



For Action

Auditor General's Report - Review of Toronto Transit Commission's Revenue Operations: Phase One – Fare Evasion and Fare Inspection

Date: February 27, 2019

To: TTC Board

From: Audit & Risk Management Committee

Summary

The subject report, reviewed at the TTC Audit and Risk Management Committee on February 26, 2019, is forwarded to the TTC Board for review and consideration.

Contact

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Review of Toronto Transit Commission's Revenue Operations: Phase One – Fare Evasion and Fare Inspection

Date: February 21, 2019

To: Toronto Transit Commission Audit & Risk Management Committee

From: Auditor General

Wards: All

SUMMARY

The Auditor General's 2018 Audit Work Plan, received by City Council on December 5, 2017, included a review of the efficiency and effectiveness of Toronto Transit Commission's (TTC's) Revenue Operations.

We took a phased approach to the TTC Revenue Operations audit and have planned at least two audit phases, given there are multiple areas and risks within revenue operations. Phase 1 of the audit focused on fare evasion and the estimated loss of passenger revenue. The second phase will focus on the completeness of PRESTO revenue data received from Metrolinx and TTC's contract management.

Based on the data we collected and analyzed, TTC is estimated to have lost **\$61 million** in passenger revenue in 2018 due to fare evasion. Moreover, according to TTC staff, an additional **\$3.4 million** in revenue loss for 2018 was due to malfunctioning Metrolinx equipment. The total estimated annual revenue loss of **\$64 million** is probably understated, as we were not able to quantify the loss due to the malfunction of TTC's subway fare gate equipment and the use of crash gates¹ at subway stations. We plan to review these other factors further and estimate the loss in the next phase of our audit.

Based on our review, TTC's fare evasion rates are:

Streetcar	15.2 per cent
Bus	5.1 per cent
Subway	3.7 per cent
Overall	5.4 per cent (weighted average)

¹ "Crash gates" refer to TTC's practice of leaving the large accessibility fare gate open with a TTC staff member by the fare box to observe payment. This practice is done in high-volume subway stations to speed up passenger flow.

Our audit provides 27 recommendations. The implementation of these recommendations will contribute to decreasing TTC's fare evasion rates and increasing passenger revenue. It will also improve the effectiveness and efficiency of TTC's fare inspection program.

RECOMMENDATIONS

The Auditor General recommends that:

1. The Board request the Chief Executive Officer, Toronto Transit Commission, to set acceptable targets for its fare evasion rates (by mode and overall) and to develop short and long-term strategies to reduce the fare evasion rates and the resulting revenue loss, while ensuring good customer service.
2. The Board request the Chief Executive Officer, Toronto Transit Commission, to raise customer awareness and understanding of the importance of paying the appropriate fare, as well as the PRESTO card payment process, Proof-of-Payment system, and consequences if found evading fare.
3. The Board request the Chief Executive Officer, Toronto Transit Commission, to:
 - a. Accurately measure and publicly report on the fare evasion rate every year; and
 - b. Reports from Internal Audit on fare evasion study should be made public.
4. The Board request the Chief Executive Officer, Toronto Transit Commission, to further improve the fare inspection program by ensuring:
 - a. Adequate training to Fare Inspectors on data collection and why this work is important to Toronto Transit Commission;
 - b. Development of realistic and clear performance expectations; and
 - c. Implementation of ongoing monitoring of staff performance and regular review of inspection data.
5. The Board request the Chief Executive Officer, Toronto Transit Commission, to explore system wide options that can help prevent and reduce fare evasion on streetcars with multiple doors and Proof-of-Payment policy.
6. The Board request the Chief Executive Officer, Toronto Transit Commission, to expand its fare inspection program to include buses and develop effective fare inspection methods for buses.
7. The Board request the Chief Executive Officer, Toronto Transit Commission, to ensure that bus operators and streetcar operators are instructed and trained to press the fare dispute key whenever the appropriate fare is not paid. Data from the fare

dispute keys should be routinely analyzed and used to aid in the strategic allocation of fare enforcement resources.

8. The Board request the Chief Executive Officer, Toronto Transit Commission, to expand its fare inspection program to include coverage of subway station entrances.

9. The Board request the Chief Executive Officer, Toronto Transit Commission, to take the necessary actions to reduce the number of illegal entries, particularly at automatic subway entrances, including:

a. Perform a cost-benefit analysis of continuing to keep the automatic entrances open, whether to install high gates in high-risk entrances at subway stations, and whether to station Toronto Transit Commission staff at some of these entrances;

b. Complete work on the fare gate sensors and fare gate event data reporting, so that information can be used to determine the rate of illegal entries at subway stations and to strategically allocate fare inspection resources; and

c. Ensure security camera video is monitored on a regular basis.

10. The Board request the Chief Executive Officer, Toronto Transit Commission, to ensure the contracted service requirements are upheld regarding functionality of Metrolinx Single Ride Vending Machines and PRESTO Card Readers, and recover from Metrolinx lost passenger revenue.

11. The Board request the Chief Executive Officer, Toronto Transit Commission, to review current TTC fare gate functionality issues, and develop and implement short and long-term strategies to improve fare gate functionality to reduce revenue loss.

12. The Board request the Chief Executive Officer, Toronto Transit Commission, to instruct and train crash gate staff on Toronto Transit Commission (TTC) policy, to request the fare collector to close the TTC fare gate when unattended by TTC staff, and to ensure fare collectors are trained in this task.

13. The Board request the Chief Executive Officer, Toronto Transit Commission, to re-assess whether there is a critical need to issue Child PRESTO cards, balancing provision of good customer service with the risk of fraudulent use of the Child Cards.

14. The Board request the Chief Executive Officer, Toronto Transit Commission, to *NOT* distribute the Toronto Transit Commission's promotional Child PRESTO cards until appropriate controls are in place.

15. The Board request the Chief Executive Officer, Toronto Transit Commission, to explore ways to provide a Child PRESTO Card that is visually different from an Adult PRESTO card, including further negotiation with Metrolinx to issue visually different PRESTO cards for adults and children aged 12 and under.

16. The Board request the Chief Executive Officer, Toronto Transit Commission, to make the necessary changes to the Child PRESTO cards so that bus and streetcar operators can spot inappropriate use of PRESTO concession cards including:

- a. Negotiate with Metrolinx to provide a different light and sound on PRESTO card readers for Child PRESTO cards from other concession types; and
- b. Perform cost benefit analysis and consider making change to Toronto Transit Commission revenue vehicles to include display of the PRESTO concession type for bus and streetcar operators.

17. The Board request the Chief Executive Officer, Toronto Transit Commission, to ensure adequate controls are in place and consistently applied in the issuance of Child PRESTO cards by Distributors.

18. The Board request the Chief Executive Officer, Toronto Transit Commission, to find ways with Metrolinx to either seize or obtain confirmation of deactivation for Child PRESTO cards found to be fraudulently used.

19. The Board request the Chief Executive Officer, Toronto Transit Commission, to work with Metrolinx to determine the feasibility of temporarily suspending the Child PRESTO cards on the Toronto Transit Commission until appropriate controls are in place.

20. The Board request the Chief Executive Officer, Toronto Transit Commission, to conduct a cost-benefit analysis of Transit Fare Inspectors vs. Transit Enforcement Officers with a view to improving the effectiveness and efficiency of the fare inspection program.

21. The Board request the Chief Executive Officer, Toronto Transit Commission, to review the level of authority, tools and uniform provided to Transit Fare Inspectors to ensure they can carry out their duties in a safe and effective manner.

22. The Board request the Chief Executive Officer, Toronto Transit Commission, to take steps to improve the speed, reliability, and functionality of PRESTO hand-held devices for fare inspections. Such steps should include, but not be limited to:

- a. Improving tracking and reporting of the functionality and repairs of the hand-held devices;
- b. Finalizing the Service Level Agreement with Metrolinx, which should specify a level of speed and functionality for the hand-held devices that meets Toronto Transit Commission's business requirements; and
- c. Holding Metrolinx accountable for its contracted service requirements on the speed, reliability and functionality of the hand-held devices supplied to the Toronto Transit Commission.

23. The Board request the Chief Executive Officer, Toronto Transit Commission, to improve the effectiveness of the off-boarding inspection process to minimize the number of passengers walking away from fare inspection, including measures such as installation of temporary or permanent physical barriers where feasible, and assigning a sufficient number of Transit Fare Inspectors and Transit Enforcement Officers for the off-boarding inspection.

24. The Board request the Chief Executive Officer, Toronto Transit Commission, to provide Transit Fare Inspectors with efficient access to the previous fare evader database during inspections.

25. The Board request the Chief Executive Officer, Toronto Transit Commission, to improve the effectiveness and consistency of the scheduling practices of its fare inspection program to:

- a. Ensure the route and timing coverage is risk-based and strategic; and
- b. Increase the use of plain clothed Transit Fare Inspectors as it enables a more accurate assessment of fare evasion rates and a more effective inspection program.

26. The Board request the Chief Executive Officer, Toronto Transit Commission, to explore ways to increase actual inspection time by Transit Fare Inspectors including:

- a. Automating the manual ticketing process and the recording and reporting of fare inspection results;
- b. Assessing the feasibility of establishing an internal fare evasion ticket appeal process, similar to Metrolinx (GO Transit); and
- c. Exploring ways to reduce travel time by Transit Fare Inspectors between their reporting and lunch locations and assigned routes.

27. The Board request the Chief Executive Officer, Toronto Transit Commission, to finalize updating the TTC By-law No.1 and enhance the Fare Inspection Policies and Procedures manual to ensure they are up to date and include sufficient details to facilitate consistent fare inspections.

28. The Board forward this report to City Council for information through the City's Audit Committee.

FINANCIAL IMPACT

Based on the data we collected and analyzed, TTC is estimated to have lost \$61 million in passenger revenue in 2018 due to fare evasion. In addition, according to TTC staff, \$3.4 million in annual revenue loss for 2018 was due to malfunctioning Metrolinx equipment.

The implementation of recommendations in this report will likely result in an increase in passenger revenue. The amount of passenger revenue increase resulting from implementing the recommendations in this report is not determinable at this time.

DECISION HISTORY

The Auditor General's 2018 Audit Work Plan, received by City Council in December 5, 2017, included a review of the efficiency and effectiveness of Toronto Transit Commission's (TTC's) Revenue Operations:

<https://www.toronto.ca/legdocs/mmis/2017/au/bgrd/backgroundfile-107813.pdf>

COMMENTS

TTC's total conventional passenger revenue (excluding Wheel Trans) for the year 2018 was \$1.162 billion, down \$1 million from \$1.163 billion in 2017. Passenger revenue represented 95 per cent of TTC's total operating revenue for both years. The basic adult fare was \$3.00 in 2017 and 2018 (for token/PRESTO, cash \$3.25), increased by \$0.10 from the \$2.90 fare in 2016.

Fare evasion is one of the risks causing loss of passenger revenue. The objectives of this Phase One audit were to assess the effectiveness and efficiency of TTC's controls intended to minimize revenue loss from fare evasion risks, including its fare inspection program.

To assess TTC's fare evasion rate, we conducted observations with TTC Fare Inspectors for a total of 136 hours on 315 streetcars (seven routes), 76 buses (26 routes), and 15 subway stations. We also reviewed 38 hours of TTC security camera footage for illegal entries at four automatic subway entrances. This audit work was conducted over a six-week period in November and December 2018. The instances of fare evasion during the observation period were identified by TTC Fare Inspectors with audit staff in attendance - observing and recording. Audit staff did not interact with passengers.

Based on the data we collected and analyzed, TTC is estimated to have lost **\$61 million** in passenger revenue in 2018 due to fare evasion. Moreover, according to TTC staff, an additional **\$3.4 million** in revenue loss for 2018 was due to malfunctioning Metrolinx equipment. The total estimated annual revenue loss of **\$64 million** (see table below) is probably understated, as we were not able to quantify the loss due to the malfunction of TTC's subway fare gate equipment and the use of crash gates at subway stations. We plan to review these other factors further and estimate the loss in the next phase of our audit.

	<u>Estimated Amount of Revenue Loss</u>
Fare Evasion:	
Bus	\$30.1 Million
Streetcar	12.2 Million
Subway	<u>18.4 Million</u>
Subtotal – Fare Evasion	\$60.7 Million
Equipment Functionality Issues:	
Functionality issues - Metrolinx Equipment (according TTC staff)	\$3.4 Million
TTC Fare gates (will be assessed during Phase 2 audit)	Unknown
Use of Crash gates	<u>Unknown</u>
Subtotal – Equipment Functionality	<u>\$3.4 Million</u>
Total Passenger Revenue Loss	\$64.1 Million

Based on our review, TTC's fare evasion rates are: **overall 5.4 per cent** (weighted average), streetcar **15.2 per cent**, bus **5.1 per cent**, and subway **3.7 per cent**.

The fare evasion rate on streetcars is high, averaging more than 1 in 10 passengers. This could be attributable to the Proof-of-Payment system on streetcars where there is no interaction between passengers and streetcar operators, as well as the multiple-door design of TTC's new streetcars. The design and functionality of subway fare gates make illegal entry easier, particularly at automatic subway entrances without the presence of TTC staff.

There is significant risk of fraudulent use of the Child PRESTO card. Under the current fare policy, children 12 years of age and under can ride TTC for free. During our six weeks of audit observation work on all three modes of transit covering many different times of the day on TTC, we did not come across ANY children aged 12 and under who were using the Child PRESTO cards. TTC Fare Inspectors identified 56 subway riders and 22 bus riders who were fraudulently using a Child PRESTO card during our audit observation period.

There are numerous serious control weaknesses with the issuance and monitoring of these cards, including a lack of visual distinction from the regular PRESTO card, no display available to help bus and streetcar drivers to determine if the rider is using a Child card, and uncertainty in the deactivation of cards found to be used fraudulently.

Fare inspection is one of the key elements in reducing fare evasion. TTC has a fare inspection program with 68 approved positions of Transit Fare Inspectors. The focus of the fare inspection program is currently on the streetcar routes. There are many opportunities to improve the efficiency and effectiveness of the fare inspection program, including reviewing the authority level and tools needed for Fare Inspectors to effectively and safely enforce TTC By-law No.1, improving the speed and reliability of the Fare Inspectors' PRESTO hand-held devices, and increasing actual inspection time.

The implementation of the 27 recommendations in our audit report will contribute to decreasing TTC's fare evasion rates and increasing passenger revenue. It will also improve the effectiveness and efficiency of its fare inspection program.

The audit report is attached as Attachment 1. Management responses to audit recommendations are also included in the Attachment.

CONTACT

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SIGNATURE

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ATTACHMENTS

Attachment 1: Review of Toronto Transit Commission's Revenue Operations: Phase One – Fare Evasion and Fare Inspection