

Clause 4 in Report No. 4 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on March 24, 2016.

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# York Region Transit (YRT/Viva) Mobility Plus Scheduling Software Upgrade Contract Award

Committee of the Whole recommends adoption of the following recommendations contained in the report dated February 17, 2016 from the Commissioner of Transportation Services:

- 1. Council approve award of a contract for upgrade of the existing scheduling software for York Region Transit (YRT/Viva) Mobility Plus to RouteMatch Software Inc., pursuant to the Direct Purchase provisions of the Purchasing Bylaw on the following terms:
  - a) The duration of contract be five years, from April 1, 2016 through March 31, 2021.
  - b) The Region pay RouteMatch Software Inc. \$618,955, excluding taxes, for software licenses, implementation, and training services.
  - c) The Region pay RouteMatch Software Inc. an additional \$265,782, excluding taxes, for software support and maintenance over the duration of the five-year contract.
- 2. Council authorize the Commissioner of Transportation Services to execute the contract.

Report dated February 17, 2016 from the Commissioner of Transportation Services now follows:

#### 1. Recommendations

It is recommended that:

- Council approve award of a contract for upgrade of the existing scheduling software for York Region Transit (YRT/Viva) Mobility Plus to RouteMatch Software Inc., pursuant to the Direct Purchase provisions of the Purchasing Bylaw on the following terms:
  - a) The duration of contract be five years, from April 1, 2016 through March 31, 2021.
  - b) The Region pay RouteMatch Software Inc. \$618,955, excluding taxes, for software licenses, implementation, and training services.
  - c) The Region pay RouteMatch Software Inc. an additional \$265,782, excluding taxes, for software support and maintenance over the duration of the five-year contract.
- 2. Council authorize the Commissioner of Transportation Services to execute the contract.

### 2. Purpose

This report seeks Council approval to award a contract for upgrade of the existing scheduling software for YRT/Viva Mobility Plus to RouteMatch Software Inc. (RouteMatch). The report also seeks approval for payment of software support and maintenance to RouteMatch Software Inc. for the duration of five years, effective April 1, 2016.

In seeking the authority, this report also requests approval of a Direct Purchase pursuant to the provisions of Section 9 of the Purchasing Bylaw, on the basis that the paramount consideration is compatibility with existing Mobility Plus scheduling software. Considering the compatibility and continued use of existing interfaces with other software systems, there is only one entity reasonably capable of providing the deliverables. A competitive procurement process may neither be practical nor a financially feasible option.

#### 3. Background

# In 2011 YRT/Viva Mobility Plus staff developed "Family of Services" delivery model that balances service quality and cost per trip

Since amalgamation of all municipally-operated transit systems into a Regional system in 2001, Mobility Plus has been providing door-to-door specialized transit services to people with disabilities.

The majority of customers registered with Mobility Plus use the door-to-door transit service for their requested trips. Through review of travel patterns and destinations, it was identified that many trips could be delivered using a combination of YRT/Viva conventional and rapid transit accessible services.

YRT/Viva conventional and rapid transit services are scheduled to travel along fixed routes at regular intervals. Mobility Plus staff use an optimal RouteMatch trip planning software to utilize vehicles where feasible, to provide all or a portion of a Mobility Plus trip, also known as "Family of Services" using YRT/Viva fixed route services. In addition, it allows Mobility Plus the opportunity to schedule other trip requests, thereby providing more trips with the same allocated funds.

## The current Mobility Plus scheduling and trip planning software are provided by RouteMatch Software Inc.

On March 28, 2013, Council approved the award of contract to RouteMatch Software Inc., for supply and installation of Mobility Plus scheduling and trip planning software and associated interfaces to the existing telephone-based interactive voice response (IVR) and web-based scheduling systems allowing customers to use telephone or internet to book, cancel or confirm their trips. The original contract was procured through a competitive process with four bidders.

### 4. Analysis and Options

# The current Mobility Plus web-based scheduling and trip planning software does not meet the requirements of "Family of Services" trips

When the RouteMatch scheduling software was being implemented, telephone and web-based scheduling software existed. RouteMatch Software Inc. developed interfaces to the existing telephone and web-based scheduling systems. However, the existing web-based system does not allow customers to

plan their trip using a "Family of Services" option where part of the trip is performed by YRT/Viva fixed route service.

Presently all "Family of Services" trips are planned and scheduled by Mobility Plus trip reservationists using RouteMatch scheduling and trip planning software. By implementing a RouteMatch web-based scheduling and trip planning software, customers will be able to plan "Family of Services" trips and in addition track vehicle real-time arrival information. This will result in enhanced customer experience and help to maintain service level standards.

#### A mobile-based scheduling system will allow customers to plan their trip on a smart phone

With rapid advances of mobile technology, customer preferences are shifting to services that can be accessed anytime and anywhere. RouteMatch mobile-based scheduling and trip planning application (also known as Mobile App) is an innovative way of using smartphones for Mobility Plus services. The Mobile App will enable customers to plan, book and cancel trips, look up their current location, know vehicle arrival time, as well as many other features. Through a satisfaction survey, customers have indicated their preference for self serve options through Mobile App.

# RouteMatch web and mobile-based scheduling software will provide additional benefits to YRT/Viva Mobility Plus staff and customers

Mobile App will provide the following benefits to Mobility Plus staff and customers:

- Eliminate the need for customers to call the Mobility Plus call centre or use a computer to access the additional options for "Family of Services" trips, including real-time scheduling.
- Increase customer convenience ability to book and cancel trips anywhere, anytime using a smartphone.
- Ability to determine the vehicle location and real-time arrival information at any time.
- Allow Mobility Plus staff to track customer location when on board a bus.
- Increase service efficiency by knowing customer estimated arrival time to their destination.
- Reduced Mobility Plus vehicle wait times as customers will be identified and confirmed on YRT/Viva fixed route trips.

- Fare payment convenience in future, potential ability to pay fare using Mobile App if interfaced with YRT/Viva Mobile Fare Payment Application.
- Additional capacity and efficiency in the Mobility Plus call centre as customers will be able to plan "Family of Services" trips and spend less time on the phone with trip reservationists.
- An interface between the YRT/Viva conventional and rapid transit vehicle real-time information and Mobility Plus RouteMatch software to provide Mobility Plus customers more accurate information when scheduling and verifying "Family of Services" trips.
- Minimized system errors in scheduling or cancelling trips because of the automated process and elimination of custom interfaces.
- Streamlined data management, analysis and reporting as the data will be stored in one system.
- Avoid interfaces with software supplied by another vendor. System
  interfaces are complex in nature as the information requested by
  customers must flow from one system to another. This creates additional
  difficulties and challenges when investigating customer complaints, such
  as missing customer information, missed reservations, missed
  cancellations and others.

# Beacon technology installed on YRT/Viva vehicles will allow communication with customers' mobile phones, and will provide better customer service

Beacon technology transmits an alert when someone approaches or leaves a location, such as a YRT/Viva vehicle. YRT/Viva staff will implement low energy beacon technology on YRT/Viva vehicles that will interact with customers' smartphones via the Mobile App. The Mobile App will help determine if a customer has boarded the correct vehicle. This process will help predict when a "Family of Services" conventional trip will be completed, or will alert Mobility Plus staff in the event a customer boards the wrong vehicle or disembarks at the incorrect stop.

# YRT/Viva implemented a low demand service strategy called "Dial a Ride" to provide on-demand service in rural and low ridership areas of the Region

YRT/Viva is continuously striving to meet customer demands and provide transportation services in all areas of the Region. In order to provide efficient service while reducing operating costs, Dial a Ride service was introduced. In low

demand rural areas, customers are able to call the Dial a Ride number, book a dedicated ride from the closest stop, and be transported to the required destination or a major service route.

RouteMatch web and mobile-based scheduling and trip planning software will allow customers to schedule Dial a Ride trips, find out actual time of arrival and track vehicle location. This multi-modal trip planning service allows spontaneous travel, and will be available to all YRT/Viva and Mobility Plus customers. This increased flexibility will encourage registered Mobility Plus customers to leverage Dial a Ride service.

#### Link to key Council-approved plans

This report links to the following Council-approved plans and policies:

#### Regional Official Plan

Economic vitality - A strong and stable economy is essential to a healthy
and prosperous Region. Strengthening the links between the natural
environment, healthy communities and the economy is required to
improve the overall well-being of York Region's residents and businesses
in a sustainable manner.

Vision 2051

Supports the following goals:

- An Innovation Economy
- Interconnected Systems for Mobility

#### 2015 to 2019 Strategic Plan

- Continue to deliver and sustain critical infrastructure through technology systems used to collect data and model systems
- Manage the Region's finances prudently working to optimize decisionmaking to ensure programs are managed and audited efficiently and within corporate guidelines
- Strengthen organizational capacity through implementation of best practices, continuous improvement and efficient use of existing systems

YRT/Viva Mobility Plus RouteMatch systems also support these goals by implementing best practices that create process automation, increased operational and service efficiency, and foster a positive customer environment.

#### 5. Financial Implications

YRT/Viva staff has successfully negotiated a 50 per cent discount on software licenses and implementation services.

Table 1 provides a summary of the license and implementation services costs to install RouteMatch web and mobile-based systems.

Table 1
RouteMatch Licenses and Implementation Services Costs

Description	Cost
Web and mobile-based software licenses	\$ 175,500
Web and mobile-based software implementation services	54,600
Third party software integration	40,000
Beacon equipment	55,713
Beacon installation	193,142
Additional services as required	100,000
Total cost	\$ 618,955

Table 2 provides a summary of the software maintenance and support costs over the next five years, to be paid from April 1, 2016 through March 31, 2021.

Table 2
Routematch Web and Mobile-based
Software Maintenance and Support Costs

Description	2016-17	2017-18	2018-19	2019-20	2020-21
Web and mobile-based software	\$ 48,100	\$ 50,505	\$ 53,030	\$ 55,682	\$ 58,465
Total cost over five-years					\$ 265,782

Although most transit agencies use reservationists to schedule para-transit trips, these costs are comparable to another transit agency where web and mobile-based systems have recently been implemented.

#### 6. Local Municipal Impact

Implementation of RouteMatch web and mobile-based scheduling and trip planning software systems will ensure timely, convenient and reliable services to customers with special needs. It will also increase operational efficiency by better meeting customer needs through improved vehicle scheduling.

#### 7. Conclusion

RouteMatch Software Inc. has been providing reliable and consistent service to YRT/Viva Mobility Plus since initial implementation in 2013.

It is recommended that award of a contract for upgrade of the existing RouteMatch web and mobile-based scheduling and trip planning software systems be approved, for a total cost of \$618,955, excluding taxes.

It is also recommended that the Region pay RouteMatch Software Inc. an additional \$265,782, excluding taxes, for software support and maintenance, and the duration of the contract be five years, from April 1, 2016 to March 31, 2021.

For more information on this report, please contact Rajeev Roy, Director, Business Planning and Technology at ext. 75682.

The Senior Management Group has reviewed this report.

February 17, 2016

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Accessible formats or communication supports are available upon request