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PO Box 1749  
Halifax, Nova Scotia  
B3J 3A5 Canada

Halifax Regional Council  
January 10<sup>th</sup>, 2006

**TO:** Mayor Kelly and Members of Halifax Regional Council

**SUBMITTED BY:**

A handwritten signature in black ink, appearing to read "Dan English", written over a horizontal line.

Dan English, Chief Administrative Officer

A handwritten signature in black ink, appearing to read "Wayne Anstey", written over a horizontal line.

Wayne Anstey, Acting Deputy Chief Administrative Officer

**DATE:** January 10<sup>th</sup>, 2005

**SUBJECT:** **RFP # 05-145 Award, Vehicle Tracking & Communications:  
Go-Time and Automatic Vehicle Location Components**

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**ORIGIN**

Approved 2004/05 Capital Budget, account No. CHA00160.

**RECOMMENDATION**

It is recommended that Council authorize the award of the Bus Rapid Transit Go-Time and Automatic Vehicle Location component of Request for Proposal #05-145 Vehicle Tracking and Communications to Aliant, the highest scoring proponent, subject to staff's negotiation and acceptance of contract terms for a total cost of \$1,569,302 including net HST from capital account number CHA00160, Vehicle Tracking & Communications, as outlined in the Budget Implications section of this report.

## **BACKGROUND**

The Vehicle Tracking & Communications initiative includes two core components: 1) Bus Rapid Transit Go-Time and Automatic Vehicle Location (included in this award), and 2) Non-emergency voice radio. The non-emergency voice radio portion of the Vehicle Tracking & Communications initiative was awarded separately from the Bus Rapid Transit Go-Time and Automatic Vehicle Location component.

In April 2005, HRM staff released an Expression of Interest to confirm the availability of viable options for Bus Rapid Transit Go-Time and Automatic Vehicle Location solutions. Based on these results, vendors were identified as proposing potentially viable options. These vendors were then invited to respond to a Request for Proposal that closed on October 21, 2005.

## **DISCUSSION**

It is envisioned that the Bus Rapid Transit Go-Time and Automatic Vehicle Location portions of the Vehicle Tracking and Communications project would utilize the same central processing software, and would be implemented in 2 phases:

Phase 1: Go-Time for Bus Rapid Transit vehicles (including internet-based, telephone-based, and display terminal traveller information systems) and Automatic Vehicle Location for Works, Parks, Access-A-Bus vehicles, Community Projects, Fleet and Recreation Tourism & Culture.

Phase 2: Go-Time for all conventional, fixed-route buses

Phase 1 budget has been approved by Council under Capital Account # CHA00160. Metro Transit intends to identify funds as part of the 06/07 Budget and Business Planning Process to proceed with Phase 2 the Go-Time system replacement. In order to ensure compatibility and to minimize costs, the vendor selected for Phase 1 would be contracted to implement Phase 2.

The existing Go-Time system includes the on-bus data terminals, central fleet management software, and traveller information to 14,000 transit customers each day. This system is approaching the end of its life, availability of maintenance - being once revoked and then re-instated- is uncertain, technology advances would provide increased accuracy of the public departure information, and routes are being extended beyond the coverage of the buses communications systems.

A new Go-time system for Bus Rapid Transit (and in the future for fixed route buses) will provide the following benefits:

- Improved system reliability and maintainability.
- Improved accuracy for traveller information and fixed route fleet management.
- Internet-based, telephone-based, and display terminal traveller information.

- Internet-based trip planning for travellers.
- Improved service to travellers by providing the Corporate Call Centre with direct access to traveller information.
- Improved efficiency of Access-a-Buses services.

The Automatic Vehicle Location project was conceived in an effort to improve tracking, performance management, and liability exposure for Works and Parks service vehicles. By equipping HRM and sub-contractor vehicles with Automatic Vehicle Location capabilities, HRM will derive the following benefits:

- Improved performance management of sub-contracted services e.g. snow removal.
- Fewer property damage liability claims against HRM due to detailed records of locations and vehicle speeds that would be available.
- Improved performance management of HRM service vehicles.
- Greater safety for staff.

Over the past three years, the Business Systems and Control Group, in a number of comprehensive audits, has recommended the adoption of an automatic vehicle tracking system as a means of improving data collection, monitoring and reporting on work capacity and subsequent decision making. For example, in the recently completed General Fleet Operational Review (2005) staff identified a significant need to capture accurate usage records to improve the scheduling of maintenance, equipment acquisition and rationalization of the fleet. During the Comprehensive Review of Snow and Ice Operations (2004) staff identified significant issues in vehicle fueling and usage which could be resolved using an electronic solution. Staff reported that data captured through an AVL system would facilitate the improved design of plowing and salting routes which could result in savings. An analysis conducted during the Snow and Ice Review identified that some areas were over-servicing compared to the service standards established by Council.

Staff's assessment of the submissions received for the Go-Time and Automatic Vehicle Location RFP resulted in the highest score for Aliant. Aliant's submission for the Go-Time and Automatic Vehicle Location component of the RFP for Phase 1 is \$542,207 less expensive than the second highest scoring proponent, Trapeze, and the total capital and operating cost of Aliant's Phase 1 and 2 solutions is estimated to be \$2.6M less than Trapeze's cost when evaluated over a 10-year term.

The total cost for Bus Rapid Transit Go-Time and Automatic Vehicle Location equipment purchased from Aliant shall not exceed \$1,569,302 including net HST. This total may be reduced once the selection of vehicles to be equipped is finalized. Capital funds will be taken from the Vehicle Tracking & Communications account CHA00160 that combines residual funds of the 3-year Trunked Mobile Radio project with the Vehicle Tracking & Communications project.

The following table summarizes the scores in the evaluation table found in the attached appendix.

Evaluations were completed by representatives of Metro Transit - the primary user group, with input from RPAM and Public Works.

<b>Vendor*</b>	<b>Points</b>	<b>Phase 1 Cost (including net HST)</b>
Aliant	77	\$1,569,302
Trapeze	73	\$2,111,509
IBI Group	61	\$3,612,609

\* Two other vendors invited to respond to this RFP either did not offer a solution or did not meet the technical requirements.

As identified in the attached evaluation, the proposal from Aliant represents the best overall value to HRM in terms of functionality, maintainability, and cost.

### **BUDGET IMPLICATIONS**

Funding is available in the Approved 2004/05 Capital Budget from Capital account No. CHA00160, Vehicle Tracking and Communication. The availability has been confirmed by Financial Services.

Budget Summary:           **Capital Account No. CHA00160 Vehicle Tracking and Communication**  
(including net HST)

Cumulative Unspent Budget	\$1,804,589
Less: BRT Go-Time, AVL Purchase (Aliant)	\$1,569,302
Uncommitted Budget*	\$ 235,287

\*Remaining budget will be used to purchase computer hardware and accessories separately. \$250,000 in funding has been provided by the Federal Transit Showcase Program.

### **FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN**

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

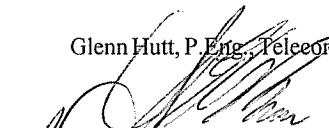
**ALTERNATIVES**

1. Parks and Works vehicles are currently unequipped with Automatic Vehicle Location functionality; operations can continue in this manner.
2. The life of the current Go-Time system could be extended with expanded maintenance programs contingent on the manufacturer's re-extension of maintenance contracts. However, Transit was informed by the manufacturer in 2004 the system would no longer be supported. Although the manufacturer ultimately did agree to provide another 1-year maintenance contract, this is not the recommended approach due to the manufacturer's unpredictable commitment to providing support.

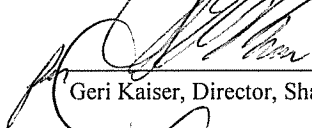
**ATTACHMENTS**

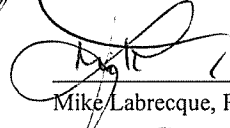
Go-Time & Automatic Vehicle Location System Evaluation

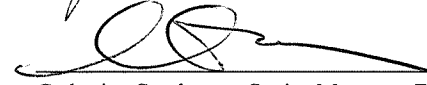
Additional copies of this report, and information on its status, can be obtained by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.


Report Prepared by:  Glenn Hutt, P. Eng., Telecommunications Technology Manager, Information Technology 490-6554

Report Approved by:

  
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Geri Kaiser, Director, Shared Services 490-4630

  
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Mike Labrecque, P.Eng., Director, Transportation & Public Works 490-4855

  
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Catherine Sanderson, Senior Manager, Financial Services 490-1562

  
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Barb Palmeter, Financial Consultant, Finance 490-7221

**RFP # 05-145  
GO-TIME AND AUTOMATIC VEHICLE LOCATION SYSTEM EVALUATION**

CATEGORY	WEIGHT	ALIAINT	TRAPEZE	IBI GROUP
SYSTEM DESIGN, FUNCTIONALITY	20	15.7	16.7	13.3
DEMONSTRATED USE OF PROPOSED PRODUCT	20	10.0	13.3	14.6
COST**	20	20	11.5	6.2
DEMONSTRATED EXPERIENCE	15	10.6	13.2	12.4
SUPPORT	10	9.0	7.4	4.5
COMPLETENESS OF PROPOSAL	5	4.4	3.9	3.8
	<b>90*</b>	<b>70</b>	<b>66</b>	<b>55</b>
	<b>100*</b>	<b>77</b>	<b>73</b>	<b>61</b>

\* Note that scores for individual categories are calculated out of 90 and then prorated to 100 for comparison  
 \*\* Points for cost are awarded based on the 10-year total capital and operating costs of Phase 1 and 2.