



## Board Report

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**File #:** 2019-0362, **File Type:** Oral Report / Presentation

**Agenda Number:** 36.

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### CONSTRUCTION COMMITTEE JUNE 20, 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 June 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** - Yohana Jonathan, Princ. Prog. Mgmt. Analyst, (213) 418-3031



# Program Management Major Project Status Report

Presented By

**Richard Clarke**

Chief Program Management Officer

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





June 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 92% complete. Metro issued non-compensable time extension to contractor extending Contract Substantial Completion Milestone to December 2019. The forecast revenue service date is Summer 2020.
Regional Connector			Project is 57% complete and proceeding on schedule and within budget.
Westside Purple Line Extension-Section 1			Project is 48% complete and proceeding on schedule and within budget.
Westside Purple Line Extension-Section 2			Project is 17% complete and proceeding on schedule and within budget.
Westside Purple Line Extension-Section 3			C1152 Stations, Trackwork, Systems, and Testing Contract - Metro received FTA's Letter of No Prejudice on April 18, 2019, and the Contract was awarded in late May 2019.
Patsaouras Plaza			Project is 65% complete. Board approved budget revision in May 2019. Metro has completed archaeological and Native American investigation. Construction resumed May 13, 2019.
Willowbrook/Rosa Parks Station			Package A is 40% complete with exterior paneling work progressing on the Customer Service Building. Structural work is complete at the Mobility Hub Building with utilities beginning. Blue Line Station and Mezzanine work continues with platform work. Package B 100% bid package is pending Metro review.
Metro Blue Line Projects			Metro Blue Line south segment System Integration Testing has started. Opening of the south side and closure of the north side scheduled for June 1, 2019.
I-210 Barrier Replacement			Working with Cities to develop mitigation measures to alleviate traffic impact to City streets during median construction. Public Outreach is developing a Draft Communication Plan for the cities. Final Design for Project 1 is underway.
I-5 North: SR 118 to SR 134			Segment 3 (Empire) is 73% complete. Segment 4 (Magnolia to SR-134) is 91% complete.
I-5 South: Orange County Line to I-605			Segment 2 (Valley View) is 40% complete. Segment 3 (Rosecrans) is open to traffic. Segment 4 (Imperial) is 95% complete. Segment 5 (Florence) is 79% complete.

June 2019

Construction Committee

Los Angeles County Metropolitan Transportation Authority



On target



Possible problem



Major issue



Metro 2

# CRENSHAW/LAX TRANSIT PROJECT

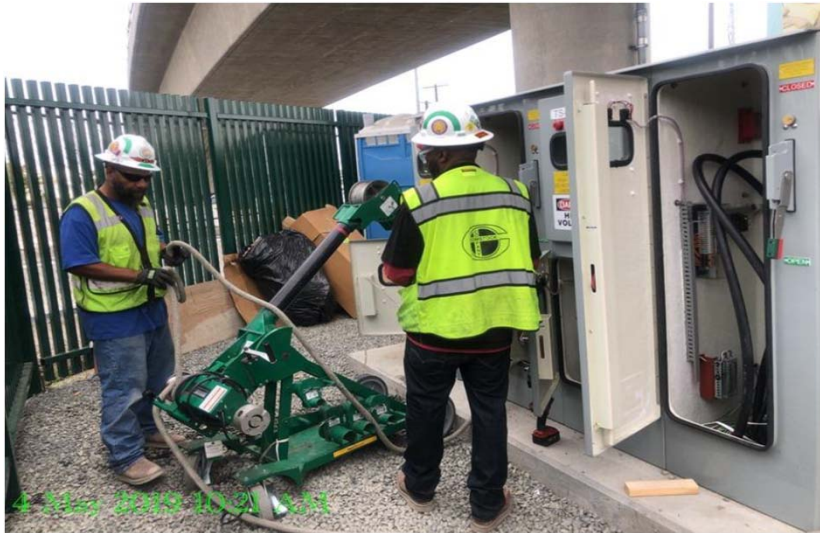
## BUDGET

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

## SCHEDULE

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

- Overall Project Progress is 92% complete; addressing contractor construction schedule.
- Contractor continues critical construction efforts in the north end underground structures.
- Working with 3<sup>rd</sup> 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.



Linemen pulling feeder cable at Traction Power Substation # 3



Installation of metal ceiling grid at the Leimert Park Station platform

June 2019



On target



Possible problem



Major issue

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Los Angeles County Metropolitan Transportation Authority



Metro 3

# REGIONAL CONNECTOR TRANSIT PROJECT

**OK BUDGET**

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

**OK SCHEDULE**

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

- Overall Project Progress is 57% complete.
- Underground:** Began work on Floating Slab Track curbs, and High Density Poly Ethylene (HDPE) installation in Sequential Excavation Method (SEM) Cavern in preparation for final liner concrete.
- Little Tokyo/Arts District Station, WYE and 1st Street:** Excavation and related support of excavation, utility protection continues at WYE and 1<sup>st</sup> Street; and structural concrete operations on station walls continue.
- 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 4<sup>th</sup> and 5<sup>th</sup> Streets continue.



Rebar installation at Ancillary Level of Grand Av Arts/Bunker Hill Station



Protection slab placement at 1st Street Leg

June 2019



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 4

# WESTSIDE PURPLE LINE EXTENSION – SECTION 1

## BUDGET

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

\* Includes Board approved LOP budget plus finance costs.

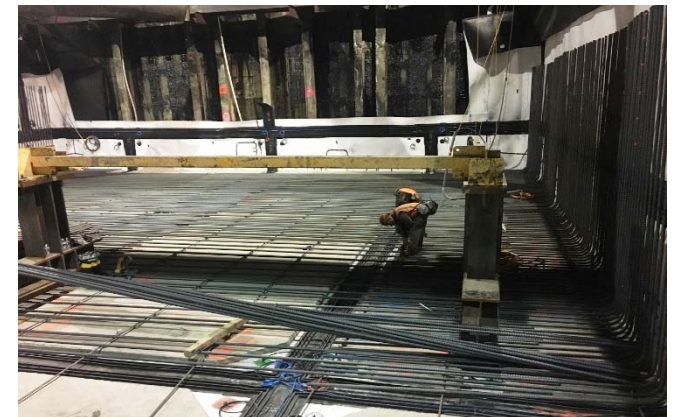
## SCHEDULE

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

- Overall Project Progress is 48% complete.
- Wilshire/Western Retrieval Shaft:** Preparation for Tunnel Boring Machine (TBM) arrival in June 2019, including framing installation for tunnel eyes. Gantry crane installation has commenced.
- Wilshire/La Brea Station:** Continued rebar placement and embedded conduit and pipe sleeves at concourse slab with the first placement of concrete scheduled at end of May 2019. Tunnel segments continue to be received, inspected and stockpiled.
- Wilshire/Fairfax Station:** HDPE installation and protection slab placement are on going concurrently. Invert rebar placement has commenced.
- Wilshire/La Cienega Station:** Level D waler installation has commenced. Installation of additional internal dewatering wells continues. Bottom of excavation is anticipated to be reached in August 2019.
- Reach 1 TBM Progress (W/LB to W/W):** TBM #1 – 8,043 ft. or 83%; TBM #2 – 7,148 ft. or 74% as of May 13, 2019.



Preparing for TBM Arrival at Wilshire/Western



Invert Rebar Placement at Wilshire/Fairfax Station

June 2019



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 5

# 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 17% complete.
- Final design progress is 92% complete.
- **Century City Constellation**
  - Installation of temporary power for the tunnel boring machine (TBM) continues.
  - TBM launch box excavation and supporting underground utilities continues.
  - Cable pulling and splicing for both utilities (LADWP & AT&T) is anticipated to complete prior to the start of piling activities West of the TBM Launch Box.
  - Santa Monica bus layover construction is ongoing with an anticipated completion in August 2019.
- **Wilshire/Rodeo**
  - Potholing for underground utilities by the contractor is ongoing.
  - Wet utility relocations are ongoing.
  - Pre-construction condition surveys are ongoing.



TBM Launch Box Overview in Century City



Utility Supported in Place in Century City

June 2019



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 6



# WESTSIDE PURPLE LINE EXTENSION – SECTION 3



## BUDGET

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

\* Includes Board approved LOP budget plus finance costs.



## SCHEDULE

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

- C1151 Tunnel Contract
  - Preparation of 60% design submittals for review.
  - Completing utility ductbank design and coordinating with SCE to install power.
  - Initiated field geotechnical investigations.
- C1152 Stations, Trackwork and Systems Contract
  - Metro received Letter of No Prejudice (LONP), and the Contract was awarded in late May 2019.
- C1153 AUR Contract (Westwood/UCLA Station)
  - Substantial completion is targeted for July 3, 2019.
  - LADWP Power relocation is complete, water is ongoing, and construction is 93% complete.
- Other 3<sup>rd</sup> Parties Utility Relocation Work
  - Joint trench for Verizon and Frontier telecom is ongoing.
  - LADWP cable pulling is ongoing.



Geotechnical Investigations at VA Hospital for Tail Track Exit Shaft



Gate Valve Steel Lateral Utility Installation

June 2019



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



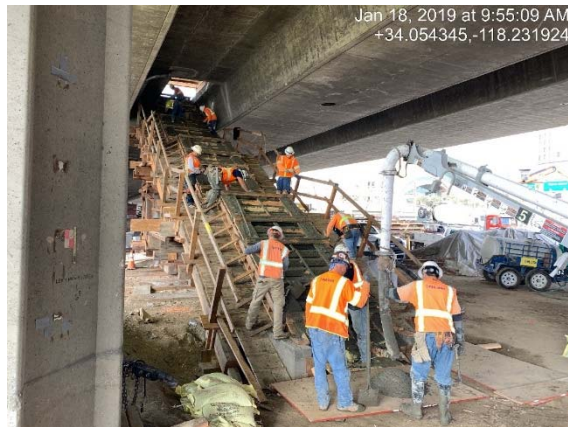
Metro 7

# PATSAOURAS BUS PLAZA STATION

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

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

- Overall project progress remains at approximately 65% complete.
- Project suspension lifted and construction resumed May 13, 2019.
- Canopy foundation construction is in progress.
- Board approved budget revision in May 2019.



Pouring the emergency stairway exit



Pouring columns for the elevator structure



Investigation of the ESA at the west end of the retaining wall

June 2019



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 8

# WILLOWBROOK/ROSA PARKS STATION

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

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

- Package A: Customer Service building exterior paneling ongoing. Major utility bottleneck has cleared and will work towards June completion. Mobility Hub Building structural work nearing completion.
- Package C: Concrete piles for Mezzanine extension complete. Extension of Blue Line platform in progress.
- Package B: Final coordination of 100% documents for Metro review.



Exterior sheathing at Customer Service Building



Structural Steel @ Mobility Hub



Formwork for south extension of Blue Line Platform



Pile and Beam work at Blue Line Platform/Mezzanine

June 2019



On target



Possible problem



Major issue

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Los Angeles County Metropolitan Transportation Authority



Metro 9

# 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

- Track, OCS, and Train Control work has been completed.
- System Integration Test has started.
- Painting of the OCS and light poles is continuing.
- Stations have been painted and new signage is being installed.
- Re-opening of the south side and closure of the north side scheduled for Saturday, June 1, 2019.



Test Trains rolling through Del Amo Station (New Digital Map on the platform covered)



Painting of the OCS/Light poles

June 2019



On target



Possible problem



Major issue

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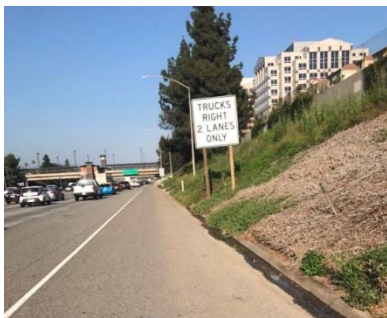
Metro 10

# I-210 BARRIER REPLACEMENT PROJECT

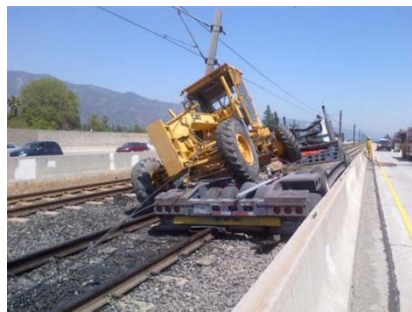
OK BUDGET		
	<u>Current</u>	<u>Forecast</u>
TOTAL COST	\$22.54M	\$22.54M
	Design	Design

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

- Draft Design Standard Decision Document for Project 1 submitted to Caltrans for review.
- Draft Communication Plan is being developed.
- Project 1: Segment from Michillinda to Iconic Bridge– Construction sequence has been determined. Final design in progress.
- Project 2: Segment from west end of the project to Michillinda – Traffic micro-simulation study results and proposed mitigation measures and detours are to be shared with the Cities and Caltrans.



Newly Installed Caltrans Freeway Sign



Incident in 2014



Newly Installed Speed Limit Sign

June 2019



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 11

# I-5 Construction Projects (By Caltrans)



June 2019

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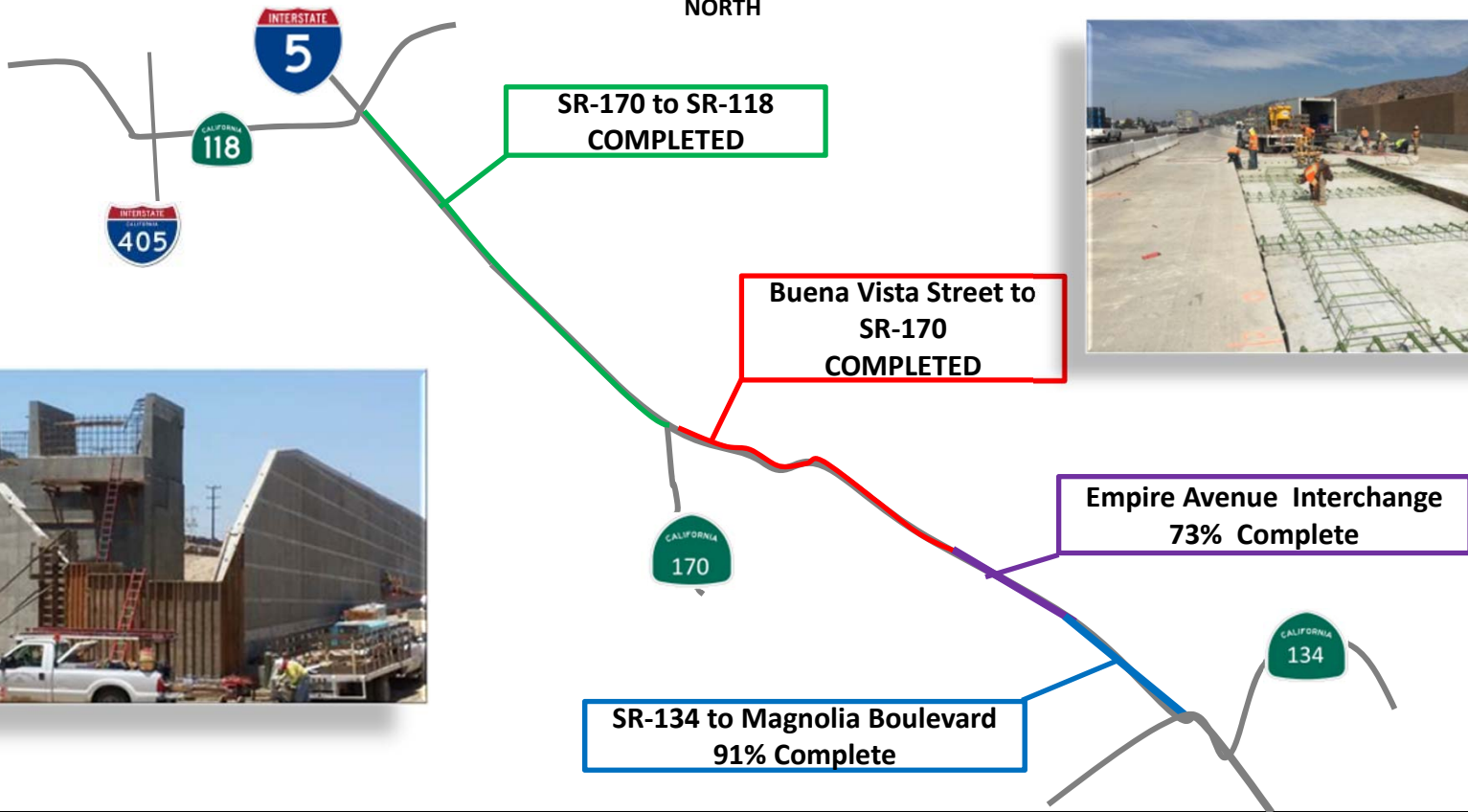
Metro 12

# I-5 NORTH: SR 118 TO SR 134



 BUDGET	Current	Forecast
TOTAL COST	\$880.9M	TBD

 SCHEDULE	Current	Forecast
ANTICIPATED PROJECT COMPLETION	Spring 2022	Summer 2022



June 2019



On target



Possible problem



Major issue

Construction Committee

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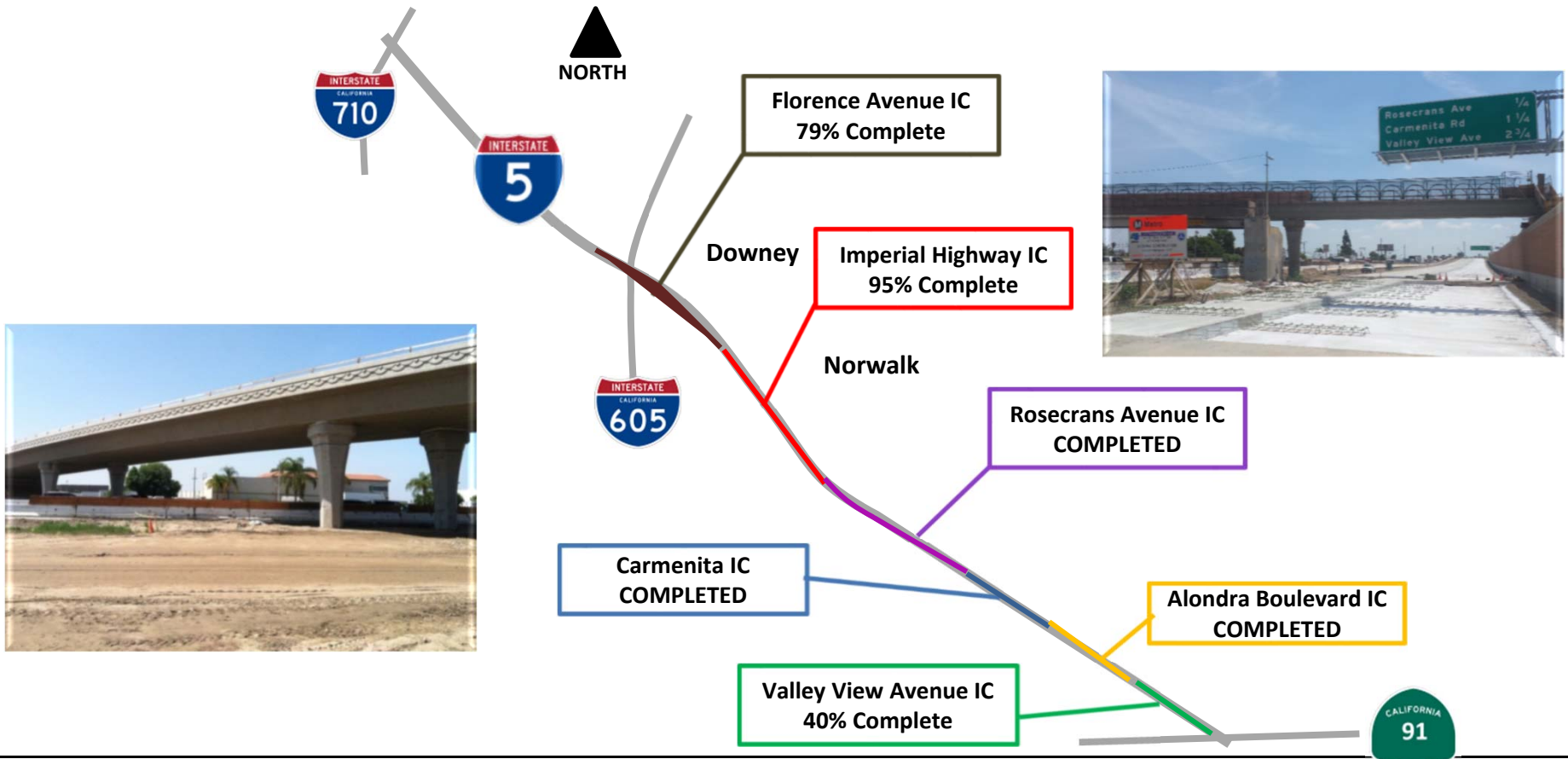
Metro 13

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



OK BUDGET		
	Current	Forecast
TOTAL COST	\$1.888B	TBD

◇ SCHEDULE		
	Current	Forecast
ANTICIPATED PROJECT COMPLETION	Fall 2022	Winter 2022



June 2019

Construction Committee

Los Angeles County Metropolitan Transportation Authority



On target



Possible problem



Major issue



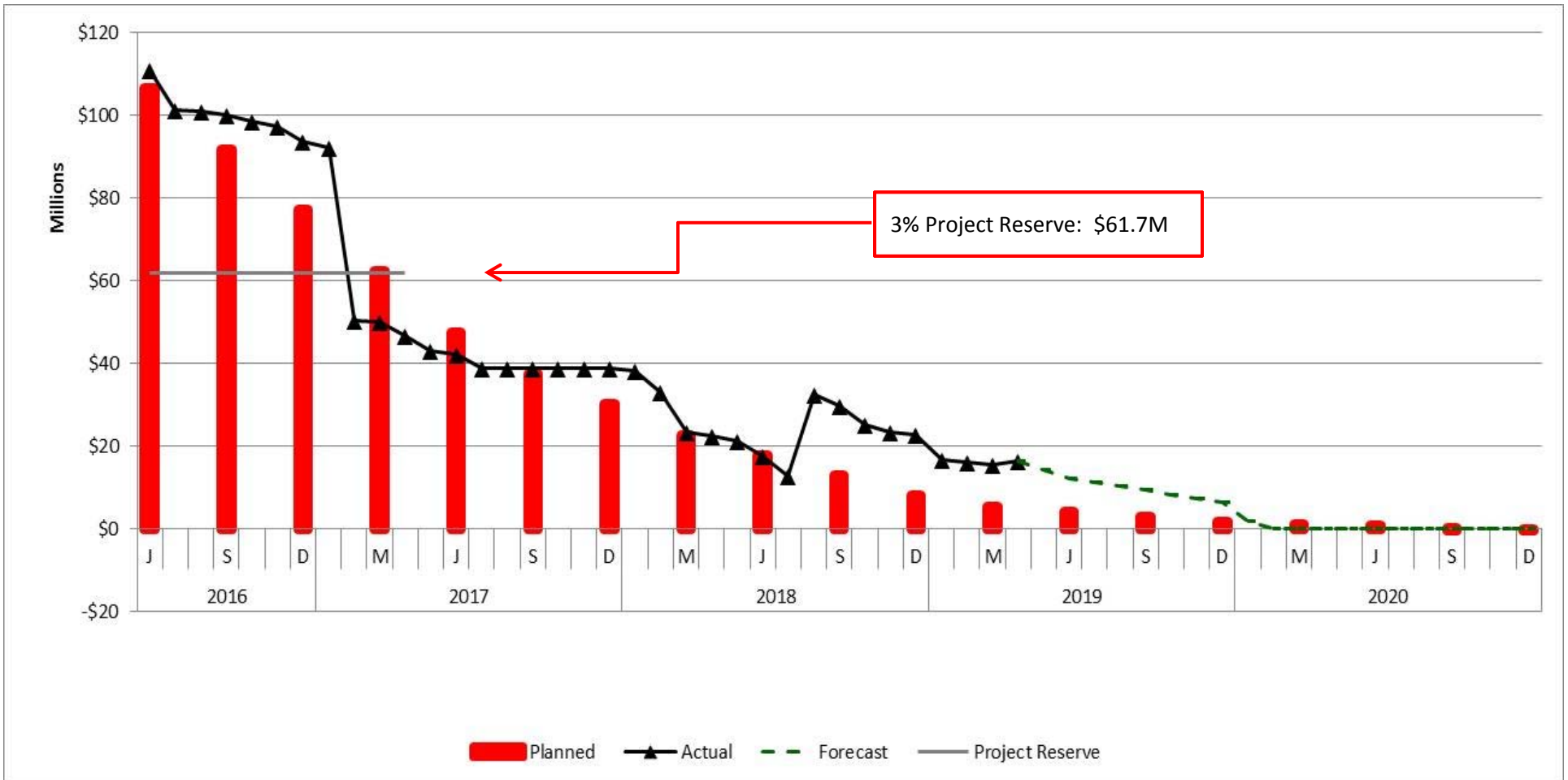
Metro 14



# Crenshaw/LAX Transit Project

## Project Cost Contingency Drawdown

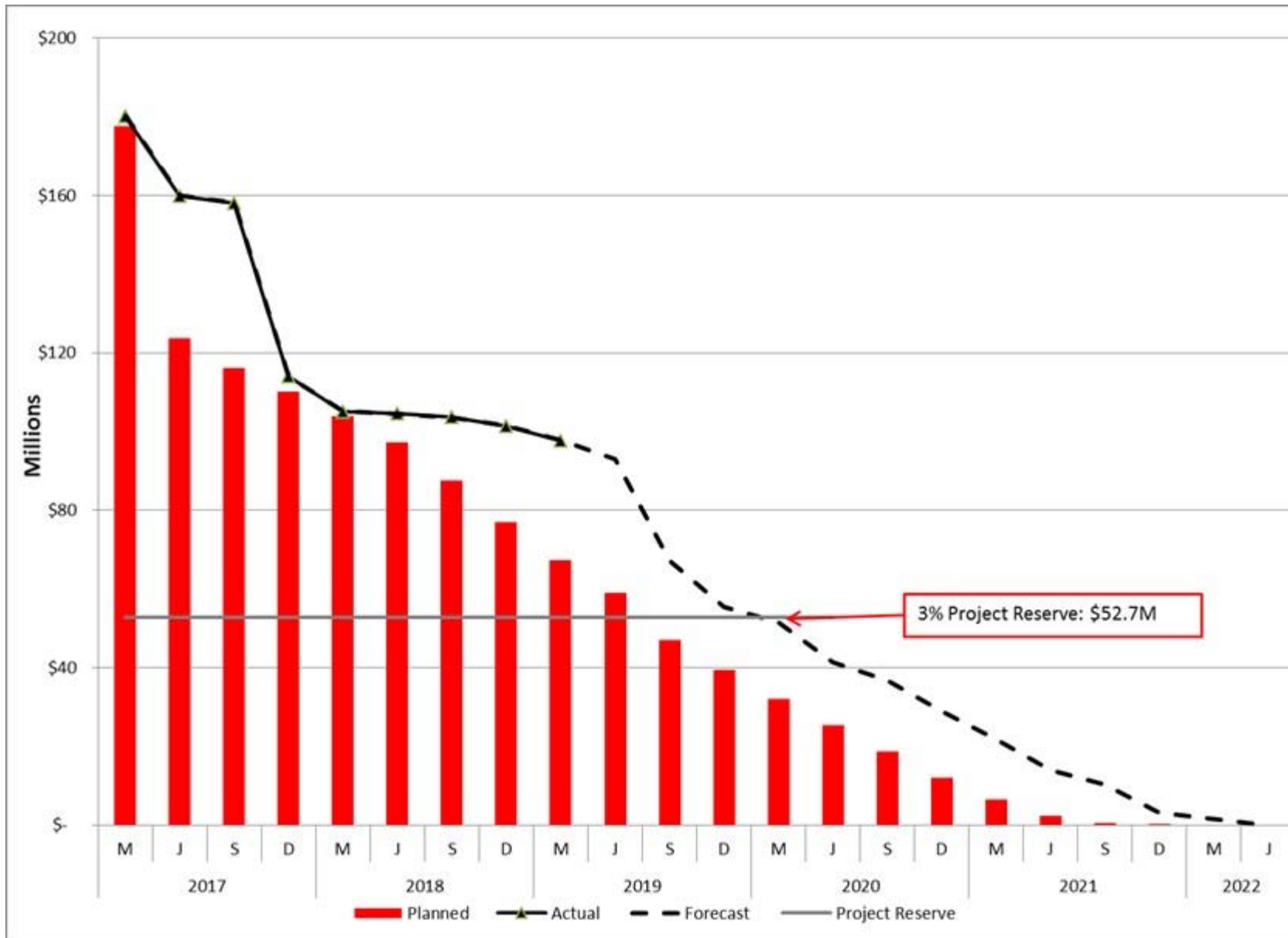
April 2019



# Regional Connector

## Project Cost Contingency Drawdown

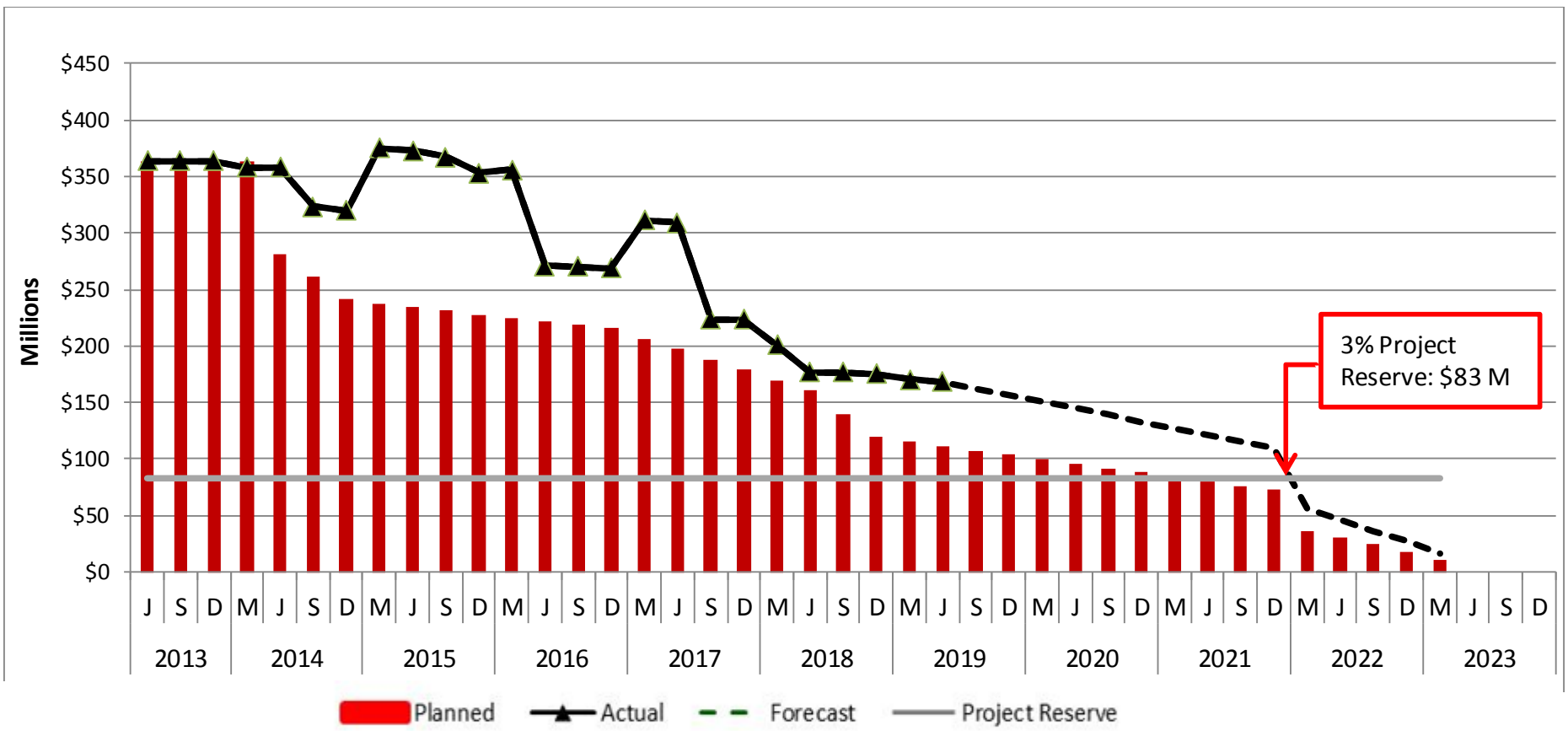
April 2019



# Westside Purple Line Extension – Section 1

## Project Cost Contingency Drawdown

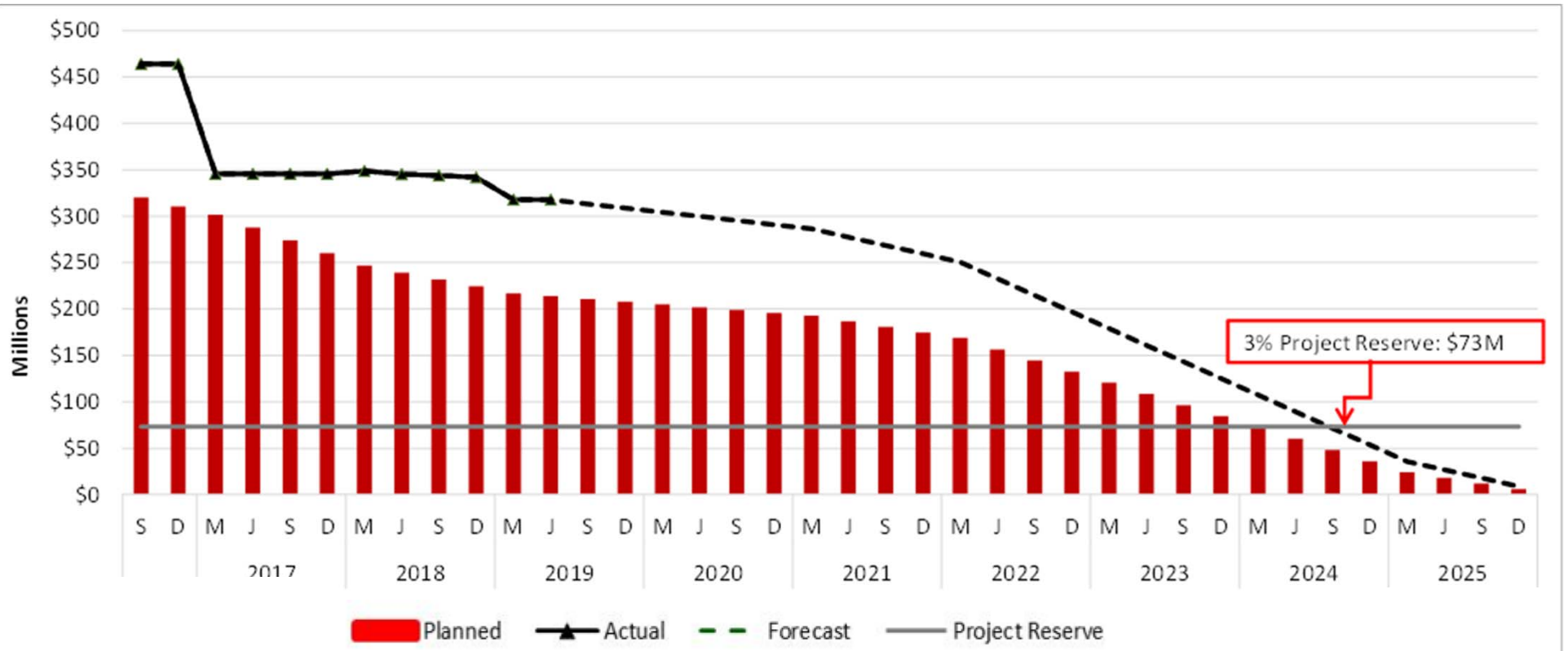
April 2019



# Westside Purple Line Extension – Section 2

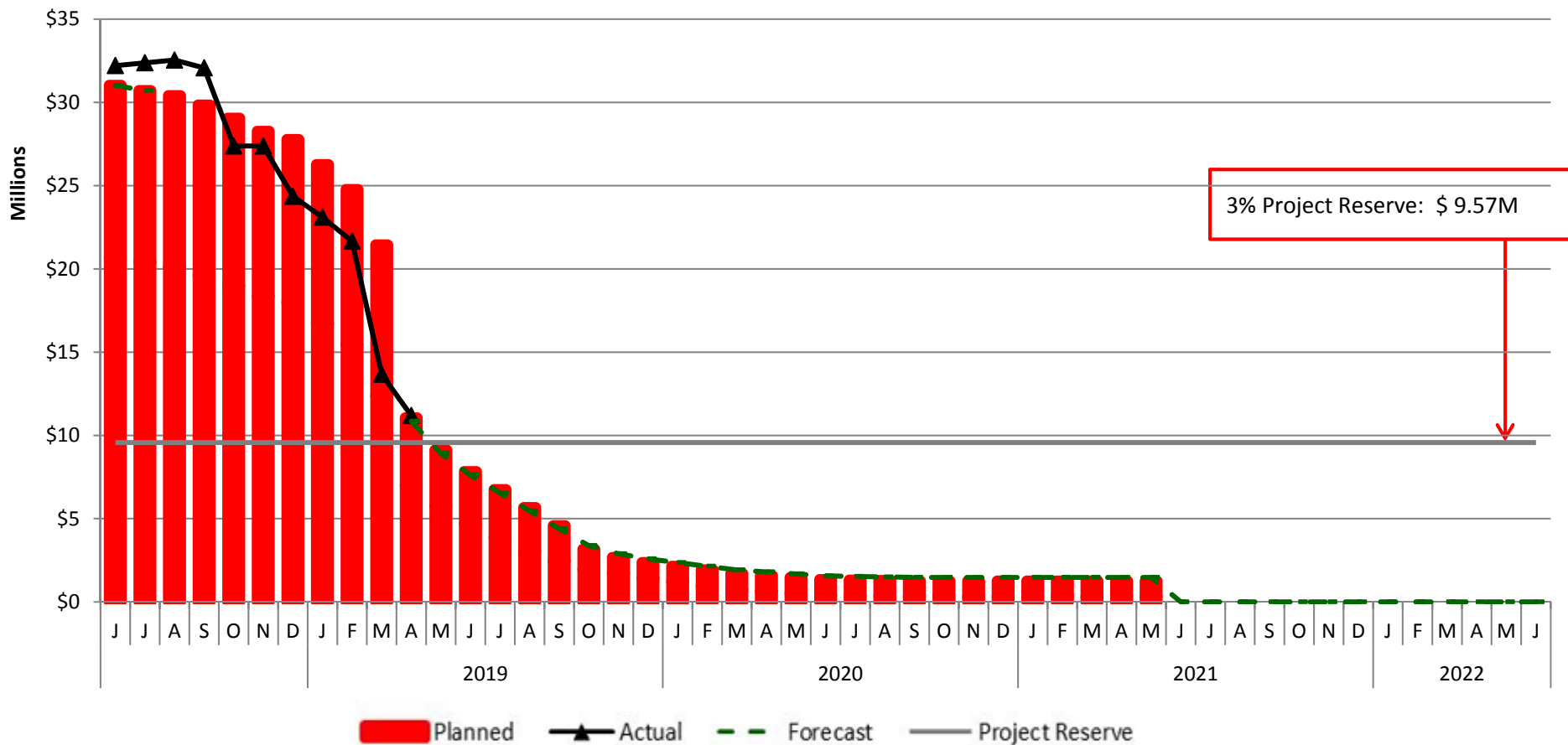
## Project Cost Contingency Drawdown

April 2019



# New Blue Projects

## Project Cost Contingency Drawdown



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

# RESPONDING TO REMARKS

## (FROM MAY 2019 CONSTRUCTION COMMITTEE)

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- Metro currently has over \$18 billion of approved projects in engineering and construction.
- Staff presents an assessment of the LOP budget for projects monthly at the Construction Committee.
- LOP budget assessments are also made to the Board as part of the Annual Program Evaluation – most recently in April 2019
- As part of these assessments, staff provides challenges and risks and actions that are being taken to reduce project risks.
- Project acceleration on new projects can increase risks as well and impact cost and quality.
- Not projecting any additional increases on current projects at this time, however, these are mega-projects with significant remaining risks.

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June 2019

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Los Angeles County Metropolitan Transportation Authority



On target



Possible problem



Major issue



# RESPONDING TO REMARKS

## (FROM MAY 2019 CONSTRUCTION COMMITTEE)

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- Staff also presents a Construction Market Analysis to the Board every two years. The report in 2018 concluded that over the next 5+ years, there will be more construction work than resources available.
- Program Management works closely with Planning to address any changes to cost and schedule assumptions as part of the Financial Plan forecast updates to the Board.

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June 2019

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On target



Possible problem



Major issue

