



## Board Report

**File #:** 2020-0219, **File Type:** Oral Report / Presentation

**Agenda Number:**

### CONSTRUCTION COMMITTEE APRIL 16, 2020

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

**ACTION: ORAL REPORT**

#### **RECOMMENDATION**

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

#### **DISCUSSION**

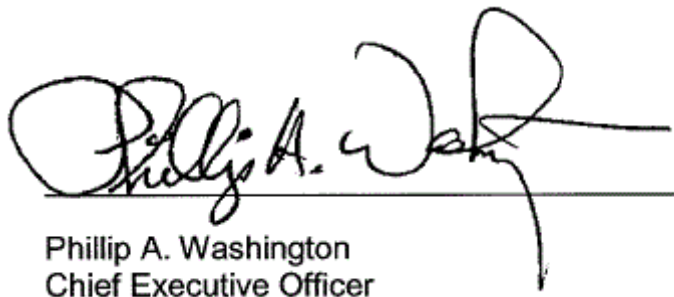
Update report covering the month of April 2020 by the Chief Program Management Officer.

#### **ATTACHMENTS**

Attachment A - Program Management Major Project Status Report

Prepared by:

- **Crenshaw/LAX** - Sameh Ghaly, Sr EO Project Mgmt., (213) 418-3369
- **Regional Connector** - Gary Baker, EO Project Mgmt., (213) 893-7191
- **Westside Purple Line Ext 1** - James Cohen, EO Project Mgmt., (213) 922-7911
- **Westside Purple Line Ext 2** - Michael McKenna, EO Project Mgmt., (213) 312-3132
- **Westside Purple Line Ext 3** - Kimberly Ong, EO Project Mgmt., (323) 903-4112
- **Patsaouras Plaza Busway Station** - Timothy Lindholm, EO Project Engr., (213) 922-7297
- **Willowbrook/Rosa Park Station** - Timothy Lindholm, EO Project Engr., (213) 922-7297
- **I-210 Barrier Replacement** - Androurh 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



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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 95% complete. Contractor needs to recover schedule.                                                                                                                                                                                                                                                                                                                                         |
| Regional Connector                        |    |    | Project is 64.5% complete and proceeding on schedule and within budget.                                                                                                                                                                                                                                                                                                                                |
| Westside Purple Line Extension-Section 1  |    |    | Project is 58% complete and proceeding on schedule. Differing site conditions and third party requirements are impacting the project budget.                                                                                                                                                                                                                                                           |
| Westside Purple Line Extension-Section 2  |    |    | Project is 27% complete and proceeding on schedule and within budget.                                                                                                                                                                                                                                                                                                                                  |
| Westside Purple Line Extension-Section 3  |    |    | Project is 8% complete and proceeding on schedule and within budget. The FTA has awarded the Full Funding Grant Agreement.                                                                                                                                                                                                                                                                             |
| Patsaouras Plaza                          |    |    | Project is 85% complete and proceeding on schedule and within budget.                                                                                                                                                                                                                                                                                                                                  |
| Willowbrook/Rosa Parks Station            |    |    | Blue Line Platform and Mezzanine Finishes and Vertical Circulation work ongoing while station is in operation. Customer Center, Mobility Hub + Public Plaza and promenade are substantially complete. Package B 100% bid package has been bid with negotiations ongoing. Real Estate and eminent domain costs are now finalized and along with Package B costs will push the project above the budget. |
| I-210 Barrier Replacement                 |   |   | Final Project 1 Project Report submitted to Caltrans for approval. We expect Project Report approval by the end of March. We are working toward Project 1 100% Design Package for approval by end of April 2020. Project 2 constructability and impact to Metro, Caltrans and surrounding cities are being investigated by the Design Team.                                                            |
| I-5 North:<br>SR 118 to SR 134            |  |  | Segment 1 and 2 are completed.<br>Segment 3 (Empire Ave & Burbank) is 79% complete. Segment 4 (Magnolia to SR-134) is 96% complete.                                                                                                                                                                                                                                                                    |
| I-5 South:<br>Orange County Line to I-605 |  |  | Segments 1, 3 and the Carmenita Interchange are completed.<br>Segment 2 (Valley View) is 60% complete. Segment 4 (Imperial) is 97% complete. Segment 5 (Florence) is 86% complete.                                                                                                                                                                                                                     |

April 2020

Construction Committee

Los Angeles County Metropolitan Transportation Authority



On target



Possible problem



Significant Impact



Metro 2

# CRENSHAW/LAX TRANSIT PROJECT

## BUDGET

|            | <u>Current</u> | <u>Forecast</u> |
|------------|----------------|-----------------|
| TOTAL COST | \$2,058M       | \$2,148M        |

## SCHEDULE

|           | <u>Current</u> | <u>Forecast</u> |
|-----------|----------------|-----------------|
| REVENUE   | Summer/Fall    | 2021            |
| OPERATION | 2020           |                 |

- Overall Project Progress is 95% complete; contractor needs to recover schedule.
- Project budget is being impacted by schedule delay.
- Contractor continues remaining facility and systems installation and testing efforts.
- Integrated testing being performed up to Hindry Ave in south section of alignment.



Vehicle testing on new bridge over I-405 Freeway



Trackwork and overhead catenary system – Crenshaw & 57<sup>th</sup>

April 2020



On target



Possible problem



Significant Impact



Metro 3

Construction Committee

Los Angeles County Metropolitan Transportation Authority

\*Substantial Completion: Winter 2020

# REGIONAL CONNECTOR TRANSIT PROJECT

## BUDGET

|            | <u>Current</u> | <u>Forecast</u> |
|------------|----------------|-----------------|
| TOTAL COST | \$1,816M       | \$1,816M        |

## SCHEDULE

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

- Overall Project Progress is 64.5% complete.
- Little Tokyo/Arts District Station, WYE and 1st Street:** Street Restoration continues at Wye and 1st/Alameda; Structural concrete operations continue at Station.
- Historic Broadway Station:** Structural concrete continues within the Station and Crossover Cavern.
- Grand Av Arts/Bunker Hill Station:** Structural concrete installation continues throughout the Station; Concrete masonry unit (CMU) walls for systems and electrical equipment continue.
- Flower Street:** Installation of exterior and interior walls and roof placements continue.
- Track:** Phase 1 of rail welding operations is complete; Phase 2 to begin in Q3 of this year.



Fan Room interior wall construction at future Little Tokyo/Arts District Station



Conduit installation at CMU walls

April 2020



On target



Possible problem



Significant Impact

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 4



# WESTSIDE PURPLE LINE EXTENSION – SECTION 1

## BUDGET

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

\* Includes Board approved LOP budget plus finance costs.

## SCHEDULE

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

- Overall Project Progress is 58% complete.
- Wilshire/Western Retrieval Shaft:** Continued support of Reach 1 cross passage construction.
- Wilshire/La Brea Station:** Concrete placement for 2<sup>nd</sup> lift exterior wall continues. First roof concrete placement is scheduled for March 14, 2020. Removal of the Center Shaft is scheduled for March 22, 2020.
- Wilshire/Fairfax Station:** Excavation and SOE installation at the future station entrance is anticipated to complete in June 2020. Tunnel boring machines TBM arrival is scheduled for April 8, 2020. Work on interior walls will commence after TBMs are launched for Reach 3 tunnel mining.
- Wilshire/La Cienega Station:** Station invert concrete placement completed on February 29, 2020. First exterior wall concrete placement is scheduled to start on March 24, 2020.
- Tunneling:** Reach 2 Tunneling as of March 11, 2020 - Purple TBM (Elsie): 3,464 feet mined (78% complete); Red TBM (Soyeon): 2,277 feet mined (51% complete).
- Cross Passages (CP):** Excavation at cross passages #11 and #12 have been completed in this reporting period. Cross passage #13 excavation has commenced.
- Differing site conditions and third party requirements are impacting the project budget.



Work at Cross Passage #12



Wilshire/Fairfax Station Entrance Structure

April 2020



On target



Possible problem



Significant Impact

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 5

# WESTSIDE PURPLE LINE EXTENSION – SECTION 2



## BUDGET

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

\* Includes Board approved LOP budget plus finance costs.



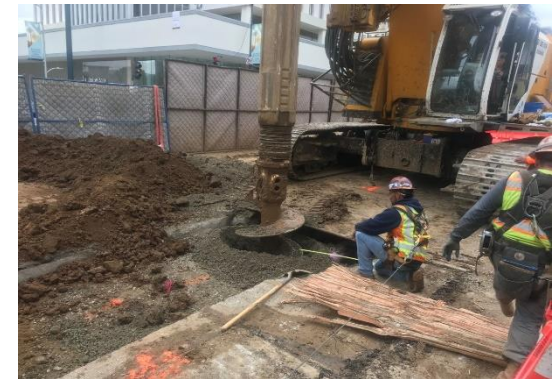
## SCHEDULE

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

- Overall Project progress is 27% complete.
- Final design progress is 98% complete.
- **Century City Constellation Station**
  - Assembly of the tunnel boring machines (TBM's) started on December 26, 2019 and is ongoing.
  - Tunnel shaft excavation has reached a depth of 64ft and is on hold pending an investigation into potential differing site conditions. Staff is coordinating additional site investigations and potential surface work on the BHHS campus with BHUSD and CalGEM.
  - LADWP cable pulling and splicing was completed on March 5, 2020.
- **Wilshire/Rodeo Station**
  - Piling for the station box excavation has completed one-hundred and nineteen (119) out of two hundred and ninety (290) piles as of March 16, 2020.
  - Piling activities are forecasted to continue through July 2020.



Lowering of TBM Cutterhead at the Launch Box in Century City



Pile Installation at Wilshire/Rodeo Station

April 2020



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 7



# WESTSIDE PURPLE LINE EXTENSION – SECTION 3



## BUDGET

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

\* Includes Board approved LOP budget plus finance costs.



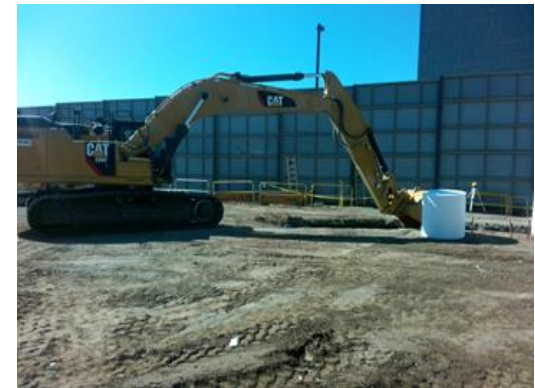
## SCHEDULE

|           | <u>Current</u> | <u>Forecast</u> |
|-----------|----------------|-----------------|
| REVENUE   | 2028           | 2027            |
| OPERATION | (FFGA)         |                 |

- The Full Funding Grant Agreement has been awarded.
- Overall Project progress is 8% complete
- Final design progress is 47% complete
- **C1151 Tunnel Contract**
  - Utility work for TBM power continues.
  - Preparation of the Tail Track Exit Shaft (TTES) site for construction continues on the VA Campus.
- **C1152 Stations, Trackwork and Systems Contract**
  - Final Design is ongoing.
  - Utility potholing investigation has begun.
  - Pre-construction surveys of adjacent properties ongoing.
  - Contractor completed geotechnical investigation work.
- **Other Third Party Utility Relocation Work**
  - Joint trench activities for combining Verizon and Frontier telecommunications are ongoing. Cable pulling/splicing ongoing.
  - Southern California Gas relocations are ongoing. Final “hot tapping” pending crew availability.
  - LADWP(Power): Cable pulling/splicing/cutover completed.



First 100 ft. of TTES Guide Wall Placement  
at Western VA Staging Area



Excavation of TTES Guide Wall Trench

April 2020



On target



Possible problem



Significant Impact

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     |

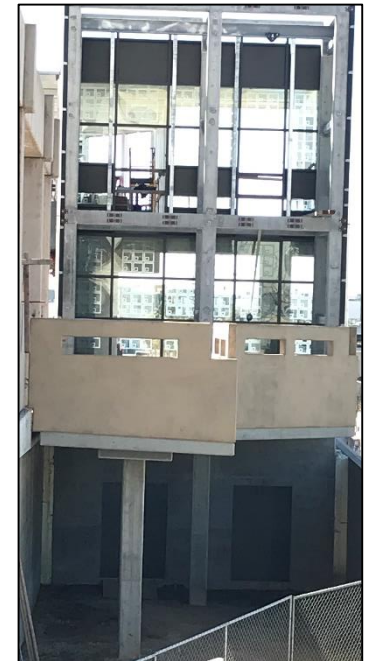
- Overall project progress at approximately 85% complete.
- Drainage system tie in on-hold to revise Area of Potential Effect with Consulting Parties.
- Elevator enclosure glass completed.
- Pedestrian walkway interior stainless steel panels initiated.
- Austin Vault completed.



Austin Vault completed



Interior panels initiated



Elevator glass enclosure completed

April 2020



On target



Possible problem



Significant Impact

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 8

# WILLOWBROOK/ROSA PARKS STATION

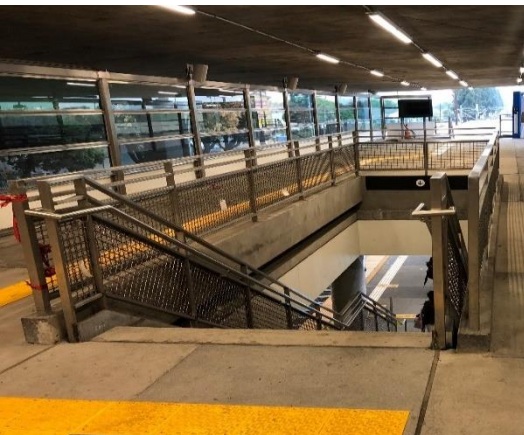
## BUDGET

|                   | <u>Current</u>  | <u>Forecast</u> |
|-------------------|-----------------|-----------------|
| <b>TOTAL COST</b> | <b>\$109.3M</b> | <b>\$128.4M</b> |

## SCHEDULE

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

- Package A: Customer Center, Mobility Hub and Public Plaza are substantially complete. Promenade remains at 95% completion due to delay in materials. Punch walks completed. Eminent domain acquisition costs are now finalized and will push the total cost of the project above the current budget. Southern pedestrian crossing being coordinated with Union Pacific Rail Road and may cause delay in planned July 2020 opening.
- Package C: Finishes, Systems (Variable Message Sign, TAP) and Vertical Circulation work ongoing while Station is in Operations. North end of mezzanine and stair to C Line platform construction near completion.
- Package B: Contractor has submitted pricing, total costs much higher than expected. Early work scheduled to commence end of March 2020, budget issue to be considered at this meeting.



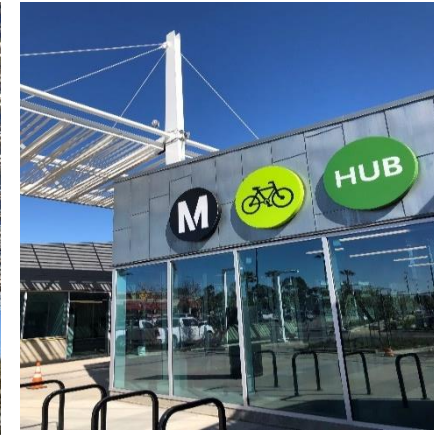
Blue Line Mezzanine open to the public



Mobility Hub Interior



Customer Center and Mobility Hub substantially complete



**April 2020**



On target



Possible problem



Significant Impact



**Metro** 9

**Construction Committee**

Los Angeles County Metropolitan Transportation Authority



# I-210 BARRIER REPLACEMENT PROJECT

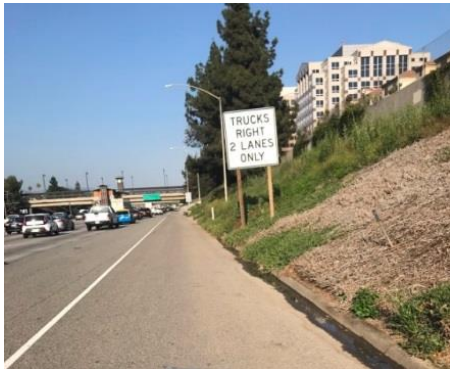
## BUDGET

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

## SCHEDULE

|                          | <u>Current</u> | <u>Forecast</u> |
|--------------------------|----------------|-----------------|
| Complete Design (Proj 1) | Apr 2020       | Spring 2020     |
| Complete Design (Proj 2) | Apr 2021       | Spring 2021     |

- Project 1: Segment from Michillinda to Iconic Bridge – Final PSR-PR submitted to Caltrans for approval. Approval is expected by end of March. After that is completed, the 100% Design Package will be submitted for approval in April.
- Project 2: Segment from west end of the project to Michillinda – Investigation of the barrier alternatives feasible for Project 2 has been completed by the Design Team.
- Projects 1 & 2: Design Team investigating the constructability and operational impact while single tracking occurs during construction on Gold Line. Additional track infrastructure (like cross-overs) is being investigated to see if they minimize the impact during construction.



Newly Installed Caltrans Freeway Sign





Incident in 2014




Newly Installed Speed Limit Sign

**April 2020**

 On target

 Possible problem

 Significant Impact

**Construction Committee**

Los Angeles County Metropolitan Transportation Authority



# I-5 Construction Projects (By Caltrans)



April 2020

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 11

# I-5 NORTH: SR 118 TO SR 134

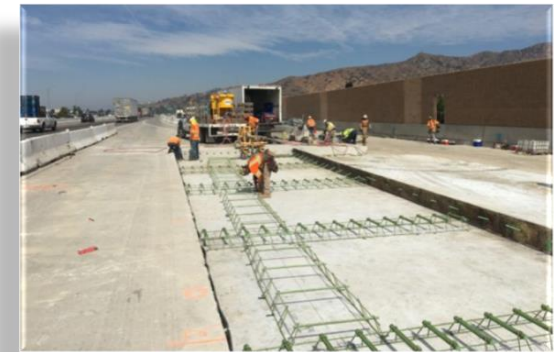
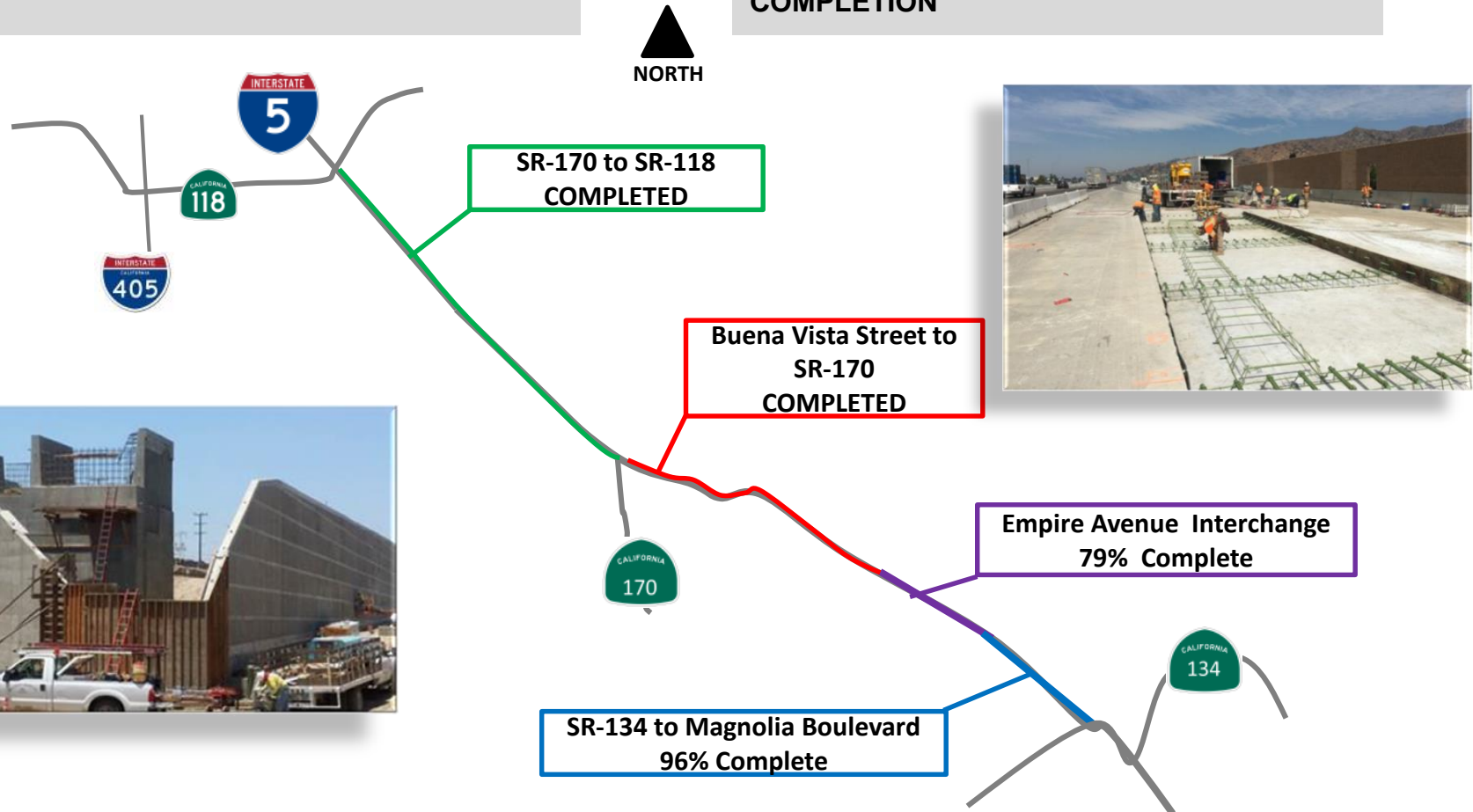


## ⚠ BUDGET

|            | Current  | Forecast  |
|------------|----------|-----------|
| TOTAL COST | \$880.9M | \$915.7M* |

## ⚠ SCHEDULE\*

| ANTICIPATED PROJECT COMPLETION | Current<br>Summer 2022 | Forecast<br>Winter 2022 |
|--------------------------------|------------------------|-------------------------|
|--------------------------------|------------------------|-------------------------|



April 2020



On target



Possible problem



Significant Impact



Metro 12

Construction Committee

Los Angeles County Metropolitan Transportation Authority

\* Risk Analysis, Nov 2019

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



## BUDGET

|                   | Current         | Forecast         |
|-------------------|-----------------|------------------|
| <b>TOTAL COST</b> | <b>\$1.888B</b> | <b>\$1.888B*</b> |

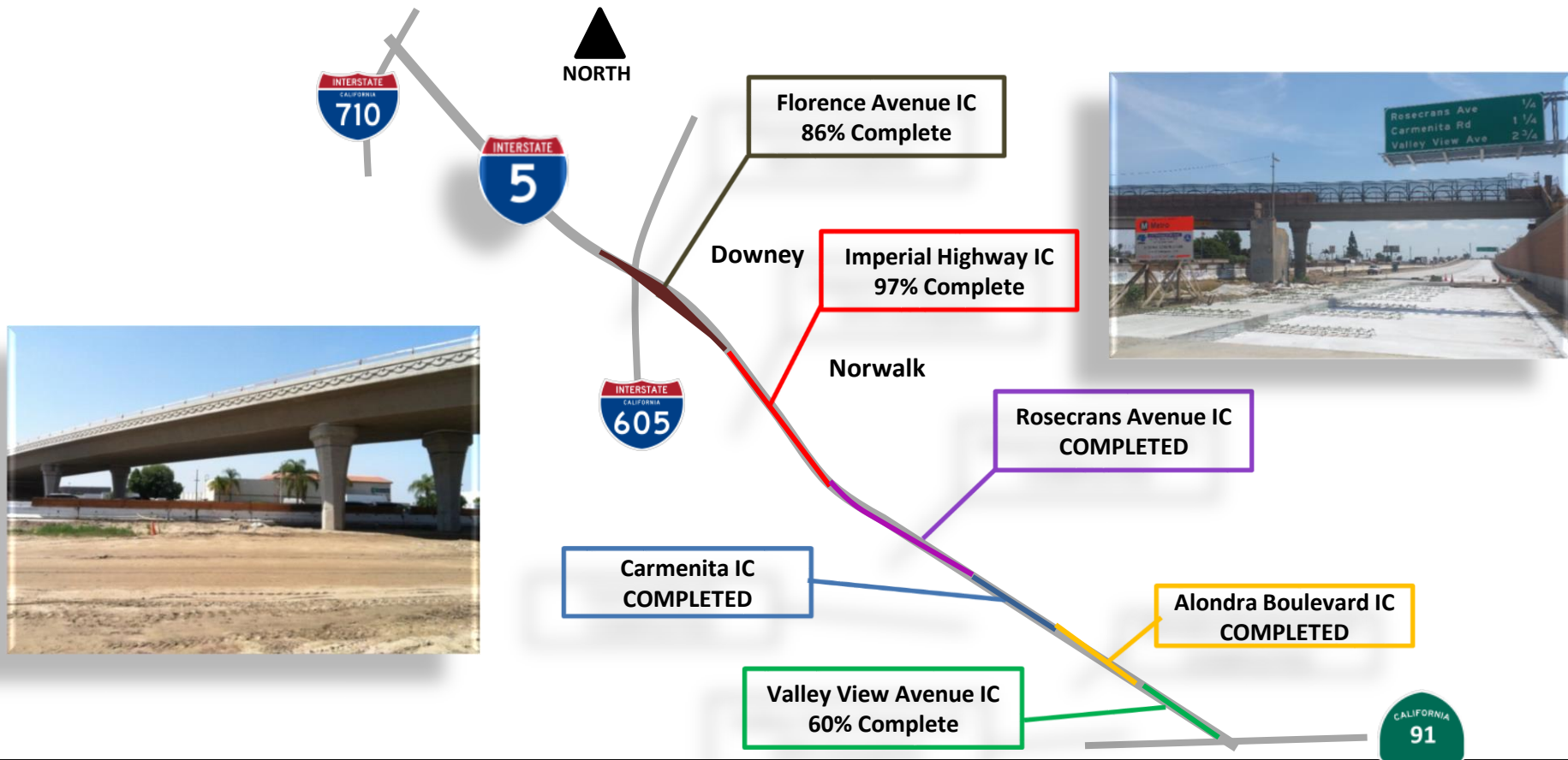


## SCHEDULE

**ANTICIPATED  
PROJECT  
COMPLETION**

**Current**  
Fall 2022

**Forecast**  
Winter 2022



On target



Possible problem



Significant Impact



**Metro** 13

April 2020

Construction Committee

Los Angeles County Metropolitan Transportation Authority

\* Risk Analysis, Nov 2019