

Metro

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



Agenda - Final

Thursday, April 18, 2019

10:15 AM

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

Construction Committee

Robert Garcia, Chair

Jacquelyn Dupont-Walker, Vice Chair

Kathryn Barger

Janice Hahn

James Butts

John Bulinski, non-voting member

Phillip A. Washington, Chief Executive Officer

METROPOLITAN TRANSPORTATION AUTHORITY BOARD RULES
(ALSO APPLIES TO BOARD COMMITTEES)

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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 should be submitted in person at the meeting to the Board Secretary. Individuals requesting to speak on more than three (3) agenda items will be allowed to speak up to a maximum of three (3) minutes per meeting. For individuals requiring translation service, time allowed will be doubled.

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.

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 up to three (3) minutes per meeting and may speak no more than once during the Public Comment period. Speakers will be called according to the order in which the speaker request forms are received. Elected officials, not their staff or deputies, may be called out of order and prior to the Board's consideration of the relevant 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.

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

CALL TO ORDER**ROLL CALL**

26. **SUBJECT: PROGRAM MANAGEMENT MAJOR PROJECT STATUS REPORT** [2019-0127](#)

RECOMMENDATION

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

Attachments: [Attachment A - Program Management Major Project Status Report - April 2019.](#)

27. **SUBJECT: PROGRAM MANAGEMENT QUARTERLY CHANGE REPORT** [2019-0168](#)

RECOMMENDATION

RECEIVE AND FILE status report on Program Management Quarterly Change Report.

Attachments: [Attachment A - April 2019 Construction Committee](#)

28. **SUBJECT: OFFICE OF THE INSPECTOR GENERAL CHANGE ORDER/MODIFICATION CONSTRUCTION SPOT CHECKS** [2019-0007](#)

RECOMMENDATION

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

Attachments: [Attachment A - Spot Check Presentation](#)

29. **SUBJECT: FISCAL YEAR 2020 PROGRAM MANAGEMENT ANNUAL PROGRAM EVALUATION** [2019-0167](#)

RECOMMENDATION

RECEIVE AND FILE report on FY20 Program Management Annual Program Evaluation.

Attachments: [Presentation](#)

**30. SUBJECT: PROJECT NO. 202808 CMF BUILDING 5 DUST
COLLECTION SYSTEM PROJECT**

[2019-0099](#)**RECOMMENDATION**

AUTHORIZE an increase in the life of project (LOP) budget for Project No. 202808 by \$440,000 for Central Maintenance Facility (CMF) Building 5 Dust Collection System project from \$785,000 to \$1,225,000.

Attachments: [Attachment A - Procurement Summary](#)
 [Attachment B - Funding-Expenditure Plan](#)
 [Attachment C - DEOD Summary](#)

31. SUBJECT: PROGRAM MANAGEMENT SUPPORT SERVICES

[2019-0153](#)**RECOMMENDATION**

AUTHORIZE:

- A. An increase to the total authorized funding for Contract No. AE35279 with Kal Krishnan Consulting Services/Triunity Engineering and Management Joint Venture (KTJV), for pending and future Contract Work Orders to provide Program Management Support Services (PMSS) in the amount of \$65,838,110, increasing the authorized funding limit from \$24,970,960 to \$90,809,070, consistent with previous action taken by the Board in June 2017 for the remaining five years of the contract, which includes exercising the option to extend the PMSS contract by two years; and
- B. The Chief Executive Officer or designee to execute individual Contract Work Orders (CWOs) and Contract Modifications within the Board approved contract funding amount.

Attachments: [Attachment A - Procurement Summary](#)
 [Attachment B - Contract Work Order Log - PMSS.pdf](#)
 [Attachment C - DEOD Summary](#)
 [Attachment D - Current and Anticipated List of Projects](#)

SUBJECT: GENERAL PUBLIC COMMENT

[2019-0216](#)

RECEIVE General Public Comment

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



Board Report

File #: 2019-0127, File Type: Oral Report / Presentation

Agenda Number: 26.

CONSTRUCTION COMMITTEE APRIL 18, 2019

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

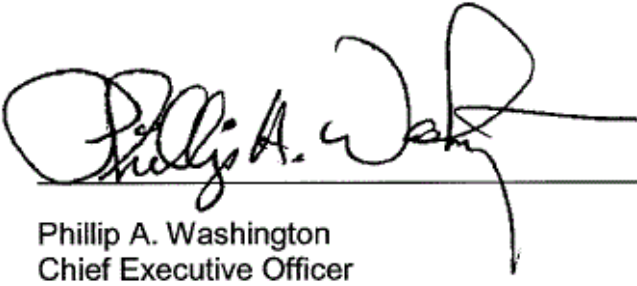
Update report covering the month of April 2019 by the Chief Program Management Officer.

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** - Shannon Hanley, Chief Administrative Analyst, (213) 922-1350



Phillip A. Washington
Chief Executive Officer

Program Management Major Project Status Report

Presented By

Richard Clarke

Chief Program Management Officer

April 2019

Construction Committee

Los Angeles County Metropolitan Transportation Authority



PROJECT BUDGET & SCHEDULE STATUS SUMMARY CHART

Project	Cost Performance	Schedule Performance	Comments
Crenshaw/LAX			Project is 91% complete. Metro issued non-compensable time extension to contractor extending Contract Substantial Completion Milestone to December 2019. The forecast revenue service date is Spring/Summer 2020.
Regional Connector			Project is 56% complete. Substantial Completion and Revenue Service are targeted for 2022. Cost forecast is consistent with LOP Budget at \$1.81 billion.
Westside Purple Line Extension-Section 1			Project is 46% complete and proceeding on schedule and within budget.
Westside Purple Line Extension-Section 2			Project is 15% complete and proceeding on schedule and within budget.
Westside Purple Line Extension-Section 3			C1151 Tunnels Contract - Issued Notice to Proceed (NTP) to Frontier-Kemper/Tutor Perini, a Joint Venture on January 15, 2019. C1152 Stations, Trackwork, Systems, and Testing Contract - Contract award is subject to FTA's approval of a Full Funding Grant Agreement (FFGA).
Patsaouras Plaza			Project is approximately 65% complete. Metro has been delayed since April 2018 due to archaeological and Native American issues. With anticipated construction delay of 11 months, significant impacts to project schedule and budget expected. Project expected to resume construction by mid-April 2019.
Willowbrook/Rosa Parks Station			Package A is 25% complete with structural and framing work continuing on the Customer Service and Mobility Hub Buildings. Blue Line Station and Mezzanine work demolition continues with initial pile work beginning. Package B 100% bid package being prepared for procurement.
Metro Blue Line Projects			Metro Blue Line south segment construction work is proceeding per schedule and inclement weather mitigations are in place as necessary as well as extensive community outreach to minimize complaints.
I-210 Barrier Replacement			Finding effective mitigation measures to some of the non-standard freeway features along with mitigation measures to alleviate freeway traffic disruption during construction are delaying the project.
I-5 North: SR 118 to SR 134			Segment 1 & 2 (SR 118 to Buena Vista) are complete and open to traffic. Segment 3 (Empire) is 73% complete. Segment 4 (Magnolia to SR-134) is 89% complete.
I-5 South: Orange County Line to I-605			Segment 2 (Valley View) is 39% complete. Segment 3 (Rosecrans) is open to traffic. Segment 4 (Imperial) is 95% complete. Segment 5 (Florence) is 78% complete.

April 2019



On target



Possible problem



Major issue



Metro 2

Construction Committee

Los Angeles County Metropolitan Transportation Authority

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	Fall	Spring/Summer
OPERATION	2019	2020

- Overall Project Progress is 91% complete; addressing contractor construction schedule.
- Contractor continues critical construction efforts in the north end underground structures.
- Working with 3rd parties to complete power drops for traction power substations in support of testing systems equipment .
- Contractor addressing open sidewalk and street punch list items along alignment.



Contractor aligning trackwork at south end Green Line tie-in



Back filling/compaction of Expo/Crenshaw Station Plaza

April 2019



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 3

CRENSHAW/LAX TRANSIT PROJECT – STATUS OF CORRECTIVE WORK

RESTORATION CLOSURES:

Total Items	22
Open Design Issues	7
Open Construction Issues	19
# Items Complete	3
# Items In Progress	2

PARK MESA HEIGHTS (PMH) CIVIL CORRECTIONS:

Total Items	426
# Items Complete	42
# Items In Progress	109

PMH TRAFFIC SIGNAL & STREET LIGHT CORRECTIONS:

Total Items	102
# Items Complete	0
# Items In Progress	0



April 2019

Construction Committee

Los Angeles County Metropolitan Transportation Authority

REGIONAL CONNECTOR TRANSIT PROJECT

OK BUDGET

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

OK SCHEDULE

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

- Overall Project Progress is 56% complete.
- Underground:** Sequential Excavation Method (SEM) crossover cavern excavation complete; final liner work has commenced.
- Little Tokyo/Arts District Station, WYE and 1st Street:** Excavation and related support of excavation, as well as utility protection continue at WYE and 1st Street; structural concrete operations underway on station walls.
- Historic Broadway Station:** Structural concrete continues with exterior walls in station entrance and concourse.
- Grand Av Arts/Bunker Hill Station:** Structural concrete walls continue to be erected at multiple levels throughout station.
- Flower Street:** Excavation and utility protection south of 5th continues. Concrete operations between 4th and 5th Streets are underway.



SEM Cavern excavation completed



Rebar and MEP installation at 1st/Alameda Wye

April 2019



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 5

WESTSIDE PURPLE LINE EXTENSION – SECTION 1

BUDGET

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

* Includes Board approved LOP budget plus finance costs.

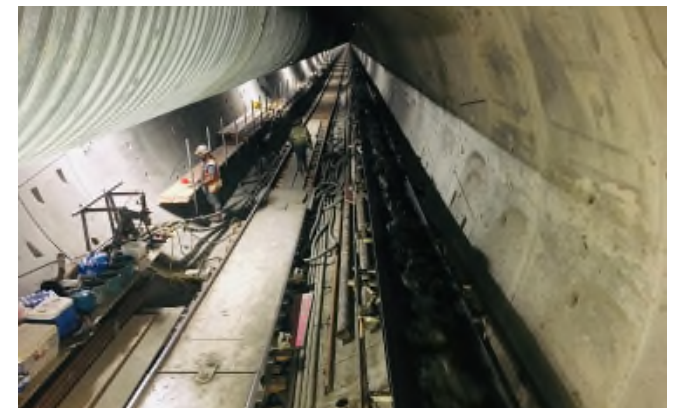
SCHEDULE

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

- Overall Project Progress is 46% complete.
- Wilshire/Western Retrieval Shaft:** Preparation for Tunnel Boring Machine (TBM) arrival in June 2019, including framing installation for tunnel eyes, cutting piles and preparation for gantry crane installation.
- Wilshire/La Brea Station:** Concrete placement for interior load bearing walls is complete. Rebar installation for the concourse slab has commenced with the first placement of concrete scheduled in April 2019.
- Wilshire/Fairfax Station:** Station box excavation and mud mat concrete placement are complete. Invert slab concrete placement is scheduled in April 2019.
- Wilshire/La Cienega Station:** Installation of Level C struts continues, along with excavation toward Level D. Bottom of excavation is anticipated to be reached in June 2019.
- Reach 1 TBM Progress (W/LB to W/W):** TBM #1 – 5,472 ft. or 57%; TBM #2 – 3,918 ft. or 41% as of March 13, 2019.



Placement of Mud Mat at Wilshire/Fairfax Station



Reach 1 Tunneling

April 2019



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 6

WESTSIDE PURPLE LINE EXTENSION – SECTION 2



BUDGET

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

* Includes Board approved LOP budget plus finance costs.



SCHEDULE

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

- Overall Project progress is 15% complete.
- Final design progress is 91% complete.
- **Century City Constellation**
 - Cable pulling and splicing for LADWP Power and AT&T is ongoing with an anticipated completion date of November 2019.
 - Tunnel muck bin construction and tunnel boring machine (TBM) launch box excavation have commenced.
 - Santa Monica bus layover construction is ongoing with an anticipated completion in April/May 2019.
 - The AT&T parking structure demolition is complete and turnover of the property to the contractor occurred in March 2019.
- **Wilshire/Rodeo**
 - Preparation for wet utility relocations by the contractor is ongoing.
 - Demolition of north staging yard properties completed in March 2019.
 - Memorandum of Agreement approved by the City of Beverly Hills on February 19, 2019.



Muck Bin Pile Installation



Demo of North Stage Yard Properties

April 2019



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 7

WESTSIDE PURPLE LINE EXTENSION – SECTION 3

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

* Includes Board approved LOP budget plus finance costs.

OK SCHEDULE		
	<u>Current</u>	<u>Forecast</u>
REVENUE OPERATION	TBD	2027

- C1151 Tunnel Contract – Started design coordination with various stakeholders.
- C1152 Stations, Trackwork, Systems, and Testing Contract – Contract award is subject to FTA’s approval of a Full Funding Grant Agreement (FFGA).
- C1153 Advanced Utility Relocations (AUR) Contract – Overall progress is 76% complete.
- Joint trench for combining Verizon and Frontier telecommunications started in February 2019 and is ongoing.
- LADWP Cable pulling started in early March 2019 and is ongoing.



LADWP Water Pipe, Valve and T-Section Installation



LADWP Cable Pulling

April 2019



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 8

PATSAOURAS PLAZA BUSWAY STATION

 BUDGET		
	<u>Current</u>	<u>Forecast</u>
TOTAL COST	\$39.7M	\$TBD

 SCHEDULE		
	<u>Current</u>	<u>Forecast</u>
SUBSTANTIAL COMPLETION	Winter 2018	Spring 2020

- Overall project progress remains at approximately 65% complete.
- Project contractor and construction suspension continues since April 24, 2018 due to archaeological and Native American resource issues.
 - Project team is working diligently to resume construction with FTA and the Consulting Parties in April 2019.
- Archaeological investigation and treatment field work began on November 12, 2018, and expected to be completed by end of March 2019.
 - To date 36 archaeological features including human remains discovered
 - Most recent discovery in early March determined to be segment of Zanja.
- Archaeological and Native American issues will deplete project contingency, requiring Life of Project (LOP) budget increase.
 - Metro concluded global settlement negotiations with contractor on December 14, 2018, with expected Board Report in May 2019.



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: Structural components and framing for Customer Service has been completed with interior utility work commencing. Mobility Hub Building structural work in progress.
- Package C: Demolition on Blue Line Platform and Mezzanine in progress. Initial column/pile work commencing.
- Package B: Preparing Documents for construction procurement.



Demolition of Rail Platform



Demolition of Rail Platform and Mezzanine



Structural Steel Installation for Mobility Hub



Framing for Customer Service Building

April 2019



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 10

THE NEW BLUE CLOSURE

 BUDGET		
	<u>Current</u>	<u>Forecast</u>
TOTAL COST	\$221.3M	\$221.3M

 SCHEDULE		
	<u>Current</u>	<u>Forecast</u>
SUBSTANTIAL COMPLETION	Fall 2019	Fall 2019

- Rail replacement and rebooting work is 50% completed.
- Overhead Catenary System (OCS) work is 50% complete.
- Compton new interlocking Local Field Acceptance Tests (LFAT) has started.
- Painting of the OCS and Light poles has started.
- Implementing inclement weather mitigations.



Switch Machine LFAT



New OCS Wires



Compton Train Control Bungalow

April 2019



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 11

I-210 BARRIER REPLACEMENT PROJECT

BUDGET		
	<u>Current</u>	<u>Forecast</u>
TOTAL COST	\$11.08M	\$22.62M
	Design	Design

SCHEDULE		
	<u>Current</u>	<u>Forecast</u>
Complete Design (Proj 1)	Summer 2019	Summer 2019
Complete Design (Proj 2)	Spring 2020	Spring 2020

- Conducting traffic micro-simulation studies to quantify the traffic delays during construction which are expected to be beyond the normal acceptable range and provide for effective mitigation measures. This traffic analysis is scheduled to be completed by mid-April 2019.
- Coordinating mitigation measures with Caltrans to address existing non-standard freeway features and other non-standard features caused by this project. Draft document to be submitted to Caltrans for Project 1 beginning of April 2019.
- Project 1: Segment from Michillinda to Iconic Bridge – Surveying to be completed end of March. Continuing environmental studies and final design concurrently.
- Project 2: Segment from west end of the project to Michillinda – Continuing traffic micro-simulation studies.



Newly Installed Caltrans Freeway Sign



Incident in 2014



Newly Installed Speed Limit Sign

April 2019



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 12

I-5 Construction Projects (By Caltrans)



April 2019

Construction Committee

Los Angeles County Metropolitan Transportation Authority



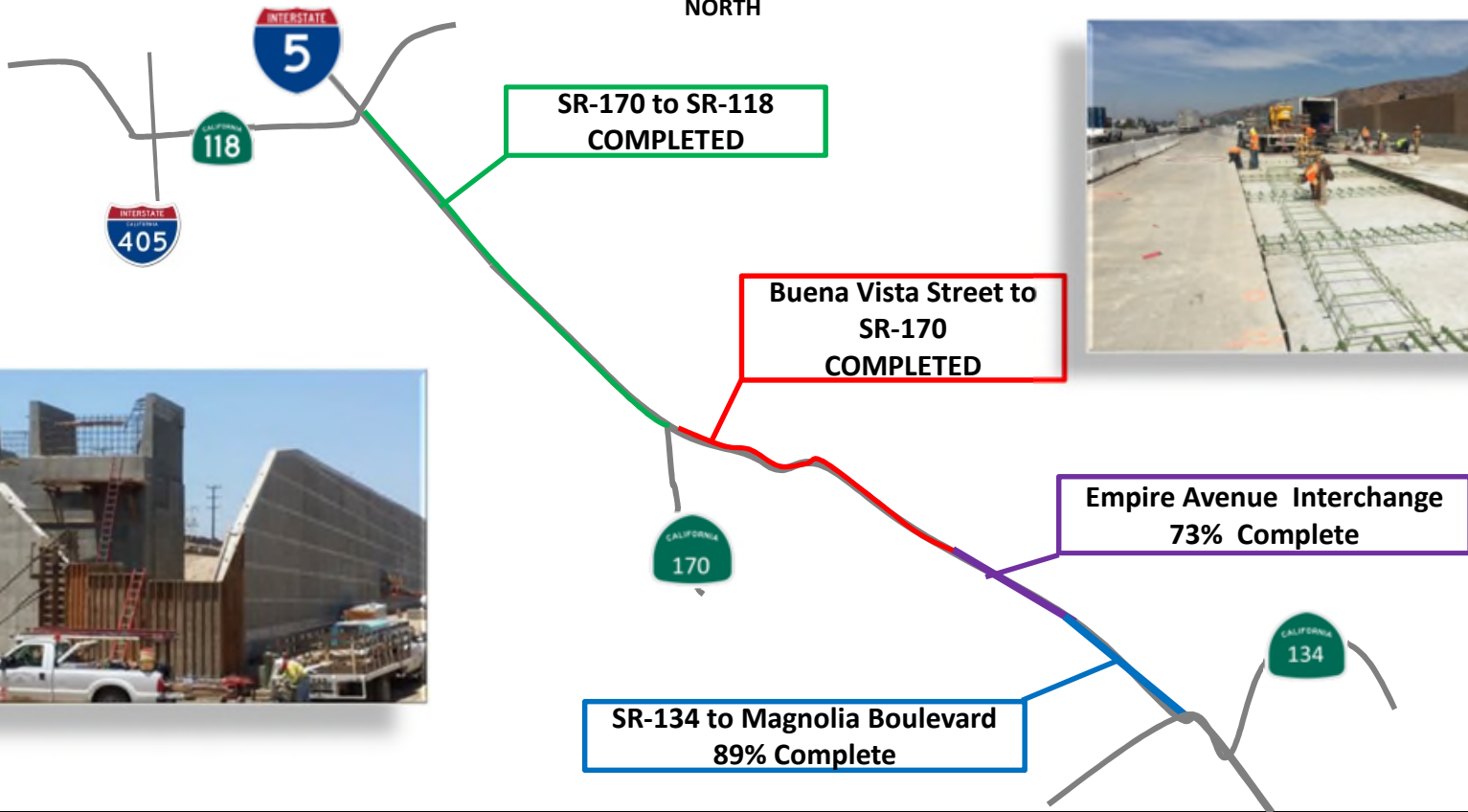
Metro 13

I-5 NORTH: SR 118 TO SR 134



⚠ BUDGET		
TOTAL COST	Current	Forecast
	\$880.9M	TBD

🟡 SCHEDULE		
ANTICIPATED PROJECT COMPLETION	Current	Forecast
	Spring 2022	Summer 2022



April 2019



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



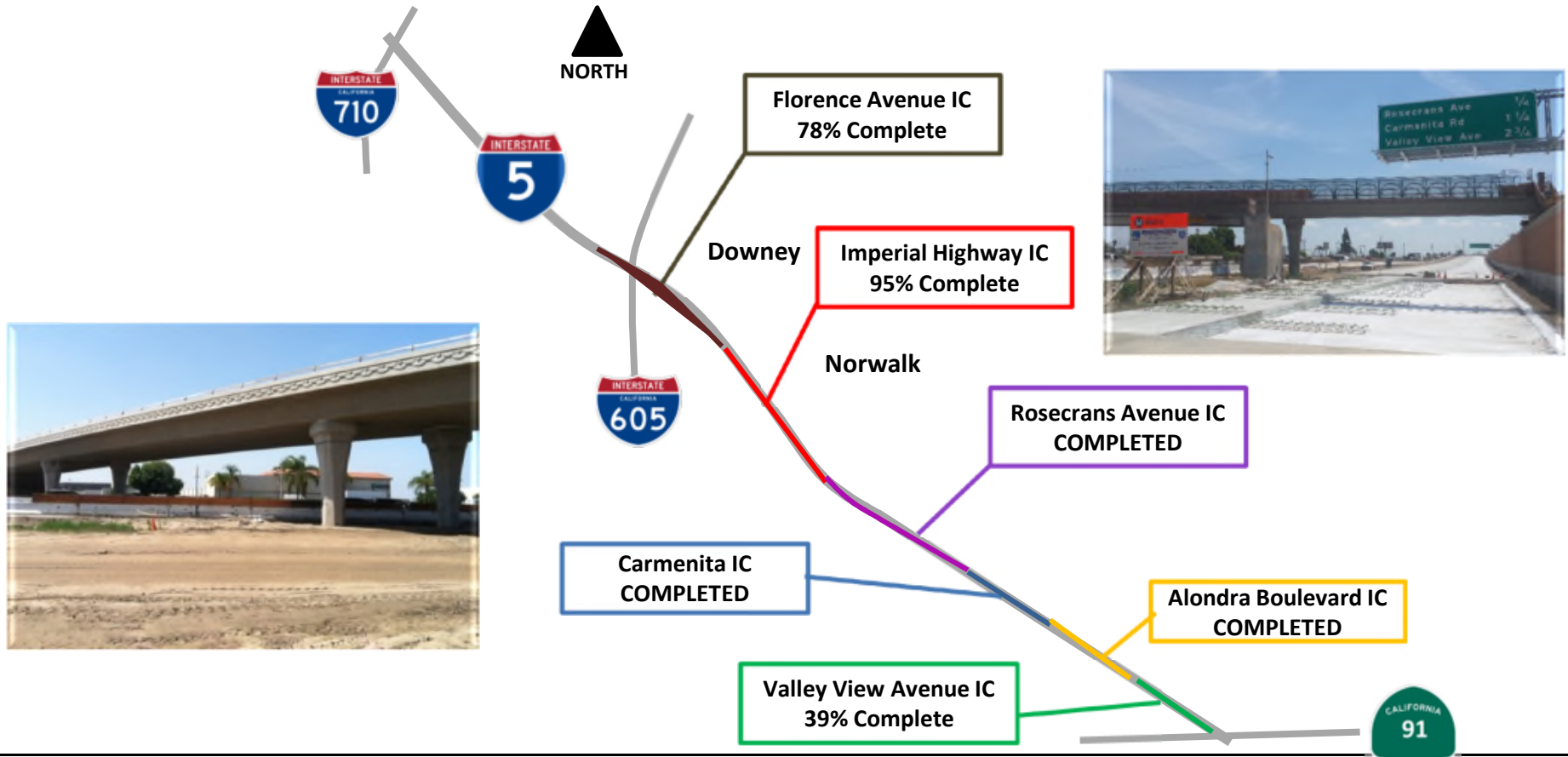
Metro 14

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



OK BUDGET		
	Current	Forecast
TOTAL COST	\$1.888B	TBD

◇ SCHEDULE		
	Current	Forecast
ANTICIPATED PROJECT COMPLETION	Summer 2022	Fall 2022



April 2019

Construction Committee

Los Angeles County Metropolitan Transportation Authority



On target



Possible problem



Major issue

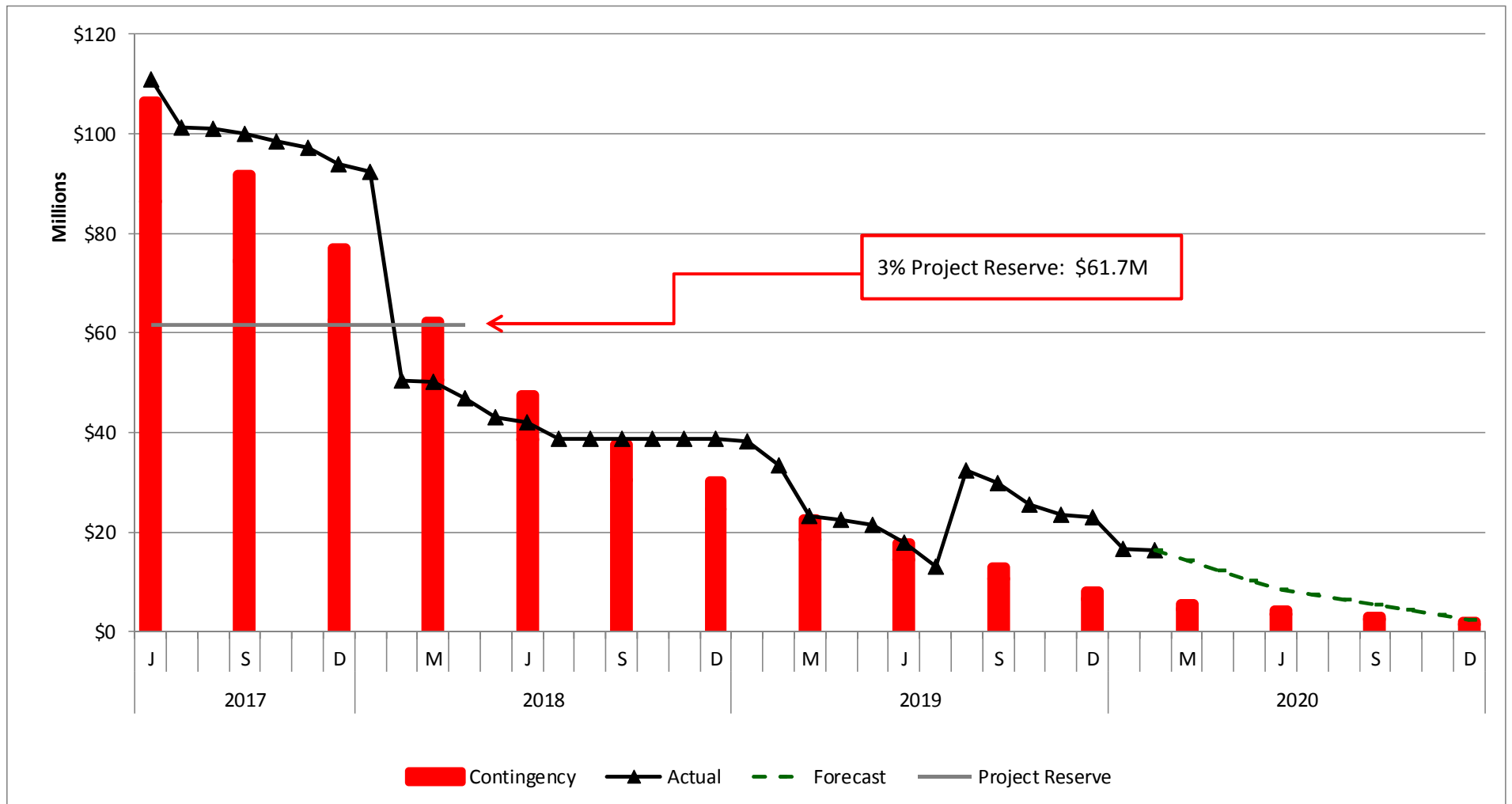


Metro 15

Crenshaw/LAX Transit Project

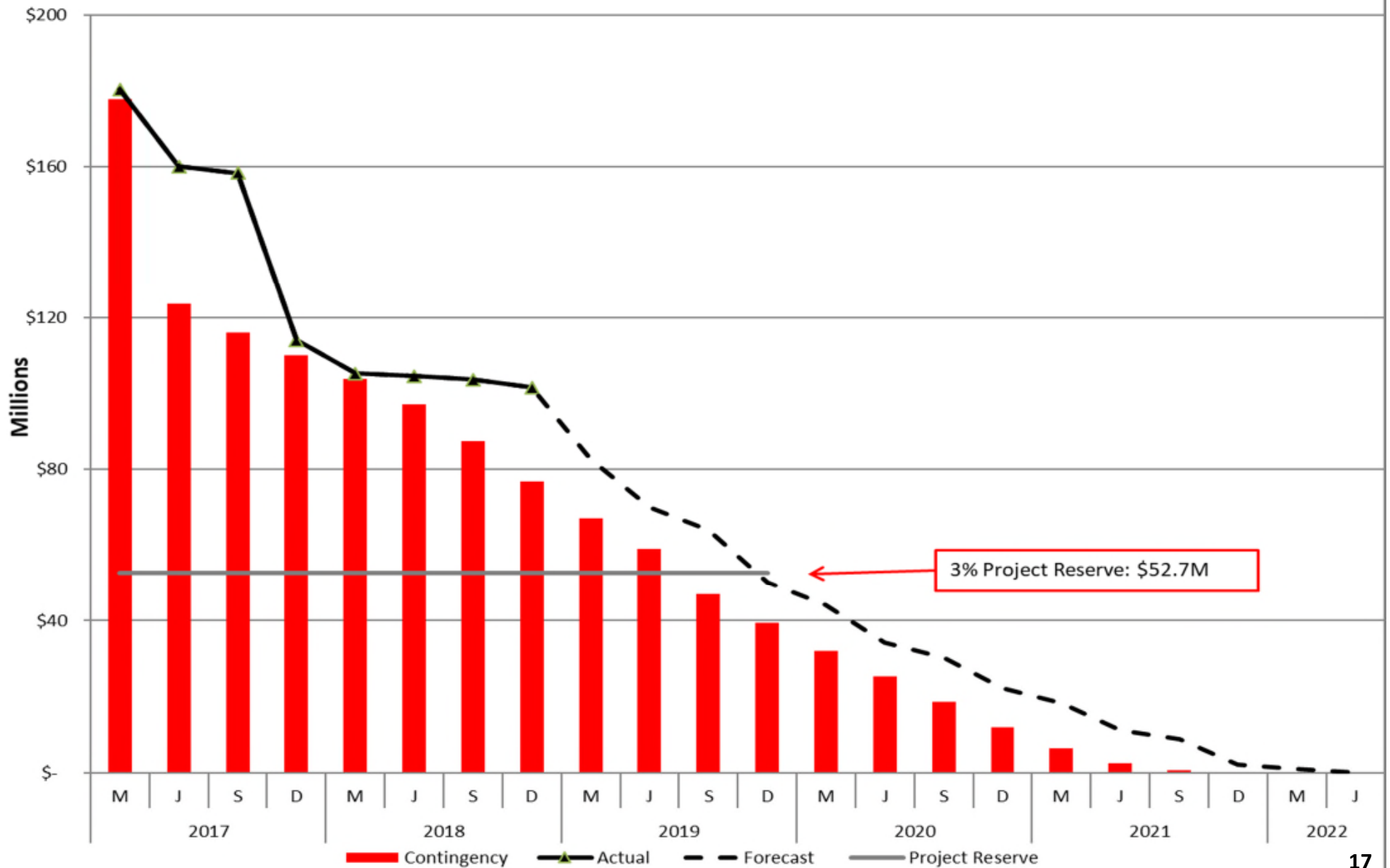
Project Cost Contingency Drawdown

February 2019



Regional Connector

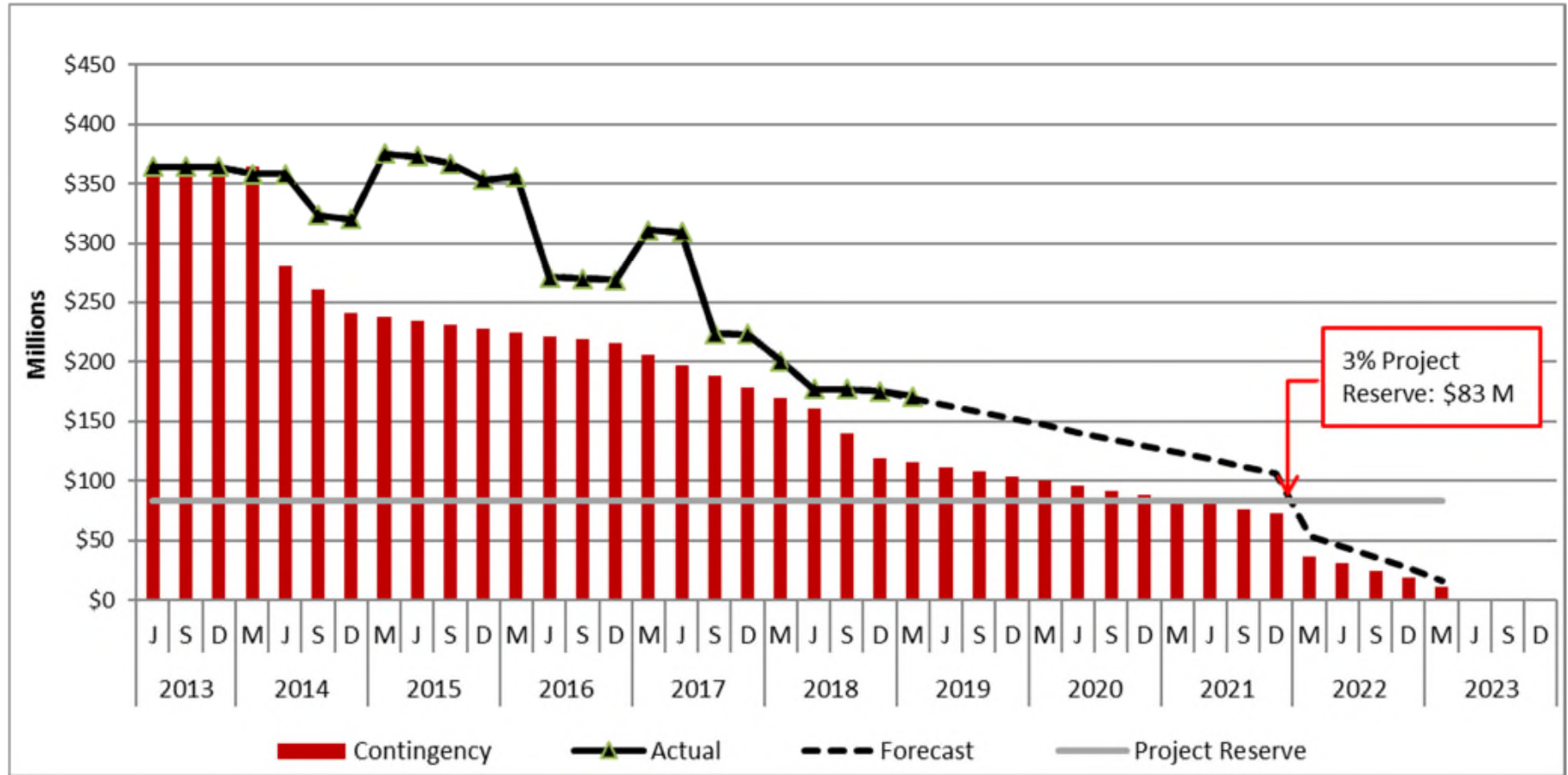
Project Cost Contingency Drawdown



Westside Purple Line Extension – Section 1

Project Cost Contingency Drawdown

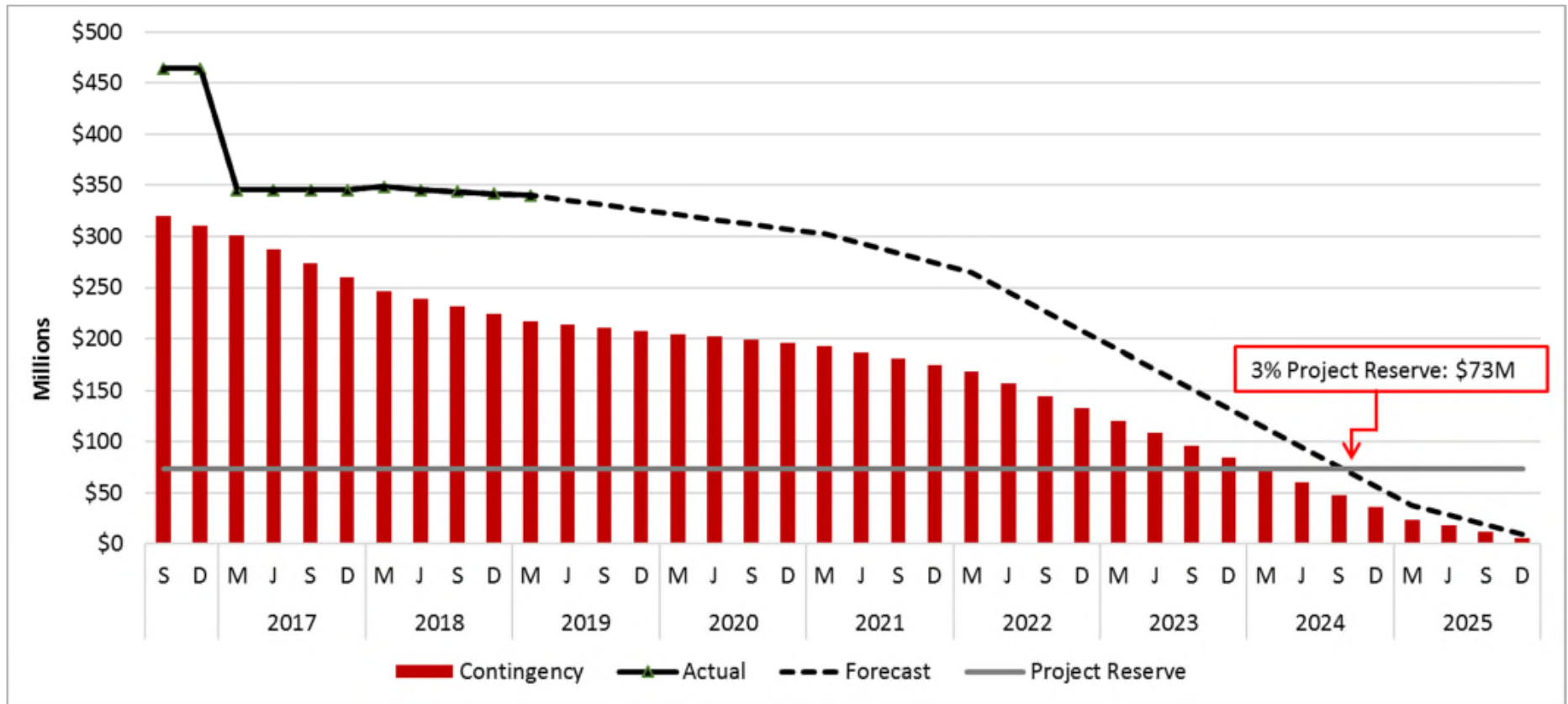
February 2019



Westside Purple Line Extension – Section 2

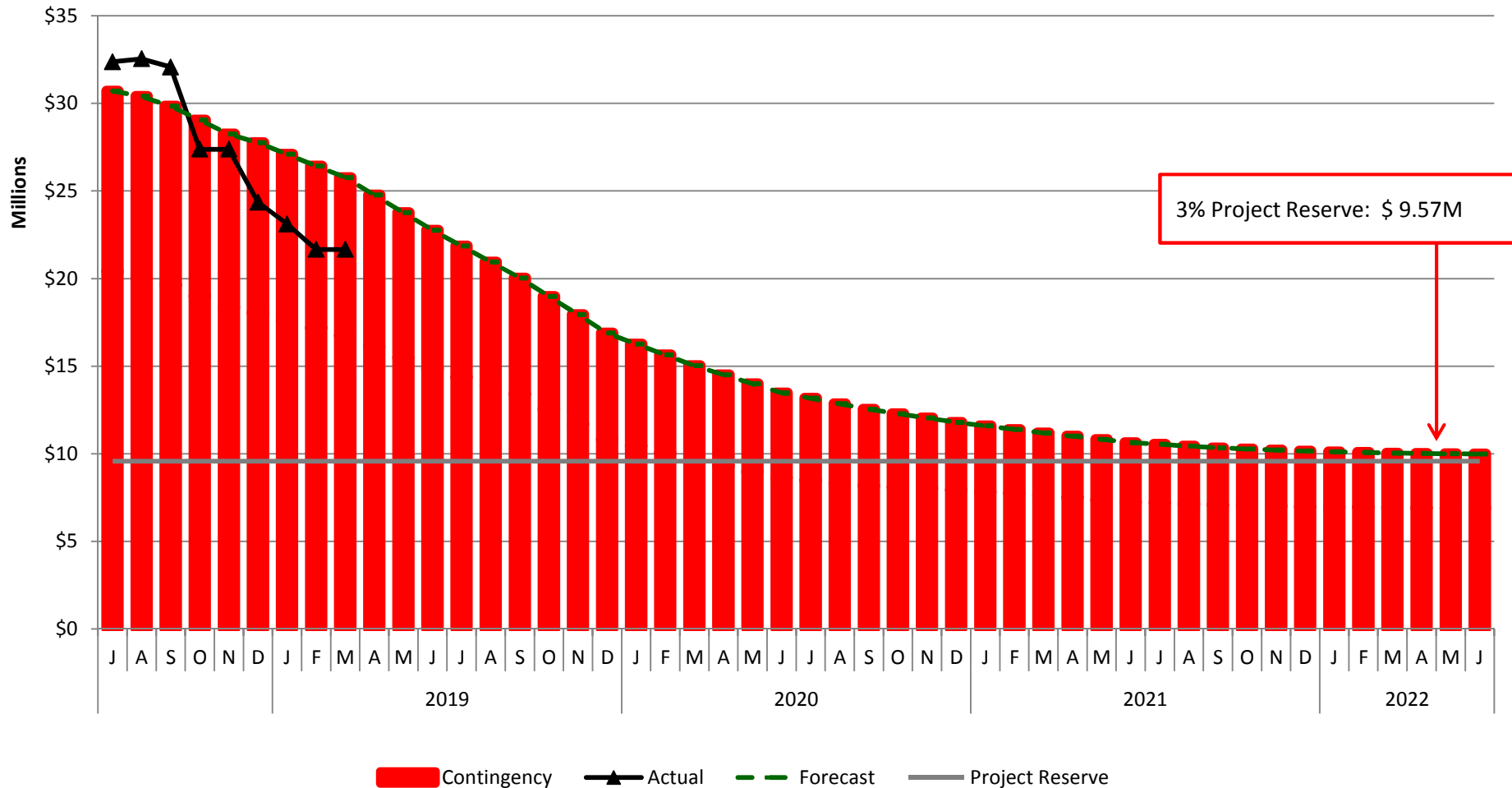
Project Cost Contingency Drawdown

February 2019



New Blue Projects

Project Cost Contingency Drawdown



- Blue Line Signal Rehabilitation
- Blue Line Track and System Refurbishment
- Willowbrook/Rosa Parks Station



Board Report

File #: 2019-0168, **File Type:** Informational Report

Agenda Number: 27.

**CONSTRUCTION COMMITTEE
APRIL 18, 2019**

SUBJECT: PROGRAM MANAGEMENT QUARTERLY CHANGE REPORT

ACTION: RECEIVE AND FILE

RECOMMENDATION

RECEIVE AND FILE status report on 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 December 1, 2018 and February 28, 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 March 1, 2019 to May 31, 2019 and will be presented to the July 2019 Construction Committee.

ATTACHMENTS

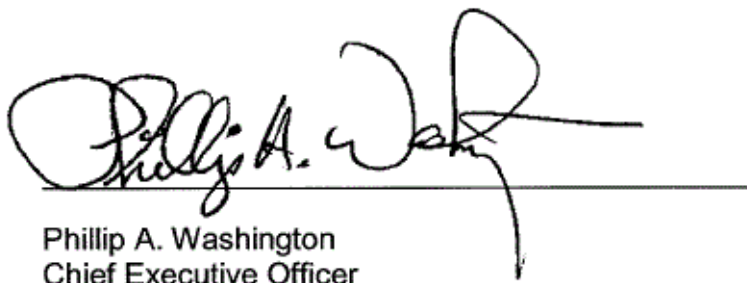
Attachment A - Quarterly Change Report for Reporting Period of December 1, 2018 - February 28, 2019.

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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- **The New Blue** - Timothy Lindholm, EO Project Engr., (213) 922-7297
- **Patsaouras Plaza Busway Station** - 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 (December 1, 2018 - February 28, 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 (WSCC)

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in BOLD 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-00402	<u>Provisional Payments-Pending Dispute Resolution Fire Rated Cable Change Orders 46.5, 173.3, 175.3, 176.3 and 177:</u> The Work provides for installation of conduit and cable for the emergency ventilation and lighting systems. Metro and WSCC (Parties) enter into a written agreement regarding unilateral Change Orders 46.5, 173.3, 174.3, 175.3, 176.3 and 177.	7	12/14/2018	12/14/2018	N/A	\$15,000,000.00
MOD-00403	<u>Fire Hydrant (FH) Relocations FH COI Near La Brea and Settlement of Claims No. 67, 77 and 108:</u> Contractor shall provide all the labor, material and equipment to design and relocate Fire Hydrants in accordance with approved for construction design documents. The fire hydrant relocations are necessary to resolve conflicts with the street improvements required by the Cities of Los Angeles and Inglewood.	7	12/14/2018	1/19/2019	\$925,760.39	\$810,000.00

B. PROFESSIONAL SERVICES CONTRACT - Contract E0117 - MOTT MACDONALD, LLC

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

C. CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACT -

MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
	CONTRACT MC069 - STANTEC CONSULTING, INC.					
CN-00119 MOD-00018	<u>CONSTRUCTION MANAGEMENT SUPPORT SERVICE (CMSS) - ADDITIONAL FUNDING:</u> Revise current contract work order value for CWO16 Crenshaw/LAX from \$66,330,445.72 to \$83,991,492.35 by increasing \$17,661,046.63 to cover forecasted construction needs from March 1, 2019 through June 30, 2020.	5	12/14/2018	1/29/2019	N/A	17,661,046.60

D. 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 (December 1, 2018 - February 28, 2019)

A. DESIGN BUILD CONTRACT - Contract No. C0988 - WALSH SHEA CORRIDOR CONSTRUCTORS			
CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
MOD-00304	<u>Back Charge for Metro payments to COLA for in scope of contract TCO Services:</u> This credit change is to back charge WSCC for Traffic Control Officers (TCO) for the period of January 2014 thru June 30, 2017 (paid by Metro to LADOT per the Master Cooperative Agreement with City of Los Angeles.)	5	Credit between \$1M and \$5M
CO-00046.5	<u>Underground Conduit and cable for Emergency Ventilation and Emergency Lighting:</u> Metro will compensate WSCC for the additional shop drawing related costs; for preparing, researching and developing a viable solution related to the Underground Fire Rated conduit/cable work	7	Between \$500K - \$1M
CO-00129	<u>Elimination Of Crossover at Sta 56+57.50 (North of 104th Street):</u> Eliminate the crossover at Sta. 56+57.50, north of 104th (or sought of Aviation/Century Station) and provide a credit to Metro labor, material and equipment, testing and commissioning to furnish and install crossover.	6	Credit between \$500K - \$1M
CO-00173.6	<u>Fire Rated Conduit and Cable for Tunnel Emergency Lighting:</u> Provide procurement and construction of additional wires and junction boxes for intermediate metal and conduit for emergency lighting at underground tunnels.	4	Between \$1M and \$5M
CO-00175.3	<u>Underground Conduit and cable for Twenty (20) UG3 and UG4 Tunnel Booster:</u> WSCC and its subcontractors shall provide elements of the two (2) UG1 Gas Mitigation Fans (GMF) and the four (4) UG4 and sixteen (16) UG3 Tunnel Booster Fan (TBF) work Metro believes to be impacted by the UL 2196 delisting and includes authorization to begin procurement of materials and immediate construction thereof. In addition, this Change Order also considers the effects of RFSC #10 that is in the process of being approved by Metro's FLS Department (the AHJ).	4	Between \$500K - \$1M
CO-00209.1	<u>Preliminary 45 Day Acceleration:</u> Contractor shall accelerate schedule critical activities at specified locations over the next 45 days to benefit the project's schedule. The estimated period of performance is from Mar 12, 2018 to April 25, 2018. Contractor is behind schedule. Contractor and Metro have identified work activities to accelerate that will benefit the Project's schedule.	5	Between \$5M and \$10M
CO-00227	<u>Relocate 24" DWP Water Main at MLK Station - Construction:</u> Contractor shall provide all labor, equipment and materials needed to relocate the 24" water main at MLK Station per an alignment provided by Metro/DWP. Contractor shall use an approved DWP Water subcontractor for the work. Scope of work includes survey and traffic control as necessary.	1	Between \$500K - \$1M

B. PROFESSIONAL SERVICES CONTRACTS			
CHANGE NOTICE/ORDER #	DESIGN SERVICES DURING CONSTRUCTION - Contract No. AE47810E0128 - SECOTRANS, JOINT VENTURE	Change Type	Rough Order of Magnitude Cost
CN-00004 MOD-00004	<u>Crenshaw Design Services During Construction (DSDC):</u> Due to the specialty nature of Rail Systems work, it has been requested by the Crenshaw Project Management that consultant support is needed to support DSDC activities as they arise. Consultant shall provide DSDC support for the Crenshaw/LAX Transit Project (Crenshaw Project). Various rail systems disciplines listed in Contract No. AE47810E0128 may be utilized to complete this Scope of Work in support of the Crenshaw project until its completion, which is currently projected for 2019. The Consultant shall provide the support services as requested by the Crenshaw Project. See attached detailed Scope of Work (SOW).	4	Credit between \$500K - \$1M

REGIONAL CONNECTOR TRANSIT PROJECT

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (December 1, 2018 - February 28, 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
	None					

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 C0980 - Regional Connector Constructors

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
C0980-CN-00099	REVISE 2ND/HOPE STATION PEDESTRIAN- CONSTRUCTION: Construct the 2nd/Hope Pedestrian Bridge in accordance with revised design.	1	Between \$1M and \$5M
C0980-CN-00111	ADDITIONAL ACOUSTICAL TREATMENTS FOR AREAS NOT SPECIFIED IN THE PROJECT: Construct additional acoustical treatments in all stations beyond what was indicated in the Contract Documents. This change includes approximately 92,471 SF of additional acoustical treatments.	5	Between \$1M and \$5M
C0980-CN-00145	ADD WYE JUNCTION FAN PLANT - CONSTRUCTION: Construct an additional fan plant at the 1st & Alameda Junction (also referred to as the "wye") based on the following approved MODs: C0980-MOD 0033/CN 00053.2 Add "Wye" Junction Fan Plant Design Only and C0980-MOD 0087/CN-00108 Revision to Wye Junction Fan Plant Design. This work also includes the elimination of the previously designed eight tunnel booster fans with all associated mechanical, electrical and system components.	5	Between \$10M and \$15M
C0980-CN-00192	REVISE COMMUNICATION RADIO SYSTEM (CONSTRUCTION): Contractor shall provide all labor, materials, and equipment to construct the Revised Communications Radio System based on Mod 65/CN51.1 (Revised Communications Radio System - Design only).	5	Between \$1M and \$5M
C0980-CN-00195	TBM PIT INVERT REMOVAL: Contractor shall provide all labor, equipment, materials, and supervision to remove the concrete invert located in the TBM pit and prepare the area for backfill operations.	5	Between \$500K and less than \$1M
C0980-CN-00198	CONSTRUCT THE 2ND/BROADWAY STATION OVERBUILD LOAD TRANSFER SYSTEM: Contractor shall provide all labor, equipment, materials, and supervision to construct the entrance structure overbuild Load Transfer System as depicted on ECI 62, revised DU07 2nd/Broadway Station engineering plans.	5	Between \$1M and \$5M
C0980-CN-00199	INSTALLATION OF PILE GAP BACKFILL WALL AT ALAMEDA: Contractor shall provide all labor, equipment, materials, and supervision required to backfill the area between the back face of the permanent structure's wall and the existing support of excavation where the piles were require to be shifted due to utility conflicts within the Alameda Wye. The backfill will consist of 4000 psi concrete and should be formed to the top of permanent structure.	5	Between \$500K and less than \$1M
C0980-CN-00200	EASTSIDE ACCESS IMPROVEMENT PROJECT - ALAMEDA ESPLANADE: Contractor shall provide all labor, associated equipment, materials, and supervision necessary to construct the USDOT "TIGER"-funded Metro Eastside Access Improvement Project (EAIP) "Segment 2" improvements along Alameda Street between, along, and including the intersections of Alameda Street/1st Street, Alameda Street/Temple Street, and Alameda Street/Commercial Street. The subject improvements are described in the attached Contract AE11938 1ST/CENTRAL STATION IMPROVEMENT DESIGN SEGMENT 2 plans and specifications, developed and furnished separately by Metro's EAIP team. The Metro-furnished plans and specifications shall supersede those previously developed by the Contractor where overlap occurs. Project anticipates full reimbursement of cost incurred.	5	Between \$1M and \$5M
C0980-CN-00201	CONSTRUCT RACKING SYSTEM AND PARKING LOT IMPROVEMENTS AT THE LADWP DUCOMMUN YARD: Contractor shall provide all necessary labor, materials, equipment and supervision to construct the outdoor storage racking system and parking lot improvements within LADWP's Ducommun Yard facility, as depicted in the attached engineering plans. All engineering plans for this work will be furnished by Metro, stamped by Metro's professional engineer, and approved for construction by LADWP and Metro.	1	Between \$500K and less than \$1M

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	Approval Date	Contractor's	Approved Amount
N/A	EXTENSION OF MANGROVE LEASE WITH CITY OF LOS ANGELES	N/A	N/A	TBD	N/A	Between \$10M and \$15M
N/A	PERMANENT EASEMENT FOR FAN PLANT AT MANGROVE	N/A	N/A	TBD	N/A	Between \$1M and \$5M
N/A	MITIGATIONS FOR ENCROACHMENT UPON LADWP SERVICE FACILITIES	N/A	N/A	TBD	N/A	Between \$1M and \$5M
N/A	PERMANENT EASEMENT FOR PLACEMENT OF MSE WALL AND BRIDGE RAMP ONTO LADWP PROPERTY	N/A	N/A	TBD	N/A	Between \$1M and \$5M

WESTSIDE PURPLE LINE EXTENSION - SECTION 1 PROJECT

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (December 1, 2018 - February 28, 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 (STS), A JOINT VENTURE

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in BOLD fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
MOD-71	<u>Golder Gas Investigation and Report</u> : Change to accommodate additional geotechnical field work, analysis and investigation.	5	11/20/18	12/17/2018	\$831,028.00	\$787,979.00
MOD-72	<u>Tunnel Reach 3 Additional Gas Testing and Assessment</u> : This MOD covers the costs for the Contractor to conduct additional gas testing to determine the extent and efficiency of the contractors proposed methods of extraction.	7	01/14/19	1/30/2019	\$2,060,221.00	\$1,697,789.00
MOD-74	<u>Additional Instrumentation (Project Wide) as requested by LABOE and STS Engineer of Record (EOR)</u> : This change accommodates the additional instrumentation required to help mitigate any risks associated with the potential of higher than predicted groundwater related settlement. This instrumentation has been requested by both the Design-Builder and LABOE.	5	02/08/19	2/28/2019	\$3,997,241.00	\$2,819,620.00

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

	None					
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II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K (December 1, 2018 - February 28, 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-43.5	<u>Isolate Ansaldo and Alstrom Track Circuits @ Wilshire/Western - Part 1</u> : The Contractor will provide a separation between Ansaldo and Alstrom Track Circuits at the Wilshire/Western and Wilshire/Normandie Train Control territories. This change avoids potential safety hazards related to track circuit failures when equipment is mixed between two different manufacturers.	7	Between \$500K - \$1M
CN-66	<u>La Brea - Additional Dewatering Treatment and Discharge Costs</u> : The Contractor has encountered two different 'Differing Site Conditions' (DSC) that have resulted in additional costs to operate and maintain the dewatering systems.	5	Between \$5M - \$10M
CN-68	<u>Increased Ventilation of Station Ancillary Rooms</u> : Change to increase the ventilation requirements at the station stairs and corridor areas to accommodate surrounding soils.	5	Between \$1M - \$5M
CN-77.1	<u>Additional Interpretation for Building Settlement</u> - Project Wide: The additional instrumentation required by Metro and LABOE will require additional reporting and analysis by the contractor. This change will accommodate the additional analysis and reporting.	5	Between \$1M - \$5M
CN-78.1	<u>Fairfax - DWP Ductbank Conflicts with Deck Beams</u> : The location of LADWP ductbanks at Wilshire/Fairfax Station were higher than indicated on the as-built drawings. This change accommodates the mitigation efforts needed to remediate the higher ductbank.	5	Between \$500K - \$1M
CN-79	<u>Western - Property Status Change (Fee to TCE) Impacts, Parcel W-0103</u> : Accommodates the change in parcel handoff status from a 'Fee Take' to a 'Temporary Construction Easement' (TCE).	5	Between \$500K - \$1M
CN-80.1	<u>Wilshire/La Cienega - Emergency Generator Enclosure (Design and Construction)</u> : This change allows the contractor to design and install the materials and equipment necessary to improve the aesthetics around the Wilshire/La Cienega Station stand-by generator. This CN is part an agreement with the City of Beverly Hills, and is not considered a betterment.	5	Between \$500K - \$1M
CN-83	<u>Western - Additional Dewatering and Treatment</u> : To accommodate the higher than expected groundwater inflows experienced at the Wilshire/Western shaft.	5	Between \$1M - \$5M
CN-84	<u>Western – Impacts from Metro SOE Deviation Request</u> : Provides new/revised criteria that the Contractor must now use for the design and evaluation of the Support of Excavation (SOE) for the Wilshire/Western Retrieval Shaft.	5	Between \$500K - \$1M
CN-87	<u>La Brea - Bracing Impacts due to DWP ductbank (ECI-004)</u> : Accommodates the re-installation of four struts at Wilshire/La Brea Station due to conflicts with the existing electrical ductbanks.	5	Between \$1M - \$5M
CN-93	<u>La Brea - Center Access Shaft - Design and Construction Costs (incl ECI-003)</u> : Construction of a central muck shaft on Wilshire Blvd at La Brea Station to help increase station excavation rates and facilitate material placement.	5	Between \$500K - \$1M

CN-99	<u>Oil Well Horizontal Investigation in lieu of TBM Probe-ahead</u> : Change to accommodate horizontal directional drilling to locate abandoned oil wells.	5	Between \$1M - \$5M
CN-122	<u>Alternative Soil Disposal</u> : This change covers the additional fees for the disposal of clean and contaminated non-hazardous soils due to the change in the Conditional Use Permit (CUP) by the County of Los Angeles.	5	Between \$5M - \$10M
CN-126	<u>Fairfax Paleo Zone Modified Limits</u> : The contract required that Fairfax Station excavation in the identified Paleo zone be restricted to 6 inch lifts to allow for identification and protection of any Paleo artifacts. The actual paleo zone identified by the Metro paleontology consultant was more extensive than anticipated in the base contract.	3	Between \$1M - \$5M
TBD	<u>Western -Systems - ROC CTS Equipment</u> : This CN allows the contractor to install the equipment required to integrate the existing Emergency Management System (EMS) at Wilshire/Western and Wilshire/Normandie Stations with the WPLE Section 1 project. This scope of work was previously to be performed by Metro Operations.	5	Between \$500K - \$1M
TBD	<u>Track Crossovers - Construction</u> : Metro provided the contractor with a revised double crossover geometry to include into the base scope of work. This change accommodates the costs associated with installing the fully guarded crossover.	5	Between \$500K - \$1M
TBD	<u>Isolate Track Circuits at Wilshire/Western Part 2</u> : This change has been implemented to avoid potential safety hazards related to track circuit failures when equipment is mixed between two different manufacturers.	7	Between \$500K - \$1M
TBD	<u>Wayside Signage - Additional Design / Fabrication / Installation</u> : This change accommodates the revisions that need to be made so that the WPLE Section 1 signage is consistent with Metro signage standards.	5	Between \$1M - \$5M
TBD	<u>La Cienega - Dewatering DSC (Letter 663)</u> : This change covers Differing Site Conditions (DSC) related to groundwater dewatering at the La Cienega Station site.	3	Between \$1M - \$5M

A. CONTRACT NO. C1078 - CLARK CONSTRUCTION GROUP

CN-28	<u>Revised Low Impact Development (LID) Construction</u> : Two (2) contaminated groundwater plumes were discovered under the Location 64 site. To avoid further contamination of the local ground water, the design-builder was directed to revise the LID design.	3	Between \$500K - \$1M
TBD	<u>Revised Metro IT & AV Work</u> : The Metro IT standards included in the 2014 C1078 Preliminary Design Documents (PDD) have been replaced by an updated version.	5	Between \$500K - \$1M

B. PROFESSIONAL SERVICES CONTRACTS

CHANGE	DESCRIPTION	Change Type	Rough Order of Magnitude
	None		

C. CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS

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

WESTSIDE PURPLE LINE EXTENSION - SECTION 2 PROJECT

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (December 1, 2018 - February 28, 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 BOLD fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
MOD-00032	<u>Environmental Impairment Liability Site Coverage Insurance</u> : Contract C71493000C1120 Special Provisions Article SP-6, Insurance Requirements, provides that the Contractor shall bind an Environmental Impairment Liability Site (Pollution Legal Liability) Insurance policy within 60 days of Metro issuance of a Change to the Contract. Metro has now determined that this policy will be beneficial to the Purple Line Extension Section 2 Project and should be implemented.	5	12/28/18	1/25/2019	\$562,854.00	\$562,854.00

B. PROFESSIONAL SERVICES CONTRACT

MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
MOD-00067	Continuation of Engineering Support Services During Construction	5	1/25/2019	2/28/2019	\$13,656,522.00	\$11,996,369.00

II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K (December 1, 2018 - February 28, 2019)

A. DESIGN BUILD CONTRACT - C1120

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
CN-00034	<p><u>Station and Bicycle Parking Architectural Features Design and Construction changes at WR and CCC Stations:</u> This change was requested by Metro Planning. Several architectural updates have been made to the Metro Rail Design Criteria (MRDC) since the version that was included in the C1120 Contract. Some of these architectural updates are now incorporated into the final design of the stations on the Westside Purple Line Extension Section 1. This change notice provides clarifications to the station and bicycle parking architectural requirements that allow the final design to be consistent with recent updates to the MRDC, with WPLE1, and with the latest Metro Bike Hub System.</p>	5	Between \$500K and \$1M
CN-00035	<p><u>Revision to Average Depth of Seismic Borings Along Wilshire Blvd. on Tunnel Reach 5:</u> The 20 planned and required borings were divided into two phases consisting of 10 borings each. The borings in Phase 1 are now complete. The findings from Phase 1 were then used to refine the proposed depths and locations of the remaining Phase 2 borings. The total number of borings remains the same, but the average depth was increased by 50 feet. This change is necessary in order to complete the geotechnical investigation needed to determine the potential placement of additional special tunnel liner. Metro benefits because the new average depth will improve our ability to find critical information about where and how the seismic fault may cross the WPLE2 alignment at a different location.</p>	5	Between \$500K and \$1M
CN-00042	<p><u>Changes to Enclosed Bicycle Parking and Map cases at Wilshire/Rodeo and Century City Stations:</u> Design and Construction: These changes were requested by Metro Planning. The new data and communications provisions to all map cases have been incorporated into the latest version of the Metro Rail Design Criteria (MRDC) and have also been incorporated into the final design of the stations on WPLE1. As for the Bike Hub, the latest MRDC lacks adequate specifications to design and construct the security access control. In addition, recently opened Bike Hubs and new Bike Hubs under design are incorporating the design requirements provided in this Change Notice. Therefore, this change notice is necessary to provide direction and performance requirements that allow the final design to be consistent with recent updates to the MRDC, with WPLE1, and with the latest Metro Bike Hub System.</p>	5	Between \$500K and \$1M
CN-00045	<p><u>Century City Constellation Station Main Entrance - Construction:</u> When the Project Definition Documents (PDD) were prepared, JMB's proposed development did not have a clear and definitive scope. JMB subsequently developed their plans, closely coordinated with Metro, and the final location of the entrance to the Century City Constellation Station and related easement on JMB's property was established. The revised entrance brings benefit to Metro by requiring less real estate acquisitions costs and by utilizing a smaller area more efficiently to provide a sufficient entrance plaza for users. It also provides an enhanced and well defined bike hub.</p>	5	Between \$5 and \$10 Million
CN-00047	<p><u>Century City Constellation Station West Ancillary and OPE Reconfiguration - Construction:</u> The Project Definition Documents (PDD) included Over Platform Exhaust (OPE) with grate locations shown on private property (across from Solar Way, north of Constellation Boulevard). This would have required acquisition of an easement agreement from Westfield Mall. As a result of updated MRDC design criteria, it is now possible to reconfigure the OPE appendages and grates to be located in sidewalks of Constellation Boulevard. This eliminates the need for an easement and reduces the construction costs. It removes 270 ft of air plenum and adds a 67 ft high vertical shaft. The station end wall is squared off and the full depth station excavation/construction is reduced by approximately 80 ft over BR track and 6 ft over BL track. It also includes interchanging the ancillary power room with the battery room, and moving the mechanical room to the concourse level. This change benefits Metro by eliminating installations on private property and interaction with Third Parties.</p>	5	TBD Credit

CN-00054	<u>MOA Work Hour Requirements For Fault Investigation Borings</u> : The City of Beverly Hills permit for fault investigation borings incorporated revised requirements for hours of work and holiday moratorium which were not in the original contract	2	Between \$500K and \$1M
CN-00055	<u>Century City Constellation Station West Ancillary and OPE Reconfiguration</u> : This change is in support of Change Notice 1 (C1120-CN-00001.1), Contract Modification 2 (C1120-MOD-00002) Constellation Station West Ancillary & OPE Reconfiguration. CN-00001.1 provided for relocating the OPE gratings from Westfield Mall private property (Parcel W-3903) to be within public right of way. The relocated OPE has been found to conflict with a 42-inch storm drain. This Change Notice provides for maintaining a corridor for the storm drain.	5	Between \$500K and \$1M

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
TBD	<u>Temporary Right of Entry</u> - This agreement is to grant temporary access prior to obtaining an executed temporary construction easement (TCE) for the AT&T property located at 2010 Century Park East. Once the TCE is executed, access to the site would be available for the duration of the Project.	2	Between \$500K and \$1M

WESTSIDE PURPLE LINE EXTENSION - SECTION 3 PROJECT

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (December 1, 2018 - February 28, 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 <small>(if the change is a unilateral, explain in BOLD fonts)</small>	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
None						

A. DESIGN BUILD CONTRACT - C1153						
MOD/CHANGE #	DESCRIPTION <small>(if the change is a unilateral, explain in BOLD fonts)</small>	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
None						

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

II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K (December 1, 2018 - February 28, 2019)

A. DESIGN BUILD CONTRACT - C1151

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
CN-01	<u>Revise the Tail Track Exit Shaft Location from the U.S. Army Reserve to the Veterans Affairs (VA) Property:</u> Metro requested this change based upon the Department of the Army declining Metro's request for easement at the U.S. Army Reserve, required for the Tail Track Exit Shaft as part of the tunnel construction operations. The U.S. Army Reserve requested the VA's determination of their ability to accommodate Metro's proposed facilities on the VA property. Metro provided a memo to the VA, outlining alternatives for the location of the shaft and tunnel construction staging areas on the VA property. A letter from the VA stated that the VA could accommodate tunnel construction operations on the western edge of the VA property provided that the only permanent Metro presence within the VA Historic District is the access shaft and associated surface exit hatch and surface ventilation plenums. Therefore, Metro must revise the Contract Documents to relocate the Tail Track Exit Shaft to complete the tunnels.	5	Between \$1 to \$5 million
CN-02	<u>Revisions to Southern California Edison (SCE) Power Connection:</u> This change is necessary because Metro was required to move the construction staging area and Tail Track Exit Shaft from the U.S. Army Reserve site to the Western VA Construction Staging Area (refer to CN-001). In addition, SCE changed their original scheme to require the entire conduit run along Federal Ave to be underground to enhance reliability of the power that will be provided to Metro and the C1151 Contractor. LA County requested that Metro not disturb Federal Ave twice for the Purple Line construction so that they can perform street/pavement work on Federal Ave sometime after the SCE power connection is installed for C1151. Combining the conduits in one trench will also reduce disturbance to the surrounding community. Additional information on existing utilities shows that there is insufficient space along the north side of Ohio Ave to accommodate the conduit, so the conduit alignment is moved closer to the center of the street. Therefore, Metro must revise the Contract Documents for the SCE power connection.	5	Between \$1 to \$5 million

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 (December 1, 2018 - February 28, 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 - Mass Electric

MOD/CHANGE #	DESCRIPTION <small>(if the change is a unilateral, explain in BOLD fonts)</small>	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
MOD 2 (CN-005)	<p><u>Willowbrook/Rosa Parks Train Control (TC) Modifications -</u> Extension of the Blue Line Platform is forcing the systems components to be moved. Staff will issue a Contract Modification to the existing Resignalling Contract C1081 to perform system-related work <u>after</u> the Blue Line Platform is extended by Contract C1161. Work is being done under Contract C1081 because Contract C1161 does not have the expertise to perform the necessary systems-related work.</p> <p>Work will be paid using Project 210151 not 205108.</p>	5	6/22/2018	6/22/2018	\$636,305.00	\$636,305.00

II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K (December 1, 2018 - February 28, 2019)

A. DESIGN BUILD CONTRACT - Contract C1081 Metro Blue Line Resignalling - Mass Electric			
CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
CN-006 (Replaces CN-4 which was cancelled - there is no CN-5)	<u>Train Control at Florence C&S Bungalow –</u> This CN is for Modifications on the Train Control Scope to include the installation of the clean agent fire suppression system in the new train control bungalows. Documents affected: Scope Modifications to Section 01 11 00 of the Scope of Work, Subsection 1.03.A.3	5	\$1,200,000.00

B. PROFESSIONAL SERVICES CONTRACTS			
CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
SECOTRANS - Task Order 6	Design Support During Construction	5	\$1,400,000.00

C. CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS			
CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
Destination Enterprises - Task Order 22 Modification 4	Provide safety specialists and flaggers.	7	\$900,000.00

METRO BLUE LINE - TRACK AND SYSTEM REFURBISHMENT PROJECT

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (December 1, 2018 - February 28, 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 C1168 Metro Blue Line Track Refurbishment

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in BOLD fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
Mod 2 / CN-2	<p><u>Order Quantities for Summary of Work Spec Section 1.02E, 1.02F, 1.02G, 1.02 I.2 , 1.02 I.3., 1.02 I.4, and 1.02N -</u> This CN is for modifications for Metro to order specified quantities of the following items: 1) Provide 20,140 tracks fasteners and install 20,008 track fasteners 2) Construct 16,870 LF of fall prevention railings on all existing structures at Slauson, Rosecrans, Domingues, Del Amo, 710 FWY 3) Complete 89,250 LF of Overhead Catenary System (OCS) refurbishments 4) Perform all new station signage upgrades at Lump Sum price</p>	5	12/06/18	1/29/2019	\$18,251,899.00	\$18,251,899.00
Mod 3 / CN-11	<p><u>Add Angle Iron at Rail Rebooting</u> Add scope in the Contract Summary of Work Spec Section 01 11 00- 1.03 (Project Elements), sub section, A, Item 1, letter i. i. Using new clips and rubber insulating boot, install running rail in accordance with specification section 34 11 00. Contractor to install standard rail boot protection angle iron on both sides of the rail and flangeway at all grade crossings, except pedestrian crossings. See Section 01 12 19 for materials supplied by Metro. Contractor shall supply all other material necessary to complete work.</p>	5	1/24/2019	2/8/2019	\$706,042.00	\$680,000.00
Mod 4 / CN-5 (Previously CO 2)	<p><u>Running Rail Replacement</u> This Change Order authorizes funding to assist the Contractor for procurement of materials to meet the project schedule. Modify Specifications Section 01 11 00 Paragraph 1.03-A.1 .h as follows (only final sentence is new): "h. Inspect rail and determine if existing rail is to be reused or if new rail is to be installed. The contractor should assume that 50% of running rail within work area will need to be replaced. See Section 01 1219 for material supplied by Metro. Contractor shall supply all other material necessary to complete work. Replacement rail shall be head-hardened and comply with the requirements of Section 34 11 13. Contractor shall purchase remaining 50% of running rail within work area."</p>	5	1/28/2019	2/8/2019	\$3,123,793.00	\$2,600,000.00

II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K (December 1, 2018 - February 28, 2019)

A. DESIGN BUILD CONTRACT - Contract C1168 Metro Blue Line Track Refurbishment

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
CN-9	<u>Pole Painting – City of Long Beach</u> The contractor shall paint the street light and traffic signal poles south of East Willow Street along the Blue Line alignment as detailed in the below “City of Long Beach Pole Count” table (count to be field verified by contractor) and in accordance with Technical Requirements Section 09 91 00 “Painting.” Contractor shall use approved primer, Vista Prime Zall, and paint (two (2) coats), Vista Protec Alkyd Emulsion 99 Gloss Finish in color RAL 7037.	5	\$600,000.00
CN-10	<u>Pole Painting – City of Long Beach</u> The contractor shall paint the street light and traffic signal poles south of East Willow Street along the Blue Line alignment as detailed in the below “City of Long Beach Pole Count” table (count to be field verified by contractor) and in accordance with Technical Requirements Section 09 91 00 “Painting.” Contractor shall use approved primer, Vista Prime Zall, and paint (two (2) coats), Vista Protec Alkyd Emulsion 99 Gloss Finish in color RAL 7037.	5	\$600,000.00

B. PROFESSIONAL SERVICES CONTRACTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
SECOTRANS - Task Order 12	Design Support During Construction	5	\$1,500,000.00

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 (December 1, 2018 - February 28, 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 BOLD fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
	None					

B. PROFESSIONAL SERVICES CONTRACTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Rough Order of Magnitude Cost
AE419800011791 Mod 10	Design Support During Construction (STANTEC RNL)	5	08/08/18	1/9/2019	\$1,720,114.00	\$1,715,914.00

II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K (December 1, 2018 - February 28, 2019)

A. DESIGN BUILD CONTRACT - Contract C1161 - Icon West

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
CN 2.1	<p><u>Updated Design Drawings and Technical Specifications</u></p> <p>In conformance with the documents dated June 29, 2018, the Contractor shall proceed with 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 updated package includes revisions to various sections in the Drawing package and Technical Specifications, including structural, civil-site, architectural, signage, electrical, and plumbing.</p>	5	\$590,000.00

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		

PATSAOURAS PLAZA BUSWAY STATION PROJECT

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (December 1, 2018 - February 28, 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 - C0970 Patsaouras Plaza Busway Station - OHL

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

II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K (December 1, 2018 - February 28, 2019)

A. DESIGN BUILD CONTRACT - C0970 Patsaouras Plaza Busway Station - OHL

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
Settlement – CN or Mod number not yet assigned	<u>Settlement of Claim for the Work Stoppage -</u> This settlement will result in a modifications to Contract C0970 to compensate OHL for the following items: 1) OHL's work stoppage due to environmental concerns 2) Escalation 3) Global Impacts and Inefficiencies 4) Claims filed before the work stoppage	5	\$5,400,000.00

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		



Board Report

File #: 2019-0007, **File Type:** Informational Report

Agenda Number: 28.

**CONSTRUCTION COMMITTEE
APRIL 18, 2019**

**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

I. SUMMARY

The OIG has developed a spot check program (“Spot Checks”) that primarily focuses on approved Change Orders and Modifications that exceed \$1 million. The Change Orders in this report were selected from the April 2019 Program Management Major Project Status Report (File # 2019-0168), covering December 2018, January and February 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.

The OIG has reviewed six Change Orders for the period of December 1, 2018, to February 28, 2019; two processed from Crenshaw/LAX, three from Purple Line Extension Section 1, and one from Westside Purple Line Extension Section 2. For this quarter, Regional Connector did not report any Change Orders above \$500,000.

We found that four of the Change Orders in this report were negotiated and executed faster than the former Board approval process would have taken, and all six were executed faster with the new delegation of authority. In addition, the negotiated cost for two Change Orders were equal to or lower

than Metro's Independent Cost Estimate (ICE) and two were higher than the ICE, but all four were lower than the contractor's proposed price. Two change orders did not have contractor's proposal or ICE. For the Change Orders/Modifications the OIG reviewed this quarter, the Spot Checks have shown that the delegation of authority has, in certain cases, resulted in:

- A negotiated amount that was reasonable for the work to be done,
- Allowing the contractor to immediately order parts and materials,
- Consultant had no overlap in schedule and was able to continue working, and
- Zero Construction delay costs.

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. The separate spread sheet of Recommendations and Responses is not included in this April report, but will be in the July 2019 report.

DISCUSSION

II. 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-00402), Provisional Payments - Pending Dispute Resolution Fire Rated Cable (multiple) Change Orders.

Facts of Change Order

See Attachment A Spot Check #1 chart.

Summary #1

Scope of Work - In the last few years, beginning in January 2016, multiple Change Notices progressed into Change Orders to fund the electrical portion, more particularly the Emergency Ventilation, Emergency Lighting Systems, and the Fire Rated Cables for the Crenshaw Project. The multiple Change Orders are combined under this Modification. Previous funds were paid by Metro to purchase materials, avoid delays, and commence construction. However, agreements on labor rates, details of quality, rights and liabilities are still in dispute between Walsh Shea (the "Contractor") and the subcontractor. At this time a definitive written bilateral contract modification has not been agreed upon. Metro is willing to assist the contractor/subcontractor, with their cash flow in the

interest of project completion while a final resolution is pending. Terms and conditions have been reached whereby Metro shall advance payments to assist with their cash flow up to \$15 million.

Certain performance criteria must be met to receive a cash flow payment. The cash flow payments are advances, over and above the amounts payable for the performance of the work. The performance requirement is that Metro will make a cash flow payment for accomplishment of expedited electrical work. The expedited work is demonstrated by approved invoices for electrical related work in an amount that exceeds \$2 million in a month, with a cap of \$2 million in extra cash flow payment in that month (for example, if completed work is demonstrated in the amount of \$3 million in invoices, Metro will pay a \$1 million cash flow payment). Any month that the value of work performed is less than \$2 million no additional cash flow payment shall be made because no expedited work was performed in that month. This is the incentive to complete the work on an expedited basis. All cash flow payments are advances, and credited against any amount that may be owed when claims are settled between Metro and the Contractor on this project.

Budget - The \$15,000,000 is a separate contract Modification, above and beyond the multiple Change Orders and unilateral Change Orders which total \$5,435,471 (as of December 2018, \$1,993,568 has been paid). The first payment will be in the amount of \$5 million and subsequent months would be based on approved billing exceeding \$2 million in electrical work. Metro will make a payment for the approved amount that exceeds \$2 million with a cap of \$2 million in cash flow payments for that month.

Schedule - The new delegation process was utilized for this Modification which was executed on December 13, 2018. The negotiations began a two years ago and multiple unilateral Change Orders have not resolved the electrical construction issues. Since the execution of this \$15,000,000 incentive to perform work, the prime contractor has hired additional electrical subcontractors to expedite finishing the work. It has been reported, by Metro management, visually there are numerous amounts of electricians now working on the project.

Recommendation

1. The OIG recommends that Metro expeditiously and fairly resolve the dispute 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.

B. Spot Check #2 - Crenshaw/LAX Transit Project

This OIG Spot Check report concerns the Crenshaw/LAX Transit Corridor Project (Contract C0988 MC069-16-MOD-00018), CWO 16 Construction Management Support Service (CMSS) - Additional Funding.

Facts of Change Order

See Attachment A Spot Check #2 chart.

Summary #2

Scope of Work - Funds for this Change Order are within the approved Life-of-Project budget for Crenshaw. By creating different phases for support and award, the CMSS contract allows the funds to be utilized based on evolving needs. This Modification will support the Construction Management services for the period March 1, 2019 through June 30, 2020. The consultant, Stantec has been providing field and office construction support on this project and will continue to do so, in the same manner, until the end of fiscal year 2020.

Budget - The current contract value for the Crenshaw Contract Work Order C0988 MC069-16, is \$66,330,445.72. This is an increase of \$17,661,046.63 for a total of \$83,991,492.35. This increase is based on the forecasted construction needs. Funds for this change are within the approved Life-of-Project budget.

Schedule - The new delegation process was utilized for this Modification. The Modification was executed on January 29, 2019. There are no days saved by the use of the new delegation process because this is an on-going contract. The consultant did not have a break in schedule and continues to provide construction support services.

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-00071), Golder Gas Investigation and Report.

Facts of Change Order

See Attachment A Spot Check #3 chart.

Summary #3

Scope of Work - Modification 71 is to perform supplementary investigation and assessment of identified occurrences of concentrations and volumes of hydrogen sulfide and methane gases in the area of the intersection of Crescent Heights Blvd and Wilshire Blvd. The report shall provide a technical approach of procedures for executing gas zone delineation, installation, and pilot testing of soil vapor extraction. MOD-71 and MOD-72 are a two phase project to conduct additional subsurface investigations. MOD -71 researches and develops a mitigation plan for the geotechnical investigation and implementation of phase two (MOD-72).

The contract states the contractor needs to be prepared for gassy soils, and Metro provided both Geotechnical Baseline and Geotechnical Data Reports. This Modification was out of scope because the original scope of work did not include mitigation of gas migration. The project deemed it valuable to further investigate this particular gas area and develop means and methods for mitigating any gas migration considered to be above acceptable Cal/OSHA levels.

Budget - The award amount for this Modification is \$787,978. The contractor's proposal was

\$831,028 and the ICE was \$749,974. The award amount was \$43,050 or 5.2% below the contractor's proposal, and the negotiated award was \$38,004 or 5.1% above the ICE amount.

Schedule - The new delegation process was utilized for this Modification. The agreed upon scope of work occurred on November 5, 2018, and the Modification was executed on December 17, 2018, which was done in 29 work-days. If this Modification had gone to the Board, it would have been on the January 2019 agenda which would be 55 work-days later. The subcontractor was able to immediately begin the research and develop the report with the approval of the scope of work.

Recommendation

The OIG recommends that Metro continue to follow through the plan for mitigation of gas migration utilizing the contractor's new report of procedures where known concentrations of hydrogen sulfide and methane gases exist.

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-00072), Reach 3 Additional Gas Testing and Assessment.

Facts of Change Order

See Attachment A Spot Check #4 chart.

Summary #4

Scope of Work - This Modification is part two of a two phase project to conduct additional subsurface investigations. MOD-71 researched and developed a mitigation plan, and now MOD-72 implements the geotechnical investigation, collecting data from the monitoring vaults, and gathering of soil vapor extractions. After all data has been collected, evaluation is to take place with the "Gas Task Force Workshop (#4)" to present findings and finally the "Gas Task Force Workshop (#5)" to develop a schedule and present Mitigation Plan for Gas Migration during Tunneling.

Budget - The award amount for this Modification is \$1,697,789. The contractor's proposal was \$2,060,221 and the ICE was \$1,511,708. The award amount was \$362,432 or 17.6% below the contractor's proposal, and the negotiated award was \$186,081 or 12.3% above the ICE amount.

Schedule - The new delegation process was utilized for this Modification. The agreed upon scope of work occurred on January 9, 2019, and the Modification was executed on January 30, 2019, which was done in 15 work-days. If this Modification had gone to the Board, it would have been on the March 2019 agenda which would be 54 work-days later. The contractor was able to immediately begin the testing of gases by the end of January. No construction work-days were missed.

Recommendation

The Project Management team has noted on the Data Sheet that Lessons Learned was, "Complete gas study around the tunnel bore envelope must be done prior to bid especially when there is a high reading of potentially harmful gasses."

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.

E. Spot Check #5 - Purple Line Extension Section 1 Transit Project

This OIG Spot Check report concerns the Purple Line Extension Section 1 Transit Project (Contract C1045 MOD-00074), Additional Instrumentation (Project Wide) as requested by LABOE and STS EOR.

Facts of Change Order

See Attachment A Spot Check #5 chart.

Summary #5

Scope of Work - This Modification 74 is similar to the Construction Spot Check written for October 2018, report, to purchase and install additional instrumentation that detects settlement. Settlement due to dewatering was found to be in excess of the original Metro design criteria, original design, and calculations. The Metro has new/revised criteria that the Contactor must now use for the design and evaluation of the Support of Excavation for the Project. Because the design builder has predicted more settlement than expected, additional instrumentation has been required to help mitigate any risks associated with this settlement. Under this Modification, additional instrumentation shall be purchased (pursuant to request of City of Los Angeles), installed, monitored, and removed. The instrumentation will electronically measure and record elevation changes.

Budget - The award amount for this Modification is \$2,819,620. The contractor's proposal was \$3,997,241 and the ICE was \$2,834,865. The award amount was \$1,177,621 or 29.4% below the contractor's proposal, and the negotiated award was \$15,245 or 0.54% under the ICE amount.

Schedule - The new delegation process was utilized for this Modification. The agreed upon scope of work occurred on January 15, 2019, and the Modification was executed on February 28, 2019, which was done in 33 work-days. If this Modification had gone to the Board it would have been on the March 2019 agenda which would be 52 work-days later. The contractor was able to immediately begin ordering the additional testing equipment in March. No work-days were reported lost.

Recommendation

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 assuming the equipment remains in usable condition for future use.

F. Spot Check #6 - Purple Line Extension Section 2 Transit Project

This OIG Spot Check report concerns the Purple Line Extension Section 2 Transit Project (Contract MC072 MOD-00001), Continuation of Engineering Support Services During Construction for WPLE Sect. 2.

Facts of Change Order

See Attachment A Spot Check #6 chart.

Summary #6

Scope of Work - This Modification allows for the Construction Management Support Services (CESS) to continue for 2 years (FY19 & FY20) for the Purple Line Section 2 Project. This staff augmentation is to hire additional experts to support the construction. By creating different phases for support and award, the CMSS contract allows funds to be utilized based on evolving needs.

Budget - This Modification was negotiated and the award is \$11,996,369. The contractor's proposal was \$13,656,522 and the ICE was \$13,360,965. The award amount was 1,660,153 or 12.2% less than the contractor's proposal. The negotiated amount was \$1,364,596 or 10.2% less than the ICE.

Schedule - The new delegation process was utilized for this Modification. The agreed upon scope of work occurred on January 25, 2019. The Modification was executed on February 28, 2019, and was completed in 24 work-days. If this Modification had gone to the Board, it would have been on the March 2019 agenda which would be 39 work-days later. No days were saved by the use of the new delegation process because this is an on-going contract for construction support services.

Recommendation

None.

FINANCIAL IMPACT

The financial impacts are the expenditures from the Projects reserves as follows:

- Spot Check #1) \$15,000,000.00
- Spot Check #2) \$17,661,046.63
- Spot Check #3) \$ 787,978.00
- Spot Check #4) \$ 1,697,789.00
- Spot Check #5) \$ 2,819,620.00
- Spot Check #6) \$11,996,369.00

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 focuses on 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, more particularly focusing on lessons learned, improving

efficiencies, and prudent spending. Our goal is to provide rational, trustworthy information to the Board. 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 July.

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 January and April, will be in the OIG July 2019 report.

ATTACHMENTS

Attachment A - Charts for Spot Checks

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-00402</u> Provisional Payments – Pending Dispute Resolution Fire Rated Cable (multiple) Change Orders	
<u>Change Order Dates:</u>	
Scope of Work approved	Dec, 5, 2018
Modification Executed	Dec. 13, 2018
<u>Elapsed Time for Executing Change Order:</u>	
Using new delegated process	0 work days
Estimate using former Board approval process	0 work days
<u>Cost of Change Order:</u>	
Metro independent cost estimate (ICE)	N/A
Contractor's proposed cost	N/A
Negotiated amount	\$15,000,000
Negotiated amount over ICE	N/A
Percentage of negotiated amount over ICE	N/A

Spot Check #2 - Crenshaw/LAX Transit Project - Contract C0988**Facts of Change Order**

<u>Description of Modification MC069-16-MOD-00018</u> CWO 16 Construction Management Support Service – Additional Funding	
<u>Change Order Dates:</u>	
Scope of Work approved	Dec. 14, 2018
Modification Executed	Jan. 29, 2019
<u>Elapsed Time for Executing Change Order:</u>	
Using new delegated process	0 work days
Estimate using former Board approval process	0 work days
<u>Cost of Change Order:</u>	
Record of Magnitude (ROM)	\$17,950,000
Contractor's proposed cost	Original contract
Negotiated amount	\$17,661,046.63
Negotiated amount over ICE	N/A
Amount negotiated under Contractors proposal	Original contract

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

<u>Description of Modification MOD-00071</u> Golder Gas Investigation and Report	
<u>Change Order Dates:</u>	
Scope of Work approved	Nov. 5, 2018
Modification Executed	Dec. 17, 2018
<u>Elapsed Time for Executing Change Order:</u>	
Using new delegated process	12 work days
Estimate using former Board approval process	70 work days
<u>Cost of Change Order:</u>	
Metro independent cost estimate (ICE)	\$749,974
Contractor's proposed cost	\$831,028
Negotiated amount	\$787,978
Negotiated amount above ICE	\$38,004
Amount negotiated under Contractors proposal	\$43,050

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

<u>Description of Modification - MOD-00072</u> Reach 3 additional Gas Testing and Assessment	
<u>Change Order Dates:</u>	
Scope of Work approved	Jan. 9, 2019
Modification Executed	Jan. 30, 2019
<u>Elapsed Time for Executing Change Order:</u>	
Using new delegated process	15 work days
Estimate using former Board approval process	54 work days
<u>Cost of Change Order:</u>	
Metro independent cost estimate (ICE)	\$1,511,708
Contractor's proposed cost	\$2,060,221
Negotiated amount	\$1,697,789
Negotiated amount over ICE	\$186,081
Amount negotiated under Contractors proposal	\$362,432

Spot Check# 5 - Purple Line Section 1 Transit Project - Contract C1045**Facts of Change Order**

<u>Description of Modification - MOD-00074</u>	
Additional Instrumentation (Project Wide) as requested by LABOE and STA EOR	
<u>Change Order Dates:</u>	
Scope of Work approved	Jan. 15, 2019
Modification Executed	Feb. 28, 2019
<u>Elapsed Time for Executing Change Order:</u>	
Using new delegated process	33 work days
Estimate using former Board approval process	52 work days
<u>Cost of Change Order:</u>	
Metro independent cost estimate (ICE)	\$2,834,865
Contractor's proposed cost	\$3,997,241
Negotiated amount	\$2,819,620
Negotiated amount under ICE	\$15,245
Amount negotiated under Contractors proposal	\$1,177,621

Spot Check# 6 - Purple Line Section 2 Transit Project - Contract PS43502000**Facts of Change Order**

<u>Description of Modification - MOD-00067</u>	
Continuation of Engineering Support Services during Construction for WPLE Section 2	
<u>Change Order Dates:</u>	
Scope of Work approved	Jan. 25, 2019
Modification Executed	Feb. 28, 2019
<u>Elapsed Time for Executing Change Order:</u>	
Using new delegated process	24 work days
Estimate using former Board approval process	39 work days
<u>Cost of Modification:</u>	
Metro independent cost estimate (ICE)	\$13,360,965
Contractor's proposed cost	\$13,656,522
Negotiated amount	\$11,996,369
Negotiated amount over ICE	\$1,364,596
Amount negotiated under Contractors proposal	\$1,660,153

Office Of Inspector General Construction Change Order Spot Check Report

Presented By
Karen Gorman
Inspector General

Construction Spot Check Program

File #
2019-0007

OIG Program Description

The OIG Spot Check program focuses on approved change orders that exceed \$1 million. The program includes:

- Review sampling of Change Orders from PMIS
- Review of Program Management's Project Status Report
- Interview Project Managers, Program Controllers, and Procurement Officers
- Review project budget, specifications, any related documentation

OIG Spot Checks focus on:

- Scope of Work
- Budget
- Schedule Comparison
- Making Recommendations

Summary of Spot Checks

Six OIG spot checks of change orders show:

- A negotiated amount that was reasonable for the work to be done,
- Allowing the Contractor to immediately order parts and materials,
- Consultant had no overlap in schedule and was able to continue working, and
- Zero Construction delay costs.

April 2019

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Construction Spot Check Costs

Summary of Selected Change Order Costs

Six OIG spot checks of Change Orders / Modifications reported

2 change order for Crenshaw/LAX

- ❖ Provisional Payments – Pending Dispute Resolution Fire Rated Cables = \$15,000,000
- ❖ Construction Management Support Service – Additional Funding = \$17,950,000

3 change orders for Purple Line Section 1

- ❖ Gas Investigation and Report = \$ 787,978
- ❖ Additional Gas Testing and Assessment = \$1,697,789
- ❖ Instrumentation to Measure Settlement / Requested by City of LA = \$2,819,620

1 change order for Purple Line Section 2

- ❖ Continuation of Engineering Support Services During Construction = \$11,996,369

Construction Spot Check Schedule Comparison

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/LAX	Provisional Payments – Pending Dispute Resolution Fire Rated Cable	0	0	0
CRENSHAW/LAX	CWO 16 Construction Management Support Service – Add’l. Funding	0	0	0
WESTSIDE PURPLE LINE SECT 1	Golder Gas Investigation and Report	58	12	70
WESTSIDE PURPLE LINE SECT 1	Reach 3 Additional Gas Testing and Assessment	39	15	54
WESTSIDE PURPLE LINE SECT 1	Add’l. Instrumentation (Project Wide) as Requested by LABOE	19	33	52
WESTSIDE PURPLE LINE SECT 2	Continuation Engineering Support Services During Construction	15	24	39



Board Report

File #: 2019-0167, File Type: Informational Report

Agenda Number: 29.

CONSTRUCTION COMMITTEE APRIL 18, 2019

SUBJECT: FISCAL YEAR 2020 PROGRAM MANAGEMENT ANNUAL PROGRAM EVALUATION

ACTION: RECEIVE AND FILE

RECOMMENDATION

RECEIVE AND FILE report on FY20 Program Management Annual Program Evaluation.

ISSUE

The Annual Program Evaluation (APE) is a priority initiative created to evaluate Metro's capital program annually. Given the challenges of managing a multi-billion dollar capital program, a comprehensive review of the risks associated with the costs and schedules of the program is conducted on an annual basis. This report summarizes the results of the FY20 APE review performed by Program Management.

BACKGROUND

The APE initiative is a comprehensive evaluation of Metro's capital program, including Transit, Highway, and Regional Rail projects. As part of the process, staff reviewed and updated project costs and schedules to current conditions, challenges, and risks. Any changes to project budgets/schedules and the reasons for the adjustments are to be reported to the Board annually for approval. In addition, APE serves as a project management tool bringing greater consistency, transparency, and discipline to better manage and deliver Board-approved projects. The APE is a dynamic tool, which is updated annually as projects move toward completion and any changes approved by the Board are incorporated.

DISCUSSION

FY20 Results

For the FY20 APE, Program Management focused on new projects, and projects that will carry-over projects through FY20, with project costs estimated at \$5 million or greater. Program Management staff evaluated 64 projects, including nine Major Transit Construction projects, 23 Other Transit Capital projects, 27 Highway projects, and five Regional Rail projects (see Attachment A presentation for a complete project listing), which total approximately \$18.3 billion. The program size has increased 14.4% from \$16 billion in FY19 to \$18.3 billion in FY20. Program dollars approved for

Major Transit Construction projects increased 27.5% from \$10.8 billion in FY19 to \$13.8 billion in FY20.

The major focus remains on managing the projects within the Board-approved life of project (LOP) budgets and schedules established for these projects. A summary of the potential adjustments requiring future Board approval to Metro's capital program in FY20 is reported in the FY20 Program Management APE presentation.

Challenges

With the significant number and size of Program Management projects and the accelerated implementation schedule for delivering Metro's capital program, including the projects on the Twenty-eight by 2028, Metro is currently undertaking the largest transportation capital program in the nation. Metro's capability and capacity to deliver multiple complex projects on-time and within budget creates unprecedented challenges to project delivery.

Efforts to improve, innovate, and increase our capabilities to deliver projects are essential. Program challenges include:

- Our ability to collaborate with stakeholders to meet community expectations;
- Attracting a competitive and qualified pool of contractors, small businesses, and workforce on Metro projects;
- Maintaining sufficient resources and staffing needed to manage and support project delivery;
- Building and delivering projects in a growing construction market with a shortage of skilled workers may impact project costs;
- Achieving continuous improvement in project delivery through innovation and application of best practices and lessons learned;
- Continued commitment by various external jurisdictions for efficient Third Party review and approval is the key to successful delivery of Metro's capital program.

Strategic Initiatives

Program Management continues to implement various strategic initiatives to bring improved planning, consistency, transparency, and discipline to project delivery. These initiatives include:

- Continuation of the Annual Program Evaluation of Metro's capital program;
- Engagement with robust management and support services consulting teams to augment technical expertise and resources;
- Enhancement of Metro's Risk Management and Construction Claims Management programs;
- Continued efforts to develop new and enhance existing project management procedures, and improve Metro's Best Practices/Lessons Learned Program.

FINANCIAL IMPACT

The FY20 Program Management APE report does not have any specific budgetary or financial impacts. The APE report serves as an annual and early notice instrument to assess the scope, cost

and schedule risk items affecting the respective projects under the oversight of Program Management. Risk items affecting scope, cost and schedule are identified on a project by project basis within the APE Presentation.

Should any of the potential project risks affecting scope, cost and schedule parameters be realized, the Chief Program Management Officer will return to the Board with separate recommendations to address the identified risks and adjust the project cost and/or schedule accordingly.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

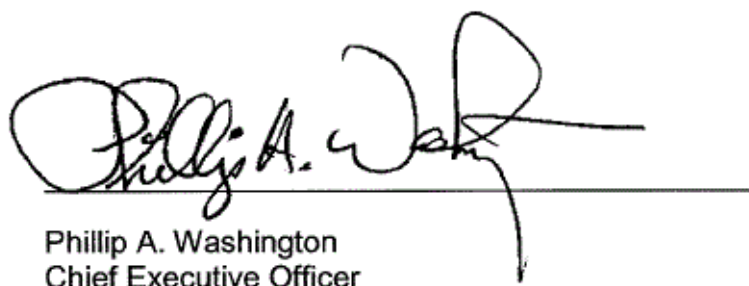
Recommendation supports Strategic Plan Goal #1 - Provide high-quality mobility options that enable people to spend less time traveling. This will be accomplished by planning and delivering multiple capital projects on time and on budget while increasing opportunities for small business development and innovation.

NEXT STEPS

Program Management will request the resources required for project delivery success through the FY20 Budget process for Board approval. Project managers will work to deliver projects safely, on-time and within the Board-approved budgets. Staff will continue to provide the Board with monthly updates on the project status throughout the year. The next FY21 Program Management APE report will be presented to the Board in Spring 2020.

Prepared by: Brian Boudreau, Senior Executive Officer, (213) 922-2474

Reviewed by: Richard F. Clarke, Chief Program Management Officer, (213) 922-7557



Phillip A. Washington
Chief Executive Officer



Fiscal Year 2020 Program Management Annual Program Evaluation



Presentation Overview

- Purpose and Process
- Capital Program Status
- Capital Program Costs and Schedules
- Adjustments for FY20
- Summary
- Next Steps



Purpose

- Annual evaluation of Metro's capital program
- Reporting to the Board any project budget and schedule changes, and reasons for the changes
- A project management tool bringing greater consistency, transparency, and discipline
- Facilitates financial planning
- Reduces the number of requests to the Board for budget adjustments



Process

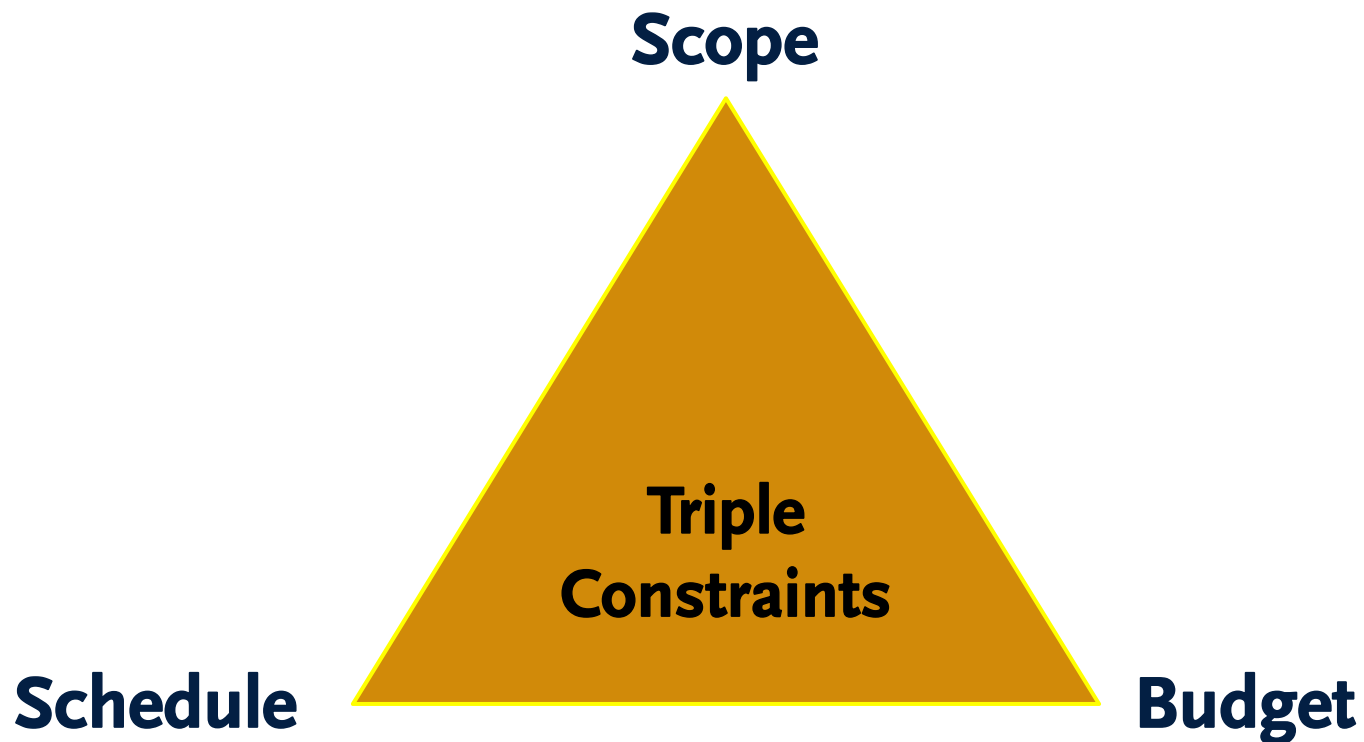
- A review of project costs and schedules
- Update project capital cost estimates to current conditions, including price trends and changes
- Focus on budget to complete current project phase/milestone
- Include APE results in the FY20 Budget review and adoption by the Board



Project Management



One side of the triangle cannot be changed without affecting the other sides:

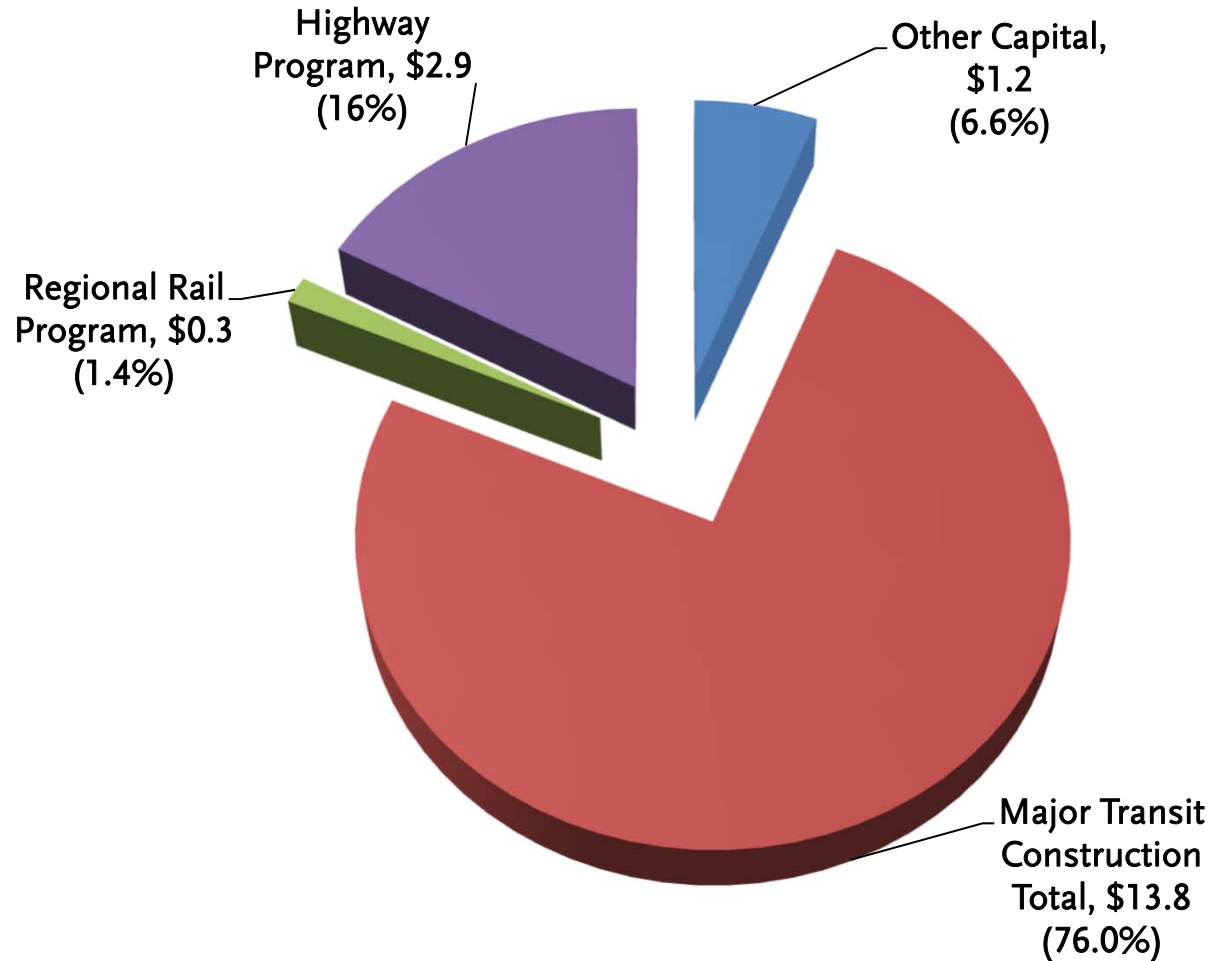


FY20 Scope

- APE focuses on only those capital projects, managed by Program Management, with a total project cost greater than \$5M:
 - Major Transit Construction Projects – 9 projects
 - Other Transit Capital Projects – 23 projects
 - Regional Rail Projects – 5 projects
 - Highway Program – 26 projects
- There are 63 projects and approximately \$18.1 billion of approved project budgets included in the FY20 APE review which is an increase of 13.1% from \$16 billion in FY19.
- Project budgets in the APE focus on authorized funding amounts.
- Project funding amounts remain within the annual budget limit approved by the Board.



FY20 Current Program: \$18.1 B



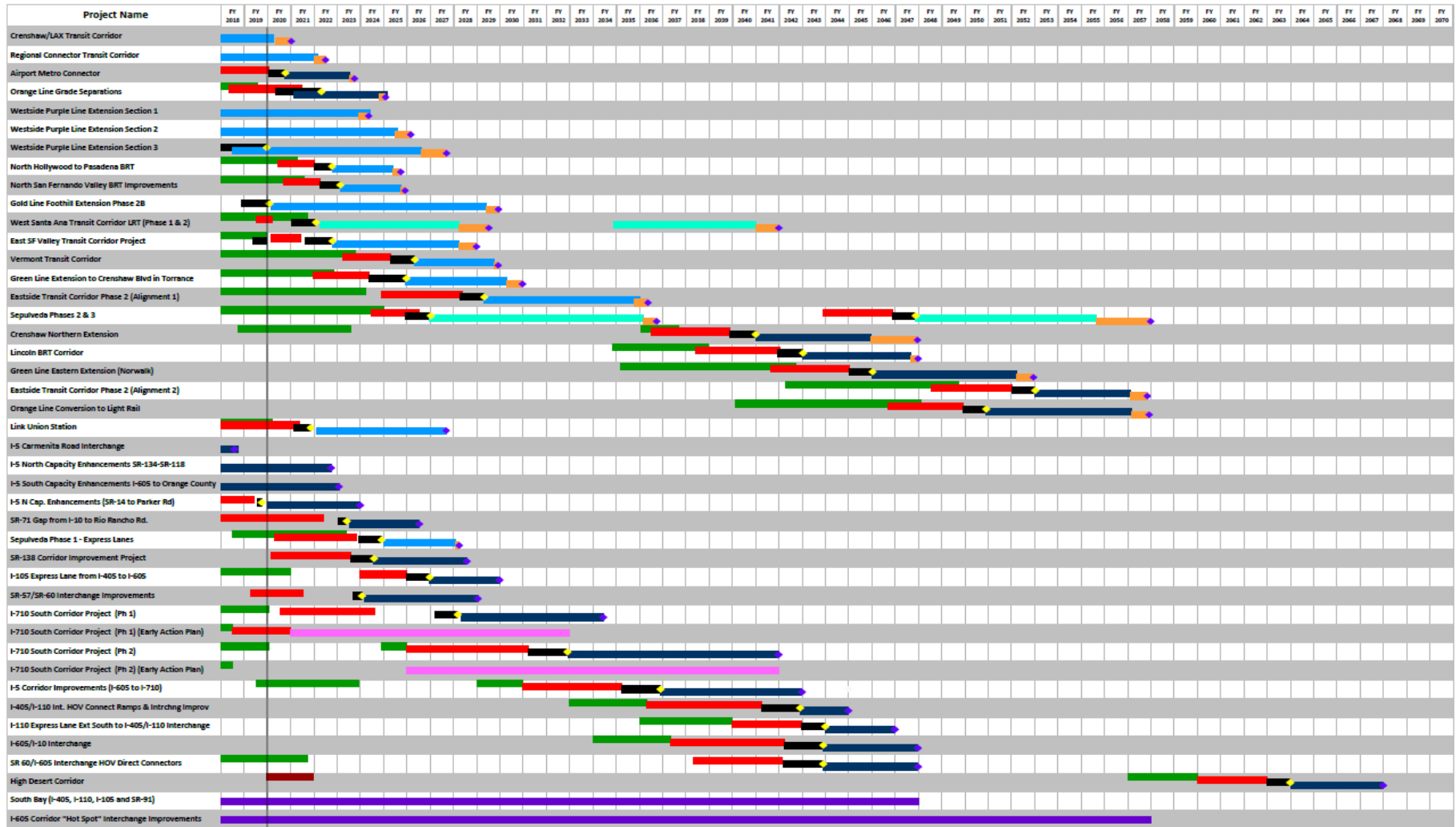
\$ in billions

Program Highlights

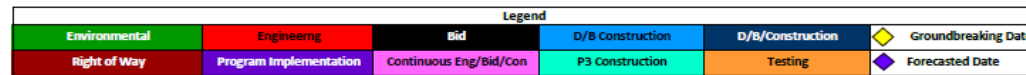
- In addition to the projects in APE, Program Management manages/oversees 40+ projects less than \$5M; Operations Capital Improvements projects, State of Good Repair projects, and other Transit Capital projects.
- Including projects within the APE, there are over 100 projects being managed by Program Management.
- Overall Program dollars increased 8.9% from \$16.8 billion in FY19 to \$18.3 billion in FY20.
- Metro's capital program will continue to grow with continued implementation of Measure M and Twenty-eight by 2028.



Metro Program Management Master Schedule



This document is a working draft meant for discussion purposes only and may contain preliminary conclusions not necessarily reflected in the final decision.



Program Challenges

- Deliver multiple large and complex projects on-time within budget
- Collaborate with stakeholders to meet community expectations
- Commitment of efficient third party review/approval by various external jurisdictions
- Encourage competitive and qualified pool of contractors, small businesses, and workforce on Metro projects
- Manage cost risks impacted by shortage of skilled workers, good Contractors and utility resources in a growing construction market
- Maintain sufficient resources and staffing needed to manage and support project delivery
- Addressing Contractor claims in a fair and equitable manner
- Achieve continuous improvement in project delivery through innovation and application of best practices and lessons learned



Strategic Initiatives

Continue to implement strategic initiatives to bring improved planning, consistency, transparency, and discipline to project delivery:

- Conduct Annual Program Evaluation of Metro's capital program
- Establish reliable Life-of-Project budgets
- Engage robust management and support services consulting teams to augment technical expertise and resources
- Enhance Risk Management Program
- Enhance Construction Claims Management Program
- Improved Best Practices/Lessons Learned Program
- Implement new Document Control/Change Control system (Unifier)



Strategic Initiatives

- Implement new quality assurance approach
- Conduct readiness reviews before projects are released
- Utilize project delivery method selection process
- Utilize Integrated Project Management Office (IPMO) and defined decision making ladders
- Implement Board delegation of authority as approved in January 2018.



Metro Transit Program



Metro Transit Capital Projects

Type	Project Budget (in millions)	# of Projects
Major Transit Construction	\$13,774	9
Other Transit Capital	\$1,194	23
Misc. Capital	\$392	6
Security/Safety	\$124	2
Rail Facilities	\$295	5
Wayside Systems	\$253	3
Bus Facilities	\$130	7
Total Transit Capital Program	\$14,967	32



Metro Transit Capital Program Summary

Projects Completion in FY19:

- Burbank Airport North Metrolink Station
- Division 3 Master Plan Phases II-IV
- BOS Bus Deferred Maintenance Imp.
- MOL to MRL – North Hollywood
- 7th Metro and BLOC
- Universal City Pedestrian Bridge



Project Completion Planned in FY20:

- Metro Silver Line Improvements and Upgrades
- Crenshaw/LAX Project
- New Blue Projects
- Blue Line Rehabilitation/Willowbrook Station



Metro Transit Capital Program Summary

Projects Transitioned from Planning to Program Management in FY19:

- Orange Line Bus Rapid Transit Improvement Project
- East San Fernando Valley Transit Corridor Project

Planned Transition to Program Management in FY20:

- Fuel Storage Tanks FY20-FY22
- Rail Operation Center and Bus Operation Center
- North Hollywood to Pasadena Bus Rapid Transit Project



Crenshaw/LAX Transit Project



Crenshaw/LAX Transit Project

Project Budget: \$2,058.0 M

Project Completion: 2020

Project Complete: 91%

Accomplishments:

- Work continues on remaining infrastructure at all eight stations with systems procurements, installations and testing activities continuing at various locations.
- Guideway activities including street crossings, remaining trackwork installation and follow-on systems installations continue through out the alignment.

Challenges/Risks:

- Limited remaining cost contingency.
- Contractor falling behind schedule with limited options available to mitigate any delays.
- A high number of complex electric and systems tests must be successfully completed.



Regional Connector Transit Project



Regional Connector Transit Project

Project Budget: \$1,795.8 M

(Excludes finance costs; includes \$40M non-FFGA)

Project Completion: 2022

Project Complete: 55%

Accomplishments:

- Successfully completed the decking of Flower Street. Project will be underground in steady state for next two years from 7th/Metro to Little Tokyo.
- Completed excavation of 2nd Street Cross-over Cavern earlier than planned; balance of excavations at the three stations complete with structural concrete work now underway.
- Finalized all planned design units including the added over-build interface designs at the Historic Broadway Station to accommodate high-rise development over the station entrance area.

Challenges/Risks:

- Costs of ~\$25M for three-year extension of Mangrove Yard Temporary Construction Easement represent an increase of \$10M from COLA's January 2017 valuation.
- Scope enhancements for the pedestrian bridge at Grand Av Arts/Bunker Hill Station are estimated to exceed project budget by \$6M stressing available contingency.
- Finalizing the permanent easement from the COLA for the Mangrove Fan Plant are impacting construction with potential impacts to the critical path and budget.
- Escalating costs for the fan plant change order.
- The project is completing an FTA mandated budget and schedule Risk Refresh at the 50% completion milestone. The Board will be informed of any outcomes which are projected to threaten existing project contingency levels.



Westside Purple Line Extension Project



Westside Purple Line Extension Section 1

Project Budget: \$2,778.9 M
(Excludes finance costs)

Forecast Completion: 2023

Project Complete: 46%

Accomplishments:

- Commenced Reach 1 tunnel drive from Wilshire/La Brea Station to Wilshire/Western TBM Retrieval Site.
- Completed excavation and temporary TBM support slab at Wilshire/Western TBM Retrieval Site. Began Wilshire/Fairfax Station concrete operations.
- Contract C1078 (Division 20 MOW/NRV Building Location 64) achieved substantial completion.

Challenges/Risks:

- Higher cost of ROW acquisition.
- Subcontractor ability to get the required resources to perform the work.
- Wilshire /La Cienega Station dewatering.
- Water quality impacting treatment/maintenance of the water system.
- Potential schedule claim from contractor.



Westside Purple Line Extension Section 2

Project Budget: \$ 2,440.9 M
(Excludes finance costs)

Forecast Completion: 2025

Project Complete: 15%

Accomplishments:

- Completed third party advanced utility relocations at Wilshire/Rodeo Station.
- Completed TBM mobilization.
- Completed civil work for third party advanced utility relocations at Century City Constellation Station.
- Completed final design for stations and tunnels.
- Completed installation of soldier piles for TBM Launch Box in Century City.

Challenges/Risks:

- The City of Beverly Hills City Council approved the Memorandum of Agreement for the C1120 Contract on August 21, 2018, but made execution of the agreement contingent on reaching a settlement agreement related to the NEPA lawsuit.
- Third party utility relocation and resource constraints at private utility companies may cause delay.



Westside Purple Line Extension Section 3

Project Budget: \$3,223.6 M
(Excludes finance costs)

Forecast Completion: 2027

Accomplishments:

- Issued Notice to Proceed for Contract C1151 (Tunnels).
- Real estate certification in progress and beginning property acquisitions.
- Contract C1153 (Wilshire/UCLA Advanced Utility Relocations) substantially completed.
- Metro third party utility relocations continue.
- Contractor begins final design of the tunnels.

Challenges/Risks:

- Required construction and staging areas at the VA Hospital may not be available in time to begin construction as currently planned.
- Obtaining lane closures and peak hour exemptions.
- Tariff potentially impacting D/B contractors.
- Receipt of Full Funding Grant Agreement.



Gold Line Foothill Extension Phase 2B



Gold Line Foothill Extension Phase 2B

Project Budget: \$1,406.9 M

Forecast Completion: 2029

Project Complete: 3%

Accomplishments:

- Received SB1 Funding in the amount of \$249 million.
- First Design Build contract completed, first of two Utility Relocation contracts. Commenced work on pole line eliminations.

Challenges/Risks:

- Address and resolve funding gap to fully fund approved alignment construction to Claremont.
- Constructing while under operations and accommodating future projects.
- Metrolink, SANBAG, City coordination.
- Freight and Metrolink track relocation work.
- Metrolink Coordination: Grade Separation of crossings not-warranted by Metro Grade Crossing Policy.



Orange Line Bus Rapid Transit Improvements



Orange Line Bus Rapid Transit Improvements

Current Authorized Project Budget : \$22.0 M

Forecast Completion: 2024

Accomplishments:

- Project is exempt from CEQA (July 2018 Board Report).
- Ceremonial ground breaking in October 2018.
- Completed Basis of Design and 15% Design of Sepulveda Grade Separation, and 15% design of gates at eight locations.
- 95% completed Traffic Analysis and Pilot Gate design.

Challenges/Risks:

- Relocate Sepulveda parking lot access road through adjacent property to fit additional escalators.
- Progressing of Van Nuys Grade Separation Station Design being coordinated with ESFV environmental process.
- Mitigation of traffic impacts.
- Integration with Sepulveda and ESFV Transit Corridor projects.
- Maintaining existing bus operation during construction.
- City of Los Angeles approvals.
- ROW acquisitions and major utility relocations.
- Future PUC regulations requires approval for gates with bus operations.



East San Fernando Valley Transit Corridor



East San Fernando Valley Transit Corridor

Current Authorized Project Budget: \$21.2 M

Forecast Completion: 2028

Accomplishments:

- Locally preferred alternative selected in June 2018.
- FEIS/FEIR
 - SHPO consultation on Findings of Effect
 - Grade crossing safety analysis
 - Orange Line Station connection
- Engineering
 - Finalizing advanced conceptual engineering (10% design)
 - Updating cost estimates
 - Receipt of preliminary engineering proposals

Challenges/Risks:

- A shared right-of-way with Metrolink.
- Design for connection with Metro Orange Line needs to be finalized.



Airport Metro Connector



Airport Metro Connector

Current Authorized Project Budget : \$151.1 M

Forecast Completion: 2024

Accomplishments:

- Engineering completed 60% design and Shoo-fly design.
- Los Angeles World Airport (LAWA) Interface and coordination continues.
- Commence Ardent and Honeywell Monitoring.
- Complete Phase II Environmental Site Assessment.
- Finalize agreement with So. Cal. Gas.
- Completed Utility Relocation design and potholing for Gas Lines transmission with So. Cal. Gas.
- Advertise for professional services contract for construction support services.
- Real Estate has commenced acquisition of Hertz property and is anticipating finalized sale and ownership by end of FY19.

Challenges/Risks:

- Real Estate relocation, advance utility relocation, relocation of clean energy facility, schedule integration with LAWA's Automated People Mover project and construction of Shoofly.
- Constructing project under full Metro operations of the Crenshaw and Green Lines.
- Coordination of the Crenshaw Line Opening and LAWA LAMP interface and contractors.



Patsaouras Plaza Busway Station

Project Budget: \$39.8 M

Project Completion: 2020

Project Complete: 67%

Challenges/Risks:

- Numerous Third party delays.
- The initial work stoppage and limited access to construction site since partially resuming work have led team to forecast a completion date of May 2020, assuming that construction resumes in April 2019.
- Project needs an LOP budget increase to settle delay claims due to the work stoppage that resulted from the paleontological and archeological discoveries.
- FTA and SHPO approvals to resume construction are imminent.



Metro Blue Line Signal Rehabilitation Project

Project Budget: \$118.9 M

Project Completion: 2021

Project Complete: 40%

Accomplishments:

- Construction In Progress - MBL Resignalling contract (Mass Electric).
- In Design - Develop scope of work and design package for Firestone Corrosion repair.

Challenges/Risks:

- This is one of several projects to be completed during the planned eight-month shut down of the Metro Blue Line that begins January 2019.
- Coordination between the three projects during shutdown of the Metro Blue Line.



New train control



Project adds 4 Crossovers



Willowbrook/Rosa Parks Station Project

Project Budget: \$109.4 M

Project Completion: 2020

Accomplishments:

- Completed relocation of utilities and improvements to the Non-Revenue rail crossing.
- Construction of the Customer Service building and Bike Hub is underway.
- Demolition of Blue Line platform and Mezzanine has started with the New Blue shutdown.



Challenges/Risks:

- Cost estimate of Park and Ride lot improvements up from \$7M to 8M, but in line with remaining contingency.
- Coordination between the projects during shutdown of the Metro Blue Line.



Emergency Security Operations Center

Project Budget: \$ 112.7 M

Project Completion: Phase 1 in 2021

Accomplishments:

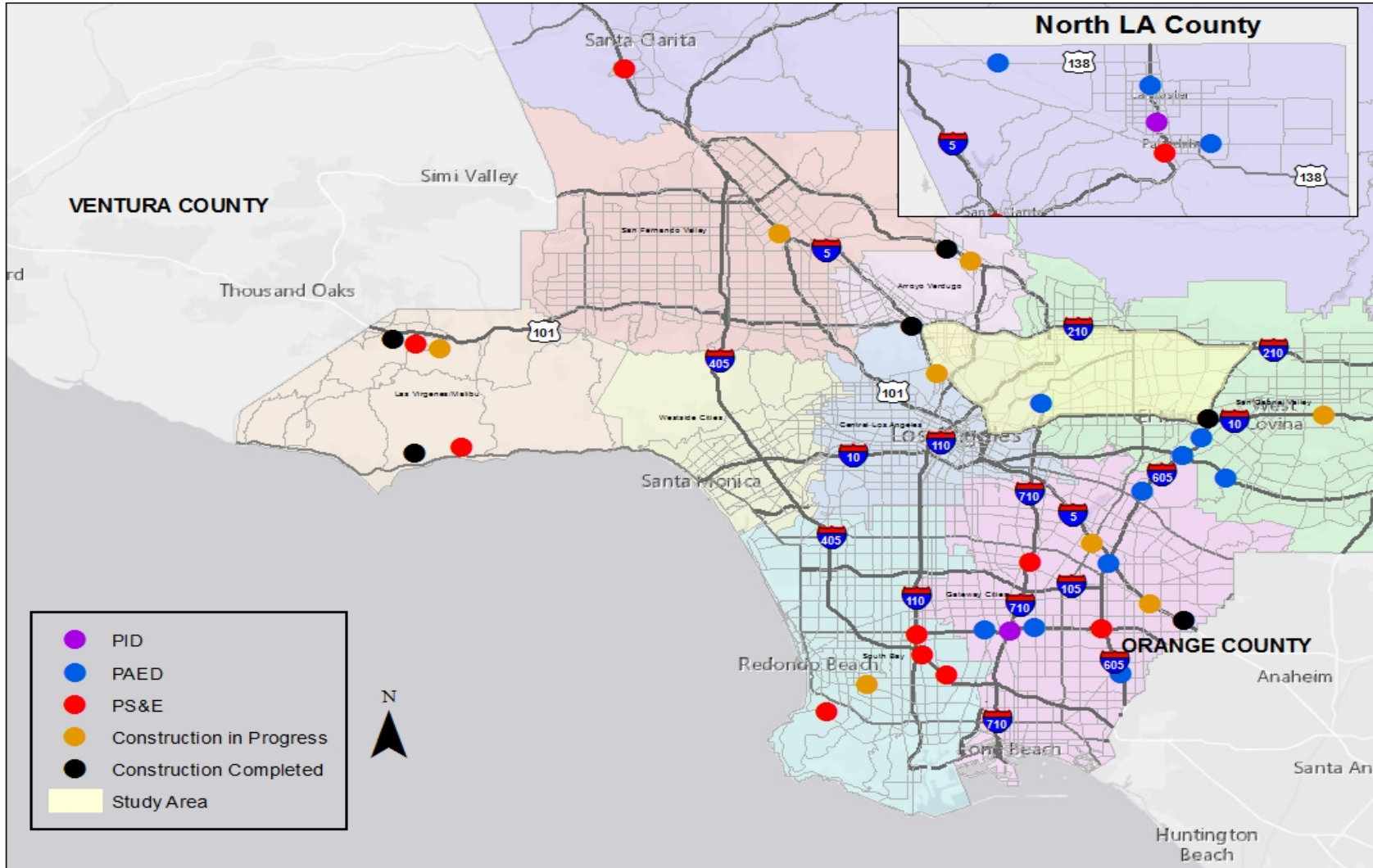
- Issued the revised RFQ/RFP package in October 2018.

Challenges/Risks:

- Competitive market may cause cost proposals to be higher than estimated which will widen the funding shortfall.
- State funding of \$112.7 million has to be used by March 2021.



Highway Program





Highway Program Status Summary (Measure R and M Funded)

#	Project	Current Phase	Estimated Cost through Current Phase (\$mil)	Current Phase Completion
1	I-5 South Valley View Interchange	Construction	\$631.1	2022
2	I-5 South - San Antonio, Imperial Hwy and Orr Day	Construction	\$323.3	2020
3	I-5 South – Florence Ave Interchange	Construction	\$211.7	2020
4	I-5 North – North of Buena Vista to South of Magnolia Blvd	Construction	\$399.4	2022
5	I-5 North - Magnolia Blvd to SR 134	Construction	\$165.9	2020
6	I-5 North HOV Project SR 14 to Parker Road	Plans, Specs, and Estimate	\$51.4	2019
7	I-605 Corridor Hot Spots – I-605/I-5 Interchange Improvements	Project Approval/ Environmental Documents (PAED)	\$30.3	2021
8	I-605 Corridor Hot Spots – I-605/SR 60 Interchange Improvements	PAED	\$41.2	2021
9	Westbound SR-91 Shoemaker to Alondra Improvements	PAED	\$9.3	2019

Highway Program Status Summary (Measure R and M Funded)

#	Project	Current Phase	Estimated Cost through Current Phase (\$mil)	Current Phase Completion
10	I-605 Corridor Hot Spots – I-605 Beverly Interchange Improvements	PAED & PS&E	\$4.2	2020
11	I-605 from SR-91 to South Street Improvements	PAED & PS&E	\$4.4	2019
New	12 I-605/Valley Boulevard Interchange Improvements	PAED & PS&E	\$2.1	2020
New	13 SR-60/7th Avenue Interchange Improvements	PAED & PS&E	\$2.0	2020
New	14 EB SR-91 Atlantic Avenue to Cherry Avenue Auxiliary Lane Improvements	PAED & PS&E	\$7.4	2020
15	Interstate 405 Crenshaw Blvd On and Off Ramp Improvements	PAED & PS&E	\$24.4	2020
New	16 I-405 Auxiliary Lanes – I-105 to Artesia Blvd	PAED & PS&E	\$4.1	2020
17	I-710 (South) Corridor Improvement Projects	PAED & PS&E	\$91.0	2019
18	I-710 (South) Early Action Projects Soundwalls (Bell Gardens, Commerce, Compton, East Los Angeles, Long Beach)	PS&E & ROW	\$10.1	2019
19	SR-710 (North) Corridor EIR/EIS	PAED	\$47.1	2019

Highway Program Status Summary (Measure R and M Funded)

#	Project	Current Phase	Estimated Cost through Current Phase (\$mil)	Current Phase Completion
New 20	SR-710 (North) TSM/TDM	PS&E/ROW/Construction	\$45.0	TBD
New 21	SR-710 (North) Mobility Improvement Projects	PAED/PS&E/Construction	\$515.0	TBD
22	Soundwall Package 10	PS&E/ROW	\$11.8	2020
23	Soundwall Package 11	Construction	\$89.2	2021
		Subtotal Measure R & M Highway Projects:	\$2,721.4 M	

Highway Program Status Summary (Non-Measure R and M Funded)

#	Project	Current Phase	Estimated Cost through Current Phase (\$mill)	Current Phase Completion
24	SR-57/SR-60 Interchange Improvements (Eastbound and Westbound flyover off-ramp to Grand Ave, Eastbound on-ramp SR-60)	PS&E & ROW	\$74.0	2021
25	SR 71: Interstate 10 to Mission Blvd (North)	PS&E & ROW	\$60.9	2022
26	SR 71: Mission Blvd to SR-60 (South)	PS&E & ROW	\$35.2	2019
		Subtotal Non-Measure R & M Funded Highway Projects:	\$170.1	
		TOTAL HIGHWAY PROGRAM:	\$2,891.5 M	

Projects Completed in FY19
I-5 South – Alondra Blvd Overcrossing
I-5 South – Shoemaker, Rosecrans, Bloomfield
I-5 South – Carmenita Interchange
I-5 North – HOV from SR 118 to SR 170
I-5 North – HOV SR 170 to North of Buena Vista

Project Completion Planned in FY20
I-5 North – HOV from Magnolia to SR-134
I-5 South – Imperial Highway

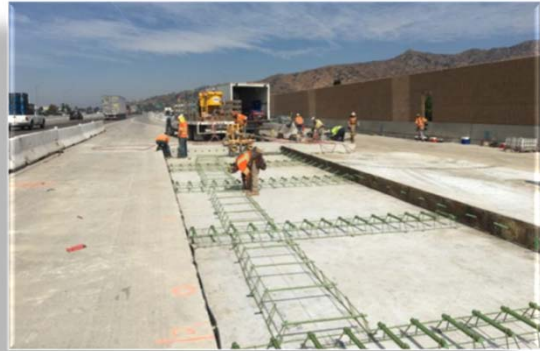
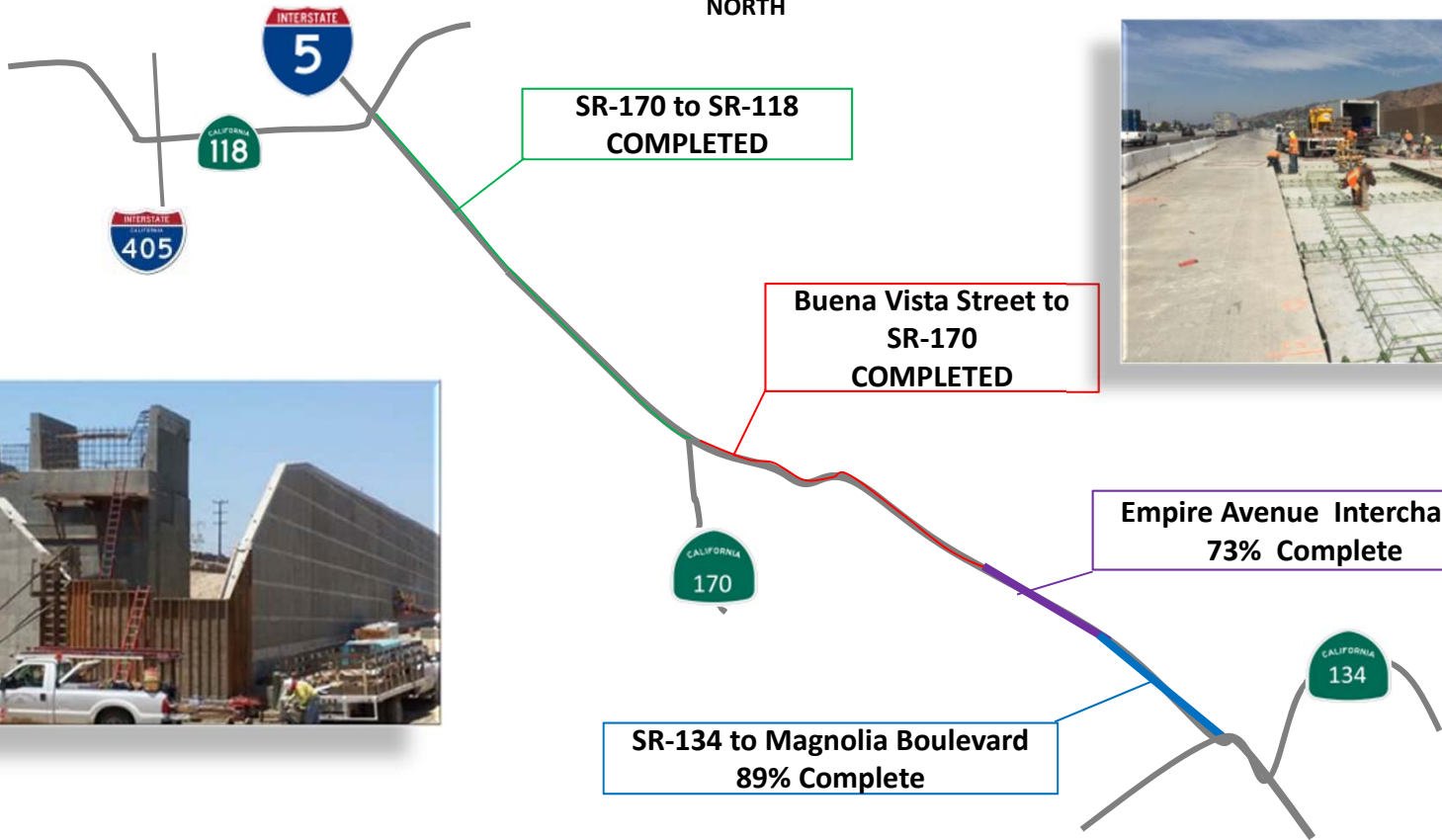
I-5 Construction Projects (By Caltrans)



I-5 NORTH: SR 118 TO SR 134

Project Budget	Current \$880.9M	Forecast TBD
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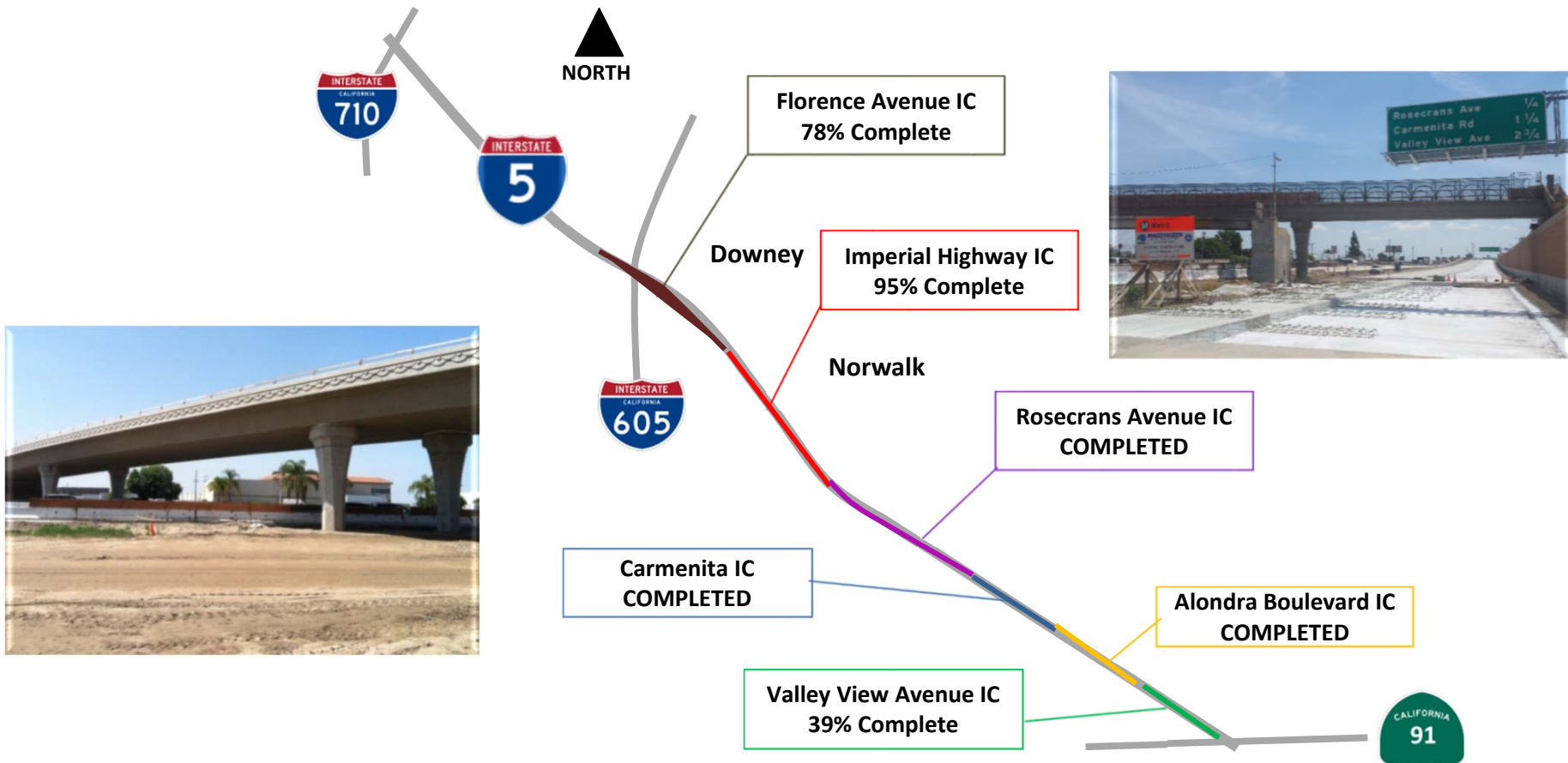
ANTICIPATED PROJECT COMPLETION	Current Spring 2022	Forecast Summer 2022
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I-5 SOUTH: ORANGE COUNTY LINE TO I-605

Project Budget	Current \$1.888B	Forecast TBD
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ANTICIPATED PROJECT COMPLETION	Current Summer 2022	Forecast Fall 2022
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I-5 N Capacity Enhancements (SR14 to Parker Road)



PHASE: PS&E

Approved Budget: \$51.4M

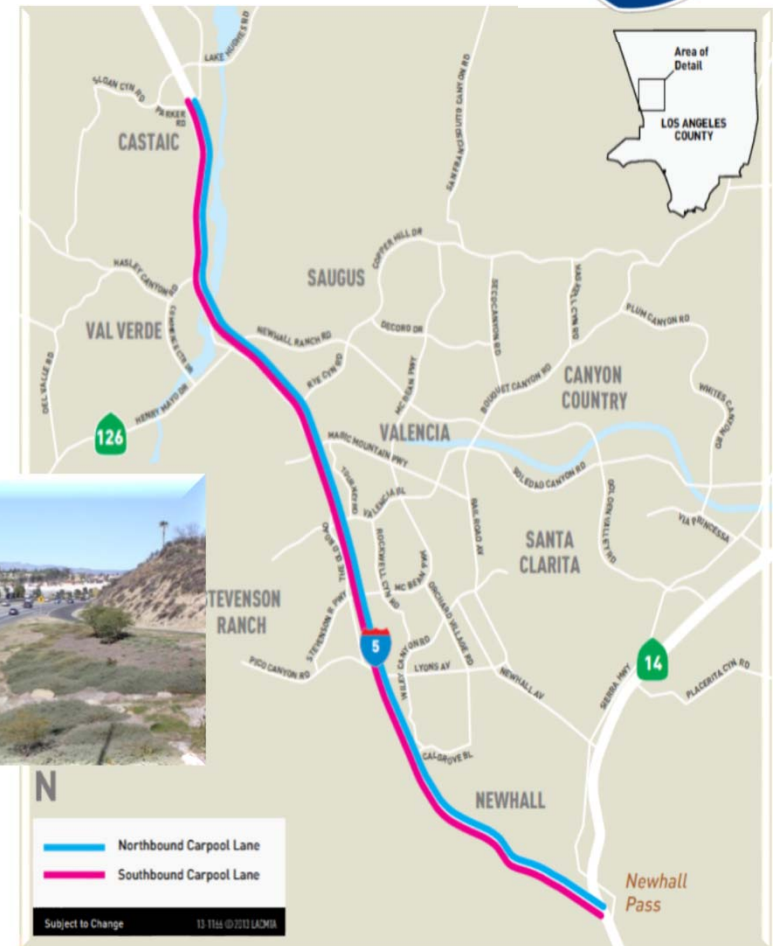
Estimated Cost to Complete Project: \$657.4 M
(includes all phases)

Accomplishments:

- 100% of PS&E submitted to Caltrans in December of 2018.
- Preparing for construction phase - projected to start in January, 2020.

Challenges/Risks:

- Coordination with Caltrans' ongoing pavement rehabilitation project.
- Coordination with projects by others.
- Project now classified by FHWA as a major project, requiring additional coordination and documentation.



I-605 “Hot Spots”



PHASE: Various

Approved Budget : \$101.0 M

Estimated Cost to Complete Current Project Phases:
\$101.0 M

Accomplishments:

- Final PAED for the Westbound SR-91 From Shoemaker to Alondra completed in January, 2019.
- Pursuing early action projects parallel to the development of the I-605 corridor environmental document.
- Initiated PAED and PS&E for multiple Early Action Interchange projects now in progress, with estimated completions through 2021.
- Continuing strong collaborative work with local agencies, communities in developing new projects and programs to address congestion in the corridor.

Challenges/Risks:

- Continue to break down corridor mega projects into smaller, fundable projects with independent utility.



I-710 South Corridor Improvement Projects

PHASE: PAED

Approved Budget : \$91.0M

Estimated Cost to Complete Phase: \$91.0M

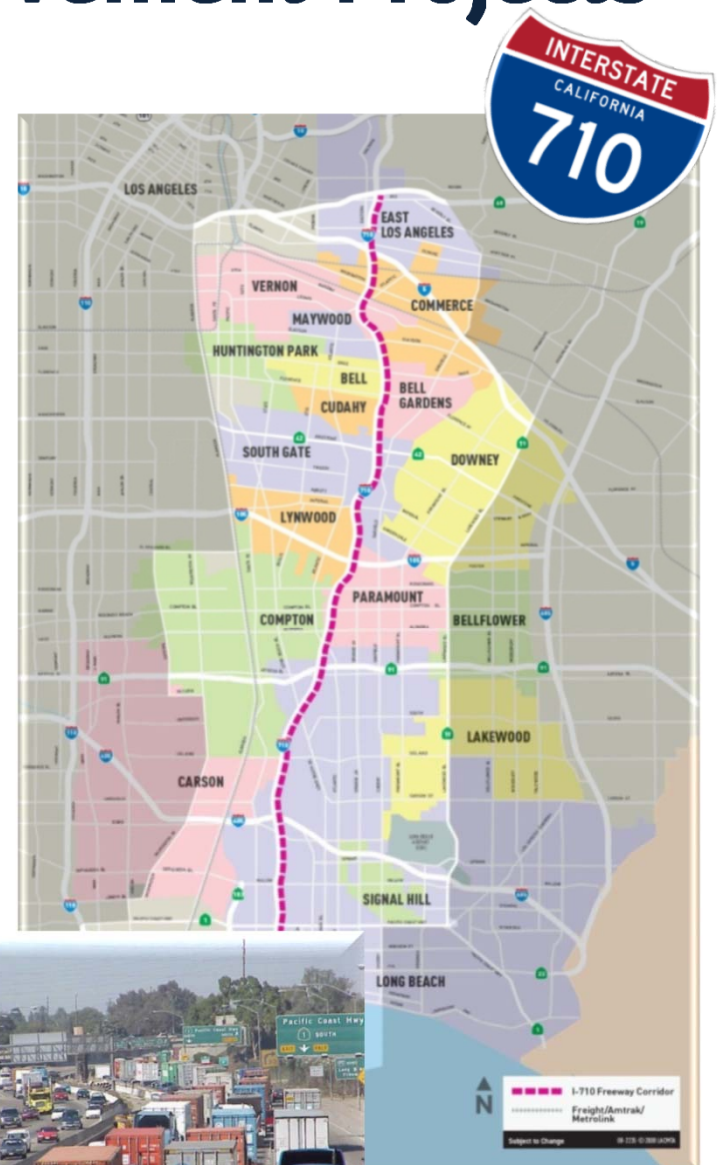
Subsequent phases include specific freeway and interchange improvements, arterial and local crossing projects

Accomplishments:

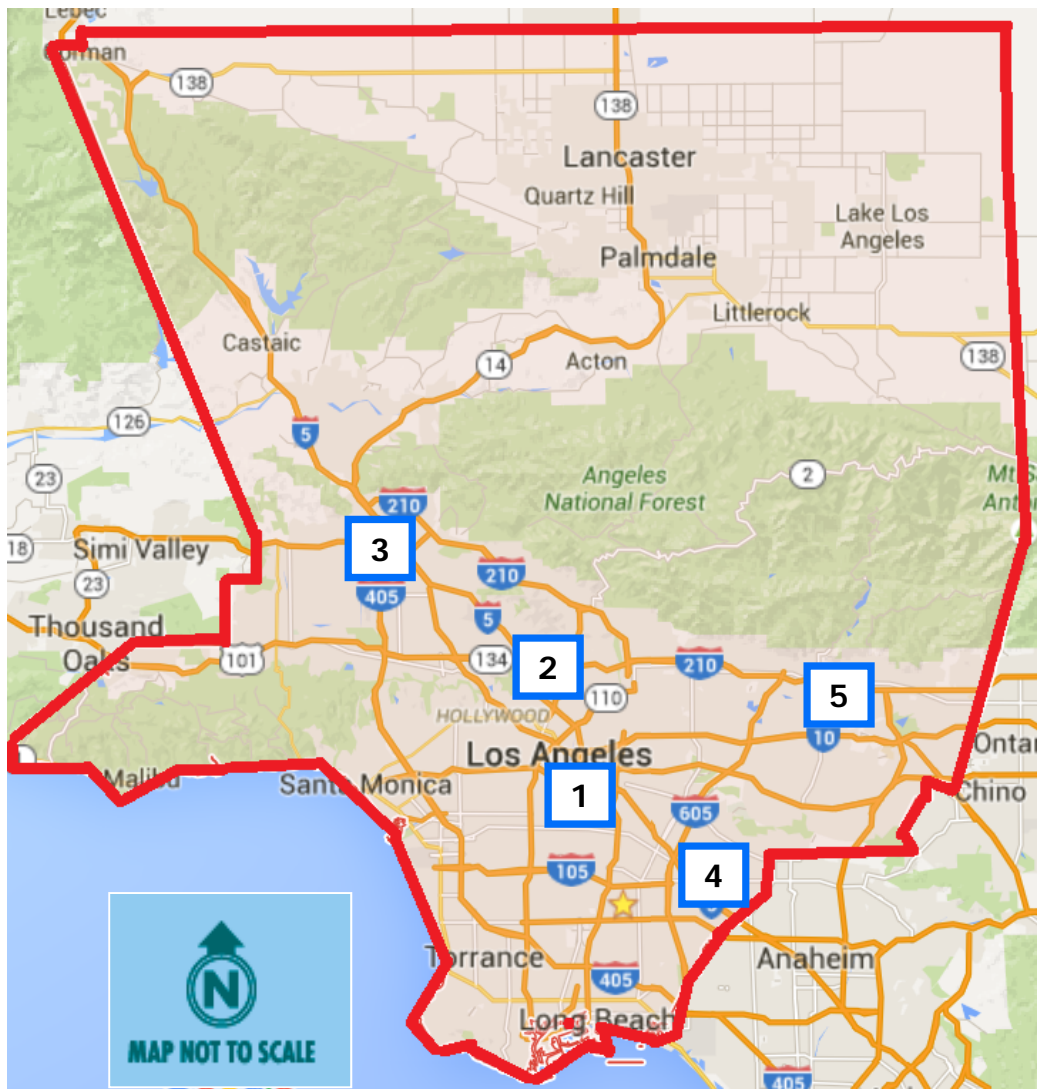
- The Recirculated DEIR/SDEIS was released in July 2017
- Metro Board adopted Locally Preferred Alternative in March 2018. In Summer 2019, staff to seek board approval of I-710 South Initial Stage Program for Alternative 5C, currently in development. Environmental phase will be completed by Summer 2019 with Caltrans approval of the document.
- Pursuing early action local projects during the development of the corridor environmental documents
- Strong collaborative work with local agencies, communities, and Metro Board members in addressing community concerns.

Challenges/Risks:

- Funding to pursue design and construction of all potential early action projects and the proposed corridor improvements
- Strategy to resolve: Pursuing funding and implementation of early action projects with independent utility.



Regional Rail Program (LA County)



1. LINK Union Station
2. Doran Street and Broadway/Brazil Grade Separation Project
3. Brighton to Roxford Double Track Project
4. Rosecrans/Marquardt Grade Separation Project
5. Lone Hill to CP White Double Track Project

Los Angeles County: 

Regional Rail Program Summary

#	Project	Current Phase	Estimated Costs through Current Phase (\$mil)	Current Phase Completion
1	LINK Union Station Project	Environmental & PE	\$70.4	2019
2	Doran Street and Broadway/ Brazil Grade Separation Project	Environmental/PE	\$8.6	2020
3	Brighton to Roxford Double Track Project	Environmental/ Final Design	\$16.7	2020
4	Rosecrans/Marquardt Grade Separation Project	Environmental; Plan, Specification & Estimate Final Design, Real Estate Acq.	\$156.4 (including construction)	2021
5	Lone Hill to White Double Track Project	Environmental & Final Design	\$10.0	2020
Total Regional Rail Program			\$262.1	

Project Completed in FY19

Bob Hope Airport/Hollywood Way Metrolink Station

Project Closed in FY19

Raymer to Bernsen Double Track



Link Union Station (LINK US)

Estimated Cost to Complete Environmental/PE: \$70.4 M

Current Phase Completion Date: 2019

Accomplishments:

- Phase A of the project is funded with a total of \$950 Million. Received concurrence from funding partners on the project scope for Phase A, including number of run-through tracks and the northern loop track, so that Phase A could be completed within the budget of \$950 Million.
- On January 17 2019, the Draft EIR was released for public review and comment. The DEIR includes both Phases A and B of the project.



Challenges/Risks:

- Board approval of contract modification to complete the Preliminary Engineering and Environmental Clearance as early as Spring 2019.
- \$423 Million in Prop 1A HSR funds need to be secured as soon as possible to mitigate the risk that funding may become unavailable with the uncertainty of the overall CHSR program.
- Acquisition for the BNSF property by the State/CHSRA .
- Additional environmental documentation may be required if the NEPA process result in a different outcome than the CEQA process.



Doran Street and Broadway/ Brazil Grade Separation Project

Est. Cost to Complete Environmental/Design: \$8.6 M
Current Phase Completion Date: 2020

Accomplishments:

- Received CPUC approval to modify the one-way interim at-grade improvements at Doran Street crossing to a two-way configuration with quiet zone ready improvements on 1/10/19.
- Received CTC staff recommendation on 12/28/2018, under ATP cycle 4, for \$16.3M of the \$22.2M needed for design and construction of both structures.

Challenges/Risks:

- Board approval of active transportation elements to the project.
- Obtaining construction funding for the interim improvements at Doran Street and improvements for the grade separation.
- An additional \$500K in third party costs to account for the scope of work modifications.



Brighton to Roxford Double Track Project

Estimated Cost to Complete Environmental/Final Design: \$16.7M

Current Phase Completion Date: 2020

Accomplishment:

- July 2018, Board approved programming \$11,528,416 for professional services for the B2R project to accommodate the changes necessary to accommodate the East San Fernando Valley Transit Corridor (ESFVTC) Project and a new pedestrian underpass for the Burbank Airport North Metrolink Station and other design changes to a 100% design level.
- January 2019 Planning and Programming Committee approved contract mod. to get design team restarted.

Challenges/Risks:

- Shifting of Metrolink tracks east to accommodate ESFVTC; grade crossings to be designed to accommodate 4 tracks to avoid unnecessary future rework; transforming existing single-main-track alignment with passing sidings into double mainline track segment.
- ESFVTC could no longer accommodate the second track shown on B&R plans resulting in \$3M increase and right-of-way and construction impacts of approximately \$65M.
- If federal funds are applied, NEPA process must be followed adding time to the schedule.



Rosecrans/Marquardt Grade Separation Project

Current Estimate for Total Project: \$156.4 M

Current Phase Completion Date: 2021

Accomplishments:

- NEPA Clearance (Environmental Assessment approved: 5/02/18, and FONSI approved: 11/07/18); Funding agreement with CHSRA executed: 5/01/18; C&M agreement with BNSF executed: 3/22/18; Cooperative & Funding agreement with City of SFS executed: 7/13/18.
- All funding sources intact; right-of-way acquisitions and design work are in progress - all appraisal for all full take properties have been completed and acquisition efforts are in progress; project plans & specs being progressed towards 90% submittal milestone scheduled for April 24, 2019.

Challenges/Risks:

- June 2020 deadline for all real estate work, ROW certifications and SCE utility relocation work completed while using TCEP funds under Senate Bill 1.
- Project must be ready to issue bid and award construction by November 2020 to comply with other funding sources.
- Duration of ROW acquisition could substantially delay ROW Certification required to bid project; possibility of TCE's part takes to turn into full takes; possibility of SCE's pole relocation work not 100% complete before start of construction contract.



Lone Hill to White Double Track

Estimated Cost to Complete Environmental/Final Design: \$10.0 M

Current Phase Completion Date: 2020

Accomplishment:

- Preliminary Engineering phase completed.

Challenges/Risks:

- Staff will be seeking Board approval to advance the final design of this project in the Spring in 2019.



FY20 Summary

New Projects with Planned Adoption of Life-of-Project Budget:

- Orange Line Bus Rapid Transit Improvement Project
- North Hollywood to Pasadena Bus Rapid Transit Project
- East San Fernando Valley Transit Corridor Project
- West Santa Ana Branch Project
- Division 20 Portal Widening Turnback Facility
- Airport Metro Connector Project
- Metro Eastside Access Improvement Project
- Rail Operations Center and a new Bus Operations Center
- I-5 North HOV Project

Existing Projects with Potential Adjustments to LOP Budget (separate Board action required):

- Patsaouras Plaza Busway Station
- Metro Gold Line I-210 Barrier Replacement Phase I
- Emergency Security Operations Center
- I-5 North: SR 118 to SR 134



Next Steps

- Project Managers to manage project scope, budget, and schedule for quality, on-time and within budget delivery
- To present project-specific Life-of-Project budgets for Board review and adoption
- Maintain resources and staffing needed to manage and support project delivery
- Seek additional revenue sources needed to fulfill funding commitment required to build and deliver projects, including Twenty-eight by 2028



Appendix: Project Listing by Type

	TRANSIT CAPITAL PROJECTS WITH TOTAL PROJECT COSTS > \$5 M	TYPE	BUDGET(\$ MIL.)
1	Crenshaw/LAX Light Rail Transit: Construction	Major Construction	\$2,058.0
2	Regional Connector: Construction	Major Construction	\$1,795.8
3	Westside Purple Line Extension Section 1 Project	Major Construction	\$2,778.9
4	Westside Purple Line Extension Section 2 Project	Major Construction	\$2,440.9
5	Westside Purple Line Extension Section 3 Project	Major Construction	\$3,223.6
6	Gold Line Foothill Extension Phase 2B Project	Major Construction	\$1,406.9
7	Orange Line Bus Rapid Transit Improvements	Major Construction	\$22.0 (a)
8	West Santa Ana Branch	Major Construction	\$26.5 (a)
9	East San Fernando Valley	Major Construction	\$21.2 (a)
		Major Transit Construction Total	\$13,773.8
10	Patsaouras Bus Plaza Paver Retrofit	Misc. Capital Projects	\$9.1
11	Division 20 Portal Widening Turnback Facility	Misc. Capital Projects	\$188.7 (a)
12	Division 22 Paint and Body Shop	Misc. Capital Projects	\$11.0
13	Rail to Rail Corridor Active Transportation Connector Project	Misc. Capital Projects	\$11.4 (a)
14	Metro Eastside Access Improvements Project	Misc. Capital Projects	\$21.0 (a)
15	Airport Metro Connector Project	Misc. Capital Projects	\$151.1 (a)
		Misc. Capital Projects Total	\$392.3
16	Metro Gold Line I-210 Barrier Replacement Phase I	Security/Safety	\$11.1
17	Metro Emergency Security Operations Center	Security/Safety	\$112.7
		Security/Safety Total	\$123.8
18	Southwestern Maintenance Yard	Rail Facilities Improvements	\$157.0
19	Systemwide Elevator Installations (Vertical Systems)	Rail Facilities Improvements	\$8.0
20	Light Rail Transit Freeway Stations Sound Enclosures	Rail Facilities Improvements	\$8.6
21	Metro Red Line Civic Center Station Escalator/Elevator Modernization	Rail Facilities Improvements	\$12.0
22	Willowbrook/Rosa Parks Station Improvement	Rail Facilities Improvements	\$109.4
		Rail Facilities Improvements Total	\$295.0
23	Metro Blue Line Pedestrian Safety Enhancement at Grade Crossings	Wayside Systems	\$31.4
24	Metro Blue Line Track and System Refurbishment	Wayside Systems	\$102.3
25	Metro Blue Line Signal System Rehabilitation	Wayside Systems	\$118.9
		Wayside Systems Total	\$252.6
26	Bus Rapid Transit Freeway Station Sound Enclosure	Bus Facilities Improvements	\$5.8
27	Fuel Storage Tank Program (FY17 - F19)	Bus Facilities Improvements	\$13.2
28	Metro Silver Line Improvements & Upgrades	Bus Facilities Improvements	\$7.8
29	Division 1 Improvements	Bus Facilities Improvements	\$20.9
30	Bus Facility Maintenance Improvements & Enhancements Phase II	Bus Facilities Improvements	\$20.9
31	Bus Facility Maintenance Improvements & Enhancements Phase III	Bus Facilities Improvements	\$21.7
32	Patsaouras Plaza Bus Station Construction	Bus Facilities Improvements	\$39.8
		Bus Facilities Improvements Total	\$130.0
		TRANSIT CAPITAL TOTAL	\$14,967

(a) Based on projected budget through FY20, prior to Board adoption of life-of-project budget.



Appendix: Project Listing by Type

	HIGHWAY	TYPE	CURRENT ESTIMATE (\$ MIL.)
1	I-5 South – Valley View Interchange	Measure R Highway Capital Project	\$631.1
2	I-5 South – San Antonio, Imperial Hwy and Orr Day	Measure R Highway Capital Project	\$323.3
3	I-5 South – Florence Ave. Interchange	Measure R Highway Capital Project	\$211.7
4	I-5 North – North of Buena Vista to South of Magnolia Blvd	Measure R Highway Capital Project	\$399.4
5	I-5 North – Magnolia Blvd to SR 134	Measure R Highway Capital Project	\$165.9
6	I-5 North HOV Project SR 14 to Parker Road	Measure R Highway Capital Project	\$51.4
7	I-605 Corridor Hot Spots – I-605/I-5 Interchange Improvement	Measure R Highway Capital Project	\$30.3
8	I-605 Corridor Hot Spots – I-605/SR 60 Interchange Improvement	Measure R Highway Capital Project	\$41.2
9	I-605 Corridor Hot Spots – SR-91 Westbound Widening at I-605 Interchange	Measure R Highway Capital Project	\$9.3
10	I-605 – Beverly Interchange Improvement Project	Measure R Highway Capital Project	\$4.2
11	I-605 from SR-91 to South St. Improvements Project	Measure R Highway Capital Project	\$4.4
12	I-605/Valley Boulevard Interchange Improvements	Measure R Highway Capital Project	\$2.1
13	SR-60/7th Avenue Interchange Improvements	Measure R Highway Capital Project	\$2.0
14	EB SR-91 Atlantic Avenue to Cherry Avenue Auxiliary Lane Improvements	Measure R Highway Capital Project	\$7.4
15	I-405 Crenshaw Blvd On and Off Ramp Improvements	Measure R Highway Capital Project	\$24.4
16	I-405 Auxiliary Lanes - Artesia Blvd to I-105	Measure R Highway Capital Project	\$4.1
17	I-710 (South) Corridor Improvement Projects	Measure R Highway Capital Project	\$91.0
18	I-710 (South) Early Action Projects - Soundwall Projects (3 locations)	Measure R Highway Capital Project	\$10.1
19	I-710 (North) Corridor EIR/EIS	Measure R Highway Capital Project	\$47.1
20	SR-710 (North) TSM/TDM	Measure R Highway Capital Project	\$45.0
21	SR-710 (North) Mobility Improvement Projects	Measure R Highway Capital Project	\$515.0
22	Soundwall Package 10	Measure R Highway Capital Project	\$11.8
23	Soundwall Package 11	Measure R Highway Capital Project	\$89.2
		Measure R Highway Total	\$2,721.4
24	SR 57 and SR 60 Mixed Flow Interchange	Other Highway Projects	\$74.0
25	SR 71: Interstate 10 to Mission Blvd	Other Highway Projects	\$60.9
26	SR 71: Mission Blvd to Rio Rancho Road	Other Highway Projects	\$35.2
		Other Highway Total	\$170.1
		HIGHWAY PROGRAM TOTAL	\$2,891.5
	REGIONAL RAIL	TYPE	CURRENT ESTIMATE (\$ MIL.)
1	LINK Union Station Project	Regional Rail	\$70.4
2	Doran Street and Broadway/Brazil Safety and Access Project	Regional Rail	\$8.6
3	Brighton to Roxford Double Track Project	Regional Rail	\$16.7
4	Rosecrans/Marquardt Grade Separation Project	Regional Rail	\$156.4
5	Lone Hill to White Double Track Project	Regional Rail	\$10.0
		REGIONAL RAIL PROGRAM TOTAL	\$262.1
		Total Program:	\$18,121



Board Report

File #: 2019-0099, File Type: Project

Agenda Number: 30.

CONSTRUCTION COMMITTEE APRIL 18, 2019

SUBJECT: PROJECT NO. 202808 CMF BUILDING 5 DUST COLLECTION SYSTEM PROJECT

ACTION: AUTHORIZE INCREASE IN LIFE OF PROJECT BUDGET

RECOMMENDATION

AUTHORIZE an increase in the life of project (LOP) budget for Project No. 202808 by \$440,000 for Central Maintenance Facility (CMF) Building 5 Dust Collection System project from \$785,000 to \$1,225,000.

ISSUE

On January 23, 2019, two bids were submitted in response to the solicitation of capital project CMF Building 5 Dust Collection System Project. The bid for the lowest responsive, responsible bidder is \$972,000, which exceeds the funds available for this project.

BACKGROUND

In August 2017, the Metro Board of Directors authorized the use of a design-build contracting method for the CMF Building 5 Dust Collection System Project. The Board Report [File No. 2017-0176] stated that the project would replace the ineffective, inefficient air scrubber system, which also uses more than 10,000 gallons of potable water each day. The proposed dust collection system is consistent with Metro's intent to reduce energy use and to conserve potable water, as outlined in Metro's Environmental Policy, Water Use and Conservation Policy, and Energy Conservation and Management Plan.

DISCUSSION

On January 23, 2019, two bids were received and opened for the CMF Dust Collection System project. Both bids were higher than the LOP budget established for this project. As a result, additional funds are needed. As a lesson learned, our new practice is to set LOP budgets later in the design/procurement process to minimize the potential for an LOP increase.

DETERMINATION OF SAFETY IMPACT

This Board action will not have an adverse impact on safety standards for Metro. It will however

increase safety as projects become more energy and operationally efficient.

FINANCIAL IMPACT

The funding for FY19 is included in Project 202808, CMF Building 5 Dust Collection System project, Cost Center 8510 Construction Contracts/Procurement.

Since this is a multi-year capital project, the cost center manager, project manager, and Chief Program Management Officer will be responsible for budgeting for costs in future years.

Impact to Budget

Funding for this project is from Sustainability Implementation Program, which is funded with Green Fund. As the project addresses the water conservation and energy efficiency, this is an appropriate funding source.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

This project supports the implementation of Metro's Strategic Plan Goals, with specific alignment to Initiative 1.3 - manage transportation demand through fair and equitable pricing structures and Initiative 5.2 - exercise good public policy judgment and sound fiscal stewardship by: 1) reducing electricity consumption and costs at Metro facilities; 2) reducing water consumption and costs; and 3) improving the air quality and working condition in CMF Building 5.

ALTERNATIVES CONSIDERED

Metro has explored reducing the scope of the project and conducting a new solicitation; however, the potential exists for the submission of bids that are higher due to the current competitive nature of the construction marketplace.

The Board may reject the request for an LOP increase. This is not recommended as it would leave in place the existing, inefficient air scrubber system that does not meet air quality standards and uses 10,000 gallons of water per day.

NEXT STEPS

Staff will execute a contract with the lowest responsive, responsible bidder for the installation of the dust collection system in Building 5 at CMF.

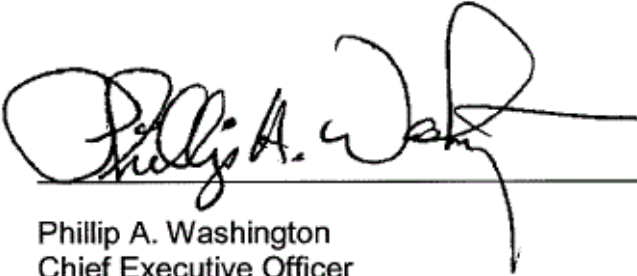
ATTACHMENTS

Attachment A - Procurement Summary

Attachment B - Funding and Expenditure Plan
Attachment C - DEOD Summary

Prepared by: Cris B. Liban, EO, Environmental Compliance and Sustainability
(213) 922-2471

Reviewed by: Richard Clarke, Chief Program Management Officer (213) 922-7557
Debra Avila, Chief Vendor/Contract Management Officer (213) 418-3051



Phillip A. Washington
Chief Executive Officer

PROCUREMENT SUMMARY

**CMF BUILDING 5 DUST COLLECTION SYSTEM
C56883C1179-2**

1.	Contract Number: C56883C1179-2	
2.	Recommended Vendor: Simgel Company, Inc.	
3.	Type of Procurement (check one): <input checked="" type="checkbox"/> IFB <input type="checkbox"/> RFP <input type="checkbox"/> RFP-A&E <input type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input type="checkbox"/> Task Order	
4.	Procurement Dates:	
	A. Issued: December 17, 2018	
	B. Advertised/Publicized: December 19, 2018	
	C. Pre-Proposal Conference: January 3, 2019	
	D. Proposals Due: January 23, 2019	
	E. Pre-Qualification Completed: February 12, 2019	
	F. Organizational Conflict of Interest Review Completed by Ethics: January 25, 2019	
	G. Protest Period End Date: 15 Calendar Days from recommendation of award submitted to CEO	
5.	Solicitations Picked up/Downloaded: 6	Proposals Received: 2
6.	Contract Administrator: Daniel A. Robb	Telephone Number: 213.922-7074
7.	Project Manager: Cris Liban	Telephone Number: 213.922-2471

A. Procurement Background

The Board Action is to approve the life of project (LOP) budget for Project No. 202808, which will allow the Chief Executive Officer to, in accordance with PUC 130051.9(c), approve the award of Contract No. C56883C1179-2 CMF Building 5 Dust Collection System to support Metro's Environmental Compliance and Sustainability Department (ECSD). This will replace the current system which is an outdated, ineffective, inefficient air scrubber system, using more than 10,000 gallons of potable water each day. The replacement dust collection system is consistent with Metro's intent to reduce energy use and to conserve potable water, as outlined in Metro's Environmental Policy, Water Use and Conservation Policy, and Energy Conservation and Management Plan.

The Invitation for Bid (IFB) No. C56883C1179-2, was issued in accordance with Public Utilities Code §130232, on December 17, 2018, for a contracting opportunity. A mandatory goal of 3% Small Business Enterprise and a 3% Disabled Veteran Business Enterprise (DVBE) goal was recommended for this project.

The IFB was advertised on December 19, 2018, in La Opinion, Los Angeles Daily News, LA Sentinel, Rafu Shimpo and The Chinese Daily News. The e-mail notification of the solicitation was sent to all firms in the applicable NAICS Codes for this project. The Pre-Bid Conference was held on January 3, 2019, with two firms in attendance.

The contract type is a Firm Fixed Price Contract. The Contract Period of Performance is 1095 Calendar Days from Notice to Proceed.

No amendments were issued during the solicitation phase of the RFP.

A total of two (2) bids were received on January 23, 2019.

B. Evaluation of Bids

This procurement was conducted in accordance, and complies with LACMTA's Acquisition Policy for a competitive sealed bid. The 2 bids received are listed below in alphabetical order:

1. A-P Construction, Inc.
2. Simgel Company, Inc.

Both bidders were determined to be responsive, responsible and capable of performing the work. Simgel Company, Inc. is determined to be the lowest price, responsive, responsible bidder.

C. Cost/Price Analysis

The recommended price has been determined to be fair and reasonable. The recommended price of \$972,000.00 is 1.3% lower than the Independent Cost Estimate (ICE) of \$985,168.00. The second lowest bid of \$1,490,000.00 is 51.3% higher than the ICE.

Bidder Name	Bid Amount	Metro ICE
Simgel Company, Inc.	\$972,000.00	\$985,168.00
A-P Construction, Inc.	\$1,490,000.00	

D. Background on Recommended Contractor

Simgel Company, Inc. is an SBE firm located in Los Angeles, California and was established in 1991. Simgel Company, Inc. holds active license classifications A, B, and C-8. Simgel Company, Inc. has completed similar projects for the various

governmental agencies in California. Currently, Simgel is working on the following Metro contracts:

- 1) Bus Wash Systems, C36183C1144-2
- 2) Division 2 Roof Replacement, C36395C1145-3
- 3) Parking Refurbishment at 7 Park-N-Ride Lots, C49758C1167

FUNDING / EXPENDITURE PLAN
Project No. 202808 - CMF Paint Shop Ventilation Project
Dust Collection System Project

	Use of Funds	Inception to January 2019	Remaining Funds FY19	FY20	Capital Cost Total
1	Rail Division Energy Efficiency Project				
2	CMF Dust Collection - Past Expenditures	\$16,532			\$16,532
3	CMF Dust Collection - Metro Labor		\$65,170		\$65,170
4	CMF Dust Collection - Prof. Services		\$25,000		\$25,000
5	CMF Dust Collection - Construction		\$575,000	\$397,000	\$972,000
6	Contingency (available funds)			\$103,298	\$103,298
7	Contingency (proposed new funds)			\$43,000	\$43,000
	Total Project Costs	\$16,532	\$665,170	\$543,298	\$1,225,000

15% combined

	Source of Funds	Inception to January 2019	Remaining Funds FY19	FY20	Totals
1	Capital Program	\$16,532	\$665,170	\$103,298	\$785,000
2	Sustainability Capital FY20			\$440,000	\$440,000
	Total Project Funding	\$16,532	\$665,170	\$543,298	\$1,225,000

<u>LOP Budget Increase</u>	<u>Amounts</u>	<u>Notes</u>
A. Authorized 202808 LOP Budget	\$785,000	Current LOP Budget amount
B. Encumbered CMF Dust Collection System Project	\$768,468	Amount encumbered for this project
C. Estimated Cost for CMF Dust Collection System	\$1,208,468	Sum of FY19 and FY20 Use of Funds
D. Required LOP Budget Increase	\$440,000	Item C minus Item B for total shortfall
E. Total LOP Budget after Proposed Increase	\$1,225,000	Item A plus Item D

DEOD SUMMARY

CMF BUILDING 5 DUST COLLECTION SYSTEM PROJECT/ AE5764500

A. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) established a 3% Small Business Enterprise (SBE) goal and a 3% Disabled Veteran Business Enterprise (DVBE) goal for this solicitation. Simgel Company, Inc., an SBE Prime, exceeded the goals with a 41.36% SBE commitment and a 4.63% DVBE commitment.

Small Business Goal	3% SBE 3% DVBE	Small Business Commitment	41.36% SBE 4.63% DVBE
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	SBE Prime	% Committed
1.	Simgel Company, Inc.	41.36%
	Total SBE Commitment	41.36%

	DVBE Subcontractors	% Committed
1.	PN Supply	4.63%
	Total DVBE Commitment	4.63%

B. Living/Prevailing Wage and Service Contract Worker Retention Policy Applicability

The Living Wage and Service Contract Worker Retention Policy is not applicable to this contract.

C. Prevailing Wage Applicability

Prevailing Wage requirements are applicable to this project. DEOD will continue to monitor contractors' compliance with the State of California Department of Industrial Relations (DIR), California Labor Code, and, if federally funded, the U S Department of Labor (DOL) Davis Bacon and Related Acts (DBRA).

D. Project Labor Agreement/Construction Careers Policy

Project Labor Agreement/Construction Careers Policy is not applicable to this Contract. Project Labor Agreement/Construction Careers Policy is applicable only to construction contracts that have a construction contract value in excess of \$2.5 million.



Board Report

File #: 2019-0153, File Type: Contract

Agenda Number: 31.

**CONSTRUCTION COMMITTEE
APRIL 18, 2019**

SUBJECT: PROGRAM MANAGEMENT SUPPORT SERVICES

ACTION: APPROVE RECOMMENDATIONS

RECOMMENDATION

AUTHORIZE:

- A. An increase to the total authorized funding for Contract No. AE35279 with Kal Krishnan Consulting Services/Triunity Engineering and Management Joint Venture (KTJV), for pending and future Contract Work Orders to provide Program Management Support Services (PMSS) in the amount of \$65,838,110, increasing the authorized funding limit from \$24,970,960 to \$90,809,070, consistent with previous action taken by the Board in June 2017 for the remaining five years of the contract, which includes exercising the option to extend the PMSS contract by two years; and
- B. The Chief Executive Officer or designee to execute individual Contract Work Orders (CWOs) and Contract Modifications within the Board approved contract funding amount.

SOLIS AMENDMENT: that the Board amends Agenda Item No. 31 to authorize funding for two years and direct Metro staff to return in April 2021 with the next request for authorization as well as a report on the contractor's performance.

ISSUE

In June 2017, the Board approved awarding a five-year cost reimbursable fixed fee Contract No. AE35279, plus one two-year option, to KTJV, a DBE Prime Joint Venture, for Program Management support services for a not-to-exceed amount of \$24,970,960 through Fiscal Year 2019. The Board action provided initial funding through the end of FY19 as part of a multiyear contract with an anticipated five-year base contract value of \$63,347,705 plus \$27,461,365 for the two-year option, for a combined total amount not-to-exceed \$90,809,070 for seven years.

BACKGROUND

To date, staff has awarded CWO/Modifications totaling \$24,120,732.10 and has approximately \$850,227.90 of the authorized funding remaining. Attachment B lists the CWO/Modifications executed over the initial two-year funded duration of the PMSS contract. Staff is now seeking the remaining funding in the amount not-to-exceed \$65,838,110 to support PMSS for the next five years of the Contract.

DISCUSSION

Metro is currently undertaking the largest transportation construction program in the nation. This creates an unprecedented challenge to project delivery. Recognizing that staffing is a key factor in project delivery, Program Management is committed to developing strengths in its capacity and capability to ensure the multi-billion dollar capital program can be successfully managed. Attachment D lists the projects that we expect to support over the duration of the PMSS contract.

The PMSS Contract is utilized to assist Program Management in securing sufficient qualified resources across a broad spectrum of disciplines in a timely manner needed to manage and support delivery of Board approved projects. Metro staff works with KTJV to scale staff up or down depending on Metro's transit, highway, regional rail and other capital improvement program needs. Currently, there is a greater reliance on consultants due to the size of Metro's capital program. The Contract terms allow Metro to efficiently and effectively augment Program Management staff to ensure proper resources necessary to manage a project are available to Metro in terms of additional staff and technical expertise.

Scope

To support the aggressive project implementation schedule for delivering Metro's Capital Program, close coordination and expertise across multiple disciplines are required in the following eight key functions: project management, program management, project delivery development support, project control, estimating, configuration management, project management and other technical training, and Project Management Information System (PMIS) support services. In addition, the scope has allowed for contract administration and small business contract compliance support, assisting Vendor/Contract Management (V/CM) to efficiently provide sufficient staffing needed to perform V/CM support activities.

Combining all the above functions together into one contract has allowed for a better coordinated and more efficient allocation of resources for Metro than would be possible under a series of separate contracts. To date, the PMSS contract has succeeded in fulfilling the consultant staffing demand on a program-wide level on various transit, regional rail, highway, and other capital improvement projects.

Contract funds are authorized by issuing separate CWOs for various projects using labor classifications and rates set forth in the contract, with funding solely supported through the Life of Project budget. This method of contracting results in more efficient cost and schedule management, since CWOs and modifications to existing CWOs are negotiated and issued as additional work is identified. For each CWO or modification, Metro prepares a scope of work and an estimate of hours, and KTJV subsequently provides a proposal. Metro and KTJV will fact-find and negotiate the hours if

there is a discrepancy. After agreement, the CWO is issued and the work proceeds.

Consultant Services

To date, KTJV has completed and is continuing assignments on project staff augmentation (WPLE Sections 1, 2, and 3; Crenshaw/LAX; Regional Connector; Blue Line Improvements; West Santa Ana Branch, East San Fernando Valley; Eastside Access; Regional Rail; and State of Good Repair projects support), Metro Gateway staff augmentation (Program Management and Control; Environmental; Disadvantaged Business Enterprise and Small Business Enterprise Contract Compliance; and WinLA support), specialty assignments (constructability review; risk assessment support; procedure writing and training; PMIS; lessons learned/Best Management Practices implementation; and P3 capability development support), and other projects as necessary. KTJV has been responsive and works with Metro staff to provide sufficient qualified resources necessary for Program Management to meet the aggressive implementation schedule for delivering Metro's Capital Program.

DETERMINATION OF SAFETY IMPACT

This Board action will not have an impact on established safety standards for Metro's capital projects.

FINANCIAL IMPACT

The not-to-exceed funding amount is based on the anticipated level of services. Funding for these services is included in the adopted FY19 and proposed FY20 budget for the various Metro projects. The individual CWOs will be funded from the associated life-of-project (LOP) budgets that are approved by the Board. The project managers, cost managers and Chief Program Management Officer will be accountable for budgeting the cost in future years, including cost associated with exercising the option.

Impact to Budget

There will be no impact to the FY20 Budget as funds for this action will be included in the budget for each project. Most of the projects are funded with multiple sources of funds: federal and state grants, federal loans, bonds and local sales taxes. Much of local sales taxes are eligible for bus and rail operations and capital improvements. These funds are programmed to state of good repair projects and to augment the costs of mega projects, where eligible and appropriate.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Recommendation supports Strategic Plan Goal #1 - Provide high-quality mobility options that enable people to spend less time traveling. This will be accomplished by providing program-wide support services to assist in delivering multiple capital projects on time and on budget while increasing opportunities for small business development and innovation.

ALTERNATIVES CONSIDERED

The Board may elect to discontinue using KTJV for PMSS. Staff does not recommend this alternative as the Program Management capital projects are in various degrees of completion and the loss of staff would cause these projects to be significantly impacted.

Another alternative would be to hire Metro staff to perform the required services. This alternative is also not recommended since the intent of the PMSS is to augment Metro staff in terms of technical expertise and availability of personnel. PMSS are typically required on a periodic or short-term basis to accommodate for peak workloads or specific tasks over the life of the projects. Further, for some projects, the specific technical expertise required may not be available within the ranks of Metro staff, whereas the KTJV consultant can provide the technical expertise on an as-needed basis.

NEXT STEPS

Upon Board approval, staff will issue a Contract Modification exercising the two-year option, and issue Contract Work Orders, as needed.

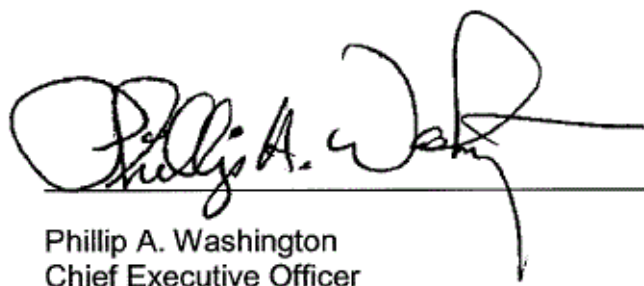
ATTACHMENTS

- Attachment A - Procurement Summary
- Attachment B - Contract Work Order/Modification Log
- Attachment C - DEOD Summary
- Attachment D - Current and Anticipated List of Projects

Prepared by: Brian Boudreau, Sr. Executive Officer, Program Control, (213) 922-2474

Reviewed by:

Richard F. Clarke, Chief Program Management Officer, (213) 922-7447
Debra Avila, Chief Vendor/Contracts Management Officer, (213) 418-3051



Phillip A. Washington
Chief Executive Officer

PROCUREMENT SUMMARY

PROGRAM MANAGEMENT SUPPORT SERVICES (PMSS)

1.	Contract Number: AE35279		
2.	Contractor: Kal Krishnan Consulting Services/Triunity Engineering and Management Joint Venture (KTJV)		
3.	Mod. Work Description: Funding for additional Contract Work Orders for projects listed in Attachment D – Current and Anticipated List of Projects		
4.	Contract Work Description: Program Management Support Services		
5.	The following data is current as of: March 20, 2019		
6.	Contract Completion Status		Financial Status
	Contract Awarded:	June 22, 2017	Original authorized funding limit: \$ 24,970,960.00
	Contract Executed Date:	August 18, 2017	Total of Contract Work Orders and Modifications Approved: \$ 24,120,732.10
	Original Completion Date:	August 18, 2022	Proposed and Pending Contract Work Orders and Modifications (including this action): \$ 66,688,337.90
	Current Est. Completion Date:	August 18, 2024	Total authorized funding limit (with this action): \$ 90,809,070.00
7.	Contract Administrator: Robert Romanowski		Telephone Number: (213) 922-2633
8.	Project Manager: Mayumi Lyon		Telephone Number: (213) 922-4020

A. Procurement Background

On June 22, 2017, the Board approved award of Contract No. AE35279 to Kal Krishnan Consulting Services/Triunity Engineering and Management Joint Venture (KTJV) for five years with funding approval through FY2019 in the amount of \$24,970,960.00, for the Scope of Work included in the Program Management Support Services (PMSS) Contract.

Attachment B shows that 28 Contract Work Orders and their Modifications have been issued to date to authorize and/or delete work, totaling \$24,120,732.10.

This Board Action is to approve an increase to the total authorized funding for Contract No. AE35279 in support of additional Program Management Support Services (PMSS) needs and to exercise the two-year option to extend the period of performance through August 18, 2024.

B. Cost/Price Analysis

All direct labor rates as modified by the annual economic price adjustment and the negotiated fixed fee factor for this cost reimbursable plus fixed fee contract remain unchanged from the original contract.

A fair and reasonable price for all future Contract Work Orders will be determined based upon fact finding, scope definition, technical evaluation, cost analysis, and negotiations before issuing work to the Consultant. Contract Work Orders will be processed in accordance with Procurement Policies and Procedures, within the additional funding requested.

CONTRACT WORK ORDER / MODIFICATION LOG



Metro Professional Services Agreement Status Report by
CWO Date
Project Listing

Page: 1 of 2
Date: 03/20/2019 10:50 am

Contract: AE35279		Program Management Support Services		To: KKCS/TRIUNITY JV			COST: \$24,970,960				
Project Number	CWO No.	Approval Date	Description	Total Cost	Apprvd Changes	Pending Changes	Revised Contract Sum	Start Date	Completion Date	Revised Date	Status
APP											
460324	AE35279-001	08/31/2017	Program-wide Management Support Services	\$0.00	\$57,879.72	\$0.00	\$57,879.72	08/21/2017	06/30/2018	06/30/2018	APP
205108	AE35279-001	08/31/2017	Program-wide Management Support Services	\$0.00	\$28,839.28	\$0.00	\$28,839.28	08/21/2017	06/30/2018	06/30/2018	APP
210151	AE35279-001	08/31/2017	Program-wide Management Support Services	\$0.00	\$28,851.22	\$0.00	\$28,851.22	08/21/2017	06/30/2018	06/30/2018	APP
100800	AE35279-001	08/31/2017	Program-wide Management Support Services	\$645,684.71	\$833,984.87	\$0.00	\$1,479,669.58	08/21/2017	06/30/2018	06/30/2018	APP
205115	AE35279-001	08/31/2017	Program-wide Management Support Services	\$0.00	\$28,839.28	\$0.00	\$28,839.28	08/21/2017	06/30/2018	06/30/2018	APP
212121	AE35279-002	09/18/2017	Constructability Evaluation and Risk Assessment Review	\$114,797.62	\$0.00	\$0.00	\$114,797.62	09/18/2017	11/17/2017	11/17/2017	APP
100800	AE35279-002	09/18/2017	Constructability Evaluation and Risk Assessment Review	\$0.00	\$20,836.95	\$0.00	\$20,836.95	09/18/2017	11/17/2017	11/17/2017	APP
865523	AE35279-003	09/12/2017	Project Delivery Development Support	\$196,000.00	\$204,561.00	\$0.00	\$400,561.00	08/28/2017	06/30/2018	06/30/2018	APP
865522	AE35279-003	09/12/2017	Project Delivery Development Support	\$84,000.00	\$10,000.00	\$0.00	\$94,000.00	08/28/2017	06/30/2018	06/30/2018	APP
100800	AE35279-003	09/12/2017	Project Delivery Development Support	\$20,000.00	\$10,000.00	\$0.00	\$30,000.00	08/28/2017	06/30/2018	06/30/2018	APP
865512	AE35279-004	09/15/2017	Crenshaw/LAX & Southwestern Yard Projects - Program	\$846,196.05	\$1,359,409.11	\$0.00	\$2,205,605.16	08/28/2017	06/30/2018	06/30/2018	APP
860003	AE35279-004	09/15/2017	Crenshaw/LAX & Southwestern Yard Projects - Program	\$211,549.01	\$1,029,737.35	\$0.00	\$1,241,286.36	08/28/2017	06/30/2018	06/30/2018	APP
100058	AE35279-005	09/29/2017	Project Management Information System (PMIS) Ongoing	\$0.00	\$74,826.00	\$0.00	\$74,826.00	09/01/2017	12/31/2017	12/31/2017	APP
100800	AE35279-005	09/29/2017	Project Management Information System (PMIS) Ongoing	\$451,825.10	\$721,921.27	\$0.00	\$1,173,746.37	09/01/2017	12/31/2017	12/31/2017	APP
865518	AE35279-006	09/19/2017	Westside Purple Line Extension Section 1 - Program Con	\$919,952.06	\$703,774.42	\$0.00	\$1,623,726.48	09/01/2017	06/30/2018	06/30/2018	APP
865522	AE35279-007	09/19/2017	Westside Purple Line Extension Section 2 - Program Con	\$627,112.16	\$262,197.39	\$0.00	\$889,309.55	09/05/2017	06/30/2018	06/30/2018	APP
450001	AE35279-008	09/13/2017	Environmental Compliance and Sustainability - Program	\$76,234.69	\$98,168.17	\$0.00	\$174,402.86	08/28/2017	06/30/2018	06/30/2018	APP
450002	AE35279-008	09/13/2017	Environmental Compliance and Sustainability - Program	\$76,234.70	\$98,168.18	\$0.00	\$174,402.88	08/28/2017	06/30/2018	06/30/2018	APP
450003	AE35279-008	09/13/2017	Environmental Compliance and Sustainability - Program	\$76,234.69	\$98,168.18	\$0.00	\$174,402.87	08/28/2017	06/30/2018	06/30/2018	APP
450004	AE35279-008	09/13/2017	Environmental Compliance and Sustainability - Program	\$76,234.69	\$98,168.18	\$0.00	\$174,402.87	08/28/2017	06/30/2018	06/30/2018	APP
300012	AE35279-008	09/13/2017	Environmental Compliance and Sustainability - Program	\$76,234.70	\$98,168.17	\$0.00	\$174,402.87	08/28/2017	06/30/2018	06/30/2018	APP
202212	AE35279-008	09/13/2017	Environmental Compliance and Sustainability - Program	\$76,234.71	\$98,168.17	\$0.00	\$174,402.88	08/28/2017	06/30/2018	06/30/2018	APP
860228	AE35279-009	09/19/2017	Regional Connector Transit Project - Program Control Su	\$368,983.64	\$307,565.00	\$0.00	\$676,548.64	09/01/2017	06/30/2018	06/30/2018	APP
100800	AE35279-010	09/21/2017	Project Management Information System (PMIS) - Unifier	\$245,165.16	\$0.00	\$0.00	\$245,165.16	09/01/2017	12/31/2017		APP
865523	AE35279-011	10/13/2017	Contract Compliance Monitoring Support Services	\$0.00	\$344,196.00	\$0.00	\$344,196.00	10/16/2017	06/30/2018	06/30/2018	APP
865518	AE35279-011	10/13/2017	Contract Compliance Monitoring Support Services	\$196,750.28	\$242,965.50	\$0.00	\$439,715.78	10/16/2017	06/30/2018	06/30/2018	APP
865512	AE35279-011	10/13/2017	Contract Compliance Monitoring Support Services	\$104,722.00	\$138,892.00	\$0.00	\$243,614.00	10/16/2017	06/30/2018	06/30/2018	APP
860228	AE35279-011	10/13/2017	Contract Compliance Monitoring Support Services	\$114,242.13	\$120,373.00	\$0.00	\$234,615.13	10/16/2017	06/30/2018	06/30/2018	APP
860003	AE35279-011	10/13/2017	Contract Compliance Monitoring Support Services	\$104,722.00	\$138,892.00	\$0.00	\$243,614.00	10/16/2017	06/30/2018	06/30/2018	APP
865522	AE35279-011	10/13/2017	Contract Compliance Monitoring Support Services	\$114,242.13	\$122,592.50	\$0.00	\$236,834.63	10/16/2017	06/30/2018	06/30/2018	APP
100058	AE35279-012	11/01/2017	Program Management Support Services	\$0.00	\$379,785.00	\$0.00	\$379,785.00	12/01/2017	12/31/2018		APP
860228	AE35279-012	11/30/2017	Project Management Information System Enhancement I	\$0.00	\$78,609.00	\$0.00	\$78,609.00	12/01/2017	12/31/2018	12/31/2018	APP
100055	AE35279-012	11/30/2017	Project Management Information System Enhancement I	\$0.00	\$78,609.00	\$0.00	\$78,609.00	12/01/2017	12/31/2018	12/31/2018	APP
100800	AE35279-012	11/30/2017	Project Management Information System Enhancement I	\$1,919,948.74	\$499,224.00	\$0.00	\$2,419,172.74	12/01/2017	12/31/2018	12/31/2018	APP
865523	AE35279-012	11/30/2017	Project Management Information System Enhancement I	\$0.00	\$78,609.00	\$0.00	\$78,609.00	12/01/2017	12/31/2018	12/31/2018	APP
100800	AE35279-013	11/15/2017	Los Angeles Construction Market Analysis	\$266,134.23	\$0.00	\$0.00	\$266,134.23	11/17/2017	04/30/2018	04/30/2018	APP
460201	AE35279-014	12/28/2017	West Santa Ana Branch (WSAB) P3 Technical Advisory	\$0.00	\$2,310,838.15	\$0.00	\$2,310,838.15	01/02/2018	03/15/2018	03/15/2018	APP
405701	AE35279-014	12/28/2017	West Santa Ana Branch (WSAB) P3 Technical Advisory	\$203,546.08	\$11,322.06	\$0.00	\$214,868.14	01/02/2018	03/15/2018	03/15/2018	APP
460324	AE35279-015	12/13/2017	Program Control Support Services on Bus & Rail Capital	\$48,036.10	\$66,794.00	\$0.00	\$114,830.10	12/18/2017	06/30/2018	06/30/2018	APP
202317	AE35279-015	12/13/2017	Program Control Support Services on Bus & Rail Capital	\$48,036.11	\$66,794.00	\$0.00	\$114,830.11	12/18/2017	06/30/2018	06/30/2018	APP

CONTRACT WORK ORDER / MODIFICATION LOG



Metro Professional Services Agreement Status Report

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Contract: AE35279		Program Management Support Services			To: KKCS/TRIUNITY JV			COST: \$24,970,960			
Project Number	CWO No.	Approval Date	Description	Total Cost	Apprvd Changes	Pending Changes	Revised Contract Sum	Start Date	Completion Date	Revised Date	Status
APP											
405523	AE35279-016	12/27/2017	I-405 Widening Project Closeout Support	\$391,957.37	\$481,192.00	\$0.00	\$873,149.37	01/02/2018	12/31/2018	12/31/2018	APP
865523	AE35279-017	01/18/2018	Westside Purple Line Extension Section 3 Project - Proje	\$286,495.87	\$1,039,735.00	\$0.00	\$1,326,230.87	01/18/2018	06/30/2018	06/30/2018	APP
100001	AE35279-018	01/29/2018	Workforce Initiative Now - Los Angeles (WINLA) Technic	\$111,514.88	\$173,096.67	\$0.00	\$284,611.55	02/01/2018	06/30/2018	06/30/2018	APP
205108	AE35279-019	02/08/2018	Project Management Support on State of Good Repair an	\$56,487.33	\$100,000.00	\$0.00	\$156,487.33	02/12/2018	06/30/2018	06/30/2018	APP
205115	AE35279-019	02/08/2018	Project Management Support on State of Good Repair an	\$0.00	\$100,000.00	\$0.00	\$100,000.00	02/12/2018	06/30/2018	06/30/2018	APP
405509	AE35279-019	02/08/2018	Project Management Support on State of Good Repair an	\$10,946.20	\$32,665.00	\$0.00	\$43,611.20	02/12/2018	06/30/2018	06/30/2018	APP
210151	AE35279-019	02/08/2018	Project Management Support on State of Good Repair an	\$45,541.12	\$75,000.00	\$0.00	\$120,541.12	02/12/2018	06/30/2018	06/30/2018	APP
100800	AE35279-020	09/21/2018	Risk Management Support Services	\$99,436.00	\$0.00	\$0.00	\$99,436.00	09/21/2018	06/30/2019		APP
860228	AE35279-021	10/12/2018	Schedule Claims Avoidance Support Services	\$50,205.05	\$0.00	\$0.00	\$50,205.05	10/10/2018	12/31/2018		APP
460066	AE35279-022	09/24/2018	Regional Rail - Program Control Support Services	\$31,865.00	\$0.00	\$0.00	\$31,865.00	09/24/2018	06/30/2019		APP
212121	AE35279-022	09/24/2018	Regional Rail - Program Control Support Services	\$31,865.00	\$0.00	\$0.00	\$31,865.00	09/24/2018	06/30/2019		APP
460089	AE35279-022	09/24/2018	Regional Rail - Program Control Support Services	\$31,865.00	\$0.00	\$0.00	\$31,865.00	09/24/2018	06/30/2019		APP
210151	AE35279-023	09/24/2018	Program Management Support Services (PMSS) for New	\$213,349.00	\$0.00	\$0.00	\$213,349.00	09/24/2018	06/30/2019		APP
205108	AE35279-023	09/24/2018	Program Management Support Services (PMSS) for New	\$213,349.00	\$0.00	\$0.00	\$213,349.00	09/24/2018	06/30/2019		APP
205115	AE35279-023	09/24/2018	Program Management Support Services (PMSS) for New	\$213,349.00	\$0.00	\$0.00	\$213,349.00	09/24/2018	06/30/2019		APP
460300	AE35279-024	09/25/2018	Program Management Support Services for Eastside Acc	\$237,268.00	\$0.00	\$0.00	\$237,268.00	09/25/2018	12/30/2019		APP
465521	AE35279-025	11/09/2018	East San Fernando Valley Project (ESFV) Project Techni	\$428,282.00	\$0.00	\$0.00	\$428,282.00	11/09/2018	06/30/2019		APP
100800	AE35279-026	01/09/2019	Program Wide Activities - Contract Submittal Review Req	\$99,436.00	\$99,668.00	\$0.00	\$199,104.00	01/09/2019	06/30/2019		APP
865518	AE35279-027	01/18/2019	WPLE Section 1 PMSS - DRB Preparation and Presentat	\$52,250.00	\$0.00	\$0.00	\$52,250.00	01/14/2019	09/28/2019		APP
460305	AE35279-028	02/27/2019	Sepulveda Corridor Project P3 Technical Advisory Suppo	\$154,133.00	\$0.00	\$0.00	\$154,133.00	02/27/2019	06/30/2019		APP
Totals:				\$11,068,648.31	\$13,052,083.79	\$0.00	\$24,120,732.10				
Totals:				\$11,068,648.31	\$13,052,083.79	\$0.00	\$24,120,732.10				
Grand Totals:				\$11,068,648.31	\$13,052,083.79	\$0.00	\$24,120,732.10				

DEOD SUMMARY

PROGRAM MANAGEMENT SUPPORT SERVICES (PMSS)

A. Small Business Participation

Kal Krishnan Consulting Services/TriunityJoint Venture (KTJV), a Disadvantaged Business Enterprise (DBE) Prime Joint Venture, made a 73.31% DBE commitment. The project is currently in the first two years of funding on a five-year base contract or 20% complete and KTJV's current DBE participation is 72.98%, which represents a 0.33% shortfall. The current Contract Modification is seeking an increase to the total authorized funding and extending the period of performance through 2024. KTJV forecasts that the additional scopes of work to be performed by DBE's are expected to grow and will increase KTJV's level of DBE participation. KTJV anticipates meeting its DBE commitment over the life of the Contract.

Notwithstanding, Metro Project Managers and Contract Administrators, will work in conjunction with DEOD to ensure that KTJV is on schedule to meet or exceed its DBE commitment. Metro staff will request that KTJV submit an updated mitigation plan if KTJV is not on track to meet its small business commitment. Additionally, key stakeholders associated with the contract have been provided access to Metro's tracking and monitoring system to ensure that all parties are actively tracking Small Business progress.

Small Business Commitment	73.31% DBE	Small Business Participation	72.98% DBE
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	DBE Contractors	Ethnicity	% Committed	% Participation
1.	KKCS (JV Partner / DBE Prime)	Subcontinent Asian	TBD	32.20%
2.	Triunity (JV Partner / DBE Prime)	African American	TBD	13.95%
3.	Armand Resource Group, Inc.	African American	TBD	7.16%
4.	Lenax Construction	Caucasian Female	TBD	7.86%
5.	LKG-CMC, Inc.	Caucasian Female	TBD	1.59%
6.	MBI Media	Caucasian Female	TBD	0.00%
7.	Ogx Consulting	African American	TBD	0.00%
8.	Ramos Consulting	Hispanic American	TBD	2.35%
9.	Stellar Services, Inc.	Asian Pacific American	TBD	1.43%
10.	Destination Enterprises, Inc.	Caucasian Female	TBD	6.44%
Total			73.31%	72.98%

B. Living Wage and Service Contract Worker Retention Policy Applicability

The Living Wage and Service Contract Worker Retention Policy is not applicable to this Contract.

C. Prevailing Wage Applicability

Prevailing wage is not applicable to this Modification.

D. Project Labor Agreement/Construction Careers Policy

Project Labor Agreement/Construction Careers Policy (PLACCP) is not applicable to this Contract. PLACCP is applicable only to construction contracts that have a construction contract value in excess of \$2.5 million.

CURRENT AND ANTICIPATED LIST OF PROJECTS

Program-wide Support

Measure M Program Support
 Policy/Procedure Streamlining
 Project Management Information System
 Implementation of Construction Management Best Practices

Major Transit Construction

Crenshaw/LAX Light Rail Transit: Construction
 Regional Connector: Construction
 Westside Purple Line Extension Section 1 Project
 Westside Purple Line Extension Section 2 Project
 Westside Purple Line Extension Section 3 Project
 Gold Line Foothill Extension Phase 2B Project
 Orange Line Bus Rapid Transit Improvements
 West Santa Ana Branch Transit Project
 East San Fernando Valley Transit Project

Misc. Capital Projects

Patsaouras Bus Plaza Paver Retrofit
 Division 20 Portal Widening Turnback Facility
 Division 22 Paint and Body Shop
 Rail to Rail Corridor Active Transportation Connector
 Metro Eastside Access Improvements Project
 Airport Metro Connector Project

Security/Safety

Metro Gold Line I-210 Barrier Replacement Phase I
 Metro Emergency Security Operations Center

Rail Facilities Improvements

Southwestern Maintenance Yard
 Systemwide Elevator Installations (Vertical Systems)
 Light Rail Transit Freeway Stations Sound Enclosures
 Metro Red Line Civic Center Station Escalator/Elevator Modernization
 Willowbrook/Rosa Parks Station Improvement

Wayside Systems

Metro Blue Line Pedestrian Safety Enhancement at Grade Crossings
 Metro Blue Line Track and System Refurbishment
 Metro Blue Line Signal System Rehabilitation

Bus Facilities Improvements

Bus Rapid Transit Freeway Station Sound Enclosure
 Metro Silver Line Improvements & Upgrades
 Division 1 Improvements
 Bus Facility Maintenance Improvements & Enhancements Phase II & Phase III
 Patsaouras Plaza Bus Station Construction

Regional Rail

LINK Union Station Project
 Doran Street and Broadway/Brazil Safety and Access Project
 Brighton to Roxford Double Track Project
 Rosecrans/Marquardt Grade Separation Project
 Lone Hill to White Double Track Project

Soundwall Projects

Soundwall Package 10
 Soundwall Package 11

Highway

I-5 South – Valley View Interchange
 I-5 South – Shoemaker, Rosecrans, Bloomfield
 I-5 South – San Antonio, Imperial Hwy and Orr Day
 I-5 South – Florence
 I-5 North – North of Buena Vista-South of Magnolia Blvd
 I-5 North – Magnolia Blvd to SR 134
 I-5 North HOV Project SR 14 to Parker Road
 I-605 Corridor Hot Spots – I-605/I-5 Interchange Improvement
 I-605 Corridor Hot Spots – I-605/SR 60 Interchange Improvement
 I-605 Corridor Hot Spots – SR-91 Westbound Widening at I-605 Interchange
 I-605 – Beverly Interchange Improvement Project
 I-605 from SR-91 to South St. Improvements Project
 I-405 Crenshaw Blvd On and Off Ramp Improvements
 I-710 (South) Corridor Improvement Projects
 I-710 (South) Early Action Projects - Soundwall Projects
 I-710 (North) Corridor EIR/EIS
 I-605/Valley Boulevard Interchange Improvements
 SR-60/7th Avenue Interchange Improvements
 EB SR-91 Atlantic Avenue to Cherry Avenue Auxiliary Lane Improvements
 I-405 Auxiliary Lanes - Artesia Blvd to I-105
 SR-710 (North) TSM/TDM
 SR-710 (North) Mobility Improvement Projects
 SR 57 and SR 60 Mixed Flow Interchange
 SR 71: Interstate 10 to Mission Blvd
 SR 71: Mission Blvd to Rio Rancho Road

Environmental Compliance Program

Fuel Storage Tank Program
 Soil Remediation
 Energy Conservative Initiative Project
 Sustainability Environmental Compliance
 Carbon Emissions Greenhouse