



**August 11, 2022**

**To:** Transit Committee

**From:** Darrell E. Johnson, Chief Executive Officer

**Subject:** Agreement for Intelligent Transportation Management System  
Radio Computing Infrastructure and Software Update

**Overview**

The Orange County Transportation Authority operates an L3Harris OpenSky II data and voice land mobile radio system to provide voice communications, vehicle position, and diagnostic data from and to our fixed-route, paratransit, field supervisor, maintenance and Transit Police Service vehicles. The Orange County Transportation Authority's land mobile radio computing and network infrastructure is over ten years old and in need of an update as it has reached the end of its useful life. Board of Directors' approval is requested to refresh the radio computing and network infrastructure.

**Recommendations**

- A. Authorize the Chief Executive Officer to negotiate and execute sole source Agreement No. C-2-2261 between the Orange County Transportation Authority and L3Harris Technologies, Inc., in the amount of \$2,270,723, to update the Intelligent Transportation Management System radio computing infrastructure and software.
- B. Amend the Orange County Transportation Authority's Fiscal Year 2022-23 Budget, in the amount of \$2,270,723, to accommodate expenses related to sole source Agreement No. C-2-2261 to update the Intelligent Transportation Management System radio computing infrastructure and software.

**Discussion**

The Orange County Transportation Authority (OCTA) last updated the Intelligent Transportation Management System (ITMS) radio computing infrastructure in fiscal year (FY) 2011-12. The radio computing infrastructure employed at the Garden Grove base, Construction Circle base, and seven radio site locations

has reached its end of life and is no longer receiving manufacturer and security updates for the networking routers, switches, servers, and operating systems. This hardware and software infrastructure needs to be updated to current technology and cyber security standards to protect normal operations from potential cyber attacks.

Three years ago, the OCTA Board of Directors (Board) approved an update of the ITMS computer-aided dispatch/automated vehicle location (CAD/AVL) infrastructure, which is separate and distinct from the land mobile radio portion of the ITMS system. The Board also approved a separate Voice Over Internet Protocol (VOIP) pilot program for 12 fixed-route vehicles to test the VOIP solution.

The ITMS CAD/AVL dispatching update added the cellular VOIP communications feature to the ITMS system for fixed-route and paratransit vehicles only. OCTA then completed the VOIP pilot for fixed-route vehicles successfully. The pilot demonstrated that cellular voice communications is significantly clearer and easier for dispatch and driver to understand communications than the land mobile radio system. Based on the result of the pilot, OCTA is gradually transitioning all fixed-route vehicles from land mobile radio to cellular VOIP solutions. This will lead to improvements in safety and operations due to clearer communications as VOIP is implemented across the fleets.

This radio computing infrastructure and software update adds significant cellular VOIP capabilities to OCTA's dispatch centers to support our field supervisors, maintenance, managers and Transit Police Services with cellular VOIP technologies. This radio refresh update also provides new interoperability gateways to support interoperability with other law enforcement and fire agencies such as the County of Orange 800MHz Cordinated Communications System. This system also provides current network, switching, and operating systems updates that will provide updates from manufacturers for potential and future cyber security threats.

The radio computing infrastructure and software update is intended to position OCTA to take full advantage of cellular VOIP technologies and discontinue land mobile radio operations over time with minimal impact to operations.

### ***Procurement Approach***

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

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L3Harris Technologies, Inc. (L3Harris) is the exclusive owner of all proprietary rights for OCTA's ITMS and the sole-entity able to market and sell the system. Therefore, L3Harris is the sole source contractor who can perform the services required to ensure successful completion of this project, which meets OCTA's criteria for a sole source procurement. Based on their technical ability and financial status, L3Harris is deemed responsible.

L3Harris' proposal was reviewed by staff from the Contracts Administration and Materials Management and Information Systems departments to ensure compliance with contract terms and conditions, as well as the technical requirements.

In accordance with OCTA's sole source procurement procedures, a sole source over \$50,000 requires OCTA's Internal Audit Department (Internal Audit) to conduct a price review of L3Harris' proposed pricing. As is common with these types of vendors, L3Harris did not provide a detailed cost breakdown in order to perform a price review. Therefore, Internal Audit compared pricing proposed for standard products to L3Harris' equipment pricing for the New York Office of General Services. Based on the review, L3Harris proposed comparable pricing. Furthermore, the quoted price is lower than the OCTA project manager's independent cost estimate. Therefore, the quoted price is deemed fair and reasonable.

### **Fiscal Impact**

This project was anticipated to begin in late FY 2021-22, but has moved to FY 2022-23. As a result, an amendment is needed to accomodate the request in the FY 2022-23 budget. An amendment is needed to OCTA's FY 2022-23 Budget, Finance and Administration, Information Systems Department, Account Nos. 1288-9028-D1111-17Z and 1288-7612-D1111-189, in the amount of \$1,678,426 and \$592,297, respectively. The project will be funded through Local Transportation Funds.

### **Summary**

Staff recommends the Board of Directors authorize the Chief Executive Officer to negotiate and execute sole source Agreement No. C-2-2261 between the Orange County Transportation Authority and L3Harris Technologies, Inc., in the [amount](#) of \$2,270,723, to update the Intelligent Transportation Management System radio computing infrastructure and software.

***Attachment***

None.

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