

August 23, 2021

TO:

Distribution

FROM:

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Project Manager

SUBJECT:

Regional Connector Transit Project

July 2021 Monthly Project Status Report

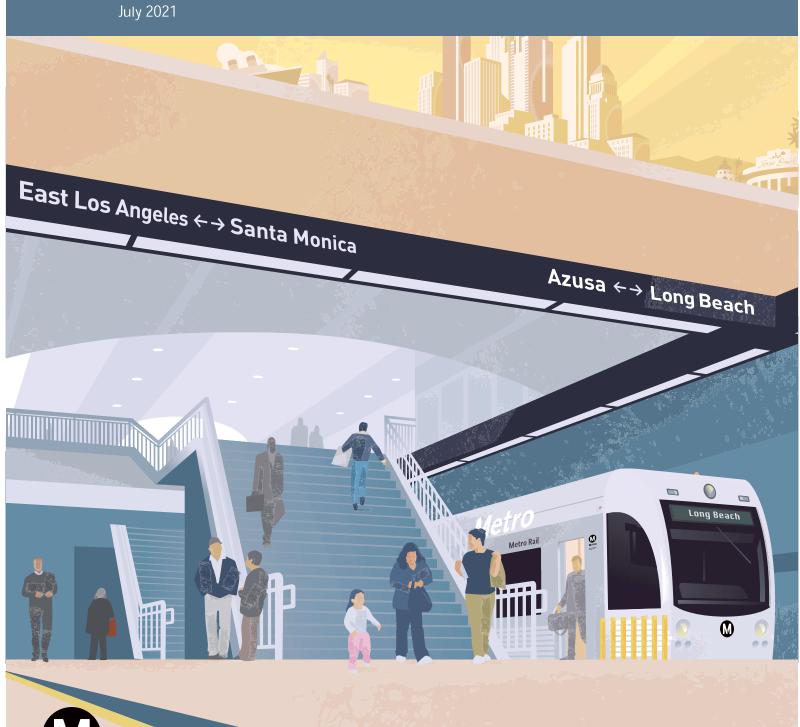
Enclosed is the Monthly Project Status Report for the Regional Connector Transit Project. This report contains the Los Angeles County Metropolitan Transportation Authority's (LACMTA) representation of the Regional Connector Transit Project status for the period ending July 30, 2021.

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.

Enclosure

## **Regional Connector Transit Project**

MONTHLY PROJECT STATUS REPORT



# 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).

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## **PROJECT OVERVIEW**

## **Project Background**

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

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



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

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

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

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

## **Major Procurements**

<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 procured four (4) Light Rail Vehicles (LRVs) for the Project. The vehicles were built and delivered by Kinkisharyo International, LLC under Option 2 of Contract P3010. Delivery and acceptance of four LRVs occurred late 2020.

Rail Operations Center (ROC): The existing functional operations at the ROC are being expanded to accommodate the central control functions associated with five new rail lines to include Regional Connector. The Project is contributing \$4.4M towards this expansion (representing a \$400k forecast increase in May 2021). The ROC expansion is scheduled to be complete by December 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 now expected to begin in 4th Quarter 2021.

#### **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 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 \$59.4 million in January 2021 to include an Early Completion Incentive Agreement. 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 17, to include:

- Federal New Starts Grant
- Federal Congestion Management Air Quality and RIP Programs
- 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 on Page 24.

<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. Detailed review of each element leading to start-up is underway. These reviews include recent developments related to bifurcating the substantial completion and the procurement related to modifications at the ROC. Interface between Project Management, Operations and Fire Life Safety representatives will intensify to ensure an integrated and timely approach is realized.

## **EXECUTIVE SUMMARY**

In June, the Project achieved 83.7% completion based on earned value measurements for design and construction. The focus of the Project is to continue with systems, mechanical and electrical installations, station finishes while the last of structural concrete and trackwork are active over the next several months.

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) are issued, thus 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>: *Completed* U-Channel invert installation, *and LVT track* installation at Left Tunnel. *Continued U-Channel walls*.

<u>Wye Structure</u>: Continued installation of the Right Hand #5 turnout, diamond special track, and curved rail installation at Alameda *Left Track*. Continued removal of temporary piles and decking.

Alameda Street Cut & Cover Tunnel & U-Channel: Completed storm drain installations at Temple Street, and emergency exit invert. Continued cut/cover tunnel wall and roof deck placement across Temple. Continued drain and sewer installations at Mangrove, and street restoration at Temple Street. Began demolition and reconstruction of the MSE wall adjacent to Alameda.

<u>Future Little Tokyo/Arts District Station</u>: In the station box, *continued metal ceiling panels*, fire protection installation, mechanical/electrical/plumbing installations, and elevator installations at PL1 and PL2. In the lower ancillary, continued mechanical/electrical/plumbing installation. In the mid-vent ancillary, continued the CMU walls. In the upper ancillary, continued mechanical/electrical/plumbing. *Started* the *installation of Train Control racks & equipment in* the *TC&C Room*. In the west vent shaft, *completed* the exterior walls. *Started the interior wall*.

Reach 1 Tunnels Section (Future Little Tokyo/Arts District Station to Crossover Cavern): Continued installation of impedance bonds, *and* walkway handrail installation in the Right and Left Track Tunnels.

<u>Crossover Cavern</u>: Continued OCR installation.

Historic Broadway Station: At the platform level, continued the mechanical/electrical/ plumbing installations, and metal ceiling panel installation. At the concourse level, continued CMU walls, metal ceiling panels, and the mechanical/electrical/ plumbing installations. Αt the Ancillary level, continued the CMU mechanical/electrical/plumbing installations. At the Roof Level, completed the East Tunnel Vent Plenum excavation, and the Load Transfer System (LTS). Started the installation of the Public Stair #1 invert. Continued the Mid-Vent Plenum walls, West Tunnel Vent Plenum walls | mid deck. Started the East Tunnel Vent Plenum invert. In the station box area, completed temporary deck beam removal. Continued Emergency Exit #2 structure, utility relocations and street restoration.

Reach 2 Tunnel Section (Historic Broadway Station to Grand Av Arts/Bunker Hill Station): Continued the emergency walkway handrail, and installation of Impedance Bonds in the Right and Left Track Tunnels.

Grand Av Arts/Bunker Hill Station: At the platform level, continued the metal panel ceiling, mechanical/electrical/plumbing and the PL7|PL8 elevator installation. At the concourse level, continued the metal panel ceiling, mechanical/electrical/plumbing, and the elevator hoist way enclosure steel for the concourse level PL1-6 elevators. At the lower and upper ancillary levels, continued the installation of mechanical/electrical/plumbing, and LADWP equipment installation. At the roof level, continued the installation of mechanical/electrical/plumbing. At the upper roof level, continued the installation of mechanical/electrical/plumbing. At the Plaza, continued the Public Stair #3 installation. At the Upper Plaza, completed the Pedestrian Bridge barrier walls. At Northbound Flower Street, continued the storm drain installation. At Hope Street, completed water line installations, and continued storm drain installations.

Reach 3 Tunnel Section (Grand Av Arts/Bunker Hill Station to Flower): Completed the installation of CX Boxes. Continued the installation of Impedance Bonds.

<u>Flower Cut & Cover Tunnel</u>: *Completed* the installation of CX Boxes. *Continued the installation of* Impedance Bonds, OCR Rail, and tunnel lighting in both tunnels. Continued the emergency exit structure, and the installation of mechanical/electrical/plumbing at the Mechanical Room and Disconnect Room. Started installation of local Fiber Optic Cables. At Flower Street, completed the structural backfill. *Completed* the removal of temporary street decking, and *continued* street restoration.

## **Schedule Summary**

Divergence between Metro's Project Master Schedule and RCC's Contract Schedule has manifest over the past several months. The driving operations center on late civil/structural work as they relate to emergency vent structures, as well as elevator installations across the alignment. Growing inefficiencies are impacting progress rates due in large part to lagging completion of predecessor activities at interfaces between operations, e.g., trackwork completion to train control device installations, or trackwork completion to OCR installation. Deep dives into status of interfaces are underway to better assess progress and reasonable path-forward sequences in support of established substantial completion milestones.

## **Costs Summary**

Project costs continue to track within budget. To date, the design and construction changes related to base scope represent 10.7% 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 12.

### **Coronavirus Impacts**

It remains unclear as to what extent the Coronavirus (COVID-19) has impacted construction operations. RCC has notified Metro of work inefficiencies and impacts to material supply chains, especially related to special trackwork, conduit deliveries, and electrical equipment.

There were *two* (2) new COVID-19 cases reported for the period; there have been a total of 109 positive cases through July 2021; all cases have been closed with sufficient negative testing. RCC continues to follow local, state, and federal regulations related to COVID-19 to maintain operations.

#### **Key Management Concerns**

<u>Item 1</u>: Rail Activation for integrating three transit lines is complex. Schedule and cost challenges are likely to continue to manifest. New challenges are expected with the bifurcated substantial completion.

Status/Action: Three weekend bus bridges have been successfully completed. Continued planning and incorporation of lessons-learned are underway for the remaining scheduled weekend outages through mid-Fall.

Agreement reached with Operations for weekend bus bridging at 7th/Metro that provides eight weekend closures (with two contingency closures, should they be required) to allow for installation and testing of various system cut-overs.

<u>Item 2</u>: The availability of SCADA resources may threaten Metro's ability to support RCC software programming and testing activities.

Status/Action: Metro Operations has committed internal resources towards the SCADA programming effort pending the initiation of consulting resources anticipated in late July. Issue is being actively managed with the SCADA Group to ensure appropriate support will be available for the planned cut-over work at 7th/Metro during the 4th Quarter 2021. Continuing concern for insufficient Metro resources to perform SIT-2 testing remains. Detailed review of scope to identify tests that pose risk to continuing transit service, together with exploring means of securing provisional resources to meet demands for expertise continue.

<u>Item 3</u>: RCC has indicated that COVID-19 has impacted performance on the Project through the late delivery of several MCC units, as well as elements where stainless steel is prominent (i.e., dampers and attenuators).

Status/Action: RCC has initiated mitigation measures in anticipation of delayed equipment deliveries. Metro continues to monitor the situation to determine the extent of actual impact to schedule or will likely occur in the coming months.

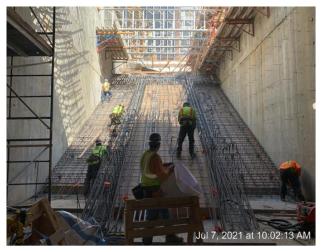
## **Project Construction Photos**



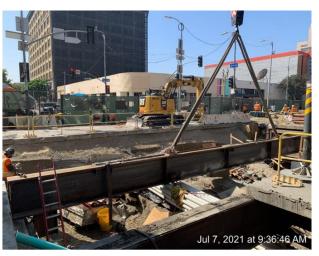
1st street U-Channel - Segment 15 Invert pour



Alameda C/C - Roof slab 7 concrete pour



PS1 rebar and formwork



Deck beam 29 removal



Illusion Panel Install at Concourse Level Ceiling



Placing Backfill Slurry Over 6-inch DI DWP Water Supply

## **PROJECT UPDATE**

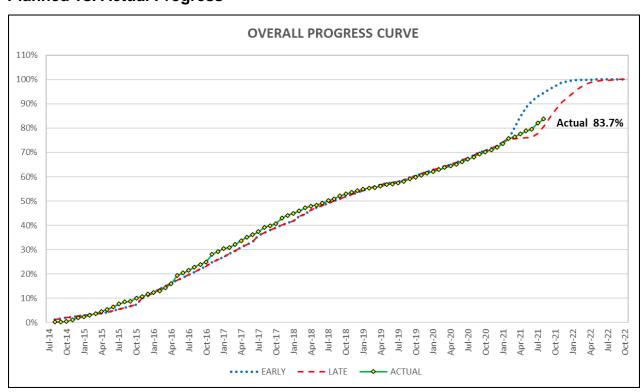
## **PROJECT SCHEDULE**

## **Progress Summary**

	Status	Change from Last Month	Comment
Forecast Revenue Service	Summer 2022	None	
Proposed FFGA Revenue Service	03/31/2023	None	
Final Design Progress:			
Contract C0980	100%	NA	
Construction Contracts Progress:			
Contract C0981R & C0980	82.5%	1.7%	

**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-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21
Complete East Vent Plenum Excavation at Historic Broadway Station	07/23/21 A	$\bigcirc$					
Complete Station Entrance Load Transfer System at Historic Broadway Station	07/29/21 A						
Complete Concourse Level CMU Installation at Historic Broadway Station	08/04/21						
Complete Flower Cut & Cover Emergency Exit Structure	08/20/21						
Complete #5 Turnouts and Diamond Track	09/03/21			$\bigcirc$			
Complete West Vent Plenum at Historic Broadway Station	09/03/21						
Complete Wye Fan Plant Roof Deck	09/21/21						
Complete OCR - 7th/Metro to Wye	10/25/21						
Complete Elevator Hoist Way Glazing at Grand Ave / Bunker Hill Station	10/25/21						
Complete LVT Track at 1st Street Cut & Cover/U-Channel	10/27/21						
Complete #10 Crossover Track at Alameda Cut & Cover	11/22/21					$\bigcirc$	
Complete LVT Track at Alameda Cut & Cover/U-Channel	12/23/21						
MTA Staff MTA Boa	rd Action	$\bigcirc$	(Federal Trainistration)	_	Utility Co		

## **Major Equipment Delivery**

## Metro Supplied Equipment

Equipment	Initial	Scheduled	Scheduled
	Procurement	Delivery	Installation
LRT Vehicles	(NTP) 08/20/2012 A	Option 2 12/31/2020 A	N/A
Ticket Vending	~ 01/30/2018 A	07/08/19 A	10/28/2021
Machines		(warehoused)	~03/07/2022

## **PROJECT COST**

#### Project Cost Analysis – 860228

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT (860228)
COST REPORT

DOLLARS IN THOUSANDS

SCC CODE		FFGA BUDGET	ORIGINAL CURRENT BUDGET BUDGET		COMMITMENTS		EXPENDITURES		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	273,671	0	275,570	4,370	252,065	311	272,478	-1,193
20	STATIONS, STOPS, TERMINALS, INTERMODAL	354,268	219,477	0	235,436	0	238,059	6,492	167,645	400	239,533	4,097
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	628,356	2,933	601,745	5,108	553,637	-50	628,052	-303
50	SYSTEMS	69,667	73,848	0	78,852	138	68,588	2,830	29,721	60	76,439	-2,413
	CONSTRUCTION SUBTOTAL (10-50)	846,343	920,468	0	1,216,314	3,071	1,183,963	18,800	1,003,069	721	1,216,502	188
60	ROW, LAND, EXISTING IMPROVEMENTS	115,889	74,208	0	59,315	0	57,858	0	57,851	630	59,946	630
70	VEHICLES	16,275	16,275	0	16,275	0	16,275	6	12,122	0	16,275	0
80	PROFESSIONAL SERVICES	261,455	257,973	0	394,865	10,212	364,816	1,242	343,358	1,610	400,949	6,084
	SUBTOTAL (10-80)	1,239,963	1,268,925	0	1,686,770	13,283	1,622,911	20,047	1,416,400	2,961	1,693,673	6,903
90	UNALLOCATED CONTINGENCY	135,399	126,892	0	42,571	0	0	0	0	-2,961	35,668	-6,903
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	13,283	1,622,911	20,047	1,416,400	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	13,283	1,649,411	20,047	1,441,463	0	1,770,142	0

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH JUL 2021.

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 Project 860228 to \$1.756 billion to reflect then current and present 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 \$13.3 million this month to \$1.65 billion which represents 93.2% of the Current Budget. The overall increase is related to RCC executed modifications, and Fiscal Year 2022 funding increases for CPJV and CMSS.

#### **Expenditures:**

Expenditures are cumulative through *July* 2021 and increased by \$20.0 million this month for costs across the Project. One billion four hundred *forty-four* million (\$1.44 billion) in expenditures to date represent 81.4% 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	T BUDGET	COMMITMENTS		EXPENI	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	0	0	0	0	0	0	0	0	0
40	SITEWORK & SPECIAL CONDITIONS	0	0	13,548	0	13,548	489	8,511	0	13,548	0
50	SYSTEMS	0	0	5,950	0	5,014	0	1,335	0	5,950	0
	CONSTRUCTION SUBTOTAL (10-50)	10,480	0	19,498	0	18,562	489	9,846	0	19,498	0
60	ROW, LAND, EXISTING IMPROVEMENTS	27,748	0	38,228	54	38,377	0	37,475	0	38,228	0
70	VEHICLES	0	0	0	0	0	0	0	0	0	0
80	PROFESSIONAL SERVICES	650	0	1,150	0	748	0	427	0	1,150	0
	SUBTOTAL (10-80)	38,878	0	58,876	54	57,687	489	47,748	0	58,876	0
90	UNALLOCATED CONTINGENCY	1,113	0	513	0	0	0	0	0	513	0
100	FINANCE CHARGES	0	0	0	0	0	0	0	0	0	0
	TOTAL PROJECTS (10-100)		0	59,389	54	57,687	489	47,748	0	59,389	0
	861228 TOTAL	39,991	0	59,389	54	57,687	489	47,748	0	59,389	0

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH JUL 2021.

## **Original Budget:**

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

## **Current Budget:**

In January 2021, the Metro Board approved an additional budget increase of \$12.9 million for the Early Completion Incentive Agreement increasing the Project 861228 LOP budget to \$59.4 million, to reflect the current Project scope.

#### **Commitments:**

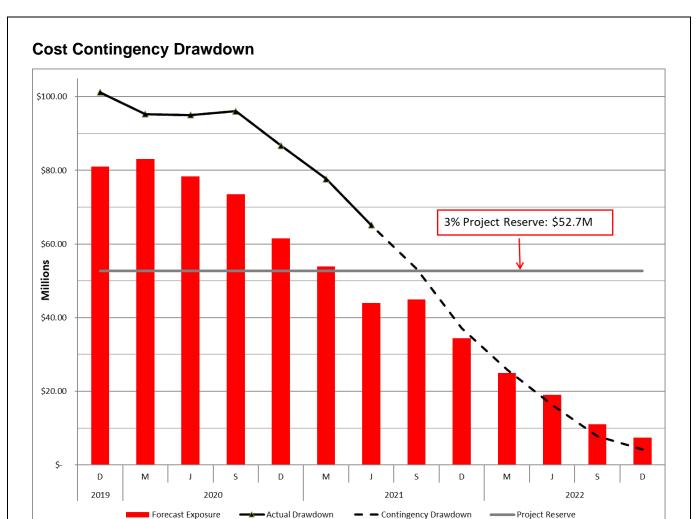
Overall commitments increased by \$544 thousand this month to \$57.9 million which represents 97% of the Current budget. The increase is related to *real estate*.

### **Expenditures:**

Expenditures are cumulative through *July* 2021 and increased by \$0.49 million for costs related to the Modification 187. The cumulative \$47.7 million through *July* 2021 represent 80% of the Current Budget.

#### **Current Forecast:**

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



## **Cost Contingency Drawdown Analysis**

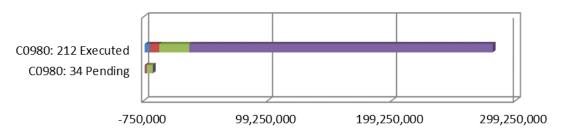
The Cost Contingency Drawdown curve reflects cost commitments and forecast exposure, thereby providing a depiction of overall contingency status. Basing the drawdown on exposures (issuances of change notices) rather than executed contract modifications eliminates the administrative processing time involved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

In *July*, there was a \$3.5 million contingency drawdown into executed modifications. The remaining unallocated contingency is \$35.7 million which is forecast to be fully utilized by 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	(51,317)	(2,961)	(54,277)	35,668				
Allocated Contingency	86,345	92,809	(66,299)	(549)	(66,848)	25,961				
Total Contingency	211,263	182,754	(117,615)	(3,510)	(121,125)	61,629				

## **Summary of Contract Modifications**

## Contract Modifications (MODs) by Cost Level



	C	0980	
	212 Executed	34 Pending	Total
■ Under \$100K	4,077,787	510,528	4,588,315
■ \$100K to \$250K	7,638,235	1,268,000	8,906,235
■ \$250K to \$1M	24,303,512	4,850,911	29,154,423
Over \$1M	244,931,807	-	244,931,807
Total Contract MODs	280,951,341	6,629,439	287,580,780
Contract Award Amount	927,226,995	927,226,995	
% of Contract MODs	30.3%	0.7%	_

#### Note:

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

Two hundred and *twelve* (212) changes with a total value of \$280.95 million have been executed since NTP of Contract C0980. An additional 34 changes, with a total estimated value of \$6.6 million, are pending.

## **DISADVANTAGED BUSINESS ENTERPRISE (DBE)**

## As of June 2021:

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	\$14.8M (22.63%)
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime	24.48%

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	\$196.3M (18%)
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime	18.85%

Construction DBE sub-contractors that have been identified increased to one hundred sixteen (116).

## **PROJECT LABOR AGREEMENTS (PLA)**

#### As of June 2021:

Targeted Worker Goal Construction work to be performed by residents from Economically Disadvantaged Area in the United States	40.00%
Targeted Worker Current Attainment	61. <i>16</i> %
Apprentice Worker Goal	00.000/
Construction work to be performed by Apprentices	20.00%
Apprentice Worker Current Attainment	20.08%
Disadvantaged Worker Goal	
Construction work to be performed by Disadvantaged Workers who are residents of	10.00%
the United States	
Disadvantaged Worker Current Attainment	11.08%

## FINANCIAL/GRANT

## Status of Funds by Source

July 2021

SOURCE	ORIGINAL BUDGET	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS \$	%	EXPENDITURES \$	%	BILLED TO FUNDING SOURCE \$	%
		ANTIONATED	AVAILABLE	•	76	Ψ	76	*	76
FEDERAL - CMAQ	\$64.00	\$228.01	\$64.00	\$167.03	73%	\$60.37	26%	\$50.94	22%
FEDERAL - SECTION 5309 NEW STARTS	\$669.90	\$669.90	\$669.90	\$669.90	100%	\$583.79	87%	\$583.79	87%
FEDERAL - SECTION 5309 NEW STARTS - AMERICAN RESCUE PLAN ACT		\$ 59.23	\$0.00	\$0.00	0	\$0.00	0	\$0.00	0
FEDERAL - RIP	\$0.00	\$1.41	\$1.41	\$1.41	100%	\$1.41	100%	\$1.41	100%
MEASURE R - TIFIA LOAN****	\$160.00	\$141.89	\$141.89	\$141.89	100%	\$141.89	100%	\$141.89	100%
MEASURE R BONDS****	\$0.00	\$18.11	\$18.11	\$18.11	100%	\$7.97	44%	\$7.56	42%
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	\$19.55	\$15.90	\$17.00	87%	\$11.97	61%	\$9.97	51%
STATE CAPITAL PROJECT LOANS - OTHERS ***	\$132.47	\$236.38	\$236.38	\$236.38	100%	\$236.38	100%	\$224.14	95%
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	\$19.85	\$19.85	\$19.85	100%	\$19.85	100%	\$19.47	98%
GENERAL FUND - METRO	\$0.00	\$69.49	\$79.80	\$85.82	123%	\$85.82	123%	\$85.82	124%
TOTAL	\$1,427.13	\$1,755.84	\$1,539.26	\$1,649.41	94%	\$1,441.47	82%	\$1,417.01	81%

- NOTES:

  1. EXPENDITURES ARE CUMULATIVE THROUGH JULY 31, 2021.

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

  3. ORIGINAL BUDGET BASED ON FUNDING PLAN INCLUDED IN THE APPROVED FULL FUNDING GRANT AGREEMENT

  4. LACMTA RESERVES THE ABILITY TO UPDATE COSTS AND CHANGE FUND SOURCES AS REQUIRED.

  \* STATE PROPOSITION 1A HIGH SPEED RAIL BONDS

  \*\* STATE PROPOSITION 1B PUBLIC TRANSPORTATION MODERNIZATION, IMPROVEMENT AND SERVICE ENHANCEMENT ACCOUNT

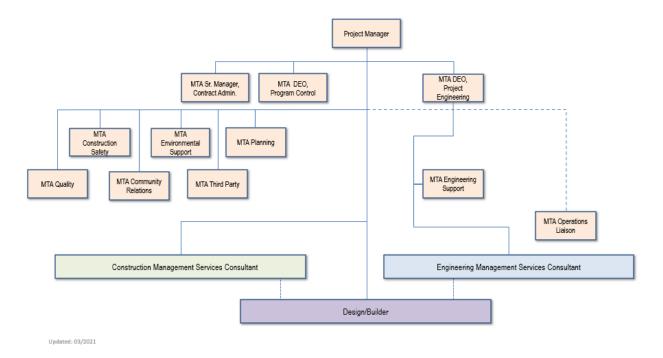
  \*\*\*OTHERS INCLUDE TDA ADMINISTRATION, AND NB PROPOSITION A ADMINISTRATION (FOR A TOTAL OF \$.255M)

  \*\*\*\* OTHERS INCLUDE TDA ADMINISTRATION, AND NB PROPOSITION A ADMINISTRATION (FOR A TOTAL OF \$.255M)

  \*\*\*\*\* TIFIA LOAN CLOSED ON AUGUST 27, 2020. BALANCE OF ORIGINAL TIFIA BUDGET WILL BE MEASURE R BONDS.

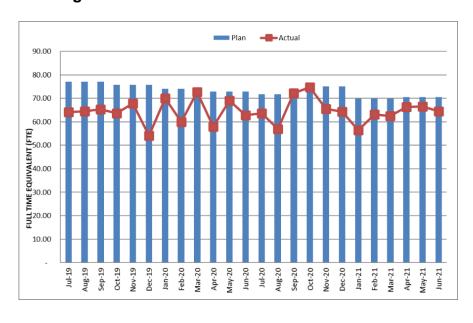
## PROJECT ORGANIZATION AND STAFFING

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



The overall FY21 Total Project Staffing plan averages 71.7 FTEs per month. The total actual project staffing for *June* 2021 was 64.5; 23.15 FTEs for Metro's Project Administration staff and 41.4 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.

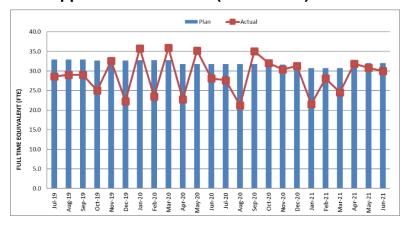
## **Total Project Staffing - Metro and Consultants**



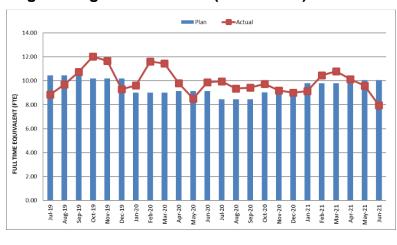
#### **Metro Staff**



## **CM Support Services Staff (Consultant)**



## **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 June 2021

## **REAL ESTATE**

## **Open Real Estate Matters – Seven Parcels Remaining**

## City of Los Angeles (Mangrove Parcels)

No further action required on this parcel until June 2022.

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

 The Purchase Agreement has been reviewed and accepted by Metro. The Chief Administrative Officer has approved the agreement; now pending LADWP Board approval. City Council approved the agreement in early May. The agreement has been signed, pending original to open escrow. Once escrow is opened LADWP will provide the executed deeds. There were no changes in the month of July.

## 2nd and Hope

 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. City approved the motion, LACMTA Real Estate coordinating with City of LA BOE on next steps to transfer property. The Project has approved the purchase price, Real Estate coordinating with City on transaction process.

#### Tribune

ROE extension fully executed and recorded through the County.

## **QUALITY ASSURANCE**

Metro QA performed the following activities during the month of *July* 2021:

- Performed oversight verification of RCC's design and construction activities
- Reviewed and provided comments on RCC's Quality related submittals
- Attended daily meeting/briefing, CMSS personnel
- Reviewed test results for Portland Cement Concrete, Soils Testing, Asphalt Testing and Non-Destructive Testing of Welding
- Attended CQWP and "Readiness Review" meetings with RCC
- Attended Bi-Weekly Quality Review Meetings with RCC Quality Management
- Metro QA conducted one surveillance (C980-Surv-2021-008) dated June 26, 2021, to review the status of the site preparation and installation of the High-density polyethylene (HDPE) water proofing system at the roof-top box of box (tunnel) and some other areas of the wall. Section observed along Alameda Leg, station 87+10 thru 88+86. All documentation and DIRs "basic" required data were found in compliance with contract documents and project specifications.
- Metro QA submitted a Quality Audit Report dated July 15, 2021 for proper filing and distribution Project Quality Audit # 2021-01, First Quarter 2021.
- Metro accepted the disposition by the EOR and closed RCC NCR 0117 on July 22, 2021.

RCC NCR 121 was issued on July 7, 2021 – At Historic Broadway Station, upon stripping of block out for the glass guardrail shoe, it was revealed the embedded anchor bolts are skewed over the acceptable tolerance.

RCC NCR 122 was issued on July 12, 2021 – At Historic Broadway Station, two 4" steel oil pipes were cut after previously being installed and pressure tested; additionally, two 3" steel electrical conduit pipes were also cut after being previously being installed and accepted.

As of July 2021, there have been a total of 122 NCRs issued, with 19 NCRs that remain open.

## **ENVIRONMENTAL**

• Stormwater Pollution Prevention Plan (SWPPP) inspections of active Project work areas are conducted weekly by RCC. Metro performs additional inspections and shares observations with RCC for corrective action. Metro receives copies of communication sent between field sites and QSP related to observed deficiencies and corrective actions. Noise and vibration spot checks continue to be conducted weekly at multiple sensitive locations, and at locations of new activities along the alignment. RCC 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. RCC also provided a weekly compliance report.

There have been inquiries relevant to environmental compliance from stakeholders adjacent to the future Grand Av Arts/Bunker Hill Station; however, Metro/RCC's Community Relations continue to be responsive and actively address community concerns in coordination with Area Leads, Resident Engineers, and field staff with respect to each construction site.

- In July, Metro began preparation of the 34th Quarterly MMRP Update covering the May-July 2021. The report will be submitted to the FTA no later than August 14, 2021.
- Five new historic period features and two previously recorded historic period features were encountered during July.

Feature 180 was exposed on July 1, 2021 and is a structural foundation of a demolished historic-age building, the Bryson-Bonebrake Block, which does not appear to be eligible for listing on either the NRHP or the CRHR. SHPO concurred with this determination on July 7, 2021. On July 13, 2021, RCC crews encountered the feature again, which led to the removal of a small section of Feature 180. The removal process was documented with photos and recordation logs. No other adverse effect is expected to occur during future work.

Feature 181 was encountered on July 1, 2021 and is a structural foundation of a demolished historic-age building identified as the Mueller Block. It does not appear to be eligible for listing on either the NRHP or the CRHR. SHPO concurred with this determination on July 7, 2021.

Feature 109 is a set of brick-and-mortar walls with a concrete footing, which was exposed initially on June 22, 2016. Feature 109 was encountered again on July 8, 2021. The feature has been heavily impacted by intrusive pipes installed during previous excavation activities (not related to Regional Connector).

Feature 175 consists of a brick wall foundation of a building, encountered initially on November 13, 2020. Mapping and historic research revealed that these foundations belong to the Copp Building. Feature 175 was exposed again on July 21, 2021.

Feature 182 was encountered on July 20, 2021 and is a structural foundation of a demolished historic-age building (of what was considered then as a "female boarding" residence), which does not appear to be eligible for listing on either the NRHP or the CRHR. SHPO concurred with this determination on July 26, 2021.

Feature 183 was encountered on July 28, 2021 and consists of a small historic-age refuse deposit. Due to the small size, the integrity of the feature was compromised during excavations, but we suspect that half of the feature is still intact further south beyond the limits of the excavation. Feature 183 does not appear to be eligible for either the NRHP or the CRHR. Further, this small refuse deposit has been mostly excavated; the current documentation exhausts its research potential. SHPO concurred with this determination on July 30, 2021.

Feature 184 was encountered on July 30, 2021. The foundation walls of Feature 184 are remnants of a "Female Boarding" building and does not appear to be eligible for listing on either the NRHP or the CRHR. SHPO concurred with this determination on August 3, 2021.

## **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 remains closed due to the COVID-19 pandemic.
- Distributed 12 construction notices to the public on the following activities through email and made it available on the Project website and social media outlets: concrete placement throughout the alignment, utility work, backfill activities, extended street closures on: pedestrian bridge construction, deck removal, and Alameda tunnel box construction; L Line (Gold) service interruption, and geotechnical monitor removal and maintenance. Furthermore, outreach to support the power and system tie-in at 7th/Metro Center Station, cable pulling and the service interruption to the A & E Lines, took place.
- Coordinated and provided update on construction activities with over 120 stakeholders throughout the alignment.
- Presented virtually to *nine* (9) community organizations, interest groups and homeowner associations on planned activities, status of the project, *and tree removal applications*.
- Hosted a Project update webinar with members of the Regional Connector's Community Leadership Council and the general public in attendance. Covered project milestones, progress of work throughout the alignment, as well as information on planned extended street closures as part of the restoration phase of the project. Business mitigations and promotions through Eat, Shop, Play were also covered.
- Continue briefings with: LA City Council District 14, and the Mayor's Office.

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

Highlighted 22 businesses near the Project's alignment in *twenty-two* (22) social media posts, *e-newsletters*, and the Project's monthly webinar.

#### **Community Relations**

The monthly Little Tokyo Marketing & Advertisement/Go Little Tokyo coordination meeting was held on *July 28*, 2021 to *plan for upcoming* activities *and review success of* the July 2021 Delicious Little Tokyo event.

## **CREATIVE SERVICES**

## **Art Program**

- Conducted factory inspection of porcelain enamel steel artwork fabrication.
- Participated in art glass fabrication coordination.
- Reviewed porcelain enamel steel artwork and art glass submittals.
- Coordinated mosaic artwork transportation and delivery.
- Facilitated artist selection meeting for two artwork opportunities.
- Continued assessment of Project operating impacts to signage systemwide



Porcelain enamel steel artwork factory inspection for future Historic Broadway 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 *one* (1) Recordable Injury in the month of *July* 2021.
- RCC reported 108,926 work hours for June 2021. RCC's total Contract to Date work hours through June 2021 are 5,218,712 with a total of 21 Recordable Injuries and no Lost Workday (Days Away) case injuries. The C0980 Contract Recordable Injury Rate is 0.80. 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* 2021 is *5,329,771* hours with *22* recordable injuries. The Total Project Contractor Recordable Injury Rate is *0.83*.
- Total Aggregate Project work hours for Contractors, Metro, and Support Services Consultants, through June 2021 is 6,288,755 with 23 Recordable Injuries and no Lost Workday (Days Away) injury cases. The Total Project Aggregate Safety Rate is 0.73.\*

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

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

November 2017	Initiated underpinning related to the Historic Broadway Station
December 2017	RCC completed mining and broke through at Grand Av Arts/Bunker Hill Station (Right Tunnel)
January 2018	RCC completed TBM mining of the second tunnel (right)
February 2018	RCC began excavation of cross passages
February 2018	RCC began SEM canopy pipe installation
March 2018	RCC began tunnel invert concrete
March 2018	RCC completed infrastructure for power relocation work at 6th/Flower
April 2018	RCC completed entrance structure excavation of Historic Broadway Station
May 2018	RCC began SEM excavation
June 2018	LADWP Power completed cable pulling at 6 <sup>th</sup> /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 <sup>st</sup> 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
August 2020	RCC completed Wye backfill, deck removal and paving
September 2020	RCC completed Grand Av Arts/Bunker Hill Station upper roof deck
September 2020	RCC completed Little Tokyo/Arts District Station ancillary walls
September 2020	TIFIA loan paid off and account closed
October 2020	RCC completed Gold Line Communications Relocation Cutover
October 2020	RCC completed Flower Cut & Cover Tunnel roof deck
November 2020	RCC completed Little Tokyo/Arts District Station ancillary roof deck
November 2020	RCC completed Grand Av Arts/Bunker Hill Station ES1/ES2 walls
December 2020	RCC completed delivery of rail stockpile to Flower Cut & Cover
December 2020	RCC completed demolition of the Little Tokyo/Arts District Station
January 2021	RCC completed Historic Broadway Station box roof deck
January 2021	RCC completed Alameda MSE Wall demolition
February 2021	RCC completed Flower Tunnel Wet Standpipe
February 2021	RCC completed Flower Tunnel Emergency Walkways
March 2021	RCC completed Historic Broadway Station Entrance Roof Deck
April 2021	RCC completed Little Tokyo/Arts District Station West Tunnel Vent excavation
May 2021	RCC completed Grand Av Arts/Bunker Hill Station Upper Plaza Deck
June 2021	RCC completed Little Tokyo/Arts District Station East Tunnel Vent structure
June 2021	Regional Connector received \$59.23M American Rescue Plan Act of 2021
July 2021	RCC completed Historic Broadway Station East Tunnel Vent Shaft Excavation
July 2021	Completed deck removal on Flower Street.