

SUBJECT

Onboard Mobile Gateway Router Deployment

RECOMMENDED ACTION

To authorize the President and CEO to enter into a contract with Trapeze Software Group for the procurement of Mobile Gateway Routers, including ancillary equipment, installation, integration and project management services, at a cost of \$1,715,313 with a five percent contingency, for a total authorization amount not to exceed \$1,801,078.

BACKGROUND

Long Beach Transit (LBT) operates and maintains various wireless computer systems onboard its buses that transmit data while en route and at its facilities. These systems operate independently of one another, and often on the same frequency bands, causing interference and impacting system reliability.

In support of LBT's strategic priority 'Improve Safety and Service Quality,' LBT has embarked on an initiative to procure and deploy Mobile Gateway Routers (MGR) on its fixed-route buses, which would consolidate all wireless communication through a single onboard device. This approach would minimize the potential for frequency interference, thus increasing the reliability and performance of these wireless computer systems.

The MGR solution includes hardware, software and services required to support in-vehicle communications, back-end management and applications, as well as complete mobile network security.

LBT is anticipating the following from this solution:

- Enhanced communication from the buses to the back-end systems by consolidating video and data on one wireless network
- Remote access to onboard cameras to view bus incidents in real time
- Onboard equipment management for configuration and software updates
- Core platform to easily connect future onboard computer systems

Staff is recommending a two-phased deployment. The first phase includes the deployment of MGRs on nine buses for validation by bus type. After the first phase is completed and the results are validated and accepted substantiating system success, staff will deploy MGRs on the remaining fleet.

PROCUREMENT

LBT issued a Request for Proposal (RFP) to qualified firms and received four proposals for three different products. The proposals were evaluated based on the following criteria: qualifications of the firm, staffing and project organization, technical solution/work plan and price. A scoring threshold was established and three firms were selected for in-person interviews: Trapeze Software Group, CDCE, Inc., and LiLee Systems.

Trapeze Software Group scored the highest rating and was found to be responsive and responsible by LBT's Purchasing department. Their solution was found to be the most compatible with LBT's environment. A Best and Final Offer (BAFO) was requested, and Trapeze Software Group was successful in reducing the firm fixed price by \$435,075 for a final cost of \$367,917 for the validation testing and \$1,347,396 for the deployment of MGRs on the remaining fleet, for a total project cost of \$1,715,313.

DBE/SBE PARTICIPATION

The Disadvantaged Business Enterprise (DBE) goal established for the solicitation was 11 percent. Trapeze Software Group will meet the established DBE goal by utilizing ESP Enterprises, Inc., a DBE subcontractor, to provide system installation services.

ALTERNATIVES CONSIDERED

The Board may choose not to approve this recommendation. However, LBT does not recommend this option.

The other two proposals received did not demonstrate the same level of capability as the Trapeze Software Group proposal. Trapeze Software Group's solution is currently deployed at Metro Transit (Minneapolis, Minnesota), Edmonton Transit Service (Edmonton, Alberta, Canada) and the Metropolitan Atlanta Rapid Transit Authority (Atlanta, Georgia). If LBT were not to proceed with the selected firm and re-issue the RFP, the agency would continue to have disparate onboard wireless computer systems, which would hinder the reliability and performance of LBT's onboard computer systems. These systems are essential to LBT's daily operations.

BUDGETARY/FISCAL IMPACT

Staff is requesting LBT's Board of Directors to authorize the President and CEO to enter into a contract with Trapeze Software Group for the procurement of MGRs, including ancillary equipment, installation, integration and project management services, at a cost of \$1,715,313 with a five percent contingency, for a total authorization amount not to exceed \$1,801,078.



Funds for this contract were included in Fiscal Year 2016 and current Fiscal Year 2019 Capital Budgets.

A handwritten signature in blue ink, reading "K. McDonald".

Kenneth A. McDonald
President and Chief Executive Officer