



## Board Report

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Agenda Number: 33.

### CONSTRUCTION COMMITTEE APRIL 15, 2021

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

**ACTION: ORAL REPORT**

#### **RECOMMENDATION**

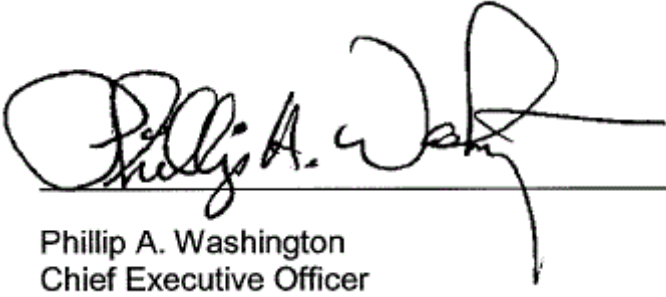
RECEIVE oral report on the Major Project Status by the Chief Program Management Officer.

#### **DISCUSSION**

Update report covering the month of April 2021 by the Chief Program Management Officer.

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
- **Willowbrook/Rosa Park Station** - Timothy Lindholm, Sr. EO Project Engr., (213) 922-7297
- **Division 20 Portal Widening Turnback** - Rick Meade, Sr EO Project Mgmt., (562)524-0517
- **I-210 Barrier Replacement** - Androush Danielians, EO Project Engr., (213) 922-7598
- **I-5 North County Enhancements** - Timothy Lindholm, Sr. EO Project Engr., (213) 922-7297
- **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, Mgr, Project Control, (213) 418-3031



Phillip A. Washington  
Chief Executive Officer























# **Program Management Major Project Status Report**

Presented By

**Bryan Pennington**

Chief Program Management Officer (Interim)

# PROJECT BUDGET & SCHEDULE STATUS SUMMARY CHART

Project	Cost Performance	Schedule Performance	Comments
Crenshaw/LAX			Project is 98% complete. Contractor is not applying sufficient work force to complete their remaining work. Metro continues to work with contractor to mitigate the schedule forecast; emphasizing safety and reliability in final acceptance of project elements and systems. Remaining work is primarily communication system testing, especially in underground sections.
Regional Connector			Project is 78% complete. Construction on full-throttle with civil, structural, trackwork, power installation, MEP, finishes and systems all underway. Comprehensive planning for testing underway at 7th/Metro Center.
Westside Purple Line Extension-Section 1			Project is 68% complete. Reviewing the impacts differing site conditions and third-party requirements had on the project schedule. The Reach 3 anomaly is significantly impacting critical path tunnel mining activities as well as the Project's budget.
Westside Purple Line Extension-Section 2			Project is 42% complete and proceeding on schedule and within budget.
Westside Purple Line Extension-Section 3			Project is 19% complete and proceeding on schedule and within budget.
Willowbrook/Rosa Parks Station			Package A & C Final Punch List work continuing for Package Closeout. Package B is in full progress with underground utility work and vertical circulation work. Major hardscape work scheduled for end of March to maintain May 2021 completion date for Package B.
Division 20 Portal Widening Turnback			Project is 20% complete and proceeding on schedule and within budget.
I-210 Barrier Replacement			Project 1 Plans, Specs and Estimate (PS&E) package is finalized. However, the construction permit for Project 1 will be granted once the Aerially Deposited Lead (ADL) testing has been completed and submitted to Caltrans. Funding source(s) for ADL testing and Project 1 construction are still to be determined. Barrier analysis and the development of Project Study Report (PSR) for Project 2 is underway.
1-5 North County Enhancements			Construction Notice to Proceed (NTP) is expected in Spring 2021
I-5 North: SR 118 to SR 134			Segment 1 and 2 are completed. Segment 3 (Empire Ave & Burbank) is 88% complete. Segment 4 (Magnolia to SR-134) is 99% complete and began the plant establishment phase on June 1, 2020. * The Cost includes the Approved Loan Term
I-5 South: Orange County Line to I-605			Segments 1, 3, and the Carmenita Interchange are completed. Segment 2 (Valley View) is 76% complete. Segment 4 (Imperial) is 98% complete and began the plant establishment phase on Jan 31, 2020. Segment 5 (Florence) is 92% complete.

April 2021



On target



Possible problem



Significant Impact

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 2

# CRENSHAW/LAX TRANSIT PROJECT

## ◆ BUDGET

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

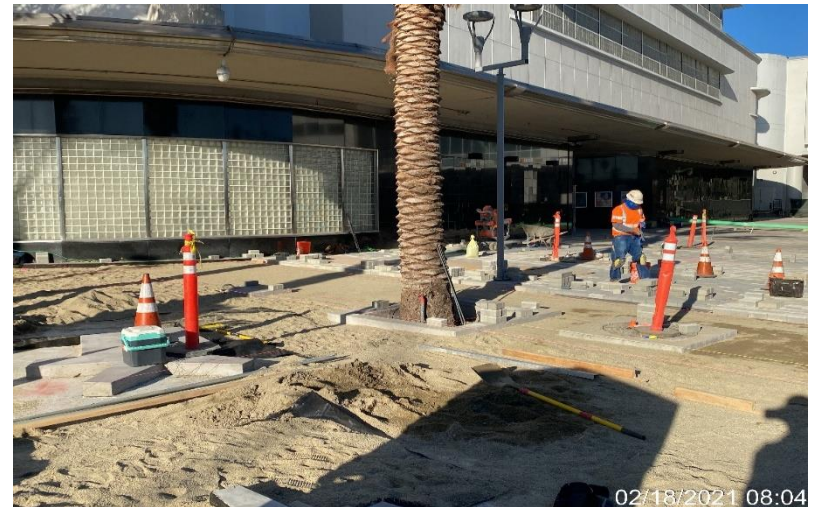
## ▲ SCHEDULE

	<u>Current</u>	<u>Forecast</u>
REVENUE OPERATION	May 2021	Winter 2021

- Overall Project Progress is 98% complete
- Contractor is not applying sufficient work force to complete their remaining work.
- Metro continues to work with contractor to mitigate the schedule forecast; emphasizing safety and reliability in final acceptance of project elements and systems.
- Remaining work is primarily communications system testing, especially in underground sections.



EXPO STATION – Installing and performing electrical work to the ticket vending machines at the Free Area.



MLK STATION – Continue brick paver installation at the north end area of the plaza.

April 2021



On target



Possible problem



Significant Impact



Metro 3

Construction Committee

Los Angeles County Metropolitan Transportation Authority

# REGIONAL CONNECTOR TRANSIT PROJECT

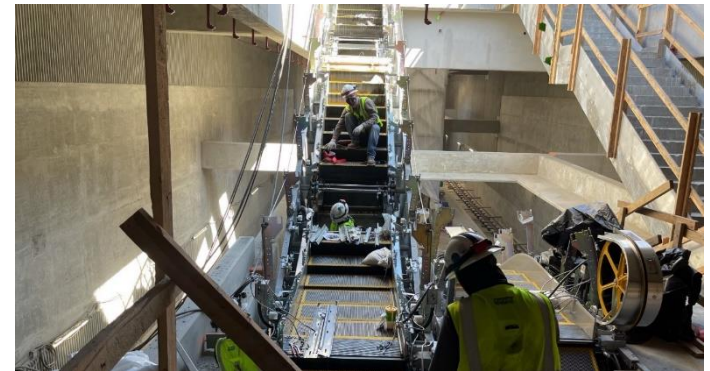
## BUDGET

	<u>Current</u>	<u>Forecast</u>
TOTAL COST	\$1,829M	\$1,829M

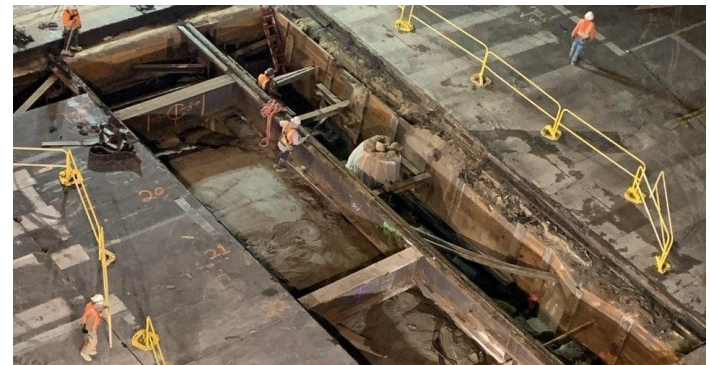
## SCHEDULE

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

- Overall Project Progress is 78% complete.
- Little Tokyo/Arts District Station & Surrounding Area:** Final 1st Street guideway pours near complete; MSE wall modifications underway; on utilities Alameda continue.
- Historic Broadway Station:** Overbuild load transfer system work approximately 50% complete; Site restoration on-going on Spring and Broadway.
- Grand Av Arts/Bunker Hill Station:** Elevator and escalator installations continue; Pedestrian Bridge advancing; Closure of Hope for restoration in-place – backfill on-going.
- Flower Street:** Advancing Mechanical, Electrical, & Plumbing (MEP) continuing; Final utility work continues; Cutover plans with 7th/Metro Station require close coordination with Operations to establish priorities.
- Trackwork:** Crossover installation east of Broadway Station complete; Crossover at the Wye Junction underway.
- Systems:** Overhead Conductor Rail (OCR) installations continue; Field preparations for signals and communications underway; Preparation for permanent power installations underway.





Escalator assembly at the future Little Tokyo/Arts District Station



Deck beam removal at 4th/Flower

April 2021

 On target

 Possible problem

 Significant Impact

Construction Committee

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# WESTSIDE PURPLE LINE EXTENSION – SECTION 1

## BUDGET

	<u>Current</u>	<u>Forecast</u>
TOTAL COST*	\$3,354M	\$3,354M

\* Includes Board approved LOP budget plus finance costs.

## SCHEDULE

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

Overall Project Progress is 68% complete.

**Wilshire/La Brea Station:** Permanent utility installation/backfill (above the roof) activities, interior masonry work and appendage construction continue.

**Wilshire/Fairfax Station:** Concourse and 2<sup>nd</sup> lift wall concrete activities continue. Entrance plaza and appendage work move forward. The first roof concrete placement (high bay area) is scheduled at the end of March 2021.

**Wilshire/La Cienega Station:** The Purple Tunnel Boring Machine (TBM) arrived at the Station on February 25, 2021. Work on the entrance structure is on-going. K-Rail installation on Wilshire Blvd. for work on the first appendage (AE) has commenced.

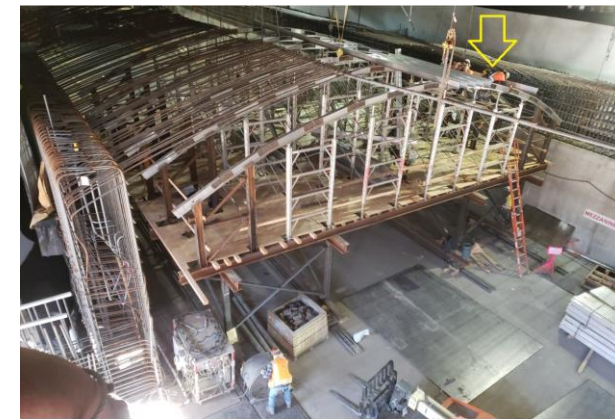
**Tunneling:** An I-Beam (Anomaly) was located and removed from the north tunnel. The Purple TBM (Elsie) successfully reached Wilshire/La Cienega Station without incident. The Red TBM (Soyeon) has restarted and has reached the anomaly area. South tunnel anomaly intervention to follow.

**Reach 1 Tunnel:** 9 out of 12 cross passage structures are complete. Completion of all Reach 1 cross passages is planned for April 2021. Reach 1 tunnel invert concrete placement has commenced.

**Budget/Schedule:** The Reach 3 anomaly and gas issues along the alignment have impacted the Project schedule and budget. The impact is expected to be significant. The current Revenue Service Date forecast is the 4<sup>th</sup> quarter of 2024. Budget impacts continue to be assessed. Metro and the FTA will conduct a formal risk assessment after mining through the anomaly in mid-2021. The Board will be briefed on the outcome.



Purple TBM Arrival of Wilshire/La Cienega Station



Installing Roof Falsework at Wilshire/Fairfax Station

April 2021



On target



Possible problem



Significant Impact



Metro 5

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# 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>

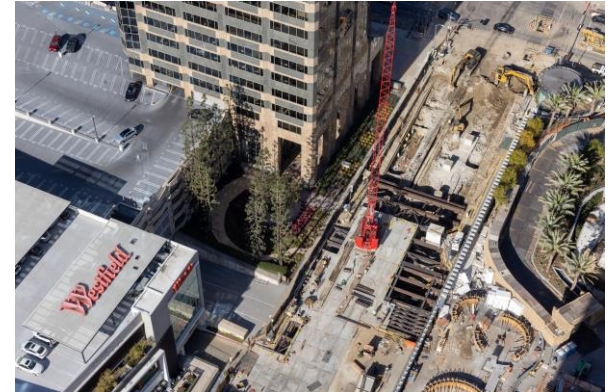
\* Includes Board approved LOP budget plus finance costs.



## SCHEDULE

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

- Overall Project progress is 42% complete.
- **Century City Constellation Station**
  - Installation of utility supports continues west of the Tunnel Boring Machine (TBM) launch box.
  - Decking operations are anticipated to be completed in March 2021.
  - Excavation of the station box is 18% complete.
- **Wilshire/Rodeo Station**
  - Excavation of the station box was 97% complete as of March 19, 2021
  - Installation of waterproofing membrane for the station mud slab is anticipated to begin in April 2021.
- **Tunneling**
  - Both TBMs “Ruth” and “Harriet” are operating within the City of Beverly Hills. Progress as of March 22, 2021 is as follows:
    - Ruth (eastbound subway tunnel) – 1,319ft
    - Harriet (westbound subway tunnel) - 979ft
  - Tunnel operations are being transitioned to the tunnel access shaft from the TBM launch box area.
  - “Ruth” is currently stopped for unplanned maintenance to its cutterhead, while “Harriet” is stopped for the planned installation of the conveyor belt system.



Aerial View of Decking West of Avenue of the Stars



Wilshire/Rodeo Station Excavation

April 2021



On target



Possible problem



Significant Impact

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	Winter 2028 (FFGA)	Spring 2027

- Overall Project progress is 19% complete
- Final design progress is 81% complete
- **C1151 Tunnel Contract**
  - TBM #1 (BR) has completed the initial drive 526 feet and is being configured with the full complemented of gantries for production mining.
  - Assembly of the starter gantry and preparation for initial launch for TBM #2 (BL) continues.
  - Grading and storm drain work continues at the Caltrans basin in the Westwood/VA station area.
  - Horizontal Directional Drilling for the installation of the inclinometer and grouting for the Metropolitan Water District 96" water line in Sepulveda Blvd is underway.
  - Installation of instrumentation and monitoring equipment and fabrication of segments are ongoing.
- **C1152 Stations, Trackwork, and Systems Contract**
  - Final design is ongoing.
  - VA Station
    - Storm Drain relocation west of Bonsall continues.
    - Support of Excavation (SOE) wall mobilization commenced in February.
  - UCLA Station utility sewer relocation (Ashton & Westwood) commenced in February.
- **Other Work**
  - Joint trench for Verizon and Frontier telecommunications is substantially complete; punch list completed in March 2021.
  - LADWP power cutover to 10921 Wilshire Boulevard is planned for spring of 2021.



TBM Assembly Overview at Tail Track Exit Shaft



Storm Drain Relocation West of Bonsall Westwood/VA Station

April 2021



On target



Possible problem



Significant Impact

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Los Angeles County Metropolitan Transportation Authority



Metro 7

# WILLOWBROOK/ROSA PARKS STATION

## BUDGET

	<u>Current</u>	<u>Forecast</u>
TOTAL COST	\$128.4M	\$128.4M

## SCHEDULE

	<u>Current</u>	<u>Forecast</u>
SUBSTANTIAL COMPLETION	March 2021	May 2021

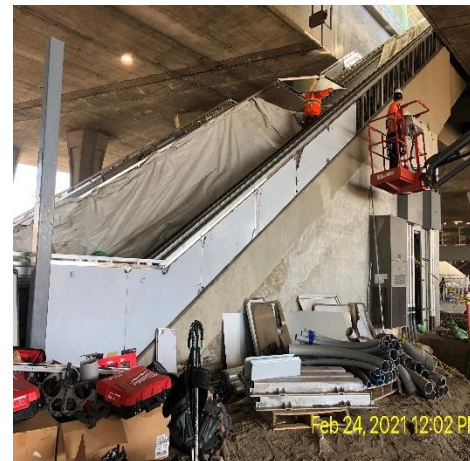
- Package A and C: All punch lists items remaining have been consolidated and is finishing up. Full close-out of punch list expected by end of April.
- Package B: Package B underground utility work ongoing at both C Line west and Central entrances. Elevator 4 work has been completed and is now in public operations, which allows full closure of the central plaza for remaining construction work. Underground storm drain system and the bus roadway has been completed. Major hardscape installation is scheduled for end of March throughout Package B areas to keep project for May delivery.



Underground utility work @ C Line west



Elevator 4 work completed



Stair/Escalator Work @ Central Plaza



Phase 3 Curb and Bus Lane completed

April 2021



On target



Possible problem



Significant Impact



Metro 8

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# DIVISION 20 PORTAL WIDENING TURNBACK

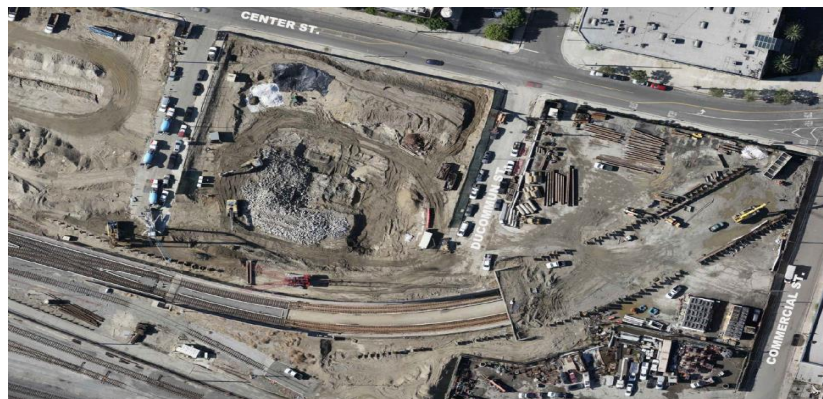
## ◆ BUDGET

	<u>Current</u>	<u>Forecast</u>
TOTAL COST	\$801.7M	\$801.7

## OK SCHEDULE

	<u>Current</u>	<u>Forecast</u>
SUBSTANTIAL COMPLETION	June 2024	June 2024

- **Overall Project progress is 20% complete.**  
Includes Real Estate Acquisitions, Environmental, Design, Contract Mobilization, Early Demolition, Power, Utility contracts and contract change orders
- **C1136 Portal Widening Turnback Contract**  
PWT C1136 Contract progress is 25%.  
Phase 1 Track and Civil work started  
1<sup>st</sup> Street Bridge Rehabilitation and Portal Widening
- **Major Change Orders to Date:**  
Hazardous Material Removal  
1<sup>st</sup> Street Bridge Rehabilitation  
Completion of Utility Contracts  
3<sup>rd</sup> Party Unforeseen Interfaces  
Design Revisions (*in progress*)
- **C1184 Transfer Power Substation Contract** at 54%
- **Coordination with Adjacent Projects**  
Purple Line Extension (PLE1)  
Regional Connector  
Metro Center Project  
6<sup>th</sup> Street Bridge (City of L.A. Project)
- **Completing risk assessment to determine budget/schedule**



April 2021



On target



Possible problem



Significant Impact



Metro 9

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# I-210 BARRIER REPLACEMENT PROJECT

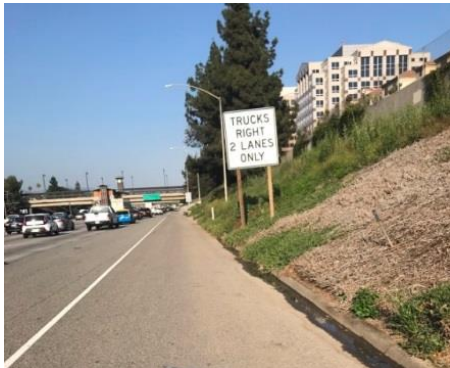
## OK BUDGET

	<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)	Feb 2021	Winter 2021
Complete Design (Proj 2)	Aug 2022	Summer 2022

- Project 1: Segment from Michillinda to Iconic Bridge – Project 1 Plans, Specs and Estimate (PS&E) package is finalized. However, the construction permit for Project 1 will be granted once the Aerially Deposited Lead (ADL) testing has been completed. Funding source(s) for ADL testing and construction for Project 1 are still to be determined.
- Project 2: Segment from west end of the project to Michillinda – Barrier analysis and the development of Project Study Report (PSR) for Project 2 is underway. The Design Team is examining the spatial constraints and the developing the construction staging for Project 2.



Newly Installed Caltrans Freeway Sign



Incident in 2014



Newly Installed Speed Limit Sign

April 2021

OK On target

◆ Possible problem

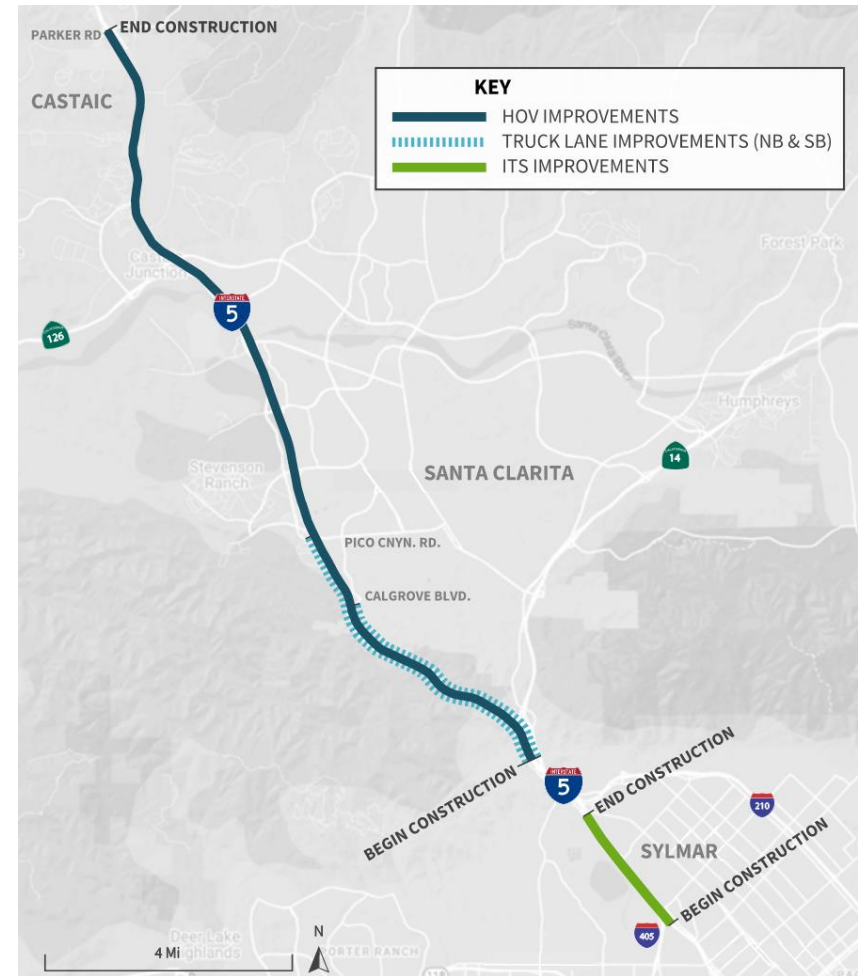
▲ Significant Impact

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# I-5 Construction Projects (Administered by Metro)



April 2021

Construction Committee

Los Angeles County Metropolitan Transportation Authority

# I-5 NORTH COUNTY ENHANCEMENTS

## OK BUDGET

	<u>Current</u>	<u>Forecast</u>
TOTAL COST	\$679.3M	\$679.3M

## OK SCHEDULE

	<u>Current</u>	<u>Forecast</u>
SUBSTANTIAL COMPLETION	Spring 2026	Spring 2026

- Bids were received February 24, 2021.
- Construction Notice to Proceed (NTP) is expected in Spring 2021.
- Advanced utility relocations complete.



April 2021



On target



Possible problem



Significant Impact



Metro 12

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# I-5 Construction Projects (By Caltrans)



April 2021

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Los Angeles County Metropolitan Transportation Authority



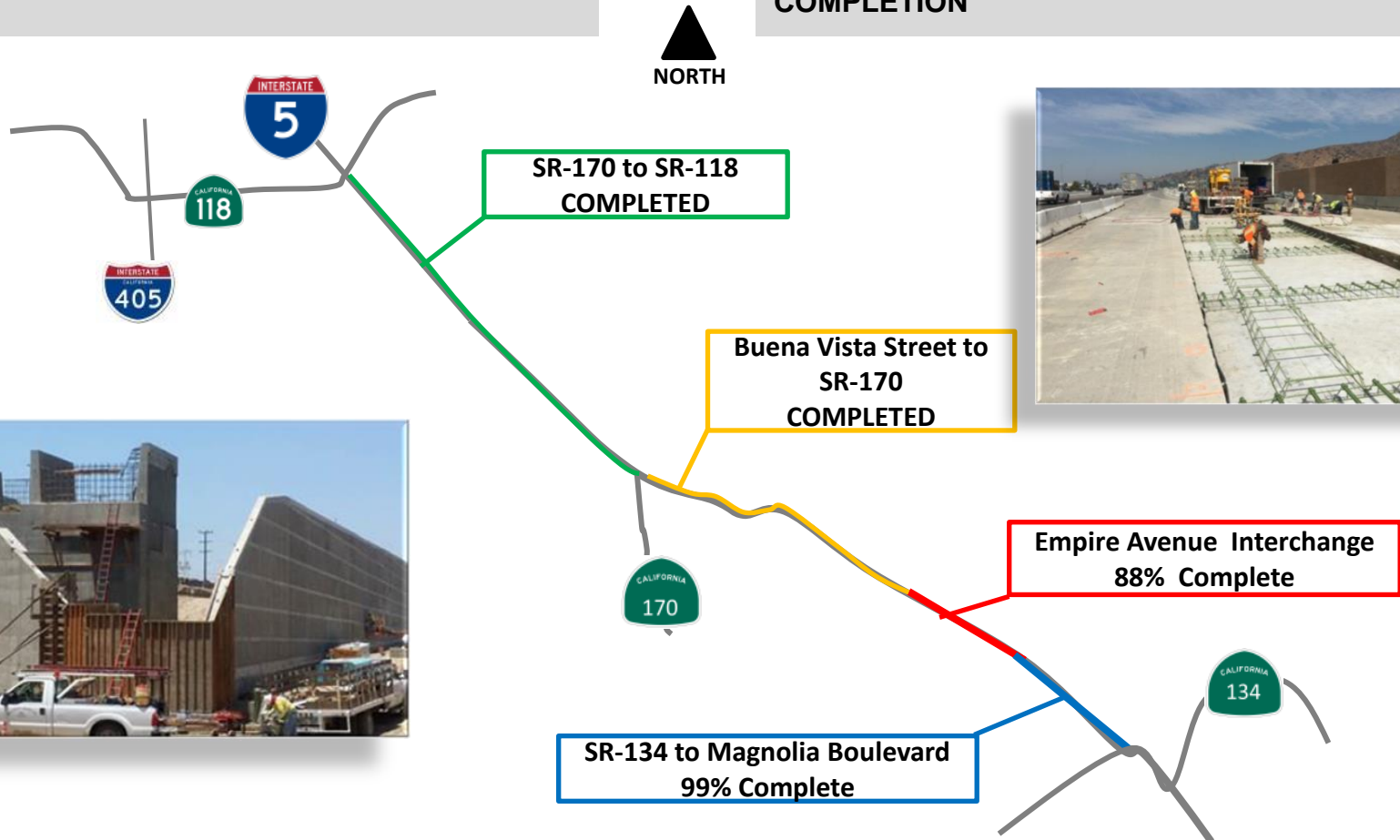
Metro 13

# I-5 NORTH: SR 118 TO SR 134



⚠ BUDGET	Current	Forecast
TOTAL COST	\$954.1.9M*	\$954.1M*

⚠ SCHEDULE	Current	Forecast*
ANTICIPATED PROJECT COMPLETION	Fall 2022	Spring 2023



April 2021

● On target    
 ◆ Possible problem    
 ▲ Significant Impact



\* Risk Analysis, Feb 2021 with the Approved

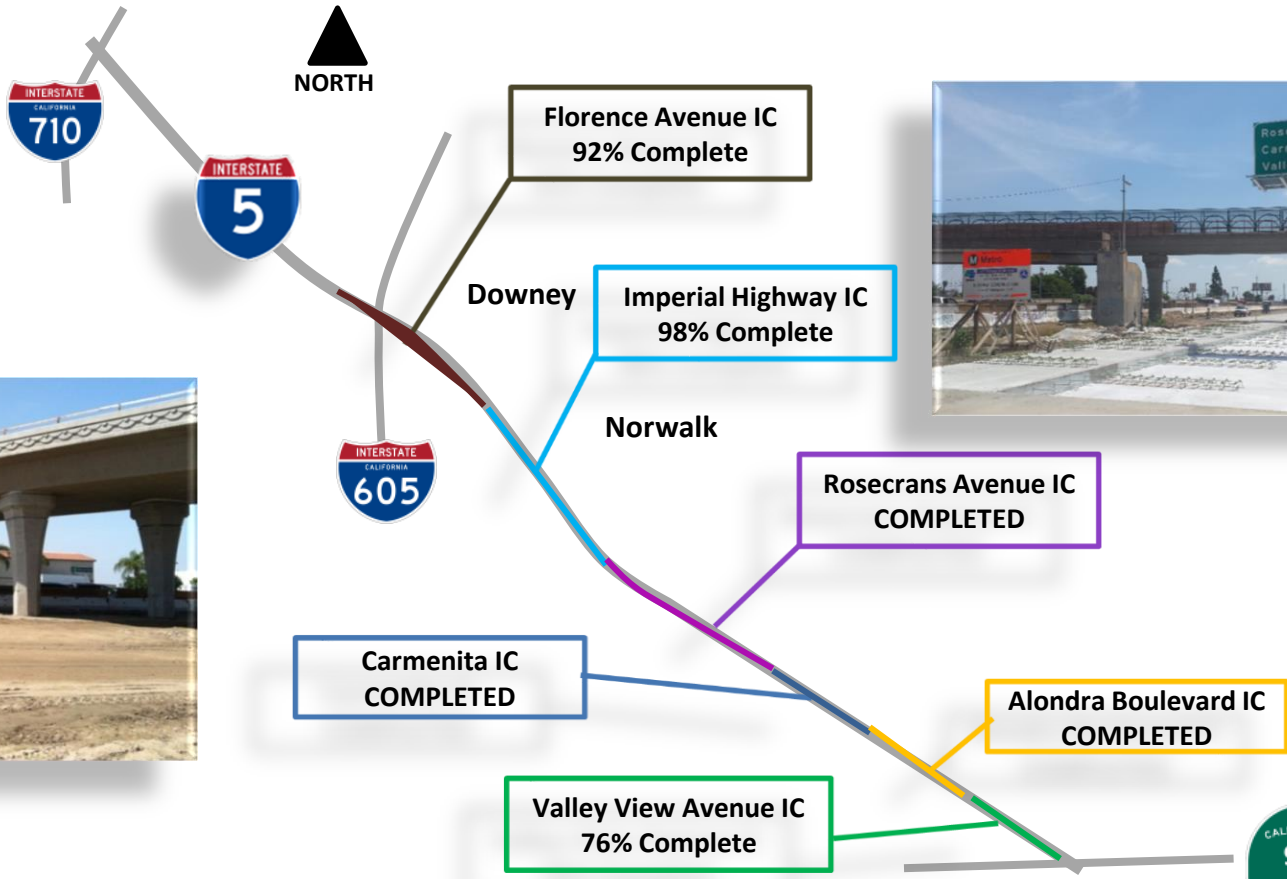


# I-5 SOUTH: ORANGE COUNTY LINE TO I-605



OK BUDGET		
	Current	Forecast
TOTAL COST	\$1.888B	\$1.888B*

◇ SCHEDULE		
	Current	Forecast*
ANTICIPATED PROJECT COMPLETION	Winter 2022	Spring 2023



Metro 15

April 2021

Construction Committee

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● On target    
 ◇ Possible problem    
 ▲ Significant Impact

\* Risk Analysis, Feb 2021