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REAL TIME TRAFFIC INFORMATION PROPOSED SINGLE SOURCE CONTRACT TO INTELLIONE INC.

The Transportation Services Committee recommends the adoption of the recommendations contained in the following report dated September 1, 2010, from the Commissioner of Transportation Services.

1. RECOMMENDATIONS

It is recommended that:

1. Regional Council authorize a single source contract with Intellione Inc. for the provision of real time traffic information in the amount of \$220,000 excluding taxes, pursuant to the single source provisions of the purchasing by-law.
2. The term of the contract be for a period of three years, commencing on January 1, 2011.
3. The Commissioner of Transportation Services be authorized to execute the contract, subject to the approval of Legal Services as to form and content.

2. PURPOSE

This report seeks Regional Council authorization to enter into a single source contract with Intellione Inc. for the provision of real time traffic condition information. The term of the contract will be for a period of three years, commencing on January 1, 2011.

The real time traffic information will be used as a source of data for traveller information services, traffic management, prioritization of capital works and travel time data collection.

3. BACKGROUND

Intellione Inc. provides real-time traffic data using Rogers cell phone location data

Intellione Inc., in partnership with Rogers Communications, is able to provide travel speed information on the York Region road network in real time. Using GPS tracking, Intellione analyzes anonymous cell phone location data to measure travel speeds on the road network. This data can be used to measure the performance of our transportation

system, manage congestion, prioritize road improvements, monitor traffic speeds through construction zones and provide traveller information services to the public.

Regional Council approved the Intelligent Transportation Systems (ITS) Strategic Plan in December of 2007

The ITS Strategic Plan approved by Regional Council in December of 2007, identified traveller information systems as a high priority for implementation. The implementation of traveller information systems has lagged largely due to the fact that hardware and software systems to collect data on the real-time performance from the transportation system are expensive and a challenge to manage.

Traditional traffic sensors (in pavement or above ground) are capable of collecting data but generally only on a very small portion of the overall transportation system unless they are implemented on a very large scale at significant cost.

Intellione Inc. technology offers a unique opportunity to collect real-time traffic data on a wide geographical area without the installation of additional infrastructure across the Regional road network.

The acquisition of reliable traffic speed data from Intellione Inc. will provide a number of advantages over traditional data collection means.

4. ANALYSIS AND OPTIONS

Regional staff have been participating in ongoing discussions with neighbouring municipalities and the Ministry of Transportation – Ontario in regards to the availability of real-time traffic data from Intellione Inc.

Intellione Inc. tracks the GPS coordinates of Rogers cell phones to collect traffic speed information on the Regional road network

Intellione Inc. uses the GPS devices embedded in all cellular phones from Rogers subscribers to track location data in real time. Intellione uses complex computer algorithms to filter this data and identify all phones that are positioned within the road right-of-way. Based on the distance that a cell phone travels over a fixed period of time, Intellione Inc. is able to calculate speed data for each individual cell phone on the road network. This data is then aggregated and Intellione Inc. is able to provide average traffic speed data for individual road sections.

Intellione Inc. is the only company that can provide real-time traffic speed data on a large scale through their partnership with Rogers Communications

Intellione Inc. is a single source provider of real-time traffic speed data on a network-wide basis. For this reason, Intellione Inc. is recommended as a single source provider.

The data provided by Intellione Inc. to York Region will be used for a number of purposes including traveller information services to the general public, traffic management and monitoring capabilities on the Regional road network, performance measurement for travel time and congestion, monitoring of traffic conditions in construction zones and prioritization of capital construction projects to address traffic bottlenecks and other congested areas.

Rogers Communications ensures that cell phone customer data is protected

Rogers Communications provides GPS data to Intellione Inc. for all active Rogers cell phones in the Greater Toronto Area. The data provided by Rogers is completely anonymous and Intellione Inc. and York Region will not have access to any personal information from Rogers' customers.

The availability of real-time traffic data will help improve the operation of the Regional road system

The ability to monitor and measure the performance of our road network is essential to identify problem areas and recommend improvements. Data from Intellione Inc. will allow staff to monitor traffic trends over time and respond accordingly. York Region will be the first Greater Toronto Area municipality to enter into a traffic data provision contract of this nature.

5. FINANCIAL IMPLICATIONS

The total cost of the proposed three-year contract is \$220,000, excluding taxes.

Sufficient capital funding is included in the 2011, 2012 and 2013 program as part of the Region's Intelligent Transportation System (ITS) Strategic Plan initiative.

6. LOCAL MUNICIPAL IMPACT

There is no direct municipal impact associated with this report. The quality of transportation services will be improved as a result of providing reliable traveller information to our customers.

7. CONCLUSION

Based on the analysis as described above, it is recommended that a payment of \$220,000 (excluding taxes) to Intellione Inc. for a period of three years, commencing on January 1, 2011, be approved.

For more information on this report, please contact Steven Kemp, Director, Traffic Management and ITS at Ext. 5226.

The Senior Management Group has reviewed this report.