



**October 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 E. 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 July 2023 through September 2023.

**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. 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 Industries, Inc., (Siemens) for the manufacturing and delivery of eight modern streetcar vehicles, spare parts, and special tools. On September 24, 2018, the Board awarded the construction contract for the Project 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 August 2023, \$128,979,790 has been drawn down on the FFGA. On May 22, 2020, the Board awarded a contract to Herzog Transit Services, Inc., (Herzog) 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 approximately 80 percent complete through last quarter, ending September 2023. Construction milestones include the substantial completion of the Santa Ana River and Westminster bridges with the placement of concrete plinths and rails. Fairview Street and Fifth Street at-grade crossings are completed with train warning and gate systems installation efforts ongoing. In the Pacific Electric Right-of-Way (PEROW) portion of the alignment, rail de-stressing and fence installation are ongoing. At the MSF, key activities near completion include installation of exterior walls, conduit and piping, roofing material and skylights, girder painting, heating, ventilation, air conditioning, and yard tracks. Given the significance of the MSF to vehicle testing, staff is focusing

efforts on continued to coordinate with Walsh to ensure significant completion of the MSF for vehicle storage at the earliest possible date.

Ninety two percent of the overhead contact system poles have been installed. A project milestone was achieved in September 2023 when the remaining embedded tracks were installed at the Santa Ana Boulevard and Santiago Street intersection. This represents 100 percent of embedded tracks installed in Segments 2, 3, 4 and 5.

Other ongoing construction activities include placement of new traffic signal poles at various street intersections, installation of OCS hardware, service connections for the four traction power substations, setting of canopies at westbound Ross Street, eastbound Sasser Park, westbound French Street, westbound Sycamore Street, and eastbound Sycamore Street, as well as constructing the station platform foundation at Lacy Street and SARTC.

#### Vehicle

Siemens coordinated with OCTA to showcase the streetcar vehicle at the American Public Transportation Association EXPO Conference in October 2023. Siemens shipped Car 5 and it safely arrived in Orlando, Florida, where it will be displayed at the conference. Of the eight-vehicle order, one vehicle is substantially complete and the remaining seven are approximately 80 percent complete. It is anticipated that all eight vehicles will be completed by spring 2024, following an OCTA inspection.

Staff continues to coordinate the complex pre-shipment planning for vehicle delivery, including coordination on necessary logistics, public safety campaigns, integration and system test requirements, and necessary inter-agency approvals. Negotiations are ongoing for the extension of storage for vehicles, spare parts, special tools, and test equipment to ensure safe keeping until the MSF is ready to accept and test the vehicles.

Staff anticipates returning to the Board for any contract amendments required for Siemens due to delay and extension of the vehicle/equipment storage and associated warranties.

#### Operations

As of July 2023, Herzog key staff, including the general manager and safety and security manager, have been on-site at OCTA to support planning activities for the start-up and pre-revenue phase of the Project. The operations manager and maintenance manager were also onboarded and on-site in September 2023.

During the reporting period, Herzog prepared safety documents required by the California Public Utilities Commission (CPUC). Drafts of the Roadway Worker Protection plan, the Personal Electronic Devices Standard Operating Procedure, and the Public Transportation Agency Safety Plan were submitted to the CPUC for an informal review and comments. Herzog continues its evaluation of the preventative maintenance schedule and warranty timeline for streetcar vehicles, employee rulebook, and other standard operating procedures.

The Rail Activation Committee is actively engaged in preparation for the start-up and testing phase of the Project. Smaller working groups, such as the Systems Integration Working Group and the Emergency Response Plan Working Group, are drafting the details and schedule of activities for rail activation.

Negotiations are ongoing with the City to identify roles and responsibilities for the operations and maintenance of the Project. Staff anticipates this agreement coming to the Board in early 2024 for approval.

#### Public Outreach

During this quarter, outreach efforts included bilingual notifications for business owners and residents for construction activities in Segments 2 through 5. Segment 2 activities included nightwork as ballast material was placed and secured along the tracks in the PEROW and rail yard at the MSF. Segment 3 activities requiring notification included intersection closures and lane closures to accommodate platform work and installation of new traffic signal poles. Business owners in Segment 4 were notified of lane closures for canopy installation at the Sycamore Street platform. In Segment 5, notices were provided for the nightwork to set the track in place and other roadway work at Mortimer Street and Santiago Street intersections along Santa Ana Boulevard.

Outreach and Diversity team members staffed information tables at four Back to School evenings in the City of Santa Ana to provide educational materials about the project construction activities and safety messaging. Staff also attended several City Summer Concert events, as well as the Fiestas Patrias event, with outreach and safety information materials.

During this quarter, the Eat Shop Play program continued providing content for City electronic billboards and social media advertisements, as well as interior and exterior advertisements, on OCTA's fixed-route service. Outreach staff met with City Economic Development staff to discuss transitional marketing support for Downtown Santa Ana (Downtown) merchants now that major construction is over. Staff is also discussing ideas with Downtown merchants to support encouraging visitors and customers to visit Downtown.

The Project continues to draw interest from outside groups for tours. Staff hosted tours for the WTS International members, Orange County Grand Jury members, and Southern California Legislative Roundtable members.

#### Cost and Schedule

In April 2023, the Board approved a revised project budget of \$579,160,000 that assumed a November 2024 revenue service date. Staff continues to actively manage Walsh to advance construction activities to meet this date. However, given continued construction and legal challenges as previously reported to the Board, including Walsh's quality issues, limited deployment of labor resources, and inaccurate schedule reporting, staff is re-evaluating the project schedule to determine a revised revenue service date based upon progress in the field and anticipated project risk. Staff is also concerned with change directives due to design modifications that result in additional work for the contractor.

Until this schedule re-evaluation is complete, OCTA will report to FTA the risk-adjusted revenue service date of August 2025. As previously reported to the Board, this schedule contingency was developed following the FTA-required risk assessment that was completed in April 2023. Staff will update the Board regarding this re-evaluation, including efforts to reduce use of the schedule contingency, as part of future project updates.

#### Next Steps

Activities in the next quarter will focus on placement of new traffic signal poles and equipment at various street intersections, installation of the OCS hardware and overhead wires, station platforms infrastructure and canopies, and service connections for the four traction power substations. Staff will focus their efforts and continue to communicate with Walsh to ensure significant completion of the MSF for vehicle delivery and testing. Next steps for vehicles include finalizing vehicle equipping and inspection. Upcoming outreach activities include ongoing coordination with the construction team and the City regarding traffic control measures that are needed for paving, new traffic signal installation, and system electrification. In addition, Outreach staff will continue to attend community events to provide project education and safety messaging. Outreach staff will also share schedule updates with the community as they become available, and express OCTA's appreciation for their patience with ongoing construction activities.

#### **Summary**

An OC Streetcar project update covering July 2023 through September 2023 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