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**TO:** Distribution

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**SUBJECT:** Regional Connector Transit Project  
August 2020 Monthly Project Status Report

Enclosed is the Monthly Project Status Report for the Regional Connector Transit Project. This report contains the Los Angeles County Metropolitan Transportation Authority's (LACMTA) representation of the Regional Connector Transit Project status for the period ending August 28, 2020.

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

GB: CS  
Enclosure



Los Angeles County  
Metropolitan Transportation Authority

# Regional Connector Transit Project

MONTHLY PROJECT STATUS REPORT

August 2020



**Metro**<sup>®</sup>

# **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).

**August 2020**



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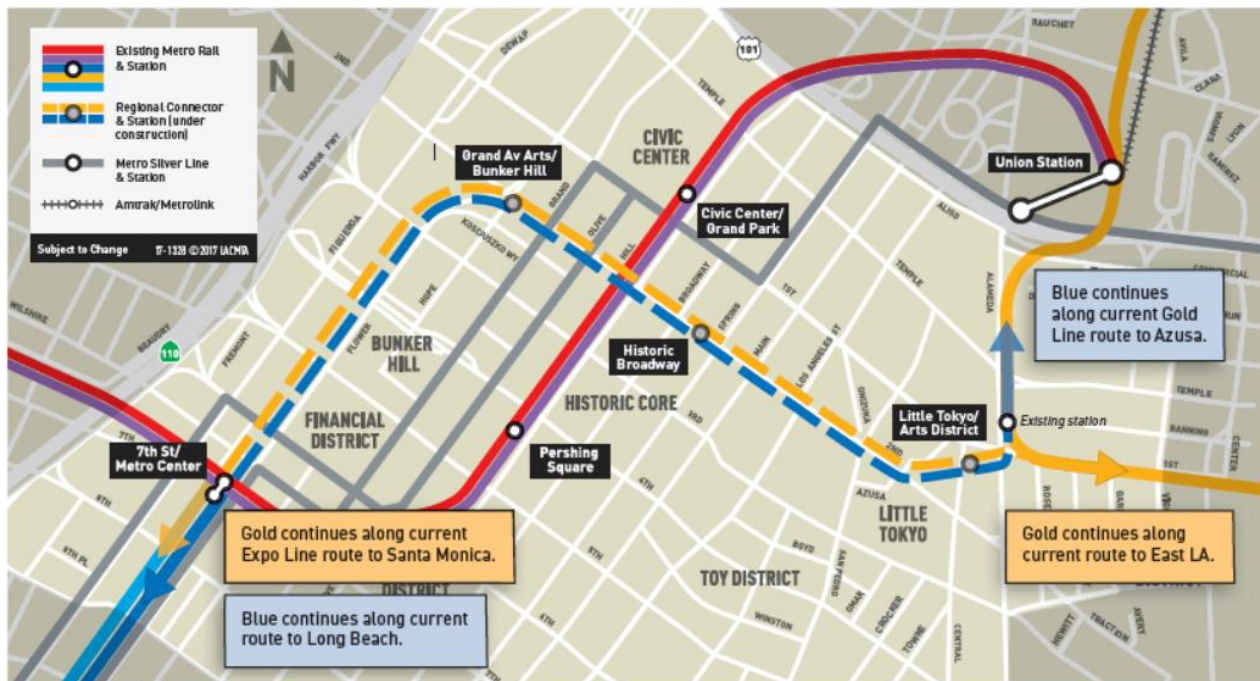


## PROJECT OVERVIEW

### Project Background

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

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



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

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



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

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

### **Major Procurements**

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

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

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

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

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

## **Program Management**

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

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

In January 2017, the Metro Board revised the Life of Project (LOP) Budget for Regional Connector Transit Project 860228 to \$1.756 billion. The LOP budget for Concurrent Non-FFGA activities related to Project 861228 was increased to \$46.4 million in December 2019 to include radio communication elements at 7th/Metro Center. Financing costs are estimated at \$14M. Cost forecasts remain consistent with budgets. A detailed FFGA budget forecast is included under the Project Cost Section of this report.

Funding has been secured from a variety of sources, detailed in the Financial/Grant Section on Page 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.

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

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

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

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

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

## EXECUTIVE SUMMARY

In *August*, the Project achieved 69.4% completion based on earned value measurements for design and construction. The focus of the Project is on completing structural concrete, and installation of trackwork.

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

### Design Status

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

### Construction Status

1st Street Cut & Cover Tunnel & U-Channel: Pending the start of Bus Bridge 3 in late October, the remaining U-Channel excavation and structure will resume.

Wye Structure: *Completed* structural backfill, removal of temporary decking *and paving*.

Alameda Street Cut & Cover Tunnel & U-Channel: *Completed* the Pre-Bus Bridge 3 excavation and the installation of support of excavation within the Mangrove Yard area. *Started the installation of Pre-Bus Bridge 3 tunnel invert sections*.

Future Little Tokyo/Arts District Station: *Completed* Station Box *interior* walls, *west intermediate landing* and *set the elevator lower enclosure*. *Continued the installation of Station Box roof deck, Lower Ancillary mechanical/electrical/plumbing, and Upper Ancillary exterior walls*. *Started the Upper Ancillary CMU Walls and excavation of the East Vent Plenum*.

Reach 1 Tunnels Section (Future Little Tokyo/Arts District Station to Crossover Cavern): *Moved rail storage piles at the left and right tunnels to 1st/Central Station Box*. *Started left tunnel track installation, installation of tunnel lighting at the right tunnel and continued at the left tunnel*.

Crossover Cavern: *No activity*.

Historic Broadway Station: At the platform level of the Station Box area, *started the installation of escalator trusses, and the elevator stainless steel enclosure*. *Continued installation of the concrete masonry unit (CMU) walls, fire protection pipes and domestic water service*. At the concourse level, *completed* the west roof deck, and at the east exterior walls. *Started the installation of public stair #2*. At the Entrance area, *completed*

the *ancillary level deck and continued the exterior/interior walls. Started the installation of the roof level deck.*

Reach 2 Tunnel Section (Historic Broadway Station to Grand Av Arts/Bunker Hill Station): Started the installation of *tunnel lighting in the left tunnel. Continued the installation of Low Vibration Track (LVT) installation in the right tunnel.*

Grand Av Arts/Bunker Hill Station: *At the Station Box platform level, completed the Floating Slab Track installation. Continued the installation of mechanical/electrical/plumbing. At the concourse level, started the placement of acoustic. At the lower and upper ancillary level, continued the installation of CMU walls, and the installation of mechanical/electrical/plumbing. At the roof level, continued with the west tunnel vent walls. At the upper roof level, continued the installation of the deck. At Emergency Exits #1 and #2 stair continued interior walls and stairs.*

Reach 3 Tunnel Section (Grand Av Arts/Bunker Hill Station to Flower): *The left and right tunnels LVT track installation was substantially completed with the tunnel/station bridge beam sections remaining.*

Flower Cut & Cover Tunnel: *In the north (5th Street to 4th Street), started the installation of the level 2 emergency exit walls, and continued the emergency walkway. In the south (5th Street to 7th/Metro Center Station), continued the interior walls, exterior walls, and the roof deck.*

**Cost and Schedule Summary**

As of the reporting date, RCC is late in submitting the *July 2020* Schedule Update. The RCC's current schedule update is *June 2020*.

**RCC Schedule Metrics**

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

## Costs

Project costs continue to track within budget. Contingency draw-downs are lagging as large modifications continue to take longer to reconcile. However, no material net variance in contingency use is anticipated. To date, the design and construction changes related to base scope represent approximately 7.0% of the contract value. There is one notice of intent to claim by RCC. The notice relates to Historic Broadway Station SOE stability issues. Detailed cost and budget information begins on Page 14.

## Coronavirus Impacts

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

There were *eleven (11)* COVID-19 cases reported for the period; for a total of *thirty (30)* positive cases through *August 2020*. *As of August 31, 2020, twenty-eight (28) of the reported cases returned to work.* RCC has strict protocols in place to minimize the spread of COVID-19, which follow local and Federal regulations and maintain operations.

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

### Key Management Concerns

Item 1: Rail Activation *for integrating three transit lines is complex.* Schedule and cost impacts are likely to surface.

Status/Action: *Cut-over, testing and rail activation meetings continue between various Metro Departments, RCC and Project staff. Issues are being addressed promptly.*

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

Status/Action: Metro is working with RCC to identify the extent of impacts and potential mitigation *measures.* Discussions are on-going *with RCC.*

Item 3: Installation of the communication link for the Gold Line Eastside Extension during Bus Bridge #3 has been delayed. *Remaining work must be completed timely to avoid adversely impacting schedule and cost.*

Status/Action: Design workarounds have been identified and agreed to by all stakeholders to provide routing of dual fiber-optic lines from the 1st Street Bridge through Division 20 to Union Station. A portion of the conduit runs have been completed. Remaining work is being coordinated.

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

Status/Action: Metro utility owners and RCC teams are meeting regularly to review priorities, designs, and interferences to construction. *Utility conflict resolution continues along 2nd St with options narrowing.* The joint trench design has been approved by BOE. *Division of construction scope discussions are continuing.*

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

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

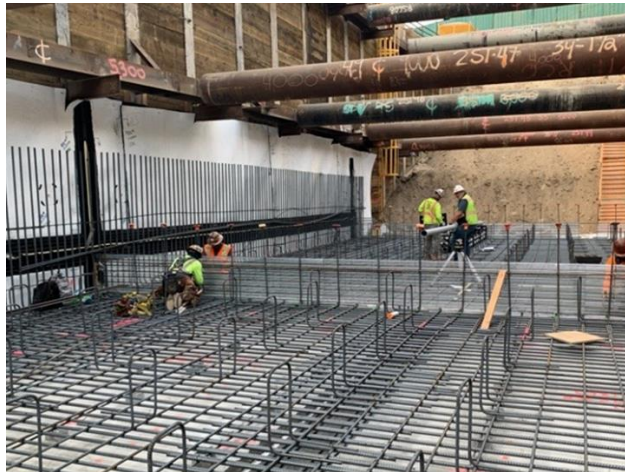
Project Construction Photos



DF Track assembled in left tunnel Reach 2



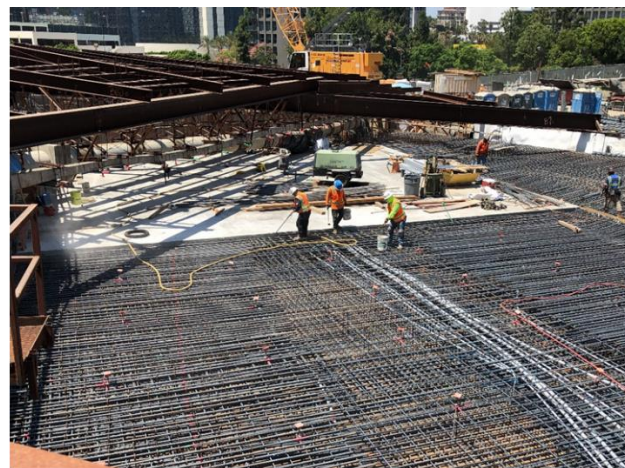
Future Little Tokyo/Arts District Station overview



Stayform installation for invert at Alameda Leg



Conduit installation at Ancillary Level at Historic Broadway Station



Stayform bulkhead installation at deck at Grand Av Arts/Bunker Hill Station



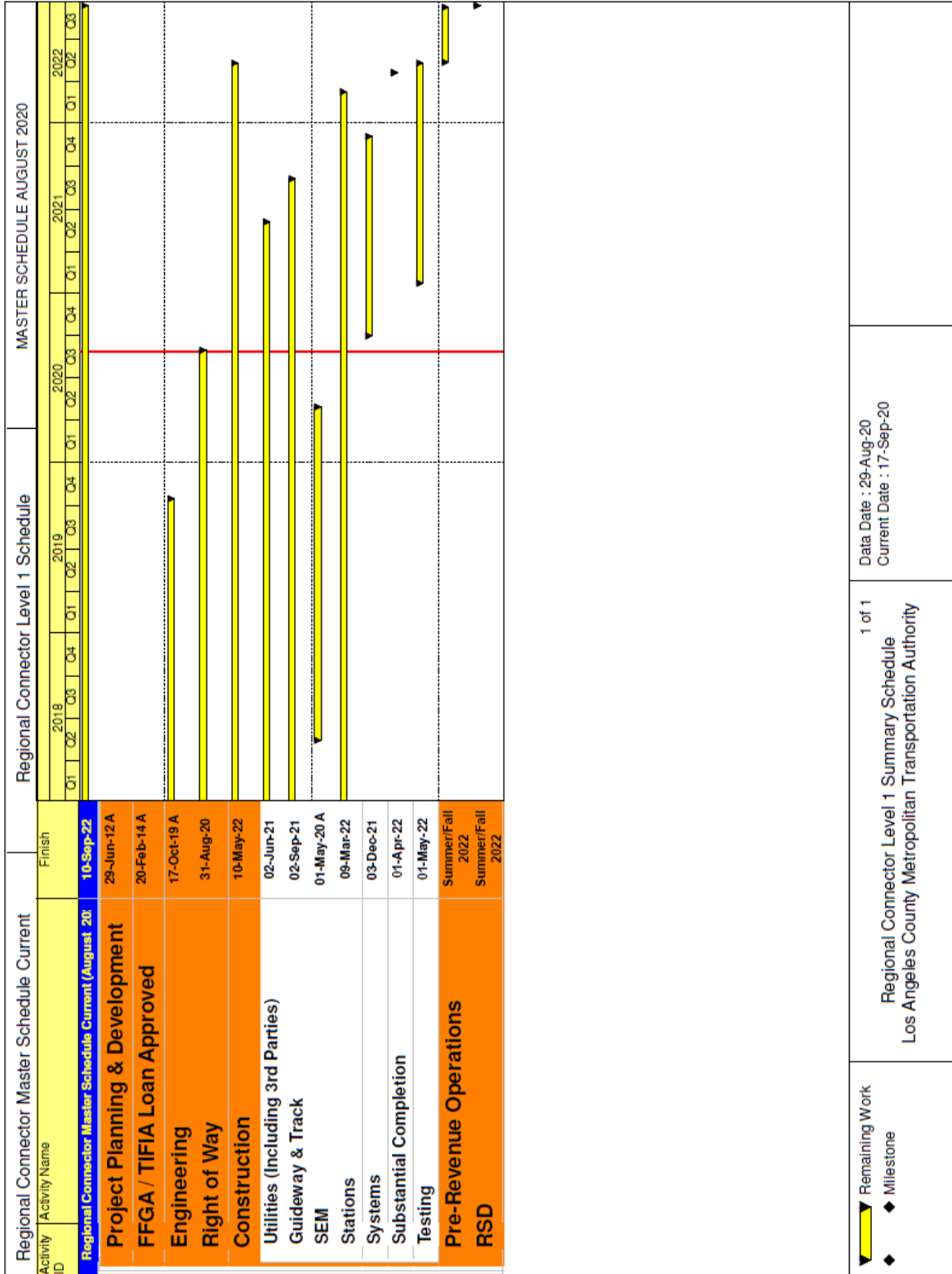
Form installation for west interior track wall at Flower St



# PROJECT UPDATE

## PROJECT SCHEDULE

### Project Summary Schedule

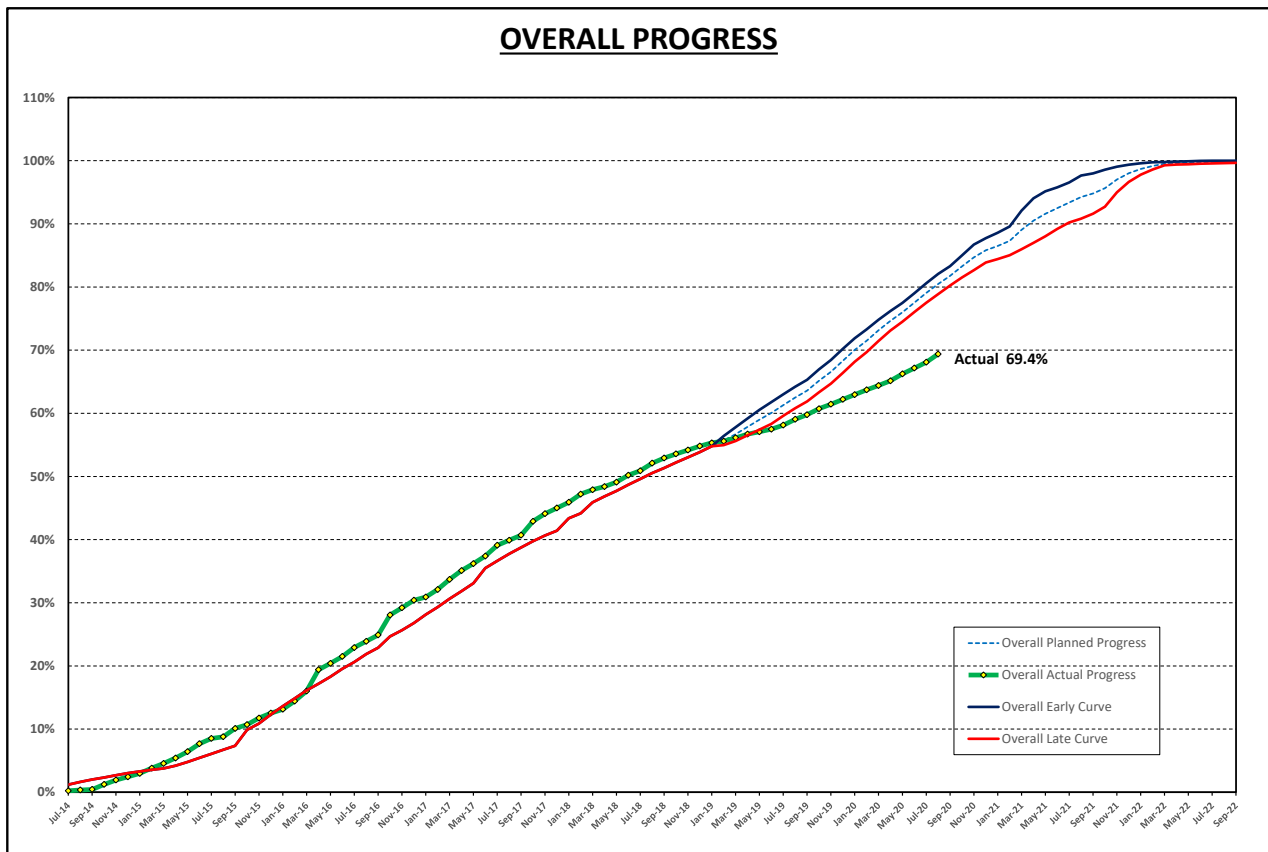


**Progress Summary**

	Status	Change from Last Month	Comment
Forecast Revenue Service	Summer/Fall 2022	None	
Proposed TIFIA Revenue Service	2/25/2023	None	
Proposed FFGA Revenue Service	2/25/2023	None	
<b>Final Design Progress:</b>			
Contract C0980	100%	NA	
<b>Construction Contracts Progress:</b>			
Contract C0981R & C0980	67.9%	1.4%	

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









**Planned vs. Actual Progress**



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

**Key Milestone Six-Month Look Ahead**

	Milestone Date	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21
Complete Station Box Intermediate Landing at Little Tokyo/Art District Station	08/07/20 A	⬡					
Complete Wye Cut & Cover Tunnel Deck Removal	08/27/20 A	⬡					
Complete Upper Ancillary Exterior Walls at Little Tokyo/Art District Station	09/14/20		⬡				
Complete South Flower Cut & Cover Tunnel Walls	09/24/20		⬡				
Complete Revised Communications System Fiber Optic Cable Pico/Aliso Station to Division 20 Yard	09/28/20		⬡				
Complete Station Box Roof Deck at Historic Broadway Station	09/30/20		⬡				
Complete South Flower Cut & Cover Tunnel Roof	10/08/20			⬡			
Complete Station Entrance Exterior Walls at Historic Broadway Station	10/12/20			⬡			
Complete Station Entrance ES1 Walls at Historic Broadway Station	11/03/20				⬡		
Complete Station Entrance Roof Deck at Historic Broadway Station	11/30/20				⬡		
Complete #8 Double Crossover Track	12/01/20					⬡	
Complete #5 Turnouts and Diamond Track	01/25/21						⬡

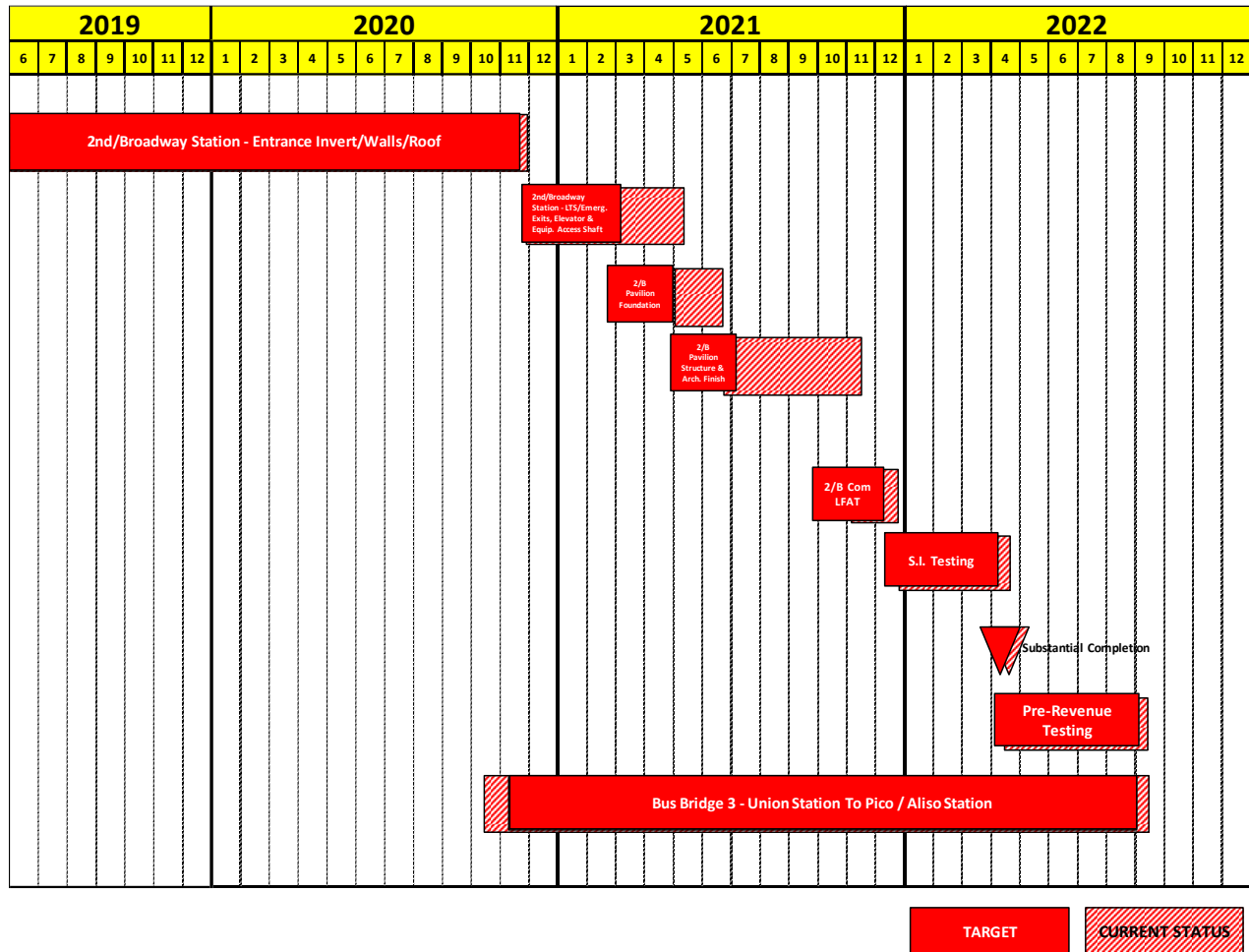
 MTA Staff    
  MTA Board Action    
  FTA (Federal Transit)    
  Utility  
 Other Agencies    
  Contractors    
  Design Consultant    
  C0980 D/B  
 \*A\* following date is actual and completed    
 \* New

**Major Equipment Delivery**

**Metro Supplied Equipment**

Equipment	Initial Procurement	Scheduled Delivery	Scheduled Installation
LRT Vehicles	(NTP) 08/20/2012	Option 2 10/26/2020	N/A
Ticket Vending Machines	~ 01/30/2018	07/08/19 A (warehoused)	05/25/2021 ~08/26/2021

Target Critical Path (C0980) depicts activity sequence leading to milestones



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

## PROJECT COST

### Project Cost Analysis – 860228

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

SCC CODE		FFGA BUDGET	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		BUDGET/ FORECAST VARIANCE
				PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
10	GUIDEWAYS & TRACK ELEMENTS	280,622	204,691	0	272,696	4,110	262,563	0	212,355	-1,584	273,435	738
20	STATIONS, STOPS, TERMINALS, INTERMODAL	354,268	219,477	0	230,857	0	230,303	0	110,102	2,012	234,941	4,084
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	0	0	0	0	0	0	0	0	0	0	0
40	SITWORK & SPECIAL CONDITIONS	141,785	422,453	0	626,831	1,131	585,171	119	504,665	-3,051	629,368	2,537
50	SYSTEMS	69,667	73,848	0	77,972	185	67,938	5	19,886	-109	77,275	-696
	CONSTRUCTION SUBTOTAL (10-50)	846,343	920,468	0	1,208,356	5,426	1,145,975	124	847,008	-2,732	1,215,019	6,663
60	ROW, LAND, EXISTING IMPROVEMENTS	115,889	74,208	0	59,315	0	57,796	0	57,636	0	59,315	0
70	VEHICLES	16,275	16,275	0	16,275	0	16,275	0	7,567	0	16,275	0
80	PROFESSIONAL SERVICES	261,455	257,973	0	394,216	254	346,962	1,156	318,552	700	394,810	594
	SUBTOTAL (10-80)	1,239,963	1,268,925	0	1,678,162	5,680	1,567,008	1,280	1,230,762	-2,032	1,685,419	7,257
90	UNALLOCATED CONTINGENCY	135,399	126,892	0	51,179	0	0	0	0	2,032	43,922	-7,257
100	FINANCE CHARGES	27,571	7,115	0	14,301	0	0	0	0	0	14,301	0
	TOTAL PROJECTS (10-100)	1,402,932	1,402,932	0	1,743,642	5,680	1,567,008	1,280	1,230,762	0	1,743,642	0
	ENVIRONMENTAL/PLANNING - 400228		6,075	0	6,075	0	6,075	0	6,075	0	6,075	0
	ENVIRONMENTAL/PLANNING - 460228		18,125	0	20,425	0	20,425	0	18,988	0	20,425	0
	TOTAL PROJECTS (EVN/PLAN'G)		24,200	0	26,500	0	26,500	0	25,063	0	26,500	0
	TOTAL	1,402,932	1,427,132	0	1,770,142	5,680	1,593,507	1,280	1,255,825	0	1,770,142	0

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH AUG 2020.  
METRO AND TRIBUNE AGREED ON REIMBURSEMENT OF ~\$1.6 MILLION RELATED TO 2ND/BROADWAY OVERBUILD.

#### Original Budget:

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

#### Current Budget:

In January 2017, the Metro Board revised the LOP Budget for the Project 860228 to \$1.756 billion to reflect the current Project scope. Finance costs, estimated at \$14.3 million, are also reflected leading to a total of \$1.770 billion.

#### Commitments:

Overall commitments increased by \$5.7 million this month to \$1.59 billion which represents 90.0% of the Current Budget. The increase is related to RCC executed modifications.

#### Expenditures:

Expenditures are cumulative through August 2020 and increased by \$1.3 million this month for costs associated with staffing and professional services. Expenditures were lower this month mainly due to the delay of RCC's invoice for the August month-end. The \$1.26 billion in expenditures to date represent 70.9% of the Current Budget.

#### Current Forecast:

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

### Project Cost Analysis – 861228

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

SCC CODE		ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		BUDGET/ FORECAST VARIANCE
			PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
10	GUIDEWAYS & TRACK ELEMENTS	0	0	0	0	0	0	0	0	0	0
20	STATIONS, STOPS, TERMINALS, INTERMODAL	0	0	0	0	0	0	0	0	0	0
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	10,480	0	0	0	0	0	0	0	0	0
40	SITWORK & SPECIAL CONDITIONS	0	0	0	0	0	0	0	0	0	0
50	SYSTEMS	0	0	5,950	0	2,750	0	157	0	5,950	0
	CONSTRUCTION SUBTOTAL (10-50)	10,480	0	5,950	0	2,750	0	157	0	5,950	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	412	0	1,150	0
	SUBTOTAL (10-80)	38,878	0	45,328	0	41,822	0	38,043	0	45,328	0
90	UNALLOCATED CONTINGENCY	1,113	0	1,113	0	0	0	0	0	1,113	0
100	FINANCE CHARGES	0	0	0	0	0	0	0	0	0	0
	TOTAL PROJECTS (10-100)	39,991	0	46,441	0	41,822	0	38,043	0	46,441	0
	861228 TOTAL	39,991	0	46,441	0	41,822	0	38,043	0	46,441	0

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH AUG 2020.

#### Original Budget:

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

#### Current Budget:

The budget reflects the addition of \$6.45 million added by the Metro Board in December 2019 for increased scope at the 7th/Metro Station to be performed by the Project.

#### Commitments:

No changes to commitments this month. The cumulative \$41.8 million through August 2020 represents 90.0% of the Current Budget.

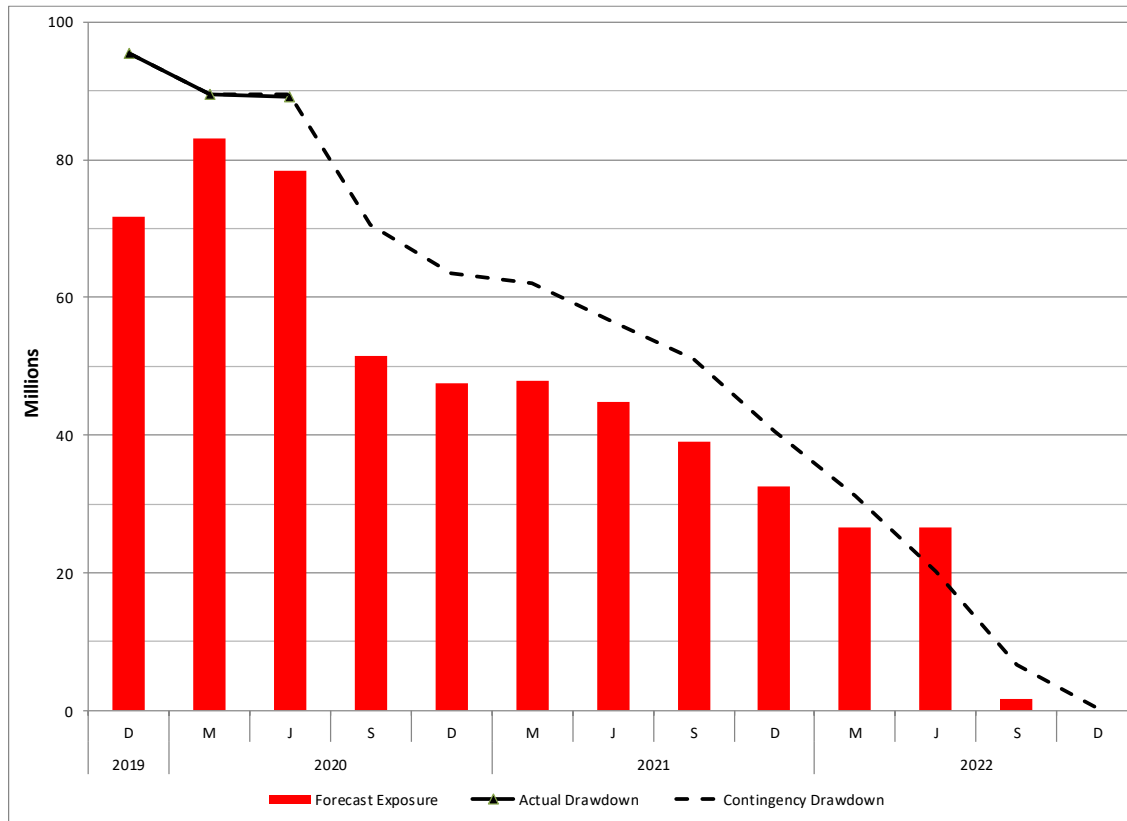
#### Expenditures:

No changes to expenditures this month. The cumulative \$38.0 million through August 2020 represent 82% of the Current Budget.

#### Current Forecast:

The total current forecast remains unchanged this month.

### Cost Contingency Drawdown



### Cost Contingency Drawdown Analysis

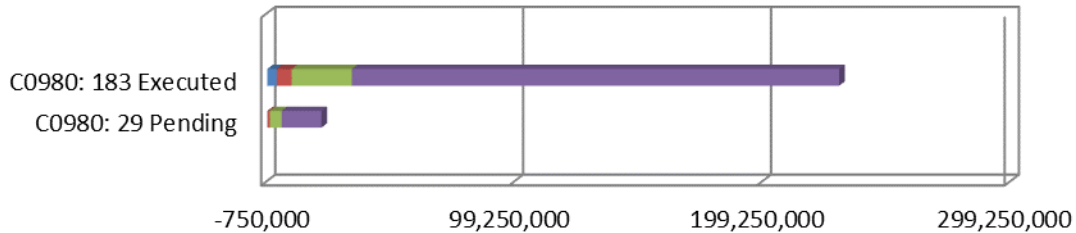
The Cost Contingency Drawdown curve introduced this month reflects cost commitments and forecast exposure, thereby providing a more accurate depiction of overall contingency status. Basing the drawdown on exposures (issuances of change notices) rather than executed contract modifications eliminates the 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 more accurately. The project is expected to reach the 3% Project Reserve (Total Contingency) threshold mid-year 2021.

In *August*, there was a \$5.34 million drawdown due to executed modifications. Several large contract modifications are being negotiated and expected to be finalized this quarter. The remaining unallocated contingency is \$44 million which is forecast to be fully utilized at the completion of the project.

PROJECT COST CONTINGENCY						
DOLLARS IN THOUSANDS						
	Original Contingency	LOP Contingency	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)
Unallocated Contingency	124,919	89,946	(48,045)	2,021	(46,024)	43,922
Allocated Contingency	86,345	92,809	(40,848)	(7,363)	(48,211)	44,598
<b>Total Contingency</b>	<b>211,263</b>	<b>182,754</b>	<b>(88,893)</b>	<b>(5,342)</b>	<b>(94,235)</b>	<b>88,520</b>

**Summary of Contract Modifications**

**Contract Modifications (MODs) by Cost Level**



	C0980		Total
	183 Executed	29 Pending	
■ Under \$100K	3,782,287	98,000	3,880,287
■ \$100K to \$250K	6,055,022	910,000	6,965,022
■ \$250K to \$1M	24,286,650	4,825,961	29,112,611
■ Over \$1M	196,627,940	16,000,000	212,627,940
<b>Total Contract MODs</b>	<b>230,751,899</b>	<b>21,833,961</b>	<b>252,585,860</b>
<b>Contract Award Amount</b>	<b>927,226,995</b>	<b>927,226,995</b>	
<b>% of Contract MODs</b>	<b>24.9%</b>	<b>2.4%</b>	

Note:

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

One hundred and *eighty-three* (183) changes with a total value of \$230.8 million have been executed since NTP of Contract C0980. An additional 29 changes, with a total estimated value of \$21.8 million, are pending.



## DISADVANTAGED BUSINESS ENTERPRISE (DBE)

As of July 2020:

<b>DBE Commitment – Design</b> The percentage of funds apportioned to Design Contracts	22.63%
<b>Current DBE Commitment Design</b> Total DBE Committed Dollars divided by Total Contract Value for Design	\$14.5M (22.63%)
<b>Current DBE Participation</b> Total amount paid to date to DBEs divided by the amount paid to date to Prime	24.38%

Fourteen (14) Design DBE sub-consultants have been identified to date.

<b>DBE Commitment – Construction</b> The percentage of funds apportioned to Construction Contracts	18%
<b>Current DBE Commitment Construction</b> Contract commitment divided by current contract value for Construction	\$194.9M (18%)
<b>Current DBE Participation</b> Total amount paid to date to DBEs divided by the amount paid to date to Prime	17.00%

One hundred *four* (104) Construction DBE sub-contractors have been identified to date.

## PROJECT LABOR AGREEMENTS (PLA)

As of July 2020:

<b>Targeted Worker Goal</b> Construction work to be performed by residents from Economically Disadvantaged Area in the United States	40.00%
<b>Targeted Worker Current Attainment</b>	60.25%
<b>Apprentice Worker Goal</b> Construction work to be performed by Apprentices	20.00%
<b>Apprentice Worker Current Attainment</b>	19.53%
<b>Disadvantaged Worker Goal</b> Construction work to be performed by Disadvantaged Workers who are residents of the United States	10.00%
<b>Disadvantaged Worker Current Attainment</b>	11.09%

## FINANCIAL/GRANT

### Status of Funds by Source

August 2020

SOURCE	ORIGINAL BUDGET	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS		EXPENDITURES		BILLED TO FUNDING SOURCE	
				\$	%	\$	%	\$	%
FEDERAL - CMAQ	\$64.00	\$218.11	\$64.00	\$81.28	37%	\$50.69	23%	\$50.69	23%
FEDERAL - SECTION 5309 NEW STARTS	\$669.90	\$669.90	\$669.90	\$662.35	99%	\$471.84	70%	\$471.84	70%
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	\$13.11	72%	\$0.00	0%	\$0.00	0%
STATE PROPOSITION 1A HSRB *	\$114.87	\$114.87	\$114.87	\$114.87	100%	\$114.87	100%	\$114.87	100%
STATE PROPOSITION 1B PTMISEA **	\$149.50	\$135.16	\$135.16	\$135.16	100%	\$135.16	100%	\$135.16	100%
STATE STIP RIP	\$2.59	\$17.00	\$15.90	\$13.52	80%	\$7.74	46%	\$7.74	46%
STATE CAPITAL PROJECT LOANS - OTHERS ***	\$132.47	\$274.83	\$274.83	\$274.83	100%	\$226.40	82%	\$224.14	82%
MEASURE R	\$27.57	\$0.00	\$0.00	\$0.00	0%	\$0.00	0%	\$0.00	0%
CITY OF LOS ANGELES	\$41.98	\$41.98	\$41.98	\$41.98	100%	\$41.98	100%	\$41.98	100%
ROW LEASE REVENUES	\$64.25	\$79.07	\$69.60	\$69.60	88%	\$20.34	26%	\$18.17	23%
GENERAL FUND - METRO	\$0.00	\$43.50	\$43.50	\$43.50	100%	\$43.50	100%	\$43.50	100%
<b>TOTAL</b>	<b>\$1,427.13</b>	<b>\$1,755.84</b>	<b>\$1,591.16</b>	<b>\$1,593.51</b>	<b>91%</b>	<b>\$1,255.82</b>	<b>58%</b>	<b>\$1,251.40</b>	<b>71%</b>

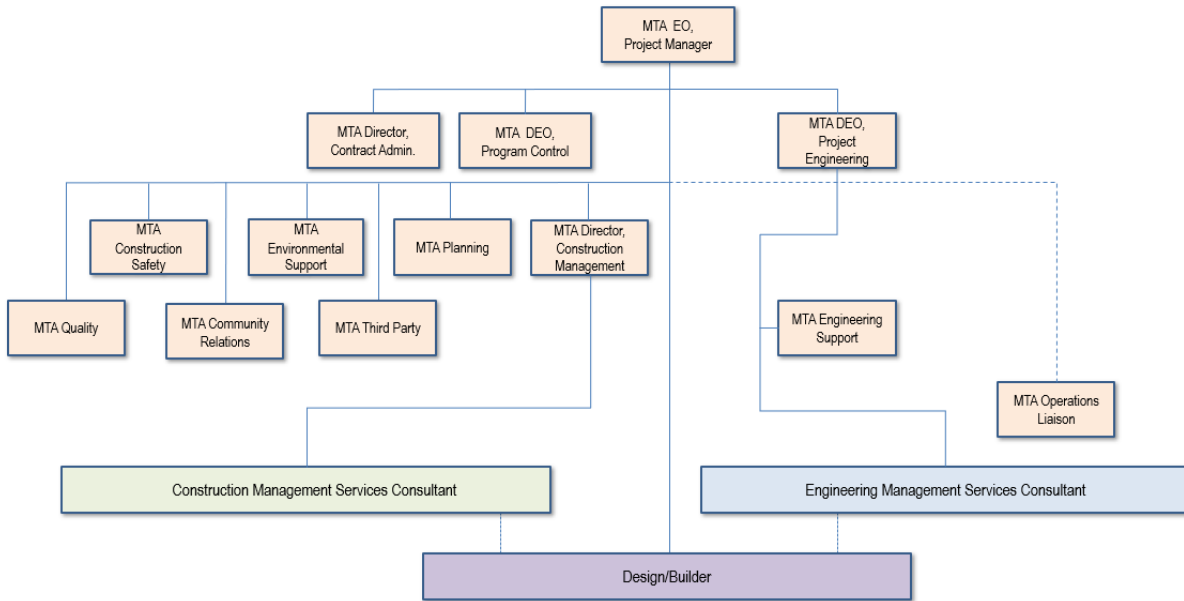
NOTES:

1. EXPENDITURES ARE CUMULATIVE THROUGH AUGUST 31, 2020.
  2. METRO AND TRIBUNE AGREED ON REIMBURSEMENT OF \$1.6 MILLION RELATED TO 2ND/BOARDWAY OVERBUILD.
  3. ORIGINAL BUDGET BASED ON FUNDING PLAN INCLUDED IN THE APPROVED FULL FUNDING GRANT AGREEMENT
  4. LACMTA RESERVES THE ABILITY TO UPDATE COSTS AND CHANGE FUND SOURCES AS REQUIRED.
- \* STATE PROPOSITION 1A HIGH SPEED RAIL BONDS  
 \*\* STATE PROPOSITION 1B PUBLIC TRANSPORTATION MODERNIZATION, IMPROVEMENT AND SERVICE ENHANCEMENT ACCOUNT  
 \*\*\* OTHERS INCLUDE TDA ADMINISTRATION, AND NB PROPOSITION A ADMINISTRATION (FOR A TOTAL OF \$.255M)  
 \*\*\* OTHERS INCLUDE TDA ADMINISTRATION, AND NB PROPOSITION A ADMINISTRATION (FOR A TOTAL OF \$.255M)  
 \*\*\*\* 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).

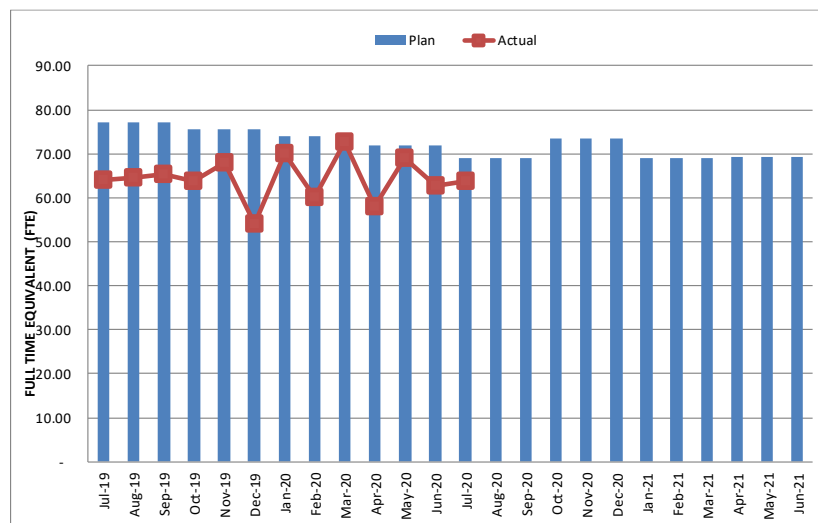
### Regional Connector Transit Project Responsibility and Reporting Matrix



Updated: 03/2020

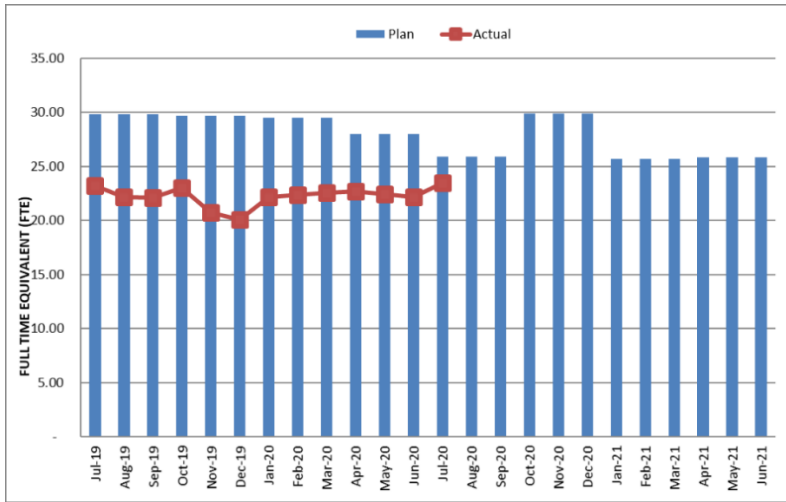
The overall FY21 Total Project Staffing plan averages 70.18 FTE's per month. The total actual project staffing for July 2020 was 63.71; 23.45 FTEs for Metro's Project Administration staff and 40.3 FTEs for consulting staff. Consulting staff FTEs are based on monthly invoice billable hours. Review of staffing plans is on-going to ensure staffing needs are appropriately managed.

### Total Project Staffing – Metro and Consultants

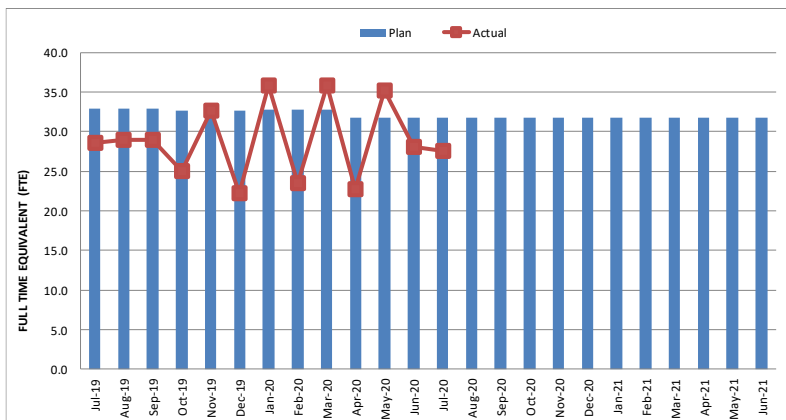


July actuals include 2.69 FTEs related to PMSS Services.

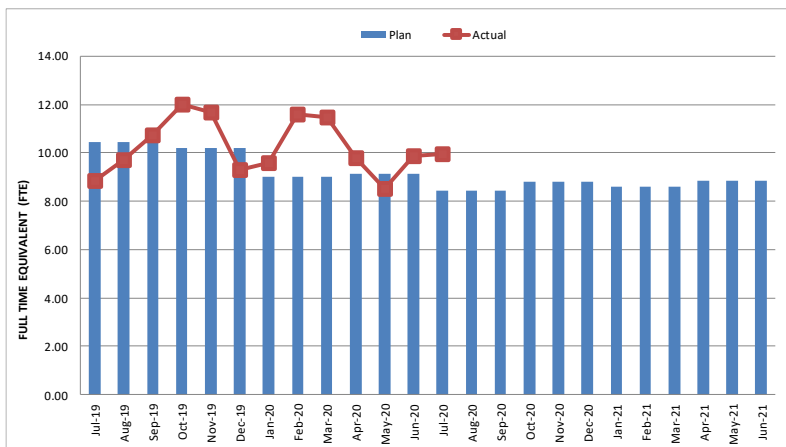
### Metro Staff



### 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.

## REAL ESTATE

### Open Real Estate Matters – Seven Parcels Remaining

#### City of Los Angeles (Mangrove Parcels)

- The transaction has been completed for the acquisition of the Fan Plant Easements and the extension of the temporary construction easement for three (3) years. Closing was held on July 22, 2020. A second closing for a small parcel at the current Little Tokyo/Arts District Station, that was separated from the Mangrove parcel, will not take place until the Project construction involving the existing Gold Line is completed which is estimated to be in 2022.

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

- The Purchase Agreement has been reviewed and accepted by Metro. Adoption by the LADWP Board is still pending. There was no activity in August.

#### 2nd and Hope

- Unknown Ownership Parcel - Resolution of Necessity adopted, eminent domain complaint filed, pending court's approval serve Order of Possession through newspaper publication. An Order of Possession publication was approved by the court on August 6, 2020 and published August 10, 2020. The publication runs for four (4) weeks; 30 days thereafter LACMTA will request entry of default if no one answers. *Pending expiration of publication period on September 9, 2020.*
- CRA/LA Parcel - CRA/LA accepted the offer and the agreement was submitted to their Board on June 4, 2020. CRA/LA Board approved the transaction on June 4, 2020; and presented to the Oversight Board on June 18, 2020. The Oversight Board approved the transaction, and the request was submitted to the Department of Finance (DOF) for approval. The DOF approved the disposition and CRA/LA signed the agreements and deed; will be sent to LACMTA for signature and payment processing the week of August 12, 2020. *Currently in escrow, final escrow documents are pending.* Escrow is anticipated to close within two (2) weeks of receiving CRA/LA signed documents.
- City of Los Angeles Parcel - The City agreed to the transfer based on the City's and LACMTA's Memorandum of Agreement. The City finalized conveyance documents and is coordinating council action to approve *There was no activity in August.*

#### Tribune

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

## QUALITY ASSURANCE

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

- Reviewed and provided comments on RCC's quality-related submittals
- Performed oversight verification of RCC's design and construction activities
- Reviewed test results for Portland Cement Concrete, Soils Testing, Asphalt Testing and Non-Destructive Testing of Welding
- Attended "Readiness Review" meetings with RCC
- *Metro QA conducted a surveillance (C980-Surv-2020-014) of concrete placement for Roof #17 at Flower Cut and Cover. All installation activities were found to be in compliance and acceptable and the surveillance was closed.*
- *Metro QA conducted a surveillance (C980-Surv-2020-015) at Mass Electric for the 34.5 kV switchgear for the Project and LADWP. The switchgear and all other associated equipment were found to be free of damage and as procured and the surveillance was closed.*
- *Metro QA conducted a surveillance (C980-Surv-2020-016) for the structural concrete placement of Tunnel Vent Invert (East) at the Alameda Cut and Cover Segment 2. The installation was found to be in compliance and acceptable and the surveillance was closed.*
- *Metro QA conducted an Audit (C980-AUD-2020-002) of the RCC Quality Management System. This Audit was started July 14, 2020 and concluded August 21, 2020. There was one finding for not completing a Management Review as stated in the RCC Quality Procedures Manual. A QAR has been drafted and sent to RCC for an action to be taken.*

*In August 2019, RCC NCR 076 was issued for damage to a sewer line installed at Grand Av Arts/Bunker Hill Station that occurred during the drilling of dowels for the platform walls at track level. Disposition was been approved by the EOR and Metro, repairs were completed and the NCR was closed.*

*In March 2020, RCC NCR 0089 was issued for conduits being damaged at Grand Av Arts/Bunker Hill Station during concrete repair operations. Disposition was been approved by the EOR and Metro, repairs were completed and the NCR was closed.*

*In April 2020, RCC NCR 093 was issued for tunnel ring embeds not installed per IFC design drawing in SEM Cavern. Disposition was been approved by the EOR and Metro, repairs were completed and the NCR was closed.*

*In May 2020, RCC NCR 095 was issued for defective concrete on Wall 73 at Grand Av Arts/Bunker Hill Station. Disposition was been approved by the EOR and Metro, repairs were completed and the NCR was closed.*

*RCC NCR 098 was issued due to shoring being removed prior to completing proper removal documents at the Alameda/Wye Traction Power Disconnect Room. This NCR remains open.*

*RCC NCR 099 was issued for concrete not being properly consolidated during the placement of the SS1 Stairs at Grand Av Arts/Bunker Hill Station.*

RCC NCRs 004, 047, 053, 054, 057, 064, 074, 083, 084, 086, 087, 092, 096 and 097 remain open with no change.

## ENVIRONMENTAL

- Stormwater Pollution Prevention Plan (SWPPP) inspections of most active Project work areas are conducted weekly by RCC. Metro staff conducted oversight observations and shared feedback on ways to improve BMP preparation and execution. RCC *prepared and submitted* the SWPPP Annual Report *by the September 1st due date and are still working on a SWPPP amendment.*
- 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 from stakeholders adjacent to the future Grand Av Arts/Bunker Hill Station; however, Metro/RCC's Community Relations team have been responsive and continue to actively address community concerns in coordination with Area Leads, Resident Engineers, and field staff with respect to each construction site.

- On *August 20, 2020* Metro submitted the 30th Quarterly MMRP Update covering the period of May through July 2020. *During August, review of the 29th Quarterly MMRP Update covering the period of February through April 2020 began between Metro and the PMOC.*
- *One (1) previously recorded historic period feature was recorded during August. Feature 23, consisting of a concentration of granite blocks (or paving stones) and sections of a historic paved surface, encountered initially on May 24, 2014, was encountered on August 5, 2020 and August 8, 2020.*



## CONSTRUCTION AND COMMUNITY RELATIONS

### Construction Relations

- Responded and addressed Project related inquiries from the public received via the hotline, and email. The Little Tokyo Community Office is closed in response to the COVID-19 pandemic.
- Performed public outreach and construction coordination to impacted area stakeholders regarding the following construction activities: concrete placement throughout the alignment, *utility investigation at Division 20 and 1st St Bridge*, Alameda guideway excavation at Mangrove Yard, utility investigation at 2nd St/Broadway, planned street closures at 1st/Alameda for restoration, excavation at *Central Av*, *street restoration at Central Av*, continued backfill material delivery on Flower St, and geotechnical monitoring maintenance.
- Distributed eight (8) construction notices to the public on the above activities through email and made it available on the Project website and social media outlets.
- Provided weekly construction updates and coordinated work activities with 80 stakeholders: *updates on construction activities and permits being sought by the Project from the City of LA such as Night-time Variance Exemption: Metropolitan News, LAPD Headquarters, Onni Times Square, Colburn School, WDCH-Choral Hall, REDCAT, The Standard Hotel, Japanese Village Plaza, Hikari, One-Santa Fe, Kawada Hotel, Higgins Building HOA Board, Douglas Lofts, Savoy Community Association, Miyako Hotel, LTCC, LTBA, LTBID, Office Depot, Broadway Civic Center, The Broad, The Emerson, 255 Grand, Bunker Hill Tower and Towers, The Promenade, Charles Dunn, Westin Bonaventure, and 444 S Flower St, Central Library/Maguire Gardens, City National Plaza, The California Club, Public School 213, Pegasus Apartments, Paragon Parking, World Trade Center Parking Garage, The Roosevelt Lofts, 888 Figueroa, 818 7th St, LTSC, JACCC, Sustainable Little Tokyo, JANM, MOCA at Geffen, Chado Tea Room, Shin-Sen Gumi, Arts District BID, Cafecito Pura Vida, LAPD Headquarters, Metropolitan News, LA Times Parking, Redwood Bar and Grill, and Cherry Pick Café.*
- Presented virtually to five (5) community organizations with updates on: *Street restoration progress and planned closures in the vicinity of 1st/Alameda, including the Fall 2020 L Line (Gold) service interruption. Briefings were given to: Arts District Los Angeles Business Improvement District, Historic Cultural Neighborhood Council, Little Tokyo Business Association, Little Tokyo Community Council, and the Little Tokyo Community Council.*

- Hosted a project update webinar on *August 13, 2020* with members of Regional Connector's Community Leadership Council and members of the general public in attendance. Provided updates on the progress of construction, planned street closures at Hope St for *pedestrian bridge construction*, 2nd St/Broadway, Central Av and 1st St *street restoration work*, as well as mitigations in place for businesses through Metro's Eat, Shop, Play Program.

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

- Highlighted Kagura Downtown in *new promotional video pilot program on social media and within the monthly project update.*

### **Community Relations**

- Continued work with the monthly Little Tokyo Marketing & Business Task Force via Zoom because of the COVID-19 pandemic. The focus of the *August 26, 2020* meeting was the *launch of AI-Fresco program in Little Tokyo and status of small businesses in Little Tokyo.*

## **CREATIVE SERVICES**

### **Art Program**

- *Planned community engagement activities with Artists.*
- Held design update meeting with the Atomic Cafe Interpretive Graphic Display *stakeholder group.*
- Reviewed and responded to RCC PSR, CN and RFI submittals.
- Reviewed and responded with Artists to porcelain enamel fabricator submittals.
- Reviewed and responded with Artists to mosaic fabricator progress updates.
- Continued assessment of Project operating impacts to signage systemwide.

## SAFETY & SECURITY

### C0980 Regional Connector

- In response to the COVID-19 pandemic, Project Safety Management continued to monitor compliance by RCC and IPMO staff with Federal, State, and City requirements for 'Essential Workers' on 'Critical Infrastructure' projects.
- Monitored RCC's pre-employment drug/alcohol testing and new employee safety orientation to ensure compliance with contract specifications.
- Conducted Project Safety Orientation for new Metro/Consultants and IPMO project staff. Training sessions included Safety Orientation, Underground Safety, and Self Rescuer Training.
- Participated in work plan reviews, daily crew safety meetings, and the RCC 'Safety Stand Down' sessions.
- Monitored construction field activities daily to ensure compliance with contract specifications. Participated with RCC staff in field safety inspection walks of multiple project worksites, laydown areas, and storage yards.
- Monitored Third Party contractor's work activities to ensure safety compliance.

### Project Safety Record

- RCC reported no Recordable Injuries during the month of *August 2020*.
- RCC reported 93,765 work hours for *July 2020*. RCC's total Contract to Date work hours through *July 2020* are 4,075,888 with a total of 18 Recordable Injuries and no Lost Workday (Days Away) case injuries. The C0980 Contract Recordable Injury Rate is 0.88. 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 *July 2020* is 4,186,947 hours with 19 recordable injuries. The Total Project Contractor Recordable Injury Rate is 0.91.
- Total Aggregate Project work hours for Contractors, Metro, and Support Services Consultants, through *July 2020* is 5,028,334 with 20 Recordable Injuries and no Lost Workday (Days Away) injury cases. The Total Project Aggregate Safety Rate is 0.80.\*

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\* Using RIR method of calculating.

## APPENDIX CHRONOLOGY OF EVENTS

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

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

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

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

November 2017	Initiated underpinning related to the Historic Broadway Station
December 2017	RCC completed mining and broke through at Grand Av Arts/Bunker Hill Station (Right Tunnel)
January 2018	RCC completed TBM mining of the second tunnel (right)
February 2018	RCC began excavation of cross passages
February 2018	RCC began SEM canopy pipe installation
March 2018	RCC began tunnel invert concrete
March 2018	RCC completed infrastructure for power relocation work at 6th/Flower
April 2018	RCC completed entrance structure excavation of Historic Broadway Station
May 2018	RCC began SEM excavation
June 2018	LADWP Power completed cable pulling at 6 <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 Revised Cable Transmission System for the Gold Line
October 2018	Metro completed approval of floating slab test results
October 2018	RCC completed SEM left drift excavation
October 2018	RCC completed Trainway Feeder duct bank at Flower St & 7 <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.*