

Minutes – Standing Policy Committee on Finance – September 13, 2013

REPORTS

**Minute No. 61 Automatic Fare Collection System – Financial Status Report No. 3 for
the period ending March 31, 2013**

STANDING COMMITTEE DECISION:

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

Minutes – Standing Policy Committee on Finance – September 13, 2013

DECISION MAKING HISTORY:

Moved by Councillor Havixbeck,

That the recommendation of the Winnipeg Public Service be concurred in.

Carried

ADMINISTRATIVE REPORT

Title: AUTOMATIC FARE COLLECTION SYSTEM – FINANCIAL STATUS REPORT NO. 3 FOR THE PERIOD ENDING MARCH 31, 2013

Critical Path: STANDING POLICY COMMITTEE ON FINANCE

AUTHORIZATION

Author	Department Head	CFO	CAO
T. Dreolini	D. Wardrop	M. Ruta	D. Joshi

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. The Committee has been formed and its members are:

Paul Olafson, Corporate Controller, Corporate Finance Department
Clive Wightman, Director of Community Services
Dave Wardrop, Director of Transit

The Committee has reviewed this report and recommends that the report be sent to the Standing Policy Committee on Finance.

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 bus fleet beginning in the spring of 2013; the installation is expected to take from three to four weeks. 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.

Bid Opportunity Number	Description	Date of Contract Award	Estimated Completion Date	Award Amount
550-2008	Consultant Services for the Update of Transit Fare Collection Systems and Technology	October 27, 2008	December 2011	\$86,973.00
345-2011	Integration of On-Board Security Camera and Fare Collection Systems with Existing Advanced Transit Communication and Vehicle Location System	May 13, 2011	November 2012	\$919,175.00*
777-2011	Development and Implementation of a Multimedia Public Information Campaign.	November 23, 2011	October 2013	\$159,400.00*
878-2011	Implementation Project Manager	November 23, 2011	July 2014	\$285,526.00
925-2010	Automatic Fare Collection System	January 1, 2012	July 2014	\$12,934,470.00
877-2011	Professional Accounting/Audit Advisory Services	February 10, 2012	May 2013	\$22,750.00
Sole source	Consulting Services	May 7, 2012	May 2013	\$85,000.00

*A portion of these awards being charged to separate projects as the contract work spanned multiple projects

(\$461,125.00)

Total Issued Contract Value

\$14,032,169.00

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 allows an orderly transition from the old fare collection system to the new system for the public. During the period of the transition, passengers will encounter buses equipped with

both the new and old fareboxes. If a one phase implementation was attempted, tickets bills and pennies would not be accepted by the new fareboxes and the old fareboxes would not accept the smart cards. Tickets would have to be discontinued before the smart cards could be implemented and this would be confusing and difficult to manage for over 25% of Transit's customers.

FINANCIAL ANALYSIS

Project Component	Budget	Value/Cost Estimate	Variance Budget to Contract Value/Cost Estimate	Change in Variance from Last Report
Professional Services	\$1,200,000	\$1,200,000		
External Contracts	14,680,000	14,680,000		
Other Equipment	860,000	860,000		
Overhead and Others.	1,000,000	1,000,000		
	\$17,740,000	\$17,740,000		

Summary

Contracts Issued to Date	\$ 14,032,169
Other Project Costs (Provincial Retail Sales Tax, Overheads, Salaries, Communication and Other Contingencies):	<u>\$ 3,707,831</u>
Total Approved Budget:	\$ 17,740,000

To the end of the reporting period, four change orders with Garival have been implemented at a total cost, before taxes, of \$638,100. Change order C01 is 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.

Change order C03 has been implemented to add two stationary cash vaults and four additional mobile bins at a cost of \$121,000. This change was made to allow a process improvement that will increase the efficiency of revenue collection.

Change order C04 is for an additional twenty fareboxes to be installed in the used articulated buses approved for purchase by Council on March 21, 2012. An additional cost of \$280,300 will be incurred but these costs will be funded by the 2012 Transit Bus project as approved by Council.

Change order C05 is for four additional mobile cash bins at a cost of \$25,800. These additional cash bins will improve the efficiency and security of cash transfers between locations where the coin is counted and processed.

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.

FINANCIAL IMPACT

Financial Impact Statement

Date: August 19, 2013

Project Name:
Automatic Fare Collection System

First Year of Program 2012

Comments:

There is no financial impact as this report is for information only.

original signed by: Patty Jamieson-Bell, CMA
Acting 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:	August 19, 2013
File No.	925-2010

Appendix I

**AUTOMATIC FARE COLLECTION SYSTEM
TRANSIT DEPARTMENT
As of March 31, 2013**

Project Component	Capital Budget			Capital Expenditure Forecast				Surplus (Deficit)	Variance Last Report	Change in Variance
	Council Approved Changes July 20,2011			Actual Costs		Total				
	Original	²	Revised	To Mar 31 2013	2013	2014	Forecast			
A PROFESSIONAL SERVICES 1	\$ 1,200,000	\$ -	\$ 1,200,000	\$ 535,988	\$ 614,012	\$ 50,000	\$ 1,200,000	-	-	-
B EXTERNAL CONTRACTS	12,180,000	2,500,000	14,680,000	905,413	12,306,587	1,468,000	\$ 14,680,000	-	-	-
C OTHER EQUIPMENT	860,000	-	860,000	582,878	277,122		\$ 860,000	-	-	-
D OVERHEADS AND OTHER	1,000,000	-	1,000,000	203,108	796,892		\$ 1,000,000	-	-	-
	\$ 15,240,000	\$ 2,500,000	\$ 17,740,000	\$ 2,227,387	\$ 13,994,613	\$ 1,518,000	\$ 17,740,000	-	\$ -	\$ -

Explanatory Notes

1-Professional Services includes amounts for a communication/advertising campaign.

2-Prevailing market conditions increased expected costs