

# **Metro**

*Los Angeles County Metropolitan Transportation Authority  
One Gateway Plaza  
3rd Floor Board Room*



## **Agenda - Final**

**Thursday, January 16, 2020**

**10:15 AM**

**One Gateway Plaza, Los Angeles, CA 90012,  
3rd Floor, Metro Board Room**

### **Construction Committee**

*Janice Hahn, Chair  
Robert Garcia, Vice Chair  
Kathryn Barger  
Jacquelyn Dupont-Walker  
Sheila Kuehl  
John Bulinski, non-voting member*

*Phillip A. Washington, Chief Executive Officer*

## **METROPOLITAN TRANSPORTATION AUTHORITY BOARD RULES**

### **(ALSO APPLIES TO BOARD COMMITTEES)**

#### **PUBLIC INPUT**

A member of the public may address the Board on agenda items, before or during the Board or Committee's consideration of the item for one (1) minute per item, or at the discretion of the Chair. A request to address the Board must be submitted electronically using the tablets available in the Board Room lobby. Individuals requesting to speak will be allowed to speak for a total of three (3) minutes per meeting on agenda items in one minute increments per item. For individuals requiring translation service, time allowed will be doubled. The Board shall reserve the right to limit redundant or repetitive comment.

The public may also address the Board on non agenda items within the subject matter jurisdiction of the Board during the public comment period, which will be held at the beginning and/or end of each meeting. Each person will be allowed to speak for one (1) minute during this Public Comment period or at the discretion of the Chair. Speakers will be called according to the order in which their requests are submitted. Elected officials, not their staff or deputies, may be called out of order and prior to the Board's consideration of the relevant item.

Notwithstanding the foregoing, and in accordance with the Brown Act, this agenda does not provide an opportunity for members of the public to address the Board on any Consent Calendar agenda item that has already been considered by a Committee, composed exclusively of members of the Board, at a public meeting wherein all interested members of the public were afforded the opportunity to address the Committee on the item, before or during the Committee's consideration of the item, and which has not been substantially changed since the Committee heard the item.

In accordance with State Law (Brown Act), all matters to be acted on by the MTA Board must be posted at least 72 hours prior to the Board meeting. In case of emergency, or when a subject matter arises subsequent to the posting of the agenda, upon making certain findings, the Board may act on an item that is not on the posted agenda.

**CONDUCT IN THE BOARD ROOM** - The following rules pertain to conduct at Metropolitan Transportation Authority meetings:

**REMOVAL FROM THE BOARD ROOM** The Chair shall order removed from the Board Room any person who commits the following acts with respect to any meeting of the MTA Board:

- a. Disorderly behavior toward the Board or any member of the staff thereof, tending to interrupt the due and orderly course of said meeting.
- b. A breach of the peace, boisterous conduct or violent disturbance, tending to interrupt the due and orderly course of said meeting.
- c. Disobedience of any lawful order of the Chair, which shall include an order to be seated or to refrain from addressing the Board; and
- d. Any other unlawful interference with the due and orderly course of said meeting.

#### **INFORMATION RELATING TO AGENDAS AND ACTIONS OF THE BOARD**

Agendas for the Regular MTA Board meetings are prepared by the Board Secretary and are available prior to the meeting in the MTA Records Management Department and on the Internet. Every meeting of the MTA Board of Directors is recorded and is available at [www.metro.net](http://www.metro.net) or on CD's and as MP3's for a nominal charge.

## DISCLOSURE OF CONTRIBUTIONS

The State Political Reform Act (Government Code Section 84308) requires that a party to a proceeding before an agency involving a license, permit, or other entitlement for use, including all contracts (other than competitively bid, labor, or personal employment contracts), shall disclose on the record of the proceeding any contributions in an amount of more than \$250 made within the preceding 12 months by the party, or his or her agent, to any officer of the agency, additionally PUC Code Sec. 130051.20 requires that no member accept a contribution of over ten dollars (\$10) in value or amount from a construction company, engineering firm, consultant, legal firm, or any company, vendor, or business entity that has contracted with the authority in the preceding four years. Persons required to make this disclosure shall do so by filling out a "Disclosure of Contribution" form which is available at the LACMTA Board and Committee Meetings. Failure to comply with this requirement may result in the assessment of civil or criminal penalties.

## ADA REQUIREMENTS

Upon request, sign language interpretation, materials in alternative formats and other accommodations are available to the public for MTA-sponsored meetings and events. All requests for reasonable accommodations must be made at least three working days (72 hours) in advance of the scheduled meeting date. Please telephone (213) 922-4600 between 8 a.m. and 5 p.m., Monday through Friday. Our TDD line is (800) 252-9040.

## LIMITED ENGLISH PROFICIENCY

A Spanish language interpreter is available at all Committee and Board Meetings. All other languages must be requested 72 hours in advance of the meeting by calling (213) 922-4600 or (323) 466-3876.



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*Español*

**323.466.3876 x3**

한국어

日本語

中文

русский

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ภาษาไทย

Tiếng Việt

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## HELPFUL PHONE NUMBERS

Copies of Agendas/Record of Board Action/Recordings of Meetings - (213) 922-4880 (Records Management Department)

General Information/Rules of the Board - (213) 922-4600

Internet Access to Agendas - [www.metro.net](http://www.metro.net)

TDD line (800) 252-9040

**NOTE: ACTION MAY BE TAKEN ON ANY ITEM IDENTIFIED ON THE AGENDA**

**CALL TO ORDER****ROLL CALL**

28. **SUBJECT: PROGRAM MANAGEMENT MAJOR PROJECT STATUS REPORT** [2019-0878](#)

**RECOMMENDATION**

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

**Attachments:** [Attachment A - Program Management Major Project Status Report](#)

29. **SUBJECT: PROGRAM MANAGEMENT QUARTERLY CHANGE REPORT** [2020-0001](#)

**RECOMMENDATION**

RECEIVE AND FILE Program Management Quarterly Change Report.

**Attachments:** [Attachment A - Quarterly Change Report for Reporting Period of September 1, 2019 to August 31, 2020](#)

30. **SUBJECT: ORAL REPORT COMPLETING THE REGIONAL CONNECTOR PROJECT** [2020-0004](#)

**RECOMMENDATION**

RECEIVE oral report describing the remaining work needed to complete and activate the Regional Connector Project in 2022.

**Attachments:** [Attachment A - Presentation on Completing the Regional Connector Project](#)

31. **SUBJECT: OFFICE OF THE INSPECTOR GENERAL CHANGE ORDER/MODIFICATION CONSTRUCTION SPOT CHECKS** [2020-0010](#)

**RECOMMENDATION**

RECEIVE AND FILE Office of the Inspector General Change Order/Modification Construction Spot Check Report.

**Attachments:** [Attachment A - Charts for Spot Checks](#)  
[Attachment B - Tracking Sheet of OIG Recommendations and Responses](#)  
[Presentation](#)

- 32. SUBJECT: I-5 NORTH CAPACITY ENHANCEMENTS FROM SR- 118  
TO SR-134; SEGMENT 3**

[2019-0829](#)

**RECOMMENDATION**

AUTHORIZE Contract Modification No. 235 (CCO 235) by the California Department of Transportation (Caltrans) for the construction contract for Segment 3 (Empire) of I-5 North Capacity Enhancements Project between SR-134 and SR-118 (Project) in the amount not to exceed \$1.5 M under Funding Agreement No. MOU. P0008355/8501A/A9 within the LOP budget.

- 33. SUBJECT: CONSTRUCTION ZONE ENHANCED ENFORCEMENT  
PROGRAM (COZEED) SERVICES**

[2019-0844](#)

**RECOMMENDATION**

AUTHORIZE the Chief Executive Officer (CEO) to:

- A. Enter into an Interagency Agreement with California Highway Patrol (CHP) for Construction Zone Enhanced Enforcement Program (COZEED) task order services for an amount of \$6,000,000; and
- B. Execute all necessary changes and task orders required to administer the agreement.

- 34. SUBJECT: ENVIRONMENTAL CONSTRUCTION WASTE HANDLING  
SERVICES**

[2019-0885](#)

**RECOMMENDATION**

AUTHORIZE:

- A. An increase to the total authorized funding for Contract No. PS20655 with TRC Solutions Inc. to increase Environmental Construction and Waste Handling Services contract value in the amount of \$20,600,000, increasing the Total Contract Value from \$46,200,000 to \$66,800,000, and
- B. The Chief Executive Officer (CEO) to execute all individual Task Orders and changes within the new Board approved contract funding amount.

**35. SUBJECT: SUSTAINABILITY PROGRAM ASSISTANCE SERVICES**[2019-0887](#)**RECOMMENDATION****AUTHORIZE:**

- A. An increase to the total authorized funding for Contract No. PS325890084203243 with Cumming Construction Management, Inc. to provide Sustainability Program Assistance Services (SPAS) support in the amount of \$1,548,036 increasing the Total Contract Value from \$13,729,353 to \$15,277,389; and
- B. The Chief Executive Officer (CEO) to execute all individual Task Orders and changes within the new Board approved contract funding amount.

**36. SUBJECT: ENVIRONMENTAL ENGINEERING SERVICES**[2019-0888](#)**RECOMMENDATION****AUTHORIZE**

- A. An increase to the total authorized funding for Contract No. PS3274 with Kleinfelder, Inc. to provide Environmental Engineering support services in the amount of \$11,926,155 increasing the Total Contract Value (CMA) from \$13,200,000 to \$25,126,155, and
- B. The Chief Executive Officer (CEO) to execute all individual Task Orders and changes within the Board approved contract funding amount.

**SUBJECT: GENERAL PUBLIC COMMENT**[2020-0039](#)**RECEIVE General Public Comment**

Consideration of items not on the posted agenda, including: items to be presented and (if requested) referred to staff; items to be placed on the agenda for action at a future meeting of the Committee or Board; and/or items requiring immediate action because of an emergency situation or where the need to take immediate action came to the attention of the Committee subsequent to the posting of the agenda.

**COMMENTS FROM THE PUBLIC ON ITEMS OF PUBLIC INTEREST WITHIN COMMITTEE'S SUBJECT MATTER JURISDICTION****Adjournment**



Metro

Los Angeles County  
Metropolitan Transportation  
Authority  
One Gateway Plaza  
3rd Floor Board Room  
Los Angeles, CA

## Board Report

**File #:** 2019-0878, **File Type:** Oral Report / Presentation

**Agenda Number:** 28.

### CONSTRUCTION COMMITTEE JANUARY 16, 2020

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

**ACTION: ORAL REPORT**

#### **RECOMMENDATION**

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

#### **DISCUSSION**

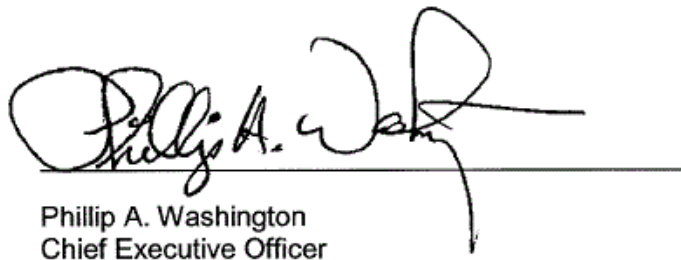
Update report covering the month of January 2020 by the Chief Program Management Officer.

#### **ATTACHMENTS**

Attachment A - Program Management Major Project Status Report

Prepared by:

- **Crenshaw/LAX** - Sameh Ghaly, Sr EO Project Mgmt., (213) 418-3369
- **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** - Kimberly Ong, EO Project Mgmt., (323) 903-4112
- **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** - Timothy Lindholm, EO Project Engr., (213) 922-7297
- **I-210 Barrier Replacement** - Androush Danielians, EO Project Engr., (213) 922-7598
- **I-5 North** - Abdollah Ansari, Sr EO Construction & Engr., (213) 922-4781
- **I-5 South** - Abdollah Ansari, Sr EO Construction & Engr., (213) 922-4781
- **Presentation** - Yohana Jonathan, Princ. Prog. Mgmt. Analyst, (213) 418-3031



Phillip A. Washington  
Chief Executive Officer



# **Program Management Major Project Status Report**

Presented By

**Richard Clarke**

Chief Program Management Officer

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January 2020

**Construction Committee**

Los Angeles County Metropolitan Transportation Authority



# PROJECT BUDGET & SCHEDULE STATUS SUMMARY CHART

Project	Cost Performance	Schedule Performance	Comments
Crenshaw/LAX			Project is 93% complete. Contractor needs to recover schedule. The forecast revenue service date is Summer/Fall 2020.
Regional Connector			Project is 61% complete and proceeding on schedule and within budget.
Westside Purple Line Extension-Section 1			Project is 55% complete and proceeding on schedule. Differing site conditions and third party requirements are impacting the project budget.
Westside Purple Line Extension-Section 2			Project is 25% complete and proceeding on schedule and within budget.
Westside Purple Line Extension-Section 3			Project is 6% complete and proceeding on schedule and within budget.
Patsaouras Plaza			Project is 80% complete. Archaeological and Native American monitoring not required due to lack of earthwork at the present. Concrete has been poured for the pedestrian walkway and overcrossing, and rebar has been completed for station and elevator platform. Pedestrian walkway overhead steel is in progress.
Willowbrook/Rosa Parks Station			Blue Line Platform and Mezzanine opened for public service. Finish Systems and Vertical Circulation work ongoing. Customer Center, Bike Hub and Public Plaza nearing substantial completion. Package B 100% bid package has begun procurement process.
I-210 Barrier Replacement			Design team looking to see if 8 minute headways are possible while single tracking occurs on Gold Line (for Projects 1 and 2). Expecting to submit Project 1 Project Report for approval by the end of the year and submit Project 1 100% Design Package for approval in January 2020.
I-5 North: SR 118 to SR 134			Segment 1 and 2 are completed. Segment 3 (Empire Ave & Burbank) is 76% complete. Segment 4 (Magnolia to SR-134) is 94% complete.
I-5 South: Orange County Line to I-605			Segments 1 and 3 and the Carmenita Interchange are completed. Segment 2 (Valley View) is 53% complete. Segment 4 (Imperial) is 96% complete. Segment 5 (Florence) is 85% complete.

January 2020

Construction Committee

Los Angeles County Metropolitan Transportation Authority



On target



Possible problem



Major issue



Metro<sup>2</sup>

# CRENSHAW/LAX TRANSIT PROJECT



## BUDGET

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



## SCHEDULE

	<u>Current</u>	<u>Forecast</u>
REVENUE	Summer/Fall	Summer/Fall
OPERATION	2020	2020

- Overall Project Progress is 93% complete; contractor needs to recover schedule.
- Focus has been on rework including repairing blocked and damaged conduits in tunnel/underground stations and repairing trackwork throughout alignment.
- Contractor continues remaining facility and systems installation and testing efforts. Integrated testing being performed up to Hindry Ave.
- Critical path is completion of the traction power substations, conduit and system installation and testing, and system integration testing.



Setting forms for the platform topping slab at Aviation/Century Station



Auxiliary power high voltage cable tray in Martin Luther King Jr. Station

January 2020



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 3

# REGIONAL CONNECTOR TRANSIT PROJECT

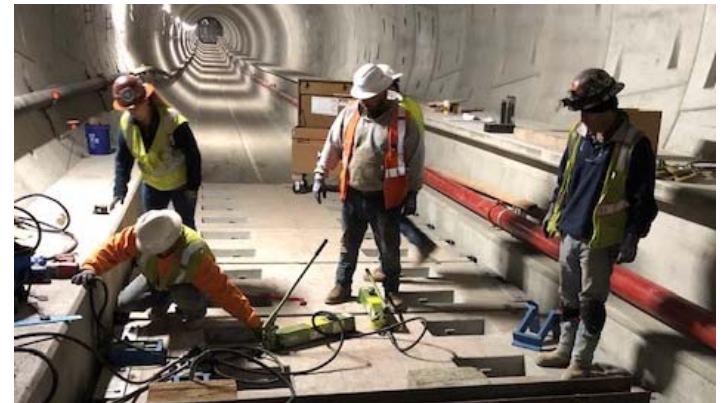
## BUDGET

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

## SCHEDULE

	<u>Current</u>	<u>Forecast</u>
REVENUE	Summer/Fall	Summer/Fall
OPERATION	2022	2022

- Overall Project Progress is 61% complete.
- Little Tokyo/Arts District Station, WYE and 1st Street:** Street Restoration work will begin in January 2020, as coordinated with the Little Tokyo Community.
- Historic Broadway Station:** Structural concrete continues within the Station, Entrance and Sequential Excavation Method (SEM) Cavern.
- Grand Av Arts/Bunker Hill Station:** Structural concrete walls and slabs continue to be erected at multiple levels throughout the station.
- Flower Street:** Continue installation of exterior and interior walls; preparations for roof placements underway.



Floating Slab Track installation



Setting wall forms at Grand Av Arts/Bunker Hill Station

January 2020



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 4



# WESTSIDE PURPLE LINE EXTENSION – SECTION 1

## BUDGET

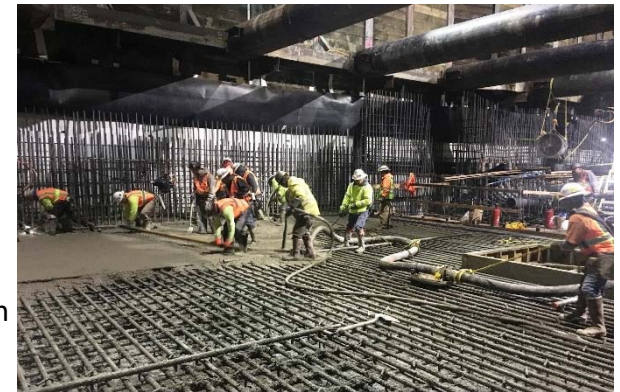
	<u>Current</u>	<u>Forecast</u>
<b>TOTAL COST*</b>	<b>\$3,154M</b>	<b>\$3,154M</b>

\* Includes Board approved LOP budget plus finance costs.

## SCHEDULE

	<u>Current</u>	<u>Forecast</u>
<b>REVENUE</b>	<b>Fall</b>	<b>Fall</b>
<b>OPERATIONS</b>	<b>2024 (FFGA)</b>	<b>2023</b>

- Overall Project Progress is 55% complete.
- Wilshire/Western Retrieval Shaft:** Reconfigured yard and shaft to accommodate the mining of Reach 1 cross passage construction.
- Wilshire/La Brea Station:** Continued roof placement shoring/forming at the concourse level; Continued infill slab preparation work at east hammerhead; Continued prep work for 2<sup>nd</sup> lift exterior wall construction.
- Wilshire/Fairfax Station:** Concrete placement for 1st lift exterior walls was completed on November 26, 2019; Continued tunnel eye and cradle installation at hammerheads; Continued entrance/appendage work.
- Wilshire/La Cienega Station:** Station invert concrete placement commenced on December 5, 2019. Protection slab placement, rebar and Mechanical, Electrical, and Plumbing (MEP) for the invert slab move forward.
- Tunneling:** Reach 2 Tunneling as of December 5, 2019 -
  - Purple TBM (Elsie): 1,618 feet mined (37% complete)
  - Red TBM (Soyeon): 358 feet mined (8% complete)
- Cross Passages (CP):**Excavation scheduled to begin on December 16 2019.
- Differing site conditions and third party requirements are impacting the project budget.



Wilshire/La Cienega Station Invert Concrete Placement



Excavation Preparation at Cross Passage 13

December 2019



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro

# WESTSIDE PURPLE LINE EXTENSION – SECTION 2



## BUDGET

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

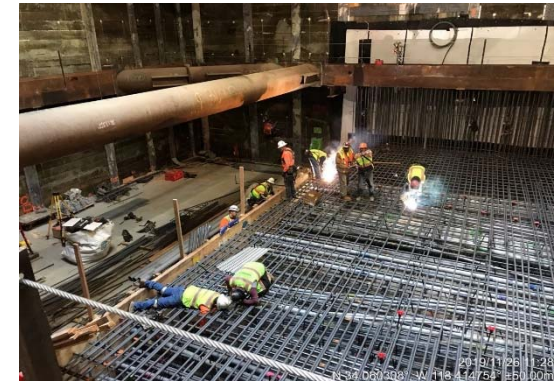
\* Includes Board approved LOP budget plus finance costs.



## SCHEDULE

	<u>Current</u>	<u>Forecast</u>
<b>REVENUE OPERATION</b>	<b>Winter 2026 (FFGA)</b>	<b>Summer 2025</b>

- Overall Project progress is 25% complete.
- Final design progress is 96% complete.
- **Century City Constellation**
  - Tunnel Boring Machine (TBM) launch box excavation is complete. Construction of the base slab is ongoing.
  - TBM assembly is scheduled for the first quarter of 2020.
  - Tunnel access shaft excavation is at a depth of 61 feet (approximately 65% complete). Geophysical testing is underway within the partially excavated shaft to confirm if there are any subsurface obstructions on the alignment near the shaft.
  - A request for a seven month extension of the full street closure of Constellation Blvd (in the vicinity of the Launch Box) was presented to the Board of Public Works in December 2019.
  - Cable pulling and splicing for LADWP is anticipated to complete prior to the start of piling activities west of the TBM Launch Box.
- **Wilshire/Rodeo**
  - Piling for the station excavation began on October 22, 2019.
  - Remobilization after the Holiday Moratorium started in January 2020.



Rebar Installation at TBM Launch Box in Century City



Wilshire/Rodeo Station Box Pile Installation

January 2020



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 7

# WESTSIDE PURPLE LINE EXTENSION – SECTION 3



## BUDGET

	<u>Current</u>	<u>Forecast</u>
<b>TOTAL COST*</b>	<b>\$3,611M</b>	<b>\$3,611M</b>

\* Includes Board approved LOP budget plus finance costs.



## SCHEDULE

	<u>Current</u>	<u>Forecast</u>
<b>REVENUE</b>	<b>TBD</b>	<b>2027</b>
<b>OPERATION</b>		

- Overall Project progress is 6% complete
- Final design progress is 30% complete
- **C1151 Tunnel Contract**
  - SCE ductbank construction within LA County was temporarily placed on hold and will resume upon resolution of design issues.
  - Limited Access Agreement executed for tree relocation/removal work. Access & Easement Agreement (AEA) negotiation continue.
  - Surface and subsurface easement acquisitions continue.
- **C1152 Stations, Trackwork and Systems Contract**
  - Station easement acquisitions continue.
  - Geotechnical drilling and utility pot-holing started at the VA Hospital site in December 2019.
- **Other Third Party Utility Relocation Work**
  - Joint trench activities for combining Verizon and Frontier telecommunications are ongoing.
  - Southern California Gas as well as Sempra Energy line relocations at Westwood/UCLA Station are ongoing.



SCE Ductbank Trench Shoring



MH 500 Installation Line D

January 2020



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 8



# PATSAOURAS BUS PLAZA STATION



## BUDGET

	<u>Current</u>	<u>Forecast</u>
TOTAL COST	\$50.9M	\$50.9M



## SCHEDULE

	<u>Current</u>	<u>Forecast</u>
SUBSTANTIAL COMPLETION	Spring 2020	Spring 2020

- Overall project progress at approximately 80% complete.
- Archaeological and Native American monitoring will continue with the construction of the drainage system at the retaining wall.
- Pedestrian ramp and overcrossing concrete pour completed.
- Elevator platform and walkway rebar installation in progress.
- Canopy columns set for bus platform concrete pour.

Bus Platform

Pedestrian Walkway & Overcrossing

Elevator



January 2020



On target



Possible problem



Major issue



Metro 9

Construction Committee

Los Angeles County Metropolitan Transportation Authority



# WILLOWBROOK/ROSA PARKS STATION

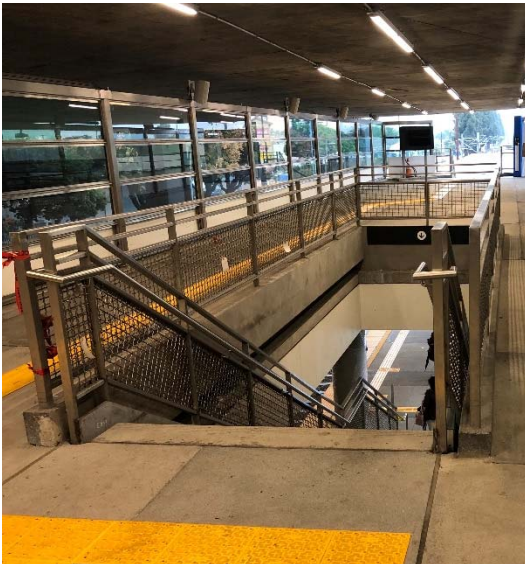
## BUDGET

	<u>Current</u>	<u>Forecast</u>
TOTAL COST	\$109.3M	\$109.3M

## SCHEDULE

	<u>Current</u>	<u>Forecast</u>
SUBSTANTIAL COMPLETION	Summer 2020	Summer 2020

- Package A: Customer Center, Mobility Hub buildings and Public Plaza nearing substantial completion. Punch walk to be conducted week of December 9<sup>th</sup> and 16<sup>th</sup>. Furniture and Equipment to begin installation the week of December 9<sup>th</sup>.
- Package C: Blue Line platform and mezzanine opened to the public in conjunction with A Line re-opening. Finish, Systems (VMS, TAP) and Vertical Circulation work ongoing. Southern pedestrian crossing in coordination with UPRR.
- Package B: Bid documents submitted for procurement.



Blue Line Mezzanine open to the public



Rosa Parks Customer Center



Mobility Hub, Customer Service Building and Plaza near completion

January 2020



On target



Possible problem



Major issue



Metro 9

Construction Committee

Los Angeles County Metropolitan Transportation Authority

# I-210 BARRIER REPLACEMENT PROJECT



## BUDGET

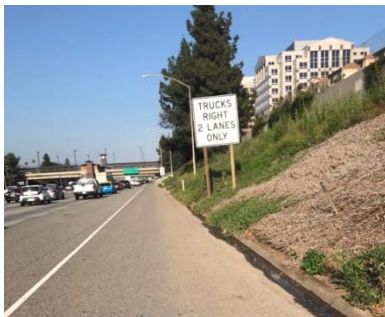
	<u>Current</u>	<u>Forecast</u>
TOTAL COST	\$22.54M	\$22.54M
	Design	Design



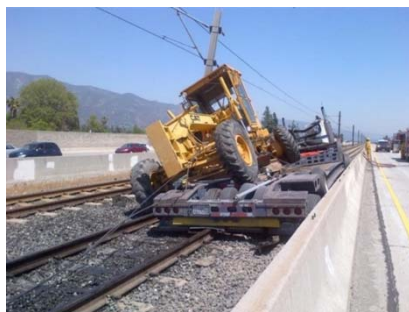
## SCHEDULE

	<u>Current</u>	<u>Forecast</u>
Complete Design (Proj 1)	Jan 2020	Winter 2020
Complete Design (Proj 2)	Feb 2021	Winter 2021

- Project 1: Segment from Michillinda to Iconic Bridge – Project Report and 95% Design Package were submitted in September. Caltrans has provided comments and they are being addressed in the 100% Design Package. The 100% Design Package will be submitted in January.
- Project 2: Segment from west end of the project to Michillinda – Development of alternative barrier system to avoid freeway lane closure for Project 2 is underway.
- Projects 1 & 2: Design Team investigating single track headways and operational impact while single tracking occurs on Gold Line. May require additional crossovers.



Newly Installed Caltrans Freeway Sign



Incident in 2014



Newly Installed Speed Limit Sign

January 2020



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 10

# I-5 Construction Projects (By Caltrans)



January 2020

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 11

# I-5 NORTH: SR 118 TO SR 134



## ! BUDGET

TOTAL COST

Current  
\$880.9M

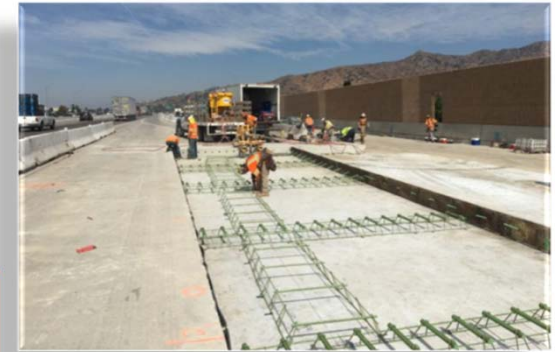
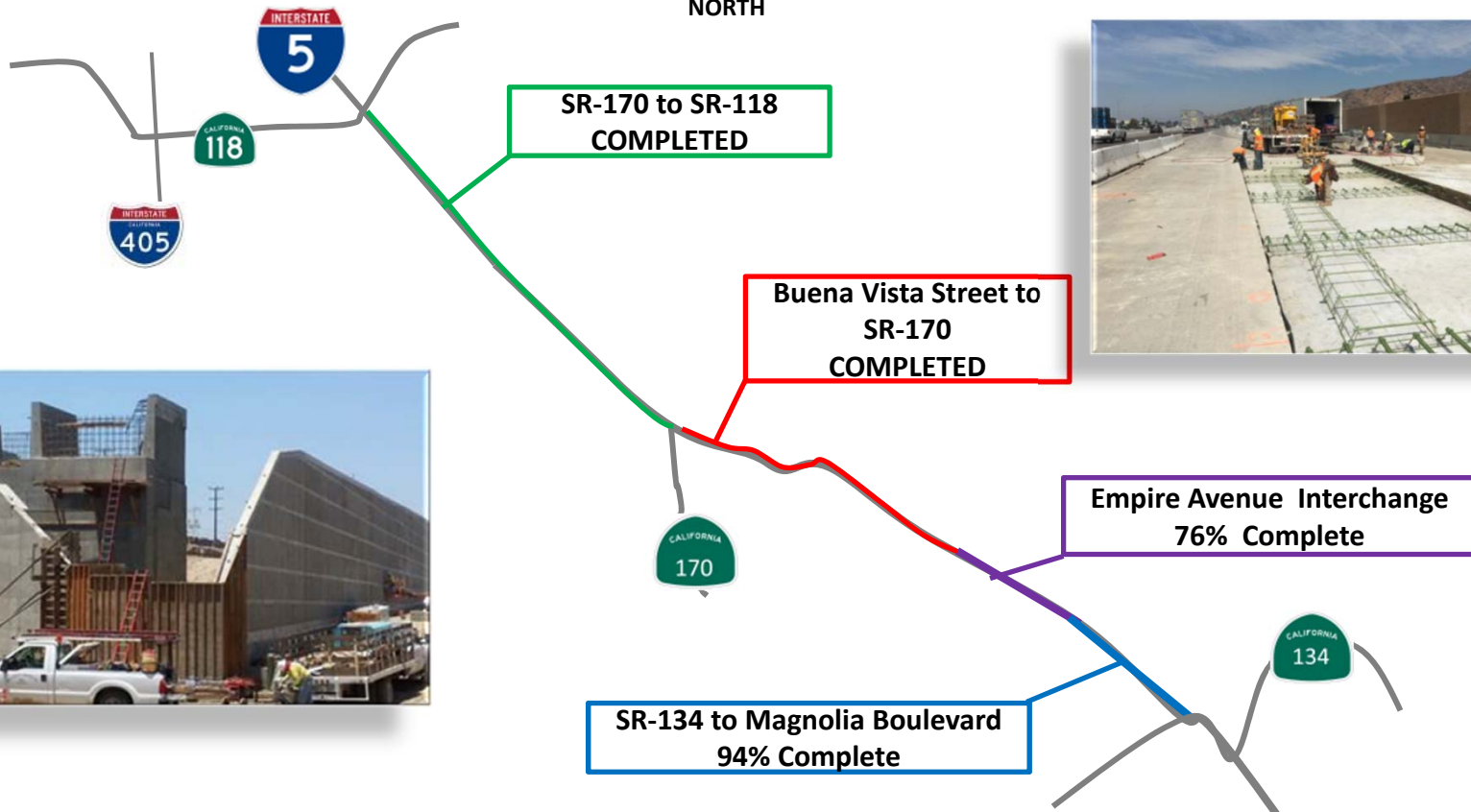
Forecast  
\$912.8M\*

## ! SCHEDULE

ANTICIPATED  
PROJECT  
COMPLETION

Current  
Spring 2022

Forecast  
Summer 2022



January 2020



On target



Possible problem



Major issue

\*

Risk Analysis, August 2019



Metro 12

Construction Committee

Los Angeles County Metropolitan Transportation Authority



# I-5 SOUTH: ORANGE COUNTY LINE TO I-605



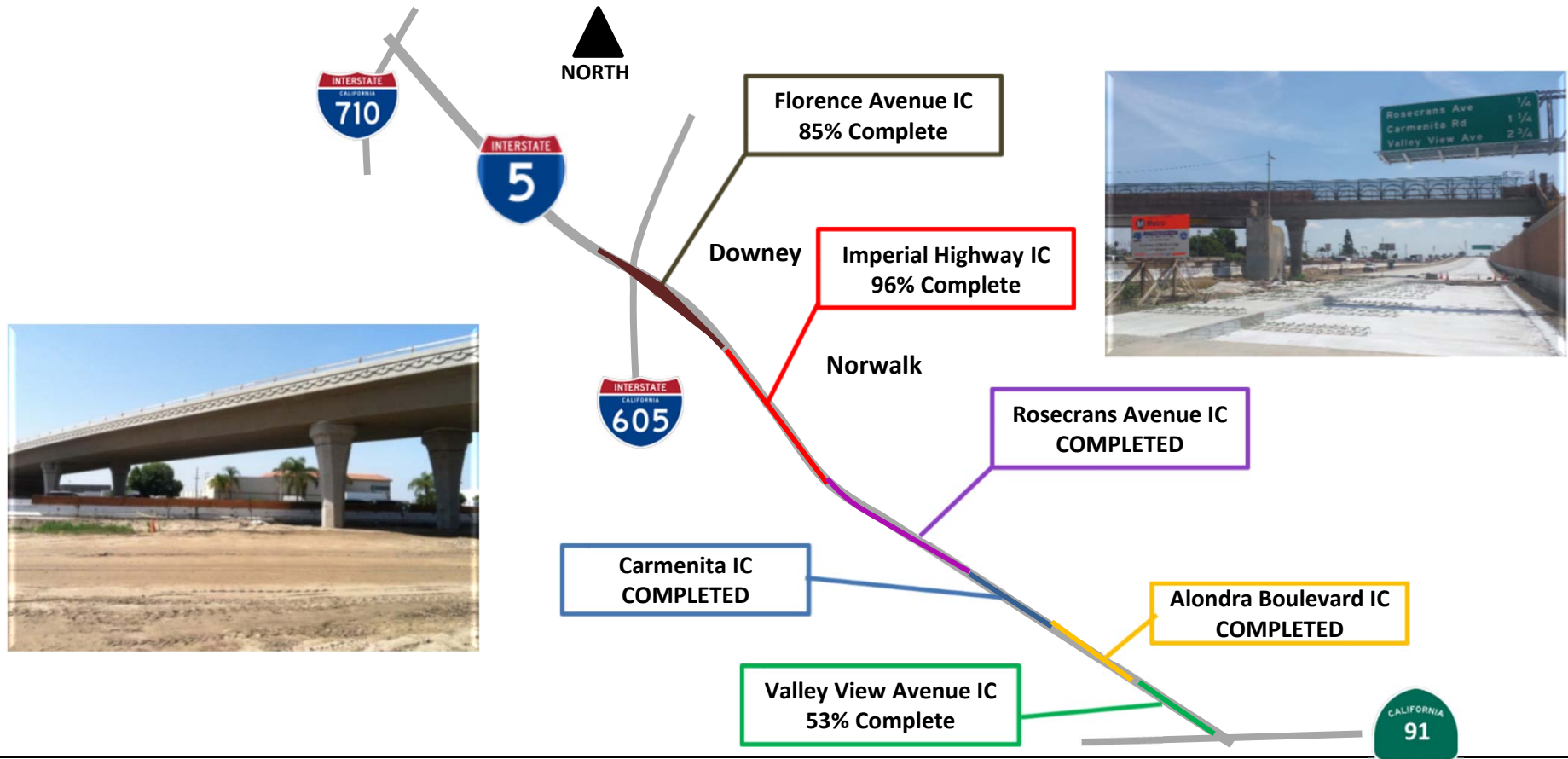
## BUDGET

	Current	Forecast
TOTAL COST	\$1.888B	\$1.888B*



## SCHEDULE

ANTICIPATED PROJECT COMPLETION	Current Fall 2022	Forecast Winter 2022
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January 2020

Construction Committee

Los Angeles County Metropolitan Transportation Authority



On target



Possible problem



Major issue



Risk Analysis, August 2019

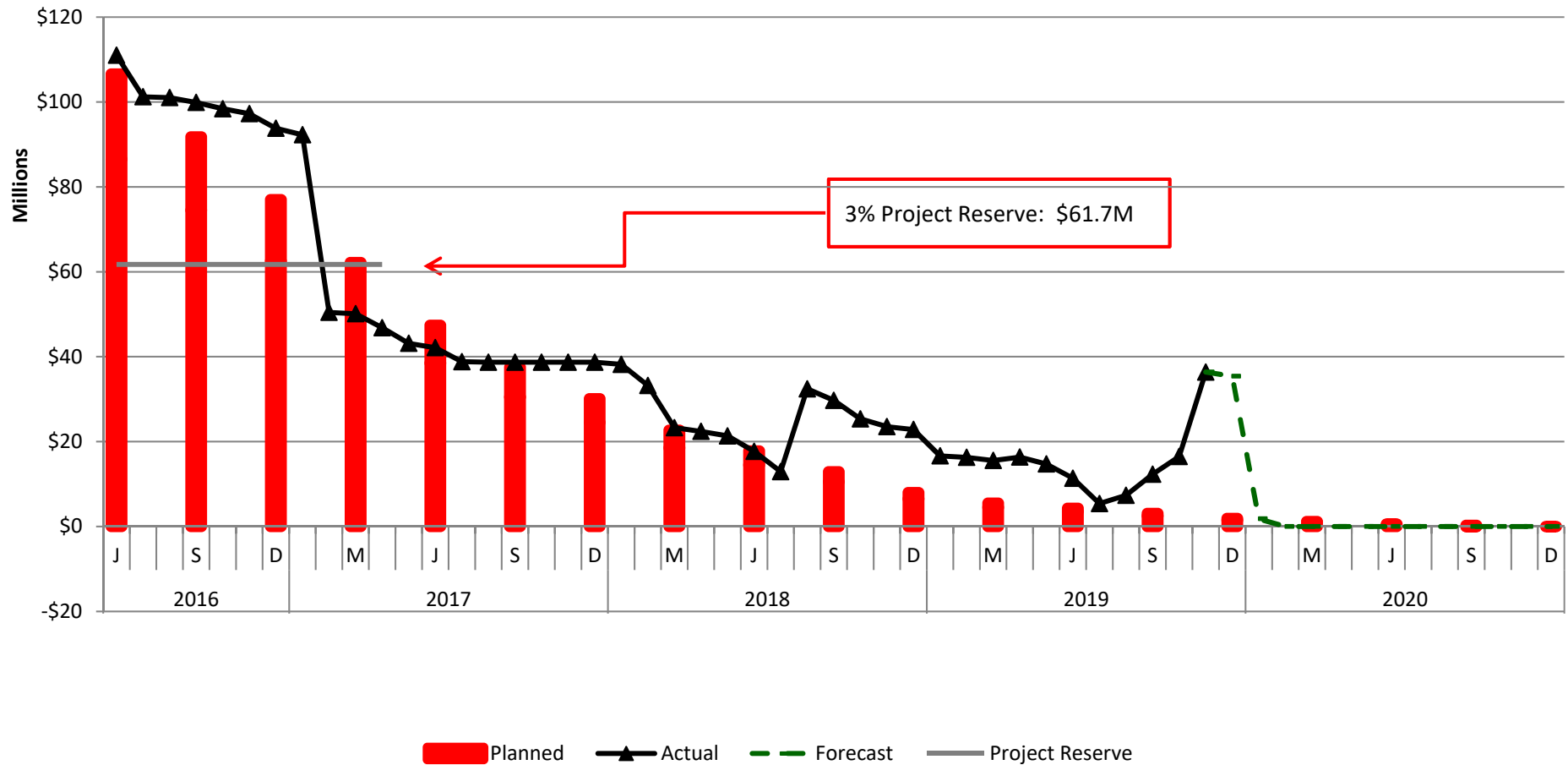


Metro 13

# Crenshaw/LAX Transit Project

## Project Cost Contingency Drawdown

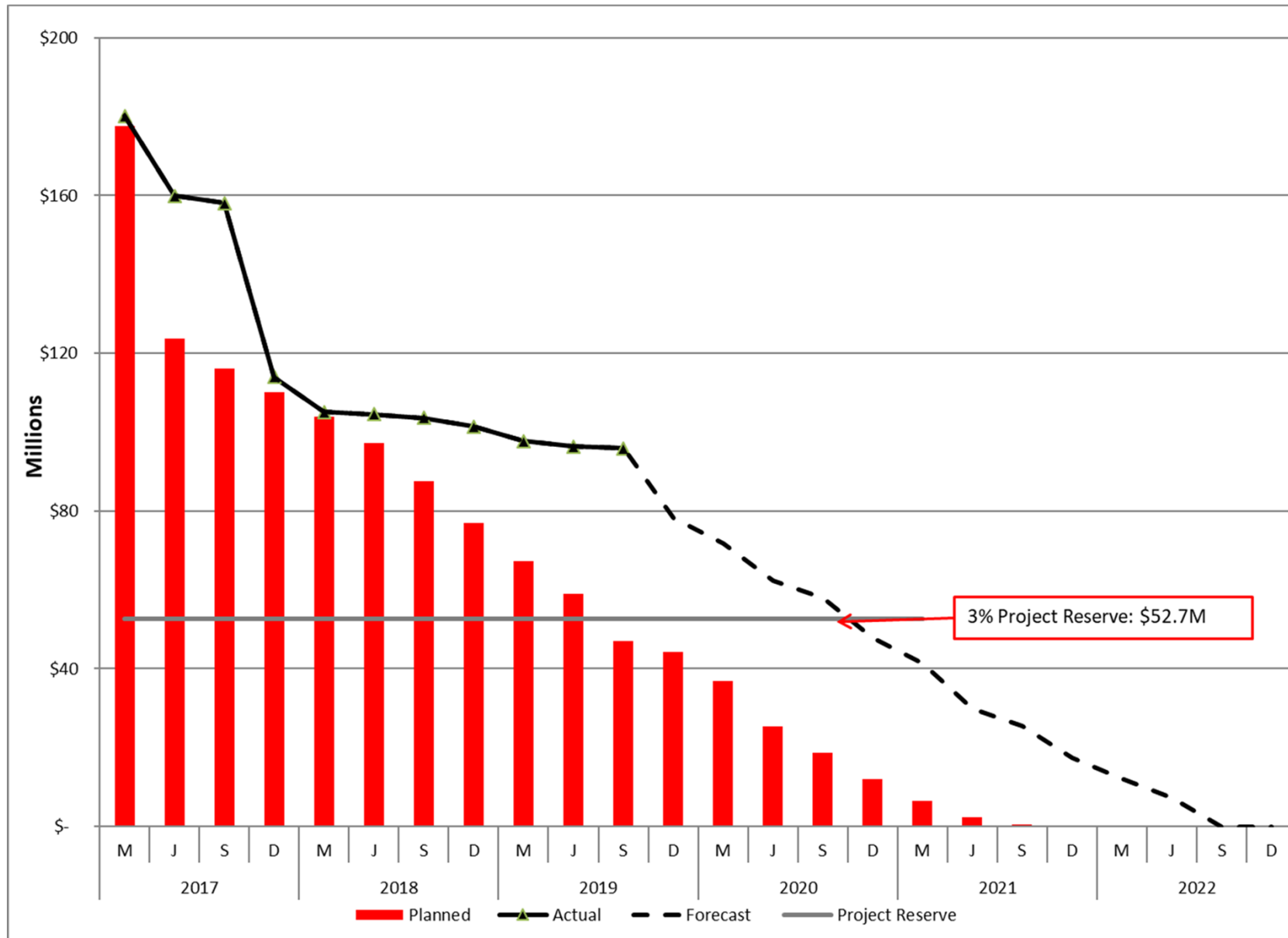
November 2019



# Regional Connector

## Project Cost Contingency Drawdown

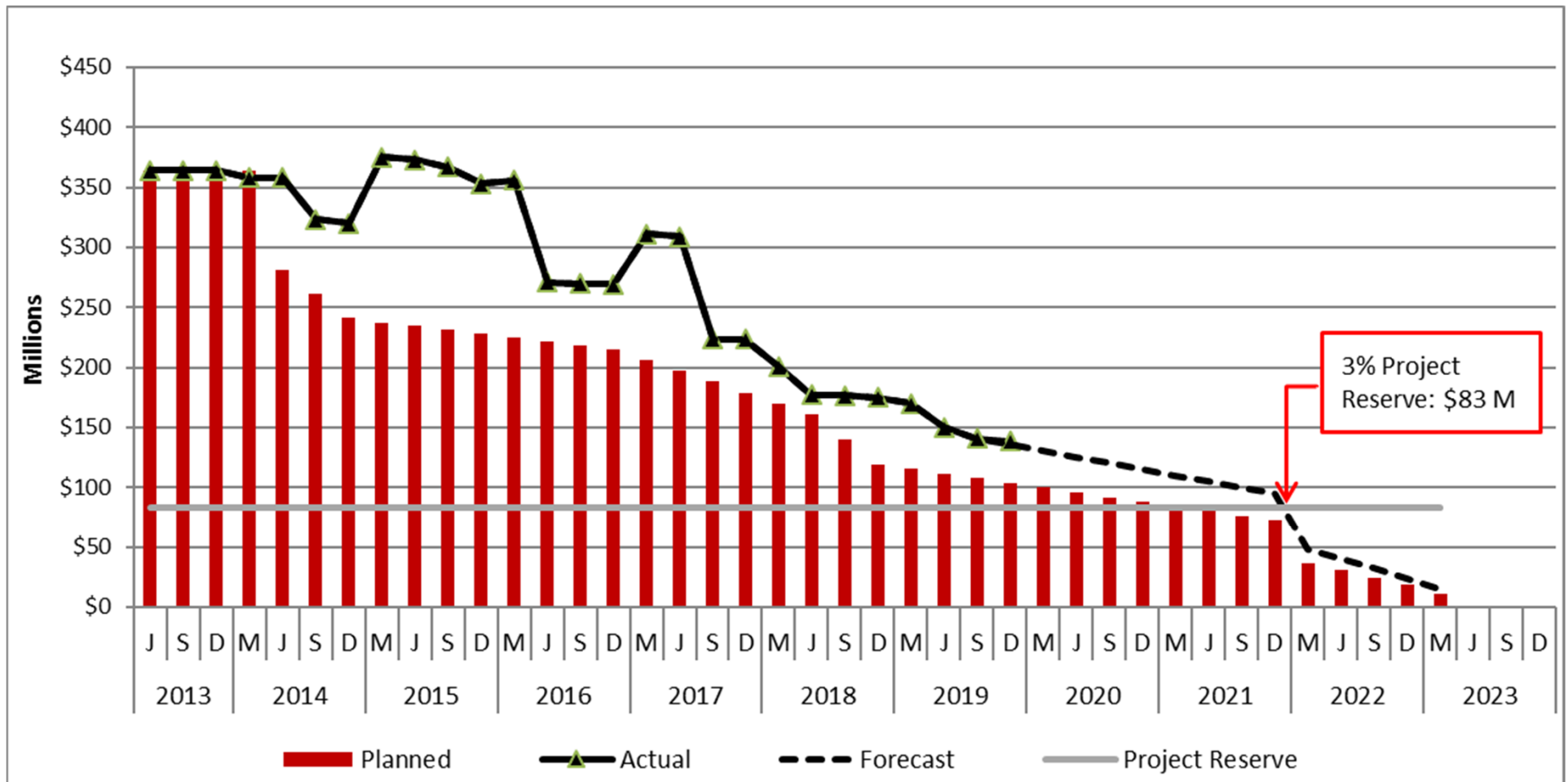
November 2019



# Westside Purple Line Extension – Section 1

## Project Cost Contingency Drawdown

December 2019

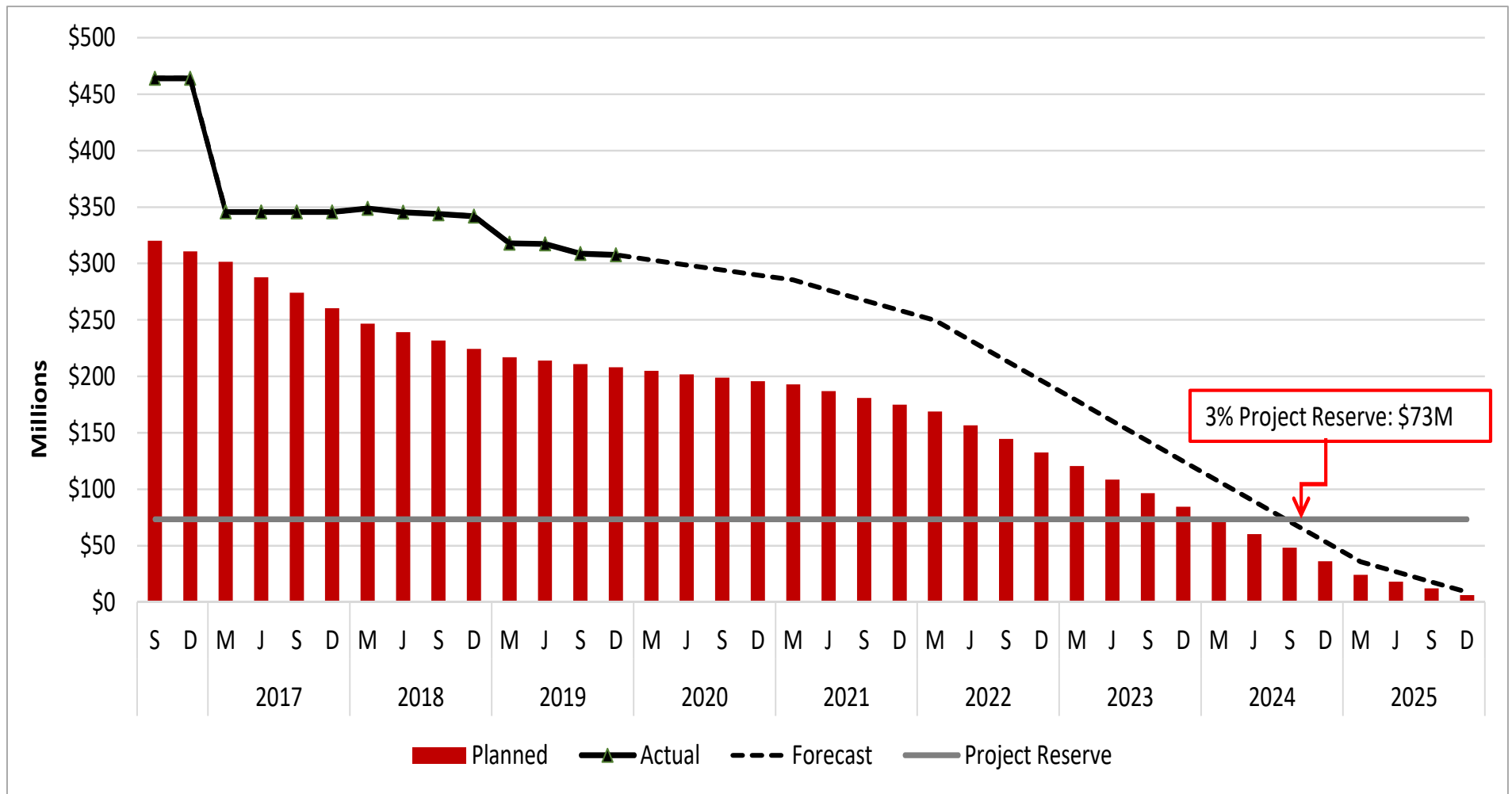




# Westside Purple Line Extension – Section 2

## Project Cost Contingency Drawdown

November 2019





Metro

## Board Report

Los Angeles County  
Metropolitan Transportation  
Authority  
One Gateway Plaza  
3rd Floor Board Room  
Los Angeles, CA

**File #:** 2020-0001, **File Type:** Contract

**Agenda Number:** 29.

### CONSTRUCTION COMMITTEE JANUARY 16, 2020

**SUBJECT: PROGRAM MANAGEMENT QUARTERLY CHANGE REPORT**

**ACTION: RECEIVE AND FILE**

#### **RECOMMENDATION**

RECEIVE AND FILE Program Management Quarterly Change Report.

#### **BACKGROUND**

At the January 26, 2018 Board meeting, the Board approved the continuation and expansion of the delegation of authority within Life of Project (LOP) budget management on all Transit and Regional Rail Capital Projects. Staff was directed to provide quarterly reports to the Board on change orders and modifications that are above \$500,000.

#### **DISCUSSION**

The change activities for the reporting period between September 1, 2019 and November 30, 2019 are included in Attachment A.

#### **FINANCIAL IMPACT**

The changes included in this report are included in the approved life-of-project budget for each project.

#### **IMPLEMENTATION OF STRATEGIC PLAN GOALS**

Recommendation supports strategic plan goal # 5 to provide responsive, accountable, and trustworthy governance within the Metro organization by keeping the Board informed of the Projects' change orders and modifications via submitting the Change Order log on a quarterly basis.

#### **NEXT STEPS**

The next Change Order Log will cover the period of December 1, 2019 to February 29, 2020 and will be presented to the April 2020 Construction Committee.

**ATTACHMENTS**

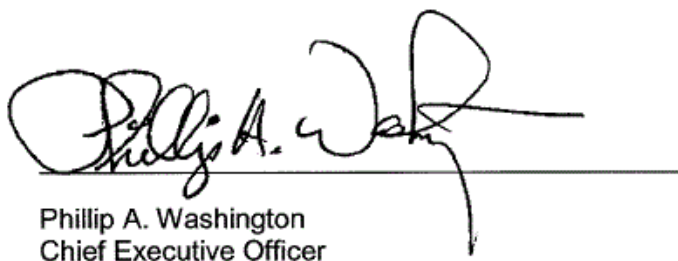
Attachment A - Quarterly Change Report for Reporting Period of September 1, 2019 - November 30, 2019.

Prepared by:

- **Crenshaw/LAX** - Sameh Ghaly, Sr. EO Project Mgmt., (213) 418-3369
- **Regional Connector** - Gary Baker, EO Project Mgmt., (213) 893-7191
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- **Westside Purple Line Ext 3** - Kimberly Ong, EO Project Mgmt., (424) 551-4501
- **The New Blue** - Timothy Lindholm, EO Project Engr., (213) 922-7297
- **Report** - Brian Boudreau, Sr. EO Program Control, (213) 922-2474

Reviewed by:

Richard Clarke, Chief Program Management Officer, (213) 922-7557



Phillip A. Washington  
Chief Executive Officer

CRENSHAW/LAX TRANSIT PROJECT

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (September 1, 2019 - November 30, 2019)						
Change Types: 1 - Betterment   2 - Third Party   3 - Differing Site Conditions   4 - Regulatory Requirements   5 - Scope   6 - Value Engineering   7 - Safety						
A. DESIGN BUILD CONTRACT - Contract No. C0988 - WALSH SHEA CORRIDOR CONSTRUCTORS						
MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in <b>BOLD</b> fonts that is why this is unilateral and a modification will follow upon negotiation is finalized between Contractor and Metro).	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
MOD-00437.1 CN-00410.1	UG1 H2S Ventilation Fans-Construction: Metro FLS requested to incorporate mechanical ventilation for the immediate disbursement of H2S in the event of a failure of the impermeable gas membrane barrier and simultaneous release of H2S gas from the ground. Procure two (2) tunnel booster fans equal to those being used in UG3 and UG4 to disperse potential H2S gas build up in the UG1 guideway.	7	7/9/2019	7/9/2019	\$ 2,912,415.44	\$ 2,448,545.00

II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K (September 1, 2019 - November 30, 2019)

A) DESIGN BUILD CONTRACT - Contract No. C0988 - WALSH SHEA CORRIDOR CONSTRUCTORS			
CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

## REGIONAL CONNECTOR TRANSIT PROJECT

### I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (September 1, 2019 - November 30, 2019)

Change Types:

1 - Betterment   2 - Third Party   3 - Differing Site Conditions   4 - Regulatory Requirements   5 - Scope   6 - Value Engineering   7 - Safety

#### A. DESIGN BUILD CONTRACT - CONTRACT NO. C0980 - REGIONAL CONNECTOR CONSTRUCTORS

MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
C0980-CO-0025.3	LADWP Ducommon Yard Improvements	5	7/18/2019	10/23/2019	N/A	\$ 500,000.00
C0980-CO-0029	Expanded Duco Yard and Temple St. Sanitary Sewer Work - Construction	5	10/16/2019	10/22/2019	N/A	\$ 500,000.00
C0980-CO-0030	Revise Communications Radio System Scope of Work - Construction	5	8/5/2019	11/4/2019	N/A	\$ 500,000.00
C0980-MOD-00154	Additional Acoustical Treatments not shown on Finish Schedule	5	9/30/2019	10/25/2019	\$ 1,968,703.00	\$ 1,968,703.00

#### B. PROFESSIONAL SERVICES CONTRACT

MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
	None					

#### C. OTHER AGREEMENTS

MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
	None					

II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K

A. DESIGN BUILD CONTRACT - CONTRACT NO. C0980 - REGIONAL CONNECTOR CONSTRUCTORS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

B) PROFESSIONAL SERVICES CONTRACTS

Design Support Services During Construction			
CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

C) CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

D. OTHER AGREEMENTS

MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
	None					

## WESTSIDE PURPLE LINE - SECTION 1 PROJECT

### I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (September 1, 2019 – November 30, 2019)

Change Types:

1 - Betterment 2 - Third Party 3 - Differing Site Conditions 4 - Regulatory Requirements 5 - Scope 6 - Value Engineering 7 - Safety

#### A. DESIGN BUILD CONTRACT - CONTRACT NO. C1045 - SKANSKA-TRAYLOR-SHEA, A JOINT VENTURE

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in <b>BOLD</b> fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
MOD-00089	<u>Phase 4.3 - Development and In Situ Validation of the selected Gas Mitigation option for M13 (CN-00131)</u> : This contract modification is part of the program to mitigate potential gas migration during Reach 3 tunneling. Contract modification 00072 (CN-00119), Reach 3 Additional Gas Testing and Assessment, was executed on 1/30/19 and covered the cost to conduct additional gas testing to evaluate the contractors proposed methods of extraction. This CN covers the scope of work for the vapor extraction DESIGN effort prior to the launch of the first TBM at Fairfax station.	5	09/06/19	9/30/2019	\$ 3,126,444.91	\$ 2,957,277.00
MOD-00090	<u>Oil Well Horizontal Investigation in lieu of TBM Probe-ahead (CN-00099.1)</u> : Change to accommodate horizontal directional drilling to locate abandoned oil wells.	5	08/28/19	9/12/2019	\$ 1,868,928.00	\$ 1,868,928.00

#### A. DESIGN BUILD CONTRACT - CONTRACT NO. C1078 - CLARK CONSTRUCTION GROUP

	None					
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#### B. PROFESSIONAL SERVICES CONTRACTS

MOD-00070	<u>Continue Engineering Support Services During Construction and Other Tasks (CN-00069)</u> : This change allows the Metro design consultant (WSP) to continue to provide design support during construction services for the C1045 contract for an additional 24 months to June 30, 2021.	5	8/23/2019	9/9/2019	\$ 8,604,304.00	\$ 8,738,217.00
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#### C. CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS

	None					
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**II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K (September 1, 2019 – November 30, 2019)****A) DESIGN BUILD CONTRACT - CONTRACT NO. C1045 - SKANSKA-TRAYLOR-SHEA, A JOINT VENTURE**

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
CN-00135	<u>Fairfax Air Scrubbers (remainder of RFC-005 issues)</u> : Contractor provided two additional air scrubbers due to AQMD district's more stringent air quality standards.	5	Between \$500K - \$1M
TBD	<u>TBM Initial Storage &amp; Transport</u> : This CN covers the cost of TBM transportation and storage that is not included in the base scope of work.	5	Between \$1M - \$5M

**A) CONTRACT NO. C1078 - CLARK CONSTRUCTION GROUP**

CN-00045	<u>Additional IT Requested for First &amp; Third Floors</u> : This change accommodates the revised Metro IT standards which required upgrades to the facilities approved IT plans.	5	Between \$500K - \$1M
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**B) PROFESSIONAL SERVICES CONTRACTS**

	None		
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**C) CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS**

	None		
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WESTSIDE PURPLE LINE - SECTION 2 PROJECT

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (SEPTEMBER 1-NOVEMBER 29, 2019)

Change Types:
1 - Betterment   2 - Third Party   3 - Differing Site Conditions   4 - Regulatory Requirements   5 - Scope   6 - Value Engineering   7 - Safety

A. DESIGN BUILD CONTRACT - C1120

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in <b>BOLD</b> fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
MOD-00055	Construction of Temporary Sound Wall/Shoring System with Slab Demolition - 2010 Century Park East (CO-00011): Design Builder will construct a support wall along the east and west sides of the site 3604/3604-1 including lagging and concrete demolition, removal and excavation.	5	8/27/2019	9/12/2019	\$ 2,308,698	\$ 1,526,000
MOD-00056	Los Angeles County Sales Tax Rate Increases: This change is pursuant to Contract Compensation and Payment Provisions, CP-6 Payment of Taxes, which requires all taxes the Contractor is required to pay by Laws in effect on the date the Contractor's Bid was opened. This change is for sales tax purchases impacted by Los Angeles County's sales tax increases on July 1, 2017 (0.5 %) and October 1, 2017 (0.25%).	4	8/2/2019	9/12/2019	\$ 1,818,528	\$ 1,774,994
MOD-00060	Additional Worksite Traffic Control for SCG and AT&T Advanced Utility Relocations: Instead of each utility (SCG and AT&T) developing and performing their own traffic control plans, TPOG provided the overall traffic control supporting both utilities, avoiding conflicts and expediting utility relocation completion. This change reconciles the costs associated with the difference in days negotiated in MOD-00010 for days worked in each Traffic Control Stage with the actual days worked in each Stage. This change also captures the costs of flaggers utilized during the AUR work, which was not included in MOD-00010.	5	08/20/19	10/8/2019	\$ 763,277	\$ 659,033
MOD-00062	North Canon Street Closure Sound Wall and Street Improvement (CO-00013): This change is needed for the Contractor to install a sound wall across North Canon Street as a permit condition in the Memorandum of Agreement with the City of Beverly Hills prior to performing piling work.	5	08/07/19	10/21/2019	\$ 1,373,075	\$ 1,084,053

B. PROFESSIONAL SERVICES CONTRACT

MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
	None					

II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K (SEPTEMBER 1-NOVEMBER 29, 2019)

A) DESIGN BUILD CONTRACT - C1120				
	CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
		None		

B) PROFESSIONAL SERVICES CONTRACTS				
	CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
		None		

C) CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS				
	CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
		None		

D) OTHER AGREEMENTS				
	MOD/CHANGE #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
		None		

## WESTSIDE PURPLE LINE - SECTION 3 PROJECT

### I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (September 1, 2019 - November 30, 2019)

Change Types:

1 - Betterment   2 - Third Party   3 - Differing Site Conditions   4 - Regulatory Requirements   5 - Scope   6 - Value Engineering   7 - Safety

#### A. DESIGN BUILD CONTRACT - C1151

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in <b>BOLD</b> fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
C1151-CO-00002.2	Revisions to Southern California Edison (SCE) Power Connection. CO 2.2 supersedes previously issued CO2.1 for \$500K. <b>This is a unilateral change order because FKTP (Design Builder) does not agree with the change value. Negotiations will continue until an agreement is reached, then a MOD will be issued.</b>	5	N/A	10/28/2019	\$ 4,867,677	\$ 3,419,314

#### A. DESIGN BUILD CONTRACT - C1152

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in <b>BOLD</b> fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
	None					

#### A. DESIGN BUILD CONTRACT - C1153

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in <b>BOLD</b> fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
	None					

#### B. PROFESSIONAL SERVICES CONTRACTS

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in <b>BOLD</b> fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
MC073-MOD-00009	Extension of Construction Management Support Services (CMSS) for Fiscal Year 2020.	5	N/A	11/8/2019	\$ 10,755,376	\$ 10,755,376

**II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K (September 1, 2019 - November 30, 2019)****A) DESIGN BUILD CONTRACT - C1151**

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
C1151-MOD-00001	Revise the Tail Track Exit Shaft Location from the U.S. Army Reserve to the Veterans Affairs (VA) Property and replace the description "U.S. Army Reserve" to "Veterans Affairs (VA)". This MOD supersedes CO 1.2.	5	\$ 11,217,006

**A) DESIGN BUILD CONTRACT - C1152**

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
C1152-CN-00001	Deletion of SCE Power Conduits Between Texas Ave and Western VA Construction Staging Area	5	\$1.6M - \$1.9M Credit
C1152-CN-00004	Deletion of Class A Project Office for Metro Section 3 (Per Schedule A Bid item #104, 105, & 106)	5	\$0.7M - \$0.8M Credit
C1152-CN-00006	Environmental Impairment Liability Site Coverage Insurance	5	\$0.5M - \$0.7M
C1152-CN-00007	Replacement Parking During Station Construction at VA Hospital	5	\$1.4M - \$1.6M

**A) DESIGN BUILD CONTRACT - C1153**

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

**B) PROFESSIONAL SERVICES CONTRACTS**

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

**C) CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS**

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

## METRO BLUE LINE - SIGNAL SYSTEM REHABILITATION PROJECT

### I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (September 1, 2019 - November 31, 2019)

Change Types:

1 - Betterment   2 - Third Party   3 - Differing Site Conditions   4 - Regulatory Requirements   5 - Scope   6 - Value Engineering   7 - Safety

#### A. DESIGN BUILD CONTRACT - Contract C1081 Metro Blue Line Resignalling - Mass Electric

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in <b>BOLD</b> fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
	None					

#### B) PROFESSIONAL SERVICES CONTRACTS

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in <b>BOLD</b> fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
SECOTRANS - Task Order 6 Mod 3	Rail Systems Support	5	9/3/2019	9/6/2019	\$ 2,040,954.00	\$ 1,811,033.00

#### C) CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS

	None					
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**II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K (September 1, 2019 - November 31, 2019)****A) DESIGN BUILD CONTRACT - Contract C1081 Metro Blue Line Resignalling - Mass Electric**

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

**B) PROFESSIONAL SERVICES CONTRACTS**

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

**C) CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS**

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

# WILLOWBROOK/ROSA PARKS STATION IMPROVEMENT PROJECT

## I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (September 1, 2019 - November 30, 2019)

Change Types:

1 - Betterment 2 - Third Party 3 - Differing Site Conditions 4 - Regulatory Requirements 5 - Scope 6 - Value Engineering 7 - Safety

### A. DESIGN BUILD CONTRACT - C1161 Willowbrook/Rosa Parks Improvements - Icon West

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in <b>BOLD</b> fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
CO 14 (CN 21)	Update Specifications RFC1 / RFC 3 / Bulletin 3 In conformance with the documents in the architect's Bulletin 3 dated June 6, 2019, the Contractor shall proceed with the changes in the construction of a new Customer Service and Security Building, Mobility Hub, pedestrian promenade, outdoor plaza, Blue Line platform and mezzanine extension, and renovation of two existing Green Line elevators. The revised package includes revisions to various sections in the Drawing package and Technical Specifications, including structural, civil-site, architectural, signage, electrical, and plumbing.	5	N/A	9/23/2019	2,298,665	700,000

### B) PROFESSIONAL SERVICES CONTRACTS

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in <b>BOLD</b> fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
	None					

### B) THIRD PARTY AGREEMENTS

CHANGE NOTICE/ORDER #	DESCRIPTION (if the change is a unilateral, explain in <b>BOLD</b> fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Rough Order of Magnitude Cost
	None					



## II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K (September 1, 2019 - November 30, 2019)

### A) DESIGN BUILD CONTRACT - Contract C1161 - Icon West

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

### B) PROFESSIONAL SERVICES CONTRACTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

### C) CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

### D) THIRD PARTY AGREEMENTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
N/A	Real Estate Settlement - Vendor: Planned Parenthood - a total of 1,932,000 broken down as follows: Planned Parenthood - Reconciled Relocation (691,000) Planned Parenthood - Goodwill (1,241,000)		1,932,000



Metro

Los Angeles County  
Metropolitan Transportation  
Authority  
One Gateway Plaza  
3rd Floor Board Room  
Los Angeles, CA

## Board Report

**File #:** 2020-0004, **File Type:** Oral Report / Presentation

**Agenda Number:** 30.

### CONSTRUCTION COMMITTEE JANUARY 16, 2020

**SUBJECT: ORAL REPORT COMPLETING THE REGIONAL CONNECTOR PROJECT**

**ACTION: ORAL REPORT**

#### **RECOMMENDATION**

RECEIVE oral report describing the remaining work needed to complete and activate the Regional Connector Project in 2022.

#### **ATTACHMENTS**

Attachment A - Presentation on Completing the Regional Connector Project

Prepared by: Gary Baker, Executive Officer, Program Management, (213) 893-7191  
John Johnson, Operations Liaison and Planning, (213) 922-5540  
Olga Arroyo, Manager Community Relations, (213) 893-7115  
Frank Alejandro, Senior Executive Officer, Operations, (213) 418-3150

Reviewed by: Rick Clarke, Chief Program Management Officer, (213) 922-7557

A handwritten signature in black ink, appearing to read 'Phillip A. Washington', written over a horizontal line.

Phillip A. Washington  
Chief Executive Officer

# Completing the Regional Connector Project

Construction Committee, Item 30

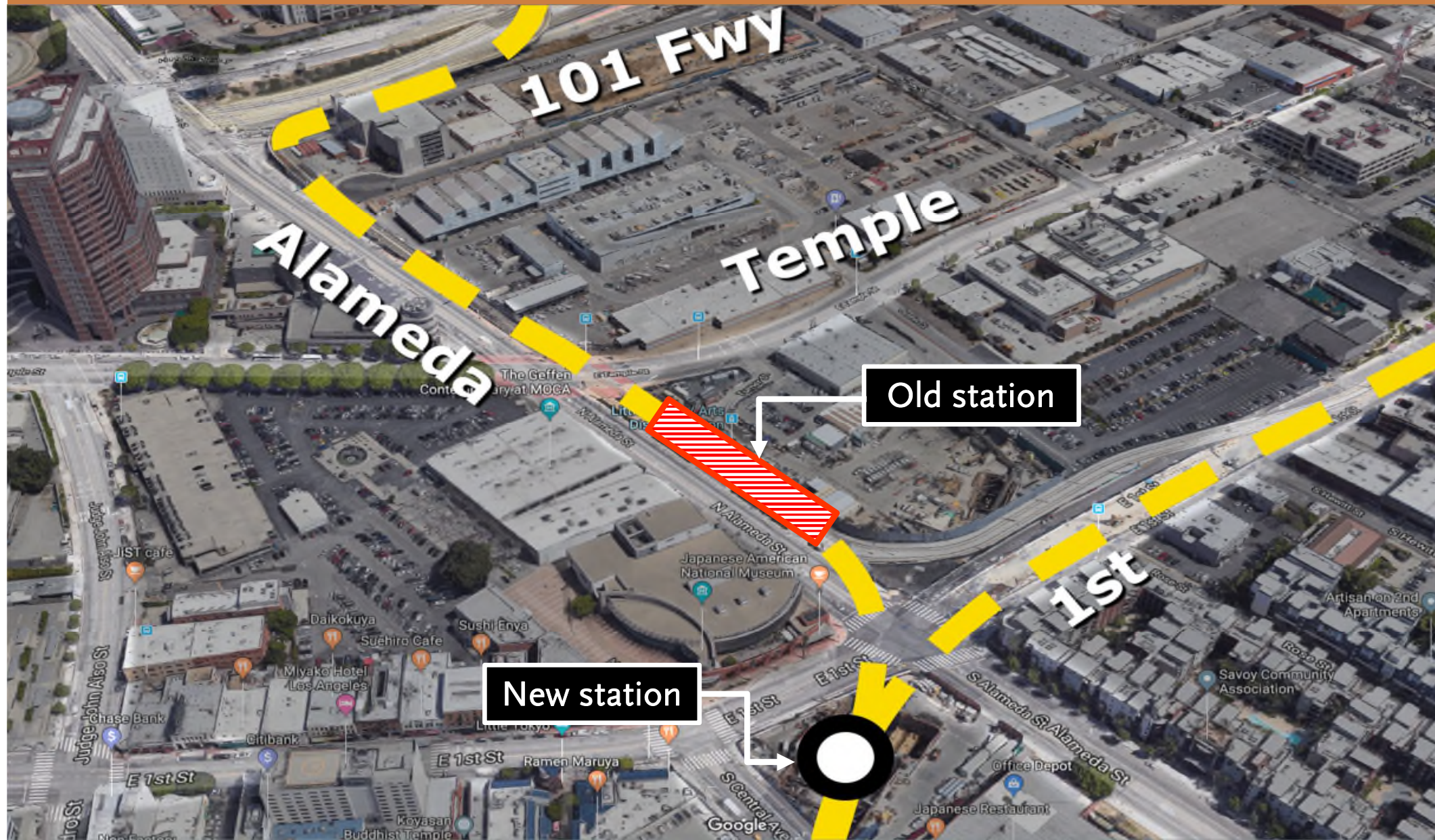


# The Regional Connector Project is on schedule for completion in 2022

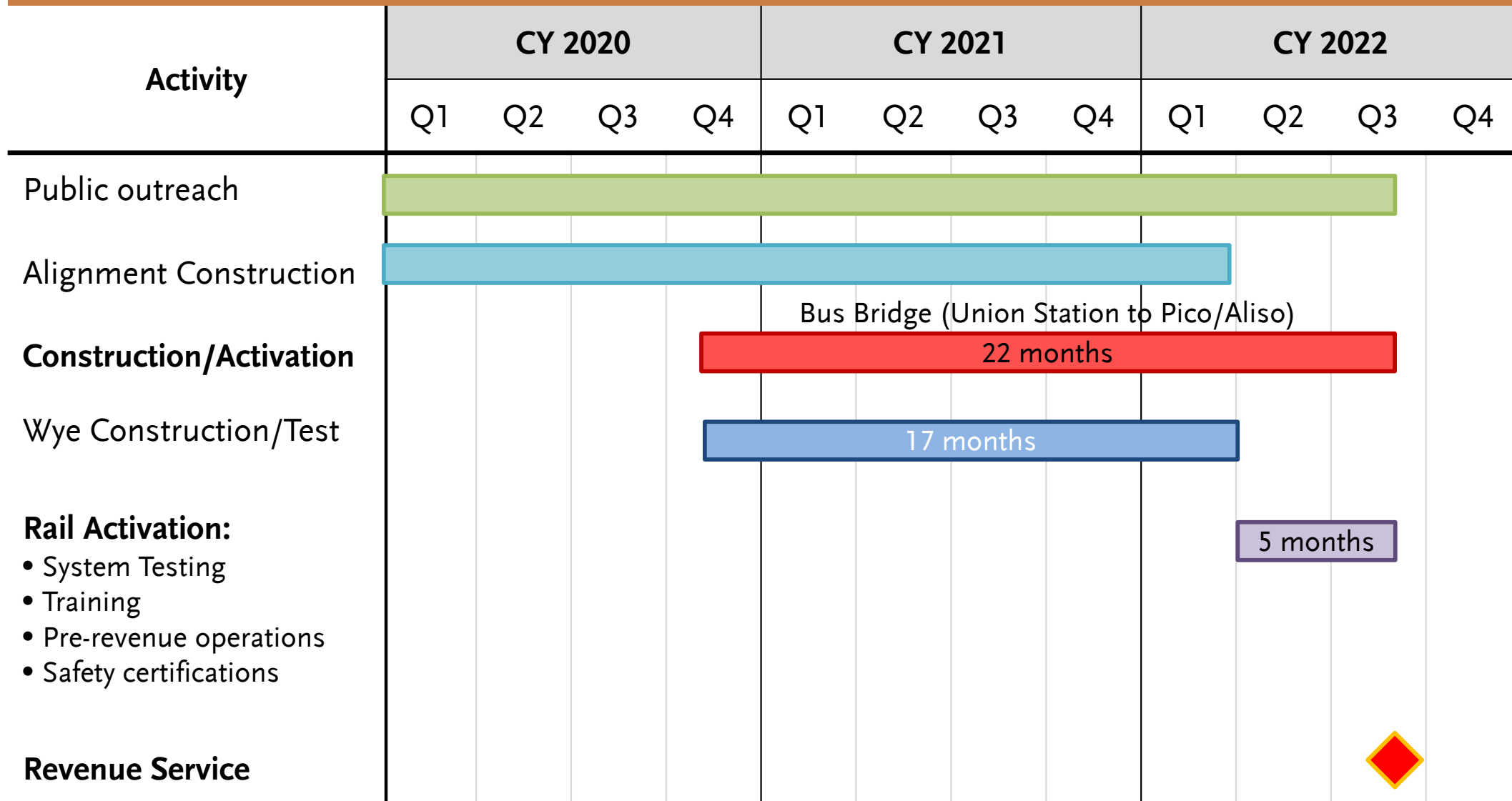
- Integration of the Metro Gold, E (Expo) and A (Blue) lines is complex and requires extensive work during next two years.
- A Gold Line service interruption is required at the Little Tokyo/Arts District station to demolish and construct the new station, test the systems and conduct trial runs.
- The temporary bus shuttle service (bus bridge) will occur between Union Station, Little Tokyo/Arts District and Pico/Aliso stations.
- This program has been a collaborative effort between Program Management, Operations and Communications



When the new rail service opens, the Gold Line will be reconfigured into two independent lines



# Construction and Rail Activation schedules have been coordinated to complete the work as early as possible





# Extensive underground infrastructure work will follow the demolition of the existing station



# Following construction and testing, significant work remains to activate the system

- Tie-in of new construction with existing legacy systems A Line (Blue), Gold & E (Expo) Line, associated systems testing and system-wide signage updates
- Training of over 400 operations and outside emergency response personnel for the new Regional Connector project.
- Run simulated revenue service schedules.
- Comply with CPUC System Safety Certification Plan.



# Community outreach in preparation for the Winter 2020 service interruption is underway

- Early outreach has begun with Little Tokyo leadership, the Arts District and Boyle Heights communities.
- Bus bridge service plan will be guided by 2016 shoo-fly experience and 2019 A Line experiences.
- Planned public outreach activities calendar year 2020:
  - Brief Elected officials, institutions and CBOs – Quarter 1-2
  - Direct customer communication and media – Quarter 3-4
  - Continuous communication and PSAs during 22 month closure

# Operations Plan Development

Three primary service scenarios being evaluated:

- Long Beach – Azusa, Santa Monica – Atlantic
- Long Beach – Atlantic, Santa Monica – Azusa
- Long Beach – Atlantic, Long Beach – Azusa, Expo – Atlantic, Expo - Azusa

Criteria for scenario screening include:

- Operability (currently simulating service scenarios)
- Travel patterns to/from each segment
- Network simplicity
- Headway consistency
- On Time Performance
- Train minutes of signal delay
- Peak vehicle requirement
- Revenue vehicle hours



## Board Report

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**File #:** 2020-0010, **File Type:** Informational Report

**Agenda Number:** 31.

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### CONSTRUCTION COMMITTEE JANUARY 16, 2020

**SUBJECT: OFFICE OF THE INSPECTOR GENERAL CHANGE ORDER/MODIFICATION  
CONSTRUCTION SPOT CHECKS**

**ACTION: RECEIVE AND FILE**

#### **RECOMMENDATION**

RECEIVE AND FILE Office of the Inspector General Change Order/Modification Construction Spot Check Report.

#### **ISSUE**

On January 25, 2018, the Metro Board directed the Office of the Inspector General (“OIG”) to conduct random spot checks on the projects listed in the quarterly program management report to ensure that the delegation of authority to approve construction Change Orders policy is performing in the manner desired by the Board of Directors.

#### **BACKGROUND**

The OIG’s Spot Check Program (“Spot Checks”) focuses on approved Change Orders and Modifications that exceed \$1,000,000. The four Change Orders in this report were selected from the January 2020 Program Management Major Project Status Report (File # 2020-0001), covering September 1 to November 30, 2019. The information for the Spot Checks was collected from the Program Management Information System (PMIS) which is the department’s database system. Also, in-person and telephonic interviews were conducted with Metro Program Management, Project Control, and Procurement staff from each individual project office.

We found that all four of the Change Orders in this report were negotiated and executed more expeditiously than would have occurred pursuant to the former Board approval process, and all four were approved faster with the new delegation of authority. In addition two Change Orders were negotiated at lower cost and two were equal to the contractors’ proposed price. This quarter’s Spot Checks of Change Orders/Modifications found the delegation of authority has resulted in:

- A negotiated amount that was reasonable for the work to be done,

- Enabled the contractor to immediately order parts and materials, reducing delay.
- Contractor and was able to continue working without stoppages related to these change orders, and
- Zero construction delay costs were incurred for these changes.

Each Spot Check summarizes the following areas:

- Introduction of Change Order/Modification
- Facts of Change Order (charts and pictures shown on Attachment A)
- Scope of Work
- Budget
- Schedule: Time to Execute Change Order
- Recommendations

Metro's Program Control department will provide responses to the recommendations in this report to the OIG Spot Checks within 30 days after this Board report. Attachment B, included with this January report, is a separate spreadsheet of recommendations and the status of responses concerning former Spot Check recommendations.

## **DISCUSSION**

### **Spot Checks Performed in this Quarter**

#### **A. Spot Check #1 - Crenshaw/LAX Transit Project**

This OIG Spot Check report concerns the Crenshaw/LAX Transit Corridor Project (Contract C0988 MOD-437), UG1 (H<sub>2</sub>S) Ventilation Fans - Construction.

#### **Facts of Change Order**

See Attachment A Spot Check #1 chart.

#### **Summary #1**

**Scope of Work** - This change order is to procure two tunnel booster fans to add to the underground trainways in section 1 (UG1). These fans were originally not in the scope of work. At that time, Metro staff understood that UG1 did not require any mechanical ventilation equipment because the trainway box structures meet the guidelines in NFPA 130 to require no mechanical ventilation.

Metro's Fire Life Safety Committee decided that the length of the tunnel and the level of existing gasses from multiple sources warrants improved air circulation to maintain desired air quality for the safety of maintenance workers, dictates the use of two tunnel booster fans.

**Budget** - This Modification was negotiated and the award amount is \$2,448,545. The contractor's proposal was \$2,912,415 and the ICE was \$2,237,017. The award amount was \$463,870, or 15.9%, under the contractor's proposal. The negotiated amount was \$211,528, or 9.45%, over the ICE. Staff has stated that funds for this change are within the approved the Life-of-Project budget, and unallocated contingency funds.

**Schedule** - The new delegation process was utilized for this Modification. The agreed upon scope of work occurred on July 9, 2019. The Modification was executed on September 12, 2019, and was

completed in 48 work-days. Using the July 29, 2019 V/CM submission date, this Change Order would have gone to the September Board. The scenario of utilizing the Board for approvals on change orders would have been 57 work-days later instead of the 48 actual work-days incurred utilizing the delegated authority.

**Recommendation** - None

**B. Spot Check #2 - Regional Connector Transit Project**

This OIG Spot Check report concerns the Regional Connector Transit Corridor Project (Contract C0980 MOD-00154), Acoustical Treatments for Areas Not on Finish Schedule.

**Facts of Change Order**

See Attachment A Spot Check #2 chart.

**Summary #2**

**Scope of Work** - This change order covers the cost of additional acoustical treatments to ceilings and walls to reduce the noise and keep sound under 50 decibels as specified in the Metro Rail Design Criteria (MRDC). The original project definition documents specification indicates the acoustical treatments in specific locations, pending determination of final quantities once the design was completed. At bid time, the contractor was instructed to include the unit rates for additional acoustical treatments, in case more treatment was necessary once the design was completed.

**Budget** -The cost for this Modification is \$1,968,703. The contractor's proposal was \$1,968,703. The independent cost estimate (ICE) was also \$1,968,703 because it was based upon the same unit price listed in the contractors original bid. Staff has stated that funds for this change are within the approved the Life-of-Project budget, and unallocated contingency funds.

**Schedule** - The new delegation process was utilized for this Modification. The agreed upon scope of work occurred on September 17, 2019. The Modification was executed on October 25, 2019, and work was completed in 29 work-days. Using the September 30, 2019 V/CM submission date, this Change Order would have gone to the November Board. The scenario of utilizing the Board for approvals on change orders would have been 54 work-days later instead the 29 actual work-days incurred utilizing the delegated authority.

**Recommendation** - None

**C. Spot Check #3 - Purple Line Extension Section 1 Transit Project**

This OIG Spot Check report concerns the Purple Line Extension Section 1 Transit Project (Contract C1045 MOD-00089), Development and On Site Validation of the Selected Gas Mitigation Option for M13.

**Facts of Change Order**

See Attachment A Spot Check #3 chart.

### **Summary #3**

**Scope of Work** - There is a potential safety concern in the M-13 zone (underground on Wilshire, about 700 feet long, between McCarty Vista and Fairfax streets) of hydrogen sulfide (H<sub>2</sub>S) and methane gas (CH<sub>4</sub>) that are present in the soil where the tunnel boring machine (TBM) alignment will be traversing. It is necessary to evaluate the current gas replenishing rate and develop an effective mitigation plan.

The change order is for the contractor to install 10 vapor extraction wells and 7 monitoring wells, analyze the resulting data, prepare plans, and make a final report to Metro.

**Budget** -This Modification was negotiated and the award amount is \$2,957,277. The contractor's proposal was \$3,126,444 and the ICE was \$2,665,860. The award amount was \$169,167, or 5.4%, under the contractor's proposal. The negotiated amount was \$291,417, or 10.9%, over the ICE.

**Schedule** - The new delegation process was utilized for this Modification. The agreed upon scope of work occurred on September 10, 2019. The Modification was executed on September 30, 2019, and was completed in 15 work-days. Using the September 30, 2019 V/CM submission date, this Change Order would have gone to the November Board. The scenario of utilizing the Board for approvals on change orders would have been 52 work-days later instead of the 15 actual work-days incurred utilizing the delegated authority.

### **Recommendation**

While the soil at every site is unique, it is possible to create a standard for testing soils for gasses. There is no current rule or technical specification within Metro criteria for extraction of CH<sub>4</sub> or H<sub>2</sub>S from the soil.

The OIG recommends after the final report is submitted by the contractor, that a technical specification for testing be developed and written into the MDRC to use in the future.

We further agree that testing to accomplish high levels of safety confidence is a prudent practice.

### **D. Spot Check #4 - Purple Line Extension Section 1 Transit Project**

This OIG Spot Check report concerns the Purple Line Extension Section 1 Transit Project (Contract C1045 MOD-00090), Oil Well Investigation In Lieu of TBM Probe-Ahead.

### **Facts of Change Order**

See Attachment A Spot Check #4 chart.

### **Summary #4**

**Scope of Work** - The Geotechnical Data Report states there are 3 abandoned Chevron Oil wells in the vicinity of the tunnel alignment. The contractor has researched with DOGGR (California Department of Conservation: Division of Oil, Gas, and Geothermal Resources) and estimated the location of the existing wells. There is a potential for the TBM to hit the metal casing of the abandoned wells which could damage and stop the machine. It is Metro's responsibility to be in

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conformance with specification CON53 of the Monitoring Mitigation Reporting Plan, which states that alignment of the TBM must be clear of the abandoned wells.

In order to mitigate the potential damage and stoppage of the TBM, Metro has asked the contractor to perform a subsurface investigation by way of horizontal directional drilling and a magnetometer survey. A magnetometer detects and measures magnetism direction and strength (this is typically used by the military to detect submarines). If there is a conflict found within the tunnel space, the tunnel alignment will be redirected to avoid the existing Chevron oil well or the oil well must be removed according the current DOGGR requirements.

The contractor will prepare and submit a drill path alignment plan, geophysical investigation plan, traffic control plan, and a plan/profile with cross sections under this change order.

**Budget** -This Modification was negotiated and the award amount is \$1,868,928. The contractor's proposal was \$1,868,928 and the ICE was \$2,022,309. The award amount was equal the contractor's proposal. The negotiated amount was \$153,381, or 7.6%, under the ICE.

**Schedule** - The new delegation process was utilized for this Modification. The agreed upon scope of work occurred on August 22, 2019. The Modification was awarded on September 12, 2019, and was completed in 16 work-days. Using the August 30, 2019 V/CM submission date, this Change Order would have gone to the October Board. The scenario of utilizing the Board for approvals on change orders would have been 46 work-days later instead of the 16 actual work-days incurred utilizing the delegated authority.

### **Recommendation**

The implementation of the drilling and magnetometer survey from section 1 has been incorporated into Purple Line Extension Sections 2 and 3 contracts.

The OIG recommends that the procedures implemented for locating tanks, pipes and other abandoned waste be added to the Lessons Learned database.

The OIG further recommends that Metro evaluates whether to pursue recovery for waste removal costs under CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act, also known as Superfund. Passed in 1980). The OIG recommends that Metro's Engineering Program Management provide information on this matter to Metro's Legal department to assist in making this determination and potentially pursuing this recovery.

### **FINANCIAL IMPACT**

Report will have no Financial Impact to the agency.

#### **Impact to Budget**

For all of the Construction Change Orders, Metro states the funds are within the approved budget, and will utilize the contingency funds to cover the costs.

- Spot Check #1) \$2,448,545 Crenshaw/LAX Transit Project
- Spot Check #2) \$1,968,703 Regional Connector Transit Project
- Spot Check #3) \$2,957,277 Purple Line Purple Line Extension Section 1
- Spot Check #4) \$1,868,928 Purple Line Purple Line Extension Section 1

## **IMPLEMENTATION OF STRATEGIC PLAN GOALS**

The recommendations that the Office of Inspector General has put forward support Metro's Strategic Plan Goal #5: Provide responsive, accountable, and trustworthy governance within the Metro organization. The OIG mission includes reviewing expenditures for fraud, waste, and abuse. For each selected Change Order/Modification reviewed, the OIG evaluates if fraud, waste, or abuse is taking place. We report the background details of the Change Order, and make recommendations consistent with the OIG's Construction Best Practices report February 29, 2016, more particularly focusing on lessons learned, improving efficiencies, and prudent spending.

Our goal is to provide rational, trustworthy information to the Board and support the efforts of Metro management to constantly improve and refine its efforts for the benefit of the public. The Office of the Inspector General will continue reporting to the Board the results of Construction Change Order Spot Checks selected from the Program Management Major Project Status Quarterly Report. The next OIG Construction Spot Check report will be in April 2020.

## **NEXT STEPS**

The OIG shall provide every quarter, an on-going spread sheet of recommendations to Program Control. Program Control and Program Management agrees to respond to the recommendations of the OIG within 30 days. The OIG continues to meet periodically to discuss reports, recommendations, and the status of implementation of recommendations, with Project Management and receive updates. The list of OIG recommendations and Metro management responses, including those for October 2019, is an attachment to this OIG January 2020 report.

## **ATTACHMENTS**

Attachment A - Charts for Spot Checks

Attachment B - Tracking Sheet of OIG Recommendations and Responses

Prepared by: Prepared by: Suzanna Sterling, Construction Specialist Investigator, (213) 244-7368

Reviewed by: Karen Gorman, Inspector General, (213) 244-7337

  
Karen Gorman  
Inspector General



**Spot Check #1 - Crenshaw/LAX Transit Project - Contract C0988****Facts of Change Order**

<u>Description of Modification MOD-00437</u> UG1 (H2S) Ventilation Fans Construction	
<u>Change Order Dates:</u>	
Scope of Work approved	July 9, 2019
Modification Executed	September 22, 2019
<u>Elapsed Time for Executing Change Order:</u>	
Using new delegated process	33 work days
Estimate using former Board approval process Agenda for the September Board	58 work days
<u>Cost of Change Order:</u>	
Metro independent cost estimate (ICE)	\$2,237,017
Contractor's proposed cost	\$2,912,415
Negotiated amount	\$2,448,545
Negotiated amount over ICE	\$211,528
Percentage of negotiated amount over ICE	9.45%
Amount negotiated under Contractor's proposal	463,870

**Spot Check #2 – Regional Connector Transit Project - Contract C0980****Facts of Change Order**

<u>Description of Modification MOD-00154</u> Acoustical Treatments for Areas Not on Finish Schedule	
<u>Change Order Dates:</u>	
Scope of Work approved	September 17, 2019
Modification Executed	October 25, 2019
<u>Elapsed Time for Executing Change Order:</u>	
Using new delegated process	29 work days
Estimate using former Board approval process Agenda for the November Board	56 work days
<u>Cost of Change Order:</u>	
Metro independent cost estimate (ICE)	\$1,968,703
Contractor's proposed cost	\$1,968,703
Negotiated amount	\$1,968,703
Negotiated amount equal to ICE	0%
Amount negotiated equal to Contractor's proposal	\$0

**Spot Check #3 - Purple Line Extension Section 1 Transit Project - Contract C1045****Facts of Change Order**

<u>Description of Modification MOD-00089</u> Development and On Site Validation of the Selected Gas Mitigation Option for M13	
<u>Change Order Dates:</u>	
Scope of Work approved	September 10, 2019
Modification Executed	September 30, 2019
<u>Elapsed Time for Executing Change Order:</u>	
Using new delegated process	15 work days
Estimate using former Board approval process Agenda for the November Board	52 work days
<u>Cost of Change Order:</u>	
Metro independent cost estimate (ICE)	\$2,665,860
Contractor's proposed cost	\$3,126,444
Negotiated amount	\$2,957,277
Negotiated amount over ICE	5.4%
Amount negotiated under Contractor's proposal	\$169,167

**Spot Check# 4 - Purple Line Section 1 Transit Project - Contract C1045****Facts of Change Order**

<u>Description of Modification - MOD-00090</u> Oil Well Investigation In Lieu of TBM Probe Ahead	
<u>Change Order Dates:</u>	
Scope of Work approved	August 22, 2019
Modification Executed	September 12, 2019
<u>Elapsed Time for Executing Change Order:</u>	
Using new delegated process	16 work days
Estimate using former Board approval process Agenda for the October Board	46 work days
<u>Cost of Modification:</u>	
Metro independent cost estimate (ICE)	\$2,022,309
Contractor's proposed cost	\$1,868,928
Negotiated amount	\$1,868,928
Negotiated amount under ICE	7.6%
Amount negotiated equal to Contractor's proposal	\$0

## ATTACHMENT B (January 2020)

OIG REPORT/ SPOT CHECK # MOD #	RECOMMENDATIONS	MANAGEMENT'S RESPONSES	COMPLETION DATE
Jan 2020 / #1 C0988-MOD-00437 Crenshaw/LAX UG1 (H2S) Ventilation Fans - Construction	none		
January 2020 #2 C0980 MOD-00154 Regional Connector - Acoustical Treatments for Areas Not on Finish Schedule	none		
January 2020 #3 C1045 MOD-00089 Purple Line Sect. 1 Development and On Site Validation of the Selected Gas Mitigation Option for M13	<p>While the soil at every site is unique, it is possible to create a standard for testing soils for gasses. There is no current rule or technical specification within Metro criteria for extraction of CH<sub>4</sub> or H<sub>2</sub>S from the soil.</p> <p>The OIG recommends after the final report is submitted by the contractor, that a technical specification for testing be developed and written into the MDRC to use in the future.</p>		
January 2020 #4 C1045 MOD-00090 Purple Line Sect. 1 Oil Well Investigation In Lieu of TBM Probe Ahead	<p>The implementation of the drilling and magnetometer survey from Section 1 has been incorporated into Purple Line Extension Section 2 and 3 contracts.</p> <p>The OIG recommends that the procedures implemented for locating tanks, pipes and other abandoned waste be added to the Lessons Learned database.</p> <p>The OIG further recommends that Metro evaluates whether to pursue recovery for waste removal costs under CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act, also known as Superfund. Passed in 1980). The OIG recommends that Metro's Engineering Program Management provide information on this matter to Metro's Legal department to assist in making this determination and potentially pursuing this recovery.</p>		

## ATTACHMENT B (Oct 2019)

OIG REPORT/ SPOT CHECK # MOD #	RECOMMENDATIONS	MANAGEMENT'S RESPONSES	COMPLETION DATE
Jan 2020 / #1 C0988-MOD-00437 Crenshaw/LAX - UG1 (H2S) Ventilation Fans - Construction	<p>The Metro RDC was updated with 2010 ADA Standards for Accessible Design later, and after the release and execution of the Crenshaw contract. When new standards are issued all request for proposal specifications pending after that date should be reviewed for correction before release when possible.</p> <p>For request for proposals released between 2010 and 2014,(when we changed the specification and Metro RDC) the OIG recommends immediate evaluation to determine if they were also awarded based on the old pre 2010 standards to determine whether their projects might be similarly impacted.</p>	Agreed	
Oct. 2019 / #3 C1078 MOD-00083 Purple Line Sect. 1 - La Cienega Dewatering DSC	<p>The Geotechnical Baseline Report stated that the ground conditions would permit drainage of water. The OIG questions if the consultant who developed the Geotechnical Baseline Report properly interpreted the boring data. Investigation is warranted to determine if the report accurately reflects the data.</p> <p>The OIG recommends recovering part of the cost, if the investigation demonstrates that the report was erroneous. The OIG further recommends future Geotechnical Baseline Reports should include interpretation of the borings to determine within a 95% confidence level the nature of the underlying soil and the location of the water table.</p>	Project reviewed the GBR and actual field data and concludes this is a DSC. There is no error and omission on the part of the consultant.	
Oct. 2019 / #4 C1078 MOD-00085 Purple Line Sect. 1 - Geotechnical Instrumentation: Revise Geotechnical Contingency Plan and Reporting	<p>The OIG recommends if Metro believes this change order is a betterment, then Metro should complete the new "Potential Notice of Betterment" form, submit a copy to LABOE and retain a copy for negotiations at the end of the contract if not sooner. This means Metro would move forward at LABOE expense. Going forward, this "Potential Notice of Betterment" form should be completed when applicable and submitted to the LABOE prior to agreeing to move forward, thus allowing the LABOE to make the decision if the betterment is truly necessary.</p>	Project concurs and will develop a Potential Notice of Betterment for LABOE.	

## ATTACHMENT B (July 2019)

OIG REPORT/ SPOT CHECK # MOD #	RECOMMENDATIONS	MANAGEMENT'S RESPONSES	COMPLETION DATE
July 2019 / #1 C0988-MOD-00426 Crenshaw/LAX - Irrigation Water Meters, Park Mesa Medians	The OIG recommends this disagreement between the City of Los Angeles Public Works and LA Metro about the responsibility for the changes should be discussed and resolved.	This item is tied to the tree permit that included adding pavement in areas beyond the project limits, increasing the number of replacement of trees for those cut down, adding landscaped medians (which require the subject irrigation). All of the items above were discussed with City and the two parties agreed to an MOU for which the City would be paid 3.5 million to pave the street (work valued at 7.0 million plus) and that this agreement resolved the other issues mentioned above with Metro installing at its cost (medians, trees...etc)	
July 2019 / #2 C0980 MOD-00141.2 Regional Connector - Impacts to Support of Excavation: Decking, Utilities and Temporary Drainage	The OIG recognizes the age of the buildings at the site and errors of definitive drawings.  The OIG recommends to research on the front end, even drawings to confirm accuracy, to preclude issuing an expensive change order after construction has commenced.	There are definitely some lessons to be applied to future projects based on Regional Connector's experience with utilities. The most significant finding is the need to conduct utility condition assessments in areas where cut-and -cover construction is planned. This could be accomplished by a combination of potholing, inspection of maintenance holes/vaults and research with the utility owner. The documented age of the utility and the presence of large masonry vaults/maintenance holes, should serve as guides in the determination of whether facilities should be replaced.	No further action by Regional Connector
July 2019 / #3 C1078 MOD-00025 Purple Line Sect. 1 - Revised Low Impact Development (LID)	The OIG recommends that all upcoming sites where known industrial and railway activity occurred, that a full investigation of soils occurs and is stated in the Environmental Impact Statement. Performing such investigation early may result in additional early costs, but these circumstances will then become known costs of the project and may be prepared with less delay and less costs than waiting.	Site investigation and soil remediation was completed prior to the construction of the site. However, the original plan for the DTSC directed site cleanup was the previous owners responsibility. Due to the nature in how this property was eventually acquired in order to meet the construction schedule (imminent domain) there was no time to cleanup the groundwater issues prior to LID designs. and assess any data gaps that may have existed. Orders from the DTSC to continue remediation efforts of the groundwater, beyond Metro's planned clean up phase, pushed the environmental effort beyond a clear end date which in effect conflicted with the LID design since it would be predicted to pushing an identified contaminated groundwater plume during rain events once completed. In the future, if Metro can anticipate action to be required from outside entities (that can take significant time to develop and execute) beyond the initial environmental phase, it will request contractor to change the design prior to 60% completion to avoid major changes	
July 2019 / #4 MC1120 MOD-00037 Purple Line Sect. 2 - Revision to Avg Depth of Seismic Borings along Wilshire Blvd. on Tunnel Reach 5	The OIG commends the Engineering department for taking supplementary steps to determine additional the location of seismic fault line in relation to the track alignment for improved safety and long term structural integrity.	Noted	N/A

ATTACHMENT B (April 2019)			
OIG REPORT/ SPOT CHECK # MOD #	RECOMMENDATIONS	MANAGEMENT'S RESPONSES	COMPLETION DATE
April 2019 / #1 C0988 MOD-00402 Crenshaw/LAX - Provisional Payments - Pending Dispute Resolution Fire Rated Cable (multiple) Change Orders	1. The OIG recommends that Metro expeditiously and fairly resolve the litigation with the Contractor. 2. The OIG further recommends that a review team monitor the billings of the Contractor to validate the efficacy of the incentive program as this may become a tool for improving future performance on other projects.	1. Agree, different mechanisms to achieve this being considered.  2. Agree, already being implemented.	1. December 2019  2. Closed
April 2019 / #3 C1045 MOD-00071 Purple Line Sect. 1 - Golder Gas Investigation and Report	The Independent Cost Estimate was not an accurate representation of work stated in the agreed upon scope of work.  The OIG recommends that Metro continue to follow through on the plan for mitigation of gas migration utilizing the Contractor's new report of procedures where known high concentrations of hydrogen sulfide and methane gases exist.	Metro is following thru on the plan. Installation of wells for field testing began in 3/19. The mitigation options draft memo, based on the field testing observations, was received 6/25. Design of a selected gas migration mitigation option, i.e. increasing the number of soil vapor extraction wells, is ongoing.	Completion of mitigation recommendation and implementation, is tentatively scheduled for December 31, 2019.
April 2019 / #4 C1045 MOD-00072 Purple Line Sect. 1 - Reach 3 Additional Gas Testing and Assessment	The OIG recommends: 1. In following the new Contractor's report, Work Plan for Exploratory Program to Assess Mitigations for Potential Gas Migration, a. Record all steps that were successful and those that need modification. b. Have information formatted and add to Technical Specifications. c. Have steps and procedures added into Lessons Learned d. Incorporate these finding and procedures into any future bid process where potential gas migration and tunnel boring may occur. 2. Note under Lessons Learned where known high concentrations of hydrogen sulfide and methane gases exist, prior study and geotechnical investigation be completed and included in the bid documents.	1. Metro has the following comments: a. Plan to record this. Modifications to the testing program in field to be made as appropriate  b. This is likely a unique area. A Full report on the program and recommendations is included in the work. Pending the outcome, Technical Specifications would be developed for the Project  c. Agree, also see b above  d. We note that investigation is in progress now to study gas migrations. Pending outcome, future bid process would include results, including incorporation in Geotechnical Investigation and Technical Requirements 2. Agree. In this instance the area was studied and fully identified/described in the bid documents. Also see 'b' above.	12/31/2019

ATTACHMENT B (April 2019)			
OIG REPORT/ SPOT CHECK # MOD #	RECOMMENDATIONS	MANAGEMENT'S RESPONSES	COMPLETION DATE
April 2019 / #5 C1045 MOD-00074 Purple Line Sect. 1 - Additional Instrumentation (Project Wide) as requested by LABOE and STS EOR	The OIG recommends that instrumentation bought for this project become property of LA Metro, so that future projects (remainder of the Purple Line Extension 2 and 3) will have instrumentation on hand to immediately install when Support of Excavation for those projects begin.	<p>Metro has made several attempts in the past for Purple Line and Regional to salvage and reuse geotechnical instrumentation. However, passing the instruments between projects offer a number of challenges. These include the following:</p> <ul style="list-style-type: none"><li>• The Design life of instrumentation equipment is limited given the temporary nature of the work.</li><li>• Given the diminished value of the used instrumentation equipment it is often abandoned in place. An effort to salvage the equipment may result in increased costs.</li><li>• The means, methods and performance of shoring, instrumentation and monitoring are left with the Design-builder. Dictating the used instruments would interfere with the selection of means and methods and make Metro responsible for warranting the equipment for the life of the project.</li><li>• The technology associated with the equipment continues to evolve. Metro may then be obligating the contractor to use obsolete equipment.</li><li>• Timing and turnover of instrumentation. The contract schedules for Regional, Crenshaw and Purple Line Sections 1, 2 and 3 all overlap. As such, the instrumentation for each project is needed at the same time.</li><li>• Metro would need to inventory and temporary store the instrumentation equipment. There is a risk that Metro may be storing the equipment permanently or Metro may need to make efforts for their disposal.</li></ul>	Closed

## ATTACHMENT B (Jan. 2019)

OIG REPORT/ SPOT CHECK # MOD #	RECOMMENDATIONS	MANAGEMENT'S RESPONSES	COMPLETION DATE
Jan 2019 / #1 C0988 MOD 00335.1 Crenshaw - Cable Transmission System Update - Construction	"The OIG recommends: The schedule <b>negotiations</b> with the <b>contractor</b> be expeditiously concluded so the schedule impacts are minimized."	Not sure what this means. CO's were issued prior to MOD that obligated the contract to commence work - this mitigated schedule impacts. Response could stay as-is I suppose (with edits) as it is relatively benign in nature	Closed
Jan 2019 / #3 C1120 MOD-00026 Purple Line Sect. 2 - Santa Monica Blvd. Bus Layover Design and Construction Changes	The OIG recommends: That Operations and LADOT be provided the scope of work after requests are submitted or "no comments" are received to confirm their requests have been added into the scope prior to the release of the RFP.	Because the OIG's recommendation is for actions to be taken prior to the release of RFPs, it has been passed on to Metro Engineering for consideration in revising Policy DSGN01 DB for future projects.	Metro Engineering (Androush Danielians/ Edwardo Cervantes) have been notified. They provided the below comment: A process will be set in place that will be included in future Specs and contract language for the PE Consultant. The process will require the consultant to submit plans to all applicable agencies (including Metro). Upon receiving comments, the Consultant shall address each comment as to the disposition in a matrix/spreadsheet. The spreadsheet / matrix will then be submitted to each of the commenting agencies. That agency will then be requested to accept the project disposition (via an initial). If the agency is not in acceptance of the disposition, the Consultant via the Project shall work with each agency until that comment disposition is accepted. The final signed off matrix shall then be included in the RFP for the DB (contractor) to complete the path forward based on the agreed upon disposition.



# Office Of Inspector General Construction Change Order Spot Check Report

Presented By  
**Karen Gorman**  
Inspector General

# Spot Check Costs

File #  
2020-0010

## Summary of Selected Change Order Costs

Four OIG spot checks of Change Orders / Modifications reported

### **1 Change Order for Crenshaw/LAX**

❖ UG1 (H<sub>2</sub>S) Ventilation Fans - Construction = \$2,448,545

### **2 Change Order for Regional Connector**

❖ Acoustical Treatments for Areas Not on Finish Schedule = \$1,968,703

### **3 Change Order for Purple Line Section 1**

❖ Development and On Site Validation of the Selected Gas Mitigation Option for M13 = \$2,957,277

### **4 Change Order for Purple Line Section 1**

❖ Oil Well Investigation In Lieu of TBM Probe Ahead = \$1,868,928

# Spot Check Schedule Comparison

File #  
2020-0010

Schedule Comparison: new delegated process vs. former Board approval process

PROJECT	Title of Change Order	Time Saved Executed date to Board Mtg.	NEW Delegated Process final SOW to Executed date	Former Board Approval Process
CRENSHAW	UG1 (H <sub>2</sub> S) Ventilation Fans - Construction	9	48	57
REGIONAL CONNECTOR	Acoustical Treatments for Areas Not on Finish Schedule	25	29	54
WESTSIDE PURPLE LINE SECT 1	Development and On Site Validation of the Selected Gas Mitigation Option for M13	37	15	52
WESTSIDE PURPLE LINE SECT 1	Oil Well Investigation In Lieu of TBM Probe Ahead	30	16	46

January 2020

Construction Committee

Los Angeles County Metropolitan Transportation Authority



# Spot Check Recommendations

File #  
2020-0010

#3

Purple Line Sect. 1  
Development and On  
site Validation of the  
Selected Gas Mitigation  
Option for M13

While the soil at every site is unique, it is possible to create a standard for testing soils for gasses. There is no current rule or technical specification within Metro criteria for extraction of CH<sub>4</sub> or H<sub>2</sub>S from the soil.

The OIG recommends after the final report is submitted by the contractor, that a technical specification for testing be developed and written into the MDRC to use in the future.

#4

Purple Line Sect. 1  
Oil Well  
Investigation  
In Lieu of TBM  
Probe Ahead

The implementation of the drilling and magnetometer survey from Section 1 has been incorporated into Purple Line Extension Sections 2 and 3 contracts.

The OIG recommends that the procedures implemented for locating tanks, pipes and other abandoned waste be added to the Lessons Learned database.

The OIG further recommends that Metro evaluates whether to pursue recovery for waste removal costs under CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act, also known as Superfund. Passed in 1980). The OIG recommends that Metro's Engineering Program Management provide information on this matter to Metro's Legal department to assist in making this determination and potentially pursuing this recovery.

January 2020

Construction Committee

Los Angeles County Metropolitan Transportation Authority

