

## ETS Fare Collection Support and Maintenance Agreement with Cubic

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### Recommendation

That an amendment to the sole source agreement, between the City of Edmonton and Cubic Transportation Systems, Inc., for support and maintenance of the LRT automated fare collection system, for an amount not to exceed \$218,661 United States Dollars (excluding GST), as outlined in the September 7, 2021, City Operations report CO00785, be approved, and that the amendment be in form and content acceptable to the City Manager.

### Executive Summary

Since early 2002, Cubic Transportation Systems, Inc. (Cubic) has provided a reliable transit fare revenue collection system to Edmonton Transit Service (ETS). The Nextfare Central System is a transit fare revenue collection system with automatic ticket vending machines installed at all of Edmonton's 18 LRT stations. Cubic maintains all the backend software, provides antivirus protection for the systems, and completes daily backups.

The current contract with Cubic expires in December of 2021. Administration is recommending an amendment to extend the sole source contract through to December of 2022. Without a contract in place, Administration will not have service support in place for the fare collection machines at all 18 LRT stations. A disruption in service would result in a loss of transit fare revenue from LRT stations. The current system is scheduled to be retired in 2022, when it will be replaced by the Smart Fare system.

### Report

Cubic Transportation Systems, Inc. (Cubic) is a leading provider of payment collection systems for the transportation industry. In 2002, the City of Edmonton issued a competitive procurement and awarded a contract to Cubic to replace aging fare equipment with Cubic's Nextfare Central System, which was approved at the September 18, 2002, Transportation and Infrastructure Committee. In 2005, Ticket Vending Machines and Nextfare Central Computer System, manufactured by Cubic, were installed throughout Edmonton's LRT system (Tender No. 887290). The contract was further renewed at the April 5, 2018 Executive Committee, and the November 9, 2020, Executive Committee meetings.

Through the sole source agreement, Cubic is responsible for solving any issues that may be encountered such as server support, accurate report reconciliation and hardware support of the ticket machines. Cubic also updates machines to accept new bills and coins as they are issued, completes daily backups, and performs regular system checks to ensure everything is operating properly.

Cubic maintains the third party software (anti-virus, monitoring, and reporting software) related to keeping the fare system operating. Cubic's management of third party support ensures proactive maintenance is done before issues emerge.

Since the last contract extension, Cubic has provided technical support for automated fare collection. ETS currently operates fare collection machines at all 18 LRT stations. The fare collection machines contain proprietary software and hardware that can only be maintained and supported by the vendor; therefore, Cubic's maintenance support program is necessary for continued automatic fare collection.

The Nextfare (Cubic) system is scheduled to be replaced when the Smart Fare system is fully operational. It is anticipated that the Nextfare system will continue to be required in 2022, due to the phased implementation of Smart Fare technology.

Cubic has agreed to provide support over a one-year period from January to December 2022, and there is the flexibility to end the contract earlier if needed. The total value of the amendment is \$218,661 in United States Dollars (USD) (approximately \$278,000 Canadian (CAD)), bringing the overall value of the 2018 sole source agreement to USD \$1,062,738 (approximately \$1.35 million CAD) over five years.

The City's contract with Cubic has been a vital component in ensuring the effective operation of the fare collection system for the lifetime of the system to date. As the system is now aging and requires more maintenance, this contract is important in the final years of operation pending the full Smart Fare implementation.

### **Budget/Financial**

The Nextfare System provided by Cubic is budgeted for as part of the 2019-2022 base budget. Therefore the cost of the required extension of the contract of \$218,661 USD (approx \$278,000 CAD) will be managed within the existing ETS 2022 operating budget.

### **Legal Implications**

As per the City Administration Bylaw 16620, agreements over \$500,000 that do not arise from a competitive procurement process must be approved by the appropriate Committee of Council.

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 amendment, there is an exemption in each applicable trade agreement.

**Public Engagement**

Public engagement was not undertaken for this report. The recommendation is based on technical requirements pending the full implementation of Smart Fare technology.

**Corporate Outcomes and Performance Management**

<b>Corporate Outcome(s): Edmontonians use public transit and active modes of transportation.</b>			
<b>Outcome(s)</b>	<b>Measure(s)</b>	<b>Result(s)</b>	<b>Target(s)</b>
Customer Satisfaction	Overall Customer Satisfaction of ETS	75.9% (2019)	79% (2021)
	Customer Satisfaction of ETS by Post-Secondary Students	74% (2019)	Target is set for overall customer satisfaction 79%(2021)

**Risk Assessment**

<b>Risk Element</b>	<b>Risk Description</b>	<b>Likelihood</b>	<b>Impact</b>	<b>Risk Score (with current mitigations)</b>	<b>Current Mitigations</b>	<b>Potential Future Mitigations</b>
Commercial	The aging Nextfare technology and equipment requires an increasing level of maintenance with greater reliance on the original vendor. If the fare system suffers a major functional impairment, there could be an inability to collect fare revenue.	3 - Possible	3 - Major	9 - Medium	<ul style="list-style-type: none"> <li>Leverage the contract with Cubic to ensure the system is well backed up and maintained</li> <li>Regular system checks and fixes by Cubic to keep the system operating smoothly.</li> </ul>	<ul style="list-style-type: none"> <li>Replacement of the entire system with the new Smart Fare system.</li> <li>Refurbish the machines and replace the backend software and servers.</li> </ul>

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Public Perception	The public may experience payment challenges due to equipment failure — this would negatively impact the ETS customer experience..	3 - Possible	2 - Moderate	6 - Low	<ul style="list-style-type: none"> <li>• Leverage the contract with Cubic to ensure the system runs optimally.</li> <li>• Utilize Cubic as an emergency callout to help with major system issues.</li> <li>• Repair individual units in a timely manner to ensure issues do not compound.</li> </ul>	<ul style="list-style-type: none"> <li>• Replace the system with a more user friendly and current system through the Smart Fare project.</li> <li>• Outsource operations and maintenance with Smart Fare.</li> </ul>
Technology / Equipment	Several components in the ticket vending machines are approaching end of sale, making it difficult to procure replacement parts.	5 - Almost certain	1 - Minor	5 - Low	<ul style="list-style-type: none"> <li>• Perform preventative maintenance repairs on equipment to reduce failure rates.</li> <li>• Procure stock of spare parts before end of sale dates.</li> </ul>	<ul style="list-style-type: none"> <li>• Refurbish ticket vending machines to replace aging components.</li> <li>• Replace ticket vending machines with new Smart Fare equipment.</li> </ul>

### Others Reviewing this Report

- S. Padbury, Acting Chief Financial Officer and Deputy City Manager , Financial and Corporate Services
- C. Owen, Deputy City Manager, Communications and Engagement
- K. Fallis-Howell, Acting City Solicitor