



January 12, 2023

To: Transit Committee
From: Darrell E. Johnson, Chief Executive Officer
Subject: OC Streetcar Project Quarterly Update

A handwritten signature in blue ink, appearing to read "Darrell Johnson", is written over the "From:" field of the header.

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 covers OC Streetcar project activities from October 2022 through December 2022.

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 (SARTC) 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 alignment 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. 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 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 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 last step necessary to begin the drawdown of federal funding. Through November 2022, \$108,192,289 has been drawn down on the FFGA. On May 22, 2020, the Board awarded a contract to Herzog Transit Services, Inc., to provide operations and maintenance services for an initial start-up and pre-revenue period, and a five-year revenue term.

Discussion

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

Construction

Construction is 78 percent complete with several construction activities continuing to advance in all segments of the Project. In the Downtown Santa Ana area (Downtown), the Project achieved a significant milestone with the completion of the embedded track on Fourth Street. On November 18, 2022, ahead of the Thanksgiving milestone date, both directions of vehicular traffic reopened from French Street to Ross Street. Another significant milestone was completed with the installation of the first platform canopy near French Street. Track installation also occurred in Segment 5 on eastbound Santa Ana Boulevard between Santiago Street and Lacy Street. Overall, approximately 70 percent of the embedded track has been installed throughout the alignment. Attachment A reflects the status of track installation. In the Pacific Electric Right-of-Way portion of the alignment, final compaction of the ballast beneath

the tracks was completed along with grading of the maintenance access road. At the MSF, key activities completed during the quarter included installation of exterior walls, conduit and piping, roof curbs and skylights, girder painting, and shop tracks. Given the significance of the MSF to vehicle testing, staff will be focusing their efforts and close coordination with Walsh to ensure significant completion of the MSF for vehicle storage mid to late next year.

Other ongoing construction activities include preparation of various street intersections for placement of new traffic signal poles, and installation of high voltage switchgear, traction power substations, remaining overhead catenary system poles, and station platform canopies at Harbor Boulevard, Raitt Street, and French Street. Roadway pavement was placed on eastbound Santa Ana Boulevard from Bristol Street to Flower Street. Embedded track work was completed in Sasser Park, and embedded track installation is currently underway on westbound Santa Ana Boulevard between Pointsettia Street and Santiago Street just west of the SARTC.

Vehicle and Operations

Siemens continues production of eight S700 streetcar vehicles. Currently, Cars 1-7 are in the final stages of manufacturing 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 first quarter of 2023.

The First Article Inspection (FAI) for Car 1, conducted in May 2022, had open items for reinspection that were conducted in mid-September 2022. Most of the open items were signed off at this reinspection, with the remaining items to be closed in early 2023. Siemens is preparing a final walkthrough for Car 3, and the anticipated inspection is January 2023.

OCTA staff returned to Siemens in December 2022 to inventory and approve an additional 25 percent of the spare parts and special tools stored at Siemens, representing approximately 40 percent of the total line items. OCTA staff is in negotiations with Siemens to extend the warranty for spare parts and special tools over the next year, and to discuss the remaining vehicle delivery schedule. Staff anticipates returning to the Board in early 2023 with any contract amendments required for Siemens as a result of these discussions.

Operations and Maintenance (O&M) Contract

A second amendment to the Limited Notice to Proceed (LNTP) for the O&M contractor, Herzog, was executed on November 23, 2022. It represents a continuation of tasks identified as part of the initial LNTP and LNTP Amendment No. 1, as well as the initiation of new tasks identified to facilitate the start-up phase of the Project.

The Herzog O&M general manager is working with OCTA operations staff to prepare procedures and documentation in compliance with all applicable FTA and California Public Utilities Commission (CPUC) requirements. On October 26, 2022, the Rail Activation Committee kick-off was held with various Project stakeholders, including FTA and their project management oversight consultant, and CPUC. Rail activation is the start-up and testing transition between construction and the start of revenue service. The Rail Activation Committee will remain actively engaged in preparation for the start-up and testing phase of the Project.

Public Outreach

Outreach efforts between October 2022 through December 2022 continued to provide bilingual notices regarding construction activities, as well as presenting targeted Project information at several in-person community meetings with Downtown merchants and residents near the Santa Ana Regional Transportation Center. Meeting topics included keeping dedicated delivery zones available to merchants in Downtown, general site conditions, parking restoration, and intersection sequencing.

In preparation for next year's electrification of service lines providing power to the streetcar vehicles, the outreach team is introducing safety messaging in our outreach materials. For example, OCTA provided information tables at school events at Carver Elementary and Garfield Elementary which included bilingual activity books targeted at young children to provide education and safety awareness on this topic.

The Eat Shop Play program began running a 15-second advertisement for the Downtown businesses in 11 local movie theaters in addition to social media, newspaper, radio spots, electronic billboards, and bus advertisements to support the Downtown businesses. The outreach team continues to meet individually with business owners to share the metrics produced by the Eat Shop Play marketing efforts. OCTA staff is compiling a year-end program-wide list of metrics that will capture the wide range of efforts made on behalf of Downtown merchants.

During the quarter, OCTA participated in several Downtown community events including an early black Friday shopping event, Tamale Fest, OC Vegan Fest, and the Posada festival. OCTA staff continues to receive positive feedback from visitors to Project information tables and excitement is building to see the vehicle testing next year.

In addition to our general notices for construction activities, the marketing team added drone footage to the OCTA website and provided links to recent tour audiences. OCTA staff accompanied American Society of Civil Engineers group

members from around the country for a tour of the alignment and MSF location. OCTA staff also hosted a group of graduate students from the University of California, Irvine to tour Downtown.

Cost and Schedule

In December 2021, the Board approved a revised Project budget of \$509,540,000. Staff continues to coordinate with the construction contractor and vehicle manufacturer to achieve the March 2024 revenue service date as presented to the Board in December 2021.

In September 2022, staff conducted a Project risk assessment consistent with achieving 70 percent construction completion. The FTA and CPUC were both in attendance for the assessment. Staff will return to the Board in spring 2023 to present the results of the risk analysis, including any adjustments to the Project cost and schedule.

Next Steps

Activities in the next quarter will focus on construction of the remaining track westbound between Mortimer Street and Santiago Street along with installation of street pavement, curbs, gutters, and OCS and traffic signal poles, and Santa Ana Regional Transportation Center tracks and platform station. Work will also continue on the station platforms and station canopies installation. Next steps for vehicles include finalizing vehicle equipping, ongoing static and dynamic testing, and completing vehicle inspections. New traffic signal equipment will be delivered and installed next quarter. 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 and continued coordination with the City.

Summary

An OC Streetcar project update covering October 2022 through December 2022 is provided for the Orange County Transportation Authority Board of Directors' review.

Attachment

- A. Project Alignment - Status of Track Installation

Prepared by:



Ross Lew, P.E.
Sr. Program Manager
(714) 560-5775

Approved by:



James G. Beil, P.E.
Executive Director, Capital Programs
(714) 560-5646