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YORK REGION TRANSIT GREATER TORONTO AREA FARE SYSTEM (PRESTO) PROGRESS REPORT

The Transit Committee recommends that Council adopt the recommendation contained in the following report dated December 17, 2008, from the Commissioner of Transportation Services.

1. RECOMMENDATION

It is recommended that:

1. This report be received for information.

2. PURPOSE

This report updates Regional Council on the Greater Toronto Area (GTA) Fare System or “Presto” project. A previous update was provided at the April 2008 Transit Committee meeting.

3. BACKGROUND

The Presto Card will allow seamless fare payment across municipal boundaries

The proposed GTA fare system, known as “Presto”, will provide a common fare card allowing customers to ride on any participating GTA transit system without pre-purchasing tickets or passes. Customers will not have to worry about the fare policies for each transit system nor have the exact cash fare. The Presto 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 customer. Customers will, however, still be able to pay in cash if they choose. Presto will provide the following tangible benefits to transit customers:

- Transit customers across the GTA will be able to use a single card to travel on and within the participant transit agencies. In York Region, the Presto card will replace all existing non-cash fare media (tickets, passes) with a single card with the exception of YRT Mobility Plus service.
- The Presto card can be used for individual transit agency programs (such as monthly passes) but the true customer benefit will be achieved by having customers utilize the Presto ePurse. The ePurse will be an account which allows customers to use the same card funds in an integrated fashion across GTA transit systems. A YRT/Viva

customer boarding a bus to connect to a GO train would use the same card on both systems and the card would automatically track any discounted fare arrangements between the agencies.

- The Presto card is reusable. Instead of the current passes and tickets, which either expire or are presented at each trip, the Presto card will carry an account balance with various methods to reload value that are both automated and manual.

Fare payment and reconciliation will be managed by the central system and equipment installed on buses and at stations

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) fare media on behalf of the Region will be transferred to the system vendor who will then be responsible for managing agents.

The Presto Project is jointly funded by the Ministry of Transportation of Ontario (MTO) and the Region

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's needs, and 100% of the capital and ongoing operating expense of the common central system. Participation in the Presto Project remains a condition for GTA area municipalities to receive provincial gas tax revenues.

The Administrative Framework between MTO and Municipalities for Procurement was signed in 2003

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.

The successful vendor, Accenture Inc., will supply, install and operate the system

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.

4. ANALYSIS AND OPTIONS

4.1 OVERALL IMPLEMENTATION STATUS

Final Design Phases for Presto were completed by September 2008

The project office completed the final design of the system at the end of September 2008. The purpose of this phase was to validate the proposed design and/or propose adjustments where required. This phase also finalized the remaining details, from previous phases, required to design the central system software and finalize hardware design. Completion of these phases is a considerable achievement and required an extensive development and review process involving several representatives from YRT, the Presto project office, and other service providers, as well as Accenture.

The project is now in the operational review and testing phase

Prior to the initial implementation of Presto in Oakville and GO Transit Lakeshore West line in September 2009, the project office will conduct an operational review of current business processes and procedures. During this time, York Region will also review and further develop a business transformation plan designed to help assist in the transition to Presto when it is implemented in late 2010. This plan will be utilized by both York Region and the project team to identify and address transitional business requirements.

During this time, the project will also be conducting testing on the proposed system and devices. The central system and devices for Presto will be tested and assessed against accepted industry standards by representatives from Presto project team, York Region and other transit agencies. The Presto central system and devices will also be tested to verify the various functionalities which were documented during the design process and ensure the system is performing as expected. Changes to the design during the initial stages of implementation will also be reviewed and tested by the Presto project team and verified by the transit agencies.

4.2 YORK REGION TRANSIT IMPLEMENTATION

Presto implementation schedule in York Region has been revised and will now happen in late 2010

The original project implementation schedule was created during the development of the request for proposal. It was intended to provide all project participants with a proposed timeframe and sequence on how the project will be rolled out. The original project implementation schedule also served as the foundation for the development of project budgets. The project office has now revised the implementation schedule for the roll-out of Presto in York Region to 2010. The revised roll-out plan focuses on enhanced customer convenience, seamless transfers between transit systems, and achieving geographically contiguous implementation. This approach plugs some of the gaps which existed in the previous schedule, ensuring that GO rail services and local transit services are implemented in each Region at the same time.

Table 1 below provides a summary of the original and revised roll-out plan.

Table 1
Presto Implementation Schedule

Original Plan	Original Schedule	Revised Plan	Revised Schedule
GO Lakeshore West Corridor trains, Burlington and Oakville together, TTC faregate, and central system	Late 2008 to Early 2009	Oakville (10 buses), 3 GO Lakeshore West Stations	Sep.-Dec. 2009
York Region	Mid to late 2009	Oakville, Burlington, GO Lakeshore West Corridor	Mid to late 2010
Others	To follow York Region	Brampton, Mississauga, GO Georgetown/Milton Corridor	Mid to Late 2010
		York Region , Hamilton, GO Barrie/Richmond Hill/Stouffville Corridor	Late 2010
		Durham, GO Lakeshore East Corridor	2011

The revised plan delays the implementation of Presto in York Region by approximately a year from late 2009 to late 2010; however, the delay does have some benefits, which are summarized below:

York Region fare collection system is very complex due to the following:

- The integration of the Viva proof-of-payment and YRT on-board payment fare policies.
- Presence of an off-board fare payment system on Viva and a fare enforcement program.
- Presence of fare zones.
- Presence of time-based transfers (i.e. transfers that are good for two hours).
- Transfers between YRT, Viva, GO Transit, Brampton Transit and Toronto Transit Commission (TTC) services (approximately 25% of YRT service), all within the boundaries of York Region.

The revised roll-out plan provides the following benefits:

- It will enable seamless transfers between YRT, Viva, GO Transit and Brampton Transit buses operating in York Region. Transfers with TTC buses operating in York will not become seamless until such time as the TTC decides to install the equipment on their buses. Currently, to accommodate transfers with TTC buses, the system design includes a transfer printer to be added to the Presto equipment on YRT buses and at Viva stations.
- The system will be fully tested and commissioned in other municipalities before being implemented in York Region. Hence, customers will experience a fully tested and proven product, which should result in a smoother implementation with less reaction required by YRT staff. In turn, this will ensure fewer start-up issues for our customers.
- It takes a customer-focused approach by building upon incremental successes. It manages roll-out risks by starting small in initial stages in advance of the more substantive roll-out in later stages. It focuses on core customer and financial functions first.
- The central system, clearing house, etc. will be fully tested and commissioned and in place before the roll-out in York Region. This will ensure compliance with proper revenue and accounting practices.

For all these reasons, York Region staff are supportive of the revised implementation plan.

The revised implementation plan includes three main stages

In each stage, a roll-out of Presto will occur in a specific area within the GTA (see *Attachment 1*). Stage 1 is scheduled for September 2009, and is intended as a limited deployment or 'soft launch' of the Presto system. Stage 1 will involve 10 Oakville Transit buses, three GO Transit stations (Bronte, Oakville and Union), and one TTC

station (Union). The buses equipped with Presto devices will be assigned to service fixed routes that provide connections to Oakville and Bronte GO Stations. Approximately 500 customers will be using the initial system between Oakville Transit and GO Transit. Limited functionality will include the adult fare ePurse and transit agency fare integration. This stage is expected to last three to four months.

Stage 2 is planned for launch in February 2010. Stage 2 marks the official launch of the system and will include Oakville Transit, Burlington Transit, GO Transit and TTC. During this stage, the Presto system will be implemented to service all of Oakville's conventional bus fleet. Burlington will be doing the same. GO Transit will be expanding service to the balance of the Lakeshore West corridor trains. Functionality will remain limited to adult fare ePurse and transit agency fare integration. Key to Stage 2 is that customers will be able to utilize the Presto card on all Oakville transit routes, with integration to Burlington Transit and GO Transit utilizing the same Presto ePurse.

By mid to late 2010, the Presto system rollout will continue to the other municipal transit agencies and GO Transit corridors. It is during Stage 3 that York Region customers will begin to take advantage of the Presto system. Stage 3 will also include increased

functionality of the Presto card to include ePurse concession fares (students, seniors) and local period passes, both of which are critical to the implementation of Presto within York Region.

4.3 OTHER MATTERS

The TTC has limited involvement in Presto which poses operational challenges for York Region

The TTC's involvement is very important for the implementation of Presto within York Region as there are 14 TTC contracted routes operating directly between York Region and the City of Toronto. As a result of this, York Region representatives have been working with the TTC to coordinate activities, document concerns, clarify requirements and address the design issues to help facilitate a smooth implementation of Presto. A transition period is required during the time that York Region implements Presto and TTC becomes a full participant. The TTC has had a limited role in the Presto project to date. Because of the size and complexity of the TTC's operations, becoming fully engaged with Presto project has taken longer than anticipated. Currently, the project is proceeding with the assumption that TTC will become part of the Presto system and is scheduled for Stage 5, following implementation in the rest of the system. For the time being, TTC participates in all aspects of the project and has committed connection points to ensure an integrated customer experience with the other transit agencies.

Security issues with smart cards have been taken into account in the design of Presto

During the last year, there have been several reported security issues identified with transit smart card solutions, including the Dutch OV-Chipcard, London's Oyster card, Boston T system, and Atlanta's Charlie Card. It is not possible to fully report on the security concerns, however, the experience from other systems has been taken into account in design and a risk strategy put in place to mitigate any breaches happening on the Presto system. This strategy includes newer card technology and advanced security policies and controls.

4.4 RELATIONSHIP TO VISION 2026

The development of a smart card system using smart card technology supports 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 GTA fare system on YRT/Viva, 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 project.

The Region will be responsible for ongoing operating costs associated with the Municipal Service Provider System beginning in 2010. 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 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 Presto smart card system will be fully operational in York Region by late 2010. YRT staff will continue to keep Regional Council apprised of the progress and timelines as the project progresses and seek direction as required.

For more information on this report, please contact Rajeev Roy, Manager, Transit Management Systems, at Ext. 5682.

The Senior Management Group has reviewed this report.

(The attachment referred to in this clause is attached to this report.)