



November 14, 2019

To: Transit Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: OC Streetcar Project Quarterly Update

Overview

The Orange County Transportation Authority is currently implementing the OC Streetcar project. Project updates are provided to the Board of Directors on a quarterly basis. This report provides a project update for the first quarter of fiscal year 2019-20 (July-September).

Recommendation

Receive and file as an information item.

Background

The Orange County Transportation Authority (OCTA), in cooperation with the cities of Santa Ana and Garden Grove, is implementing a modern streetcar running between the Santa Ana Regional Transportation Center in the City of Santa Ana (City) and the Harbor Boulevard/Westminster Boulevard intersection in the City of Garden Grove. The OC Streetcar project (Project) will improve transit connectivity and accessibility, increase transit options, relieve congestion, and provide benefits to the community and traveling public. The Project is being implemented as part of Measure M2 Project S – Transit Extensions to Metrolink, approved by Orange County voters in November 2006.

Construction of the 4.15-route-mile OC Streetcar line involves complex and specialized work, including the installation of embedded track in streets, overhead catenary system to supply power to the vehicles, stops with canopies, bridges, and a maintenance and storage facility (MSF).

The Project includes ten streetcar stops in each direction (four shared center platforms and six side platforms in each direction, for a total of 16 platforms). Each stop includes a canopy, benches, leaning rails, trash cans, lighting, changeable message signs, video cameras, a public address system, and ticket vending

machines which will be procured separately. Platforms will be 14 inches high to enable level boarding. Also included are the installations of new traffic signals and transit signal priority at intersections.

The MSF can accommodate up to 15 modern streetcar vehicles and includes Project administration, operations, vehicle maintenance, parts storage, and maintenance-of-way. Secured exterior vehicle storage, including a wye-track for turning vehicles end-for-end, a free-standing vehicle wash, employee parking, and fire department/delivery access will also be included.

On March 26, 2018, the OCTA Board of Directors (Board) awarded a contract to Siemens Mobility, Inc., (Siemens) for the manufacture and delivery of eight modern streetcar vehicles, spare parts, and special tools. On September 24, 2018, the OCTA Board awarded the Project construction contract to Walsh Construction Company II, LLC (Walsh). On November 30, 2018, the Federal Transit Administration (FTA) executed the Full Funding Grant Agreement (FFGA), which was a significant milestone as it secured \$149 million in federal New Starts discretionary funding for the Project. In February 2019, the FFGA was awarded through the FTA Transit Award Management System, which was the final step necessary to begin the drawdown of federal funding. As of the reporting quarter, \$16.36 million dollars has been drawn down on the FFGA.

Discussion

The following is a status of ongoing OC Streetcar activities.

Construction Activities

The Notice to Proceed (NTP) with Construction was issued to Walsh on March 4, 2019. Construction activities have commenced throughout the Project, with the focus on construction of the Santa Ana River and Westminster Avenue bridges, the MSF, and relocation of storm drain, sewer, and water systems within the City streets.

Foundations and pier walls for the new 350-foot long bridge across the Santa Ana River were completed, and other major work across the river channel will begin after the rainy season. Bridge approach abutments are being installed outside of the river banks. Foundations for the bridge abutments for the bridge over Westminster Avenue have been installed. Drainage systems are also being installed in preparation for the installation of ballasted track in the Pacific Electric Right-of-Way (PE ROW). On August 12, 2019, the OCTA Board approved a contract change order (CCO) for the removal and disposal of contaminated materials within the Orange County Transit District-Owned PE ROW.

The CCO was necessary in order for Walsh to segregate the contaminated soil from the non-contaminated soil, prepare documentation for the contaminated soil, and haul it to the nearest disposal facilities able to accept that particular hazardous waste.

MSF

Construction of the MSF is critical to the Project schedule as the MSF is needed to accept delivery and conduct final acceptance testing for the eight vehicles being manufactured by Siemens. Grading for the building foundation is ongoing, foundations are being poured, and utility duct work for the plumbing, drainage, and electrical systems is being installed.

Utility Relocation

There are numerous overhead and underground utilities that require relocation to accommodate the Project. Wet utilities (sewer, water, and storm drains) are being relocated by Walsh as part of the construction contract. Sewer relocation on Santa Ana Boulevard from Raitt Street to Bristol Street is complete and is progressing between downtown and the Santa Ana Regional Transportation Center. Trenchless sewer replacement work on 4th Street was completed in September 2019. Water line and storm drain relocations for all of the street-running portions of the Project are also underway.

There are challenges installing storm drains and sewers due to the discovery of utilities that were either not shown on any of the record drawings or shown at different locations or elevations than on the plans. These unforeseen utility conflicts will be addressed under a separate report to be presented to the November 14, 2019 Transit Committee and November 25, 2019 Board Meeting.

Dry utilities (electric, communications, and gas) are being relocated by the owners of these systems. Most of these third-party utility relocations are complete at this time. Remaining work includes Southern California Gas working downtown and east of downtown on Santa Ana Boulevard, a few communications facilities, Southern California Edison removal of underground vaults on Santa Ana Boulevard, and AT&T with one final relocation to be scheduled in January 2020 after a sewer line has been relocated.

Vehicle Manufacturing and Delivery

Final design review commenced for the vehicles in preparation for the start of production. During final design review, comments and revisions are incorporated into a final design review package for OCTA's final review and approval.

In September 2019, vehicle production commenced. The vehicle girders and car shells are the first components to be fabricated for the streetcars. Staff receives weekly reports from OCTA's on-site vehicle inspector to detail production progress, pictures of the work completed, and upcoming production milestones. OCTA and Siemens also conducted all-day workshops to review spare parts, special tools, and vehicle manuals.

On July 22, 2019, the Board awarded a contract to Conduent for integration and engineering services of OCTA's Intelligent Transportation Management System with the streetcar vehicles. After the NTP, coordination commenced between Conduent, OCTA, and Siemens in identifying the space requirements of the Computer Aided Dispatch and Automated Vehicle Location equipment on the vehicle.

Coordination also continued between OCTA, Siemens, and Walsh in the development of the Wheel to Rail Interface Plan that details the integration of the vehicle with the infrastructure, including the tracks, platforms, MSF, and wayside equipment and systems.

FTA Update

During the reporting period, OCTA received a letter from Representative Peter DeFazio (D-OR), Chairman of the House Transportation and Infrastructure Committee (Committee) regarding the implementation of the Section 5309 Capital Investment Grant (CIG) Program by FTA. The Committee has been conducting oversight of FTA to "ensure that the FTA is implementing the Section 5309 Program in accordance with congressional intent." At the request of the Committee, OCTA had provided documentation on the Project's application for a FFGA, submitted May 2017, as well as the approval and execution of the FFGA in November 2018. This data, along with information provided by other transit agencies in varying phases of the CIG program, resulted in a memo that summarized the findings of the Committee's oversight of FTA. A key finding in the memo is that "the CIG project approval times more than doubled for projects approved in 2017 and later". The Committee's observation on project delay is consistent with the delay that the Project experienced in getting the FFGA executed with FTA. Representative DeFazio's letter to OCTA and the accompanying memo are provided in Attachment A.

Other key Project updates include:

- Proposals were received in response to the operations and maintenance request for proposals.
- Ongoing coordination with FTA, the City, City of Garden Grove, Orange County Fire Authority, Orange County Flood Control District, and OC Parks.

Public Outreach

Outreach activities continue to focus on keeping the community and project stakeholders aware of ongoing construction activities and that all businesses remain open during construction with emails and social media updates.

The biweekly Construction News email looks ahead to general activities along the alignment, as well as segment-by-segment details. In addition to an email to the project database, individual notifications are provided with a door hanger describing the activity in more detail in multiple languages. The emails are available on the project website, and social media channels are used to broaden its availability and awareness.

During this reporting period, the construction on 4th Street included trenchless sewer replacement. In order to expedite work in the downtown area, crews worked both daytime and nighttime shifts. Two-block road closures were installed beginning with work between Ross Street and Broadway Street. A two-step notification process was implemented with an initial bi-lingual flyer describing the work activities and a follow-up bi-lingual door hanger with advance notification for the evenings when the new sewer pipe was installed. In addition, outreach staff was available on site during the initial hours of pipe installation to answer any questions or address concerns that the public had. Due to these efforts, no adverse comments were received in person, online, or at the City.

Additionally, OCTA provided twenty posters installed on A-frames placed at the entrances to the downtown parking structures alerting drivers and pedestrians that businesses are open during construction and alternate parking is available.

OCTA outreach staff works proactively with City representatives to monitor community events in the downtown area to assure the contractor is aware and can coordinate activities accordingly.

Cost and Contingency

The Project cost, as included in the FFGA, remains at \$407.7 million. This includes \$37.96 million in contingency. As of the end of the reporting quarter, \$4,176,045 in contingency has been expended.

Schedule

Upon issuance of NTP, OCTA issued Walsh two CCOs to perform demolition and removal of contaminated soil, authorized the removal of an undocumented underground storage tank and abandonment of an undocumented water well at the MSF site under a contract allowance. All this work was not anticipated prior to construction. This additional work has impacted the construction schedule to complete the MSF, which is a critical path to accommodate vehicle delivery. The construction management team is performing a time-impact evaluation of all changes to date, along with concurrent Walsh delays on other activities to determine the impact, responsibility, and forward-looking strategies to mitigate the schedule delays.

The current construction schedule status, incorporating these known early delays to date along with modeled future potential risks, indicate the revenue service date could extend to July 2022. The construction management team continues to assess Walsh's progress, track and manage schedule risks, and is actively working with Walsh to identify opportunities to reduce construction time frames on future activities.

Next Steps

Construction activities in the next quarter are scheduled to include: on-site utilities for the MSF and building foundations; completing abutments and approach fills for the Santa Ana River Bridge; the center pier foundation and abutments for the Westminster Avenue Bridge; preparation for ballasted track installation in the PE ROW; and preparation for the start of in-street embedded tracks. Next steps for vehicles include finalizing remaining design components and continued production of the girder. Upcoming outreach activities include coordination with the construction team and the City regarding sewer and water line replacement in several segments

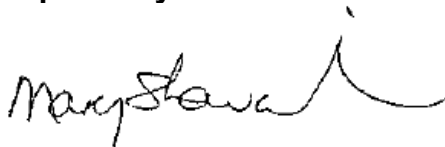
Summary

The fiscal year 2019-20 first quarter update on the OC Streetcar project is provided for the Orange County Transportation Authority Board of Directors' review.

Attachment

- A. Letter from Representative Peter DeFazio to Darrell E. Johnson, Chief Executive Officer, Dated August 8, 2019

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