TORONTO TRANSIT COMMISSION
REPORT NO.

MEETING DATE: December 19, 2013

SUBJECT: PRESTO IMPLEMENTATION AT THE TTC – STATUS UPDATE

INFORMATION ITEM

<u>RECOMMENDATION</u>

It is recommended that the Board receive a presentation entitled PRESTO
Implementation at the TTC – Status Update, for information.

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December 19, 2013

Presentation

TTC PRESTO IMPLEMENTATION – STATUS UPDATE

Allan Foster

December 2013

AGENDA

- **Background and Overview of PRESTO system**

- **TTC Implementation Program**
  - Wave 1 Rollout
  - Wave 2 Rollout

HOW THE PRESTO SYSTEM WORKS

The PRESTO shared service model supports the needs of all Transit Service Providers and their customers

Access

Purchase

Exchange Data

Transit Agency

Fare pricing and policy

Transit services and operations

Leveraging strategic information

Define PRESTO service

Use

PRESTO Central System

- Farecard Management
- Fare Policy Implementation
- Financial Clearing/Settlement
- Asset Management
- Information Management
- Infrastructure Implementation
- Day-to Day Operations

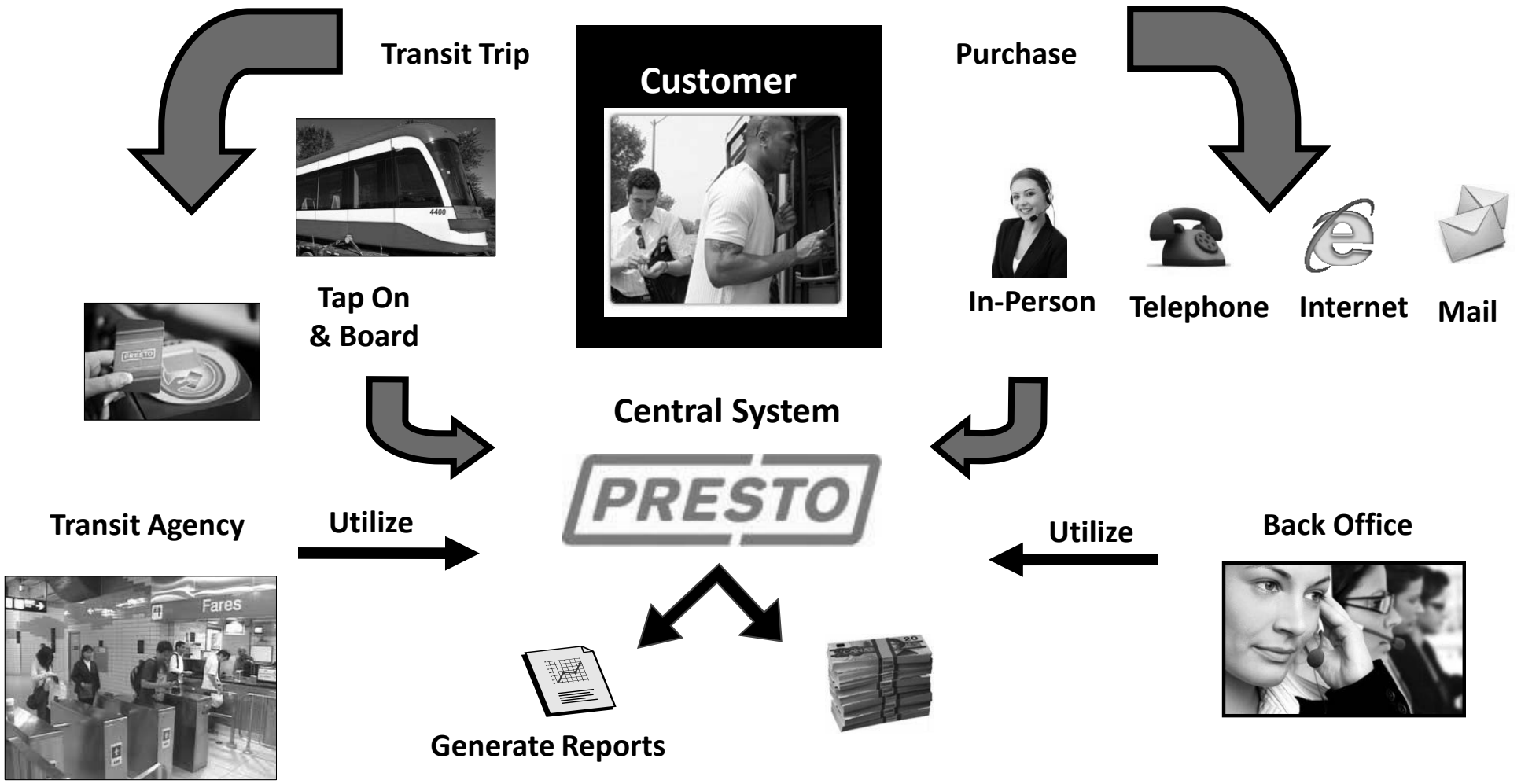Provide Information

Connect with

Use

PRESTO Program Office

Helpdesk / Technical Support

Call Centre / Customer Support

Card order fulfilment services

System monitoring, management & maintenance

Operation Support

Financial Institutions

BACKGROUND – PRESTO SYSTEM

Transit Trip

Customer

Purchase

Tap On & Board

In-Person   Telephone   Internet   Mail

Central System

Transit Agency   Utilize   PRESTO   Utilize   Back Office

Generate Reports

- **Operating at GO Transit, Ottawa Transit, and GTA transit properties and**
- **≈ 950k cards in circulation**
- **PRESTO readers currently at 14 TTC subway stations**
  - Interface stations with interregional travel and other key locations
- **≈ 35k transactions per day**
  - PRESTO only accepts adult token equivalent

Managed Service Business Model

- **Metrolinx required to design, procure, build, install, operate, service, and maintain PRESTO**

- **Payment to Metrolinx based on fixed % of TTC fare revenues (5.25%)**

- **At full implementation, overall costs of fare collection expected to remain at/below current costs of fare collection (i.e. 7%-8%):**

    - Based on TTC Business Requirements

TTC IMPLEMENTATION PROGRAM

Wave 1 Rollout – Surface Devices

- **Terminals for Customer Service Centre at McBrien Bld: Station Point of Sale (SPOS) devices**

- **PRESTO card readers installed at all streetcar boarding doors: Light Rail Vehicle Fare Transaction Processor (LFTP)**

- **Mobile device for fare enforcement and customer card/transaction query: Hand-held Point of Sale (HHPOS)**

- **Ticket validator:**
    - Validation (date/time stamp) of concessions tickets
    - Two installed on-board each streetcar
    - Installed off-board at 75 of busiest streetcar transit stops
    - TTC to purchase and install

- **Single Ride Vending Machine (SRVM):**
    - vending machine for accepting coin, token, debit and credit fare payment
    - Issue paper transfers and receipts
    - Two installed on-board each streetcar
    - Installed off-board at 75 of busiest streetcar transit stops
    - <u>**Minimal PRESTO device requirement for Wave 1**</u>

Concept of Operations (Full Implementation)

- **PRESTO media will replace tickets, tokens and passes**

- **Cash is still accepted**

- **PRESTO media on all TTC vehicles (incl. Wheel Trans) and at all subway stations**

- **Possible inclusion of other City services (e.g. Toronto Island Ferry)**

- **Fare policies and products**

  - Support existing with flexibility for new

Concept of Operations (Full Implementation)

- **Move to automated sales/reloads of PRESTO media within subway system**
  - Vending machines, add value machines
  - Debit, credit and cash
- **Opportunity for enhanced customer assistance in subway**
  - Collectors no longer required to handle cash, sell or collect fare media
  - Move staff outside booth and provide customer service throughout station

TTC IMPLEMENTATION PROGRAM

Wave 1 Rollout

- **Initial PRESTO launch October/November 2014**
- **Fulfillment of marginal amount of overall TTC business requirements**
- **Equipment installation on initial 50 new streetcars**
  - Spadina, Bathurst, Dundas, and Harbourfront
- **Equipment installation at 23 subway stations**

Wave 1 Rollout – Subway Devices

- **PRESTO card readers installed on select turnstiles: Station Fare Transaction Processor (SFTP)**

- **Mobile device for fare enforcement and customer card/transaction query: Hand Held Point of Sale (HHPOS)**

- **Add Value Machine (AVM):**

    - Vending machine for adding value to PRESTO card and query card use/transactions

    - Debit and credit payment only

    - Installed primarily in un-paid area of subway stations

TTC IMPLEMENTATION PROGRAM

**Wave 1 Rollout – Subway Installation Schedule**

- **Subway station roll-out to support route based deployment of new streetcars**
- **TTC work to upgrade power at subway stations is in advance of PRESTO installation work**
- **SPOS and HHPOS production devices to be delivered/installed Q3 2014**
- **SFTP delivery/install Q3 2014**
- **AVM delivery/install Q4 2014**
  - Not essential for system launch
  - HHPOS devices can be used by TTC staff for card enquiries
  - PRESTO card readers currently installed at 14 TTC subway stations without AVM's

Each new streetcar will have 6 card reader, 2 SRVM's and 2 ticket validators onboard.

Streetcar Stop / Non-paid Area

Legend:
☐ SRVM - Off Board
☐ SRVM – On Board   ☐ TTC Ticket Validator   ☐ PRESTO Card Reader
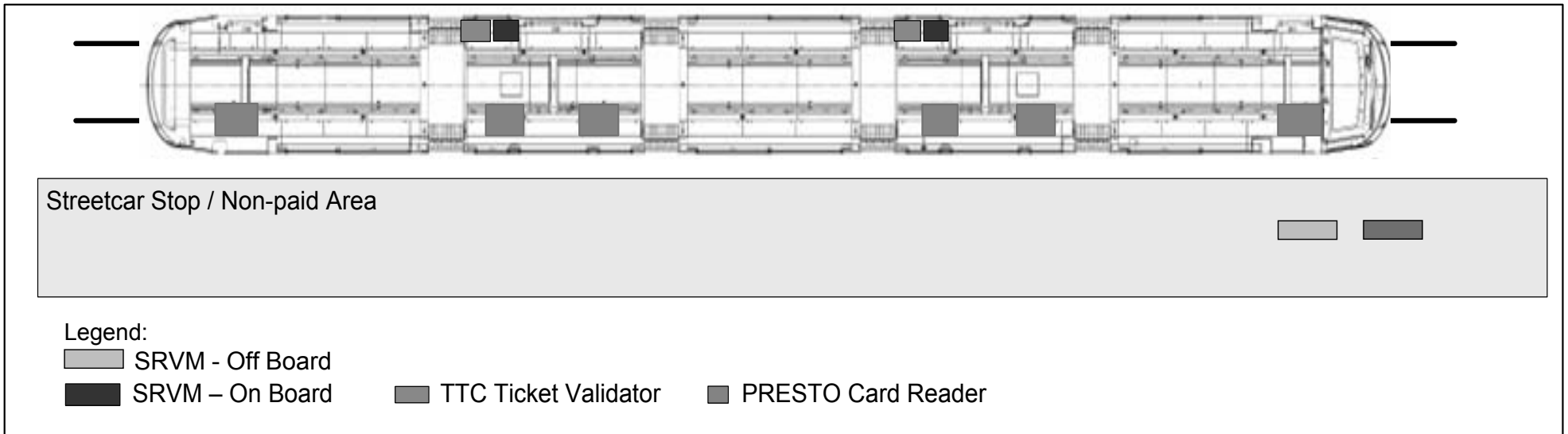
Fare Payment Options	Card Reader	SRVM	Ticket Validator	Proof of Payment
PRESTO e-Purse single ride (adult and concession)	X	X		Single ride record on PRESTO card POP Transfer from SRVM
Cash (coin) single ride		X		POP Transfer from SRVM
Token		X		POP Transfer from SRVM
Concession ticket / single ride			X	Stamped ticket
Metropass				Metropass (visual verification by inspector)

TTC IMPLEMENTATION PROGRAM

Wave 1 Rollout – Surface Installation Schedule

- **Ticket Validator Procurement is underway – Handled by TTC**

- **SPOS, LFTP, and HHPOS production devices to be delivered/installed Q3 2014**

- **Field testing of 'pre-production' SRVM to commence in Q2 2014**

- **Delivery of 40 production SRVM's Q3 - Q4 2014**

- **SRVM debit/credit roll-out Q1 2015**

Wave 1 Rollout – Devices (illustrative)

Fare Payment Device (Subway Turnstile)

Fare Payment Device (Streetcar)

For Enforcement

Add Value and Full Service Vending Machines (Subway)

Single Ride Vending Machines (in-vehicle and off-board)

Ticket Validator (in-vehicle and off-board

Station-Point of Sale

(customer service centre)

Wave 1 Rollout – Key Issues

- **Extended time to complete device design**

- **SRVM manufacture, delivery, and testing**

  - Launch of new streetcars

  - Alternate fare collection options (short term)

- **Managed Services Plan and availability**

  – Commenced discussion and planning

Wave 1 Rollout – Key Issues

- **Solution Functionality and Quality**
  - Comprehensive testing process to validate solution and identify any deficiencies
- **Schedule includes little time for contingency/remedial work to address deficiencies**
- **Business process definition to include alternative manual solutions**

TTC IMPLEMENTATION PROGRAM

Wave 2 Rollout

- **Fulfill all TTC business requirements**
- **Equipment installation on buses, Wheel-Trans, remaining streetcars and subway stations**
- **Elimination of TTC legacy fare media**
- **Alternate fare strategies and options for PRESTO system**
  - Report to Board in 2014
- **Review extending PRESTO for Toronto Island Ferry (December 2012 Board directive)**
- **Device procurement to commence in 2014**
- **Roll-out schedule to be determined**