

## **Background**

Under the first phase of the Public Transit Infrastructure Fund, the City of Greater Sudbury (City) has received approval of \$1.24M to undertake a route optimization study and implement supporting infrastructure improvements. The following are funded under this project:

1. Greater Sudbury Transit Action Plan study.
2. Purchase and installation of bike racks.
3. Updated wayfinding tools based on the new network service and route structure.
4. Purchase and installation of contactless smart card technology.
5. Project Manager to oversee implementation of new service and infrastructure.

On June 26, 2018 a report titled Affordable Transit Fare Structure was presented to Council, providing information on affordable fare policy strategies which aim to reward regular users, encourage ridership and make the fare structure easier to understand. These strategies will be presented in a Business Case to Council during the 2019 Budget deliberations. Along with effective fare structure and policies, improving ease and convenience of fare purchases can also have a positive impact on ridership. Contactless smart card technology is a solution that can supplement fare policies and fare structure and result in improved customer experience and ridership growth.

This report provides information on the benefits of replacing the existing and outdated registering fare box equipment currently in use by Greater Sudbury Transit with Smart Card Technology.

## **Contactless Smart Card Technology Overview**

Contactless smart card technology is growing in popularity as it delivers improved ease of use, security and reliability versus the traditional magnetic stripe tickets or cards currently used by Greater Sudbury Transit. The use of contactless smart card technology, along with an easy to understand and well balanced fare structure increases a transit customer's confidence in the system and provides a convenient payment option. This in turn increases ridership.

Contactless smart card systems are very simple to use. The passenger can load the value required on a reloadable card and hold their card up to a card reader mounted in the bus to pay a fare. The smart card's chip keeps track of a passenger's remaining ticketing value and provides origin-destination information used to effectively plan service delivery.

## **Key Benefits of Contactless Smart Card Technology**

The following are some of the benefits contactless smart card technology offers:

- Transit customers have the ability to manage their purchases by loading values on

- their reusable fare card, removing the need to wait in line to purchase a ticket.
- Removes the need to provide proof to validate discounts as all cards look the same.
  - Reduces fare altercation between operators and passengers.
  - If lost or stolen, registered smart cards can be replaced and the value remaining loaded on the replacement card.
  - Annual operating costs savings can be realized due to the elimination of printing and distribution of paper media, commissions paid to sell fare media, and fare box maintenance.
  - Utilized seamlessly on all types of vehicles, including conventional and specialized buses or taxis.
  - Day passes and transfers can be obtained directly from the operator.
  - Ability to promote and create incentives easily.
  - Boarding times are reduced which improves on time performance of the service.

## **Next Steps**

The initial estimated cost of implementing contactless smart card technology is \$600,000. The upfront capital cost of replacing the fare boxes with smart card technology will be funded through the Public Transit Infrastructure Fund.

Greater Sudbury Transit Services will issue a request for proposal (RFP) for Contactless Smart Card Technology to determine the actual cost of implementation. If a successful bidder is selected within approved and available capital Public Transit Infrastructure Funds, a system will be implemented.

## **References**

Public Infrastructure Fund, City Council meeting, November 22, 2016

<http://agendasonline.greatersudbury.ca/index.cfm?pg=agenda&action=navigator&id=955&itemid=12277&lang=en>

Greater Sudbury Transit Action Plan – Better Routes. Better Schedules. Better Service. City Council Meeting, June 13, 2017

<https://agendasonline.greatersudbury.ca/index.cfm?pg=agenda&action=navigator&id=1129&itemid=13378&lang=en>

Affordable Transit Fare Structure, City Council meeting, June 26, 2018

<https://agendasonline.greatersudbury.ca/index.cfm?pg=agenda&action=navigator&id=1243&itemid=15177&lang=en>