



May 20, 2020

TO:	Distribution
FROM:	Gary Baker
	Executive Officer/Project Manager

SUBJECT: Regional Connector Transit Project April 2020 Monthly Project Status Report

Enclosed is the Monthly Project Status Report for the Regional Connector Transit Project. This report contains the Los Angeles County Metropolitan Transportation Authority's (LACMTA) representation of the Regional Connector Transit Project status for the period ending May 1, 2020.

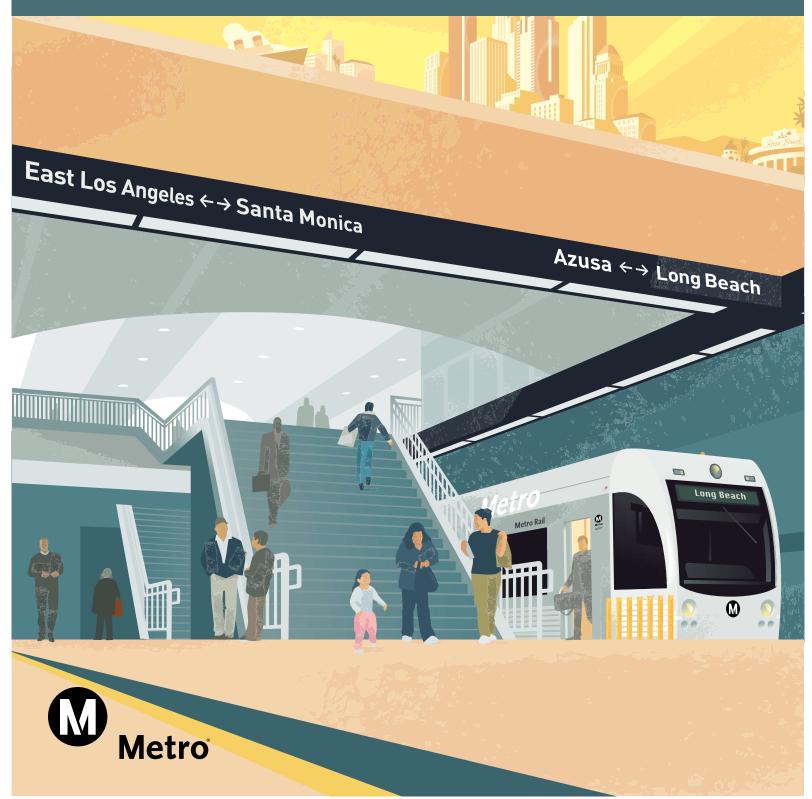
If you have any questions regarding this report or its supporting information, please contact Dan Estrada, Deputy Executive Officer of Program Control at (213) 893-7130.

GB: CS Enclosure

Regional Connector Transit Project

MONTHLY PROJECT STATUS REPORT

April 2020



REGIONAL CONNECTOR TRANSIT PROJECT

MONTHLY PROJECT STATUS REPORT

THE PREPARATION OF THIS DOCUMENT HAS BEEN FINANCED IN PART THROUGH A GRANT FROM THE U. S. DEPARTMENT OF TRANSPORTATION, FEDERAL TRANSIT ADMINISTRATION (FTA).

April 2020

TABLE OF CONTENTS

Project Overview1
Executive Summary5
Project Update9
Project Schedule9
Project Summary Schedule9
Progress Summary10
Planned vs. Actual Progress10
Key Milestones Six-Month Look Ahead11
Major Equipment Delivery11
Critical Path12
Project Cost13
Project Cost Analysis13
Cost Contingency Drawdown and Analysis15
Summary of Contract Modifications 16
Disadvantaged Business Enterprise (DBE)17
Project Labor Agreement17
Financial/Grant
Project Staffing19
Real Estate 21
Quality Assurance
Environmental
Construction and Community Relations25
Creative Services
Safety and Security
Appendix
Chronology of Events

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 49mile 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

<u>Utility Relocation</u>: 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.

<u>Guideway & Systems Contract</u>: 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.

<u>Vehicles</u>: 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 *August* 2020.

<u>Rail Operations Center (ROC)</u>: 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.

<u>Fare Collection</u>: 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 of these consultants 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.

<u>Project Schedule and Budget</u>: 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 in December 2019 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.

<u>Construction and Community Relations</u>: 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 Relations Section of this report.

<u>System Integration</u>: 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.

<u>Rail Activation</u>: 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 *April*, the Project achieved 65.1% 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 Engineering Change Instructions (ECI), enabling required changes to be promptly addressed while the balance of the scope is built.

Construction Status

<u>1st Street Cut & Cover Tunnel & U-Channel</u>: *Pending* the *start of Bus Bridge 3,* the *remaining U-Channel excavation* and *structure will resume*.

<u>Wye Structure</u>: Continued structural backfill and removal of temporary decking.

<u>Little Tokyo/Arts District Station</u>: *Continued* Upper Ancillary exterior walls. *Started Upper Level Station Box exterior walls and Platform deck.*

<u>Floating Slab Track</u>: *Resumed* fabrication and delivery of pre-cast segments. *Through April*, a total of *248* segments were installed in the left *track*; and 150 segments *on* the right *track*.

<u>Historic Broadway Station</u>: In the station box area, completed *the platform walls, the west concourse exterior walls and* the east *concourse deck. The concourse roof* continued. In the entrance area, *the* concourse invert *continued, and the ancillary deck started.*

Crossover Cavern: Continued the arch concrete placements.

<u>Grand Av Arts/Bunker Hill Station</u>: In the Station Box area, continued Upper Ancillary exterior walls and Roof deck. Started Platform deck. In the Entrance area, completed the Roof deck.

<u>Flower Cut & Cover Tunnel</u>: In the *north tunnel, continued with the emergency walkway and started backfill. In the* south *tunnel* (5th Street to 7th/Metro Center Station), continued the invert, *interior walls, exterior walls,* and *started the roof.*

Cost and Schedule Summary

As of the reporting date, RCC was late in submitting the February 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	05/3/22	- <i>3</i> 2 days

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 begins on Page 13.

Coronavirus Impacts

Although the Project was designated as critical infrastructure by the Governor - thus allowing construction operations to continue - the Project has witnessed an overall slowdown in momentum. The Governor's Stay-at-Home order combined with similar local orders have placed restrictions on Metro employees, contractor staff, union crafts, suppliers, consultants, and others which account for the slow-down. RCC has notified Metro of multiple situations where impacts may surface but have not yet manifested.

RCC has, for the most part, focused their efforts on critical path elements of the Project enabling the maintenance of total float in their schedule. However, some operations have been delayed or deferred due to insufficient crew staffing and similar logistical issues. The combined effect is RCC's inability to increase the overall progress rate which was planned to dominate throughout 2020.

Key Management Concerns

<u>Item 1</u>: 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.

<u>Item 2</u>: 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 and a proposal is pending. *Metro continues to await RCC Request for Change*.

<u>Item 3</u>: Installation of CTS link for the Gold Line Eastside Extension during Bus Bridge #3 has been delayed. 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. Schedule to commission the CTS Link has lagged recently due to a variety of delays. Progress moving forward must be maintained to ensure timelines.

<u>Item 4</u>: 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 utility owners and RCC teams are meeting regularly to review priorities, designs, and interferences enroute to construction.

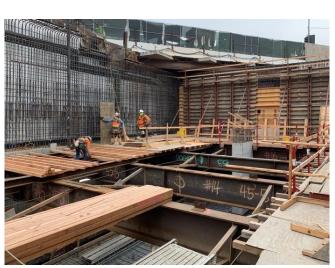
<u>Item 5</u>: The Project has received notification from RCC of COVID-19 related impacts to cost and schedule.

Status/Action: Metro continues to closely monitor construction progress.

Project Construction Photos



Wall form fabrication in future Little Tokyo/Arts District Station



Wall installation at platform level in future Little Tokyo/Arts District Station



Entrance structure overview at Historic Broadway Station



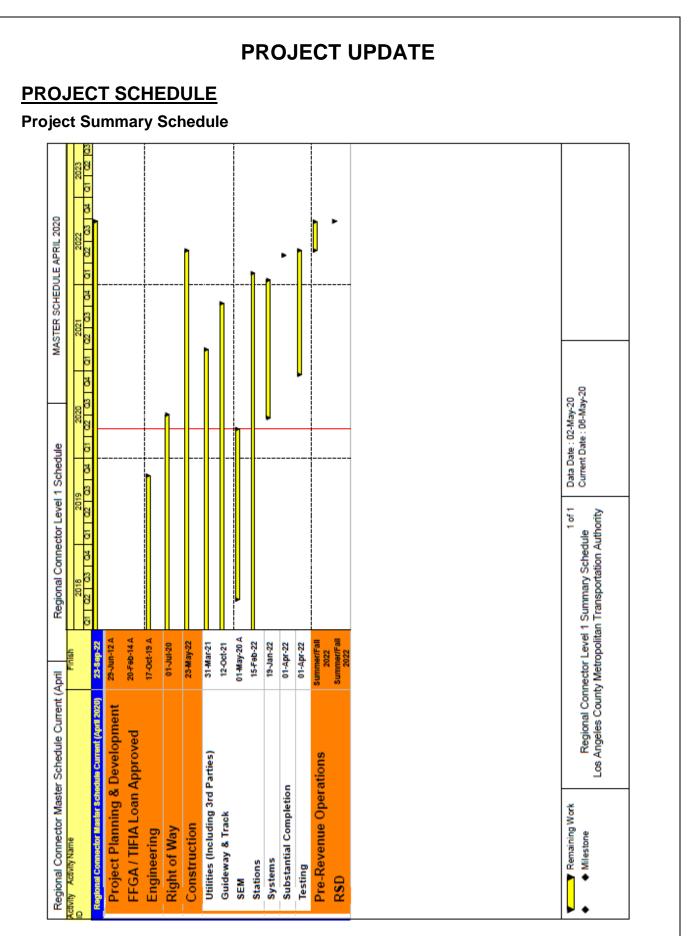
 $\label{eq:linear} Installation of drainage piping at concourse level at Historic Broadway Station$



Forming emergency exit structure walls at Grand Av Arts/Bunker Hill Station



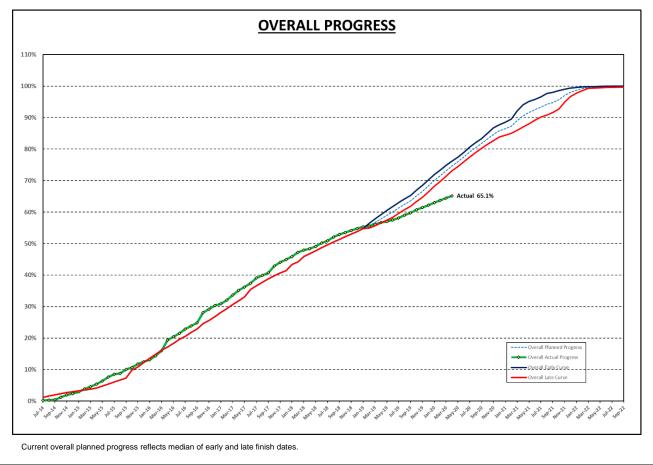
Top mat rebar installation at roof slab at 7th/Flower



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	63 <i>.3</i> %	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

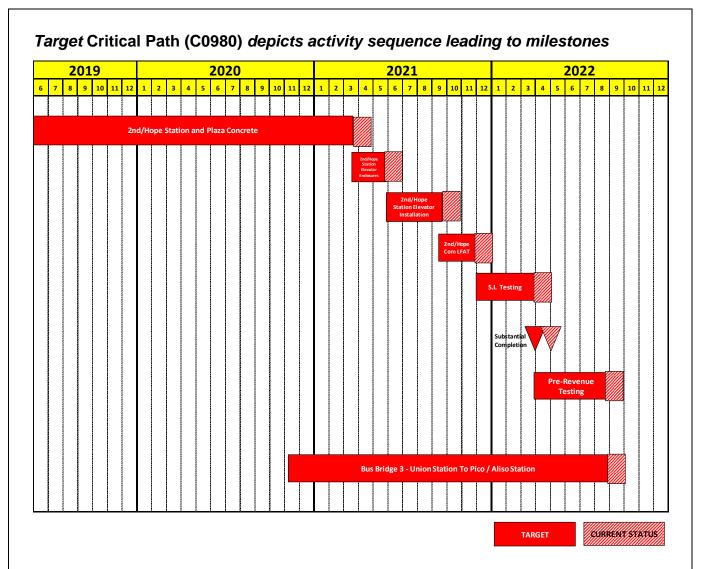
Key Milestone Six-Month Look Ahead

	Milestone Date	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20
Complete West Concourse Station Box Exterior Walls at Historic Broadway Station	04/03/20 A	\bigcirc					
Complete Station Box Concourse Deck at Historic Broadway Station	04/24/20 A	\bigcirc					
Complete SEM Arch Concrete	05/08/20		\bigcirc				
Complete South Flower Cut & Cover Tunnel Invert	05/07/20		\bigcirc				
Complete Fabrication Pre-Cast Floating Slab Sections	05/09/20		\bigcirc				
Complete Upper Ancillary Level Walls at Grand Ave / Bunker Hill Station	05/15/20		\bigcirc				
Complete Right Track Floating Slabs	06/18/20			\bigcirc			
Complete North Flower Cut & Cover Roof	06/18/20			\bigcirc			
Complete Upper Ancillary Exterior Walls at Little Tokyo / Art District Station	07/09/20				\bigcirc		
Complete Station Box Roof Deck at Historic Broadway Station	07/21/20				\bigcirc		
Complete East Roof Level Walls at Grand Ave / Bunker Hill Station	08/13/20					\bigcirc	
Complete Revised Communications System Fiber Optic Cable Pico/Aliso Station to Division 20 Yard	09/24/20						\bigcirc
MTA Staff MTA Board Action	FTA (Fee	deral Transit	Administratio	n) 🗸	Utility Con	npany	
△ Other Agencies □ Contractors	O Design C	onsultant		\bigcirc	C0980 D/E	3	
"A" follow ing date is actual and completed	* New						

Major Equipment Delivery

Metro Supplied Equipment

Equipment	Initial	Scheduled	Scheduled
	Procurement	Delivery	Installation
LRT Vehicles	(NTP) 08/20/2012	Option 2 <i>08/31/</i> 2020	N/A
Ticket Vending	~ 01/30/2018	07/08/19 A	05/25/2021
Machines		(warehoused)	~08/26/2021



Due to a revised track installation sequence, the future Little Tokyo/Arts District Station is no longer on the critical path. The critical path has shifted to the Grand Av Arts/Bunker Hill Station. The current focus is the completion of the upper ancillary exterior walls, which will then be followed by the roof deck, and the upper roof deck. After the station concrete is complete, then the backfill and the plaza concrete will begin. Following the completion of the plaza, the station entrance elevator enclosures and elevator installation will commence. After the elevator installation is completed, then the communications Local Field Acceptance Testing (LFAT) will continue, which will be followed by the systems integration testing. Upon completion of systems integration testing, pre-revenue testing will be completed.

April 2020

PROJECT COST

Project Cost Analysis – 860228

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT (860228)

COST REPORT

DOLLARS IN THOUSANDS

SCC CODE		FFGA ORIGINAL BUDGET BUDGET		CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		BUDGET/ FORECAST VARIANCE
				PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	Manano E
10	GUIDEWAYS & TRACK ELEMENTS	280,622	204,691	0	272,696	0	258,459	3,036	204,855	0	274,586	1,889
20	STATIONS, STOPS, TERMINALS, INTERMODAL	354,268	219,477	0	230,857	112	229,907	3,111	96,360	0	234,519	3,662
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	321	581,753	3,185	495,529	537	630,286	3,455
50	SYSTEMS	69,667	73,848	0	77,972	-92	67,632	66	19,118	300	78,349	378
	CONSTRUCTION SUBTOTAL (10-50)	846,343	920,468	0	1,208,356	342	1,137,752	9,399	815,861	837	1,217,740	9,384
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	0	7,499	0	16,275	0
80	PROFESSIONAL SERVICES	261,455	257,973	0	394,216	356	326,272	3,121	310,855	-2,051	394,670	454
	SUBTOTAL (10-80)	1,239,963	1,268,925	0	1,678,162	697	1,532,928	12,520	1,186,839	-1,215	1,688,001	9,838
90	UNALLOCATED CONTINGENCY	135,399	126,892	0	51,179	0	0	0	0	1,215	41,340	-9,838
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	697	1,532,928	12,520	1,186,839	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		0	0	20,425	0	20,425	0	18,988	0	20,425	0
	TOTAL PROJECTS (EVN/PLAN'G)		6,075	0	26,500	0	26,500	0	25,063	0	26,500	0
	TOTAL	1,402,932	1,409,007	0	1,770,142	697	1,559,428	12,520	1,211,902	0	1,770,142	0

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH APR 2020.

METRO AND TRIBUNE AGREED ON REIMBURSEMENT OF ~\$1.6 MILLION RELATED TO 2ND/BROADWAY OVERBUILD.

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 \$0.7 million this month to \$1.56 billion which represents 88.1% of the Current Budget. The increase is related to RCC executed mods, *work order* from *LAPD*, and purchase orders from Legal and Community Relations.

Expenditures:

Expenditures are cumulative through *April* 2020 and increased by \$12.5 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 \$1.21 billion in expenditures to date represent *68.5*% 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	CURREN	TBUDGET	СОММІ	TMENTS	EXPENDITURES		CURRENT FORECAST		BUDGET/ Forecast Variance
			PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
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	SITEWORK & SPECIAL CONDITIONS	0	0	0	0	0	0	0	0	0	0
50	SYSTEMS	0	0	5,950	2,250	2,750	125	125	0	5,950	0
	CONSTRUCTION SUBTOTAL (10-50)	10,480	0	16,430	2,250	13,230	125	125	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	3	648	6	412	0	1,150	0
	SUBTOTAL (10-80)	38,878	0	45,328	2,253	41,627	131	23,007	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	2,253	41,627	131	23,007	0	46,441	0
	861228 TOTAL	39,991	0	46,441	2,253	41,627	131	23,007	0	46,441	0

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH APR 2020.

Original Budget:

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

Current Budget:

The budget reflects the addition of \$6.45 million added by the Metro Board in December 2019.

Commitments:

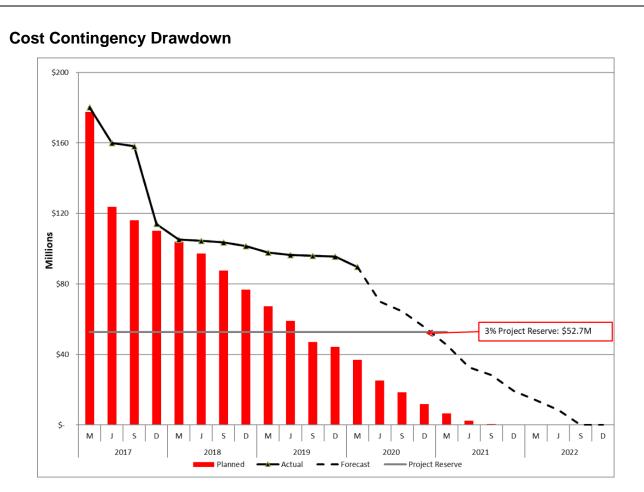
Overall commitments increased by \$2.3 million this month to \$41.6 million which represents 90.0% of the Current Budget. The increase is related to RCC executed mods.

Expenditures:

Expenditures are cumulative through *April* 2020 and *increased by* \$0.13 *million* this *month for costs associated with C0980 Design Build Contract, and Community Relations.* The cumulative \$23.0 million through *April* 2020 represent 50% of the Current Budget.

Current Forecast:

The total current forecast remains unchanged this month.



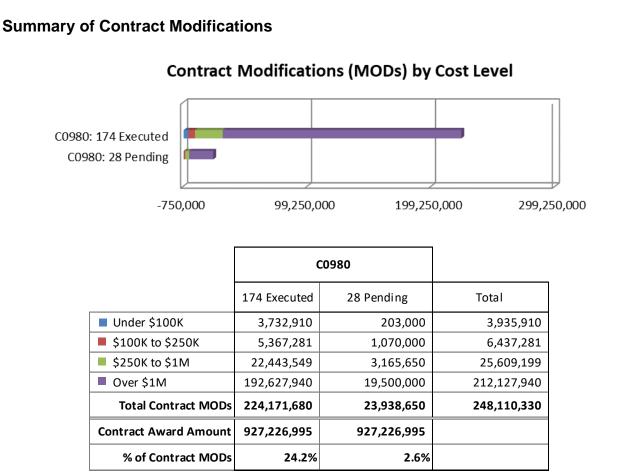
Cost Contingency Drawdown Analysis

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 *April*, there was a \$0.20 million drawdown from contingency due to executed mods. The remaining total Project Contingency (allocated and unallocated) remains \$95.1 million this month.

PROJECT COST CONTINGENCY DOLLARS IN THOUSANDS										
	Original Contingency	0		To-Date	Remaining Contingency (Forecast)					
Unallocated Contingency	124,919	89,946	(49,821)	(1,215)	(51,035)	38,910				
Allocated Contingency	86,345	92,809	(37,632)	1,013	(36,619)	56,190				
Total Contingency	211,263	182,754	(87,453)	(202)	(87,655)	95,100				



Note:

1. Percent of Contract MODs equals the Total Contract MODs divided by the Contract Award Amount.

One hundred and seventy-*four (174)* changes with a total value of \$224.2 million have been executed since NTP of Contract C0980. An additional 28 changes, with a total estimated value of \$23.9 million, are pending.

DISADVANTAGED BUSINESS ENTERPRISE (DBE)

As of March 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	23.98%

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	15.43%

One hundred (100) Construction DBE sub-contractors have been identified to date.

PROJECT LABOR AGREEMENTS (PLA)

As of March 2020:

Targeted Worker GoalConstruction work to be performed by residents from Economically DisadvantagedArea in the United States	40.00%
Targeted Worker Current Attainment	60.13%
Apprentice Worker Goal Construction work to be performed by Apprentices	20.00%
Apprentice Worker Current Attainment	18.86%
Disadvantaged Worker Goal Construction work to be performed by Disadvantaged Workers who are residents of the United States	10.00%
Disadvantaged Worker Current Attainment	11.28%

FINANCIAL/GRANT

Status of Funds by Source

SOURCE	ORIGINAL BUDGET	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS \$	%	EXPENDITURES \$	%	BILLED TO FUNDING SOURCE \$	%
	*								
FEDERAL - CMAQ	\$64.00	\$218.11	\$64.00	\$132.42	61%	\$61.98	28%	\$46.22	21%
FEDERAL - SECTION 5309 NEW STARTS	\$669.90	\$669.90	\$565.00	\$652.35	97%	\$436.38	65%	\$430.41	64%
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%	\$145.89	91%	\$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%	\$2.70	16%	\$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	\$41.98	\$30.56	73%	\$28.00	67%	\$28.00	67%
LEASE REVENUE****	\$64.25	\$79.07	\$0.00	\$0.00	0%	\$0.00	0%	\$18.50	23%
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	\$1,385.24	\$1,559.43	89%	\$1,211.90	58%	\$1,184.91	67%

NOTES:

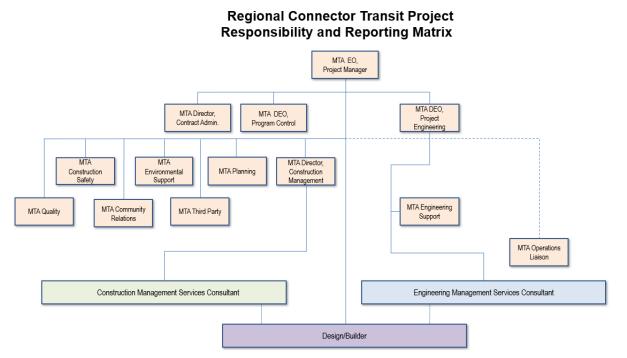
2. 3.

NOTES: 1. EXPENDITURES ARE CUMULATIVE THROUGH APRIL 30, 2020 2. METRO AND TRIBUNE AGREED ON REIMBURSEMENT OF \$1.6 MILLION RELATED TO 2ND/BOARDWAY OVERBUILD. 3. ORGINAL 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 1A HIGH SPEED RAIL BONDS ** STATE PROPOSITION 1B PUBLIC TRANSPORTATION MODERNIZATION, IMPROVEMENT AND SERVICE ENHANCEMENT ACCOUNT ** OTHERS INCLUDE TOA ADMINISTRATION, AND NB PROPOSITION A ADMINISTRATION (FOR A TOTAL OF \$.255M) *** OTHERS INCLUDE TOA ADMINISTRATION, AND NB PROPOSITION A ADMINISTRATION (FOR A TOTAL OF \$.255M)

*REFLECTS PLANNED BILLING. GENERAL FUND WAS CHARGED \$18.5M IN ERROR, BILLING WILL BE REALLOCATED TO LEASE REVENUE IN MAY 2020

PROJECT ORGANIZATION AND STAFFING

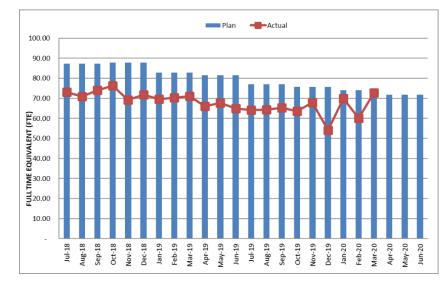
The D/B contract is being managed by a joint team of Metro and consultant personnel located at the Integrated Project Management Office (IPMO).



Updated: 03/2020

The overall FY20 Total Project Staffing plan averages 73.7 FTE's per month. The total actual project staffing for *March* 2020 was 72.72; 22.56 FTEs for Metro's Project Administration staff and 50.16 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.

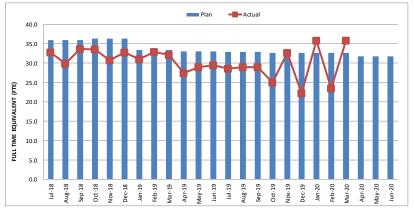
Total Project Staffing – Metro and Consultants



March actuals include 2.8 FTEs related to PMSS Services.

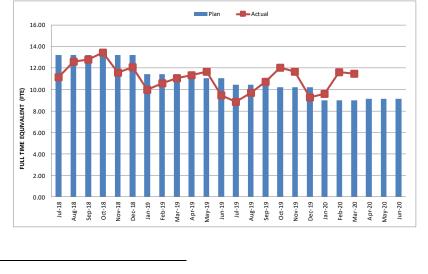
Metro Staff -Actual Plan 40.00 35.00 30.00 £25.00 20.00 E000015.00 HIL 10.00 5.00 May-19 Sep-19 Oct-18 Nov-18 Dec-18 Jan-19 Feb-19 Mar-19 Apr-19 Jun-19 Aug-19 Oct-19 Nov-19 Dec-19 Jan-20 Feb-20 Mar-20 Jul-19 Apr-20 May-20 Jul-18 Aug-18 Sep-18

CM Support Services Staff (Consultant)



CMSS March actual FTEs exceeded the forecast due to lower billable hours in February.

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.

All above data through March 2020

REAL ESTATE

Open Real Estate Matters – Seven Parcels Remaining

City of Los Angeles (Mangrove Parcels) – No change

 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. *No change, meeting scheduled with LADWP on 5/20/20 to discuss status of agreement.*

2nd and Hope

- Unknown Ownership Parcel Resolution of Necessity adopted, eminent domain complaint filed, pending court's approval serve Order of Possession through newspaper publication. *Received updated declaration from engineer on 5/15/20, pending submission to court.*
- CRALA Parcel CRALA has accepted the offer and will be taking the agreement to their Board on June 4, 2020. *No change*
- County of Los Angeles Parcel the County has accepted the offer and will be taking the agreement to their Board on May 5, 2020. *Item rescheduled to May 19th meeting.*
- City of Los Angeles Parcel the City has agreed to the transfer based on the City's and LACMTA's Memorandum of Agreement. The City is preparing the conveyance documents. *Conveyance documents finalized. City coordinating council action to approve conveyance.*

<u>Tribune</u>

• Finalizing property swap for subsurface easement area.

QUALITY ASSURANCE

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

- 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-2020-006) of concrete placement of an Entrance Structure Concourse Invert Station. The installation activities were found to be in compliance and acceptable and the surveillance was closed.
- Metro QA conducted a surveillance (C980-Surv-2020-007) for the placement of Roof Level Deck and ES1 Landings at Grand Av Arts/Bunker Hill Station. The installation activities were found to be in compliance and acceptable and the surveillance was closed.
- Metro QA conducted a Quarterly Audit (C980-AUD-2019-002) of the RCC Quality Management System with regard to sub-contractors and as-built drawings. There was one (1) Finding, and one (1) Observation noted during the Audit and it was closed.
- Metro QA conducted a Quarterly Audit (C980-AUD-2020-001) of the RCC Quality Management System. This audit encompassed Sub-Contractor Work Process and Inspection Documents. There was one Observation noted during this Audit. The Audit is complete and closed.

RCC NCR 088 was issued for traction power conduits at Grand Av Arts/Bunker Hill Station exceeding 270 degrees in bends between pull points. RCC submitted and RFI (#1065) with an acceptable recommended solution and the NCR was closed.

RCC NCR 090 was issued for Wall N9 that was out of tolerance for plumbness at the future Little Tokyo/Arts District Station. The NCR is with the Engineer of Record for disposition approval and remains open.

RCC NCR 091 was issued for CMU walls lintels not being cast in place per RFI instructions at Grand Av Arts/Bunker Hill Station. This NCR is with the Engineer of Record for disposition approval and remains open.

RCC NCR 092 was issued for two (2) conduits being damaged during coring operations at Grand Av Arts/Bunker Hill Station. This NCR is being dispositioned internally by RCC, prior to sending to the Engineer of Record for disposition approval and remains open.

RCC NCR 093 was issued for tunnel ring embeds not installed per IFC design drawing in SEM Cavern. NCR is being dispositioned internally by RCC, prior to sending to the Engineer of Record for disposition approval and remains open.

RCC NCR 094 was issued for a cold-water copper line strike at future Little Tokyo/Arts District Station during drilling operations for dowel placement. NCR is being dispositioned internally by RCC, prior to sending to the Engineer of Record for disposition approval and remains open.

RCC CAR (Corrective Action Request) 007 was issued for numerous embedded conduit and utility strikes on the Project. If not resolved the impacts will be detrimental to Project's success. RCC is reviewing internally to determine a path forward to alleviate this issue.

RCC NCRs 004, 0038, 0047, 0053, 0054, 0057, 0064, 0068, 0069, 0074, 0076, 0083, 0084, 0086, 0087, 0088, and 0089 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 observations and shared feedback on ways to improve BMP preparation and execution. A comprehensive SWPPP update is in development by the contractor. There were qualifying rain events in *April*.
- Noise and vibration spot checks continue to be conducted weekly at multiple sensitive locations, and at locations 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 gathered 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, Historical Broadway Station, and Little Tokyo/Arts District 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.

- In April, Metro began preparation of the 29th Quarterly MMRP report covering the period from February through April 2020. Metro will submit this report next month. Metro also worked with the PMOC to review the 28th Quarterly report. Due to COVID-19, documents were exchanged via email for review.
- Two new historic period isolates were recorded during April, an iron railroad spike (not collected) and a ceramic circuit breaker rivet (collected).

CONSTRUCTION AND COMMUNITY RELATIONS

Construction Relations

- Responded and addressed Project related inquiries from the public received via the hotline, email. The Little Tokyo Community Office *is closed in response to Safer at Home order due to COVID-19*. 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 investigation on Temple and Alameda streets, planned street closures at 1st/Alameda for street restoration and deck removal, pile installation at Central Ave, equipment mobilization & backfill material delivery on Flower St, and geotechnical monitor maintenance.
- Distributed *eight (8)* 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 three (3) construction coordination activities with Project adjacent property owners to perform maintenance on geo-tech equipment: Metropolitan News, Onni Times Square, and Colburn Music School.
- Provided weekly construction updates and coordinated work activities with 27 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/LTBID, LTCC, LTSC, JACCC, Sustainable Little Tokyo, JANM, MOCA at Geffen, Chado Tea Room, *Hikari Apartments, JVP,* Arts District BID and Savoy Community Association.
- Presented to three (3) community organizations with updates on: extended closure for street restoration amid COVID-19, pile installation at Central Av and service interruption anticipated for Fall of 2020 for Alameda tunnel box construction and planned street closures: Little Tokyo Business Association, Little Tokyo Community Council, and the Historic Cultural Neighborhood Council.
- Conducted ten (10) briefings to local stakeholders on planned construction activities:
 - 1st/Alameda intersection weekday street closure and restoration progress and pile installation on Central Ave: LTCC, LTBA/BID, Savoy Community Association, Art District Los Angeles BID, JANM, MOCA, Hikari Apartments, and Japanese Village Plaza.
 - Flower St concrete placement and below deck work: Charles Dunn, 444 S. Flower St.

- Continued standing meetings with LA City Council District 14 and the Mayor's Office.
- Hosted a webinar on April 29, 2020 with 63 participants in attendance including members of the Community Leadership Council. The Project highlighted progress on deck removal at 1st/Alameda and covered upcoming activities; cavern and station construction progress at the Hope and Broadway sites; and Flower St backfill material delivery. Also addressed safety measures to protect staff amid COVID-19 and presented a summary on marketing of businesses impacted by construction.

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

Continue daily email campaign and highlighted 35 businesses impacted by construction and that remain amid COVID-19: program.abeautifullife, open jamaican café, Amazebowls, Anime Jungle, Azay, Badmaash, Bowls, Café Dulce, CafeNow at Westing Bonaventure, Chinchikurin, Donatsu, Far Bar, Go Little Tokyo, Hob Nob Shop, Ikkousha, Japanese American National Museum, JiST Café, Kouraku, Leola Lace, Library Store, MenOh Sushi, MILK+T, Mitsuru Sushi & Grill, Monkey Pants, Poketo, Prime Pizza, Rakkan Ramen, Redwood Bar & Grill, Senor Suehiro Café, Sushi Gen, The Broad, Fish. Wurstkuche, Yamazki Bakery, and Yapa.



Community Relations

Continued work with the monthly Little Tokyo Marketing & Business Task Force via Zoom because of the statewide COVID-19 Stay-At-Home order. The focus of the meeting was on how to continue to promote small and/or legacy businesses that *remain open*. *Encouraged participants to participate in Community Feeding Community and Little Tokyo Eats program*.

CREATIVE SERVICES

Art Program

- Transmitted final artwork for artist-designed glass at Little Tokyo/Arts District and Historic Broadway Stations to Contractor.
- Participated in art glass fabricator RFP pre-proposal meeting and prospective fabricator coordination.
- Reviewed porcelain enamel steel artwork fabrication color proofs with artists and participated in comment resolution for Historic Broadway and Grand Av Arts/Bunker Hill Station.
- Refined layout and text for Atomic Cafe Interpretive Graphic Display Mitigation Measure.
- Reviewed and responded to RCC PSR, CN and RFI submittals.
- Continued assessment of Project operating impacts to signage systemwide.



Artist Clarence Williams reviews art fabricator prints



Artist Mungo Thomson reviews art fabricator prints

SAFETY & SECURITY

C0980 Regional Connector

- In response to the COVID-19 pandemic, Project Safety and management continue to monitor compliance by RCC and IPMO staff with Federal, State, and City requirements for 'Essential Workers' on 'Critical Infrastructure' projects.
- Monitored RCC's pre-employment drug/alcohol testing and new employee safety orientation to ensure compliance with contract specifications.
- 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

- There was one (1) reported COVID-19 case, by RCC, for the Project in April 2020.
- RCC reported no Recordable Injuries during the month of April 2020.
- RCC reported 75,245 work hours for March 2020. RCC's total Contract to Date work hours through March 2020 are 3,738,714 with a total of 18 Recordable Injuries and no Lost Workday (Days Away) case injuries. The C0980 Contract Recordable Injury Rate is 0.96. 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 *March* 2020 is 3,*849*,773 hours with 19 recordable injuries. The Total Project Contractor Recordable Injury Rate is *0.99*.
- Total Aggregate Project work hours for Contractors, Metro, and Support Services Consultants, through *March* 2020 is 4,*650,975* with 20 Recordable Injuries and no Lost Workday (Days Away) injury cases. The Total Project Aggregate Safety Rate is 0.86.*

^{*} 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 form 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 2015RCC started Historic Broadway Station Site Move-InApril 2015Metro terminated C0981R Contract for convenienceMay 2015RCC started pile installation at Mangrove Launch PitJune 2015RCC started decking for shoofly bridge (Pile Cap & Grade Beam)July 2015DWP Water started installing 36" Water Valve at Alameda St.August 2015RCC completed DWP Power work at Flower & 5th StreetSeptember 2015RCC started Phase 2 DWP Power Relocation work at Broadway (Behind K Rail).October 2015RCC completed Central Ave Full Closure (Pile & Decking)December 2015RCC completed Central Ave Full Closure (Pile & Decking)December 2015Metro Board approved the increase (\$131.8M) of the Project LOP Budget to \$1,589.9 million.January 2016RCC began implementation of Bus Bridge # 1 (Shoofly Tie-In Work at Little Tokyo.February 2016RCC completed Bus Bridge # 1 (Shoofly Tie-In at Little Tokyo) work.March 2016Excavation of 1st/Central Station was initiated.April 2016TBM (Tunnel Boring Machine) was delivered to the temporary storage site.May 2016Closed 1st Street between Alameda and Central Streets. Opened northbound 1st East of Alameda Street.June 2016RCC began pile installation on west side of Flower Street between 4th and 5th StreetJuly 2016RCC initiated CIP invert at 1st/Central Station BoxJuly 2016RCC Initiated CIP invert at 1st/Central Station BoxAgust 2016RCC completed Se" waterline replacement at 1st/Alameda		
May 2015RCC started pile installation at Mangrove Launch PitJune 2015RCC started decking for shoofly bridge (Pile Cap & Grade Beam)July 2015DWP Water started installing 36" Water Valve at Alameda St.August 2015RCC completed DWP Power work at Flower & 5th StreetSeptember 2015RCC started Phase 2 DWP Power Relocation work at Broadway (Behind K Rail).October 2015RCC started pile installation at 1st/Central StationNovember 2015RCC completed Central Ave Full Closure (Pile & Decking)December 2015Metro Board approved the increase (\$131.8M) of the Project LOP Budget to \$1,589.9 million.January 2016RCC began implementation of Bus Bridge # 1 (Shoofly Tie-In Work at Little Tokyo.February 2016RCC completed Bus Bridge # 1 (Shoofly Tie-In at Little Tokyo) work.March 2016Excavation of 1st/Central Station was initiated.April 2016TBM (Tunnel Boring Machine) was delivered to the temporary storage site.June 2016RCC completed excavation at 1st/Central Station BoxJune 2016RCC began pile installation on west side of Flower Street between 4th and 5th StreetJuny 2016RCC began pile installation at Historic Broadway Station (West Hammer Head)July 2016RCC linitiated CIP invert at 1st/Central Station Box	March 2015	RCC started Historic Broadway Station Site Move-In
June 2015RCC started decking for shoofly bridge (Pile Cap & Grade Beam)July 2015DWP Water started installing 36" Water Valve at Alameda St.August 2015RCC completed DWP Power work at Flower & 5th StreetSeptember 2015RCC started Phase 2 DWP Power Relocation work at Broadway (Behind K Rail).October 2015RCC started pile installation at 1st/Central StationNovember 2015RCC completed Central Ave Full Closure (Pile & Decking)December 2015Metro Board approved the increase (\$131.8M) of the Project LOP Budget to \$1,589.9 million.January 2016RCC began implementation of Bus Bridge # 1 (Shoofly Tie-In Work at Little Tokyo.February 2016RCC completed Bus Bridge # 1 (Shoofly Tie-In Work at Little Tokyo.March 2016RCC completed Bus Bridge # 1 (Shoofly Tie-In at Little Tokyo) work.March 2016Excavation of 1st/Central Station was initiated.April 2016TBM (Tunnel Boring Machine) was delivered to the temporary storage site.May 2016Closed 1st Street between Alameda and Central Streets. Opened northbound 1st East of Alameda Street.June 2016RCC completed excavation at 1st/Central Station BoxJune 2016RCC completed pile installation on west side of Flower Street between 4th and 5th StreetJuly 2016RCC hiltiated CIP invert at 1st/Central Station Box	April 2015	Metro terminated C0981R Contract for convenience
Beam)July 2015DWP Water started installing 36" Water Valve at Alameda St.August 2015RCC completed DWP Power work at Flower & 5th StreetSeptember 2015RCC started Phase 2 DWP Power Relocation work at Broadway (Behind K Rail).October 2015RCC started pile installation at 1st/Central StationNovember 2015RCC completed Central Ave Full Closure (Pile & Decking)December 2015Metro Board approved the increase (\$131.8M) of the Project LOP Budget to \$1,589.9 million.January 2016RCC began implementation of Bus Bridge # 1 (Shoofly Tie-In Work at Little Tokyo.February 2016RCC completed Bus Bridge # 1 (Shoofly Tie-In at Little Tokyo) work.March 2016RCC completed Bus Bridge # 1 (Shoofly Tie-In at Little Tokyo) work.March 2016Excavation of 1st/Central Station was initiated.April 2016TBM (Tunnel Boring Machine) was delivered to the temporary storage site.May 2016Closed 1st Street between Alameda and Central Streets. Opened northbound 1st East of Alameda Street.June 2016RCC began pile installation on west side of Flower Street between 4th and 5th StreetJuly 2016RCC Initiated CIP invert at 1st/Central Station BoxJuly 2016RCC Initiated CIP invert at 1st/Central Station Box	May 2015	RCC started pile installation at Mangrove Launch Pit
August 2015RCC completed DWP Power work at Flower & 5th StreetSeptember 2015RCC started Phase 2 DWP Power Relocation work at Broadway (Behind K Raii).October 2015RCC started pile installation at 1st/Central StationNovember 2015RCC completed Central Ave Full Closure (Pile & Decking)December 2015Metro Board approved the increase (\$131.8M) of the Project LOP Budget to \$1,589.9 million.January 2016RCC began implementation of Bus Bridge # 1 (Shoofly Tie-In Work at Little Tokyo.February 2016RCC began implementation of full closure at 2nd/Broadway intersection.March 2016RCC completed Bus Bridge # 1 (Shoofly Tie-In at Little Tokyo) work.March 2016Excavation of 1st/Central Station was initiated.April 2016Closed 1st Street between Alameda and Central Streets. Opened northbound 1st East of Alameda Street.June 2016RCC began pile installation on west side of Flower Street between 4th and 5th StreetJuly 2016RCC initiated CIP invert at 1st/Central Station Box	June 2015	
September 2015RCC started Phase 2 DWP Power Relocation work at Broadway (Behind K Raii).October 2015RCC started pile installation at 1st/Central StationNovember 2015RCC completed Central Ave Full Closure (Pile & Decking)December 2015Metro Board approved the increase (\$131.8M) of the Project LOP Budget to \$1,589.9 million.January 2016RCC began implementation of Bus Bridge # 1 (Shoofly Tie-In Work at Little Tokyo.February 2016RCC began implementation of full closure at 2nd/Broadway intersection.March 2016RCC completed Bus Bridge # 1 (Shoofly Tie-In at Little Tokyo) work.March 2016CC completed Bus Bridge # 1 (Shoofly Tie-In at Little Tokyo) work.March 2016Closed 1st Street between Alameda and Central Streets. Opened northbound 1st East of Alameda Street.June 2016RCC began pile installation on west side of Flower Street between 4th and 5th StreetJuly 2016RCC Initiated pile installation at Historic Broadway Station (West Hammer Head)July 2016RCC Initiated CIP invert at 1st/Central Station Box	July 2015	DWP Water started installing 36" Water Valve at Alameda St.
Broadway (Behind K Rail).October 2015RCC started pile installation at 1st/Central StationNovember 2015RCC completed Central Ave Full Closure (Pile & Decking)December 2015Metro Board approved the increase (\$131.8M) of the Project LOP Budget to \$1,589.9 million.January 2016RCC began implementation of Bus Bridge # 1 (Shoofly Tie-In Work at Little Tokyo.February 2016RCC began implementation of full closure at 2nd/Broadway intersection.March 2016RCC completed Bus Bridge # 1 (Shoofly Tie-In at Little Tokyo) work.March 2016Excavation of 1st/Central Station was initiated.April 2016Closed 1st Street between Alameda and Central Streets. Opened northbound 1st East of Alameda Street.June 2016RCC began pile installation on west side of Flower Street between 4th and 5th StreetJuly 2016RCC Initiated CIP invert at 1st/Central Station BoxJuly 2016RCC Initiated CIP invert at 1st/Central Station Box	August 2015	RCC completed DWP Power work at Flower & 5th Street
November 2015RCC completed Central Ave Full Closure (Pile & Decking)December 2015Metro Board approved the increase (\$131.8M) of the Project LOP Budget to \$1,589.9 million.January 2016RCC began implementation of Bus Bridge # 1 (Shoofly Tie-In Work at Little Tokyo.February 2016RCC began implementation of full closure at 2nd/Broadway intersection.March 2016RCC completed Bus Bridge # 1 (Shoofly Tie-In at Little Tokyo) work.March 2016RCC completed Bus Bridge # 1 (Shoofly Tie-In at Little Tokyo) work.March 2016Excavation of 1st/Central Station was initiated.April 2016TBM (Tunnel Boring Machine) was delivered to the temporary storage site.May 2016Closed 1st Street between Alameda and Central Streets. Opened northbound 1st East of Alameda Street.June 2016RCC began pile installation on west side of Flower Street between 4th and 5th StreetJuly 2016RCC initiated pile installation at Historic Broadway Station (West Hammer Head)July 2016RCC Initiated CIP invert at 1st/Central Station Box	September 2015	
December 2015Metro Board approved the increase (\$131.8M) of the Project LOP Budget to \$1,589.9 million.January 2016RCC began implementation of Bus Bridge # 1 (Shoofly Tie-In Work at Little Tokyo.February 2016RCC began implementation of full closure at 2nd/Broadway intersection.March 2016RCC completed Bus Bridge # 1 (Shoofly Tie-In at Little Tokyo) work.March 2016Excavation of 1st/Central Station was initiated.April 2016TBM (Tunnel Boring Machine) was delivered to the temporary storage site.May 2016Closed 1st Street between Alameda and Central Streets. Opened northbound 1st East of Alameda Street.June 2016RCC began pile installation on west side of Flower Street between 4th and 5th StreetJuly 2016RCC initiated pile installation at Historic Broadway Station (West Hammer Head)July 2016RCC Initiated CIP invert at 1st/Central Station Box	October 2015	RCC started pile installation at 1st/Central Station
LOP Budget to \$1,589.9 million.January 2016RCC began implementation of Bus Bridge # 1 (Shoofly Tie-In Work at Little Tokyo.February 2016RCC began implementation of full closure at 2nd/Broadway intersection.March 2016RCC completed Bus Bridge # 1 (Shoofly Tie-In at Little Tokyo) work.March 2016RCC completed Bus Bridge # 1 (Shoofly Tie-In at Little Tokyo) work.March 2016Excavation of 1st/Central Station was initiated.April 2016TBM (Tunnel Boring Machine) was delivered to the temporary storage site.May 2016Closed 1st Street between Alameda and Central Streets. Opened northbound 1st East of Alameda Street.June 2016RCC began pile installation on west side of Flower Street between 4th and 5th StreetJuly 2016RCC initiated pile installation at Historic Broadway Station (West Hammer Head)July 2016RCC Initiated CIP invert at 1st/Central Station Box	November 2015	RCC completed Central Ave Full Closure (Pile & Decking)
 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 	December 2015	
March 2016RCC completed Bus Bridge # 1 (Shoofly Tie-In at Little Tokyo) work.March 2016Excavation of 1st/Central Station was initiated.April 2016TBM (Tunnel Boring Machine) was delivered to the temporary storage site.May 2016Closed 1st Street between Alameda and Central Streets. Opened northbound 1st East of Alameda Street.June 2016RCC completed excavation at 1st/Central Station BoxJune 2016RCC began pile installation on west side of Flower Street between 4th and 5th StreetJuly 2016RCC initiated pile installation at Historic Broadway Station (West Hammer Head)July 2016RCC Initiated CIP invert at 1st/Central Station Box	January 2016	
work.March 2016Excavation of 1st/Central Station was initiated.April 2016TBM (Tunnel Boring Machine) was delivered to the temporary storage site.May 2016Closed 1st Street between Alameda and Central Streets. Opened northbound 1st East of Alameda Street.June 2016RCC completed excavation at 1st/Central Station BoxJune 2016RCC began pile installation on west side of Flower Street between 4th and 5th StreetJuly 2016RCC initiated pile installation at Historic Broadway Station (West Hammer Head)July 2016RCC Initiated CIP invert at 1st/Central Station Box	February 2016	
April 2016TBM (Tunnel Boring Machine) was delivered to the temporary storage site.May 2016Closed 1st Street between Alameda and Central Streets. Opened northbound 1st East of Alameda Street.June 2016RCC completed excavation at 1st/Central Station BoxJune 2016RCC began pile installation on west side of Flower Street between 4th and 5th StreetJuly 2016RCC initiated pile installation at Historic Broadway Station (West Hammer Head)July 2016RCC Initiated CIP invert at 1st/Central Station Box	March 2016	
storage site.May 2016Closed 1st Street between Alameda and Central Streets. Opened northbound 1st East of Alameda Street.June 2016RCC completed excavation at 1st/Central Station BoxJune 2016RCC began pile installation on west side of Flower Street between 4th and 5th StreetJuly 2016RCC initiated pile installation at Historic Broadway Station (West Hammer Head)July 2016RCC Initiated CIP invert at 1st/Central Station Box	March 2016	Excavation of 1st/Central Station was initiated.
Opened northbound 1st East of Alameda Street.June 2016RCC completed excavation at 1st/Central Station BoxJune 2016RCC began pile installation on west side of Flower Street between 4th and 5th StreetJuly 2016RCC initiated pile installation at Historic Broadway Station (West Hammer Head)July 2016RCC Initiated CIP invert at 1st/Central Station Box	April 2016	
June 2016RCC began pile installation on west side of Flower Street between 4th and 5th StreetJuly 2016RCC initiated pile installation at Historic Broadway Station (West Hammer Head)July 2016RCC Initiated CIP invert at 1st/Central Station Box	May 2016	
July 2016RCC initiated pile installation at Historic Broadway Station (West Hammer Head)July 2016RCC Initiated CIP invert at 1st/Central Station Box	June 2016	RCC completed excavation at 1st/Central Station Box
(West Hammer Head)July 2016RCC Initiated CIP invert at 1st/Central Station Box	June 2016	
	July 2016	
August 2016 RCC completed 36" waterline replacement at 1st/Alameda	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 Revise 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 & 7th 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
February 2020	RCC completed Wye Cut & Cover Tunnel Pin Pile Removal
February 2020	RCC completed Grand Av Arts/Bunker Hill Station platform walls
March 2020	RCC completed Grand Av Arts/Bunker Hill Station lower ancillary level walls
March 2020	RCC completed SEM plenum deck
April 2020	RCC completed Historic Broadway Station west concourse exterior walls
April 2020	RCC completed Historic Broadway Station concourse deck