>PROFESSIONAL SERVICES CONTRACT</b>			
<b>Design Support Services During Construction (E0119)</b>			
TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS		12	\$ 44,629,810
TOTAL PENDING MODIFICATIONS ROUGH ORDER OF MAGNITUDE COST		0	\$ -
		TOTAL MODIFICATIONS	\$ 44,629,810
<b>Construction Management Support Services (MC070)</b>			
TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS		5	\$ 35,630,672
TOTAL PENDING MODIFICATIONS ROUGH ORDER OF MAGNITUDE COST		0	\$ -
		TOTAL MODIFICATIONS	\$ 35,630,672

# Regional Connector Project Cost Contingency Drawdown



# Westside Purple Line Extension – Section 1 Change Activity

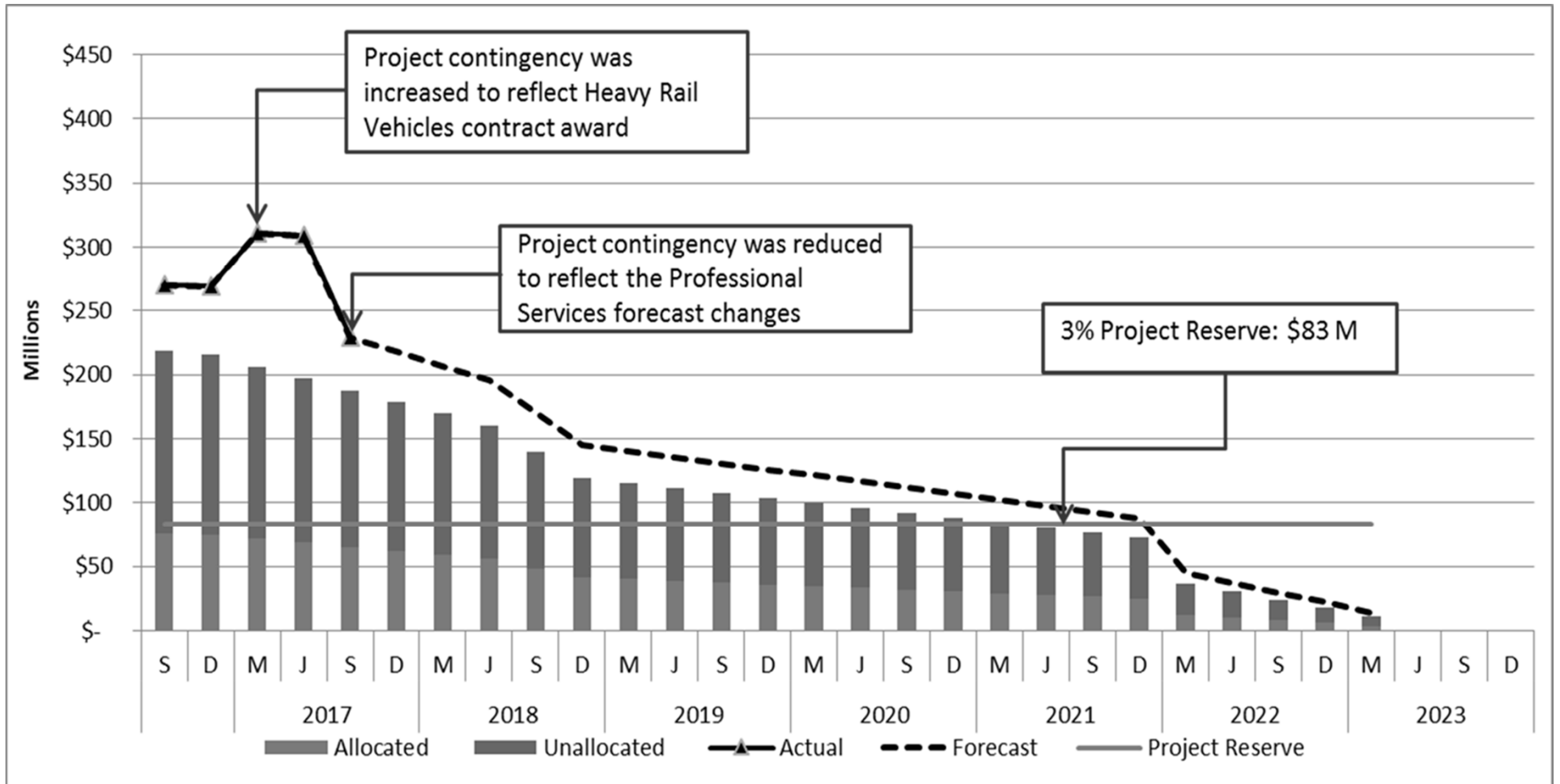
August 2017

Change Notice #	Description	Number of Mod/ Change Orders	Cost Value
<b>TOTAL VALUE OF ALL EXECUTED CONTRACT MODIFICATIONS AND CHANGE ORDERS:</b>		<b>144</b>	<b>\$ 29,887,179</b>
<b>TOTAL PENDING MODIFICATIONS AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST:</b>		<b>39</b>	<b>More than \$15M</b>
<b>DESIGN/BUILD CONTRACT C1045</b>			
		30	
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		Less Than \$1 Million
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
<b>CN-56</b>	<b>Implement City of Beverly Hills Memorandum of Agreement (MOA)</b>		<b>Between \$10M - \$15M</b>
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	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
TBD	Fairfax - Piling Obstructions, Conflicts, Delays		Less Than \$1 Million
<b>DESIGN/BUILD CONTRACT C1078</b>			
		9	
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
TBD	<b>TOTAL MODIFICATIONS AND CHANGE ORDERS</b>	<b>183</b>	
Change Notice #	Description	Number of Mod/ Change Orders	Cost Value
<b>PROFESSIONAL SERVICES CONTRACTS</b>			
<b>Design Support Services During Construction - CONTRACT PS43502000</b>			
<b>TOTAL VALUE OF ALL EXECUTED CONTRACT MODIFICATIONS:</b>		<b>22</b>	<b>\$ 92,608,453</b>
<b>TOTAL PENDING MODIFICATIONS</b>		<b>0</b>	
<b>TOTAL MODIFICATIONS AND CHANGE ORDERS</b>		<b>22</b>	
<b>Construction Management Support Services - CONTRACT MC071</b>			
<b>TOTAL VALUE OF ALL EXECUTED CONTRACT MODIFICATIONS:</b>		<b>4</b>	<b>\$ 70,297,456</b>
<b>TOTAL PENDING MODIFICATIONS</b>		<b>0</b>	
<b>TOTAL MODIFICATIONS AND CHANGE ORDERS</b>		<b>4</b>	
<b>OTHER - THIRD PARTY AGREEMENTS</b>			
	Annual work plan for Fiscal Year 2018 with the City of Beverly Hills, in an amount not-to-exceed		Between \$10M - \$15M

# Westside Purple Line Extension – Section 1

## Project Cost Contingency Drawdown

August 2017



# Westside Purple Line Extension – Section 2

## Change Activity

August 2017

Change Notice #	Description	Number of Mod/Change Orders	Cost Value
<b>TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS AND APPROVED CHANGE ORDERS</b>		1	\$ -
<b>TOTAL PENDING MODIFICATIONS AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST:</b>		10	More than \$15 Million
<b>DESIGN/BUILD CONTRACT C1120</b>			
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	Furnish Cradles for LADWP Power Vaults		Less Than \$1 Million
	Delete Four boreholes at Cross-Passages		Less Than \$1 Million
	Abatement at ACE Gallery		Less Than \$1 Million
<b>TOTAL MODIFICATIONS AND CHANGE ORDERS</b>		11	\$ -
<b>PROFESSIONAL SERVICES CONTRACT</b>			
Design Support Services During Construction			
<b>TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS</b>		0	\$ -
<b>TOTAL PENDING MODIFICATIONS</b>		0	\$ -
<b>TOTAL MODIFICATIONS</b>		0	\$ -
Construction Management Support Services			
<b>TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS</b>		0	\$ -
<b>TOTAL PENDING MODIFICATIONS</b>		0	\$ -
<b>TOTAL MODIFICATIONS</b>		0	\$ -
<b>OTHER - THIRD PARTY AGREEMENTS</b>			
	Annual Work Plan for Fiscal Year 2018 with the City of Beverly Hills (not-to-exceed amount)		Between \$5M - \$10M
	The Auto Club of Southern California (AAA) - reimbursement agreement for tenant improvements and building maintenance for construction field office		Between \$1M - \$5M

# Westside Purple Line Extension – Section 2

## Project Cost Contingency Drawdown

August 2017

