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**YORK REGION TRANSIT**  
**GREATER TORONTO AREA FARE SYSTEM (SMART CARD)**  
**PROGRESS REPORT**

The Transit Committee recommends the following:

- 1. The presentation by Rajeev Roy, Manager, Transit Management Systems, be received;**
- 2. The recommendation contained in the following report, October 23, 2007, from the General Manager, Transit, be adopted:**

**1. RECOMMENDATION**

It is recommended that this report be received for information.

**2. PURPOSE**

This report provides an update to Transit Committee and Regional Council on the Greater Toronto Area (GTA) fare system or “Smart Card” project. A previous update was provided at the June 2007 Transit Committee meeting.

**3. BACKGROUND**

The proposed Greater Toronto Area fare system or “Smart Card” will provide a common fare card allowing customers to ride on any participating Greater Toronto Area transit system without pre-purchasing tickets or passes. The customers do not have to worry about the fare policies or have the exact cash fare for each transit system. The smart card will allow fare payment and accommodate the fare policies of all transit systems, including intersystem transfers, discounts and customer loyalty schemes, in a way that will be transparent to the customers. Customers will still be able to pay in cash if they choose. The smart card would help integrate the Greater Toronto Area transit systems.

There are two major components to an integrated smart card system:

- A computer system including fare transaction processors installed on all conventional buses and at Viva stations; and
- A central system enabling fare integration and reconciliation between the transit agencies.

The existing network of third party agents selling York Region Transit (YRT) tickets on behalf of the Region will be transferred to the vendor who will then be responsible for managing agents.

In 2003, the Ministry of Transportation of Ontario (MTO) recognized the need for a new fare collection system to integrate the Greater Toronto Area transit systems and committed up to \$40 million to cover a portion of the two major components. The MTO will cover 33% of capital costs attributed to each transit system needs, and 100% of the capital and ongoing operating expense of the common central system.

In 2003, YRT signed an Administrative Framework Accord between MTO and GTA transit agencies. The accord constitutes the administrative framework needed to co-ordinate the design-related activities between the transit systems. The accord is not a legally binding document, rather it was designed to enable the project Steering Committee to make timely decisions and recommendations to successfully complete procurement documents and address transit authority concerns during the design process.

In October 2006, an expert panel of representatives from the participating transit systems reviewed the proposals from vendors and conducted oral evaluations. Accenture Inc. was chosen as the successful vendor and awarded the contract for the supply, installation and operation of the smart card system.

The MTO is responsible for the successful completion of the smart card project.

#### **4. ANALYSIS AND OPTIONS**

The following sections provide a brief summary of the activities completed since the last update (June 14, 2007).

##### **4.1 Launch 1 – Pilot Testing on GO, TTC and Mississauga Transit**

Launch 1 of the project includes limited deployment of representative devices at GO Transit (Milton line – Union, Meadowvale and Cooksville stations), Mississauga Transit (4 Mississauga feeder bus routes to GO Transit Milton line stations) and the TTC (Union Station) to demonstrate the use of the smart card for fare payment with a small selected group of commuters.

For over a month, transit riders commuting from Mississauga to Union Station have had the option of using the smart card. Over 400 people have already joined the pilot and have made smart card use a part of their daily lives. The year-long pilot will help obtain feedback on the customer experience, to better understand how the general public perceives this new means of public transit payment. Initial response to the smart card has been very positive, and some riders were excited enough to load their e-Purse to the \$300 maximum on the very first day of service. The novelty of having a contactless, paperless

medium has proven to be of great interest to the general public as far more applications were received than cards distributed.

#### **4.2 Launch 2 – Full Deployment**

Launch 2 of the project includes full-scale certification and deployment on the following transit services:

- GO Transit Lakeshore West Corridor trains, train buses and Hamilton QEW bus.
- Burlington/Oakville together for certification of the common Municipal Service Provider System (MSPS) functions.
- GO/ Municipal Service Provider (MSP) fare integration.
- TTC faregate.
- Central System.

Launch 2 is the first full-scale revenue service test of the GTA Fare System. The purpose of this test is to validate the full functionality of the GTA Fare System (Burlington/Oakville together) before full-scale rollout. Accenture Inc. and the GTAFA project office have started working on Launch 2.

#### **4.3 York Region Transit Preparedness**

Certification and deployment will likely start in York Region in late 2008 to early 2009. In preparation for this, YRT has been working on many associated aspects so that the system integrates well with the existing fare policy and infrastructure.

##### **4.3.1 Transition Plan**

The smart card project will introduce a great amount of change into existing YRT fare systems/policies. There will be a significant impact on YRT staff and customers as change will be introduced into fare policy, fare media, fare distribution, collection, financial systems and data systems. Transit customers will be introduced to entirely new ways of obtaining and using fare media.

YRT is working on a transition plan which will identify the various steps to move from the existing to the final state. This will include the various fare payment options for customers during the transition period when TTC and Brampton buses will not have the smart card equipment installed on their buses. The plan would also rationalize the ticket agent network currently used by YRT for the distribution of fare media.

##### **4.3.2 Integration with Viva Stations**

As part of the system, a Fare Transaction Processor will be installed at existing Viva stations for off-board fare payment. YRT has been working with the vendor and project office on the detailed design and installation so that it integrates well with the existing look and feel of the Viva stations.

#### **4.3.3 Preliminary Design Review**

The GTA Fare System project office with assistance from all municipalities is in the process of reviewing the preliminary design documents submitted by the vendor. This stage provides sufficient details of all components of smart card system and the vendor's approach to meet the specifications included with request for proposal.

#### **4.4 Relationship to Vision 2026**

The development of a smart card system using smart card technology is supportive of the Vision 2026 goal to "have effective, efficient and environmentally sensitive transportation, waste management and water systems", and the action areas around that goal, including "developing an integrated transportation network" and "making transit accessible".

### **5. FINANCIAL IMPLICATIONS**

In June 2006, Regional Council authorized an expenditure of up to \$7.39 million as the capital cost for the implementation of the Greater Toronto Area fare system, exclusive of applicable taxes.

One of the criteria to qualify for provincial gas tax funds is to demonstrate participation in the smart card project. York Region was one of the first municipalities to join the smart card project. For 2007, provincial gas tax funds will be available for offsetting operating and capital costs on a 50:50 basis, although they are also available for other projects such as ridership growth-related initiatives.

The Region will be responsible for ongoing operating costs associated with the Municipal Service Provider System beginning in 2008. It is estimated that there will be a net saving in operating costs of approximately \$3.23 million over a ten-year period, or \$323,000 per year resulting from a reduction in maintenance costs for Viva ticket validators and printing costs for fare media.

### **6. LOCAL MUNICIPAL IMPACT**

The development of a smart card system using smart card technology will further enhance public transit as a transportation option. This, in turn, will support the modal split objectives of the Region and all local municipalities.

### **7. CONCLUSION**

It is likely that the smart card system in York Region will be fully operational by early 2009. York Region Transit staff are of the opinion that satisfactory progress has been achieved on the smart card project. YRT staff will continue to keep Transit Committee

apprised of the progress and timelines as the project matures and where Transit Committee and Regional Council direction may be required.

In the interim, it is recommended that this report be received for information.

For more information on this report, contact Rajeev Roy, Manager, Transit Management System (ext. 5682), in the Transit Branch of the Transportation and Works Department.

The Senior Management Group has reviewed this report.