

**Minutes – Standing Policy Committee on Finance – March 13, 2014**

**REPORTS**

**Minute No. 31          Automatic Fare Collection System – Financial Status Report No. 6  
for the period ending December 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 report of the Automatic Fare Collection System Replacement Project as information.

**Minutes – Standing Policy Committee on Finance – March 13, 2014**

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. 6 FOR THE PERIOD ENDING DECEMBER 31, 2013**

**Critical Path: STANDING POLICY COMMITTEE ON FINANCE**

## AUTHORIZATION

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

## 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.

## 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 fareboxes have been configured to accept coins only and collect, secure, reliably count and report all fare payments. They have also been 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 is being delivered in two phases. Phase 1 was completed on June 14, 2013 and consisted of the installation of the new fareboxes on the entire bus fleet. The fareboxes are 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 and early in Phase 2.

Smart cards are being implemented as part of Phase 2 of the project. The smart card system has been in development during 2013 and system testing began in November. Comprehensive pilot testing will follow. The pilot test will verify the operation of the various hardware and software elements of the system required to purchase smart cards and fare products from retailers, customer service terminals and on-line, manage the card inventory, use the smart cards on buses and use the reporting capabilities of the system. The pilot test will be conducted using Transit employees. On the successful completion of the pilot test, the smart cards will be rolled out to the public in stages by passenger class to minimize any potential problems with the distribution to hundreds of thousands of Transit customers.

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

<b>Bid Opportunity Number</b>	<b>Description</b>	<b>Date of Contract Award</b>	<b>Estimated Completion Date</b>	<b>Award Amount</b>
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 this project have been developed to meet Transit's specific requirements. 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.

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 has already occurred.

The risk of technical or card distribution problems following the smart card implementation have been mitigated by using a phased roll out strategy. Smart cards will be introduced by passenger classes beginning with Handi-Transit registrants, seniors, youth, full fare, eco pass and post-secondary customers. During the roll out, paper passes and tickets will not be phased out until the volume of smart cards sold is sufficient to avoid a surge in demand and excessive line ups at card distribution points. Cards will also be available to the public at 87 locations throughout the city to minimize line ups. Following the initial roll out, these same locations will be available to load fare products onto cards in addition to online and 311.

## **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>
<b>Total Approved Budget:</b>	<b>\$ 17,740,000</b>

To the end of the previous reporting period, seven change orders with Garival were implemented at a total cost, before taxes, of \$898,600.00 as described in Financial Status Report Number 5.

Between September 30 and December 31, 2013, Change orders CO19 and CO 22 for the supply of a spare Vault Receiver and a spare Data Probe were purchased at a cost of \$25,191.18. These spare parts are required to allow preventative maintenance and defect repairs to be performed on stationary vaults with minimal down time. These items have been charged to equipment maintenance accounts in the Operating Budget and will have no effect on the project's budget.

Although not yet finalized, CO17 for a reduction in one time loadable smart cards, which was possible due to the introduction of a Transit token, will reduce the impact of the above change orders significantly.

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:** February 11, 2014

**Project Name:**

**First Year of Program**

**2012**

Automatic Fare Collection System

**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:	February 11, 2014
File No.	925-2010

Appendix I

**AUTOMATIC FARE COLLECTION SYSTEM  
TRANSIT DEPARTMENT  
As of December 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	Note 2	Revised	To Dec 30 2013	2013	2014	Forecast	From Revised Budget		
A PROFESSIONAL SERVICES <small>Note 1</small>	\$ 1,200,000	\$ -	\$ 1,200,000	\$ 815,095	\$ -	\$ 384,905	\$ 1,200,000	-	-	-
B EXTERNAL CONTRACTS	12,180,000	2,500,000	14,680,000	8,846,538	-	5,833,462	\$ 14,680,000	-	-	-
C OTHER EQUIPMENT	860,000	-	860,000	96,936	-	763,064	\$ 860,000	-	-	-
D OVERHEADS AND OTHER	1,000,000	-	1,000,000	515,998	-	484,002	\$ 1,000,000	-	-	-
	<b>\$ 15,240,000</b>	<b>\$ 2,500,000</b>	<b>\$ 17,740,000</b>	<b>\$ 10,274,567</b>	<b>\$ -</b>	<b>\$ 7,465,433</b>	<b>\$ 17,740,000</b>	<b>-</b>	<b>\$ -</b>	<b>\$ -</b>

**Explanatory Notes**

- 1-Professional Services includes amounts for a communication/advertising campaign.
- 2-Prevailing market conditions increased expected costs.