

6

YORK REGION TRANSIT GREATER TORONTO AREA FARE SYSTEM PROGRESS REPORT

The Transit Committee recommends the adoption of the recommendations contained in the following report, December 16, 2003, from the Commissioner of Transportation and Works, subject to including Recommendation 3 as follows:

“3. Staff be requested to continue to participate in the Greater Toronto Area (GTA) fare system project and report back at the appropriate time with an update on the process.”

1. RECOMMENDATIONS

It is recommended that:

1. The following report be received for information by Transit Committee and Council.
2. York Region Transit staff report back with respect to preferred fare collection technology for buses in view of the GTA smart card initiative and the YRTP program.

2. PURPOSE

The purpose of this report is to update Transit Committee and Regional Council on the Greater Toronto Area (GTA) fare system project since the presentation by GO Transit at the June 18, 2003 Transit Committee meeting.

3. BACKGROUND

Successful implementation of a GTA fare system will mean that a transit passenger will be able to travel between transit systems using a single medium known as a smart card. This will negate the need to carry exact cash fare or individual transit system fare media (e.g. tickets and passes).

There are two major components to an integrated smart card system. York Region Transit, as well as all other participating transit agencies, will require an office computer system, and all buses will need to be equipped with card readers. A central system clearing house, will also be required to reconcile smart card transactions, and allocate revenues to participating transit agencies.

GO Transit defined a need for a new fare collection system, which coincided with needs of surrounding GTA transit agencies to upgrade their systems. Given the desirability of integrating transit services, a collaborative effort between operating authorities made sense. The Ministry of Transportation of Ontario recognized this and committed up to

\$40 million to cover a portion of the two major components needed for successful fare integration. The Province will cover 33% of local capital costs attributed to each transit authority smart card system needs, and 100% of the capital and ongoing operating expense of the common central system.

4. ANALYSIS AND OPTIONS

Within the policy and fiscal framework of the sponsoring organizations, a GTA Fare System Steering Committee was created to act as the primary forum for system design decisions and recommendations. There are three levels of memberships on the Steering Committee represented by area transit agencies. Participating 'Core Members' are York Region Transit, Ajax Pickering Transit Authority, Burlington Transit, GO Transit, Hamilton Street Railway Company, Ministry of Transportation, Mississauga Transit, and Oakville Transit. 'Non-core' Members are Oshawa Transit and Whitby Transit. The Toronto Transit Commission is an observing body, although the program does contemplate card reading equipment being installed at TTC subway stations where there is an interface with either GTA transit systems.

Given the time-consuming nature of the Steering Committee member participation and the York Region Transit (YRT) initiatives underway, YRT has retained the services of iTRANS Consulting Inc. of Richmond Hill for representation. Throughout the process, there will be a need to involve other Regional staff. In this regard, staff members from the Region's Finance, Legal, and Supplies and Services departments will be participating on an as-needed basis.

4.1 Project Phases

There are six phases that are required to implement full GTA fare integration by mid 2009.

4.1.1 Phase 1 – Planning Process

This process has been completed and is comprised of project planning, financial analysis and the development of business models. The business model revealed that there is a strong business case at York Region Transit (YRT) for an integrated fare collection system utilizing the smart card technology. Savings will be realized through improvements such as the elimination of costs associated with fare collection, the production and distribution of various forms of fare media (i.e. tickets, transfers, and passes), security, lower farebox maintenance-related costs, etc. Since operating conditions will change over time, the business model will be updated on an as needed basis to reflect the most current information available.

4.1.2 Phase 2 - Design (Current)

The design phase ends with the signed-off Vendor RFP comprising vendor specifications, contract conditions and procurement rules and processes. This phase is currently underway and by November 2004, approvals by decision-making bodies will be required. GO Transit staff will be working with the GTA Steering Committee and the Consultant

Management Team to develop user specifications for the smart card technology over the next year. In this regard, Mississauga Transit and Hamilton Street Railway have each dedicated a full time employee to develop specifications that will incorporate the needs of the municipal systems as much as possible. It is unlikely that participating agencies will have everything they want in the final design, however, it is recognized that trade-offs may be required as the design team work progresses.

Each agency will have more accurate information with respect to its share of the integrated fare system costs and will weigh it against the most current business case and how well the smart card system will meet the agency's customer needs.

4.1.3 Phase 3 - Procurement

This phase ends with a signed Vendor contract by October 2005. The GTA Fare System is comprised of three main components: the GO Transit Service Provider System, the Municipal Service Provider Systems and the Central System. All the components must work together as a single system using a single common farecard for use throughout the GTA. The procurement approach is structured to support the stated requirements. It should be noted that the procurement would be single procurement for all participants. The process will be the responsibility of GO Transit in consultation with the appropriate staff from the participating agencies.

4.1.4 Phase 4 - Development

This phase ends with a system that is developed, tested and accepted for initial revenue service demonstrations by April 2007. The installation of the smart card system will be phased in a way that will make the transition to smart cards as smooth as possible. The learning curve will be instrumental in ensuring the eventual full roll-out is relatively problem free.

4.1.5 Phase 5 – Initial Service Demonstrations

By July 2008, the system will have been fully demonstrated on GO Transit and early adopter municipal systems, namely, York Region Transit, Hamilton Street Railway and Ajax-Pickering Transit Authority, including a TTC subway interface. This phase will end when final modifications are confirmed.

4.1.6 Phase 6 – Full Rollout

It is expected that a full rollout will take approximately one year, ending in July 2009. The full rollout will include all municipal systems, the entire GO rail and bus network, the interfaces with TTC at subway terminals, and the central system.

4.2 Administrative Framework

York Region Transit has signed an Administrative Framework Accord between the Ontario Ministry of Transportation and GTA transit agencies. The accord constitutes the administrative framework needed to coordinate the design-related activities between the signatories. The accord is not a legally binding document, rather it was designed to enable the Steering Committee to make timely decisions and recommendations to successfully complete procurement documents and address transit authority concerns during the design process.

4.3 Current Status

The Steering Committee will be involved from preliminary design to the development of final specifications in Phase 2. To assist the Steering Committee, a secure password-protected GO Transit website has been developed to enable member access to confidential documents. A public website (www.gtfaresystem.ca) is in place to facilitate the dissemination of information to the general public and the vendor community. The Steering Committee efforts throughout July and August have resulted in several milestones.

GO Transit is in the process of hiring a GTA Fare System Project Manager to work with various GO Transit staff and with the Steering Committee in managing the joint design of the GTA smart card system.

In addition, a technical sub-committee comprised of one full-time staff member of Mississauga Transit and Hamilton Street Railway has been established. YRT input will be provided by iTRANS Consulting in consultation with Regional staff.

Finally, the Steering Committee has initiated the pre-qualification process to hire a Consultant Technical Management Team for GTA System Procurement. The Steering Committee sub-committee will be involved in assessing the pre-qualification submissions and the subsequent design phases once the Consultant has been selected.

At this point and until the end of Phase 2, there will be no cost to York Region Transit for the Consultant Technical Management Team.

4.4 Other Issues

YRT staff will continue to be actively involved with and support the efforts of the Steering Committee and at the same time keep Transit Committee apprised of issues where decision-making is required. There are several ongoing issues that will need to be addressed.

Given the Quick Start rapid transit project currently underway, a decision will have to be made regarding the fare collection technology for the bus rapid transit stations. An off-board, pre-payment system is being proposed to enable faster passenger boarding. Unfortunately, full rollout of the GTA fare system is not scheduled until 2009, while the rapid transit project is scheduled to begin operation in 2005. What is purchased today for a stand-alone rapid transit system stands the risk of not being salvageable for the future GTA fare system. In this regard, iTRANS Consulting will be working with YRT and York Consortium staff to develop low-cost, low-risk solutions, and will report back to Transit Committee in this regard.

Another issue that needs to be addressed is the replacement of the existing fare collection equipment. YRT currently uses DOS-based electronic farebox equipment out of two garages. The third garage has only mechanical (i.e. gravity) fareboxes. Window-based

equipment was obtained with the transfer of GO Transit's Yonge C and Bayview services to YRT. While DOS-based fare collection equipment is intended to be replaced with the windows version, two other courses of action are being investigated, namely the upgrading of the remaining mechanical fareboxes, or alternatively, the replacement of all electronic fareboxes with mechanical ones. The latter would be done in anticipation of the implementation of the smart card system, thus eliminating the need for tickets and passes.

The least cost scenario is the system-wide purchase of mechanical fareboxes when the smart card system is introduced; however, the mechanical farebox solution will be dependent upon the success of the smart card system and a detailed business case analysis. During the interim, it may be prudent to maintain the existing equipment or upgrade the equipment, as required. This issue is currently being investigated and results will be reported to Transit Committee.

A business case analysis was prepared by Mississauga Transit and is being used as a basis for a more detailed analysis of the YRT system. A technical review of the business case for YRT is currently underway. Once completed, a more accurate financial assessment can be brought to the Transit Committee to aid in the decision-making process.

While the reluctance of the TTC to fully participate in the project is of concern, it does not jeopardize the viability of the project. It is hoped that they will eventually come on board as funding and other discussions progress with the Provincial Government.

4.5 Relationship to Vision 2026

The development of a GTA fare 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

For the balance of 2003 and for 2004, the financial implications associated with York Region's continued participation in this project are minimal funding is contained in the draft 2004 Business Plan and Budget for consulting services during this time period.

The longer term financial implications are in the process of being determined through a business case analysis, which staff will be reporting back on.

6. LOCAL MUNICIPAL IMPACT

The development of GTA fare 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

York Region Transit is committed to providing a convenient fare payment system that enables York Region residents and residents throughout the GTA to transfer seamlessly between transit systems. The long term time frame for full GTA implementation in 2009 is in line with other international smart card installations that involve several transit systems and a central clearing house. During the interim, YRT has a number of local issues to overcome that will be addressed in a timely fashion to ensure that needs are met and costs are minimized.

YRT supports the GO Transit led initiative supported by the Ministry of Transportation of Ontario and will continue to be an active participant of the GTA Fare System Steering Committee. York Region Transit will continue to keep the Transit Committee apprised of the progress and time lines as the project matures and where Transit Committee direction will be required.

It is recommended that YRT staff be authorized to continue participation in the GTA fare system project.

The Senior Management Group has reviewed this report.