

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**

## **QUARTERLY PROJECT STATUS REPORT**

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

**September 2015**

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**PROJECT SUMMARY**

**As of September 2015**

<b>LOCATION:</b> Downtown Los Angeles				<b>CONSTRUCTION MANAGEMENT CONSULTANT:</b> ARCADIS			
<b>DESIGN CONSULTANT:</b> Connector Partnership JV				<b>CONTRACTORS:</b> Regional Connector Constructors, Joint Venture			
Electrical PVC Conduit installation and Wood Form Working at Mangrove site				<b>WORK/ACTIVITY COMPLETED PAST MONTH</b>			
				<ul style="list-style-type: none"> <li>Overall DB contract is 3.9 % complete as of September 26, 2015.</li> <li>Final design is 79.5% complete as of September 2015.</li> <li>Metro completed review of submittals for Fire Assessment and Alternate Mix Design for Precast Concrete Tunnel Lining (PCTL), Reliability Availability Maintainability Dependability Program Plan (RAMDPP), Final Load Flow Analysis Report, Bored Tunnel 100% Design Drawings, AFC shoofly temporary Communication Drawings.</li> <li>RCC completed excavation for the 6" water line at 1st/Alameda.</li> <li>RCC completed pile trenching for the Wye in Work Area 3 at 1st/Alameda.</li> <li>RCC installed a temporary power substation at the 1st/Central Yard.</li> <li>RCC completed excavation to verify Sprint line design on Broadway.</li> <li>RCC completed fire hydrant relocation on 2nd/Broadway.</li> </ul>			
<b>EXPENDITURE STATUS</b> (\$ In Millions)				<b>SCHEDULE ASSESSMENT</b>			
<b>ACTIVITIES</b>	<b>CURRENT BUDGET</b>	<b>EXPENDED AMOUNT</b>	<b>PERCENT EXPENDED</b>	<b>MAJOR SCHEDULE ACTIVITIES</b>	<b>PRIOR PERIOD</b>	<b>CURRENT PLAN</b>	<b>VARIANCE WEEKS</b>
<b>DESIGN</b>	\$125.0	\$101.6	81.3%	<b>Environmental</b>			
				FEIS / FEIR	N/A	04/26/12	Complete
				SEIS Flower St.	N/A	10/31/15	In Progress
<b>RIGHT-OF-WAY</b>	\$102.0	\$68.6	67.3%	<b>Design</b>			
				PE Notice to Proceed	N/A	01/04/11	Complete
				Final Design complete	06/13/16	08/08/16	8
				Note: Based on the latest approved D/B Contractor's schedule, The Systems Design Package was delayed by seven weeks.			
<b>CONSTRUCTION</b>	\$1,013.3	\$227.1	22.4%	<b>Right-of-Way</b>			
				All parcels available	06/01/16	06/01/16	0
<b>OTHER</b>	\$219.8	\$70.4	32.0%	Note: ROW dates are adjusted to reflect the latest D/B Contractor's coordinated			
<b>TOTAL</b>	\$1,460.0	\$467.6	32.0%	<b>Construction - Design / Build Contract</b>			
				Notice to Proceed	07/07/14	07/07/14	Complete
				Construction complete	12/23/20	02/04/21 *	6
				Revenue Service Date	02/21/21	04/05/21 *	6
				Note: * Based on the Board Meeting in April 2015, the project is reflecting six months potential delay due to AUR work transferred to C0980 Contract.			
<p>Current Budget reflects Board approved Life-of-Project Budget and does not include Finance Charges.</p> <p>Note: Expended amount is through 08/31/2015.</p>				<b>CRITICAL ACTIVITIES / 3 MONTH LOOK AHEAD</b>			
<b>AREAS OF CONCERN</b>				<ul style="list-style-type: none"> <li>Metro continues to work with RCC and FLS committee to resolve emergency ventilation design issues.</li> <li>RCC continues relocation of a 6" water line (AUR) and fire hydrant construction activities near 4th/Flower.</li> <li>RCC will continue decking for the Shoofly Bridge and installing the remaining 5 piles for the TBM Pit pending traffic approval for the 1st St. widening.</li> <li>RCC continues 6", 8", 12" and 16" water line construction activities at 1st/Alameda.</li> <li>RCC continues with the installation of electrical duct banks at 2nd/Spring and 2nd/Broadway</li> <li>Level 3 and Verizon Business/MCI are planning to complete remaining work, cable pulling and splicing on Flower St.</li> <li>LADWP Power will mobilize to install intercepts and cables on Spring St. Flower St (5th/6th).</li> </ul>			
<b>ROW ACQUISITION</b>	<b>PLAN</b>	<b>ACQUIRED</b>	<b>REMAINING</b>				
<b>PERMANENT PARCELS</b>	5	2	3				
<b>TEMPORARY PARCELS</b>	29	12	17				
<b>TOTAL PARCELS</b>	34	14	20				

## **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 February 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 would 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 underground 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, a joint venture of Skanska USA Civil West California District, Inc. and Traylor Brothers, Inc. and Metro Board authorized to award 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**

*Level 3 Communications plans to install 60' of conduit connecting their duct bank to the relocated AT&T CA duct bank in Flower Street, and then place new cable, splice and remove old cable by Mid-November 2015. MCI, as lessee in the AT&T CA joint trench in Flower Street, is scheduled to complete the pulling & splicing of their cable into the new AT&T CA joint trench and the removal of their old cable by late October 2015.*

*At 2<sup>nd</sup> & Broadway, Sprint is relocating their duct bank in order to accommodate the LADWP vault installation which is part of phase 1 on the LADWP power relocations. The Sprint relocation is scheduled to be completed by the end of November 2015.*

*The contractor continues to expedite completion of AUR work at 2<sup>nd</sup>/Broadway, and is currently installing conduit as part of the phase 1 work, and the work is estimated to be complete by early December 2015.*

*At 2<sup>nd</sup> & Spring Street, the contractor is trenching and installing conduit at night, and the work is estimated to be complete by the end of October 2015.*

Metro and RCC continue to explore options for sequencing and accelerating station construction work to mitigate delay to this work. Critical utility work is also progressing at 1<sup>st</sup>/Alameda and 5<sup>th</sup> and Flower Streets.

### **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 and reissued with each successive integration of the following rail line extensions including Crenshaw/LAX, Regional Connector and Purple Line.

### **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 April 2014 session of the Metro Board. The Board established a life-of-Project (LOP) budget of \$1,420,016,799 for the RCTC Project No. 860228 and also established a LOP budget of \$39,991,168 for a new RCTC Project No. 861228 for Concurrent Non-FFGA Project activities. The current project cost has been revised to \$1.46

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

billion dollars and includes \$24.2 million in environmental and planning costs and does not include \$7.1M finance cost.

Funding for the project comes from a variety of sources such as 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 – 47% - comes from Federal New Starts.

*The project commitments through September 2015 increased by \$18.52 million to \$1.284 billion or 90.01% of the Current Budget. The increase is due to issued Change Order for Advance Utility Relocation to RCC. The project expenditure through August 2015 is \$444.98 million or 31.2% of the current budget. The expenditures to date are for Engineering Management and continuation of Management Support Services, third party utility relocation work, agency administration, advanced utility relocation construction (C0981R), design build contract (C0980), right-of-way, Master Cooperative Agreements and professional services.*

*The project master schedule reflects a forecast of April 2021 for Revenue Service, which will be executed in two phases. Phase I Revenue Service Date to Eastside is in December 2020 and phase II Revenue Service Date to Pasadena is in April 2021.*

A Risk Register during PE phase was developed for the project and was updated quarterly during the early phases of the project to reflect any new risks that derive from concerns or issues. A more comprehensive Risk Register is developed and being reviewed and updated between Metro, CPJV, CMSS, RCC and FTA/PMOC monthly for the current phase of the project. Risk Management reporting will continue to be on a quarterly basis. Last risk assessment was conducted in February 2015 and reviewed with FTA/PMOC. *Metro is planning to perform and coordinate a Risk Assessment in October 2015 and review the current schedule and cost status of the project.*



## **MANAGEMENT ISSUES / OPPORTUNITIES**

**Concern No. 1:** NEPA Law suits potentially delay the construction of C0980 Contract on Flower Street.

**Status/Action** The NEPA trial concluded on Feb. 24, 2014. In an order issued on May 29, 2014, Judge Kronstadt concluded the FEIS did not sufficiently discuss alternative tunneling methods. *MTA is working with FTA to complete supplemental NEPA process and issue the SEIS by the end of October 2015, before the D/B contractor is scheduled to commence cut-and-cover construction on Flower Street. No impact is anticipated to D/B Contractor.*

**Concern No. 2:** *AUR contract work has been delayed, impacting RCC's schedule.*

**Status/Action** *Metro and RCC are collaborating on a schedule recovery plan which includes significant re-sequencing of work and additional measures to complete the project in March 2021 and complete pre-revenue testing by the FFGA Revenue Service Date.*

**Concern No. 3:** Non-availability of space to install the electrical ductbanks due to existing infrastructure at 2<sup>nd</sup> and Broadway location remains a concern.

**Status/Action** *Resolved - Design has been substantially completed and work is proceeding.*

**Concern No. 4:** *Late submittals and City approvals of traffic control plans and shoring designs may impact beginning critical path work at 1<sup>st</sup>/Central and 2<sup>nd</sup>/Hope stations.*

**Status/Action** *Metro is working with RCC, LADOT and BOE to actively manage submission, quality review and approvals of required plans.*

**Concern No. 5:** *Metro Operation has requested that the project implement a 15 mph alignment design at the Alameda Wye which has potential impact on the Project's Cost and Schedule.*

**Status/Action** *This issue is elevated to Metro management for resolution and expected a decision in November 2015. Currently, the contractor is proceeding with 10 mph design per contract scope.*

**Concern No. 6:** Delayed approval of the 1st Street WB and EB Widening Worksite Traffic Control Plan (WTCP) is preventing storm drain and sewer installation, soldier pile installation at the TBM Launch Pit and 1st Street EB roadway widening.

**Status/Action** *Resolved - West bound and East bound widening scheduled to begin on 10/31/15.*

## **MANAGEMENT ISSUES / OPPORTUNITIES (Cont.)**

**Opportunity No. 1:** Metro has exercised C0980 Project Option 12 which includes elements of design required for a Super Fast Growth Rate/Arson Fire. Metro Fire Life Safety (FLS) revised the criteria to include Medium Growth Rate Fire.

**Status/Action** RCC will identify the physical elements required for the Medium Growth Rate Fire compared to the previous Super Fast Growth Rate/Arson Fire. Metro will pursue equitable adjustment to the Contract for elements associated with Super Fast Growth Rate/Arson Fire not required in C0980 Contractor's design (Potential Cost Reduction).

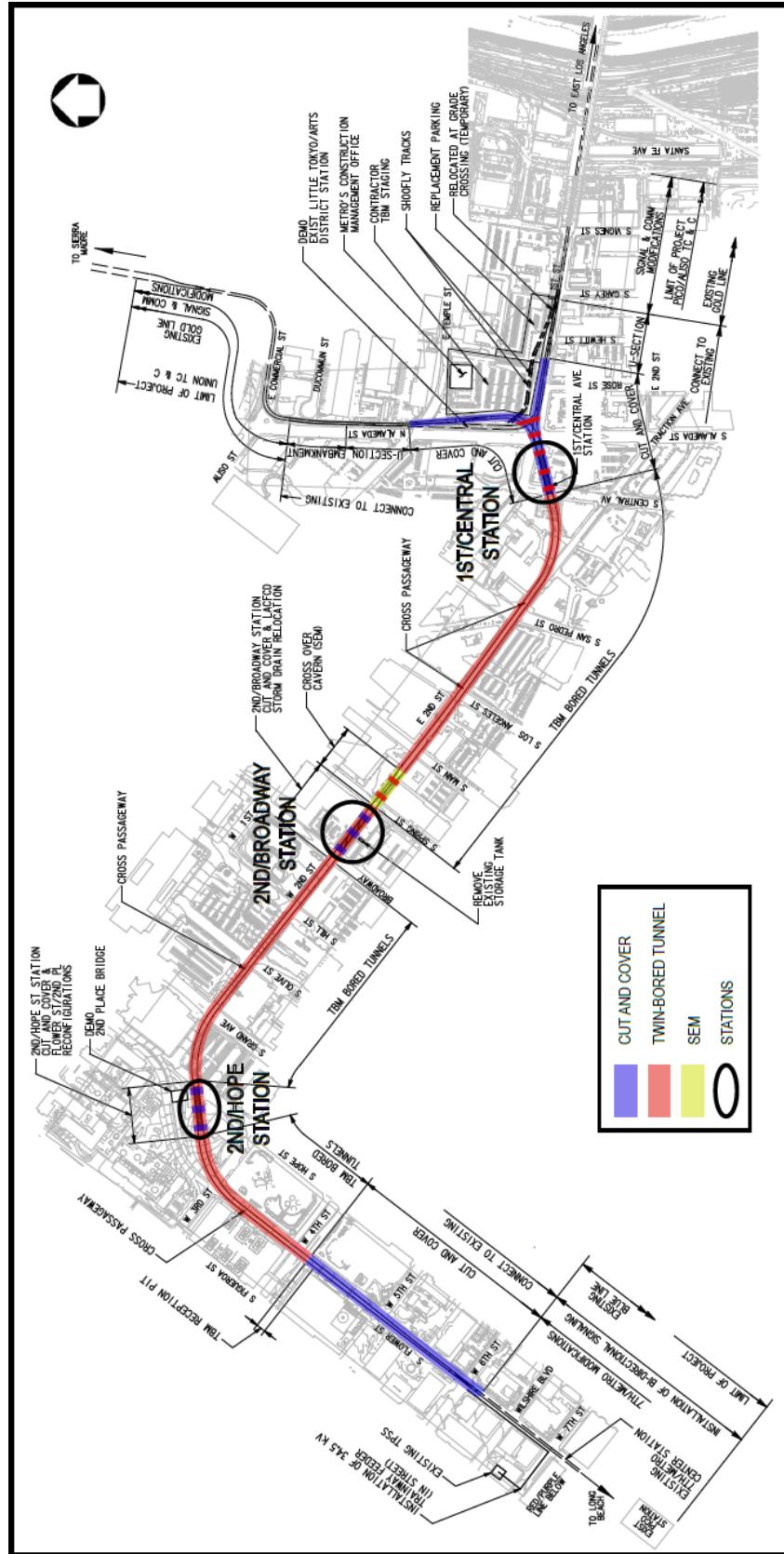
**Opportunity No. 2:** METRO/RCC is working with City Council District 14 and LADOT to secure approval for the closure/partial closure of the 2<sup>nd</sup>/Broadway intersection to facilitate construction of DWP utilities through that intersection. This full closure will last up to 7 months.

**Status/Action:** *Traffic Control Plans and Traffic Management Plans submitted to LADOT for approval for full closure of 2<sup>nd</sup>/Broadway on January 9<sup>th</sup>, 2016.*

**Opportunity No. 3:** METRO/RCC is working to modify the phasing of the waterline installation at 1<sup>st</sup>/Alameda to eliminate the necessity of having all the water line relocation work completed prior to start of the TBM operations.

**Status/Action:** Phasing modification will reduce the amount of Water line relocation work associated with the Critical TBM operation activities (Schedule Recovery). RCC is currently collaborating on the phasing plan with LADWP.

# PROJECT ALIGNMENT



## **BASE PROJECT SCOPE**

### **Engineering**

This phase consists of Preliminary Engineering (PE) 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 enough detail to provide the conceptual 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 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 on their own.

Final Design is being performed by the D/B contractor as part of the C0980 Contract.

### **Metro Furnished Equipment**

Metro will procure Light Rail Vehicles and UFS equipment. Four Light Rail Vehicles for the Project will be procured and delivered by Kinkisharyo International, LLC under Option 2 of Contract P3010 and the vehicles would 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) Contract as follows:

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

A number of utility owners have already relocated and will continue relocating their own utilities. The utilities include fiber optic, telephone, cable television, electrical (power cable pulling and splicing), and natural gas lines, which 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

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

*Remaining work by Level 3 and MCI to splice and remove of old cable is expected to be completed by mid-November, 2015.*

Completion dates for cable pulling, splicing and removal of old facilities for LADWP:

- Alameda/1st Streets and Flower north of 5th Street: Cable pulling, splicing and removal of old facilities is now complete with the exception of pulling cable for Lateral 3, which will eventually provide permanent power to the 1<sup>st</sup>/Central Avenue Station
- *Flower south of 5<sup>th</sup> Street: LADWP intercept conduit installation and cable pulling, splicing and removal of old facilities is on hold until RCC complete potholing to scrutinize the condition and conflict with the existing vault and ductbank at the intersection of Flower and 6<sup>th</sup> Street.*
- 2<sup>nd</sup> and Broadway: Cable pulling, Splicing and removal of existing facilities is driven by LADWP re-design of the power system route at Broadway Street. A two phase relocation solution has been agreed to. Early September 2015 LABOE partially approved 2<sup>nd</sup> Street duct bank mainline design for Phase 1. *Target date for LADWP to begin intercept work is early December 2015.*

### **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, all system components including signaling, communications, traction power, overhead conductor rail, train control, communications, all electrical and mechanical equipment, and testing. The contractor will restore the site to its previous condition at the end of the project. The duration of this contract is approximately 2300 calendar days, which includes approximately 300 days of bus bridges.

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 issues for the various stakeholders along the alignment. This contract was awarded May 6, 2014 and NTP issued July 7, 2014. *Metro has exercised several contract options and is in the process of adding the remaining Advanced Utility Relocation work to C0980 Contract (see below C0981R Contract).*

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

### ***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 are long-lead construction tasks that are known to conflict with cut and cover excavations.*

*The scope of this work includes 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 is transferred to C0980 Contract. Contract C0981R is currently in closeout.*

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

Metro awarded the contract for Construction Management Support Services to ARCADIS, Inc. ARCADIS Project Manager and other staff are co-located with Metro at an integrated project management office located at the Mangrove site. At the April 2014 Board Meeting, the Board authorized the Chief Executive Officer to execute a contract modification to fund ARCADIS during FY15. A contract modification to ARCADIS was issued in June 2014. CMSS's (Arcadis) FY16 contract modification is included in July 2015 Board Report.

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

Metro awarded this contract to a joint venture (CPJV) between AECOM, Inc. and Parsons Brinkerhoff. CPJV provided preliminary engineering services to support the EIR/EIS, prepared project definition documents for Contract C0980, and prepared the final design documents for Contract C0981. CPJV is currently performing design support during construction (DSDC) for the C0980 contract. CPJV's FY16 contract modifications are included in July 2015 Board Report.

**KEY MILESTONES SIX- MONTH LOOK AHEAD**

	Milestone Date	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16
Start DWP Power Mainline work at Broadway North	09/12/15	⬡					
LADOT/BSS approved TCP for 1st/Alameda WB+EB Widening	09/30/15	△					
Start Pile Installation at 1st/Central Station	10/05/15		⬡				
Flower St/Alameda/WYE/Guideways - 100% Design Sub	10/08/15		⬡				
2nd/Broadway Station Package - 85% Design Submittal	10/09/15		⬡				
2nd/Hope Station Package - 85% Design Submittal	10/14/15		⬡				
Start 1st St EB/WB Widening	10/24/15		⬡				
Complete Potholing 24" waterline on Flower St	10/30/15		⬡				
DU12 Communication - 85% Design Submittal	11/02/15			⬡			
DU03A SEM/Crossover - 100% Design Submittal	11/20/15			⬡			
Traffic Control Plan approved by LADOT for SOE work at 2nd/Hope Station	12/05/15				△		
Civil Segment A (Flower to Hope) - 85% Design Submittal	12/11/15				⬡		
Start Full Closure at 2nd/Broadway Intersection	01/02/16					⬡	
Civil Segment B (Broadway to WYE) - 100% Submittal	01/06/16					⬡	
Traffic Control Plan approved by LADOT for SOE work at Flower Street	01/31/16					△	
Traffic Control Plan approved by LADOT for Bus Bridge#1	02/06/16						△
Civil Segment A (Flower to Hope) - 100% Design Submittal	02/22/16						⬡

◆ MTA Staff

Ⓜ MTA Board Action

⌘ FTA (Federal Transit Administration)

△ Other Agencies

□ Contractors

○ Design Consultant

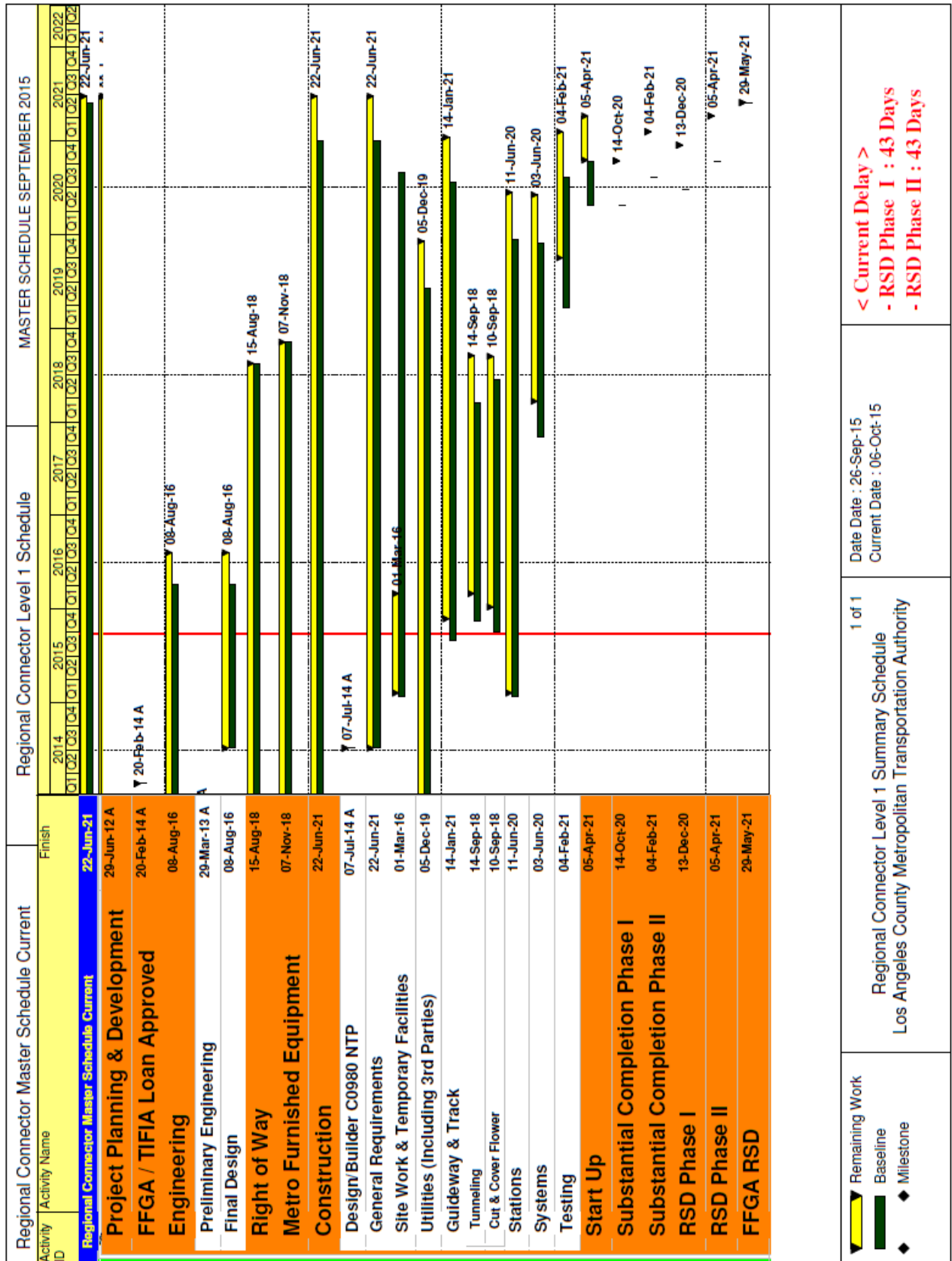
⬡ C0980 D/B Contractor

"A" following date is actual and completed

\* New

▽ Utility Company

## PROJECT SUMMARY SCHEDULE



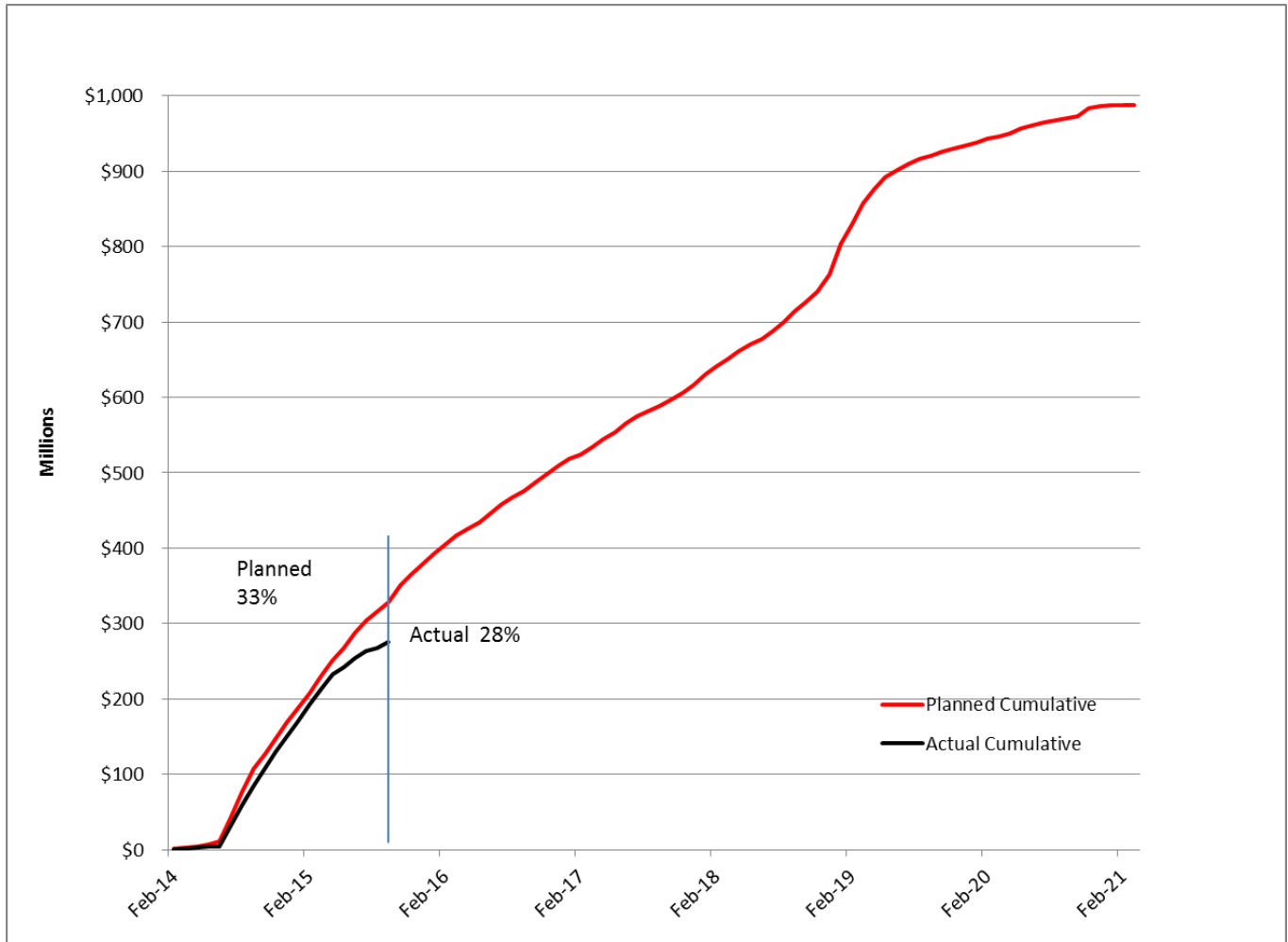


**SCHEDULE MEASUREMENTS**

	Status	Change from Last	Comment
Forecast Revenue Service	4/5/2021	43CD	Incorporating partial impact resulting from additional AUR work transferred to RCC
TIFIA Revenue Service	5/29/2021	None	
FFGA Revenue Service	5/29/2021	None	
<b>Final Design Progress :</b>			
Contract C0980	79.5%	1.5%	4 months Behind
<b>Construction Contracts Progress :</b>			
Contract C0981R	100%		Termination for Convenience (4/14/2015). Contract in closeout
Contract C0980	3.9%	0.4%	5 months behind (Compare 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) and including executed Modifications and change orders.

## OVERALL CONSTRUCTION PROGRESS CURVE STATUS

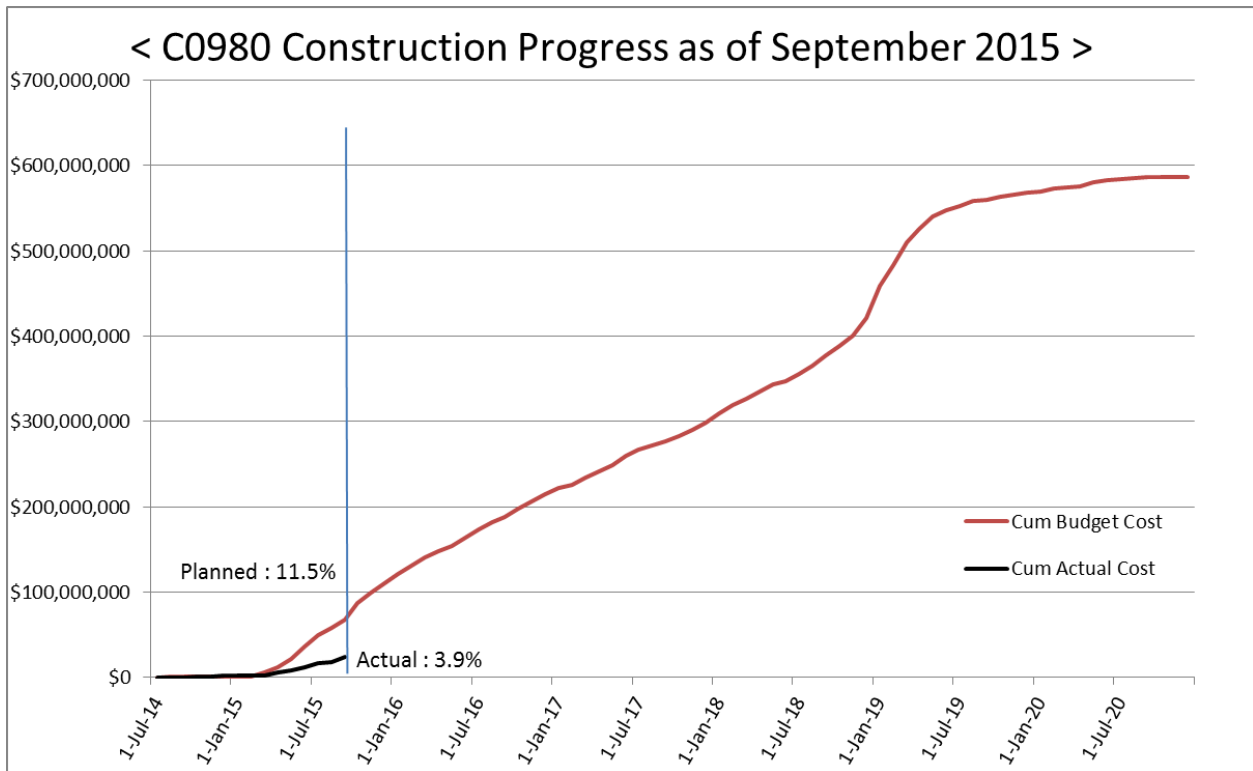
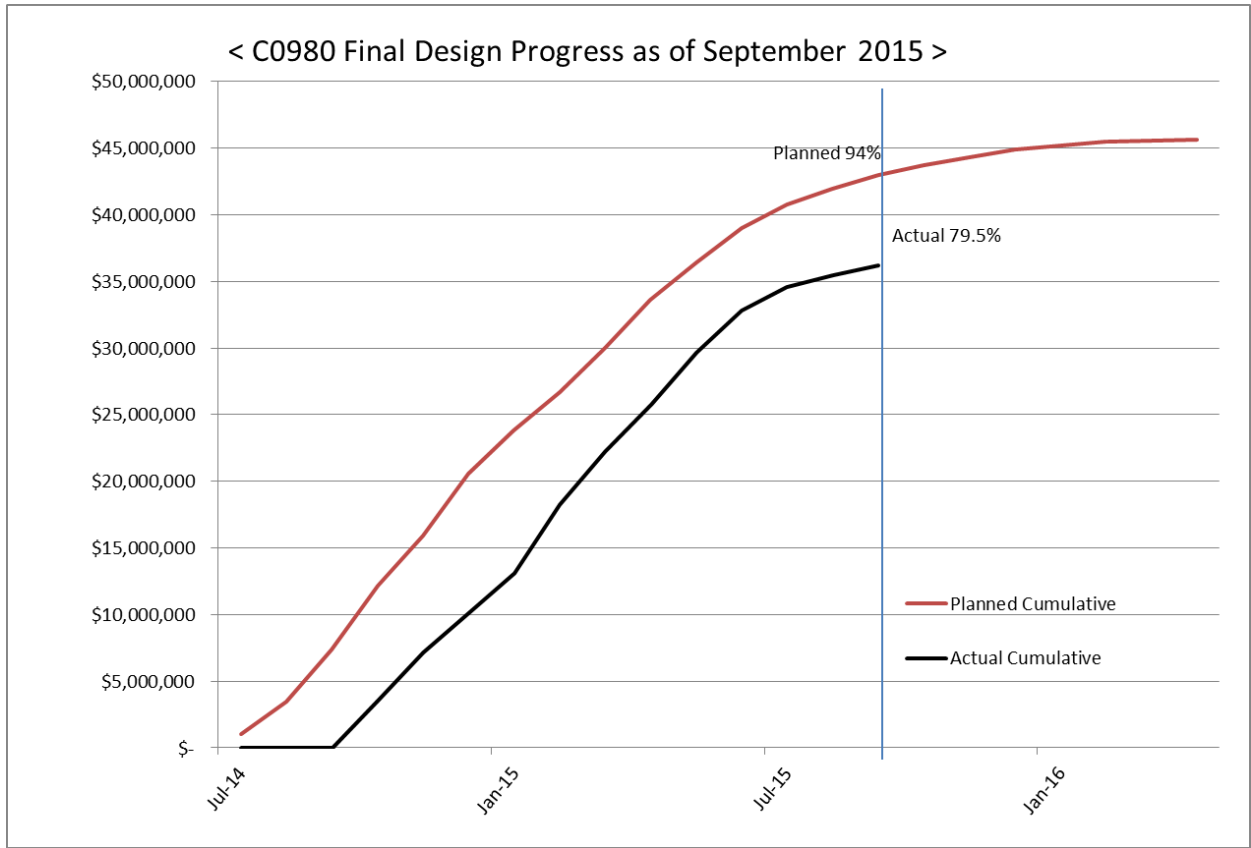


*The above progress curve is based on planned expenditures of C0980 (Design-Build and C0981 (AUR) Baseline Schedule and actual expenditures.*

*The cumulative overall construction progress for C0980 & C0981R Contract is 228.0%.*

Contract C0981R was terminated for convenience on April 14<sup>th</sup>, 2015, and is going through final payment and closeout.

Final Design for C0980 commenced upon MTA issuing NTP on July 7, 2014. Cumulative final design progress is 79.5% and the cumulative construction progress is 3.9%.



## **MAJOR EQUIPMENT DELIVERY STATUS**

### **Tunnel Boring Machine**

RCC, the design-builder for C0980, will design and procure the tunnel boring machine (TBM) and equipment.

Following are key dates for TBM design and procurement:

<b>Activity Name</b>	<b>Early Finish</b>	<b>Need Date</b>
LACTMA ACCEPTED TBM GENERAL ARRANGEMENT DRAWINGS	08/29/14 A *	9/3/2015
TBM DESIGN	02/12/15A *	7/23/2015
EXCECUTED TBM PURCHASE ORDER - PAYMENT 1	04/27/15A *	10/16/2015
EXCECUTED TBM PURCHASE ORDER - PAYMENT 2	05/29/15A *	12/1/2015
EXCECUTED TBM PURCHASE ORDER - PAYMENT 3	06/29/15A *	1/14/2016
EXCECUTED TBM PURCHASE ORDER - PAYMENT 4	07/31/15A *	2/26/2016
FAB/DELIV PRECAST TUNNEL LINER MOLDS	11/10/2015	7/8/2016
TBM REBUILD	12/24/2015	2/26/2016
VERIFIED ASSEMBLY / TEST OF TBM AT FABRICATION SHOP	1/18/2016	3/18/2016
FAB/DELIV TBM MACHINE TO SITE	2/17/2016	4/19/2016
VERIFIED TBM SHIPPED TO SITE	2/18/2016	4/20/2016

\* A: the date is actual and completed

### **Light Rail Vehicles**

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. 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 (TAP) is coordinating with RCC for installation and testing schedule.

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

<b>Activity Name</b>	<b>Early Finish</b>	<b>Need Date</b>
PROCURE H-PILE PURCHASE ORDER	1-Jun-15	23-Jul-15
PROCURE AC PURCHASE ORDER	1-Jun-15	2-Apr-15
PROCURE BASE PURCHASE ORDER	1-Jun-15	2-Apr-15
FAB/DELIVER DECK BEAMS - MANGROVE LAUNCH PIT	1-Jun-15	23-Jul-15
FAB/DELIVER SHORING BEAMS - MANGROVE LAUNCH PIT	1-Jun-15	23-Jul-15
EXECUTE PURCHASE ORDER - RAIL CAR TRANSPORTER - MOD #00011.1	1-Jun-15	
PROCURE PRECAST DECK PANEL PURCHASE ORDER	5-Jun-15	12-Oct-15
PROCURE PIPE (RCP) PURCHASE ORDER	5-Jun-15	7-Oct-15
PROCURE PIPE (WSP) PURCHASE ORDER	5-Jun-15	5-May-15
PROCURE PRECAST SANITARY SEWER STRUCTURE PURCHASE ORDER	12-Jun-15	13-Aug-15
PROCURE TIMBER LAGGING PURCHASE ORDER	12-Jun-15	28-Sep-15
PROCURE TRACK - TEMP SHOOFLY	25-Jun-15	19-Feb-16
FAB/DELIVER PIPE STRUTS - 1ST/CENTRAL	12-Jul-15	28-Sep-15
FAB/DELIVER PIPE STRUTS - MANGROVE LAUNCH PIT	12-Jul-15	16-Mar-16
FAB/DELIVER WALES - 1ST/CENTRAL	12-Jul-15	28-Sep-15
FAB/DELIVER WALES - MANGROVE LAUNCH PIT	12-Jul-15	16-Mar-16
FAB/DELIVER DECK PANELS - 1ST/CENTRAL	25-Jul-15	4-Dec-15
PROCURE SHORING PURCHASE ORDER	27-Jul-15	10-Jul-15
FAB/DELIVER DECK BEAMS - 1ST/CENTRAL	4-Aug-15	12-Oct-15
FAB/DELIVER PIPE STRUTS - 2ND/BROADWAY	23-Aug-15	11-Dec-15
FAB/DELIVER WALES - 2ND/BROADWAY	23-Aug-15	11-Dec-15
PROCURE PIPE (DIP) PURCHASE ORDER	24-Aug-15	30-Jul-15
PROCURE PIPE (PVC) PURCHASE ORDER	24-Aug-15	13-Aug-15
PROCURE PIPE (VCP) PURCHASE ORDER	24-Aug-15	13-Aug-15
FAB/DELIVER DECK BEAMS - 2ND/BROADWAY	25-Aug-15	12-Oct-15
PROCURE PLATE PURCHASE ORDER	26-Aug-15	12-Oct-15
FAB/DELIV OCS POLES / EQUIPMENT - SHOOFLY	8-Sep-15	24-Feb-16
FAB/DELIV TRAIN CONTROL CABLE - SHOOFLY	8-Sep-15	16-Feb-16
FAB/DELIV TRAIN CONTROL EQUIPMENT - SHOOFLY	8-Sep-15	26-Feb-16
FAB/DELIVER SHORING BEAMS - 1ST/CENTRAL	15-Sep-15	30-Aug-15
FAB/DELIVER SHORING BEAMS - 2ND/BROADWAY	15-Sep-15	14-Sep-15
FAB/DELIVER SHORING BEAMS - 2ND/HOPE	15-Sep-15	21-Dec-15
FAB/DELIVER SHORING BEAMS - FLOWER ST	15-Sep-15	8-Dec-15
PROCURE PRECAST ELEC STRUCTURE PURCHASE ORDER	22-Sep-15	18-Dec-18
PROCURE RAIL - JOBWIDE	22-Sep-15	
FAB/DELIVER PIPE STRUTS - FLOWER ST	4-Oct-15	16-Feb-16
FAB/DELIVER WALES - FLOWER ST	4-Oct-15	16-Feb-16
FAB/DELIVER - RAIL CAR TRANSPORTER - MOD #00011.1	6-Oct-15	
TRAINING - RAIL CAR TRANSPORTER - MOD #00011.1	14-Oct-15	
PROCURE PLUMBING SUBCONTRACTOR	16-Oct-15	4-Mar-16
FAB/DELIVER DECK BEAMS - 2ND/HOPE	29-Oct-15	27-Feb-16

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

<b>Activity Name</b>	<b>Early Finish</b>	<b>Need Date</b>
FAB/DELIVER DECK BEAMS - FLOWER ST	29-Oct-15	27-Feb-16
PROCURE PRECAST COMM STRUCTURE PURCHASE ORDER	4-Nov-15	6-Mar-19
FAB/DELIVER PIPE STRUTS - 2ND/HOPE	15-Nov-15	29-Mar-16
FAB/DELIVER WALES - 2ND/HOPE	15-Nov-15	29-Mar-16
PROCURE BALLASTED TRACK - NORTH ALAMEDA LEG	17-Dec-15	19-Feb-16
PROCURE REBAR - FLOWER ST C/C	5-Jan-16	10-Jan-18
PROCURE HDPE - FLOWER ST C/C	5-Jan-16	21-Dec-17
PROCURE PIPE SPECIALTY STORM DRAIN PIPE PURCHASE ORDER	16-Feb-16	5-Feb-20
PROCURE MSE PANEL PURCHASE ORDER	2-Mar-16	18-Jun-20
PROCURE RAIL - JOBWIDE	18-Mar-16	23-Nov-18
PROCURE SPECIAL TRACK - JOBWIDE	18-Mar-16	12-Mar-19
PROCURE NEW 115RE RAIL - STANDARD RAIL	18-Mar-16	23-Nov-18
PROCURE NEW 115RE RAIL - HIGH STRENGTH RAIL	18-Mar-16	23-Nov-18
FAB/DELIV PRECAST TUNNEL LINER SEGMENTS	8-May-16	11-Aug-17
PROCURE RAIL - FLOATING SLAB MATERIALS	27-Jun-16	
FAB/DELIV GLAZING SPIDERS - ALL STATIONS	30-Jun-16	
FAB/DELIV LIGHT FIXTURES - CENTRAL STA	27-Jul-16	29-Jul-19
FAB/DELIV EDGE LIGHTING - CENTRAL STA	27-Jul-16	11-Mar-19
FAB/DELIV LIGHT FIXTURES - BROADWAY STA	27-Jul-16	29-Jul-19
FAB/DELIV EDGE LIGHTING - BROADWAY STA	27-Jul-16	11-Jun-19
PROCURE ARCHITECTURAL PRECAST PAVER SUBCONTRACTOR	12-Sep-16	21-Aug-19
PROCURE GRANITE STONework SUBCONTRACTOR	12-Sep-16	10-Jun-19
PROCURE MASONRY SUBCONTRACTOR	12-Sep-16	23-Jan-19
PROCURE PRECAST STRUCTURAL ELEMENTS SUBCONTRACTOR	12-Sep-16	27-Jun-19
PROCURE ARCHITECTURAL CONCRETE PAVING SUBCONTRACTOR	12-Sep-16	24-May-19
PROCURE DOORS & HARDWARE SUBCONTRACTOR	12-Sep-16	14-May-19
PROCURE DRYWALL & FRAMING SUBCONTRACTOR	12-Sep-16	16-Sep-19
PROCURE ELEVATORS SUBCONTRACTOR	12-Sep-16	7-Aug-17
PROCURE ESCALATORS SUBCONTRACTOR	12-Sep-16	25-Sep-17
PROCURE FIRE PROTECTION SUBCONTRACTOR	12-Sep-16	20-Aug-18
PROCURE FLOORING SUBCONTRACTOR	12-Sep-16	30-Sep-19
PROCURE GLAZING SUBCONTRACTOR	12-Sep-16	7-Jun-19
PROCURE HVAC SUBCONTRACTOR	12-Sep-16	29-Mar-19
PROCURE METAL CEILING SUBCONTRACTOR	12-Sep-16	30-Jul-19
PROCURE PAINT SUBCONTRACTOR	12-Sep-16	18-Jun-19
PROCURE SHEET METAL SUBCONTRACTOR	12-Sep-16	8-Aug-19
PROCURE SPRAY ON ACCOUSTICAL FINISH SUBCONTRACTOR	12-Sep-16	8-Jul-19

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

<b>Activity Name</b>	<b>Early Finish</b>	<b>Need Date</b>
PROCURE STAINLESS STEEL SUBCONTRACTOR	12-Sep-16	3-Jun-19
PROCURE STATION SIGNS SUBCONTRACTOR	12-Sep-16	26-Sep-19
PROCURE STEEL (PERMANENT) SUBCONTRACTOR	12-Sep-16	25-Apr-19
PROCURE TERRAZZO SUBCONTRACTOR	12-Sep-16	26-Sep-19
PROCURE TILE SUBCONTRACTOR	12-Sep-16	19-Jun-19
PROCURE FLUID APPLIED WATERPROOFING SUBCONTRACTOR	12-Sep-16	14-May-19
FAB/DELIV LIGHT FIXTURES - HOPE STA	12-Sep-16	20-Jun-19
FAB/DELIV EDGE LIGHTING - HOPE STA	12-Sep-16	14-May-19
FAB/DELIV HIGH VOLTAGE DISCONNECT - 1ST & CENTRAL	13-Sep-16	12-Apr-19
PROCURE LANDSCAPING SUBCONTRACTOR	1-Nov-16	14-May-20
ELEVATOR COORDINATION DRAWINGS - 1ST/CENTRAL	1-Dec-16	26-Oct-17
ESCALATOR COORDINATION DRAWINGS - 1ST/CENTRAL	1-Dec-16	14-Dec-17
FAB/DELIV 2ND/HOPE UNIT SUBSTATION AND TRANSFORMER	15-Dec-16	21-Aug-19
FAB/DELIV 2ND/BROADWAY UNIT SUBSTATION AND TRANSFORMER	15-Dec-16	15-Nov-19
ELEVATOR COORDINATION DRAWINGS - 2ND/BROADWAY	19-Feb-17	14-Jan-18
ESCALATOR COORDINATION DRAWINGS - 2ND/BROADWAY	19-Feb-17	4-Mar-18
FAB/DELIV EMERGENCY VENTILLATION FANS - CENTRAL (4)	3-Mar-17	7-Jun-19
FAB/DELIV EMERGENCY BOOSTER FANS (12)	3-Mar-17	23-Jul-19
FAB/DELIV EMERGENCY VENTILLATION FANS - BROADWAY (4)	3-Mar-17	16-Jul-19
FAB/DELIV EMERGENCY VENTILLATION FANS - HOPE (4)	3-Mar-17	7-Jun-19
ELEVATOR COORDINATION DRAWINGS - 2ND/HOPE	10-May-17	4-Apr-18
ESCALATOR COORDINATION DRAWINGS - 2ND/HOPE	10-May-17	23-May-18
FAB/DELIV TRAIN CONTROL CABLE	9-Aug-17	13-Apr-18
FAB/DELIV OCS POLES / EQUIPMENT	3-Nov-17	15-Jul-19
FAB/DELIV OCR FOR TUNNEL	3-Nov-17	24-Jul-19
FAB/DELIV ELEVATORS - 1ST/CENTRAL	1-Dec-17	12-Jun-19
FAB/DELIV ESCALATORS - 1ST/CENTRAL	1-Dec-17	16-Jul-19
FAB/DELIV 2ND/HOPE TPSS	4-Jan-18	26-Feb-19
FAB/DELIV ELEVATORS - 2ND/BROADWAY	19-Feb-18	11-Apr-19
FAB/DELIV ESCALATORS - 2ND/BROADWAY	19-Feb-18	28-Mar-19
FAB/DELIV ELEVATORS - 2ND/HOPE	10-May-18	4-Apr-19
FAB/DELIV ESCALATORS - 2ND/HOPE	10-May-18	23-May-19
FAB/DELIV TRAIN CONTROL EQUIPMENT	24-Aug-18	30-Apr-19
FAB/DELIV 2ND/BROADWAY TPSS	26-Sep-18	15-Nov-19

## CRITICAL PATH NARRATIVE

### Critical Path (C0980):

Master Schedule shows the following critical path:

The longest path to project substantial completion runs through the final design and key submittals by C0980; excavation support system and tunnel final designs; procurement, delivery and assembly of the TBM; 1<sup>st</sup> and Alameda Wye junction excavation; 1<sup>st</sup>/Central Station excavation to track level; tunnel mining; 2<sup>nd</sup>/Broadway Station excavation to track level; tunnel finish, wye structure at 1<sup>st</sup> and Alameda; construct guideway, track, OCS and OCR and train control; systems integration testing Phase I and II; and Pre-Revenue Operations Phase I and II.

### Note:

1. Several contract options were exercised by Metro as per contract, which are incorporated into the schedule. Design Builder's current schedule including exercised options does not show any change to contract milestones as a result of the options.
2. Metro is in the process of adding all the remaining Advanced Utility Relocation (AUR) work to C0980 contract, which significantly impacted the project schedule. *A Linear Schedule was prepared by RCC. A detail schedule incorporating the AUR work and mitigation/recovery measures is being prepared by RCC to be submitted by mid-November 2015.*



## **SCHEDULE CONTINGENCY DRAWDOWN**

*Due to AUR work delays and transfer of work scope to C0980 contract, the schedule milestones and contingency are being re-evaluated and will be reflected in the master schedule once the plan is submitted and approved by Metro.*

*A cost and risk assessment started in September 2015 to evaluate project contingency needs. Metro is planning to maintain FFGA-RSD of May 29, 2021.*

**PROJECT COST STATUS**

REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT  
DOLLARS IN THOUSANDS

SCC CODE	DESCRIPTION	FFGA BUDGET	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		BUDGET/ FORECAST VARIANCE
				PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
10	GUIDEWAYS & TRACK ELEMENTS	280,622	204,691	0	227,876	0	227,876	3,625	12,164	0	229,376	1,500
20	STATIONS, STOPS, TERMINALS, INTERNODA	354,268	219,477	0	229,327	0	229,327	13	206	-210	229,372	45
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN	0	0	0	0	0	0	0	0	0	0	0
40	SITWORK & SPECIAL CONDITIONS	141,785	422,453	239	471,730	18,520	462,910	3,240	214,687	-70	476,359	4,629
50	SYSTEMS	69,667	73,848	0	73,848	0	63,265	0	0	1,000	75,513	1,665
	CONSTRUCTION SUBTOTAL (10-50)	846,343	920,468	239	1,002,780	18,520	983,378	6,877	227,057	721	1,010,620	7,839
60	ROW, LAND, EXISTING IMPROVEMENTS	115,889	74,208	0	74,208	0	73,820	3	46,019	0	74,208	0
70	VEHICLES	16,275	16,275	0	16,275	0	2,000	0	0	0	16,275	0
80	PROFESSIONAL SERVICES	261,455	257,973	251	264,204	0	201,164	3,463	147,333	251	264,204	0
	SUBTOTAL (10-80)	1,239,963	1,268,925	490	1,357,468	18,520	1,260,362	10,344	420,409	971	1,365,308	7,839
90	UNALLOCATED CONTINGENCY	135,399	126,892	-490	38,349	0	0	0	0	-971	30,509	-7,839
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	1,402,932	18,520	1,260,362	10,344	420,409	0	1,402,932	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	18,125	0	18,125	281	18,497	0	18,625	500
	TOTAL PROJECTS 400228 & 460228 (EVN/PLANN'G)	0	24,200	0	24,200	0	24,200	281	24,572	0	24,700	500
	400228, 460228, 860228 TOTAL	1,402,932	1,427,132	0	1,427,132	18,520	1,284,562	10,624	444,981	0	1,427,632	500

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH 08/31/2015

FFGA: Full Funding Grant Agreement

**PROJECT COST ANALYSIS**

**Original Budget:**

The Original Budget of \$1.43 billion reflects the Board approved Life-of-Project (LOP) budget on April 24, 2014 plus Finance Charges of \$7.1 million.

**Current Budget:**

*There is no increase in Life of Project budget this period; however, there is budget change to SCC 40 and 80. The change is due to Modification for C0980 Contract for Design of Tactile Guidance Strips in STA, design of Mod Pre-Cast Concrete Tunnel Liners under JVP and increase in budget to include "As Needed" Soil Sampling, Waste Disposal, Hazardous building material abatement and monitoring and Environmental Mitigation. The budget comes from Unallocated Contingency.*

**Commitments:**

*The Commitments increased by \$18.52 million this period at \$1.284 billion which represent 90.01% of the Current Budget. Right of Way (ROW) amount shown under Commitments are the obligated numbers; expenditures as of this period is \$46.01 million.*

**Expenditures:**

*The Expenditures are cumulative through August 2015. The Expenditures increased by \$10.62 million this period primarily for costs associated with C0980 Design Build contract, C0981R contract, Engineering Management Support, Metro Project Administration, Construction Management Support Service, Legal Services, Third Party Master Cooperative Agreements with the City of LA, Community Relations, ROW and Environmental Consultant Services. The \$444.98 million in expenditures to date represents 31.2% of the Current Budget.*

**Current Forecast:**

There is no change to Forecast for this period.

**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, INTERNODAL	-	0	0	0	0	0	0	0	0	0
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	10,480	10,480	10,480	0	10,480	0	0	0	10,480	0
40	SITework & SPECIAL CONDITIONS	0	0	0	0	0	0	0	0	0	0
50	SYSTEMS	0	0	0	0	0	0	0	0	0	0
	<b>CONSTRUCTION SUBTOTAL (10-50)</b>	<b>10,480</b>	<b>10,480</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	27,748	27,748	0	27,748	0	22,551	0	27,748	0
70	VEHICLES	0	0	0	0	0	0	0	0	0	0
80	PROFESSIONAL SERVICES	650	650	650	0	650	11	60	0	650	0
	<b>SUBTOTAL (10-80)</b>	<b>38,878</b>	<b>38,878</b>	<b>38,878</b>	<b>0</b>	<b>38,878</b>	<b>11</b>	<b>22,611</b>	<b>0</b>	<b>38,878</b>	<b>0</b>
90	UNALLOCATED CONTINGENCY	1,113	1,113	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>39,991</b>	<b>39,991</b>	<b>0</b>	<b>38,878</b>	<b>11</b>	<b>22,611</b>	<b>0</b>	<b>39,991</b>	<b>0</b>
	<b>861228 TOTAL</b>	<b>39,991</b>	<b>39,991</b>	<b>39,991</b>	<b>0</b>	<b>38,878</b>	<b>11</b>	<b>22,611</b>	<b>0</b>	<b>39,991</b>	<b>0</b>

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH 08/31/2015

**PROJECT COST ANALYSIS**

**Original Budget, Current Budget, and Current Forecast:**

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

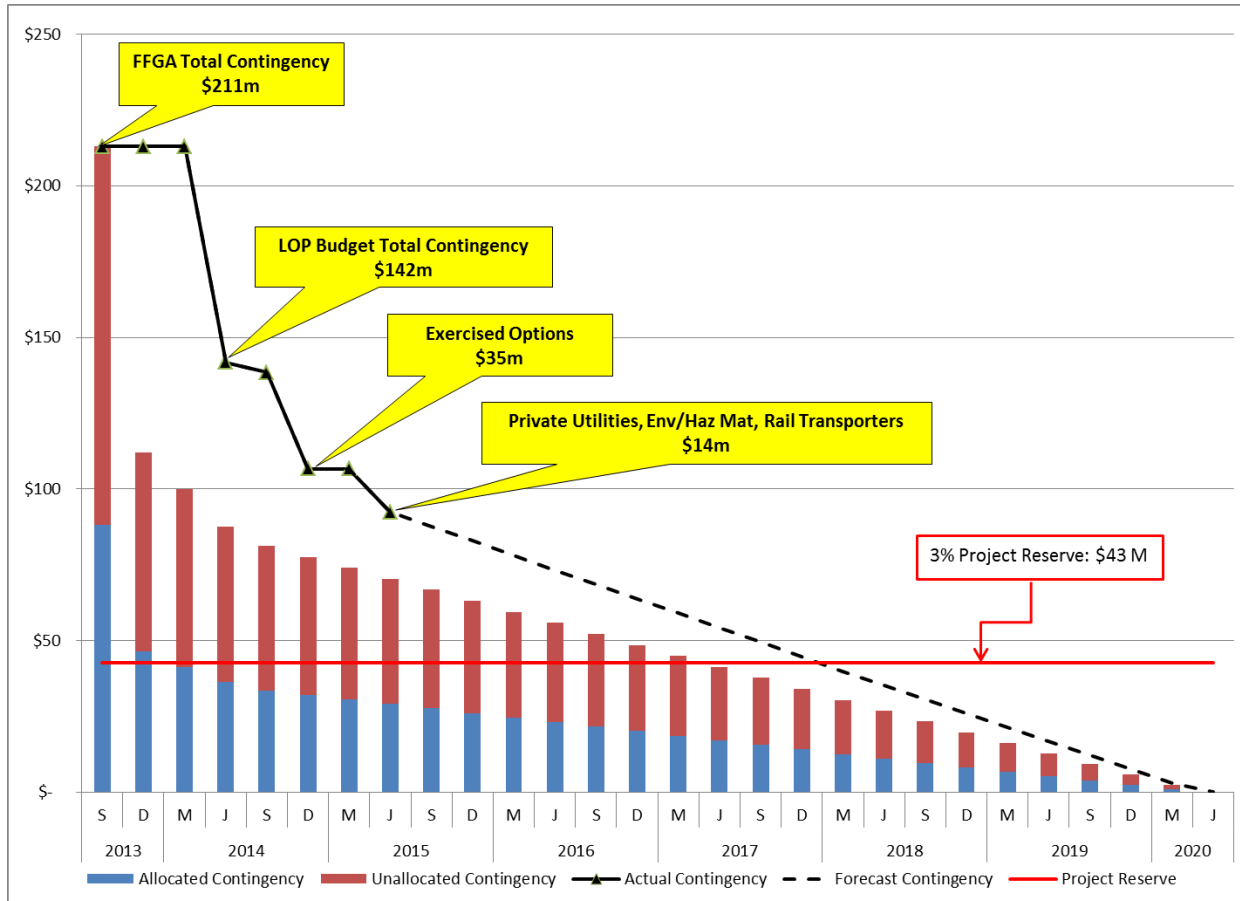
**Commitments:**

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 as of this period are \$22.6 million.*

**Expenditures:**

*There was an \$11k Expenditure incurred in this period. The \$22.6 million in expenditures to date represents 56.5% of the Current Budget.*

### COST CONTINGENCY DRAWDOWN



Note: this chart would be re-evaluated and adjusted based on the project contingency and LOP analysis.

### COST CONTINGENCY DRAWDOWN ANALYSIS

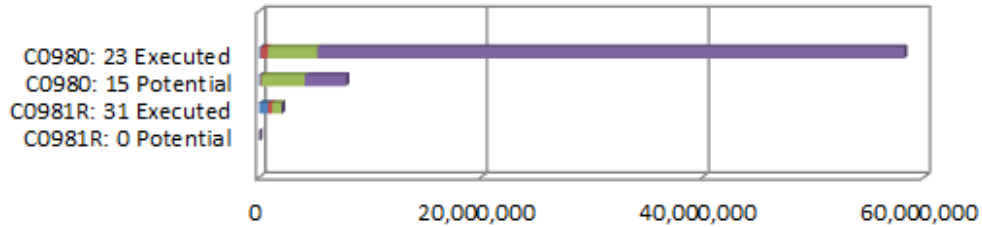
The Regional Connector Transit Corridor Project of \$1.42 billion includes an “unallocated contingency” amount of \$38.35 million, which is included as a separate Standard Cost Category (SCC) element. Also included within the current budget is an “allocated contingency” of \$14.8 million allocated to ROW, \$8.96 million for Transfer of AUR scope of work to C0980 Contractor and \$6.1 million allocated for Private Utilities, C0981R AUR Contract, Environmental Mitigation & Hazardous Materials. The allocated contingency is not broken out separately in the current budget, as this amount covers anticipated but unknown contract modifications issued by Metro. The total project cost contingency is \$68.21 million or 4.86 % of total project cost.

Included in the project contingency drawdown is a 3% project reserve line. Metro’s Board is to be notified when it becomes necessary to drawdown contingency below the project reserve line to cover project costs. This was adopted by the Metro Board of Directors in September 2012. Metro is performing a detail project cost analysis to evaluate adequacy of project contingency.

The project contingency drawdown curve is being re-evaluated based on the project contingency and LOP analysis. Cost risk assessment started in September 2015 to determine project contingency need.

## SUMMARY OF CONTRACT MODIFICATIONS

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



	C0980		C0981R		Total
	23 Executed	15 Potential	31 Executed	0 Potential	
■ Under \$100K	167,724	152,200	814,761	-	1,134,685
■ \$100K to \$250K	657,411	102,900	372,752	-	1,133,063
■ \$250K to \$1M	4,430,804	3,883,920	863,000	-	9,177,724
■ Over \$1M	52,960,287	3,700,405	-	-	56,660,692
<b>Total Contract MODs</b>	<b>58,216,226</b>	<b>7,839,425</b>	<b>2,050,513</b>	<b>-</b>	<b>68,106,164</b>
<b>Contract Award Amount</b>	<b>927,226,995</b>	<b>927,226,995</b>	<b>25,643,000</b>	<b>25,643,000</b>	
<b>% of Contract MODs</b>	<b>6.3%</b>	<b>0.8%</b>	<b>8.0%</b>	<b>0.0%</b>	

Percent of contract MODs equals the Total Contract MODs divided by the Contract Award Amount.

31 changes with a total value of \$2.051 million have been executed since execution of Contract C0981R.

*23 changes with total value of \$58.22 million have been executed since execution of Contract C0980 and 15 potential changes with a total value of \$7.84 million is pending.*

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

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

- DBE Goal – Design: 20%
- Current DBE Commitment - Design: \$10,818,236 (22.63%)
- *Current DBE Participation: 21%*
- *Twenty (20) Design DBE sub-consultants have been identified to date*
  
- DBE Goal – Construction: 18%
- Current DBE Commitment - Construction: \$157,068,359 (18%)
- *Current DBE Participation: 0.91%*

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

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

- Targeted Worker Goal - 40.0%
- *Targeted Worker Current Participation - 58.64%*
  
- Apprentice Worker Goal - 20.0%
- *Apprentice Worker Current Participation - 15.54%*
  
- Disadvantaged Worker Goal - 10.0%
- *Disadvantaged Worker Current Participation - 13.88%*

**FINANCIAL/GRANT STATUS**

**Status of Funds Anticipated**

**September 2015**

<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
<b>MEASURE R - TIFIA LOAN:</b> (Transportation Infrastructure Finance & Innovation Act)	A TIFIA LOAN AGREEMENT BETWEEN THE DEPARTMENT OF TRANSPORTATION AND METRO FOR \$160M WAS EXECUTED ON FEBRUARY 20, 2014. FIRST DISBURSEMENT OF \$61,864,368 RESCHEDULED TO 4TH QUARTER OF FY 16.
<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 PROPOSED PAYMENT SCHEDULE IS DUE TO BEGIN IN FY 2016.

**Status of Funds by Source**

**September 2015**

SOURCE	(A) ORIGINAL BUDGET	(B) TOTAL FUNDS ANTICIPATED	(C) TOTAL FUNDS AVAILABLE	(D) (D/B) COMMITMENTS		(E) (E/B) EXPENDITURES		(F) (F/B) BILLED TO FUNDING SOURCE	
				\$	%	\$	%	\$	%
FEDERAL - CMAQ	\$64.000	\$64.000	\$64.000	\$64.000	100%	\$40.768	64%	\$40.768	64%
FEDERAL - SECTION 5309 NEW STARTS	\$669.900	\$669.900	\$165.000	\$669.900	100%	\$82.660	12%	\$82.660	12%
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	\$0.000	\$160.000	100%	\$19.411	12%	\$19.411	12%
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%	\$120.785	89%	\$99.013	73%
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	\$152.906	\$152.906	\$123.698	81%	\$63.893	42%	\$63.893	42%
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	\$0.000	\$0.000	0%	\$0.000	0%	\$0.000	0%
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>\$1,427.132</b>	<b>\$634.470</b>	<b>\$1,284.562</b>	<b>90.0%</b>	<b>\$444.981</b>	<b>31.2%</b>	<b>\$423.209</b>	<b>29.7%</b>

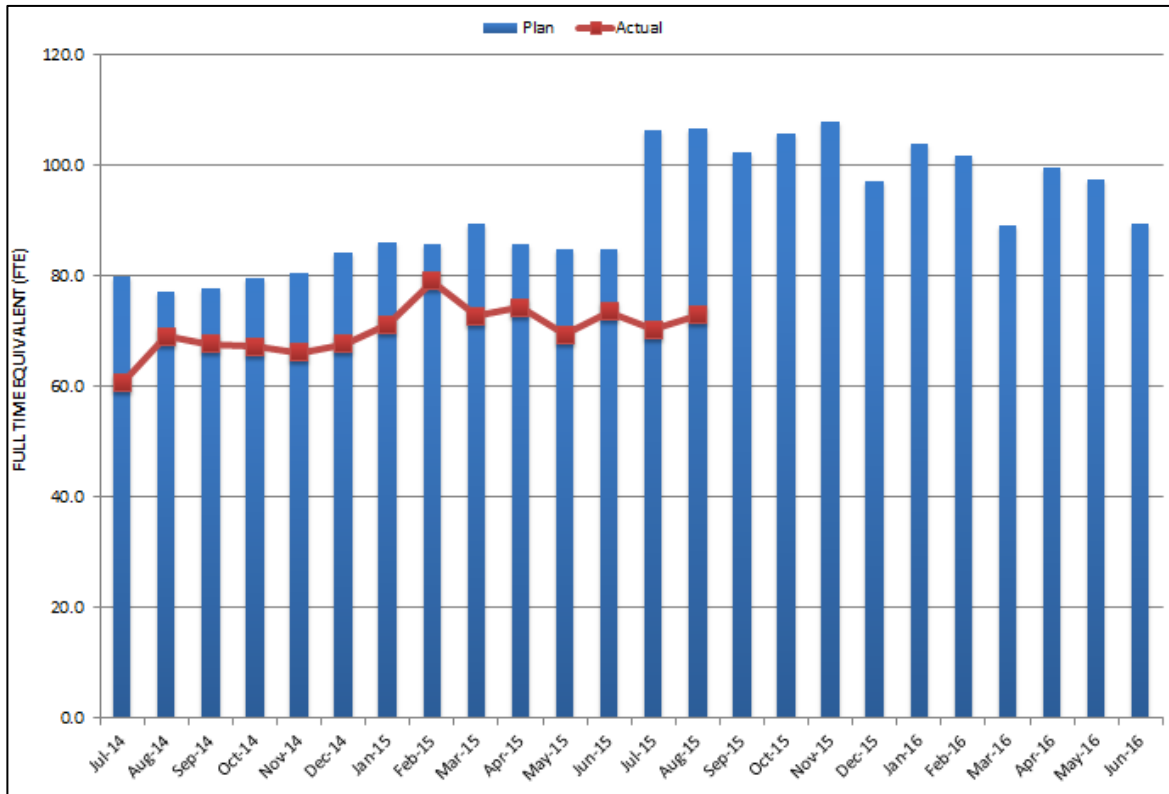
EXPENDITURES ARE CUMULATIVE THROUGH AUGUST 2015  
ORIGINAL BUDGET BASED ON FUNDING PLAN INCLUDED IN THE APPROVED FULL FUNDING GRANT AGREEMENT

\* 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**

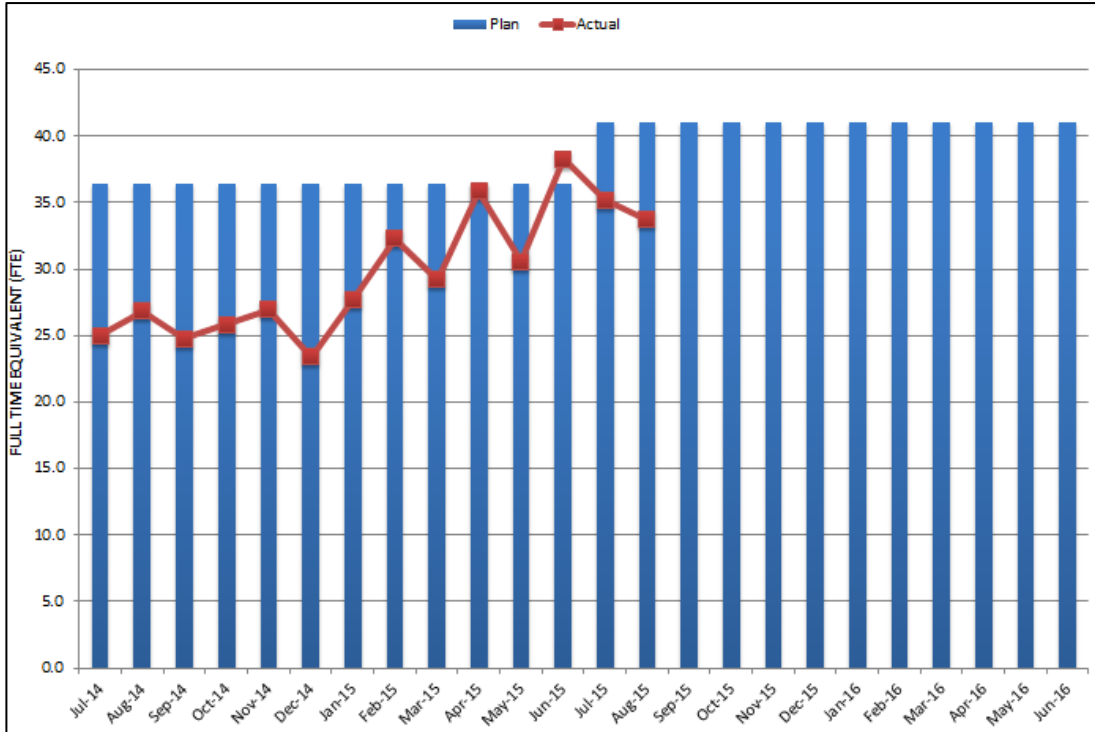
*The overall FY16 Total Project Staffing plan averages 101 FTE's per month.*

*For August 2015, there were a total of 33.7 FTE's for MTA's Project Administration staff and 39.2 FTE's for consulting staff. The total project staffing for August 2015 was 73 FTEs. The main variance of FTE's actual (73) versus FTE's planned (106.6) is due to changes as a result of AUR schedule delays at various locations resulting in lower staff needs and charges for this period, which includes, Corporate Safety, Contract Administration, Executive Office Communications, Metro Art, Executive Office Construction, Public Relations, Creative Services, Quality Assurance / Compliance, Major Capital Project Engineering and Construction Management. Metro is working on filling a few additional positions approved in July 2015 Board.*

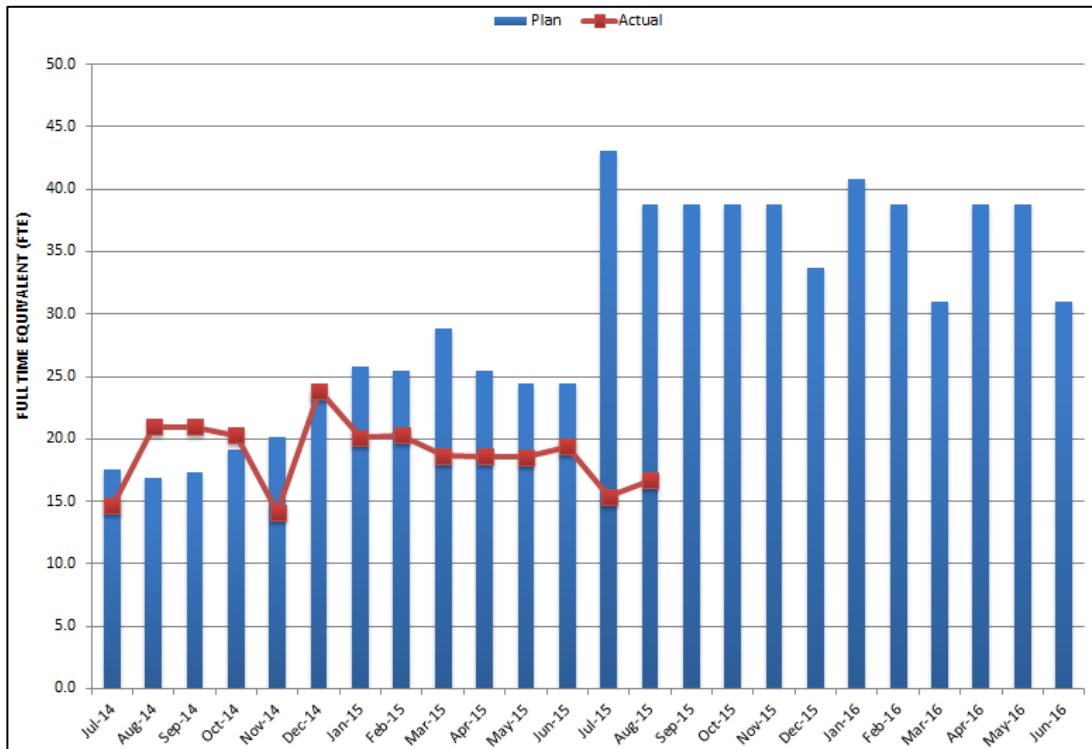
Note: The planned monthly FTE used in the chart for FY2016 is contingent on the board authorization from January through June 2016.



**Metro Staff**

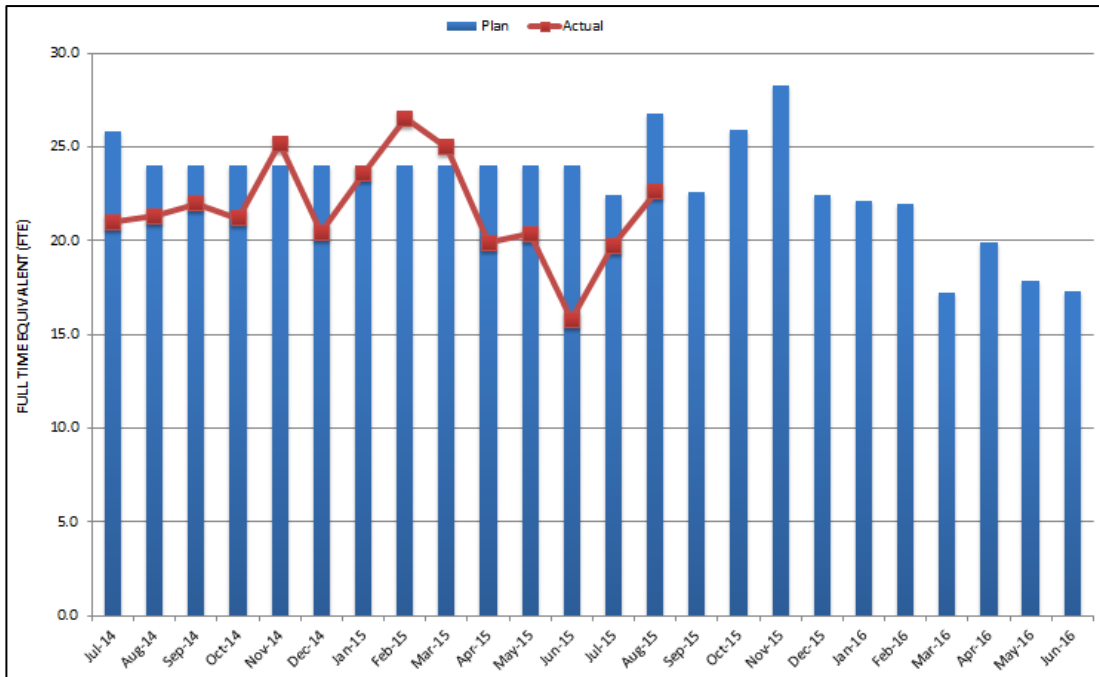


**CONSTRUCTION MANAGEMENT  
SUPPORT SERVICES CONSULTANT**



Note: The variance in FTEs is due to Holiday's time off (Nov. 14), extensive weekend work (Dec. 14) and additional field support staff.

**ENGINEERING SERVICES CONSULTANTS**



Note: The variance in FTEs is due to Holiday's time off (Dec. 14) and in support of C0980 submittals and C0981R beyond planned completion.

**REAL ESTATE STATUS**

<b>Regional Connector- Real Estate Status Summary September 30, 2015</b>									
Type of Take	Number of Parcels	Certified	Decertified	Appraisals In Process/ Completed	Offers Made	Agreements Signed	Condemnation Filed	Relocations Complete	Parcels Available
Full Takes	3	3	0	3	3	1	2	4	3
Part Takes	2	2	0	2	1	0	1	0	1
SSE	13	9	4	13	10	0	3	0	8
TCE/ROE	16	7	1	8	8	3	2	0	8
<b>Sub Total Parcels:</b>	<b>34</b>	<b>21</b>	<b>5</b>	<b>26</b>	<b>22</b>	<b>4</b>	<b>8</b>	<b>4</b>	<b>20</b>
Relocation	5								
<b>Total Parcels:</b>	<b>34</b>	<b>21</b>	<b>5</b>	<b>26</b>	<b>22</b>	<b>4</b>	<b>8</b>	<b>4</b>	<b>20</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).

**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 action will now be terminated*

**LA Times – LA Times Square**

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

**Japanese Village Plaza – “JVP”**

- Submitted offer to Japanese Village Plaza in November 2013. JVP rejected offer; MTA Board adopted a resolution to acquire property through 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 30th Board meeting and the Board adopted the Resolution of Necessity to include the tenants. Agreement has also been reached with several of the tenants which eliminate the requirement to include them in the eminent domain action.
- Court approved Motion on Order of Possession for tunnel and grouting pipe easements against JVP on 6/30/15. Order for Possession effective 7/31/15.

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

- Court granted motion to acquire the right to conduct pre-construction surveys and grout pipe installation monitoring effective 5/11/15. 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 9/21/15. Real Estate has obtained rights on 12 of the 19 tenant spaces via right of entry.*

### **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.
- C0980 Contractor using site for laydown area.

### **Broad Collection**

- Broad's appraisal review completed. *Metro Real Estate negotiated a settlement Subject to approval at November/December Board.*

### **ANAIBIV**

- *Offer accepted. Owner's attorney reworked Purchase Agreement and deed language. Real Estate working with County Counsel to finalize contract and open escrow. Additional language changes being negotiated as of 9/21 to address indemnity and possible environmental contamination disclosed by Seller.*

### **Hull's Hope**

- RON approved in February but condemnation on hold pending potential decertification of parcel by Project. Received formal decertification of parcel from Project on 6/19/15. Revocation of Offer letter in process and Revocation of RON scheduled for October Board.

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

- Property owner has not accepted offer for reduced property requirements, but Project has confirmed it will decertify parcel, so RON has been on hold. Received formal decertification of parcel from Project on 6/19/15. Revocation of Offer letter sent 8/13.

### **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.

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

## **QUALITY ASSURANCE STATUS**

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

- Reviewed and provided comments on the Contractor's quality required submittals, construction work plans and milestone submittals.
- Attended "Readiness Review" meetings with Contractor.
- Attended design and construction coordination meetings with the Contractor and the design team.
- Performed oversight verification of Contractor design and field activities.

## **ENVIRONMENTAL STATUS**

- Pre-Construction Surveys for the Central Japanese Village Parking, the Japanese Village Plaza, the Japanese Village Plaza Mall, the Citibank Group Building, the Veolia Energy Central Plant, the LA Times Building, the Hikari Apartments, the Walt Disney Concert Hall, the Colburn School of Music, the Eli Broad Museum, the Los Angeles Library and the Standard Hotel are complete. *Pre-Construction Surveys for the California Club, Pegasus, Union Bank Building, Commonwealth Parking Structure, City National/Commonwealth Buildings, and the Westin Bonaventure are pending.* These surveys will be prepared for all historic properties as well as sensitive, non-historic structures 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 August 13, 2015, RCC has completed installation of noise monitors at 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.
- *Rights-of-Entry are being negotiated for the vibration monitors to be installed at the Broad Museum, Colburn School of Music, LA Times, and Japanese Village Plaza.* This is based on the Vibration Monitoring Plan to be conducted daily measurements of vibration during peak vibration generating construction activities.
- The Zanja segment No. 3 at 1<sup>st</sup>/Central was treated in accordance with procedures outlined in the project Mitigation Monitoring and Reporting Plan as well as the Memorandum of Agreement between Metro and the State Historic Preservation Office (SHPO) and the FTA. A Level II Historic American Engineering Record (HAER) document was prepared as defined by the National Parks Service (NPS) and as requirement by the Cultural Resources Monitoring and Mitigation Plan (CRMMP). Upon review with NPS, it was noted that a portion of Zanja segment No. 3 had been previously recorded with a Level II HAER and that Metro would prepare an addendum to the original HAER. *The document is in review and will be finalized with Metro and submitted to NPS by the end of October.* Other Zanja segments will be recorded as they are encountered.
- 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 received notification from the NPS on March 4, 2015 that the Historical American Buildings Survey (HABS) for the former Atomic Café/Senor Fish building located at the planned 1<sup>st</sup> and Alameda Station will be accepted into the Library of Congress. The HABS has been reformatted in accordance with NPS guidelines for inclusion in the Library and was finalized on September 3, 2015. Additional copies were provided to the Los Angeles Library and the Los Angeles Conservancy on September 24, 2015.

## **CONSTRUCTION AND COMMUNITY RELATIONS STATUS**

### **Construction Relations**

- Responded and addressed project related inquiries from the public received on the project hotline and email.
- Continued outreach to impacted area stakeholders regarding utility relocation and pre-construction activities throughout the alignment. *Distributed 28 construction notices to the public.*
- *Performed stakeholder briefings and coordinated construction activities with with: The Los Angeles Times, Commonwealth Properties, Charles Dunn Company, Standard Hotel, Japanese American National Museum, Japanese Village Plaza.*
- Continued bi-weekly meetings with: L.A. City Councilmember District 14, the Mayor's office and the Westin Bonaventure.
- *Briefed Board member DuPont Walker and Mayor's Office Borja Leon on business outreach at 2<sup>nd</sup>/Broadway.*

*Provided area specific construction update at the 1st/Central and 2<sup>nd</sup>/Broadway Station Area Committees monthly meeting.*

### **Social Media Outreach Efforts**

- *Current social media platforms in use include Nextdoor, Waze, Facebook (1,162 followers), and Twitter (2,223 followers).*
- *Utilizing Facebook, Twitter, and Waze advertisement options to engage those in underserved communities who rely on cell phones for internet access, transit information, and social media.*
- *Evaluating approach to construction notices by conducting a survey solicit suggestions and potential improvements. Results of survey will be available in December.*

### **Community Relations**

- *Added Little Tokyo Business Assistance Center on Metro's Web-site and worked with Asian Pacific Islander Small Business personnel on outreach survey to Little Tokyo business owners.*
- *Conducted monthly updates with the Regional Connector Community Leadership Council for station areas and Financial District.*
- *Continued weekly Eat, Shop, Play 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 Little Tokyo Marketing & Business Task Force on full launch of GoLittleTokyo.com (as small business mitigation) and the development of an adjusted Mangrove Soundwall design.*

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

- *Engaged the Los Angeles River Arts and Business Organization representative in a follow-up discussion of the reasoning for the 1<sup>st</sup>/Central Station area landscape palette developed and approved by Little Tokyo leaders and presented to the LARABA board in August. Discussed future joint-development outreach process anticipated between Metro, Arts District and Little Tokyo stakeholders in the next year.*

## **CREATIVE SERVICES STATUS**

### **Art Program**

- Responded to RFIs and Submittals.
- *Continued refining artwork opportunities and locations.*
- Participated in Design Build design workshops and document reviews.
- Continued to support mitigation efforts.



## **SAFETY & SECURITY STATUS**

### **C0980 Regional Connector**

- Assisted RCC in the generation and submittal of acceptable contractually required safety documentation.
- Met daily with RCC Staff to discuss Work Plans for the day's activities.
- Monitored RCC's safety orientation & pre-employment drug testing to insure compliance with contract specifications.
- *Participated in Safety and Security meeting with RCC and Metro Management discussing submittal and security issues. Ongoing assembly of a large Liebherr Crawler crane at the 1<sup>st</sup> and Central Yard was reviewed. Assembly is following the Factory Manual as directed by a Manufacturer's Representative on-site for this assembly.*
- *Participated in work plan reviews, scheduled and daily Contractor crew safety meetings.*
- Monitored RCC field activities including saw-cutting, potholing, traffic control crews at 2<sup>nd</sup> and Broadway, 2<sup>nd</sup> and Spring, 5<sup>th</sup> and Flower, 1<sup>st</sup> and Rose and 1<sup>st</sup> and Alameda Streets. All activities safe and compliant.
- *Monitored and inspected continued road closures, excavation, and trench shoring activity along Broadway and 2<sup>nd</sup> Street.*
- *RCC reported 19,444 August work-hours. Project To Date work-hours total 301,234 with two recordable injuries. C0980 Recordable Injury Rate is now 1.3.*

### **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.

**THIRD PARTY AGREEMENT STATUS**

<b>Agency</b>	<b>Type of Agreement</b>	<b>Status/ Comments</b>
City of Los Angeles	Amendment to Master Cooperative Agreement	Parties will work under 2003 MCA.
Los Angeles Department of Water and Power	Amendment to Memorandum of Understanding	Metro and LADWP will continue to work under the terms of the previous Cooperative Agreement.
Los Angeles County Public Works	Letter of Agreement	Executed on 4/11
Caltrans	Amendment	Executed on 8/11
Private Utilities	LOA, MOU or UCA	<i>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.</i>

**ADVANCED UTILITY RELOCATION STATUS**

*C0981R contract work is transitioned to the C0980 design build contractor. A solution has been reached for completion of AUR relocation of electrical facilities at the 2<sup>nd</sup>/Broadway Station. The work essentially has been broken out into two phases; the first phase is minimum needed to allow installation of piles; the second phase will install the remainder of necessary electrical facilities. The two-part design (Phase 1 and 2) has been submitted to LABOE for their review and approval.*

*In September 2015, the C0980 Contractor began performing the C0981R water work in Flower Street between 4<sup>th</sup> Street and 5<sup>th</sup> Street and began potholing for the C0981R water work between 5<sup>th</sup> Street and 6<sup>th</sup> Street. The remainder of the C0981R conduit relocation in Flower Street between 5<sup>th</sup> & 6<sup>th</sup> Streets was put on hold pending a determination of the need for a redesign due to shallower than expected locations for existing power vaults at 6<sup>th</sup> Street and Flower Street.*

*C0980 Contractor performance of C0981R electrical work at 2<sup>nd</sup> Street and Spring Street continues and is expected to be complete late October 2015-early November 2015.*

*In October 2015, it is anticipated that Level 3 will begin trenching and installing 60' of conduit in Flower Street connecting their duct bank to the AT&T CA duct bank and then begin pulling & splicing their cable into the new AT&T CA joint trench and removing old cable. MCI will also be relocating some of their cable to the new AT&T CA joint trench in Flower Street with completion expected in late October 2015.*

*At 2<sup>nd</sup> & Broadway, Sprint is planning to relocate their duct bank at the end of October 2015 in order to accommodate LADWP vault installation which is part of the C0981R LADWP power relocation work.*

## **C0980 UTILITY WORK STATUS**

*The C0980 Contractor has identified conflicts between their proposed soldier pile installations at 2<sup>nd</sup> & Broadway and telecommunications duct banks and is working with the affected carriers to relocate their facilities to accommodate pile installation. LADWP-Power also completed pulling cable and energizing temporary power for the Tunnel Boring Machine at the C0980 Turner Street substation. On 2<sup>nd</sup> & Broadway, the contractor started the construction of the temporary power substation, and Flower and 2<sup>nd</sup> & Hope temporary power substation is currently in the design phase.*

## **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 City Council Office to obtain Peak Hour Exemptions. *Metro extended both AM and PM peak hour exemptions for C0980's pre-trenching, and waterline relocation (potholing/excavation) activities at the 1<sup>st</sup> St & Alameda and 1<sup>st</sup> & Central intersections. Additionally, Metro coordinated with Council District 14 to obtain concurrence to place K-Rail on Broadway between 1<sup>st</sup> & 3<sup>rd</sup> Streets as well as on 2<sup>nd</sup> St between Broadway & Spring St to perform utility exploratory trenching to support installation of LADWP-Power Utility Relocations. Furthermore, peak hour exemptions will be extended for 2<sup>nd</sup> & Spring Streets Power Utility Relocations at a future date. Moreover, AM Peak Hour Exemptions have been obtained for power & water utility relocations in the vicinity of the Flower Street project area.*

## **POLICE COMMISSION CONSTRUCTION VARIANCES**

Metro continues to actively pursue night/Sunday work hour variances to accommodate the Project needs by working closely with the Los Angeles Police Commission.

*In September 2015 Metro Requested amendments to existing Nighttime Variances and in early October, Metro Submitted the Night Variance application for the 1<sup>st</sup>/Central Station.*

## **CPUC CROSSING SUMMARY**

### **Current Status**

Contract C0980 requires the Contractor to design and obtain CPUC approval for the temporary relocation of the existing at-grade crossing of 1<sup>st</sup> Street adjacent to Alameda Street, approximately 500 feet east of its current location at 1<sup>st</sup>/Hewitt Streets. Also, the south Little Tokyo station pedestrian crossing will have to be re-opened to provide pedestrian access. The temporary modification of the existing at-grade crossing will remain in-place until construction of the underground Y 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, approximately 500 feet east of its current location at 1<sup>st</sup>/Hewitt Street. Additionally, on May 26, 2015, RCC received CPUC approval of the South Little Tokyo station pedestrian crossing Form GO-88B application package.

## **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
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

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

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
April 2015	Metro terminated C0981R Contract for convenience
May 2015	RC 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).

## CONSTRUCTION CONTRACTS

<p><b>Description: Design-Build Contract</b> <b>Contractor: Regional Connector Constructors (RCC)</b></p>	<p><b>Contract No. C0980</b> <b>Status as of: September 30, 2015</b></p>
<p><b>Work Completed:</b></p> <ul style="list-style-type: none"> <li>• Metro completed review of Fire Assessment and Alternate Mix Design for PCTL, Reliability Availability Maintainability Dependability Program Plan (RAMDPP), Final Load Flow Analysis Report, DU 03 Bored Tunnel 100% Design Drawings, DU 17-100 Pre-Final 1st &amp; Central-Wye-Soil Nail SO, DU09 - 85% - Overhead Contact System (OCS) Specifications, DU10 85% Traction Power Drawings and Specifications, Alameda and 1st Street Legs SOE Design, Building Protection APDU 1 AFC.</li> <li>• Metro completed review of DU1.1 AFC Shoofly Temporary Communications Drawings, Shoofly OCS Test Program Plan and Procedures, Shoofly Train Control Test Plan, Test Procedures for AFTAC Track Circuits and Vital Circuit Breakdown, Shoofly Interlockings Operational Test and Shoofly Grade Crossing Operational Test.</li> <li>• Metro completed Geotechnical Design Summary Report-Part 2 (C&amp;C Structures, SEM Tunnels, Stations and Bored Tunnels).</li> <li>• RCC completed excavation for the 6" water line at 1st/Alameda.</li> <li>• RCC completed pile trenching for the Wye in Work Area 3 at 1st/Alameda.</li> <li>• RCC installed a temporary substation at the 1st/Central Yard.</li> <li>• RCC completed excavation to verify Sprint line design on Broadway.</li> <li>• RCC completed fire hydrant relocation on 2nd/Broadway.</li> <li>• RCC completed tree removal on Alameda and Central.</li> </ul> <p><b>Areas of Concern:</b></p> <ul style="list-style-type: none"> <li>• NEPA Law suits could potentially delay the construction of Design-Build Contract on Flower Street. MTA and FTA completed SEIS (Supplemental Environmental Impact Statement) and issued it for public comments on June 12, 2015. Finalization of SEIS is expected by October 2015, after addressing public comments.</li> <li>• Advanced Utility Relocation (AUR) work have been delayed. Metro Board approved transfer of remaining AUR work to C0980 on April 30, 2015. Mitigation measures and close schedule coordination efforts are being implemented and alternative plans are being evaluated by RCC, DWP and Metro. Utility relocations plans are being developed at all locations to mitigate schedule delays.</li> </ul> <p>Please see the "Management Issues/Opportunities" section for Concerns and Opportunities details.</p>	<p><b>Major Activities (In Progress):</b></p> <ul style="list-style-type: none"> <li>• Metro continues to work with RCC and FLS committee to resolve emergency ventilation design issues.</li> <li>• Metro continues review of submittals for Final Traction Power, DU01 AFC Alignment Design, APDU for AFC Hope Street Storm Drain, DU11 85% Systemwide Train Control Design, DU17 1st/Central Station Final Design.</li> <li>• Metro continues to work with RCC and FLS committee to finalize the basis of design and facilities for fire emergency ventilation design.</li> <li>• Metro continues coordination and support of discussions with Contractor related to SEM Cavern (with TAP), Fire-Life Safety Design at Stations, Tactile Warning Strips in Stations, 2nd/Hope Station Pedestrian Bridge to Broad Museum site.</li> <li>• RCC continues demolition and earthwork for Shoofly.</li> <li>• RCC continues decking for the Shoofly Bridge and TBM pit.</li> <li>• RCC continues 6", 8", 12" and 16" water line construction activities at 1st/Alameda.</li> <li>• RCC continues with the installation of electrical duct banks at 2nd/Spring and 2nd/Broadway.</li> <li>• RCC continues Underground Investigation – Potholing Hydrovac and Exploratory Trenching at various locations project wide.</li> <li>• RCC continues potholing for the DWP duct bank/vault depths and 24" water line on 6th/Flower.</li> <li>• RCC continues Broadway power drop.</li> <li>• RCC placed OCS foundations at the Mangrove Yard, and will resume during 1st St widening.</li> <li>• RCC began train drain installation at Mangrove, and will resume during 1st St widening.</li> <li>• RCC continues geotechnical monitoring at 1st/Central Yard and Alameda Public ROW</li> <li>• RCC continues relocation of a 6" water line (AUR) and Fire Hydrant construction activities near 4th/Flower.</li> </ul> <p><b>Major Activities Next Period:</b></p> <ul style="list-style-type: none"> <li>• Metro will review Initial SUSMP Report, 100% Trackwork Design, Re-issued APDU1 Building Protection AFC Design, DU06 85% 2nd/Hope Station Design, DU9 100% Overhead Contact System Design, DU11 Train Control 85% Design, DU14 Flower Street Support of Excavation Final Design, Updated Fire Assessment for PCTL.</li> <li>• RCC will begin preparation for AT&amp;T and MCI communication lowering at Spring.</li> <li>• RCC will begin pile installation at 1st/Central Station.</li> <li>• RCC will install the remaining 5 piles for the TBM Pit, pending traffic approval for the 1st Street widening.</li> <li>• RCC will begin implementation of the 1st Street EB and WB Widening, pending traffic approval.</li> <li>• RCC will begin potholing for the tie back removal pit at 3rd/Flower.</li> <li>• RCC will begin tree removal on 2nd/Broadway.</li> <li>• RCC will resume pile trenching for the Wye at 1st/Alameda in various work areas.</li> <li>• RCC will resume pre-con survey (photograph existing conditions) at various locations.</li> </ul>

**CONSTRUCTION CONTRACTS (Cont.)**

<b>Description: Design-Build Contract</b> <b>Contractor: Regional Connector Constructors (RCC)</b>		<b>Contract No. C0980 (Cont.)</b> <b>Status as of: September 30, 2015</b>				
Date of Award: 5/6/2014 Notice to Proceed: 7/7/2014 Original Contract Duration 2430 CD  Current Contract Duration 2430 CD Elapsed Time from NTP: 446 CD		Original Contract	Time Extension	Current Contract	Forecast	Variance CDs
	Notice to Proceed	07/07/14	0	07/07/14	07/07/14	0
	Milestone 1:	10/22/20	0	10/22/20	02/04/21	-105
	Milestone 2:	06/14/20	0	06/14/20	10/14/20	-122
	Milestone 3:	05/15/16	0	05/15/16	08/14/16	-91
	Milestone 4:	05/27/18	0	05/27/18	08/26/18	-91
	Milestone 5:	08/19/19	0	08/19/19	10/15/19	-57
	Milestone 6:	09/18/19	0	09/18/19	02/03/20	-138
	Milestone 7:	10/10/15	0	10/10/15	01/13/16	-95
	Milestone 8:	04/22/18	0	04/22/18	10/28/18	-189
	Milestone 9A:	07/14/20	0	07/14/20	08/28/20	-45
	Milestone 9B:	10/22/20	0	10/22/20	12/13/20	-52
	Milestone 10:	10/12/20	0	10/12/20	04/05/21	-175
Milestone 11:	10/27/20	0	10/27/20	04/20/21	-175	
Milestone 12:	03/01/21	0	03/01/21	06/22/21	-113	
Note: RCC to provide a recovery plan by the end of September to maintain FFGA-RDS.						
Physical completion as of 09/26/2015:  Design 79.5% Construction 3.9% Total Incurred Cost 25.9%  * Note: Physical completion assessment excludes mobilization, general mobilization and Provisional Sum.	<b>Cost Summary:</b>		<b>\$ In millions</b>			
	1. Award Value:	927.2				
	2. Executed Modifications:	40.1				
	3. Approved Change Orders:	18.1				
	4. Current Contract Value (1+2+3):	985.4				
	5. Incurred Cost:	255.2				



## CONSTRUCTION PHOTOS



2<sup>nd</sup> St. closure – Installing fence panels



Bollards set up at 1<sup>st</sup> and Central

**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
CR	Camera Ready
CSPP	Construction Safety Phasing Plan
CTC	California Transportation Commission
CUD	Contract Unit Description
DB	Design Build
DBB	Design Bid Build
DOT	Department of Transportation
DWP	Department of Water and Power
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
GBN	Ground Borne Noise
GBR	Geotechnical Baseline Report
GDSR	Geotechnical Design Summary Report

**APPENDIX**

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

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
PE	Preliminary Engineering
PEER	Permit Engineering Evaluation Report
PIP	Project Implementation Plan
PLA	Project Labor Agreement
PM	Project Manager
PMIP	Project Management Implementation Plan

**APPENDIX**

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

PMOC	Project Management Oversight Consultant
PMP	Project Management Plan
P&P	Policies & Procedures
PR	Project Report
PSR	Project Study Report
QA	Quality Assurance
QAR	Quality Assurance Report
QC	Quality Control
QPSR	Quarterly Project Status Report
QTIB	Qualified Transit Improvement Bonds
RAMDPP	Reliability Availability Maintainability Dependability Program Plan
RAMP	Real Estate Acquisition Management Plan
RCC	Regional Connector Contractors
RCMP	Risk Assessment Management Plan
RFC	Request For Change
RFP	Request For Proposals
RFSC	Request for Special Consideration
RHA	Risk Hazard Analysis
RLPE	Red Light Photo Enforcement
ROC	Rail Operations Center
ROD	Record Of Decision
ROM	Rough Order of Magnitude
ROW	Right-Of-Way
RSD	Revenue Service Date
SAV	Stand Alone Validator
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
SHA	State Highway Account
SHPO	State Historic Preservation Office
SIT	System Integration Testing
SOE	Support Of Excavation
SOQ	Statement of Qualification
SOV	Schedule Of Value
SOW	Statement Of Work
SP	Special Provision
SSMP	Safety and Security Management Plan
STB	Surface Transportation Board
STIP	State Transportation Improvement Program
STP	Surface Transportation Program
SUSMP	Standard Urban Stormwater Mitigation Plan

## **APPENDIX**

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

TBD	To Be Determined
TBM	Tunnel Boring Machine
TCC	Train Control Center
TCE	Temporary Construction Easement
TCRP	Traffic Congestion Relief Program
TCTMC	Major Transit and Transportation Construction Traffic Management Committee
TIFIA	Transportation Infrastructure Finance and Innovation Act
TIGER	Transportation Investment Generating Economic Recovery
TPSS	Traction Power Substation
TRACS	Transit Automatic Control System
TVA	Threat Vulnerability Analysis
TVM	Ticket Vending Machine
UFS	Universal Fare System
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