



## Board Report

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**File #:** 2019-0493, **File Type:** Oral Report / Presentation

**Agenda Number:** 28.

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### CONSTRUCTION COMMITTEE JULY 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**

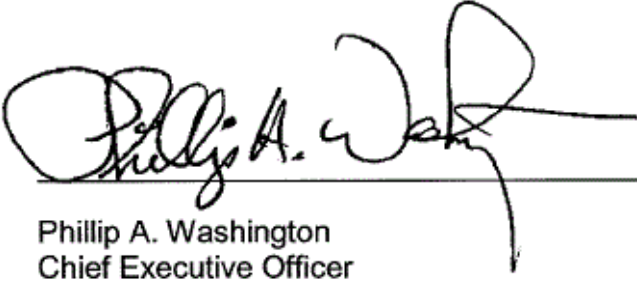
Update report covering the month of July 2019 by the Chief Program Management Officer.

#### **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



Phillip A. Washington  
Chief Executive Officer























# **Program Management Major Project Status Report**

Presented By

**Richard Clarke**

Chief Program Management Officer

# PROJECT BUDGET & SCHEDULE STATUS SUMMARY CHART

Project	Cost Performance	Schedule Performance	Comments
Crenshaw/LAX			Project is 92.6% complete. 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 49% complete and proceeding on schedule and within budget.
Westside Purple Line Extension-Section 2			Project is 19% complete and proceeding on schedule and within budget.
Westside Purple Line Extension-Section 3			C1152 Stations, Trackwork, Systems, and Testing Contract - Metro awarded contract on May 28, 2019.
Patsaouras Plaza			Project is 65% complete. Archaeological and Native American monitoring continues. Foundation work for the pedestrian overcrossing, busway canopy , elevator and walkway is ongoing.
Willowbrook/Rosa Parks Station			Customer Service Building is 50% complete with exterior paneling work ongoing. Mobility hub has completed main framing with MEP now progressing. Blue Line Station and Mezzanine work is completing pre-cast work and preparing for concrete work. Package B 100% bid package is pending Metro review.
Metro Blue Line Projects			Metro Blue Line South Segment opened on schedule, June 1, 2019. Construction started on the North Segment on June 2, 2019. Construction in the 7 <sup>th</sup> /Metro Tunnel started on June 22,2019.
I-210 Barrier Replacement			As part of Final Design, Metro Engineering is working closely Metro Operations and Systems to optimize single tracking operations and minimize anticipated headway during construction. Pursuing of final approval of staging configuration. Public Outreach is developing a Draft Communication Plan for the cities.
I-5 North: SR 118 to SR 134			Segment 3 (Empire) is 74% complete. Segment 4 (Magnolia to SR-134) is 91% complete.
I-5 South: Orange County Line to I-605			Segment 2 ( Valley View) is 43% complete. Segment 3 (Rosecrans) is open to traffic. Segment 4 (Imperial) is 96% complete. Segment 5 (Florence) is 80% complete.

July 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

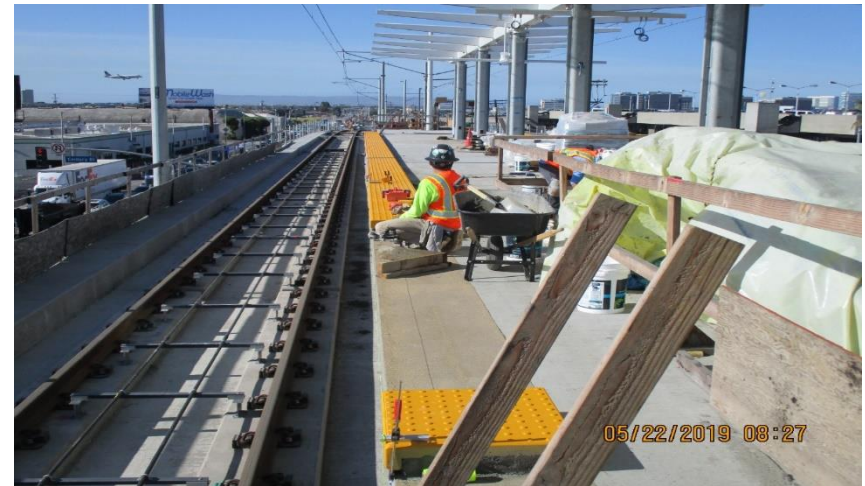
## SCHEDULE

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

- Overall Project Progress is 92.6% complete; addressing contractor construction schedule.
- Contractor continues critical systems installations/testing along the alignment.
- Working with 3<sup>rd</sup> parties to complete power drops for traction power substations.
- Contractor addressing open sidewalk and street punch list items along alignment.
- Contractor is developing a detailed Green Line Cutover Plan and coordinating with Metro Operations to implement this summer. This effort will include ten-weekend closures of the Green Line.



Installation of emergency lighting at southbound tunnel



Tactile paver installation at Aviation/Century Station

July 2019



On target



Possible problem



Major issue



Metro 3

Construction Committee

Los Angeles County Metropolitan Transportation Authority

# REGIONAL CONNECTOR TRANSIT PROJECT

## BUDGET

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

## SCHEDULE

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

- Overall Project Progress is 57% complete.
- Tunnels:** Continued work on waterproofing installation within the Sequential Excavation Method (SEM) Cavern in preparation for final liner concrete.
- Little Tokyo/Arts District Station, WYE and 1st Street:** Structural concrete placement for station walls continues. Excavation of Wye is complete.
- Historic Broadway Station:** Structural concrete continues in station entrance and throughout the concourse level.
- Grand Av Arts/Bunker Hill Station:** Structural concrete walls continue to be erected at multiple levels throughout the station.
- Flower Street:** Utility support work is complete. The final phase of excavation is underway.





Invert placement in SEM Cavern



Setting walers at mid-level under Flower St

July 2019

 On target

 Possible problem

 Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



# 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.

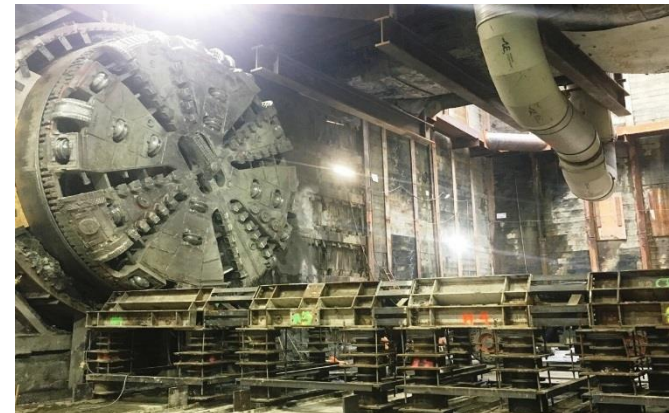
## SCHEDULE

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

- Overall Project Progress is 49% complete.
- Wilshire/Western Retrieval Shaft:** Break through (arrival) of TBM #1 (Soyeon) occurred on June 11, 2019. Arrival of TBM #2 (Elsie) is scheduled for early July 2019.
- Wilshire/La Brea Station:** Concourse concrete placement (GL 5- GL 15) completed on May 31, 2019. Concourse slab reshoring and removal of Level B and C struts is on going. Tunnel segments continue to be received, inspected and stockpiled.
- Wilshire/Fairfax Station:** On June 11, 2019, the first invert slab placement was completed. Invert rebar placement is on going.
- Wilshire/La Cienega Station:** Level D strut installation has commenced. Daily maintenance of 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 – 9,598 ft. or 100%; TBM #2 – 8,915 ft. or 93% as of June 13, 2019. The start of Reach 2 mining is scheduled for October 2019.



TBM #1 Break Through at Wilshire/Western



Preparations for Retrieval of TBM #1 at Wilshire/Western

July 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 19% complete.
- Final design progress is 93% complete.
- **Century City Constellation**
  - Installation of bracing for the TBM Launch Box commenced this period and are ongoing.
  - 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 have started this period and are ongoing.
  - Pre-construction condition surveys are ongoing.
  - Site grading continues at both staging yards.



TBM Launch Box Overview in Century City



Underground Activities in TBM Launch Box in Century City



On target



Possible problem



Major issue

July 2019

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.



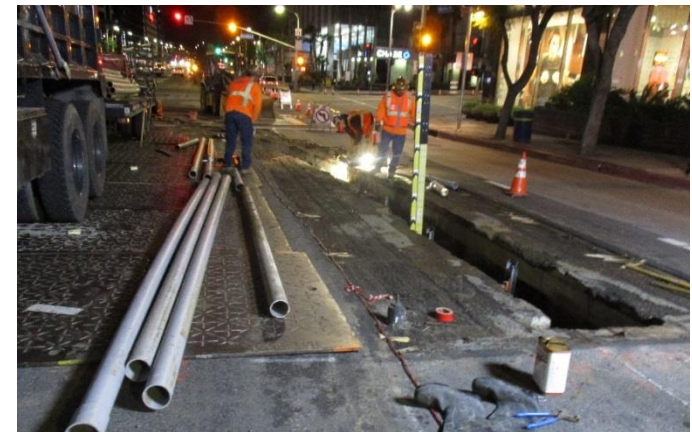
## SCHEDULE

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

- C1151 Tunnel Contract
  - Progressing 60% and 85% design submittals.
  - Ongoing coordination with Southern California Edison (SCE) for approval of 100% design for TBM power duct bank installation.
  - Executed the Memorandum of Understanding and finalizing the Access and Easement Agreement with Veterans Affairs (VA) for construction staging area.
  - Geotechnical investigations are ongoing.
- C1152 Stations, Trackwork and Systems Contract
  - Contract was awarded on May 28, 2019.
- C1153 AUR Contract (Westwood/UCLA Station)
  - Achieved substantial completion in July 2019.
- Other 3<sup>rd</sup> Parties Utility Relocation Work
  - Joint trench for Verizon and Frontier telecom is ongoing.
  - LADWP cable pulling and splicing is ongoing.



Installing Riser for Water Pressure Test



Joint Trench Conduit Installation

July 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.
- Archaeological and Native American monitoring continues.
  - Human remains continue to be discovered requiring focused monitoring impacting construction.
- Pedestrian overcrossing foundations started
  - Micropile excavation is proceeding at 6" intervals with the spoils being sifted/evaluated by monitors.
- Busway canopy foundations started.
- Elevator and walkway foundation work started.
- Retaining wall footing rework started.



# WILLOWBROOK/ROSA PARKS STATION

## BUDGET

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

## SCHEDULE

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

- Package A: Customer Service building exterior paneling ongoing with interior sheathing beginning. Mobility Hub Building main framing complete with Mechanical electrical and plumbing (MEP) work initiated.
- Package C: Precast installation near completion. Preparing for main concrete and canopy work.
- Package B: Final coordination of 100% documents for Metro review.



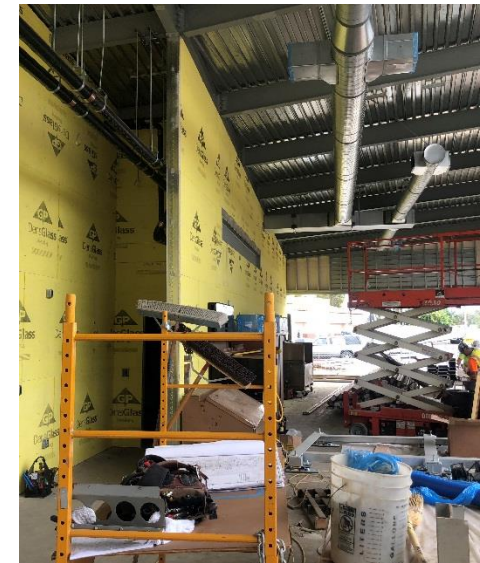
Formwork @ Blue Line Platform/Mezzanine

Escalator and platform work @ Mezzanine



Precast @ Blue Line Mezzanine Extension

Interior and MEP Work @ Mobility Hub



July 2019



On target



Possible problem



Major issue

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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

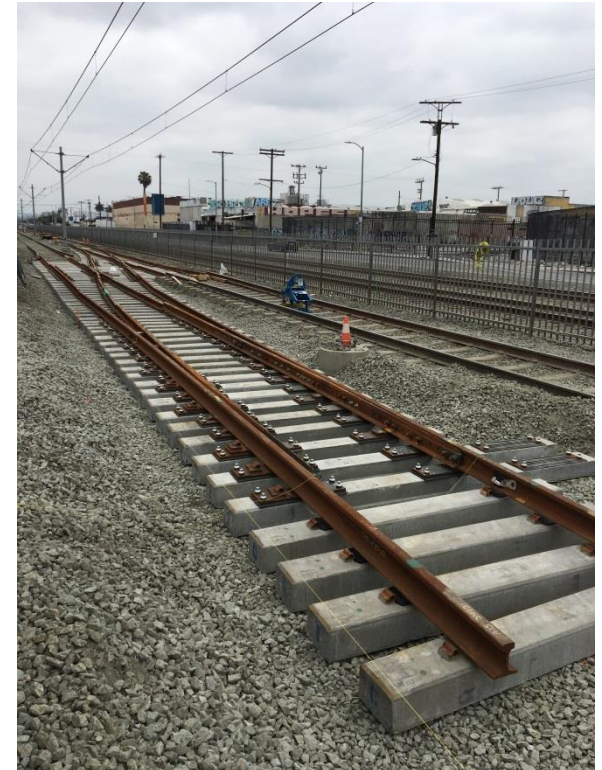
- Successfully opened South segment on June 1st
- North segment work started on OCS, Track and Train Control.
- Expo service suspension to Pico and 7<sup>th</sup> Metro starting June 22, 2019.
- 7<sup>th</sup> Metro Tunnel work planned for 2 months.



Train Control work in existing bungalow





New Compton Interlocking Local Control Panel (LCP)



Constructing new Slauson Crossover

July 2019

 On target

 Possible problem

 Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



# I-210 BARRIER REPLACEMENT PROJECT

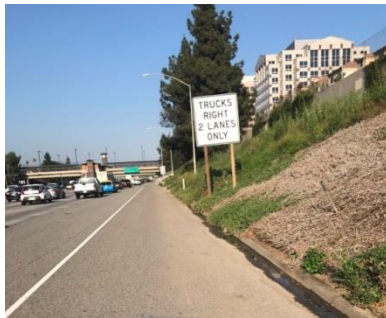
## BUDGET

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

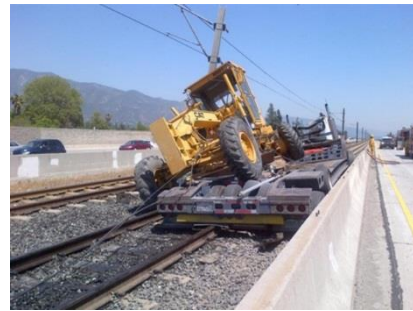
## SCHEDULE

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

- Working with Caltrans to obtain approval of the Design Standard Decision Document for Project 1.
- Draft Communication Plan is being developed.
- Project 1: Segment from Michillinda to Iconic Bridge – As part of the final design, simulations are being performed to determine the headways during construction.
- Project 2: Segment from west end of the project to Michillinda – Construction sequence of new barrier is in development. Traffic microsimulation analysis completed, mitigation measures in development.



Newly Installed Caltrans Freeway Sign



Incident in 2014



Newly Installed Speed Limit Sign

July 2019



On target



Possible problem



Major issue

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Metro 11



# I-5 Construction Projects (By Caltrans)

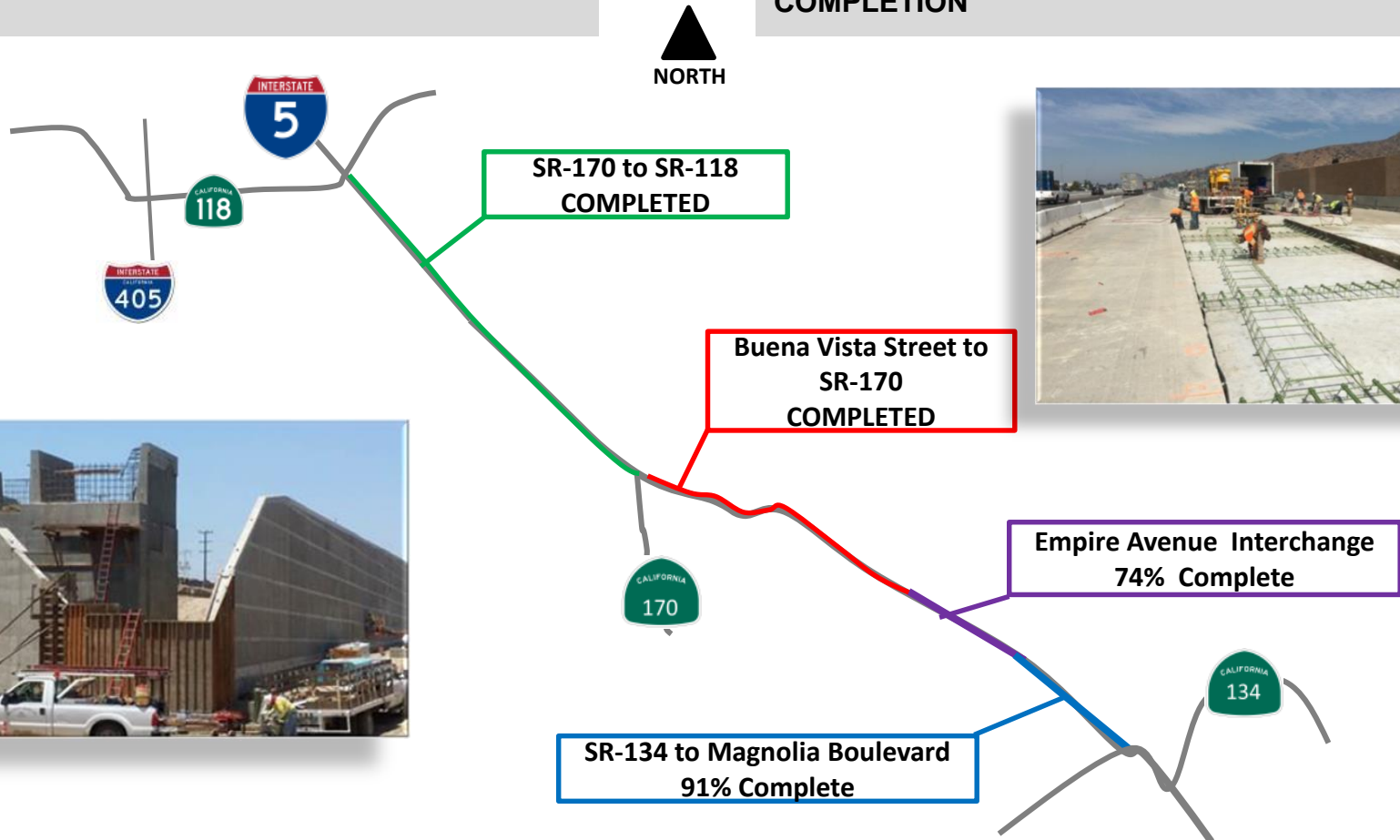


# I-5 NORTH: SR 118 TO SR 134



BUDGET	Current	Forecast
TOTAL COST	\$880.9M	TBD

SCHEDULE	Current	Forecast
ANTICIPATED PROJECT COMPLETION	Spring 2022	Summer 2022



July 2019

On target    Possible problem    Major issue

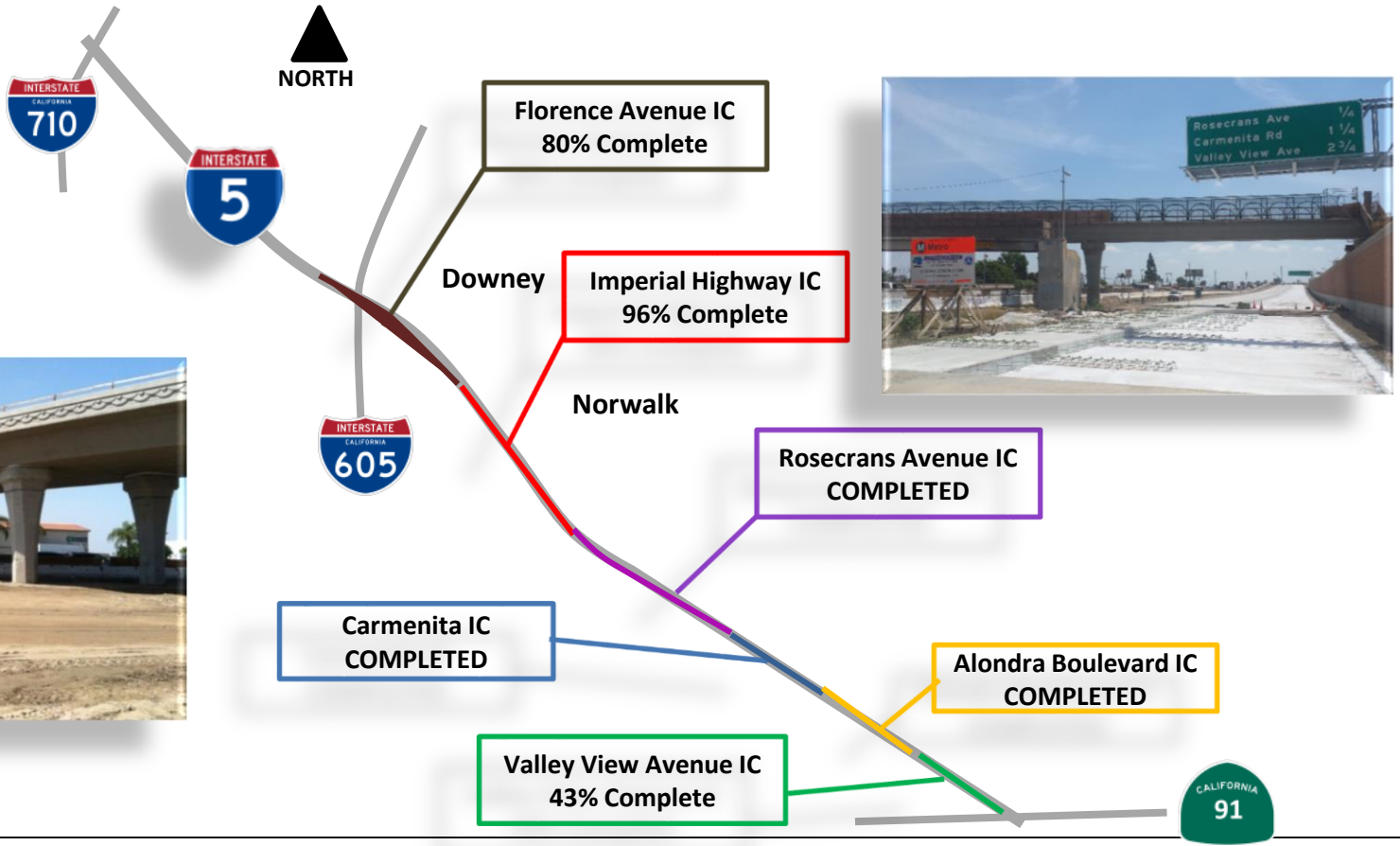


# I-5 SOUTH: ORANGE COUNTY LINE TO I-605



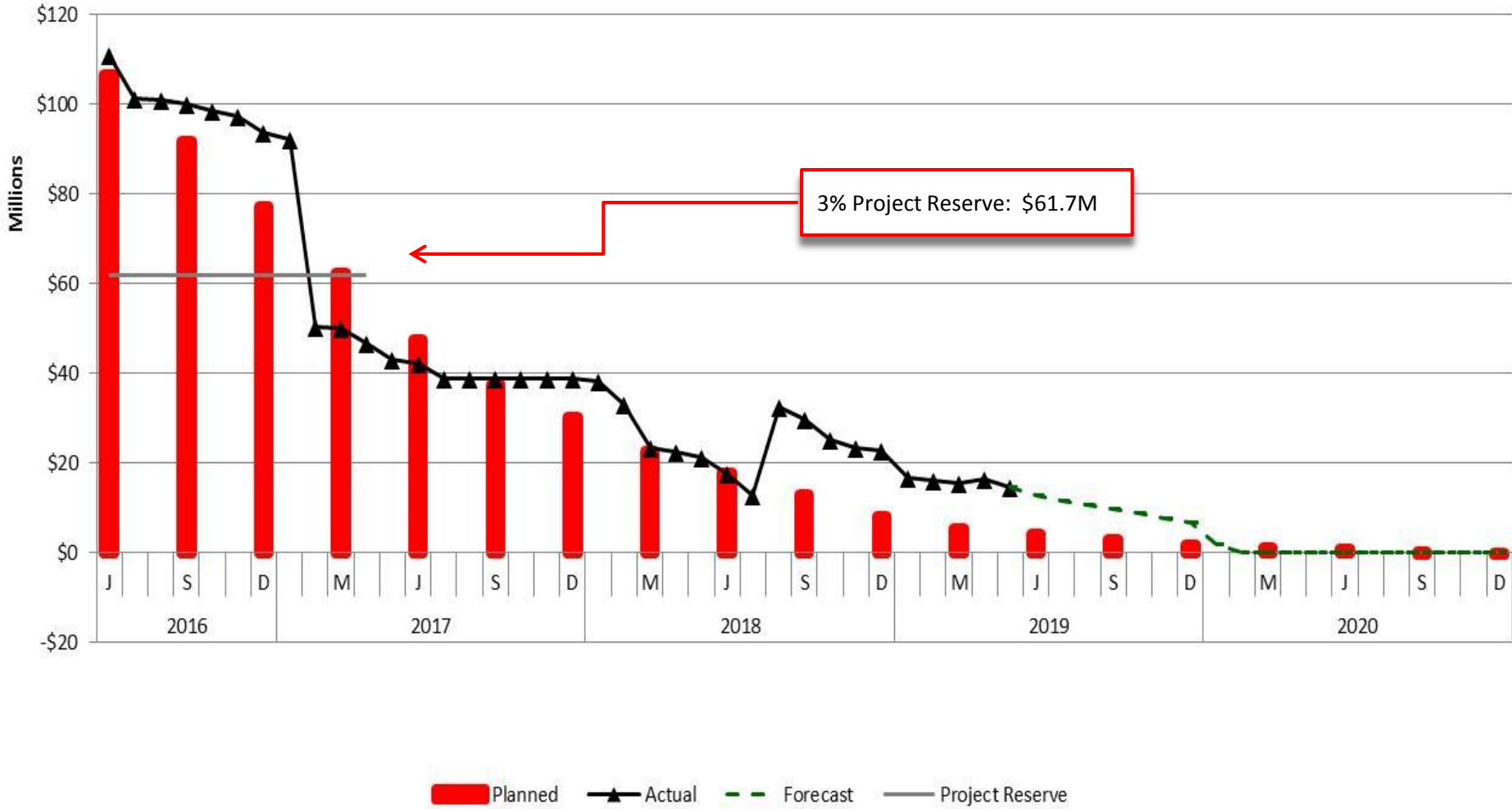
OK BUDGET		
	Current	Forecast
TOTAL COST	\$1.888B	TBD

◇ SCHEDULE		
	Current	Forecast
ANTICIPATED PROJECT COMPLETION	Fall 2022	Winter 2022

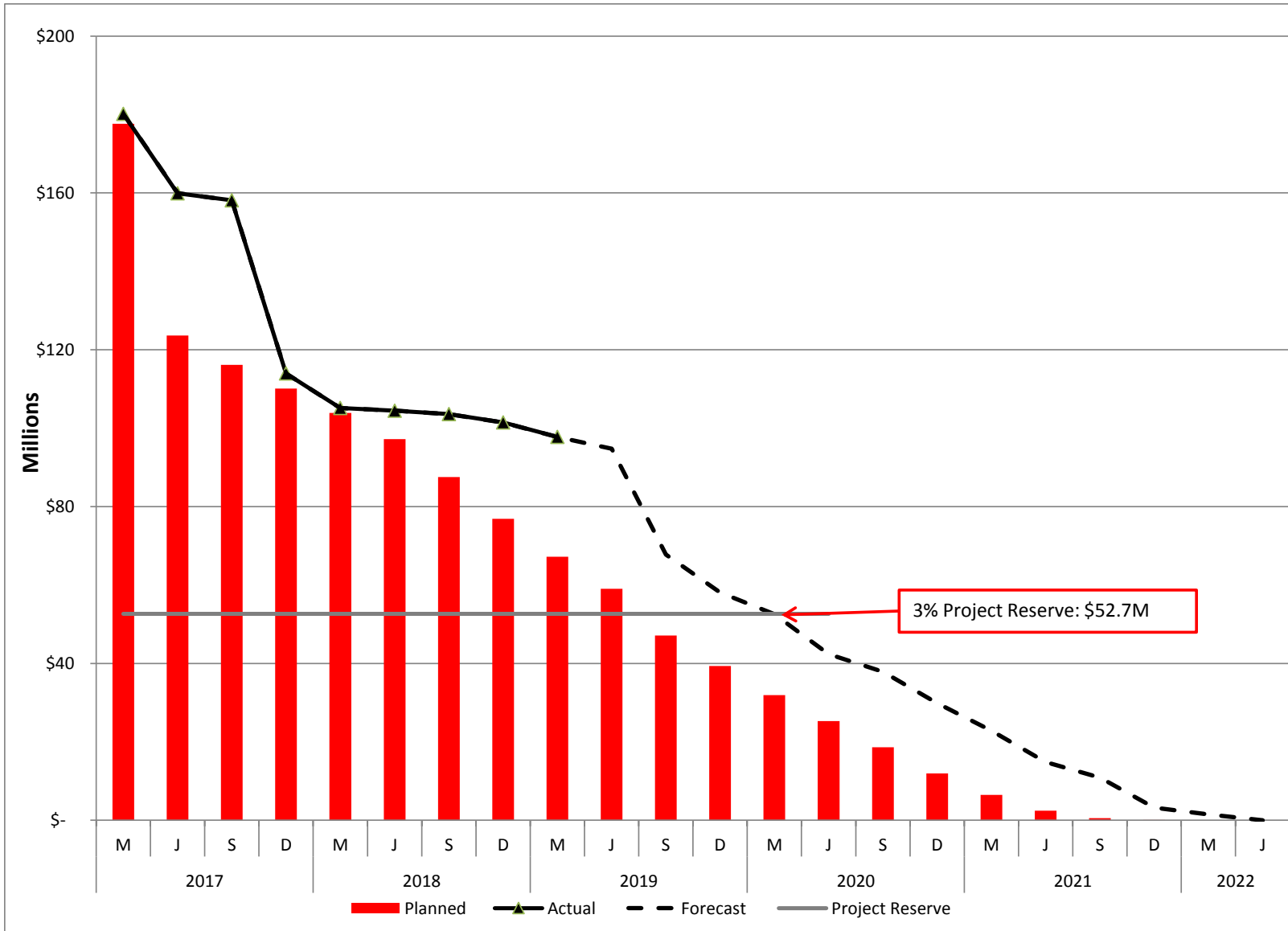


# Crenshaw/LAX Transit Project

## Project Cost Contingency Drawdown



# Regional Connector Project Cost Contingency Drawdown

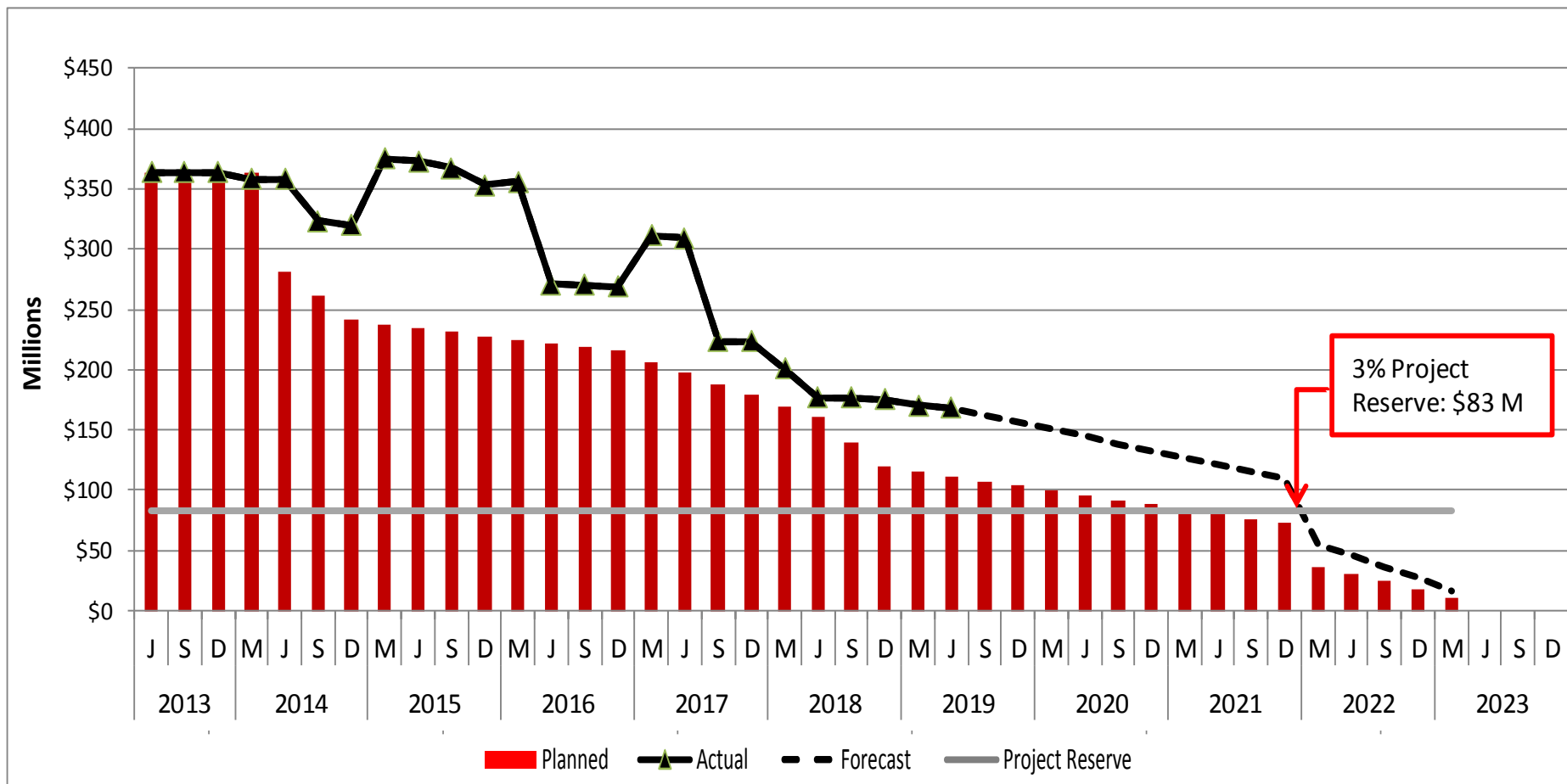




# Westside Purple Line Extension – Section 1

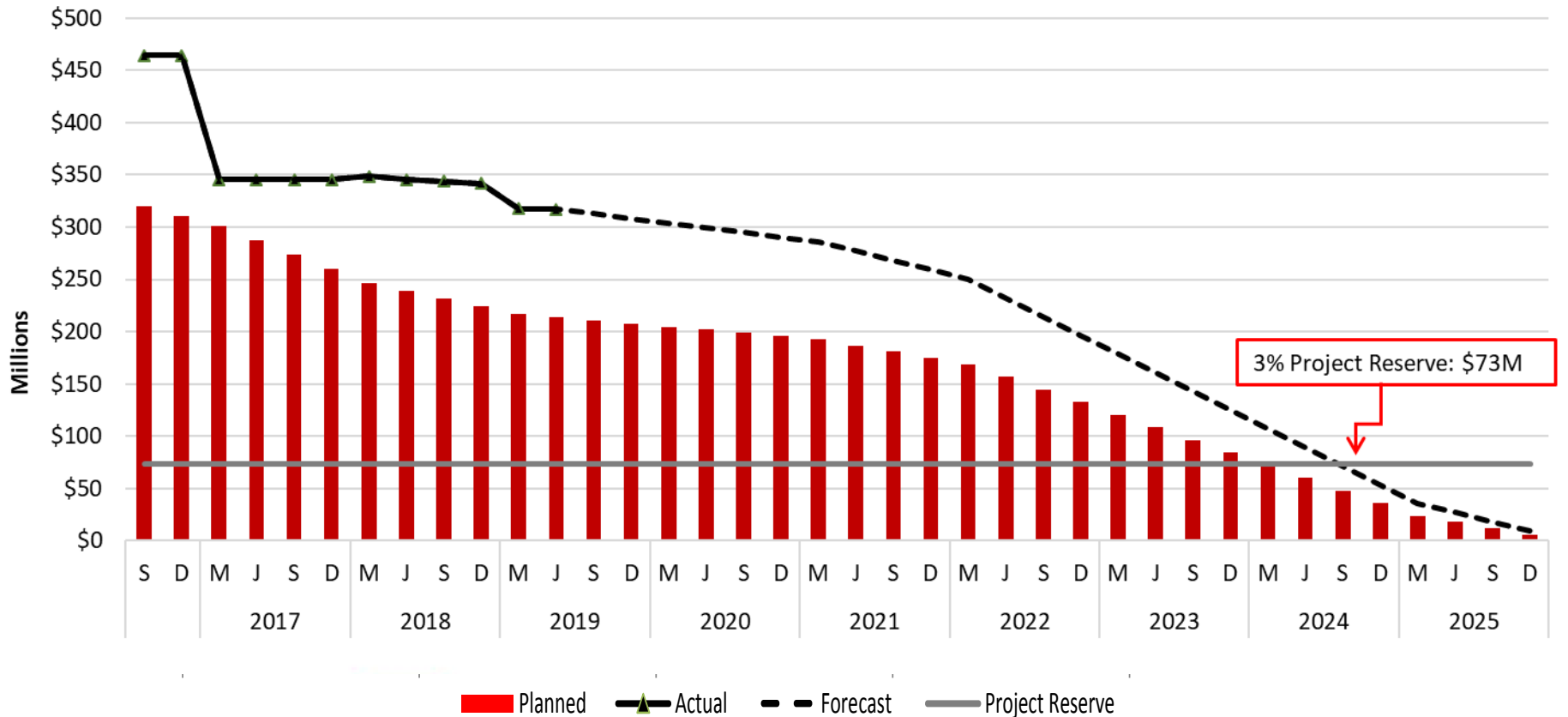
May 2019

## Project Cost Contingency Drawdown



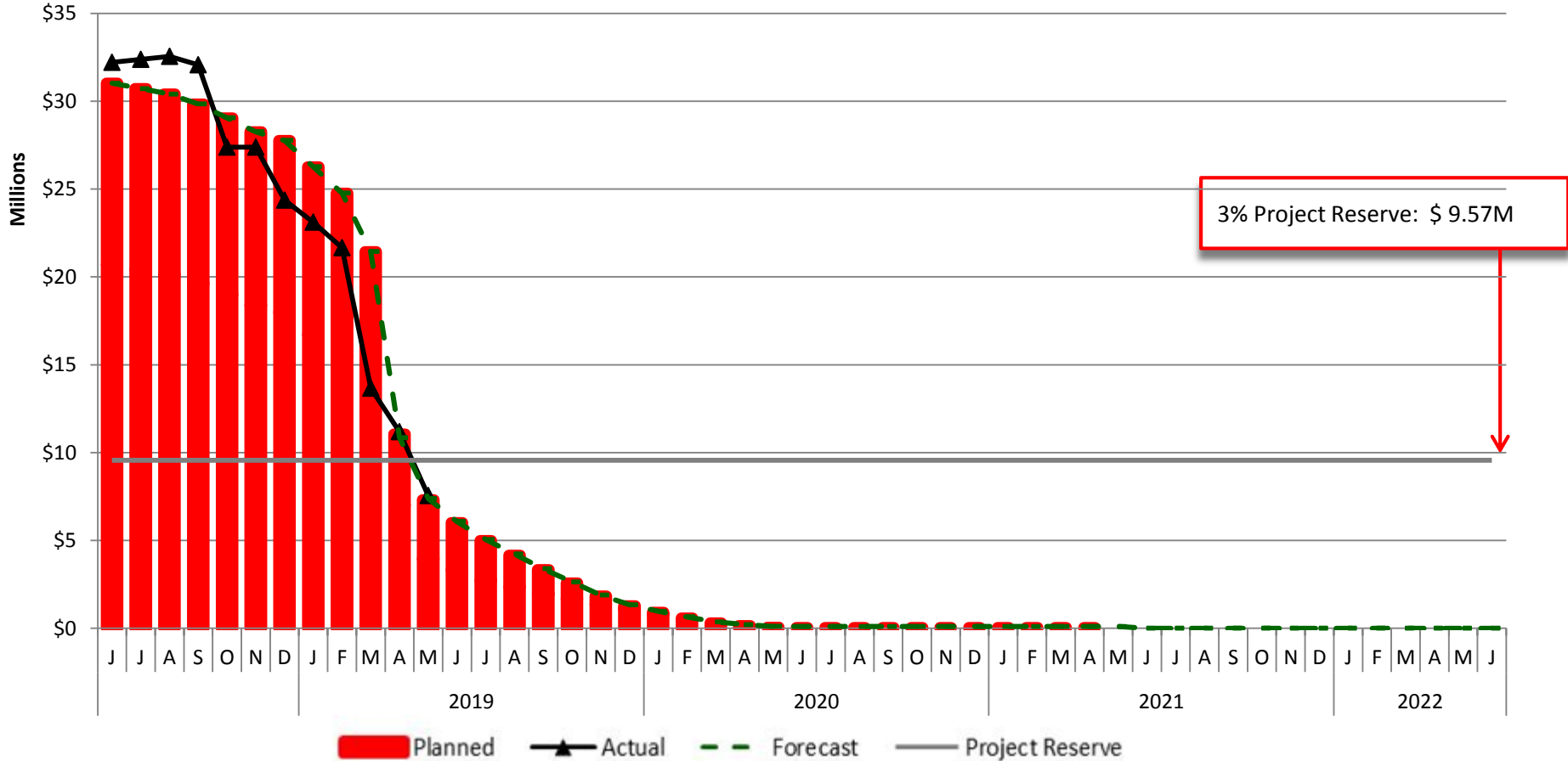
# Westside Purple Line Extension – Section 2

## Project Cost Contingency Drawdown



# New Blue Projects

## Project Cost Contingency Drawdown



3% Project Reserve: \$ 9.57M

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