



## Board Report

---

**File #:** 2019-0706, **File Type:** Oral Report / Presentation

**Agenda Number:** 37.

---

### CONSTRUCTION COMMITTEE OCTOBER 17, 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

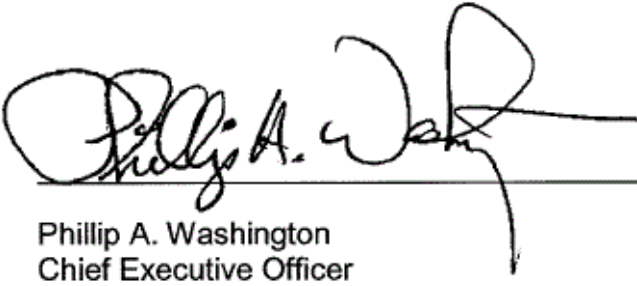
Update report covering the month of October 2019 by the Chief Program Management Officer.

#### 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, Sr. EO Project Mgmt., (213) 922-7297
- **Willowbrook/Rosa Park Station** - Timothy Lindholm, Sr. EO Project Mgmt., (213) 922-7297
- **The New Blue** - Timothy Lindholm, Sr. EO Project Mgmt., (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

---

October 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 93% complete. The forecast revenue service date is Summer/Fall 2020.  |
| Regional Connector                        |                  |                      | Project is 58% complete and proceeding on schedule and within budget.  |
| Westside Purple Line Extension-Section 1  |                  |                      | Project is 52% complete and proceeding on schedule and within budget.  |
| Westside Purple Line Extension-Section 2  |                  |                      | Project is 23% complete and proceeding on schedule and within budget.  |
| Westside Purple Line Extension-Section 3  |                  |                      | Project is 4% complete and proceeding on schedule and within budget.   |
| Patsaouras Plaza                          |                  |                      | Project is 75% complete. Archaeological and Native American monitoring continues. False work for the pedestrian overcrossing, elevator platform and walkway are complete.  |
| Willowbrook/Rosa Parks Station            |                  |                      | Customer Service Building and mobility hub ongoing at 70% completion. Blue Line Station and mezzanine work progressing with topping slab and final utility/elevator/VMS/Fare gate Systems infrastructure. In full coordination with New Blue. Package B 100% bid package has been delivered and is under review by Metro |
| Metro Blue Line Projects                  |                  |                      | MBL North Segment work under System Integration Testing.   |
| I-210 Barrier Replacement                 |                  |                      | Metro Systems has performed simulations and determined less than 10 minute headways during construction of Project 1. Design team looking at how to obtain 8 minute headways. Obtained Caltrans approval of proposed stage construction & reduced lane widths for Project 1.   |
| I-5 North:<br>SR 118 to SR 134            |                  |                      | Segment 3 (Empire) is 75% complete. Segment 4 (Magnolia to SR-134) is 92% complete.  |
| I-5 South:<br>Orange County Line to I-605 |                  |                      | Segment 2 (Valley View) is 46% complete. Segment 3 (Rosecrans) is open to traffic. Segment 4 (Imperial) is 96% complete. Segment 5 (Florence) is 82% complete.   |

October 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   | Summer/Fall    | Summer/Fall     |
| OPERATION | 2020           | 2020            |

- Overall Project Progress is 93% complete; addressing contractor construction schedule.
- Critical path is completion of the conduit work, system equipment installation and testing, and integrated testing, especially at the three underground stations.
- Contractor continues Crenshaw Blvd road restoration in the Hyde Park neighborhood.
- Commenced System integrated testing (SIT 1) on south end, including running first train.



Test Train at Segment A



Continued restoration 60th to 63<sup>rd</sup> Streets at UG#3

October 2019



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 3

# REGIONAL CONNECTOR TRANSIT PROJECT

**OK BUDGET**

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

**OK SCHEDULE**

|                   | <u>Current</u><br>Summer/Fall<br>2022 | <u>Forecast</u><br>Summer/Fall<br>2022 |
|-------------------|---------------------------------------|--|
| REVENUE OPERATION |                                       |  |

- Overall Project Progress is 58% complete.
- Tunnels:** Continued concrete placement in the Sequential Excavation Method (SEM) Cavern.
- Little Tokyo/Arts District Station, WYE and 1st Street:** Structural concrete placement for station walls continues. Pre-Bus Bridge piling activities are ongoing.
- 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:** Continue installation of exterior and interior walls; completed the removal of the knock-out panel at 7th/Metro Station interface.



1st Street Cut/Cover Walls pour preparation



Concrete placement of headwall in SEM Cavern

October 2019



On target



Possible problem



Major issue


Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 4

# PATSAOURAS BUS PLAZA STATION

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

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

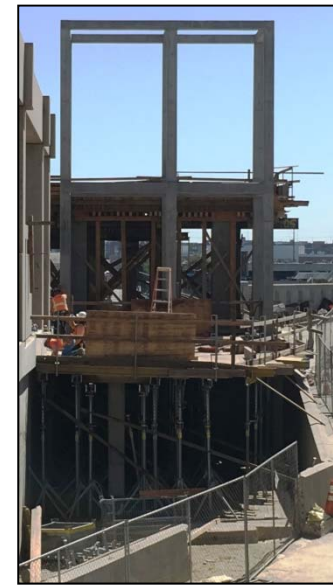
- Overall project progress at approximately 75% complete
- Archaeological and Native American monitoring continues, causing occasional construction delays
- Pedestrian overcrossing connected and false work completed
- Elevator platform and walkway false work completed
- Walkway and Platform Falsework completed
- Retaining wall graded



Pedestrian Walkway False work



Pedestrian Overcrossing False Work



Elevator Platform

October 2019



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 9

# 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.



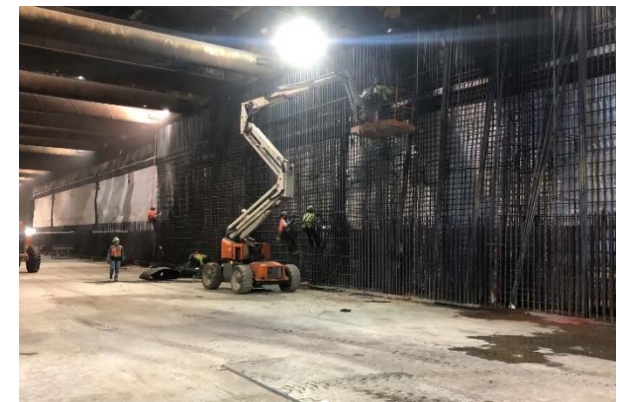
## SCHEDULE

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

- Overall Project Progress is 52% complete.
- Wilshire/Western Retrieval Shaft:** Reconfigure yard and shaft to accommodate mining Reach 1 cross passage construction.
- Wilshire/La Brea Station:** Placement of second lift exterior wall concrete commenced on August 27, 2019. Roof construction is scheduled to start in September 2019 and work on the concourse level high bay area is scheduled to begin in December 2019.
- Wilshire/Fairfax Station:** Invert concrete placement was completed on August 30, 2019, and HDPE installation for first lift walls has commenced. First lift wall placement is scheduled to begin in October 2019.
- Wilshire/La Cienega Station:** Excavation to invert elevation is scheduled to complete in September 2019 and daily maintenance of dewatering wells continues.
- Tunneling:** Re-assembly of the TBMs is on-going. Reach 2 TBM launch and Reach 1 cross passage work are both scheduled to start in October 2019.



TBM Assembly at Wilshire/La Brea Station



Wall Rebar Placement at Wilshire/Fairfax

October 2019



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro



# WESTSIDE PURPLE LINE EXTENSION – SECTION 2

| OK BUDGET  |                |                 |
|--|----------------|-----------------|
|  | <u>Current</u> | <u>Forecast</u> |
| TOTAL COST*  | \$2,530M       | \$2,530M        |
| * Includes Board approved LOP budget plus finance costs. |                |                 |

| OK SCHEDULE       |                    |                 |
|-------------------|--------------------|-----------------|
|                   | <u>Current</u>     | <u>Forecast</u> |
| REVENUE OPERATION | Winter 2026 (FFGA) | Summer 2025     |

- Overall Project progress is 23% complete.
- Final design progress is 95% complete.
- **Century City Constellation**
  - Tunnel Boring Machine (TBM) launch box excavation is on going. The installation of the third level bracing has been completed and the fourth level bracing has commenced.
  - Tunnel shaft excavation and installation of walers/struts is ongoing.
  - LA Bureau Of Engineering granted an extension for the full street closure of Constellation Blvd until December 2019.
  - Cable pulling and splicing for AT&T and LADWP is anticipated to be complete prior to the start is of piling activities west of the TBM Launch Box.
  - Santa Monica bus layover construction is complete and operational.
- **Wilshire/Rodeo**
  - Sound wall pile installation at Canon Yard is complete.
  - Potholing for underground utilities and utility relocations are ongoing.
  - Piling for station excavation is scheduled to begin in October 2019.



TBM Launch Box Excavation in Century City



Tunnel Shaft Overview in Century City

October 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 |                |                 |

- Overall Project progress is 4% complete
- Final design progress is 14% complete
- **C1151 Tunnel Contract**
  - Received SCE design approval to proceed with conduit/vault installation in County of Los Angeles locations.
  - Continue real estate negotiations for access to Veterans Administration property. Draft Access Easement Agreement (AEA) and draft Right-of-Entry (ROE) are under review.
- **C1152 Stations, Trackwork and Systems Contract**
  - Design-Build Contractor has mobilized the design team.
  - Work plan preparation for geotechnical and potholing operations is ongoing.
- **Other Third Party Utility Relocation Work**
  - Joint trench for Verizon and Frontier telecom is ongoing.
  - Southern California Gas relocation at Westwood/UCLA station is ongoing.



Southern California Gas Steel Pipe Installation



Telecom Main Line A Installation

October 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> |
|-------------------|-----------------|-----------------|
| <b>TOTAL COST</b> | <b>\$109.3M</b> | <b>\$109.3M</b> |

**OK SCHEDULE**

|                               | <u>Current</u>     | <u>Forecast</u>    |
|-------------------------------|--------------------|--------------------|
| <b>SUBSTANTIAL COMPLETION</b> | <b>Summer 2020</b> | <b>Summer 2020</b> |

- Package A: Customer Service and Mobility Hub building finish work ongoing with metal panel and curtain wall installations. Interior partitions have been finished with ceiling systems being installed. Plaza formwork nearly complete to begin concrete work.
- Package C: Blue Line platform canopy 95% complete with platform topping slab installed. Rail and Variable Message systems work ongoing. Mezzanine structure completely in place and prepping for topping slab. Fare gate and elevator/escalator components and infrastructure currently being installed.
- Package B: Final coordination of 100% documents submitted for Metro review.



Blue Line Platform Work



Mezzanine Extension and Platform Work ongoing



Mobility Hub and Plaza Work

**October 2019**



On target



Possible problem



Major issue

**Construction Committee**

Los Angeles County Metropolitan Transportation Authority



**Metro** 9

# THE NEW BLUE CLOSURE

| ◇ BUDGET   | ◇ SCHEDULE     |                 |
|------------|----------------|-----------------|
|            | <u>Current</u> | <u>Forecast</u> |
| TOTAL COST | \$221.3M       | \$221.3M        |
|            | <u>Current</u> | <u>Forecast</u> |
|            | Fall 2019      | Fall 2019       |
|            | COMPLETION     |                 |

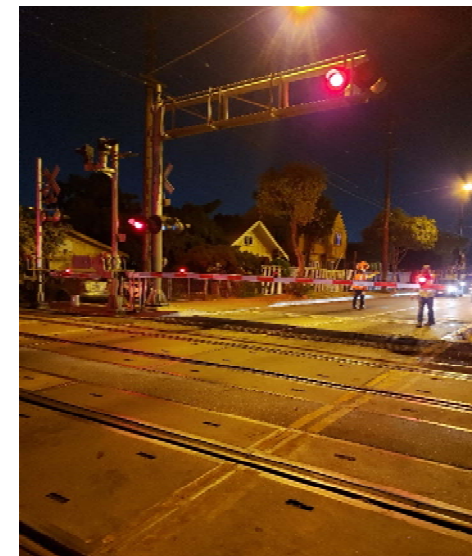
- Metro Blue Line North Segment is now under integration testing.
- 7<sup>th</sup> Metro tunnel tail track section Overhead Conductor Rail (OCR) and North Crossover also under construction
- Late October 2019 opening contingent on successful completion of Systems Integration Testing



7<sup>th</sup> Metro tail track new Overhead Conductor Rail (OCR)



Train control system testing



Testing the crossing gates at night

October 2019



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



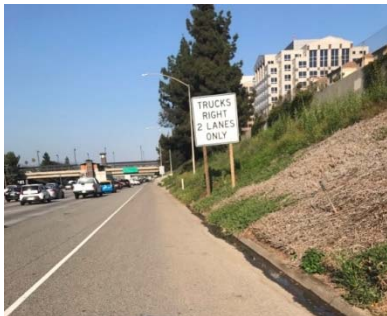
Metro 10

# 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) | Jan 2020       | Winter 2020     |
| Complete Design (Proj 2) | Feb 2021       | Winter 2021     |

- Obtained Caltrans approval of the Stage Construction Plans including the proposed reduced lane widths for Project 1 to avoid lane closures. 95% Design Plans to be submitted in mid-September.
- Draft Communications Plan to be presented to Pasadena and Arcadia for review in next meeting.
- Project 1: Segment from Michillinda to Iconic Bridge – Train Simulations have been performed and results show less than 10 minute headways with single tracking during construction of Project 1 is achievable. Design Team looking at ways to get to under 8 minute headways.
- Project 2: Segment from west end of the project to Michillinda – Development of alternative barrier system to avoid freeway lane closure for Project 2 is underway.



Newly Installed Caltrans Freeway Sign



Incident in 2014



Newly Installed Speed Limit Sign

October 2019



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 11

# I-5 Construction Projects (By Caltrans)



October 2019  
Construction Committee  
Los Angeles County Metropolitan Transportation Authority

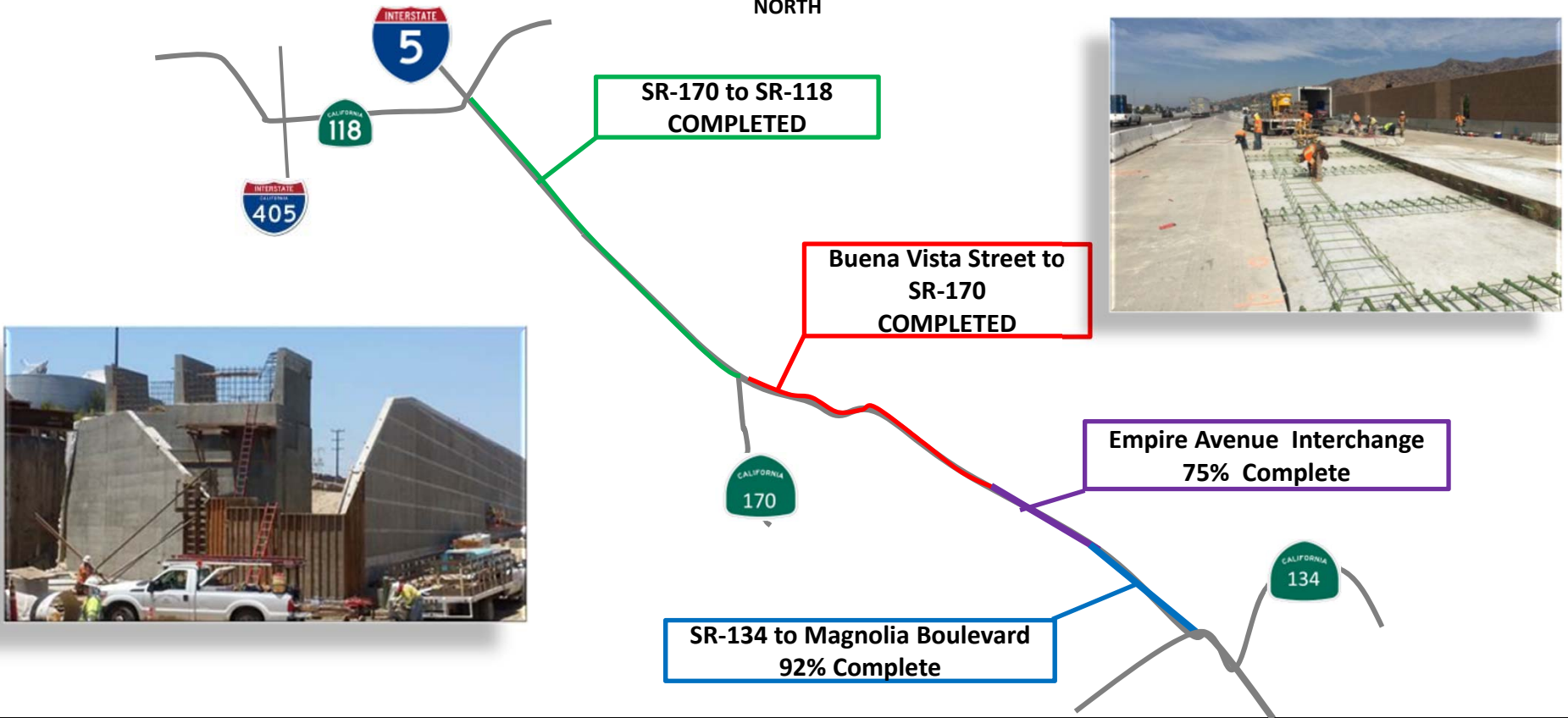


# I-5 NORTH: SR 118 TO SR 134



|                   |                         |                     |
|-------------------|-------------------------|---------------------|
| <b>! BUDGET</b>   |                         |                     |
| <b>TOTAL COST</b> | <b>Current \$880.9M</b> | <b>Forecast TBD</b> |

|                                       |                            |                             |
|---------------------------------------|----------------------------|-----------------------------|
| <b>! SCHEDULE</b>                     |                            |                             |
| <b>ANTICIPATED PROJECT COMPLETION</b> | <b>Current Spring 2022</b> | <b>Forecast Summer 2022</b> |



October 2019



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



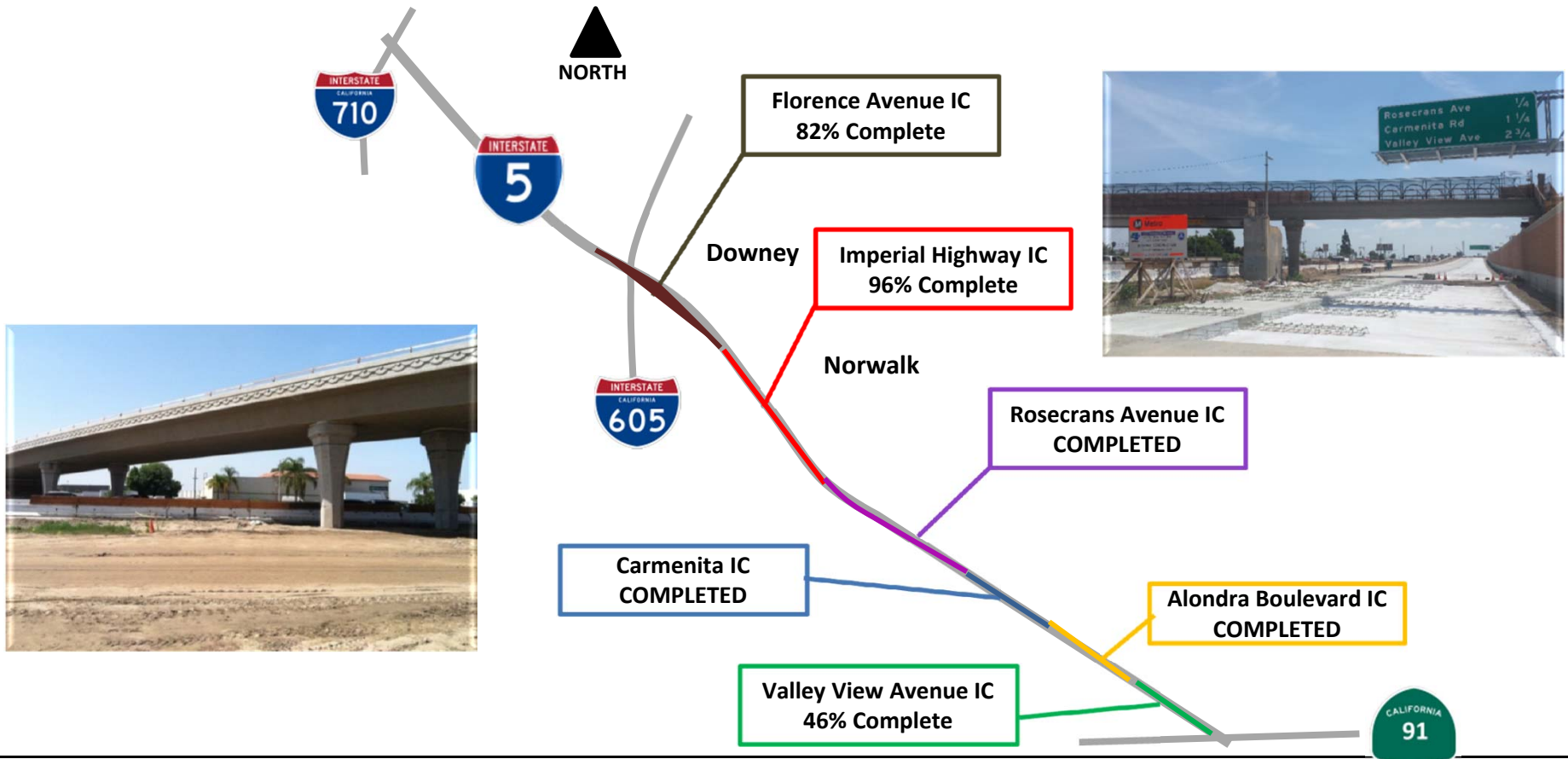
Metro 13

# 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 |



October 2019

Construction Committee

Los Angeles County Metropolitan Transportation Authority



On target



Possible problem



Major issue



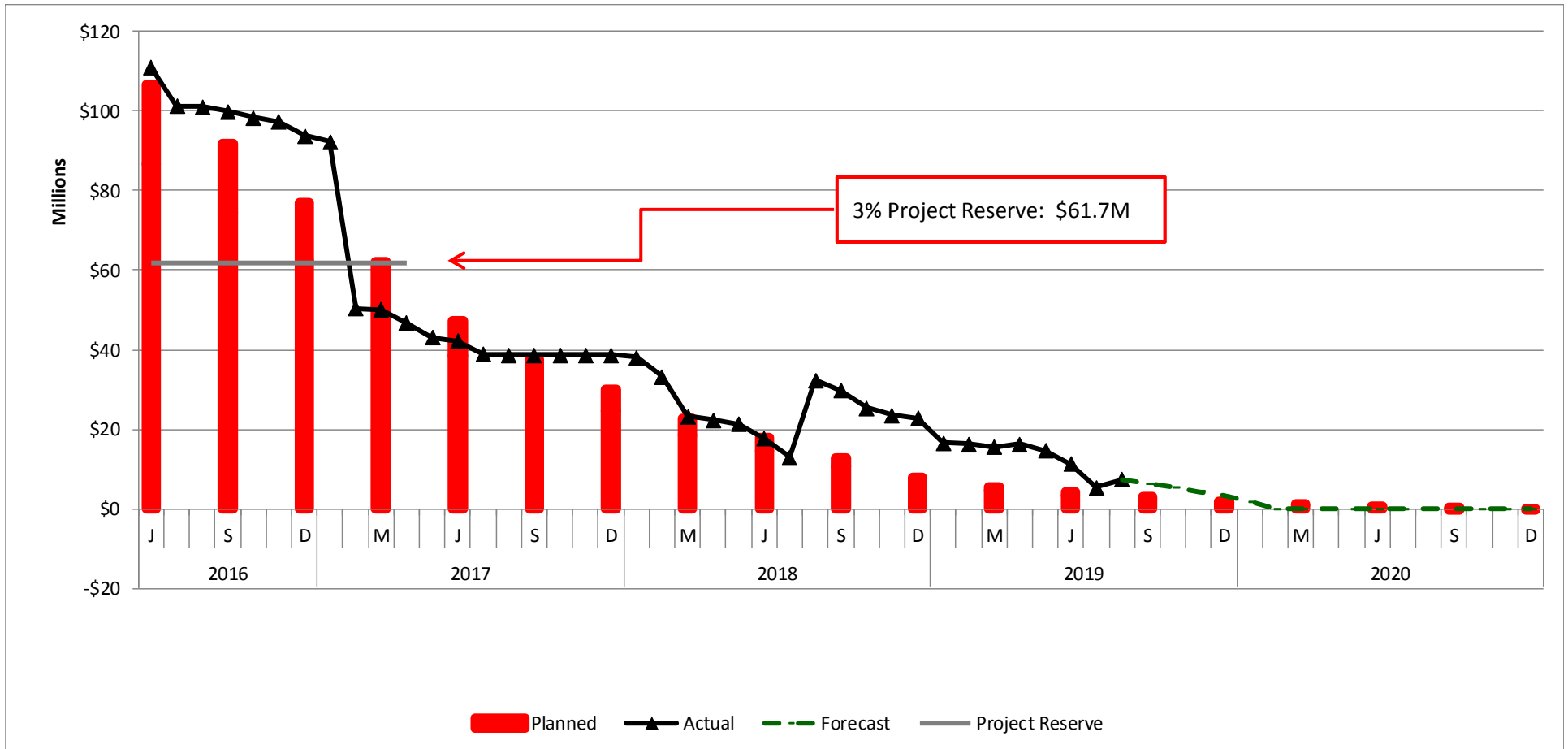
Metro 14



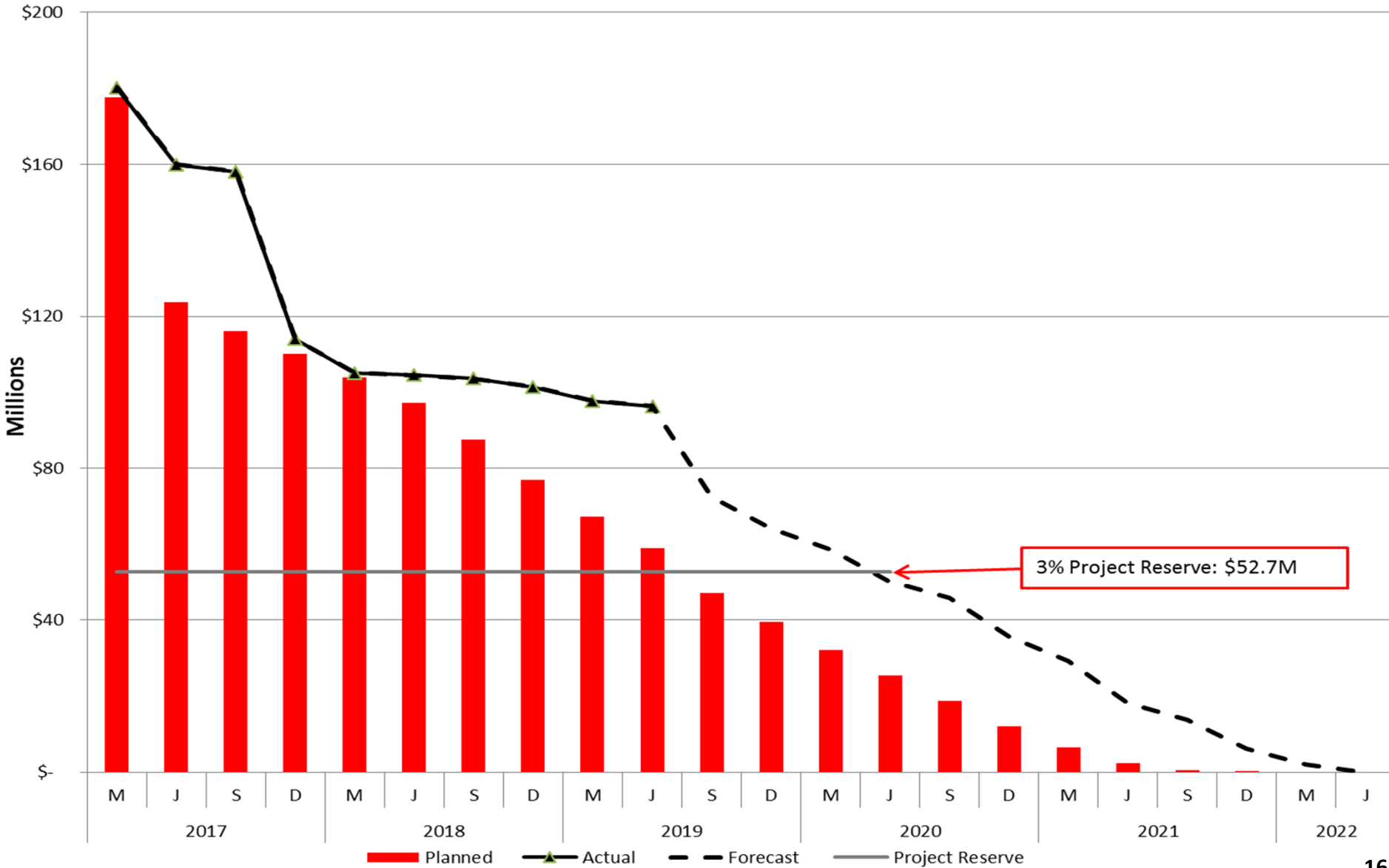
# Crenshaw/LAX Transit Project

## Project Cost Contingency Drawdown

August 2019



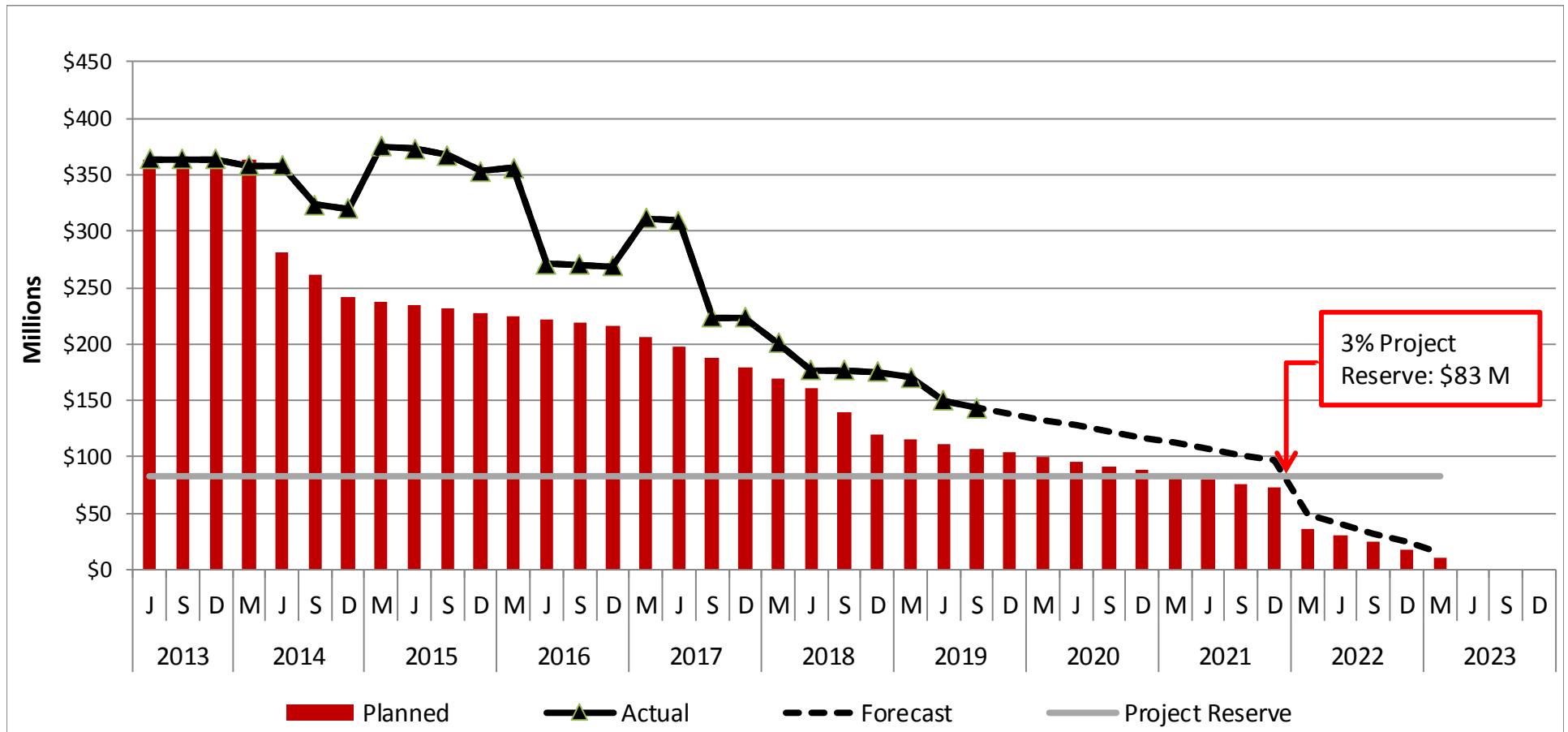
# Regional Connector Project Cost Contingency Drawdown



# Westside Purple Line Extension – Section 1

## Project Cost Contingency Drawdown

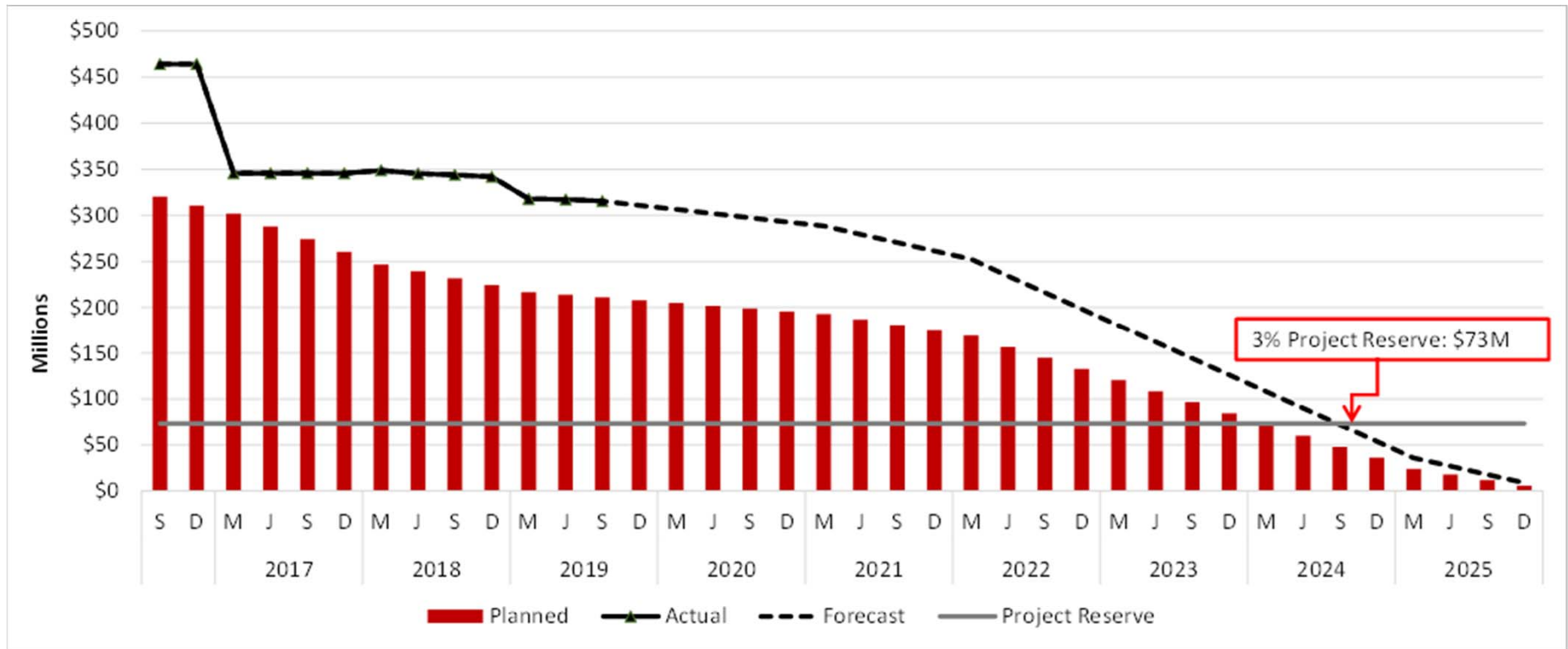
August 2019



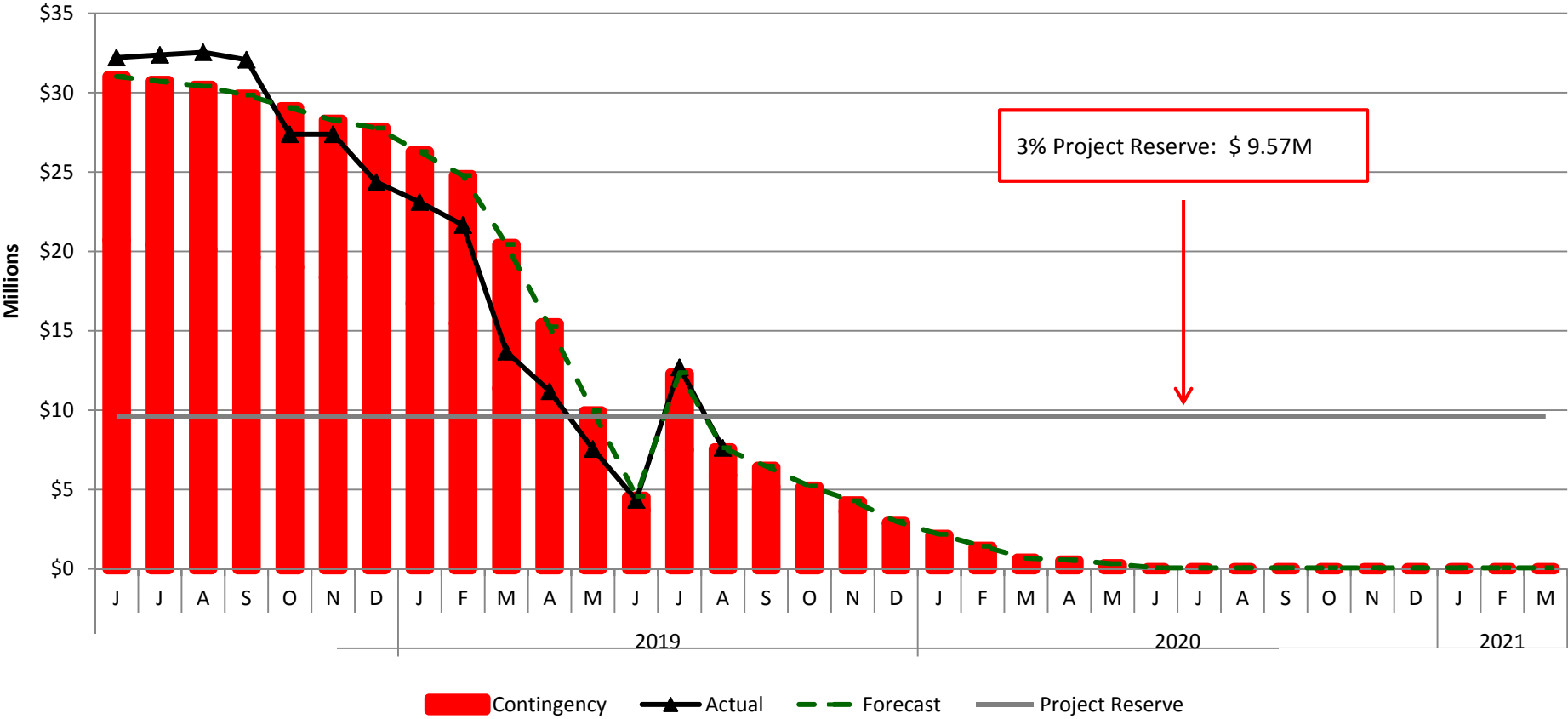
# Westside Purple Line Extension – Section 2

## Project Cost Contingency Drawdown

August 2019



# New Blue Projects Project Cost Contingency Drawdown



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