



February 13, 2025

To: Transit Committee

A handwritten signature in blue ink, appearing to read "Darrell E. Johnson", is written over the "To:" and "From:" lines of the memo.

From: Darrell E. Johnson, Chief Executive Officer

Subject: OC Streetcar Funding and Schedule Update and Amendments to Supporting Agreements

Overview

The Orange County Transportation Authority is currently underway with the implementation of the OC Streetcar project. Staff is seeking Board of Directors' approval of a revised OC Streetcar budget and funding plan. Staff is also seeking Board of Directors' approval for two contract amendments for project management consultant services and construction management consultant services needed to support the ongoing delivery of the OC Streetcar project.

Recommendations

- A. Approve the revised OC Streetcar Federal Transit Administration Full Funding Grant Agreement budget of \$649 million.
- B. Direct the use of \$22 million in Federal Congestion Mitigation and Air Quality Improvement Program funds, previously approved for OC Streetcar operations and future potential capital needs to be used for the OC Streetcar project and authorize the use of up to \$47.84 million in Local Measure M2 Transit funding, which will increase total funding for the project from \$579.16 million to \$649 million.
- C. Authorize staff to make all necessary amendments to the Federal Transportation Improvement Program, update any air quality conformity requirements, and execute any required agreements, amendments, or grants with the Federal Transit Administration to facilitate the recommendation above.
- D. Authorize the Chief Executive Officer to negotiate and execute Amendment No. 34 to Agreement No. C-4-1854 between the Orange County Transportation Authority and HDR Engineering Inc., in the

amount of \$4,783,234, and extend the agreement term through December 31, 2026, for continued OC Streetcar project management consultant services. This will increase the maximum cumulative obligation of the agreement to a total contract value of \$49.3 million.

- E. Authorize the Chief Executive Officer to negotiate and execute Amendment No. 24 to Agreement No. C-6-0926 between the Orange County Transportation Authority and PGH Wong Engineering, Inc., in the amount of \$6,918,266, and extend the agreement term through June 30, 2026, for continued OC Streetcar project construction management consultant services. This will increase the maximum cumulative obligation of the agreement to a total contract value of \$49,700,836.

Background

The Orange County Transportation Authority (OCTA), in cooperation with the cities of Garden Grove and Santa Ana, is implementing a modern streetcar to operate between the Santa Ana Regional Transportation Center in the City of Santa Ana 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 (M2) Project S – Transit Extensions to Metrolink, approved by Orange County voters in November 2006.

Construction of the 4.15-mile Project 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, two 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 are 14 inches high to enable level boarding to streetcar vehicles.

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 also includes 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.

Discussion

The Project is progressing with several construction and other activities continuing to advance. Several major milestones have been accomplished on the Project, including the following:

- Construction has surpassed 90 percent complete;
- The bridges over the Santa Ana River and Westminster Avenue are complete;
- Installation of all tracks and OCS poles are complete;
- All major communications systems are complete;
- Train warning and gate systems installation at the Fairview Street, Fifth Street, and Raitt Street at-grade crossings are complete;
- Reinterment of cultural resources at the MSF is complete;
- Three of the four traction power substations are energized;
- Many elements at the MSF are complete;
- Canopies, lighting, and customer information center cabinets/hardware are installed at all station platforms; and
- All eight vehicles are complete and successfully inspected.

Additionally, several other major milestones are anticipated this year, including the following:

- Construction will be complete;
- All system elements will be energized;
- Certificate of occupancy will be obtained for the MSF;
- All eight vehicles will be delivered; and
- Systems integration testing will be initiated.

As construction of the Project is nearing completion and numerous construction risks have been retired, OCTA has a clearer assessment of the remaining work activities and risks and their potential impacts to the overall project completion schedule. This assessment has been informed by the construction contractor's progress at the MSF, which is critical to the project schedule. Also factored into this assessment was a comprehensive review of remaining project milestones required for revenue service, including vehicle delivery and testing, systemwide integrated testing, safety certification, and pre-revenue service. Each of these milestones is highly complex, with the integration of multiple construction and operational disciplines involved coupled with significant coordination required with third parties, including the California Public Utilities Commission, Southern California Edison (SCE), Orange County Fire Authority (OCFA), and the cities of Santa Ana and Garden Grove. Based upon this review, staff has determined that the Project is anticipated to be complete and operational for revenue service

in March 2026. This completion date is approximately 18 months later than the completion date assumed previously. As discussed with the Board of Directors (Board) in the regular quarterly updates, challenges related to construction, additional contaminated materials, requisite design modifications at the station platforms and MSF, and coordination with SCE for electrical services have contributed to this delay. This is in addition to some of the early project delays associated with the removal and disposal of contaminated soils at the MSF and in the Pacific Electric Right-of-Way (ROW), unknown utilities, and the discovery of significant archaeological resources within the project site.

Staff has analyzed the impacts of the revised schedule on the current project budget of \$579 million approved by the Board in April 2023. Results of this analysis indicate that the estimated cost to complete the Project is \$649 million, which is \$69.8 million (12 percent) over the current Board-approved funding of \$579 million. This cost increase is largely attributed to the 18-month delay noted above.

The updated project cost was developed by including the current construction contract value and anticipated change orders through the end of construction in addition to increases in other owner-supplied construction costs, such as the ticket vending machines and validators. The updated cost also includes costs associated with additional ROW acquisition as well as vehicle storage, vehicle spare parts storage, maintenance costs during storage, extended warranty, and other vehicle costs associated with the revised schedule. Continued professional services are needed through the revised revenue service date plus project closeout, including those for the project management consultant (PMC), construction management consultant (CMC), designer of record, public outreach, safety education, quality manager, legal services, and those provided by OCTA staff. Start-up and testing costs were also adjusted to account for an extended period of performance for the operations and maintenance contractor and utility services needed during system testing and MSF building commissioning.

While staff is confident that a March 2026 revenue service date is achievable, there remains schedule risks, including OCS installation, completion of MSF and building commissioning, and post-construction testing requirements, including systems integration testing and pre-revenue operations. There are cost implications to these schedule risks as well because they could, if materialized, result in contract change orders, revisions to design plans, labor and materials cost escalation, warranty extensions for vehicles and spare parts, and additional costs in professional services. As a result, staff has included an appropriate contingency budget to mitigate those risks, if realized.

Revised Funding Plan

Staff is recommending \$22 million in Congestion Mitigation and Air Quality Improvement Program (CMAQ) funding, previously approved for OC Streetcar operations and potential future capital needs, be directed entirely to the Project. The use of CMAQ funds is consistent with OCTA’s Capital Programming Policies (CPP) for CMAQ as it is a fixed-guideway system. Even with this change, streetcar operations are still funded for approximately the first three to five years of operations using a combination of federal, state, and local funds.

In order to fully fund the Project, staff is also recommending Board approval for an additional \$47.84 million in M2 funds. The use of M2 funds is consistent with the CPP as this is Project S in the M2 Transportation Investment Plan.

The Capital Funding Program is included as Attachment A. It is a report that provides a summary of how OCTA’s capital projects are currently funded and is updated with every funding action for capital projects, including the proposed changes in this item.

The recommended funding is summarized in the table below:

Project Recommended Funding Plan

Funding Programs	Funding Approved April 2023	Funding Need	Recommended Funding
FTA New Starts CIG	\$148,955,409		\$148,955,409
FTA Section 5307	\$13,599,177		\$13,599,177
Federal CMAQ	\$108,132,284	\$22,000,000	\$130,132,284
Federal ARP*	\$9,407,202		\$9,407,202
State TIRCP	\$175,427,000		\$175,427,000
Subtotal State and Federal	\$455,521,072		\$477,521,072
M2- Project S	\$123,635,987	\$47,842,941	\$171,478,928
Total Funding	\$579,157,059	\$69,842,941	\$649,000,000

FTA - Federal Transit Administration

CIG - Capital Investment Grant

ARP* - American Rescue Plan funding is an offset to the M2 amount requested

TIRCP - Transit and Intercity Rail Capital Program

With the funding plan revisions noted above, state and federal funding programs will account for approximately 74 percent of the total funding. When OCTA approves a programming change for a project, a capital funding plan is provided to allow the Board to consider this change while reviewing the overall funding for capital projects in the transit program. Once approved, the changes noted above will be finalized into the Capital Funding Program Report for the transit program, which is provided in Attachment A.

Supporting Amendments

HDR Engineering, Inc. (HDR)

On February 23, 2015, the Board approved an agreement with HDR to provide PMC services to support the implementation of the Project. The scope of services of the PMC includes project management administration, coordination between the project designer and CMC, management oversight of the CMC, third-party utility coordination, quality assurance activities related to design, construction and vehicle manufacturing, risk analysis and management, safety and environmental compliance activities, and project controls, including management of the project schedule and budget, and coordination with the FTA. It also includes reporting requirements and monthly/quarterly meetings with the FTA and its project management oversight consultant, vehicle design/manufacturing oversight and on-site vehicle inspection, and operations planning, including startup and testing, coordination with other third-party stakeholders, including the County of Orange, US Army Corps of Engineers, OCFA, and the cities of Garden Grove and Santa Ana.

The current term of the PMC contract expires on June 30, 2025. The PMC contract requires an amendment to extend to the expiration date to December 31, 2026, to provide additional support to achieve project completion and closeout. A majority of the cost increase is due to the extended time the PMC will be providing services on the Project beyond what was originally assumed in the prior level of effort estimate. Other specific efforts to support the Project include:

- Additional PMC efforts to coordinate with SCE to establish electrical services for all platform stations along the project corridor, traction power substations, traffic signals, streetcar crossings, street lighting, and OCS system.
- Additional PMC coordination for CIC enclosure cabinet design changes at all platform stations and security equipment upgrades at the MSF.

- Additional PMC support to review schedules and coordination with the construction contractor, including meetings for attempting to resolve numerous schedule and cost disputes through the project level dispute resolution process.

Staff is requesting Board approval for additional funds, in the amount of \$4,783,234, for continued PMC support services and to extend the term of the agreement through December 31, 2026.

PGH Wong Engineering, Inc. (PGH Wong)

On July 25, 2016, the Board approved an agreement with PGH Wong to provide CMC services. The scope of services of the CMC includes administration and oversight of the construction contract, performance of quality assurance field inspections, preparation of daily construction activity reports, processing, collecting, and maintaining project communications and records, review and processing of progress payments to the contractor, and review and processing of contract change orders.

The current term of the CMC contract expires on June 30, 2025. The CMC contract requires an amendment to extend to the expiration date to June 30, 2026, to provide additional support to achieve project completion and closeout. A majority of the cost increase is due to the extended time the CMC will be providing services on the Project beyond what was originally assumed in the prior level of effort estimate. Some specific efforts to support the Project includes:

- Additional CMC efforts to review the extensive volume of requests for information, change order requests, and cost proposals submitted by the construction contractor, which require extensive time and effort to coordinate responses.
- Additional CMC efforts to coordinate and prepare change directives, contract change orders, and processing of time and materials payments to the construction contractor.
- The volume and complexity of the construction contractor's submittals for project elements at the MSF and OCS system changes require extensive coordination between various technical disciplines to review and approve. This effort is beyond what was anticipated in prior level of effort estimates.

Staff is requesting Board approval for the additional funds, in the amount of \$6,918,266, for continued CMC support services and to extend the term of the agreement through June 30, 2026.

Procurement Approach

Project Management Consultant Services

The original procurement was handled in accordance with the OCTA Board-approved procedures for architectural and engineering (A&E) services that conform to both state and federal laws. On February 23, 2015, the Board approved an agreement with HDR for an initial term of five years with two, two-year option terms. The total maximum obligation of the initial five-year term was \$20,962,005. The first two-year option term approved by the Board on February 24, 2020, extended the agreement to March 31, 2022, and increased the maximum obligation to \$29,026,290. The second two-year option term approved by the Board on December 13, 2021, extended the agreement to December 31, 2024, and increased the maximum obligation to \$44,343,767. The agreement has also been previously amended as shown in Attachment A.

OCTA staff and HDR have agreed upon the required level of effort (LOE) for continued project management consultant support services. Staff found HDR's cost proposal to be fair and reasonable relative to the negotiated LOE and the independent cost estimate prepared by the OCTA project management team. Proposed Amendment No. 34 to Agreement No. C-4-1854 in the amount of \$4,783,234, will increase the total contract value to \$49,300,000 and extend the term of the agreement by 18 months through December 31, 2026.

Construction Management Consultant Services

The original procurement was handled in accordance with OCTA's Board-approved procedures for A&E services, which conform to both state and federal laws. The original time-and-expense agreement was issued on December 6, 2016, in the amount of \$10,752,136. This agreement has been previously amended as shown in Attachment B.

OCTA staff and PGH Wong have agreed upon the required LOE for additional CMC support services. Staff found Wong's cost proposal to be fair and reasonable relative to the negotiated LOE and the independent cost estimate prepared by the OCTA project management team. Proposed Amendment No. 24, in the amount of \$6,918,266, will increase the total contract value to \$49,700,836 and extend the term of the agreement by 12 months through June 30, 2026.

Fiscal Impact

Funds are included in OCTA's Fiscal Year 2024-25 Budget, Capital Programs Division, under professional services for the Project in fund 0051. This action will not require a fiscal year budget amendment because the proposed project budget increase will primarily affect future fiscal year budgets. It will increase the project budget by \$69.8 million, using CMAQ and M2 funding.

Next Steps

Staff will work with the Southern California Association of Governments to amend the Federal Transportation Improvement Program, and with the FTA to update and/or amend the Federal Funding Grant Agreement. Staff will continue to track project cost and schedule adherence and continue to report to the Board quarterly.

Summary

Staff is seeking Board of Directors' approval of a revised OC Streetcar project budget and funding plan, approval to process all necessary amendments to the Federal Transportation Improvement Program, update air quality conformity requirements, and execute any agreements, amendments, or grants necessary to facilitate the revised funding plan. Staff is also seeking Board of Directors' approval of contract amendments that support the ongoing delivery of the OC Streetcar project.

Attachments

- A. HDR Engineering, Inc., Agreement No. C-4-1854 Fact Sheet
- B. PGH Wong Engineering, Inc., Agreement No. C-6-0926 Fact Sheet
- C. Capital Funding Program Report

Prepared by:



Jeff Mills, P.E.
Director, Capital Project Delivery
(714) 560-5925

Approved by:



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



Pia Veesapen
Director, Contracts Administration and
Materials Management
(714) 560-5619