

# Crenshaw/LAX Transit Project



Metro®

# **CRENSHAW/LAX TRANSIT PROJECT**

## **MONTHLY PROJECT STATUS REPORT**

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

**FEBRUARY 2019**

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## **PROJECT OVERVIEW**

### **Project Background**

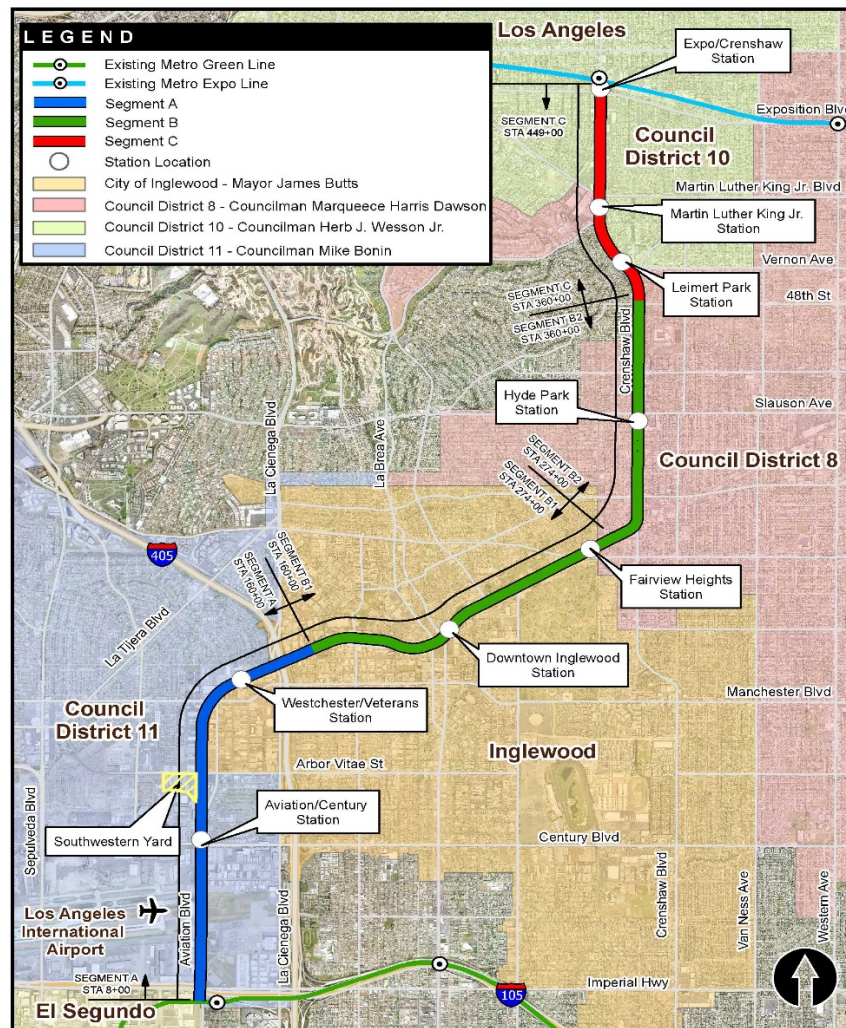
The Crenshaw/LAX Transit Project is a north/south corridor that serves the cities of Los Angeles, Inglewood, Hawthorne and El Segundo as well as portions of unincorporated Los Angeles County. The alignment extends 8.5 miles, from the intersection of Crenshaw and Exposition boulevards to a connection with the Metro Green Line at the Aviation/LAX Station. The project provides major connections with the Los Angeles International Airport (LAX) as well as links to the Metro Green Line, the Exposition Line and countywide bus network.

Two additional stations, Leimert Park and Westchester/Veterans were funded by the City of Los Angeles and by Metro and were approved to be part of the project by the Metro Board in May 2013. The Metro Board in July 2014 and again in May 2015, approved a revision to the project alignment to include accommodations to the alignment at 96<sup>th</sup> street to not preclude a future light rail Metro Rail station being developed as part of the Airport Metro Connector (AMC) project. The accommodations included shifting the ultimate track configuration to the west side of the alignment to confine the revised track-work on Metro right-of-way to mitigate potential cost exposure. These accommodations are not funded by the Crenshaw/LAX Transit Project but are paid for by the AMC project.

The alignment is comprised of a double-tracked right-of-way consisting of sections of at-grade in-street, at-grade within railroad right-of-way, aerial, and below-grade guideway sections, eight stations, park and ride facilities at two locations, utilities, landscaping, roadway improvements required by the project and a maintenance & storage facility (Southwestern Yard).

The Project configuration is based on years of planning and environmental work that is reflected in the following milestones:

- Major Investment Study – 2003
- Metro Board approval of Alternative Analysis – December 2009
- Initiation of Preliminary Engineering – September 2010
- Metro Board certification of Final EIS/EIR – September 2011
- FTA issuance of Record of Decision – December 2011
- TIFIA and TIGER II Grants approved September 2012



## **Major Procurements**

### Contract C0990 Crenshaw/LAX Advanced Utility Relocations

The design of several early utility relocations was advanced sufficiently into final design to allow for bidding of critical early utility relocations. This contract includes relocating three (3) existing duct banks that feed various NAVAIDS on the south airfield complex. New ductbank infrastructure will be built by Metro with the fiber replacement work and cut-over by FAA/LAWA. These ductbanks contain fiber lines and power lines which belong to both LAWA and FAA. Since the track alignment is below grade at these crossings, the ductbanks have to be relocated in advance to allow for the construction of the track alignment. In addition, other wet utilities along the Harbor Branch and Crenshaw Boulevard segments of the corridor that can be relocated in advance are included as part of this contract.

Design-Build Contract C0988 Crenshaw/LAX Transit Corridor

This is the largest project contract which completes final design and construction of the infrastructure required along the corridor alignment. The structures required to be constructed are eight stations, grade separations including flyover structures, cut and cover trenching, tunneling and three park-n-ride facilities. The scope of work will include all the necessary systems work including train control, traction power supply substations and distribution, overhead catenary, communications, and systems tie-in to the existing Metro Green Line. The project delivery method for this contract was design-build utilizing a two-step best value procurement approach with submittal of qualification statements through a RFQ process, prequalification of qualified proposers followed by release of a RFP soliciting technical and price proposals with an option at Metro's discretion for best and final offers (BAFO).

Design-Build Contract C0991 Southwestern Yard

The Board-adopted 2009 Long Range Transportation Plan (LRTP) for Los Angeles County envisioned one new central Light Rail Transit (LRT) Maintenance facility to be used by all projects. Since the LRTP adoption, substantial progress on light rail system planning and development, including more accurate vehicle assignments, cost estimates, and functional requirements, has led Metro to conclude that two new LRT yards, an Eastern Yard and a Southwestern Yard, are necessary. This contract will construct the Southwestern Yard which will consolidate maintenance facility requirements for this project as well as the operating Metro Green Line, proposed South Bay Metro Green Line Extension and proposed Metro Green Line to LAX.

Contract C0992 Crenshaw/LAX Concrete Ties and Assembly Items

Metro added a contract for procuring owner-supplied equipment for the Design-Build Contract C0988 Crenshaw/LAX Transit Corridor Contractor. The equipment within the contract scope of work includes concrete ties and assembly items.

Contract C0992A Crenshaw/LAX Rail and Bumping Posts Procurement

Metro added a contract for rebidding the procurement of running rail and bumping posts for the Design-Build Contract C0988 Crenshaw/LAX Transit Corridor Contractor.

Light Rail Vehicles

The Board approved exercising Option 1 of Contract P3010 with Kinkisharyo International (KI) to provide light rail vehicles (LRV) for the Crenshaw/LAX project. The total number of vehicles in the option is 28 which include 20 LRVs for the Crenshaw/LAX project and two additional cars for spares. The first Option 1 P3010 car was delivered in May 2017. The final P3010 car (22nd car) was delivered in September 2017, completing the Option delivery for the Crenshaw Project. All twenty-two Crenshaw cars are currently in revenue service on the Green and Blue Lines. KinkiSharyo/ASTS still needs to work on the Cutover (revenue service) software development to include Crenshaw's final alignment, track profiles, and berthing locations. Once completed, a series of software validation tests will need to be performed prior to implementation on the P3010s.

be performed prior to implementation on the P3010s.

Rail Operations Center (ROC)

The existing functional operations at the ROC are being expanded to accommodate the central control functions associated with five new rail lines including Crenshaw/LAX Project. The Project is contributing \$3.5 million towards this expansion which is scheduled to be completed in time for Crenshaw/LAX Project revenue service.

Fare Collection

A notice-to-proceed was issued on January 30, 2018 to the existing Metro Universal Fare System (UFS) contractor, Cubic Transportation Systems, to procure UFS equipment for the Crenshaw/LAX Project eight stations. The contractor commenced manufacturing of the equipment in February 2018 and will complete manufacturing of the equipment and delivery by February 2019. The UFS equipment will be shipped to a local storage area where it will be stored until the Crenshaw/LAX Project stations become ready for its installation.

**Program Management**

The WSCC contract is being managed by a team of Metro and consultant personnel jointly located at the Integrated Project Management Office (IPMO). Mott MacDonald provides engineering and design support services while Stantec, Inc., provides construction management support services. An overview of staffing is provided under the Staffing section of this report. The on-site program management team is also supported by Metro Headquarters resources to include, but not limited to, engineering, risk management, environmental, quality management, operations, and creative services departments.

Project Schedule and Budget:

The Revenue Service Date (RSD) is forecast for spring/summer 2020.

In May 2013, the Metro Board approved a Motion that amended the fiscal year 2014 Proposed Metro Budget to include funding for an underground station at Leimert Park Village and an at-grade station at Hindry as part of the baseline project. This Motion added \$135 million to the LOP budget which included \$80 million in uncommitted fiscal year 2014 funding and \$55 million from the City of Los Angeles. Metro reached agreement with the City of Los Angeles to cover the incremental cost of the stations above the \$80 million identified in fiscal year 2014 funding which the Metro Board approved in May 2013.

With Metro Board approval on June 27, 2013, the additional \$135 million is included in the sources of funds chart as well as the additional \$160.1 million for the increased cost of the base work. All recommendations were approved by the Metro Board on June 27, 2013 except that change order authority was maintained at \$500,000. This board action amended the life of project budget to \$2,058 million.

The Metro Board approved on May 28, 2015, an increase in the amount of funding that the Crenshaw/LAX Project is contributing toward the total cost of the Southwestern Yard Project. An additional \$10.8 million is required to be funded by drawdown from the Unallocated Contingency Current Budget SCC 90 and added to the Southwestern Yard Current Budget SCC 30. The current budget includes the 49% cost allocation share that the project is responsible for paying which includes funding of the design and construction for the Southwestern Yard. This amount is revised to \$150.2 million out of a new total of \$307.2 million adopted by the Metro Board.

The amount of funding available for the Crenshaw/LAX Transit Corridor Project, excluding the Southwestern Yard \$150.2 million allocation and Environmental/Planning budget of \$26.0 million is \$1,881.8 million. Although there is no change to the Total LOP Current Budget there was a reallocation for changes to the SCC elements within the Current Budget in April 2017. The reallocation was required due to the drawdown to date of the SCC 90 Allocated Contingency for changes issued to the design-build contractor, additional relocations of utilities by third parties, additional legal services, and special service as well as an increase in professional services for construction and project management oversight.

Construction and Community Relations: The Construction and Community Relations team is tasked with promoting the Project and performing public outreach within the community to keep stakeholders informed of construction activities occurring along the Project alignment. To facilitate the communication, community leadership councils have been formed which represent geographic-based constituent groups along the Project.

The Project is also engaged in social media outreach and various marketing and advertising efforts designed keep the public informed and excited about the Project. These efforts are aimed at promoting businesses that are affected by construction.

System Integration:

The Project's integration of three separate lines, each possessing distinct system technologies, presents significant challenges for both the Project and Metro. The Project will need to coordinate the systems interface design, construction and testing while the Agency maintains revenue service on two of the lines.

Rail Activation:

The Project and Metro Operations recognize the extensive planning required in preparation for rail activation of the new regional light rail service the Project will enable through the south Los Angeles area. Associated detailed planning and scheduling efforts to optimize the extensive efforts are underway.



## **EXECUTIVE SUMMARY**

As of the end of February, the Project achieved 91% completion based on earned value measurements for design and construction. The focus of the Project continues with facilitating critical path construction activities. Work is trending behind schedule due to the alignment contractor's progress. The following is an overview of current design and construction activities.

### **Design Status**

#### Design - Build Contract C0988 (Mainline Contractor) –

Walsh-Shea Corridor Constructors (WSCC) final design is complete except for designs required for changes. WSCC continues design and engineering in support of construction.

#### Design - Build Contract C0991 Southwestern Yard Contractor (Division 16) -

Hensel Phelps/Herzog JV (HPH) has substantially completed final design. HPH continues design and engineering in support of Contract closeout.

### **Construction Status**

Mainline Contractor - WSCC continues construction along all areas of the alignment. The four at-grade stations structure concrete placements are substantially completed. Finish work continues for these stations. The aerial station structure concrete placement is substantially complete. The three underground stations remain at various levels of completion with emphasis on work inside the stations and entrance structures. All six bridge superstructures are substantially complete except finishes and systems installations.

Trackwork is nearing completion with work continuing on wayside and OCS/OCR along the alignment. System work continues in the stations for communication and train control. WSCC and Metro continue to coordinate with DWP and SCE for power energization at various locations.

Construction continues within the roadway section at Park Mesa Heights.

Southwestern Yard (Division 16) – HPH submitted to Metro a notice of Substantial Completion as of January 30, 2019. Metro is reviewing HPH's request for Metro to grant substantial completion. The final punch list items are being worked on by the contractor.

### **Cost and Schedule Summary**

Metro issued in August 2018 a non-compensable unilateral change order to WSCC to extend their substantial completion milestone to December 11, 2019. Metro is evaluating a potential 2020 date for revenue service based on the revised substantial completion milestone date.

WSCC in mid-February 2019 submitted a schedule update for the November 2018 period of performance. This update indicated the contractor has fallen further behind schedule. No schedule updates by WSCC have been submitted for December 2018, January 2019, or February 2019 periods of performance. Metro's assessment is that thru the February period of performance, WSCC is at least eight (8) weeks behind schedule. Metro is assessing the impact of WSCC caused delays on the Project's schedule critical path.

The critical path of the project remains completing construction activities, then communications installations and field acceptance testing. The critical path then flows through Systems Integration Testing (SIT), Phase I (by WSCC) and then SIT Phase II (by Metro), leading to pre-revenue services and revenue service. A summary graphic of the critical path is found later in this report.

### **WSCC Schedule Metrics – Mainline Contractor**

|                        | <b>Original Contract Date/Duration</b> | <b>Time Extension (CD)</b> | <b>Current Contract Schedule</b> | <b>Forecast (Metro PMS)</b> | <b>Variance CD (Trending)</b> |
|------------------------|----------------------------------------|----------------------------|----------------------------------|-----------------------------|-------------------------------|
| NTP                    | 09/10/13                               |                            |                                  |                             |                               |
| Substantial Completion | 09/08/18                               | 459                        | 12/11/19                         | 2/5/20                      | 56 days                       |

### **HPH Schedule Metrics – Southwestern Yard Contractor**

|                        | <b>Original Contract Date/Duration</b> | <b>Time Extension (CD)</b> | <b>Current Contract Schedule</b> | <b>Forecast (Metro PMS)</b> | <b>Variance CD (Trending)</b> |
|------------------------|----------------------------------------|----------------------------|----------------------------------|-----------------------------|-------------------------------|
| NTP                    | 06/29/15                               |                            |                                  |                             |                               |
| Substantial Completion | 10/31/18                               | 91                         | 01/30/19                         | 01/30/19 (Actual)           | 0 days                        |

Project costs continue to track within budget and projected contingency limits. To date, the design and construction changes for WSCC related to base scope represent approximately 12.85% of the contract value with a potential to increase to 13.9%. For HPH, the changes represent 1.12% of the contract value with a potential to increase to 1.16%. There have been 97 claims submitted by WSCC and one notice of intent to claim by HPH on the Project. Detailed cost and budget information is provided later in this report.

**Key Management Concerns**

No. 1: WSCC Construction Schedule

Status/Action

Metro is evaluating a potential 2020 date for revenue service based on the revised WSCC Contract Substantial Completion Milestone date of December 11, 2019. The contractor's latest schedule submittal, November 2018, reflects continuing schedule slippage. Metro's assessment is that progress thru February 2019 is at least eight (8) weeks behind schedule.

No 2: Remaining Contingency is less than 2% of Total Project Budget.

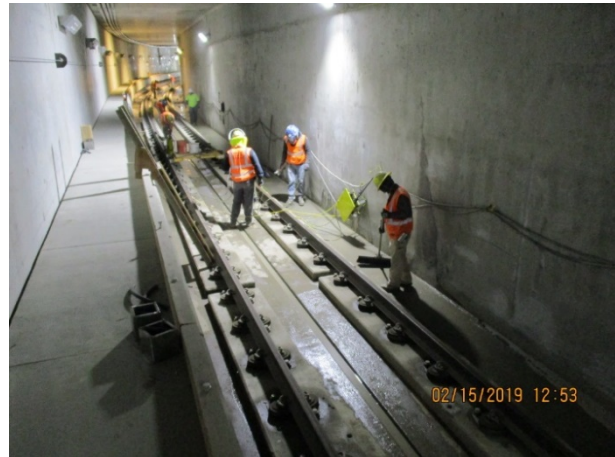
Status/Action

Metro monitors and reports on the drawdown of contingency monthly. Metro has identified funding available in fiscal year 2019 for specific scope of work that is eligible to be reallocated to a non-Crenshaw/LAX Project local funding source. Metro initiated in July 2018 reallocating the associated expenditures to date for this specific scope of work. This allows Metro to replenish a portion of the Crenshaw/LAX Project contingency. In February 2019, there was a drawdown of \$0.4 million which reduced remaining contingency to \$16.3 million. The remaining contingency is 0.8% of total project current forecast and 7.5% of total project cost-to-go.

**Project Construction Photos**



South end – Working on overhead line



Underground guideway - finishing invert and cleanup



Expo Station - north plaza ventilation shaft room



Martin Luther King Jr. Station - Traction Power



Division 16 - train on heavy repair platform  
in main shop

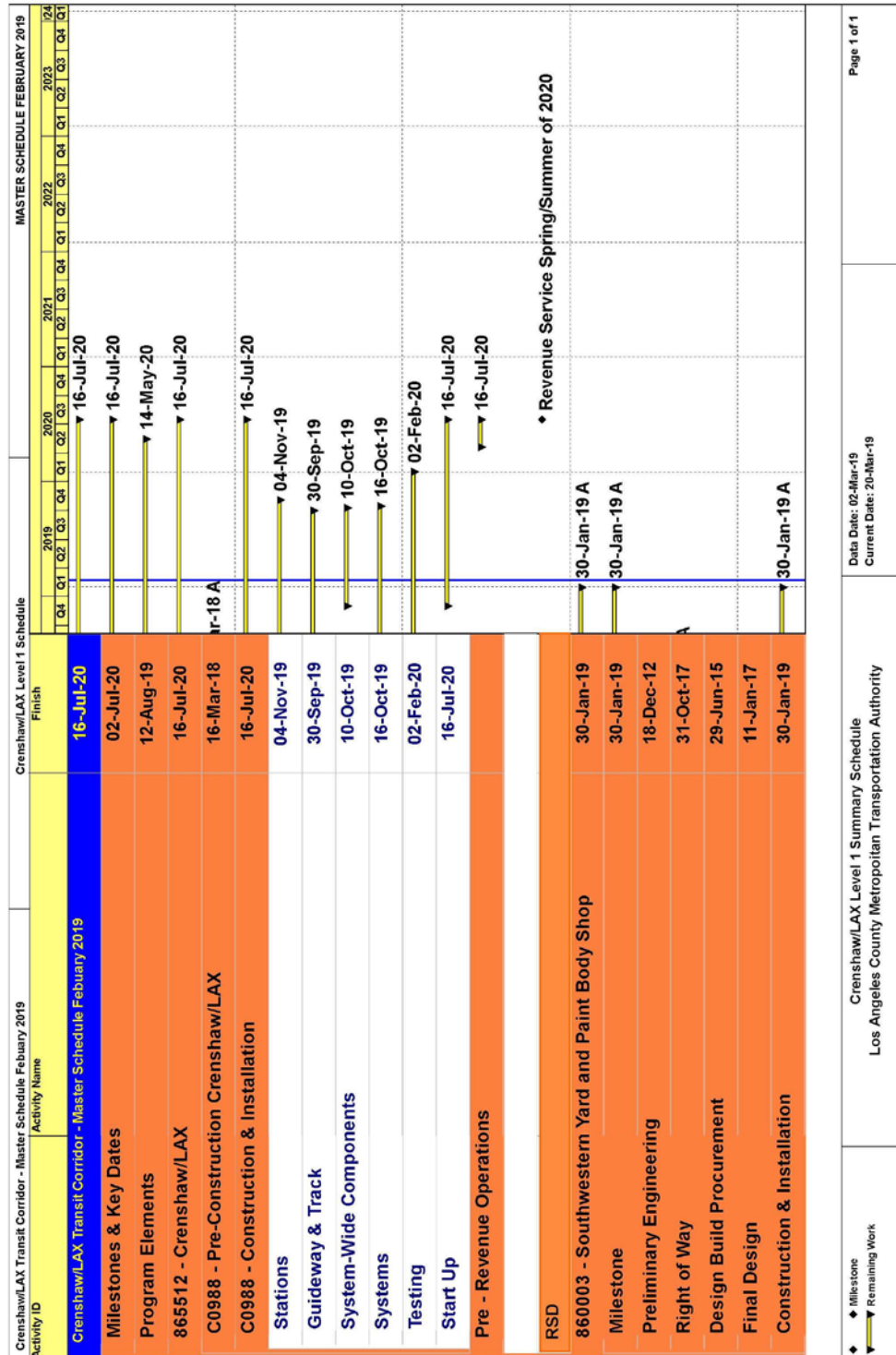


Division 16 - aerial photo

## PROJECT UPDATE

### PROJECT SCHEDULE

#### Project Summary Schedule

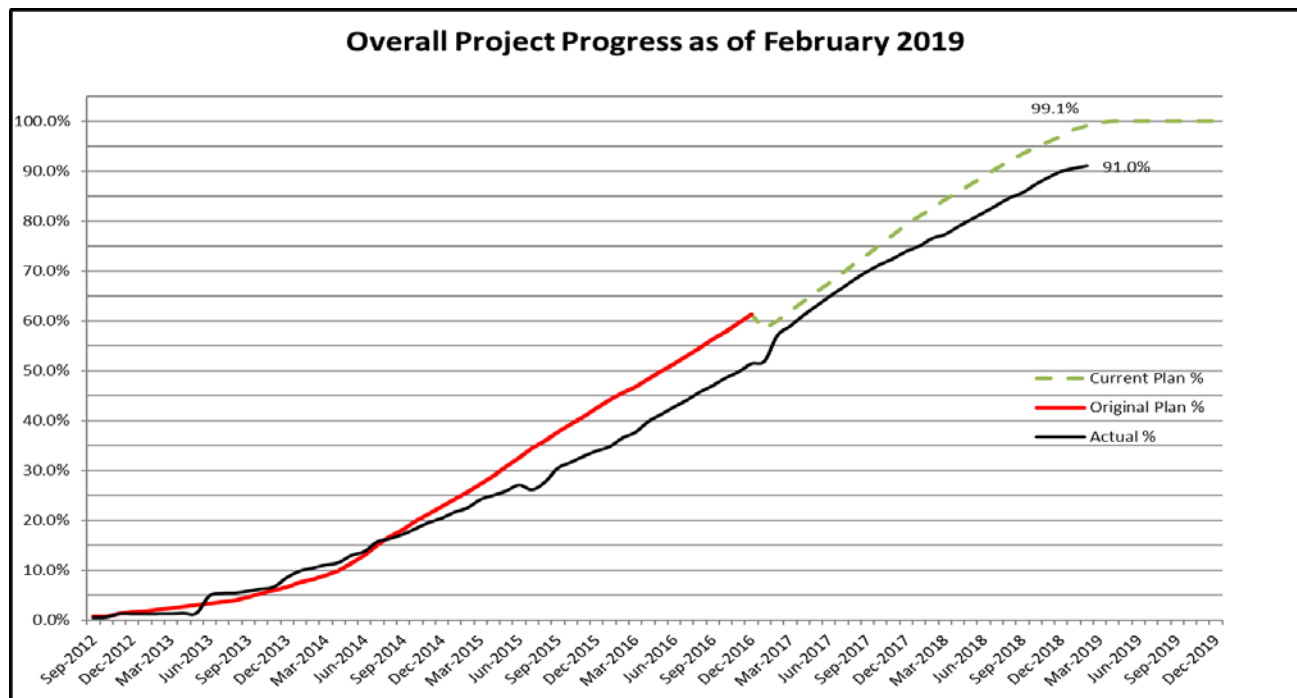




**Progress Summary**





|                                         | Status     | Change from Last Period | Comment                                             |
|-----------------------------------------|------------|-------------------------|-----------------------------------------------------|
| Current Revenue Service:                | 10/30/2019 | 0                       |                                                     |
| Forecast Revenue Service:               | -          | 0                       | Revenue Service Spring/Summer of 2020               |
| TIFIA Revenue Service:                  | 10/30/2019 | 0                       |                                                     |
|                                         |            |                         |                                                     |
| <b>Final Design Progress:</b>           |            |                         |                                                     |
| Contract C0988                          | 99.7%      | 0.1%                    | Design Services During Construction Behind Schedule |
| Contract C0990                          | 100%       | None                    | Design Completed                                    |
| Contract C0991                          | 100%       | None                    | Design Services During Construction Completed       |
| Contract C0992                          | 100%       | None                    | Design Completed                                    |
| Contract C0992A                         | 100%       | None                    | Design Completed                                    |
|                                         |            |                         |                                                     |
| <b>Construction Contracts Progress:</b> |            |                         |                                                     |
| Contract C0988                          | 85.1%      | 0.4%                    | Behind Schedule                                     |
| Contract C0990                          | 100%       | None                    | Completed                                           |
| Contract C0991                          | 100%       | 0.7%                    | Completed                                           |
| Contract C0992                          | 100%       | None                    | Completed                                           |
| Contract C0992A                         | 100%       | None                    | Completed                                           |





**Planned vs. Actual Progress**



**Key Milestones Six Month Look Ahead**

|                                                                                   | Milestone Date | Mar-19 | Apr-19 | May-19 | Jun-19 | Jul-19 | Aug-19 |
|-----------------------------------------------------------------------------------|----------------|--------|--------|--------|--------|--------|--------|
| Destress DF Track - STA 274+25 to 316+66 (Underground #3) - Seg. B2               | 03/03/19       | ⬡      |        |        |        |        |        |
| Terminate CTS Rack & Panels @ Downtown Inglewood                                  | 03/03/19       | ⬡      |        |        |        |        |        |
| Install/Term SCA DA Equipment in TPSS-03                                          | 03/03/19       | ⬡      |        |        |        |        |        |
| Install HVAC - Zone 4B - TPSS Fan                                                 | 03/03/19       | ⬡      |        |        |        |        |        |
| Field Acceptance Testing & Start-up @ TPSS-02                                     | 03/03/19       | ⬡      |        |        |        |        |        |
| TPSS-01 Permanent Power Drop - SCE - Install Equipment, Cable, Energize & Monitor | 03/16/19       | ⬡      |        |        |        |        |        |
| Install Fire Rated Cable - CO 176 - Zone 8A - N.AUX (MLK)                         | 04/02/19       |        | ⬡      |        |        |        |        |
| Fabricate & Deliver - UG1 H2S Jet Fans                                            | 04/04/19       |        | ⬡      |        |        |        |        |
| Fabricate & Deliver Elevators - UG Stations                                       | 05/30/19       |        |        | ⬡      |        |        |        |
| Fabricate & Deliver Elevators - Aviation/Century                                  | 05/30/19       |        |        | ⬡      |        |        |        |
| Fab/Procure & Deliver Jet Fans - UG #3, UG#4                                      | 05/30/19       |        |        | ⬡      |        |        |        |
| Fab/Procure & Deliver Station Emergency Ventilation Fans                          | 06/10/19       |        |        |        | ⬡      |        |        |
| Fab/Procure & Deliver Gas Fans - UG #1                                            | 06/14/19       |        |        |        | ⬡      |        |        |
| Installation Ventilation Equipment - UG #3                                        | 06/14/19       |        |        |        | ⬡      |        |        |

 MTA Staff
  MTA Board Action
  FTA (Federal Transit Administration)
  Utility Company

 Other Agencies
  C0991 D/B Contractor
  Design Consultant
  C0988 D/B Contractor

"A" following date is actual and completed

★ New

**Crenshaw/LAX Transit Project  
Monthly Project Status Report**

**February 2019**

**Major Equipment Delivery**

*Metro Supplied Equipment*

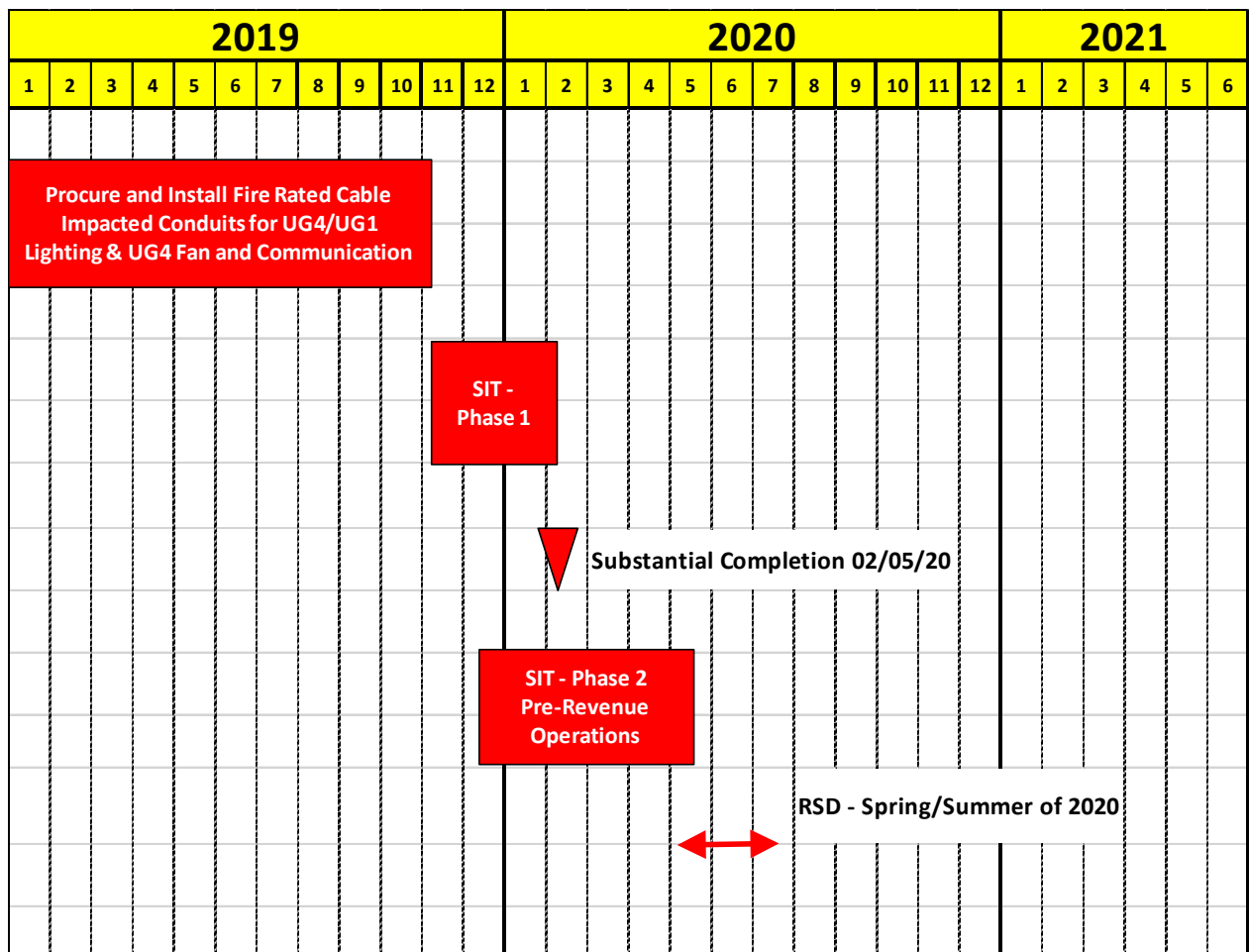
| <b>Equipment</b>           | <b>Initial Procurement</b> | <b>Scheduled Delivery</b>  | <b>Scheduled Installation</b> |
|----------------------------|----------------------------|----------------------------|-------------------------------|
| LRT Vehicles               | (NTP)<br>08/20/2012        | Option 1<br>9/1/2017       | N/A                           |
| Ticket Vending<br>Machines | 01/30/2018                 | 02/28/2019<br>(Warehoused) | 11/12/2019                    |

*Design - Builder Equipment Delivery Requirements*

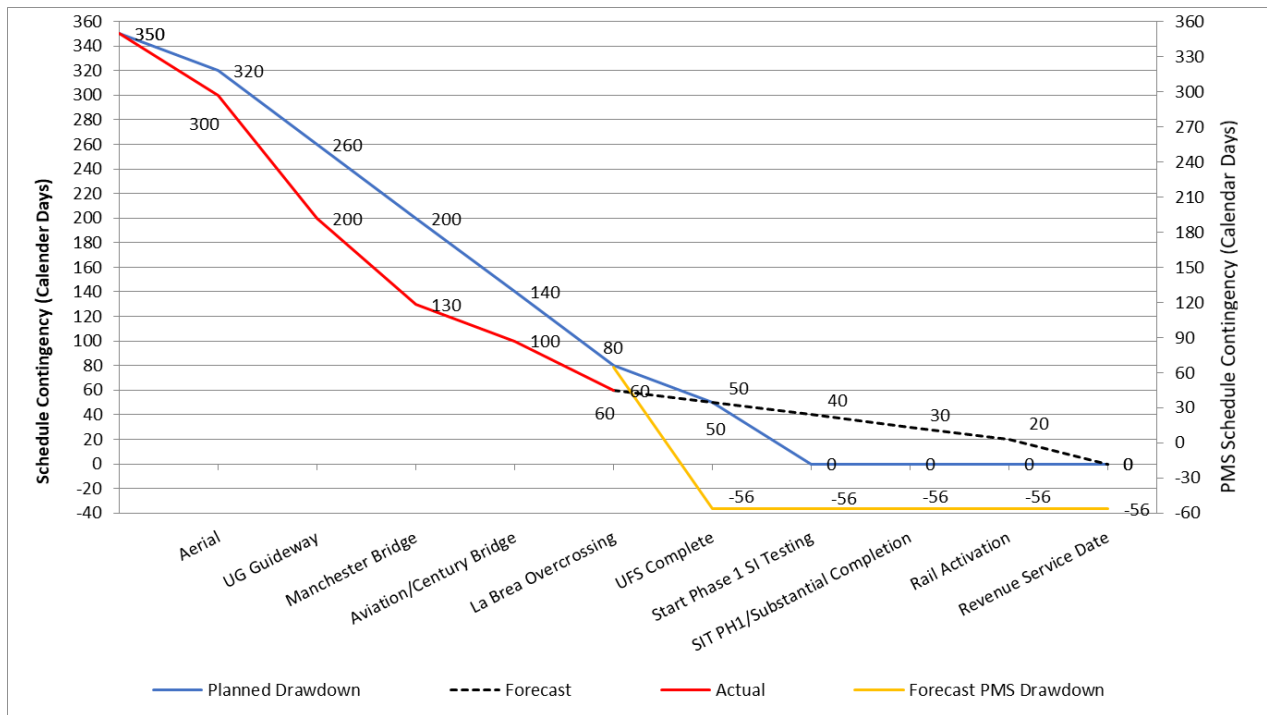
| <b>Activity Name</b>                                     | <b>Early Finish</b> | <b>Need Date</b> |
|----------------------------------------------------------|---------------------|------------------|
| Procure & Deliver UPS & Batteries - TC&C #3 Century      | 30-Nov-18 A         | 18-Feb-19 A      |
| Fab/Procure & Deliver Jet Fans - UG #3, UG#4             | 03-Mar-19           | 30-May-19        |
| Fabricate & Deliver Elevators - UG Stations              | 03-Mar-19           | 30-May-19        |
| Fabricate & Deliver Elevators - Aviation/Century         | 03-Mar-19           | 30-May-19        |
| Fab/Procure & Deliver Gas Fans - UG #1                   | 03-Mar-19           | 14-Jun-19        |
| Fab/Procure & Deliver Station Emergency Ventilation Fans | 03-Mar-19           | 10-Jun-19        |



## Critical Path



**Project Schedule Contingency Drawdown**



Metro issued in August 2018 a non-compensable unilateral change order to WSCC to extend their substantial completion milestone to December 11, 2019. Thus, performance measurement is now tracked against this new date.

The contractor last schedule update submitted was for period as of November 2018. They reported they are behind schedule. Metro assessment is that WSCC is behind schedule by at least 56 calendar days.

Metro is evaluating a potential 2020 date for revenue service based on the revised substantial completion milestone date.

## **Risk Management Narrative**

### **Summary of Risks**

Within this reporting no risks were closed, and no new risks were identified. There is a total of thirty-six (36) risks to be managed in the next reporting period.

Of the thirty-six (36) risks, seven (7) are scored as high, twelve (12) as medium and seventeen (17) as low.

### **Top 5 Risks**

The table below shows the top 7 project risks:

| <b>Risk ID</b> | <b>SCC</b> | <b>Risk Description</b>                                                                                                                                                                                         | <b>Risk Rating</b> |
|----------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| 369            | 50         | Continued delay of fire rated conduit/cable installation. WSCC is falling behind in completing work as scheduled and potential cost and claim.                                                                  | 25                 |
| 124            | 50         | Main Line testing prior to pre-revenue operations may take longer than expected, resulting in increased Main Line Metro and Consultant costs and potential delay to December 11, 2019 - Substantial Completion. | 18                 |
| 359            | 40         | Extended Overhead or productivity loss claims exposure not covered by cost impacts in individual risks.                                                                                                         | 18                 |
| 362            | 30         | Schedule activities that are critical to completion.                                                                                                                                                            | 16                 |
| 277            | 50         | SCADA interface between ROC & field installations could impact Metro's SIT2. Workforce issue to perform testing.                                                                                                | 16                 |
| 355            | 50         | Issues with long lead delivery or improper planning for integration, testing and startup of Communication systems.                                                                                              | 12                 |
| 354            | 50         | Issues with energization of traction power. DWP and Edison Issues                                                                                                                                               | 11                 |

### **Newly Identified Risks**

- No new risks were added to the risk register.

### **Closed Risks**

- No risks that were closed in the risk register.

### **Risk Score Changes**

- No risks scores were changed in the risk register.

### **Actions in Next Reporting Cycle**

Continuous efforts in Risk Management will be made through the following actions:

- Update the project risk register.

# Crenshaw/LAX Transit Project Monthly Project Status Report

February 2019

## PROJECT COST

### Project Cost Analysis

| SCC CODE | DESCRIPTION                                   | ORIGINAL BUDGET | CURRENT BUDGET |               | COMMITMENTS |               | EXPENDITURES |               | CURRENT FORECAST |               | CURRENT BUDGET/ FORECAST VARIANCE |
|----------|-----------------------------------------------|-----------------|----------------|---------------|-------------|---------------|--------------|---------------|------------------|---------------|-----------------------------------|
|          |                                               |                 | PERIOD         | TO DATE       | PERIOD      | TO DATE       | PERIOD       | TO DATE       | PERIOD           | TO DATE       |                                   |
| 10       | GUIDEWAYS                                     | 471,335,000     | -              | 450,354,375   | -           | 452,814,896   | 5,027,016    | 433,611,458   | -                | 452,817,916   | 2,463,541                         |
| 20       | STATIONS, STOPS, TERMINALS, INTERMODAL        | 153,906,000     | -              | 315,050,000   | -           | 309,849,246   | 3,347,513    | 251,627,308   | -                | 309,849,246   | (5,200,754)                       |
| 30       | SUPPORT FACILITIES (SOUTHWEST YARD)           | 66,673,000      | -              | 71,164,000    | (899,574)   | 67,232,778    | 443,962      | 64,990,820    | (1,530,000)      | 69,634,000    | (1,530,000)                       |
| 40       | SITWORK/SPECIAL CONDITIONS                    | 235,576,000     | -              | 395,798,361   | (222,935)   | 404,611,999   | 1,234,815    | 352,933,146   | (222,935)        | 411,163,509   | 15,365,148                        |
| 50       | SYSTEMS                                       | 125,132,000     | -              | 169,436,000   | 139,711     | 169,244,486   | 1,962,248    | 113,542,303   | 69,761           | 173,082,923   | 3,646,923                         |
|          | CONSTRUCTION SUBTOTAL (10-50)                 | 1,052,622,000   | -              | 1,401,802,736 | (982,798)   | 1,403,753,404 | 12,015,554   | 1,216,705,034 | (1,683,174)      | 1,416,547,594 | 14,744,858                        |
| 60       | RIGHT-OF-WAY                                  | 132,294,000     | -              | 127,490,000   | 372,821     | 129,941,507   | 398,099      | 129,769,391   | 372,810          | 129,957,266   | 2,467,266                         |
| 70       | VEHICLES / BUSES                              | 87,780,000      | -              | 83,571,544    | -           | 82,158,061    | -            | 78,793,298    | -                | 83,571,544    | (0)                               |
| 80       | PROFESSIONAL SERVICES                         | 273,147,000     | -              | 368,734,466   | 4,715,272   | 381,807,310   | 3,280,487    | 346,224,875   | 1,675,000        | 385,593,993   | 16,859,528                        |
|          | SUBTOTAL (10-80)                              | 1,545,843,000   | -              | 1,981,598,746 | 4,105,295   | 1,997,660,283 | 15,694,140   | 1,771,492,598 | 364,636          | 2,015,670,397 | 34,071,651                        |
| 90       | UNALLOCATED CONTINGENCY                       | 177,157,000     | -              | 50,401,254    | -           | -             | -            | -             | (364,636)        | 16,329,603    | (34,071,651)                      |
|          | TOTAL PROJECT 865512 (10-100)                 | 1,723,000,000   | -              | 2,032,000,000 | 4,105,295   | 1,997,660,283 | 15,694,140   | 1,771,492,598 | -                | 2,032,000,000 | -                                 |
|          | ENVIRONMENTAL/PLANNING - 405512               | 5,526,150       | -              | 5,526,150     | -           | 5,526,150     | -            | 5,526,150     | -                | 5,526,150     | -                                 |
|          | ENVIRONMENTAL/PLANNING - 465512               | 20,473,850      | -              | 20,473,850    | -           | 20,022,881    | -            | 20,022,881    | -                | 20,473,850    | -                                 |
|          | TOTAL PROJECTS 405512 & 465512 (ENV / PLAN'G) | 26,000,000      | -              | 26,000,000    | -           | 25,549,031    | -            | 25,549,031    | -                | 26,000,000    | -                                 |
|          | TOTAL PROJECTS 405512, 465512 & 865512        | 1,749,000,000   | -              | 2,058,000,000 | 4,105,295   | 2,023,209,314 | 15,694,140   | 1,797,041,629 | -                | 2,058,000,000 | -                                 |

1. Expenditures are Cumulative through March 1, 2019

2. Expenditures exclude \$6.6 million for State Board of Equalization (SBOE) decision to tax LRT Vehicle deliveries since August 2016. Metro is appealing the decision by the SBOE but paid tax so as not to incur any late fees.

3. Expenditures exclude \$5.5 million for various right-of-way and professional services costs that are being reallocated to other local funding.

The project numbers 405512, 465512, 865512 and 860003 are internal to Metro and are used to differentiate between environmental/planning and construction components of the project.

### Original Budget:

The Board in October 2011 established the Life-of-Project (LOP) Original Budget of \$1,749 million for the Crenshaw/LAX Transit Project.

### Current Budget:

There have been two increases in the total LOP Current Budget to date:

- The Board in December 2012 approved an increase of \$13.9 million for a new LOP Current Budget total of \$1,762.9 million. The Unallocated Contingency Standard Cost Category (SCC) 90 budget line item was increased by the \$13.9 million for a new total of \$191.1 million.
- The Board in June 2013 approved an increase of \$295.1 million for a new LOP total of \$2,058.0 million. The total increase was based on two actions:
  - Increase LOP base project scope in the amount of \$160.1 million, and
  - Increase LOP to include the options for Crenshaw/Vernon Station (Leimert Park Village) and Florence/Hindry Station in the amount of \$135.0 million.
- The Board in May 2015 approved an increase in the amount of funding that the Crenshaw/LAX project is contributing toward the total cost of the Southwestern Yard Project. An additional \$10.8 million was drawdown from the Unallocated Contingency Current Budget SCC 90 and added to the Southwestern Yard Current Budget SCC 30. The Current Budget includes the 49% cost allocation share that the project is responsible for paying which includes funding of the design and construction for the Southwestern Yard. This amount was revised to \$150.2 million.

# Crenshaw/LAX Transit Project Monthly Project Status Report

February 2019

The \$150.2 million is spread among the SCC 30, 40, 60, 80 and 90 in the Cost Report by Element table above. A project cost status chart depicting the LOP Current Budget for the Southwestern Yard Project is included in the appendix section of this report. The Current Budget allocation for Crenshaw/LAX Transit Project only, excluding the Southwestern Yard Project \$150.2 million 49% allocation and the Environmental/Planning Current Budget of \$26.0 million, is \$1,881.8 million.

Although there is no change to the Total LOP Current Budget there was a reallocation for changes to the SCC elements within the Current Budget in April 2017.

## Commitments:

Commitments increased by \$4.1 million this period to \$2,023.2 million which represents 98.3% of the current budget. The total increase is related to design-build Contract C0988 Crenshaw/LAX Transit Corridor, real estate acquisition, professional services and unencumbering Contract C0991 Division 16: Southwestern Yard Purchase Orders. The total commitments include \$147.5 million for the Southwestern Yard 49% allocation.

## Expenditures:

Expenditures increased by \$15.7 million this period to \$1,797.0 million which represents 87.3% of the current budget. The increase is for costs associated with design-build Contract C0988 Crenshaw/LAX Transit Corridor, Contract C0991 Division 16: Southwestern Yard, real estate acquisition and professional services. The cumulative expenditures to date include \$142.7 million for the Southwestern Yard 49% allocation.

## Current Forecast:

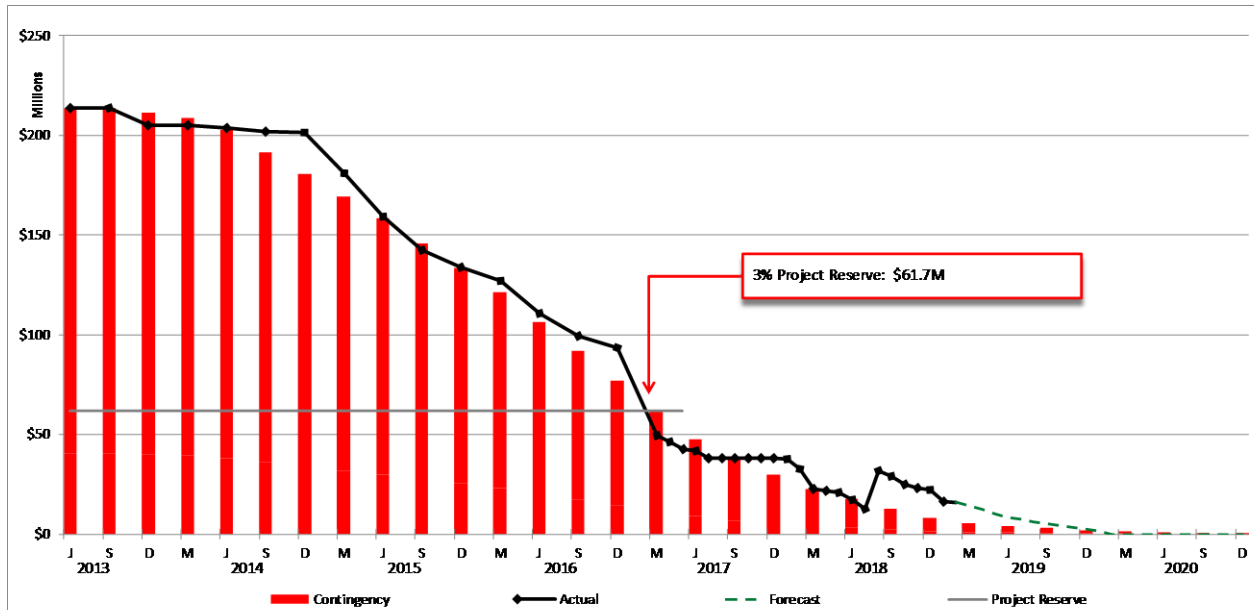
The total current forecast remains the same as the total current budget.

## Non-Crenshaw/LAX Transit Project Funded Scope of Work

The costs shown in the table below are not part of Crenshaw/LAX Transit Project costs but are funded by other Metro projects using the services of the alignment design-builder (Contract C0988).

| C0988 NON-CRENSHAW/LAX TRANSIT PROJECT FUNDED SCOPE OF WORK |                |            |             |            |              |              |                  |            |                   |
|-------------------------------------------------------------|----------------|------------|-------------|------------|--------------|--------------|------------------|------------|-------------------|
| DESCRIPTION                                                 | CURRENT BUDGET |            | COMMITMENTS |            | EXPENDITURES |              | CURRENT FORECAST |            | FORECAST VARIANCE |
|                                                             | PERIOD         | TO DATE    | PERIOD      | TO DATE    | PERIOD       | TO DATE      | PERIOD           | TO DATE    |                   |
| 405556 SYSTEMWIDE TRANSIT PLANNING                          | -              | 320,035    | -           | 320,035    | -            | 320,035      | -                | 320,035    | -                 |
| 210090/93 FARE GATE PROJECT                                 | -              | 2,566,226  | -           | 2,566,226  | -            | 1,541,048    | -                | 2,566,226  | -                 |
| 210152 CRENSHAW/LAX BUS TRANSFER FACILITY                   | -              | 2,200,000  | -           | 2,200,000  | -            | 403,334      | -                | 2,200,000  | -                 |
| 460303 AIRPORT METRO CONNECTOR                              | -              | 37,914,465 | -           | 37,047,674 | -            | 36,872,565.7 | -                | 37,914,465 | -                 |
| 500013 C/LAX LAWA SCOPE OF WORK                             | -              | 1,575,362  | -           | 1,114,613  | (246,670)    | 545,439      | -                | 1,575,362  | -                 |
| 405522 HIGHWAY PLANNING                                     | 1,935,000      | 1,935,000  | 1,935,000   | 1,935,000  | 693,003      | 693,003      | 1,935,000        | 1,935,000  | -                 |
| TOTAL                                                       | 1,935,000      | 46,511,088 | 1,935,000   | 45,183,548 | 446,333      | 40,375,425   | 1,935,000        | 46,511,088 | -                 |

## Cost Contingency Drawdown



## Cost Contingency Drawdown Analysis

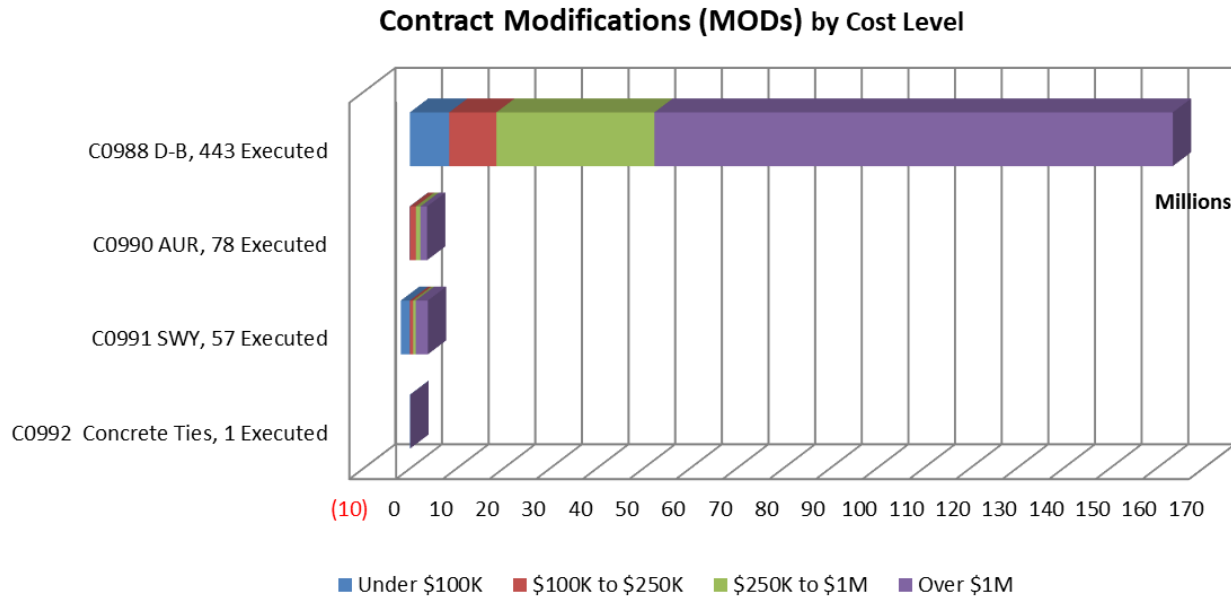
The project current budget of \$2,058,000,000 includes a contingency amount of \$213,866,792. The drawdown plan is correlated to anticipate risk trends and measures drawdowns moving forward.

Included in the project contingency drawdown is a 3% project reserve threshold. The Board is to be notified when it becomes necessary to drawdown contingency below the project reserve line to cover project costs. This notification request was adopted by the Metro Board of Directors in September 2012. In February 2017, the project contingency drawdown curve went below the 3% project reserve level and the Board was notified.

This month, \$364,646 was drawn down from contingency. The remaining total project contingency (allocated and unallocated) is \$16,329,602.

| PROJECT COST CONTINGENCY (through 01-Mar-2019) |                      |                      |                  |                      |                                  |
|------------------------------------------------|----------------------|----------------------|------------------|----------------------|----------------------------------|
| UNITS IN DOLLARS                               |                      |                      |                  |                      |                                  |
|                                                | Original Contingency | Previous Period      | Current Period   | To-Date              | Remaining Contingency (Forecast) |
| Unallocated Contingency                        | 173,500,000          | (156,805,762)        | (364,636)        | (157,170,398)        | 16,329,602                       |
| Allocated Contingency                          | 40,366,792           | (40,366,792)         | -                | (40,366,792)         | -                                |
| <b>Total Contingency</b>                       | <b>213,866,792</b>   | <b>(197,172,554)</b> | <b>(364,636)</b> | <b>(197,537,190)</b> | <b>16,329,602</b>                |

## SUMMARY OF CONTRACT MODIFICATIONS



|                              | C0988                   | C0990               | C0991                 | C0992               | Total                   |
|------------------------------|-------------------------|---------------------|-----------------------|---------------------|-------------------------|
|                              | 443 Executed            | 78 Executed         | 57 Executed           | 1 Executed          |                         |
| Under \$100K                 | \$ 8,418,207            | \$ (70,251)         | \$ (1,918,854)        | \$ 81,738           | \$ 6,510,840            |
| \$100k to \$250K             | \$ 10,126,408           | \$ 1,280,184        | \$ 674,625            | \$ -                | \$ 12,081,217           |
| \$250K to \$1M               | \$ 33,872,300           | \$ 984,662          | \$ 590,334            | \$ -                | \$ 35,447,297           |
| Over \$1M                    | \$ 111,145,950          | \$ 1,417,202        | \$ 2,590,000          | \$ -                | \$ 115,153,152          |
| <b>Total Contract MODs</b>   | <b>\$ 163,562,866</b>   | <b>\$ 3,611,797</b> | <b>\$ 1,936,105</b>   | <b>\$ 81,738</b>    | <b>\$ 169,192,506</b>   |
| <b>Contract Award Amount</b> | <b>\$ 1,272,632,356</b> | <b>\$ 7,827,500</b> | <b>\$ 172,312,695</b> | <b>\$ 2,161,297</b> | <b>\$ 1,454,933,848</b> |
| <b>% of Contract MODs</b>    | <b>12.85%</b>           | <b>46.14%</b>       | <b>1.12%</b>          | <b>3.78%</b>        | <b>11.63%</b>           |

Four hundred and forty - three (443) changes with a total value of \$163.56 million have been executed since award of Contract C0988. There are an additional thirty-two (32) changes with a total credit value of \$0.22 million pending the administrative approval process.

Seventy-eight (78) changes with a total value of \$3.61 million have been executed for completed Contract C0990.

Fifty-seven (57) changes with a total value of \$1.94 million have been executed since award of Contract C0991.

One (1) change with a value of \$81,738 was executed for completed Contract C0992.

Percent of Contract modifications equals the total Change modifications divided by the Contract Award amount

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

### **Contract C0988 Crenshaw/LAX Transit Corridor Design-Build**

(Reported Data as of February 2019)

- |                                                                                                                                                                                                                                                                                                 |                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| <ul style="list-style-type: none"> <li>• <b>DBE Goal (Design)</b> – A numerically expressed percentage of funds apportioned to Design Contracts and is calculated based upon the relative availability of DBE firms as compared to all firms in the relevant geographic market area.</li> </ul> | <p><b>20.00%</b></p>                |
| <ul style="list-style-type: none"> <li>• <b>Current DBE Commitment</b> – Total DBE Committed Dollars divided by Total Contract Value for Design or Construction.</li> </ul>                                                                                                                     | <p><b>\$25,078,875 (20.00%)</b></p> |
| <ul style="list-style-type: none"> <li>• <b>Current DBE Participation</b> – Total amount paid to date to DBEs divided by the amount paid to date to Prime.</li> </ul>                                                                                                                           | <p><b>\$28,918,585 (23.79%)</b></p> |

Twenty-Six (26) Design subcontractors have been identified to-date

- |                                                                                                                                                                                                                                                                                                             |                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| <ul style="list-style-type: none"> <li>• <b>DBE Goal (Construction)</b> - A numerically expressed percentage of funds apportioned to Construction Contracts and is calculated based upon the relative availability of DBE firms as compared to all firms in the relevant geographic market area.</li> </ul> | <p><b>20.00%</b></p>                 |
| <ul style="list-style-type: none"> <li>• <b>DBE Commitment</b> - Contract commitment divided by current contract value for Construction</li> </ul>                                                                                                                                                          | <p><b>\$257,764,345 (20.00%)</b></p> |
| <ul style="list-style-type: none"> <li>• <b>Current DBE Commitment</b> - Actual commitments as Construction work is awarded</li> </ul>                                                                                                                                                                      | <p><b>\$275,768,731 (21.40%)</b></p> |
| <ul style="list-style-type: none"> <li>• <b>Current DBE Participation</b> - Total amount paid to date to DBEs divided by the amount paid to date to Prime</li> </ul>                                                                                                                                        | <p><b>\$280,206,891 (25.67%)</b></p> |



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

### **Contract C0991 Division 16: Southwestern Yard Design-Build**

(Reported Data as of January 2019)

- **DBE Goal (Design)** – A numerically expressed percentage of funds apportioned to Design Contracts and is calculated based upon the relative availability of DBE firms as compared to all firms in the relevant geographic market area. **20.93%**
- **Current DBE Commitment** – Total DBE Committed Dollars divided by Total Contract Value for Design or Construction. **\$2,467,837 (20.93%)**
- **Current DBE Participation** – Total amount paid to date to DBEs divided by the amount paid to date to Prime. **\$2,283,421 (20.84%)**

Ten (10) Design subcontractors have been identified to-date

- **DBE Goal (Construction)** - A numerically expressed percentage of funds apportioned to Construction Contracts and is calculated based upon the relative availability of DBE firms as compared to all firms in the relevant geographic market area. **16.00%**
- **DBE Commitment** - Contract commitment divided by current contract value for Construction. **\$25,930,836 (16.00%)**
- **Current DBE Commitment** - Actual commitments as Construction work is awarded **\$32,441,412 (20.02%)**
- **Current DBE Participation** - Total amount paid to date to DBEs divided by the amount paid to date to Prime **\$25,471,225 (17.17%)**

Ninety-six (96) Construction subcontractors have been identified to-date

**PROJECT LABOR AGREEMENTS (PLA)**

**Contract C0988 Crenshaw/LAX Transit Corridor Design-Build**

(Reported Data as of January 2019)

- |                                                                                                                                                      |               |
|------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| • <b>Targeted Worker Goal</b> – Construction work to be performed by residents from Economically Disadvantaged Area of LA County                     | <b>40.00%</b> |
| • <b>Targeted Worker Current Attainment</b>                                                                                                          | <b>60.30%</b> |
| • <b>Apprentice Worker Goal</b> – Construction work to be performed by Apprentices                                                                   | <b>20.00%</b> |
| • <b>Apprentice Worker Current Attainment</b>                                                                                                        | <b>23.37%</b> |
| • <b>Disadvantaged Worker Goal</b> – Construction work to be performed by Disadvantaged Workers whose primary place of residence is within LA County | <b>10.00%</b> |
| • <b>Disadvantaged Worker Current Attainment</b>                                                                                                     | <b>12.21%</b> |

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

### **Contract C0991 Division 16: Southwestern Yard Design-Build**

(Reported Data as of January 2019)

- **Targeted Worker Goal** – Construction work to be performed by residents from Economically Disadvantaged Area of LA County **40.00%**
- **Targeted Worker Current Attainment** **49.47%**
- **Apprentice Worker Goal** – Construction work to be performed by Apprentices **20.00%**
- **Apprentice Worker Current Attainment** **29.84%**
- **Disadvantaged Worker Goal** – Construction work to be performed by Disadvantaged Workers whose primary place of residence is within LA County **10.00%**
- **Disadvantaged Worker Current Attainment** **10.28%**

**Crenshaw/LAX Transit Project  
Monthly Project Status Report**

**February 2019**

**FINANCIAL/GRANT**

\$ in millions

| SOURCE                            | (A)<br>ORIGINAL<br>BUDGET | (B)<br>TOTAL<br>FUNDS<br>ANTICIPATED | (C)<br>TOTAL<br>FUNDS<br>AVAILABLE | (D)<br>COMMITMENTS<br>\$ | (D/B)<br>%   | (E)<br>EXPENDITURES<br>\$ | (E/B)<br>%   | (F)<br>BILLED to<br>\$ | (F/B)<br>FUNDING<br>SOURCE<br>% |
|-----------------------------------|---------------------------|--------------------------------------|------------------------------------|--------------------------|--------------|---------------------------|--------------|------------------------|---------------------------------|
|                                   |                           |                                      |                                    |                          |              |                           |              |                        |                                 |
| FEDERAL - CMAQ                    | 68.2                      | 54.0                                 | 54.0                               | 54.0                     | 100%         | 54.0                      | 100%         | 54.0                   | 100%                            |
| FEDERAL - SECTION 5309 BUS CAPT   | 8.6                       | 8.6                                  | 8.6                                | 8.6                      | 100%         | 8.6                       | 100%         | 8.6                    | 100%                            |
| FEDERAL - REGIONAL STP            | 20.0                      | 99.9                                 | 99.9                               | 99.9                     | 100%         | 99.9                      | 100%         | 91.2                   | 91%                             |
| FEDERAL - ALTERNATIVE ANALYSIS    | 1.2                       | 1.2                                  | 1.2                                | 1.2                      | 100%         | 1.2                       | 100%         | 1.2                    | 100%                            |
| FEDERAL - TIGER II                | 0.0                       | 13.9                                 | 13.9                               | 13.9                     | 100%         | 13.9                      | 100%         | 13.9                   | 100%                            |
| STATE REGIONAL IMPROVEMENT PROG   | 36.5                      | 36.6                                 | 9.1                                | 36.6                     | 100%         | 26.3                      | 72%          | 26.3                   | 72%                             |
| STATE PPM                         | 0.178                     | 0.178                                | 0.178                              | 0.178                    | 100%         | 0.178                     | 100%         | 0.178                  | 100%                            |
| STATE PROP 1B PTMISEA             | 201.2                     | 129.0                                | 129.0                              | 129.0                    | 100%         | 129.0                     | 100%         | 129.0                  | 100%                            |
| STATE PROP 1 B LOCAL PARTNER PROG | 0.0                       | 49.5                                 | 49.5                               | 49.5                     | 100%         | 49.5                      | 100%         | 49.5                   | 100%                            |
| MEASURE R - TIFIA LOAN            | 545.9                     | 545.9                                | 545.9                              | 545.9                    | 100%         | 545.9                     | 100%         | 545.9                  | 100%                            |
| MEASURE R                         | 661.1                     | 529.3                                | 529.3                              | 529.3                    | 100%         | 464.9                     | 88%          | 450.4                  | 85%                             |
| CITY CONTRIBUTION                 | 52.4                      | 101.7                                | 40.0                               | 66.9                     | 66%          | 43.2                      | 42%          | 43.2                   | 42%                             |
| GENERAL FUNDS                     | 0.0                       | 54.3                                 | 54.3                               | 54.3                     | 100%         | 54.3                      | 100%         | 54.3                   | 100%                            |
| PROP C 25% HIGHWAY                | 148.9                     | 429.1                                | 429.1                              | 429.1                    | 100%         | 301.4                     | 70%          | 287.0                  | 67%                             |
| PROP C 40% DISCRETIONARY          | 0.0                       | 0.0                                  | 0.0                                | 0.0                      | 0%           | 0.0                       | 0%           | 0.0                    | 0%                              |
| PROP A 35% RAIL CAPITAL           | 4.8                       | 4.9                                  | 4.9                                | 4.9                      | 100%         | 4.9                       | 100%         | 4.9                    | 100%                            |
| <b>TOTAL</b>                      | <b>1,749.0</b>            | <b>2,058.0</b>                       | <b>1,968.8</b>                     | <b>2,023.2</b>           | <b>98.0%</b> | <b>1,797.0</b>            | <b>87.0%</b> | <b>1,759.4</b>         | <b>85.0%</b>                    |

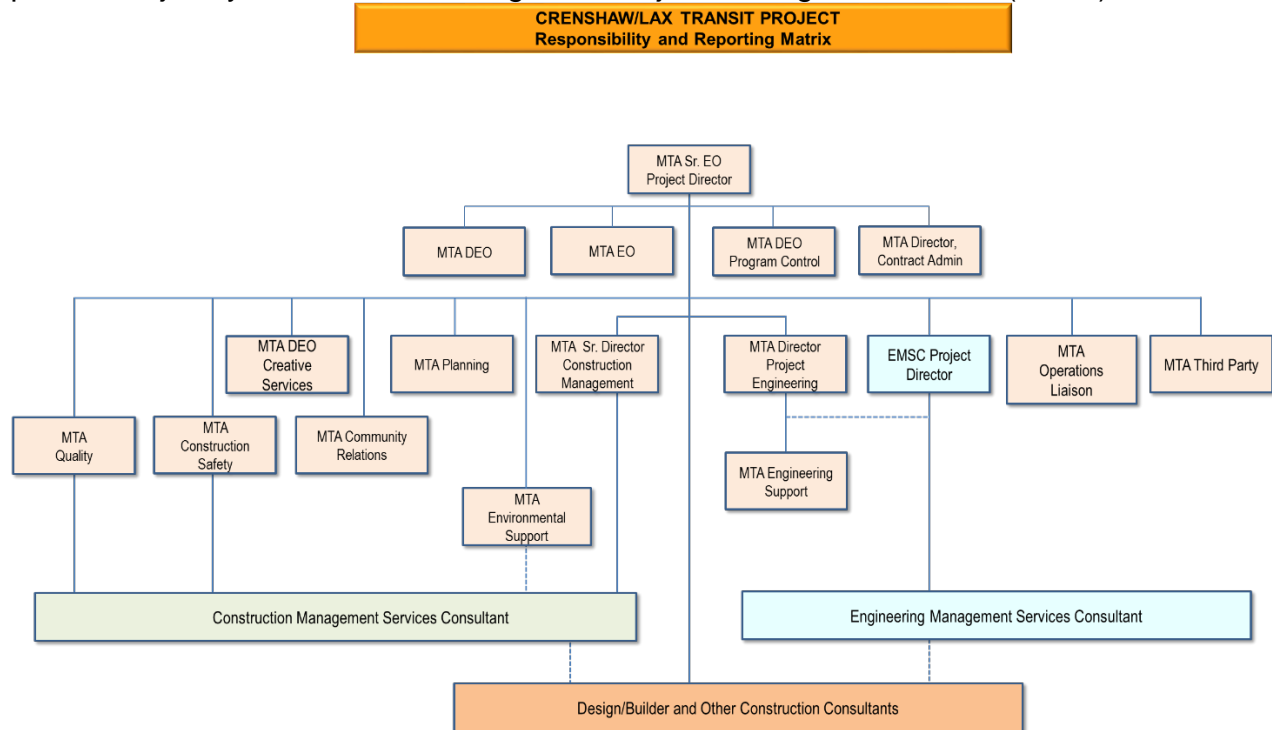
NOTE: Expenditures are cumulative through March 1, 2019

Original Budget based on Board approved October 2011 Funding/Expenditure Plan

Expenditures exclude \$10.7 Mil awaiting State Board of Equalization decision whether to tax LRT vehicle deliveries and \$5.5 Mil for various right of way and professional services cost being reallocated to other local funding.

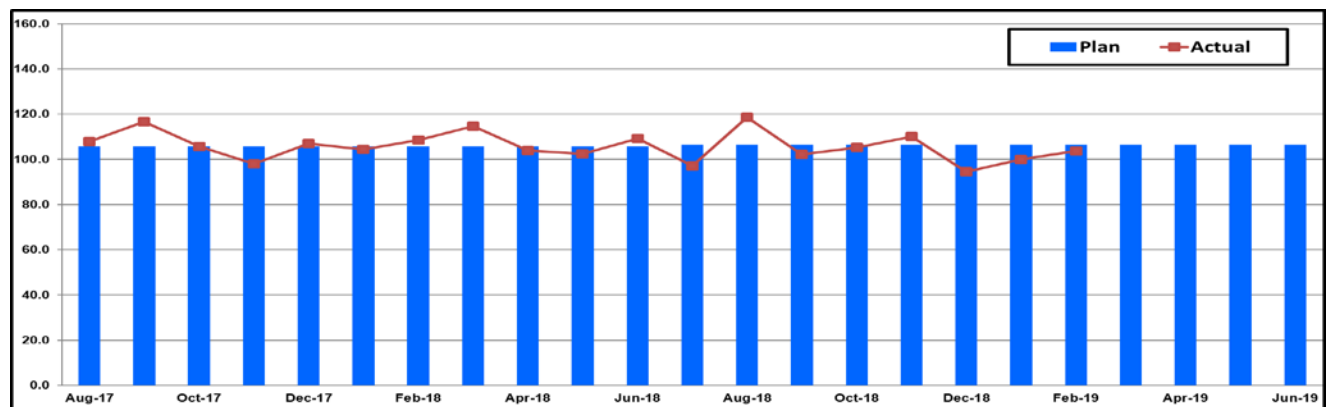
## PROJECT ORGANIZATION AND STAFFING

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



The overall FY19 Total Project Staffing Plan averages 106.5 Full Time Equivalent (FTEs) per month consisting of 53.5 for Metro Agency staff, 45.5 for Construction Management Support Services Consultant and 7.6 for Design and Engineering Support Services Consulting staff.

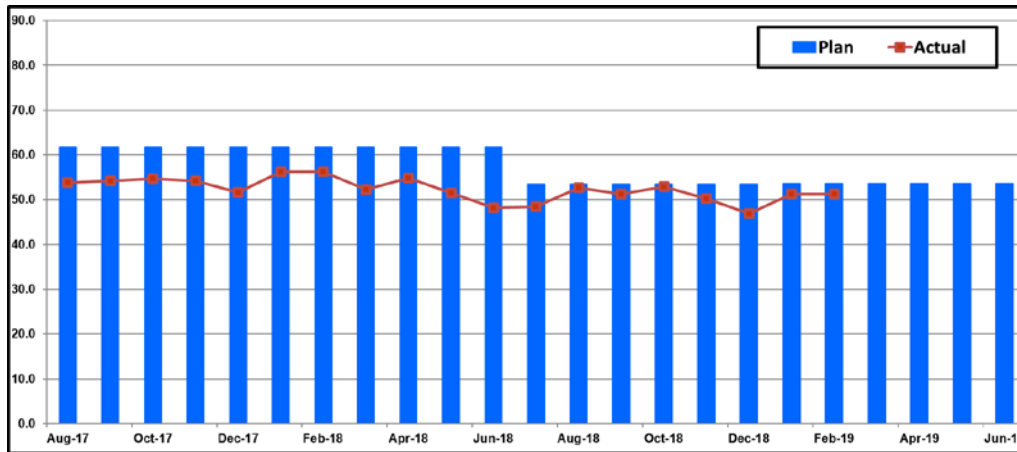
For February 2019, total project staffing were 103.6 FTEs for the month consisting of 51.2 FTEs for Metro's project administration staff, 44.2 FTEs for Construction Management Support Services Consultant and 8.2 FTEs for Design and Engineering Support Services Consulting staff.



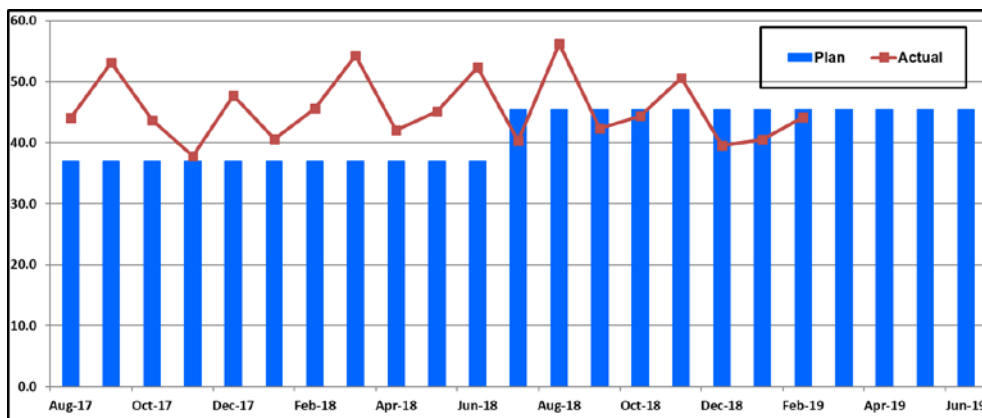
# Crenshaw/LAX Transit Project Monthly Project Status Report

February 2019

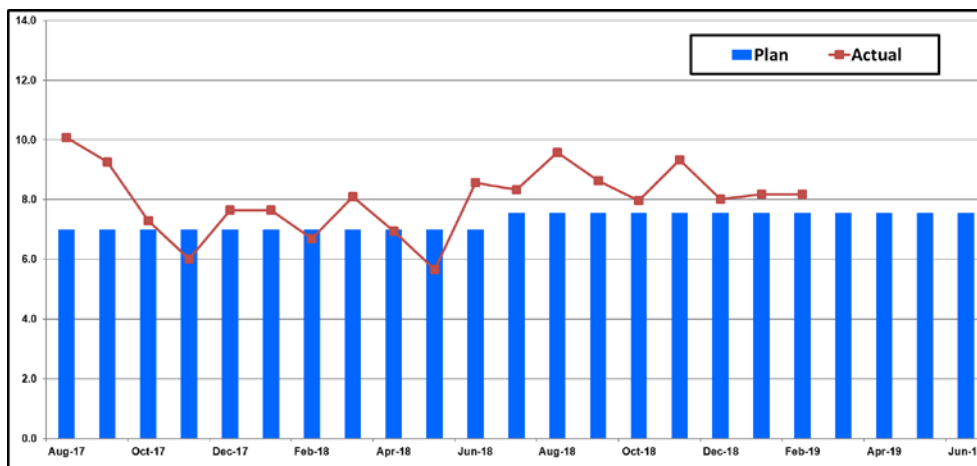
## Metro Staff



## CM Support Services Staff (Consultant)



## Engineering Services Staff (Consultant)



## Staffing by Group

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

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

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

## **REAL ESTATE**

- All parcels necessary to construct the guideway have been turned over to the Contractor. Metro is working on extending some temporary construction easements due to revised construction schedule.
- Work requiring the last remaining parcel does not fall under WSCC's scope of work and will be constructed under a separate contract. Relocations for this parcel should be complete by 3/31/19.
- Efforts continue to closeout court cases on the various remaining condemned properties.

## **QUALITY ASSURANCE**

### **C0988 Crenshaw/LAX Transit Corridor Design Build**

- *Participated in Readiness Review Meeting for Premier Tile & Granite and WSCC's Field Workplan Expo: Remove So Cal Gas Forms left in place.*
- *Participated in Underground Structures Weekly Construction Performance and Technical Coordination Meetings.*
- *No Inspections scheduled for Metro's Independent Testing Lab (ITL).*

## **ENVIRONMENTAL**

### **C0988 Crenshaw/LAX Transit Corridor Design Build**

- Noise and vibration spot checks continue to be conducted weekly at multiple sensitive locations, and at locations of new activities along the project alignment. Specific attention was paid this month to the Crenshaw Blvd. restoration work in UG4.
- SWPPP inspections of all project areas are conducted weekly by WSCC and spot checks by Metro to observe site conditions and report on performance of stormwater protection Best Management Practices and overall housekeeping. Weather was dominantly dry, and prone to favor fugitive dust conditions. Therefore, daily street sweeping continued throughout the month.

### **CREATIVE SERVICES**

- Reviewed and provided comments on submittals and RFIs.
- Facilitated coordination between artists and fabrication firms.
- *Reviewed architectural glass artwork control samples.*

### **CONSTRUCTION RELATIONS**

- Continued working with WSCC to minimize the impacts of lane and street closures along the Crenshaw/LAX alignment.
- Circulated public notice for project construction activities. The notices are distributed via-email, social media networks, and hand delivered to key stakeholders.
- Continue to provide directional signage for businesses impacted by ongoing construction activities.
- Ongoing coordination with WCSS and Metro Bus Operations to plan for bus detour routes to accommodate lane reductions and closures.
- Continued outreach to stakeholders in the LAX area regarding ongoing construction activities.
- Continued face to face outreach to key stakeholders and community organizations along the alignment.



## **SAFETY AND SECURITY**

- Conducted Monthly All Hands Safety and Security Meetings with WSCC to discuss ventilation at Expo, security /vandalism and ROW protection, track allocation, Teamwork and Partnering.
- *Participated in Safety Briefings/Safety Huddles at EXPO, MLK and Vernon Stations.*
- *Contract C0991 Hensel Phelps Project to date completed 518,946 work hours with 3 recordable injuries. Hensel Phelps and their subcontractors completed 14,113 work hours and zero (0) recordable injuries for the month of January 2019.*
- *Hensel Phelps submitted a Notice of Substantial Completion to Metro on January 30, 2019. They continued to work on punch list items.*
- Total Days Away (DART) Injury Rate: Six (6) Days Away from Work (DART) Injuries is 0.1. The National Ave is 1.7.
- Project to Date – Total Days Away Rate (561 Days Away from Work) is 17.1. No National Published Rate.
- *Contract C0988 (WSCC) completed 115,107 work hours with zero (0) recordable injuries for the month of February 2019. Total Project to Date work hours is 7,875,327 with a total of ninety (90) recordable incidents. The Project Recordable Rate is 2.3. The Bureau of Labor Statistics (BLS) average recordable rate per 200,000 work hours is 2.8.*

## **CHRONOLOGY OF EVENTS**

|                    |                                                                                                                                                                                                                        |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| October 2011       | Board approved the Life-of-Project Budget of \$1.749 billion.                                                                                                                                                          |
| December 30, 2011  | Received Record of Decision from FTA.                                                                                                                                                                                  |
| March 12, 2012     | Received Statement of Qualifications for Contract C0988 C/LAX Transit Corridor.                                                                                                                                        |
| May 30, 2012       | Awarded Contract No. C0990 C/LAX Advanced Utility Relocations to Metro Builders and Engineers Group LTD.                                                                                                               |
| May 23, 2013       | Board amended the Agency's FY14 Proposed Budget to include funding of \$80 million for an underground station at Leimert Park Village as part of the baseline project.                                                 |
| June 27, 2013      | The Board awarded Contract C0988 Crenshaw/LAX Transit Corridor to Walsh-Shea Corridor Constructors.                                                                                                                    |
| September 10, 2013 | Issued Notice to Proceed to Walsh-Shea Corridor Constructors, Contract C0988 Crenshaw/LAX Transit Project.                                                                                                             |
| December 5, 2013   | The Board approved Memorandum of Understanding with the Los Angeles World Airports for a parallel design and possible construction modifications near Aviation/Century Station to accommodate elements of LAWA's SPAS. |
| December 5, 2013   | The Board awarded Contract C0992 with Rocla Concrete Tie, Inc; for the procurement of concrete ties and assembly items.                                                                                                |
| January 21, 2014   | A Groundbreaking Ceremony was held at the Crenshaw/Exposition Station.                                                                                                                                                 |
| January 23, 2014   | The Board awarded Contract C0992A Rail and Bumping Posts to LB Foster Rail Technologies Corp.                                                                                                                          |
| August 21, 2014    | Substantial Completion issued for Advanced Utility Relocations Contract C0990.                                                                                                                                         |

**CHRONOLOGY OF EVENTS (Continued)**

|                |                                                                                                                                                                                                                               |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| May 28, 2015   | The Board awarded Contract C0991 Division 16: Southwestern Yard to Hensel Phelps/Herzog JV. Also increased by \$22.0 million the Life of Project Budget for the Southwestern Yard Project to a new amount of \$307.2 million. |
| May 28, 2015   | The Board approved Design Option 3 for the track alignment to accommodate the future Metro Connector Transit Station (96 <sup>th</sup> St. Station).                                                                          |
| June 29, 2015  | Issued Notice to Proceed to Hensel Phelps/Herzog JV, Contract C0991 Division 16: SouthwesternYard.                                                                                                                            |
| April 27, 2016 | The Tunnel Boring Machine was launched and drilling from north to south of the alignment started.                                                                                                                             |
| May 7, 2016    | Held Halfway There Community Celebration at Leimert Park marking the halfway point of the project.                                                                                                                            |
| May 27, 2016   | Held Groundbreaking Ceremony for the Southwestern Yard (Division 16).                                                                                                                                                         |
| April 6, 2017  | The northbound tunnel boring machine completed mining with the hole thru at Leimert Park Station.                                                                                                                             |
| June 15, 2018  | Restoration of the road over the three underground stations along Crenshaw Blvd. commenced at Leimert Park Station area and the at-grade transition section.                                                                  |

## PROJECT COST STATUS – SOUTHWESTERN YARD

| SCC CODE     | DESCRIPTION                  | ORIGINAL BUDGET    | CURRENT BUDGET |                    | COMMITMENTS      |                    | EXPENDITURES     |                    | CURRENT FORECAST |                    | FORECAST VARIANCE |
|--------------|------------------------------|--------------------|----------------|--------------------|------------------|--------------------|------------------|--------------------|------------------|--------------------|-------------------|
|              |                              |                    | PERIOD         | TO DATE            | PERIOD           | TO DATE            | PERIOD           | TO DATE            | PERIOD           | TO DATE            |                   |
| 10           | GUIDEWAYS                    | 0                  | 0              | 0                  | 0                | 21,997             | 0                | 21,997             | 0                | 21,997             | 21,997            |
| 20           | STATIONS                     | 0                  | 0              | 0                  | 0                | 0                  | 0                | 0                  | 0                | 0                  | 0                 |
| 30           | SUPPORT FACILITIES (Y & S)   | 85,546,835         | 0              | 85,189,999         | 0                | 85,629,355         | 1,335,331        | 84,450,964         | 0                | 85,629,355         | 439,356           |
| 40           | SITEWORK(SPECIAL CONDITIONS) | 35,932,000         | 0              | 38,273,000         | 252,825          | 39,703,781         | 284,220          | 36,164,399         | (347,601)        | 42,135,003         | 3,862,003         |
| 50           | SYSTEMS                      | 25,784,616         | 0              | 32,991,000         | (125,000)        | 34,409,342         | 350,023          | 32,173,460         | (155,000)        | 34,379,342         | 1,388,342         |
|              | (10-50) CONSTRUCTION         | 147,263,451        | 0              | 156,453,999        | 127,825          | 159,764,475        | 1,969,574        | 152,810,819        | (502,601)        | 162,165,697        | 5,711,698         |
| 60           | RIGHT-OF-WAY                 | 99,910,000         | 0              | 100,000,000        | 45,635           | 102,466,258        | 0                | 102,418,610        | 0                | 102,420,623        | 2,420,623         |
| 70           | VEHICLES                     | 0                  | 0              | 0                  | 0                | 0                  | 0                | 0                  | 0                | 0                  | 0                 |
| 80           | PROFESSIONAL SERVICES        | 35,601,095         | 0              | 33,639,631         | 1,824,670        | 38,435,420         | 532,343          | 34,764,823         | 1,610,702        | 38,798,230         | 5,158,599         |
| 90           | PROJECT CONTINGENCY          | 13,659,732         | 0              | 17,106,370         | 0                | 0                  | 0                | 0                  | (1,108,101)      | 3,815,449          | (13,290,921)      |
| <b>TOTAL</b> |                              | <b>296,434,278</b> | <b>0</b>       | <b>307,200,000</b> | <b>1,998,130</b> | <b>300,666,153</b> | <b>2,501,918</b> | <b>289,994,252</b> | <b>(0)</b>       | <b>307,200,000</b> | <b>0</b>          |

| C0991 PAINT & BODY SHOP PROJECT |                 |                |             |             |             |              |             |                  |             |          |
|---------------------------------|-----------------|----------------|-------------|-------------|-------------|--------------|-------------|------------------|-------------|----------|
| DESCRIPTION                     | ORIGINAL BUDGET | CURRENT BUDGET |             | COMMITMENTS |             | EXPENDITURES |             | CURRENT FORECAST |             | FORECAST |
|                                 |                 | PERIOD         | TO DATE     | PERIOD      | TO DATE     | PERIOD       | TO DATE     | PERIOD           | TO DATE     | VARIANCE |
| 861301 DIV 22 PAINT & BODY SHOP | 11,000,000      | 0              | 11,000,000  | 0           | 11,000,000  | 374,260      | 10,292,964  | 0                | 11,000,000  | 0        |
|                                 |                 |                |             |             |             |              |             |                  |             |          |
| GRAND TOTAL                     | 307,434,278     | 0              | 318,200,000 | 1,998,130   | 311,666,153 | 2,876,178    | 300,287,216 | (0)              | 318,200,000 | 0        |

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH MARCH 1, 2019.

The project number 865512, 860003 and 861301 are internal to Metro and are used to differentiate between various components of the project.

### Original Budget:

The Board in May 2015 established the Life-of-Project (LOP) budget of \$307.2 million for the Southwestern Yard Project.

### Current Budget:

The Board in May 2015 approved an increase for the funding for the Southwestern Yard by \$22.0 million to increase the LOP budget to \$307.2 million to allow for the award of design-build Contract C0991 Southwestern Yard Project. Of the total \$307.2 million, \$150.2 million is funded in the Crenshaw/LAX Transit Project LOP budget which includes the original 49% allocation amount of \$139.4 million plus a new \$10.8 million reduction from the Crenshaw/LAX Transit Project contingency line item in the budget. There is no increase in the LOP for the Crenshaw/LAX Transit Project. The original 51% share associated with future Green Line related extensions in an amount of \$145.8 million was increased by \$11.2 million for a new total of \$157.0 million.

In addition to the \$307.2 million there is another \$11.0 million that is the budget for the paint and body shop, under another Metro internal cost project number, which funding was approved by a prior agreement for a paint and body shop to support the Green Line shops and was required for the award of the design-build Contract C0991 Southwestern Yard Project.

The grand total of the combined budget is \$318.2 million.

**Current Forecast:**

The current project forecast is \$318.20 million and remain the same as total current budget.

**Commitments:**

The commitments are cumulative through March 1, 2019. The total commitments increased by \$2.00 million to \$311.67 million to date represents 97.95% of the current budget. The increase is for commitments associated with change order to design-build contractor and professional services.

**Expenditures:**

The expenditures are cumulative through March 1, 2019. The total expenditures increased by \$2.88 million to \$300.29 million which represents 94.37% of the current budget. The increase is for cost associated with design-build contract C0991 Division 16: Southwestern Yard, Paint Body Shop, and project administration, construction management support and labor compliance.