

Board Report

Los Angeles County
Metropolitan Transportation
Authority
One Gateway Plaza
3rd Floor Board Room
Los Angeles, CA

File #: 2021-0431, File Type: Oral Report / Presentation Agenda Number: 28.

CONSTRUCTION COMMITTEE JULY 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 July 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

Program Management Major Project Status Report

Presented By

Bryan Pennington

Chief Program Management Officer (Interim)



PROJECT BUDGET & SCHEDULE STATUS SUMMARY CHART					
	Cost Performance		Schedule Performance		
Project	Variance Approved LOP	Variance Revised Budget	Variance Original	Variance Revised Schedule	Comments
Crenshaw/LAX	OK OK	OK	A	A	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	A	ОК	A	OK OK	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	A	OK	A	OK	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	○K	ОК	OK	OK	Project is 44% complete and proceeding on schedule and within budget. Equity - This project is not located within or adjacent to Equity Focus Communities.

in final stages with all major hardscape work, including Park & Ride lot, completed. Overall project substantial completion OK lackOK remains on schedule for end of June. Equity - 100% of the project is within or adjacent to Equity Focus Communities. Early Works Phase site work beginning with environmental processes. Primary station contract continuing bid validation phase,

OK **Equity Focus Communities.** Package A & C Final Punch List work continuing for Package Closeout. North crossing and signal case work ongoing. Package B is

OK OK with NTP expected in Summer 2021 with construction start expected near the end of 2021. Equity - 100% of the project is within OK OK or adjacent to Equity Focus Communities. Project is 23% complete. Construction continues with the excavation and grading for duct banks and vaults, Portal excavation,

adjacent to Equity Focus Communities. 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 I-210 Barrier Replacement ОК OK ОК ОК

lack

On target

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 Construction NTP is expected early Summer 2021. Equity - This project is not located within or adjacent to Equity Focus OK OK OK ОК **Communities Enhancements** Segment 1, 2 and 4 are completed. I-5 North: Segment 3 (Empire Ave & Burbank) is 90% complete. Equity - I-5 North: 4 of 4 segments of the corridor project are within or

lead on the project. Segments 1, 3, 4, and the Carmenita Interchange are completed. I-5 South: Segment 2 (Valley View) is 80% complete. Segment 5 (Florence) is 94% complete and started the one-year plant establishment OK ОК Orange County Line to I-605 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 Committee

Westside Purple Line

Extension-Section 3

Willowbrook/Rosa Parks

Station

Airport Metro Connector

Division 20

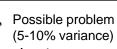
Portal Widening Turnback

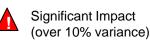
SR 118 to SR 134

OK

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OK





Project is 23% complete and proceeding on schedule and within budget. Equity - 1 of 2 stations (50%) are within or adjacent to

utility installation, the 1st 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 Metro's Equity Focus Communities. Only 1 segment of the project remains to be completed. Caltrans is the



CRENSHAW/LAX TRANSIT PROJECT

BUDGET Approved TIFIA LOP* \$2,148M \$2,058M

Variance from Approved LOP: Variance from Revised Budget: **Previous** Period** \$2,148M

\$90M (4%)

Current Forecast** \$2,148M

\$90M (4%) თ \$0

SCHEDULE

Rebaseline Original Oct.2019

May 2020 Variance from Original:

Approved

+766d (26%) Variance from Revised Schedule: +581d (23%)

Previous

Winter 2021

Period

Forecast* Winter 2021 +802d (26%) 🛕

Current

(REVENUE OPERATION)

+596d (24%) A

*Current Forecast is 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.



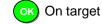
Expo/Crenshaw Station – Artwork installation and fare gate equipment



Aviation/Century Station - Porcelain enamel artwork at station platform

July 2021

Construction Committee





Possible problem (5-10% variance)





^{*}At time of the award of contract - Board Approval June 2013 **Excludes finance costs and includes \$10M Non-TIFIA activities

REGIONAL CONNECTOR TRANSIT PROJECT

BUDGET

FFGA

\$1,402M

Approved LOP*

Variance from Revised Budget:

\$1,420M **Variance from Approved LOP:**

*At time of the award of contract - Board Approval April 2014

Period** \$1,755M \$335M (24%)

Previous

Current Forecast** \$1,755M \$335M (24%)

\$0

SCHEDULE Original

Re-baseline **Fall 2022**

Approved**

May 2021 Variance from Original:

Variance from Revised Schedule:

(REVENUE OPERATION)

Previous

Current Forecast*

Period Fall 2022 +480d (19%)

Fall 2022 +480d (19%) 🔥



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

- 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.



Alameda Cut & Cover looking South



2nd & Broadway NE corner concrete sidewalk pour

July 2021





Possible problem (5-10% variance)





^{**}Excludes finance costs

WESTSIDE PURPLE LINE EXTENSION – SECTION 1

BUDGET FFGA

Variance from Revised Budget:

\$2,822M

**Excludes finance costs

Previous Approved LOP* ** Period** \$2,774M \$3,129M **Variance from Approved LOP:** \$355M (13%)

Current Forecast** \$3,129M \$355M (13%) 🛕





Original

Approved Rebaseline

Nov.2023 Fall 2024 Variance from Original:

Variance from Revised Schedule:

*Current Forecast is Contractor's April Schedule update

(REVENUE OPERATION)

Period

Fall 2024

+365d (11%)

Previous Current

Forecast*

Fall 2024

+365d (11%) 🛕



Overall Project Progress is 70% complete.

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

- 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.



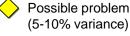
Wilshire/La Brea West Hammerhead Concrete Placement



TBM Gantries at Wilshire/La Cienega Station

July 2021 Construction Committee









WESTSIDE PURPLE LINE EXTENSION – SECTION 2

BUDGET **Previous Approved** LOP* **FFGA** Period** \$2.441M \$2.499M \$2.441M **Variance from Approved LOP:** \$0M (0%)

Current Forecast** \$2.441M \$0M (0%) \$0

- 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

Variance from Revised Budget:

- 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



Site Visit By U.S. Senator Alex Padilla



Rebar work for Wilshire/Rodeo Station Invert

July 2021





Possible problem (5-10% variance)





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

^{*}Current Forecast is Contractor's April Schedule update

^{*}At time of the award of contract - Board Approval January 2017

^{**}Excludes finance costs

WESTSIDE PURPLE LINE EXTENSION – SECTION 3

BUDGET

FFGA \$3,599M

LOP* \$3,224M

Variance from Approved LOP: Variance from Revised Budget:

Previous Approved

Period** \$3,224M \$OM (0%)

Current Forecast** \$3,224M \$OM (0%) (ox \$0



Approved Rebaseline

Original Mar. 2027

N/A Variance from Original:

Variance from Revised Schedule:

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

(REVENUE OPERATION)

Previous

Period

Spring 2027

+0d (0%)

Spring 2027

Current



Forecast*

- 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.



Conveyor Belt Assembly for TBM Operation at Tail Track Exit Shaft



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

July 2021

On target



Possible problem (5-10% variance)





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

WILLOWBROOK/ROSA PARKS STATION

BUDGET

TOTAL COST

Approved LOP*

\$109.3M

Previous Period \$128.4M

Current **Forecast** \$128.4M

Variance from Approved LOP: \$18.5M (16.5%) \$18.5M (16.5%) Variance from Revised Budget:

*At time of the award of contract – Board Approval (May 2018)

SCHEDULE

Original March 2021

Approved Rebaseline June 2021

Variance from Original:

Variance from Revised Schedule:

*Current Forecast is Contractor's May Schedule update

(Substantial Completion) Previous

Current **Period** Forecast*

June 2021 June 2021

+90d (8%) +90d (8%)





- 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.









Finish work @ C Line west

Elevator #3 finish work

Passenger Pick-up & Drop-off area completed

Park & Ride Lot completed







Possible problem (5-10% variance)





AIRPORT METRO CONNECTOR (AMC) PROJECT

BUDGET

TOTAL COST

Approved LOP*

\$898.6M

Variance from Approved LOP: Variance from Revised Budget: **Previous** Period \$898.6M

\$0M (0%)

Current **Forecast** \$898.6M

\$0M (0%) **\$0**



SCHEDULE

Original June 2024

Approved Rebaseline N/A

Variance from Original: Variance from Revised Schedule:

*Current Forecast is Metro's May Schedule update

Period June 2024 +0d (0%)

Previous

(Revenue Operation)

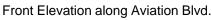
Current Forecast* June 2024

+0d (0%) 0d

*Approved May 2021 Board

- 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



On target



Possible problem (5-10% variance)





DIVISION 20 PORTAL WIDENING TURNBACK

BUDGET **Approved** LOP* **TOTAL COST** \$801.7M

Variance from Approved LOP:

Variance from Revised Budget:

Previous Period \$801.7M

Current **Forecast** \$801.7M

\$0M (0%)

\$TBD

\$TBD

SCHEDULE

June 2024

Variance from Original:

Approved Rebaseline **Original**

*Current Forecast is Contractor's Schedule update

N/A

June 2024 +0d (0%) Variance from Revised Schedule:

Previous

Period

Current Forecast* June 2024

TBD

(Substantial Completion)

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

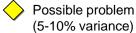


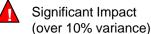




July 2021







I-210 BARRIER REPLACEMENT PROJECT

BUDGET

(Design) **Approved** LOP* \$11.08M

(Design) **Previous**

Current Period **Forecast** \$22.54M \$22.54M

TOTAL COST

Variance from Approved LOP: \$11M (103%) \$11M (103%) 🕟 Variance from Revised Budget:

*At time of the award of contract – Board Approval (May 2016)

SCHEDULE

Original (Project 1) Feb 2021

Variance from Revised Schedule:

(Project 2) Aug 2022

Variance from Original:

Approved Rebaseline Winter 2021 **Summer 2022**

Previous Period Winter 2021 **Summer 2022**

Current Forecast* March 2021 Summer 2022

+15d (1%) 🕝

+15d (1%)

(Complete Design)

0d

*Current Forecast is Contractor's (June) Schedule 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)





I-5 Construction Projects (Administered by Metro)









I-5 NORTH COUNTY ENHANCEMENTS

BUDGET Approved LOP* **TOTAL COST** \$679.3M

Variance from Approved LOP:

Variance from Revised Budget:

Previous Period \$679.3M

\$0M (0%)

Current **Forecast** \$679.3M

\$0M (0%) \$0



Variance from Original: Variance from Revised Schedule:

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

SCHEDULE

Original

Spring 2026

Approved Rebaseline N/A

(Substantial Completion) Previous **Period** Spring 2026 +0d (0%)

Current Forecast* Spring 2026

0d (0%)

N/A

*Current Forecast is Metro's Internal Schedule update

- 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



July 2021

On target



Possible problem (5-10% variance)





I-5 Construction Projects (By Caltrans)





July 2021

Construction Committee

Los Angeles County Metropolitan Transportation Authority

I-5 NORTH: SR 118 TO SR 134



BUDGET

TOTAL COST

Variance from Approved LOP:

Approved LOP*

\$845.1M

Previous Period

Current **Forecast**

\$954.1M* \$954.1M*

\$109M (13%) \$109M (13%)

Fall 2017 **Variance from Original:**

Variance from Revised Budget:

\$ 73.2M (8%) \$ 73.2M (8%)



*At time of the award of contract – Board Approval (December 2012)



Original

(Anticipated Project Completion) **Approved** Rebaseline

Summer 2022

Previous Period Spring 2023

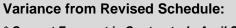
Forecast* Spring 2023

Current

+2034d (77%) +266d (6%)

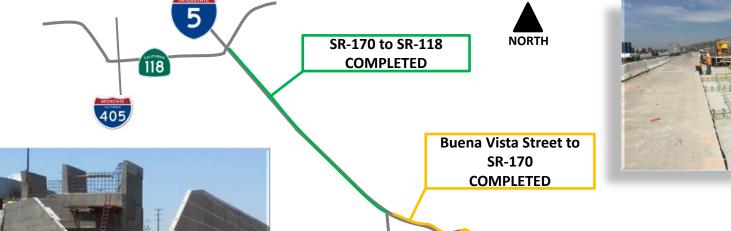
+2034d (77%)





* Current Forecast is Contractor's April Schedule update







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.



SR-134 to Magnolia Boulevard **COMPLETED**

134

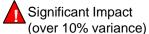
July 2021





Possible problem (5-10% variance)

170



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



Construction Committee

Los Angeles County Metropolitan Transportation Authority

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



BUDGET

TOTAL COST

Variance from Approved LOP*:

Variance from Revised Budget:

Approved LOP*

\$1,844M

Period \$1,888M

Previous

\$44M (2%)

\$0

Current **Forecast** \$1,888M* \$44M (2%)

\$0

Original Winter 2016

SCHEDULE

Approved Rebaseline Spring 2022

Period Spring 2023

(Anticipated Project Completion)

Previous

Forecast* Spring 2023

Current

Variance from Original: Variance from Revised Schedule:

+2324d (87%) +372d (10%)

+2324d (87%) +372d(10%)

* At time of the award of contract – Board Approval (Jun 2013 & May 2009)

*Current Forecast is Contractor's April Schedule update

