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TO: Distribution

- FROM: Mat Antonelli Project Manager
- SUBJECT: Regional Connector Transit Project June 2021 Quarterly Project Status Report

Enclosed is the Quarterly 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 2, 2021.

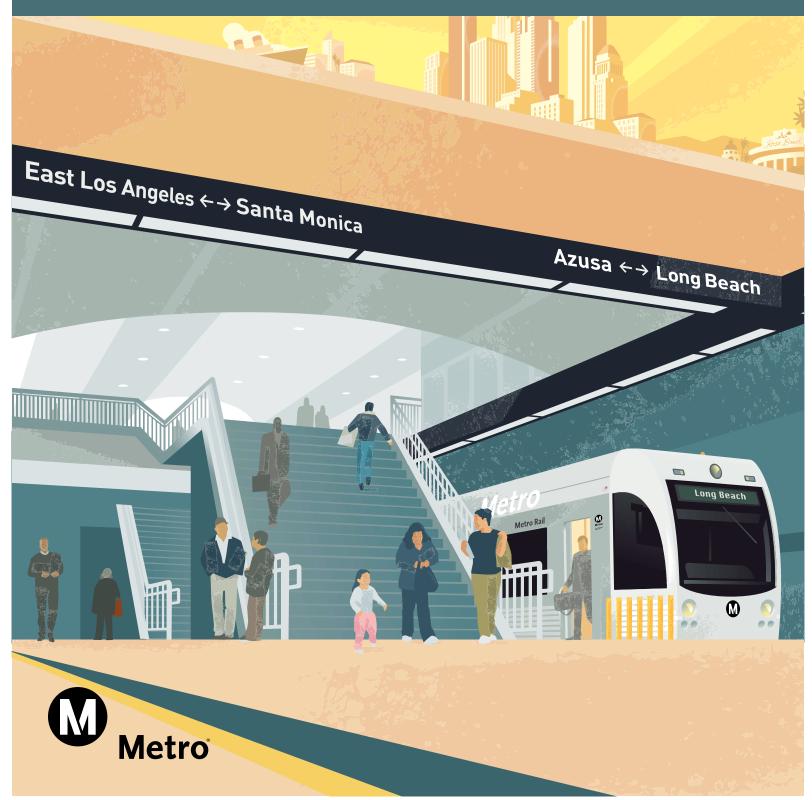
If you have any questions regarding this report or its supporting information, please contact Dan Estrada, Deputy Executive Officer of Program Control at (213) 893-7130.

Enclosure

# **Regional Connector Transit Project**

### QUARTERLY PROJECT STATUS REPORT

June 2021



# REGIONAL CONNECTOR TRANSIT PROJECT

QUARTERLY 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).

June 2021

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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 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 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.

<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 \$4.4M 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.

Project Schedule and Budget: 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 *19*, 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 25.

<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 *82.1*% completion based on earned value measurements for design and construction. The focus of the Project is to effectively continue gaining momentum with systems, mechanical and electrical installations and station finishes while the balance of structural concrete and trackwork remain 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>: *Continued* U-Channel *invert* installation. Continued installation of LVT *at* Left Tunnel.

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

<u>Alameda Street Cut & Cover Tunnel & U-Channel</u>: Completed invert placement. *Continued wall and* roof deck placement. Continued storm drain installations at Temple Street. *Continued* sewer *installation* at Mangrove. *Started street restoration at Temple Street.* 

<u>Future Little Tokyo/Arts District Station</u>: In the station box, *completed CMU wall installations. Continued* 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, *completed* the *switchgear* & *equipment* installation *and continued* mechanical/electrical/plumbing. In the east vent shaft, completed the *parapet walls.* In the west vent shaft, *started* the *exterior walls*.

<u>Reach 1 Tunnels Section (Future Little Tokyo/Arts District Station to Crossover Cavern)</u>: Completed *the* installation of Trainway Feeder Cables in the Right and Left Track tunnels. *Continued installation of impedance bonds in both tunnels. Started the emergency walkway handrail installation in the Right and Left Track Tunnels.* 

Crossover Cavern: Continued OCR rail installation.

<u>Historic Broadway Station</u>: At the platform level, completed *OCR rail installation*. Continued the mechanical/electrical/plumbing installations, *and* metal ceiling panel installation. At the concourse level, continued CMU walls, and the mechanical/electrical/ plumbing installations. *Started the metal ceiling panel installation*. At the Ancillary level, continued the CMU walls. *Started mechanical/electrical/plumbing installations*. At the Roof Level, completed walls, *and* Elevator Shaft *and West Tunnel Vent Plenum invert*. *Continued* the mid-vent plenum, West Tunnel Vent Plenum walls | mid deck and the East Tunnel Vent Plenum excavation, and Load Transfer System (LTS). In the station box area, continued backfill, and Emergency Exit #2 structure, at 2nd Street, continued temporary deck beam removal, utility relocations and street restoration.

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

<u>Grand Av Arts/Bunker Hill Station</u>: At the platform level, *completed* pulling train control cables from TC&C Room to Cable Rooms. *Continued the metal panel ceiling installation*, installation of mechanical/electrical/plumbing and the installation of the PL7|PL8 elevators. At the concourse level, continued the metal panel ceiling installation, and the installation of mechanical/electrical/plumbing. *Started the installation of the elevator enclosures at PL1-6 at concourse level.* At the lower and upper ancillary levels, *completed acoustic placement at East Tunnel Vent Plenum. Continued* the installation of mechanical/electrical/plumbing, and LADWP equipment installation & cable pulling. At the roof level, *continued* the installation of mechanical/electrical/plumbing. At the Plaza, *completed* the ES1|ES2 Head House roof deck. *Started the PS3 stairs.* At the Upper Plaza, completed the Pedestrian Bridge deck. At Northbound Flower Street, continued the storm drain installation. At Hope Street, continued storm drain *and* water line installations.

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

<u>Flower Cut & Cover Tunnel</u>: Continued the installation of CX Boxes, and Impedance Bonds, OCR Rail, and tunnel lighting in both tunnels. Continued installation of mechanical/electrical/plumbing at the Mechanical Room. Continued the installation of the train control equipment and cable pulling. At Flower Street, *completed the sewer line installation. Continued* the structural backfill, the removal of temporary street decking, and 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 is 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 no new COVID-19 cases reported for the period; there have been a total of 107 positive cases through *June* 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: Cut over, testing and rail activation meetings continue between various Metro Departments, RCC and Project staff. Workshops are being scheduled with Operations, Fire Life Safety and Engineering to coordinate the turnover and testing of the facilities.

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**



Excavation & SOE at emergency stairs at Alameda/Temple



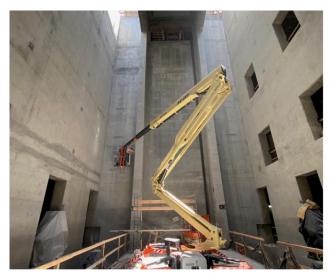
Concrete placement at Alameda Leg west wall



West vent walls and upper deck formwork and rebar at Historic Broadway Station



Stripping slurry forms in east Hammerhead at Historic Broadway Station



Station interior at Grand Av Arts/Bunker Hill Station



Formwork for PS3 stairs at Plaza Level of Grand Av Arts/Bunker Hill Station

### **PROJECT UPDATE**

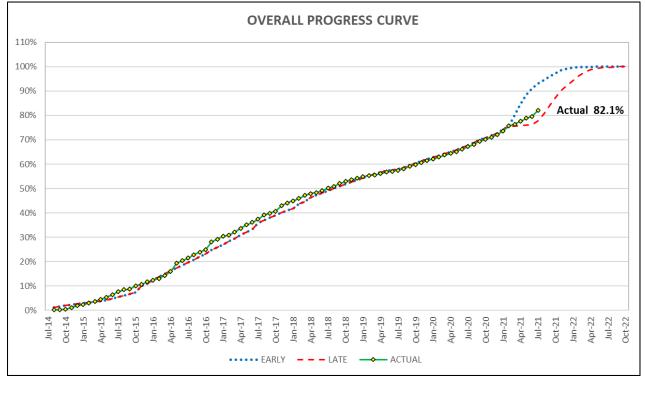
#### PROJECT SCHEDULE

#### **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	80.8%	2.7%	

**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	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21
Complete East Vent Shaft Structure at Little Tokyo / Art District Station	06/04/21 A	$\bigcirc$					
Complete Pedestrian Bridge Deck at Grand Ave / Bunker Hill Station	06/25/21 A	$\bigcirc$					
Complete East Vent Plenum Excavation at Historic Broadway Station	07/12/21		$\bigcirc$				
Complete Station Entrance Load Transfer System at Historic Broadway Station	07/14/21		$\bigcirc$				
Complete Flower Cut & Cover Emergency Exit Structure	08/16/21			$\bigcirc$			
Complete #5 Turnouts and Diamond Track	08/16/21			$\bigcirc$			
Complete Wye Fan Plant Roof Deck	08/31/21			$\bigcirc$			
Complete West Vent Plenum at Historic Broadway Station	09/07/21				$\bigcirc$		
Complete LVT Track at 1st Street Cut & Cover/U- Channel	09/30/21				$\bigcirc$		
Complete OCR - 7th/Metro to Wye	10/20/21					$\bigcirc$	
Complete #10 Crossover Track at Alameda Cut & Cover	10/26/21					$\bigcirc$	
Complete LVT Track at Alameda Cut & Cover/U- Channel	11/17/21						$\bigcirc$
MTA Staff MTA Board A	ction	<b>FTA (</b> Fo Adminis	ederal Tration)	ansit [	7 Utility	Company	
△ Other Agencies □ Contractors	$\bigcirc$	-	Consulta	int 🤇	C0980 Contra		
	*	New Da	ate				

#### 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 BUDGET	CURREN	T BUDGET	СОММІ			EXPENDITURES CURRENT FORECAST		BUDGET/ FORECAST VARIANCE	
				PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
10	GUIDEWAYS & TRACK ELEMENTS	280,622	204,691	0	273,671	7,700	275,570	2,830	247,695	-496	272,167	-1,504
20	STATIONS, STOPS, TERMINALS, INTERMODAL	354,268	219,477	0	235,436	0	238,059	3,994	161,154	100	239,133	3,697
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	1,182	598,812	5,112	548,529	700	628,103	-253
50	SYSTEMS	69,667	73,848	0	78,852	-14	68,450	2,180	26,891	-50	76,379	-2,473
	CONSTRUCTION SUBTOTAL (10-50)	846,343	920,468	0	1,216,314	8,868	1,180,892	14,116	984,269	254	1,215,782	-533
60	ROW, LAND, EXISTING IMPROVEMENTS	115,889	74,208	0	59,315	0	57,858	0	57,851	0	59,315	0
70	VEHICLES	16,275	16,275	0	16,275	0	16,275	0	12,117	0	16,275	0
80	PROFESSIONAL SERVICES	261,455	257,973	0	394,865	2,754	354,604	4,757	342,116	-351	399,340	4,475
	SUBTOTAL (10-80)	1,239,963	1,268,925	0	1,686,770	11,622	1,609,629	18,872	1,396,353	-97	1,690,712	3,942
90	UNALLOCATED CONTINGENCY	135,399	126,892	0	42,571	0	0	0	0	97	38,629	-3,942
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	11,622	1,609,629	18,872	1,396,353	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	11,622	1,636,129	18,872	1,421,416	0	1,770,142	0

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH JUN 2021. JUNE EXPENDITURES ARE PRELIMINARY AS ACCOUNTING HAS NOT CLOSED MONTH-END. 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 \$11.6 million this month to \$1.64 billion which represents 92.4% of the Current Budget. The overall increase is related to *RCC executed* modifications, *Fiscal Year 2022 funding increases for KKCS, award contract to HNTB,* and work orders from *MCAs*.

#### **Expenditures:**

Expenditures are cumulative through *June* 2021 and increased by \$18.9 million this month for costs across the Project. *June expenditures are preliminary due to the pending monthend close.* One billion *four hundred twenty million* (\$1.42 billion) in expenditures to date represent 80.3% of the Current Budget.

#### **Current Forecast:**

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

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

DOLLARS IN THOUSANDS											
SCC CODE		ORIGINAL BUDGET	CURREN	CURRENT BUDGET		COMMITMENTS		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	2,005	8,021	0	13,548	0
50	SYSTEMS	0	0	5,950	37	5,014	0	1,335	0	5,950	0
	CONSTRUCTION SUBTOTAL (10-50)	10,480	0	19,498	37	18,562	2,005	9,357	0	19,498	0
60	ROW, LAND, EXISTING IMPROVEMENTS	27,748	0	38,228	0	38,323	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	37	57,634	2,005	47,258	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)	39,991	0	59,389	37	57,634	2,005	47,258	0	59,389	0
	861228 TOTAL	39,991	0	59,389	37	57,634	2,005	47,258	0	59,389	0

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH JUN 2021. JUNE EXPENDITURES ARE PRELIMINARY AS ACCOUNTING HAS NOT CLOSED MONTH-END.

#### **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:**

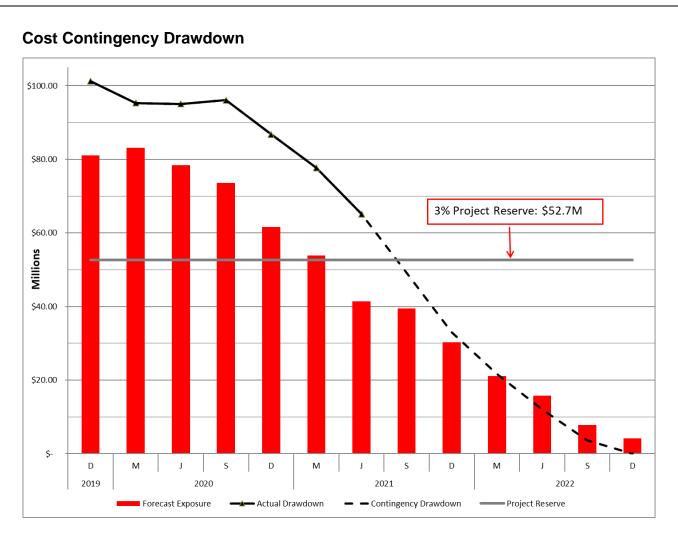
Overall commitments increased by \$0.04 million this month to \$57.6 million which represents 97% of the Current budget. The overall increase is related to radio system.

#### **Expenditures:**

Expenditures are cumulative through *June* 2021 and increased by \$2 million for costs related to the Modification 187. *June expenditures are preliminary due to the pending month-end close.* The cumulative \$47.3 million through *June* 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 *late Summer* 2021.

In *June*, there was a \$8.7 million contingency drawdown into executed modifications. *Wye Fan Plant* mod was executed in *June*. The remaining unallocated contingency is \$38.6 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)	Percentage (%)		
Unallocated Contingency	124,919	89,946	(51,413)	97	(51,317)	38,629	43%		
Allocated Contingency	86,345	92,809	(57,499)	(8,800)	(66,299)	26,510	29%		
Total Contingency	211,263	182,754	(108,912)	(8,703)	(117,615)	65,139	36%		

### **RISK MANAGEMENT**

#### **Summary of Risks**

During this quarterly reporting period, *three (3)* risks' scores were adjusted, *three (3)* new risks were identified, and *ten (10)* active risk were closed. There are *twenty-two (22)* risks to be managed over the next quarter. Of the *twenty-two (22)* risks, *one (1)* are scored high, *thirteen (13)* as medium and *eight (8)* as low.

The following details the activity for the quarter:

#### Top Risks

The Project's top risks as of June 2021 are:

Risk ID	scc	Risk Description	Risk Rating
566	40	Potential impacts to costs due to Corvid - 19 Emergency.	15
572	1 80	SCADA resources may be insufficient to support programming required at ROC and /or SIT-2 testing.	9
311	40	Commonwealth Agreement may impact costs due to extended "construction phase."	8
575	50	Clearances for top-of-rail and OCR are compromised on southern most 500' of both tunnels; remedial work threatens schedule.	7.5
571	40	Sewer line on 1st St may exceed assigned budget	6

#### **Risk Score Changes**

*Three (3)* active risks had a scoring assessment change this quarter.

Risk ID	SCC	Risk Description	Updated Risk Rating	Previous Risk Rating
572	80	SCADA resources may be insufficient to support programming required at ROC and SIT-2 testing.	9	17.5
562	40	Unreconciled As-Built Conditions vis-a-vis Real Estate Standard Hotel	6	2
506		Across all interfaces with existing LRT lines, cut-over integration challenges exceed allowances in current forecast (excludes Comm). Costs shown are above the current forecast	3	4.5

#### New Risks

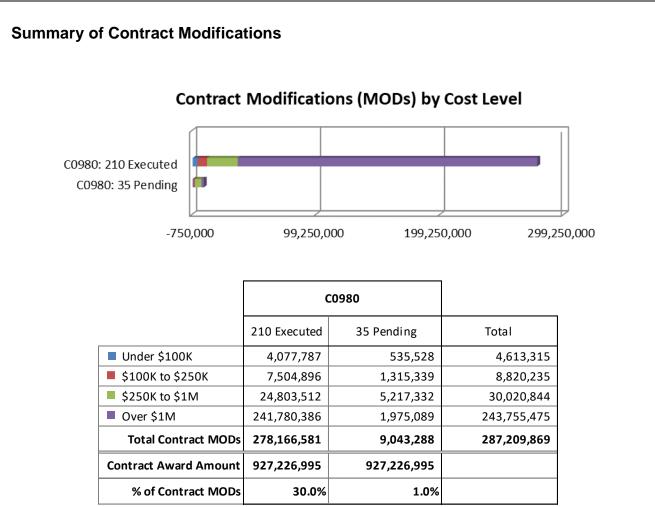
Three (3) new risks were identified this quarter.

Risk ID	scc	Risk Description	Risk Rating
578	20	Elevator steel frame schedule risks delays at Hope Station.	5
575	50	OCR/OCS Quality Issues (Top of rail to tunnel, trackwork and concrete)	7.5
576	10	Special trackworks pose threat to schedule related to #5 and #8	5
577	80	Proposed schedule for Project completion post substantial completion uncertain due to lack of concurrence between Operatons and Project Management.	6

#### **Closed Risks**

Ten (10) risks were closed this quarter.

Risk ID	scc	Risk Description	Risk Rating
414	50	System-wide signage requirements may not be funded by Agency requiring scope/budget by Project for minimal implementation.	4
561	40	Timing issue of the construction of AT&T Duct bank serving Mangrove Gardens might result in additional costs.	2
514	30	Fan Plant final modification negotiated above 12M. Costs shown are above the current forecast and adjustment.	10
567	50	Cost for radio enhancements at 7/M center may increase as complexities grow	3
236	10	As environmental issues are likely to be present during tunnel construction SOV quantities may be exceeded.	1
450	20	Final designs related to the Historic Broadway Overbuild reflect additional construction costs owing largely to the Load Transfer System agreed-to.	15
564	40	AT&T duct bank reconstruction at 2nd/Broadway threaten cost.	8
319	40	Timely supply of emergency generator (by others) may be compromised requiring a contingency plan for standby generator (Cost and Schedule Implication).	6
508	40	Notwithstanding newly established milestone, RCC claims delay against early completion.	4
568	80	MOW support of balance of Project may require alternate resources and related contracting.	3



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 *ten (210)* changes with a total value of \$278.2 million have been executed since NTP of Contract C0980. An additional *35* changes, with a total estimated value of \$9.0 million, are pending.

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

As of *May* 2021:

<b>DBE Commitment – Design</b> 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. <i>85</i> %

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

# **PROJECT LABOR AGREEMENTS (PLA)**

As of *May* 2021:

Targeted Worker GoalConstruction work to be performed by residents from Economically DisadvantagedArea in the United States	40.00%
Targeted Worker Current Attainment	61.51%
Apprentice Worker Goal Construction work to be performed by Apprentices	20.00%
Apprentice Worker Current Attainment	20. <i>06</i> %
<b>Disadvantaged Worker Goal</b> Construction work to be performed by Disadvantaged Workers who are residents of the United States	10.00%
Disadvantaged Worker Current Attainment	11. <i>13</i> %

#### Status of Funds by Source

SOURCE	ORIGINAL BUDGET	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS	%	EXPENDITURES	%	BILLED TO FUNDING SOURCE \$	%
				¥	,,,	¥	70	<b>.</b>	,,,
FEDERAL - CMAQ	\$64.00	\$228.01	\$64.00	\$97.28	43%	\$53.08	23%	\$50.93	22%
FEDERAL - SECTION 5309 NEW STARTS	\$669.90	\$669.90	\$669.90	\$669.90	100%	\$581.48	87%	\$570.61	85%
FEDERAL - SECTION 5309 NEW STARTS - AMERICAN RESCUE PLAN ACT		\$ 59.23	0		0		0		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%	\$5.97	33%
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	\$248.00	105%	\$226.14	96%	\$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	\$69.31	349%	\$24.25	122%	\$19.47	98%
GENERAL FUND - METRO	\$0.00	\$69.49	\$79.80	\$81.21	117%	\$81.21	117%	\$81.21	117%
TOTAL	\$1,427.13	\$1,755.84	\$1,539.26	\$1,636.13	93%	\$1,421.42	81%	\$1,397.62	80%

NOTES:

1. EXPENDITURES ARE CUMULATIVE THROUGH JUNE 30, 2021. JUNE EXPENDITURES ARE PRELIMINARY AS ACCOUNTING HAS NOT CLOSED MONTH-END 2. METRO AND TRIBUNE AGREED ON REIMBURSEMENT OF \$1.6 MILLION RELATED TO 2ND/BOARDWAY OVERBUILD.

CIRCIAND TINDONE ONCEDE OF FUNDING PLAN INCLUED IN THE APPOVED FULL FUNDING GRANT AGREEMENT
 CIRCIANAL BUDGET BASED ON FUNDING PLAN INCLUED IN THE APPOVED FULL FUNDING GRANT AGREEMENT
 LACMTA RESERVES THE ABILITY TO UPDATE COSTS AND CHANGE FUND SOURCES AS REQUIRED.
 STATE PROPOSITION 1A HIGH SPEED RAIL BONDS

\* STATE PROPOSITION IN FIGHT SPEED RAIL BOINDS \*\* STATE PROPOSITION IN PUBLIC TRANSPORTATION MODERNIZATION, IMPROVEMENT AND SERVICE ENHANCEMENT ACCOUNT \*\*\* OTHERS INCLUDE TDA ADMINISTRATION, AND NB PROPOSITION A ADMINISTRATION (FOR A TOTAL OF \$255M)

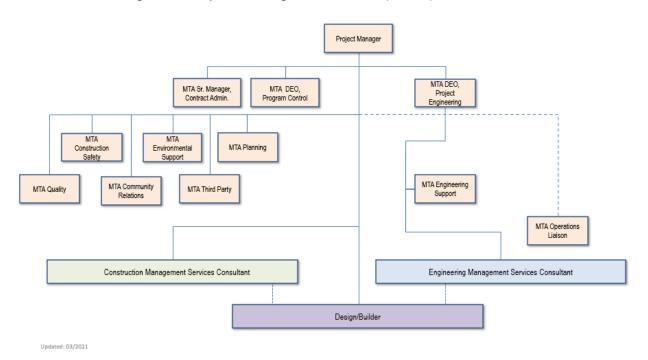
\*\*\*\* TIFIA LOAN CLOSED ON AUGUST 27, 2020. BALANCE OF ORIGINAL TIFIA BUDGET WILL BE MEASURE R BONDS

June 2021

June 2021

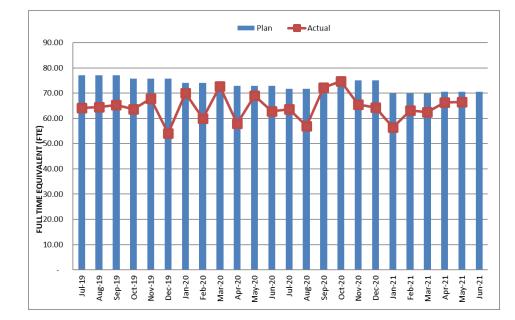
### PROJECT ORGANIZATION AND STAFFING

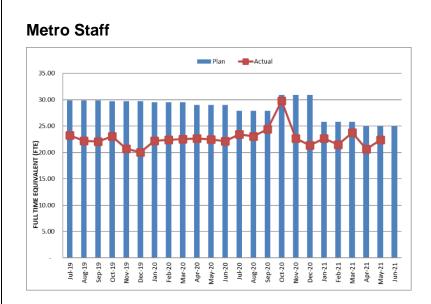
The D/B contract is being managed by a joint team of Metro and consultant personnel located at the Integrated Project Management Office (IPMO).



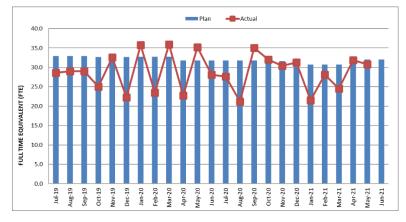
The overall FY21 Total Project Staffing plan averages 71.7 FTEs per month. The total actual project staffing for *May* 2021 was 66.5; 22.39 FTEs for Metro's Project Administration staff and 44.1 FTEs for consulting staff. Consulting staff FTEs are based on monthly invoice billable hours. Review of staffing plans is on-going to ensure staffing needs are appropriately managed.

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

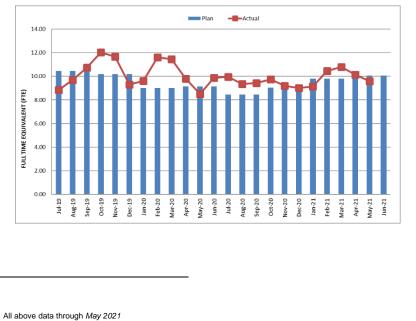




#### CM Support Services Staff (Consultant)



#### **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.

## **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 June.* 

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.* 

#### <u>Tribune</u>

• Extension full executed, LACMTA Real Estate coordinating recordation of extension.

## QUALITY ASSURANCE

Metro QA performed the following activities during the month of June 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-2021-007) dated June 22 and 23, 2021. RCC DIRs and its QC documentation for three Inspectors chosen at random. Documents consisted of design drawings, contract documents and specifications, CQWPs, third party permits, and inspectors' certifications. All documentation and DIRs "basic" required data were found in compliance with contract documents and project specifications.
- Metro accepted the disposition approved by the EOR, and closed the following NCR's:
  - RCC NCR 105 was closed on June 22, 2021
  - RCC NCR 107 was closed on June 14, 2021
- To date, Metro Quality Management has issued a total of 108 surveillances and 10 internal audits.

RCC issued NCR 119 on June 01, 2021 for work and applied primer coat of dielectric coating to floor without notification or acceptance from RCC QC at the Grand Av Arts/Bunker Hill Station.

RCC issued NCR 120 on June 02, 2021 for concrete placed at PL1/PL2 walls before inspection was completed and pour card was signed, at the Grand Av Arts/Bunker Hill Station.

As of June 2021, there have been a total of 120 NCRs issued, with 18 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. Some BMP drawings have been updated to reflect site conditions. A Change of Information *was submitted to* the Stormwater Multiple Application and Report Tracking System (SMARTS) to extend the construction end date.
- 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 June, Metro submitted documentation to the PMOC for their review of the 33rd Quarterly MMRP Update covering the February-April 2021. The review was closed out on June 18, 2021. Metro staff are awaiting the final status report.
- No historic period features or isolates were recorded during June.

## **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.
- Coordinated and provided update on construction activities with *approximately 100* stakeholders throughout the alignment.
- Presented virtually to eight (8) community organizations, interest groups and homeowner associations on planned activities and status of the project.
- 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 6 businesses near the Project's alignment in *six (6)* social media posts, and the Project's *monthly* webinar: *The Broad, Dalia Cocina Mexicana, Japangeles, Kurata Eyecare Center, Salata, and Public School 213.* 

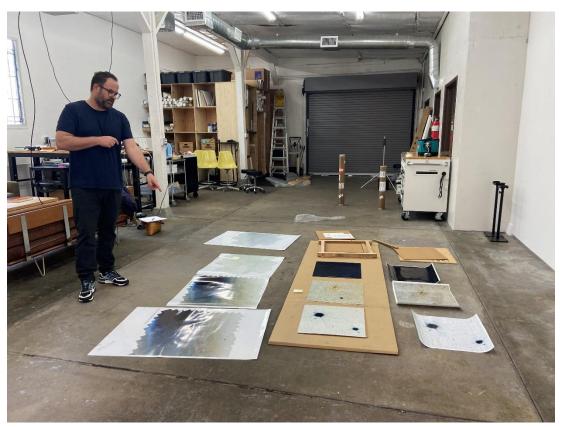
#### **Community Relations**

The monthly Little Tokyo Marketing & Advertisement/Go Little Tokyo coordination meeting was held on May 26, 2021 to discuss activities for the *July 2021* Delicious Little Tokyo event.

### **CREATIVE SERVICES**

#### Art Program

- Participated in comment resolution meetings
- Reviewed and responded to porcelain enamel steel fabrication submittals
- Reviewed and responded to mosaic fabrication submittals
- Coordinated community engagement activities with Artists
- Continued assessment of Project operating impacts to signage systemwide



Porcelain enamel steel sample review with Artist Mungo Thomson

### 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 in the month of May 2021.
- RCC reported 139,845 work hours for May 2021. RCC's total Contract to Date work hours through May 2021 are 5,109,786 with a total of 20 Recordable Injuries and no Lost Workday (Days Away) case injuries. The C0980 Contract Recordable Injury Rate is 0.78. 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 *May* 2021 is 5,*220,845* hours with 21 recordable injuries. The Total Project Contractor Recordable Injury Rate is 0.80.
- Total Aggregate Project work hours for Contractors, Metro, and Support Services Consultants, through *May* 2021 is 6,*169,549* with 22 Recordable Injuries and no Lost Workday (Days Away) injury cases. The Total Project Aggregate Safety Rate is 0.71.\*

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

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

November 2017	Initiated underpinning related to the Historic Broadway Station
December 2017	RCC completed mining and broke through at Grand Av Arts/Bunker Hill Station (Right Tunnel)
January 2018	RCC completed TBM mining of the second tunnel (right)
February 2018	RCC began excavation of cross passages
February 2018	RCC began SEM canopy pipe installation
March 2018	RCC began tunnel invert concrete
March 2018	RCC completed infrastructure for power relocation work at 6th/Flower
April 2018	RCC completed entrance structure excavation of Historic Broadway Station
May 2018	RCC began SEM excavation
June 2018	LADWP Power completed cable pulling at 6 <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 & 7 <sup>th</sup> 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