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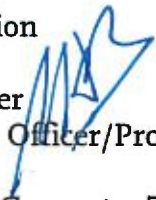
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April 17, 2020

**TO:** Distribution

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

**SUBJECT:** Regional Connector Transit Project  
March 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 March 27, 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

QUARTERLY PROJECT STATUS REPORT

March 2020



**Metro**

# **REGIONAL CONNECTOR TRANSIT PROJECT**

## **QUARTERLY PROJECT STATUS REPORT**

THE PREPARATION OF THIS DOCUMENT HAS BEEN FINANCED IN PART THROUGH A GRANT FROM THE U. S. DEPARTMENT OF TRANSPORTATION, FEDERAL TRANSIT ADMINISTRATION (FTA).

**March 2020**

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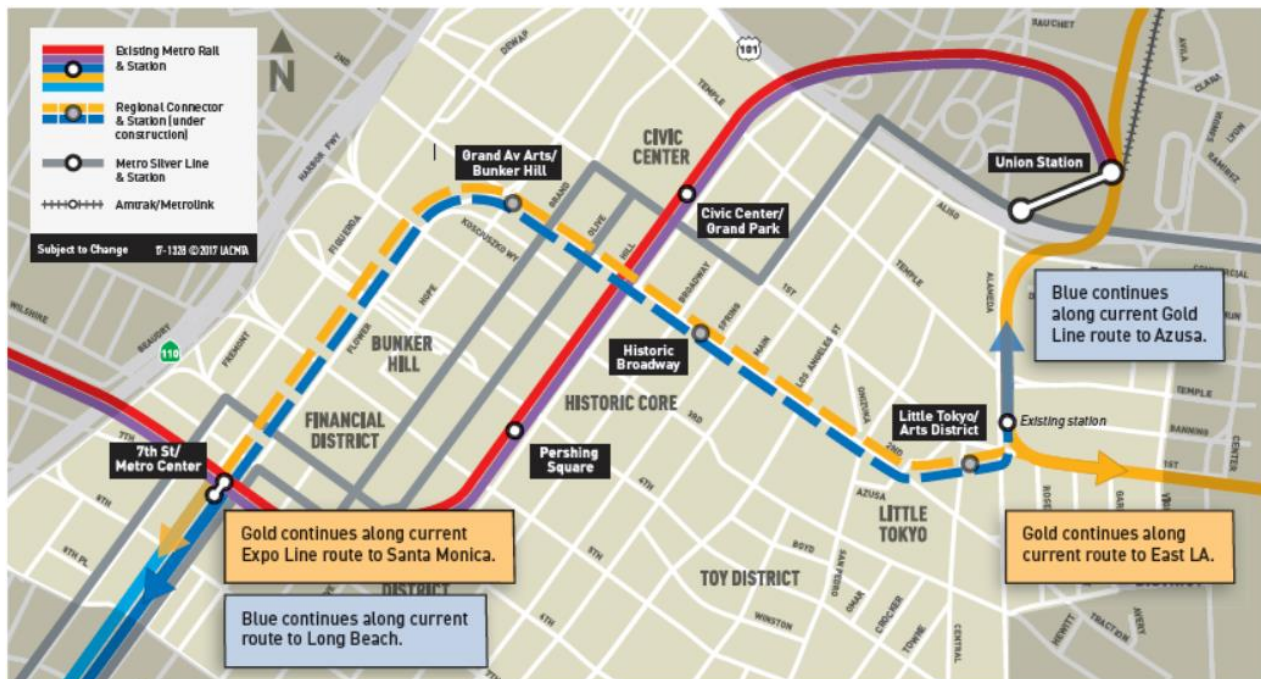
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## PROJECT OVERVIEW

### 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 mid-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 20, to include:

- Federal New Starts Grant
- Federal Congestion Management Air Quality and RIP Programs
- USDOT TIFIA loan proceeds
- State Proposition 1A/1B and Capital Project Loan proceeds
- City of Los Angeles
- Lease revenues.

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 to guide the testing, rail activation and start-up. The twenty weeks are initiated by the Project's issuance of the Substantial Completion milestone to RCC.



## EXECUTIVE SUMMARY

In *March*, the Project achieved 64.4% completion based on earned value measurements for design and construction. The focus of the Project is on facilitating advancement of construction activities throughout the alignment.

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 Instruction (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: *Completed* backfill at the Cut & Cover Tunnel section. *Completed* emergency walkways in the tunnel sections. *Completed* rail welding and provisioning of Continuous Welded Rail (CWR) to the stockpile area located in the bored tunnel section between the SEM and the future Little Tokyo/Arts District Station.

Wye Structure: *Continued structural backfill.*

Little Tokyo/Arts District Station: *Completed* west Ancillary tunnel/vent deck. *Started Upper Ancillary exterior walls.*

Floating Slab Track: *Due to shortages of metal angle plates, fabrication of pre-cast segments was suspended. Fabrication and delivery of pre-cast segments will resume this period.* A total of 214 segments were installed in the left tunnel; and 150 segments in the right tunnel. *Delays are not expected to impact downstream activities.*

Historic Broadway Station: In the station box area, *completed concrete pours of the east track level exterior walls, and continued concrete operations of the west roof deck and east platform walls. Also, continued preparation of the entrance area concourse level invert pours.*

Crossover Cavern: *Completed* the plenum deck and *continued the arch concrete placements.*

Grand Av Arts/Bunker Hill Station: *Concrete operations continue on seven levels and fronts.*

Flower Cut & Cover Tunnel: In the south section (5th Street to 7th/Metro Center Station), *continued the invert placement and exterior walls.*

**Cost and Schedule Summary**

As of the reporting date, RCC was late in submitting the January 2020 Schedule Update.

**RCC Schedule Metrics**

	<b>Original Contract Date/Duration</b>	<b>Time Extension (CD)</b>	<b>Current Contract Schedule</b>	<b>Forecast (Metro PMS)</b>	<b>Variance CD (Trending)</b>
NTP	7/7/14				
Substantial Completion	10/22/20	527	04/01/22	05/25/22	-54 days

**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 6.8% 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 13.

### Key Management Concerns

Item 1: Given the impact the Project will have on light rail operations through downtown Los Angeles and the region, the Rail Activation effort is exceedingly complex. Schedule and cost impacts are likely to surface.

Status/Action: Ongoing cut-over, testing and rail activation meetings are being conducted with various Metro Departments. Through this process, specific work items have been identified and those requiring further investigation are being evaluated and attended-to when possible. Notwithstanding considerable progress, planning meetings continue, as the team plans the complex rail activation and certification process. Cutover requirements may stress Metro resource availability.

Item 2: Design comments from the over-build developer at the Historic Broadway Station has led to design revisions with cost impacts.

Status/Action: Metro/RCC have collaborated closely with the developer and finalized design elements necessary to meet development objectives while working within available budget. Constructability analysis has been completed with acceptance of the design by the developer. Metro is now moving to reconcile final design and construction costs dictated by the agreed-to design. Related change notices have been issued to RCC and a proposal is pending.

Item 3: Installation of CTS link for the Gold Line Eastside Extension during Bus Bridge #3 has been delayed. If not remedied, the delays will adversely impact schedule and costs.

Status/Action: Design workarounds have been identified and agreed to by all stakeholders to provide routing of dual fiber optic lines from the 1<sup>st</sup> Street bridge through Division 20 to Union Station. These designs are utilizing temporary and permanent infrastructure options, to meet the Project's needs. *Discussion with Metro stakeholders continue to support the improvements in a timely manner.*

Item 4: Multiple utility rearrangements remain to be completed as the Project enters street restoration phase. 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 enroute* to construction.

Project Construction Photos



Staging Continuous Welded Rail (CWR) in bored tunnel



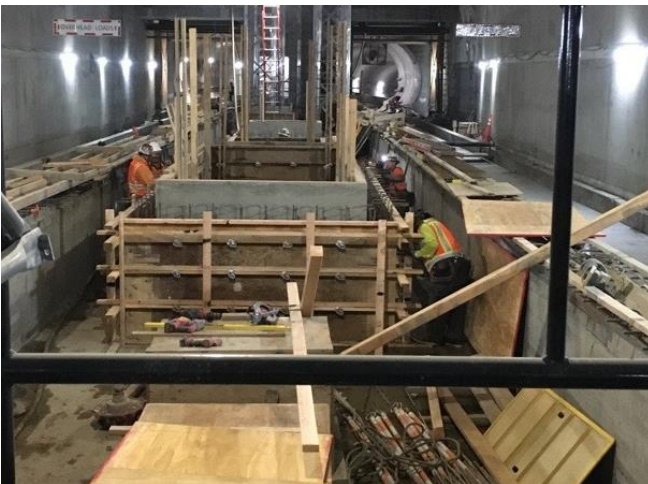
Interior wall placement in the future Little Tokyo/Arts District Station



Rebar installation at the entrance structure at Historic Broadway Station



Crossover Cavern overview



Forming pit walls at Track Level at Grand Av Arts/Bunker Hill Station

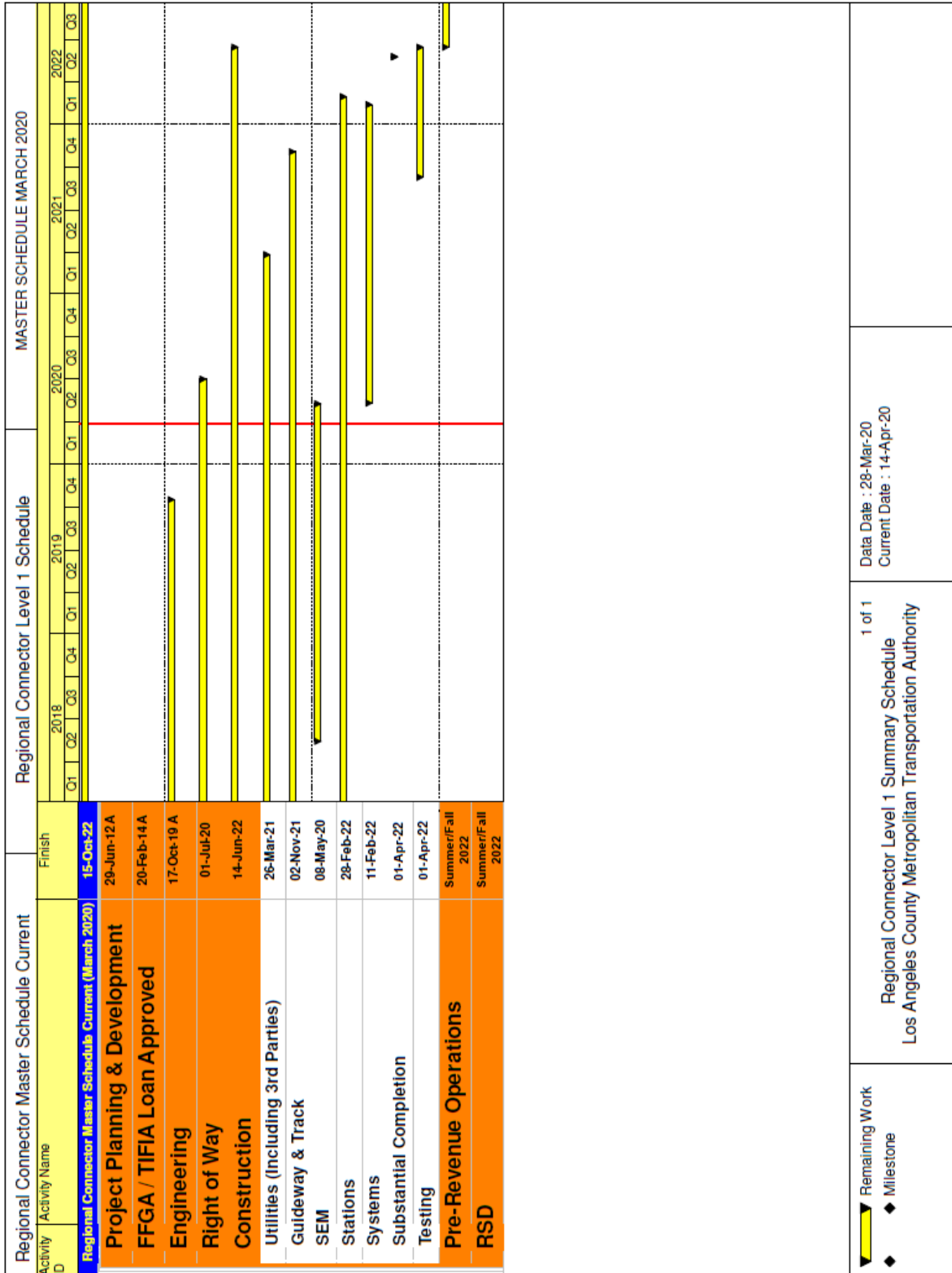


HDPE installation for invert at 7th/Flower

# PROJECT UPDATE

## PROJECT SCHEDULE

### Project Summary Schedule

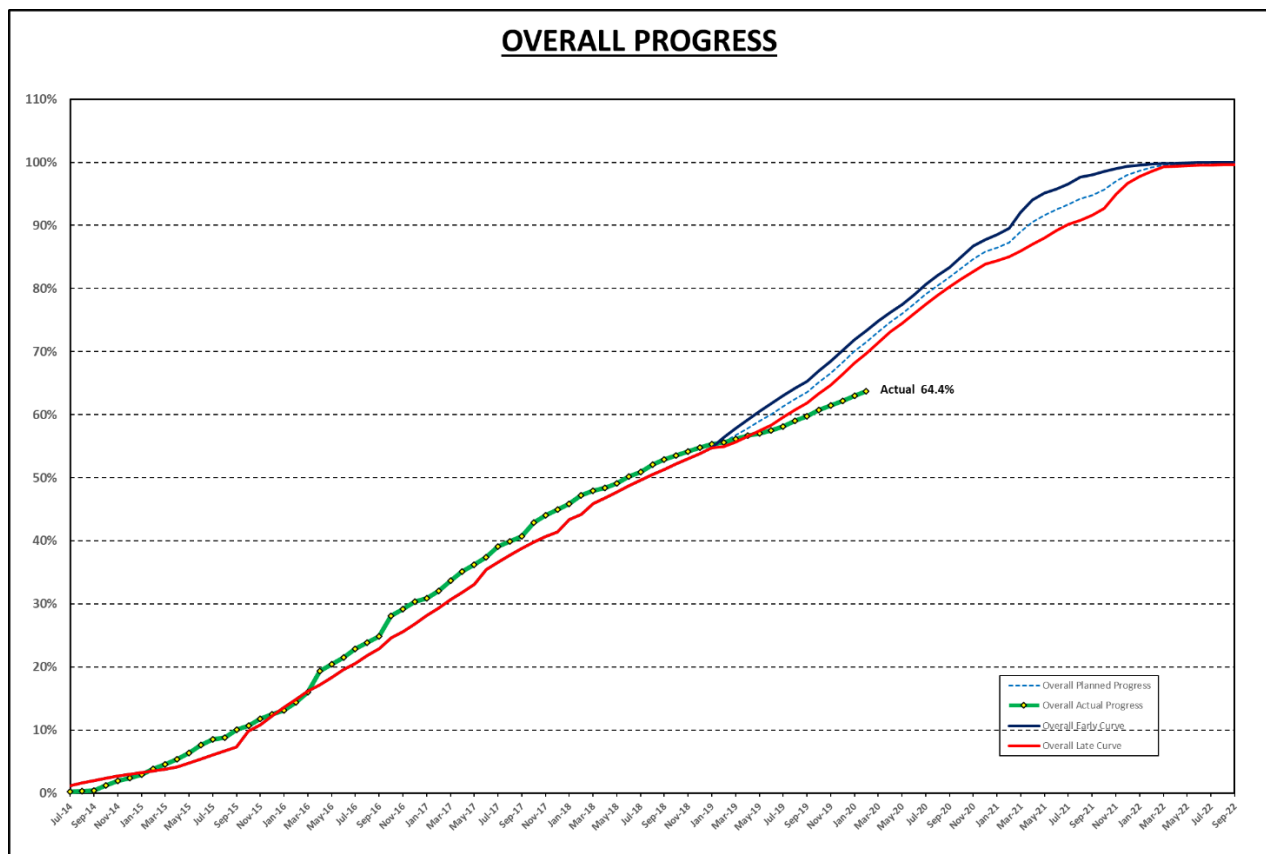


**Progress Summary**

	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%	0.0%	
<b>Construction Contracts Progress:</b>			
Contract C0981R & C0980	62.5%	0.7%	

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









**Planned vs. Actual Progress**



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

**Key Milestone Six-Month Look Ahead**

	Milestone Date	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20
Complete Lower Ancillary Level Walls at Grand Ave / Bunker Hill Station	03/02/20 A	◡					
Complete East Track Level Station Box Exterior Walls at Historic Broadway Station	03/06/20 A	◡					
Complete West Ancillary Tunnel Vent Fan Deck at Little Tokyo / Art District Station	03/06/20 A	◡					
Complete SEM Plenum Slab Concrete	03/13/20 A	◡					
Complete West Concourse Station Box Exterior Walls at Historic Broadway Station	04/03/20		◡				
Complete South Flower Cut & Cover Tunnel Invert	04/08/20		◡				
Complete Wye Cut & Cover Tunnel Temporary Deck Removal	04/18/20		◡				
Complete Fabrication Pre-Cast Floating Slab Sections	04/29/20		◡				
Complete Upper Ancillary Level Walls at Grand Ave / Bunker Hill Station	05/05/20			◡			
Complete Upper Ancillary Exterior Walls at Little Tokyo / Art District Station	06/11/20				◡		
Complete Station Entrance Ancillary Deck at Historic Broadway Station	07/20/20					◡	
Complete Station Box Upper Ancillary Exterior Walls at Little Tokyo / Art District Station	08/31/20						◡

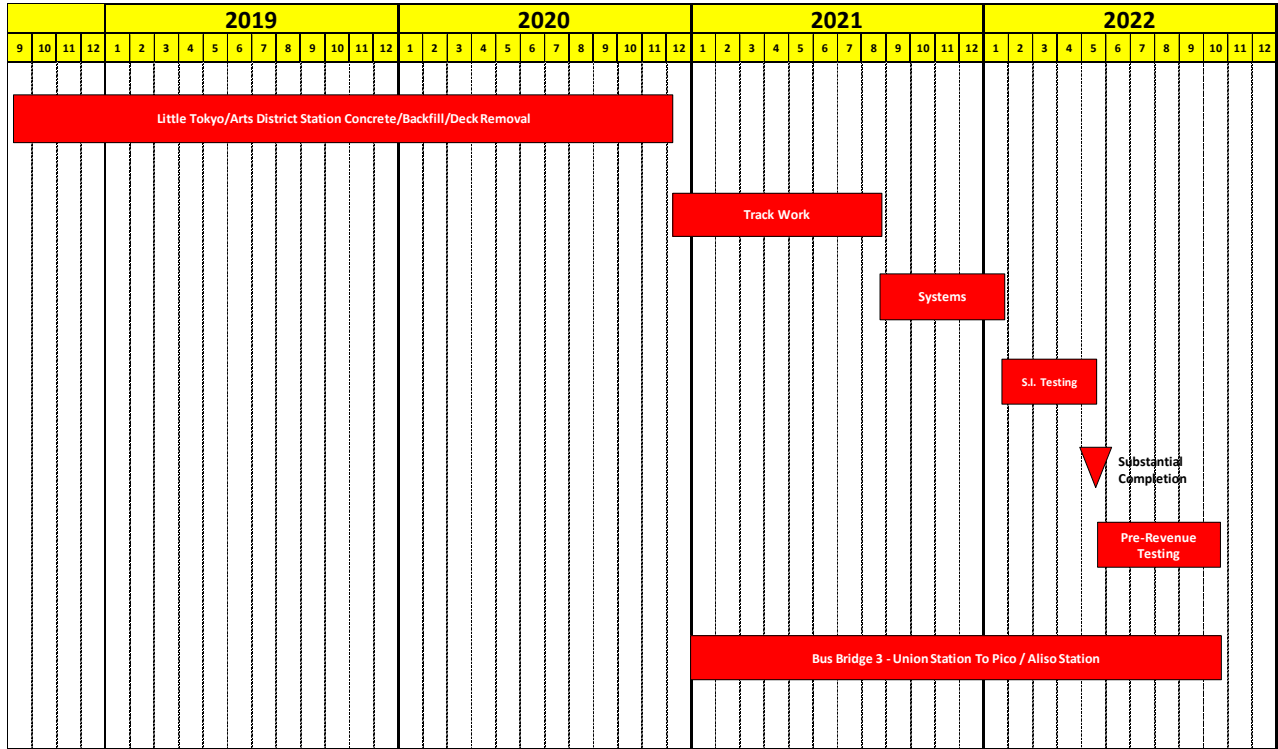
 MTA Staff	 MTA Board Action	 FTA (Federal Transit Administration)	 Utility Company
 Other Agencies	 Contractors	 Design Consultant	 C0980 D/B Contractor
*A* following date is actual and completed		* New	

**Major Equipment Delivery**

**Metro Supplied Equipment**

Equipment	Initial Procurement	Scheduled Delivery	Scheduled Installation
LRT Vehicles	(NTP) 08/20/2012	Option 2 06/30/2020	N/A
Ticket Vending Machines	~ 01/30/2018	07/08/19 A (warehoused)	05/25/2021 ~08/26/2021

**Critical Path (C0980)**



The critical path continues through the future Little Tokyo/Arts District Station. The current focus is the upper ancillary level exterior walls, which will then be followed by the roof deck. After station concrete and backfill are completed, the critical path is paced through the track and systems installations. After the majority of the systems installations are complete, systems integration will commence and continue through 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	258,459	5,425	201,819	250	274,586	1,889
20	STATIONS, STOPS, TERMINALS, INTERMODAL	354,268	219,477	0	230,857	112	229,907	1,248	93,249	347	234,519	3,662
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	160	581,482	2,829	492,344	586	629,750	2,919
50	SYSTEMS	69,667	73,848	0	77,972	13	67,736	294	19,051	-964	78,049	78
	CONSTRUCTION SUBTOTAL (10-50)	846,343	920,468	0	1,208,356	284	1,137,585	9,795	806,463	219	1,216,903	8,548
60	ROW, LAND, EXISTING IMPROVEMENTS	115,889	74,208	0	59,315	0	52,630	0	52,623	0	59,315	0
70	VEHICLES	16,275	16,275	0	16,275	0	16,275	0	7,499	0	16,275	0
80	PROFESSIONAL SERVICES	261,455	257,973	0	394,216	259	325,926	2,321	307,734	1,149	396,721	2,506
	SUBTOTAL (10-80)	1,239,963	1,268,925	0	1,678,162	543	1,532,416	12,117	1,174,319	1,368	1,689,215	11,053
90	UNALLOCATED CONTINGENCY	135,399	126,892	0	51,179	0	0	0	0	-1,368	40,126	-11,053
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	543	1,532,416	12,117	1,174,319	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	543	1,558,915	12,117	1,199,382	0	1,770,142	0

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH MAR 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 Regional Connector Project 860228 to \$1.756 billion. Finance costs, estimated at \$14.3 million, are also reflected leading to a total of \$1.770 billion. Budgets were adjusted throughout the SCC structure reflecting revised values as of September 30, 2019.

#### Commitments:

Overall commitments increased by \$0.5 million this month to \$1.56 billion which represents 88.1% of the Current Budget. The increase is related to RCC executed mods, a mod from CMSS and purchase orders from Legal and Community Relations.

#### Expenditures:

Expenditures are cumulative through March 2020 and increased by \$12.1 million this month for costs associated with C0980 Design Build Contract, Engineering Management Support, Metro Project Administration, Construction Management Support Services, Third Party Master Cooperative Agreements with the City of LA, Community Relations, and Environmental Consultant Services. The \$1.20 billion in expenditures to date represent 67.8% of the Current Budget.

**Current Forecast:**

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

**Project Cost Analysis – 861228**

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

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	10,480	0	10,480	0	0	0	10,480	0
40	SITWORK & SPECIAL CONDITIONS	0	0	0	0	0	0	0	0	0	0
50	SYSTEMS	0	0	5,950	0	500	0	0	0	5,950	0
	CONSTRUCTION SUBTOTAL (10-50)	10,480	0	16,430	0	10,980	0	0	0	16,430	0
60	ROW, LAND, EXISTING IMPROVEMENTS	27,748	0	27,748	0	27,748	0	22,470	0	27,748	0
70	VEHICLES	0	0	0	0	0	0	0	0	0	0
80	PROFESSIONAL SERVICES	650	0	1,150	0	646	0	399	0	1,150	0
	SUBTOTAL (10-80)	38,878	0	45,328	0	39,374	0	22,869	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	39,374	0	22,869	0	46,441	0
	861228 TOTAL	39,991	0	46,441	0	39,374	0	22,869	0	46,441	0

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH MAR 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.

**Commitments:**

Commitments reflect actions through *March 2020*.

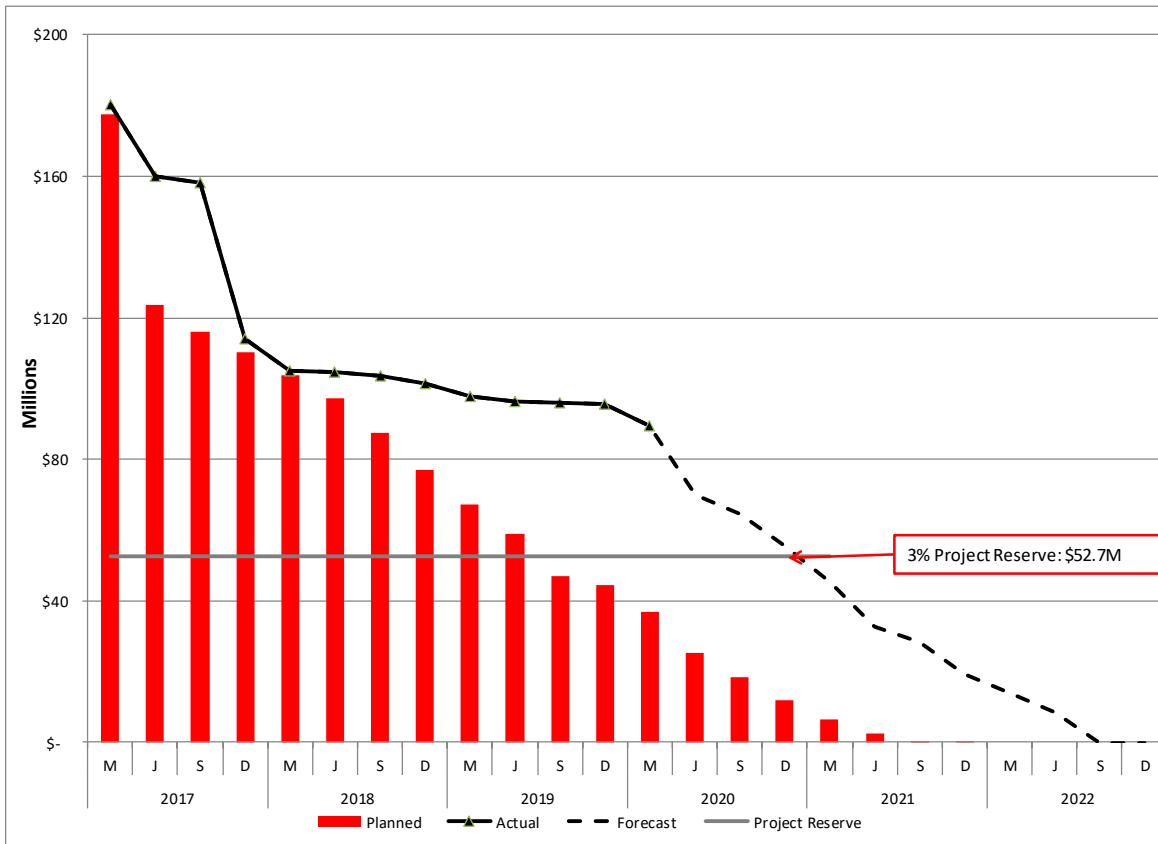
**Expenditures:**

Expenditures are cumulative through *March 2020* and this month's expenditures *remain unchanged*. The cumulative \$22.9 million through *March 2020* represent 49.2% of the Current Budget.

**Current Forecast:**

The total current forecast remains unchanged this month.

### Cost Contingency Drawdown



### Cost Contingency Drawdown Analysis

In January 2017, the Metro Board revised the LOP Budget to \$1.756 billion, which included increasing the unallocated contingency to \$89 million and allocated contingency to \$92.8 million. From that action, a revised drawdown plan for unallocated contingency, correlated to anticipate risk trends, was developed to monitor and measure drawdowns moving forward.

Highlighted in the drawdown is a 3% Project Reserve threshold measured against the LOP Budget. Metro’s Board is to be notified when it becomes necessary to drawdown contingency below the threshold to cover Project costs.

In *March*, there was a \$0.39 million drawdown from contingency due to executed mods. The remaining total Project Contingency (allocated and unallocated) remains \$95.3 million this month.

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	(48,452)	(1,368)	(49,821)	40,125
Allocated Contingency	86,345	92,809	(38,606)	974	(37,632)	55,177
<b>Total Contingency</b>	<b>211,263</b>	<b>182,754</b>	<b>(87,058)</b>	<b>(394)</b>	<b>(87,453)</b>	<b>95,302</b>

## RISK MANAGEMENT

### Summary of Risks

During this quarterly reporting period, three (3) active risk were closed, six (6) new risks were identified and nine (9) risks' scores were adjusted. There are forty-three (43) risks to be managed over the next quarter.

Of the forty-three (43) risks, three (3) are scored high, twenty-three (23) as medium and seventeen (17) as low.

### Top Risks

The Project's top risks as of March 2020 include:

Risk ID	SCC	Risk Description	Risk Rating
502	40	Temple Sewer Line total costs run higher due to offset constructibility issues and depth	10
514	30	Fan Plant final modification negotiated above 12M. Costs shown are above the current forecast and adjustment	10
566		Potential impacts to schedule and costs due to Covid - 19 Emergency	10
304	10	Unknown obstructions may be encountered during station or cut/cover guideway excavation, or Support of Excavation installation; delays may ensue	9
425	10	Concrete production issues (quality and resources) impact to schedule at 2nd/Hope threaten the Project	9

### New Risks

Six (6) risks were identified during the quarter.

Risk ID	SCC	Risk Description	Risk Rating
564	40	AT&T ductbank at Historic Broadway Station threaten costs and schedule	12
565	50	CTS for Bus Bridge #3 (Gold Line) delay may impact start of bus bridge	12
566		Potential impacts to schedule and costs due to Covid - 19 Emergency	10
561	40	Timing issue of the construction of AT&T ductbank serving Mangrove Gardens might result in additional costs	5
563	40	Re-striping at Duco Yard	4
562	40	Unreconciled As-Built Conditions vis-a-vis Real Estate	3

### Closed Risks

Three (3) risks were closed during the quarter.

Risk ID	SCC	Risk Description	Risk Rating
475	40	Logistical challenges related to the remaining utilities requiring relocation in and around 1st/Temple and Alameda pose varied threats to the Project	7.5
465	40	Incorporation of Duco Yard sanitary lines into scope indicate additional costs. Meanwhile schedule impacts are TDB	7.5
363	40	Wye pin pile removal after backfill and street restoration may have schedule and cost implications beyond the Wye	6

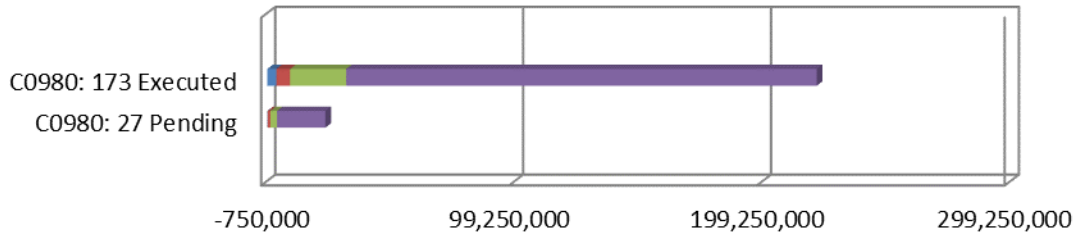
### Risk Score Changes

Nine (9) active risks had a scoring assessment change this quarter.

Risk ID	SCC	Risk Description	Updated Risk Rating	Previous Risk Rating
510	40	Tribune does not cover construction cost delta for design parameter changes in 2nd/Broadway Overbuild	8	3
565	50	CTS for BB3 (Gold Line) delay may impact of bus bridge	6	12
562	40	Unreconciled As-Built Conditions vis-a-vis Real Estate	6	3
373	40	Project may be held responsible for damages south of 6th/Flower due to Flower St settlement issue (Cost Implication only)	6	4.5
564	40	AT&T costs at Historic Broadway Station threaten costs and schedule	5	12
450	20	The deteriorated condition of AT&T duct bank and vault at 5th and 6th St/Flower intersections will have cost implications	3	4.5
364	40	The deteriorated condition of AT&T duct bank and vault at 5th and 6th St/Flower intersections will have cost implications	3	4.5
213	10	Law suits at Flower Street may delay the Project and increase costs	3	6
561	40	Timing issue of the construction of AT&T Duckbank serving Mangrove Gardens might result in additional costs	2	5

**Summary of Contract Modifications**

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



	C0980		Total
	173 Executed	27 Pending	
■ Under \$100K	3,672,715	148,000	3,820,715
■ \$100K to \$250K	5,496,663	1,070,000	6,566,663
■ \$250K to \$1M	22,672,351	2,736,848	25,409,199
■ Over \$1M	189,877,940	19,500,000	209,377,940
<b>Total Contract MODs</b>	<b>221,719,669</b>	<b>23,454,848</b>	<b>245,174,517</b>
<b>Contract Award Amount</b>	<b>927,226,995</b>	<b>927,226,995</b>	
<b>% of Contract MODs</b>	<b>23.9%</b>	<b>2.5%</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 *seventy-three* (173) changes with a total value of \$221.7 million have been executed since NTP of Contract C0980. An additional 27 changes, with a total estimated value of \$23.5 million, are pending.

## DISADVANTAGED BUSINESS ENTERPRISE (DBE)

As of *February 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	24.05%

Thirteen (13) 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	15.22%

Ninety-six (96) Construction DBE sub-contractors have been identified to date.

## PROJECT LABOR AGREEMENTS (PLA)

As of *February 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>	60.02%
<b>Apprentice Worker Goal</b> Construction work to be performed by Apprentices	20.00%
<b>Apprentice Worker Current Attainment</b>	18.67%
<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>	11.34%

## FINANCIAL/GRANT

### Status of Funds by Source

**March 2020**

SOURCE	ORIGINAL BUDGET	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS		EXPENDITURES		BILLED TO FUNDING SOURCE	
				\$	%	\$	%	\$	%
FEDERAL - CMAQ	\$64.00	\$218.11	\$64.00	\$131.91	60%	\$56.98	26%	\$46.13	21%
FEDERAL - SECTION 5309 NEW STARTS	\$669.90	\$669.90	\$565.00	\$652.35	97%	\$428.86	64%	\$411.84	61%
FEDERAL - RIP	\$0.00	\$1.41	\$1.41	\$1.41	100%	\$1.41	100%	\$1.41	100%
MEASURE R - TIFIA LOAN	\$160.00	\$160.00	\$141.89	\$160.00	100%	\$145.89	91%	\$141.89	89%
STATE PROPOSITION 1A HSRB *	\$114.87	\$114.87	\$114.87	\$114.87	100%	\$114.87	100%	\$114.87	100%
STATE PROPOSITION 1B PTMISEA **	\$149.50	\$135.16	\$135.16	\$135.16	100%	\$135.16	100%	\$135.16	100%
STATE STIP RIP	\$2.59	\$17.00	\$2.59	\$16.11	95%	\$2.70	16%	\$2.59	15%
STATE CAPITAL PROJECT LOANS - OTHERS ***	\$132.47	\$274.83	\$274.83	\$274.83	100%	\$243.79	89%	\$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	\$30.56	73%	\$28.00	67%	\$28.00	67%
LEASE REVENUE	\$64.25	\$79.07	\$0.00	\$0.00	0%	\$0.00	0%	\$0.00	0%
GENERAL FUND - METRO	\$0.00	\$43.50	\$43.50	\$41.71	96%	\$41.71	96%	\$41.71	96%
<b>TOTAL</b>	<b>\$1,427.13</b>	<b>\$1,755.84</b>	<b>\$1,385.24</b>	<b>\$1,558.92</b>	<b>89%</b>	<b>\$1,199.38</b>	<b>58%</b>	<b>\$1,147.75</b>	<b>65%</b>

**NOTES:**

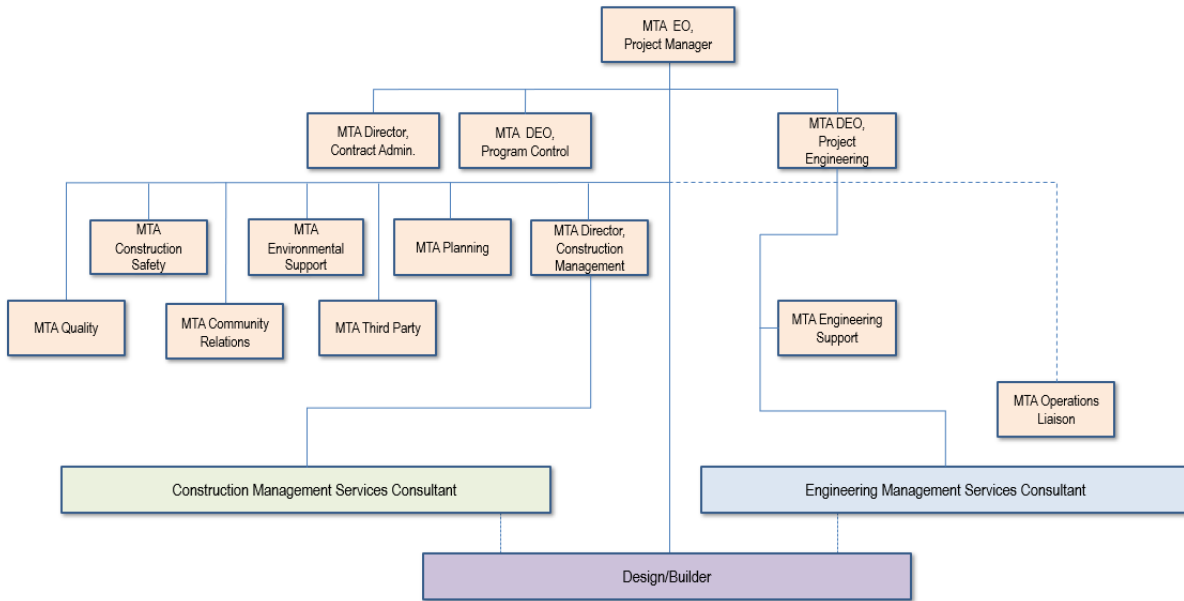
1. EXPENDITURES ARE CUMULATIVE THROUGH MARCH 31, 2020
  2. METRO AND TRIBUNE AGREED ON REIMBURSEMENT OF \$1.6 MILLION RELATED TO 2ND/BOARDWAY OVERBUILD.
  3. ORIGINAL BUDGET BASED ON FUNDING PLAN INCLUDED IN THE APPROVED FULL FUNDING GRANT AGREEMENT
  4. LACMTA RESERVES THE ABILITY TO UPDATE COSTS AND 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)



## 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).

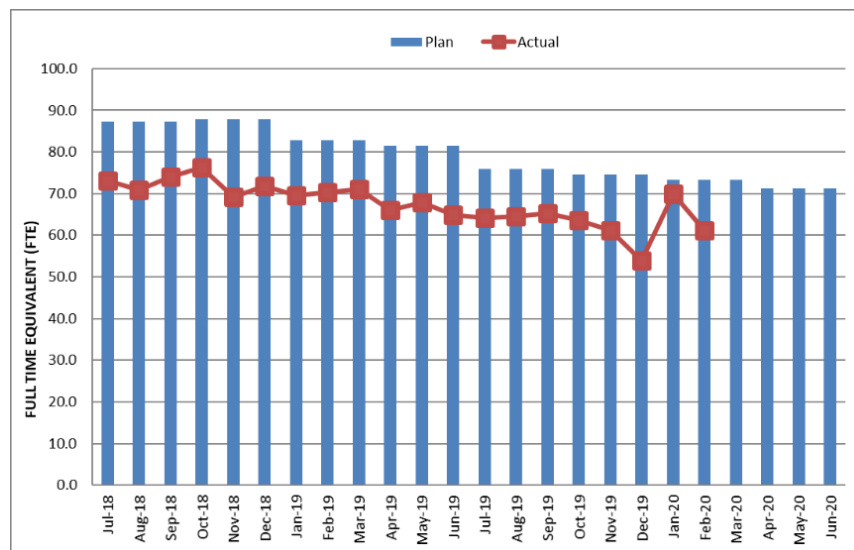
### Regional Connector Transit Project Responsibility and Reporting Matrix



Updated: 03/2020

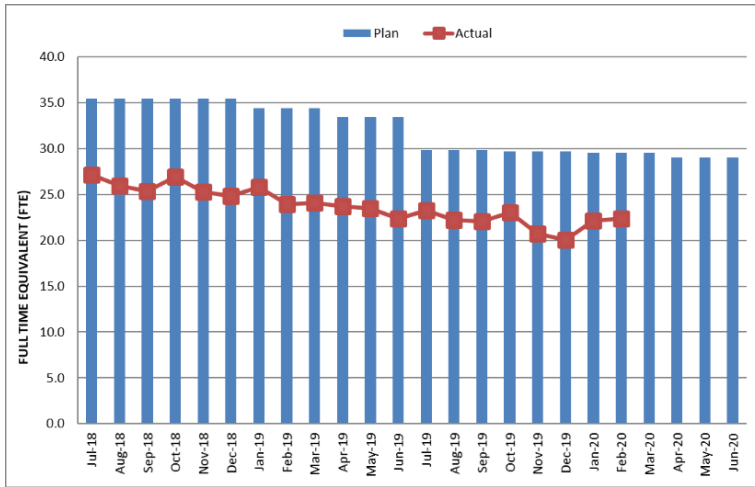
The overall FY20 Total Project Staffing plan averages 73.7 FTE's per month. The total actual project staffing for *February 2020* was 61.2; 22.4 FTEs for Metro's Project Administration staff and 38.8 FTEs for consulting staff. Consulting staff FTEs are based on monthly invoice billable hours. Review of staffing plans is on-going to ensure staffing needs are appropriately managed.

### Total Project Staffing – Metro and Consultants

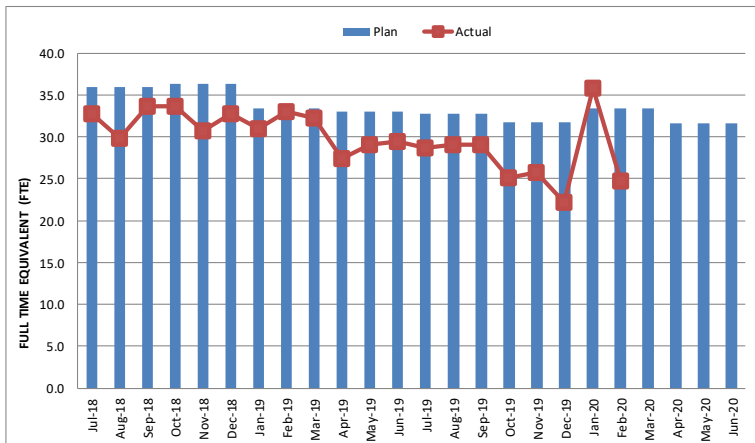


February actuals include 2.6 FTEs related to PMSS Services.

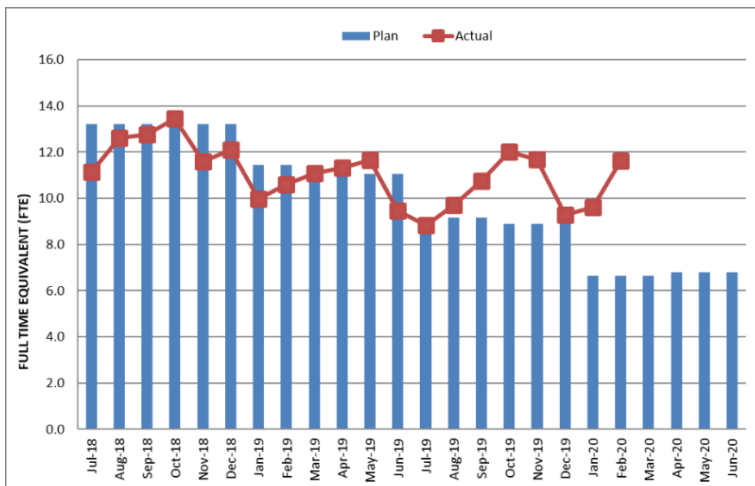
### Metro Staff



### 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.

All above data through February 2020

## REAL ESTATE

### Open Real Estate Matters – Seven Parcels Remaining

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

- Agreement has been reached with the City of Los Angeles to acquire the remaining easements required from the Mangrove Parcel. County Counsel and Real Estate staff are working with the City Attorney and the City staff to finalize the transfer documents for the fan plant easements and the temporary construction easement which will extend to June 2022. FTA and the MTA Board approval of the extension was obtained in July 2019. The outlook for closure of this agreement is scheduled for second quarter 2020.

#### 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.

#### 2nd and Hope

- Unknown Ownership Parcel – Acquisition of this parcel will be via condemnation and is currently underway.
- CRALA Parcel – CRALA has accepted the offer; final documents are being prepared.
- County of Los Angeles Parcel – the County has accepted the offer; final documents are being prepared.
- City of Los Angeles Parcel – Working with City staff on terms and conditions to convey the required right of way.

#### Tribune

- Finalizing property swap for subsurface easement area.

## QUALITY ASSURANCE

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

- 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
- Attended Bi-Weekly Quality Review Meetings with RCC Quality Management
- *Metro QA conducted a surveillance (C980-Surv-2020-004) on concrete placement of walls IC-39 and 57 at the future Little Tokyo/Arts District Station. The installation activities were found to be in compliance and acceptable and the surveillance was closed.*
- *Metro QA conducted a surveillance (C980-Surv-2020-005) for the placement of wall IC-60 at the future Little Tokyo/Arts District Station. The installation activities were found to be in compliance and acceptable and the surveillance was closed.*

*RCC NCR 0088 was issued for traction power conduits at Grand Av Arts/Bunker Hill Station exceeding 270 degrees in bends between pull points. The NCR is with RCC for internal disposition development and remains open.*

*RCC NCR 0089 was issued for conduits being damaged at Grand Av Arts/Bunker Hill Station during concrete repair operations. The NCR is with RCC for internal disposition and remains open.*

*In June 2018, Metro QA performed a surveillance of the 2nd Lift Concrete placement for Cross Passage #3. After form removal it was determined that the concrete was defective due to non-consolidation of the concrete, which resulted in RCC NCR 0041. In March 2020, repairs were completed by RCC and the NCR was closed.*

*In May 2019, RCC NCR 0067 was issued for a drain line installed at Historic Broadway Station by the tunneling crew when in fact it is required to be installed by California Licensed Plumbers. The line was also listed on the drawing to be Schedule 80; however, it was installed Schedule 40. In March 2020, RCC reworked the drain line to the original design condition and the NCR was closed.*

*In July 2019, RCC issued NCR 0073 for obstructions of conduits at future the Little Tokyo/Arts District Station. A mandrel will not pass through the conduits. In March 2020, the conduits were reworked to the original design and the NCR was closed.*

*In December 2019, RCC NCR 0085 was issued for Sika Rugasol not being removed within the specified 24-hour time period. In March 2020, RCC reworked to the original design condition and the NCR was closed.*

RCC NCRs 004, 0038, 0047, 0053, 0054, 0057, 0064, 0068, 0069, 0074, 0076, 0083, 0084, 0086, and 0087 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. The TBM Yard and a portion of the TSA Yard are no longer part of the project area. A comprehensive SWPPP update is in development by the contractor. There were no qualifying rain events in *March and some high winds*.
- Noise and vibration spot checks continue to be conducted weekly at multiple sensitive locations, and at locations of new activities along the alignment. The Contractor conducted attended monitoring weekly at active construction sites or when work and/or equipment changed. In addition, noise and vibration monitoring was also conducted continuously and data was gathered in an online system. The Contractor also provided a compliance report weekly.

There have been inquiries from stakeholders adjacent to the future Grand Av Arts/Bunker Hill Station, Historical Broadway Station, and *Little Tokyo/Arts District Station* construction sites; however, Metro/RCC's Community Relations team have been responsive and continue to actively address community concerns in coordination with Area Leads, Resident Engineers, and field staff with respect to each construction site.

- No new historic period isolates and no new historic period features were recorded during *March*.

## CONSTRUCTION AND COMMUNITY RELATIONS

### Construction Relations

- Responded and addressed Project related inquiries from the public received via the hotline, email and during office hours at the Little Tokyo Community Office. Concerns were addressed by RCC and Metro project staff.
- Performed public outreach and construction coordination to impacted area stakeholders regarding the following construction activities: concrete placement throughout the alignment, utility *investigation on Temple and Alameda streets*, planned street closures at 1st/Alameda for street restoration, rail distribution at 1st St portal, paving activities on Flower St, and geotechnical monitor maintenance.
- Distributed *four (4)* construction notices to the public on the above activities through email and made it available on the Project website and social media outlets.
- Completed a total of *three (3)* construction coordination activities with Project adjacent property owners to perform maintenance on geo-tech equipment: Metropolitan News and Onni Times Square, *and Colburn Music School*.
- Provided weekly construction updates and coordinated work activities with 25 stakeholders: The Westin-Bonaventure Hotel, 444 S Flower St, Central Library/Maguire Gardens, City National Plaza, The California Club, The Standard Hotel, Public School 213, Pegasus Apartments, Charles Dunn, Paragon Parking, Takami Sushi, The Roosevelt Lofts, 888 Figueroa, and 818 7th St, LTBA, LTCC, LTBD, LTSC, JACCC, Sustainable Little Tokyo, JANM, MOCA at Geffen, *Chado Tea Room, Arts District BID* and Savoy Community Association.
- Presented to three (3) community organizations with updates on utility investigation/relocation *for Alameda tunnel box construction* and planned street closures at 1st/Alameda for restoration: Little Tokyo Business Association/Little Tokyo Business Improvement District (LTBA/LTBID), Little Tokyo Community Council (LTCC), and Little Tokyo Community Council All Committees.
- Conducted *ten (10)* briefings to local stakeholders on planned construction activities:
  - 1st/Alameda street closures and restoration: LTCC, LTCC All Committees, LTBA/BID, and Nisei Week Committee.
  - Flower St concrete placement, and below deck work: Charles Dunn, Westin Bonaventure Hotel, 444 S. Flower St.
- *Continued standing meetings with LA City Council District 14 and the Mayor's Office.*

- *Briefed the Westside/Central and San Fernando Valley Service Councils on the planned service interruption to the Gold Line, Union Station to Pico/Aliso, starting Fall 2020 to build the underground portion of the Alameda tunnel box.*

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

- *Implemented a new daily email campaign amid COVID-19 business restrictions to highlight 19 businesses that remain open: a beautiful life jamaican café, Badmaash, Big Sugar Bake Shop, Cafecito Pura Vida, Cherry Pick Café, CRFT by Maki, Downtown Flowers, Ebisu Japanese Tavern, Fugetsu-Do, Go For Broke National Education Center, Kues, Limericks Tavern, Little Spring Rolls & Bowls, Mitsuru Sushi & Grill, POPKiller, Public School 213, Senor Fish, Spitz, and Yapa.*

### **Community Relations**

- *Continued work with the monthly Little Tokyo Marketing & Business Task Force via Zoom because of the statewide COVID-19 Stay-At-Home order. The focus of the meeting was on how to continue to promote small and/or legacy businesses that were still open.*
- *Due to COVID-19 Little Tokyo Community Council, Go Little Tokyo, Little Tokyo Service Center, and Metro Eat Shop Play worked closely every day during weekdays to highlight three Little Tokyo small and/or legacy businesses open during COVID-19.*

## **CREATIVE SERVICES**

### **Art Program**

- *Participated in art glass coordination meeting with RCC glazing subcontractor.*
- *Participated in Metro Youth Career Experience Regional Connector Build a Station Module.*
- *Reviewed porcelain enamel steel artwork fabrication color proofs for Little Tokyo/Arts District Station.*
- *Reviewed and responded to RCC PSR, CN and RFI submittals.*
- *Continued assessment of Project operating impacts to signage systemwide.*



## SAFETY & SECURITY

### C0980 Regional Connector

- *In response to the COVID-19 pandemic, Project Safety and management continue 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, visitors, 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.
- Made recommendations to utility crews regarding contract activities and improving overall traffic control and pedestrian safety.

### Project Safety Record

- *There were no reported COVID-19 cases on the Project for February and March 2020.*
- RCC reported no Recordable Injuries during the month of *March 2020*.
- RCC reported 89,423 work hours for *February 2020*. RCC's total Contract to Date work hours through *February 2020* are 3,663,469 with a total of 18 Recordable Injuries and no Lost Workday (Days Away) case injuries. The C0980 Contract Recordable Injury Rate is 0.98. 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 *February 2020* is 3,774,528 hours with 19 recordable injuries. The Total Project Contractor Recordable Injury Rate is 1.01.
- Total Aggregate Project work hours for Contractors, Metro, and Support Services Consultants, through *February 2020* is 4,565,885 with 20 Recordable Injuries and no Lost Workday (Days Away) injury cases. The Total Project Aggregate Safety Rate is 0.88.\*

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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
<i>March 2020</i>	<i>RCC completed Grand Av Arts/Bunker Hill Station lower ancillary level walls</i>
<i>March 2020</i>	<i>RCC completed SEM plenum deck</i>