Minutes – Standing Policy Committee on Finance – February 25, 2013

REPORTS

Minute No. 18  Automatic Fare Collection System – Financial Status Report No. 1 for the Period Ending September 30, 2012

STANDING COMMITTEE DECISION:

The Standing Policy Committee on Finance Committee concurred in the recommendation of the Winnipeg Public Service and received as information the financial status of the Automatic Fare Collection System Replacement Project.
DECISION MAKING HISTORY:

Moved by Acting Deputy Mayor Browaty,
That the recommendation of the Winnipeg Public Service be concurred in.

Carried
ADMINISTRATIVE REPORT

Title: AUTOMATIC FARE COLLECTION SYSTEM – FINANCIAL STATUS REPORT NO. 1 FOR THE PERIOD ENDING SEPTEMBER 30, 2012

Critical Path: STANDING POLICY COMMITTEE ON FINANCE

AUTHORIZATION

<table>
<thead>
<tr>
<th>Author</th>
<th>Department Head</th>
<th>CFO</th>
<th>CAO</th>
</tr>
</thead>
<tbody>
<tr>
<td>T. Dreolini</td>
<td>D. Wardrop</td>
<td>Acting CFO, P. Olafson</td>
<td>Acting COO, M. Jack</td>
</tr>
</tbody>
</table>

RECOMMENDATIONS

That the financial status of the Automatic Fare Collection System Replacement Project as contained in the report be received as information.

REASON FOR THE REPORT

Administrative Standard No. FM-004 requires quarterly reporting to the Standing Policy Committee on Finance.

IMPLICATIONS OF THE RECOMMENDATIONS

The project is currently within budget and on schedule.

HISTORY

On February 22, 2006, Council approved the report submitted by the Transit Department entitled Implementation Plan for Rapid Transit Task Force Recommendations. The implementation plan included a recommendation that the existing fareboxes be replaced with an automated fare collection system. The existing fareboxes date back to the early 20th Century and have been out of production for decades. The implementation of a new fare collection system will modernize and simplify the fare collection process, provide more convenience and options for passengers, and improve the security of fare collection.

The Automatic Fare Collection System has a total budget of $17.74 million; $15.24 million was approved in the 2011 and earlier Capital Budgets and Council approved the transfer of an additional $2.5 million from surpluses in the 2011 Transit Buses Capital Project and the Transit System Funds retained earnings at its meeting of July 20, 2011.
MAJOR PROJECT STEERING COMMITTEE

Administrative policy for projects with capital costs exceeding $10 million requires formation of a Major Project Steering Committee. Establishment of this Committee is in process.

PROJECT STATUS

The project is currently within budget and on schedule.

DESCRIPTION OF PROJECT

Fare collection is a core element of Transit's business and has an impact on the operations of every division within the department. This is an extremely complex technology project involving the installation of electronic validating fareboxes on Transit’s fleet and the implementation of a smart card based automatic fare payment system that is supported by the necessary financial and information technology hardware and software systems.

The electronic validating farebox will be configured to accept coins only and will collect, secure, reliably count and report all fare payments. It will also be configured to print and validate transfers. The electronic fare card reader will be used to read and update contactless electronic smart cards.

All pre-purchased fare products, including passes and advance trip purchases, will be offered on electronic smart cards. These cards would contain a record of the payment, including the time of payment, and would constitute the “transfer” to permit the passenger to board another bus for free during the valid time period.

Retail outlets located throughout the city, telephone and on-line systems will be used by passengers to conveniently reload transit products or value on to reloadable electronic smart cards.

The new fare collection system will be designed to allow the addition of a variety of future enhancements. This will include the capability to easily adjust or increase the number of fare classes to suit future fare policy or marketing initiatives.

The primary contract for the supply of the automatic fare collection system was awarded to Garival Inc. of Laval, Quebec in the estimated amount of $12,934,470.00 before all taxes in January 2012.

PROJECT SCHEDULE

The Automatic Fare Collection System Project will be delivered in two phases. Phase 1 will include the installation of the new fareboxes on the entire fleet bus beginning in February 2013; this is expected to continue to April 2013. In Phase 1, the fareboxes will be equipped with a coin counter/validator, transfer printer, transfer reader and a ticket chute. Paper tickets and monthly and weekly flash passes will continue to be used during Phase 1.

Smart Card functionality will be implemented in Phase 2 of the project in late 2013. At this time, the ticket chute will be removed from the fareboxes and all fare products, other than cash, will be on electronic smart cards.

The delivery of the project is being accomplished through seven separate contracts, which were awarded as shown in the table below.
**RISK AND MITIGATION STRATEGIES**

There have been very few large scale electronic smart card implementations in North America and elements of Transit’s project are still under development. This new technology must undergo extensive testing and verification before it can be introduced to the public. The greatest risk to the project at this point is that the development of the smart card technology is delayed, extending the project schedule beyond December 2013.

The risk of a delay in the development of the smart card technology has been mitigated with the two phase implementation. With a phased implementation, the benefits of the coin counting and automated transfer verification technology and the corresponding reduction in fare evasion will occur as early as possible.

A two phase implementation also allows an orderly transition from the old fare collection system to the new system for the public. During the period of the transition, the bus fleet will be equipped with both new and old fareboxes. The new fareboxes will not be able to accommodate tickets, bills and pennies; however, smart cards cannot be used with the old fareboxes. Operating both payment systems concurrently for the period of the fleet retrofit would be extremely difficult to manage and secure and would be very confusing to the public.
# FINANCIAL ANALYSIS

<table>
<thead>
<tr>
<th>Project Component</th>
<th>Budget</th>
<th>Value/Cost Estimate</th>
<th>Variance Budget to Contract Value/Cost Estimate</th>
<th>Change in Variance from Last Report</th>
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<td>Professional Services</td>
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<td>$1,200,000</td>
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<tr>
<td>External Contracts</td>
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<td>14,680,000</td>
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<tr>
<td>Other Equipment</td>
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<td>Overhead and Others.</td>
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<tr>
<td></td>
<td>$17,740,000</td>
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</table>

## Summary

Contracts Issued to Date $14,032,169

Other Project Costs

(Provincial Retail Sales Tax, Overheads, Salaries, Communication and Other Contingencies): $3,707,831

**Total Approved Budget:** $17,740,000

To this point, one change order with Garival has been implemented related to the delivery of the project in two phases. An additional cost of $211,000 will be incurred due to the addition of a ticket chute to the farebox, additional testing and documentation.

Budget revisions will be accommodated in the External Contracts portion of the project.

Professional Services include technical engineering consultation on the design and testing of the fare collection system, external auditing of systems and procedures necessary to secure revenue and marketing to effectively communicate the changes to the public.

Other equipment includes infrastructure changes and equipment in Transit garage buildings and treasury to allow secure revenue servicing and coin handling. It also includes the hardware required for the new farebox to exchange route and bus stop information with the bus radio system and use the wifi system within Transit buildings to communicate with data servers to upload revenue collection information from the bus and download fare structure and smart card update information to the farebox on a daily basis.

The project cash flow is included in Appendix 1.
<table>
<thead>
<tr>
<th>Financial Impact Statement</th>
<th>Date:</th>
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<tr>
<td>Project Name:</td>
<td>First Year of Program</td>
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<td>Automatic Fare Collection System</td>
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**Comments:**
There is no financial impact as this report is for information only.

original signed by: Tanis Yanchishyn, CA
Manager of Finance and Administration
CONSULTATION

In preparing this report there was consultation with:

None

SUBMITTED BY

Department: Transit
Division: Plant and Equipment
Prepared by: Tony Dreolini, Manager of Plant & Equipment
Date: December 19, 2012
File No. 925-2010
## Appendix I

**AUTOMATIC FARE COLLECTION SYSTEM**  
**TRANSIT DEPARTMENT**  
**As of September 30, 2012**

<table>
<thead>
<tr>
<th>Project Component</th>
<th>Capital Budget Actual Costs</th>
<th>Capital Expenditure Forecast</th>
<th>Surplus (Deficit)</th>
<th>Variance Last Report</th>
<th>Change in Variance</th>
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<td>Original 2012</td>
<td>To Sep 30 2012</td>
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<td>2013</td>
<td>2014</td>
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<td>C  OTHER EQUIPMENT</td>
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**Explanatory Notes**  
Professional Services includes amounts for a communication/advertising campaign.