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Item No.13.2.2
Audit & Finance Standing Committee
December 11, 2024

TO: Chair and Members of Audit & Finance Standing Committee

-ORIGINAL SIGNED-

SUBMITTED BY: _____

Cathie O'Toole, Chief Administrative Officer

DATE: November 22, 2024

SUBJECT: Modem Purchases for Public Works and Halifax Transit

ORIGIN

This report originates from a request to move capital funding available for the purchase of modems for both the Public Works and Halifax Transit Business Units.

LEGISLATIVE AUTHORITY

Halifax Regional Municipality Council approved, Dec 11, 2012, that all budget increases are to be presented to the Audit and Finance Standing Committee, prior to submission to Council.

Halifax Charter, section 93(1) - The Council shall make estimates of the sums that are required by the Municipality for the fiscal year; Halifax Charter, section 79 – The Municipality may spend money for municipal purposes in accordance with this section; Halifax Charter, section 35(2)(d)(i) - The CAO can only authorize budgeted expenditures or within the amount determined by Council by policy; Halifax Charter, section 120(6) - The Municipality may maintain other reserve funds for such purposes as the Council may determine; Halifax Regional Municipality policy on Changes to Cost Sharing for Capital Projects - Changes requiring Council approval; and the Halifax Regional Municipality Reserve Policy - No reserve funds will be expended without the CAO's recommendation and Council approval.

RECOMMENDATION

It is recommended that the Audit and Finance Standing Committee approve the following funding transfers:

- a. For the Public Works purchases: \$56,000 from capital project CT200004 – Controller Cabinet & Detection and \$225,670 from Q526 - Capital Fund Reserve to capital project CI200003 – IT Infrastructure Recap totalling \$281,670 in transferred funds.
- b. For the Halifax Transit purchases: \$150,000 from capital project CM210013 – Fixed Route Planning, Scheduling & Operations and \$619,000 from Q526 – Capital Fund Reserve to capital project CM210011 – Transit Fare Management totalling \$769,000 in transferred funds.

BACKGROUND

Two distinct business units, Public Works and Halifax Transit have an immediate need to procure replacement modem technology for underlying critical HRM infrastructure.

Public Works Traffic Maintenance & Traffic Operations (PW Traffic) manages approximately 300 signalized intersections with traffic cabinets across HRM. These cabinets house technology that operates signal lights and communicates with operations. This connectivity enables operations to be alerted to signal issues and troubleshoot them from a central office.

The deployed modems have reached the end of expected life and failure of units has begun to occur, causing periodic signal drops and communication outages. As a result, PW Traffic loses visibility into the intersections, and if the lights malfunction or start flashing, they are not notified until the public reports it. This has an impact on directing traffic or adjusting timing for emergency vehicles. In addition, it has been determined that the current modems will not support new network solutions or capacity for future growth, necessitating the replacement of all the modems. IT has identified a suitable replacement device. The proposed approach would be to replace 100 modems in 2024 using in-year funding as outlined in this report and the remaining 200 modems in 2025 using funding from the 2025/2026 capital budget.

Halifax Transit has the Transit Fare Management Mobile Application Project, Phase II currently underway and it includes the installation of electronic Just Ride Validators (JRV) in each of the conventional and regional express buses. Each JRV requires mobile communications from the device to the internet for verification of validated fares. The original plan was to leverage one of the two existing modems already on the buses to enable this new service. During the setup and testing it was discovered that this configuration would not work with the existing modems. A review of various communications alternatives was undertaken by both IT Infrastructure and Architecture along with Halifax Transit's technical services team and proof of concepts were run on buses to validate the viability of the solution. The selected communications solution will enable all existing services on the buses and also have some future expansion capability. This work needs to move forward in the 2024 fiscal year. The proposed approach would be to implement the required 466 modems in 2024 using in-year funding as outlined in this report.

DISCUSSION

On September 19, 2024 the IT Investment Committee provided direction to Information Technology to further investigate with support from Public Works and Halifax Transit funding alternatives for the modem replacements. Estimated total project costs for Public Works for 2024 is \$225,670 for the first 100 modems and funds would be transferred to Information Technology to manage the purchase and ongoing support of the technology. Estimated total project costs for Halifax Transit is \$769,000. Funds would be transferred to the Transit Fare Management Mobile Application Project. Information Technology would manage the purchase and ongoing support of the technology for Transit.

FINANCIAL IMPLICATIONS

Outlined below are the identified funding sources for these two separate technology requests.

The required modem replacements identified above for Public Works for 2024 are estimated to cost \$281,670 including net HST. Funding to be reallocated to capital project CI200003 - Information Technology Infrastructure Recap.

Capital Budget Summary:

Project Account No. CI200003 (IT Infrastructure Recap)

Cumulative Unspent Budget	\$ 22,681
Plus: Transfer from Capital Account CT200004	\$ 56,000
Plus: Transfer from Capital Account Reserve Q526	<u>\$ 225,670</u>
Balance	\$ 304,351

Project Account No. CT200004 (Controller Cabinet & Detection)

Cumulative Unspent Budget	\$ 191,359
Less: Transfer to Capital Account CI200003	<u>(\$ 56,000)</u>
Balance	\$ 135,359

Project Account No. Q526 (Capital Fund Reserve)

Cumulative Unspent Budget	\$ 15,852,257
Less: Transfer to Capital Account CI200003	<u>(\$ 225,670)</u>
Balance	\$ 15,626,587

The required modem replacements identified above for Halifax Transit are estimated to cost \$769,000 including net HST. Funding to be reallocated to capital project CM210011 – Transit Fare Management.

Capital Budget Summary:

Project Account No. CM210011 (Transit Fare Management)

Cumulative Unspent Budget	\$ 991,865
Plus: Transfer from Capital Account CM210013	\$ 150,000
Plus: Transfer from Capital Account Reserve Q526	<u>\$ 619,000</u>
Balance	\$ 1,760,865

Project Account No. CM210013 (Fixed Route Plan, Sched & Ops)

Cumulative Unspent Budget	\$ 358,622
Less: Transfer to Capital Account CM210011	<u>(\$ 150,000)</u>
Balance	\$ 208,622

Project Account No. Q526 (Capital Fund Reserve)

Cumulative Unspent Budget	\$ 15,626,587
Less: Transfer to Capital Account CM210011	<u>(\$ 619,000)</u>
Balance	\$ 15,007,587

RISK CONSIDERATION

There are no significant risks associated with the recommendations in this Report.

ENVIRONMENTAL IMPLICATIONS

No environmental implications associated with the recommendations in this Report have been identified.

ALTERNATIVES

Audit and Finance Standing Committee could choose not to allow the transfer of capital, resulting in insufficient funding to enable these critical infrastructure upgrades for both Halifax Transit and Public Works.

ATTACHMENTS

None

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