

October 14, 2021

To: Transit Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: OC Streetcar Project Quarterly Update

Overview

The Orange County Transportation Authority is implementing the OC Streetcar project, and updates are provided to the Board of Directors on a quarterly basis. This report provides an update on OC Streetcar project activities from July 2021 through September 2021.

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 intersection of Harbor Boulevard and Westminster Avenue 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-mile project line involves complex and specialized work, including the installation of embedded track in existing streets, an overhead contact system (OCS) 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,

variable 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 to streetcar vehicles. Furthermore, the installation of new traffic signals and transit signal priority at intersections along the route is also included.

The MSF can accommodate up to 15 modern streetcar vehicles, as well as all necessary administration, operations, vehicle maintenance, parts storage, and maintenance-of-way needs for the Project. The MSF will also include secured exterior vehicle storage, a wye track for turning vehicles end-for-end, a free-standing vehicle wash, employee parking, and fire department/delivery access.

On March 26, 2018, the 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 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), securing \$149,000,000, in federal New Starts discretionary funding for the Project. In February 2019, the FFGA was funded through the FTA Transit Award Management System, which was the final step necessary to begin the drawdown of federal funding. Through August 31, 2021, \$76,208,345, has been drawn down on the FFGA.

Discussion

The following is the status of ongoing project activities related to construction, vehicle manufacturing, and public outreach.

Construction

In the Pacific Electric Right-of-Way (PEROW), Walsh continues to install OCS pole foundations, duct banks, and foundation and block for three soundwalls. The Fairview Street grade crossing was completed with installation of rail and crossing panels, and final paving was completed. Although work at the Fifth Street crossing began, delays occurred due to utility conflicts. Construction of the Westminster Bridge and Santa Ana River Bridge (SARB) is substantially complete, and work is underway to prepare for rail installation on both bridges.

The double-sided station platforms at Fairview Street and Raitt Street have most of the concrete and conduits placed, and conduits are being installed at the Harbor Station. At the MSF, construction work continues for the site utilities, foundation slab, wheel-truing pit, and service and inspection pits. Although there were some construction delays at the MSF while waiting for design and material procurement for cathodic and stray current protection, the majority has been

installed, and placement of reinforced concrete and vapor barrier continues. Installation of MSF yard utilities and the car wash building slab have also been completed.

Construction of eastbound and westbound track on Santa Ana Boulevard between Bristol Street and Raitt Street is complete, including the median island construction and final pavement. On Santa Ana Boulevard between French Street and Parton Street, Walsh encountered conflicting utilities within the excavation for track construction, which was addressed by employing a redesigned track slab to avoid the utilities, allowing construction to advance by reducing the overall depth of excavation. Embedded track has been placed along Santa Ana Boulevard westward from Spurgeon Street to 100 feet west of the intersection with Broadway Street, as well as a short portion west of Ross Street. Curved track has been placed from Mortimer Street onto Fourth Street, stopping just east of French Street.

Due to shared concerns by OCTA and the City about Walsh being able to complete work prior to the holiday moratorium starting the week of Thanksgiving, work on Fourth Street has been delayed until January 2022 after the holiday moratorium ends. This will assist business owners along Fourth Street to continue business during the holidays. The shared concerns between OCTA and the City were based on Walsh's slow progress on open trench work for embedded track on Segment 3.

During the reporting quarter, the project team prepared contract change orders for Board approval in October 2021 for additional utility conflicts, Traction Power Substation site plan revisions, SCE metering switchgears, optical backbone network system redundancy, and MSF permit drawings and revisions.

Vehicle and Operations

Siemens continues production of eight S700 streetcar vehicles. OCTA has an on-site resident inspector at the Siemens facility to oversee the vehicle manufacturing process and ensure compliance with the technical specifications. Currently, cars 1-7 are in final stages of equipping with installation of the last remaining vehicle components. Car 8 is in final assembly and preparations are underway to commence static and dynamic testing in the next quarter. Other key activities conducted during the quarter included water testing for the emergency battery drive and preparations for the installation of the energy absorbing bumper.

Ongoing coordination with Siemens on the design features and First Article Inspections of multiple vehicle components has impacted the anticipated dates for delivery of the S700 vehicles. Staff is in negotiations with Siemens on an updated master program schedule, including options for vehicle storage at the

Siemens facility to align with the availability of the project infrastructure needed to accept and test the vehicles. Staff will return to the Board later this year with any contract amendments required for Siemens as a result of these discussions.

Operations and Maintenance (O&M) Contract

A limited Notice to Proceed (NTP) for the O&M contractor, Herzog, was issued in May 2021. The O&M general manager has been coordinating with staff on several processes which will be performed by Herzog during system integration testing, pre-revenue operations, and once revenue service begins. The full NTP will be issued to Herzog pending discussions related to the revised revenue service date with FTA and OCTA later this year.

Public Outreach

During this quarter, outreach staff provided targeted flyers for the completion of track installation in Segment 2A on Santa Ana Boulevard between Raitt Street and Bristol Street, reminding drivers to follow signage to navigate the new median. Drivers may only cross Santa Ana Boulevard at Raitt Street, Pacific Street and Bristol Street.

Moving east along the corridor, track installation activities began in Segment 2B, Santa Ana Boulevard between Bristol Street and Parton Street. The outreach team alerted residents to the shift of traffic lanes to the south, loss of on-street parking, and how to access driveways along the north side of Santa Ana Boulevard. Walsh provided ramps down to the excavated area for their use during this phase of construction. In addition to door-to-door notifications, the outreach team hosted a bilingual virtual community meeting via Zoom in early September 2021. Residents were invited to view a bilingual presentation followed by an opportunity to have their questions answered. Most of the questions from residents were focused on the elimination of street parking. OCTA and the City reviewed the area, and an area north of Shelton Street was restriped to provide additional street parking. In addition to mitigating and resolving residential concerns, outreach staff organized a field meeting with representatives from the Orange County Sheriff's Department to review requested adjustments to the Maintenance of Traffic plans that maintained access to their driveways on Santa Ana Boulevard adjacent to the work zone.

In Segment 3 on Santa Ana Boulevard between Parton Street and Mortimer Street, Walsh is advancing the track installation work with increased activity in front of the Hall of Administration. Recently, outreach staff and other project staff met with representatives from the County of Orange's executive staff to develop a targeted map highlighting access for County employees to parking areas on either side of the track installation work zone.

Outreach staff continues to meet with the two Santa Ana business associations to discuss event programming, as well as keep them apprised of upcoming activities associated with track installation, such as the embedded track connecting Mortimer Street to Fourth Street. In addition, outreach staff provided notification for the slot trench along Fourth Street.

The Eat Shop Play program continues to provide increased awareness through their targeted social media ads, and the program now has 55 participants.

Both the construction highlights and Eat Shop Play biweekly emails continue to inform the community about upcoming construction activities and highlight businesses along the corridor.

Cost and Schedule

As discussed with the Board in March 2021, the Project cost and schedule to complete the Project is under review by OCTA and FTA, considering the challenges encountered and outstanding project risks. Staff will return to the Board in either November 2021 or December 2021 to present recommendations for the cost and schedule adjustments needed to complete the Project.

Next Steps

Activities in the next quarter will focus on construction of station stop platforms, as well as the installation of street pavement, curbs, gutters, floor slabs in the MSF building, embedded track in the street along Santa Ana Boulevard, OCS and traffic signal poles, and foundations and ballasted track in the PEROW. Next steps for vehicles include finalizing vehicle assembly and ongoing static and dynamic testing. Upcoming outreach activities include ongoing coordination with the construction team and the City regarding traffic control measures that are needed for the in-street embedded track installation.

Summary

An OC Streetcar project update covering July 2021 through September 2021 is provided for the Orange County Transportation Authority Board of Directors' review.

Attachment

None.

Prepared by:

Ross Lew, P.E.

Program Manager, Senior (714) 560-5775

Approved by:

James G. Beil, P.E.

Executive Director, Capital Programs

(714) 560-5646