

Los Angeles County
Metropolitan Transportation Authority

Regional Connector Transit Project



REGIONAL CONNECTOR TRANSIT PROJECT

MONTHLY PROJECT STATUS REPORT

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

July 2018

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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 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 has been transferred to the C0980 D/B Contractor, RCC.

Guideway & Systems Contract: The Board authorized to solicit a major Design/Build (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 is performed by Mott McDonald.

Vehicles: Metro is procuring four (4) Light Rail Vehicles (LRVs) for the Project. The vehicles will be built and delivered by Kinkisharyo International, LLC under Option 2 of Contract P3010. Delivery and acceptance of four (4) LRVs is anticipated no later than February 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 UFS and TVM equipment was completed in January 2018 with award to Cubic Corporation. Metro is coordinating with RCC for installation and testing schedules, which is currently expected to begin in winter 2020. The scope addition of fare transfer equipment in the three Regional Connector stations was made in September 2017.

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 Connector Partnership, a joint venture between AECOM, Inc. and WSP (CPJV) provides engineering and design support services while Arcadis, Inc., provides construction management support services. An overview of staffing 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 December 2021.

In January 2017, the Metro Board revised the Life of Project (LOP) Budget for Regional Connector Project 860228 to \$1.756 billion. The LOP budget for Concurrent Non-FFGA activities related to Project 861228 remains at \$39.9 million. Financing costs are estimated at \$14M. Forecasts remain consistent with budgets. A detailed FFGA budget forecast is included under the Budget and Cost Forecast Section of this report.

Funding has been secured from a variety of sources 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 community 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 Project.

The Project is also engaged in social media outreach and various marketing and advertising efforts designed keep the public informed and excited about 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 Relation 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. The Project will need to coordinate the systems interface design, construction and testing while the Agency 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. Associated detailed planning and scheduling efforts to optimize the extensive efforts are underway.

EXECUTIVE SUMMARY

In July, the Project achieved 50.9% completion based on earned value measurements for design and construction. The focus of the Project remains on completing the design and facilitating critical path construction activities. Work is trending ahead of schedule as a result of successful TBM mining operations, an early start to SEM excavation, and expedited utility relocations at the 6th/Flower area. The following is an overview of current design and construction activities.

Design Status

90% of the design drawings have been completed with 13 design units issued for Construction. This month, the Civil Restoration Package (DU 04) was approved which represents a significant design milestone. The following three design units remain outstanding:

- DU 5 – Civil B (AFC Design in Progress)
- DU 12.1 – Radio (AFC Design in Progress)
- DU 64 – Grand Av Arts/Bunker Hill Station Ped Bridge (100% plans are under review by Metro)

Significant design work is also proceeding on the Tribune Entrance Redesign at the Historic Broadway Station. This work has become necessary to accommodate revised loading parameters from the developer. The redesign work is a significant challenge for the designer who has been successful at keeping pace with construction requirements

Construction Status

At the Little Tokyo/Arts District Station, excavation is continuing on the south half of the Wye and along the 1st Street cut and cover.

Tunneling work is complete and efforts are now focused on the SEM cavern excavation adjacent to Historic Broadway Station.

Meanwhile at Broadway, crews are preparing final subgrade for invert concrete along the station box. Concurrently, work is proceeding with the foundation mat for the station entrance and overbuild elements.

At the Grand Av Arts/Bunker Hill Station, work is advancing on the sump structures and station walls.

On Flower Street, the major DWP electrical change order work at 6th Street has been completed and crews are now able to advance the piling and decking work to join the 7th/Metro Station tie-in. Once this decking is completed over the next two months, construction on Flower Street will be completely underground.

Cost and Schedule Summary

Metro has received the June Contract Schedule Update from RCC which indicates that work is proceeding ahead of schedule. Metro is collaborating with RCC to strengthen the schedule planning effort for the final 18 months of construction to better prepare for the complex system integration and cut-overs, as well as their interface with Metro-led rail activation activities.

The critical path of the project remains the completion of the SEM mining, structural interfaces with the SEM and Historic Broadway Station, followed by track installation and systems. A summary graphic of the critical path is found on Page 13.

RCC Schedule Metrics

	Original Contract Date/Duration	Time Extension (CD)	Current Contract Schedule	Forecast (Metro PMS)	Variance CD (Trending)
NTP	7/7/14				
Substantial Completion	10/22/20	527	04/01/22	Oct. 2021	-150 days

Project costs continue to track within budget and projected contingency limits. To date, the design and construction changes related to base scope represent approximately 5.5% of the contract value with a potential to increase to 8%. There are no claims on the Project. Detailed cost and budget information is provided on Page 15.

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: A second Rail Activation Workshop was held at the IPMO on April 28, 2018 with representatives from the Project and multiple operating departments within Metro. The purpose of the meeting was to receive an update on current initiatives and agree on a methodology for arriving at a comprehensive bottoms-up schedule. Task Force Teams were established, with action items to address specific issues. Task Force Teams commenced to outline respective schedule requirements for integration into a detailed schedule. A draft start-up schedule has been prepared for review by stakeholders. Further development is anticipated over the coming months.

Item. 2: Managing and responding to stakeholder needs during cut-and-cover activities along Flower Street has the potential to impact both schedule and budget.

Status/Action: Project is engaged in active stakeholder outreach and construction impact mitigation. Working closely with the contractor to ensure concerns are addressed and that MMRP requirements are fully complied with.

Item 3: Addressing City comments on final street restoration plans has resulted in additional design efforts and Project costs.

Status/Action: The Project proceeded with incorporating City requested changes into the final design. The team also back-checked the first of two final AFC plan submittals to confirm that all prior comments were addressed before the plans were submitted to the City for approval. Metro has also requested an informal comment resolution meeting with the

City on any new comments prior to their formal response. The second submittal is anticipated in August 2018 with a similar back-check process planned.

Item 4: A differing site condition (DSC) within the SEM cavern guideway has been reported. The DSC is believed to be steel remnants from recent construction along 2nd Street. The extent of the DSC and its impact to safety, means and methods, schedule or cost are not yet known. The SEM cavern is on the critical path so related delays could prove significant.

Status/Action: Three instances of steel remnants were encountered early-on in the excavation. Cumulative delays totaled 28 hours; contractual recognition of delays is underway. No further encounters are anticipated.

Item 5: Agreement and closure on the property acquisition and related mitigations at LADWP's Duco Yard have been delayed; impacts to early construction planning, surveying and logistical imperatives may result.

Status/Action: Agreement in-principle on the property and mitigations has been reached. Agreement terms and conditions are in review. Action to secure a right-of-entry may be necessary to support schedule.

Item 6: Design comments from the over-build developer at the Historic Broadway Station has led to design revisions with potential cost impacts.

Status/Action: Metro/RCC are collaborating closely with the developer to finalize design elements necessary to keep work in the station entrance area moving forward uninterrupted.

Project Construction Photos



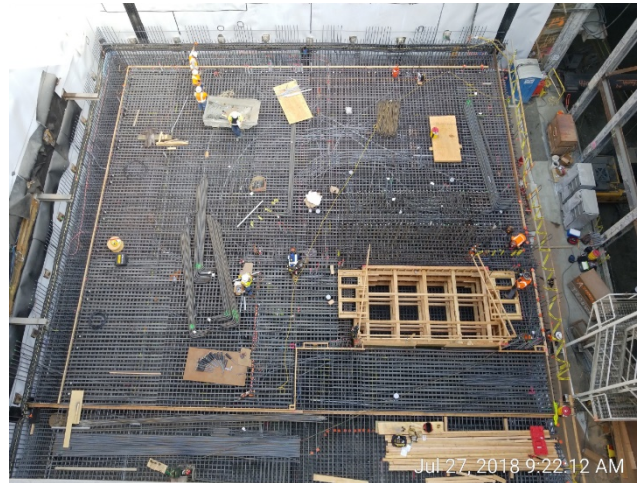
SEM left and right drift entrances



SEM right drift excavation



Excavation in Historic Broadway Station



Rebar installation in Historic Broadway Station entrance



Rebar installation for elevator in
Grand Av Arts/Bunker Hill Station

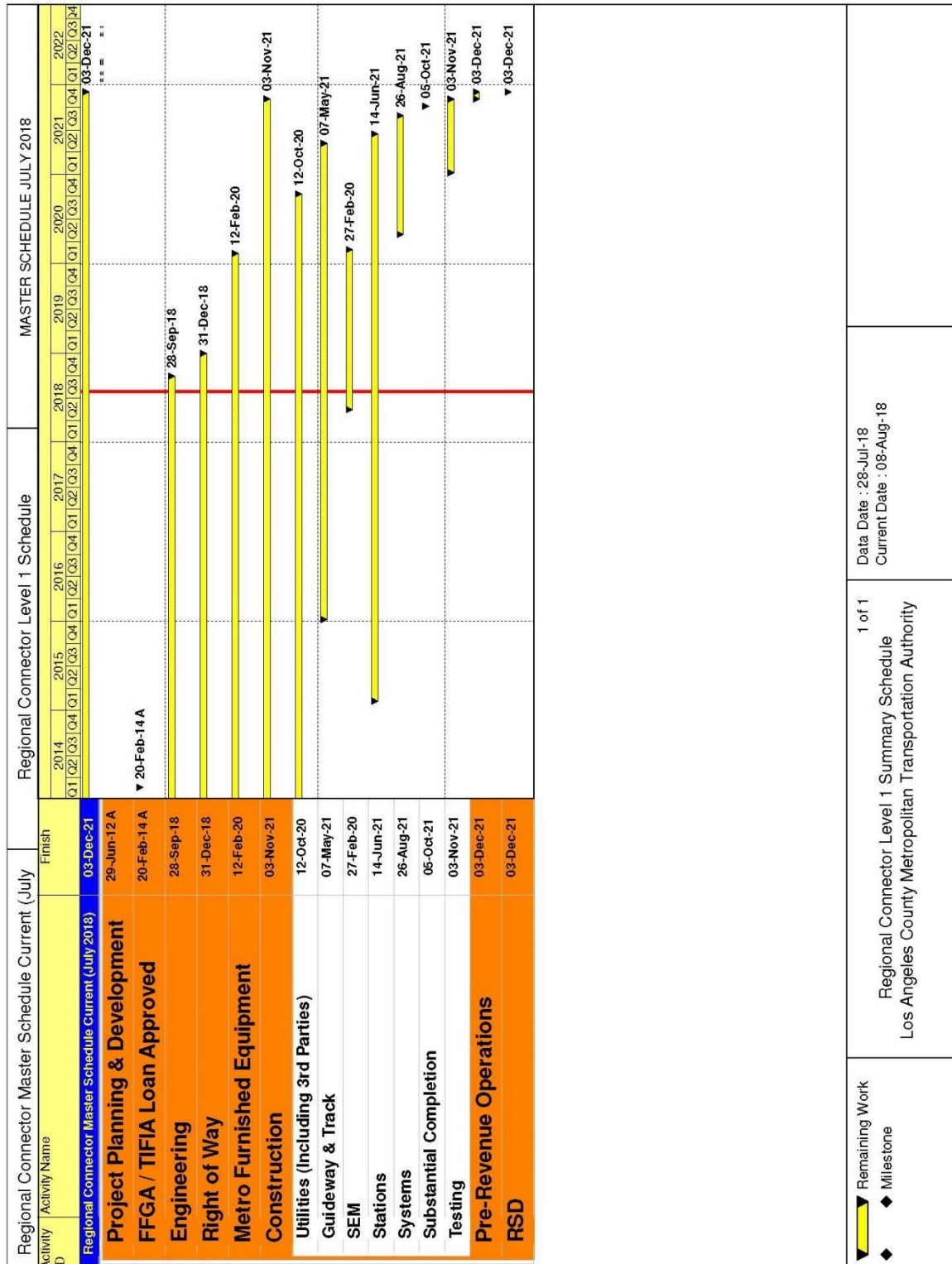


Excavation for cap beam installation on Flower Street

PROJECT STATUS

PROJECT SCHEDULE

Project Summary Schedule

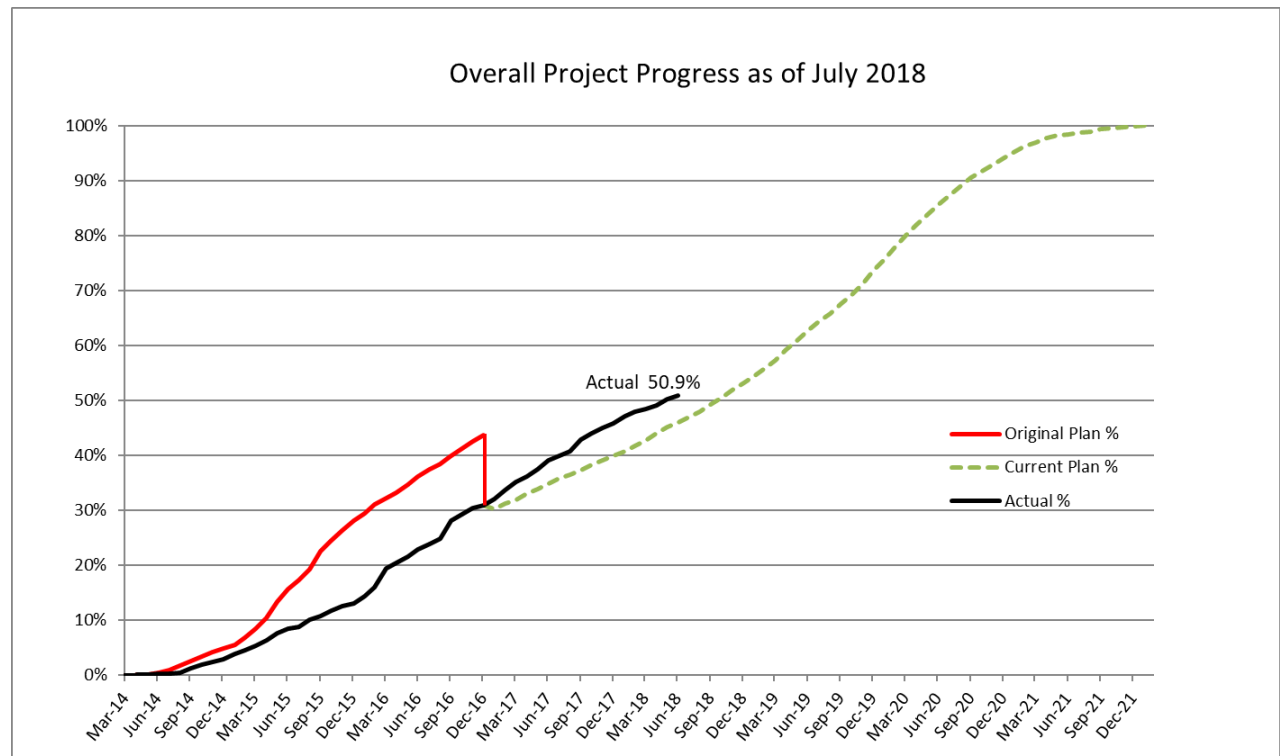


Progress Summary

	Status	Change from Last Period	Comment
Forecast Revenue Service	12/03/2021	+4 CD	
Proposed TIFIA Revenue Service	2/25/2023	None	
Proposed FFGA Revenue Service	2/25/2023	None	
Final Design Progress:			
Contract C0980	99.8%	0%	Not impacting the critical path
Construction Contracts Progress:			
Contract C0981R & C0980	47.7%	0.8%	

Note: Construction Progress excludes of 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 plan reflects median of early and late finish dates.

Key Milestone Six-Month Look Ahead

	Milestone Date	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Initiate SEM right drift excavation	7/5/18 A	⬡					
Completed mock-up testing for floating slab track	7/20/18 A	⬡					
Completed excavation of Historic Broadway station box (West)	7/25/18 A	⬡					
Civil Segment A - AFC Package approved	7/26/18 A	◆					
Completed remaining piles at 6th/Flower intersection	7/28/18 A	⬡					
Complete excavation of Flower North (Between 4th and 5th)	08/03/18		⬡				
Approve testing report for floating slab track	08/24/18		⬡				
Complete temporary decking at 6th/Flower intersection	08/26/18		⬡				
Complete entrance structure Invert of Historic Broadway Station	08/28/18		⬡				
Complete excavation of Little Tokyo/Art District Station (GL10~12)	08/31/18		⬡				
Initiate SEM center drift excavation	09/17/18			⬡			
Complete excavation under Central Ave	09/17/18			⬡			
Complete tunnel invert concrete	09/18/18			⬡			
Complete WYE Phase 2 excavation	09/24/18			⬡			
Civil Segment B - AFC Design approved	09/30/18			◆			
Pedestrian Bridge - AFC Design approved	09/30/18			◆			
Complete invert of Little Tokyo/Art District Station (GL10~12)	10/29/18				⬡		
Complete station invert of Historic Broadway Station (West)	11/06/18					⬡	
Complete SEM left drift excavation	11/07/18					⬡	
Complete SEM right drift excavation	12/07/18						⬡
Initiate precast floating slab panel installation	12/12/18						⬡

◆ MTA Staff ⬡ C0980 D/B Contractor

* New

"A" following date is actual and completed

Major Equipment Delivery Status

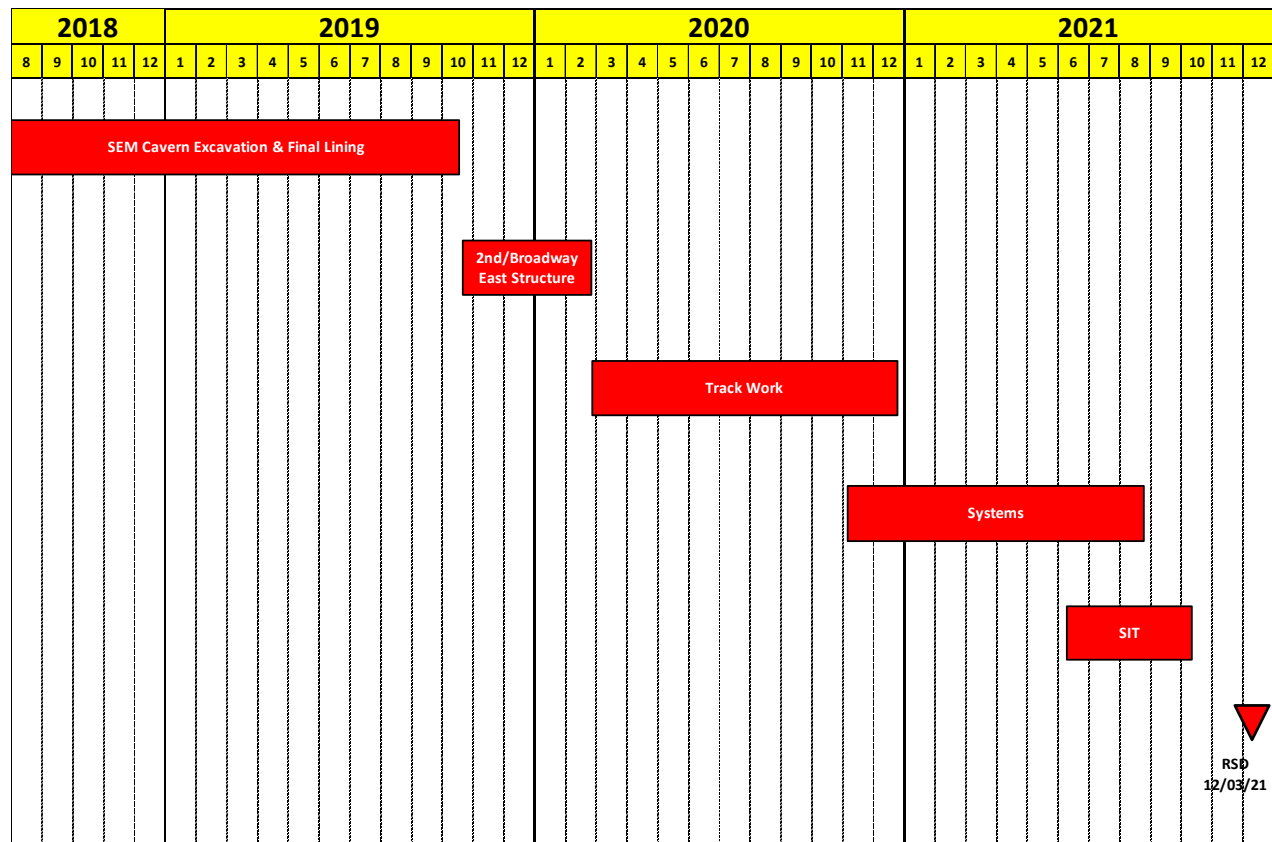
Metro Supplied Equipment

Equipment	Initial Procurement	Scheduled Delivery	Scheduled Installation
LRT Vehicles	(NTP) 08/20/2012	Option 2 02/12/2020	N/A
Ticket Vending Machines	~ 01/30/2018	11/01/2018 (warehoused)	08/19/2020 ~03/01/2021

Design-Builder Equipment Delivery Requirements

Activity Name	Early Finish	Need Date
FAB/DELIV ELEVATORS - 2ND/HOPE	23-Aug-18	26-Aug-21
FAB/DELIV ESCALATORS - 2ND/HOPE	28-Aug-18	2-Mar-21
FAB/DELIV TRAIN CONTROL EQUIPMENT	31-Jan-19	1-Feb-21
FAB/DELIV 2ND/BROADWAY TPSS	5-Mar-19	10-Jan-20
PROCURE NEW 115RE RAIL - HIGH STRENGTH RAIL	24-Oct-19	20-May-20
PROCURE RAIL – JOBWIDE	24-Oct-19	20-May-20
PROCURE SPECIAL TRACK – JOBWIDE	24-Oct-19	25-Jun-20
PROCURE NEW 115RE RAIL - STANDARD RAIL	24-Oct-19	20-May-20
FAB/DELIV EMERGENCY VENTILLATION FANS - CENTRAL (4)	11-Nov-19	16-Sep-20
FAB/DELIV GLAZING SPIDERS - ALL STATIONS	18-Dec-19	19-May-21
PROCURE BALLASTED TRACK - NORTH ALAMEDA LEG	23-Dec-19	15-Sep-21
FAB/DELIV EMERGENCY BOOSTER FANS (12)	6-Feb-20	26-Aug-21

Critical Path (C0980)



The critical path in July remained the same as portrayed in June.

SEM excavation is the current critical path operation underway; due to several production-related difficulties over the course of the month, four (4) days were lost in July.

The production issues experienced in July are viewed as anomalies that can be overcome with disciplined coordination and prosecution of the work.

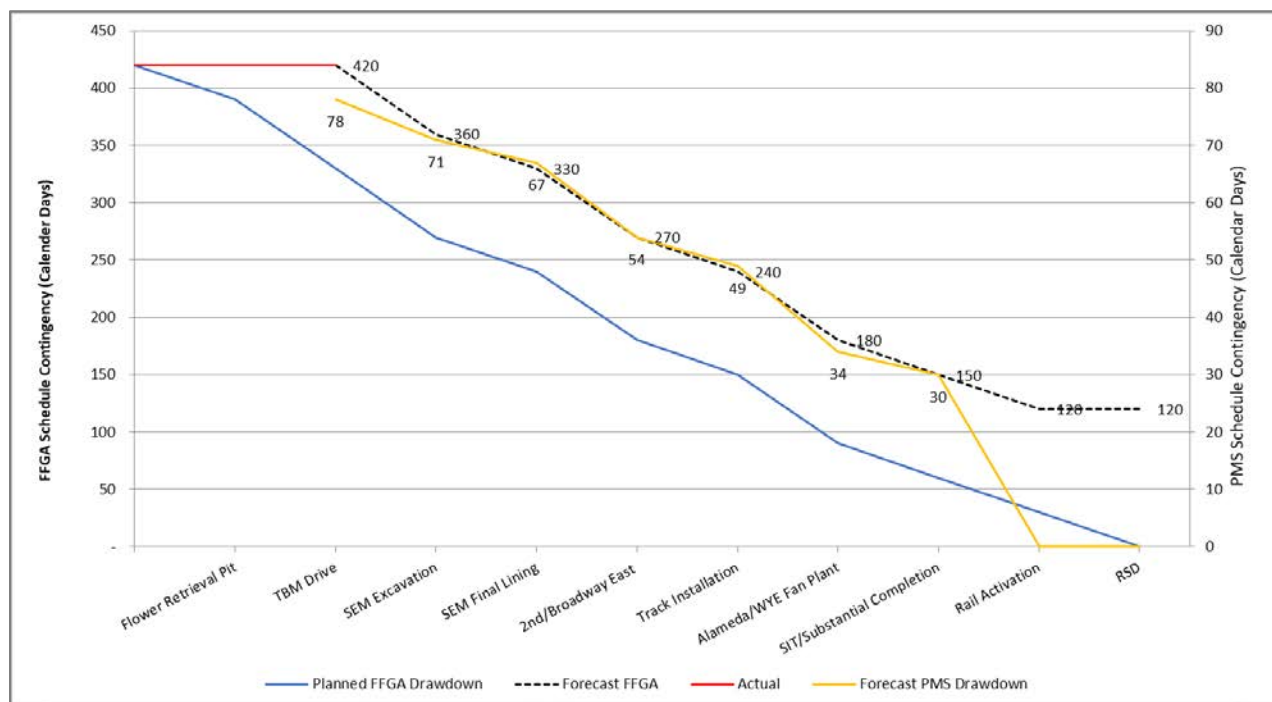
Despite the July schedule loss above, the SEM operation is proceeding, continuing a positive trend in overall production with two headings in excavation underway in July – as planned.

Project Schedule Contingency Drawdown Analysis

The project schedule contingency drawdown model provides a dual-axis perspective based upon the proposed FFGA RSD of February 2023 and Metro's Project Master Schedule (PMS) forecast of December 2021.

The introduction of the PMS model axis reflects a proportional distribution of available float relative to the FFGA model. With the early start of the critical SEM excavation, schedule contingency would appear to be bolstered.

With regard to the FFGA RSD, schedule float of fourteen months has been maintained. This steady performance was recorded despite challenges through the boring of both tunnels – which were completed successfully in January 2018.



PROJECT COST

Project Cost Analysis – 860228

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT 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	249,281	0	247,316	2,298	149,025	966	254,423	5,142
20	STATIONS, STOPS, TERMINALS, INTERMODAL	354,268	219,477	0	229,919	6	229,912	2,302	56,121	-50	230,110	192
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	0	0	0	0	0	0	0	0	0	0	0
40	SITework & SPECIAL CONDITIONS	141,785	422,453	0	598,417	-6,326	574,579	5,203	426,177	1,914	621,220	22,803
50	SYSTEMS	69,667	73,848	0	73,424	3,097	66,833	995	12,926	0	75,055	1,631
	CONSTRUCTION SUBTOTAL (10-50)	846,343	920,468	0	1,151,041	-3,223	1,118,641	10,798	644,249	2,830	1,180,808	29,767
60	ROW, LAND, EXISTING IMPROVEMENTS	115,889	74,208	0	92,742	104	52,245	24	51,953	0	76,410	-16,331
70	VEHICLES	16,275	16,275	0	16,275	0	16,275	0	1,678	0	16,275	0
80	PROFESSIONAL SERVICES	261,455	257,973	0	379,338	7,887	300,641	1,872	262,506	-265	387,150	7,813
	SUBTOTAL (10-80)	1,239,963	1,268,925	0	1,639,395	4,768	1,487,802	12,693	960,386	2,565	1,650,644	21,249
90	UNALLOCATED CONTINGENCY	135,399	126,892	0	89,946	0	0	0	0	-2,565	68,697	-21,249
100	FINANCE CHARGES	27,571	7,115	0	14,301	0	0	0	0	0	14,301	0
	TOTAL PROJECTS 460228 & 860228 (10-100)	1,402,932	1,402,932	0	1,743,642	4,768	1,487,802	12,693	960,386	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	22	18,961	0	20,425	0
	TOTAL PROJECTS 400228 & 460228 (EVN/PLAN'G)	0	24,200	0	26,500	0	26,500	22	25,036	0	26,500	0
	400228, 460228, 860228 TOTAL	1,402,932	1,427,132	0	1,770,142	4,768	1,514,302	12,715	985,422	0	1,770,142	0

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH 07/31/2018. 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 Life-of-Project (LOP), 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 December 2016.

Commitments:

Commitments increased by \$4.8 million this period to \$1.51 billion which represents 85.6% of the Current Budget. The total increase is related to RCC and Universal Fare System Equipment (UFS) executed modifications, Real Estate and, Professional Services' committed amount, and unencumbering work orders from Department of Water and Power.

Expenditures:

Expenditures are cumulative through July 2018. Expenditures increased by \$12.7 million this period for costs associated with C0980 Design Build contract, Engineering Management Support, Metro Project Administration, Construction Management Support Service, Legal Services, Third Party Master Cooperative Agreements with the City of LA, Community Relations, and Environmental Consultant Services. The \$985.42 million in expenditures to date represents 55.7% of the Current Budget.

Current Forecast:

The total current forecast remains the same as the total current budget.

Project Cost Analysis – 861228

CONCURRENT NON-FFGA ACTIVITIES (861228)

PROJECT COST STATUS BY FTA SCC
DOLLARS IN THOUSANDS

SCC CODE	Description	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
20	STATIONS, STOPS, TERMINALS, INTERMODAL	-	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	SITework & SPECIAL CONDITIONS	0	0	0	0	0	0	0	0	0	0
50	SYSTEMS	0	0	0	0	0	0	0	0	0	0
	CONSTRUCTION SUBTOTAL (10-50)	10,480	0	10,480	0	10,480	0	0	0	10,480	0
60	ROW, LAND, EXISTING IMPROVEMENTS	27,748	0	27,748	0	27,748	0	22,498	0	27,748	0
70	VEHICLES	0	0	0	0	0	0	0	0	0	0
80	PROFESSIONAL SERVICES	650	0	650	0	650	5	313	0	650	0
	SUBTOTAL (10-80)	38,878	0	38,878	0	38,878	5	22,811	0	38,878	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 861228 (10-100)	39,991	0	39,991	0	38,878	5	22,811	0	39,991	0
	861228 TOTAL	39,991	0	39,991	0	38,878	5	22,811	0	39,991	0

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH 07/31/2018.

Original Budget:

The Original Budget, Current Budget, and Current Forecast reflect the Board Approved Life-of-Project (LOP) budget established April 24, 2014.

Current Budget:

There is no change to the Budget for this period.

Commitments:

Commitments reflect actions through *July* 2018.

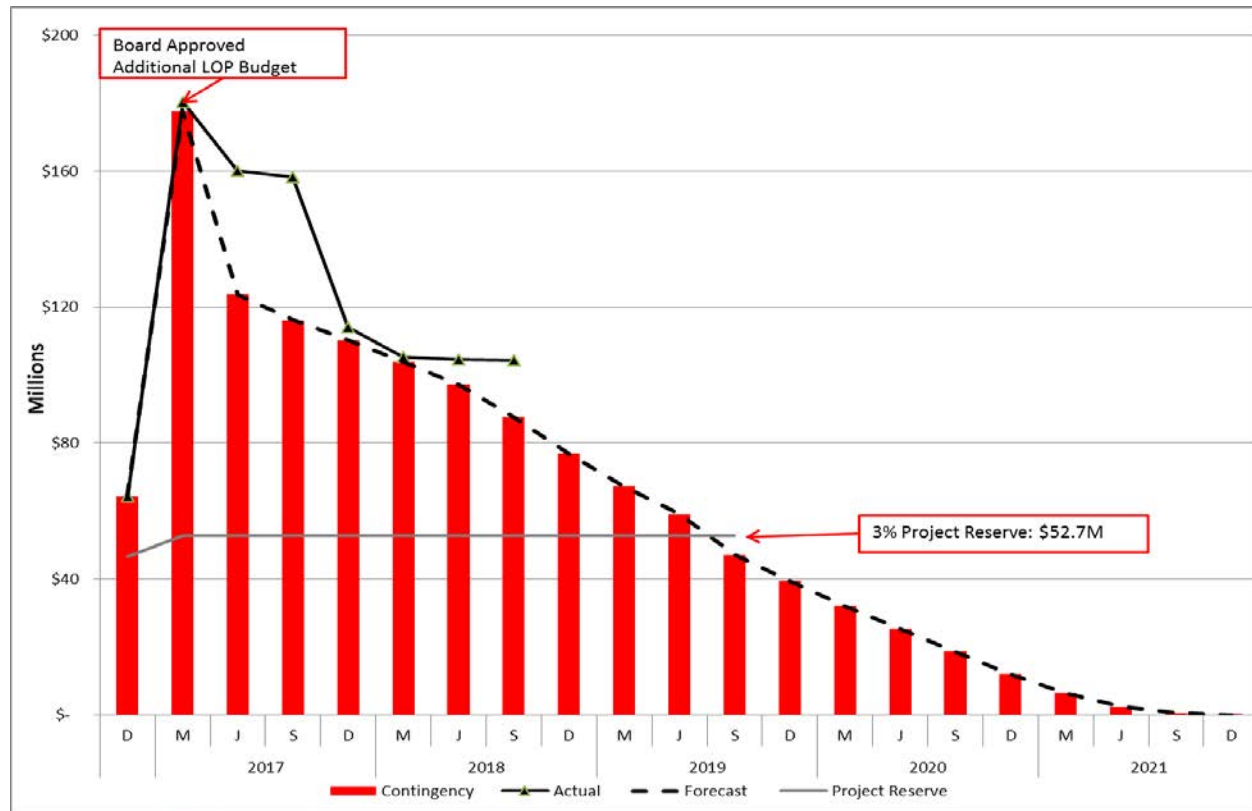
Expenditures:

Expenditures are cumulative through *July* 2018. Expenditures increased by \$5 thousand this period for costs associated with Community Relations. The \$22.8 million in expenditures through *July* 2018 represents 57.0% of the Current Budget.

Current Forecast:

There was no change to the Forecast for this period.

Cost Contingency Drawdown



Cost Contingency Drawdown Analysis

In January 2017, the Metro Board revised the Life-of-Project Budget to \$1.756 billion, which included increasing the unallocated contingency to \$89 million and allocated contingency to \$92.8 million. A revised drawdown plan for unallocated contingency, correlated to anticipate risk trends, was developed to monitor and measure drawdowns moving forward.

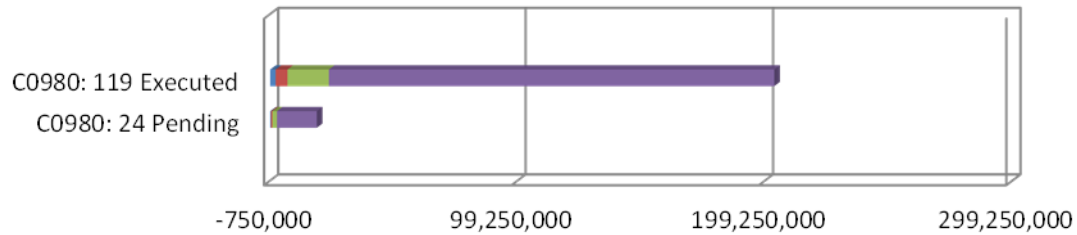
Included in the drawdown is a 3% project reserve threshold. Metro's Board is to be notified when it becomes necessary to drawdown contingency below the project reserve threshold to cover project costs. This policy was adopted by the Metro Board in September 2012.

This month \$286 thousand was drawn down from contingency. The remaining total project contingency (allocated and unallocated) is \$104.3 million.

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	(18,684)	(2,565)	(21,249)	68,697
Allocated Contingency	86,345	92,809	(59,467)	2,279	(57,188)	35,620
Total Contingency	211,263	182,754	(78,151)	(286)	(78,437)	104,317

Summary of Contract Modifications

Contract Modifications (MODs) by Cost Level



	C0980		Total
	119 Executed	24 Pending	
■ Under \$100K	2,200,405	288,110	2,488,515
■ \$100K to \$250K	4,757,482	565,650	5,323,132
■ \$250K to \$1M	16,761,970	1,887,563	18,649,533
■ Over \$1M	180,009,237	16,077,878	196,087,115
Total Contract MODs	203,729,094	18,819,201	222,548,295
Contract Award Amount	927,226,995	927,226,995	
% of Contract MODs	22.0%	2.0%	

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 *nineteen* (119) changes with a total value of \$203.7 million have been executed since NTP of Contract C0980. An additional *twenty-four* (24) changes, with a total estimated value of \$18.8 million are pending.

DISADVANTAGED BUSINESS ENTERPRISE (DBE) STATUS

As of *June* 2018:

- **DBE Goal – Design** 20%
The percentage of funds apportioned to Design Contracts
 - **Current DBE Commitment Design** \$ 13.9M
Total DBE Committed Dollars divided by Total Contract Value for Design (22.63%)
 - **Current DBE Participation** 27.04%
Total amount paid to date to DBEs divided by the amount paid to date to Prime:
- Twelve (12) Design DBE sub-consultants have been identified to date.

- **DBE Goal – Construction** 18%
The percentage of funds apportioned to Construction Contracts
 - **Current DBE Commitment Construction** \$ 192M
Contract commitment divided by current contract value for Construction: (18%)
 - **Current DBE Participation** 12.55%
Total amount paid to date to DBEs divided by the amount paid to date to Prime:
- Seventy-six (76) Construction DBE sub-contractors have been identified to date.

Note: The contractor has expressed concern about the lack of interest from the DBE community to submit bids for various construction work packages. The inability to attract qualified firms in this extremely busy market place presents a significant risk to achieving the project's DBE construction goal.

PROJECT LABOR AGREEMENTS (PLA) STATUS

As of *June* 2018:

- **Targeted Worker Goal** 40.00%
Construction work to be performed by residents from Economically Disadvantaged Area in the United States
- **Targeted Worker Current Attainment** 58.77%
- **Apprentice Worker Goal** 20.00%
Construction work to be performed by Apprentices
- **Apprentice Worker Current Attainment** 16.11%
- **Disadvantaged Worker Goal** 10.00%
Construction work to be performed by Disadvantaged Workers who are residents of the United States
- **Disadvantaged Worker Current Attainment** 7.40%

FINANCIAL/GRANT STATUS

Status of Funds by Source

July 2018

SOURCE	(A)	(B)	(C)	(D)	(D/B)	(E)	(E/B)	(F)	(F/B)
	ORIGINAL BUDGET	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS \$	%	EXPENDITURES \$	%	BILLED TO FUNDING SOURCE \$	%
FEDERAL - CMAQ	\$64.000	\$227.000	\$64.000	\$128.909	57%	\$49.873	22%	\$45.403	20%
FEDERAL - SECTION 5309 NEW STARTS	\$669.900	\$669.900	\$365.000	\$669.900	100%	\$362.223	54%	\$362.223	54%
FEDERAL - RIP	\$0.000	\$14.400	\$1.411	\$14.400	100%	\$1.411	10%	\$1.411	10%
MEASURE R - TIFIA LOAN	\$160.000	\$160.000	\$117.803	\$160.000	100%	\$117.759	74%	\$117.759	74%
STATE PROPOSITION 1A HSRB *	\$114.874	\$114.874	\$114.874	\$114.874	100%	\$114.874	100%	\$114.874	100%
STATE PROPOSITION 1B PTMISEA **	\$149.500	\$135.163	\$135.163	\$135.163	100%	\$135.163	100%	\$135.163	100%
STATE STIP RIP	\$2.590	\$2.590	\$2.590	\$2.590	100%	\$2.590	100%	\$2.590	100%
STATE CAPITAL PROJECT LOANS - OTHERS ***	\$132.466	\$274.871	\$274.871	\$257.425	94%	\$183.529	67%	\$170.814	62%
MEASURE R	\$27.571	\$0.000	\$0.000	\$0.000	0%	\$0.000	0%	\$0.000	0%
CITY OF LOS ANGELES	\$41.984	\$41.984	\$18.000	\$31.041	74%	\$18.000	43%	\$18.000	43%
LEASE REVENUE	\$64.247	\$115.058	\$0.000	\$0.000	0%	\$0.000	0%	\$0.000	0%
TOTAL	\$1,427.132	\$1,755.840	\$1,093.712	\$1,514.302	86%	\$985.422	56%	\$968.237	55%

NOTES:

1. EXPENDITURES ARE CUMULATIVE THROUGH JULY 31, 2018.

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

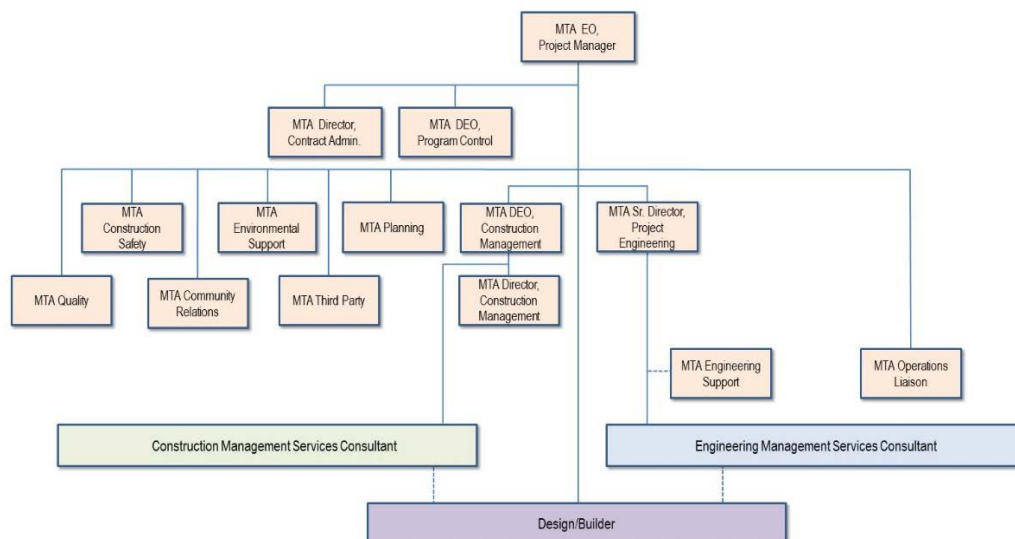
* STATE PROPOSITION 1A HIGH SPEED RAIL BONDS

** 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)

PROJECT ORGANIZATION AND STAFFING

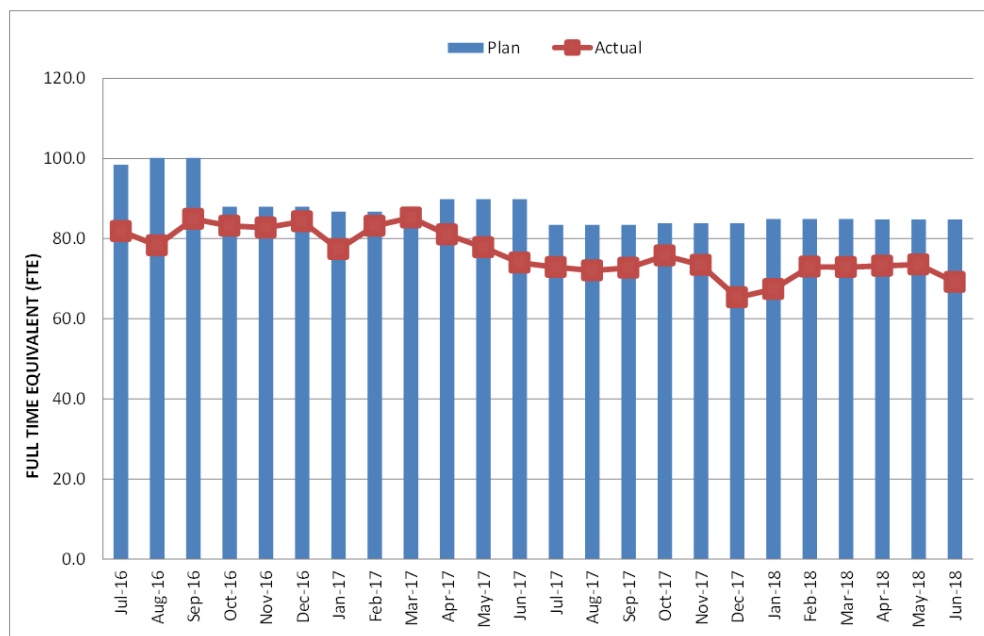
The design-build contract is being managed by a joint team of Metro and consultant personnel jointly located at the Integrated Project Management Office (IPMO).



Updated: 07/11/2018

The overall FY18 Total Project Staffing plan averages 84.2 FTE's per month. The total actual project staffing for *June 2018* was 69.1*; 26.0 actual FTEs for Metro's Project Administration staff and 43.2 FTEs for Consulting staff. The shortfall in staffing has not impacted Metro's ability to effectively manage the Project. Review of staffing plans is ongoing to ensure needs are addressed.

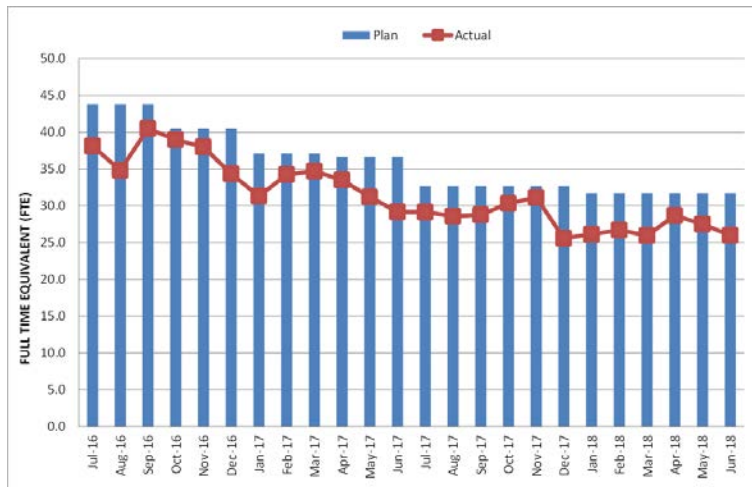
Total Project Staffing – Metro and Consultants



Data through June 2018

* June actuals include two (2) FTEs related to PMSS Services.

Metro Staff



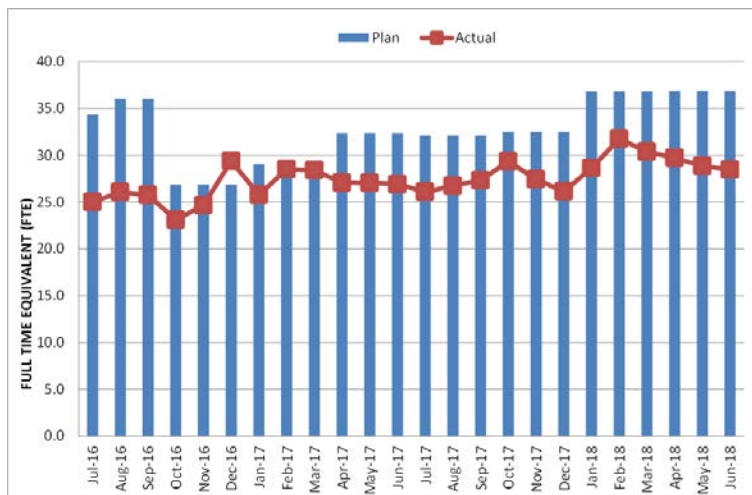
Staffing by Group

The opposing graphs represent planned vs. actual staffing levels by group.

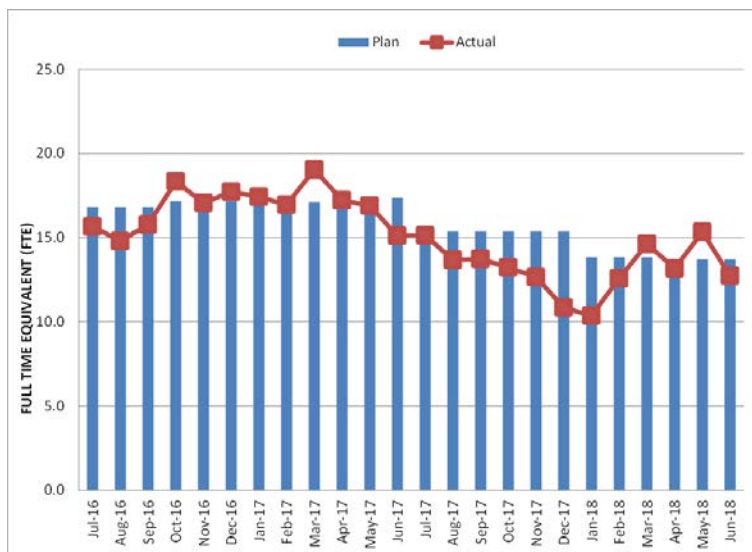
Metro staffing includes full time staff located in the IPMO as well as part-time support located at Gateway Headquarters.

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

CM Support Services Staff (Consultant)



Engineering Services Staff (Consultant)



All above data through June 2018

REAL ESTATE STATUS

Type of Take	Number of Parcels	Certified	Decertified	Appraisals In Process / Completed	Offers Made	Escrow Closed	Effective OIP	Parcels Available	Remaining
Full Takes	2	2		2	2		2	2	
Part Takes	3	3		3	3			2	1
SSE	12	8	4	9	9	6	2	7	
TCE/ROE	14	5	3	6	6	4	1	5	
PE	3	3		3	3	2		3	
Sub Total	34	21	7	23	23	12	5	20	1
Pedestrian Bridge	420-1, 420-2, 420-3								1
Mangrove Fan Plant	TBD								1
Grand Total	36	21	7	23	23	12	5	20	3

Open Real Estate Matters

City of Los Angeles (Mangrove Parcels)

- *A formal request was sent to the City regarding extending the 5-year elements of the Easement for an additional three years.*
- *The City has indicated it will honor the request. Valuation of the property for lease cost purposes will be managed on one-year increments to reflect current market conditions. The first one-year extension will go into effect in June 2019; a new appraisal in early spring 2019 will serve as a basis for the lease amount.*

City of Los Angeles Department of Water and Power 'Duco Yard' – DWP (RC-473)

- LADWP has agreed to a compromise in the valuation of the property. The LADWP Board approved the recommended purchase price at its June 22nd meeting. Metro Staff and County Counsel *have completed comments on the Purchase and Sale Agreement ("PSA") and presented the same to LADWP; awaiting LADWP comments. LADWP indicated that it is obtaining an updated appraisal and want to get the results of the appraisal before it finalizes the PSA.*
- The Project and LADWP have reached agreement regarding the mitigation requirements and the cost associated with the work. Follow-up interface between the parties *continue to finalize both issues; i.e. the purchase of the easements and the payment for the mitigation requirements.*

QUALITY ASSURANCE STATUS

C0980 Regional Connector D/B

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

- Reviewed and provided comments on RCC's quality-related submittals;
- Performed oversight verification of RCC's design and construction activities;
- Reviewed test results for Portland Cement Concrete, Soils Testing, Asphalt Testing and Non-Destructive Testing of Welding; and
- Attended "Readiness Review" meetings with RCC.
- *Metro QA performed a surveillance (C980-Surv-2018-0015) of the repair of Cross Passage #3. The structural repairs were acceptable. RCC NCR 41 remains open pending the cosmetic repairs by RCC Construction.*
- *Metro QA conducted a surveillance (C980-Surv-2018-0016) of RCC's Procore system that is used as a database by Metro for current status drawings. Some drawings were found to be out of revision. A QAR (C980-QAR-S016-001) was drafted and sent to RCC. RCC responded to the QAR and the QAR is closed.*
- *RCC NCR 42 was drafted due to concrete arriving to the placement site for a wall at Grand Av Arts/Bunker Hill Station at too high of a temperature (92°F). The concrete placement was halted due to the fact the batch plant could not batch concrete meeting the ASTM Standard for temperature. A cold joint is now being formed in the area of the wall placement and a repair proposal has been sent to the Engineer of Record. This NCR is awaiting a response from the Engineer of Record.*
- *RCC NCR 0038 remains open pending the repairs by RCC Construction.*
- *Concrete Aggregate for Concrete Mix designs requirement for all aggregate sizes have failed testing repeatedly. RCC was to meet with Robertson's, the aggregate and concrete supplier for RCC. Concrete operations were halted after the last failures of aggregate testing. Concrete aggregates have now passed (3) successive tests and concrete operations can continue. Metro Quality Management will employ its independent Testing Laboratory to conduct an audit of Robertson's Quarry, Testing Laboratory and Batching Plants used for the RC Project.*
- *It has been determined by Metro Quality Management that Audits of the RCC Quality Management System will take place quarterly in lieu of yearly audits. A schedule will be drafted by Metro Quality Management in the upcoming weeks.*
- RCC testing performed to date are as follows:
 1. Portland cement concrete 28-day test results: 1105; number accepted: 1105
 2. Asphalt concrete density tests results: 238; number accepted: 238
 3. Soil compaction (in-situ density) tests performed to date: 168; number accepted: 168
 4. Welding MT/UT testing to date is: 14,378; number accepted: 14,378

ENVIRONMENTAL STATUS

- SWPPP inspections of all Project areas are conducted weekly by RCC and Metro Staff to observe site conditions and report on performance of stormwater protection per Best Management Practices. Throughout July, Weather was dominantly dry, and prone to favor fugitive dust conditions. Therefore, daily street sweeping continued throughout the month.
- Metro *reviewed* the 21st Quarterly Mitigation and Monitoring Report covering February 2018 through April 2018 with the PMOC *on July 17, 2018*. The team has also begun preparation of the 22nd Quarterly Mitigation Monitoring and Reporting Plan covering May 2018 to July 2018 and will be submitting the report to the FTA no later than August 14, 2018.
- Metro *submitted* the 7th Semi-Annual Cultural Resources Report to the FTA and SHPO *on July 30, 2018*. Reporting will continue on a semi-annual basis until ground-disturbing activities conclude.
- Noise and vibration spot checks continue to be conducted weekly at multiple sensitive locations, and at the location of new activities along the project alignment. Ventilation fans for Flower Street underground work were shrouded with sound blankets as a noise mitigation action. The fan noise levels are in compliance with the EIR; however, further mitigation is being evaluated.
- SEM Cavern construction has the potential to produce ground-borne vibration and noise. Therefore, planning has begun to monitor noise and vibration on 2nd Street adjacent to sensitive receptors as the work advances eastward.

CONSTRUCTION AND COMMUNITY RELATIONS STATUS

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.
- Performed public outreach and construction coordination to impacted area stakeholders regarding the following construction activities: *Flower Street: cut & cover weekend closures, sidewalk repair, and bus stop relocation for upcoming train feeder line. Historic Broadway and Little Tokyo/Arts District Stations: geotechnical monitoring installation, deck panel repair, fire testing and rescue drills.*
- 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.
- Coordinated construction activities with *45* stakeholders throughout the project alignment on the above activities.
- *Hosted the Flower St/Financial District Community Leadership Council Committee meeting at the Central Library where updates on the progress of cut & cover activities on Flower St and the station construction at the Grand Av Arts/Bunker Hill Station were provided. Updates on Eat, Shop, Play business mitigation accomplishments were also presented.*
- Continued standing meetings with: LA City Council District 14, the Mayor's Office, Commonwealth Partners, The Westin Bonaventure Hotel, Charles Dunn and The Standard Hotel.

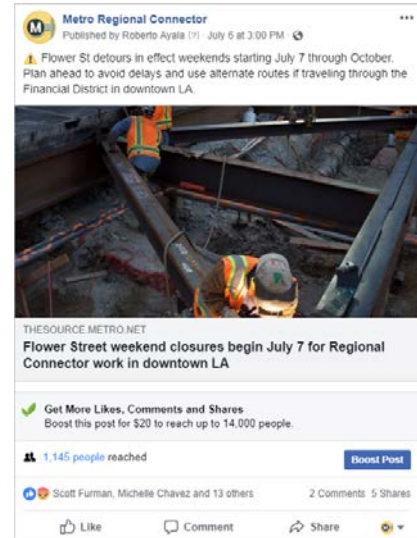
Eat, Shop, Play – Construction Impact Business Mitigation Program

- *Promoted four (4) Flower St Eat, Shop, Play participants impacted by the cut & cover activities through social media, including City National Plaza's Nice Coffee, Public School 213, 10Below, and Big Sugar Bakeshop.*
- *A special promotion offered Eat, Shop, Play and project followers a chance to receive a free TAP card, with a purchase, at 10Below and Big Sugar Bakeshop. Over 60 tap cards were distributed within a few hours.*
- *Released the July video spotlight of BonaVista Lounge, located in the Bonaventure Hotel.*



Social Media Outreach and Marketing Efforts

- *Published 11 newsletters, including four construction notices, a project update, meetings and special announcements, weekend look ahead and Eat, Shop, Play business promotion, totaling 18.6k mailings.*
- *The trending stories on social media included the Flower St weekend closure updates, reaching 1,145 people, 43 reactions, 92 post clicks.*



Community Relations

- Continued work with the monthly Little Tokyo Marketing & Business Task Force

CREATIVE SERVICES STATUS

Art Program

- *Facilitated art coordination meetings with RCC*
- *Coordinated with IPMO, RCC and Procurement in preparation for the release of RFPs for glass mosaic fabrication*
- Continued to support mitigation efforts
- Continued design development for corridor artworks

Signage & Environmental Graphic Design

- Responded to RFIs and Submittals
- Participated in Design Build document reviews

SAFETY & SECURITY STATUS

C0980 Regional Connector

- Monitored RCC's pre-employment drug/alcohol testing and new employee safety orientation to insure compliance with contract specifications.
- Participated in weekly progress meetings with RCC's management personnel and Metro's Construction Manager to discuss safety/security/quality related issues and construction work schedules.
- 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 insure 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 insure safety compliance.
- Made recommendations to utility crews regarding contract activities and improving overall traffic control and pedestrian safety.

Project Safety Record

- RCC reported no Recordable Injuries and no major incidents during the month of *July 2018*.
- RCC reported 63,885 work hours for *June 2018*. RCC's total Contract to Date work hours through *June 2018* are 2,373,898 with a total of thirteen (13) Recordable Injuries and no Lost Workday (Days Away) case injuries. The C0980 Contract Recordable Injury Rate is 1.10. The Bureau of Labor Statistics reports that the National Average Recordable Injury Rate is 2.8 for heavy civil construction projects.
- Total Contractors' to Date Work Hours, including both the C0980 and the completed C0981 AUR contract, through *June 2018* is 2,484,957 hours with fourteen (14) recordable injuries. The Total Project Contractor Recordable Injury Rate is 1.13.
- Total Aggregate Project work hours for Contractors, Metro, and Support Services Consultants, through *June 2018* is 3,061,856 with fifteen (15) Recordable Injuries and no Lost Workday (Days Away) injury cases. The Total Project Aggregate Safety Rate is 0.98.¹

¹ 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	<i>RCC completed station box excavation of Historic Broadway Station</i>