Program Management Major Project Status Report

Presented By Bryan Pennington Chief Program Management Officer (Interim)

July 2021

Construction Committee Los Angeles County Metropolitan Transportation Authority



PROJECT BUDGET & SCHEDULE STATUS SUMMARY CHART

Cost Performance		ormance	mance Schedule Performance			
Project	Variance Approved LOP	Variance Revised Budget	Variance Original	Variance Revised Schedule	Comments	
Crenshaw/LAX	ok	8			Project is 99% 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. Equity - 8 of 8 stations (100%) are within or adjacent to Equity Focus Communities.	
Regional Connector		6		•	Project is 81% complete. Comprehensive planning for testing underway for 7th/Metro Center interfaces; Site work and restoration throughout alignment continues; and MEP and systems work continues in stations and guideway. Equity - 3 of 3 stations (100%) are within or adjacent to Equity Focus Communities.	
Westside Purple Line Extension-Section 1		OK		<u>()</u>	Project is 70% complete. TBM tunnel mining is complete. The implementation and planning of post-tunnel construction activities continue. The Project's forecast Revenue Service Date is Fall 2024. Equity - This project is not located within or adjacent to Equity Focus Communities	
Westside Purple Line Extension-Section 2	<u>ok</u>	OK	ОК	<u>()</u>	Project is 44% complete and proceeding on schedule and within budget. Equity - This project is not located within or adjacent to Equity Focus Communities.	
Westside Purple Line Extension-Section 3	8	8	<u>ok</u>	<u>()</u>	Project is 23% complete and proceeding on schedule and within budget. Equity - 1 of 2 stations (50%) are within or adjacent to Equity Focus Communities.	
Willowbrook/Rosa Parks Station		8	\diamond	OK	Package A & C Final Punch List work continuing for Package Closeout. North crossing and signal case work ongoing. Package B is in final stages with all major hardscape work, including Park & Ride lot, completed. Overall project substantial completion remains on schedule for end of June. Equity - 100% of the project is within or adjacent to Equity Focus Communities.	
Airport Metro Connector	•	8	<u>ok</u>	OK	Early Works Phase site work beginning with environmental processes. Primary station contract continuing bid validation phase, with NTP expected in Summer 2021 with construction start expected near the end of 2021. Equity - 100% of the project is within or adjacent to Equity Focus Communities.	
Division 20 Portal Widening Turnback	\diamond	\diamond	\diamond	\diamond	Project is 23% complete. Construction continues with the excavation and grading for duct banks and vaults, Portal excavation, utility installation, the 1 st Bridge and duct banks and manholes for the Traction Power Substation. Upon execution of upcoming CN6 /MOD 20, contingency will be drawn significantly, and schedule dates will potentially be updated as time impacts are unknown at this time. Updated information may be available at next reporting cycle. Equity - 100% of the project is within or adjacent to Equity Focus Communities.	
I-210 Barrier Replacement	œ	ок	<u>()</u>	8	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 took place on May 24, 2021. Barrier workshop #2 is to take place in mid June 2021. Equity - 8.53% of the corridor is within or adjacent to Equity Focus Communities	
1-5 North County Enhancements	<u>()</u>	8	<u>()</u>	<u>()</u>	Construction NTP is expected early Summer 2021. Equity - This project is not located within or adjacent to Equity Focus Communities	
I-5 North: SR 118 to SR 134		\diamond		\diamond	Segment 1, 2 and 4 are completed. Segment 3 (Empire Ave & Burbank) is 90% complete. Equity - I-5 North: 4 of 4 segments of the corridor project are within or adjacent to Metro's Equity Focus Communities. Only 1 segment of the project remains to be completed. Caltrans is the lead on the project.	
I-5 South: Orange County Line to I-605	OK	or		\diamond	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. Equity - I-5 South: 3 of 6 segments of the corridor project are within or adjacent to Metro's Equity Focus Communities. Only 2 segments of projects remain to be completed. Caltrans is the lead on the project.	
July 2021 Construction Comm	nittee		or On	target	 Possible problem (5-10% variance) Significant Impact (over 10% variance) 	
Los Angeles County	Metro	politar	n Trans	portatio		

CRENSHAW/LAX TRANSIT PROJECT

BUDGET	Approved	Previous	Current	SCHEDULE	A remember of	(REVENUE O	
<u>TIFIA</u>	LOP*	Period**	Forecast**		Approved	Previous	Current
\$2,148M	\$2.058M	\$2,148M	\$2,148M	<u>Original</u>	<u>Rebaseline</u>	Period	Forecast*
• •	Approved LOP:	\$90M (4%)	\$90M (4%) 🕓	Oct.2019	May 2020	Winter 2021	Winter 2021
	Revised Budget:	<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>	\$0 ok	Variance from C		+766d (26%)	+802d (26%) 🛕
	d of contract - Board A	Approval June 2013		Variance from R	Revised Schedule	e: +581d (23%)	+596d (24%) 🛕
**Excludes finance costs and includes \$10M Non-TIFIA activities				*Current Forecast is	s Contractor's April	Schedule update	

- Overall Project Progress is 99% 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.
- Equity 8 of 8 stations (100%) are within or adjacent to Equity Focus Communities.



Expo/Crenshaw Station – Artwork installation and fare gate

equipment



Aviation/Century Station - Porcelain enamel

artwork at station platform

July 2021

On target

Possible problem (5-10% variance)



Significant Impact (over 10% variance)



Construction Committee

REGIONAL CONNECTOR TRANSIT PROJECT

**Approval in process

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

	SCHEDULE	Approved**	Previous	Current
	Original	<u>Re-baseline</u>	Period	Forecast*
	May 2021	Fall 2022	Fall 2022	Fall 2022
\	Variance from Or	riginal:	+480d (19%)	+480d (19%) 🛕
	Variance from Re	evised Schedule:		0d 👩

*Current Forecast is Contractor's March Schedule update

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

- Overall Project Progress is 81% complete.
- Little Tokyo/Arts District Station & Surrounding Area: Cut & Cover guideway concrete, 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. Backfill operations continue.
- Grand Av Arts/Bunker Hill Station: Concrete near complete; elevator 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 continues.
- Trackwork: Remedial work along alignment underway on various installations to prepare for acceptance inspections.
- Systems: Installation of signals and communications, as well as equipment and cabling for permanent power continuing. Train control and overhead conductor rail (OCR) gaining momentum.
- Equity 3 of 3 stations (100%) are within or adjacent to Equity Focus Communities.



(REVENUE OPERATION)

Alameda Cut & Cover looking South



2nd & Broadway NE corner concrete sidewalk pour

July 2021

On target

Possible problem (5-10% variance)



Significant Impact (over 10% variance)

Meti

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WESTSIDE PURPLE LINE EXTENSION – SECTION 1

BUDGET	Approved	Previous	Current
FFGA_	LOP* **	Period**	Forecast**
\$2,822M	\$2,774M	\$3,129M	\$3,129M
Variance from Ap	proved LOP:	\$355M (13%)	\$355M (13%) 🛕
Variance from Rev	vised Budget:		\$0 💽

SCHEDULE			ENATION				
	Approved	Previous	Current				
<u>Original</u>	Rebaseline	Period	Forecast*				
Nov.2023	Fall 2024	Fall 2024	Fall 2024				
Variance from O	+365d (11%)						
Variance from Revised Schedule: 0d							
*Current Forecast is	*Current Forecast is Contractor's April Schedule update						

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

- Overall Project Progress is 70% complete.
- Wilshire/La Brea Station: Permanent utility installation/backfill (above the roof) activities, west hammerhead structure, interior stairs, MEP work and appendage construction are ongoing.
- Wilshire/Fairfax Station: Structural concrete work moves forward (2nd lift wall & roof). 5 out of 16 concrete roof blocks have been placed to date. Entrance plaza and appendage work continue.
- Wilshire/La Cienega Station: The TBM equipment and gantry removal effort is on going. Work on the entrance structure progresses, and excavation on the first appendage (AE) continues. East hammerhead construction has commenced.
- **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.
- Reach 2 Tunnel : Cross passage activities have commenced. Grouting and the installation of support cages are underway.
- **Budget/Schedule:** In May 2021, the Board approved a \$150M budget increase. The Project's current target RSD is Fall 2024.
- Equity This project is not located within or adjacent to Equity Focus Communities.

(REVENUE OPERATION)

1%) 🛕

Wilshire/La Brea West Hammerhead Concrete Placement



TBM Gantries at Wilshire/La Cienega Station

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Possible problem (5-10% variance)

Significant Impact (over 10% variance)



WESTSIDE PURPLE LINE EXTENSION – SECTION 2

BUDGET	Approved	Previous	Current
FFGA_	LOP*	Period**	Forecast*
\$2,499M	\$2,441M	\$2,441M	\$2,441M
Variance from A	pproved LOP:	\$0M (0%)	\$0M (0%)
Variance from R	evised Budget:		\$0 (

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

SCHEDULE	:	(REVENUE OPERATION)			
OGHEDOLL	Approved	Previous	Current		
	Approved	FIEVIOUS	Guilent		
<u>Original</u>	Rebaseline	Period	Forecast*		
Aug. 2025	N/A	Summer 2025			
Variance from Or	riginal:	+0d (0%)	+0d (0%) 🛛 🥶		
Variance from Re	evised Schedule:		0d 🔍 🕓		

*Current Forecast is Contractor's April Schedule update

- Overall Project progress is 44% complete as of period ending May 2021.
- Century City Constellation Station
 - Excavation of the station box is 22% complete as of June 11, 2021.
- Wilshire/Rodeo Station
 - Excavation of the station box and entrance has been completed.
 - Concrete placement for invert slab is 33% complete as of June 14, 2021.
 - Closure of S. Reeves Dr.. to support excavation ended June 15, 2021.
- Tunneling
 - Both tunnel boring machines (TBMs) "Ruth" and "Harriet" are operating within the City of Beverly Hills. Progress as of June 14, 2021, is as follows:
 - Ruth (eastbound subway tunnel) 1,828ft (16%)
 - Harriet (westbound subway tunnel) 1,814ft (16%)
- Equity This project is not located within or adjacent to Equity Focus Communities

On target

Possible problem

(5-10% variance)

July 2021

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Los Angeles County Metropolitan Transportation Authority



Site Visit By U.S. Senator Alex Padilla



Rebar work for Wilshire/Rodeo Station Invert

Significant Impact (over 10% variance)



WESTSIDE PURPLE LINE EXTENSION – SECTION 3

BUDGET	A managed a	Drovieus	Commonst	SCHEDULE		(REVENUE OPERATION)	
FFGA	Approved LOP*	Previous Period**	Current <u>Forecast</u> **	Original	Approved Rebaseline	Previous Period	Current Forecast*
\$3,599M Variance from Ap Variance from Re	-	\$3,224M <i>\$0M (0%)</i>	\$3,224M \$ <i>OM</i> (0%) \$0	Mar. 2027	N/A	Spring 2027 +0d (0%)	Spring 2027 +0d (0%) 💽
*At time of the award of contract – Board Approval February 2019 **Excludes finance costs				evised Schedule: Contractor's March		0d os	

- Overall Project Progress is 23% complete.
- Final design progress is 87% complete.
- Tunneling
 - TBM Iris (BR) full gantry system is being commissioned.
 - TBM Aura (BL) initial drive progressed and has mined over 270 feet.
- Stations
 - Westwood/VA: Utility relocation and Support of Excavation piling installation continues.
 - Westwood/UCLA: Utility relocations continues.
- Equity 1 of 2 stations (50%) are within or adjacent to Equity Focus Communities.

On target



Conveyor Belt Assembly for TBM Operation at Tail Track Exit Shaft

Possible problem (5-10% variance)



Drilling for Support of Excavation Soldier Pile Installation at Westwood/VA Station

Significant Impact (over 10% variance)



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July 2021

WILLOWBROOK/ROSA PARKS STATION

BUDGET	Approved	Previous	Current	S		
TOTAL COST	<u>LOP*</u> \$109.3M	<u>Period</u> \$128.4M	<u>Forecast</u> \$128.4M			
	-	·	\$18.5M (16.5%) 🛕	1		
Variance from Re	evised Budget	:	\$0 <mark>o</mark> k	\		
*At time of the awar	*At time of the award of contract – Board Approval (May 2018)					

	SCHEDULE	Approved	(Substantial Previous	Completion) Current			
	<u>Original</u>	<u>Rebaseline</u>	Period	Forecast*			
	March 2021	June 2021	June 2021	June 2021			
	Variance from Or	iginal:	+90d (8%)	+90d (8%) 🔶			
)	Variance from Re	vised Schedule:		0d 👩			
	*Current Forecast is Contractor's May Schedule update						

- Package A and C: Remaining punch lists items have been consolidated and are being closed out. Full close-out of punch list expected by end of June. North Pedestrian Crossing and signal case installation in progress. All of this work has been performed with minimal interruptions to public service.
- Package B: Major Package B components have been completed. Remaining work focused on completing installation of final project components – security cameras, signage and faregates – to meet end of June substantial completion.
- Equity 100% of the project is within or adjacent to Equity Focus Communities.



Possible problem

(5-10% variance)

Finish work @ C Line west

Elevator #3 finish work

On target

Passenger Pick-up & Drop-off area completed

Significant Impact

(over 10% variance)

Park & Ride Lot completed



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AIRPORT METRO CONNECTOR (AMC) PROJECT

BUDGET TOTAL COST Variance from A		Previous <u>Period</u> \$898.6M \$0M (0%)	Current <u>Forecast</u> \$898.6M \$0M (0%)	OK	SCHEDULE Original June 2024 Variance from Or	-	(Revenue O Previous <u>Period</u> June 2024 +0d (0%)	Current Forecast* June 2024 +0d (0%)	
Variance from A Variance from R		\$0M (0%)	\$0M (0%) \$0	OK)		riginal: evised Schedule:	+0d (0%)	+0d (0%) 0d	\sim
*Approved May 202	•		·			s Metro's May Sched	lule update		OK

- Early Works Phase construction contract NTP issued with shovel in ground scheduled for June 2021.
- Groundbreaking ceremony signaling the start of work scheduled for June 21, 2021.
- Primary Station Construction Contract in validation process with expected NTP issued Summer 2021.
- APM Guideway structural completed with APM Station heavy structural installation in progress and scheduled for completion fall of 2021 – clearing the area for AMC Station work to begin.
- Equity 100% of the project is located within or adjacent to Equity Focus Communities.



Construction of LAWA APM Guideway over AMC Site

July 2021



Possible problem (5-10% variance)



Significant Impact (over 10% variance)



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Front Elevation along Aviation Blvd.

DIVISION 20 PORTAL WIDENING TURNBACK

BUDGET	Approved LOP*	Previous Period	Current <u>Forecast</u>
TOTAL COST	\$801.7M	\$801.7M	\$801.7M
Variance from Ap Variance from Re		\$0M (0%)	\$TBD \$TBD

*At time of the award of contract – Board Approval (February 2020)

- Overall Project progress is 23% 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 29%. Phase 1 Track, utilities, and civil work continues 1st Street Bridge Rehabilitation and Portal excavation
- 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 Traction Power Substation Contract at 56%
- 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

On target

Equity - 100% of the project is located within or adjacent to Equity Focus Communities

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Los Angeles County Metropolitan Transportation Authority

SCH	EDULE		(Substantial	Completion)
		Approved	Previous	Current
<u>O</u>	riginal	Rebaseline	Period	Forecast*
Ju	ne 2024	N/A	June 2024	June 2024
	nce from O		+0d (0%)	TBD 🔶
Varia	TBD 🔥			
*Curre	nt Forecast i	is Contractor's Sched	lule update	\checkmark







Possible problem (5-10% variance)

Significant Impact (over 10% variance)

I-210 BARRIER REPLACEMENT PROJECT

BUDGET	(Design)	(Design)				
BUDGET	Approved	Previous	Current			
	LOP*	Period	Forecast			
TOTAL COST	\$11.08M	\$22.54M	\$22.54M			
Variance from Approved LOP: \$11M (103%) \$11M (103%) 🐼						
Variance from Revised Budget: \$0						
*At time of the award of contract – Board Approval (May 2016)						

SCHEDULE		(Complete Design)		
	Approved	Previous	Current	
<u>Original</u>	Rebaseline	Period	Forecast*	
(Project 1) Feb 2021	Winter 2021	Winter 2021	March 2021	
(Project 2) Aug 2022	Summer 2022	Summer 2022	Summer 2022	
Variance from Original:		+15d (1%)	+15d (1%) 砅	
Variance from Revised	Schedule:		0d 😽	
*Current Forecast is Contra	ctor's (June) Sched	ule update	•	

- 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. Barrier analysis workshop #1 with Caltrans barrier and wall experts to took place on May 24, 2021. The next workshop is scheduled for mid June.
- Equity 8.53% of the corridor is within or adjacent to Equity Focus Communities.



Newly Installed Caltrans Freeway Sign

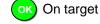


Incident in 2014



Newly Installed Speed Limit Sign

July 2021



Possible problem (5-10% variance)

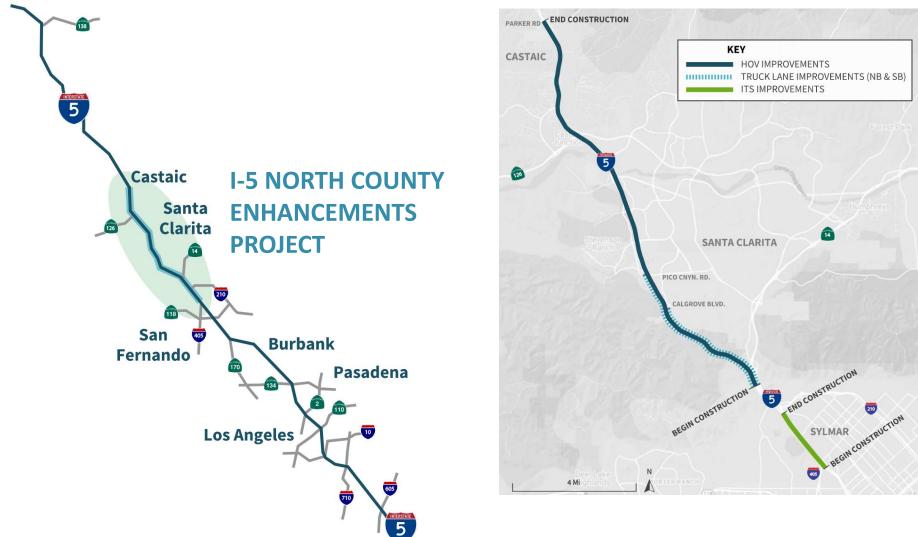


Significant Impact (over 10% variance)



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I-5 Construction Projects (Administered by Metro)



July 2021

Construction Committee



I-5 NORTH COUNTY ENHANCEMENTS

BUDGET	Approved	Previous	Current	
	LOP*	Period	Forecast	
TOTAL COST	\$679.3M	\$679.3M	\$679.3M	
Variance from Ap Variance from Re		\$0M (0%)	\$0M (0%) \$0	

	SCHEDULE	Approved	(Substantial C Previous	Completion) Current	
	<u>Original</u>	<u>Rebaseline</u>	Period	Forecast*	
	Spring 2026	N/A	Spring 2026	Spring 2026	
6	Variance from Or	iginal:	+0d (0%)	0d (0%)	
k	Variance from Re	vised Schedule:		N/A	
	*Current Forecast is Metro's Internal Schedule update				

*At time of the award of contract – Board Approval (March 2021)

- Notice to Proceed is expected to be issued in early summer
- Construction Community Meeting and Groundbreaking anticipated in summer
- Life of Project budget established in March
- Equity This project is not located within or adjacent to Equity Focus Communities



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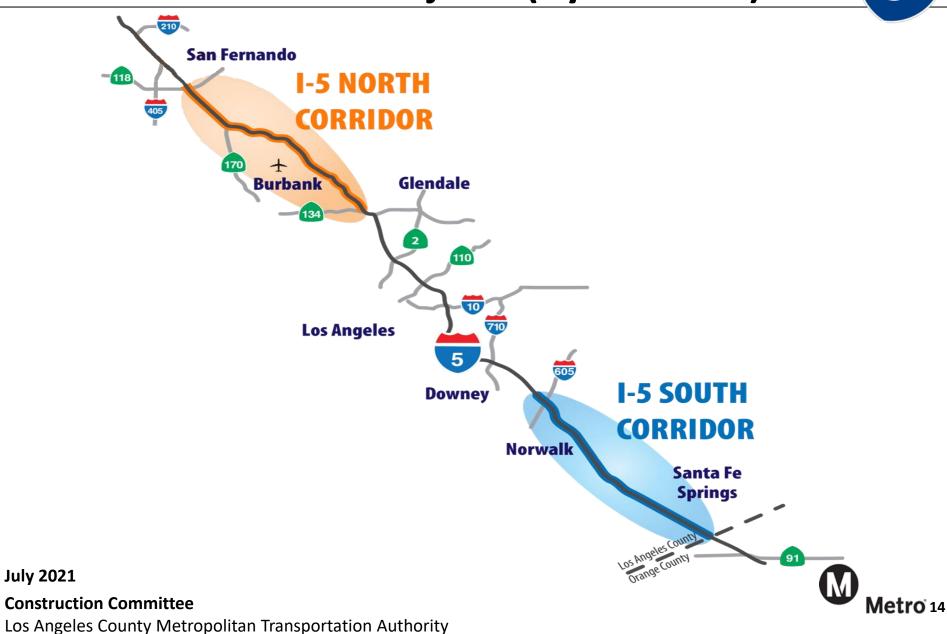
Possible problem (5-10% variance)



Significant Impact (over 10% variance)



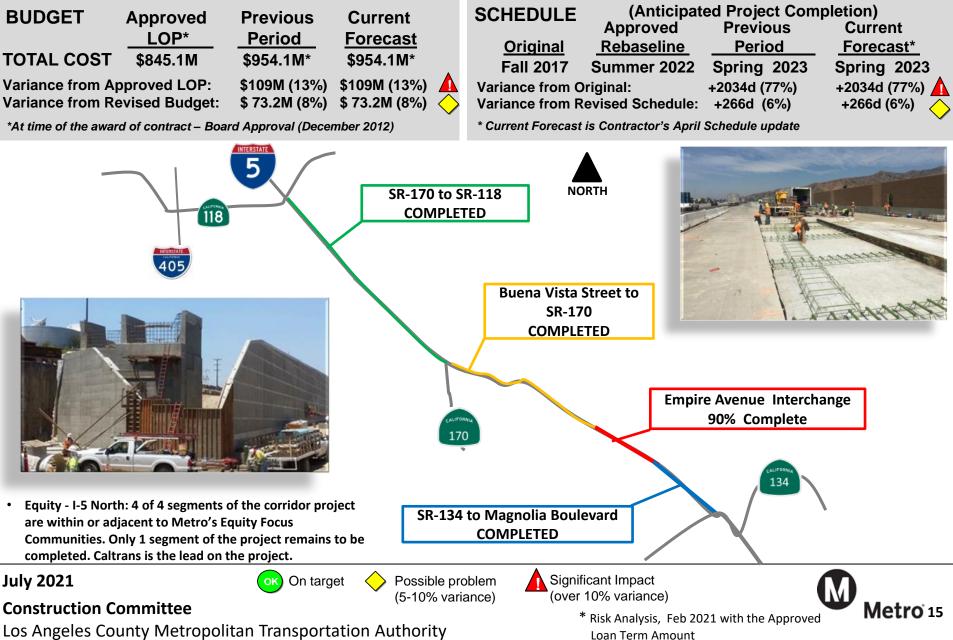
I-5 Construction Projects (By Caltrans)



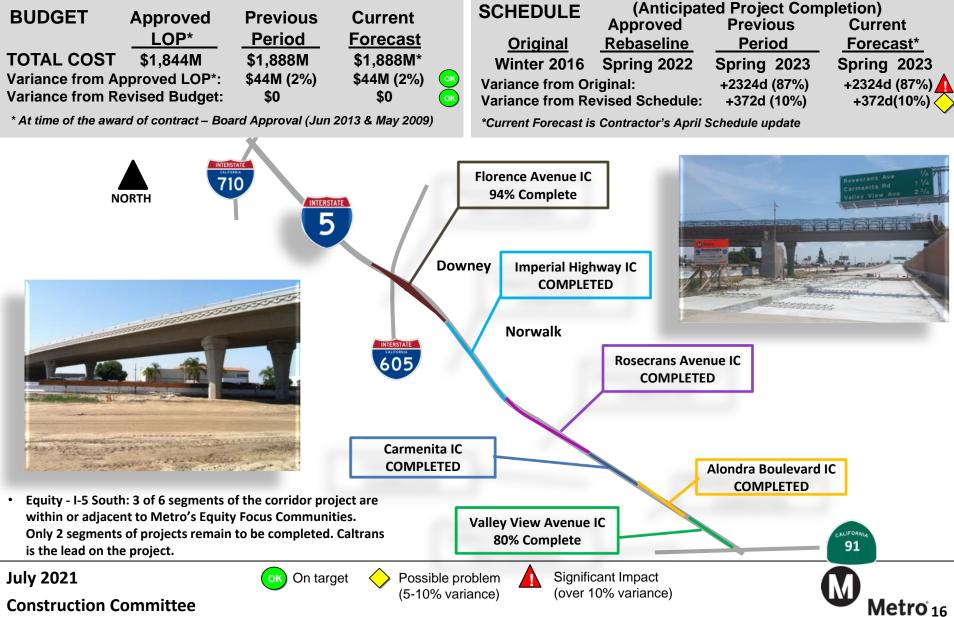
INTERSTATE

I-5 NORTH: SR 118 TO SR 134





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



^{*} Risk Analysis, Feb 2021