

TTC Audit & Risk Management Committee Meeting
February 26, 2019

**AUDITOR
GENERAL**

TORONTO

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

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Agenda

1. Audit objective, phases and approach
2. Results of the audit
3. Moving forward

Audit Phase 1

Focus was on:

- ▶ Fare evasion and the estimated loss of passenger revenue
- ▶ Effectiveness and efficiency of fare inspection program

Audit Phase 2

Focus will be on:

- ▶ Revenue controls including **completeness** of PRESTO revenue data
- ▶ TTC's contract management, including PRESTO **equipment**

Audit Approach

Audit staff spent 136 hours over 6 weeks observing TTC Fare Inspectors on:

- 315 streetcars (7 routes)
- 76 buses (26 routes), and
- 15 subway stations.

Staff also reviewed 38 hours of security camera footage for four automatic subway entrances.

Results

1. Need to manage with better information
2. Preventive controls
3. Detective controls

1. Need to Manage with Better Information

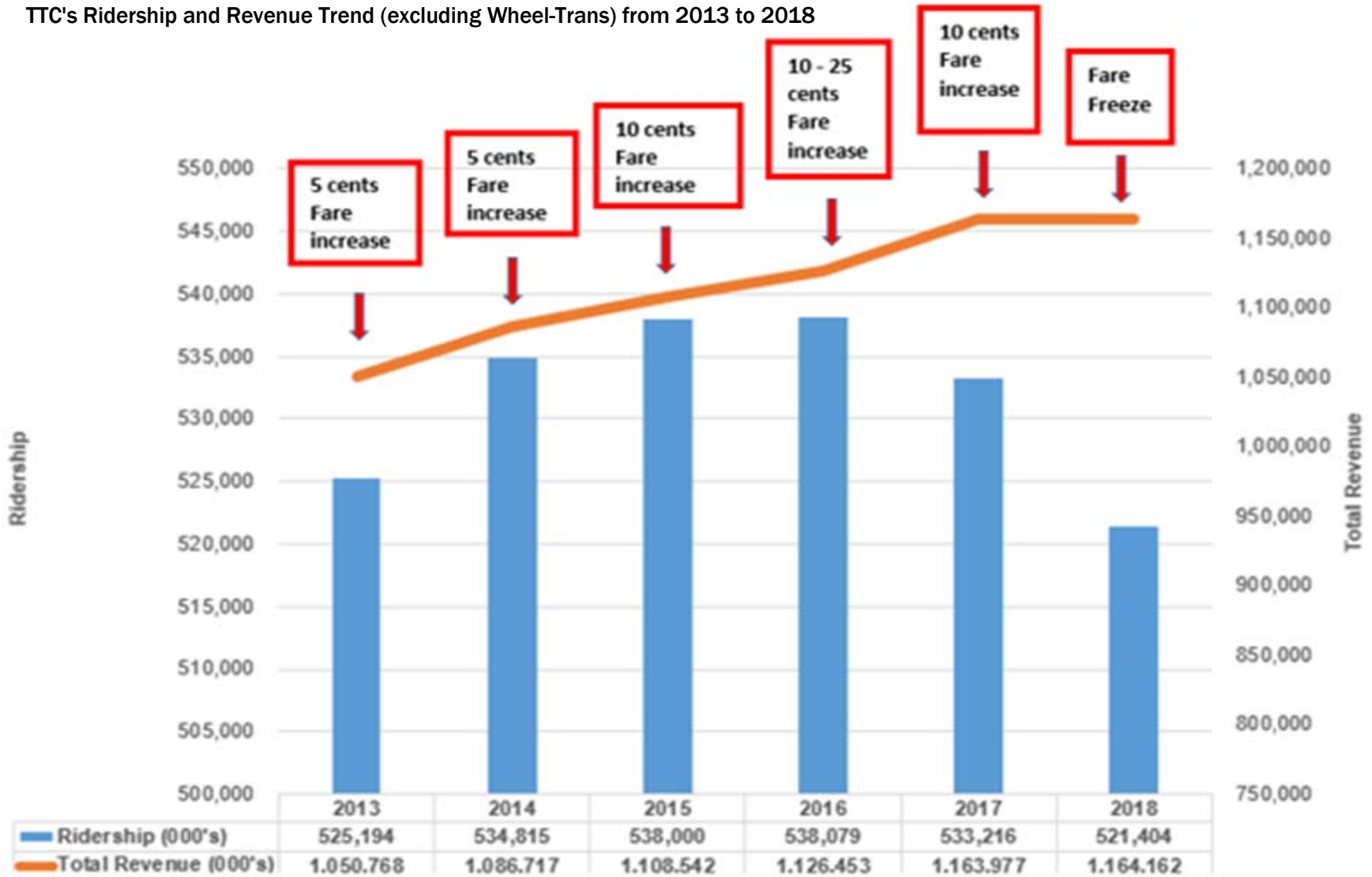
- Better ridership information
- More current and accurate fare evasion numbers

Management's Reporting Responsibility

“Management’s duty is to diligently provide an accurate, clear and complete informational picture to the Board. It should not omit information where doing so could leave the Board with an inaccurate understanding of an issue.”

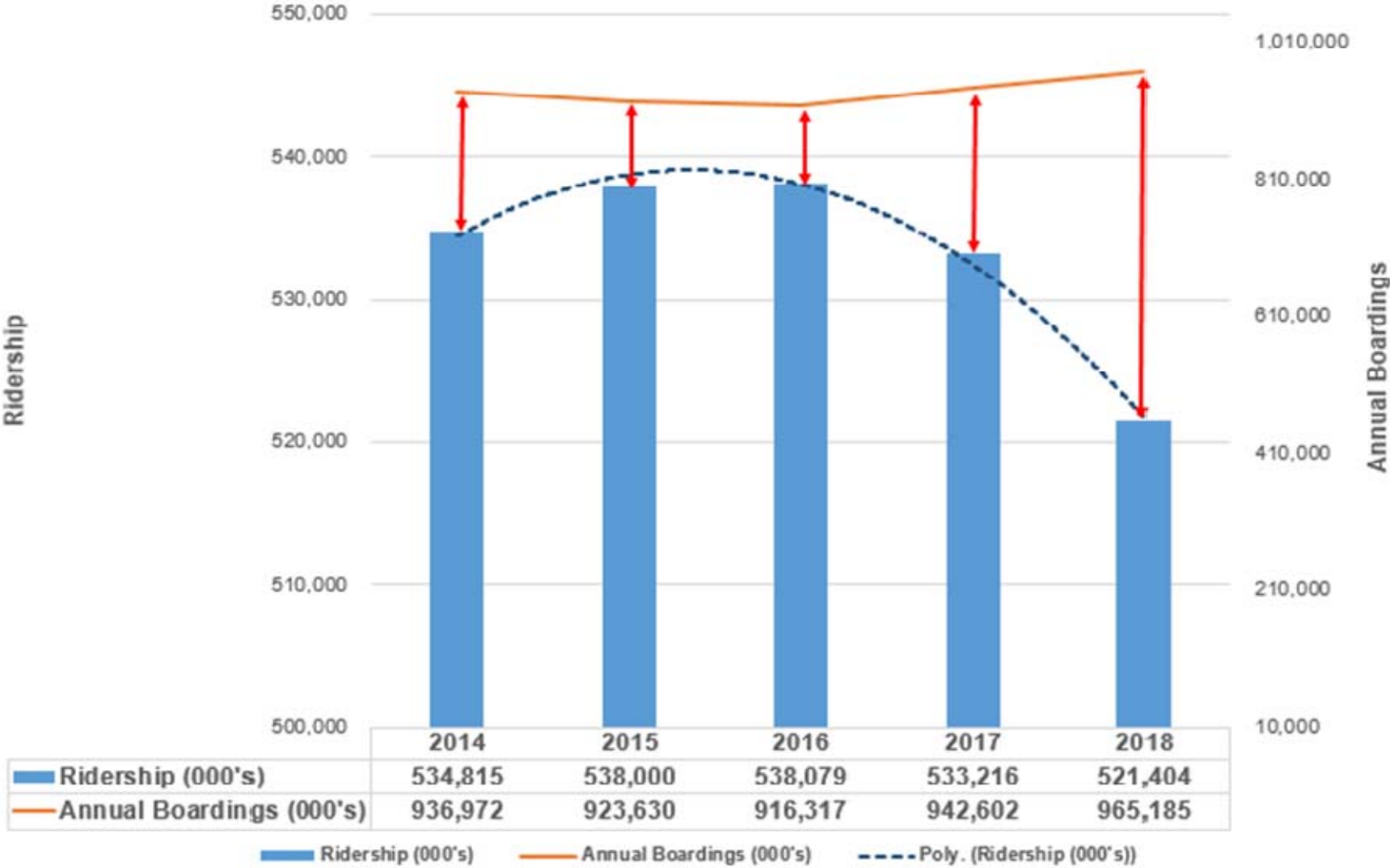
Revenue and Ridership

TTC's Ridership and Revenue Trend (excluding Wheel-Trans) from 2013 to 2018



Ridership and Boardings

Comparison of Annual Boardings vs. Ridership



Estimated Total Passenger Revenue Loss

Type of Revenue Loss	Estimated Amount of Revenue Loss
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:	
Metrolinx Equipment Functionality issues (according to 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

TTC's Fare Evasion Rates



*Observations were conducted for four unstaffed automatic entrances for 9.5 hours each and extrapolated to TTC's 56 unstaffed/automatic entrances

Fare Evasion Rate – Streetcar (15.2%)



	New Streetcar	Old Streetcar	Bus	Total
Invalid Payments	609	174	44	827
Total observations	3,272	2,299	747	6,318
Fare Evasion Rate	18.6%	7.6%	5.9%	

Fare Evasion Rate – Bus (5.1%)



Articulated Bus (3 doors)

Evasion rate: 6.6%



Regular Bus (2 doors)

Evasion rate: 4.4%

Fare Evasion Rate – Subway (3.7%)



Type of Illegal Entries	Number of Illegal Entries
Tailgating	109
Pushing fare gate/going through the gap	46
Jumping the fence	35
Letting people in from paid area	11
Going through a malfunctioned fare gate without paying	12
Other	5
Total	218

Types of Controls

Preventive

Front-end controls stop an unwanted outcome **BEFORE** it happens for example:

- Having well-functioning fare gates where payment is required before entry
- Having proper controls for the Child PRESTO card



Detective

Back-end controls find the problem **AFTER** the fact.

A detective control is having Fare Inspectors check for potential fare evaders.



2. Improving Preventive Controls

- Subway fare gates – functioning and design
- Crash gates – closing when unattended by TTC staff
- Controls around Child PRESTO card
 - Implementation of policy - proof of age identification
 - Visually distinct cards for Child PRESTO cards
 - Distinct light/sound on PRESTO card reader for Child concession
 - Display for Child concession type for bus and streetcar operators
- Metrolinx equipment – functionality for customers to pay fare easily



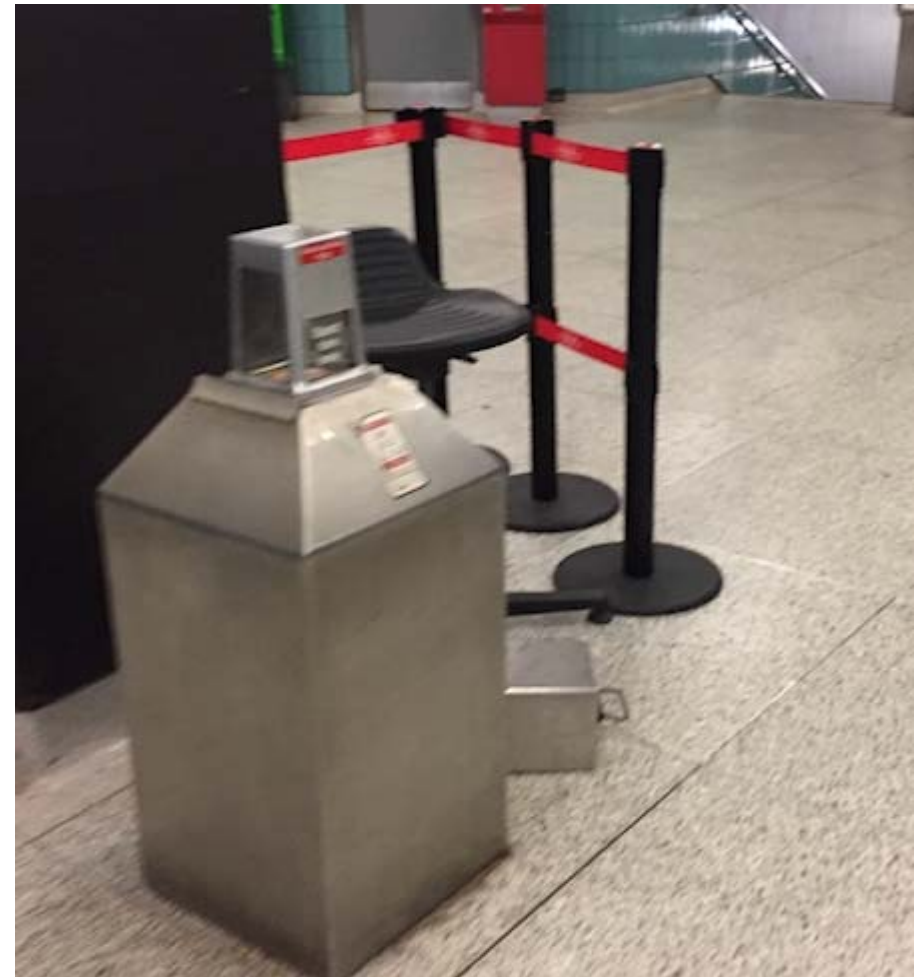
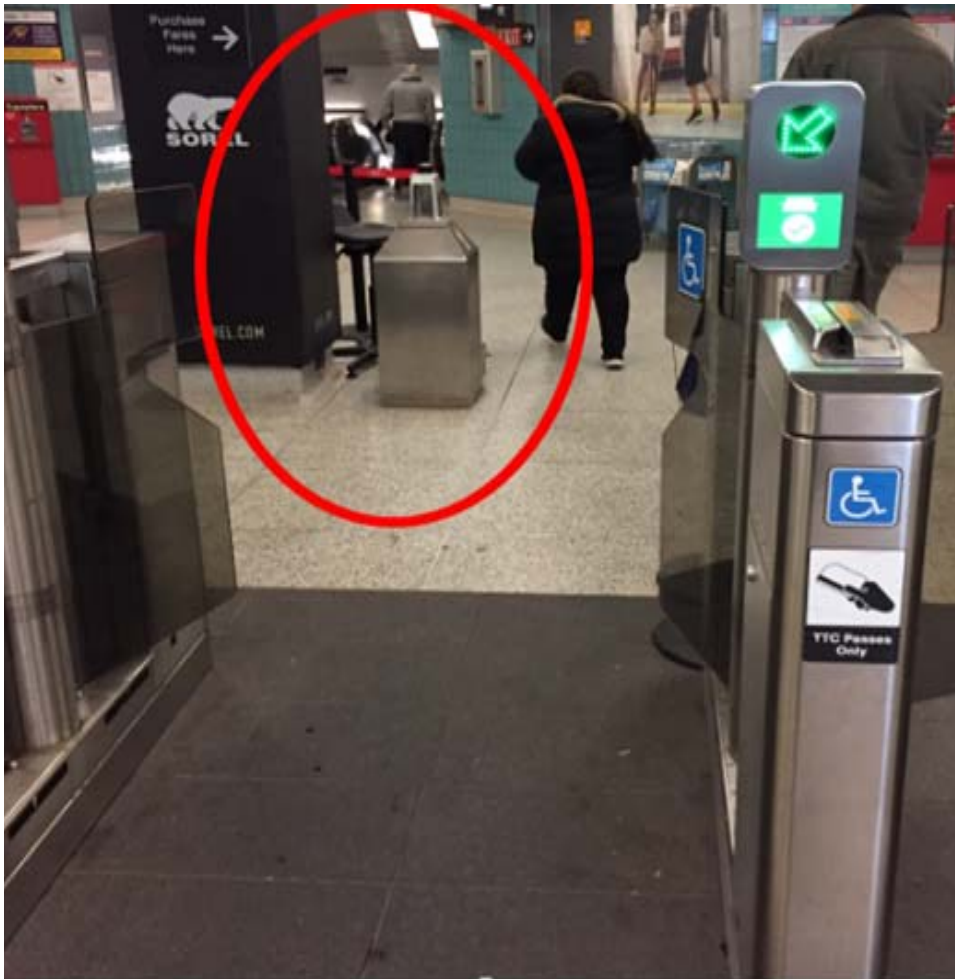
TTC fare gates stuck in open position



Subway illegal entries – design of fare gates/entrance



Crash gates left open and unattended



Fraudulent Use of Child Presto Card



Toronto (GTA)
City of Toronto (28) X

Distance: [7]
City of Toronto
[Change]

Offer Type:
All Types
Offering (26)
Wanted (2)

Featured Ads:
All Ads
Urgent Ads

Price
from to Update

Additional Info:

Presto Unlimited Card (Unregistered) \$100.00
City of Toronto < 4 hours ago
I have for sale Presto Unlimited Card (Unregistered) up to 4 years of to use.

Unlimited TTC Cards \$180.00
City of Toronto < 6 hours ago
Multiple presto cards available \$180 for each card you purchase. Cards are valid to use for 4 years. Price is negotiable if you purchase multiple. Cards will be tested if meet up comes through

Presto Card Unlimited Card \$120.00
City of Toronto < 13 hours ago
Presto Card Unlimited Card feel free to message me on kijiji or text my cell number Price is negotiable. The cards are good for 4 years

Malfunctioning Metrolinx Equipment



- TTC has invoiced Metrolinx \$7.5M for the three years ending December 31, 2018 for malfunctioning Metrolinx equipment
- TTC staff estimate it could cost up to \$6M in 2019 if functionality does not improve and if adoption of PRESTO increases from 77% to 95%.

3. Detective Controls

Detective controls are controls that help to detect if something is not working properly AFTER the fact....they are intended to uncover the existence of errors, inaccuracies or fraud that has already occurred.

Example: consistent use of fare dispute key.



Better data analysis

1. To identify issues and anomalies – for example:
 - Using a database to detect fraudulently used Child PRESTO cards
 - Identifying whether Child PRESTO cards used frequently at certain locations
 - Using a Fare dispute key to determine higher risk routes
2. To allow for a risk-based approach to deploying Fare Inspectors
3. To provide better information for management and the Board to help them prioritize where to focus overall TTC resources

TTC's Fare Inspection Program

Ways to improve efficiency and effectiveness:

1. Increase actual fare inspection time
2. Increase speed and reliability of PRESTO hand-held devices
3. Improve scheduling to ensure adequate risk-based coverage of routes and time periods
4. Perform analysis to determine optimal mix of Transit Fare Inspectors vs. Transit Enforcement Officers
5. Review authority and tools of Fare Inspectors to ensure they can carry out their duties safely and effectively

Moving Forward

Short-term (within six months)

Subway Entrances

- Train and require fare collectors in the booth to **close the crash gates** when unattended by staff.
- Reduce illegal entries at automatic entrances (e.g. **monitor security footage** to determine high-risk entrances, **extend fare inspection program** to high-risk entrances, and shorten opening hours of entrances with low passenger volume).
- **Timely response to malfunctioning** TTC fare gates (e.g. assign staff to place barriers in front of broken gates and re-direct passengers to enter through other functioning gates).

Child PRESTO Cards

- Work with Metrolinx to determine the feasibility of **temporarily suspending the Child PRESTO card** on TTC until appropriate controls are in place. The City's child ride free policy can continue without the Child PRESTO card.

Recovery of Revenue Loss from Metrolinx Equipment

- Recover lost passenger revenue due to malfunctioning Metrolinx vending machines and PRESTO card readers.

Fare Inspection Program

- Review level of authority and tools provided to Fare Inspectors to ensure they can carry out their work safely and effectively.
- **Improve accuracy of fare evasion data** collected by Fare Inspectors.
- Improve fare inspection program efficiency and effectiveness (e.g. improve training, set realistic performance expectations, monitor staff performance, **improve scheduling** and route coverage, **increase actual inspection time** by Inspectors).

Customer Awareness

- **Raise customer awareness** of the importance of paying proper fare.

Moving Forward (Continued)

Intermediate (less than one year)

Subway Entrances

- Implement longer-term measures to **address illegal entries at automatic subway entrances**, including the design of station entrances and fare gates.
- **Improve the functionality of subway fare gates** to reduce frequency of malfunctioning equipment.
- Expedite work on fare gate sensors and fare gate event reporting to determine high-risk subway entrances.

Buses and Streetcars

- Provide a **display of the type of PRESTO concession** to bus and streetcar operators.
- Provide training to bus operators on fare dispute key and analyze the data to help with strategic resource allocation.
- Expand fare inspection program to buses.
- Explore ways to prevent and reduce fare evasion on streetcars (under Proof-of-Payment policy).

Child PRESTO Cards

- **Work together with Metrolinx** to improve controls over the Child PRESTO card. In particular, negotiate with Metrolinx to provide visually distinct PRESTO cards and a different light and sound on PRESTO card readers for Child PRESTO cards from other concession types.

Long-term (more than one year)

Reduce and Publicly Report on Fare Evasion

- Set acceptable targets for fare evasion and develop short- and long-term strategies to reduce fare evasion on all modes of transit.
- Accurately measure fare evasion rate and report it to the TTC board annually.

Ticket Appeal Process

- Explore setting up an internal fare evasion ticket appeal process, similar to what Metrolinx uses.

Summary

1. Better transparency of data

- Measure better
- Better, more transparent public reporting
- Use the data to inform your decisions

2. Preventive and detective controls

- Balance customer service with effective controls to reduce fare evasion
- Better collaboration between TTC and Metrolinx to fix the issues

3. Time to move forward...

- Take accountability to fix what can be fixed now (e.g. close gates, fix gates)
- Make a plan to address intermediate and long term issues

