

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).

**August 2016**

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**PROJECT SUMMARY**

**As of August 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>Piling at 2nd/Broadway Intersection</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 completed</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>• Excavation and installation of walers, struts, cap beams and decking at the Wye continued</li> <li>• 2nd/Spring LADWP water relocation continued</li> <li>• Pile installation at 2nd/Broadway continued</li> <li>• Installation of deck beams at 2nd/Broadway intersection continued</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 continued</li> <li>• Station box excavation and SOE continued at 2nd/Hope Station</li> <li>• Water relocations along Flower Street continued</li> <li>• Pile installation on west side of Flower St. continued</li> <li>• Cap beam installation on Flower St. continued</li> <li>• Geotechnical monitoring equipment installation across the project alignment continued</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>02/28/17</td> <td>05/31/17</td> <td>13</td> </tr> <tr> <td colspan="4">Note: Completion of systems design is now projected for end of December 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 | 02/28/17 | 05/31/17 | 13 | Note: Completion of systems design is now projected for end of December 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 |
| 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  | 02/28/17              | 05/31/17  | 13                      |  |                           |              |              |                |                       |          |          |   |                      |          |           |          |                 |     |          |          |               |  |  |  |                      |     |          |          |                       |          |          |    |  |  |  |  |                     |  |  |  |                       |          |          |   |
| Note: Completion of systems design is now projected for end of December 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                       |  |                           |              |              |                |                       |          |          |   |                      |          |           |          |                 |     |          |          |               |  |  |  |                      |     |          |          |                       |          |          |    |  |  |  |  |                     |  |  |  |                       |          |          |   |
| <b>DESIGN</b>  | \$132.9               | \$116.7   | 87.8%                   |  |                           |              |              |                |                       |          |          |   |                      |          |           |          |                 |     |          |          |               |  |  |  |                      |     |          |          |                       |          |          |    |  |  |  |  |                     |  |  |  |                       |          |          |   |
| <b>RIGHT-OF-WAY</b>  | \$110.5               | \$68.8  | 62.3%                   |  |                           |              |              |                |                       |          |          |   |                      |          |           |          |                 |     |          |          |               |  |  |  |                      |     |          |          |                       |          |          |    |  |  |  |  |                     |  |  |  |                       |          |          |   |
| <b>CONSTRUCTION</b>  | \$1,079.6             | \$328.9   | 30.5%                   |  |                           |              |              |                |                       |          |          |   |                      |          |           |          |                 |     |          |          |               |  |  |  |                      |     |          |          |                       |          |          |    |  |  |  |  |                     |  |  |  |                       |          |          |   |
| <b>OTHER</b>   | \$276.0               | \$98.4  | 35.6%                   |  |                           |              |              |                |                       |          |          |   |                      |          |           |          |                 |     |          |          |               |  |  |  |                      |     |          |          |                       |          |          |    |  |  |  |  |                     |  |  |  |                       |          |          |   |
| <b>TOTAL</b>   | <b>\$1,598.9</b>      | <b>\$612.8</b>  | <b>38.3%</b>            |  |                           |              |              |                |                       |          |          |   |                      |          |           |          |                 |     |          |          |               |  |  |  |                      |     |          |          |                       |          |          |    |  |  |  |  |                     |  |  |  |                       |          |          |   |
| Current Budget reflects Board approved Life-of-Project Budget and includes Finance Charges.  |                       | Note: ROW dates are adjusted to reflect the latest D/B Contractor's coordinated Need Dates. Duco Yard need date is in August 2018.  |                         |  |                           |              |              |                |                       |          |          |   |                      |          |           |          |                 |     |          |          |               |  |  |  |                      |     |          |          |                       |          |          |    |  |  |  |  |                     |  |  |  |                       |          |          |   |
| Note: Expended amounts are through 07/31/2016.   |                       | <b>Construction - Design / Build Contract</b> <table border="1"> <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>05/03/21</td> <td>05/15/21</td> <td>2</td> </tr> <tr> <td>Revenue Service Date</td> <td>07/16/21</td> <td>07/28/21*</td> <td>2</td> </tr> </table>   |                         |  | Notice to Proceed         | 07/07/14     | 07/07/14     | Complete       | Construction complete | 05/03/21 | 05/15/21 | 2 | Revenue Service Date | 07/16/21 | 07/28/21* | 2        |                 |     |          |          |               |  |  |  |                      |     |          |          |                       |          |          |    |  |  |  |  |                     |  |  |  |                       |          |          |   |
| Notice to Proceed  | 07/07/14              | 07/07/14  | Complete                |  |                           |              |              |                |                       |          |          |   |                      |          |           |          |                 |     |          |          |               |  |  |  |                      |     |          |          |                       |          |          |    |  |  |  |  |                     |  |  |  |                       |          |          |   |
| Construction complete  | 05/03/21              | 05/15/21  | 2                       |  |                           |              |              |                |                       |          |          |   |                      |          |           |          |                 |     |          |          |               |  |  |  |                      |     |          |          |                       |          |          |    |  |  |  |  |                     |  |  |  |                       |          |          |   |
| Revenue Service Date   | 07/16/21              | 07/28/21*   | 2                       |  |                           |              |              |                |                       |          |          |   |                      |          |           |          |                 |     |          |          |               |  |  |  |                      |     |          |          |                       |          |          |    |  |  |  |  |                     |  |  |  |                       |          |          |   |
| <b>AREAS OF CONCERN</b>  |                       | <p>Note: *The project is reflecting an approximate seven-month delay to the RSD due to differing site conditions related to underground utilities.</p>  |                         |  |                           |              |              |                |                       |          |          |   |                      |          |           |          |                 |     |          |          |               |  |  |  |                      |     |          |          |                       |          |          |    |  |  |  |  |                     |  |  |  |                       |          |          |   |
| <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 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> <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> |                       | <b>CRITICAL ACTIVITIES / 3 MONTH LOOK AHEAD</b> <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>• Begin Steady State implementation on Flower Street</li> <li>• Decking installation on Flower, north of 5th St.</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 2<sup>nd</sup>/Broadway, 2<sup>nd</sup>/Hope and 1<sup>st</sup>/Central Stations. Offsite tunnel liner castings also advanced to 90% 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 *August* 2016 increased by \$1.58 million to \$1.38 billion or 88.4% of the Current Budget. The increase reflects the Board adopted FY17 budget. Project expenditures through *July* 2016 are \$590.1 million or 37.9% 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

**Concern No.1:** Utility relocations have been delayed, impacting RCC's schedule.

**Status/Action** 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.

**Concern No. 2:** *Resource limitations impact the City's ability to review multiple Traffic Control Plans, therefore impacting construction progress on Flower and 2nd Streets.*

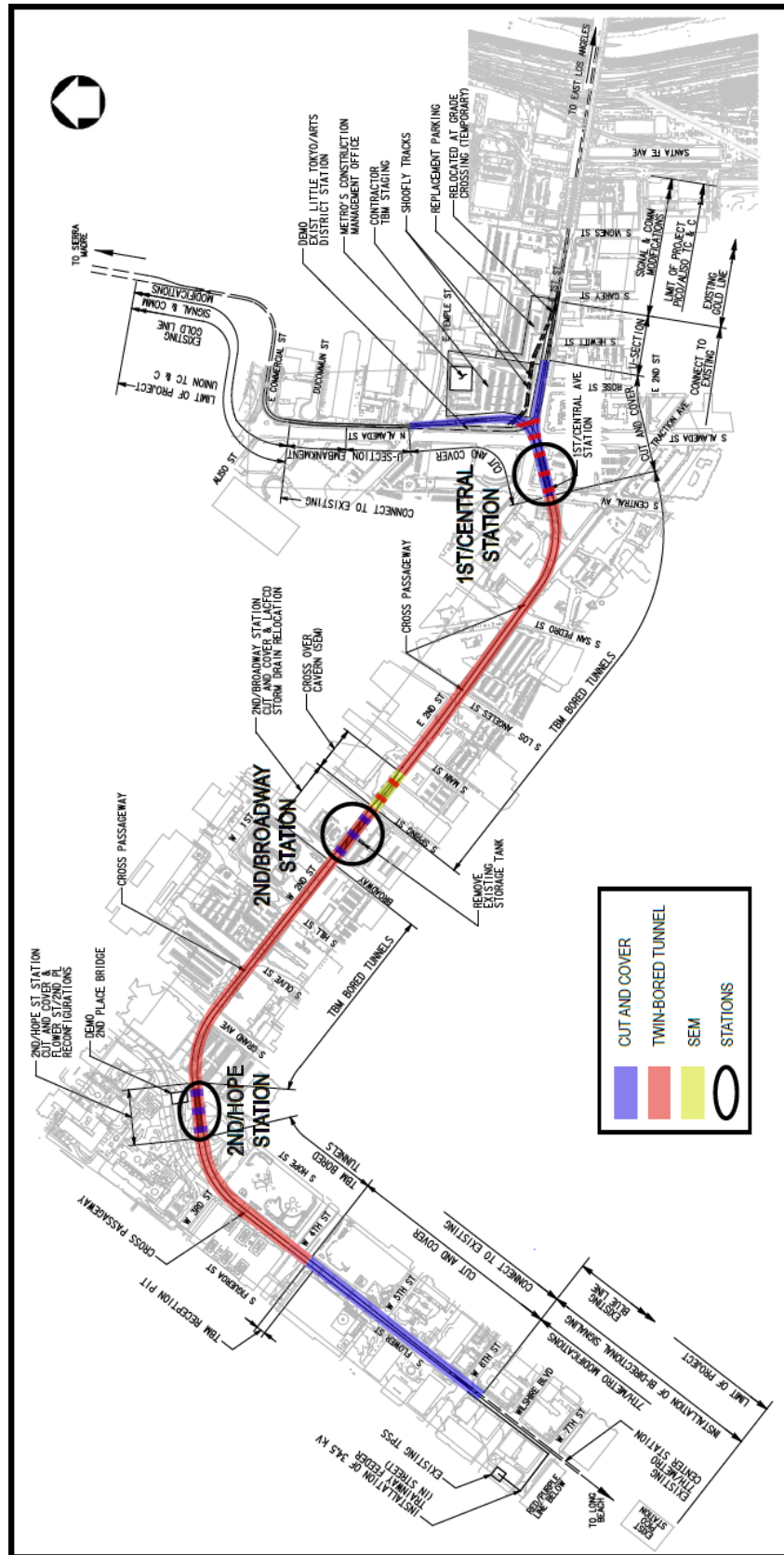
**Status/Action** Metro is working with RCC, LADOT and BOE to actively expedite submissions, quality reviews, and approvals of required plans.

**Concern No. 3:** Delays and reduced productivity along Flower St. continue to be experienced; work hour constraints and permit processing are driving causes.

**Status/Action** Metro is aggressively pursuing work hour variance for 55-hour weekend closures for decking work.

**Opportunity No. 1:** Metro is working with RCC and Operations to identify alternate sequencing to complete the Wye construction and commissioning earlier, while minimizing impacts from bus bridges.

# 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 to Regional Connector Constructors, JV (RCC) on 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 | Aug-16 | Sep-16 | Oct-16 | Nov-16 | Dec-16 | Jan-17 |
|---|----------------|--------|--------|--------|--------|--------|--------|
| Floating Slab Track Design Submittal - AFC Approved                     | 08/11/16       | ⬡      |        |        |        |        |        |
| Tie-Back Removal Pit TCP Impementation                                  | 08/20/16       | ⬡      |        |        |        |        |        |
| Initiated DWP Power Intercept work on Flower St (5th-6th)               | 08/22/16       | ⬡      |        |        |        |        |        |
| Complete 36" Water Mainline at 1st/Alameda                              | 08/26/16       | ⬡      |        |        |        |        |        |
| DU11 Train Control Package - 100% Submittal Approved                    | 08/30/16       | ⬡      |        |        |        |        |        |
| 1st/Central Station Package - AFC Submittal                             | 09/15/16       |        | ⬡      |        |        |        |        |
| 2nd/Hope Station Package - AFC Submittal                                | 09/15/16       |        | ⬡      |        |        |        |        |
| Complete WYE Temp Decking (WTCP Stage 2.3)                              | 09/23/16       |        | ⬡      |        |        |        |        |
| 2nd/Broadway Station Package - 100% Design Submittal                    | 09/30/16       |        | ⬡      |        |        |        |        |
| DU03A SEM/Crossover - AFC Submittal                                     | 09/30/16       |        | ⬡      |        |        |        |        |
| Complete 2nd/Broadway DWP Power Intercepts and Cable (Phase 2)          | 10/03/16       |        |        | △      |        |        |        |
| 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 Temp Decking at 2nd/Broadway West Hammer Head                  | 10/15/16       |        |        | ⬡      |        |        |        |
| End of 2nd/Broadway Intersection Full Closure / Start Mid Block Closure | 10/15/16       |        |        | ⬡      |        |        |        |
| TBM Lowering Ceremony   | 10/19/16       |        |        | ◆      |        |        |        |
| Complete WYE Intersection Excavation                                    | 10/25/16       |        |        | ⬡      |        |        |        |
| LADOT Approve Flower South SOE Traffic Control Plan                     | 11/08/16       |        |        |        | ⬡      |        |        |
| Complete WYE / TBM Launch Pit CIP Invert                                | 11/17/16       |        |        |        | ⬡      |        |        |
| Complete 2bd/Hope Excavation  | 12/06/16       |        |        |        |        | ⬡      |        |
| Civil Segment B (Broadway to 1st/Central) - 85% Design                  | 12/11/16       |        |        |        |        | ⬡      |        |
| Complete Flower St Decking (North of 5th)                               | 01/08/17       |        |        |        |        |        | ⬡      |
| Complete Flower St Water Line (South of 5th)                            | 01/27/17       |        |        |        |        |        | ⬡      |



MTA Staff



MTA Board Action



FTA (Federal Transit Administration)



Utility Company



Other Agencies



Contractors



Design Consultant

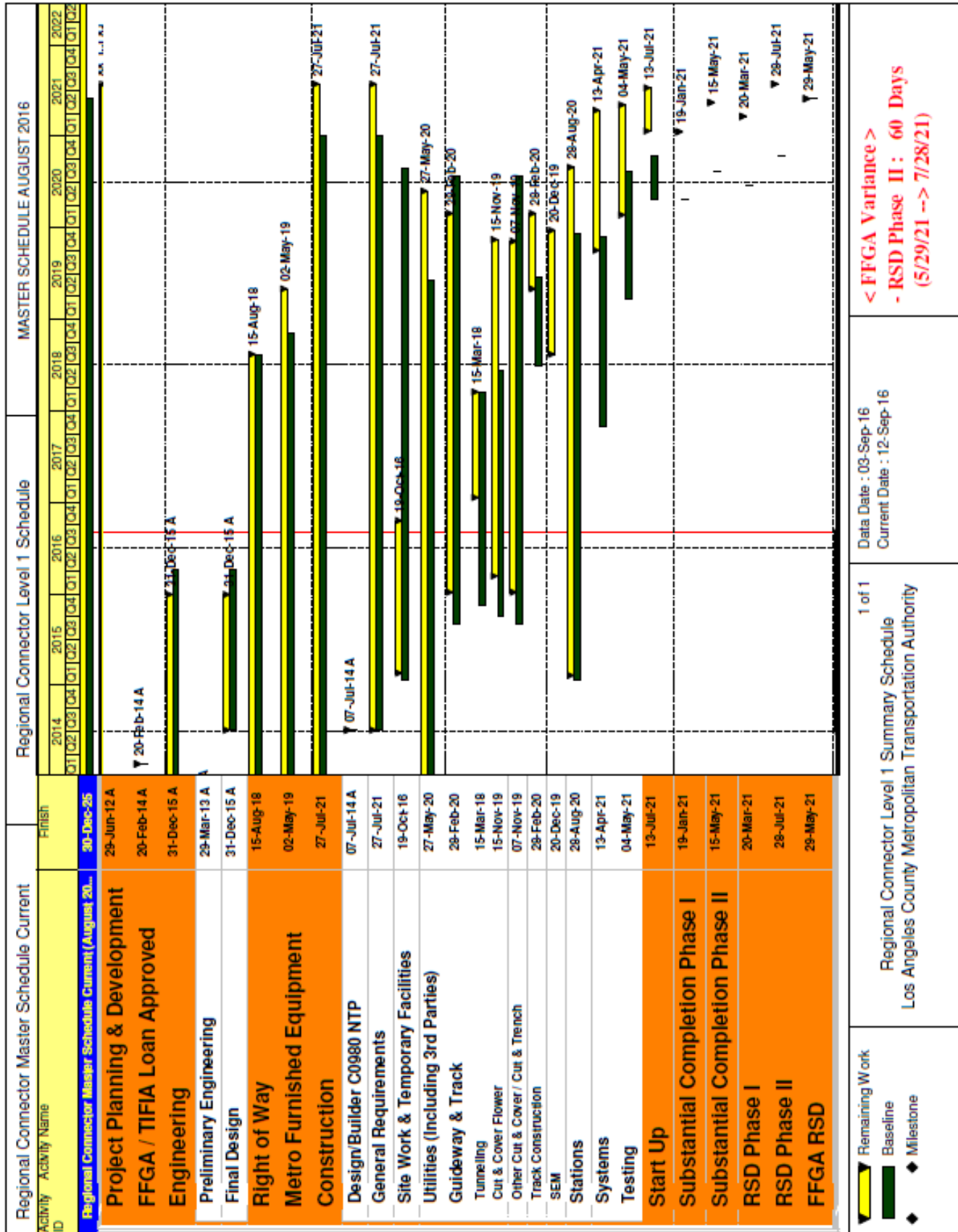


C0980 D/B Contractor

"A" following date is actual and completed

\* New

## PROJECT SUMMARY SCHEDULE



< FFGA Variance >  
 - RSD Phase II : 60 Days  
 (5/29/21 --> 7/28/21)

Data Date : 03-Sep-16  
 Current Date : 12-Sep-16

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

- Remaining Work
- Baseline
- ◆ Milestone

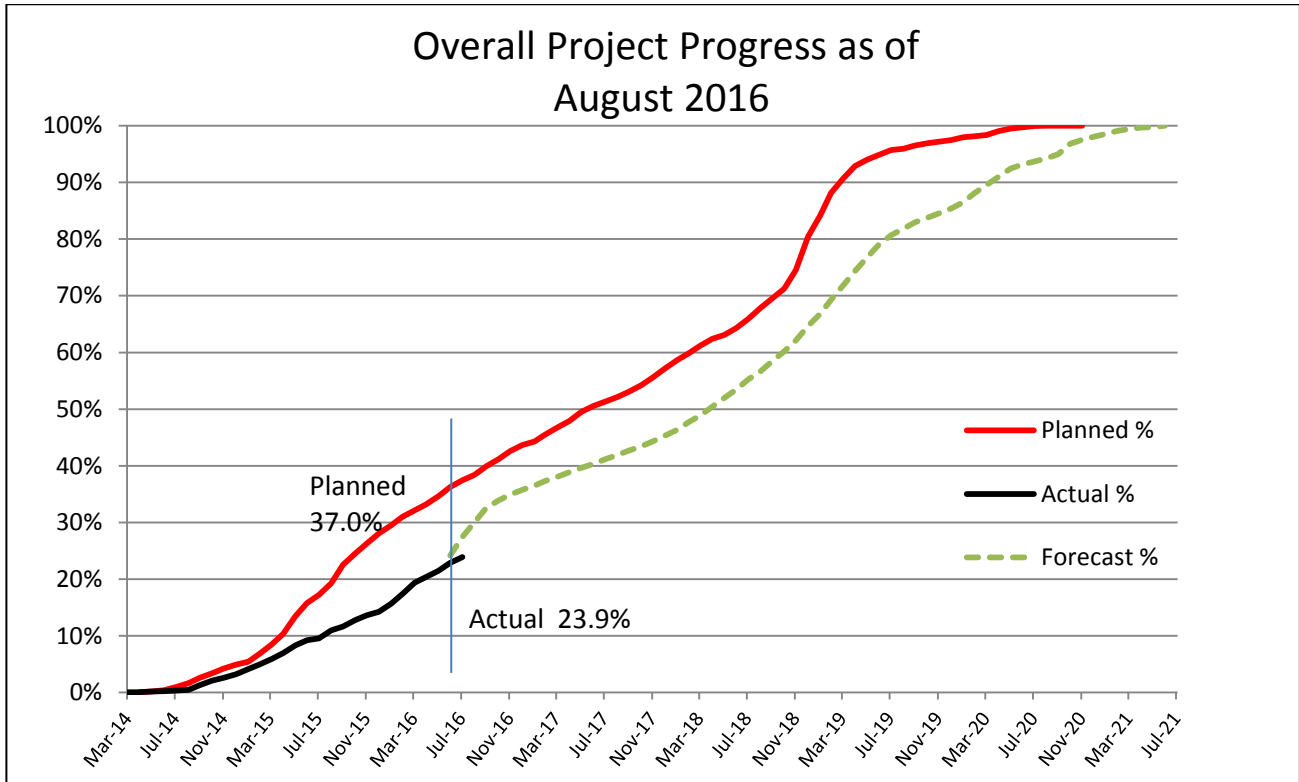
**SCHEDULE MEASUREMENTS**

|   | <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                          | 94.2%         | 0.8%                    | 13 months Behind  |
| <b>Construction Contracts Progress:</b> |               |                         |   |
| Contract C0981R & C0980                 | 18.8%         | 1.1%                    | 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**



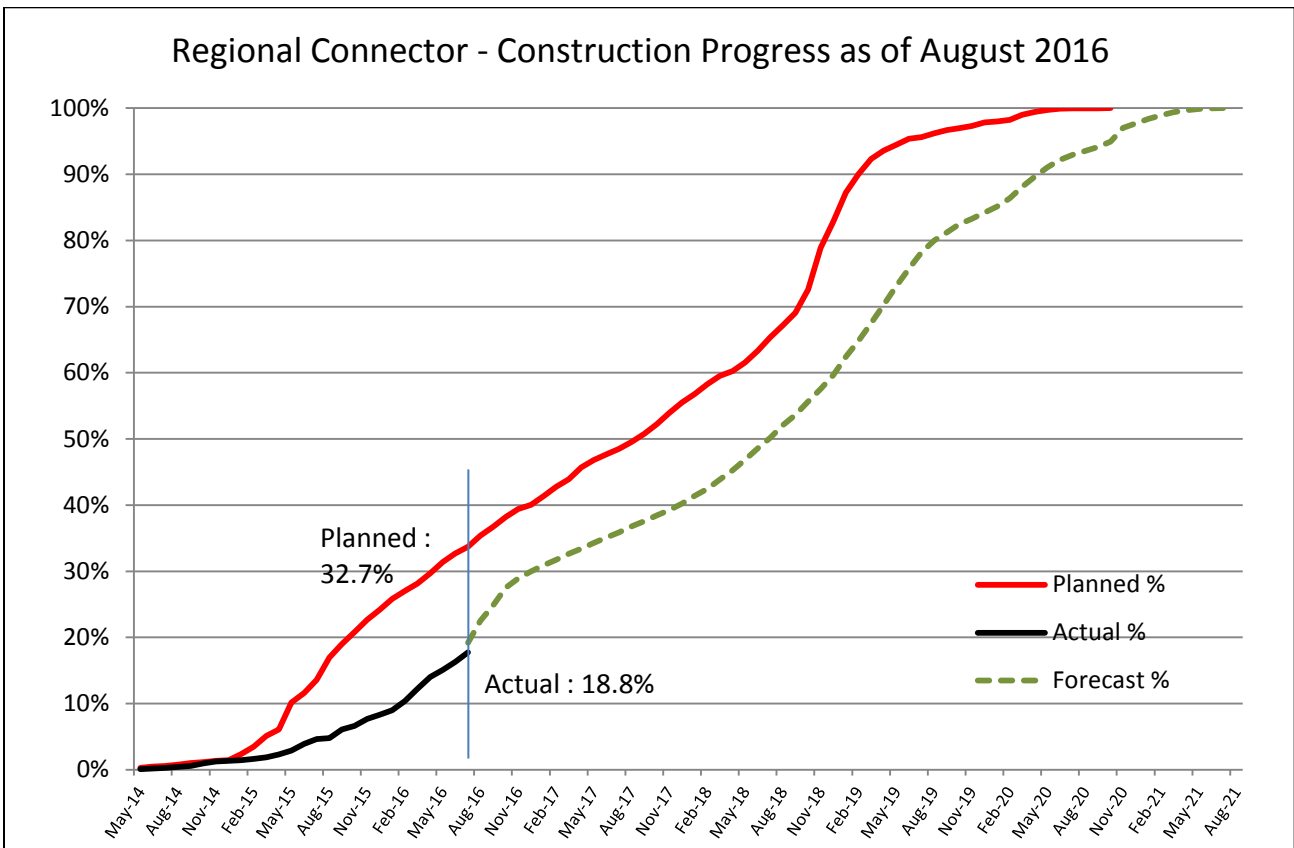
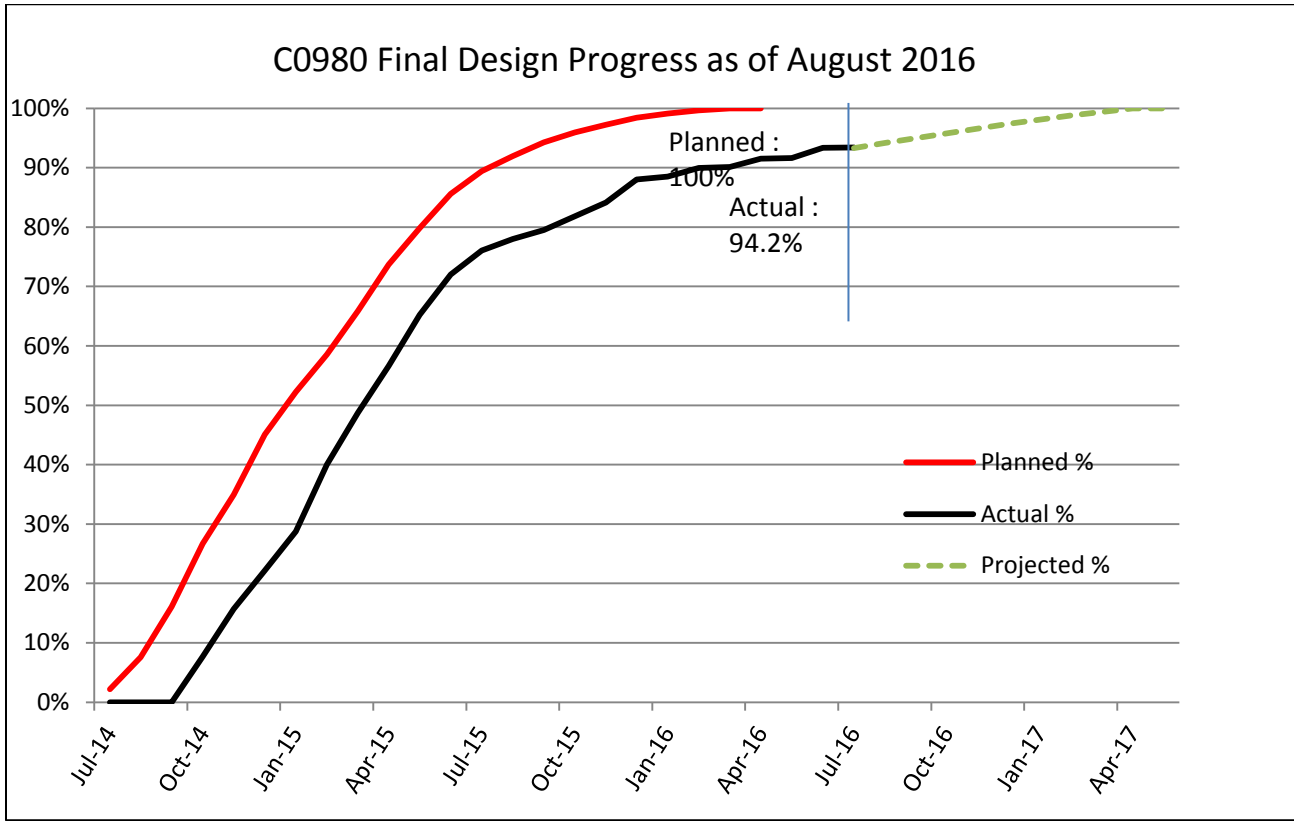
The above progress curve is based on planned expenditures of C0980 (Design-Build and C0981 (AUR) Baseline Schedule against their actual expenditures.

The cumulative overall project progress for C0980 and C0981R Contract is 23.9%.

Final Design for C0980 commenced upon MTA issuing NTP on July 7, 2014. Cumulative final design progress is 94.2% and the cumulative construction progress is 18.8%.

**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 28, 2021 and is 60 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 *mid*-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 20, 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 28, 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         | -83            | 243,830   | 173         | 229,499   | 0            | 41,586  | -83              | 243,910   | 80                        |
| 20       | STATIONS, STOPS, TERMINALS, INTERMODAL         | 354,268     | 219,477         | 0              | 229,779   | 0           | 223,779   | 0            | 13,310  | 0                | 229,849   | 70                        |
| 30       | SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS | 0           | 0               | 0              | 0         | 0           | 0         | 0            | 0       | 0                | 0         | 0                         |
| 40       | SITWORK & SPECIAL CONDITIONS                   | 141,785     | 422,453         | 189            | 527,523   | 1,112       | 495,442   | 1,074        | 272,449 | -1,979           | 538,063   | 10,541                    |
| 50       | SYSTEMS  | 69,667      | 73,848          | -42            | 74,900    | 0           | 63,689    | 0            | 1,520   | 32               | 74,169    | -732                      |
|          | CONSTRUCTION SUBTOTAL (10-50)                  | 846,343     | 920,468         | 64             | 1,076,032 | 1,284       | 1,012,409 | 1,074        | 328,864 | -2,030           | 1,085,991 | 9,959                     |
| 60       | ROW, LAND, EXISTING IMPROVEMENTS               | 115,889     | 74,208          | 0              | 82,704    | 0           | 74,151    | 25           | 46,342  | 0                | 82,704    | 0                         |
| 70       | VEHICLES                                       | 16,275      | 16,275          | 0              | 16,275    | 0           | 16,275    | 839          | 1,678   | 0                | 16,275    | 0                         |
| 80       | PROFESSIONAL SERVICES                          | 261,455     | 257,973         | 298            | 277,598   | 298         | 248,494   | 2,388        | 188,377 | -452             | 278,958   | 1,360                     |
|          | SUBTOTAL (10-80)                               | 1,239,963   | 1,268,925       | 363            | 1,452,609 | 1,583       | 1,351,329 | 4,326        | 565,261 | -2,482           | 1,463,928 | 11,319                    |
| 90       | UNALLOCATED CONTINGENCY                        | 135,399     | 126,892         | -363           | 72,732    | 0           | 0         | 0            | 0       | 4,073            | 61,413    | -11,319                   |
| 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 | 1,583       | 1,351,329 | 4,326        | 565,261 | 1,590            | 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    | 0           | 20,425    | 0            | 18,749  | 0                | 20,425    | 0                         |
|          | TOTAL PROJECTS 400228 & 460228 (EVN/PLAN'G)    | 0           | 24,200          | 0              | 26,500    | 0           | 26,500    | 0            | 24,824  | 0                | 26,500    | 0                         |
|          | 400228, 460228, 860228 TOTAL                   | 1,402,932   | 1,427,132       | 0              | 1,558,956 | 1,583       | 1,377,829 | 4,326        | 590,086 | 1,590            | 1,558,956 | 0                         |

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH 07/31/2016

**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. *There was a budget transfer from unallocated contingency and allocated contingency for SCC 10, 40, 50 and 80 for Contract C0980 Modifications.*

**Commitments:**

The Commitments increased by \$1.58 million this period to \$1.38 billion which represents 88.4% of the Current Budget. The increase is due to *execution of Contract C0980 Modifications.*

**Expenditures:**

The Expenditures are cumulative through July 2016. Expenditures increased by \$4.36 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 \$590.1 million in expenditures to date represents 37.9% 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           | 0            | 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>0</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>0</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>0</b>     | <b>22,699</b> | <b>0</b>         | <b>39,991</b> | <b>0</b>                   |

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH 07/31/2016

**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.

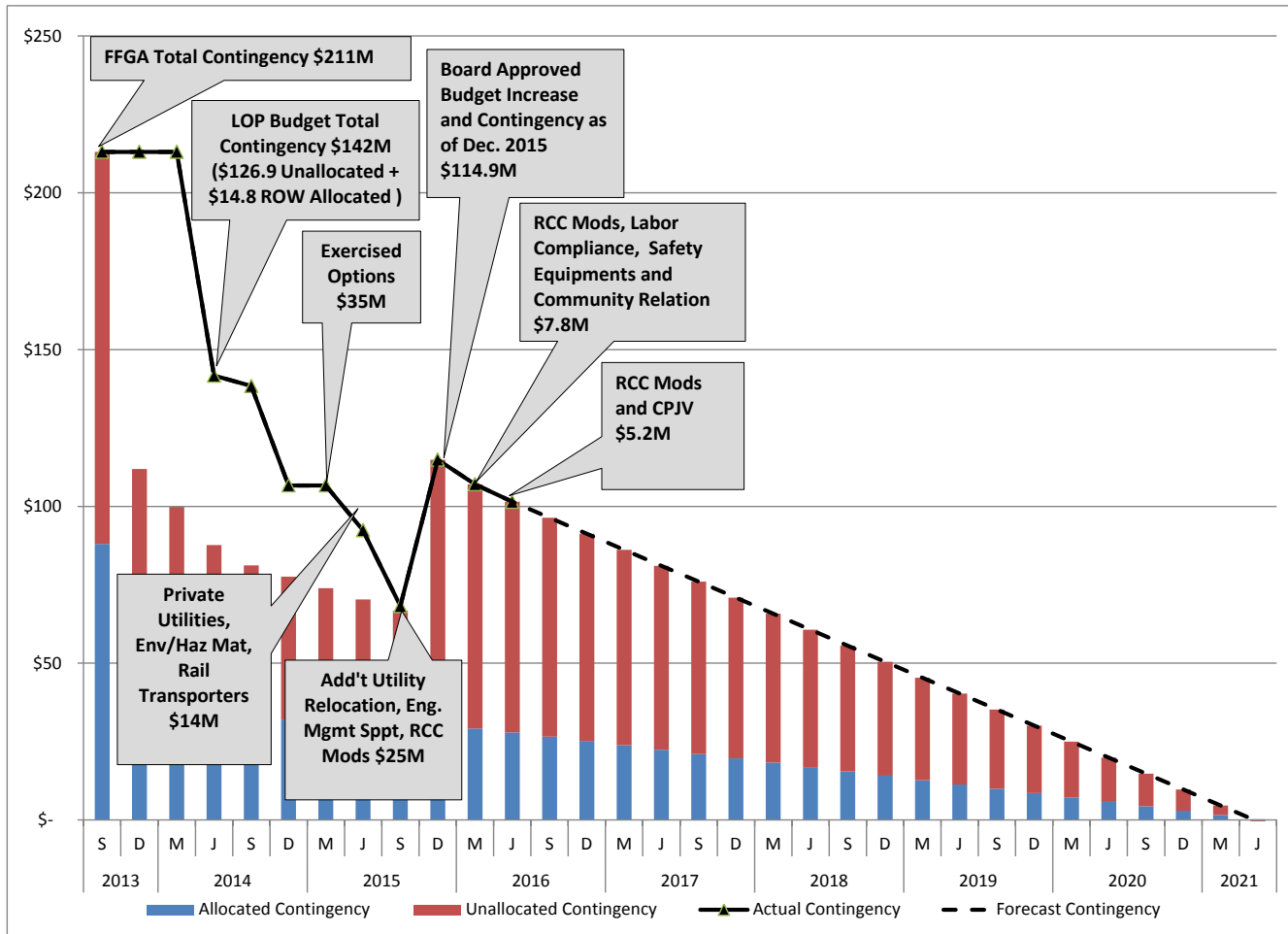
**Expenditures:**

The Expenditures are cumulative through July 2016. There was no expenditure this month. 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**

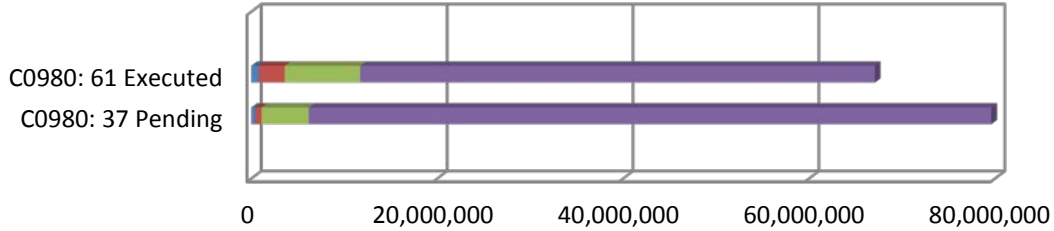


**COST CONTINGENCY DRAWDOWN ANALYSIS**

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 \$1.58 million from the Design Build Contract: \$1.23 million from “allocated contingency” and \$362k from “unallocated contingency”. The remaining project cost contingency for August 2016 is \$97.7 million.

## SUMMARY OF CONTRACT MODIFICATIONS

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



|                              | C0980              |                    | Total              |
|------------------------------|--------------------|--------------------|--------------------|
|                              | 61 Executed        | 37 Pending         |                    |
| ■ Under \$100K               | 798,696            | 415,000            | 1,213,696          |
| ■ \$100K to \$250K           | 2,781,832          | 684,000            | 3,465,832          |
| ■ \$250K to \$1M             | 8,133,237          | 5,077,086          | 13,210,323         |
| ■ Over \$1M                  | 55,370,692         | 73,429,222         | 128,799,914        |
| <b>Total Contract MODs</b>   | <b>67,084,457</b>  | <b>79,605,308</b>  | <b>146,689,765</b> |
| <b>Contract Award Amount</b> | <b>927,226,995</b> | <b>927,226,995</b> |                    |
| <b>% of Contract MODs</b>    | <b>7.2%</b>        | <b>8.6%</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

*Sixty-one (61) changes with total value of \$67.08 million have been executed since NTP of Contract C0980. An additional thirty-seven (37) changes, with a total estimated value of \$79.61 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: 23.01%
- 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: 17.45%
- *Fifty-two (52)* 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 -      | 57.64%   |
| • Apprentice Worker Goal -                     | 20.00%   |
| • Apprentice Worker Current Participation -    | - 19.43% |
| • Disadvantaged Worker Goal -                  | 10.00%   |
| • Disadvantaged Worker Current Participation - | 7.54%    |

**FINANCIAL/GRANT STATUS**

**Status of Funds Anticipated**

**August 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<br>METRO SUBMITTED A GRANT AMENDMENT OF \$100M IN JULY 2016. GRANT APPROVAL WAS EXECUTED ON AUGUST 18, 2016. FUNDS ARE AVAILABLE FOR DRAW DOWN. |
| <b>MEASURE R - TIFIA LOAN:</b><br>(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**

**August 2016**

| SOURCE                                   | (A)                | (B)                     | (C)                   | (D)                | (D/B)        | (E)              | (E/B)        | (F)                         | (F/B)        |
|--|--------------------|-------------------------|-----------------------|--------------------|--------------|------------------|--------------|-----------------------------|--------------|
|  | ORIGINAL BUDGET    | TOTAL FUNDS ANTICIPATED | TOTAL FUNDS AVAILABLE | COMMITMENTS \$     | %            | EXPENDITURES \$  | %            | BILLED TO FUNDING SOURCE \$ | %            |
| FEDERAL - CMAQ                           | \$64.000           | \$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%         | \$61.864         | 39%          | \$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%         | \$130.470        | 97%          | \$121.828                   | 90%          |
| 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             | \$211.965          | 74%          | \$69.354         | 24%          | \$69.354                    | 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>\$1,377.829</b> | <b>88.4%</b> | <b>\$590.086</b> | <b>37.9%</b> | <b>\$587.274</b>            | <b>37.7%</b> |

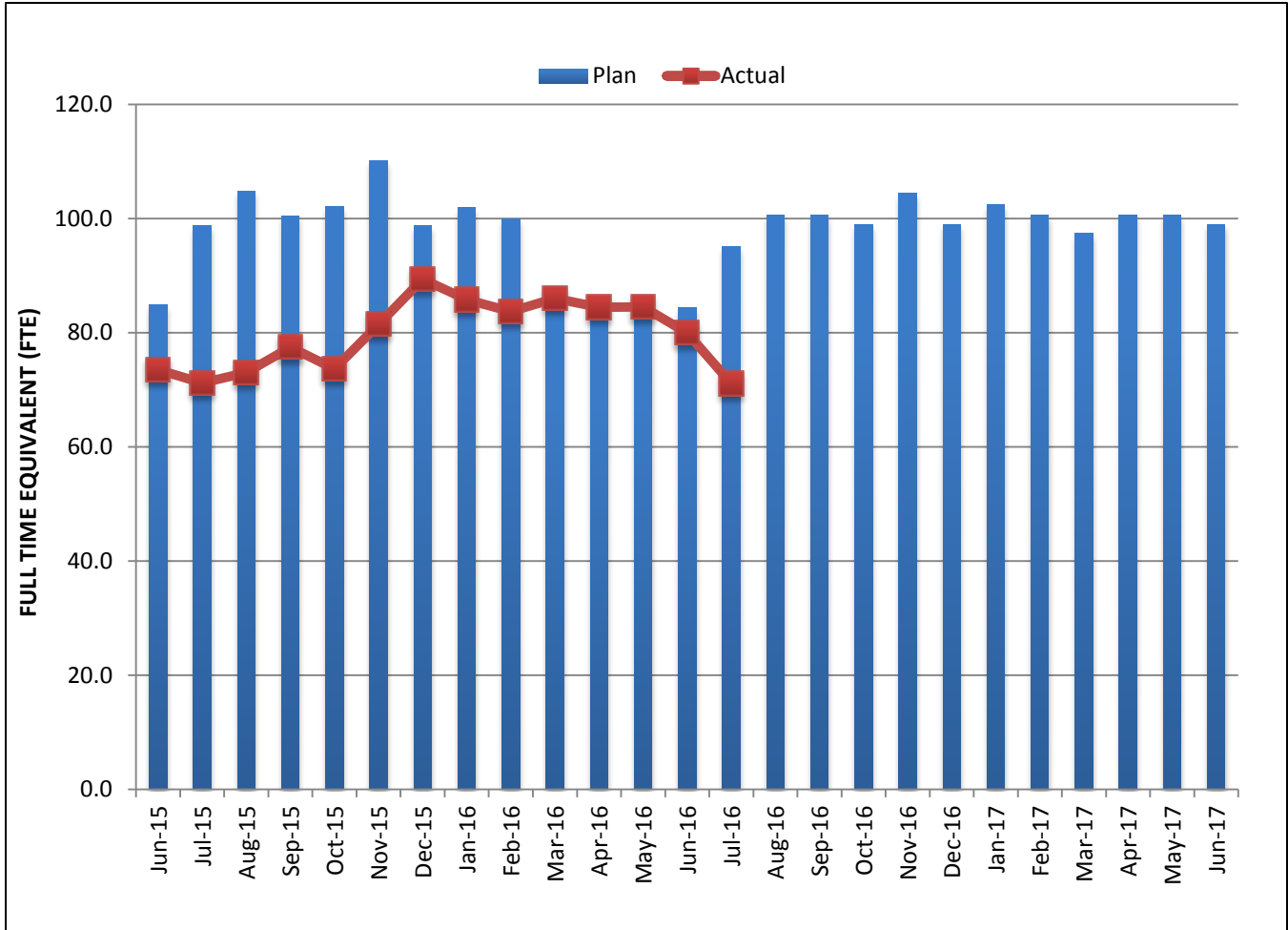
EXPENDITURES ARE CUMULATIVE THROUGH JULY 2016  
ORIGINAL BUDGET BASED ON FUNDING PLAN INCLUDED IN THE APPROVED FULL FUNDING GRANT AGREEMENT

\* 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**

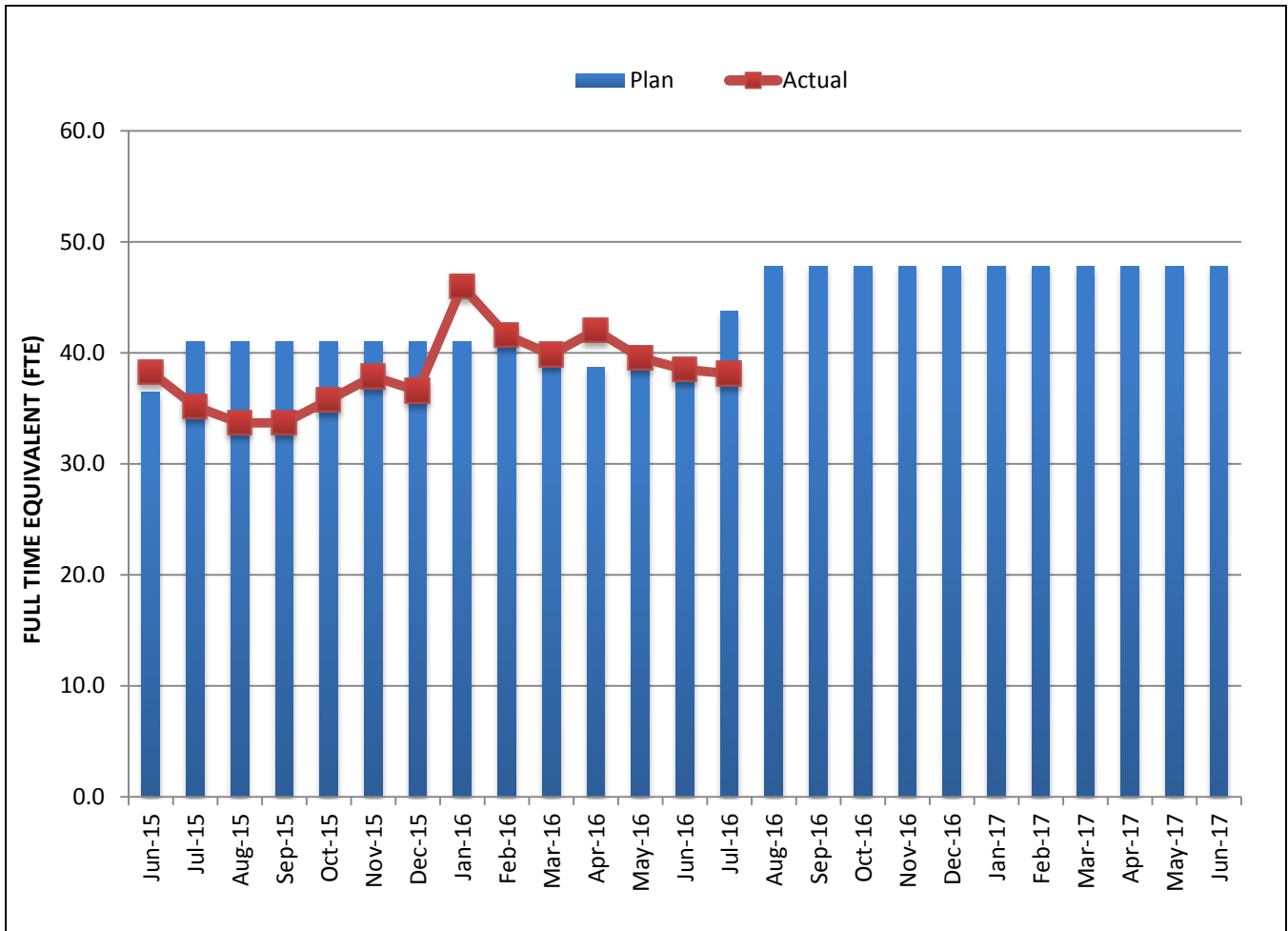


**TOTAL PROJECT STAFFING**

The overall FY16 Total Project Staffing plan averages 71.1 FTE's per month.

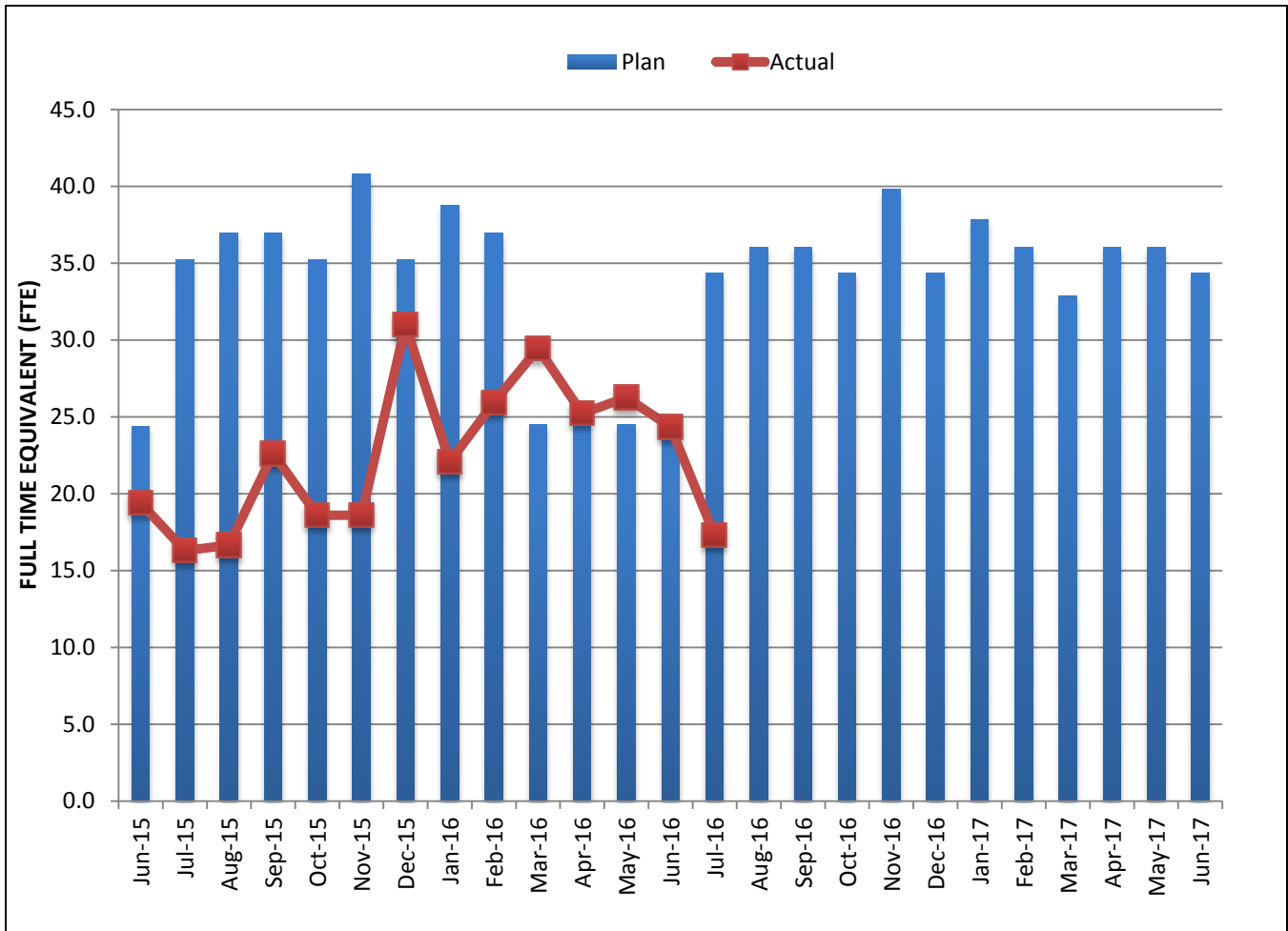
For July 2016, there were a total of 38.1 FTE's for MTA's Project Administration staff and 33.9 FTE's for consulting staff. The total actual project staffing for July 2016 was 78.8 FTE's versus FTE's planned (95.0).

**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**

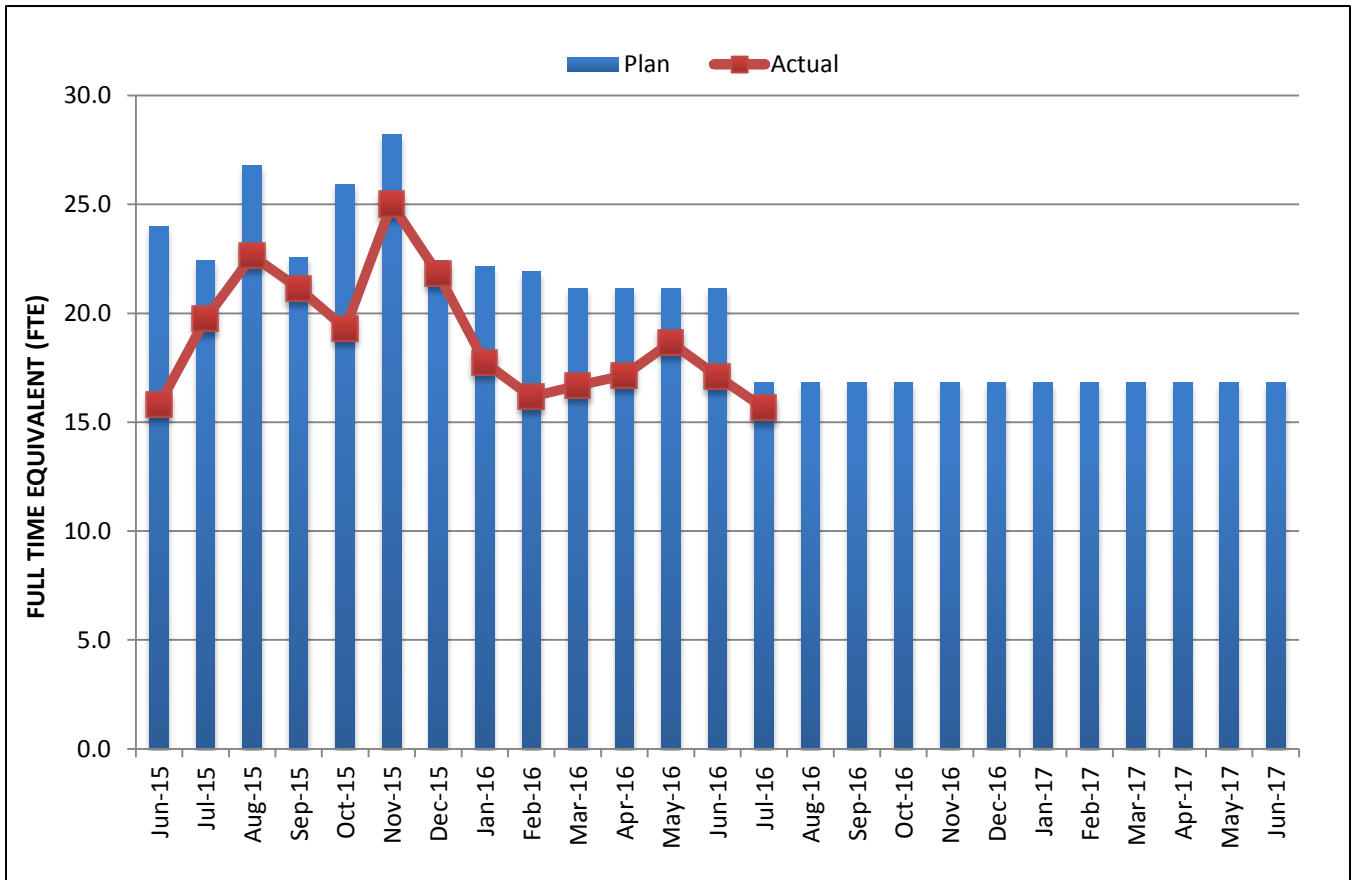


**Note:**

- 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 August 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           | 2                    | 2                  | 4                    | 3                 |
| Part Takes  | 2                 | 2         | 0           | 2                                | 1           | 1                    | 1                  | 0                    | 1                 |
| SSE   | 13                | 9         | 4           | 13                               | 9           | 7                    | 3                  | 0                    | 8                 |
| TCE/ROE   | 16                | 7         | 1           | 8                                | 8           | 7                    | 0                  | 0                    | 7                 |
| <b>Sub Total Parcels:</b>   | <b>34</b>         | <b>21</b> | <b>5</b>    | <b>26</b>                        | <b>21</b>   | <b>17</b>            | <b>6</b>           | <b>4</b>             | <b>19</b>         |
| Relocation  | 5                 |           |             |                                  |             |                      |                    |                      |                   |
| <b>Total Parcels:</b>   | <b>34</b>         | <b>21</b> | <b>5</b>    | <b>26</b>                        | <b>21</b>   | <b>17</b>            | <b>6</b>           | <b>4</b>             | <b>19</b>         |

\* Total number of parcels on this summary (34) reflect a consolidation of some ownerships, whereas ownerships and parcels are separately counted on main Regional Connector Project Control Matrix (43).  
\*\* Includes multiple parcels with same ownership.

**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**

- Metro QA reviewed and provided comments on RCC's quality related submittals, construction work plans and milestone submittals. *During the month August six (6) Construction Quality Work Plans (CQWPs) were submitted and reviewed. Five (5) additional submissions of Inspection and Test Procedures (ITPs) are currently under review. Metro QA also reviewed test results for Portland Cement Concrete Lab, Asphalt Concrete, Tie-Back, Soils and Welding MT/UT.*
- Attended "Readiness Review" meetings with RCC.
- *Metro QA performed QA surveillance at Traylor Precast in Palmdale, CA for Tunnel Liner Segment Fabrication. The facility was found to be in compliance with all specified Contract Requirements. Surveillance Report C0980-SUR2016-002 was issued to RCC and Metro QA.*
- Performed oversight verification of RCC's design and construction activities, as well as ongoing monitoring of RCC's QA/QC activities.
- *Five (5) NCR's were closed for the month of August.*
- *NCR 011 was closed by a disposition of Reject. The Concrete was removed completely and replaced. NCR 013 (7-01-16) noting that 2<sup>nd</sup>/Hope Station initial baseline readings were not submitted for review and approval prior to station excavation remained open in August. NCR 014 (7-12-16) was initiated for low compressive strength on the Soil Nail Walls at 1<sup>st</sup>/Central. It was closed (8-10-16) by an Accept As Is disposition after the RCC agreed to a 56-day break and batch plant inspections. NCR 015 was opened by RCC for the drilling and installation of Piles #2 and #3 deeper than the design depth; it was closed after the EOR's acceptance of corrective action (8-02-16), with Metro's concurrence (8-12-16). NCR 016 was issued (7-28-16) for a data logger failure on load cells at 1<sup>st</sup>/Central; it was closed (8-18-16) after restoring proper readings. NCR 017 (8-02-16) was initiated for thrust frame tie-down anchors not meeting the 150% design capacity. The design loads were re-analyzed with the weight of the thrust block taken into account in re-evaluating the uplift load carried by the tie-downs; it was closed (8-10-16) by Accept As Is disposition.*
- Through end of August 2016, Metro received a total of 1624 submittals and 142 Requests for Information (RFIs) from RCC, of which *nine (9) were closed and one (1) remains open and will be rescinded next month. Two Design Deviation Requests were processed; DDR-RC-2016-035 returned to RCC (8-01-16) and DDR-RC-2016-036 (8-30-16). Both were rescinded as neither issue required Metro's approval. RCC's monthly quality reports for July and August 2016 were also received by Metro.*

## **QUALITY ASSURANCE STATUS (CONT.)**

- A surveillance of RCC's internal design with regard to SOE was *conducted* and a *report of findings was formally issued (8-26-16), which resulted in a quality action request (C0980-QAR2016-S01-01), noting three deficiencies for RCC's correction.* During August, AFC drawings for DU3 Tieback removal shaft and adit were reviewed and rejected, as were AFC drawings for DU3A SEM Cavern and Cross Passages (pending Metro's acceptance of revised technical report, "Basis of Design Crossover Cavern Dynamic Time-History Analysis", dated 8-23-16).
  
- *Contractor Tests performed to date are as follows:*
  - 1) *Portland Cement Concrete 28 day test results: 452 number accepted: 452*
  - 2) *Asphalt Concrete Density tests results: 147 number accepted: 147*
  - 3) *Soil Field Density tests performed to date: 161 number accepted: 161*
  - 4) *Welding MT/UT testing to date is: 3420 number accepted: 3420*

## **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 *submitted* the 14<sup>th</sup> Quarterly Mitigation Monitoring and Reporting Plan (MMRP) covering May 2016 to July 2016 to the FTA on August 12, 2016.
- RCC has identified thirteen (13) trees requiring removal. RCC has submitted a request *a for a tree* removal permit from Urban Forestry in August.

## **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 seventeen (17) 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 twenty-three (23) stakeholders *throughout the project*.
- *Five (5) 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
  - *2<sup>nd</sup>/Hope pedestrian bridge design review*
- *Eight (8) presentations were made to area stakeholders on Flower Street regarding pile and deck installation and nighttime variance applications.*
- Continued bi-weekly *and weekly* meetings with: L.A. City Councilmember District 14 and the Mayor's office, Los Angeles Times, Common Wealth Partners, and Bonaventure Hotel.
- *Participated in Little Tokyo's Nisei Week Festival and mitigated construction impacts to the event through a marketing and advertising partnership with the Nisei Week Foundation.*

### **TBM and Construction Safety Program**

- *Presented to seniors of the Little Tokyo Towers on the Construction Safety Program and accepted votes for the TBM name and art contest.*

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

- Facebook had 6,924 "likes" (363 new likes). Twitter had 3,162 total followers.



## **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.
- 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 the Shoofly (Jan-March 2016) was extended to address impacts associated with 2<sup>nd</sup> Street 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 was one incident reported where an RCC crew cut through a fiber optic line at 2<sup>nd</sup> and Broadway. Communications crews repaired the line and restored service.*
- *There were no recordable injuries reported in the month of July 2016.*
- *C0980 Contractor RCC reported 76,258 work-hours for the month of July 2016. The total C0980 Contract to Date work hours through July 2016 are 941,030 with a total of 5 recordable injuries and no Lost Time injuries. The C0980 Contract Recordable Injury Rate is 1.0. The Bureau of Labor Statistics National Average Recordable Injury Rate is 3.2 for heavy civil construction projects.*
- Project to Date Total Work Hours including both the C0980 and the C0981 Advanced Utility Relocation contract through is now one million hours with six (6) recordable injuries with a Project Total Recordable Injury Rate of 1.1.

### **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

| Agency                                    | Type of Agreement                         | Status/<br>Comments   |
|---|---|---|
| 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, RCC completed their remaining punch list items on August 10, 2016. The LADWP intercept crew started their intercept work on August 8, 2016 (Saturday) on the east side of Flower Street, south of 5th Street. The LADWP conduit crew is scheduled to work on the east side of Flower Street on August 20, 2016. Once the intercept crew completes a portion of the conduit work, the cable pulling crew will intervene to pull and splice cable. While work is occurring east side, the conduit crew will work on the west side of Flower Street, south of 5<sup>th</sup> Street to continue their intercept work.
- At the intersection of 6<sup>th</sup> and Flower Street, In the LADWP tracking meeting that took place on August 8, 2016, LADWP indicated that they are currently working on the horizontal design. In addition, LADWP indicated that they no longer need three vaults to meet the power needs, but instead they will only use two vaults, which are vault 1B and 4C. On August 24, 2016, LADWP submitted the cable design drawing for only the 4.8 KV cable design to RCC and Metro for their review, and on August 30, 2016, LADWP released the 34.5 KV cable design for 6th and Flower Street for Metro and RCC's review.

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

- *At 2nd Street and Broadway (Construction) – Phase 2:* RCC began the installation of Phase 2 conduit 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, RCC started the installation of the 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 *September* 2016.

## **C0980 UTILITY WORK STATUS**

RCC 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> Street between Central and Vignes, and Alameda Street 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> Street Midblock Closure (between Broadway and Spring Street) anticipated for October 2016.
- *At the intersection of 2<sup>nd</sup>/Spring Streets, AM Peak Hours were granted by LABOE to perform wet and dry utility relocations.*

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

- AM and PM Exemptions for the 2<sup>nd</sup>/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.
- *Metro is also in the process of coordinating with CD 14/LADOT to obtain an AM Peak Hour Exemption to perform LADWP Power intercept utility work in the vicinity of 5<sup>th</sup> and Flower Streets.*

## 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 *five (5)* existing variances for the following locations:

- At the *Flower Street* work area, three (3) variances were given for time extension for *cable pulling and intercept work*.
- At the *1<sup>st</sup> and Alameda* work area, two (2) variances were given for time extension for excavation of *the Central Station and cable pulling for 1<sup>st</sup> and San Pedro*.

In July 2016, LAPD approved one (1) new variance for the *relocation of wet and dry utilities*.

- At the *2<sup>nd</sup> and Broadway* work area, one (1) variance was approved for *relocation of wet and dry utilities*.

## **CPUC CROSSING SUMMARY**

### **Current Status**

Contract C0980 requires RCC 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  |
| Aug 2016       | RCC Completed 36" waterline replacement at 1 <sup>st</sup> /Alameda                                  |

**CONSTRUCTION CONTRACTS**

|   |   |
|---|---|
| <p><b>Description: Design-Build Contract</b><br/><b>Contractor: Regional Connector Constructors</b></p>   | <p><b>Contract No. C0980</b><br/><b>Status as of: September 2, 2016</b></p>   |
| <p><b>Work Completed:</b></p> <p><b>Design</b></p> <ul style="list-style-type: none"> <li>Reviewed and Approved ITP 214 Shotcrete Placement Rev 1, Project Temporary Ventilation Plan (TBM) Tunneling, Project Temporary Ventilation Plan (TBM) Tunneling, and Project Temporary Ventilation Plan (TBM) Tunneling.</li> <li>Reviewed and Rejected of DU03 Tieback removal shaft ECI No. 00111.</li> <li>Reviewed AFC Design for Floating Slab Track, DU16 Broadway Station SOE AFC design package, DU07/DU08 100% Wayfinding Drawings, 2<sup>nd</sup>/Hope Station 100% BOP Design and 85% Supplemental Spec Package for DU08 1<sup>st</sup>/Central (including comment resolution).</li> </ul> <p><b>Construction</b></p> <p><b>1st/Central</b></p> <ul style="list-style-type: none"> <li>RCC completed drilling and installation of passenger elevator casings.</li> <li>RCC completed horizontal inclinometers, horizontal drilling and pipe installation.</li> <li>RCC completed HDPE waterproofing installation.</li> <li>RCC completed pouring of concrete slab on station invert.</li> <li>RCC completed installation and testing of TBM tie downs and launch slab.</li> <li>“Broke-through” the excavation across Alameda Wye.</li> </ul> <p><b>2nd/Broadway</b></p> <ul style="list-style-type: none"> <li>DWP completed Phase 2 cable pulling for power work.</li> </ul> | <p><b>Major Activities (In Progress):</b></p> <p><b>Design</b></p> <ul style="list-style-type: none"> <li>Continue coordination with Fire Life Safety of exiting along Flower, Hope Street and Alameda Fan Plant and 6<sup>th</sup>/Flower DWPPS vault support.</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 hanging utilities in the Wye.</li> <li>RCC continues 1st Street Leg SOE pile installation.</li> <li>RCC continues excavation/lagging and installation of walers and struts for TBM SOE/Wye.</li> <li>RCC continues geotechnical installation and monitoring at 1st/Central Yard and Alameda Public ROW.</li> <li>RCC continues removal of tie-backs for station bulkhead removal.</li> <li>RCC continues the pre-condition phase of compensation grouting from Central Ave.</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>RCC continues installing deck beams in the 2nd/Broadway intersection.</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 Street.</li> <li>RCC continues excavation and installation of 24” waterline on Flower Street.</li> <li>RCC continues excavation for the installation of cap beams on Flower Street West between 4th and 5th Street.</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><br/><b>Contractor: Regional Connector Constructors</b></p>   | <p><b>Contract No. C0980</b><br/><b>Status as of: September 2, 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 2<sup>nd</sup>/Hope Station and DU08 1<sup>st</sup>/Central Station, 100% packages for DU06.3 2<sup>nd</sup>/Hope Pedestrian Bridge Design Package, 100% packages for DU06.3 2<sup>nd</sup>/Hope Pedestrian Bridge Design Package and AFC package for DU16.1 2<sup>nd</sup>/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 installation for rebar for the ancillary level.</li> <li>• RCC will begin utility line installation for electrical, drainage and elevator utilities.</li> <li>• RCC will begin preparation for the implementation of Steady State configuration at 1st/Alameda.</li> </ul> <p><b>2nd/Broadway</b></p> <ul style="list-style-type: none"> <li>• RCC will begin installation of piles in the ancillary structure.</li> <li>• RCC will begin utility hanging in the 2nd/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 Streets.</li> <li>• RCC will begin Phase 2 of sewer bypass work at 4th/Flower.</li> <li>• RCC will begin implementation of Steady State configuration.</li> </ul> <p><b>Project-wide</b></p> <ul style="list-style-type: none"> <li>• RCC will begin installation of MPBX along 2nd Street.</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 Street.</li> </ul> |

**CONSTRUCTION CONTRACTS (Cont.)**

| <b>Description: Design-Build Contract<br/>Contractor: Regional Connector Constructors</b>               |          |          | <b>Contract No. C0980<br/>Status as of: September 2, 2016</b> |                         |                |                       |          |              |
|---|----------|----------|---|-------------------------|----------------|-----------------------|----------|--------------|
| <b>Schedule Summary:</b>  |          |          |   | Original Contract Dates | Time Extension | Current Contract      | Forecast | Variance CDs |
| Date of Award:  | 5/6/2014 |          | Notice to Proceed   | 07/07/14                | 0              | 07/07/14              | 07/07/14 | 0            |
| Notice to Proceed:  | 7/7/2014 |          | Milestone 1:  | 10/22/20                | 0              | 10/22/20              | 05/15/21 | -205         |
| Original Contract Duration:   | 2430 CD  |          | Milestone 2:  | 06/14/20                | 0              | 06/14/20              | 01/19/21 | -219         |
|   |          |          | Milestone 3:  | 05/15/16                | 0              | 05/15/16              | 11/04/17 | -538         |
|   |          |          | Milestone 4:  | 05/27/18                | 0              | 05/27/18              | 09/27/19 | -488         |
| Current Contract Duration:  | 2430 CD  |          | Milestone 5:  | 08/19/19                | 0              | 08/19/19              | 05/28/20 | -283         |
| Elapsed Time from NTP:  | 789 CD   |          | Milestone 6:  | 09/18/19                | 0              | 09/18/19              | 08/26/20 | -343         |
|   |          |          | Milestone 7:  | 10/10/15                | 0              | 10/10/15              | 03/21/16 | -163         |
|   |          |          | Milestone 8:  | 04/22/18                | 0              | 04/22/18              | 03/29/20 | -707         |
|   |          |          | Milestone 9A:   | 07/14/20                | 0              | 07/14/20              | 12/10/20 | -149         |
|   |          |          | Milestone 9B:   | 10/22/20                | 0              | 10/22/20              | 03/20/21 | -149         |
|   |          |          | Milestone 10:   | 10/12/20                | 0              | 10/12/20              | 07/13/21 | -274         |
|   |          |          | Milestone 11:   | 10/27/20                | 0              | 10/27/20              | 07/28/21 | -274         |
|   |          |          | Milestone 12:   | 03/01/21                | 0              | 03/01/21              | 09/21/21 | -204         |
|   |          |          |   |                         |                |                       |          |              |
|   |          |          |   |                         |                |                       |          |              |
| <b>Physical Percent Complete as of :</b>  |          | 09/03/16 | <b>Cost Summary:</b>  |                         |                | <b>\$ In millions</b> |          |              |
| Design  | 94.2%    |          | 1. Award Value:   |                         |                |                       |          | 927.2        |
| Construction  | 16.9%    |          | 2. Executed Modifications:                                    |                         |                |                       |          | 47.4         |
| Total Incurred Cost   | 36.8%    |          | 3. Approved Change Orders:                                    |                         |                |                       |          | 19.7         |
| * Note: Physical completion assessment excludes mobilization, general mobilization and Provisional Sum. |          |          | 4. Current Contract Value (1+2+3):                            |                         |                |                       |          | 994.3        |
|   |          |          | 5. Incurred Cost:   |                         |                |                       |          | 365.9        |

## CONSTRUCTION PHOTOS



Excavation at Alameda Wye



Tie-back related work at 2<sup>nd</sup>/Hope Station



Installation of rebar for elevator shaft at 1<sup>st</sup>/Central Station



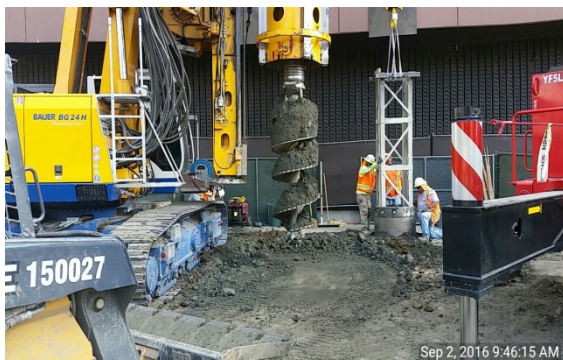
Excavation at 2<sup>nd</sup>/Hope Station



Deck beam installation at 2<sup>nd</sup>/Broadway intersection



Pile related work on Flower Street



Pile installation at 2<sup>nd</sup>/Broadway



Cap beam installation on Flower Street

**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                        |