

August 18, 2020

TO: Distribution

FROM: Gary Baker // -Executive Officer/Project Manager

SUBJECT: Regional Connector Transit Project July 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 July 31, 2020.

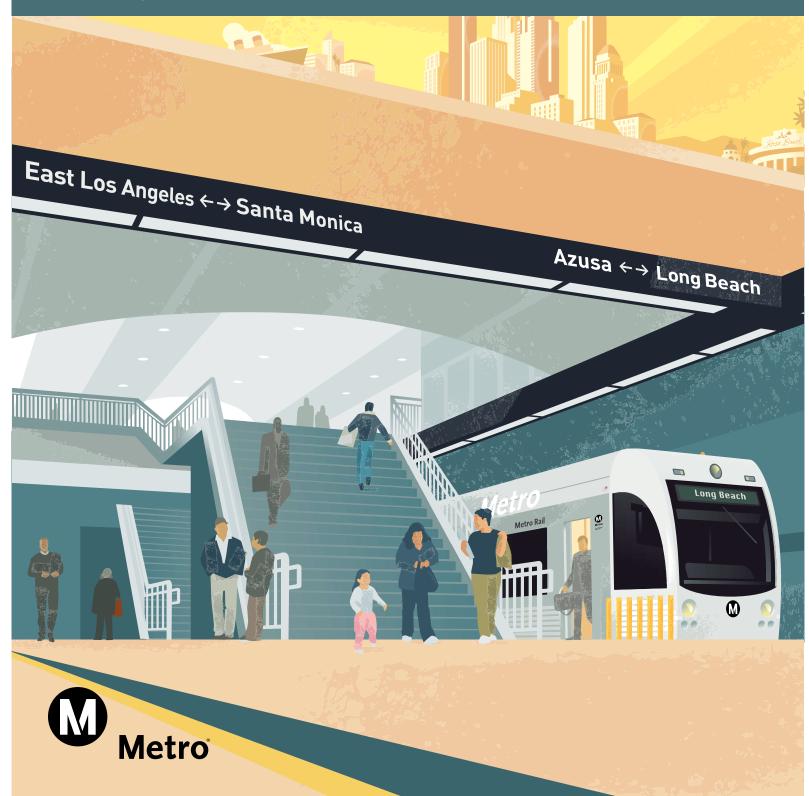
If you have any questions regarding this report or its supporting information, please contact Dan Estrada, Deputy Executive Officer of Program Control at (213) 893-7130.

GB: CS Enclosure

Regional Connector Transit Project

MONTHLY PROJECT STATUS REPORT

July 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).

July 2020

TABLE OF CONTENTS

Project Overview1
Executive Summary5
Project Update
Project Schedule10
Project Summary Schedule 10
Progress Summary11
Planned vs. Actual Progress11
Key Milestones Six-Month Look Ahead 12
Major Equipment Delivery12
Critical Path
Project Cost 14
Project Cost Analysis14
Cost Contingency Drawdown and Analysis16
Summary of Contract Modifications 17
Disadvantaged Business Enterprise (DBE) 18
Project Labor Agreement
Financial/Grant
Project Staffing
Real Estate
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.

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 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 for the testing, rail activation and start-up. The twenty weeks begin following the Project's issuance of the Substantial Completion to RCC.

EXECUTIVE SUMMARY

In July, the Project achieved 68.1% completion based on earned value measurements for design and construction. The focus of the Project is on completing structural concrete, and installation of trackwork.

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.

Wye Structure: Continued structural backfill and removal of temporary decking.

<u>Alameda Street Cut & Cover Tunnel & U-Channel</u>: *Continued* the Pre-Bus Bridge 3 excavation and the installation of support of excavation within the Mangrove Yard area.

<u>Future Little Tokyo/Arts District Station</u>: *Completed* Station Box exterior walls *and east intermediate landing*, continued the *Upper* Ancillary *exterior walls and* roof deck and started the west *intermediate landing*.

<u>Reach 1 Tunnel Section (Future Little Tokyo/Arts District Station to Crossover Cavern)</u>: Continued temporary storage of rail in both the left and right tunnels. *Started installation of tunnel lighting at the left tunnel.*

Crossover Cavern: Completed cleaning.

<u>Historic Broadway Station</u>: At the platform level of the Station Box area, started the installation of the *concrete masonry unit (CMU) walls. Continued the installation of* fire protection pipes and domestic water service. At the concourse level, continued the west roof deck, and at the east end continued the exterior walls. At the concourse level of the Entrance area, *completed* the exterior walls. At the ancillary level, continued the *installation of the* deck and the exterior walls.

<u>Reach 2 Tunnel Section (Historic Broadway Station to Grand Av Arts/Bunker Hill Station)</u>: Completed the installation of *Floating Slab Track (FST)* plates in the left tunnel. Started the installation of Low Vibration Track (LVT) installation in the right tunnel.

<u>Grand Av Arts/Bunker Hill Station</u>: Work continues at all levels of the station. Trackwork continues as well as mechanical and electrical installation at platform and concourse levels. At lower and upper ancillary levels, CMU and electrical conduit installation is ongoing. Structural concrete work is advancing at the roof and upper roof levels.

<u>Reach 3 Tunnel Section (Grand Av Arts/Bunker Hill Station to Flower)</u>: LVT block installation continues in both left and right tunnels.

<u>Flower Cut & Cover Tunnel</u>: In the north (5th Street to 4th Street), *started backfill of* the *access shaft*. Continued the emergency walkway; and structure backfill. In the south (5th Street to 7th/Metro Center Station), continued the interior walls, exterior walls, and the roof *deck*.

Cost and Schedule Summary

As of the reporting date, RCC is late in submitting the April and May 2020 Schedule Update. The Contractor's current schedule update is March 2020.

RCC Schedule Metrics

Notice to Proceed	Contract Substantial Completion	Forecast Substantial Completion	Forecast RSD	Proposed FFGA RSD
7/7/14	4/1/22	4/1/22	9/1/22	2/25/23

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 7.0% 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 14.

Coronavirus Impacts

Despite RCC effectively managing the critical path, the Project has witnessed an overall slow-down in momentum which is evident with the decline of free float through all areas. *It remains unclear however, to what extent the Coronavirus (COVID-19) has impacted operations.* RCC has notified Metro of work inefficiencies and impacts to material supply chains, especially related to special trackwork and conduit deliveries.

There were fourteen (14) COVID-19 cases reported for the period; for a total of nineteen (19) positive cases through July 2020. RCC has strict protocols in place to minimize the spread of COVID-19, which follow local and Federal regulations and maintain operations.

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 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: Cut-over, testing and rail activation meetings with various Metro Departments *are ramping up*. Through this process, specific work items have been identified and those requiring further investigation are being evaluated and attended-to when possible.

<u>Item 2</u>: Constructability issues related to construction of the load transfer system for the Historic Broadway Station overbuild structure, *are having* cost and schedule impacts; *the critical path shifted to the station in July*.

Status/Action: Metro is working with RCC to identify the extent of impacts, their causes and potential mitigation, which could include early closure of 2nd Street for deck removal and street restoration *and application of additional resources*. Discussions are on-going.

<u>Item 3</u>: Installation of the communication 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. A portion of the conduit runs have been completed. Remaining work is being coordinated.

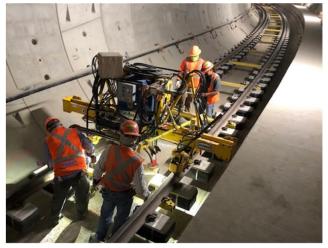
<u>Item 4</u>: Multiple utility rearrangements remain to be completed as the Project enters street restoration phase. Most notably, AT&T at 2nd Street and the joint utility trench at Grand Av Arts/Bunker Hill Station. If not properly managed, there is a budget and schedule risk.

Status/Action: Metro utility owners and RCC teams are meeting regularly to review priorities, designs, and interferences to construction. The joint trench design has been approved by BOE. While Broadway has been completed, potholing on Spring continues as sites for placement of new, larger vaults have not yet been located.

Item 5: RCC has indicated that COVID-19 has impacted performance on the Project.

Status/Action: Metro continues to monitor impacts to the extent possible. Remedy may include schedule relief. *Critical Path work is being progressed as scheduled.*

Project Construction Photos



Setting rail height and aligning rail in Reach 3 RT



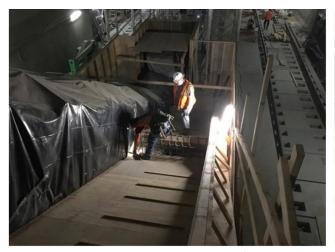
Installing forms at mid-landing of future Little Tokyo/Arts District Station



Roof deck shoring at Historic Broadway Station



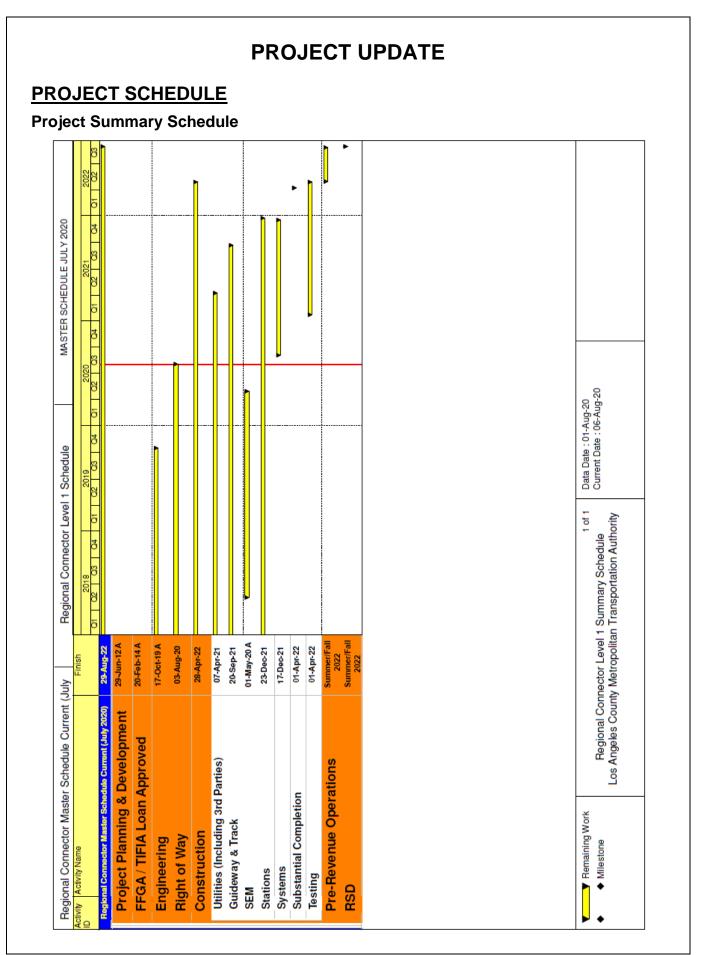
North end of excavation on Alameda Leg on Mangrove Yard



Forms for the public stairs at Platform Level at Grand Av Arts/Bunker Hill Station



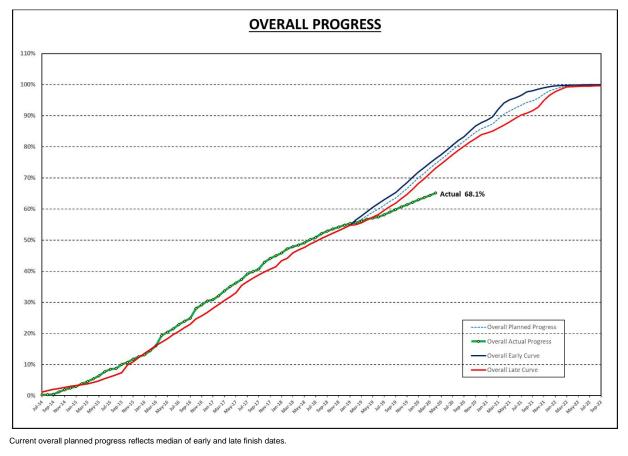
Bottom mat rebar installation for roof slab at Flower St



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%	NA	
Construction Contracts Progress:			
Contract C0981R & C0980	66.5%	1.0%	

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

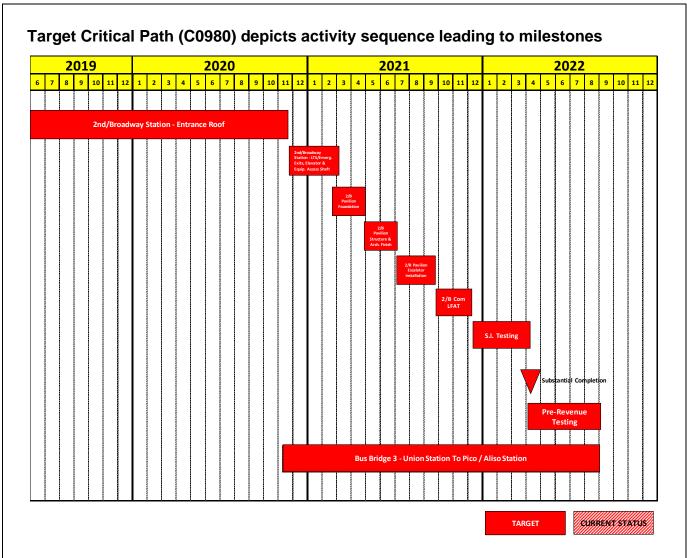
Key Milestone Six-Month Look Ahead

	Milestone Date	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	
Complete Right Track Floating Slabs	07/10/20 A	\bigcirc						
Complete East Roof Level Walls at Grand Av Arts/ Bunker Hill Station	07/24/20 A	\bigcirc						
Complete Station Box Exterior Walls at the future Little Tokyo/Arts District Station	07/24/20 A	\bigcirc						
Complete Station Box Intermediate Landing at the future Little Tokyo/Arts District Station	08/14/20		\bigcirc					
Complete Upper Ancillary Exterior Walls at the future Little Tokyo/Arts District Station	08/28/20		\bigcirc					
Complete South Flower Cut & Cover Tunnel Walls	09/08/20			\bigcirc				
Complete Station Box Roof Deck at Historic Broadway Station	09/21/20			\bigcirc				
Complete South Flower Cut & Cover Tunnel Roof	09/24/20				\bigcirc			
Complete Station Entrance Exterior Walls at Historic Broadway Station	10/12/20				\bigcirc			
Complete Revised Communications System Fiber Optic Cable Pico/Aliso Station to Division 20 Yard	10/12/20					\bigcirc		
Complete Station Entrance Roof Deck at Historic Broadway Station	11/23/20					\bigcirc		
Complete #8 Double Crossover Track	12/01/20						\bigcirc	
MTA Staff 🚺 MTA Board Action XFTA (Federal Transit 🗸 Utility								
△ Other Agencies □ Contractor	C0980	D/B						
"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 08/31/2020	N/A
Ticket Vending	~ 01/30/2018	07/08/19 A	05/25/2021
Machines		(warehoused)	~08/26/2021



The critical path *shifted from* the Grand Av Arts/Bunker Hill Station *to the Historic Broadway Station.* The *critical sequence is traced from* the *ancillary* level *deck, to the* exterior walls, then followed by the roof deck. After the *roof deck* is complete, the *Load Transfer System (LTS), and elevator/emergency exit/equipment access shafts will be placed.* Completion of *concrete to grade* and *the pavilion foundation concrete will then begin, followed by the pavilion structural steel and architectural finish* installations. *Final systems installations will take place - leading to Local Field Acceptance Testing. Systems integration testing will follow leading to substantial completion.* Upon completion of systems integration testing, pre-revenue testing operations will commence.

PROJECT COST

Project Cost Analysis - 860228

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT (860228)

COST REPORT

SCC CODE		FFGA BUDGET	ORIGINAL BUDGET	CURREN	T BUDGET	COMMIT	TMENTS	EXPENI	DITURES	CURRENT	FORECAST	BUDGET/ FORECAST VARIANCE
				PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
10	GUIDEWAYS & TRACK ELEMENTS	280,622	204,691	0	272,696	0	258,459	2,756	212,361	136	274,738	2,042
20	STATIONS, STOPS, TERMINALS, INTERMODAL	354,268	219,477	0	230,857	0	229,907	4,977	108,519	-350	232,929	2,072
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	1,762	584,621	2,541	504,540	-333	632,419	5,588
50	SYSTEMS	69,667	73,848	0	77,972	15	67,753	88	19,881	-250	77,654	-318
	CONSTRUCTION SUBTOTAL (10-50)	846,343	920,468	0	1,208,356	1,777	1,140,740	10,362	845,301	-798	1,217,740	9,384
60	ROW, LAND, EXISTING IMPROVEMENTS	115,889	74,208	0	59,315	5,165	57,796	5,011	57,636	0	59,315	0
70	VEHICLES	16,275	16,275	0	16,275	0	16,275	0	7,567	0	16,275	0
80	PROFESSIONAL SERVICES	261,455	257,973	0	394,216	7,828	346,816	874	317,396	675	394,110	-106
	SUBTOTAL (10-80)	1,239,963	1,268,925	0	1,678,162	14,770	1,561,628	16,247	1,227,899	-123	1,687,440	9,278
90	UNALLOCATED CONTINGENCY	135,399	126,892	0	51,179	0	0	0	0	123	41,901	-9,278
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	14,770	1,561,628	16,247	1,227,899	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 14.770 1.588.128 16.247 1.252.962 0 1.770.142											(

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH JUL 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 Project 860228 to \$1.756 billion to reflect the current Project scope. Finance costs, estimated at \$14.3 million, are also reflected leading to a total of \$1.770 billion.

Commitments:

Overall commitments increased by \$14.8 million this month to \$1.59 billion which represents 89.7% of the Current Budget. The increase is related to RCC executed modifications, Fiscal Year 2021 funding increases for *Metro, KTJV*, and the *Fan Plant easement/Mangrove Yard lease transaction*.

Expenditures:

Expenditures are cumulative through *July* 2020 and increased by \$16.2 million this month for costs across the Project. The \$1.25 billion in expenditures to date represent 70.8% 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

DOLLAN	S IN THOUSANDS										
SCC CODE		ORIGINAL BUDGET	CURREN	T BUDGET	COMMI	IMENTS	EXPEN	DITURES	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	-10,480	0	-10,480	0	0	0	-10,480	0	0
40	SITEWORK & SPECIAL CONDITIONS	0	0	0	0	0	0	0	0	0	0
50	SYSTEMS	0	0	5,950	0	2,750	32	157	0	5,950	0
	CONSTRUCTION SUBTOTAL (10-50)	10,480	-10,480	5,950	-10,480	2,750	32	157	-10,480	5,950	0
60	ROW, LAND, EXISTING IMPROVEMENTS	27,748	10,480	38,228	10,575	38,323	15,005	37,475	10,480	38,228	0
70	VEHICLES	0	0	0	0	0	0	0	0	0	0
80	PROFESSIONAL SERVICES	650	0	1,150	100	748	0	412	0	1,150	0
	SUBTOTAL (10-80)	38,878	0	45,328	195	41,822	15,036	38,043	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	195	41,822	15,036	38,043	0	46,441	0
	861228 TOTAL	39,991	0	46,441	195	41,822	15,036	38,043	0	46,441	0

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH JUL 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 for increased scope at the 7th/Metro Station to be performed by the Project.

Commitments:

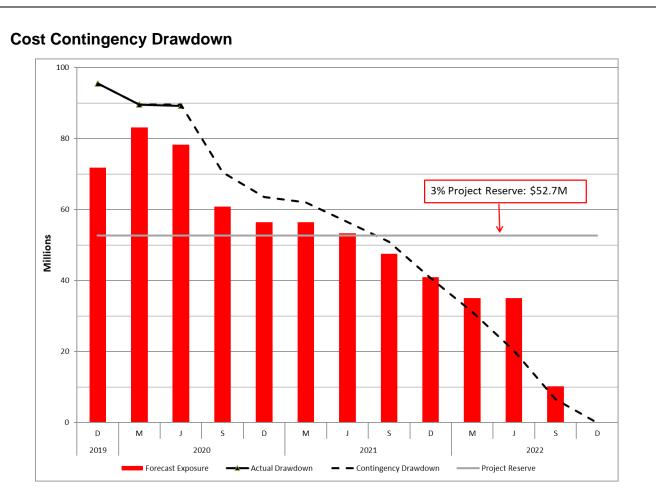
Overall commitments *increased by* \$195 *thousand* this month. The cumulative \$41.8 million through July 2020 represents 90.0% of the Current Budget. *The increase is related to real estate and professional services.*

Expenditures:

Expenditures are cumulative through July 2020 and increased by \$15.0 million this month for costs associated with the Mangrove lease extension transaction. The cumulative \$38.0 million through July 2020 represent 82% of the Current Budget.

Current Forecast:

The total current forecast remains unchanged this month.

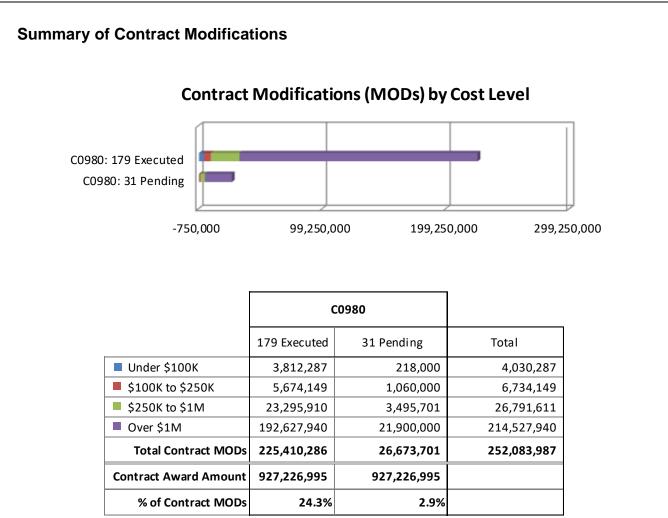


Cost Contingency Drawdown Analysis

The Cost Contingency Drawdown curve introduced this month reflects cost commitments and forecast exposure, thereby providing a more accurate depiction of overall contingency status. Basing the drawdown on commitments (issuances of change notices) rather than executed contract modifications eliminates the administrative processing time involved to finalize contract modifications from the drawdown projections. Planned expenditures per quarter have also been updated to more accurately reflect the current schedule and risks. The project is expected to reach the 3% Project Reserve (Total Contingency) threshold mid-year 2021.

In July, there was a \$1.2 Million drawdown due to executed modifications. Several large contract modifications are being negotiated and expected to be finalized this quarter. The remaining unallocated contingency is \$41 million which is forecast to be fully utilized at the completion of the project.

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	(48, 168)	123	(48,045)	41,900					
Allocated Contingency	86,345	92,809	(39, 529)	(1,319)	(40,848)	51,961					
Total Contingency	211,263	182,754	(87,697)	(1,196)	(88,893)	93,861					



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 seventy-*nine (179)* changes with a total value of \$225.4 million have been executed since NTP of Contract C0980. An additional 31 changes, with a total estimated value of \$26.7 million, are pending.

DISADVANTAGED BUSINESS ENTERPRISE (DBE)

As of June 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	24.41%

Fourteen (14) 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	16. <i>56</i> %

One hundred three (103) Construction DBE sub-contractors have been identified to date.

PROJECT LABOR AGREEMENTS (PLA)

As of June 2020:

Targeted Worker GoalConstruction work to be performed by residents from Economically DisadvantagedArea in the United States	40.00%
Targeted Worker Current Attainment	60.17%
Apprentice Worker Goal Construction work to be performed by Apprentices	20.00%
Apprentice Worker Current Attainment	19.42%
Disadvantaged Worker Goal Construction work to be performed by Disadvantaged Workers who are residents of the United States	10.00%
Disadvantaged Worker Current Attainment	11.14%

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	\$124.50	57%	\$46.76	21%	\$46.25	21%
FEDERAL - SECTION 5309 NEW STARTS	\$669.90	\$669.90	\$669.90	\$662.35	99%	\$464.66	69%	\$464.66	69%
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	\$155.00	97%	\$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	\$15.90	\$13.52	80%	\$7.74	46%	\$7.74	46%
STATE CAPITAL PROJECT LOANS - OTHERS ***	\$132.47	\$274.83	\$274.83	\$265.83	97%	\$232.74	85%	\$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	\$41.98	100%	\$41.98	100%	\$41.98	100%
ROW LEASE REVENUES	\$64.25	\$79.07	\$69.60	\$30.00	38%	\$18.24	23%	\$12.00	15%
GENERAL FUND - METRO	\$0.00	\$43.50	\$43.50	\$43.50	100%	\$43.50	100%	\$43.50	100%
TOTAL	\$1,427.13	\$1,755.84	\$1,573.05	\$1,588.13	90%	\$1,252.96	58%	\$1,233.61	70%

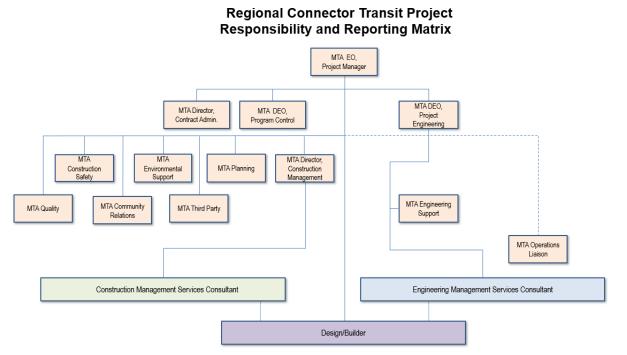
NOTES: 1. EXPENDITURES ARE CUMULATIVE THROUGH JULY 31, 2020. 2. METRO AND TRIBUNE AGREED ON REIMBURSEMENT OF \$1. 2. METRO AND TRIBUNE AGREED ON REIMBURSEMENT OF \$1.6 MILLION RELATED TO 2ND/BOARDWAY OVERBUILD. 3. ORIGINAL BUDGET BASED ON FUNDING PLAN INCLUDED IN THE APPROVED FULL FUNDING GRANT AGREEMENT

3. OKIGINAL BUDIECT BASED ON FUNDING FLAN INCLUDED IN THE APPROVED FULL FONDING 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 TDA ADMINISTRATION, AND NB PROPOSITION A ADMINISTRATION (FOR A TOTAL OF \$.255M)

July 2020



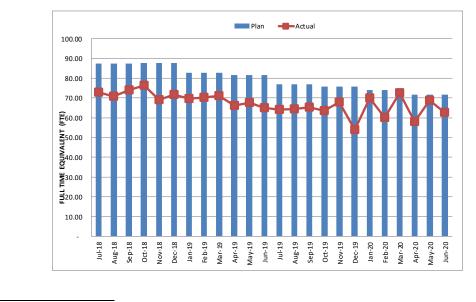
The D/B contract is being managed by a joint team of Metro and consultant personnel located at the Integrated Project Management Office (IPMO).



Updated: 03/2020

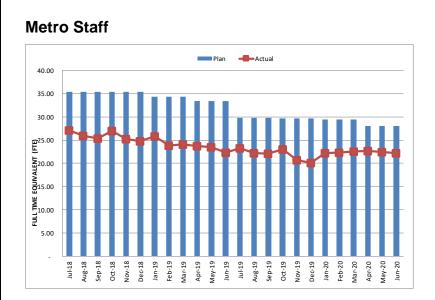
The overall FY20 Total Project Staffing plan averages 73.7 FTE's per month. The total actual project staffing for *June* 2020 was *62.79*; 22.16 FTEs for Metro's Project Administration staff and *40.6* FTEs for consulting staff. Consulting staff FTEs are based on monthly invoice billable hours. Review of staffing plans is on-going to ensure staffing needs are appropriately managed.

Total Project Staffing – Metro and Consultants

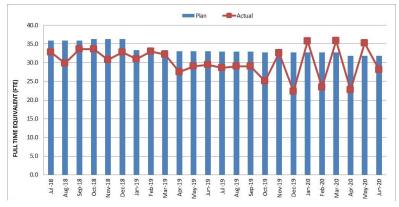


June actuals include 2.65 FTEs related to PMSS Services.

Regional Connector Transit Project Monthly Project Status Report

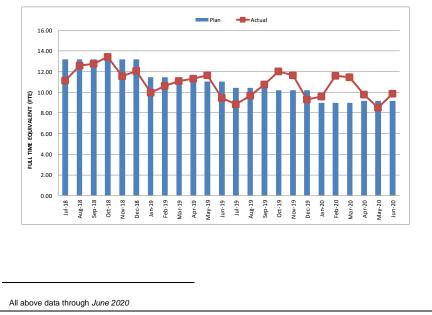


CM Support Services Staff (Consultant)



CMSS June actual FTEs fall short of the forecast due to lower billable hours in the month.

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)

• The transaction has been completed for the acquisition of the Fan Plant Easements and the extension of the temporary construction easement for three (3) years. Closing was held on July 22, 2020. The second closing will not take place until the Project construction involving the existing Gold Line is completed which is estimated to be in 2022.

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. *There was no activity in July*.

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 May 15, 2020, pending submission to court. On June 24, 2020, Condemnation counsel submitted request to serve order of possession via publication, pending court response. An Order of Possession publication was approved by the court on August 6, 2020 and published August 10, 2020. The publication runs for four (4) weeks; 30 days thereafter LACMTA will request entry of default if no one answers.
- CRA/LA Parcel CRALA accepted the offer and the agreement was submitted to their Board on June 4, 2020. CRA/LA Board approved the transaction on June 4, 2020; and presented to the Oversight Board on June 18, 2020. The Oversight Board approved the transaction, and the request was submitted to the Department of Finance (DOF) for approval. The DOF approved the disposition and CRA/LA signed the agreements and deed; will be sent to LACMTA for signature and payment processing the week of August 12, 2020. Escrow is anticipated to close within two (2) weeks of receiving CRA/LA signed documents.
- County of Los Angeles Parcel The County accepted the offer and received Board approval on May 19, 2020; County recorded deed in late July 2020.
- City of Los Angeles Parcel The City agreed to the transfer based on the City's and LACMTA's Memorandum of Agreement. The City finalized conveyance documents and is coordinating council action to approve *There was no activity in July*.

<u>Tribune</u>

• The Property swap for subsurface easement area agreements was finalized and signed by LACMTA; pending Tribune signatures.

QUALITY ASSURANCE

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

- 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
- Metro QA conducted a surveillance (C980-Surv-2020-012) for Concrete Placement 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 surveillance (C980-Surv-2020-013) for Concrete Placement of West Wall #22 at Flower Street Cut and Cover. The installation activities were found to be in compliance and acceptable and surveillance was closed.

RCC NCR 0097 was issued for a cold joint in Wall #104 after placement of concrete at Grand Av Arts/Bunker Hill Station. The NCR was sent to the Engineer of Record for approval.

RCC NCRs 004, 047, 053, 054, 057, 064, 074, 076, 083, 084, 086, 087, 089, 092, 093, 095, and 096 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. *RCC is preparing the SWPPP Annual Report.* The project experienced high heat days during June, which required dust suppression activities.
- 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 weekly monitoring 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 weekly compliance report.

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.

- On July 1, 2020 Metro began preparing the 30th Quarterly MMRP Update covering the period of May through July 2020. This report will be submitted to the FTA no later than August 14, 2020.
- Three (3) new historic period isolates were recorded during July, including creamcolored ceramic plates and cups and a white porcelain doll head. Two (2) new historic period features were recorded during July. Feature 172, consisting of a cylindrical sewer vault shaft, was encountered on July 17, 2020. Feature 172 was evaluated by the Project Archaeologist; the feature does not appear to be eligible for either the NRHP or the CRHR. Feature 173, consisting of a basin shaped burn pit with historic refuse and various artifacts including ceramics, glass, and metal fragments, was encountered on July 30. On that same day, Metro notified the FTA and SHPO of this new discovery in accordance with Stipulation I.J of the Memorandum of Agreement between the Federal Transit Administration and the California State Historic Preservation Officer Regarding the Regional Connector Transit Corridor Project, Los Angeles County, California (MOA) for this undertaking, the Amended Cultural Resource Monitoring and Mitigation Plan for the Regional Connector Transit Corridor Project, Los Angeles County, California (CRMMP), and 36 CFR 800.13(b)(3). On July 31, 2020, the FTA determined that the feature does not meet the criteria for eligibility for the National Register of Historic Places and requested SHPO's concurrence on this determination. On August 6, 2020, SHPO concurred with the FTA determination.

CONSTRUCTION AND COMMUNITY RELATIONS

Construction Relations

- Responded and addressed Project related inquiries from the public received via the hotline, and email. The Little Tokyo Community Office is closed in response the COVID-19 *pandemic*. 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, storm drain installation at Temple St, Alameda guideway excavation at Mangrove Yard, fire hydrant and waterline installation on 1st St/Central Av, utility investigation at 2nd St/Broadway and 2nd St/Spring St, planned street closures at 1st/Alameda for restoration, excavation at Central Av, continued backfill material delivery on Flower St, and geotechnical monitor maintenance, as well as introduced stakeholders to 5th St/6th St Improvements Project team for further coordination with that project.
- 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 four (4) construction coordination activities with Project adjacent property owners to perform maintenance on geo-tech equipment: Metropolitan News, Onni Times Square, Hikari Apartments, and *The Music Center*.
- Provided weekly construction updates and coordinated work activities with 36 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, World Trade Center Parking Garage, The Roosevelt Lofts, 888 Figueroa, 818 7th St, LTBA, LTCC, LTBID, LTSC, JACCC, Sustainable Little Tokyo, JANM, MOCA at Geffen, Chado Tea Room, Hikari Apartments, JVP, Office Depot, Shin-Sen Gumi, Arts District BID, Savoy Community Association, One-Santa Fe, Higgins Building, Broadway Civic Center, Cafecito Pura Vida, LAPD Headquarters, Metropolitan News.
- Presented virtually to three (3) community organizations with updates on: Little Tokyo Business Association, Little Tokyo Community Council, and the Little Tokyo Community Council All Committees on the progress of the 1st/Alameda street restoration, the planned Central Av street restoration closure, and the Fall 2020 Alameda tunnel box construction and Gold Line Station closure.

- Conducted *twenty-five* (25) briefings to local stakeholders on planned construction activities:
 - Geotech decommissioning with Hikari and Japanese Village Plaza
 - Nighttime variance applications: The Emerson, The Promenade, The Broad, Bunker Hill Tower
 - Street restoration and nighttime variance for Central Av: LTCC, LTBA, LTBID, Japanese Village Plaza, Go For Broke, JANM, Chado Tea Room, MOCA, Savoy Community Association, Office Depot, Hikari
 - Street restoration at 2nd St/Broadway: Higgins, Broadway Civic Center
 - Flower St concrete placement, backfill material delivery, and upcoming work below deck: Charles Dunn, Westin Bonaventure, and Maguire Gardens.
- Hosted a project update webinar on *July 9*, 2020 with members of Regional Connector's Community Leadership Council and members of the *general* public in attendance. Provided updates on the progress of construction, planned street closures *at Hope St, 2nd St/Broadway and Central Av and 1st St, as well as* mitigations in place for businesses through Metro's Eat, Shop, Play Program.
- Continued standing meetings with LA City Council District 14 and the Mayor's Office.

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

- Highlighted 8 businesses *near the Metro construction alignment* via a combined *nine (9)* electronic newsletter and social media posts:
 - Mitsuru Sushi & Grill, Rakkan Ramen, Chado Team Room, Drago Centro, Kagura Downtown, Limericks Tavern, Café Dulce, Oomasa.

Community Relations

• Continued work with the monthly Little Tokyo Marketing & Business Task Force via Zoom because of the COVID-19 *pandemic*. *The focus of the meeting was the outcome of a month-long program called virtual Delicious Little Tokyo campaign. Virtual Delicious Little Tokyo was launched on June 26, 2020 and ended on July 26, 2020.*

CREATIVE SERVICES

Art Program

- Reviewed art glass fabricator submittals with Artists, RCC and project team.
- Held design update meeting with the Atomic Cafe Interpretive Graphic Display community task force.
- Reviewed and responded to RCC PSR, CN and RFI submittals.
- Reviewed and responded with Artists to porcelain enamel fabricator submittals.
- Reviewed and responded with Artists to mosaic fabricator progress updates.
- Continued assessment of Project operating impacts to signage systemwide.



Fabrication of mosaic artwork for Grand Av Arts/Bunker Hill Station

SAFETY & SECURITY

C0980 Regional Connector

- In response to the COVID-19 pandemic, Project Safety Management continued 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 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.

Project Safety Record

- RCC reported no Recordable Injuries during the month of July 2020.
- RCC reported *83,835* work hours for *June* 2020. RCC's total Contract to Date work hours through *June* 2020 are 3,*982,123* with a total of 18 Recordable Injuries and no Lost Workday (Days Away) case injuries. The C0980 Contract Recordable Injury Rate is 0.90. 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 *June* 2020 is 4,093,182 hours with 19 recordable injuries. The Total Project Contractor Recordable Injury Rate is 0.93.
- Total Aggregate Project work hours for Contractors, Metro, and Support Services Consultants, through *June* 2020 is 4,*923,348* with 20 Recordable Injuries and no Lost Workday (Days Away) injury cases. The Total Project Aggregate Safety Rate is 0.81.*

^{*} 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

July	2020
------	------

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

July	2020
------	------

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

July	2020
------	------

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
May 2020	RCC completed SEM Cavern Arch Walls
May 2020	RCC completed Grand Av Arts/Bunker Hill Station upper ancillary level walls
May 2020	RCC completed South Flower Cut & Cover invert
June 2020	RCC completed fabrication pre-cast floating slabs
June 2020	RCC completed North Flower Cut & Cover roof deck
July 2020	RCC completed Historic Broadway Station entrance concourse level walls
July 2020	RCC completed installation pre-cast floating slabs