




July 11, 2019

To: Transit Committee 
From: Darrell E. Johnson, Chief Executive Officer
Subject: Agreement for the Intelligent Transportation Management System Integration and Engineering with the OC Streetcar Vehicles

Overview

The Orange County Transportation Authority utilizes an Intelligent Transportation Management System to provide dispatch communications, vehicle locators, data interface, and other services for the county-wide bus system. To support and maintain one integrated system, there is a need for software, hardware, and engineering services to integrate the OC Streetcar vehicles into this system. A proposal was solicited and received from Conduent Transport Solutions, Inc., in accordance with the Orange County Transportation Authority's sole source procurement procedures for professional and technical services.

Recommendation

Authorize the Chief Executive Officer to negotiate and execute sole source Agreement No. C-9-1192 between the Orange County Transportation Authority and Conduent Transport Solutions, Inc., in the amount of \$2,719,650, for the integration of the OC Streetcar vehicles into the existing Intelligent Transportation Management System.

Discussion

The Orange County Transportation Authority (OCTA) originally purchased the Intelligent Transportation Management System (ITMS) in 2011 to support the Computer-Aided Dispatch/Automated Vehicle Location (CAD/AVL) systems on the bus fleet. On June 24, 2019, the Board of Directors (Board) approved the upgrade of the core software and hardware for the ITMS on the bus fleet.

In July 2018, OCTA entered into Agreement No. C-6-1445 with Siemens Mobility, Inc. (Siemens) for the manufacturing and delivery of the Siemens S-70 OC Streetcar vehicles (OC Streetcar vehicles). In order to support and maintain one integrated system, there is a need for software, hardware, and

engineering services to integrate the OC Streetcar vehicles into the ITMS. The integration will allow the OC Streetcar vehicles to directly interface with OCTA's current ITMS that interfaces with Lawson (Human Resources), Ellipse (Maintenance), Hastus (Scheduling), CAD/AVL dispatch, Data Warehouse, Informatica (Analytics), Risk Management (Occurrence Tracking System), and other key systems in use throughout OCTA.

Due to the unique operating characteristics of the OC Streetcar vehicle, additional integration and engineering is required. This integration and engineering are substantially different than the level of effort required for bus vehicles. Bus vehicles generally have standard communications and power interfaces and operate from a single driving cab. The OC Streetcar vehicles utilize a variety of interfaces for communications and power, and have driving cabs on either end of the car. The OC Streetcar Passenger Information System is a stand-alone system that allows it to function separately or combined with the ITMS, which does not exist on bus vehicles.

Equipping the OC Streetcar vehicles with the ITMS interfaces requires additional integration and engineering between Conduent Transport Solutions, Inc. (Conduent) and Siemens. Conduent will provide a complete integrated electronics tray that will interface with the OC Streetcar vehicle, and will work with Siemens to define the interface and information flows between the Conduent ITMS onboard equipment and Siemens passenger information system. This will allow OCTA to have one consistent ITMS across all vehicles and allow consistent workflows across all major information systems supported by OCTA.

The cost to integrate the ITMS in the OC Streetcar vehicles is funded from the project contingency as a result of the ITMS equipment not being originally included in the cost estimate. It will not increase the total project estimate, as defined in the Full Funding Grant Agreement, of \$407.7 million.

Procurement Approach

The procurement was handled in accordance with OCTA's Board-approved policies and procedures for a sole source procurement.

This project is funded by the Federal Transit Administration (FTA) and complies with the FTA's requirements for sole source procurements, as this project is for the continued development or production of highly specialized equipment and major components thereof, and it is likely that award to another contractor would result in substantial duplication of costs that are not expected to be recovered

through competition. In addition, Conduent has proprietary rights to its technology, and it is the sole entity able to sell its proprietary technologies as it does not have agreements that allow resale through other contractors.

Conduent's proposal was reviewed by staff from the Contracts Administration and Materials Management, Information Systems, and the Rail Operations departments to ensure compliance with the contract terms and conditions, as well as the technical requirements. Based on the technical ability and financial status, Conduent is deemed responsible.

In accordance with OCTA's sole source procurement procedures, a sole source over \$50,000 requires OCTA's Internal Audit Department to conduct a price review of Conduent's proposed pricing. Conduent provided a detailed pricing breakdown; however, as is common with this type of vendor, Conduent was not able to provide detailed cost breakdowns in a format that would be required in order to perform a price review.

Per the FTA requirements for sole source procurements, the recipient of FTA funds is required to perform a cost analysis. OCTA staff performed a cost analysis of Conduent's quoted pricing by analyzing selected cost elements in the detailed cost breakdown, such as labor rates, overhead, materials, and profit. OCTA staff determined that the selected cost elements from Conduent are consistent with those of other technology development firms that OCTA has worked with in the past. In addition, the selected cost elements are consistent with those of other government agencies that have worked with Conduent. Furthermore, Conduent's quoted pricing is lower than the project manager's estimate, and the level of effort was approved by the project manager. Therefore, OCTA staff concluded that the quoted pricing from Conduent is deemed fair and reasonable.

Fiscal Impact

The funding for the contract will be accommodated in OCTA's Fiscal Year 2019-20 Capital Programs Division, Account 0051-9026-TS010-Z71.

Summary

Based on the information provided, staff recommends the Board authorize the Chief Executive Officer to negotiate and execute sole source Agreement No. C-9-1192 between the Orange County Transportation Authority and Conduent Transport Solutions, Inc., in the amount of \$2,719,650, for

the integration of the OC Streetcar vehicles into the existing Intelligent Transportation Management System.

Attachment

None.

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