

Los Angeles County  
Metropolitan Transportation Authority

# Regional Connector Transit Corridor

East Los Angeles ↔ Santa Monica

Azusa ↔ Long Beach



**Metro**<sup>®</sup>

# **REGIONAL CONNECTOR TRANSIT CORRIDOR 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 2016**

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**PROJECT SUMMARY**

**As of July 2016**

<b>LOCATION:</b> Downtown Los Angeles		<b>CONSTRUCTION MANAGEMENT CONSULTANT:</b> ARCADIS																																										
<b>DESIGN CONSULTANT:</b> Connector Partnership JV		<b>CONTRACTOR:</b> Regional Connector Constructors, Joint Venture																																										
<b>Muck Removal at 2nd/Hope Station</b>		<b>WORK/ACTIVITY DURING PAST MONTH</b>																																										
		<ul style="list-style-type: none"> <li>• 36" water line replacement at 1st/Alameda completed</li> <li>• Pile installation at 1st /Alameda intersection continued</li> <li>• Completed SOE and station excavation at 1st/Central</li> <li>• Compensation grouting preparations along 2nd St. continued</li> <li>• TBM shaft excavation and SOE at Mangrove Yard on the 2nd lift continued</li> <li>• 2nd/Spring LADWP Water relocation continued</li> <li>• Pile installation at 2nd/Broadway continued</li> <li>• Water relocations along Flower Street continued</li> <li>• Pile installation on west side of Flower St. continued</li> <li>• Station box excavation and SOE continued at 2nd/Hope Station</li> <li>• Electrical and communication duct bank installation at 2nd/Broadway continued</li> <li>• Relocation/protection of power and communication assets in 2nd/Broadway Station area</li> </ul>																																										
<b>EXPENDITURE STATUS (\$ In Millions)</b>		<b>SCHEDULE ASSESSMENT</b>																																										
<b>ACTIVITIES</b>	<b>CURRENT BUDGET</b>	<b>EXPENDED AMOUNT</b>	<b>PERCENT EXPENDED</b>	<table border="1"> <thead> <tr> <th>MAJOR SCHEDULE ACTIVITIES</th> <th>PRIOR PERIOD</th> <th>CURRENT PLAN</th> <th>VARIANCE WEEKS</th> </tr> </thead> <tbody> <tr> <td colspan="4"><b>Environmental</b></td> </tr> <tr> <td>FEIS / FEIR</td> <td>N/A</td> <td>04/26/12</td> <td>Complete</td> </tr> <tr> <td>SEIS Flower St.</td> <td>N/A</td> <td>12/18/15</td> <td>Complete</td> </tr> <tr> <td colspan="4"><b>Design</b></td> </tr> <tr> <td>PE Notice to Proceed</td> <td>N/A</td> <td>01/04/11</td> <td>Complete</td> </tr> <tr> <td>Final Design complete</td> <td>12/30/16</td> <td>02/28/17</td> <td>9</td> </tr> <tr> <td colspan="4">Note: Completion of systems design is now projected for end of November 2016. No adverse impact to the overall schedule is anticipated from these design delays.</td> </tr> <tr> <td colspan="4"><b>Right-of-Way</b></td> </tr> <tr> <td>All parcels available</td> <td>08/15/18</td> <td>08/15/18</td> <td>0</td> </tr> </tbody> </table>	MAJOR SCHEDULE ACTIVITIES	PRIOR PERIOD	CURRENT PLAN	VARIANCE WEEKS	<b>Environmental</b>				FEIS / FEIR	N/A	04/26/12	Complete	SEIS Flower St.	N/A	12/18/15	Complete	<b>Design</b>				PE Notice to Proceed	N/A	01/04/11	Complete	Final Design complete	12/30/16	02/28/17	9	Note: Completion of systems design is now projected for end of November 2016. No adverse impact to the overall schedule is anticipated from these design delays.				<b>Right-of-Way</b>				All parcels available	08/15/18	08/15/18	0
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All parcels available	08/15/18	08/15/18	0																																									
<b>DESIGN</b>	\$132.6	\$116.7	88.0%																																									
<b>RIGHT-OF-WAY</b>	\$110.5	\$68.8	62.3%																																									
<b>CONSTRUCTION</b>	\$1,075.5	\$327.9	30.5%																																									
<b>OTHER</b>	\$280.3	\$97.6	34.8%																																									
<b>TOTAL</b>	<b>\$1,598.9</b>	<b>\$610.9</b>	<b>38.2%</b>																																									
Current Budget reflects Board approved Life-of-Project Budget and includes Finance Charges. Note: Expended amounts are through 06/30/2016.		<p>Note: ROW dates are adjusted to reflect the latest D/B Contractor's coordinated Need Dates. Duco Yard need date is in August 2018.</p> <p><b>Construction - Design / Build Contract</b></p> <table border="1"> <thead> <tr> <th>Activity</th> <th>Prior Period</th> <th>Current Plan</th> <th>Variance Weeks</th> </tr> </thead> <tbody> <tr> <td>Notice to Proceed</td> <td>07/07/14</td> <td>07/07/14</td> <td>Complete</td> </tr> <tr> <td>Construction complete</td> <td>04/17/21</td> <td>05/03/21</td> <td>2</td> </tr> <tr> <td>Revenue Service Date</td> <td>06/30/21</td> <td>07/16/21*</td> <td>2</td> </tr> </tbody> </table> <p>Note: *The project is reflecting an approximate seven-month delay to the RSD due to differing site conditions related to underground utilities.</p>			Activity	Prior Period	Current Plan	Variance Weeks	Notice to Proceed	07/07/14	07/07/14	Complete	Construction complete	04/17/21	05/03/21	2	Revenue Service Date	06/30/21	07/16/21*	2																								
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<b>AREAS OF CONCERN</b>		<b>CRITICAL ACTIVITIES / 3 MONTH LOOK AHEAD</b>																																										
<ul style="list-style-type: none"> <li>• Schedule mitigation measures are being implemented across the alignment to address continuing and new delays precipitated by utility relocations. Major street and intersection closures are being coordinated with LADOT, LABOE, and Council District 14 to facilitate construction plans and schedules. Additionally, Metro and RCC are coordinating with DWP and third party utility owners on utility design and relocation issues along Flower, Broadway, Alameda and 2nd Streets to advance construction fronts at these locations.</li> <li>• Schedule recovery measures not withstanding, schedule float and flexibility is minimal; opportunities for improvement continue to be reviewed.</li> <li>• Delays and reduced productivity along Flower St. continue to be experienced; work hour and access constraints are driving causes.</li> <li>• Methods of supporting the existing DWP vaults and duct banks at 6th/Flower are being investigated to minimize relocation requirements and resulting schedule impacts.</li> </ul>		<ul style="list-style-type: none"> <li>• 100% design packages for all three stations, bored tunnel, SEM cavern and systems; review of the related AFCs</li> <li>• Excavate and install walers, struts, cap beams and decking for Wye</li> <li>• Install deck beams at 2nd/Broadway intersection</li> <li>• Decking installation on Flower, north of 5th St.</li> <li>• Tie-back removal pit activities to be initiated</li> <li>• Secure Sunday work variance for Flower St operations</li> <li>• Resolve Fire Life Safety (FLS) issues including emergency ventilation design and egress</li> <li>• Reconcile path-forward for schedule and costs</li> </ul>																																										
<b>ROW ACQUISITION</b>	<b>PLAN</b>	<b>CERTIFIED</b>	<b>ACQUIRED</b>	<b>REMAINING</b>																																								
PERMANENT PARCELS	5	5	4	1*																																								
TEMPORARY PARCELS	29	16	14	2*																																								
<b>TOTAL PARCELS</b>	<b>34</b>	<b>21</b>	<b>18</b>	<b>3</b>																																								
* Remaining parcels are scheduled in-advance of need dates.																																												

## **PROJECT OVERVIEW & STATUS**

The Regional Connector Transit Corridor Project (Project) will link the current terminus of the Blue and Expo Lines at 7th/Metro Center to the Gold Line near the Little Tokyo/Arts District Station in a new underground alignment along Flower Street and Second Street in Downtown Los Angeles. The Project is scheduled to become operational in two phases: one to tie into the existing Eastside Gold Line along 1st Street; and subsequently to the existing Gold Line to Pasadena along Alameda Street toward Union Station. Revenue Service Date (RSD) is forecasted for *July 2021* (FFGA planned RSD is May 2021).

The alignment will extend underground from the 7th Street/Metro Center Station under Flower Street to 2nd Street. It will then proceed east underneath the 2nd Street tunnel to just west of Central Avenue where the alignment will veer northeast under privately-held property, Japanese Village Plaza. At 1<sup>st</sup> Street and Central, the tracks continue underground heading northeast under 1<sup>st</sup> and Alameda Streets. A junction (“Wye”) will be constructed beneath the 1st and Alameda intersection. To the north and east of the junction, trains will rise to the surface through two new portals to connect to the Metro Gold Line heading north to Pasadena and east to Atlantic Boulevard. One portal will be located northeast of the Little Tokyo/Arts District Station and tracks. This portal will rise to the north within the City of LA DWP Maintenance Yard and connect to the existing LRT bridge over the US-101 freeway, allowing a connection to the Metro Gold Line to Pasadena. The portal will be connected to the 1st and Alameda junction by a new cut and cover box structure crossing beneath Temple Street and the parcel on the northeast corner of 1st and Alameda Streets, running immediately east of the existing Little Tokyo/Arts District Station and tracks. The second portal will be located within 1st Street between Alameda and Vignes Streets. Tracks will rise to the east within this second portal and connect at-grade to the existing Metro Gold Line tracks toward Atlantic Boulevard.

### **Major Contract Procurement**

The Board authorized to solicit a major Design/Build (D/B) contract, C0980, in August 2011. Metro staff recommended to award contract C0980 to the Regional Connector Constructors (RCC), a joint venture of Skanska USA Civil West California District, Inc. and Traylor Brothers, Inc. and Metro Board authorized award of the contract on April 24, 2014 in the amount of \$927,226,995; Notice to Proceed (NTP) to Design Builder, Regional Connector Constructors, issued July 7, 2014. Solicitation of an Advanced Utility Relocations Contract, C0981R, completed February 2014 after Metro’s Procurement team awarded the contract to Pulice Construction, Inc. in January 2014 and issued NTP on February 18, 2014. Contract C0981R was terminated for convenience on April 14, 2015 and remaining AUR work has been transferred to C0980, D/B contractor.

## **PROJECT OVERVIEW & STATUS (Cont.)**

### **Construction**

Excavation and related structural support remained the prominent work activities throughout the alignment with said action seen at the Mangrove Yard, “Wye”, guideways along 1st and Flower Streets, as well as the 2nd/Hope and 1st/Central Stations. Offsite tunnel liner castings also advanced to 78% along with continuing mobilization efforts related to the TBM. Placement of settlement monitoring instrumentation continued at Japanese Village Plaza in Little Tokyo and along 2nd Street adjacent to the large LA County Flood Storm Drain. Water relocations continued along the south end of Flower Street as did power relocation and protection efforts around the 2nd/Broadway Station area.

### **Systems**

The existing functional operations at the Rail Operations Center (ROC) necessitate an expansion to accommodate the central control functions associated with five new rail lines and extensions including the Regional Connector Transit Corridor Project. Design for the ROC Reconfiguration Project was completed to reconfigure the second floor to prepare for Expo II and Foothill Rail Line extensions, and the design will be further updated with each successive integration of the Crenshaw/LAX, Regional Connector and Purple Line projects.

### **Light Rail Vehicle**

Four Light Rail Vehicles (LRVs) for the Project will be procured and delivered by Kinkisharyo International, LLC under Contract P3010. The base contract includes 235 LRVs and options which will add up to 157 LRVs to the total. The four LRVs for the Regional Connector Project are currently in Option 2 of the P3010 Contract. Manufacturer continued performing qualification and post shipment tests on prototype cars 1 and 2 at LACMTA’s Green Line shop.

### **Program Management**

The current budget was established in the December 2015 session of the Metro Board. The Board revised the Life-of-Project (LOP) budget of \$1.559 billion (this includes Finance Charges) for the RCTC Project No. 860228 and maintained the LOP budget of \$39,991,168 for RCTC Project No. 861228 for Concurrent Non-FFGA Project activities.

Funding for the project comes from a variety of sources to include Federal New Starts, TIFIA Loan, State repayment of capital project loan, State Proposition 1B, State proposition 1A (High Speed Rail), local agency and lease revenues, and from the Congestion Mitigation and Air Quality Improvement Program. The bulk of the funding - 56% - comes from federal sources.

## **PROJECT OVERVIEW & STATUS (Cont.)**

Project commitments through *July* 2016 increased by \$34.2 million to \$1.38 billion or 88.3% of the Current Budget. The increase *reflects the Board adopted FY17 budget*. Project expenditures through *June* 2016 are \$588.2 million or 37.7% of the budget. The expenditures to date are for engineering management, construction management support services, third party utility relocation work, agency administration, design build contract (C0980), right-of-way, various master cooperative agreements, and other professional services.

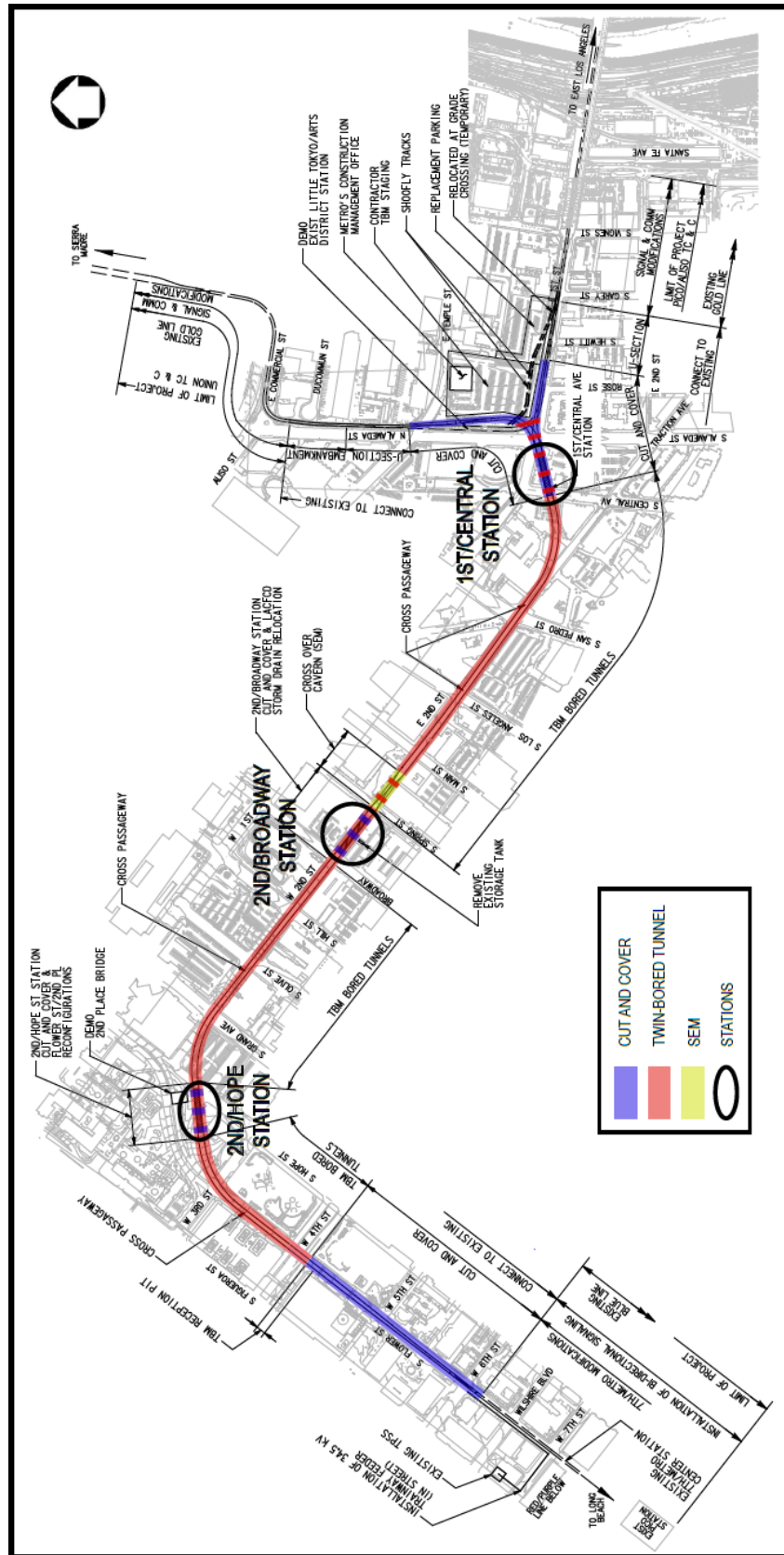
The project master schedule forecasts July 2021 for Revenue Service, which will be executed in two phases. Phase I Revenue Service Date to Eastside is in March 2021 and Phase II Revenue Service Date to Pasadena is in July 2021.

A comprehensive risk register is reviewed and updated on a monthly basis for the current phase of the project. Risk Management reporting will continue to be on a quarterly basis. Metro is targeting an updated risk register in August 2016.

## **MANAGEMENT ISSUES / OPPORTUNITIES**

<b><u>Concern No.1:</u></b>	Utility relocations have been delayed, impacting RCC's schedule.
<b>Status/Action</b>	Metro and RCC are collaborating on a schedule plan which includes significant re-sequencing of work and additional measures to complete the project expeditiously. Elements of this plan are dependent upon obtaining various street closures for station and guideway construction. Approvals of such closures are being vigorously pursued.
<b><u>Concern No. 2:</u></b>	Approvals of multiple traffic control plans may impact construction progress at Flower Street.
<b>Status/Action</b>	Metro is working with RCC, LADOT and BOE to actively expedite submissions, quality reviews, and approvals of required plans.
<b><u>Concern No. 3:</u></b>	Delays and reduced productivity along Flower St. continue to be experienced; work hour constraints and permit processing are driving causes.
<b>Status/Action</b>	Metro is aggressively pursuing work hour variance for Sunday piling work and 55-hour weekend closures for decking work.
<b><u>Opportunity No. 1:</u></b>	Metro is working with RCC and Operations to identify alternate sequencing to complete the Wye construction and commissioning earlier, while minimizing bus bridge durations.

# PROJECT ALIGNMENT



## **BASE PROJECT SCOPE**

### **Engineering**

This phase consists of Preliminary Engineering (PE), Advanced PE (APE) and Final Design. During Preliminary Engineering, the Design Consultant, CPJV, was responsible for engineering, design, and development of fixed facilities, stations, guideways, tunnels, and related facilities for the Project to a level sufficient to provide the basis for final design. CPJV was also responsible for documentation necessary to support the Environmental Assessment process and the engineering and final design for advanced utility relocations.

Alignment modifications and Value Engineering were developed during Advanced PE to accommodate environmental mitigations and further develop the design to better accommodate rail operations and reduce the cost of the Project. PE and APE were completed in March 2013.

Final design for advanced utility relocations performed by Metro and Engineering Design Consultant was completed during Advanced PE and it included DWP water and power lines as well as City of LA sewer lines. AUR final design for other utilities was performed by individual utility companies. The balance of Final Design is being performed by the D/B Contractor Team as part of the C0980 Contract.

### **Metro Furnished Equipment**

Metro is procuring Light Rail Vehicles and Universal Fair System (UFS) equipment. Four Light Rail Vehicles for the Project will be procured and delivered by Kinkisharyo International, LLC under Option 2 of Contract P3010. The vehicles will be tested and accepted at the Gold Line Yard and put in service when the line is open for Revenue Service. UFS equipment will be designed, fabricated and installed under a Metro contract.

### **Construction**

The scope of work in this phase is performed by third party utility companies and Design Build (C0980) Contractor as follows:

#### **Third Party Advanced Utility Relocations**

A number of utility owners have already relocated many of their assets and will continue to do so through early 2017. The utilities include fiber optic, telephone, cable television, electrical (power cable pulling and splicing), and natural gas lines. Utility work started in late 2012 at the following locations:

- Flower Street cut-and-cover tunnel box
- 2<sup>nd</sup>/Hope Station box area
- 2<sup>nd</sup>/Broadway Station box area
- 1<sup>st</sup>/Central Station box area and Wye Structure

## **BASE PROJECT SCOPE (Cont.)**

### **Contract C0980 Regional Connector Design Builder**

This is the largest construction contract of the project that includes: final design and construction of underground guideway; station structures; miscellaneous underground structures; trackwork; traction power; overhead conductor rail; train control; communications; and all electrical and mechanical equipment and testing. The contractor will restore the Mangrove site and impacted streets to their previous condition at the end of the project.

The design-build contractor also has to meet sensitive noise and vibration standards at Disney Music Hall and the Colburn Music School, control subsidence along the alignment, and meet various other requirements for the various stakeholders along the alignment. This contract was awarded May 6, 2014 and NTP was issued July 7, 2014. Metro has exercised several contract options as well adding the remaining Advanced Utility Relocation work (C0981R Contract) to the C0980 Contract.

### **Contract C0981R Regional Connector Advanced Utility Relocations**

Metro awarded the design-bid-build Advanced Utility Relocations Contract (Metro Contract No. C0981R) to Pulice Construction, Inc. to complete specific relocations at each of the future stations and along Flower Street in advance of the main D/B Contract C0980. The relocated utilities were long-lead construction tasks that were known to conflict with cut and cover excavations.

The scope of this work included the following relocations: LADWP water lines, LADWP power lines, and City of Los Angeles sewer lines. Metro assisted the contractor in obtaining exemptions as necessary for the City of LA nighttime work as well as for Peak Hour work hours.

Contract C0981R was terminated for convenience on April 14, 2015 and all remaining work was transferred to C0980 Contract. Contract C0981R was closed out and final payment processed.

### **Contract MCO70 – Construction Management Support Services**

Metro awarded the contract for Construction Management Support Services (CMSS) to ARCADIS, Inc. ARCADIS Project Manager and other staff are co-located with Metro at the Integrated Project Management Office (IPMO) located at the Mangrove site. Additionally, the Metro Board approved a contract modification for Arcadis to fund services through FY 2017.

## **BASE PROJECT SCOPE (Cont.)**

### **Contract E0119 – Preliminary Engineering And Design Support Services During Construction**

Metro awarded this contract to The Connector Partnership, a joint venture between AECOM, Inc. and Parsons Brinkerhoff (CPJV). CPJV provided preliminary engineering services to support the EIR/EIS, prepared project definition documents for Contract C0980, and prepared the basis for final design development for Contract C0981. CPJV is currently performing design support during construction (DSDC) for the C0980 contract. Action to extend funding through FY17 was approved by the Metro Board on May 26, 2016.

**KEY MILESTONES SIX- MONTH LOOK AHEAD**

	Milestone Date	July-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
LADWP : Complete Phase 1 Power Intercepts and Cable Pulling at 2nd/Broadway	07/12/16	△					
MTA : Approve AFC Traction Power Design Submittal	07/18/16	◆					
D/B : Initiate Pile/ & Beams at 2nd/Broadway West Hammer Head	07/18/16	⬡					
D/B : Submit AFC Floating Slab Design Submittal	07/25/16	⬡					
D/B : Initiate CIP Invert at 1st/Central Station Box	07/27/16	⬡					
LABOE : Approve 2nd/Broadway SOE Design Submittal	07/28/16	⬡					
MTA : Complete 3rd Party Utility Relocation on 5th Street (Flower)	07/29/16	▽					
2nd/Broadway Station Package - 100% Design Submittal	08/03/16		⬡				
1st/Central Station Package - AFC Submittal	08/05/16		⬡				
DU03A SEM/Crossover - AFC Submittal	08/15/16		⬡				
2nd/Hope Station Package - AFC Submittal	08/15/16		⬡				
Complete Temp Decking at 2nd/Broadway West Hammer Head	09/19/16			⬡			
Complete WYE Temp Decking (WTCP Stage 2.3)	09/23/16			⬡			
Complete 2nd/Broadway DWP Power Intercepts and Cable (Phase 2)	09/30/16			△			
Complete WYE Intersection Excavation	09/30/16			⬡			
End of 2nd/Broadway Intersection Full Closure (Extended)	10/01/16				⬡		
Approve 2nd St Mid Block Closure (4 Months)	10/01/16				△		
2nd/Broadway Station Package - AFC	10/03/16				⬡		
Start Flower Street Decking (North of 5th)	10/08/16				⬡		
Civil Segment A (Flower to Hope) - 85% Design Submittal	10/14/16				⬡		
Complete WYE / TBM Launch Pit CIP Invert	10/18/16				⬡		
TBM Lowering Ceremony	10/19/16				◆		
Civil Segment B (Broadway to 1st/Central) - 85% Design	11/11/16					⬡	
Start Flower St Excavation (North of 5th)	12/12/16						⬡
Civil Segment A (Flower to Hope) - 100% Design	12/28/16						⬡



MTA Staff



MTA Board Action



FTA (Federal Transit Administration)



Utility Company



Other Agencies



Contractors



Design Consultant

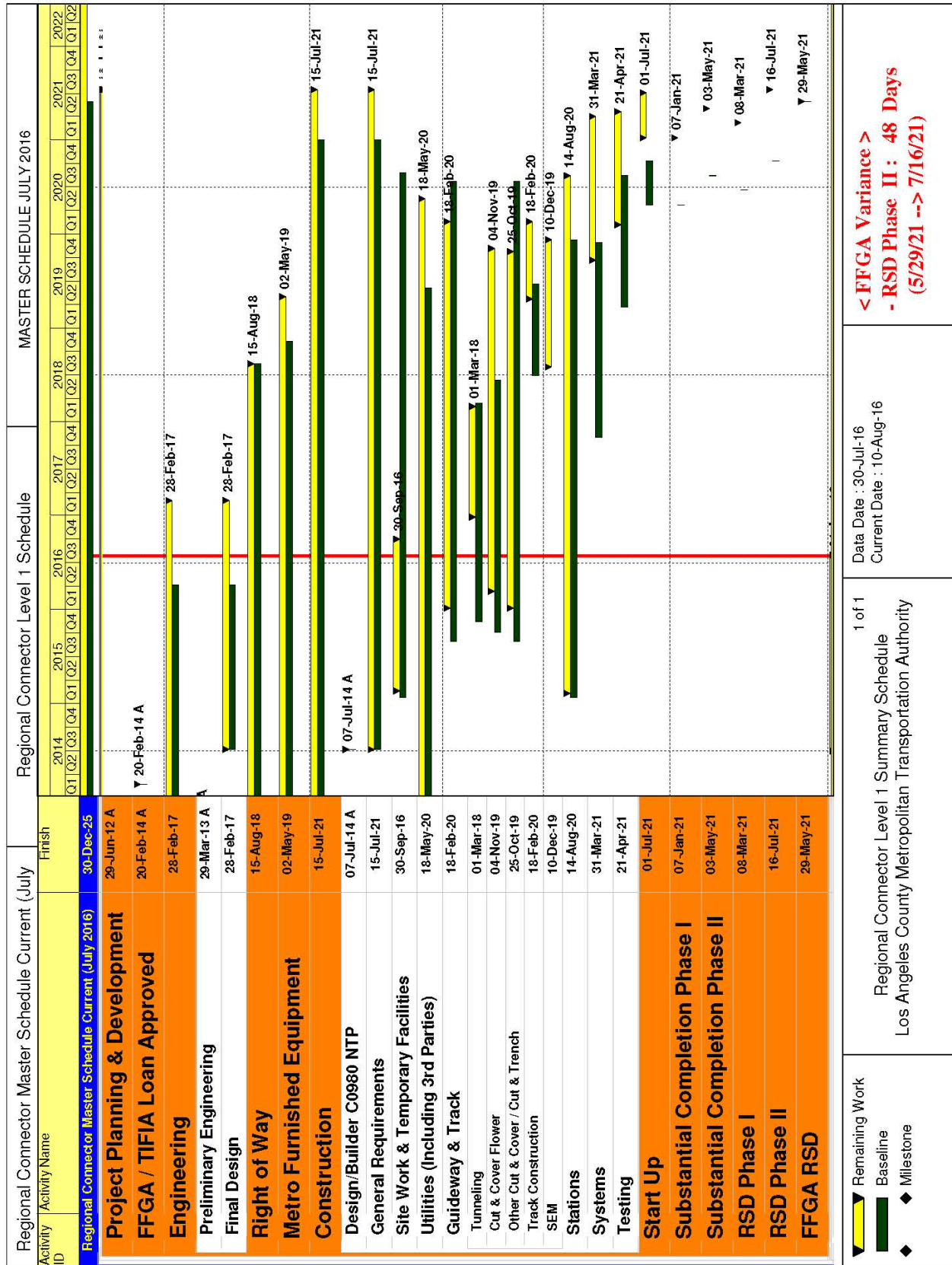


C0980 D/B Contractor

\* New

"A" following date is actual and completed

# PROJECT SUMMARY SCHEDULE



<FFGA Variance >  
 - RSD Phase II : 48 Days  
 (5/29/21 --> 7/16/21)

Data Date : 30-Jul-16  
 Current Date : 10-Aug-16

1 of 1  
 Regional Connector Level 1 Summary Schedule  
 Los Angeles County Metropolitan Transportation Authority

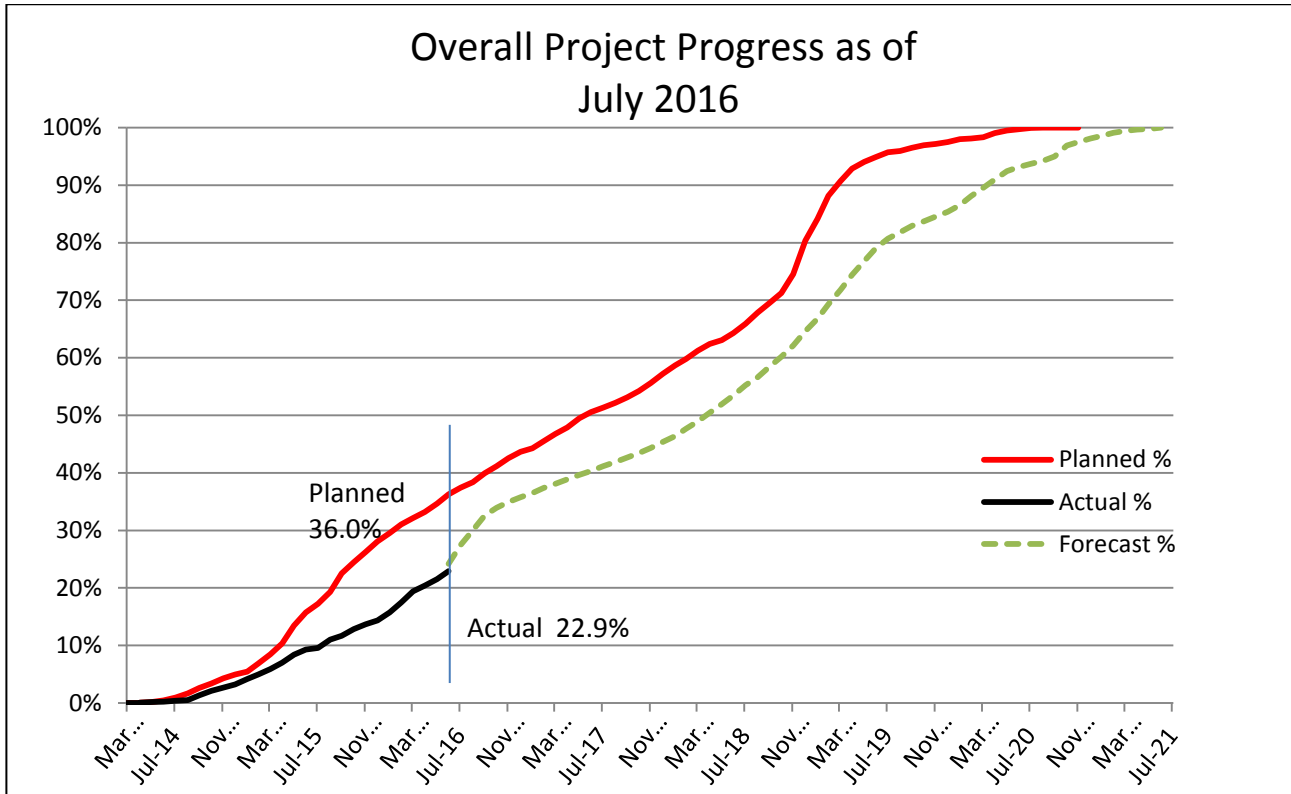
Remaining Work  
 Baseline  
 Milestone

**SCHEDULE MEASUREMENTS**

	<b>Status</b>	<b>Change from Last</b>	<b>Comment</b>
Forecast Revenue Service	7/16/2021	16 CD	Schedule Recovery Measures and Acceleration plans are being implemented
TIFIA Revenue Service	5/29/2021	None	
FFGA Revenue Service	5/29/2021	None	
<b>Final Design Progress :</b>			
Contract C0980	93.4%	0.1%	10 months Behind
<b>Construction Contracts Progress :</b>			
Contract C0981R & C0980	17.7%	1.4%	7 months behind (Compared to the Contract Substantial Completion)

**Note:** Method of Construction Progress Measurement has been modified to reflect current methodology: excluding all General Requirements, Construction Mobilization, Design Mobilization, Final Design and Provisional Sum (Schedule C) including executed Modifications and change orders.

**PROJECT PROGRESS STATUS**



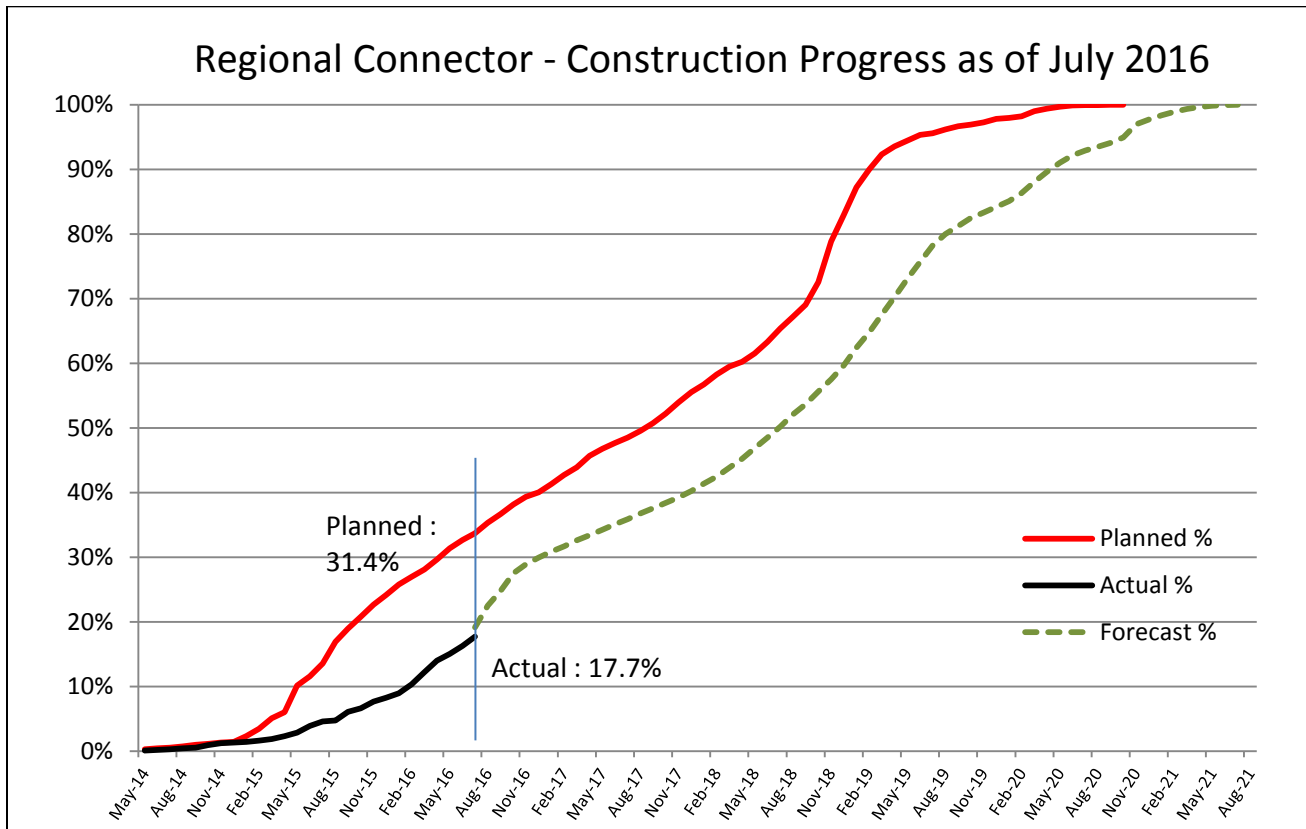
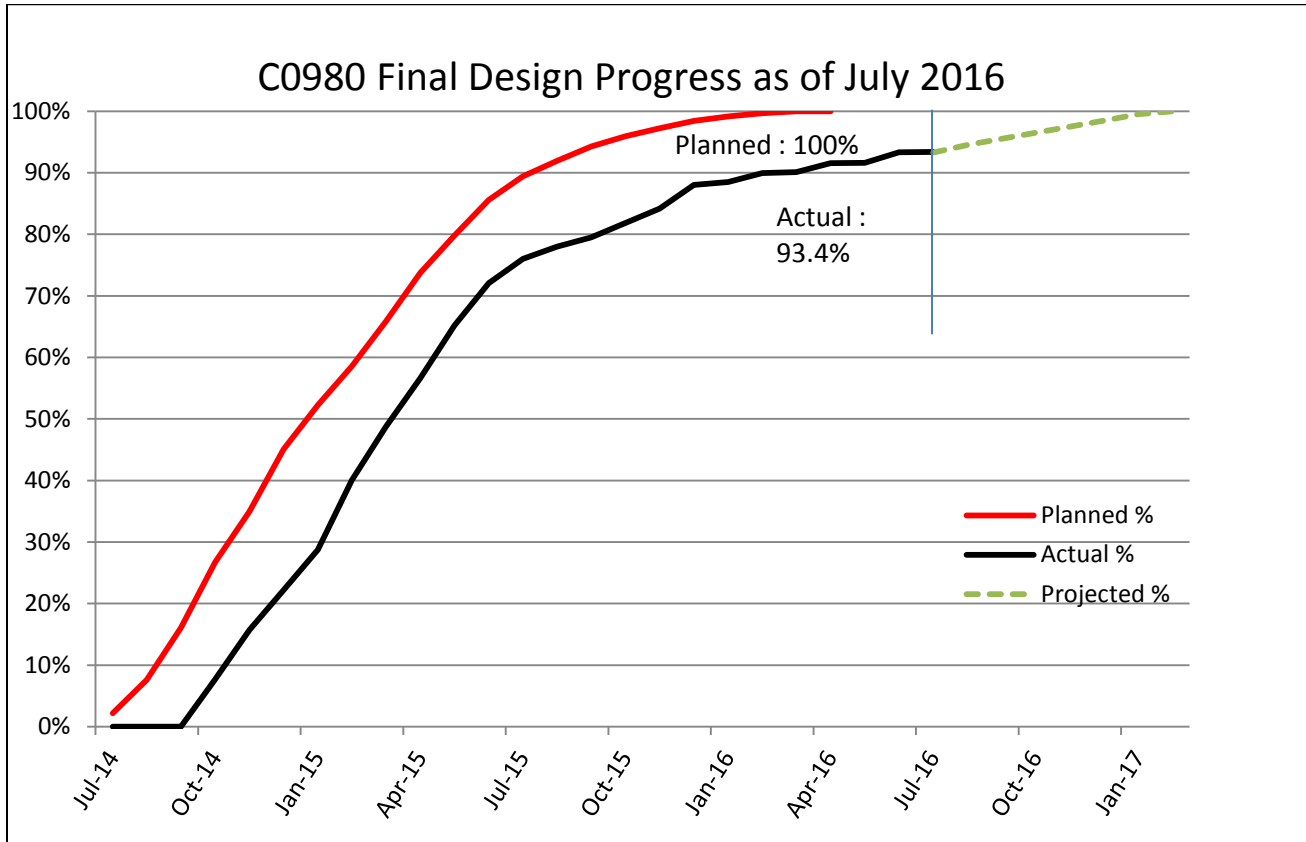
The above progress curve is based on planned expenditures of C0980 (Design-Build and C0981 (AUR) Baseline Schedule against their actual expenditures.

The cumulative overall project progress for C0980 and C0981R Contract is 22.9%.

Final Design for C0980 commenced upon MTA issuing NTP on July 7, 2014. Cumulative final design progress is 93.4% and the cumulative construction progress is 17.7%.

**Note:** Method of Overall Project Progress Measurement was modified in January 2016 to reflect current methodology: excluding all General Requirements, Construction Mobilization, Design Mobilization and Provisional Sum (Schedule C) including executed Modifications and change orders.

**PROJECT PROGRESS STATUS (Cont.)**



## **MAJOR EQUIPMENT DELIVERY STATUS**

### **Tunnel Boring Machine**

RCC, the design-builder for C0980, has designed, procured and delivered the tunnel boring machine (TBM) and equipment.

The TBM is currently at a temporary storage site where assembly preparations are underway.

### **Light Rail Vehicles**

Four Light Rail Vehicles (LRVs) for the Project will be procured and delivered by Kinkisharyo International, LLC under Contract P3010. The four LRVs for the Regional Connector Project are currently in Option 2 of the P3010 Contract. LRV design and design reviews as well as manufacturing of the prototype vehicles continued this period. Manufacturer continued performing qualification and post shipment tests on prototype cars 1 and 2 at LACMTA's Green Line shop.

### **UFS (Universal Fare System) & TVM (Ticket Vending Machines)**

Procurement of UFS and TVM will commence after the design-builder completes the final design. Metro is coordinating with RCC for installation and testing schedules.

**DESIGN-BUILDER'S (C0980) LONG LEAD ITEM LIST**

<b>Activity Name</b>	<b>Early Finish</b>	<b>Need Date</b>
FAB/DELIVER DECK BEAMS - 2ND/BROADWAY	5-Mar-16	4-May-16
FAB/DELIVER SHORING BEAMS - 2ND/BROADWAY	19-Feb-16	9-Nov-16
FAB/DELIVER SHORING BEAMS - 2ND/HOPE	19-Feb-16	18-May-16
FAB/DELIVER SHORING BEAMS - FLOWER ST	19-Feb-16	15-Mar-16
FAB/DELIVER PIPE STRUTS - 1ST/CENTRAL	15-Jan-16	19-Jan-16
FAB/DELIVER PIPE STRUTS - MANGROVE LAUNCH PIT	11-Feb-16	23-Jun-16
PROCURE PLATE PURCHASE ORDER	25-Apr-16	16-Dec-16
VERIFIED ASSEMBLY / TEST OF TBM AT FABRICATION SHOP	22-Jan-16	27-May-16
PROCURE PIPE SPECIALTY STORM DRAIN PIPE PURCHASE ORDER	15-Sep-16	12-Mar-20
PROCURE PIPE (PVC) PURCHASE ORDER	28-Mar-16	29-Apr-16
PROCURE PIPE (VCP) PURCHASE ORDER	28-Mar-16	29-Apr-16
FAB/DELIV OCS POLES / EQUIPMENT - SHOOFLY	5-Jan-16	29-Jan-16
FAB/DELIV TRAIN CONTROL CABLE - SHOOFLY	4-Jan-16	25-Jan-16
PROCURE PRECAST COMM STRUCTURE PURCHASE ORDER	10-Mar-16	12-Dec-19
PROCURE PLUMBING SUBCONTRACTOR	10-Mar-16	11-Aug-16
FAB/DELIVER WALES - 2ND/BROADWAY	26-Feb-16	1-May-16
FAB/DELIVER PIPE STRUTS - 2ND/BROADWAY	26-Feb-16	1-May-16
FAB/DELIV TBM MACHINE TO SITE	21-Feb-16	22-Aug-16
PROCURE BALLASTED TRACK - NORTH ALAMEDA LEG	20-Jul-16	9-Feb-21
PROCURE NEW 115RE RAIL - STANDARD RAIL	26-May-16	12-Aug-19
PROCURE NEW 115RE RAIL - HIGH STRENGTH RAIL	26-May-16	12-Aug-19
PROCURE RAIL - JOBWIDE	26-May-16	12-Aug-19
PROCURE SPECIAL TRACK - JOBWIDE	26-May-16	4-Oct-19
VERIFIED TBM SHIPPED TO SITE	22-Feb-16	23-Aug-16
FAB/DELIVER WALES - FLOWER ST	8-Apr-16	12-Jun-16
FAB/DELIVER PIPE STRUTS - FLOWER ST	8-Apr-16	12-Jun-16
FAB/DELIVER DECK BEAMS - FLOWER ST	9-May-16	8-Jul-16
FAB/DELIV OCS POLES / EQUIPMENT	14-Aug-17	17-Dec-19
FAB/DELIV OCR FOR TUNNEL	14-Aug-17	20-Jan-20
PROCURE MSE PANEL PURCHASE ORDER	1-Jul-16	3-Dec-20
PROCURE REBAR - FLOWER ST C/C	5-May-16	3-Jul-18
PROCURE HDPE - FLOWER ST C/C	5-May-16	15-Jun-18
**PROCURE RAIL - FLOATING SLAB MATERIALS	29-Jul-16	1-Aug-19
FAB/DELIVER WALES - 2ND/HOPE	20-May-16	24-Jul-16
FAB/DELIVER PIPE STRUTS - 2ND/HOPE	20-May-16	24-Jul-16
FAB/DELIV LIGHT FIXTURES - CENTRAL STA	5-Aug-16	15-Apr-20
FAB/DELIV EDGE LIGHTING - CENTRAL STA	3-Oct-16	20-Feb-20
FAB/DELIV GLAZING SPIDERS - ALL STATIONS	12-Sep-16	6-Apr-20
PROCURE LANDSCAPING SUBCONTRACTOR	5-Oct-16	18-Jun-20
FAB/DELIV LIGHT FIXTURES - BROADWAY STA	14-Nov-16	15-Apr-20
FAB/DELIV EDGE LIGHTING - BROADWAY STA	13-Jan-17	26-May-20
FAB/DELIV LIGHT FIXTURES - HOPE STA	21-Nov-16	22-Apr-20

**DESIGN-BUILDER'S (C0980) LONG LEAD ITEM LIST (Cont.)**

<b>Activity Name</b>	<b>Early Finish</b>	<b>Need Date</b>
FAB/DELIV EDGE LIGHTING - HOPE STA	20-Jan-17	26-May-20
PROCURE ARCHITECTURAL PRECAST PAVER SUBCONTRACTOR	21-Nov-16	6-Mar-20
PROCURE GRANITE STONework SUBCONTRACTOR	21-Nov-16	29-Jun-20
PROCURE MASONRY SUBCONTRACTOR	21-Nov-16	9-Sep-19
PROCURE PRECAST STRUCTURAL ELEMENTS SUBCONTRACTOR	21-Nov-16	7-Apr-20
PROCURE ARCHITECTURAL CONCRETE PAVING SUBCONTRACTOR	21-Nov-16	23-Mar-20
PROCURE DOORS & HARDWARE SUBCONTRACTOR	21-Nov-16	9-Jan-20
PROCURE DRYWALL & FRAMING SUBCONTRACTOR	21-Nov-16	30-Jun-20
PROCURE ESCALATORS SUBCONTRACTOR	21-Nov-16	25-May-18
PROCURE FIRE PROTECTION SUBCONTRACTOR	21-Nov-16	6-Nov-18
PROCURE FLOORING SUBCONTRACTOR	21-Nov-16	23-Jul-20
PROCURE GLAZING SUBCONTRACTOR	21-Nov-16	16-Mar-20
PROCURE HVAC SUBCONTRACTOR	21-Nov-16	18-Oct-19
PROCURE METAL CEILING SUBCONTRACTOR	21-Nov-16	27-Feb-20
PROCURE PAINT SUBCONTRACTOR	21-Nov-16	20-Feb-20
PROCURE SHEET METAL SUBCONTRACTOR	21-Nov-16	29-Apr-20
PROCURE SPRAY ON ACCOUSTICAL FINISH SUBCONTRACTOR	21-Nov-16	23-Jan-20
PROCURE STAINLESS STEEL SUBCONTRACTOR	21-Nov-16	8-Jan-20
PROCURE STATION SIGNS SUBCONTRACTOR	21-Nov-16	17-Jul-20
PROCURE STEEL (PERMANENT) SUBCONTRACTOR	21-Nov-16	12-Feb-20
PROCURE TERRAZZO SUBCONTRACTOR	21-Nov-16	10-Jul-20
PROCURE TILE SUBCONTRACTOR	21-Nov-16	24-Jan-20
PROCURE FLUID APPLIED WATERPROOFING SUBCONTRACTOR	21-Nov-16	23-Dec-19
PROCURE ELEVATORS SUBCONTRACTOR	21-Nov-16	22-Aug-18
FAB/DELIV EMERGENCY VENTILLATION FANS - CENTRAL (4)	30-Jun-17	13-May-20
FAB/DELIV EMERGENCY BOOSTER FANS (12)	30-Jun-17	20-May-20
FAB/DELIV EMERGENCY VENTILLATION FANS - BROADWAY (4)	30-Jun-17	13-May-20
FAB/DELIV EMERGENCY VENTILLATION FANS - HOPE (4)	30-Jun-17	13-May-20
ELEVATOR COORDINATION DRAWINGS - 1ST/CENTRAL	9-Feb-17	10-Nov-18
ESCALATOR COORDINATION DRAWINGS - 1ST/CENTRAL	9-Feb-17	13-Aug-18
**ASSEMBLY OF THE TBM AND BACKUP EQUIP / INST FIRST 10 RINGS	8-Dec-16	14-Nov-16
FAB/DELIV 2ND/HOPE TPSS	21-May-18	23-May-19
FAB/DELIV 2ND/HOPE UNIT SUBSTATION AND TRANSFORMER	25-Aug-17	13-Mar-20
FAB/DELIV 2ND/BROADWAY UNIT SUBSTATION AND TRANSFORMER	25-Aug-17	18-Feb-20
FAB/DELIV HIGH VOLTAGE DISCONNECT - 1ST & CENTRAL	29-Mar-17	6-Dec-19
FAB/DELIV TRAIN CONTROL CABLE	27-Dec-17	27-Dec-18
FAB/DELIV ELEVATORS - 1ST/CENTRAL	9-Feb-18	2-Dec-19
ELEVATOR COORDINATION DRAWINGS - 2ND/BROADWAY	30-Apr-17	29-Jan-19
ESCALATOR COORDINATION DRAWINGS - 2ND/BROADWAY	30-Apr-17	1-Nov-18
FAB/DELIV ESCALATORS - 1ST/CENTRAL	9-Feb-18	25-Jun-20
FAB/DELIV ELEVATORS - 2ND/BROADWAY	30-Apr-18	29-Jan-20

**DESIGN-BUILDER'S (C0980) LONG LEAD ITEM LIST (Cont.)**

<b>Activity Name</b>	<b>Early Finish</b>	<b>Need Date</b>
ELEVATOR COORDINATION DRAWINGS - 2ND/HOPE	19-Jul-17	23-Apr-19
FAB/DELIV ESCALATORS - 2ND/BROADWAY	30-Apr-18	15-Jan-20
ESCALATOR COORDINATION DRAWINGS - 2ND/HOPE	19-Jul-17	20-Jan-19
FAB/DELIV ELEVATORS - 2ND/HOPE	19-Jul-18	22-Apr-20
FAB/DELIV ESCALATORS - 2ND/HOPE	19-Jul-18	20-Jan-20
FAB/DELIV 2ND/BROADWAY TPSS	13-Feb-19	18-Feb-20
FAB/DELIV TRAIN CONTROL EQUIPMENT	14-Jan-19	14-Jan-20

## CRITICAL PATH NARRATIVE

### Critical Path (C0980):

The current forecast to meet the Revenue Service Date is *July 16, 2021* and is *48* days behind the FFGA date of *May 29, 2021*. *The critical path slipped 2 weeks due to the fact that TBM Launching has been rescheduled to early January 2017 – after the holiday period.*

The critical path is currently running through the soldier pile and decking installation at the wye. The path continues through the Wye excavation and invert pour. Upon the completion of the critical activities at the Wye, the critical path continues through the tunnel excavations. *In conjunction with the Wye, TBM Retrieval Pit excavation and invert pour at Flower North between 4<sup>th</sup> and 5<sup>th</sup> Street is also critical. After TBM mining, the crossover SEM excavation and concrete at 2<sup>nd</sup>/Broadway will commence. Once the crossover structure is complete, the special track work installation will follow.* The critical path continues through systems installation and testing from 1<sup>st</sup>/Alameda to 7<sup>th</sup>/Flower, which will be followed by systems integration testing (Eastside Gold Line – Phase 1) and pre-revenue testing. Phase 1- Revenue Service to the Eastside Gold Line is forecast to be complete on *March 8, 2021*.

After Phase 1 Revenue Service is achieved, the critical path continues through the Alameda Street civil, structural, and systems work. Upon the completion of the systems work, the critical path continues through the systems integration testing (Pasadena Gold Line – Phase 2) and pre-revenue testing. Phase 2 – Revenue Service to the Pasadena Gold Line is forecast to be complete on *July 16, 2021*.

**PROJECT COST STATUS**

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	2,821	243,913	340	229,326	9,194	41,586	3,984	245,156	1,243
20	STATIONS, STOPS, TERMINALS, INTERMODAL	354,268	219,477	0	229,779	0	223,779	2,915	13,310	70	229,849	70
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	-4,114	527,333	15,904	494,253	7,938	271,440	-3,488	539,632	12,298
50	SYSTEMS	69,667	73,848	0	74,942	359	63,689	9	1,520	154	75,475	532
	CONSTRUCTION SUBTOTAL (10-50)	846,343	920,468	-1,292	1,075,968	16,603	1,011,047	20,057	327,855	720	1,090,112	14,144
60	ROW, LAND, EXISTING IMPROVEMENTS	115,889	74,208	0	82,704	293	74,151	22	46,317	0	82,704	0
70	VEHICLES	16,275	16,275	0	16,275	0	16,275	839	839	0	16,275	0
80	PROFESSIONAL SERVICES	261,455	257,973	1,600	277,299	17,318	248,195	9,115	188,368	4,056	279,409	2,110
	SUBTOTAL (10-80)	1,239,963	1,268,925	308	1,452,246	34,215	1,349,669	30,033	563,379	4,776	1,468,500	16,254
90	UNALLOCATED CONTINGENCY	135,399	126,892	-308	73,094	0	0	0	0	-4,776	56,841	-16,254
100	FINANCE CHARGES	27,571	7,115	0	7,115	0	0	0	0	0	7,115	0
	TOTAL PROJECTS 460228 & 860228 (10-100)	1,402,932	1,402,932	0	1,532,456	34,215	1,349,669	30,033	563,379	0	1,532,456	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	-1	20,425	85	18,777	0	20,425	0
	TOTAL PROJECTS 400228 & 460228 (EVN/PLAN'G)	0	24,200	0	26,500	-1	26,500	85	24,852	0	26,500	0
	400228, 460228, 860228 TOTAL	1,402,932	1,427,132	0	1,558,956	34,215	1,376,169	30,118	588,232	0	1,558,956	0

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH 06/30/2016

**PROJECT COST ANALYSIS – 860228**

**Original Budget:**

The Original Budget of \$1.427 billion reflects the Board approved Life-of-Project (LOP) budget on April 24, 2014 plus Finance Charges of \$7.1 million.

**Current Budget:**

The Board in December 2015 approved an increase to the Life-of-Project (LOP) budget of \$131.8 million to \$1,558.9 million. The new budget includes \$7.1 million Finance Charges. Budgets *have been assigned for Recovery Schedule modifications* under SCC 10 and 40 from *Allocated Contingency* and unallocated contingency.

**Commitments:**

The Commitments increased by \$34.22 million this period to \$1.38 billion which represents 88.3% of the Current Budget. The increase is due to *Board adopted FY17 budget*.

**Expenditures:**

The Expenditures are cumulative through *June* 2016. Expenditures increased by \$30.12 million this period for costs associated with C0980 Design Build contract, Engineering Management Support, Metro Project Administration, Construction Management Support Service, Legal Services, and Third Party Master Cooperative Agreements with the City of LA, Community Relations, ROW and Environmental Consultant Services. The \$588.23 million in expenditures to date represents 37.7% of the Current Budget.

**Current Forecast:**

The forecast includes pending modifications.

**PROJECT COST STATUS (Cont.)**

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	SITWORK & SPECIAL CONDITIONS	0	0	0	0	0	0	0	0	0	0
50	SYSTEMS	0	0	0	0	0	0	0	0	0	0
	<b>CONSTRUCTION SUBTOTAL (10-50)</b>	<b>10,480</b>	<b>0</b>	<b>10,480</b>	<b>0</b>	<b>10,480</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,480</b>	<b>0</b>
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	4	201	0	650	0
	<b>SUBTOTAL (10-80)</b>	<b>38,878</b>	<b>0</b>	<b>38,878</b>	<b>0</b>	<b>38,878</b>	<b>4</b>	<b>22,699</b>	<b>0</b>	<b>38,878</b>	<b>0</b>
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
	<b>TOTAL PROJECTS 861228 (10-100)</b>	<b>39,991</b>	<b>0</b>	<b>39,991</b>	<b>0</b>	<b>38,878</b>	<b>4</b>	<b>22,699</b>	<b>0</b>	<b>39,991</b>	<b>0</b>
	<b>861228 TOTAL</b>	<b>39,991</b>	<b>0</b>	<b>39,991</b>	<b>0</b>	<b>38,878</b>	<b>4</b>	<b>22,699</b>	<b>0</b>	<b>39,991</b>	<b>0</b>

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH 06/30/2016

**PROJECT COST ANALYSIS – 861228**

**Original Budget:**

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

**Current Budget:**

There is no change to the Budget for this period.

**Commitments:**

The Commitments reflect the Board approved Life-of-Project (LOP) budget on April 24, 2014 less the Unallocated Contingency of \$1.1 million. Right-of-Way (ROW) numbers shown under Commitment are the obligated numbers.

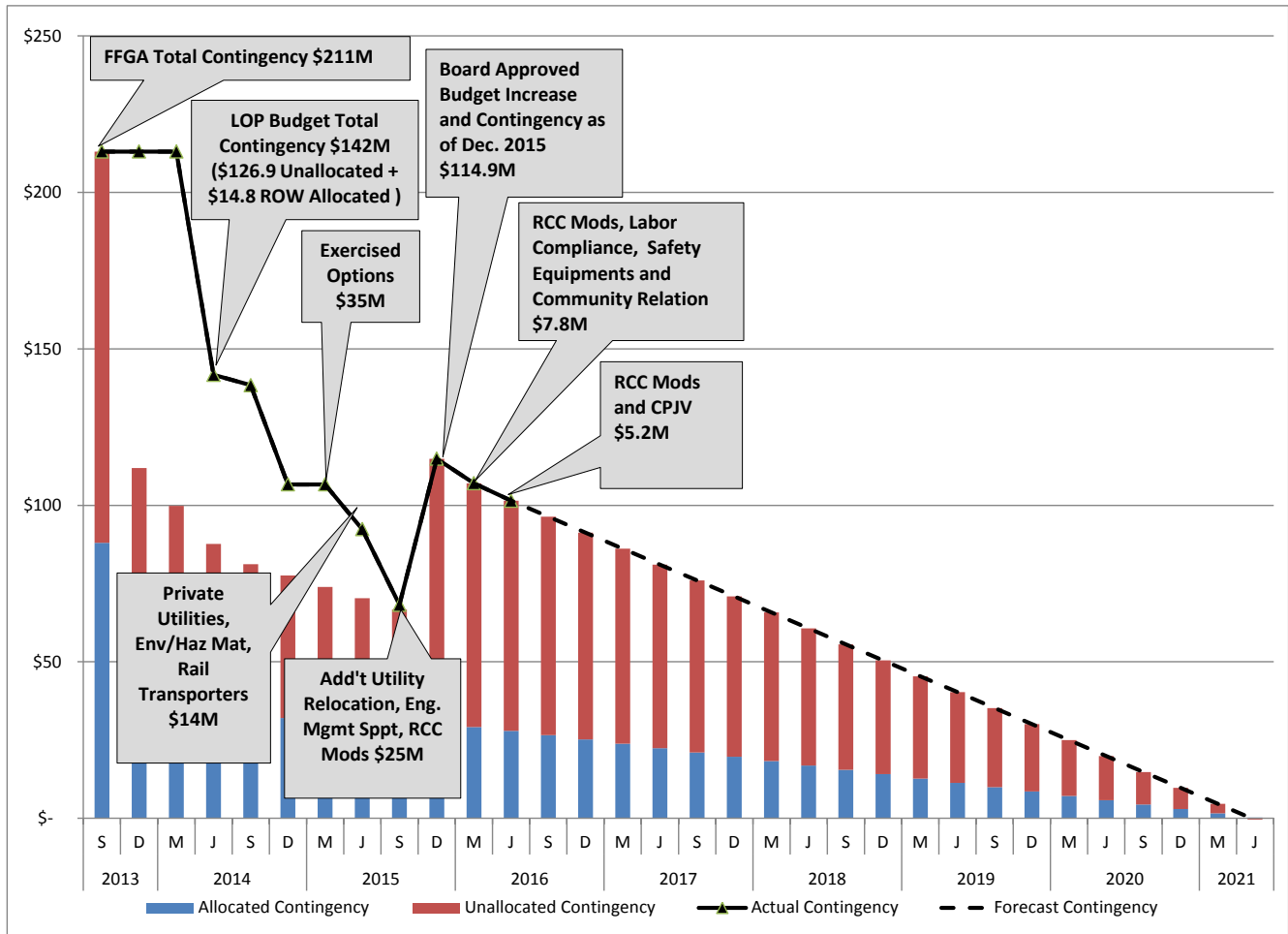
**Expenditures:**

The Expenditures are cumulative through *June* 2016. There was \$4k in Expenditures for this period. The \$22.7 million in expenditures to date represents 56.8% of the Current Budget.

**Current Forecast:**

There was no change to the Forecast for this period.

**COST CONTINGENCY DRAWDOWN**

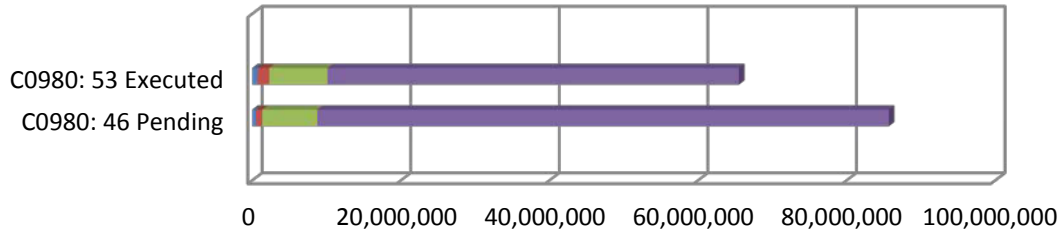


**COST CONTINGENCY DRAWDOWN ANALYSIS**

The Board in December 2015 approved an increase to the Life-of-Project budget of \$131.8 million. The Regional Connector Transit Corridor Project budget of \$1.56 billion reinstated the total project cost contingency to \$114.9 million, \$80.3 million in “unallocated contingency”, which is included as a separate Standard Cost Category (SCC) element and \$31.3 million in an “allocated contingency” to Design Build Contract, \$3.00 million allocated for Private Utilities, and \$0.25 million to Environmental Planning. This month there is a drawdown of \$0.62 million from the Design Build Contract: \$1.75 million from “allocated contingency” and \$308k from “unallocated contingency”. The remaining project cost contingency for July 2016 is \$99.3 million.

## SUMMARY OF CONTRACT MODIFICATIONS

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



	C0980		Total
	53 Executed	46 Pending	
■ Under \$100K	699,569	528,550	1,228,119
■ \$100K to \$250K	1,604,401	814,861	2,419,262
■ \$250K to \$1M	7,827,207	7,417,116	15,244,323
■ Over \$1M	55,370,692	76,914,222	132,284,914
<b>Total Contract MODs</b>	<b>65,501,869</b>	<b>85,674,749</b>	<b>151,176,618</b>
<b>Contract Award Amount</b>	<b>927,226,995</b>	<b>927,226,995</b>	
<b>% of Contract MODs</b>	<b>7.1%</b>	<b>9.2%</b>	

Note:

1. Percent of Contract MODs equals the Total Contract MODs divided by the Contract Award Amount.
2. Pending Mods are under negotiations.
3. Contract C0980 Pending Changes include \$65.84M budget (AUR transfer scope, delay and impact cost on recovery schedule). \$19.3M was committed with a remaining balance of \$46.5M

*Fifty-three (53)* changes with total value of \$65.50 million have been executed since NTP of Contract C0980. An additional *forty-six (46)* changes, with a total estimated value of \$85.67 million are pending.

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

### **Contract C0980 Regional Connector Transit Corridor Design-Build**

- DBE Goal – Design: 20%
- Current DBE Commitment - Design: \$11,303,360.03 (22.63%)
- Current DBE Participation: 23.21%
- Twelve (12) Design DBE sub-consultants have been identified to date
  
- DBE Goal – Construction: 18%
- Current DBE Commitment - Construction: \$157,068,359.10 (18%)
- Current DBE Participation: 18.82%
- Forty *eight* (48) Construction DBE sub-consultants have been identified to date

## **PROJECT LABOR AGREEMENTS (PLA) STATUS**

### **Contract C0980 Regional Connector Transit Corridor Design-Build**

- |  |          |
|--|----------|
| • Targeted Worker Goal -                     | 40.00%   |
| Targeted Worker Current Participation -      | 57.12%   |
| • Apprentice Worker Goal -                   | 20.00%   |
| Apprentice Worker Current Participation -    | - 19.62% |
| • Disadvantaged Worker Goal -                | 10.00%   |
| Disadvantaged Worker Current Participation - | 8.46%    |

**FINANCIAL/GRANT STATUS**

**Status of Funds Anticipated**

**July 2016**

<b>FEDERAL - CMAQ</b>	METRO SUBMITTED ON NOVEMBER 25, 2013 A GRANT APPLICATION OF \$64.0M TO THE FTA. GRANT APPROVAL WAS EXECUTED ON SEPTEMBER 24, 2014. FUNDS ARE AVAILABLE FOR DRAW DOWN
<b>FEDERAL - SECTION 5309 NEW STARTS</b>	METRO SUBMITTED ON NOVEMBER 25, 2013 A GRANT APPLICATION OF \$65.0 M TO THE FTA. GRANT APPROVAL WAS EXECUTED ON SEPTEMBER 23, 2014. METRO SUBMITTED ON JUNE 11, 2015 A GRANT AMENDMENT OF \$100M. GRANT AWARDED AUGUST 2015. FUNDS ARE AVAILABLE FOR DRAW DOWN METRO WILL SUBMITTED A GRANT AMENDMENT OF \$100M IN JULY 2016. GRANT EXPECTED TO BE EXECUTED IN AUGUST 2016.
<b>MEASURE R - TIFIA LOAN:</b> (Transportation Infrastructure Finance & Innovation Act)	A TIFIA LOAN AGREEMENT BETWEEN THE DEPARTMENT OF TRANSPORTATION AND METRO FOR \$160M WAS EXECUTED ON FEBRUARY 20, 2014. THE DISBURSEMENT OF \$61,864,368 WAS SPLIT INTO TWO PARTS. RECEIVED THE FIRST DISBURSEMENT OF \$25.2 MILLION 4TH QUARTER FY2016. THE REMAINING BALANCE WILL BE DISBURSED WITHIN THE 2ND QUARTER OF FY 2017.
<b>STATE PROP 1A HSRB</b>	ALLOCATION REQUEST OF \$114.9M TO THE CTC WAS SUBMITTED ON JUNE 27, 2013. ALLOCATION WAS APPROVED ON JULY 18, 2014. FUNDS HAVE BEEN DRAW DOWN.
<b>STATE PROP 1B PTMISEA</b>	ALLOCATION REQUEST OF \$135.1M WAS APPROVED ON APRIL 24, 2013. FUNDS ARE AVAILABLE FOR DRAW DOWN.
<b>CITY OF LA</b>	FUNDING AGREEMENT OF \$42M WITH THE CITY OF LA WAS APPROVED IN JUNE 2014. THE FIRST PAYMENT DRAWDOWN OF \$5.0M WAS IN JUNE 2016.

**Status of Funds by Source**

**July 2016**

SOURCE	(A)	(B)	(C)	(D)	(D/B)	(E)	(E/B)	(F)	(F/B)
	ORIGINAL BUDGET	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	\$	%	\$	%	\$	%
FEDERAL - CMAQ	\$64.000	\$64.000	\$64.000	\$64.000	100%	\$40.934	64%	\$40.934	64%
FEDERAL - SECTION 5309 NEW STARTS	\$669.900	\$669.900	\$165.000	\$669.900	100%	\$165.000	25%	\$165.000	25%
FEDERAL - RIP	\$0.000	\$14.400	\$0.000	\$14.400	100%	\$0.000	0%	\$0.000	0%
MEASURE R - TIFIA LOAN	\$160.000	\$160.000	\$25.209	\$160.000	100%	\$67.694	42%	\$67.694	42%
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	\$135.100	\$135.100	\$135.100	100%	\$123.786	92%	\$118.285	88%
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	\$284.730	\$284.730	\$210.305	74%	\$68.354	24%	\$68.354	24%
MEASURE R	\$27.571	\$7.115	\$0.000	\$0.000	0%	\$0.000	0%	\$0.000	0%
CITY OF LOS ANGELES	\$41.984	\$42.000	\$5.000	\$5.000	12%	\$5.000	12%	\$5.000	12%
LEASE REVENUE	\$64.247	\$64.247	\$0.000	\$0.000	0%	\$0.000	0%	\$0.000	0%
<b>TOTAL</b>	<b>\$1,427.132</b>	<b>\$1,558.956</b>	<b>\$796.503</b>	<b>\$1,376.169</b>	<b>88.3%</b>	<b>\$588.232</b>	<b>37.7%</b>	<b>\$582.731</b>	<b>37.4%</b>

EXPENDITURES ARE CUMULATIVE THROUGH JUNE 2016  
ORIGINAL BUDGET BASED ON FUNDING PLAN INCLUDED IN THE APPROVED FULL FUNDING GRANT AGREEMENT

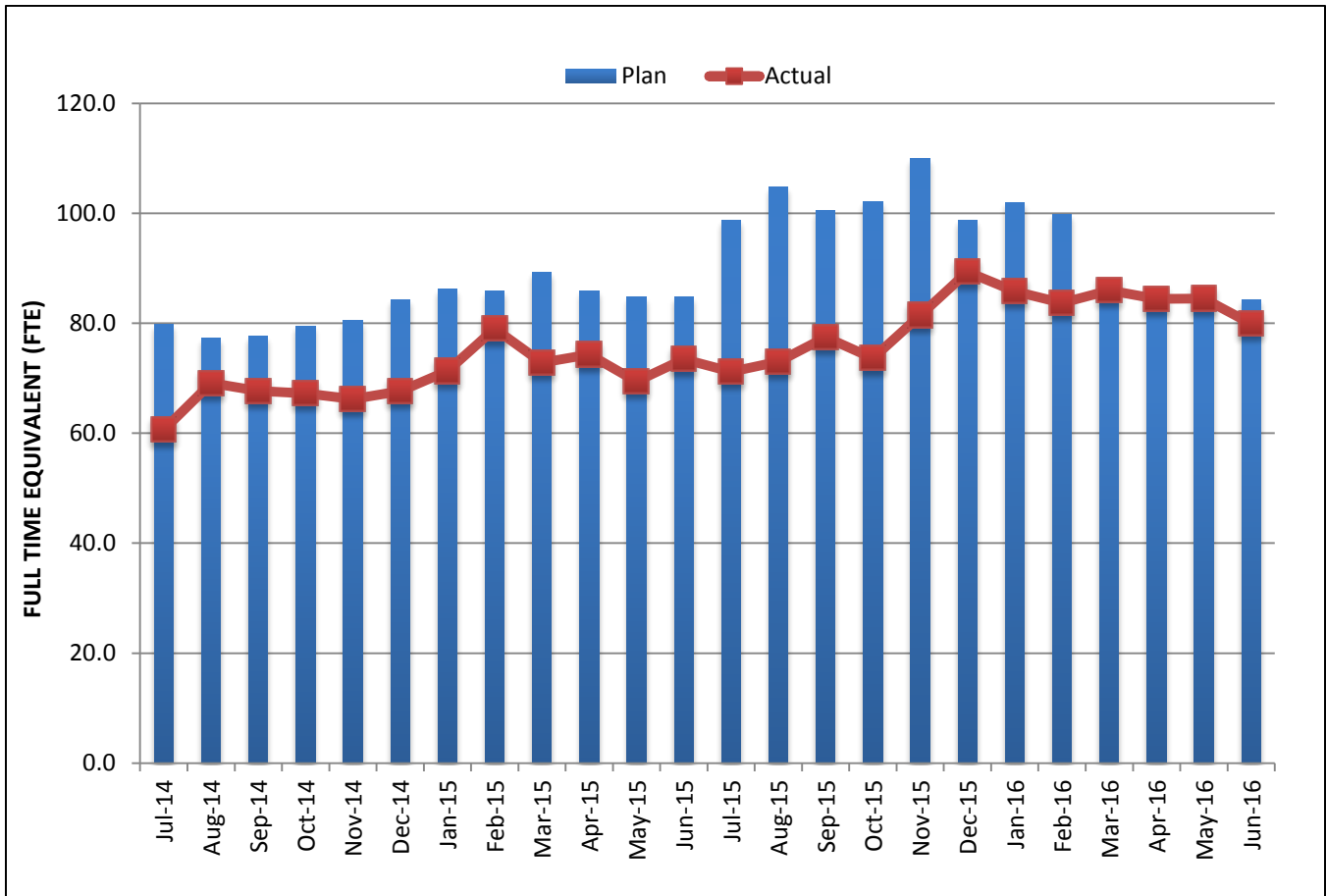
\* STATE PROPOSITION 1A HIGH SPEED RAIL BONDS

\*\* STATE PROPOSITION 1B PUBLIC TRANSPORTATION MODERNIZATION, IMPROVEMENT AND SERVICE ENHANCEMENT ACCOUNT

\*\*\* OTHERS INCLUDE TDA ADMINISTRATION, NB PROPOSITION A ADMINISTRATION, AND PROPOSITION 1B INTEREST (FOR A TOTAL OF \$ 318M)

## STAFFING STATUS

### TOTAL PROJECT STAFFING – METRO AND CONSULTANTS

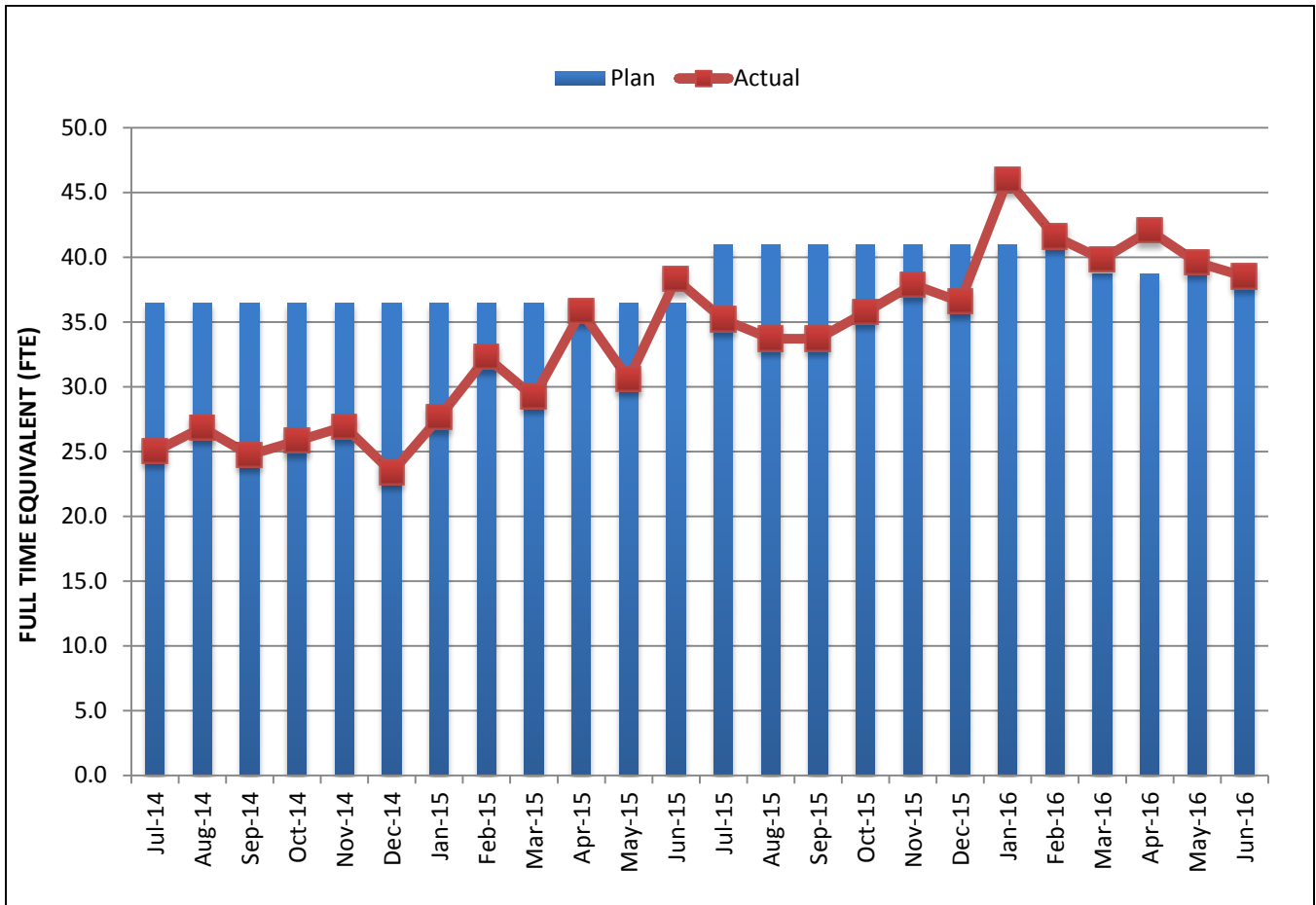


### TOTAL PROJECT STAFFING

The overall FY16 Total Project Staffing plan averages 96.2 FTE's per month.

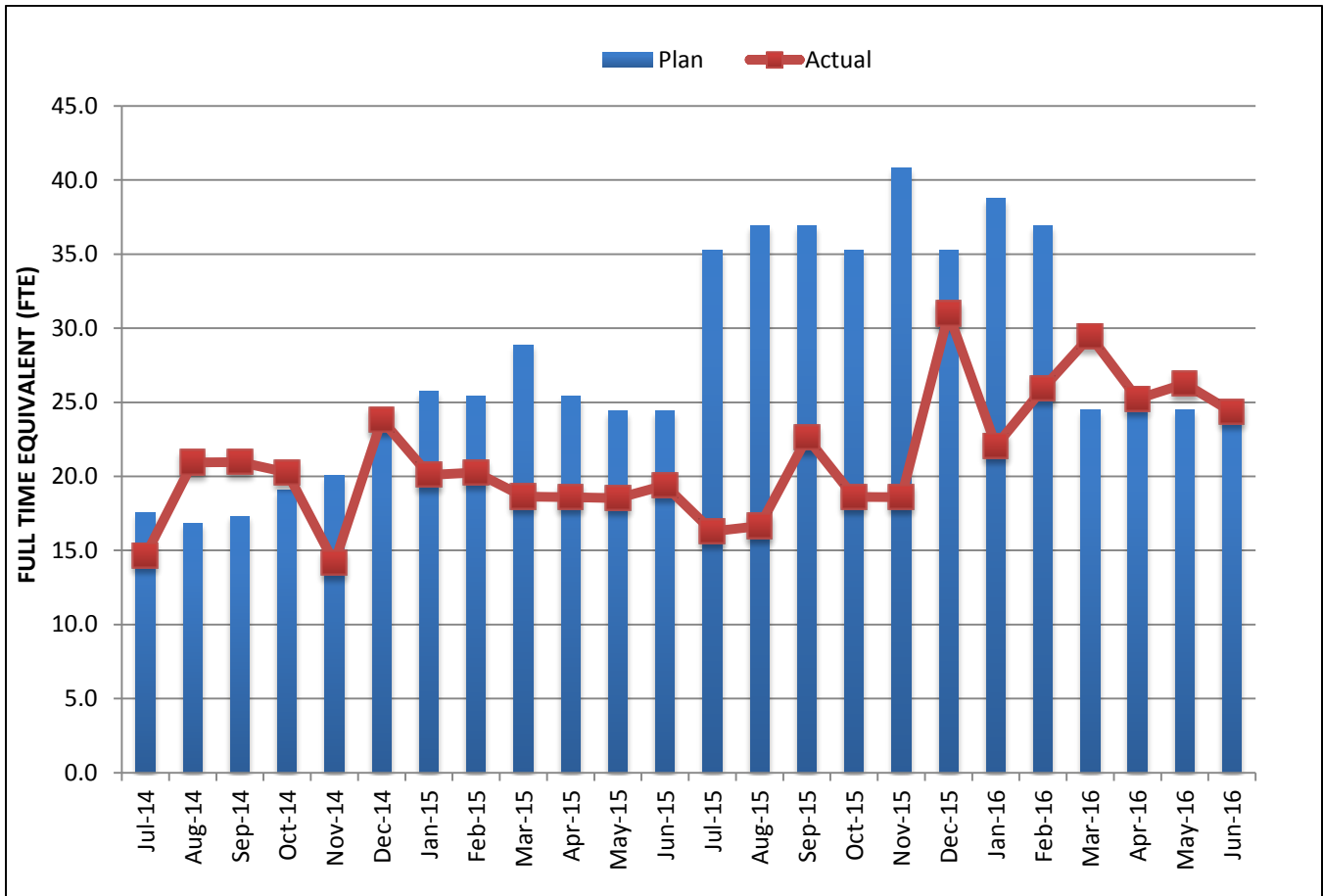
For *June* 2016, there were a total of 38.5 FTE's for MTA's Project Administration staff and 41.4 FTE's for consulting staff. The total actual project staffing for *June* 2016 was 79.9 FTEs versus FTE's planned (84.4).

**STAFFING STATUS (Cont.)  
METRO STAFF**



Note: The variance in FTEs is due to Customer Relations for Shoofly opening

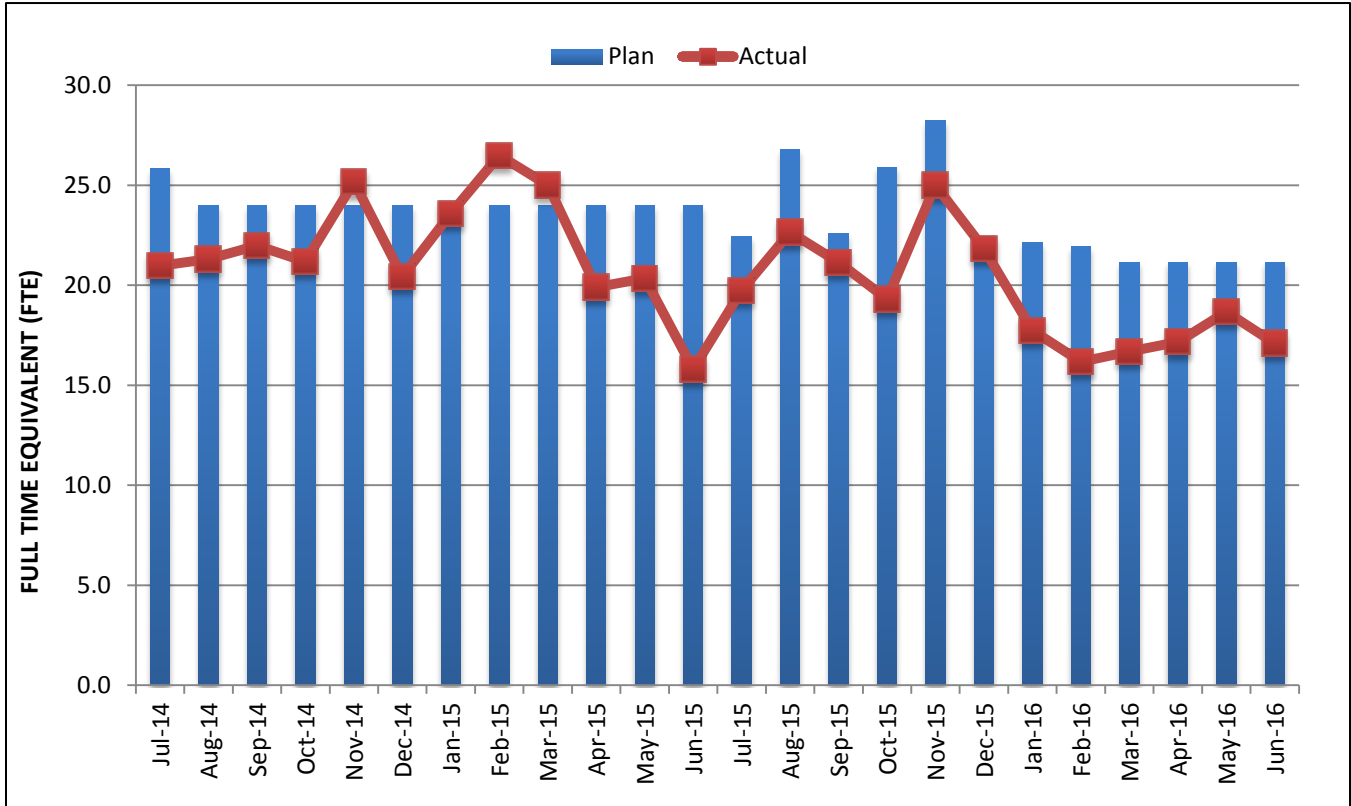
**STAFFING STATUS (Cont.)  
CONSTRUCTION MANAGEMENTSUPPORT SERVICES CONSULTANT**



**Note:**

- a) The variance in FTEs is due to Holiday's time off (Nov. 14), extensive weekend work (Dec.14) and additional field support staff.
- b) The Actual FTEs for the month are based on the FTE hours submitted in the invoice that month.

**STAFFING STATUS (Cont.)  
ENGINEERING SERVICES CONSULTANTS**



**Note:**

- a) The variance in FTEs is due to Holiday's time off and in support of C0980 submittals and C0981R beyond planned completion.
- b) The Actual FTEs for the month are based on the FTE hours submitted in the invoice of that month.

**REAL ESTATE STATUS**

<b>Regional Connector- Real Estate Status Summary May 31, 2016</b>									
Type of Take	Number of Parcels	Certified	Decertified	Appraisals In Process/ Completed	Offers Made	Agreements Signed	Condemnation Filed	Relocations Complete	Parcels Available
Full Takes	3	3	0	3	3	1	2	4	3
Part Takes	2	2	0	2	1	1	1	0	1
SSE	13	9	4	9	9	6	3	0	8
TCE/ROE	16	7	1	7	7	7	0	0	7
<b>Sub Total Parcels:</b>	<b>34</b>	<b>21</b>	<b>5</b>	<b>21</b>	<b>20</b>	<b>15</b>	<b>6</b>	<b>4</b>	<b>19</b>
Relocations	5								
<b>Total Parcels:</b>	<b>34</b>	<b>21</b>	<b>5</b>	<b>21</b>	<b>20</b>	<b>15</b>	<b>6</b>	<b>4</b>	<b>19</b>

**\* (8) TCE/ROE parcels have not been Certified. Totals for Appraisal, Offers Made, Condemnations Filed, and Parcel Available columns corrected (reduced) to remove decertified parcels erroneously being carried in those totals.**

**REAL ESTATE ACQUISITION**

**Central Plants**

- The Project obtained legal possession of the portion of the parcel required for the Project via a Stipulation for Possession effective July 1, 2015. The remaining property interests were acquired through an escrow which closed September 2<sup>nd</sup> and the condemnation was terminated.

**LA Times – LA Times Square**

- Required real estate was transferred at no cost to Project on March 2, 2015.

**Japanese Village Plaza – “JVP”**

- Metro submitted an offer to Japanese Village Plaza in November 2013. JVP rejected the offer; MTA Board adopted a resolution to acquire property through the condemnation process in June 2014. Tenants have also been named in the condemnation lawsuit by the Judge in order to acquire the rights to survey the property, monitor grout pipe installation, and install and monitor deformation monitoring devices in tenant’s spaces. This action required a new resolution of necessity be adopted by the MTA Board of Directors. The Board action took place at the April 2015 Board meeting and the Board adopted the Resolution of Necessity to include the tenants.
- Court approved Motion on Order of Possession for tunnel and grouting pipe easements against JVP on June 30, 2015. Order for Possession effective July 31, 2015.

## **REAL ESTATE ACQUISITION (Cont.)**

- Court granted motion to acquire the right to conduct pre-construction surveys and grout pipe installation monitoring effective May 11, 2015. Currently working through Court referee to schedule surveys and grout pipe monitoring in tenant spaces - ongoing.
- Motion filed to obtain Order for Possession allowing the right to install and monitor the deformation monitoring devices in 19 tenant spaces. Court granted motion for OP on 8/19/15 and OP became effective September 21, 2015. Real Estate has obtained rights on 17 of the 19 tenant spaces via right of entry.
- Motion for Proposed First Amended Complaint for modified take area filed with Court to allow amended RON in March.
- Project rescinded Motion for Proposed First Amended Complaint for modified take area – Project redesign did not require additional take area. Amended RON approved in April by Metro Board to allow for bifurcated tunnel easement.

### **Volk**

- FTA and MTA approved the proposed settlement with Volk on the value of the property. Agreement has now been reached with the remaining tenants with regard to their Loss of Good Will claims. Final payments processed and complete *by the end of September 2016*.
- C0980 Contractor using site for laydown area.

### **Broad Collection**

- Broad's appraisal review competed. Metro Real Estate negotiated a settlement Subject to approval at November/December Board. Seller changed terms prior to Board meeting – action pulled and negotiations continue. Awaiting comments from Broad's counsel on Agreement. *Working to complete in July 2016*.

### **ANAIBIV**

- Offer accepted. Owner's attorney reworked Purchase Agreement and deed language. Real Estate working with County Counsel to finalize contract and open escrow. Processing payments to allow recordation of easement. Easement recorded April 2016 and property rights transferred to Project.

### **Hull's Hope**

- Received formal decertification of parcel from Project in June 2015. Revocation of RON approved at January 2016 Board hearing. Matter closed.

### **401 E Second St (Office Depot)**

- Received formal decertification of parcel from Project in June 2015. Revocation of Offer letter sent in August 2015.

## **REAL ESTATE ACQUISITION (Cont.)**

### **City of Los Angeles (Mangrove Parcels) – No Change**

- Project is still considering potential change to the tunnel easement. Once decision is made, will advise City of Los Angeles and negotiate for the revised easement area.

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

- Appraisal completed of temporary and permanent Easement areas. *Offer letter to be prepared and discussions commence by late September 2016.*

### **(Former) CRA Parcels - Decertified 6/10/14**

### **TBM (Temporary) Storage Yard:**

Metro has acquired (leased) a parcel at 703 E. Commercial Street for the purpose of temporary storage at TBM. The lease period is from February-August with an option to extend it until December 2016.

## **QUALITY ASSURANCE STATUS**

### **C0980 Regional Connector D/B**

- Reviewed and provided comments on the Contractor's quality related submittals, construction work plans and milestone submittals. During current reporting period, these included Construction Quality Work Plans (CQWPs) *of which four (4) of five CQWPs were submitted and reviewed. Also, during current reporting period, four submissions of Inspection and Test Procedures (ITPs) are under Metro QA review.*
- Attended "Readiness Review" meetings with Contractor.
- Performed oversight verification of Contractor's design and construction activities, as well as ongoing monitoring of Contractor's QA/QC activities. *RCC opened NCR 013 7-01-16 noting that 2nd and Hope Station Initial Baseline Readings were not submitted for review and approval prior to station excavation. Installation of ground surface settlement points were incomplete prior to start of excavation. RCC opened NCR 014 7-12-16 identifying low compressive strength of the shotcrete on the soil nail wall at 1st and Central location. NCR 015 was opened by RCC for the drilling and installation of Piles #2 and #3 deeper than the design depth. NCR 015 was opened by RCC 7-28-16 for data logger failure on load cells at 1st and Central.*
- *Through end of July 2016, received a total of 1543 submittals from Contractor and 135 Requests for Information (RFIs), of which five (5) remain open. One Design Deviation Request (DDR) opened 6-27-16 will likely be rescinded by Contractor as Metro will not consider further, due to the chosen locations for train control equipment housings are within Metro-fenced property. Submission of RCC's monthly quality report for July 2016 is forthcoming.*
- *A surveillance of the Contractor's internal design with regard to SOE was initiated and is ongoing to determine the timeliness of implementation of the ECI and RFI processes for field activities. Drawings are being reviewed to determine the incorporation of major changes per the ECI and RFI processes. During July, AFC drawings for Design Unit DU16 2nd/Broadway Station SOE were reviewed and approved.*

## **ENVIRONMENTAL STATUS**

- Pre-Construction Surveys have been completed for 61 adjacent buildings, which include the following sensitive, historic, and/or Flower Street properties: Hikari Apartments, Japanese Village Plaza Parking, Japanese Village Plaza, Japanese Village Plaza Mall, Nakamura Tetsujiro Building, The Broad Art Foundation Museum, The Colburn School, General Petroleum, Superior Oil Co. Building, The California Club, the Los Angeles Central Library, Maguire Gardens and Underground Parking Structure, WDCH, LA Times Building, LA Times Mirror Building, Higgins Building, Cathedral of Saint Vibiana, Citibank Group (Hines Property), the Downtown YMCA, the Parking Structure (Commonwealth), the Westin Bonaventure, and the 2<sup>nd</sup> Street Tunnel. Pre-Construction Surveys for the City National Bank/Commonwealth Buildings are in-progress. These surveys are prepared for all properties within 21 feet of vibration producing construction activities to assess the building category and the potential for ground borne vibration to cause damage to the buildings.
- As of *June 30, 2016*, RCC has installed noise monitors at six Metro-approved locations along the Project alignment. The noise monitors will be instrumental in verifying compliance of construction-generated noise with the local ordinance and thresholds listed in the Project Contract Specifications.
- RCC has installed vibration monitors at WDCH, REDCAT, the Broad Museum, the Japanese Village Plaza, the LA Times, the Hikari Apartments, and the Colburn School. A Right-of-Entry is being negotiated for a vibration monitor to be installed at the Nakamura Tetsujiro Building. Locations are based on the Vibration Monitoring Plan to monitor vibration continuously during peak vibration generating construction.
- SWPPP inspections of all project areas are conducted weekly by RCC to observe site conditions and report on performance of stormwater protection Best Management Practices.
- *Metro is preparing the 14<sup>th</sup> Quarterly Mitigation Monitoring and Reporting Plan (MMRP) covering May 2016 to July 2016 to the FTA. Metro expects to submit the report no later than August 14, 2016.*
- *RCC has identified 13 trees requiring removal. The contractor has submitted a request a removal permit from Urban Forestry in August.*

## ENVIRONMENTAL STATUS (Cont.)

- During *July*, the Zanja 8-R, located on the west side of Flower Street, was *not further encountered* between 5<sup>th</sup> and 6<sup>th</sup> Streets during pre-trenching and piling activities. In each location the Zanja was *previously encountered along this block*, it was found to be filled with hard-packed sediment, *which made* CCTV explorations impossible. These explorations have confirmed the location of the Zanja. In every exposure where the Zanja has been encountered it has been cement pipe. Where safety conditions have allowed it to be measured, it has in every case been 22 inches in diameter. No variation in construction has been observed.
- *The project expects to encounter the Zanja three more times during piling operations along this block as there are three remaining piles to be completed below the northern most exposure of Zanja 8-R. Archaeological monitors are present during soil-disturbing Flower Street activities to document any Zanja 8-R encounters.* In accordance with the established plan, if, in the course of the project, a new aspect of Zanja No. 8-R (such as a manhole, lateral pipe, sluice or flow control system, pipe segment of a different material or dimensions, etc.) is encountered which, in the view of the Project Archaeologist, is not represented by the segments documented thus far, Metro will notify FTA and SHPO.
- Per Stipulation I.D.3 of the MOA, FTA in coordination with Metro will consult with SHPO on appropriate treatment of this new aspect of the feature, which may be uncovered and documented on appropriate DPR 523 forms, and included as an addition to the HAER, depending on site conditions and the information potential inherent in the resource.
- Other Zanja segments will be treated in accordance with the existing Cultural Resource Monitoring and Mitigation Plan (CRMMP), recorded as they are encountered, and included in the final package sent to NPS.

## **CONSTRUCTION AND COMMUNITY RELATIONS STATUS**

### **Construction Relations**

- Responded and addressed project related inquiries from the public received on the project hotline, email and during office hours at the Little Tokyo Community Office.
- Continued outreach to impacted area stakeholders regarding construction activities: utility relocation; station excavation, pile and deck installation, and geotechnical instrumentation. Distributed 20 construction notices to the public through email and door-to-door, and made it available on the project website and social media outlets.
- Coordinated construction activities with *approximately 40* stakeholders project wide.
- *Four* Metro sponsored public meetings were held to provide updates on the progress of construction:
  - Regional Connector Community Leadership Council Committees: 1<sup>st</sup>/Central, 2<sup>nd</sup>/Hope, Flower St/Financial District
  - Little Tokyo Leaders Task Force
- Presented *Metro's Parking Assessment Study findings at the* Little Tokyo Community Council and Little Tokyo Business Association.
- Continued bi-weekly meetings with: L.A. City Councilmember District 14 and the Mayor's office, Los Angeles Times, Common Wealth Partners, and Bonaventure Hotel.

### **Social Media Outreach and Marketing Efforts**

- Facebook had 6,587 "likes" (363 new likes) and reached over 59k users. Twitter had 2,071 total followers and over 195k impressions.
- Top post on Facebook included the opening of voting to name the TBM and select art work to decorate it. The support of station excavation at 1<sup>st</sup>/Central got the most views on Twitter.
- A visual campaign to promote businesses open during construction, East Shop Play – a business mitigation program and the Regional Connector in the works, was implemented through a series of banners at all construction sites.

## **CONSTRUCTION AND COMMUNITY RELATIONS STATUS (Cont.)**

### **Community Relations**

- Conducted monthly updates with the Regional Connector Community Leadership Council for station areas representatives on construction related work, mitigations review, upcoming marketing and advertising efforts.
- Continued monthly Eat, Shop, Play (ESP) implementation and promotion of small businesses impacted by construction along the line. ESP provides social media and in-community promotions of area businesses.
- Continued work with the monthly Little Tokyo Marketing & Business Task Force. Preparation of “culturally appropriate” historic Little Tokyo banner signage will be placed in early August for Little Tokyo cultural and business festival, Nisei Week. Metro is establishing a Little Tokyo Festival Shuttle to increase circulation of visitors to area businesses. Approximately 7 festival shuttles are planned.
- Metro’s continued sponsorship of the Little Tokyo 2- hour free visitor validation program added a fourth location to the program. - The program originally instituted to address construction impacts associated with Shoofly (Jan-March 2016) was extended to address impacts associated with 2<sup>nd</sup> St. grouting activities and advance work in preparation for the tunnel boring machine launch.

## **CREATIVE SERVICES STATUS**

### **Art Program**

- Responded to RFIs and Submittals
- Participated in Design Build document reviews
- Continued to support mitigation efforts

### ***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 and IPMO project staff. Training sessions included 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 on a daily basis to insure compliance with contract specifications. Participated with RCC staff in field safety inspection walks of multiple project worksites, laydown, and storage yards.
- There *were no* recordable injuries and no major incidents reported in the month of *July 2016*. There is a necessary one month lagtime to accumulate contractor work hours, therefore the *June 2016* work hours and safety statistics are reflected in this *July 2016* report.
- C0980 contractor RCC reported *50,912* work hours for the month of *June 2016*. The total C0980 Contract to Date work-hours through *June 2016* are *864,772* with a total of five recordable injuries. The Contract Recordable Injury Rate is *1.15* and the (Bureau of Labor Statistics (BLS) National Average Recordable Injury Rate per 200,000 work hours is 3.2).
- Project to Date Total Work Hours including both the C0980 and the C0981 Advanced Utility Relocation contract through *June* are *975,821* hours with six (6) recordable injuries with a Project Total Recordable Injury Rate of *1.2* (National Average Rate is 3.2).

### **Third Party Utility Relocations**

- 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.

### **THIRD PARTY AGREEMENT STATUS**

<b>Agency</b>	<b>Type of Agreement</b>	<b>Status/ Comments</b>
City of Los Angeles	Amendment to Master Cooperative Agreement	Parties will work under 2003 MCA.
Los Angeles Department of Water and Power	Amendment to Memorandum of Understanding	Metro and LADWP will continue to work under the terms of the previous Cooperative Agreement.
Los Angeles County Public Works	Letter of Agreement	Executed in April 2011
Caltrans	Amendment	Executed in August 2011
Private Utilities	LOA, MOU or UCA	All agreements in place with exception of Level 3, Qwest, XO Comm, Zayo and Time Warner. Metro is in discussion with those utilities to establish agreements.

### **ADVANCED UTILITY RELOCATION STATUS**

LADWP-Power Services anticipated completion dates for cable pulling, splicing and removal of old facilities including the following:

- On Flower Street between 5<sup>th</sup> and 6<sup>th</sup> Street, Metro requested that LADWP-Power to begin the intercept work, cable pulling, and splicing. LADWP will begin their work once the Design build contractor completes the remaining punch list items that weren't completed by the previous contractor near 5<sup>th</sup> and Flower Street. *The contractor is planning to complete the punch list by the 2<sup>nd</sup> week of August 2016.*
- At the intersection of 6<sup>th</sup> and Flower Street, LADWP has advised Metro/Design Build Contractor that they would need three vaults to meet their customer's power demands. Currently, CPJV is assisting LADWP with the re-design of power assets, and RCC will provide pothole information to identify potential locations for LADWP vaults. RCC is currently potholing on Saturdays at various locations.

## **ADVANCED UTILITY RELOCATION STATUS (Cont.)**

- Phase 1: At 2nd Street and Broadway (Construction): The Design Build Contractor started Phase 1 electrical work in late February 2016 and turned over the entire area to LADWP on April 28, 2016.
- LADWP intercept crew has completed Phase 1 intercept work on June 1, 2016. LADWP cable crew started pulling cable and splicing on June 2, 2016 and *completed work on July 12, 2016.*
- Phase 2: RCC began the installation of conduit work of Phase 2 work on May 2, 2016, and completed on June 1, 2016. LADWP approved RCC's work on June 6, 2016. LADWP conduit crews started their work on June 6, 2016 and completed on June 10, 2016. Completion of cable pulling and splicing is *tentatively scheduled at the end of September 2016.*

LADWP-Water Services anticipated completion dates for water installation and removal of old facilities including the following:

- At the 1<sup>st</sup> and Alameda Street intersection, the Design Build Contractor started the installation of 36" water line the first week of June 2016, and they are scheduled to complete their work by late September.
- At 2<sup>nd</sup> and Spring Street, the water relocation of the 8" water line started on April 19, 2016, and is estimated to be complete at the end of August 2016.

## **C0980 UTILITY WORK STATUS**

The Design Build Contractor is currently coordinating with all affected utility owners to relocate their utilities by lowering in place or support and protect in order to accommodate the Regional Connector Project.

## **PEAK HOUR CONSTRUCTION VARIANCES**

Metro is actively pursuing extended hour variances/exemptions to accommodate the Project needs by working with the City of Los Angeles, Bureau of Engineering, the Los Angeles Police Commission, the City of Los Angeles Department of Transportation and the City Council District 14<sup>th</sup> Office to obtain Peak Hour Exemptions.

### **1st/Central Station:**

- AM and PM Exemptions for the Shoofly Full Closure started January 9, 2016 *and have been extended through September 2016*. Affected streets are 1<sup>st</sup> St between Central and Vignes, and Alameda St between Temple and 2<sup>nd</sup> Street. Work being performed includes the utility relocations (power, water, sewer, etc.), and piling/decking operations to support construction of the Shoofly, 1<sup>st</sup>/Central Station, and the future tunnel portal structure in the vicinity of 1<sup>st</sup>/Alameda.

### **2<sup>nd</sup>/Broadway Station**

- Permission to obtain a full closure of the 2<sup>nd</sup>/Broadway intersection was granted from February 27, 2016 to July 29, 2016. Work includes the Utility Relocations, and soldier piling/decking operations. Metro *coordinated* with LADOT/CD14 to extend the closure for approximately 2 month (*until October 1, 2016*) to support soldier piling/decking operations at this location. Further exemptions will be pursued for the planned 2<sup>nd</sup> St Midblock Closure (between Broadway and Spring St) anticipated for October 2016.

### **2<sup>nd</sup>/Hope Station**

- AM and PM Exemptions for the 2nd and Hope full closure have been obtained from January 23, 2016 to April 20, 2019. This is to support utility relocations, piling/decking operations, and the 2nd/Hope Station construction.

### **Flower Street Cut & Cover Area**

- Metro obtained an AM and PM Peak Hour Exemption to place a k-rail lane closure on the west side of Flower Street between 4th and 5th Streets. This was in support of Soldier Piling/Decking operations and is anticipated to last from June 4, 2016 to September 30, 2016. Coordination with the City is already underway to obtain approvals for other closures to continue utility relocations/piling operations along Flower Street.

## **POLICE COMMISSION CONSTRUCTION VARIANCES**

Metro continues to work closely with the Los Angeles Police Commission and actively pursue new night/Sunday work hour variances as well as expanded geographic limits and time extensions for existing variances to accommodate Project needs.

In *July 2016*, LAPD approved time extensions for *three (3)* existing variances for the following locations:

- At 2<sup>nd</sup> and Broadway work area, two (2) variances were given time extension for the installation of *decking and soldier piles* and utility relocation.
- At 2<sup>nd</sup> and Hope work area, one (1) variance was given time extension for rough excavation of NB GTK/Hope Street.

In *July 2016*, LAPD approved one (1) new variance for the installation of geotechnical monitoring.

- At 2<sup>nd</sup> and Hope Street work area, one (1) variance was approved for excavation of 2<sup>nd</sup> and Hope Station.

*In July 2016, LAPD received four (4) night time variance applications for their review and approval for the following locations:*

- *At 2<sup>nd</sup> and Broadway area, one (1) variance application was submitted for wet and dry utilities.*
- *At Flower Street work area, three new (3) variances were submitted for review and approval for the installation of decking and soldier piles, and wet and dry utilities work. The delay in obtaining Police Commission approvals for Sunday piling work along Flower Street continues to result in a week-for-week delay to the Project.*

## **CPUC CROSSING SUMMARY**

### **Current Status**

Contract C0980 requires the Contractor to design and obtain CPUC approval for the temporary relocation of the existing at-grade crossing of 1<sup>st</sup> Street adjacent to Alameda Street, approximately 500 feet east of its current location at 1<sup>st</sup>/Hewitt Streets. Also, the south Little Tokyo station pedestrian crossing will have to be re-opened to provide pedestrian access. The temporary modification of the existing at-grade crossing will remain in-place until construction of the underground Wye junction necessitates closure of the existing Little Tokyo Station, at which point bus bridging will be implemented to transfer passengers between the Pico/Aliso and Union Station. When complete, the Regional Connector Project will no longer have an at-grade crossing at the intersections of 1<sup>st</sup>/Alameda and Temple/Alameda Streets.

On May 13, 2015, RCC received CPUC approval for the temporary relocation of the existing at-grade crossing of 1<sup>st</sup> Street adjacent to Alameda Street. Additionally, on May 26, 2015, RCC received CPUC approval of the South Little Tokyo station pedestrian crossing Form GO-88B application package.

As of *July 2016*, Metro and RCC have finalized the items that need to be included in the checklist for the Safety Certification Status. This involves both design and construction items noted below:

- Passenger Stations, Train Control and Signals, Traction Power, Overhead Catenary, Communications, Track and Structures, Vertical Transportation (elevators, escalators), Fire Life Safety Systems, Security Systems, and CPUC Specific Requirements.
- *Metro and RCC staff have reached a consensus of each Systems Safety Certification item per discipline that needs to be included in the plan. These items are presently being inserted into a Microsoft Access Database for tracking, sorting, and distribution to key staff members for alerting of any potential issues that must be resolved. This will ensure that the completion of the Safety Certification Plan will be completed in a timely manner and not impact the Revenue Operation Date (ROD).*

## **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 1st draft FFGA application to FTA for review
September 2013	Received proposals for D/B Contract C0980

## **CHRONOLOGY OF EVENTS (Cont.)**

September 2013	Submitted 2nd 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 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 2nd/Broadway Station Site Move-In

**CHRONOLOGY OF EVENTS (Cont.)**

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 2nd/Broadway Station (West Hammer Head)
July 2016	RCC Initiated CIP invert at 1st/Central Station Box

**CONSTRUCTION CONTRACTS**

<p><b>Description: Design-Build Contract</b> <b>Contractor: Regional Connector Constructors</b></p>	<p><b>Contract No. C0980</b> <b>Status as of: July 31, 2016</b></p>
<p><b>Work Completed:</b></p> <p><b>Design</b></p> <ul style="list-style-type: none"> <li>Final design is 93.4% complete as of July 2016.</li> <li>Review and approval of 100% packages for DU06 2nd/Hope Station Design (without pedestrian bridge), DU8 Station Spec Package AFC, DU10 Traction Power Drawings – AFC, and System and Sub-System Hazard Analysis Rev 2.</li> <li>Review and comment on DU8 - Division 32 Exterior Improvement Specs - 100%, DU11 - 2nd/Broadway - Software Application Logic - 85 Prct, Basis of Design Crossover Cavern Dynamic Analysis, 100% design package for DU08 1st/Central Station, DU15 2nd_Hope SOE Design AFC and DU11 Train Control 7th/Metro 100% Plans.</li> </ul> <p><b>Construction</b></p> <p><b>1st/Central</b></p> <ul style="list-style-type: none"> <li>RCC completed working on the Temporary Soil Nail Wall.</li> <li>RCC completed 2nd St restoration.</li> <li>RCC completed Muck Bin pile installation</li> <li>RCC completed Hobas pipe installation.</li> <li>RCC completed 36" water line at 1st/Alameda.</li> <li>RCC completed SOE and station excavation at 1st/Central</li> </ul> <p><b>2nd/Broadway</b></p> <ul style="list-style-type: none"> <li>RCC completed Traffic Signal Relocation at 2nd/Broadway.</li> <li>DWP completed Phase 1 cable pulling for power work.</li> </ul> <p><b>Flower</b></p> <ul style="list-style-type: none"> <li>RCC completed potholing for vaults at locations in and around 6th/Flower.</li> <li>RCC completed utility investigation on the west side of Flower St between 4th and 5th Sts.</li> <li>RCC completed relocation of MFS line on Flower between 5th and 6th Sts.</li> </ul>	<p><b>Major Activities (In Progress):</b></p> <p><b>Design</b></p> <ul style="list-style-type: none"> <li>Review and comment resolution on the 85% Supplemental Spec Package for DU08 1st/Central.</li> <li>Coordination with Fire Life Safety of exiting along Flower Street.</li> <li>Review of the DU16 Broadway Station SOE AFC design package, AFC Design for Floating Slab Track, 2nd/Hope Station 100% BOP Design and Review 2nd/Broadway Station 100% BOP Design.</li> </ul> <p><b>Construction</b></p> <p><b>1st/Central</b></p> <ul style="list-style-type: none"> <li>RCC continues 1st/Alameda Wye decking installation.</li> <li>RCC continues 1st St Leg SOE pile installation.</li> <li>RCC continues excavation/lagging and installation of walers and struts for TBM SOE/Wye.</li> <li>RCC continues pouring Invert Concrete slab at 1st/Central Station.</li> <li>RCC continues installation and testing of TBM tie downs and launch slab.</li> <li>RCC continues geotechnical installation and monitoring at 1st/Central Yard and Alameda Public ROW.</li> </ul> <p><b>2nd/Broadway</b></p> <ul style="list-style-type: none"> <li>RCC continues pile installation at 2nd/Broadway intersection (hammer head).</li> <li>RCC continues water work at 2nd/Spring.</li> <li>DWP continues Phase 2 cable pulling for power work.</li> </ul> <p><b>2nd/Hope</b></p> <ul style="list-style-type: none"> <li>RCC continues station excavation at 2nd/Hope station.</li> <li>RCC continues station wood lagging at 2nd/Hope station.</li> <li>RCC continues SOE waler and strut installation at 2nd /Hope Station</li> <li>RCC continues station tie-back installation at 2nd/Hope.</li> </ul> <p><b>Flower</b></p> <ul style="list-style-type: none"> <li>RCC continues pile installation between 4th and 5th on west side of Flower.</li> <li>RCC continues excavation and installation of 24" Waterline on Flower.</li> <li>RCC continues excavation for the installation of cap beams on Flower St West between 4th and 5th St.</li> </ul> <p><b>Project-wide</b></p> <ul style="list-style-type: none"> <li>RCC continues pre-con survey (photograph existing conditions) at various locations, as needed.</li> <li>RCC continues underground investigation – potholing Hydrovac and exploratory trenching at various locations project wide.</li> <li>RCC continues preparation of submittals and traffic control plans, including weekly meetings with LADOT and City Council District 14.</li> </ul>

**CONSTRUCTION CONTRACTS (Cont.)**

<p><b>Description: Design-Build Contract</b> <b>Contractor: Regional Connector Constructors</b></p>	<p><b>Contract No. C0980</b> <b>Status as of: July 31, 2016</b></p>
<p><b>Areas of Concern:</b></p> <ul style="list-style-type: none"> <li>• Utility relocations have been delayed, impacting RCC's schedule. Schedule mitigation measures are being implemented across the alignment. Major street and intersection closures are being coordinated with LADOT, LABOE, and Council District 14 to facilitate construction plans and schedules. Additionally, Metro and RCC are coordinating with DWP and third-party utility owners on utility design and relocation issues along Flower, Broadway, Alameda and 2<sup>nd</sup> Street to advance construction fronts at these locations.</li> <li>• Schedule recovery measures notwithstanding, schedule float and flexibility is minimal; opportunities for improvement continue to be reviewed.</li> <li>• Delays and reduced productivity along Flower St. continue to be experienced; work hour and access constraints are driving causes.</li> </ul> <p>Please see the "Management Issues/Opportunities" section for Concerns and Opportunities details.</p>	<p><b>Major Activities Next Period:</b></p> <p><b>Design</b></p> <ul style="list-style-type: none"> <li>• Will review AFC design for DU06 2nd/Hope Station and DU08 1st/Central Station, 100% packages for DU06.3 2nd/Hope Pedestrian Bridge Design Package, AFC design package for DU06 2nd/Hope without pedestrian bridge, and AFC package for DU16.1 2nd/Broadway Underpinning design package.</li> </ul> <p><b>Construction</b></p> <p><b>1st/Central</b></p> <ul style="list-style-type: none"> <li>• RCC will begin drilling and installation of passenger elevator casings.</li> <li>• RCC will begin pre-condition phase of compensation grouting from Central Ave.</li> <li>• RCC will begin horizontal inclinometers horizontal drilling and pipe installation.</li> <li>• RCC will begin tie-in for the 20" water line.</li> </ul> <p><b>2nd/Broadway</b></p> <ul style="list-style-type: none"> <li>• RCC will begin decking of 2nd and Broadway intersection.</li> <li>• RCC will begin implementation and demolition of a Temporary Street Lighting Plan.</li> </ul> <p><b>Flower</b></p> <ul style="list-style-type: none"> <li>• RCC will begin activities for the tie-back removal pit.</li> <li>• RCC will begin decking installation between 4th and 5th Sts.</li> </ul> <p><b>Tunnel</b></p> <ul style="list-style-type: none"> <li>• RCC will begin installation of MPBX along 2nd St.</li> <li>• RCC will begin installation of UMP at 3rd/Flower (tie back removal shaft).</li> <li>• RCC will begin installation of inclinometer and UMP at Flower St.</li> </ul>



## CONSTRUCTION PHOTOS



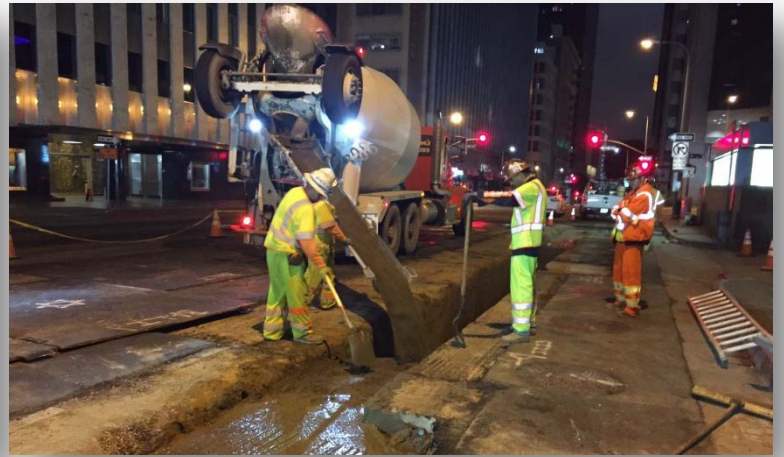
Pouring mud mat at 1<sup>st</sup> /Central Station



Piling setup at 4<sup>th</sup> /Flower



Hanging Utilities under Wye



Slurry backfill over welded steel pipe on Flower Street



Piling at 2<sup>nd</sup> /Broadway Intersection



Muck removal at 2<sup>nd</sup> /Hope Station

**APPENDIX  
COST AND BUDGET TERMINOLOGY**

**Project Cost Descriptions**

ORIGINAL BUDGET	The Original Project Budget established upon Board approval of Life-of-Project (LOP) budget.
CURRENT BUDGET	The Original Budget plus all budget amendments approved by formal Metro Board action. Also referred to as Approved Budget.
COMMITMENTS	The total of actual contracts awarded, executed change orders or amendments, approved work orders of Master Cooperative Agreements, and other Metro actions which have been spent or result in the obligation of specific expenditures at a future time.
EXPENDITURES	The total dollar amount of funds expended by Metro for contractor or consultant invoices, third party invoices, staff salaries, real estate and other expenses that is reported in Metro's Financial Information System (FIS).
CURRENT FORECAST	The best estimate of the final cost of the project when all checks have been issued and the project is closed out. Current Forecast is composed of actual costs incurred to date, the best estimate of work remaining and a current risk assessment for each budgeted cost item.

**Cost Report by Element Descriptions**

CONSTRUCTION	Includes construction contracts. Cost associated with Guideways, Stations, Southwestern Yard, Sitework/Special Conditions and Systems.
RIGHT-OF-WAY	Includes purchase cost of parcels, easements, right-of-entry permits, escrow fees, contracted real estate appraisals and tenant relocation.
VEHICLES	Includes the purchase of LRT vehicles and spare parts for the project.
PROFESSIONAL SERVICES	Includes design engineering, project management assistance, construction management support services, legal counsel, agency staff costs, and other specialty consultants.
CONTINGENCY	A fund established at the beginning of a project to provide for anticipated but unknown additional costs that may arise during the course of the project.
PROJECT REVENUE	Includes all revenue receivable to the Metro as a direct result of project activities. This includes cost sharing construction items, insurance premium rebates, and the like.

## **APPENDIX**

### **LIST OF ABBREVIATIONS AND ACRONYMS**

AFC	Approved for Construction
APE	Advanced Preliminary Engineering
ATC	Automatic Train Control
ATSAC	Automated Traffic Surveillance and Control
AUR	Advanced Utility Relocation
BAFO	Best and Final Offer
BIM	Building Information Modeling
CADD	Computer Aided Drafting and Design
CALTRANS	California Department of Transportation
CCTV	Closed Circuit Television
CD	Calendar Day
CEQA	California Environmental Quality Act
CM	Construction Manager
CMAQ	Congestion Mitigation and Air Quality Improvement Program
CN	Change Notice
CO	Change Order
CPM	Critical Path Method
CPUC	California Public Utilities Commission
CQWP	Construction Quality Work Plan
CR	Camera Ready
CSPP	Construction Safety Phasing Plan
CTC	California Transportation Commission
CUD	Contract Unit Description
DB	Design Build
DBB	Design Bid Build
DDR	Design Deviation Request
DOT	Department of Transportation
DWP	Department of Water and Power
ECI	Engineering Change Instruction
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPB TBM	Earth Pressure Balance Tunnel Boring Machine
FAR	Federal Acquisition Regulation
FD	Final Design
FEIS	Final Environmental Impact Statement
FEIR	Final Environmental Impact Report
FFGA	Full Funding Grant Agreement
FIS	Financial Information System
FLSR	Fire Life Safety Report
FONSI	Finding of No Significant Impact
FRA	Federal Railroad Administration
FSEIR	Final Supplemental Environmental Impact Report
FSEIS	Final Supplemental Environmental Impact Statement
FTA	Federal Transit Administration
FTE	Full Time Equivalent

**APPENDIX**

**LIST OF ABBREVIATIONS AND ACRONYMS (Cont.)**

GBN	Ground Borne Noise
GBR	Geotechnical Baseline Report
GDSR	Geotechnical Design Summary Report
HABS/HAER	Historical American Building Survey / Historical American Engineering Record
IFB	Invitation for Bid
IPMO	Integrated Project Management Office
JV	Joint-Venture
LA	Los Angeles
LABOE	Los Angeles Bureau of Engineering
LABOS	Los Angeles Bureau of Sanitation
LABSL	Los Angeles Bureau of Street Lighting
LACFCD	Los Angeles County Flood Control District
LACMTA	Los Angeles County Metropolitan Transportation Authority
LADOT	Los Angeles Department of Transportation
LADPW	Los Angeles Department of Public Works
LADWP	Los Angeles Department of Water and Power
LAFD	Los Angeles Fire Department
LAPD	Los Angeles Police Department
LNTP	Limited Notice To Proceed
LONP	Letter Of No Prejudice
LOP	Life-of-Project
LPA	Locally Preferred Alternative
LRT	Light Rail Transit
L RTP	Long Range Transportation Plan
LRV	Light Rail Vehicle
MCA	Master Cooperative Agreement
MIS	Major Investment Study
MMRP	Mitigation Monitoring and Reporting Program
MOU	Memorandum of Understanding
MPSR	Monthly Project Status Report
N/A	Not Applicable
NEPA	National Environmental Protection Act
NOD	Notice of Determination
NPDES	National Pollution Discharge Elimination System
NTE	Not to Exceed
NTP	Notice To Proceed
OCC	Operations Control Center
OCR	Overhead Conductor Rail
OCS	Overhead Catenary System
OSHA	Occupational Health and Safety Administration
PA/VMS	Public Address/Visual Messaging Sign
PCTL	Precast Concrete Tunnel Lining
PE	Preliminary Engineering
PEER	Permit Engineering Evaluation Report
PIP	Project Implementation Plan

**APPENDIX**

**LIST OF ABBREVIATIONS AND ACRONYMS (Cont.)**

PLA	Project Labor Agreement
PM	Project Manager
PMOC	Project Management Oversight Consultant
PMP	Project Management Plan
PR	Project Report
PSR	Project Study Report
QA	Quality Assurance
QAR	Quality Assurance Report
QC	Quality Control
QPSR	Quarterly Project Status Report
RAMP	Real Estate Acquisition Management Plan
RCC	Regional Connector Contractors
RCMP	Risk Assessment Management Plan
RFC	Request For Change
RFP	Request For Proposals
RHA	Risk Hazard Analysis
ROC	Rail Operations Center
ROD	Record Of Decision
ROM	Rough Order of Magnitude
RON	Resolution of Necessity
ROW	Right-Of-Way
RSD	Revenue Service Date
SCAQMD	Southern California Air Quality Management District
SCADA	Supervisory Control and Data Acquisition
SCC	Standard Cost Category
SCG	Southern California Gas Company
SEIS	Supplemental Environmental Impact Statement
SHPO	State Historic Preservation Office
SIT	System Integration Testing
SOE	Support Of Excavation
SOQ	Statement of Qualification
SOV	Schedule Of Values
SOW	Statement Of Work
SP	Special Provision
SSMP	Safety and Security Management Plan
TBD	To Be Determined
TBM	Tunnel Boring Machine
TCC	Train Control Center
TCE	Temporary Construction Easement
TIFIA	Transportation Infrastructure Finance and Innovation Act
TIGER	Transportation Investment Generating Economic Recovery
TPSS	Traction Power Substation
TVA	Threat Vulnerability Analysis
TVM	Ticket Vending Machine
UFS	Universal Fare System

**APPENDIX**

**LIST OF ABBREVIATIONS AND ACRONYMS (Cont.)**

UST	Underground Storage Tank
USDOT	United States Department Of Transportation
VE	Value Engineering
WBS	Work Breakdown Structure
WP	Work Package
WTCP	Worksite Traffic Control Plan
YOE	Year of Expenditure