



Board Report

File #: 2021-0346, **File Type:** Oral Report / Presentation

Agenda Number: 32.

**CONSTRUCTION COMMITTEE
JUNE 17, 2021**

SUBJECT: PROGRAM MANAGEMENT MAJOR PROJECT STATUS REPORT

ACTION: ORAL REPORT

RECOMMENDATION

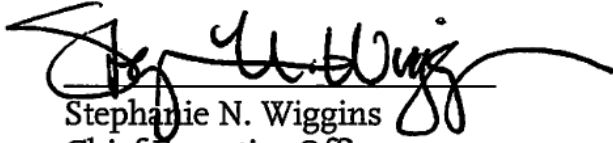
RECEIVE oral report on the Major Project Status by the Chief Program Management Officer.

DISCUSSION

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

Prepared by:

- **Crenshaw/LAX** - Sameh Ghaly, Sr EO Project Mgmt., (213) 418-3369
- **Regional Connector** - Sameh Ghaly, Sr EO Project Mgmt., (213) 418-3369
- **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
- **Airport Metro connector (AMC)** - 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, Sr 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



Stephanie N. Wiggins
Chief Executive Officer

Program Management Major Project Status Report

Presented By

Bryan Pennington

Chief Program Management Officer (Interim)

June 2021

Construction Committee

Los Angeles County Metropolitan Transportation Authority



PROJECT BUDGET & SCHEDULE STATUS SUMMARY CHART

Project	Cost Performance		Schedule Performance		Comments
	Variance Approved LOP	Variance Revised Budget	Variance Original	Variance Revised Schedule	
Crenshaw/LAX					Project is 98.9% complete. Contractor is not applying sufficient work force to complete their remaining work. Remaining work is primarily underground station finishing, facility equipment and communications system testing. Metro continues to work with contractor to mitigate the delays and impacts to the project schedule; emphasizing safety and reliability in final acceptance of project elements and systems.
Regional Connector					Project is 79% complete. Comprehensive planning for testing underway for 7th/Metro Center interfaces. Site work throughout alignment underway. MEP and systems dominating the pace.
Westside Purple Line Extension-Section 1					Project is 70% complete. TBM tunnel mining is complete. Follow-on construction impacts from delayed TBM tunneling due to the Wilshire/San Vicente anomaly continue to be assessed. The Project's forecast Revenue Service Date has been adjusted to Fall 2024.
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 22% complete and proceeding on schedule and within budget.
Willowbrook/Rosa Parks Station					Package A & C Final Punch List work continuing for Package Closeout. North crossing and signal case work scheduled for May/June. Package B is in full progress with underground utility work completed and hardscape installation in progress. Overall project substantial completion scheduled for June.
Airport Metro Connector					Early Works Phase contract awarded with shovel in ground by end of June. Main Station Project is in bid validation phase, with NTP expected in Summer 2021 with construction duration of three years.
Division 20 Portal Widening Turnback					Project is 22% complete. Upcoming major change orders for Design Revisions and Differing Site Conditions when finalized, will draw down project contingency.
I-210 Barrier Replacement					Project 1 Plans, Specs and Estimate (PS&E) package is approved by Caltrans Design. Funding source(s) for ADL & Haz Mat 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. Barrier workshop #1 with Caltrans barrier and wall experts to take place on May 24, 2021.
1-5 North County Enhancements					Construction NTP is expected late Spring/early Summer 2021
I-5 North: SR 118 to SR 134					Segment 1, 2 and 4 are completed. Segment 3 (Empire Ave & Burbank) is 90% complete. * The Cost includes the Approved Loan Term
I-5 South: Orange County Line to I-605					Segments 1, 3, 4, and the Carmenita Interchange are completed. Segment 2 (Valley View) is 80% complete. Segment 5 (Florence) is 94% complete and started the one-year plant establishment period in April 2021.

June 2021
Construction Committee



On target



Possible problem



Significant Impact



Metro 2

Los Angeles County Metropolitan Transportation Authority

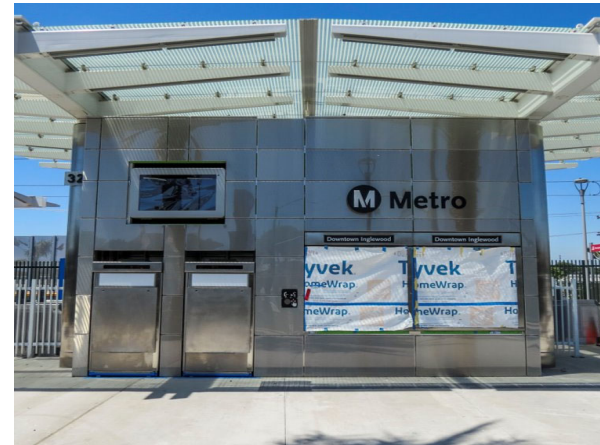
CRENSHAW/LAX TRANSIT PROJECT

BUDGET				SCHEDULE			
<u>TIFIA</u>	<u>Approved LOP*</u>	<u>Previous Period**</u>	<u>Current Forecast**</u>	<u>Original</u>	<u>Approved Rebaseline</u>	<u>(REVENUE OPERATION) Previous Period</u>	<u>Current Forecast*</u>
\$2,148M	\$2,058M	\$2,148M	\$2,148M	Oct.2019	May 2020	Winter 2021	Winter 2021
Variance from Approved LOP:			\$90M (4%)	Variance from Original:		+766d (26%)	+802d (26%)
Variance from Revised Budget:			\$0	Variance from Revised Schedule:		+545d (22%)	+581d (23%)
*At time of the award of contract: Board Approval June 2013				*Current Forecast is Contractor's March Schedule update			
**Excludes finance costs and includes \$10M Non-TIFIA activities							

- Overall Project Progress is 98.9% complete.
- Contractor is not applying sufficient work force to complete remaining work; prepare/submit test reports on time.
- Remaining work is primarily underground station finishing, facility equipment and communications systems testing.
- Metro continues to work with contractor to mitigate the delays and impacts to the project; emphasizing safety and reliability in final acceptance of project elements and systems.



LEIMERT PARK STATION – Train tunnel with emergency walkway



Downtown Inglewood Station – Ticketing vending machine canopy structure

June 2021



On target



Possible problem (5-10% variance)



Significant Impact (over 10% variance)





Metro 3

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REGIONAL CONNECTOR TRANSIT PROJECT

BUDGET

<u>FFGA</u>	<u>Approved LOP*</u>	<u>Previous Period**</u>	<u>Current Forecast**</u>
\$1,402M	\$1,420M	\$1,755M	\$1,755M
Variance from Approved LOP:		\$335M (24%)	\$335M (24%) 
Variance from Revised Budget:		\$0	

*At time of the award of contract – Board Approval April 2014
 **Excludes finance costs

SCHEDULE

<u>Original</u>	<u>Approved** Rebaseline</u>	<u>Previous Period</u>	<u>Current Forecast*</u>
May 2021	Fall 2022	Fall 2022	Fall 2022
Variance from Original:		+480d (19%)	+480d (19%) 
Variance from Revised Schedule:		0d	

*Current Forecast is Contractor's March Schedule update
 **Approval in process

(REVENUE OPERATION)

- Overall Project Progress is 80% complete.
- Little Tokyo/Arts District Station & Surrounding Area:** MSE wall modifications, station MEP and finishes continue.
- Historic Broadway Station:** Overbuild Load Transfer System (LTS) structural concrete continues; vent structures along Spring and Broadway continue; station finishes and MEP advancing per plan. Relocated communication bank underway; backfill operations continue.
- Grand Av Arts/Bunker Hill Station:** Concrete near complete – plaza pours underway; elevator and installations continue; closure of Hope Street continues as backfill and joint communication trench construction is on-going; systems and MEP busy on all levels.
- Flower Street:** Final utility work continues; cut-over plans and actions with 7th/Metro Station established; interface with Operations to mitigate impacts to ongoing rail service progressing.
- Trackwork:** Progress on crossover at Wye Junction lagging; remedial work along alignment underway on various installations to prepare for acceptance inspections.
- Systems:** Installation of signals and communications, and equipment and cabling for permanent power continuing – as are train control and overhead conductor rail (OCR).





North Mechanical Room Lower Ancillary Level at Grand Av Arts/Bunker Hill Station




PVC and device boxes in Ped Bridge Pavilion Deck at Hope St

June 2021

 On target

 Possible problem (5-10% variance)



 Significant Impact (over 10% variance)

Construction Committee



Los Angeles County Metropolitan Transportation Authority



WESTSIDE PURPLE LINE EXTENSION – SECTION 1

BUDGET FFGA	Approved LOP* **	Previous Period**	Current Forecast**
\$2,822M	\$2,774M	\$3,129M	\$3,129M
Variance from Approved LOP:		\$355M (13%)	\$355M (13%) 
Variance from Revised Budget:		\$0	

*At time of the award of contract – Board Approval July 2014
**Excludes finance costs

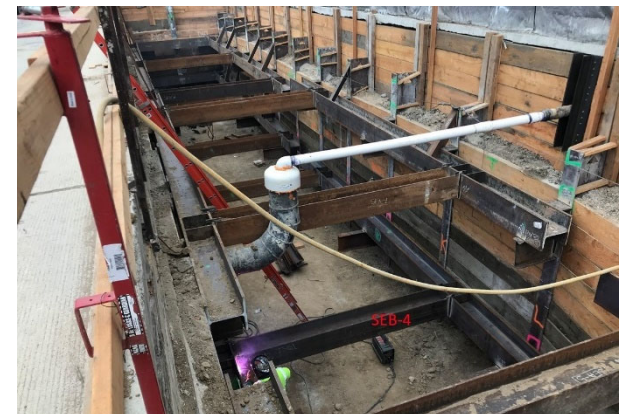
SCHEDULE		(REVENUE OPERATION)	
Approved Original	Approved Rebaseline	Previous Period	Current Forecast*
Nov.2023	Nov. 2023	Fall 2024	Fall 2024
Variance from Original:		+365d (11%)	+365d (11%) 
Variance from Revised Schedule:		0d	

*Current Forecast is Contractor's March Schedule update

- Overall Project Progress is 70% complete.
- Wilshire/La Brea Station:** Permanent utility installation/backfill (above the roof) activities, interior stairs, MEP work and appendage construction are ongoing.
- Wilshire/Fairfax Station:** Structural concrete work moves forward (2nd lift wall & roof). Entrance plaza and appendage work continue.
- Wilshire/La Cienega Station:** With TBM tunneling mining completed, TBM equipment and gantry removal is underway. Work on the entrance structure progresses, and excavation on the first appendage (AE) continues.
- Tunneling:** TBM tunnel mining for the Project was completed in May 2021.
- Reach 1 Tunnel:** 11 out of 12 cross passage structures are complete. Completion of all Reach 1 cross passages is planned for June 2021. Reach 1 tunnel invert and walkway concrete activities continue.
- Budget/Schedule:** The implementation and planning of follow-on construction activities to address the impacts associated with the San Vicente anomaly move forward. The current Revenue Service Date forecast is Fall 2024. The FTA/PMOC has issued a draft (abbreviated) Cost, Schedule & Contingency Review report to Metro. The Board has been briefed on the findings.



Reach 1 Tunnel Invert & Walkway Concrete Placement



Wilshire/La Cienega Station Appendage AE



On target



Possible problem
(5-10% variance)



Significant Impact
(over 10% variance)



WESTSIDE PURPLE LINE EXTENSION – SECTION 2

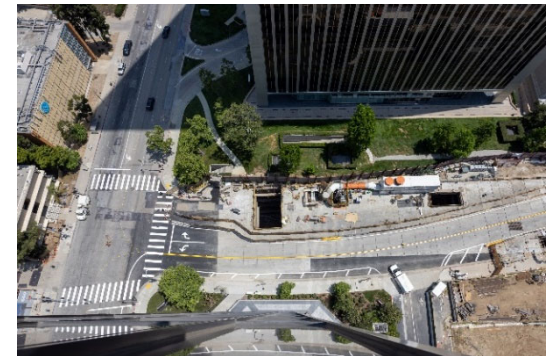
BUDGET			
<u>FFGA</u>	<u>Approved LOP*</u>	<u>Previous Period**</u>	<u>Current Forecast**</u>
\$2,499M	\$2,441M	\$2,441M	\$2,441M
Variance from Approved LOP:		\$0M (0%)	\$0M (0%) OK
Variance from Revised Budget:			\$0 OK

*At time of the award of contract – Board Approval January 2017
 **Excludes finance costs

SCHEDULE		(REVENUE OPERATION)	
<u>Original</u>	<u>Rebaseline</u>	<u>Previous Period</u>	<u>Current Forecast*</u>
Aug. 2025	N/A	Summer 2025	Summer 2025
Variance from Original:		+0d (0%)	+0d (0%) OK
Variance from Revised Schedule:		0d	0d OK

*Current Forecast is Contractor’s April Schedule update

- Overall Project progress is 43% complete.
- **Century City Constellation Station**
 - The closure of Constellation Boulevard between Avenue of the Stars and Century Park East ended on May 15, 2021.
 - Excavation of the station box is 19% complete as of May 20, 2021.
- **Wilshire/Rodeo Station**
 - Excavation of the station box is complete.
 - Work on the invert slab is ongoing.
- **Tunneling**
 - Both tunnel boring machines (TBMs) “Ruth” and “Harriet” are operating within the City of Beverly Hills. Progress as of May 21, 2021, is as follows:
 - Ruth (eastbound subway tunnel) – 1,571ft (14%)
 - Harriet (westbound subway tunnel) – 1,424ft (12%)



Reopening of Constellation Blvd. at Century Park East



First Concrete Placement for Wilshire/Rodeo Station Invert

June 2021



On target



Possible problem
(5-10% variance)



Significant Impact
(over 10% variance)

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 6

WESTSIDE PURPLE LINE EXTENSION – SECTION 3

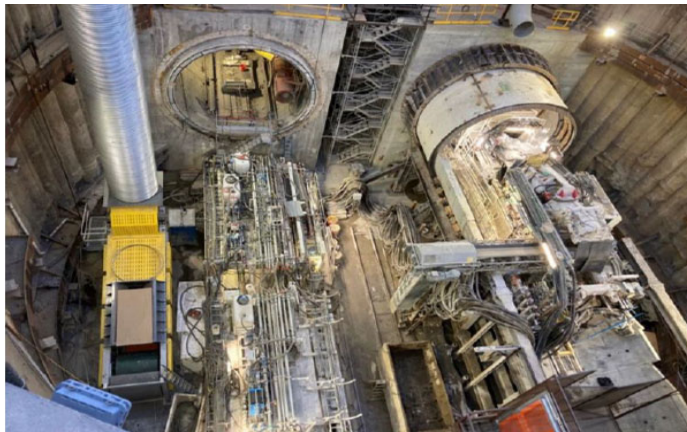
BUDGET			
FFGA	Approved LOP*	Previous Period**	Current Forecast**
\$3,599M	\$3,224M	\$3,224M	\$3,224M
Variance from Approved LOP:		\$0M (0%)	\$0M (0%) OK
Variance from Revised Budget:			\$0 OK

*At time of the award of contract – Board Approval February 2019
 **Excludes finance costs

SCHEDULE (REVENUE OPERATION)			
Original	Approved Rebaseline	Previous Period	Current Forecast*
Mar. 2027	N/A	Spring 2027	Spring 2027
Variance from Original:		+0d (0%)	+0d (0%) OK
Variance from Revised Schedule:			0d OK

*Current Forecast is Contractor's March Schedule update
 **Approval in process

- Overall Project Progress is 22% complete.
- Final design progress is 86% complete.
- Tunneling
 - TBM #1 (BR) – work continues for the assembly of the full gantry assembly
 - TBM #2 (BL) – initial drive mined 100 feet.
- Stations
 - Station utility relocations ongoing at Westwood/VA and Westwood/UCLA stations; SOE piling at VA continues



TBM Assembly Overview at Tail Track Exit Shaft



Sewer Relocation Work at Westwood Blvd and Wilshire Blvd

June 2021



On target



Possible problem
(5-10% variance)



Significant Impact
(over 10% variance)



Metro 7

Construction Committee

Los Angeles County Metropolitan Transportation Authority

WILLOWBROOK/ROSA PARKS STATION



BUDGET

	<u>Original</u>	<u>Current</u>	<u>Forecast</u>
TOTAL COST	\$109.3M	\$128.4M	\$128.4M



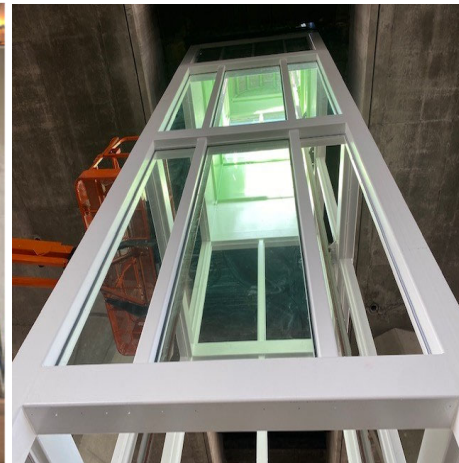
SCHEDULE

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

- Package A and C: Punch lists items remaining have been consolidated and is finishing up. Full close-out of punch list expected by end of June. Completed installation of Artwork. North Pedestrian Crossing currently being converted into Emergency Crossing per CPUC. Final signal case installation scheduled for June.
- Package B: Package B underground utility work is complete with final hardscape at bus bays and park & ride lot being installed with expected completion by end of May. The Contractor will then focus on completing installation of final project components – security cameras, bus shelters, lighting, VMS and faregates.



Completed concrete work @ C Line west



Elevator #3 finish work



Formed & poured North Drainage System



Installed Art parasols @ central plaza

June 2021



On target



Possible problem



Significant Impact

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 8

AIRPORT METRO CONNECTOR (AMC) PROJECT

OK BUDGET

	<u>Original</u>	<u>Current</u>	<u>Forecast</u>
TOTAL COST	\$898.6M	\$898.6M	\$898.6M

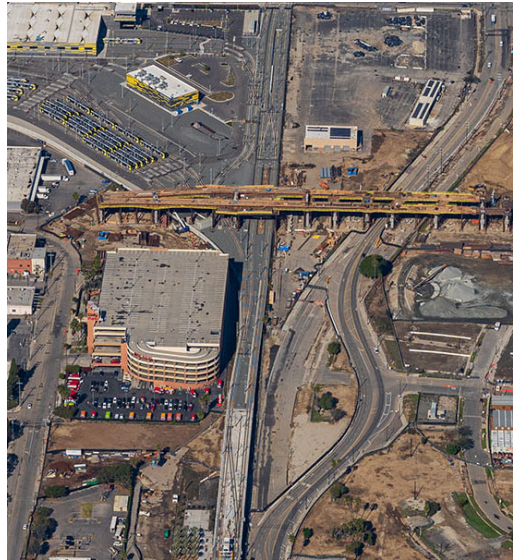
OK SCHEDULE

	<u>Current</u>	<u>Forecast</u>
REVENUE OPERATION	June 2024	June 2024

- Early Works Phase construction contract NTP issued with shovel in ground scheduled for June 2021.
- Ceremony signaling the start of work scheduled for end of June 2021.
- Main Station Construction Contract in validation process with expected NTP issued Summer 2021.
- In continuous coordination with LAWA for construction integration on AMC Site. APM Guideway structural completed and cleared for AMC Work to begin.



Front Elevation along Aviation Blvd.



Construction of LAWA APM Guideway over AMC Site



June 2021



On target



Possible problem



Significant Impact

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 9

DIVISION 20 PORTAL WIDENING TURNBACK

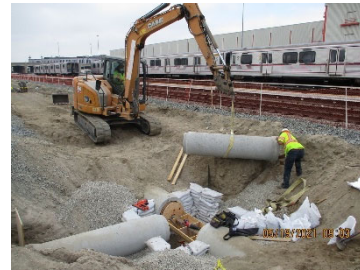
◆ BUDGET

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

OK SCHEDULE

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

- **Overall Project progress is 22% 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 27%.
Phase 1 Track, utilities, and civil work continues
1st Street Bridge Rehabilitation and Portal Widening
- **Major Change Orders to Date:**
Hazardous Material Removal
1st Street Bridge Rehabilitation
Completion of Utility Contracts
3rd Party Unforeseen Interfaces
Design Revisions (*in progress*)
- **C1184 Transfer Power Substation Contract at 55%**
- **Coordination with Adjacent Projects**
Purple Line Extension (PLE1)
Regional Connector
Metro Center Project
6th Street Bridge (City of L.A. Project)
- **Continued Regular risk assessments to determine budget/schedule**



June 2021



On target



Possible problem



Significant Impact

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 10

I-210 BARRIER REPLACEMENT PROJECT

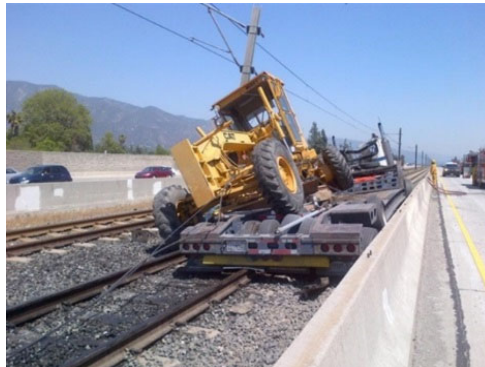
OK BUDGET			
	<u>Original</u>	<u>Current</u>	<u>Forecast</u>
TOTAL COST	\$11.08M	\$22.54M	\$22.54M
	Design	Design	Design

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 has been approved by Caltrans Design. Funding source(s) for ADL and Haz Mat 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 are on-going. A barrier analysis workshop with Caltrans barrier and wall experts to take place on May 24, 2021.



Newly Installed Caltrans Freeway Sign



Incident in 2014



Newly Installed Speed Limit Sign

June 2021



On target



Possible problem



Significant Impact

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 11

I-5 Construction Projects (Administered by Metro)



June 2021

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Los Angeles County Metropolitan Transportation Authority

I-5 NORTH COUNTY ENHANCEMENTS



BUDGET

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



SCHEDULE

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

- Notice to Proceed is expected to be issued in late spring/early summer
- Construction Community Meeting and Groundbreaking anticipated in summer
- Life of Project budget established in March 2021



June 2021



On target



Possible problem



Significant Impact

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 13

I-5 Construction Projects (By Caltrans)



June 2021

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 14

I-5 NORTH: SR 118 TO SR 134

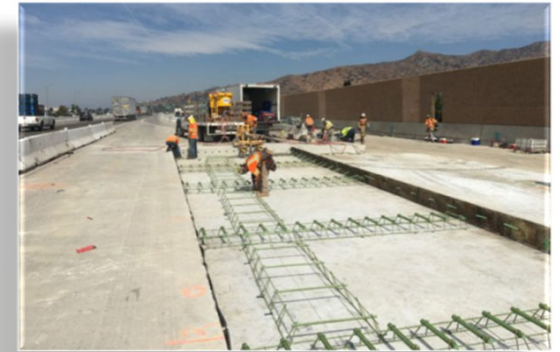
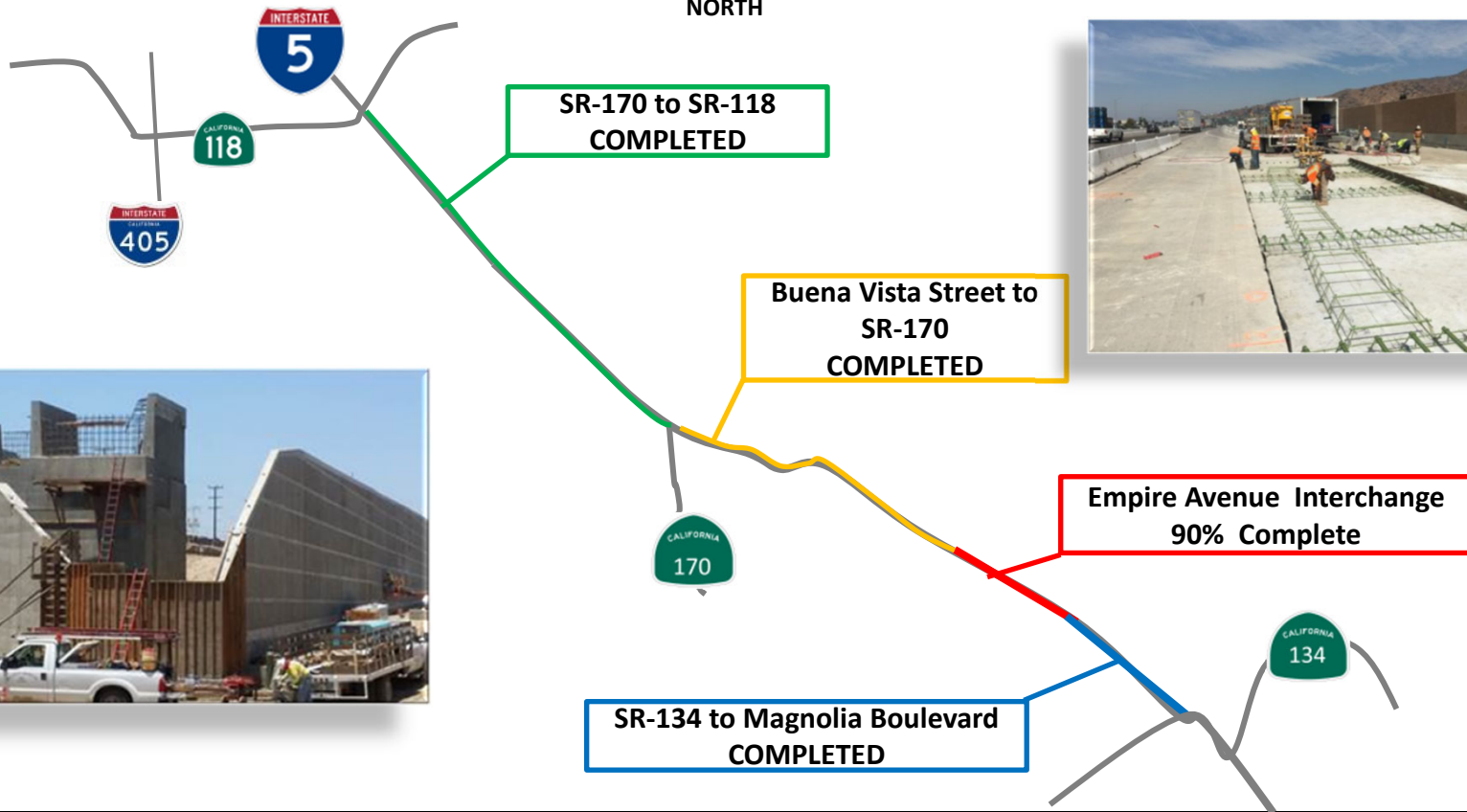


⚠️ BUDGET

	<u>Original</u>	<u>Current</u>	<u>Forecast</u>
TOTAL COST	\$845.2M	\$954.1M*	\$954.1M*

⚠️ SCHEDULE

ANTICIPATED PROJECT COMPLETION	<u>Current</u>	<u>Forecast*</u>
	Fall 2022	Spring 2023



June 2021



On target



Possible problem



Significant Impact

Construction Committee

Los Angeles County Metropolitan Transportation Authority

* Risk Analysis, Feb 2021 with the Approved Loan Term Amount



Metro 15

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

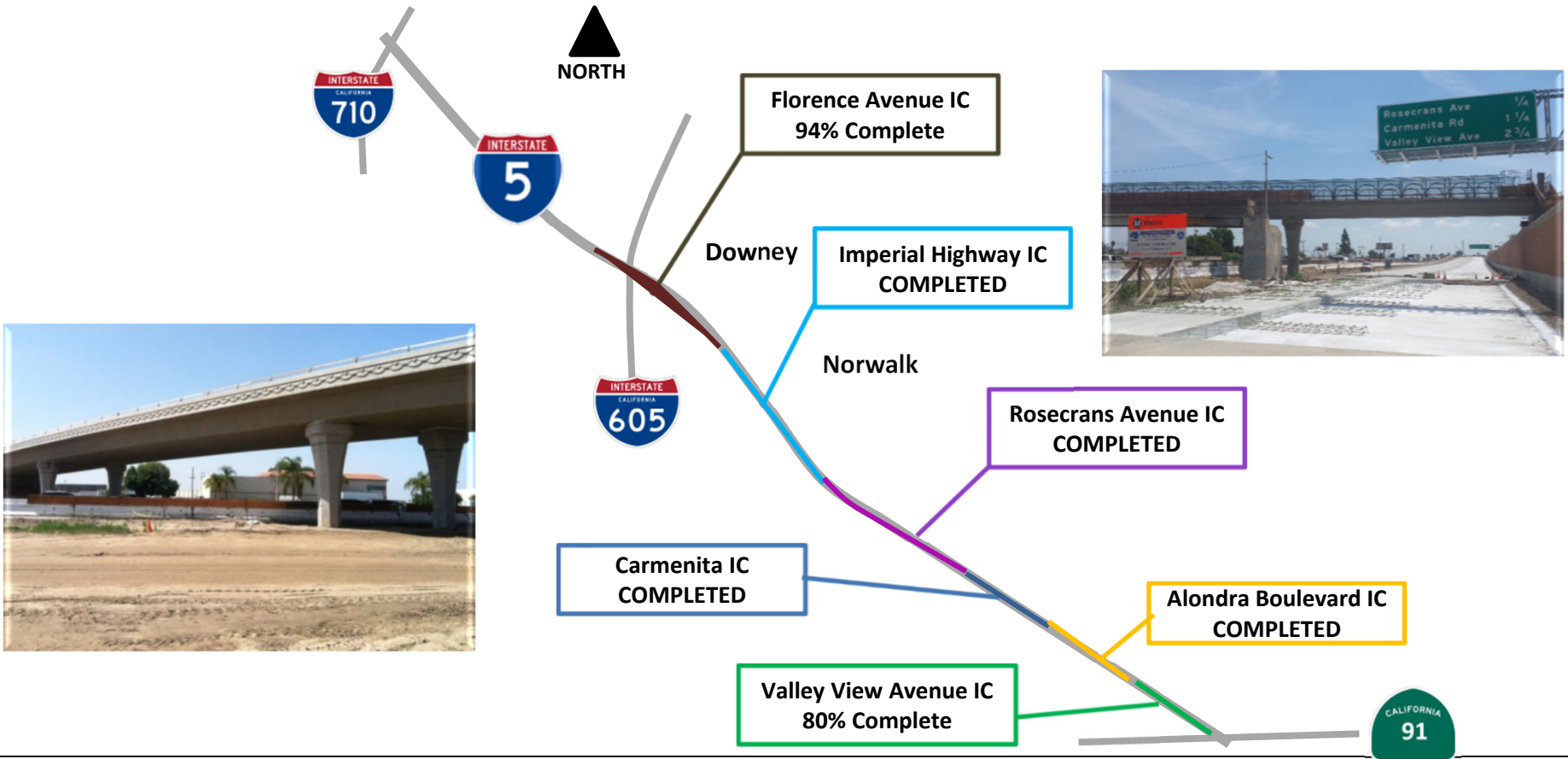


OK BUDGET

	<u>Original</u>	<u>Current</u>	<u>Forecast</u>
TOTAL COST	\$1,488M	\$1,888M	\$1,888M*

◇ SCHEDULE

	<u>Current</u>	<u>Forecast*</u>
ANTICIPATED PROJECT COMPLETION	Winter 2022	Spring 2023



June 2021

● On target
 ◇ Possible problem
 ▲ Significant Impact

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 16

* Risk Analysis, Feb 2021