

Los Angeles County
Metropolitan Transportation Authority

Regional Connector Transit Project

MONTHLY PROJECT STATUS REPORT

February 2020



Metro

REGIONAL CONNECTOR TRANSIT PROJECT

MONTHLY PROJECT STATUS REPORT

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February 2020

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PROJECT OVERVIEW

Project Background

The Regional Connector Transit Project (Project) will link the terminus of the Blue and Expo Lines at 7th/Metro Center to the Gold Line near the current Little Tokyo/Arts District Station through a new 1.9-mile underground alignment in downtown Los Angeles. The alignment includes three underground stations: Grand Av Arts/Bunker Hill; Historic Broadway; and Little Tokyo/Arts District.

From the existing 7th Street/Metro Center Station, the Project alignment will extend north under Flower Street to 2nd Street. It will then proceed east underneath 2nd Street to just west of Central Avenue where the alignment will veer northeast under privately-held property to the new Little Tokyo/Arts District Station at 1st and Central. The alignment continues briefly eastward through a Wye Junction (Wye) constructed beneath the 1st and Alameda intersection. To the north of the Wye at Temple and Alameda, and to the east of the Wye at 1st and Vignes, trains will connect with the Gold Line by rising to the surface through two new transition portals heading north to Pasadena, and east to East Los Angeles.



Upon completion, the Project will in effect facilitate regional light rail service along a 49-mile north-south route – Azusa to Long Beach, and a 23-mile east-west route – East LA to Santa Monica.

Passenger forecasts in 2035, as a result of the improved service, indicate 90,000 daily transit trips will occur through the 1.9-mile downtown trunk, including 17,000 new riders.

The above Project configuration is based on years of planning and environmental work that is reflected in the following milestones:

- Metro Board approval of Alternative Analysis – January 2009
- Initiation of Draft EIS/EIR – February 2009
- Initiation of Preliminary Engineering (PE) – January 2011
- Metro Board certification of Final EIS/EIR – April 2012
- FTA issuance of Record of Decision – June 2012
- PE and Advanced PE complete – March 2013
- FTA award of Full Funding Grant Agreement – February 2014.

Major Procurements

Utility Relocation: Advanced Utility Relocation Contract, C0981R, was awarded to Pulice Construction, Inc. in January 2014 and the Notice to Proceed (NTP) issued on February 18, 2014. Contract C0981R was terminated for convenience on April 14, 2015 and remaining AUR work was transferred to the C0980 Design/Build (D/B) Contractor.

Guideway & Systems Contract: The Board authorized to solicit a major D/B contract, C0980, in August 2011. A contract was awarded on April 24, 2014 to Regional Connector Constructors (RCC), a joint venture of Skanska USA Civil West California District, Inc. and Traylor Brothers, Inc. in the amount of \$927,226,995. NTP was issued July 7, 2014. The final engineering and design for the joint venture was performed by Mott McDonald.

Vehicles: Metro is procuring four (4) Light Rail Vehicles (LRVs) for the Project. The vehicles are being built and delivered by Kinkisharyo International, LLC under Option 2 of Contract P3010. Delivery and acceptance of four LRVs is under review by Metro and Kinkisharyo. The outlook appears to be mid-2020.

Rail Operations Center (ROC): The existing functional operations at the ROC are being expanded to accommodate the central control functions associated with five new rail lines to include Regional Connector. The Project is contributing \$4.07M towards this expansion which is scheduled to be completed by June 2021.

Fare Collection: Procurement of Universal Fare System and Ticket Vending Machine equipment was completed in January 2018 with award to Cubic Corporation. Metro is coordinating with RCC for installation and testing schedules, which are currently expected to begin in late 2020. The scope addition of fare transfer equipment in the three Regional Connector stations is on hold pending decision to proceed. A decision will be made in 2020.

Program Management

The RCC contract is being managed by a team of Metro and consultant personnel jointly located at the Integrated Project Management Office (IPMO). The consultant component is comprised of The Connector Partnership, a joint venture between AECOM, Inc. and WSP (CPJV) which provides engineering and design support services while Arcadis, Inc., provides construction management support services. An overview of management staffing is provided under the Staffing Section of this report. The on-site program management team is also supported by Metro Headquarters resources to include, but not limited to, engineering, risk management, environmental, quality management, operations and creative services departments.

Project Schedule and Budget: The Revenue Service Date (RSD) is planned for Summer/Fall 2022.

In January 2017, the Metro Board revised the Life of Project (LOP) Budget for Regional Connector Transit Project 860228 to \$1.756 billion. The LOP budget for Concurrent Non-FFGA activities related to Project 861228 *was increased to \$46.4 million to include radio communication elements at 7th/Metro Center*. Financing costs are estimated at \$14M. Cost forecasts remain consistent with budgets. A detailed FFGA budget forecast is included under the Project Cost Section of this report.

Funding has been secured from a variety of sources, detailed in the Financial/Grant Section on Page 18, to include:

- Federal New Starts Grant
- Federal Congestion Management Air Quality and RIP Programs
- USDOT TIFIA loan proceeds
- State Proposition 1A/1B and Capital Project Loan proceeds
- City of Los Angeles
- Lease revenues.

Construction and Community Relations: The Construction and Community Relations Team is tasked with promoting the Project and performing public outreach within the communities to keep stakeholders informed of construction activities occurring along the Project alignment. To facilitate the communication, community leadership councils have been formed which represent geographic-based constituent groups along the alignment.

The Project is also engaged in social media outreach and various marketing and advertising efforts designed to keep the public informed and supportive of the Project. These efforts are aimed at promoting businesses that are affected by construction. An overview of monthly activities is presented in the Construction and Community Relation Section of this report.

System Integration: The Project's integration of three separate lines, each possessing distinct system technologies, presents significant challenges for both the Project and Metro at-large. Extensive planning continues to be performed to define logistics of the systems' cut-overs that will be required. The Project will continue to coordinate the completed systems interface design, with on-going procurement in preparation for construction and testing as Metro maintains revenue service on the three operating lines.

Rail Activation: The Project and Metro Operations recognize the extensive planning required in preparation for rail activation of the new regional light rail service the Project will enable through downtown Los Angeles. The training of 400+ operators and supervisors across the regions has surfaced as a key component to rail activation. This training will require dedicated time during rail activation to ensure safety.

Planning efforts have outlined a sequence of dependent testing, training, simulation, and safety certification. From the sequence, a twenty-week schedule has been developed to guide the testing, rail activation and start-up. The twenty weeks are initiated by the Project's issuance of the Substantial Completion milestone to RCC.

EXECUTIVE SUMMARY

In *February*, the Project achieved 63.7% completion based on earned value measurements for design and construction. The focus of the Project is on facilitating advancement of construction activities throughout the alignment.

The following is an overview of current design and construction activities.

Design Status

Miscellaneous design changes to approved design packages continue to be managed as an Engineering Change Instruction (ECI), enabling required changes to be promptly addressed while the balance of the scope is built.

Construction Status

1st Street Cut & Cover Tunnel & U-Channel: *Continued* backfill at the Cut & Cover Tunnel section. *Started emergency walkways in the tunnel sections. Started rail welding and provisioning of Continuous Welded Rail (CWR) to the stockpile area located in the bored tunnel section between the SEM and the future Little Tokyo/Arts District Station.*

Wye Structure: *Completed the removal of the interfering pin piles. Completed emergency walkways.*

Little Tokyo/Arts District Station: *Completed walls for the platform deck. Continued west Ancillary tunnel/vent deck.*

Floating Slab Track: *Continued delivery and staging of material and pre-cast segments at Grand Av Arts/Bunker Hill Station. A total of 214 segments installed in the left tunnel; and 150 segments in the right tunnel. The installation was suspended due to fabrication delays, which continued through February. Resumption of the slab pre-casting is anticipated in late March.*

Historic Broadway Station: *In the station box area, continued the west concourse level exterior walls. Continued east platform level exterior walls, and walls for the platform deck. Started the west roof level deck.*

Crossover Cavern: *Continued the plenum and arch concrete placements.*

Grand Av Arts/Bunker Hill Station: *In the west station box area, continued the lower ancillary interior walls. In the center station box area, completed the upper ancillary exterior walls. In the east station box area, started the upper ancillary exterior walls. In the entrance area, continued the upper ancillary level exterior walls. Completed concrete placement for the Emergency Exit 1 & 2 structure invert.*

Flower Cut & Cover Tunnel: *In the south section (5th Street to 7th/Metro Center Station), continued the invert placement and exterior walls.*

Cost and Schedule Summary

As of the reporting date, RCC was late in submitting the January 2020 Schedule Update.

RCC Schedule Metrics

| | Original Contract Date/Duration | Time Extension (CD) | Current Contract Schedule | Forecast (Metro PMS) | Variance CD (Trending) |
|------------------------|--|----------------------------|----------------------------------|-----------------------------|-------------------------------|
| NTP | 7/7/14 | | | | |
| Substantial Completion | 10/22/20 | 527 | 04/01/22 | 05/16/22 | -45 days |

Critical Path

This month the critical path continued through the future Little Tokyo/Arts District Station. *The current focus is the upper ancillary level exterior walls, which will then be followed by the roof deck. After station concrete and backfill are completed, the critical path continues through the track and systems installations. After the majority of the systems installations are complete, systems integration will commence and continue through pre-revenue testing.*

Costs

Project costs continue to track within budget. Contingency draw-downs are lagging as large modifications continue to take longer to reconcile. However, no material net variance in contingency use is anticipated. To date, the design and construction changes related to base scope represent approximately 6.8% of the contract value. There is one notice of intent to claim by RCC. The notice relates to Historic Broadway Station SOE stability issues. Detailed cost and budget information is provided on Page 13.

Key Management Concerns

Item 1: Given the impact the Project will have on light rail operations through downtown Los Angeles and the region, the Rail Activation effort is exceedingly complex. Schedule and cost impacts are likely to surface.

Status/Action: Ongoing cut-over, testing and rail activation meetings are being conducted with various Metro Departments. Through this process, specific work items have been identified and those requiring further investigation are being evaluated *and attended-to when possible*. Notwithstanding considerable progress, planning meetings continue, as the team plans the complex rail activation and certification process. Cutover requirements may stress Metro resource availability.

Item 2: Design comments from the over-build developer at the Historic Broadway Station has led to design revisions with cost impacts.

Status/Action: Metro/RCC have collaborated closely with the developer and finalized design elements necessary to meet development objectives while working within available budget. Constructability analysis has been completed with acceptance of the design by the developer. Metro is now moving to reconcile final design and construction costs dictated by the agreed-to design. Related change notices have been issued to RCC. Cost and schedule proposals are pending.

Item 3: Installation of CTS link for the Gold Line Eastside Extension during Bus Bridge #3 has been delayed due to procurement set-backs. If not remedied, the delays will adversely impact schedule and costs.

Status/Action: Design workarounds *have been identified and agreed to by all stakeholders to provide routing of dual fiber optic lines from the 1st Street bridge through Division 20 to Union Station*. These designs are *utilizing* temporary and permanent infrastructure options, to meet the Project's needs.

Item 4: *Multiple utility rearrangements remain to be completed as the Project enters street restoration phase. If not properly managed, there is a budget and schedule risk.*

Status/Action: *Metro and RCC teams are meeting regularly to review priority work and track progress on design and construction.*

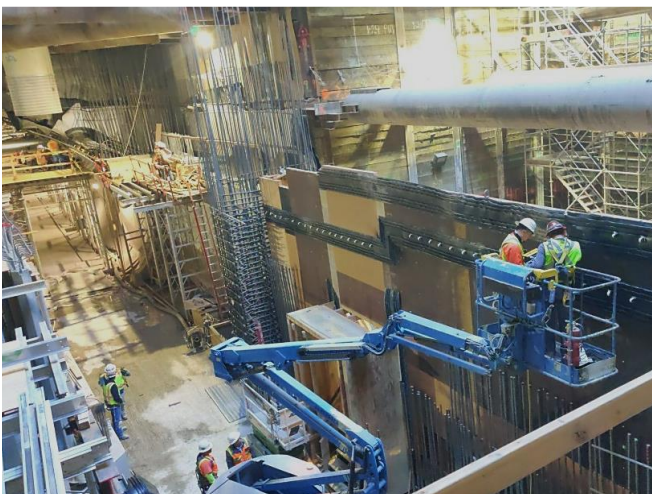
Project Construction Photos



400' CWR stringers being pulled into right tunnel on rollers at 1st St Leg



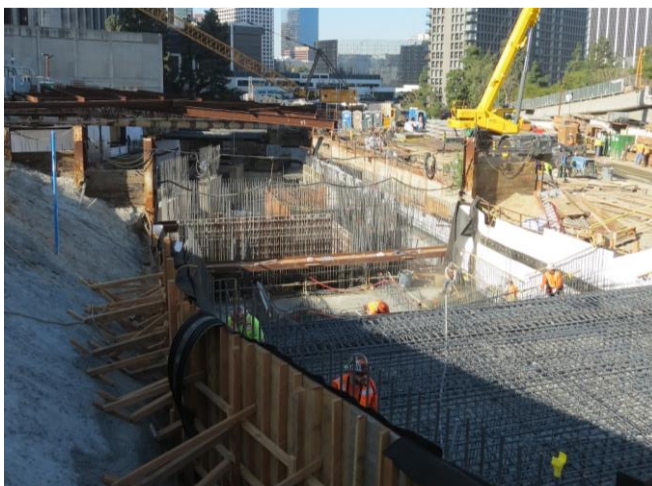
Street restoration at 1st/Alameda



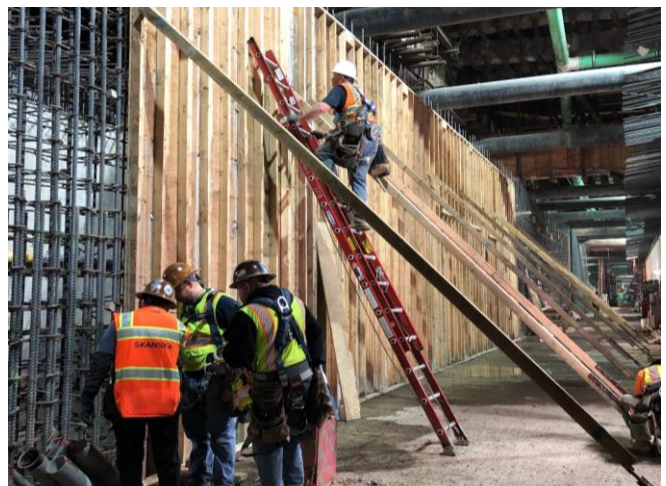
Waterbar fabrication and installation at Historic Broadway Station



SEM Cavern post plenum placement



Rebar installation at Upper Ancillary Level at Grand Av Arts/Bunker Hill Station

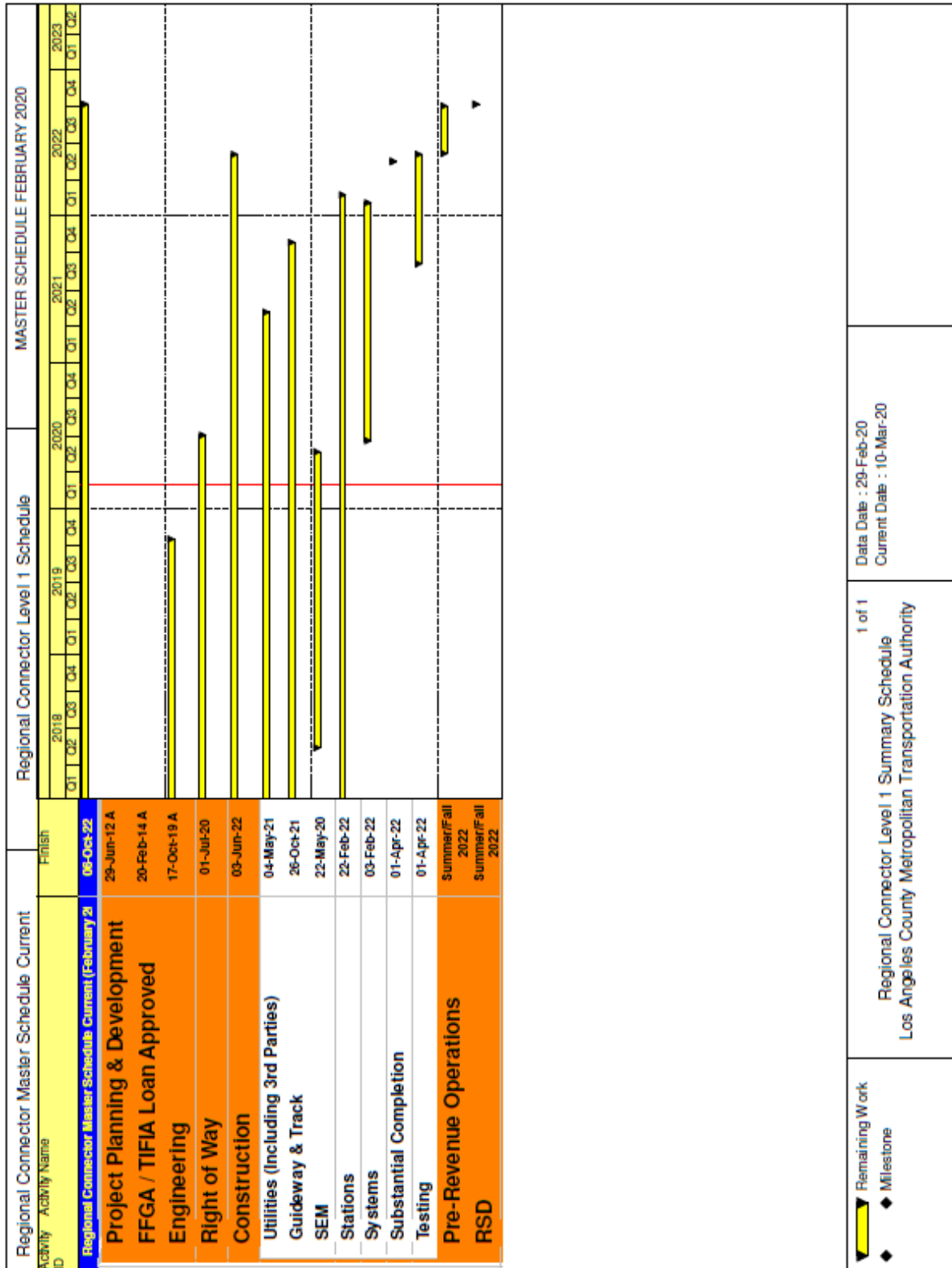


Wall form placement at center wall at Flower

PROJECT UPDATE

PROJECT SCHEDULE

Project Summary Schedule

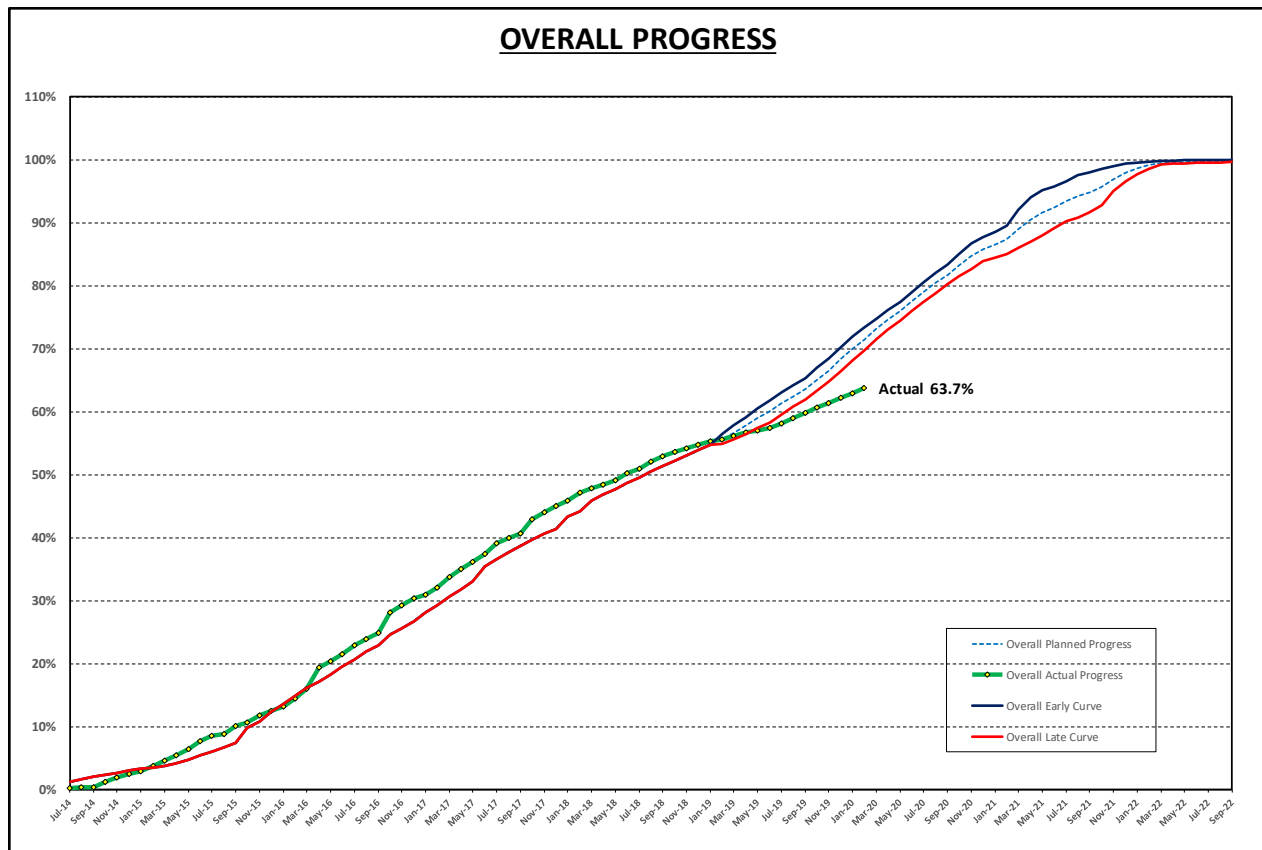


Progress Summary

| | Status | Change from Last Month | Comment |
|---|------------------|------------------------|---------|
| Forecast Revenue Service | Summer/Fall 2022 | None | |
| Proposed TIFIA Revenue Service | 2/25/2023 | None | |
| Proposed FFGA Revenue Service | 2/25/2023 | None | |
| Final Design Progress: | | | |
| Contract C0980 | 100% | 0.0% | |
| Construction Contracts Progress: | | | |
| Contract C0981R & C0980 | 61.8% | 0.8% | |

Note: Construction Progress excludes General Requirements, Construction and Design Mobilization, Final Design and Provisional Sum costs (Schedule C). Progress values include executed modifications and change orders.









Planned vs. Actual Progress



Current overall planned progress reflects median of early and late finish dates.

Key Milestone Six-Month Look Ahead

| | Milestone Date | Feb-20 | Mar-20 | Apr-20 | May-20 | Jun-20 | Jul-20 |
|---|----------------|--------|--------|--------|--------|--------|--------|
| Complete West Concourse Station Platform Walls at Grand Ave / Bunker Hill Station | 02/7/20 A | ◻ | | | | | |
| Complete Wye Cut & Cover Tunnel Pin Pile Removal | 2/13/20 A | ◻ | | | | | |
| Complete Lower Ancillary Level Walls at Grand Ave / Bunker Hill Station | 03/02/20 | | ◻ | | | | |
| Complete West Concourse Station Box Exterior Walls at Historic Broadway Station | 03/04/20 | | ◻ | | | | |
| Complete West Ancillary Tunnel Vent Fan Deck at Little Tokyo / Art District Station | 03/06/20 | | ◻ | | | | |
| Complete SEM Plenum Slab Concrete | 03/20/20 | | ◻ | | | | |
| Complete Wye Cut & Cover Tunnel Temporary Deck Removal | 03/29/20 | | ◻ | | | | |
| Complete Fabrication Pre-Cast Floating Slab Sections | 04/01/20 | | | ◻ | | | |
| Complete South Flower Cut & Cover Tunnel Invert | 04/10/20 | | | ◻ | | | |
| Complete Upper Ancillary Level Walls at Grand Ave / Bunker Hill Station | 05/19/20 | | | | ◻ | | |
| Complete Station Entrance Ancillary Deck at Historic Broadway Station | 06/26/20 | | | | | ◻ | |
| Complete Flower Cut & Cover Emergency Exit Level 1 Stairs | 07/09/20 | | | | | | ◻ |

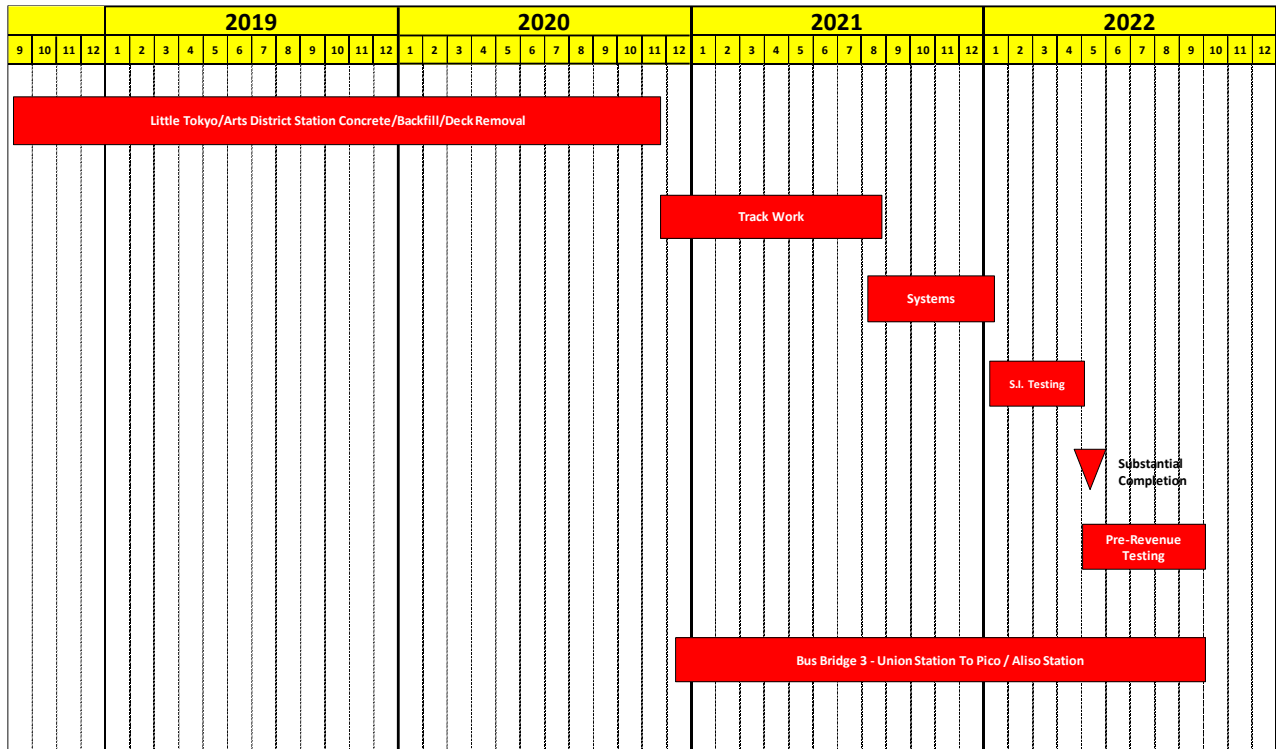
| | | | |
|--|--|--|--|
|  MTA Staff |  MTA Board Action |  FTA (Federal Transit Administration) |  Utility Company |
|  Other Agencies |  Contractors |  Design Consultant |  C0980 D/B Contractor |
| *A* following date is actual and completed | | * New | |

Major Equipment Delivery

Metro Supplied Equipment

| Equipment | Initial Procurement | Scheduled Delivery | Scheduled Installation |
|-------------------------|---------------------|----------------------------|---------------------------|
| LRT Vehicles | (NTP) 08/20/2012 | Option 2 06/30/2020 | N/A |
| Ticket Vending Machines | ~ 01/30/2018 | 07/08/19 A (warehoused) | 05/25/2021 ~08/26/2021 |

Critical Path (C0980)



This month, the critical path continues to run through the future Little Tokyo/Arts District Station structure.

In Metro’s Project Master Schedule, the primary critical path is traced through the future Little Tokyo/Arts District Station concrete. The critical path runs through structural concrete. The current focus is the ancillary upper level exterior walls.

After station concrete and backfill are completed, the critical path continues through the *track installation* and will be followed by the critical OCS and train control installations. After the majority of the systems installations are complete, systems integration and testing will commence.

PROJECT COST

Project Cost Analysis – 860228

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT (860228)
COST REPORT
DOLLARS IN THOUSANDS

| SCC CODE | | FFGA BUDGET | ORIGINAL BUDGET | CURRENT BUDGET | | COMMITMENTS | | EXPENDITURES | | CURRENT FORECAST | | BUDGET/ FORECAST VARIANCE |
|----------|--|-------------|-----------------|----------------|-----------|-------------|-----------|--------------|-----------|------------------|-----------|---------------------------|
| | | | | PERIOD | TO DATE | PERIOD | TO DATE | PERIOD | TO DATE | PERIOD | TO DATE | |
| 10 | GUIDEWAYS & TRACK ELEMENTS | 280,622 | 204,691 | 0 | 272,696 | 4,806 | 258,459 | 2,780 | 196,394 | 610 | 274,336 | 1,639 |
| 20 | STATIONS, STOPS, TERMINALS, INTERMODAL | 354,268 | 219,477 | 0 | 230,857 | 0 | 229,795 | 1,940 | 92,001 | 2,372 | 234,172 | 3,315 |
| 30 | SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 40 | SITework & SPECIAL CONDITIONS | 141,785 | 422,453 | 0 | 626,831 | 145 | 581,306 | 5,937 | 489,515 | 2,333 | 629,163 | 2,333 |
| 50 | SYSTEMS | 69,667 | 73,848 | 0 | 77,972 | 0 | 67,724 | 70 | 18,758 | 1,042 | 79,014 | 1,042 |
| | CONSTRUCTION SUBTOTAL (10-50) | 846,343 | 920,468 | 0 | 1,208,356 | 4,950 | 1,137,285 | 10,727 | 796,667 | 6,357 | 1,216,684 | 8,329 |
| 60 | ROW, LAND, EXISTING IMPROVEMENTS | 115,889 | 74,208 | 0 | 59,315 | 0 | 52,630 | 0 | 52,623 | 0 | 59,315 | 0 |
| 70 | VEHICLES | 16,275 | 16,275 | 0 | 16,275 | 0 | 16,275 | 183 | 7,499 | 0 | 16,275 | 0 |
| 80 | PROFESSIONAL SERVICES | 261,455 | 257,973 | 0 | 394,216 | 576 | 325,667 | 1,258 | 305,412 | 313 | 395,572 | 1,356 |
| | SUBTOTAL (10-80) | 1,239,963 | 1,268,925 | 0 | 1,678,162 | 5,526 | 1,531,857 | 12,169 | 1,162,202 | 6,669 | 1,687,847 | 9,685 |
| 90 | UNALLOCATED CONTINGENCY | 135,399 | 126,892 | 0 | 51,179 | 0 | 0 | 0 | 0 | -6,669 | 41,494 | -9,685 |
| 100 | FINANCE CHARGES | 27,571 | 7,115 | 0 | 14,301 | 0 | 0 | 0 | 0 | 0 | 14,301 | 0 |
| | TOTAL PROJECTS (10-100) | 1,402,932 | 1,402,932 | 0 | 1,743,642 | 5,526 | 1,531,857 | 12,169 | 1,162,202 | 0 | 1,743,642 | 0 |
| | ENVIRONMENTAL/PLANNING - 400228 | | 6,075 | 0 | 6,075 | 0 | 6,075 | 0 | 6,075 | 0 | 6,075 | 0 |
| | ENVIRONMENTAL/PLANNING - 460228 | | 18,125 | 0 | 20,425 | 0 | 20,425 | 0 | 18,988 | 0 | 20,425 | 0 |
| | TOTAL PROJECTS (EVN/PLAN'G) | | 24,200 | 0 | 26,500 | 0 | 26,500 | 0 | 25,063 | 0 | 26,500 | 0 |
| | TOTAL | 1,402,932 | 1,427,132 | 0 | 1,770,142 | 5,526 | 1,558,356 | 12,169 | 1,187,265 | 0 | 1,770,142 | 0 |

Original Budget:

The Original Budget of \$1.427 billion reflects the April 2014 Board approved LOP Budget, plus finance costs of \$7.1 million.

Current Budget:

In January 2017, the Metro Board revised the LOP Budget for the Regional Connector Project 860228 to \$1.756 billion. Finance costs, estimated at \$14.3 million, are also reflected leading to a total of \$1.770 billion. Budgets were adjusted throughout the SCC structure reflecting revised values as of September 30, 2019.

Commitments:

Overall commitments increased by \$5.5 million this month to \$1.56 billion which represents 88.0% of the Current Budget. The increase is related to RCC executed mods, and purchase orders from Legal and PMA.

Expenditures:

Expenditures are cumulative through February 2020 and increased by \$12.2 million this month for costs associated with C0980 Design Build Contract, Engineering Management Support, Metro Project Administration, Construction Management Support Services, Third Party Master Cooperative Agreements with the City of LA, Community Relations, and Environmental Consultant Services. The \$1.19 billion in expenditures to date represent 67.1% of the Current Budget.

Current Forecast:

The total current forecast remains equal to the total current budget.

Project Cost Analysis – 861228

CONCURRENT NON-FFGA ACTIVITIES (861228)
PROJECT COST STATUS BY FTA SCC
DOLLARS IN THOUSANDS

| SCC CODE | | ORIGINAL BUDGET | CURRENT BUDGET | | COMMITMENTS | | EXPENDITURES | | CURRENT FORECAST | | BUDGET/ FORECAST VARIANCE |
|----------|--|-----------------|----------------|---------|-------------|---------|--------------|---------|------------------|---------|---------------------------|
| | | | PERIOD | TO DATE | PERIOD | TO DATE | PERIOD | TO DATE | PERIOD | TO DATE | |
| 10 | GUIDEWAYS & TRACK ELEMENTS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20 | STATIONS, STOPS, TERMINALS, INTERMODAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30 | SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS | 10,480 | 0 | 10,480 | 0 | 10,480 | 0 | 0 | 0 | 10,480 | 0 |
| 40 | SITWORK & SPECIAL CONDITIONS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 50 | SYSTEMS | 0 | 0 | 5,950 | 0 | 500 | 0 | 0 | 0 | 5,950 | 0 |
| | CONSTRUCTION SUBTOTAL (10-50) | 10,480 | 0 | 16,430 | 0 | 10,980 | 0 | 0 | 0 | 16,430 | 0 |
| 60 | ROW, LAND, EXISTING IMPROVEMENTS | 27,748 | 0 | 27,748 | 0 | 27,748 | 0 | 22,470 | 0 | 27,748 | 0 |
| 70 | VEHICLES | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 80 | PROFESSIONAL SERVICES | 650 | 0 | 1,150 | 0 | 646 | 3 | 399 | 0 | 1,150 | 0 |
| | SUBTOTAL (10-80) | 38,878 | 0 | 45,328 | 0 | 39,374 | 3 | 22,869 | 0 | 45,328 | 0 |
| 90 | UNALLOCATED CONTINGENCY | 1,113 | 0 | 1,113 | 0 | 0 | 0 | 0 | 0 | 1,113 | 0 |
| 100 | FINANCE CHARGES | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | TOTAL PROJECTS (10-100) | 39,991 | 0 | 46,441 | 0 | 39,374 | 3 | 22,869 | 0 | 46,441 | 0 |
| | 861228 TOTAL | 39,991 | 0 | 46,441 | 0 | 39,374 | 3 | 22,869 | 0 | 46,441 | 0 |

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH FEB 2020.

Original Budget:

The Original Budget reflects the Board approved LOP Budget established April 24, 2014.

Current Budget:

The budget reflects the addition of \$6.49 million added by the Metro Board in December 2019.

Commitments:

Commitments reflect actions through January 2020.

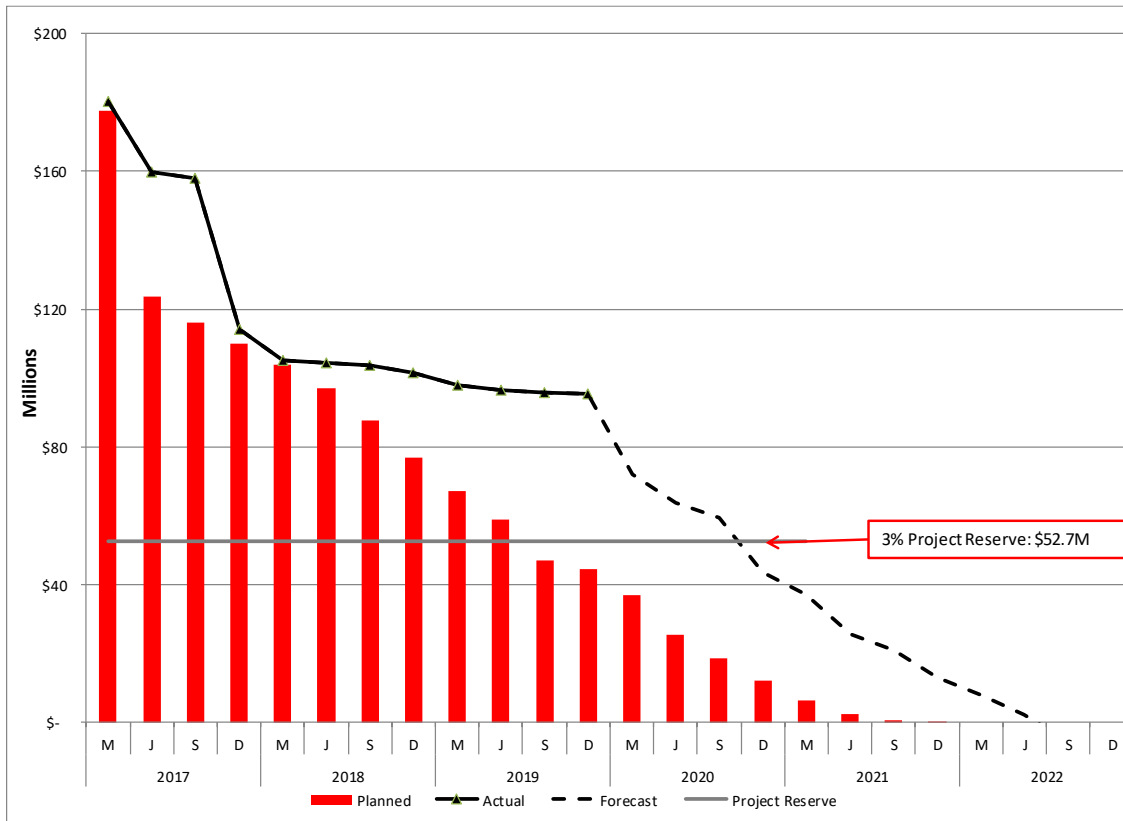
Expenditures:

Expenditures are cumulative through February 2020 and this month's expenditures increased by \$3 thousand. The cumulative \$22.9 million through February 2020 represent 49.2% of the Current Budget.

Current Forecast:

The total current forecast remains unchanged this month.

Cost Contingency Drawdown



Cost Contingency Drawdown Analysis

In January 2017, the Metro Board revised the LOP Budget to \$1.756 billion, which included increasing the unallocated contingency to \$89 million and allocated contingency to \$92.8 million. From that action, a revised drawdown plan for unallocated contingency, correlated to anticipate risk trends, was developed to monitor and measure drawdowns moving forward.

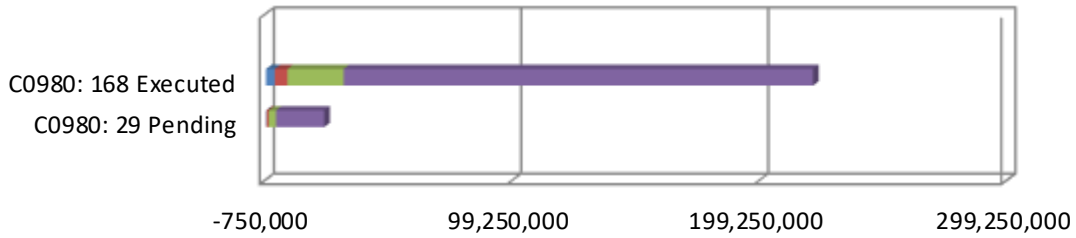
Highlighted in the drawdown is a 3% Project Reserve threshold measured against the LOP Budget. Metro’s Board is to be notified when it becomes necessary to drawdown contingency below the threshold to cover Project costs.

In *February*, there was a \$5.06 million drawdown from contingency due to executed mods. The remaining total Project Contingency (allocated and unallocated) remains \$95.7 million this month.

| PROJECT COST CONTINGENCY | | | | | | |
|--------------------------|----------------------|-----------------|-----------------|----------------|-----------------|----------------------------------|
| DOLLARS IN THOUSANDS | | | | | | |
| | Original Contingency | LOP Contingency | Previous Period | Current Period | To-Date | Remaining Contingency (Forecast) |
| Unallocated Contingency | 124,919 | 89,946 | (44,768) | (3,684) | (48,452) | 41,494 |
| Allocated Contingency | 86,345 | 92,809 | (37,226) | (1,380) | (38,606) | 54,203 |
| Total Contingency | 211,263 | 182,754 | (81,994) | (5,064) | (87,058) | 95,696 |

Summary of Contract Modifications

Contract Modifications (MODs) by Cost Level



| | C0980 | | Total |
|------------------------------|--------------------|--------------------|--------------------|
| | 168 Executed | 29 Pending | |
| ■ Under \$100K | 3,578,281 | 287,958 | 3,866,239 |
| ■ \$100K to \$250K | 5,196,703 | 872,019 | 6,068,722 |
| ■ \$250K to \$1M | 22,672,351 | 2,896,269 | 25,568,620 |
| ■ Over \$1M | 189,877,940 | 19,500,000 | 209,377,940 |
| Total Contract MODs | 221,325,275 | 23,556,246 | 244,881,522 |
| Contract Award Amount | 927,226,995 | 927,226,995 | |
| % of Contract MODs | 23.9% | 2.5% | |

Note:

1. Percent of Contract MODs equals the Total Contract MODs divided by the Contract Award Amount.
2. Pending Mods are under negotiation.

One hundred and sixty-eight (168) changes with a total value of \$221.3 million have been executed since NTP of Contract C0980. An additional 29 changes, with a total estimated value of \$23.6 million, are pending.

DISADVANTAGED BUSINESS ENTERPRISE (DBE)

As of *January 2020*:

| | |
|---|---------------------|
| DBE Commitment – Design The percentage of funds apportioned to Design Contracts | 22.63% |
| Current DBE Commitment Design Total DBE Committed Dollars divided by Total Contract Value for Design | \$14.5M (22.63%) |
| Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime | 24.04% |

Thirteen (13) Design DBE sub-consultants have been identified to date.

| | |
|--|-------------------|
| DBE Commitment – Construction The percentage of funds apportioned to Construction Contracts | 18% |
| Current DBE Commitment Construction Contract commitment divided by current contract value for Construction | \$194.9M (18%) |
| Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime | 15.18% |

Ninety-six (96) Construction DBE sub-contractors have been identified to date.

PROJECT LABOR AGREEMENTS (PLA)

As of *January 2020*:

| | |
|---|--------|
| Targeted Worker Goal Construction work to be performed by residents from Economically Disadvantaged Area in the United States | 40.00% |
| Targeted Worker Current Attainment | 59.65% |
| Apprentice Worker Goal Construction work to be performed by Apprentices | 20.00% |
| Apprentice Worker Current Attainment | 18.39% |
| Disadvantaged Worker Goal Construction work to be performed by Disadvantaged Workers who are residents of the United States | 10.00% |
| Disadvantaged Worker Current Attainment | 10.25% |

FINANCIAL/GRANT

Status of Funds by Source

February 2020

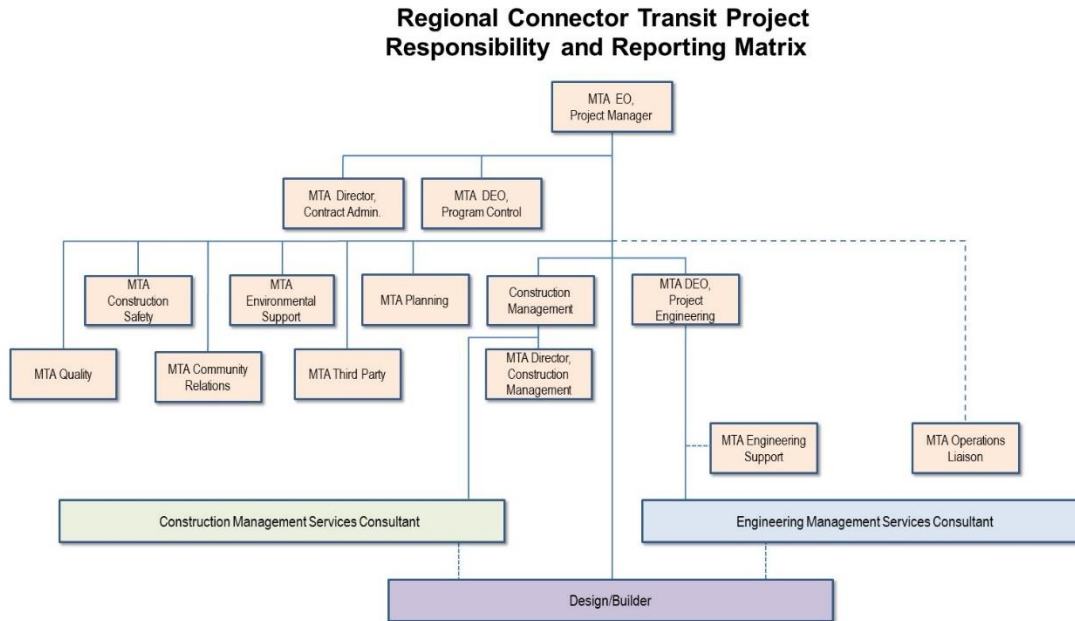
| SOURCE | ORIGINAL BUDGET | TOTAL FUNDS ANTICIPATED | TOTAL FUNDS AVAILABLE | COMMITMENTS | | EXPENDITURES | | BILLED TO FUNDING SOURCE | |
|--|-------------------|-------------------------|-----------------------|-------------------|------------|-------------------|------------|--------------------------|------------|
| | | | | \$ | % | \$ | % | \$ | % |
| FEDERAL - CMAQ | \$64.00 | \$218.11 | \$64.00 | \$131.91 | 60% | \$54.98 | 25% | \$46.13 | 21% |
| FEDERAL - SECTION 5309 NEW STARTS | \$669.90 | \$669.90 | \$665.00 | \$652.35 | 97% | \$422.86 | 63% | \$411.84 | 61% |
| FEDERAL - RIP | \$0.00 | \$1.41 | \$1.41 | \$1.41 | 100% | \$1.41 | 100% | \$1.41 | 100% |
| MEASURE R - TIFIA LOAN | \$160.00 | \$160.00 | \$141.89 | \$160.00 | 100% | \$141.89 | 89% | \$141.89 | 89% |
| STATE PROPOSITION 1A HSRB * | \$114.87 | \$114.87 | \$114.87 | \$114.87 | 100% | \$114.87 | 100% | \$114.87 | 100% |
| STATE PROPOSITION 1B PTMISEA ** | \$149.50 | \$135.16 | \$135.16 | \$135.16 | 100% | \$135.16 | 100% | \$135.16 | 100% |
| STATE STIP RIP | \$2.59 | \$17.00 | \$2.59 | \$16.11 | 95% | \$2.59 | 15% | \$2.59 | 15% |
| STATE CAPITAL PROJECT LOANS - OTHERS *** | \$132.47 | \$274.83 | \$274.83 | \$274.83 | 100% | \$243.79 | 89% | \$224.14 | 82% |
| MEASURE R | \$27.57 | \$0.00 | \$0.00 | \$0.00 | 0% | \$0.00 | 0% | \$0.00 | 0% |
| CITY OF LOS ANGELES | \$41.98 | \$41.98 | \$28.00 | \$30.00 | 71% | \$28.00 | 67% | \$28.00 | 67% |
| LEASE REVENUE | \$64.25 | \$79.07 | \$0.00 | \$0.00 | 0% | \$0.00 | 0% | \$0.00 | 0% |
| GENERAL FUND - METRO | \$0.00 | \$43.50 | \$43.50 | \$41.71 | 96% | \$41.71 | 96% | \$41.71 | 96% |
| TOTAL | \$1,427.13 | \$1,755.84 | \$1,371.26 | \$1,558.36 | 89% | \$1,187.27 | 58% | \$1,147.75 | 65% |

NOTES:

1. EXPENDITURES ARE CUMULATIVE THROUGH FEBRUARY 29, 2020
 2. METRO AND TRIBUNE AGREED ON REIMBURSEMENT OF \$1.6 MILLION RELATED TO 2ND/BOARDWAY OVERBUILD.
 3. ORIGINAL BUDGET BASED ON FUNDING PLAN INCLUDED IN THE APPROVED FULL FUNDING GRANT AGREEMENT
 4. LACMTA RESERVES THE ABILITY TO UPDATE COSTS AND CHANGE FUND SOURCES AS REQUIRED.
- * STATE PROPOSITION 1A HIGH SPEED RAIL BONDS
 ** STATE PROPOSITION 1B PUBLIC TRANSPORTATION MODERNIZATION, IMPROVEMENT AND SERVICE ENHANCEMENT ACCOUNT
 *** OTHERS INCLUDE TDA ADMINISTRATION, AND NB PROPOSITION A ADMINISTRATION (FOR A TOTAL OF \$.255M)
 *** OTHERS INCLUDE TDA ADMINISTRATION, AND NB PROPOSITION A ADMINISTRATION (FOR A TOTAL OF \$.255M)

PROJECT ORGANIZATION AND STAFFING

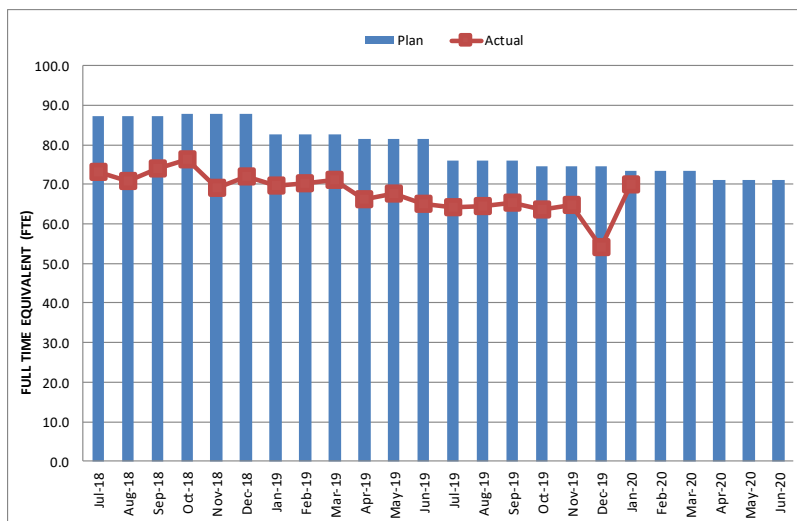
The D/B contract is being managed by a joint team of Metro and consultant personnel jointly located at the Integrated Project Management Office (IPMO).



Updated: 09/2019

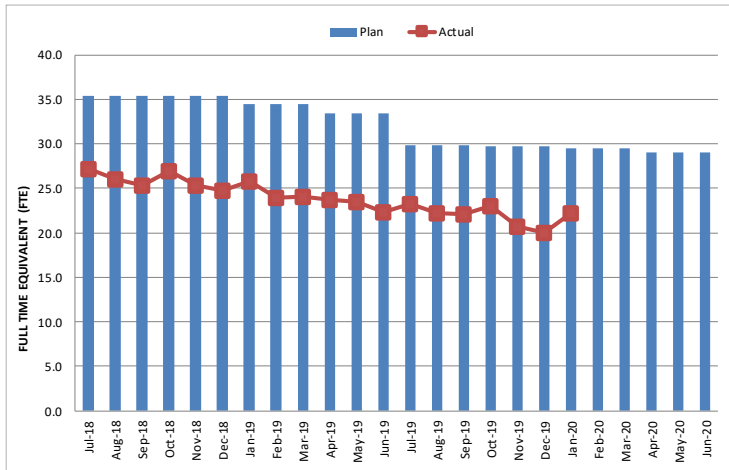
The overall FY20 Total Project Staffing plan averages 73.7 FTE's per month. The total actual project staffing for *January 2020* was 70; 22.2 FTEs for Metro's Project Administration staff and 47.8 FTEs for consulting staff. *Consulting staff FTEs are based on monthly invoice billable hours.* Review of staffing plans is on-going to ensure staffing needs are appropriately managed.

Total Project Staffing – Metro and Consultants

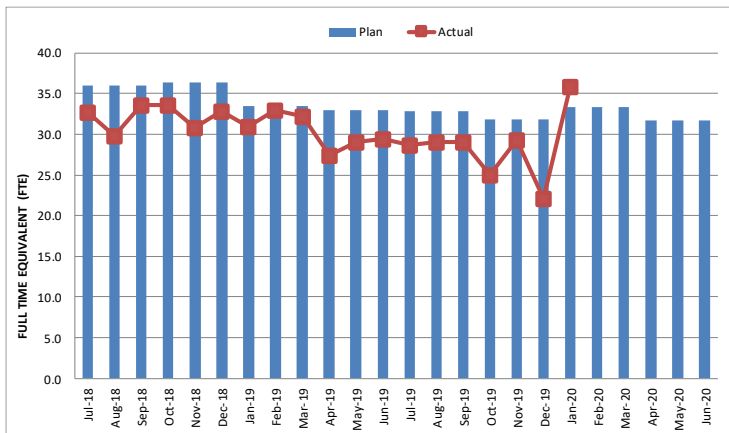


January actuals include 2.4 FTEs related to PMSS Services.

Metro Staff

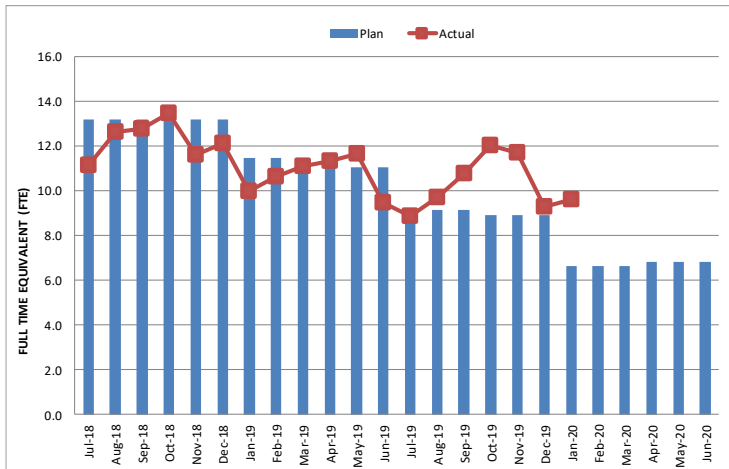


CM Support Services Staff (Consultant)



CMSS January actual FTEs exceeded the forecast due to lower billable hours in December.

Engineering Services Staff (Consultant)



Staffing by Group

The opposing graphs represent planned vs. actual staffing levels by group.

Metro staffing includes full-time staff located in the IPMO as well as part-time support located at Gateway Headquarters.

Staffing plans are developed for each fiscal year based on Project needs.

REAL ESTATE

Open Real Estate Matters – *Seven Parcels Remaining*

City of Los Angeles (Mangrove Parcels)

- Agreement has been reached with the City of Los Angeles to acquire the remaining easements required from the Mangrove Parcel. County Counsel and Real Estate staff are working with the City Attorney and the City staff to finalize the transfer documents for the fan plant easements and the temporary construction easement which will extend to June 2022. FTA and the MTA Board approval of the extension was obtained in July 2019. The outlook for closure of this agreement is *scheduled for second quarter 2020*.

Department of Water and Power 'Duco Yard' – DWP (RC-473)

- The Purchase Agreement has been reviewed and accepted by Metro. Adoption by the LADWP Board is *still* pending.

2nd and Hope

- Unknown Ownership Parcel – *Acquisition of this parcel will be via condemnation and is currently underway.*
- CRALA Parcel – CRALA has accepted the offer; *final documents are being prepared.*
- County of Los Angeles Parcel – the County has accepted the offer; *final documents are being prepared.*
- City of Los Angeles Parcel – Working with City staff on terms and conditions to convey the required right of way.

Tribune

- Finalizing property swap for subsurface easement area.

QUALITY ASSURANCE

Metro QA performed the following activities during the month of *February*:

- Reviewed and provided comments on RCC's quality-related submittals
- Performed oversight verification of RCC's design and construction activities
- Reviewed test results for Portland Cement Concrete, Soils Testing, Asphalt Testing and Non-Destructive Testing of Welding
- Attended "Readiness Review" meetings with RCC
- Attended Bi-Weekly Quality Review Meetings with RCC Quality Management
- Metro QA conducted a surveillance (C980-Surv-2020-01) for the Structural Concrete Placement of the 1st/Central Platform Walls. All activities for this installation were found to be satisfactory and the surveillance was closed.
- *Metro QA conducted a surveillance (C980-Surv-2020-002) for an incoming material inspection at the Mass Electric warehouse for train control components. The components were found to be acceptable and the surveillance was closed.*
- *Metro QA conducted a surveillance (C980-Surv-2020-003) for the placement of the Historic Broadway Station Crossover Cavern ceiling CR-61/BW-72. The installation activities were found to be in compliance and acceptable; and the surveillance was closed.*

RCC NCR 0052 was issued for damaged rigid conduit in the tunnel from Grand Av Arts/Bunker Hill Station to Flower St. The Engineer of Record returned the NCR with two (2) repair options. Metro rejected Option A and approved Option B for the repair. Repairs have been completed to the approved option and the NCR was closed.

RCC NCR 0077 was issued due to damaged rebar for an auxiliary power equipment pad at Grand Av Arts/Bunker Hill Station. The disposition was approved by the Engineer of Record and Metro, repairs were completed, and the NCR was closed.

RCC NCR 0079 was issued for conduits damaged during drilling operations during the placement of the invert. The disposition was approved the Engineer of Record and Metro, repairs were completed, and the NCR was closed.

RCC NCRs 004, 0038, 0047, 0053, 0054, 0057, 0064, 0068, 0069, 0074, 0076, 0083, 0084, 0086, and 0087 remain open with no change.

ENVIRONMENTAL

- Stormwater Pollution Prevention Plan (SWPPP) inspections of most active Project work areas are conducted weekly by RCC. Metro staff conducted oversight site observations and shared feedback on ways to improve BMP preparation and execution. *The TBM Yard and a portion of the TSA Yard are no longer part of the project area. A comprehensive SWPPP update to include these changes is in development by the contractor. There were no qualifying rain events in February.*
- In February, the PMOC provided their Mitigation Monitoring Report Review for the 27th Quarterly Mitigation Monitoring and Reporting Plan covering August 2019 to October 2019. *The PMOC determined that the 27th Quarterly Mitigation Measures Status Report is Compliant with the mitigation requirements of OP 20. The overall Compliant rating was given because all elements of the reports are in accordance with the requirements of OP 20, for the specific phase of the project.*
- On February 14, 2020, Metro submitted the 28th Quarterly Mitigation Monitoring and Reporting Plan covering November 2019 to January 2020 to the FTA.
- Noise and vibration spot checks continue to be conducted weekly at multiple sensitive locations, and at the location of new activities along the alignment. The Contractor conducted attended monitoring weekly at active construction sites or when work and/or equipment changed. In addition, noise and vibration monitoring was also conducted continuously and data was available in an online system. The Contractor also provided a compliance report weekly. There have been inquiries from stakeholders adjacent to the future Grand Av Arts/Bunker Hill Station and Historical Broadway Station construction sites; however, Metro/RCC's Community Relations team have been responsive and continue to actively address community concerns in coordination with Area Leads, Resident Engineers, and field staff with respect to each construction site.
- No new historic period isolates and no new historic period feature was recorded during February.

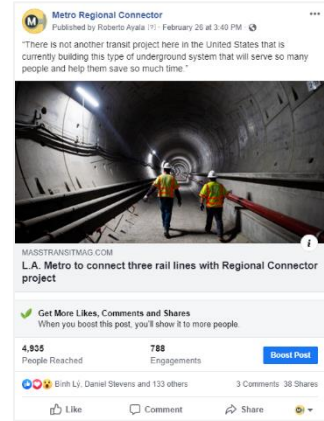
CONSTRUCTION AND COMMUNITY RELATIONS

Construction Relations

- Responded and addressed Project related inquiries from the public received via the hotline, email and during office hours at the Little Tokyo Community Office. Concerns were addressed by RCC and Metro project staff.
- Performed public outreach and construction coordination to impacted area stakeholders regarding the following construction activities: concrete placement throughout the alignment, *utility relocation and pile installation on Alameda St*, planned street closures at 1st/Alameda for street restoration, *rail welding and distribution on 1st St portal*, *paving activities* on Flower St, and geotechnical monitor maintenance.
- Distributed *ten (10)* construction notices to the public on the above activities through email and made it available on the Project website and social media outlets.
- Completed a total of *two (2)* construction coordination activities with project adjacent property owners to perform maintenance on geo-tech equipment: Metropolitan News *and* Onni Times Square.
- Provided weekly construction updates and coordinated work activities with 23 stakeholders: The Westin-Bonaventure Hotel, 444 S Flower St, Central Library/Maguire Gardens, City National Plaza, The California Club, The Standard Hotel, Public School 213, Pegasus Apartments, Charles Dunn, Paragon Parking, Takami Sushi, The Roosevelt Lofts, 888 Figueroa, and 818 7th St, LTBA, LTCC, LTBD, LTSC, JACCC, Sustainable Little Tokyo, JANM, MOCA at Geffen, and Savoy Community Association.
- Presented to three (3) community organizations with updates on *utility investigation/relocation in advance of Alameda tunnel box construction and* planned street closures at 1st/Alameda for restoration: Little Tokyo Business Association/Little Tokyo Business Improvement District (LTBA/LTBID), Little Tokyo Community Council (LTCC), and Little Tokyo Community Council All Committees.
- Conducted *seven (7)* briefings to local stakeholders on planned construction activities:
 - 1st/Alameda street closures and restoration: *LTCC, LTCC All Committees, LTBA/BID, and Nisei Week Committee.*
 - Flower St concrete placement, and *below deck work*: Charles Dunn, Westin Bonaventure Hotel, *444 S. Flower St.*

Social Media Outreach

- Published *thirteen (13)* newsletters, including *ten (10)* construction updates, totaling *17.3k* mailings.
- Trending stories on social media included notice of street restoration closures at 1st/Alameda St; street restoration detour routes for weekend closures and weekday closures; progress photos of deck removal; and NextGen bus plan.



Eat, Shop, Play – Construction Impact Business Mitigation Program Highlights

- *Continue public outreach and recruitment of businesses to the Eat, Shop, Play program and visited eleven (11) new businesses.*
- *Signed up one (1) new business for Eat Shop Play, Little Spring Rolls & Bowls, and highlighted them in our monthly project newsletter.*

Construction Safety and Awareness Program

- *Presented to 15 seniors on how to safely use the temporary sidewalks in place to support street restoration on Alameda St. Workshop materials were available in Spanish, Korean, Japanese and English, while a Japanese interpreter was available to translate the workshop. Metro's On the Move Riders Program also presented on how the program can help older adults feel comfortable using public transit for daily trips.*

Community Relations

- Continued bi-weekly coordination meetings with Little Tokyo Community Council, Little Tokyo Service Center and additional community partners as part of a new collaboration with Little Tokyo with the goal to better serve Little Tokyo businesses through Metro's Eat, Shop, Play program.
- Continued work with the monthly Little Tokyo Marketing & Business Task Force to promote special events in Little Tokyo. Launched digital and printed holiday guides to promote unique gift ideas only found in Little Tokyo. Reviewed special programming that will occur in 2020.

CREATIVE SERVICES

Art Program

- Reviewed glass mosaic artwork fabrication progress for Grand Ave/Bunker Hill.
- Reviewed porcelain enamel steel artwork fabrication color proofs for Little Tokyo/Arts District Station
- Reviewed and responded to RCC PSR, CN and RFI submittals.
- Continued assessment of Project operating impacts to signage systemwide.



Artist Audrey Chan reviews artwork color proof prints



Grand Av Arts/Bunker Hill Station Glass Mosaic Fabrication

SAFETY & SECURITY

C0980 Regional Connector

- Monitored RCC's pre-employment drug/alcohol testing and new employee safety orientation to ensure compliance with contract specifications.
- Participated in weekly progress meetings with RCC's management personnel and Metro's Construction Manager to discuss safety/security/quality related issues and construction work schedules.
- Conducted Project Safety Orientation for new Metro/Consultants, visitors, and IPMO project staff. Training sessions included Safety Orientation, Underground Safety, and Self Rescuer Training.
- Participated in work plan reviews, daily crew safety meetings, and the RCC 'Safety Stand Down' sessions.
- Monitored construction field activities daily to ensure compliance with contract specifications. Participated with RCC staff in field safety inspection walks of multiple project worksites, laydown areas, and storage yards.
- Monitored Third Party contractor's work activities to ensure safety compliance.
- Made recommendations to utility crews regarding contract activities and improving overall traffic control and pedestrian safety.

Project Safety Record

- RCC reported *no* Recordable Injuries during the month of *February 2020*.
- RCC reported *66,645* work hours for *January 2020*. RCC's total Contract to Date work hours through *January 2020* are *3,574,046* with a total of *18* Recordable Injuries and no Lost Workday (Days Away) case injuries. The C0980 Contract Recordable Injury Rate is *1.01*. The Bureau of Labor Statistics reports that the National Average Recordable Injury Rate is *2.5* for heavy civil construction projects.
- Total Contractors' Project to Date Work Hours, including both the C0980 and the completed C0981 AUR contract, through *January 2020* is *3,685,105* hours with *19* recordable injuries. The Total Project Contractor Recordable Injury Rate is *1.03*.
- Total Aggregate Project work hours for Contractors, Metro, and Support Services Consultants, through *January 2020* is *4,467,042* with *20* Recordable Injuries and no Lost Workday (Days Away) injury cases. The Total Project Aggregate Safety Rate is *.90*.*

* Using RIR method of calculating.

APPENDIX CHRONOLOGY OF EVENTS

| | |
|---------------|--|
| June 2007 | Began Alternatives Analysis study |
| January 2009 | Board approval of Alternatives Analysis study and next phase |
| February 2009 | Began Draft Environmental Impact Statement / Report (EIS / EIR) |
| October 2010 | Board approval of Draft EIS / EIR and selection of locally preferred alternative |
| January 2011 | FTA approval to Enter into Preliminary Engineering |
| January 2011 | Began Preliminary Engineering |
| August 2011 | Board authorized to solicit major D/B contract C0980 |
| October 2011 | Issued RFQs for D/B contract C0980 |
| December 2011 | Began Real Estate Acquisition |
| March 2012 | Completed PE and began Advanced PE |
| April 2012 | Board certification of Final EIS / EIR and adoption of project |
| April 2012 | Began Final Design - Advanced Utility Relocations (AUR) |
| June 2012 | FTA Record of Decision |
| August 2012 | Issued RFQs for D/B contract C0980 |
| January 2013 | Issued RFPs for D/Build contract C0980 |
| March 2013 | Completed Final Design - Advanced Utilities Relocation (AUR) |
| May 2013 | NTP for Construction Management Services contract MC070 |
| June 2013 | Beginning of AUR contract C0981R Bid Period |
| July 2013 | Submitted TIFIA loan application |
| July 2013 | Submitted first draft FFGA application to FTA for review |

| | |
|----------------|--|
| September 2013 | Received proposals for D/B Contract C0980 |
| September 2013 | Submitted second draft FFGA application to FTA, incorporating FTA comments |
| October 2013 | Submitted Application to FTA Requesting an FFGA |
| November 2013 | Started Emergency Generator Replacement Tank at 2nd Street and Historic Broadway Station (LA Times Building) |
| December 2013 | Issued "Notice of Intent to Award" letter to contract C0981R contractor Pulice Construction Inc. |
| January 2014 | Awarded AUR contract C0981R to Pulice Construction Inc. |
| February 2014 | Issued Notice to Proceed for AUR Contract C0981R |
| February 2014 | FTA issued Full Funding Grant Agreement to Metro |
| March 2014 | Issued Amendment # 11 for D/B Contract C0980 |
| March 2014 | Started Survey for AUR Contract C0981R |
| April 2014 | Metro Board approved the award of D/B Contract C0980 and established a LOP Budget |
| May 2014 | Awarded D/B Contract C0980 to Regional Connector Constructors, Joint Venture |
| June 2014 | Obtained possession of the Mangrove property from the City of Los Angeles |
| July 2014 | Issued Notice to Proceed for D/B contract C0980 |
| August 2014 | C0980 D/B Contractor (RCC) began Final Design |
| September 2014 | Metro performed the ground-breaking ceremony for C0980 D/B Contract |
| October 2014 | EN077 Contractor, Arcadis, removed the underground storage tank at LA Times Parking Lot |
| November 2014 | C0981R AUR Contractor completed DWP power work at 1st St. and Alameda |
| December 2014 | Metro completed Field Vibration Testing for existing Expo and Gold Lines |
| January 2015 | Demolish Buildings at 1st/Central Station |
| February 2015 | Metro approved the Baseline Schedule for C0980 D/B Contract |

| | |
|----------------|--|
| March 2015 | RCC started Historic Broadway Station Site Move-In |
| April 2015 | Metro terminated C0981R Contract for convenience |
| May 2015 | RCC started pile installation at Mangrove Launch Pit |
| June 2015 | RCC started decking for shoofly bridge (Pile Cap & Grade Beam) |
| July 2015 | DWP Water started installing 36" Water Valve at Alameda St. |
| August 2015 | RCC completed DWP Power work at Flower & 5th Street |
| September 2015 | RCC started Phase 2 DWP Power Relocation work at Broadway (Behind K Rail). |
| October 2015 | RCC started pile installation at 1st/Central Station |
| November 2015 | RCC completed Central Ave Full Closure (Pile & Decking) |
| December 2015 | Metro Board approved the increase (\$131.8M) of the Project LOP Budget to \$1,589.9 million. |
| January 2016 | RCC began implementation of Bus Bridge # 1 (Shoofly Tie-In Work at Little Tokyo). |
| February 2016 | RCC began implementation of full closure at 2nd/Broadway intersection. |
| March 2016 | RCC completed Bus Bridge # 1 (Shoofly Tie-In at Little Tokyo) work. |
| March 2016 | Excavation of 1st/Central Station was initiated. |
| April 2016 | TBM (Tunnel Boring Machine) was delivered to the temporary storage site. |
| May 2016 | Closed 1st Street between Alameda and Central Streets. Opened northbound 1st East of Alameda Street. |
| June 2016 | RCC completed excavation at 1st/Central Station Box |
| June 2016 | RCC began pile installation on west side of Flower Street between 4th and 5th Street |
| July 2016 | RCC initiated pile installation at Historic Broadway Station (West Hammer Head) |
| July 2016 | RCC Initiated CIP invert at 1st/Central Station Box |
| August 2016 | RCC completed 36" waterline replacement at 1st/Alameda |

| | |
|----------------|---|
| September 2016 | RCC completed temporary decking at 1st/Alameda intersection (Wye) |
| October 2016 | Metro performed TBM lowering ceremony |
| October 2016 | RCC completed CIP invert at 1st/Central Station Box |
| November 2016 | RCC completed CIP invert at Mangrove Launch Pit and Wye |
| December 2016 | RCC completed Phase 1, 2nd Street Decking in front of LA Times Bldg. |
| January 2017 | Metro Board approved a LOP Budget increase |
| February 2017 | RCC initiated TBM mining (1st – Left) |
| March 2017 | RCC completed TBM mining under JVP (first 500 ft.) |
| March 2017 | RCC completed temporary decking on Flower St. (between 4th and 5th) |
| April 2017 | RCC completed sub-invert at TBM retrieval pit |
| April 2017 | RCC completed CIP invert at Grand Av Arts/Bunker Hill Station Box |
| May 2017 | RCC completed temporary decking at Historic Broadway Station |
| May 2017 | RCC completed water relocation work along Flower Street |
| June 2017 | RCC completed mining and broke through at Grand Av Arts/Bunker Hill Station |
| June 2017 | Five-month full closure of 6th Street approved by LADOT, Caltrans and LADWP |
| July 2017 | RCC completed TBM mining of the first tunnel |
| August 2017 | RCC extracted TBM shields from the Retrieval Shaft |
| September 2017 | RCC began TBM mining of the second tunnel (right) |
| October 2017 | RCC completed TBM mining under JVP (first 500 ft.) |
| October 2017 | RCC completed temporary decking on Flower St. (between 5th and 6th, deck beam 16 to deck beam 58) |
| November 2017 | Completed five-month full closure of 6th Street |

| | |
|----------------|--|
| November 2017 | Initiated underpinning related to the Historic Broadway Station |
| December 2017 | RCC completed mining and broke through at Grand Av Arts/Bunker Hill Station (Right Tunnel) |
| January 2018 | RCC completed TBM mining of the second tunnel (right) |
| February 2018 | RCC began excavation of cross passages |
| February 2018 | RCC began SEM canopy pipe installation |
| March 2018 | RCC began tunnel invert concrete |
| March 2018 | RCC completed infrastructure for power relocation work at 6th/Flower |
| April 2018 | RCC completed entrance structure excavation of Historic Broadway Station |
| May 2018 | RCC began SEM excavation |
| June 2018 | LADWP Power completed cable pulling at 6 th /Flower |
| June 2018 | Completed underpinning related to the Historic Broadway Station |
| July 2018 | RCC completed station box excavation of Historic Broadway Station |
| August 2018 | Completed entrance structure invert of Historic Broadway Station |
| September 2018 | Completed temporary decking of Flower Street |
| October 2018 | RCC started the CN 106.2 Final Design of the Revised Cable Transmission System for the Gold Line |
| October 2018 | Metro completed approval of floating slab test results |
| October 2018 | RCC completed SEM left drift excavation |
| October 2018 | RCC completed Trainway Feeder duct bank at Flower St & 7 th St |
| November 2018 | RCC completed Little Tokyo / Arts District Station Box Excavation |
| November 2018 | RCC completed Grand Av Arts/Bunker Hill Station East Platform Level Exterior Walls |
| December 2018 | RCC completed SEM right drift excavation |

| | |
|---------------|--|
| December 2018 | RCC completed the Historic Broadway Station west invert |
| December 2018 | RCC started tunnel walkways between the future Little Tokyo/Arts District Station to Historic Broadway Station |
| December 2018 | RCC started the future Little Tokyo/Arts District Station east invert |
| December 2018 | RCC completed Grand Av Arts/Bunker Hill Station mezzanine concrete |
| January 2019 | RCC completed Grand Av Arts/Bunker Hill Station invert concrete |
| January 2019 | RCC completed SEM center top drift excavation. |
| January 2019 | RCC started Little Tokyo/Arts District Station west cable pit and sump pit |
| February 2019 | RCC completed SEM excavation |
| February 2019 | RCC completed platform level exterior walls at Grand Av Arts/Bunker Hill Station |
| February 2019 | RCC started fire protection in tunnels |
| March 2019 | RCC completed Little Tokyo/Arts District Station invert concrete |
| March 2019 | RCC completed Bored Tunnels walkway concrete |
| April 2019 | RCC completed Grand Av Arts/Bunker Hill Station east concourse deck concrete |
| April 2019 | RCC completed 1 st Street Cut & Cover / U-Channel Level 1 excavation |
| May 2019 | RCC completed North Flower Cut & Cover tunnel invert concrete |
| May 2019 | RCC completed Wye Cut & Cover tunnel invert concrete |
| June 2019 | RCC completed Right Tunnel floating slab curb |
| July 2019 | RCC completed Left Tunnel floating slab curb |
| July 2019 | RCC completed SEM Cavern concrete invert |
| August 2019 | RCC completed 7th Street / Metro Center Wall Demolition |
| August 2019 | RCC completed the Historic Broadway Station West Concourse Deck |

| | |
|----------------------|---|
| September 2019 | RCC completed Historic Broadway Station east invert |
| September 2019 | RCC completed South Flower Cut & Cover tunnel excavation |
| October 2019 | RCC completed Wye Tunnel Cut & Cover walls |
| October 2019 | RCC completed Grand Av Arts/Bunker Hill Station concourse walls |
| November 2019 | RCC completed Wye Tunnel Cut & Cover Roof Deck |
| November 2019 | RCC completed SEM Cavern Exterior Walls |
| December 2019 | RCC completed Little Tokyo/Arts District Station plenum deck concrete |
| January 2020 | RCC completed SEM Cavern Interior Walls |
| January 2020 | RCC completed 1st Street Tunnel Cut & Cover Roof Deck |
| <i>February 2020</i> | <i>RCC completed Wye Cut & Cover Tunnel Pin Pile Removal</i> |
| <i>February 2020</i> | <i>RCC completed Grand Av Arts/Bunker Hill Station platform walls</i> |