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TO: Distribution

FROM: Gary Baker
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SUBJECT: Regional Connector Transit Project
September 2020 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 October 2, 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
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Los Angeles County
Metropolitan Transportation Authority

Regional Connector Transit Project

QUARTERLY PROJECT STATUS REPORT

September 2020



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REGIONAL CONNECTOR TRANSIT PROJECT

QUARTERLY PROJECT STATUS REPORT

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September 2020

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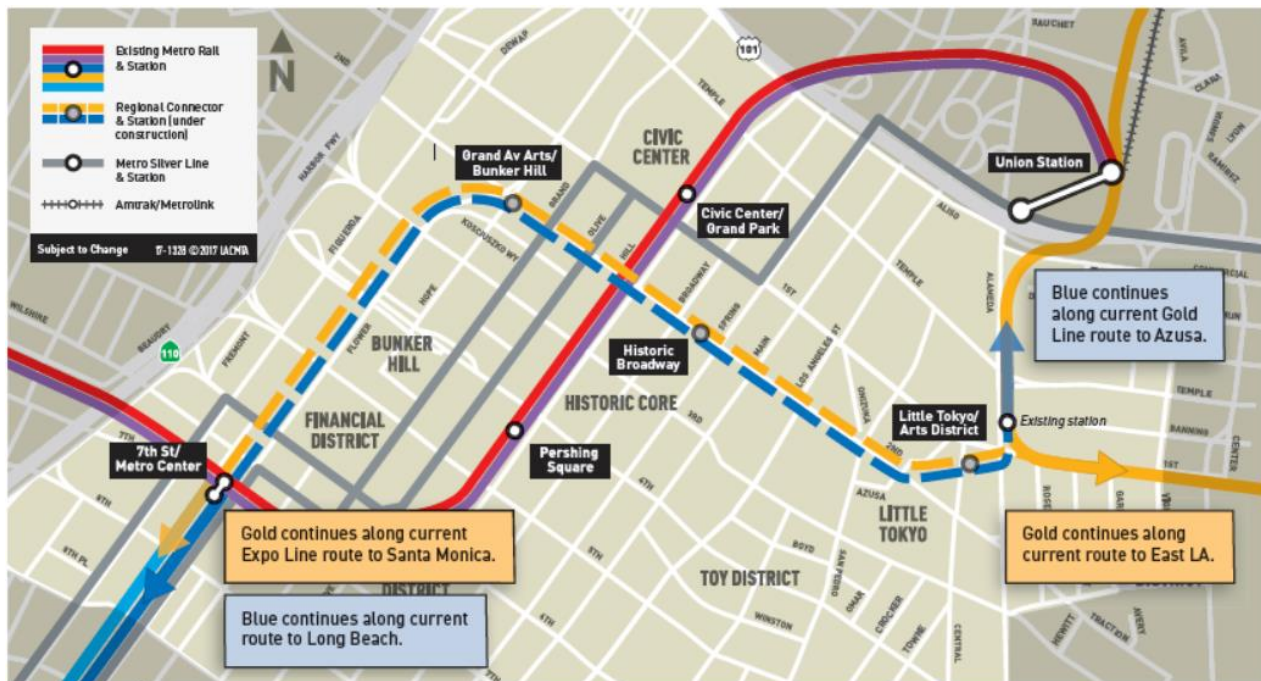
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PROJECT OVERVIEW

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 early 2021. 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 *September*, the Project achieved 70.1% completion based on earned value measurements for design and construction. The focus of the Project is on completing structural concrete, and installation of trackwork.

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

Design Status

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

Construction Status

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: *Store rail stockpiles and LVT block materials.*

Alameda Street Cut & Cover Tunnel & U-Channel: Completed the Pre-Bus Bridge 3 tunnel invert sections. *Started the Pre-Bus-Bridge tunnel exterior walls and the Temple Street 10" sewer line installation.*

Future Little Tokyo/Arts District Station: Completed *Upper Ancillary exterior walls*. Continued the *Station Box and Ancillary roof decks*, and Lower Ancillary mechanical/electrical/plumbing, the Upper Ancillary concrete masonry unit (CMU) Walls, and East Vent Plenum excavation.

Reach 1 Tunnels Section (Future Little Tokyo/Arts District Station to Crossover Cavern): *Started right tunnel track installation. Completed left tunnel track installation. Continued tunnel lighting installation at the right tunnel and left tunnel.*

Crossover Cavern: *Started plinth installation.*

Historic Broadway Station: At the platform level of the Station Box, *completed the platform deck and the escalator truss installations. Continued installation of Public Stair #3 and #4*, CMU walls, *elevator stainless steel enclosure*, fire protection pipes and domestic water service. At the concourse level, completed the *east interior walls*. At the Entrance area, *started concourse level CMU walls, continued the ancillary exterior/interior walls*, the installation of *Public Stair #2 and the roof-level deck*.

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

Grand Av Arts/Bunker Hill Station: At the platform level, *continued Public Stair #1 and #2 installation. Completed acoustic placement and the installation of mechanical/electrical/plumbing.* At the concourse level, *completed 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, *completed the west tunnel vent walls and roof deck. Started backfill.* At the upper roof level, *completed the upper roof deck, and started elevator walls.* At Emergency Exits #1 and #2, *completed exterior walls and continued interior walls. At the Pedestrian Bridge, installed column foundations.*

Reach 3 Tunnel Section (Grand Av Arts/Bunker Hill Station to Flower): *Started installation of tunnel lighting in the left tunnel and right tunnel.*

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

Cost and Schedule Summary

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

RCC Schedule Metrics

Notice to Proceed	Contract Substantial Completion	Forecast Substantial Completion	Forecast RSD	Proposed FFGA RSD
7/7/14	4/1/22	5/16/22	10/8/22	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

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 no new COVID-19 cases reported for the period; for a total of thirty (30) positive cases through September 2020. As of September 30, 2020, thirty (30) 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 *to the degree planned for the balance of 2020.*

Key Management Concerns

Item 1: Rail Activation for integrating three transit lines is complex. Schedule and cost challenges 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. *Work has been completed in advance of Bus Bridge #3. This item is now closed.*

Item 4: Multiple utility rearrangements remain to be completed as the Project enters the 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 *Broadway, Spring and 2nd St through continued potholing and redesigns. Evaluation of final options is underway.*

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. *Despite COVID-19 impacts, critical path work is being progressed as scheduled.*

Project Construction Photos



Pre-heating rail for Orgo-Thermite welding



Formwork for DF track in crossover cavern



Rebar installation at Alameda Leg



Stainless steel elevator frames at platform level at Historic Broadway Station



Rebar installation at Roof Level deck at Grand Av Arts/Bunker Hill Station

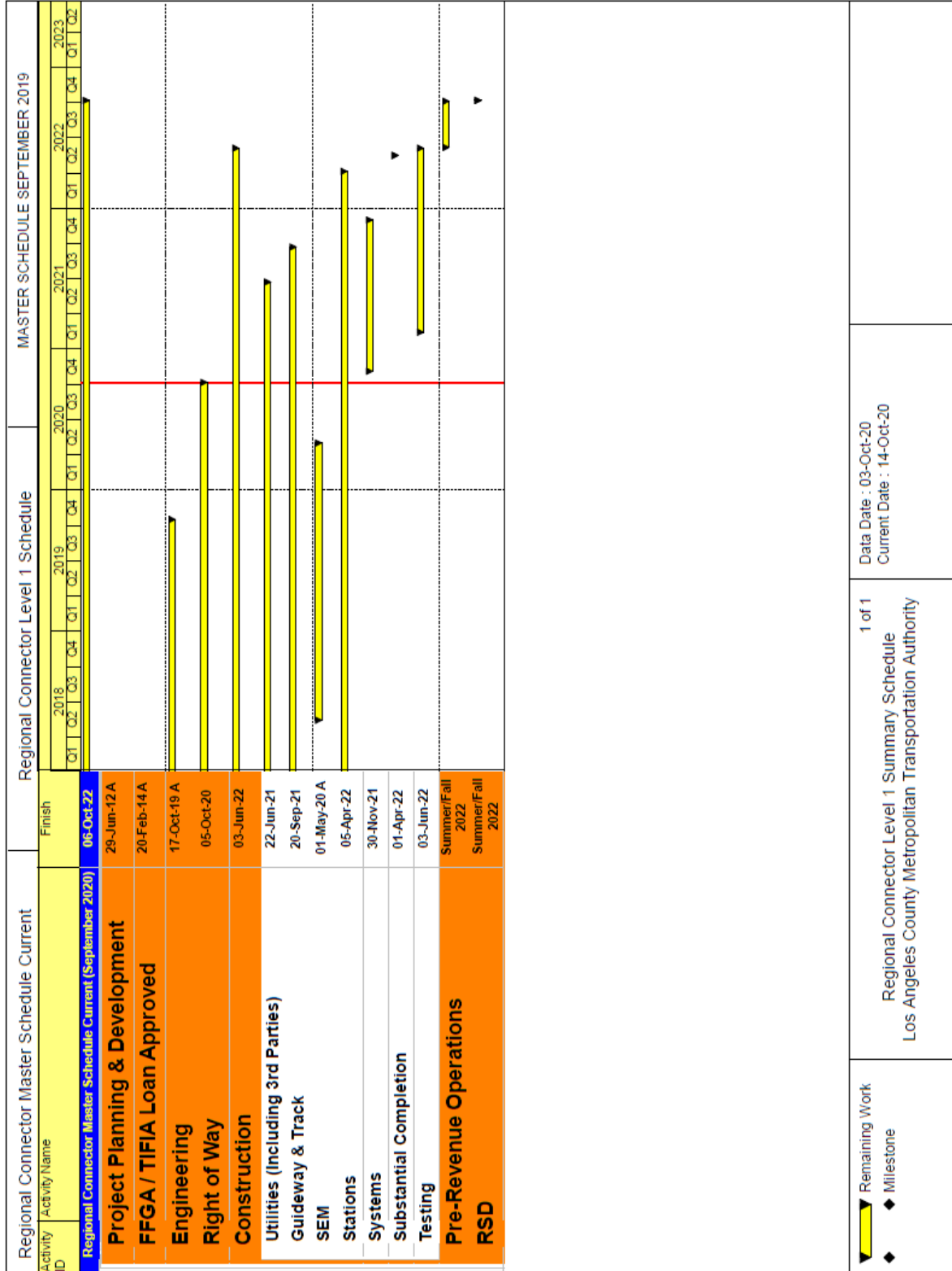


Backfill east and west of 72-inch RCP storm drain under Flower St

PROJECT UPDATE

PROJECT SCHEDULE

Project Summary Schedule

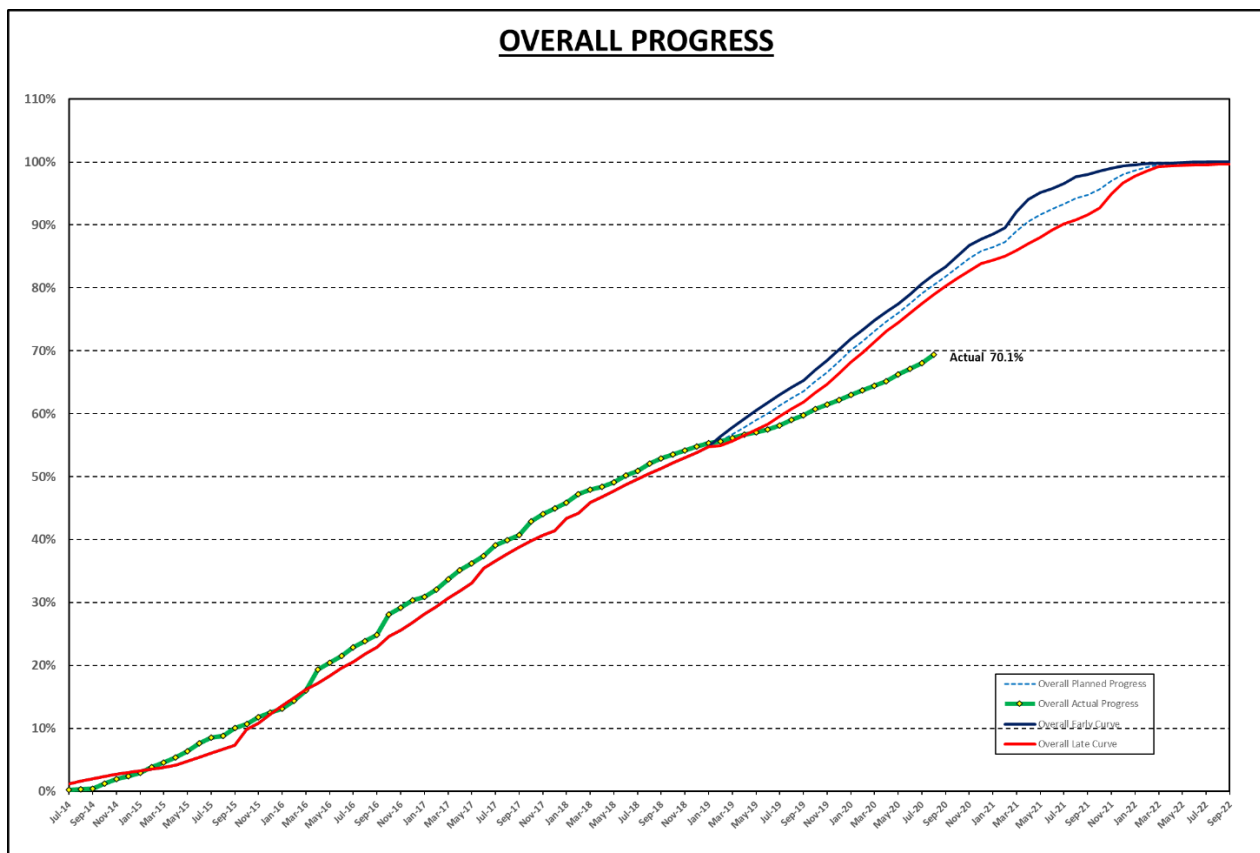


Progress Summary

	Status	Change from Last Month	Comment
Forecast Revenue Service	Summer/Fall 2022	None	
Proposed TIFIA Revenue Service	2/25/2023	None	<i>Loan paid off – Account closed</i>
Proposed FFGA Revenue Service	2/25/2023	None	
Final Design Progress:			
Contract C0980	100%	NA	
Construction Contracts Progress:			
Contract C0981R & C0980	68.7%	0.80%	

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	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21
Complete Upper Ancillary Exterior Walls at Little Tokyo / Art District Station	9/18/20 A	⬡					
Complete Upper Roof Deck at Grand Ave / Bunker Hill Station	9/25/20 A	⬡					
Complete Revised Communications System Fiber Optic Cable Pico/Aliso Station to Division 20 Yard	10/23/20		⬡				
Complete Roof Deck at Little Tokyo / Art District Station	10/23/20		⬡				
Complete South Flower Cut & Cover Tunnel Roof	11/02/20			⬡			
Complete Station Entrance Ancillary Walls at Historic Broadway Station	11/02/20			⬡			
Complete Emergency Exit 1&2 Roof at Grand Ave / Bunker Hill Station	11/09/20			⬡			
Complete Station Box Roof Deck at Historic Broadway Station	11/18/20			⬡			
Complete #8 Double Crossover Track	12/21/20				⬡		
Complete Station Entrance Roof Deck at Historic Broadway Station	12/24/20				⬡		
Complete Structural Backfill at Little Tokyo / Art District Station	01/22/21					⬡	
Complete Pin Pile Removal at Historic Broadway Station	02/23/21						⬡

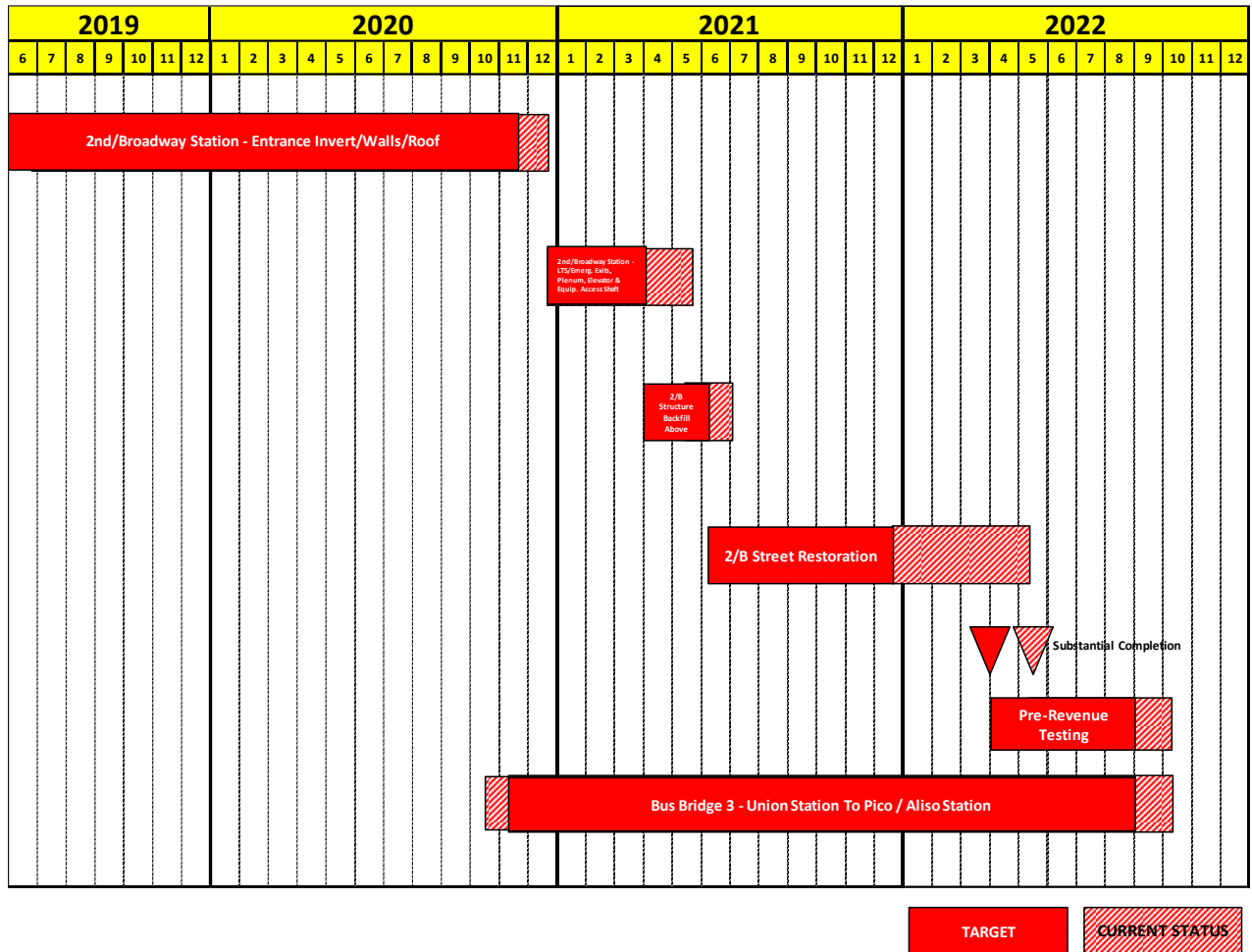
◆ MTA Staff
 Ⓜ MTA Board Action
 ✕ FTA (Federal Transit)
 ▽ Utility
△ Other Agencies
 □ Contractors
 ○ Design Consultant
 ⬡ C0980 D/B
 * "A" following date is actual and completed
 * New

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 *plenum/elevator/emergency exit/equipment access shafts* will be placed. *Station structure backfill above the utilities* will commence, followed by *street restoration*. *Below street level and in parallel, Systems Integration Testing will be conducted leading ultimately to Substantial Completion*. Metro Operations will thereafter commence *pre-revenue testing*.

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	0	262,563	7,355	219,710	236	273,671	975
20	STATIONS, STOPS, TERMINALS, INTERMODAL	354,268	219,477	0	230,857	0	230,303	11,658	121,761	495	235,436	4,579
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	439	585,610	5,986	510,650	-1,012	628,356	1,525
50	SYSTEMS	69,667	73,848	0	77,972	33	68,001	303	20,189	1,576	78,852	880
	CONSTRUCTION SUBTOTAL (10-50)	846,343	920,468	0	1,208,356	472	1,146,477	25,302	872,310	1,296	1,216,314	7,959
60	ROW, LAND, EXISTING IMPROVEMENTS	115,889	74,208	0	59,315	13	57,809	13	57,648	0	59,315	0
70	VEHICLES	16,275	16,275	0	16,275	0	16,275	1,902	9,468	0	16,275	0
80	PROFESSIONAL SERVICES	261,455	257,973	0	394,216	3,768	350,730	3,042	321,594	55	394,865	649
	SUBTOTAL (10-80)	1,239,963	1,268,925	0	1,678,162	4,253	1,571,291	30,258	1,261,020	1,351	1,686,770	8,608
90	UNALLOCATED CONTINGENCY	135,399	126,892	0	51,179	0	0	0	0	-1,351	42,571	-8,608
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	4,253	1,571,291	30,258	1,261,020	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
	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	4,253	1,597,790	30,258	1,286,083	0	1,770,142	0

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH SEP 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 \$4.3 million this month to \$1.60 billion which represents 90.3% of the Current Budget. The increase is related to *FY21 work orders from City of Los Angeles*.

Expenditures:

Expenditures are cumulative through *September 2020* and increased by \$30.3 million this month for costs *across the Project*. \$1.29 billion in expenditures to date represent 72.7% 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	815	972	0	5,950	0
	CONSTRUCTION SUBTOTAL (10-50)	10,480	0	5,950	0	2,750	815	972	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	815	38,859	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	815	38,859	0	46,441	0
	861228 TOTAL	39,991	0	46,441	0	41,822	815	38,859	0	46,441	0

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH SEP 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 *September* 2020 represents 90.0% of the Current Budget.

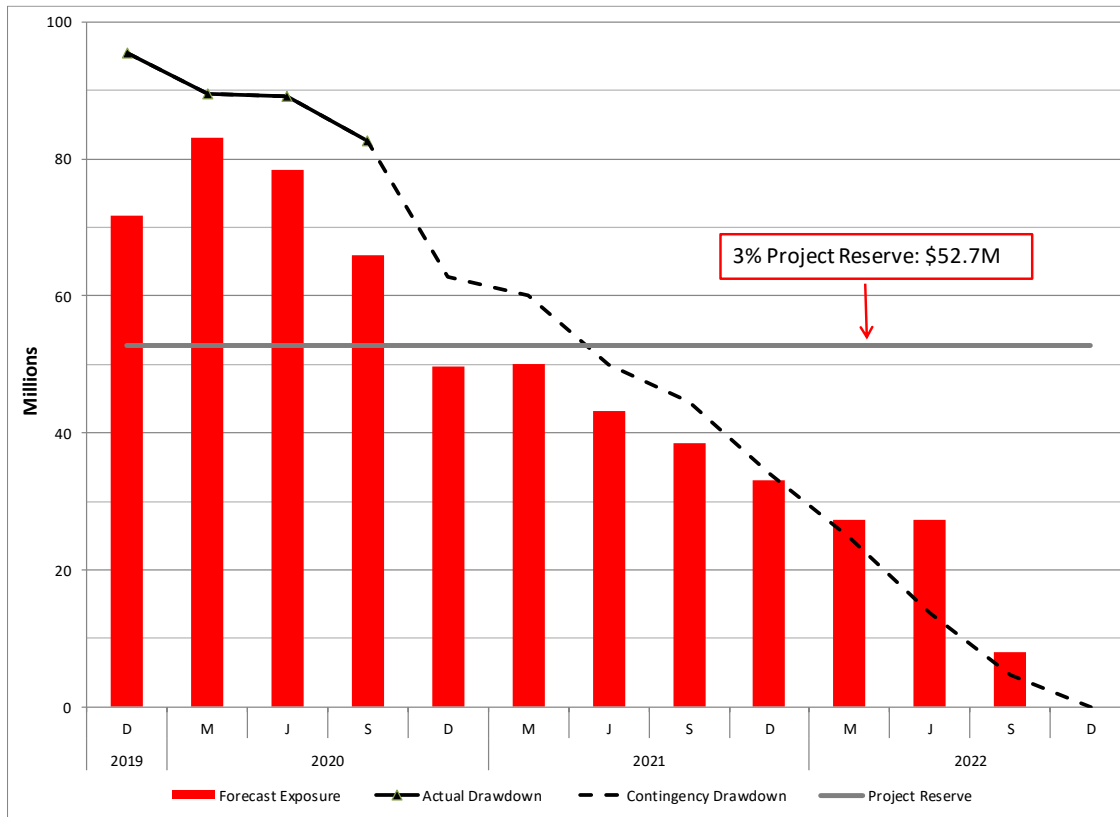
Expenditures:

Expenditures are cumulative through September 2020 and increased by \$815 thousand this month for costs associated with the radio system. The cumulative \$38.9 million through September 2020 represent 84% 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 *September*, there was a \$32 thousand drawdown to an executed modification. Several large contract modifications are being negotiated and expected to be finalized *next* quarter. The remaining unallocated contingency is \$43 million which is forecast to be fully utilized by 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	(46,024)	(1,351)	(47,375)	42,571
Allocated Contingency	86,345	92,809	(48,211)	1,319	(46,892)	45,917
Total Contingency	211,263	182,754	(94,235)	(32)	(94,267)	88,488

RISK MANAGEMENT

Summary of Risks

During this quarterly reporting period, *ten (10)* active risk were closed, *one (1)* new risk was identified and *eleven (11)* risks' scores were adjusted. There are *thirty-six (36)* risks to be managed over the next quarter.

Of the thirty-six (36) risks, three (3) are scored high, *sixteen (16)* as medium and seventeen (17) as low.

The following details the activity for the quarter:

Top Risks

The Project's top risks as of September 2020 are:

Risk ID	SCC	Risk Description	Risk Rating
450	20	Final designs related to the Historic Broadway Overbuild reflect additional construction costs owing largely to the Load Transfer System agreed-to.	15
566	90	Potential impacts to schedule and costs due to Covid - 19 Emergency.	12.5
514	30	Fan Plant final modification negotiated above 12M. Costs shown are above the current forecast and adjustment.	10
304	10	Unknown obstructions may be encountered during station or cut/cover guideway excavation, or Support of Excavation installation; delays may ensue.	9
565	50	CTS for Bus Bridge #3 (Gold Line) delay may impact start of bus bridge.	9

New Risks

One (1) risk was identified this quarter.

Risk ID	SCC	Risk Description	Risk Rating
569	40	Flower St. storm drain repair per COLA expectations threaten costs.	5

Risk Score Changes

Eleven (11) active risks had a scoring assessment change this quarter.

Risk ID	SCC	Risk Description	Updated Risk Rating	Previous Risk Rating
566	90	Potential impacts to schedule and costs due to COVID-19 Emergency.	12.5	10
450	20	Final designs related to the Historic Broadway Overbuild reflect additional construction costs owing largely to the Load Transfer System agreed-to.	10	7.5
373	40	Project may be held responsible for damages south of 6th/Flower due to Flower St settlement issue (Cost Implication only).	8	6
507	80	MOW support of BB3 is limited due to resource constraints; schedule and cost impacts likely to follow.	8	10
564	40	AT&T duct bank reconstruction at 2nd/Broadway threaten cost and schedule.	8	12
291	40	City agency review and approval time for traffic management plans (TMP), traffic control plans (TCP) and permits may delay project schedule.	4.5	3
425	10	Concrete production issues (quality and resources) impact to schedule at 2nd/Hope threaten the Project Milestones.	4	9
346	40	Mod 74 Schedule Risk (Article 19): Metro will be responsible for up to 120 days of delay if certain construction work is delayed beyond the baseline durations for reasons beyond the control of RCC	3	5
425	10	Concrete production issues (quality and resources) impact to schedule at 2nd/Hope threaten the Project Milestones.	2	4
445	20	Evidence of Times Bldg. damage raises threats to cost.	1.5	3
236	10	As environmental issues are likely to be present during tunnel construction SOV quantities may be exceeded.	1	2

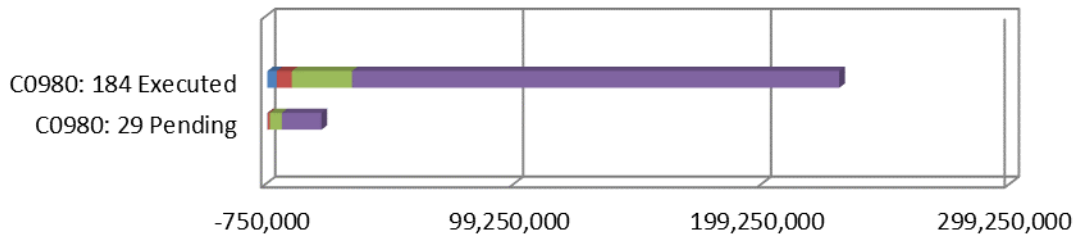
Closed Risks

Ten (10) risks were closed this quarter.

Risk ID	SCC	Risk Description	Risk Rating
502	40	Temple Sewer Line total costs run higher due to added scope and DWP constraints.	10
347	40	DWP request for new infrastructure along Flower St during street restoration will have cost implications.	7.5
560	40	Re-design of Temple sanitary sewer may delay construction by delayed acceptance of BOS	6
349	40	Capital costs for additional betterment requests from BOE/DOT may further adversely impact costs.	4
194	10	Unknown obstructions and settlements of any type that may be encountered during tunnel drives or support of excavation installation will require corrective actions; delays may ensue.	3
346	40	Mod 74 Schedule Risk (Article 19): Metro will be responsible for up to 120 days of delay if certain construction work is delayed beyond the baseline durations for reasons beyond the control of RCC	3
405	20	1st/Central concrete durations have been adjusted leading to extended duration for entire station. Slippage adds risk to entire schedule by its elimination of float.	2.5
410	10	Floating slab issues will likely impact schedule.	2.5
306	20	Discovery of historic artifacts during station box and cut/cover guideway excavation may delay project.	2
425	10	Concrete production issues (quality and resources) impact to schedule at 2nd/Hope threaten the Project Milestones.	2

Summary of Contract Modifications

Contract Modifications (MODs) by Cost Level



	C0980		Total
	184 Executed	29 Pending	
■ Under \$100K	3,814,287	115,627	3,929,914
■ \$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
Total Contract MODs	230,783,899	21,851,588	252,635,487
Contract Award Amount	927,226,995	927,226,995	
% of Contract MODs	24.9%	2.4%	

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-four (184) 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 \$21.9 million, are pending.

DISADVANTAGED BUSINESS ENTERPRISE (DBE)

As of August 2020:

DBE Commitment – Design The percentage of funds apportioned to Design Contracts	22.63%
Current DBE Commitment Design Total DBE Committed Dollars divided by Total Contract Value for Design	\$14.5M (22.63%)
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime	24.31%

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

DBE Commitment – Construction The percentage of funds apportioned to Construction Contracts	18%
Current DBE Commitment Construction Contract commitment divided by current contract value for Construction	\$194.9M (18%)
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime	17.32%

One hundred *eight* (108) Construction DBE sub-contractors have been identified to date.

PROJECT LABOR AGREEMENTS (PLA)

As of August 2020:

Targeted Worker Goal Construction work to be performed by residents from Economically Disadvantaged Area in the United States	40.00%
Targeted Worker Current Attainment	60.19%
Apprentice Worker Goal Construction work to be performed by Apprentices	20.00%
Apprentice Worker Current Attainment	19.63%
Disadvantaged Worker Goal Construction work to be performed by Disadvantaged Workers who are residents of the United States	10.00%
Disadvantaged Worker Current Attainment	11.17%

FINANCIAL/GRANT

Status of Funds by Source

September 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%	\$56.00	26%	\$50.71	23%
FEDERAL - SECTION 5309 NEW STARTS	\$669.90	\$669.90	\$669.90	\$664.35	99%	\$492.12	73%	\$481.67	72%
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	\$15.80	93%	\$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%	\$25.00	32%	\$21.54	27%
GENERAL FUND - METRO	\$0.00	\$43.50	\$43.50	\$43.50	100%	\$43.50	100%	\$43.50	100%
TOTAL	\$1,427.13	\$1,755.84	\$1,591.16	\$1,597.79	91%	\$1,286.08	58%	\$1,264.62	72%

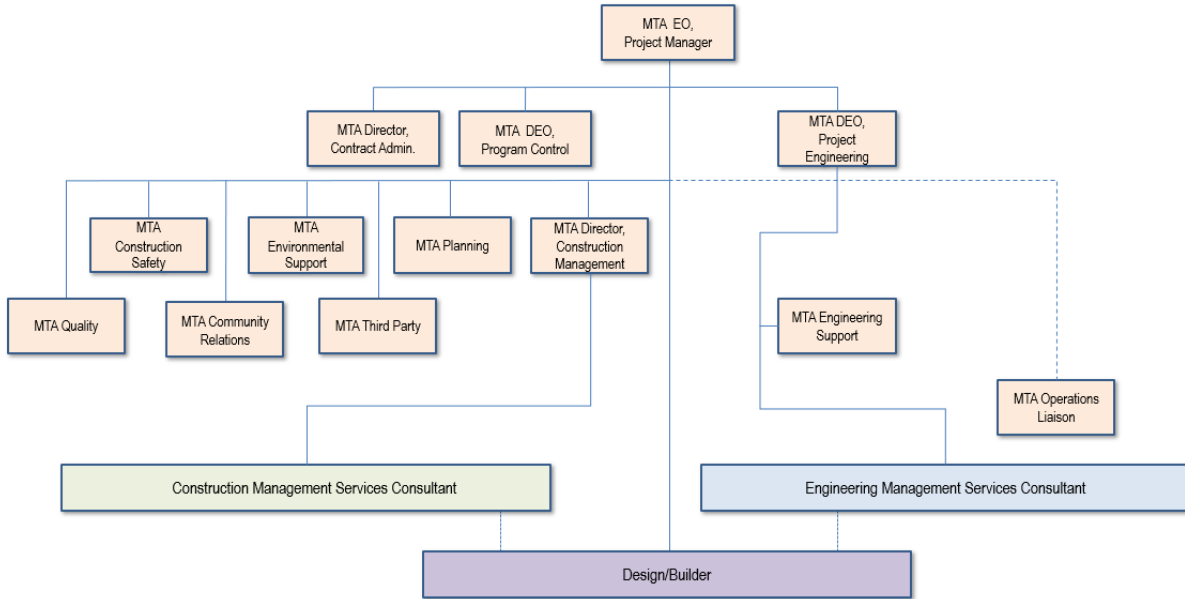
NOTES:

1. EXPENDITURES ARE CUMULATIVE THROUGH SEPTEMBER 30, 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).

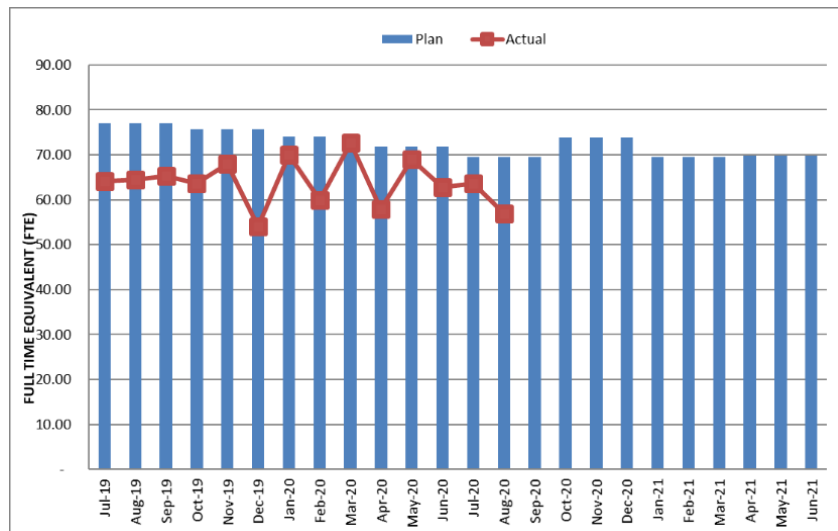
Regional Connector Transit Project Responsibility and Reporting Matrix



Updated: 03/2020

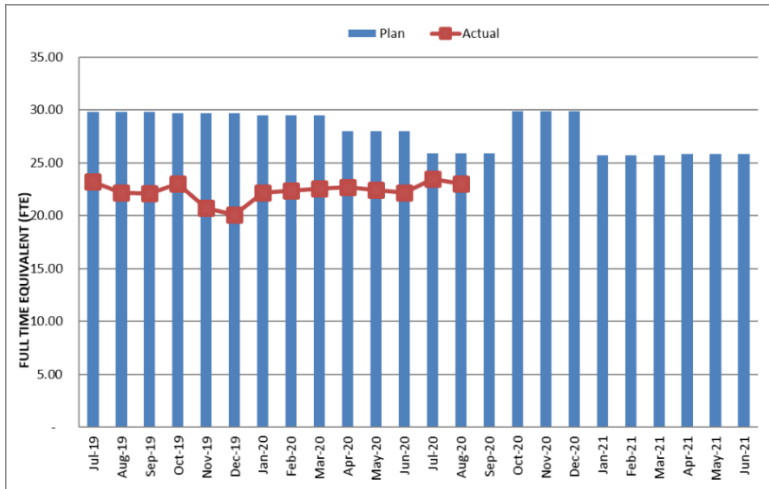
The overall FY21 Total Project Staffing plan averages 70.18 FTE's per month. The total actual project staffing for August 2020 was 56.95; 23.05 FTEs for Metro's Project Administration staff and 33.9 FTEs for consulting staff. Consulting staff FTEs are based on monthly invoice billable hours. Review of staffing plans is on-going to ensure staffing needs are appropriately managed.

Total Project Staffing – Metro and Consultants



August actuals include 3.35 FTEs related to PMSS Services.

Metro Staff



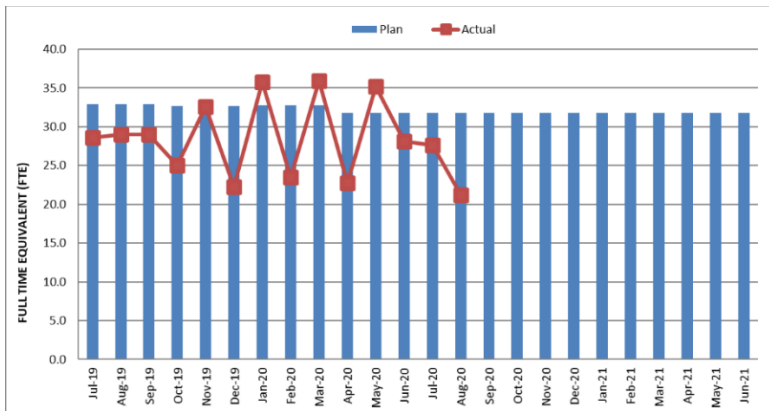
Staffing by Group

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.

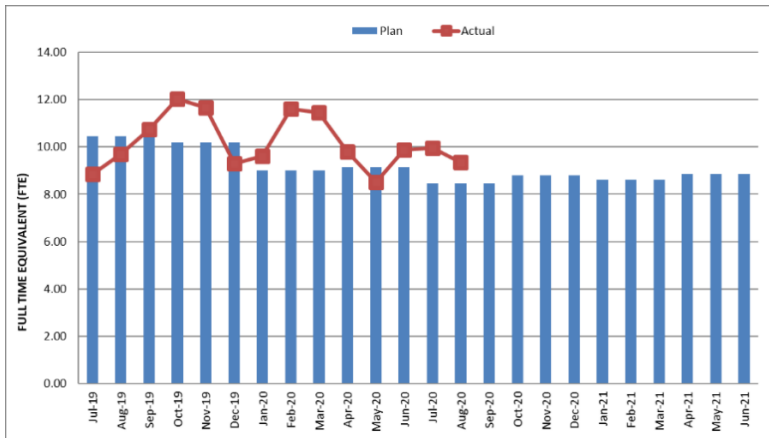
Staffing plans are developed for each fiscal year based on Project needs.

CM Support Services Staff (Consultant)



CMSS actuals were lower than forecast as a result of fee reduction issue with one subcontractor. Gannett Fleming hours were missing in June to August 2020 invoices.

Engineering Services Staff (Consultant)



All above data through August 2020

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 September:

- 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-2020-017) for the Backfill Operation at Grand Av Arts/Bunker Hill Station. All activities were found to be in compliance and acceptable and the surveillance 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 was dispositioned, resolved, and closed.*

RCC NCRs 004, 047, 053, 054, 057, 064, 074, 083, 084, 086, 087, 092, 096, 097 and 099 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. *This month included high heat days. As such, measures to control dust per CASQA WE-1 were required. RCC is still working on approval of 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.

- *In September, review of the 29th Quarterly MMRP Update covering the period of February through April 2020 concluded. All items were given a compliant rating. On October 2nd, Metro began preparation of the 31st Quarterly MMRP Update covering the period of August through October 2020. Metro will submit the report no later than November 14, 2020.*
- One (1) *new* historic period feature was recorded during *September*. Feature 174, consisting of a *short (two feet) section* of a *concrete pipe*, was encountered on *September 30, 2020*. *This feature was identified as a segment of the Zanja 6-1 branch of the Zanja system. There are no current plans to impact this portion of the Zanja, which will be preserved in place. Coordination with the FTA and the SHPO will be conducted in October.*

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 *during* 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 work (sewer, fire hydrant, water line) at Temple St, Alameda St, 1st St, and 2nd St; Mangrove Yard guideway excavation; Central Av street closure; continuation of backfill material delivery on Flower St; geotechnical monitor maintenance; and introduction of the 5th St/6th St Improvements Project team for further coordination of that project.*
- *Distributed twelve (12) construction notices to the public on the above activities through email and made it available on the Project website and social media outlets.*
- *Coordinated with 41 stakeholders and presented virtually to 20 community organizations on work activities, civil restoration progress, planned closures in the vicinity of 1st/Alameda and at 2nd/Broadway, including the October 24th L Line (Gold) service interruption, City-issued required permits, Geotech instrumentation, Metropolitan News, Onni Times Square, Hikari Apartments, LAPD Headquarters, The Westin-Bonaventure Hotel, 444 S Flower St, Central and Little Tokyo Public Library, Maguire Gardens, City National Plaza, The California Club, The Standard Hotel, Public School 213, Pegasus Apartments, Charles Dunn, Paragon Parking, World Trade Center Parking Garage, The Roosevelt Lofts, 888 Figueroa, 818 7th St, LTBA/LTBA LTCC, LTSC, JACCC, Sustainable Little Tokyo, JANM, MOCA at Geffen, Hikari Apartments, JVP (tenants, ownership and parking garage), Office Depot, Shin-Sen Gumi, Twinkle Brown, Prime Pizza, Starbucks, Champion's Curry, Arts District BID, Little Tokyo Safety Association, Savoy Community Association, One-Santa Fe, Higgins Building, Broadway Civic Center, Cafecito Pura Vida, Central City Association, Go For Broke, Kawada Hotel and CommonWealth Partners.*
- Hosted a project update webinar on *September 10, 2020* with members of Regional Connector's Community Leadership Council and 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, *the L Line (Gold) service interruption including bus shuttle stops and locations*, 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 six (6) businesses in eblasts and social media posts highlighting businesses near Metro construction in eight (8) social media posts and one (1) e-blast: Rafu Shimpo, Fugetsu-do, LTCC, Dalia Cocina Mexicana, The Broad Museum, and Cafecito Pura Vida.

Community Relations

- Continued work with monthly *virtual* Little Tokyo Marketing & Advertisement/Go Little Tokyo Task Force. The focus of the meeting, on September 23, 2020, was preparation of *Haunted Little Tokyo* and *Delicious Little Tokyo* media coverage.

CREATIVE SERVICES

Art Program

- Reviewed and responded to porcelain enamel fabricator submittals.
- Reviewed and responded to mosaic fabricator progress updates.
- Coordinated text and design refinement with the Atomic Cafe Interpretive Graphic Display stakeholder group.
- Planned community engagement activities with Artists.
- Reviewed and responded to RCC PSR submittals.
- Continued assessment of Project operating impacts to signage systemwide.



Artist Clarence Williams reviews porcelain enamel fabricator prints



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



Artist Mungo Thomson reviews porcelain enamel fabricator prints

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 September 2020.
- RCC reported 113,230 work hours for August 2020. RCC's total Contract to Date work hours through August 2020 are 4,189,118 with a total of 18 Recordable Injuries and no Lost Workday (Days Away) case injuries. The C0980 Contract Recordable Injury Rate is 0.86. 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 August 2020 is 4,300,177 hours with 19 recordable injuries. The Total Project Contractor Recordable Injury Rate is 0.88.
- Total Aggregate Project work hours for Contractors, Metro, and Support Services Consultants, through August 2020 is 5,157,113 with 20 Recordable Injuries and no Lost Workday (Days Away) injury cases. The Total Project Aggregate Safety Rate is 0.78.*

* 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 th /Flower
June 2018	Completed underpinning related to the Historic Broadway Station
July 2018	RCC completed station box excavation of Historic Broadway Station
August 2018	Completed entrance structure invert of Historic Broadway Station
September 2018	Completed temporary decking of Flower Street
October 2018	RCC started the CN 106.2 Final Design of the 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 th St
November 2018	RCC completed Little Tokyo / Arts District Station Box Excavation
November 2018	RCC completed Grand Av Arts/Bunker Hill Station East Platform Level Exterior Walls
December 2018	RCC completed SEM right drift excavation

December 2018	RCC completed the Historic Broadway Station west invert
December 2018	RCC started tunnel walkways between the future Little Tokyo/Arts District Station to Historic Broadway Station
December 2018	RCC started the future Little Tokyo/Arts District Station east invert
December 2018	RCC completed Grand Av Arts/Bunker Hill Station mezzanine concrete
January 2019	RCC completed Grand Av Arts/Bunker Hill Station invert concrete
January 2019	RCC completed SEM center top drift excavation.
January 2019	RCC started Little Tokyo/Arts District Station west cable pit and sump pit
February 2019	RCC completed SEM excavation
February 2019	RCC completed platform level exterior walls at Grand Av Arts/Bunker Hill Station
February 2019	RCC started fire protection in tunnels
March 2019	RCC completed Little Tokyo/Arts District Station invert concrete
March 2019	RCC completed Bored Tunnels walkway concrete
April 2019	RCC completed Grand Av Arts/Bunker Hill Station east concourse deck concrete
April 2019	RCC completed 1 st Street Cut & Cover / U-Channel Level 1 excavation
May 2019	RCC completed North Flower Cut & Cover tunnel invert concrete
May 2019	RCC completed Wye Cut & Cover tunnel invert concrete
June 2019	RCC completed Right Tunnel floating slab curb
July 2019	RCC completed Left Tunnel floating slab curb
July 2019	RCC completed SEM Cavern concrete invert
August 2019	RCC completed 7th Street / Metro Center Wall Demolition
August 2019	RCC completed the Historic Broadway Station West Concourse Deck

September 2019	RCC completed Historic Broadway Station east invert
September 2019	RCC completed South Flower Cut & Cover tunnel excavation
October 2019	RCC completed Wye Tunnel Cut & Cover walls
October 2019	RCC completed Grand Av Arts/Bunker Hill Station concourse walls
November 2019	RCC completed Wye Tunnel Cut & Cover Roof Deck
November 2019	RCC completed SEM Cavern Exterior Walls
December 2019	RCC completed Little Tokyo/Arts District Station plenum deck concrete
January 2020	RCC completed SEM Cavern Interior Walls
January 2020	RCC completed 1st Street Tunnel Cut & Cover Roof Deck
February 2020	RCC completed Wye Cut & Cover Tunnel Pin Pile Removal
February 2020	RCC completed Grand Av Arts/Bunker Hill Station platform walls
March 2020	RCC completed Grand Av Arts/Bunker Hill Station lower ancillary level walls
March 2020	RCC completed SEM plenum deck
April 2020	RCC completed Historic Broadway Station west concourse exterior walls
April 2020	RCC completed Historic Broadway Station concourse deck
May 2020	RCC completed SEM Cavern Arch Walls
May 2020	RCC completed Grand Av Arts/Bunker Hill Station upper ancillary level walls
May 2020	RCC completed South Flower Cut & Cover invert
June 2020	RCC completed fabrication pre-cast floating slabs
June 2020	RCC completed North Flower Cut & Cover roof deck
July 2020	RCC completed Historic Broadway Station entrance concourse level walls

July 2020	RCC completed installation pre-cast floating slabs
August 2020	RCC completed Wye backfill, deck removal and paving.
<i>September 2020</i>	<i>RCC completed Grand Av Arts/Bunker Hill Station upper roof deck</i>
<i>September 2020</i>	<i>RCC completed Little Tokyo/Arts District Station ancillary walls</i>
<i>September 2020</i>	<i>TIFIA loan paid off and account closed</i>