

Item No. 9.1.2

Audit & Finance Standing Committee

April 16, 2014

TO:

Chair and Members of Audit & Finance Standing Committee

Original Signed

SUBMITTED BY:

Richard Butts, Chief Administrative Officer

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Kathleen Llewellyn-Thomas, A/Director, Transportation and Public Works

DATE:

April 1, 2014

SUBJECT:

Award – RFP No. P14 – 101 - Digital Video Based Driver Training Solution

ORIGIN

The approved 2013/14 Project Budget

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(1) - Specifies areas that the Council may expend money required by the Municipality.

RECOMMENDATION

It is recommended that the Audit & Finance Standing Committee recommend that Halifax Regional Council approve:

1. An increase to Project No. CV010002 - Fire Services Driving Testing System, in the amount of \$24,934.63 through a transfer from Project No. CVJ01088 - Fire Fleet Apparatus.
2. Award RFP No. P14-101, for two (2) Digital Video Based Driver Training Solutions to the only Proponent, Trackit LLC Inc., for a total price of \$124,934.63 (net HST included), with funding from Project No. CV010002 - Fire Services Driving Testing System, as outlined in the Financial Implications section of this report.

BACKGROUND

The purpose of this report is to award a Tender and allocate additional funds for a Digital Video Based Driver Training Solution. This is in accordance with the 2013/2014 Approved Capital Budget, which allocated \$100,000 to this project.

The rationale for the Digital Video Based Driver Training Solution is to improve firefighter driving safety performance with more comprehensive and frequent driver evaluation.

Collisions involving fire apparatus (engines, ladder trucks and water tanker trucks) are a significant risk factor to all fire departments. A review of US firefighter fatality statistics reveals that vehicle-related deaths account for 25 % of all fire service fatalities (1).

Motor vehicle collisions are the second leading cause of job related deaths for firefighters. In addition to injuring or killing firefighters, these collisions often involve injury or death to residents. Less severe accidents are more frequent, and result in injury and property loss to fire departments and residents. In 2010, US fire departments experienced 14,200-fire apparatus collisions (2). Statistics for Canada are not available but are likely similar when adjusted for population.

Operating fire apparatus (trucks) is difficult and dangerous. Fire apparatus are operated in all road and weather conditions, in darkness and fog, in stressful responses to emergencies and on roadways that are increasingly congested. As the fire service becomes more diverse and inclusive, these apparatus are increasingly driven by people who have little or no experience with heavy trucks. A crash involving a fire truck often results in injury or death to firefighters, civilians, and hundreds of thousands of dollars of property loss to the municipality. In addition, these crashes can lead to criminal code charges and costly civil lawsuits.

Halifax Regional Fire & Emergency (HRFE) faces similar risks as other North American fire departments with 40 motor vehicle collisions in 2013.

On October 31, 1998, a fire engine operating from fire station 13 collided with a civilian car in an intersection, resulting in the death of the civilian driver and injury to a civilian passenger. On August 4, 2007, a water tanker truck operating from fire station 21 left the roadway and overturned, resulting in loss of the vehicle and injuries to two firefighters. Less serious accidents occur more frequently. In 2013, HRFE experienced 40 motor vehicle collisions (defined as an accident that occurred when the vehicle was in motion). So far, in 2014 we have experienced 15 motor vehicle collisions. While most of these incidents do not result in injury, they all result in property damage and labour hours spent on investigation, driver testing & evaluation, and repairs.

HRFE Training Officers provide training required for our firefighters to obtain the required "Class 3" driving license, along with the skills they need to operate these large and heavy vehicles. Training Officers also re-evaluate drivers periodically to ensure the continued ability of the driver to operate the vehicle safely. Our goal is to complete an evaluation of all drivers annually. In 2013, evaluations were completed with 175 volunteer firefighter drivers (84% of total) and 150 career firefighter drivers (69% of total).

The Digital Video Based Driver Training Solution will improve the objectivity of evaluations.

A traditional driving evaluation relies heavily on the subjective judgment of the evaluator. The evaluator observes the driver and deducts points on a paper checklist for observed infractions. This system is open to accusations of errors or bias. In addition, the driver may not be aware, recall or believe that an infraction occurred. Reviewing the facts can be difficult and time consuming.

It is proposed that HRM procure two (2) mobile driver training & testing systems. These systems can be installed on any fire truck in about ten minutes. They use cameras, an accelerometer, a global positioning system and a tablet computer to record all aspects of the driving evaluation. Testing forms are included in the tablet computer. When

the instructor marks an infraction, data including map position, camera footage (front and side views), speed, G-forces and engine settings are recorded. Subjectivity is greatly reduced. After the evaluation, the driver and

evaluator can quickly review all recorded infractions. This has a positive impact on driver learning and reduces disagreements about the facts. Test data can be stored electronically for future reference. Training Officers do not have to hand-write their test reports, reducing the chance for errors and saving time.

These devices will be used in conjunction with the Fire Services driving simulator. Operators trained in the simulator will be taken on the road by an instructor where their driving skills will be tested and verified with these devices.

The benefits of the Solution are expected to be:

- Reduced risk to firefighters, residents and the Municipality.
- Improved engagement, confidence and commitment by fire department drivers.
- Enhanced public image.
- Enhanced record keeping.
- Improved ability to demonstrate "due diligence".

(1) – U.S. Fire Administration, "Emergency Vehicle Safety Initiative FA-336", Federal Emergency Management Agency (US), February 2014, 1.

(2) – U.S. Fire Administration, 14.

DISCUSSION

RFP No P14-101, for the purchase of Digital Video Based Driver Training Solution was posted to the Province of Nova Scotia's Procurement website on January 31, 2014 and closed on February 20, 2014.

Only one (1) proposal was received from Trackit LLC.

This is a niche market with very few "out of the box" options available. The proposal was reviewed by staff from Fire and Emergency Services and Corporate Fleet and Equipment and was found to meet all of the requirements of the RFP and represent fair value to HRM.

Trackit LLC will be supplying two (2) Vigil Vanguard Digital Video Based Driver Training systems to the Halifax Regional Fire Service for use by its Training Division.

Delivery of the new equipment is approximately forty-five (45) working days from date of purchase order.

FINANCIAL IMPLICATIONS

The original cost estimate set by Fire Services was \$50,000.00 per unit. Unfortunately, the quoted price is higher than the original estimate and therefore the project requires funding from two (2) sources in order to procure two (2) devices as per the capital request.

Halifax Regional Fire Services Training Division has identified the need for two (2) units in order to train and evaluate the driving skills of the one hundred & fifty (150) full time career, and one hundred & seventy five (175) volunteer, fire fighters in the system.

Based on the Track-It cost proposal of \$119,800.00, plus net HST of \$5,134.63, for a net total of \$124,934.63, funding is available from Project No. CV010002 - Fire Services Driving Testing System. The budget availability has been confirmed by Finance.

Budget Summary: Project No. CV010002 - Fire Services Driving Testing System

Cumulative Unspent Budget	\$100,000.00
Plus: Transfer from Project CVJ01088	\$24,934.63
Less: RFP. No. P14-101	<u>\$124,934.63*</u>
Balance	\$0.00

Budget Summary: Project No. CVJ01088 - Fire Fleet Apparatus

Cumulative Unspent Budget	\$277,902.22
Less: Transfer to Project CV010002	<u>\$ 24,934.63</u>
Balance	\$252,967.59

*This project was estimated in the Approved 2013/14 Project Budget at \$100,000.00

ENVIRONMENTAL IMPLICATIONS

Implications not identified.

ALTERNATIVES

The Committee, at its discretion, may choose not to approve the transfer of funds.

ATTACHMENTS

None

A copy of this report can be obtained online at <http://www.halifax.ca/boardscom/SCfinance/index.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

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