



Board Report

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Agenda Number: 30.

**CONSTRUCTION COMMITTEE
MARCH 18, 2021**

SUBJECT: PROGRAM MANAGEMENT MAJOR PROJECT STATUS REPORT

ACTION: ORAL REPORT

RECOMMENDATION

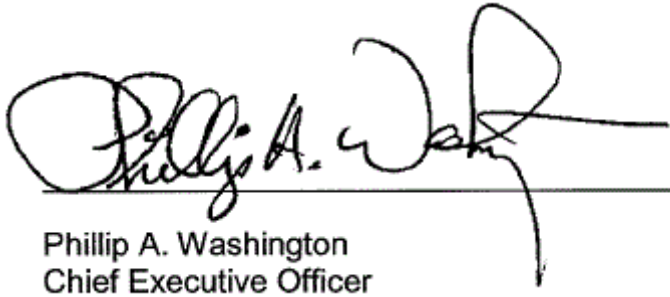
RECEIVE oral report on the Major Project Status by the Chief Program Management Officer.

DISCUSSION

Update report covering the month of March 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
- **Patsaouras Plaza Busway Station** - Timothy Lindholm, Sr. EO Project Engr., (213) 922-7297
- **Willowbrook/Rosa Park Station** - Timothy Lindholm, Sr. EO Project Engr., (213) 922-7297
- **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

Richard Clarke

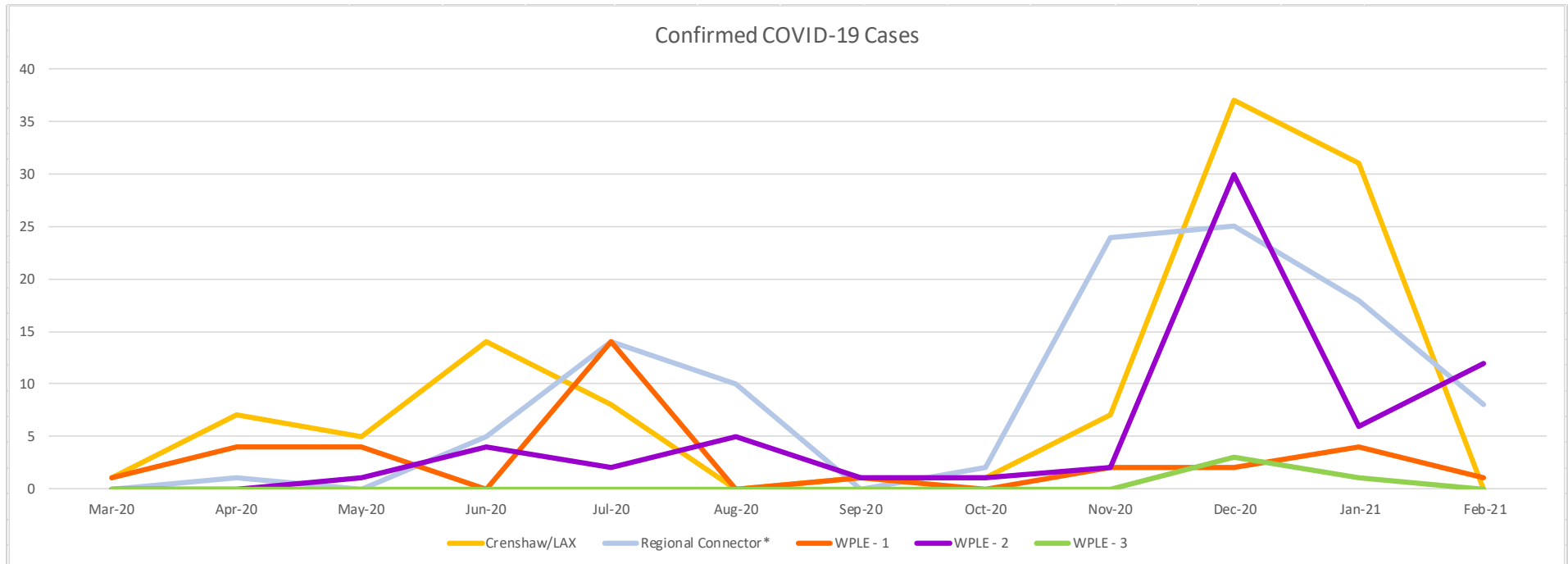
Chief Program Management Officer

Impact of COVID-19 Cases on Mega Construction Projects (as of 2/28/2021)

Metro Mega Construction Projects COVID-19 Confirmed Cases





















Project	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Total Cases to Date
Crenshaw/LAX	1	7	5	14	8	0	1	1	7	37	31	0	112
Regional Connector*	0	1	0	5	14	10	0	2	24	25	18	8	107
WPLE - 1	1	4	4	0	14	0	1	0	2	2	4	1	33
WPLE - 2	0	0	1	4	2	5	1	1	2	30	6	12	64
WPLE - 3	0	0	0	0	0	0	0	0	0	3	1	0	4

Confirmed COVID-19 Cases



*Regional Connector's January 2021 total was adjusted due to a late notification of 1 additional COVID case.

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.
Regional Connector			Project is 78% complete. Schedule agreement mitigated Load Transfer System (LTS) delays and incentivized Contractor to finish balance of project early. Work shifting from civil structural to systems and finishes.
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 18% complete and proceeding on schedule and within budget.
Willowbrook/Rosa Parks Station			Package A Final Punch List Scheduled to begin Package Closeout. Package B is in full progress with underground utility work and vertical circulation work. Elevator #4 at the C Line West entrance, a major phase for the project, is expected to be completed by 1 st quarter 2021.
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. Project 2 Barrier analysis began in February. Development of Project Study Report (PSR) for Project 2 is underway.
1-5 North County Enhancements			Project is in procurement and is expected to begin construction in Summer 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 98% complete and began the plant establishment phase on June 1, 2020.
I-5 South: Orange County Line to I-605			Segments 1, 3, and the Carmenita Interchange are completed. Segment 2 (Valley View) is 74% complete. Segment 4 (Imperial) is 97% complete and began the plant establishment phase on Jan 31, 2020. Segment 5 (Florence) is 92% complete.

March 2021



On target



Possible problem



Significant Impact

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 3

CRENSHAW/LAX TRANSIT PROJECT

◆ BUDGET

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

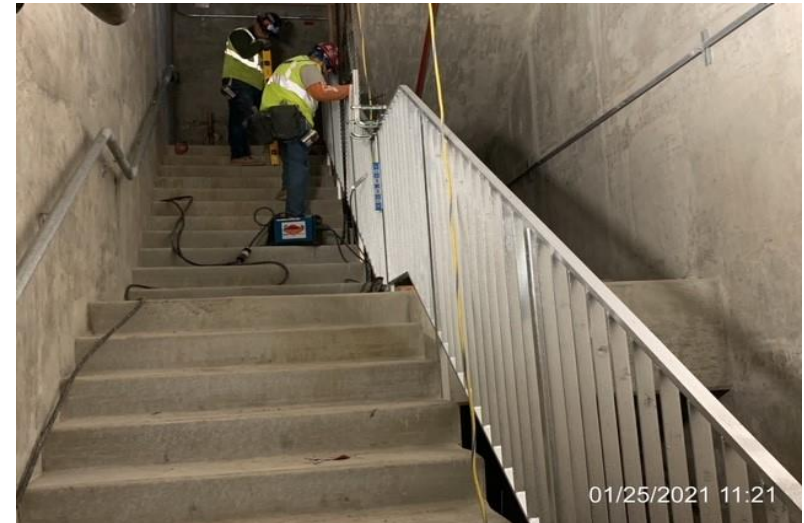
▲ SCHEDULE

	<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 systems—power, train control, station/tunnel fire life safety & communications.



LEIMERT PARK STATION – Main entrance canopy art installation



MLK Station – Installing guard rail at emergency exit stairs

March 2021

○ On target

◆ Possible problem

▲ Significant Impact

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% (March Projection) complete.
- Little Tokyo/Arts District Station & Surrounding Area:** Final 1st Street guideway pours underway; utilities continue.
- Historic Broadway Station:** Construction work on the overbuild load transfer system work is continuing; site restoration underway.
- Grand Av Arts/Bunker Hill Station:** Final underground concrete pours complete; Escalator installations and finishes underway; Pedestrian Bridge pours in-progress.
- Flower Street:** Final walkways and Mechanical, Electrical, & Plumbing (MEP) continuing; Final utility work underway; Cutover plans with 7th/Metro Station require close coordination with Operations to establish priorities.
- Trackwork:** Crossover installation east of Broadway Station underway.
- Systems:** Overhead Conductor Rail (OCR) installations continue; Field preparations for signals underway; Expediting of electrical equipment due to COVID supply chain delays underway.



Special trackwork installation in Crossover Cavern



Power distribution equipment at Grand Av Arts/Bunker Hill Station

March 2021



On target



Possible problem



Significant Impact

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 5

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, plenum work and appendage construction continue.
- Wilshire/Fairfax Station:** Concourse and 2nd lift wall concrete activities continue. Entrance plaza and appendage work move forward. The build out of the roof forming system in the high bay area has commenced.
- Wilshire/La Cienega Station:** The last roof placement prior to the anticipated TBM arrival has been placed. Work on the entrance structure continues. Preparation for Tunnel Boring Machine (TBM) arrival is on-going.
- Tunneling:** The Wilshire/San Vicente grout block for the north and south tunnels have been completed. The Purple TBM (Elsie) has restarted and has reached the anomaly area. Anomaly intervention is underway. The Red TBM (Soyeon) remains parked 190' from the anomaly site.
- Reach 1 Tunnel:** 11 out of 12 cross passages have been excavated. Concrete placement for 8 cross passages are complete. Completion of all Reach 1 cross passages is planned for April 2021. Tunnel invert activities in the north tunnel have 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 4th quarter of 2024. Budget impacts are currently being 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.



Track Level View of Wilshire/La Cienega Station



Installing Roof Rebar at Wilshire/Fairfax

March 2021



On target



Possible problem



Significant Impact

Construction Committee

Los Angeles County Metropolitan Transportation Authority

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 42% complete.
- **Century City Constellation Station**
 - Completed pile installation at the intersection of Constellation Boulevard and Avenue of the Stars.
 - Installation of utility supports continues west of the TBM launch box.
 - Decking operations are anticipated to be completed in April 2021.
- **Wilshire/Rodeo Station**
 - Excavation of the station box was 93% complete as of February 17, 2021
 - Installation of waterproofing membrane on the station walls is anticipated to begin in April 2021.
- **Tunneling**
 - Both Tunnel Boring Machine (TBM)s “Ruth” and “Harriet” are operating within the City of Beverly Hills. Progress as of February 17, 2021 is as follows:
 - Ruth (eastbound subway tunnel) - 545ft
 - Harriet (westbound subway tunnel) - 983ft
 - Tunneling operations are transitioning from the TBM launch box area to the access shaft.



Pile Installation on Constellation & Avenue of the Stars



Excavation - Wilshire/Rodeo Station



On target



Possible problem



Significant Impact

March 2021

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 18% complete
- Final design progress is 78% complete
- **C1151 Tunnel Contract**
 - TBM #1 (BR) has mined 331 feet resumed mining after refitting gantries 2, 3, & 4.
 - TBM #2 (BL) assembly continues at the BL headwall.
 - Fabrication of tunnel precast concrete liners are ongoing.
 - Installation of instrumentation and monitoring equipment are ongoing.
 - Aerially Deposited Lead removal is complete, and work is proceeding at Caltrans basin.
- **C1152 Stations, Trackwork, and Systems Contract**
 - Final design is ongoing.
 - VA Campus sound wall has been completed.
 - VA Campus utility relocation work began in January 2021. Relocations include natural gas, storm drain, sewer, water, electric, and steam lines.
 - VA Campus SOE installation is scheduled to start in February 2021.
 - UCLA Station utility sewer (Ashton & Westwood) relocation to start in February 2021.
- **Other Work**
 - Joint trench for Verizon and Frontier telecommunications is substantially complete; punch list expected to be complete in February 2021.
 - LADWP power cutover to 10921 Wilshire Boulevard is planned for spring of 2021.



TBM Assembly Overview at Tail Track Exit Shaft



Sound Wall Barrier at Westwood/VA Station Site (VA Lot 42)

March 2021



On target



Possible problem



Significant Impact



Metro 8

Construction Committee

Los Angeles County Metropolitan Transportation Authority

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: Landscape Punch completed with warranty period started. Final punch items in progress.
- Package B: Package B underground utility work ongoing at both C Line west and Central entrances. Installation of new County required storm drain in progress. Elevator 4 work at the C Line West Entrance is ongoing with temporary sidewalk and state inspection approval expected by end of February. Once certified, the project will be cleared to close up the entire central plaza for main Package B work.



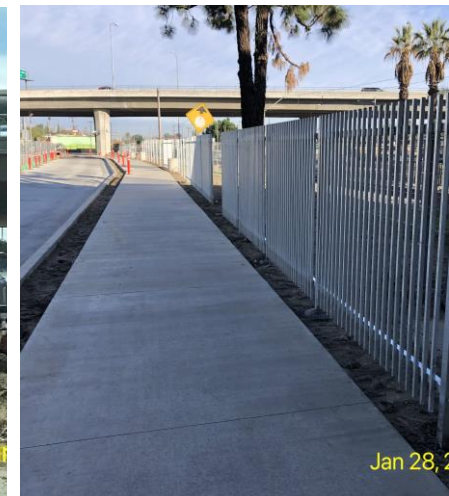
New Curb Kiss & Ride Lot @ Central Plaza



Stair/Escalator Work @ Central Plaza



Soil remediation completed @ Bus Lane



Phase 1 Finish Work completed

March 2021



On target



Possible problem



Significant Impact



Metro 9

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I-210 BARRIER REPLACEMENT PROJECT

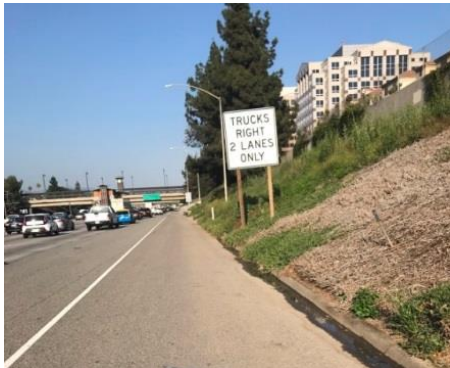
OK BUDGET

	<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 began in February. Development of Project Study Report (PSR) for Project 2 is underway.



Newly Installed Caltrans Freeway Sign



Incident in 2014



Newly Installed Speed Limit Sign

March 2021

OK On target

◆ Possible problem

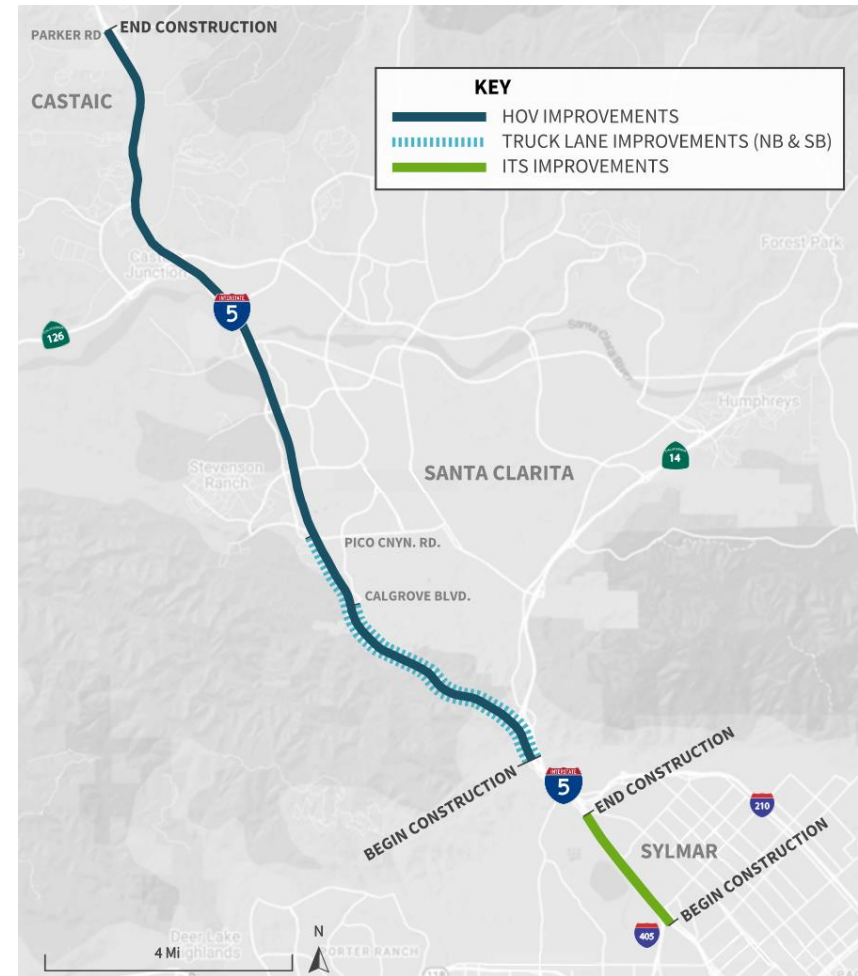
▲ Significant Impact

Construction Committee

Los Angeles County Metropolitan Transportation Authority



I-5 Construction Projects (Administered by Metro)



March 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

- Project is in procurement phase, bids due February 24th.
- Construction is expected to begin in Spring 2021.
- Advanced utility relocations complete, collecting as-built plans.



March 2021



On target



Possible problem



Significant Impact

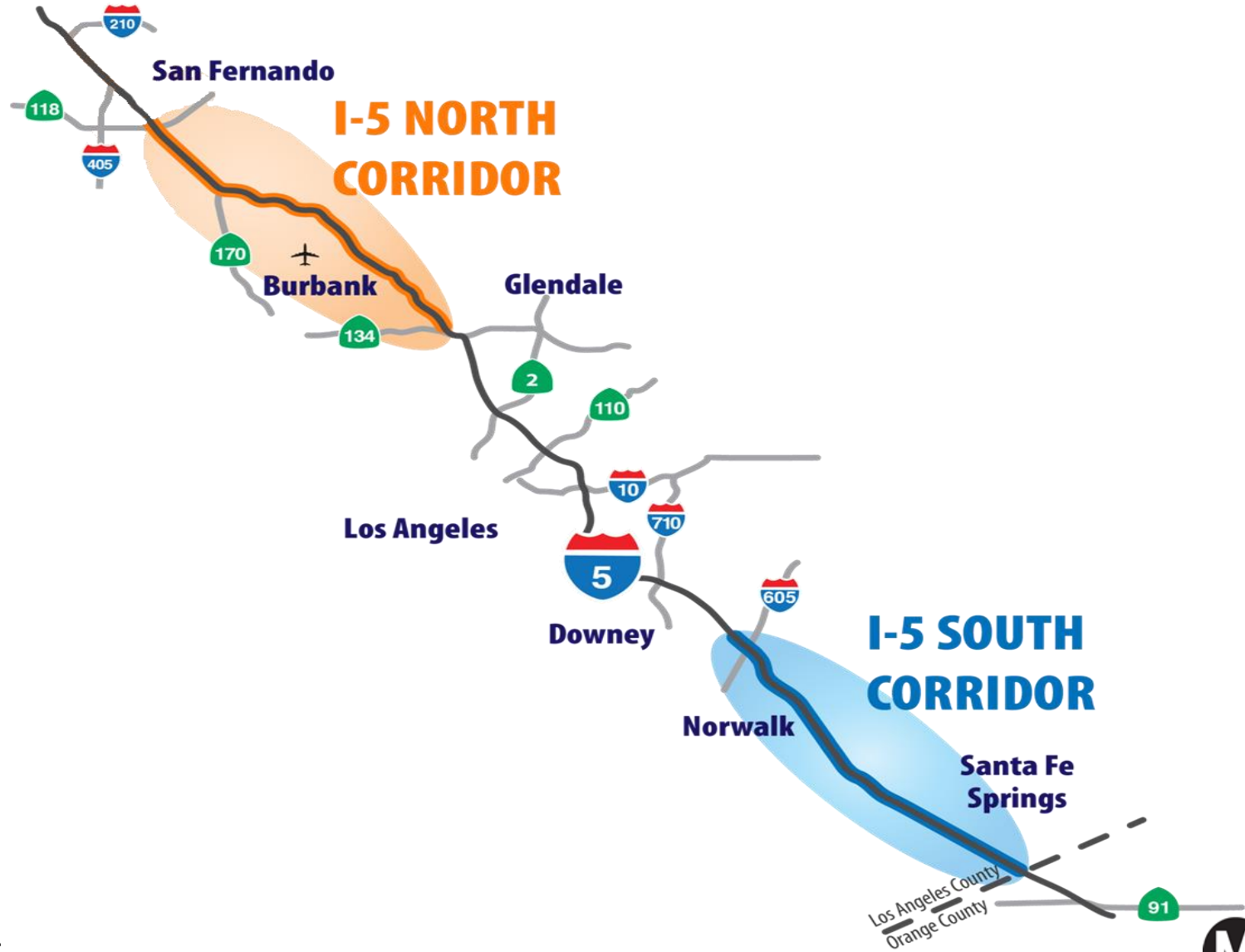


Metro 12

Construction Committee

Los Angeles County Metropolitan Transportation Authority

I-5 Construction Projects (By Caltrans)

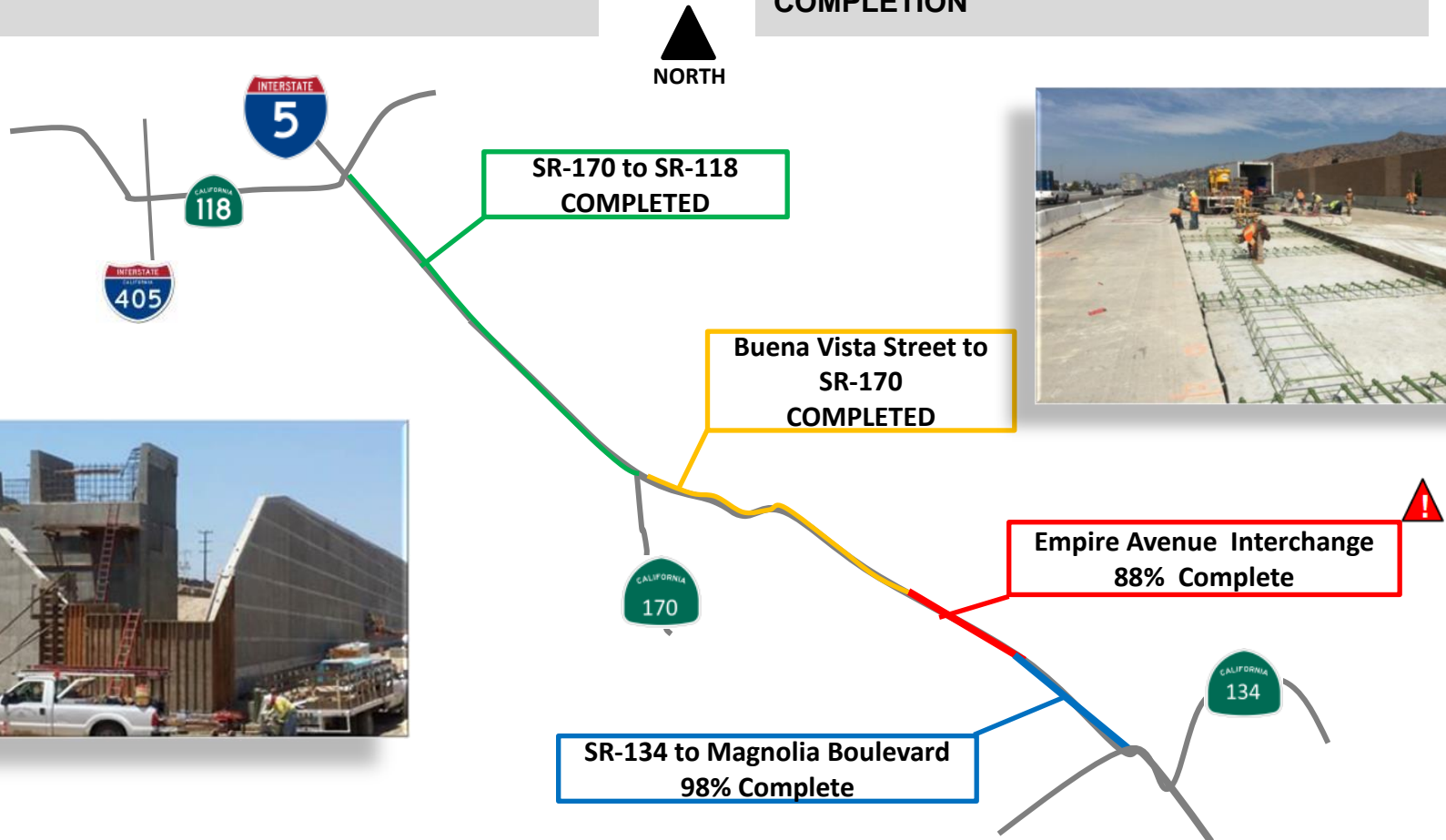


I-5 NORTH: SR 118 TO SR 134



⚠ BUDGET	Current	Forecast
TOTAL COST	\$880.9M	\$954.1M*

⚠ SCHEDULE	Current	Forecast*
ANTICIPATED PROJECT COMPLETION	Summer 2022	Winter 2022



March 2021

● On target
 ◆ Possible problem
 ⚠ Significant Impact



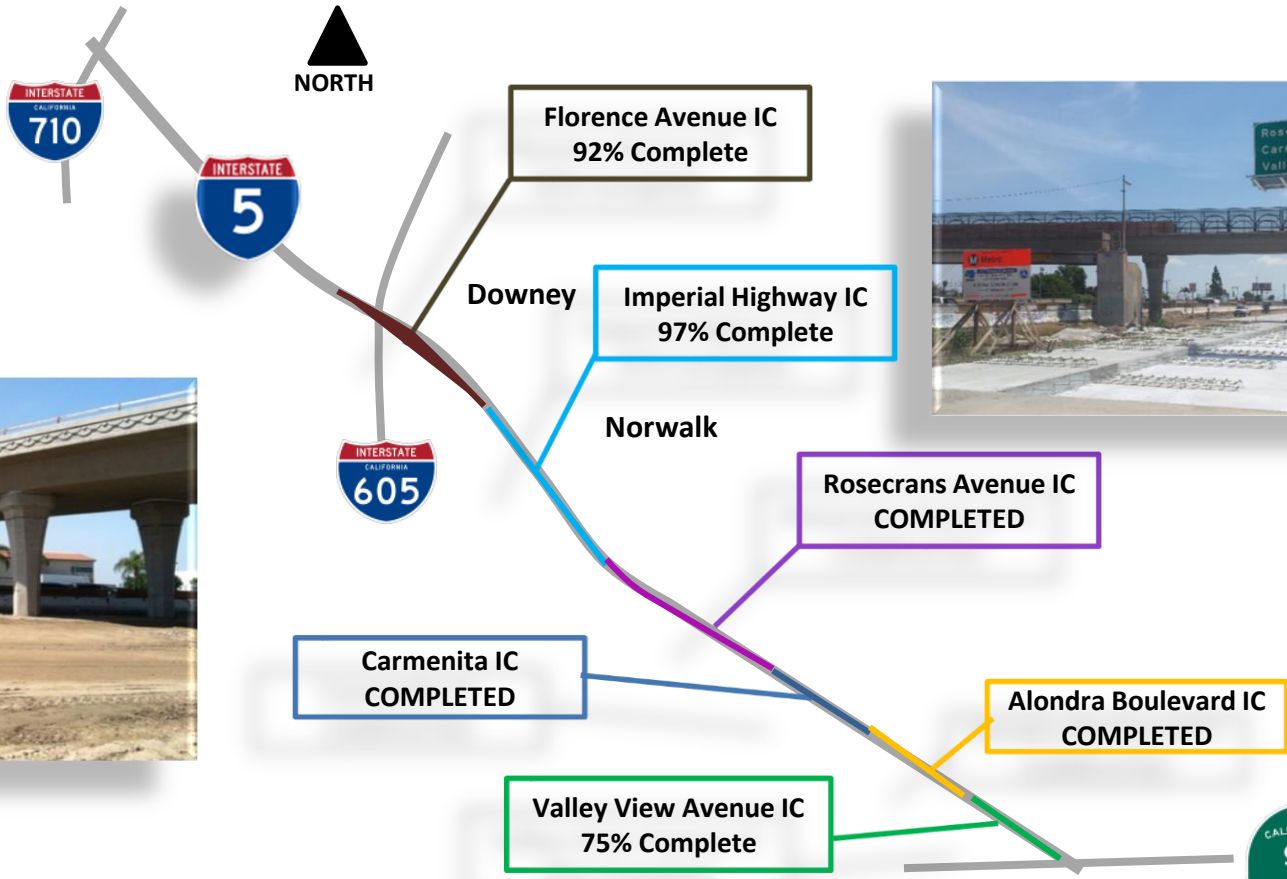
* Risk Analysis, Nov 2020 and Caltrans' request

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

March 2021



On target



Possible problem



Significant Impact

Construction Committee

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* Risk Analysis, Nov 2020