

SOLE SOURCE TRANSIT TECHNOLOGY

RECOMMENDATION

1. That a sole source agreement, as outlined in the June 29, 2022, City Operations report CO01274, for a term up to 10 years, beginning July 27, 2022, between the City of Edmonton and Trapeze Software ULC, and as further described in Attachment 1, be approved, and that the agreement be in form and content acceptable to the City Manager.
2. That Attachment 1 of the June 29, 2022, City Operations report CO01274, remain private pursuant to sections 24 (advice from officials) and 25 (disclosure harmful to economic and other interests of a public body) of the *Freedom of Information and Protection of Privacy Act*.

Report Purpose

Committee decision required.

Executive Committee is being asked to approve a sole source agreement with Trapeze Software ULC, for the annual licensing and support of Smart Bus hardware and software, purchase of hardware and software and professional services.

Executive Summary

- Technology systems provided through Trapeze Software ULC (Trapeze) are critical for accessibility, transit rider information, safety, security, planning, scheduling and transit operations.
- Trapeze provides a Smart Bus system that provides real-time information directly to riders and to third-party app developers that improves Edmontonians' transit experience. Proper technology tools are necessary to improve the transit rider experience, improve reliability, predictability, accessibility and safety.
- The City of Edmonton and regional partners have invested in the Smart Bus system and have integrated the technology into Arc, the new Smart Fare system. The Trapeze contract is critical to ensure successful implementation of Smart Fare.

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- Administration requires City Council approval to enter a sole source agreement with Trapeze for a period up to 10 years to ensure ongoing support of the Smart Bus system. The current contract expires on July 26, 2022 (D921001), and was awarded to Trapeze as a result of a competitive procurement process.
- For sole source agreements, there should be a trade agreement exception to enable the City to proceed with the work. For this contract, since the hardware and software are part of a proprietary system that only Trapeze can provide, a trade agreement exception applies.

REPORT

This report outlines Administration's Smart Bus requirements and the rationale for a sole source agreement between the City and Trapeze.

On July 26, 2012, after a competitive Request for Proposals process, the City of Edmonton entered into a contract with Trapeze for a collection of hardware and software components that constitute the Smart Bus system. This contract expires on July 26, 2022, and a new long term agreement is required to support the ongoing needs of Edmonton Transit Service (ETS).

The Smart Bus technology has been integrated with Arc (formerly Smart Fare program). Renewing the Trapeze contract is vital to ensure maximum value for the Smart Bus and Arc investments can be realized. The hardware and software included in Smart Bus are part of a proprietary ecosystem that only Trapeze can provide and they do not allow third parties to sell, license or provide support.

System Features

The system is comprised of many components critical for accessibility, customer information, safety, security, planning, scheduling and transit operations, including:

- Audible and visual stop announcements on-board buses.
- Audible route and destination announcements outside buses.
- Trip planning information tools available on the web and through Android and iOS apps.
- Real-time Automatic Vehicle Location (AVL), schedule adherence and service alerts for both riders and internal staff.
- Generation of real time General Transit Feed Specification (GTFS) data for use by 3rd party tools such as Google Maps and Transit.
- Computer Aided Dispatching (CAD) for service and incident management.
- Integration with onboard cameras for live look-in during security incidents.
- Dedicated covert emergency switch for activating various onboard emergency functions.
- Mobile Data Terminal (MDT) for Transit Operators with schedule, adherence and detour information, turn by turn navigation, and messaging functionality to communicate with the ETS Control Center.
- Integration with the destination signs for automatic changes.
- Playback application to review past vehicle location and adherence data.
- Adherence data for route planning and scheduling, and Enterprise Performance Reporting.

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Smart Bus Background

In 2012, during the pilot phase of the Smart Bus project, 45 buses were equipped with the required technology. Beginning in 2013, all new bus purchases included the Smart Bus equipment. As additional funding became available, retrofit projects took place over a three-year period, starting in 2014. By 2016 the entire fleet was Smart Bus equipped.

In 2012, the desire for a Smart Fare system that would work across all transit agencies in the region was discussed and became part of the Smart Fare project requirements. While the solution for Smart Fare was being developed, it was established that integration with the Smart Bus system was also required to create a common operator interface, enable a connection of faring and scheduling data, and allow for shared communication infrastructure. As a result of both of these requirements, in advance of the Smart Fare launch, a Regional Smart Bus project took place leading to the installation of the required equipment on all buses at St. Albert Transit and Strathcona County Transit.

The City of Edmonton's contract with Trapeze was modified to allow use of the system by multiple transit agencies and a Regional Smart Bus Operating agreement was completed between the City of Edmonton, City of St. Albert, and Strathcona County, allowing all of these municipalities to use the system and defining contractual obligations to them. This Regional Smart Bus system was first brought online in a pilot phase during 2020, and went into full production in early 2021. Work is also underway to further expand the Smart Bus system across the Edmonton Metropolitan Region.

Legal Implications

As per City Administration Bylaw 16620, procurement agreements over \$1 million that do not arise from a competitive procurement process require approval by the appropriate City Council committee.

The City is subject to trade agreements that require an open competitive process for procurements of this value, unless a trade agreement exemption applies. For this procurement, the sole source exemption in each trade agreement applies.

GBA+

The Trapeze contract supports transit riders of a large variety of equity deserving groups, like those who speak English as a second language or persons with disabilities. The technology is needed to keep riders informed about the status of their bus in real-time, keep service running on time, and support Automated Stop Announcements (ASA) to let passengers know which stop is coming up.

The technology also enhances security features such as automatic vehicle location and live look-in capability for camera-equipped buses, allowing Transit Control to investigate and respond to unplanned events quickly and effectively.

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ATTACHMENT

1. PRIVATE Contract Overview