

Date: 2022-11-10

Subject: **Budget Amendment for Replacement of Brampton Transit's CAD/AVL System**

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Report Number: Brampton Transit-2022-1019

Recommendations:

1. That the report titled **Budget Amendment for Replacement of Brampton Transit's CAD/AVL System (Report Number Brampton Transit-2022-1019, IB.c)** to the Council Meeting of December 14, 2022 be received; and
2. That a budget amendment be approved for Project #214610-001 – Smart Bus in the amount of \$1,500,000, with funding allocated from Reserve #119 - Transit Levy.

Overview:

- **Brampton Transit's Computer Aided Dispatch / Automatic Vehicle Location (CAD/AVL) System is reaching end of life.**
- **On May 4, 2022, Council provided approval to City staff to begin procurement for the replacement of Brampton Transit's CAD/AVL system (CW218-2022).**
- **This project is currently funded through the Investing in Canada Infrastructure Program (ICIP) with a total project cost of \$10,000,000.**
- **In July 2022, a public Request for Proposal was issued (NRFP2022-066) for the replacement of Brampton Transit's CAD/AVL system.**
- **All qualified Proposals exceeded the available budget of \$10,000,000.**

- **The funding gap has affected Transit's ability to continue the procurement process within previously approved ICIP funding.**
- **This report seeks approval of a budget amendment in the amount of \$1,500,000, to be funded through Reserve #119 - Transit Levy.**

Background:

The existing CAD/AVL system, which includes software, on-board equipment, garage infrastructure and electronic signs at Züm stations was installed over 12 years ago, as part of the Züm project.

CAD/AVL systems are a subset of Intelligent Transportation Systems (ITS), which are the backbone of the future integration of roads and vehicles. These systems provide the technology used to track bus location; which among many other applications, delivers the source data for next bus arrival information, schedule adherence, and emergency distress calls, to name a few.

Replacement of Transit's CAD/AVL System

City staff conducted a competitive public procurement process by releasing a negotiable RFP (NRFP2022-066) on July 7, 2022.

All qualified Proposals exceeded the approved budget of \$10,000,000.

Brampton Transit cannot proceed with the balance of the RFP process until additional funding of \$1,500,000 is approved. Once approved, staff can proceed with negotiations and contract award.

Current Situation:

The existing CAD/AVL system is reaching end of life. Prolonged use of end of life software and equipment carries many risks such as:

- Decreased equipment and software reliability
- Increased maintenance costs
- Scarce availability / obsolescence of new, spare and repair parts
- Increased technical support costs
- Heightened risk of cyber-attacks as older equipment and software are more vulnerable due to end-of-support, software patches and fixes

The project includes the design, build, and installation of all on-board electronic equipment on Transit's bus fleet, electronic displays at Züm bus stops, computing infrastructure and software for the CAD/AVL system. The replacement on-board

equipment will be installed on over 470 buses and includes the implementation and integration of sub-systems, including Interactive Voice Response and Yard Manager.

The new CAD/AVL system will position Brampton Transit to be ready to take advantage of new technologies to support on-demand transit and improved real time information for customers as well as to provide an efficient way to improve transit operations and customer experience.

Corporate Implications:

Legal Implications:

Council involvement during an active procurement is limited in accordance with the Purchasing By-Law (19-2018). Council is limited to addressing the budgetary shortfall, with a decision to increase the budget or not. Beyond that, staff cannot provide Council with further details about this procurement activity, as this RFP has not yet been awarded.

Purchasing Implications:

See Legal implications.

Financial Implications:

Subject to Council approval of Recommendation # 2, a budget amendment is required to increase capital project # 214610-001 – Smart Bus, in the amount of \$1,500,000 with the funding to be transferred from Reserve #119 - Transit Levy.

This project is currently funded 40% federally and 33.33% provincially, through the Investing in Canada Infrastructure Program (ICIP), with the remaining 26.67% being funded by the City of Brampton.

Project	Funding Source(s)	Approved Budget	Budget Amendment	Total
Smartbus - System Upgrade	Res#119-Transit Levy	2,667,000	1,500,000	4,167,000
	Provincial Subsidy	3,333,000		3,333,000
	Federal Subsidy	4,000,000		4,000,000
		10,000,000	1,500,000	11,500,000

The 2022 Budget included approval of a 3-year capital program and funding plan, which maximized the allocation of anticipated funding availability across planned projects. The approval of this amendment will require reprioritization of capital projects forecasted to be funded against Reserve # 119 – Transit Levy.

Term of Council Priorities:

This report achieves the Strategic Plan of Move and Connect by keeping people moving efficiently by maintaining Transit's bus fleet in a state of good repair, ensuring seamless delivery of Transit services to the community.

Living the Mosaic – 2040 Vision

This report directly aligns with the vision that Brampton will be a mosaic of safe, integrated transportation.

Conclusion:

This report seeks Council approval for a budget amendment of \$1,500,000 to conclude the procurement process for the replacement of Transit's CAD/AVL system.

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