

TTC AUDIT COMMITTEE REPORT NO.

MEETING DATE: July 29, 2014

SUBJECT: TTC AUDIT REPORT – PRESTO CARD USER ENTITY
CONTROLS, STRATEGY AND CUSTOMER EXPERIENCE
GROUP FARECARD TEAM

INFORMATION ITEM:

RECOMMENDATION

It is recommended that the TTC Audit Committee receive for information the attached TTC Audit Report.

01-27



TORONTO TRANSIT COMMISSION

AUDIT OF PRESTO CARD USER ENTITY CONTROLS STRATEGY AND CUSTOMER EXPERIENCE GROUP FARECARD TEAM

Covering Period:
January 1, 2013 to December 31, 2013

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EXECUTIVE SUMMARY

The objective of the audit was to review TTC's involvement with the PRESTO System and establish which controls TTC is responsible for putting into place as a Service Provider. This review assessed the applicability, existence and effectiveness of the controls that are expected to be in place for the PRESTO operations.

The 2012 PricewaterhouseCoopers (PwC) audit report, conducted on the Metrolinx PRESTO System, reported that it is the responsibility of each Service Provider organization management to ensure that appropriate controls are in place at the Service Provider organization level to complement the control procedures implemented by the PRESTO Division and Accenture for the processing and settlement of farecard fare payment revenue, and related transactions through the PRESTO system.

The PwC auditors are responsible for looking at the design controls and to test that controls are operating as designed for the PRESTO System. The 2012 PwC audit of the Metrolinx PRESTO System did not include an audit of the settlement of farecard fare payment revenue at the Service Provider level.

The PRESTO devices currently installed at a limited number of select TTC subway stations are owned, operated and maintained by PRESTO. Therefore, of the nine "Complementary User Entity Controls" identified by PwC (see Appendix B), only two controls were identified as applicable to the TTC, which are:

- Establish and maintain controls to ensure that there is adequate review and verification of reports and statements received from the PRESTO System, and timely communication of any discrepancies that may arise in those reports and statements.
- Establish and maintain controls to administer Service Provider user access to the PRESTO system and Service Provider Website, and to ensure the appropriateness of these access rights.

Conclusion

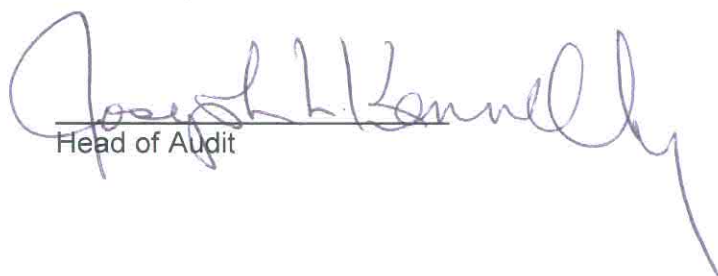
Currently, the TTC does not have direct access to all data from the "initial tap" of a PRESTO card at a TTC turnstile through to the settlement of each subsequent fare payment transaction to the TTC's bank. TTC is able to ensure that, at least, all TTC taps deemed "valid" by Presto are eventually settled to TTC's bank account. However, the TTC does not have direct access to device level reports, and any tap exceptions between the device level reports and the central system cannot be identified by TTC. As a result the TTC cannot validate that ridership reporting and revenue settlements and adjustments relating to the PRESTO System are complete and settled on a timely basis.

PRESTO needs to provide TTC with more complete and timely access to all transactional data produced by the PRESTO System to ensure that ridership and revenue reconciliation and related adjustments are properly recorded.

The current PRESTO devices were installed as an interim solution and will be replaced as part of the system-wide implementation of PRESTO at the TTC. The full implementation of PRESTO will be based on an extensive upgrade of the PRESTO System (PRESTO Next Generation), the addition of new devices to accommodate all modes of TTC revenue vehicles and the implementation of Managed Services to support the operation of the PRESTO system. The full roll-out of PRESTO is not expected to be completed until 2016-2017 and will be subject to fulfillment of the TTC business requirements and the terms and conditions of the TTC-Metrolinx Master Agreement executed on November 28, 2012.

However, Wave 1 of the full PRESTO roll-out is expected to begin this fall with the introduction of PRESTO devices on the new streetcars operating on 510 Spadina. As part of the Wave 1 implementation, it is recommended that the Fare Card Team work with PRESTO to ensure TTC is provided with complete transactional data, improved ridership and revenue reconciliation and settlement reports.

In addition, controls relating to user access to the PRESTO System should be established and formalized internally and with the PRESTO system administrators.


Head of Audit


Audit Manager/Auditor

BACKGROUND

The Ontario Government has a long standing objective to implement a regional fare card in the Greater Toronto and Hamilton Area (GTHA), with a regional integrated fare card being a critical component of the Metrolinx Regional Transportation Plan, "The Big Move". The fare card system, known as PRESTO, will enhance the GTHA's regional transportation system by allowing integrated inter-regional travel with one common payment card that can be utilized across participating agencies in Ontario.

Current PRESTO Implementation (2008 to date)

Between 2008-2011, TTC approved and assisted with the installation of interim PRESTO devices on select TTC turnstiles at 14 subway stations. These initial stations are key regional transit interface stations for customers traveling inbound to Toronto from the GTHA (e.g., Union, Finch, Islington etc.), and select downtown subway stations that enable PRESTO customers to complete their return journeys. This initial PRESTO implementation enhanced the seamless travel and fare payment process for GTHA PRESTO transit riders and supported the roll-out of PRESTO in the GTHA.

The 39 PRESTO devices installed within the 14 TTC subway stations are owned, operated and maintained by PRESTO. The current PRESTO devices were installed as an interim solution and will be replaced as part of the system-wide implementation of PRESTO at the TTC. In accordance with a Memorandum of Understanding, between the TTC and Metrolinx, the TTC is to receive 100% of the fare revenues associated with the PRESTO fare payment transactions from these devices. In 2013 these PRESTO machines generated approximately \$21.7 million in revenue based on 8.1 million PRESTO "taps" or fare payments.

There are two groups of TTC users for the reports and documentation captured by PRESTO. The TTC Financial Statements section requires reconciliation and settlement reports and the Finance – Statistics section requires reports to measure ridership. As of December 2013, PRESTO Fare Media made up 1.6% of the total TTC ridership which is an increase from 0.9% in 2012.

Full PRESTO Implementation at TTC

The full implementation of PRESTO will be based on an extensive upgrade of the PRESTO System (PRESTO Next Generation), the addition of new devices to accommodate all modes of TTC revenue vehicles and the implementation of Managed Services to support the operation of the PRESTO system. The full roll-out of PRESTO is not expected to be completed until 2016-2017 and will be subject to fulfillment of the TTC business requirements and the terms and conditions of the TTC-Metrolinx Master Agreement executed on November 28, 2012.

AUDIT SCOPE AND OBJECTIVES

Scope: The audit scope included an assessment of the PRESTO System revenue settlement and reconciliation process within the TTC Finance Department, and the controls in effect for the administration of TTC user access to the PRESTO System.

The review covered the period January to December 2013.

Audit reviewed the PRESTO Card User TTC ridership and revenue settlement and reconciliation data for the periods June and October 2013.

Objectives: To establish which “Complementary User Entity Controls” TTC is responsible for putting into place as a Service Provider for the PRESTO System.

To assess whether the PRESTO data and reports are providing complete and accurate information required to prepare the TTC ridership reporting and monthly revenue settlement and reconciliations, and to assess the adequacy of the system access user controls.

AUDIT METHODOLOGY

To achieve the audit objectives, Audit performed the following:

- Discussions with TTC Finance, IT Support and the Farecard Team staff regarding the implementation of the PRESTO system.
- Review of the “Complementary User Entity Controls” prepared by PwC and assess which controls applied to the TTC.
- Review TTC user access controls to the PRESTO System.
- Review and verify the TTC ridership and revenue settlement and reconciliation process for periods June and October, 2013.

ANALYSIS AND RECOMMENDATIONS

FINDING #1

DATA CONTROL AND ADJUSTMENTS

OBJECTIVE: To ensure that there is adequate review and verification of reports and statements received from the PRESTO System and timely communication of any discrepancies that may arise in those reports and statements.

ANALYSIS: The TTC Finance Department and Farecard Team does not have direct access to all data from the “initial tap” of a PRESTO card at a TTC turnstile through to the settlement of each subsequent fare payment transaction to the TTC’s bank. TTC is able to ensure that, at least, all TTC taps deemed “valid” by Presto are eventually settled to TTC’s bank account. However, the TTC does not have access to device level reports, and tap exceptions between the device level reports and the central system cannot be identified by TTC. Consequently, the TTC cannot ensure that all exception transactions are recorded and all the revenue is submitted to the TTC.

Adjustments from PRESTO are not recognized and submitted on a timely basis. Audit noted that the TTC Finance Department received numerous adjustments from PRESTO two to three months after the PRESTO monthly reconciliations were completed. As of January 2014, missing transactions were only settled to the end of August 2013. In addition, incomplete transactions were only settled to the end of November 2013.

When the PRESTO System is expanded in Wave 1 2014 and subsequently in use across the whole TTC system, the tracking of ridership, revenue recovery and adjustments will be more difficult and the reconciliations time consuming if the TTC does not have more timely and efficient access to the PRESTO data.

In the interim the TTC Finance Department is working with the TTC Information Technology Services Department to assist with automation and consolidation of the various PRESTO ridership, revenue and settlement reports, to assist with the validation of the data provided from PRESTO and the reconciliation to TTC’s bank deposits.

RECOMMENDATION: Management should formally communicate to Metrolinx the TTC's requirements with respect to:

- access to transaction data that allows the TTC Finance Department to reconcile revenue received from PRESTO in a more efficient manner, e.g., this would include PRESTO data from "initial tap" at the device level through to final settlement with TTC
- revenue related adjustments that are reconciled and accounted for on a timelier basis, e.g., this would include automated checks and balances within the PRESTO System to ensure that missing, delayed and/or exception transactions are processed in a more timely and efficient manner

MANAGEMENT RESPONSE AND ACTION PLAN

TTC is dependent upon PRESTO to provide access to transactional data and to improve or upgrade the PRESTO System. In the short-term TTC will continue to work with PRESTO to identify and implement improvements to the current PRESTO System reporting and procedures as part of the Wave 1 implementation scheduled to begin in November 2014. In the longer-term these data and reconciliation issues will be addressed as part of the full system-wide implementation of PRESTO at TTC, in accordance with the TTC stipulated business requirements and terms and conditions of the TTC-Metrolinx Master Agreement, executed on November 12, 2012.

Responsibility: TTC is dependent upon PRESTO to provide access to transactional data and to improve or upgrade the PRESTO System.

Completion Date: TBD

Status: Underway

FINDING #2

PRESTO SYSTEM USER ACCESS CONTROLS

- OBJECTIVE:** To determine that there are adequate controls in place to ensure that only approved users have access to the PRESTO System.
- ANALYSIS:** Audit found that the controls for user access to the PRESTO System have not been documented. All user access requests are submitted to the Fare Card Team - Director of Business Policy Review for approval. Once approved the Director informs PRESTO via email that the individual be granted access. No signed documentation is forwarded to PRESTO and PRESTO does not formally respond to the request. A list produced by PRESTO indicating who has access to the TTC data on the PRESTO System is provided upon request.
- RECOMMENDATION:** Management should:
- formalize the TTC policy and related controls for obtaining access to the PRESTO System, and establish a process with PRESTO that ensures only approved documented requests by the TTC are allowed access to TTC data on the PRESTO system
 - on a periodic basis request a listing from PRESTO identifying TTC users with access to the PRESTO System

MANAGEMENT RESPONSE AND ACTION PLAN

The Farecard Team will implement a process for internal request/approval of PRESTO data access and then document and submit these requests to PRESTO in accordance with the PRESTO data access protocols.

The Farecard Team will request quarterly updates from PRESTO Operations listing individuals with PRESTO System TTC data access.

- Responsibility:** TTC Farecard Team
- Completion Date:** Prior to the Wave 1 implementation of PRESTO currently scheduled for November 2014.
- Status:** Underway

Appendix A

Summary of Recommendations, Management Responses and Action Plans

Finding #	RECOMMENDATIONS	Agree	Disagree	MANAGEMENT RESPONSES	Completion Date
1.	<p>Management should formally communicate to Metrolinx the TTC's requirements with respect to:</p> <ul style="list-style-type: none"> access to transaction data that allows the TTC Finance Department to reconcile revenue received from PRESTO in a more efficient manner, e.g., this would include PRESTO data from "initial tap" at the device level through to final settlement with TTC revenue related adjustments that are reconciled and accounted for on a timelier basis e.g., this would include automated checks and balances within the PRESTO System to ensure that missing, delayed and/or exception transactions are processed in a more timely and efficient manner 	Yes		<p>TTC is dependent upon PRESTO to provide access to transactional data and to improve or upgrade the PRESTO System. In the short-term TTC will continue to work with PRESTO to identify and implement improvements to the current PRESTO System reporting and procedures as part of the Wave 1 implementation scheduled to begin in November 2014. In the longer-term these data and reconciliation issues will be addressed as part of the full system-wide implementation of PRESTO at TTC, in accordance with the TTC stipulated business requirements and terms and conditions of the TTC-Metrolinx Master Agreement, executed on November 12, 2012.</p>	TBD

Finding #	RECOMMENDATIONS	Agree	Disagree	MANAGEMENT RESPONSES	Completion Date
2.	<p>Management should:</p> <ul style="list-style-type: none"> formalize the TTC policy and related controls for obtaining access to the PRESTO System, and establish a process with PRESTO that ensures only approved documented requests by the TTC are allowed access to TTC data on the PRESTO system on a periodic basis request a listing from PRESTO identifying TTC users with access to the PRESTO System 	Yes		<p>The Farecard Team will implement a process for internal request/approval of PRESTO data access and then document and submit these requests to PRESTO in accordance with the PRESTO data access protocols.</p> <p>The Farecard Team will request quarterly updates from PRESTO Operations listing individuals with PRESTO System TTC data access.</p>	<p>Prior to the PRESTO Wave 1 implementation currently scheduled to occur in November 2014.</p>

COMPLEMENTARY USER ENTITY CONTROLS

FACTOR	Applicable To TTC	Non-Applicable To TTC	STATUS	COMMENTS
Establish and maintain controls that ensure they meet their requirements and obligations as outlined in their individual Service Level Standards and Service Agreements with Metrolinx.		Y		The TTC does not have a Service Agreement. TTC is currently operating under a Memorandum of Understanding which allows PRESTO to install equipment in certain stations. TTC is reimbursed for any revenue generated by the equipment and does not reimburse PRESTO for any costs. The 39 PRESTO devices installed within the 14 TTC subway stations are owned, operated and maintained by PRESTO.
Establish and maintain controls to administer Service Providers (SP) user access to PRESTO System and SP Website, and to ensure the appropriateness of these access rights.	Y		See Finding # 2	
Establish and maintain controls to ensure that SP systems and acceptance testing of PRESTO System changes is completed and results reported to PRESTO.		Y		Equipment is installed and maintained by PRESTO, who ensures software is tested and operating properly.
Establish and maintain controls to ensure that complete, valid and accurate information is provided to PRESTO for the set-up and maintenance of Equipment Operating Data (EOD) tables.		Y		EOD tables are set up and maintained by PRESTO. TTC will be reimbursed the value of the fare at the time of the transaction.
Establish and maintain controls to ensure that the devices used to capture transactions for subsequent submissions to the PRESTO System are installed, operated, maintained and repaired in accordance with		Y		PRESTO is responsible for operating, maintaining and repairing of all PRESTO equipment in the system. TTC staff may report equipment that is out of service, to initiate a PRESTO

FACTOR	Applicable To TTC	Non-Applicable To TTC	STATUS	COMMENTS
related agreements and procedures, including those associated with escalation of device failures or defects.				maintenance request, but it is not TTC's responsibility. PRESTO is responsible for device monitoring and maintenance.
Establish and maintain controls to ensure that the submission of farecard and device orders to PRESTO is complete, accurate and authorized.		Y		The TTC does not order farecards or device equipment from PRESTO.
Establish and maintain controls to ensure that the delivered farecards and devices are reconciled to the original order documentation for completeness and accuracy, and timely communication of any discrepancies that may arise.		Y		The TTC does not order or maintain any farecards. Farecards are sold by PRESTO and/or other GTHA PRESTO-enabled Transit Agencies.
Establish and maintain controls to ensure that there is adequate review and verification of all customer farecard refunds processed by the SP.		Y		The TTC does not process any farecard refunds. PRESTO and/or other GTHA PRESTO-enabled Transit Agencies processes all refunds.
Establish and maintain controls to ensure that there is adequate review and verification of reports and statements received from the PRESTO System, and timely communication of any discrepancies that may arise in those reports and statements.	Y		See Finding # 1	

Source: PricewaterhouseCoopers LLP – REPORT ON MANAGEMENT'S DESCRIPTION OF THE SERVICE ORGANIZATION'S SYSTEM AND THE SUITABILITY OF THE DESIGN AND OPERATING EFFECTIVENESS OF CONTROLS FOR THE PERIOD JANUARY 1, 2012 TO DECEMBER 31, 2012, (CSAE 3416 TYPE 2 REPORT), Section G. COMPLEMENTARY USER ENTITY CONTROLS (pages 46 – 47)