

CITY OF HAMILTON

PUBLIC WORKS DEPARTMENT
Transportation, Energy and Facilities Division

TO: Chair and Members Public Works Committee	WARD(S) AFFECTED: CITY WIDE
COMMITTEE DATE: May 7, 2012	
SUBJECT/REPORT NO: Standardization of Radio Communications, Next Stop Announcement and Automated Vehicle Location Equipment 2012 - 2014 (PW12033) - (City Wide)	
SUBMITTED BY: Gerry Davis, CMA General Manager Public Works Department	PREPARED BY: Carol Wildeman Senior Project Manager, Transit Business Applications (905) 546-2424, Extension 1842
SIGNATURE:	

RECOMMENDATION

That the Transit Bus Radio Communications, Next Stop Announcement and Automated Vehicle Location system parts be standardized to the existing Motorola and Mentor Engineering parts supplied by Glentel Inc. in accordance with Purchasing Policy 14 - Policy for Standardization for the period of 2012 through 2014, in conjunction with the existing maintenance contract.

EXECUTIVE SUMMARY

Through the 2011 capital budget process, Council previously approved project ID: 5301185001 in the amount of \$720,000 to be funded from Transit Capital Reserves.

The purpose of this report is to obtain Council approval to utilize Purchasing Policy 14 - Policy for Standardization for this expenditure as the amount for this segment of the Capital Project in the estimated amount of \$433,000 exceeds staff's approval level of \$250,000. Council's approval will allow for the standardization of Motorola and Mentor Engineering parts supplied by Glentel Inc. for the Radio Communications, Next Stop Announcement and Automated Vehicle Location until the end of the current maintenance contract with Glentel in 2014.

This upgrade to wireless technology will assist in adherence to Accessibility for Ontarians with Disabilities Act (AODA) requirements respecting changes in the transit routes and bus stop infrastructure in a timely fashion.

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It is worth noting that the Automated Stop Announcements and Radio system have been in constant use since late 2009. An interesting statistic, in a one year period (2011), the system announced 48 million stops in audio and visual format.

Alternatives for Consideration - See Page 3

FINANCIAL / STAFFING / LEGAL IMPLICATIONS

Financial: This cost has been budgeted for and approved under ProjectID 5301185001.

Staffing: This will result in some efficiency in staff time. Upgrading to wireless will mean staff will be able to update data on the buses without having to physically visit each bus. At a minimum, staff time to update stops will fall from 41 hours to two hours every signup period - four times per year. It will also allow staff to implement temporary bus stop changes and special messaging between stops such as: "For your safety and the safety of others, please stand behind the yellow line" as requested by bus operators and the union executive.

Legal: N/A

HISTORICAL BACKGROUND

Staff report PW08038a presented to Public Works Committee on March 23, 2009, sought and received Council approval to enter negotiations with Glentel Inc. for a single source purchase to obtain a contract for the replacement of HSR's radio communications equipment, implementation of automated next stop announcement (audio and visual) and replacement of the automated vehicle location (AVLC) system with global position satellite (GPS). The contract included the initial procurement and implementation of the system, as well as a five year all-in maintenance plan with an option for an additional five years.

In 2009, upon Council's approval of report PW08038a, staff implemented the Radio/Automated Stop Announcement (ASA) system to meet the requirements of the Ontario Human Rights Commission order to provide audio and visual announcements of all Transit stops by the end of 2009. The system purchased uses Motorola radio equipment and a stop announcement system supplied by Mentor Engineering Inc.

Since the Motorola and Mentor equipment has performed satisfactorily and the service provided under the maintenance contract with Glentel has been satisfactory, it is recommended that the City standardize to the existing Motorola and Mentor Engineering parts supplied by Glentel Inc. for the remaining period of the existing maintenance contract, 2012 through December 31, 2014, with an option to renew for an additional five year period in conjunction with the existing maintenance contract.

The principal improvement will be the introduction of wireless technology which will allow an instantaneous system wide upgrade versus the current practice of having to make changes to the stop annunciation system on each of the 220 buses in the fleet on an individual basis.

POLICY IMPLICATIONS

Purchasing Policy # 14 - Policy for Standardization - Section 4.14

Innovate Now (Public Works Business Plan) - This report's recommendations support *Innovate Now* by "Building on our Core Capacities." The use of "smart processes to match our needs," is the primary focus of this report and directly supports the strategic plan by finding creative and better ways to leverage resources.

RELEVANT CONSULTATION

Corporate Services Department: Financial Services Division, Purchasing Section.

ANALYSIS / RATIONALE FOR RECOMMENDATION

The Mentor TBox units offer significant advantages over the previous units: route files and stop names can be downloaded to the units automatically over WiFi or cellular wireless connections whereas the Mackenzie units require staff to physically change memory cards on each bus. This will allow for more rapid changes to routes and stops. The Mentor TBox units have proven to be highly robust and reliable resulting in no disruptions to stop announcements because of annunciator failure.

Also, the TBox units' software are being actively supported and upgraded by Mentor which will allow future enhancements including:

- Display date/time on the sign when no bus stop messages are being sent to the sign
- Support for Location based announcements (e.g. announcements that are not tied to bus stops)
- Support for Time based announcements (e.g. trigger an announcement if it is the week leading up to Christmas)
- Support for Driver Initiated announcements (e.g. "Please watch your step when exiting the bus")
- Display Stop Request on the sign when a stop request is initiated by a passenger.

These added features will be required to meet the requirements of the AODA legislation.

ALTERNATIVES FOR CONSIDERATION

Council could direct staff to continue to seek individual approval for Policy 11 purchase for additional units as required on a case by case basis. This is not recommended as it lengthens the procurement process for parts that are required to integrate with an existing system and does not result in efficiencies in staff time.

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Council could direct staff to purchase Mentor TBox annunciators in conjunction with new bus purchases and replace the MacKenzie equipment as the existing fleet is replaced. This is not recommended as it would take twelve years to replace all the annunciators given the twelve year bus replacement cycle and would prevent us from achieving full compliance with the AODA requirements until all buses were replaced.

CORPORATE STRATEGIC PLAN

Focus Areas: 1. Skilled, Innovative and Respectful Organization, 2. Financial Sustainability, 3. Intergovernmental Relationships, 4. Growing Our Economy, 5. Social Development, 6. Environmental Stewardship, 7. Healthy Community

Financial Sustainability

- ◆ Delivery of municipal services and management capital assets/liabilities in a sustainable, innovative and cost effective manner

APPENDICES / SCHEDULES

None