
Fiscal Year 2024
Program Management
Annual Program Evaluation (APE)



Presentation Overview



FY24 Construction Market Outlook

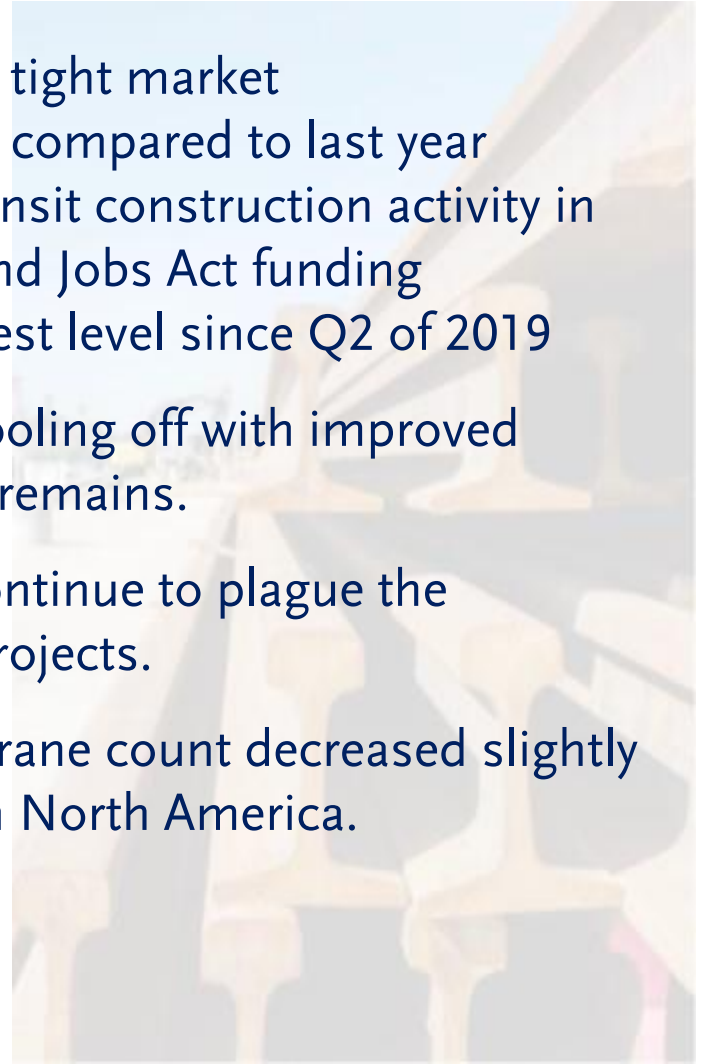
Industry Market Outlook: Continues to be a tight market

- Construction projects started up by 16% compared to last year
- Contractors expect higher increase in transit construction activity in 2023 due to Infrastructure Investment and Jobs Act funding
- Contractors' backlog remains at its highest level since Q2 of 2019

Material Price Trends: Material prices are cooling off with improved production levels but potential for volatility remains.

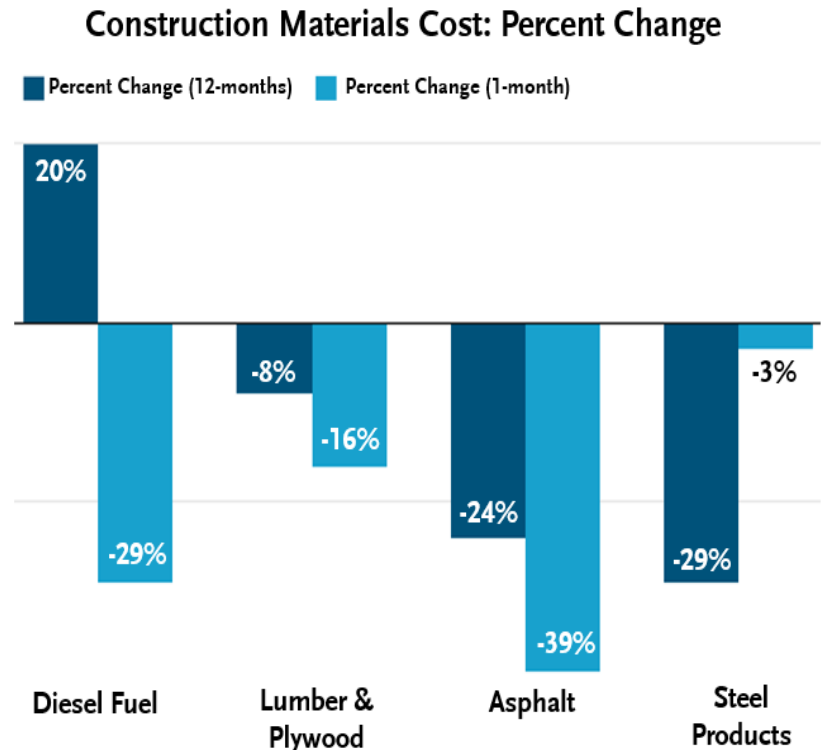
Labor Trends: Skilled labor shortages will continue to plague the construction industry to adequately staff projects.

Local Construction Indicator: Los Angeles crane count decreased slightly but remains the city with the most cranes in North America.



Construction Market Outlook

- Steel and lumber prices significantly decreased from last month
- Steel mills production levels ramping up
- Prices are leveling out in 2023 but contractors remain wary materials may increase again according to a recent AGC survey



Source: Bureau of Labor Statistics

Construction Market Outlook

Construction Costs Declined by

- 5% in past 6 months
- 2% in past 3 months

Bid Prices Increased by

- 9% in past 6 months
- 0% in past 3 months

Even with decline in material costs, over the last year bid prices are increasing but remaining flat over the last quarter, due to an increase in worker compensation and market risks.

Skilled Labor Shortage Continues

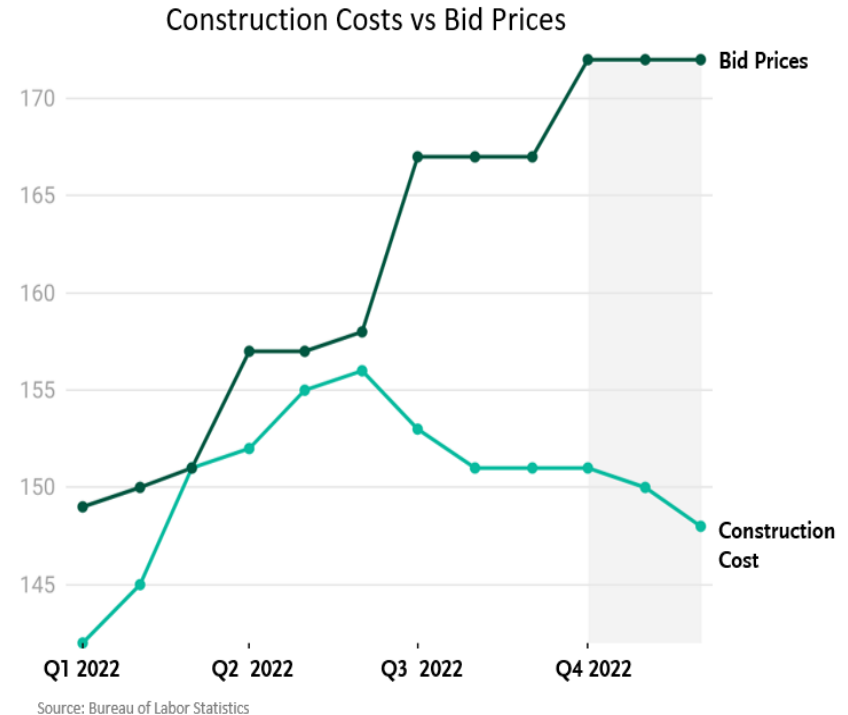
Construction Unemployment Rate

- 3-Months Ago: 3.4% (**23-year low**); Current: 4.4%

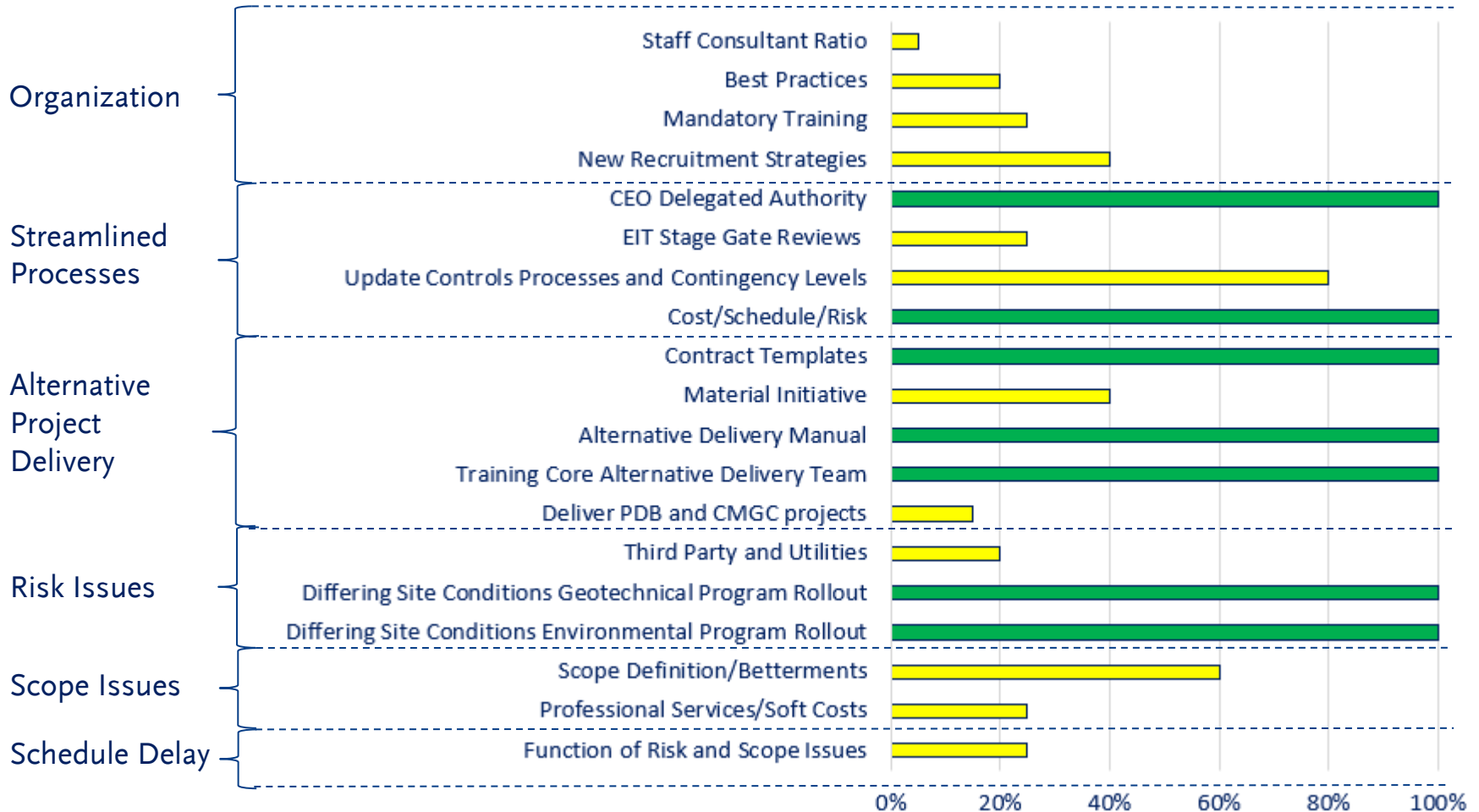
Construction Professionals Unemployment Rate

- 3-Months Ago: 2.2%; Current: 2.1%.

Demand for projects is outpacing the supply of workers. Job openings outpacing hiring. Record low number of unemployed construction workers.



Progress on FY23 Strategic Initiatives and Mitigation Measures



FY24 Program

36
Projects

APE focuses only on those capital projects, managed by Program Management, with a total project cost greater than \$5M:

- 24 Transit Construction Projects
- 6 Regional Rail Projects
- 6 Highway Modernization Projects

Up to
\$26.8B
Program

Overall Program dollars increased up to 13.1% from \$23.7 billion in FY23 to between \$25.2-\$26.8 billion in FY24. In addition to the projects in APE, Program Management manages/oversees 40+ projects less than \$5M. There are approximately 70+ total projects being managed by Program Management throughout the fiscal year.

Benefits

- A key goal of Measure M is to expand regional access to high-quality transit options.
- Bus/rail service ridership typically has a ~60-75% of boardings from EFCs, which is greater than the 40% of the county that the 2022 EFC designation comprises
- Capital investment of Measure M anticipated to create jobs, reduce pollution, generate local economic benefits, and increase personal quality time and overall quality of life.
- To measure program and capital investment cost-effectiveness, the Metro Board requested staff to develop greenhouse gas emissions goals. This is an ongoing effort with an update to the Board on progress scheduled for later this calendar year.

Metro Project Completion Summary

80% of active construction projects, as listed below, were or will be completed on time.

Project Completion in FY23

- Regional Connector Transit Project
- Bus Facility Maintenance Improvements & Enhancements Phase III
- Light Rail Transit Freeway Stations Sound Enclosures
- Sound Wall Package 11/North Hollywood
- Eastside Access Improvements
- Division 1 Improvements - 6th/Central Downtown LA Industrial District
- Crenshaw/LAX Transit Project

Project Completion Planned in FY24

- Metro Center Street Project
 - I-710 Early Action Soundwalls Package 2
 - I-5 South Capacity Enhancements – Valley View Interchange
 - I-5 North Capacity Enhancements – Buena Vista to Magnolia
-

Anticipated LOP Increase and New Projects

Anticipated FY23/FY24 LOP Budget Increases
Project Name
Purple Line Extension Section 1
Purple Line Extension Section 2
Purple Line Extension Section 3
Division 20 Portal Widening Turnback Facility
Rail to Rail Corridor Active Transportation Connector Project
Metro Center Street Project
C/LAX Closeout “Catch-All” Project
Soundwall Package 11
Projects for LOP Adoption
Project Name
I-605 South Street Interchange Improvement
Eastbound SR-91 Atlantic to Cherry Auxiliary Lane Improvements
I-710 Early Action Soundwalls Package 2

Individual project details are in the Appendix.

Major Transit Construction Projects

PROJECT LISTING	DELIVERY METHOD	FUNDING TO DATE (in Mil.)	EST. COST RANGE (in Mil.)	% COMPLETE
Major Transit Construction				
Regional Connector Transit Project	DB	\$1,755.8	\$1,755.8	98.0%
Westside Purple Line Extension Section 1 Project	DB	\$3,128.9	\$3,353.9	82.0%
Gold Line Foothill Extension Phase 2B Project*	DB	\$1,532.9	\$1,532.9	65.0%
Westside Purple Line Extension Section 2 Project	DB	\$2,441.0	\$2,546.0	57.0%
Westside Purple Line Extension Section 3 Project	DB	\$3,223.6	\$3,273.6	45.5%
C/LAX Closeout “Catch-All” Project	DBB	\$47.0	\$57.0	35.0%
Sub-total:		\$12,129.2	\$12,519.2	

*Pomona to Montclair segment awaiting funding.

- High risk due to project duration, complexity, and ground conditions.
- Associate potential schedule impacts.
- Market conditions affects in FY23.
- Based upon project risk profile/market conditions, the costs may increase up to 5% this year.

Capital Projects

PROJECT LISTING	DELIVERY METHOD	FUNDING TO DATE (in Mil.)	EST. COST RANGE (in Mil.)	% COMPLETE
Capital Projects				
Metro Eastside Access Improvements Project	DBB	\$29.7	\$29.7	90.0%
Metro Center Street Project (ESOC)	DB	\$130.1	\$143.7	63.6%
Rosecrans/Marquardt Grade Separation Project	DB	\$156.4	\$156.4	49.0%
Division 20 Portal Widening Turnback Facility	DBB	\$876.7	\$956.7	46.0%
Airport Metro Connector Project	DBB	\$898.6	\$898.6	32.1%
Rail to Rail Corridor Active Transportation Connector Project	DBB	\$143.3	\$158.3	25.0%
I-5 North County Enhancements Project	DBB	\$679.3	\$679.3	20.7%
Soundwall Package 10	DBB	\$72.5	\$72.5	6.0%
Systemwide Signage	DBB	\$24.1	\$24.1	1.0%
Transit Learning Center	DBB	\$20.0	\$20.0	1.0%
Division 1 Street Closure	DBB	\$9.5	\$9.5	1.0%
Subtotal:		\$3,040.2	\$3,148.8	

Alternative Project Delivery Projects

PROJECT LIST	DELIVERY METHOD	FUNDING TO DATE (in Mil.)	EST. COST RANGE (in Mil.)	% COMPLETE
Alternative Project Delivery Projects				
LINK Union Station Project	CM/GC	\$950.4	\$1,750.4 - \$2,130	16.0%
Metro G Line Bus Rapid Transit (BRT) Improvements*	PDB	\$391.0	\$392.0-\$511.0	6.0%
BRT Connector Red/Orange Line (NoHo to Pasadena BRT)	CM/GC	\$267.0	\$263.0 - \$386.0	4.0%
I-105 Express Lanes	CM/GC	\$325.0	\$780.0-\$1000.0	2.0%
East San Fernando Valley	PDB	\$2,591.8	\$2,811.0-\$3,575.0	1.0%
Sub-total:		\$4,525.2	\$5,996.4 - \$7,602.0	

*Based on projected budget and funds available through FY23, prior to Board adoption of life-of-project budget.

- Initial award for design and pre-construction services only.
- Alternative Project Delivery provides an opportunity to optimize project scope and reduce costs to conform with available funding.
- Construction pricing at 100% design.
 - Metro G Line project to negotiate at 85% design
- Board approval required to enter construction.

Shovel Ready Project Development

PROJECT LISTING	DELIVERY METHOD	FUNDING TO DATE (in Mil.)	EST. COST RANGE (in Mil.)	% COMPLETE
Shovel Ready Project Development				
I-710 Early Action Soundwalls Package 2*	DBB	\$9.4	\$9.4	36.8%
I-605/South Street Interchange Improvement	DBB	\$23.1	\$23.1	21.7%
Eastbound SR-91 Atlantic to Cherry Auxillary Lane Improvements	DBB	\$94.7	\$94.7	8.3%
Brighton to Roxford Double Track Project*	DBB	\$97.2	\$300.0	6.0%
Lone Hill to White Double Track Project*	DBB	\$8.3	\$180.0	4.0%
Doran Street and Broadway/Brazil Grade Separation Project*	DBB	\$11.0	\$279.0	2.0%
Doran Street Active Transportation Project*	DB	\$19.3	\$25.0	0.0%
Doran Street Interim Improvements*	DBB	\$9.0	\$9.0	0.0%
Subtotal:		\$272.0	\$920.2	

*Based on projected budget and funds available through FY23, prior to Board adoption of life-of-project budget.

Projects in Closeout

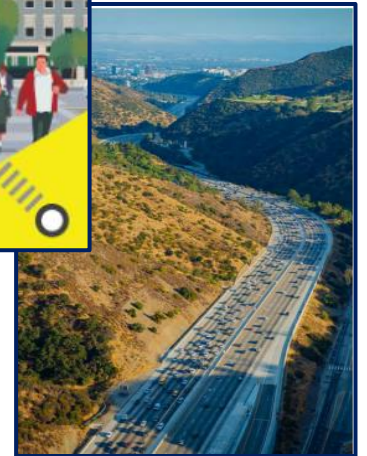
Projects in Closeout				
Willowbrook/Rosa Parks Station Improv.	DB	\$128.3	\$128.3	100.0%
Metro Blue Line Track and System Refurb.	DB	\$102.3	\$102.3	100.0%
Crenshaw/LAX Transit Project	DB	\$2,148.0	\$2,148.0	99.9%
Patsaouras Plaza Bus Station Construction	DB	\$50.9	\$50.9	99.0%
Soundwall Package 11	DBB	\$102.5	\$109.2	93.2%
Metro Blue Line Signal System Rehabilitation	DB	\$119.0	\$119.0	90.0%
Subtotal:		\$2,651.0	\$2,657.7	



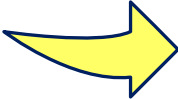
Metro Transit Capital Program Summary

Planned Transition from Countywide Planning to Program Management in FY24:

- West Santa Ana Branch Transit Corridor
- Green Line Extension to Torrance
- LA River Bike Path
- North San Fernando Valley BRT



Next Steps



Project Managers to manage project scope, budget, and schedule for quality, on-time and within budget delivery.



Maintain resources and staffing needed to manage and support project delivery.



Present project-specific Life-of-Project budgets for Board review and adoption.



Seek additional revenue sources needed to fulfill funding commitment required to build and deliver projects.



APPENDIX – INDIVIDUAL PROJECT DETAILS



MAJOR TRANSIT CONSTRUCTION PROJECTS

Regional Connector Transit Project

Original
LOP
\$1420.0M

Current
LOP
\$1,755.8M

Current Forecast
LOP
\$1,755.8M

Forecast
Completion
Summer 2023

Project
Complete
98%



Regional Connector Transit Project

Cost: No additional anticipated LOP increase in FY24.

Schedule: Revenue Service Date targeted for Spring 2023.

Mitigation Measures: The Project has afforded access of the guideway and station platforms to Operations for purposes of testing, familiarization, and training of staff.

Accomplishments:

- Progress throughout is measured in excess of 98% complete; final material/device installations and punch list adjustments are underway.
- Efforts remain focused on comprehensive systems-integrated testing and related safety certification documentation; liaison with CPUC staff has been initiated to introduce the Project with guided tours
- Operations are fully engaged with training operators and maintenance-of-way staff; simulated service began in early January 2023
- Coordinated preparations for initiating revenue service by all Metro departments are underway.

Challenges/Risks:

- Trouble-shooting of electrical systems among interfaces of older systems and components adjacent to the Project's newer technologies have been identified and are being resolved
 - Testing has posed challenges to maintain start-up.
-

Gold Line Foothill Extension Phase 2B

**Original
LOP**
\$1,406M

**Current
LOP**
\$1,532.9M

**Current
Forecast**
\$1,532.9M

**Forecast
Completion**
Spring 2026 (Pomona)
Spring 2029 (Montclair)

**Project
Complete**
65%



Gold Line Rail Corridor (shared with freight)

Metrolink Rail Corridor

Gold Line Station

Gold Line Station and Metrolink Station (not shared)

Planned Grade Separation for Gold Line Trains Only

Gold Line Foothill Extension Phase 2B

Cost: Project segmented to Pomona. Remaining segment is seeking funding to complete the project.

Schedule: Due to unfavorable economic conditions affecting bid prices, the alignment contract was restructured to terminate in Pomona, reducing the completion date with the alignment ending in Montclair.

Mitigation Measures: Seeking additional funding to complete the project.

Accomplishments:

- Freight Track Relocation: Completed
- Delivery of All Rail Needed for Project: Completed
- Grade Crossings: Long-Term Reconstruction of 20 (out of 21) Crossings Completed
- Bridges: 18 (out of 19) New or Renovated Bridges Complete
- Stations: Three of the four stations are currently under construction

Challenges/Risks:

- The contract option to extend the existing contract to Montclair expired on 10/7/21; the Construction Authority is negotiating a possible one-year extension of this “Montclair Option”.
- Securing funding for remaining initial proposed alignment to Montclair.

Westside Purple Line Extension Project



Westside Purple Line Extension Section 1

<u>Original LOP</u>	<u>Current LOP</u>	<u>Current Forecast</u>	<u>Forecast Completion</u>	<u>Project Complete</u>
\$2,773.9M	\$3,128.9M	\$3,353.9M	Fall 2024	82%

Cost: Anticipated Board Request for Increase: \$225M.

Schedule: The Project is trending behind the project completion date of Fall 2024.

Mitigation Measures: Continued monitoring of critical and near-term critical path schedule activities. The Project is actively engaging with specialty subcontractors on progress to determine any critical needs.

Accomplishments:

- Completed cross passage concrete work, removal of the TBM cutterhead, track installation (Reaches 2 & 3), and roof concrete placement complete at all three Stations. Permanent power available at Wilshire/La Brea Station.

Challenges/Risks:

- Due to the impacts associated with the Reach 3 tunnel anomaly, there is a possibility that the Revenue Service Date (RSD) will not achieve the FFGA date of October 31, 2024. The current schedule forecast for RSD is Fall 2024. The Project is currently trending behind the target RSD.
- The current project budget does not include cost exposures from unmerited contractor claims. These claims will be subject to the dispute resolution process (subject to the Board's approval).

Westside Purple Line Extension Section 2

<u>Original LOP</u>	<u>Current LOP</u>	<u>Current Forecast</u>	<u>Forecast Completion</u>	<u>Project Complete</u>
\$2,441.0M	\$2,441.0M	\$2,546.0M	Fall 2025	57%

Cost: \$105.0M LOP increase forecasted in FY2024. Proposed LOP \$2,546.0M.

Schedule: Original baseline schedule milestones are still being maintained and monitored.

Mitigation Measures: Closely monitoring cost exposures and schedule slippages.

Accomplishments:

- Completed reach 4 and 5 BR & BL tunnel excavations
- Complete excavation at Century City Constellation Station box and entrance
- Complete construction of invert slab and platform level walls at Wilshire/Rodeo Station and advance concourse deck level walls and station entrance
- Started construction of tunnel cross passages
- Start Wilshire/Rodeo Station appendage construction

Challenges/Risks:

- Due to the Contractor's forecasted completion date, the Project is identifying opportunities to potentially mitigate delays and not impact the current Substantial Completion date.
- Changes to project scope, Requests for Changes (RFCs), Notices of Intent to Claim (NOICs), Open Claims, and elements in the Risk Register are posing additional risks to cost and schedule containment for the project.

Westside Purple Line Extension Section 3

<u>Original LOP</u>	<u>Current LOP</u>	<u>Current Forecast</u>	<u>Forecast Completion</u>	<u>Project Complete</u>
\$3,223.6M	\$3,223.6M	\$3,273.6M	Spring 2027	45.5%

Cost: \$50M LOP increase to concurrent non-FFGA project due to VA easement agreement and hi-rail vehicle storage (added scope).

Schedule: Metro has reviewed the re-sequencing schedules from both C1151 Tunnels and C1152 Stations contractors and has determined that re-sequencing is the responsibility of the contractors based upon the information provided by the contractors. This can be re-evaluated should additional information be provided by the contractors.

Mitigation Measures: Implement agreed recovery schedule and further reduce negative float through acceleration.

Accomplishments:

- Tunnels Contract: Tunneling completed. Stations Contract: Completed final design, decking, Westwood/UCLA Station utility relocation, and Westwood/VA steam line tunnel relocation. Started station excavation.

Challenges/Risks:

- Due to the Contractor’s forecasted completion date, the Project is identifying opportunities to potentially mitigate delays and not impact the current Substantial Completion date.
- Tunneling production rate. Turnover of Tunnels to C1152.
- Commissioning of VA relocated steam line, to enable continued excavation of Westwood/VA station excavation.

C/LAX Closeout “Catch-All”

<u>Original LOP</u>	<u>Current LOP</u>	<u>Current Forecast</u>	<u>Forecast Completion</u>	<u>Project Complete</u>
\$47M	\$47M	\$57M	Fall 2024	35%

Cost: Anticipated LOP increase of \$10M in FY23. Current risks may require a future LOP increase as noted below.

Schedule: Change in complete date due to delay in scope development and procurement of Catch-All Contract no.2.

Mitigation Measures: Continued monitoring of critical and near-term critical path activities. Future opportunities to build schedule contingency will be reviewed and implemented as they are recognized.

Accomplishments:

- CLAX “Construction Punch Out Work” Contract C1217 completed key items for K-Line start of Service Operations.

Challenges/Risks:

- Catch-All contract no. 2 “K-Line Paving & Improvement” is in scope development; delay of six months.
- Unanticipated cost increase due to market conditions and inflation for Catch-All Contract
 - Legal and claim support services for three months due to REA2 Evaluation hearing delay.
 - Extension of CMSS staffing to support Contract C1217.
 - Longer than anticipated procurement due to availability of materials.



CAPITAL PROJECTS

Eastside Access Improvements Project

<u>Original LOP</u>	<u>Current LOP</u>	<u>Current Forecast</u>	<u>Forecast Completion</u>	<u>Project Complete</u>
\$29.7M	\$29.7M	\$29.7M	Spring 2023	90%

Cost: There is potential for cost increases for the Segment 2 work performed by Regional Connector.

Schedule: No Change. Hashimoto Plaza to be completed late Spring 2023.

Mitigation Measures:

- EAIP Team is coordinating with Regional Connector Team for the Segment 2 work as there is potential for changes related to the work Regional Connector Constructor is performing under C0980 Mod 152 and C0980 CO 51 based on the RFIs that have been generated.
- Work with City of LA to expedite review and approval of submittals.

Accomplishments:

95% of Contract C1207 work – Segments 1, 3, 4, 5, 6 and 7 – is complete. This includes all bike lanes, pedestrian/ADA improvements, LED street lighting improvements, and mid-block crosswalk and traffic signal.

Challenges/Risks:

- Traffic control coordination with adjacent Metro projects (Division 20).
- Hashimoto Plaza LED lighting improvements transferred to BSL at unanticipated cost.
- Segment 2 work still in progress including esplanade bioswales, planters, and Class 1 bike lane plus the Wayfinding Installation remains.
- ~~Compromise with the City for track removal needed to build Bike Lanes at Center and Banning.~~

Metro Center Street Project

**Original
LOP**
\$ 112.7M

**Current
LOP**
\$130.7M

**Current
Forecast**
\$143.7M

**Forecast
Completion**
2023

**Project
Complete**
63.6%



Metro Center Street Project

Cost: In Nov 2022, the Board authorized to replace lapsed Prop 1B funds of \$32.2 millions with Prop C 5% Security funds. Due to differing site conditions, design delays by the Design Build Contractor, supply chain issues, extended completion schedule, the current forecast LOP budget is \$143.7 M based on August 2022 Independent Cost, Schedule, Risk Assessment.

Schedule: The substantial completion is in Q4 2023, one year after the original completion date.

Mitigation Measures:

A recovery schedule with mitigations is being developed by the Contractor per Metro's request Enhanced coordination with Metro Division 20 Portal Widening Project to schedule interface works. Negotiate open claims to resolve disputes, avoid further escalation and reduce cost and schedule impacts. Perform additional site investigations to address differing site conditions in Public ROW including Center St sidewalks.

Accomplishments:

Matt foundation, steel erection, and roof deck were completed.

Challenges/Risks:

- Seeking board approval to increase in LOP budget by \$13M based on August 2022 independent cost, schedule, and risk assessment. LOP increase accommodates a year long delays due to combination of unforeseen site obstructions and UPS re-designs.

Rosecrans/Marquardt Grade Separation Project

Original
LOP
\$156.4M

Current
LOP
\$156.4M

Current
Forecast
\$156.4M

Forecast
Completion
2025

Project
Complete
49%

Cost: No Change.

Schedule: Assure project closeout by 2025.

Mitigation Measures: Work with funding partners so grant funding allocations meet construction schedule timeline.

Accomplishments:

- Construction notice to proceed issued in June 2022
- Mobilization and 50% of "clearing and grubbing" work is completed.

Challenges/Risks:

- BNSF may not be able to approve Absolute Work Windows (AWWs) for pre-cast girder erection, due to BNSF's limits of work windows and freight train operations.
- BNSF requests for project betterments
- Loss of grant funding if funding partners are not fully engaged and approve latest construction schedule.



Division 20 Portal Widening Turnback

**Original
LOP**
\$801.7M

**Current
LOP**
\$876.7M

**Current
Forecast**
\$956.7M

**Change in Forecast
Completion**
Winter 2025 to
Spring 2026

**Project
Complete**
46%



Division 20 Portal Widening Turnback

Cost: Anticipated LOP increase through FY24. Current risks may require a future LOP increase.

Schedule: Change in completion date due to change orders related to design issues, differing site conditions. Key change orders are critical path to be addressed prior to base contract work.

Mitigation Measures: Currently prioritizing construction activities, working with contractor to update project schedule

Accomplishments:

- Traction Power Substation Grounding Grid and Pad.
- Metering Switchgear Pad and Cabinet installation.
- First Street Bridge Repairs and Bent Removals complete.
- West Portal Structure bracing and demolition.
- Milestone 2 - Completion of TPSS Pad, Grounding Grid, Site Work, Ductbank, and Other Associated Infrastructure to Set TPSS.

Challenges/Risks:

- Design changes and revisions. Differing site conditions.
 - Portal Wall Demolition: relocation of existing systems and utilities that have been difficult to identify.
 - Ductbank Realignment in the Southern Yard.
 - Time Impacts - Portal Wall Demolition and Construction Phasing.
 - Traction Power Sub-Station (TPSS) Delivery and Installation Delay Impacts.
 - Professional Services Support Contracts.
-

Airport Metro Connector

Original
LOP
\$898.6M

Current
LOP
\$898.6M

Current
Forecast
\$898.6M

Change in Forecast
Completion
Fall 2024

Project
Complete
32.1%



Airport Metro Connector

Cost: No Change.

Schedule: No Change.

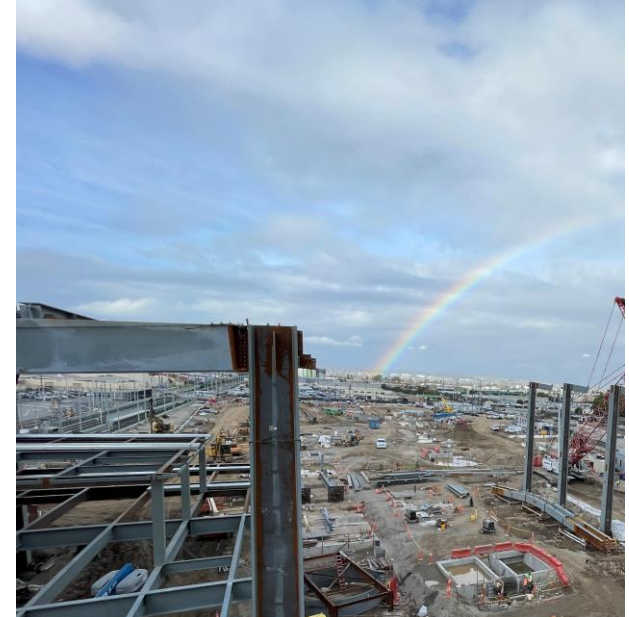
Mitigation Measures: Not Applicable.

Accomplishments:

- Early Works Contract (Demolition, grading and installation of turnbacks) – Contract awarded and NTP issued on May 12, 2021. Contract was substantially complete on July 19, 2022.
- Main AMC Construction Contract – Contract awarded and NTP issued on October 25, 2021. Construction started March 2022. Main structure foundation work completed, and installation of structural steel and main utility runs in progress
- Acquired Hertz Property

Challenges/Risks:

- Supply chain issues affecting delivery of structural steel and electrical equipment.
- Interface with CLAX operation and current adjacent LAWA Projects



Rail to Rail Active Transportation Corridor

<u>Original</u> <u>LOP</u>	<u>Current</u> <u>LOP</u>	<u>Current</u> <u>Forecast</u>	<u>Forecast</u> <u>Completion</u>	<u>Project</u> <u>Complete</u>
\$ 116.0M	\$143.3M	\$158.3M	Fall 2024	25%

Cost: Additional anticipated LOP increase of approximately \$15M through FY24 due largely to unforeseen soil contaminants.

Schedule: No Change.

Mitigation Measures: Not Applicable.

Accomplishments:

- Executed \$27,295,000 funding agreement with City of LA for work in public ROW in March 2022.
- Increased LOP from \$116.0M to 143.28M in April 2022 to include work in public ROW.
- Groundbreaking ceremony July 2022.
- Redesign efforts in support of the City of LA Slauson Connect project.
- Completed placing concrete for retaining wall footing and walls to 8th Ave.

Challenges/Risks:

- Unforeseen contamination in Metro ROW may impact schedule due to additional treatment/clean-up
- Unforeseen subsurface conditions in the Public ROW intersections.
- Third party expenditures with City of LA are much higher than forecasted in preliminary design due to the work in public ROW.
- Challenging schedule from LADOT for obtaining traffic control approval which may delay construction in Public ROW as Traffic control plans must be approved ahead of Contractor’s schedule.
- Tree Grant awarded to City is scoped to install a greater number of trees than feasible by design.

I-5 North County Enhancements Project



Current
LOP
\$679.3M

Available
Funding
\$679.3M

Forecast
Completion
Summer 2026

Project
Complete
20.7%

Cost: No Change.

Schedule: No Change.

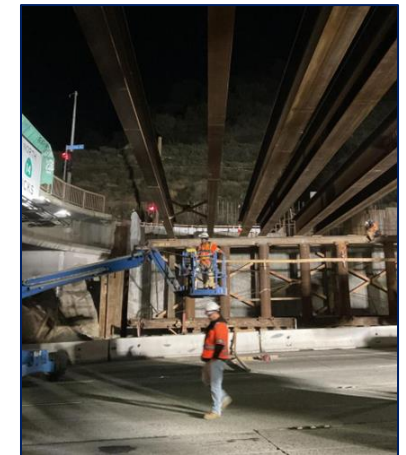
Mitigation Measures: Not Applicable.

Accomplishments:

- Secured \$47M in INFRA - Federal Funding
\$247M in TCEP - SB1 State Funding
- Construction Support Services Contract awarded Aug 2020
- Bids issued Nov 2020, Bids Received Feb 2021; LOP approved by Metro Board Mar 2021; Contract award to OHL USA July 2021; NTP for project August 23, 2021; Construction start Oct 2021; work on Stage 1 Phase 1 and Phase 2 – several bridges, multiple retaining walls, drainage, barrier/roadway demo, excavation and base placement
- Anticipated Substantial Completion July 2026.

Challenges/Risks:

- Coordinating with other Stakeholders: FHWA, City of Santa Clarita, LA County, CHP, NPS, CDFW.



Soundwall Package 10



Original
LOP
\$50.9M

Current
LOP
\$72.5M

Current
Forecast
\$72.5M

Forecast
Completion
Winter 2026

Project
Complete
6%

Cost: No Change.

Schedule: No Change.

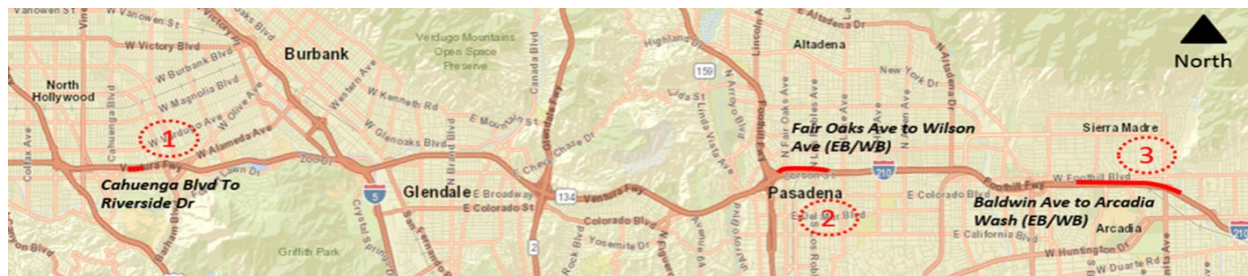
Mitigation Measures: Not Applicable.

Accomplishments:

- Secured \$48.6M in HIP - Federal Funding
- Constructability Review Complete
- Construction Cooperative Agreement Executed
- CSSC Contract has been awarded.
- Construction Contract has been advertised.
- LOP Approved by Metro Board in December 2022.
- Field office has been opened in City of Pasadena.

Challenges/Risks:

- Encroachment Permit from City of Pasadena is Conditional





ALTERNATIVE PROJECT DELIVERY PROJECTS



Link Union Station (LINK US)

Preconstruction <u>Phase Budget</u>	Available <u>Funding</u>	Current Forecast <u>LOP Budget</u>	Change in Forecast <u>Completion</u>	Project <u>Complete</u>
\$297.8M	\$950.4M	\$1,750.4 - \$2,130.0	2032	16%



Link Union Station (LINK US)

Cost: The Project Team is developing a Bottom-up Estimate. Costs will be refined to account for recent Value Engineering and any reduction in risk associated with access to the West Bank Storage Tracks.

Schedule: The master schedule has been extended to account for a new CMGC Procurement that coincides with NEPA environmental clearance, as well as the risks from acquiring a portion of the West Bank Storage Tracks from BNSF.

Mitigation Measures: Once a budget and schedule has been refined, the project will proceed with Advanced Preliminary Engineering while NEPA is being finalized. This projects is being delivered Alternative Project Delivery which provides an opportunity to optimize project scope and reduce costs to conform with available funding.

Accomplishments:

- On May 26, 2022, the Metro Board approved a Preconstruction Budget of \$297.8 million for the Preconstruction Work of the Link US Phase A Project including planning, design, preconstruction services by CMGC, Real Estate Acquisition and 3rd Party Work.
- On May 26, 2022, the Metro Board approved a Project Management Funding Agreement (PMFA) in the amount of \$423.3 million with the California High Speed Rail Authority.

Challenges/Risks:

- NEPA Approval prior to CMGC Award.
 - Agreement from BNSF to occupy a portion of the West Bank Storage Tracks prior to CMGC Award.
 - Substantial funding gap as a result of cost escalation, potential railroad impacts, revised base scope costs, and other impacts.
-

G Line (Orange) Bus Rapid Transit Improvements

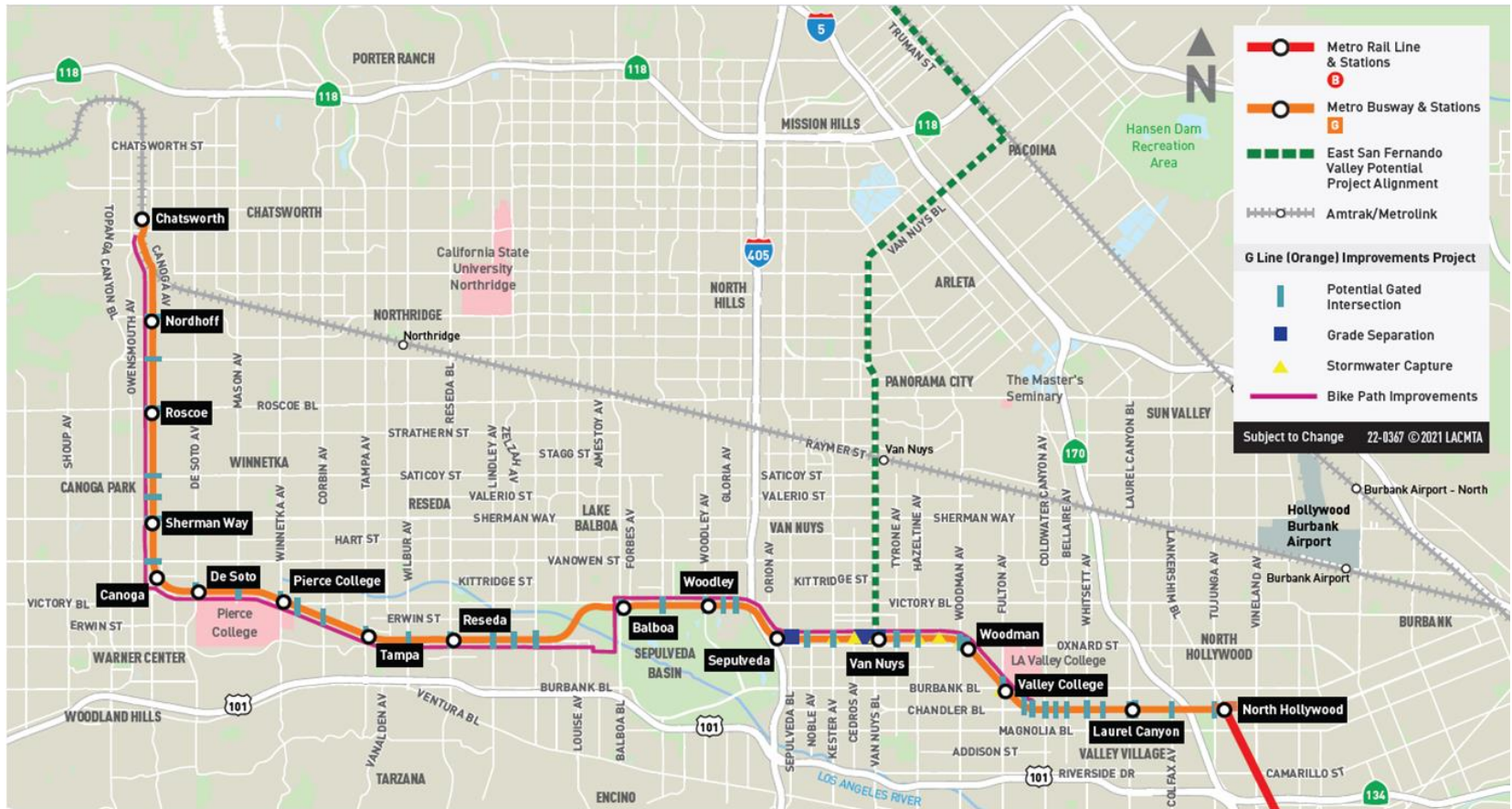
**Pre-Construction
Phase Budget**
\$149.7M

**Available
Funding**
\$391.0M

**Current Forecast
LOP Budget**
\$392.0M - \$511.0M

**Change in Forecast
Completion**
Winter 2026

**Project
Complete**
6%



G Line (Orange) Bus Rapid Transit Improvements

Cost: Increase in estimated costs due to added gated intersection scope and stormwater capture scope (*not in original Expenditure Plan*), with additional application of market-based escalation.

Schedule: Change in completion date due to pivot to Progressive Design Build (PDB) delivery method which required board action and development of new contract.

Mitigation Measures: Implementing progressive design build project delivery to support potential cost reduction strategies and encourage contractor collaboration and optimization of the design, scope, pricing and schedule.

Accomplishments:

- Completed installation and testing of Pilot Gate project.
- Award and Approval of PDB Contract Phase 1 by the board in August 2022.
- Notice to Proceed was issued in November 2022.

Challenges/Risks:

- Gates for bus transit do not exist in US; new technology to be developed and tested.
- Traffic impacts/mitigation due to gates.
- Uncertainty of fiber availability to satisfy project requirements.
- Right of way acquisitions and major utility relocations.
- Integration with Sepulveda and ESFV Transit Corridor projects.
- Maintaining existing bus operation during construction.
- City Agency review and approval time may delay project schedule.

I-105 Express Lanes

Pre-Const. Phase
Budget
 \$119.4M

Available
Funding
 \$325.0M

Current Forecast
LOP Budget
 \$780.0-\$1000M

Forecast
Completion
 Summer 2028

Project
Complete
 2%



I-105 Express Lanes

Cost: Segment 1 estimate by CMGC; ICE is in progress. Seg 2/3 estimating process has not started.

Schedule: No change.

Mitigation Measures: Project will be delivered by segment. Pursuing Federal grants, TIFIA loan, and revenue bonds backed by toll revenue as part of funding plan. Implementing Construction Manager/General Contractor (CM/GC) project delivery to support State grant schedule and potential cost reduction strategies and encourage contractor collaboration and optimization of the design, scope, pricing and schedule.

Accomplishments:

- Notice to Proceed (NTP) was issued to CMGC Contractor on November 10th and CMGC Phase 1, Pre-Construction work has initiated.
- For Segment 1, 95% Design was submitted on 12/20/22 and 100% design is in progress, for Segment 2 and 3, 35% Design submitted to Caltrans.

Challenges/Risks:

- Measure M/State SB 1 grant funds partial project cost, funding plan relies on future TIFIA loan and/or revenue bonds to be repaid by toll revenue.
- Accelerated design schedule for Segment 1 to meet SB1 requirements to issue construction contract by December 2023, which requires close partnership with Caltrans.
- Multiple contracts on the project require close coordination.
- Close coordination required with Metro rail operations to minimize disruption to C line and all the proposed improvements including OCS and tie replacements.
- Close coordination required with Metro WSAB project.

East San Fernando Valley Transit Corridor

Pre-Const. Phase Budget
\$496.8M

Available Funding
\$2,591.8

Current Forecast LOP Budget
\$3,575.0M

Forecast Completion
Summer 2030

Project Complete
1%



East San Fernando Valley Transit Corridor

Cost: FFGA value and Metro LOP differential will be on the order of \$61M as FTA has defined FFGA cost eligibility to not include investments pre-dating the EPD Award. FFGA value forecast as of December 2022 is \$3.573B; work continues to address risks and thereby reduce the FFGA budget.

Schedule: FTA risk assessment reflects 2030 completion; Project is reviewing the entire schedule to ensure a reasonable baseline is established in the FFGA.

Mitigation Measures: Implementing progressive design-build project delivery to encourage contractor collaboration, optimization of the design, scope, pricing and schedule, and risk reduction. Collaboration with the City of LA's many stakeholders continues to be a priority. Of particular concern is the undergrounding of power and communication lines in the northern half of the Project which poses significant challenges to scope, environmental clearance, schedule, cost and funding.

Accomplishments:

- Preliminary Engineering 30-60% in late 2022; designs of utility adjustments and realignments have progressed considerably with the full design of 1 of 7 packages contracted.
- Construction Management contract awarded in August 2022; P3 Solar and Storage Equipment for MSF awarded in November 2022; PDB contract awarded in February 2023; AUA issued in late 2022.
- Received \$600M in February 2023 from Transit Intercity Rail Capital Program (TIRCP) State funding.

Challenges/Risks:

- Utility issues (especially LADWP undergrounding) are impacting project cost and schedule.
 - ROW acquisition schedule has lagged due to prolonged contracting efforts which may ultimately strain timely access for the PDB contractor.
 - Reducing funding gap and securing residual funds needed among federal, state and local sources.
-

North Hollywood to Pasadena BRT

Design, Pre-Procurement Budget	Available Funding	Current Forecast LOP Budget	Forecast Completion	Project Complete
\$13.7 M	\$317.0 M	\$ 263.0-\$386.0 M	Spring 2027	4%

Cost: The proposed project is estimated to cost estimate between \$263 million to \$386 million. The project has \$317M in programmed capital funding including \$267M in the Measure M Expenditure Plan and \$50 million SB1 funds.

Schedule: FEIR was approved in FY22, procurement of CMSS, Design Engineer and CMGC to be completed in FY24, Design and Construction to follow FY24-FY27.

Mitigation Measures: Project Delivery via CMGC to provide opportunities to pursue phasing strategies and value engineering opportunities to reduce project cost, minimize construction impacts and potentially open segment sections early.

Accomplishments:

- FEIR approved by Board April 28, 2022
- Design advancing to Preliminary Engineering
- Scope and scheduling meetings being held with authorities having jurisdiction

Challenges/Risks:

- Staffing/Project Resources
- Coordination with authorities having jurisdiction and associated scope creep.

A high-speed train, possibly a Shinkansen, is shown on tracks. The train is white with a teal stripe and has the number 670 on its front. The background features palm trees and a clear sky. The text "SHOVEL READY PROJECT DEVELOPMENT" is overlaid in the center.

SHOVEL READY PROJECT DEVELOPMENT

I-710 Early Action Soundwall Package 2



Design, Pre-Procurement Budget
\$4.77M

Available Funding
\$9.44M

Current Forecast
\$9.44M

Forecast Completion
Summer 2025

Project Complete
36.80%

Cost: No Change.

Schedule: No Change.

Mitigation Measures: Not Applicable.

Accomplishments:

- Constructability Review Completed
- Construction Cooperative Agreement Executed
- CSSC Contract has been awarded

Challenges/Risks:

- Funding approval to pursue construction.
- TCE Extension would have cost and schedule implications.



I-605/South Street Interchange Improvement



Design, Pre-Procurement Budget
\$5.0M

Available Funding
\$23.06M

Current Forecast
\$23.06M

Forecast Completion
Summer 2024

Project Complete
21.70%

Cost: No Change.

Schedule: No Change.

Mitigation Measures: Not Applicable.

Accomplishments:

- Constructability Review Completed
- CSSC Contract has been awarded
- Caltrans Cooperative Agreement executed.

Challenges/Risks:

- Funding approval to pursue construction.
- City Restriction of no lane closures during the holiday season.



EB SR-91 Atlantic to Cherry Auxiliary Lane Improvements



<u>Design, Pre-Procurement Budget</u>	<u>Available Funding</u>	<u>Current Forecast</u>	<u>Forecast Completion</u>	<u>Project Complete</u>
\$7.9M	\$94.7M	\$94.7M	Summer 2028	8.30%

Cost: No Change.

Schedule: No Change.

Mitigation Measures: Not Applicable.

Accomplishments:

- Design has been completed pending final RTL.
- Constructability Review Completed
- Caltrans Cooperative Agreement executed.
- Construction Management Support Services RFP has been issued.

Challenges/Risks:

- TCEP funding obligation deadline
- Delay of final RTL would impact project advertisement schedule.



Brighton to Roxford Double Track Project

Design Phase <u>Budget</u>	Available <u>Funding</u>	Total Project <u>Forecast</u>	Change in Forecast <u>Completion</u>	Project <u>Complete</u>
\$17.8 M	\$97.2M	\$300.0 M	2027	6%

Cost: \$4.3M to account for out-of-scope services, third party coordination and other design condition changes.

Schedule: One year extension to complete design phases for segments 1, 2 and 4.

Mitigation Measures: Issue contract modification and task order contract. Staff will continue to look for local, state, and federal funding opportunities for construction.

Accomplishments:

- Secured \$77.3M for Segment 1 improvements through the AVL Service and Capacity 2020 TIRCP grant.
- City of Los Angeles has approved all roadway geometrics at the grade crossings for segments 1, 2 and 4.

Challenges/Risks:

- Significant changes to existing conditions or betterment third party requests.
- Obtaining construction funding for segments 2, 3 and 4.
- Third party utility modification approvals.



Lone Hill to White Double Track

Design Phase Budget	Current Design Phase LOP	Total Project Forecast	Forecast Completion	Project Complete
\$8.3M	\$8.3M	\$180.0M	2027	4%

Cost: \$4M to account for out of scope of work from the 60% submittal and third-party services.

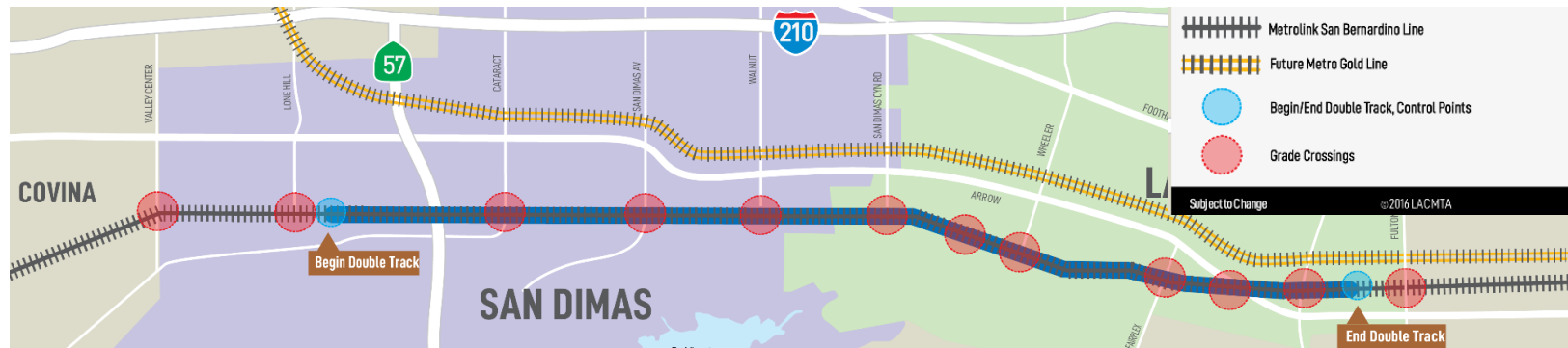
Schedule: One year extension for project reviews and new approving agency oversight.

Mitigation Measures: Staff will continue to seek construction funding and contract modification.

Accomplishments: Preliminary Engineering and CEQA completion and submitted 60% final design.

Challenges/Risks:

- Obtaining \$169.5M to fully fund the project with a construction start by 2026.
- Cities can elect not to proceed with quiet zone ready infrastructure and request soundwalls.



Doran and Broadway/Brazil Grade Separation Project

<u>Design Phase</u>	<u>Available</u>	<u>Total Project</u>	<u>Forecast</u>	<u>Project</u>
<u>Budget</u>	<u>Funding</u>	<u>Forecast</u>	<u>Completion</u>	<u>Complete</u>
\$11.0M	\$11.0M	\$279.0M	2030	2%

Cost: \$5M to account for out-of-scope services, third party coordination and other design direction changes.

Schedule: Two-year extension to split the project into two phases and revise Salem/Sperry Overpass per City requests.

Mitigation Measures: Continue to seek construction funding and issue contract modification. Sought full funding for Phase a through grant programs such as Railroad Elimination Crossing, Consolidated Rail Infrastructure and Safety Improvements (CRISI), and Transit and Intercity Rail Capital Program (TIRCP). If awarded, seeking same programs for Phase B in 2024.

Accomplishments:

- Army Corps approved geotechnical boring within the Verdugo Wash
- Submitted \$38.5M request through the 2022 Railroad Crossing Elimination/Consolidated Rail Infrastructure and Safety Improvements Programs to fully fund Phase A improvements

Challenges/Risks:

- Obtaining construction funding for the Salem/Sperry Overpass (\$220.5M) and the Doran Street Grade Separation project (\$53.3M) and agency design approvals.

Doran Street Active Transportation Project

Design Phase	Available	Total Project	Forecast	Project
<u>Budget</u>	<u>Funding</u>	<u>Forecast</u>	<u>Completion</u>	<u>Complete</u>
\$3.0M	\$19.3M	\$25.0M	2025	0%

Cost: No Change.

Schedule: One year to start and complete design build procurement documents.

Mitigation Measures: Issue task order to prepare bidding documents.

Accomplishments:

- Project has received CEQA Notice of Exemption approval.

Challenges/Risks:

- Maintain \$16.3M of ATP grant funding and secure remaining \$5.7M needed for project.
- Obtaining Army Corps approval to construct the Riverwalk Bridge project.



Doran Street Interim Improvements

Construction
Phase Budget
\$9.0M

Available
Funding
\$9.0M

Current Forecast
LOP Budget
\$9.0M

Forecast
Completion
2025

Project
Complete
0%

Cost: No Change.

Schedule: Construction schedule extended while waiting for 2022 Railroad Crossing Elimination/ Consolidated Rail Infrastructure and Safety Improvement Program award notification for grade separation work with approval from California Public Utilities Commission (CPUC).

Mitigation Measures: Seeking board approval for \$600k for real estate costs for acquisition work at the Propane Facility.

Accomplishments:

- Completed construction of Broadway/Brazil traffic signal improvements.
- Final design approval for all project partners.

Challenges/Risks:

- Resume right-of-way work to meet revised CPUC approved construction completion.





PROJECTS IN CLOSEOUT



Crenshaw/LAX Transit Project

**Original
LOP**
\$1,749.0M

**Current
LOP**
\$2,148.0M

**Current
Forecast**
\$2,148.0M

**Change in Forecast
Completion**
Fall 2019 to
Fall 2022

**Project
Complete**
99.9%



Crenshaw/LAX Transit

Cost: Anticipated LOP increase in FY24 due to current risks as noted below.

Schedule: Started revenue service October 7, 2022. Project's Final Acceptance is anticipated by fall 2023.

Mitigation Measures: Negotiating outstanding change orders including credit and Request for Equitable Adjustment (REA) resolution.

Accomplishments:

- Started Revenue service with minimum issues reported.
- Safety Certification Verification Report (SCVR) was submitted to CPUC on 9/13/22 and approved and accepted by CPUC on 9/28/2022.
- Metro Operations completed "K-Line Standard Operating Procedures" and operator training.
- Continue to resolve outstanding changes including credit change orders.

Challenges/Risks:

- Project Team continues to make progress to finish the remaining work including punch list items, training, submittals, and as-built drawings to achieve the Project's Final Acceptance.
- The closing and resolving remaining California Public Utility Commission (CPUC) non-safety critical open items is progressing slower than anticipated.
- Resolution of REA claim has slipped by three months.
- Additional funding will be needed to address REA resolution.

Soundwall Package 11

<u>Original LOP</u>	<u>Current LOP</u>	<u>Current Forecast</u>	<u>Forecast Completion</u>	<u>Project Complete</u>
\$98.38M	\$102.5M	\$109.2M	Summer 2023	93.2%

Cost: Additional anticipated LOP increase of \$6.7M in FY23 Q3 due to ongoing vandalism and maintenance costs.

Schedule: No schedule change in FY24.

Mitigation Measures: Working with CALTRANS and getting them to accept ownership. Metro and CALTRANS are collaborating to resolve the issues and determine a joint path forward..

Accomplishments:

- NTP for Soundwall Package 11 December 2017 (FY18 Q2); Period of Performance is 48 months
- Board for LOP increase January 2021
- Substantial Completion: February 2022 (FY22 Q3)
- Punchlist / All construction complete: April 2022 (FY22 Q4)
- Contract Close-out: July 2022 (FY23 Q1)
- Project Close-out: June 2023 (FY23 Q4)
- Completed 99% of current Contract Value

Challenges/Risks:

- Homeless encampments along the job site
- Recurring vandalism and theft
- Timely billing by DWP and other 3rd parties
- CALTRANS not taking ownership keeps maintenance costs on Metro books impacting LOP.

