



INFORMATION REPORT

TO: Mayor and Members General Issues Committee	WARD(S) AFFECTED: CITY WIDE
COMMITTEE DATE: January 15, 2014	
SUBJECT/REPORT NO: Transit Customer Information Service Enhancements Suite (PW14005) - (City Wide) (Outstanding Business List)	
SUBMITTED BY: Gerry Davis, CMA General Manager Public Works Department	PREPARED BY: Carol Wildeman Senior Project Manager, Transit Business Applications (905) 546-2424, Extension 1842
SIGNATURE:	Mike Kirkopoulos Corporate Communications Manager (905) 546-2424, Extension 2261

Council Direction:

This report is accompanied by a staff presentation.

At the General Issues Committee on November 20, 2013, staff was directed to report back with a progress update on implementation of the Transit Customer Information Service Enhancements Suite including: real time MacNab Transit Terminal platform level signage and Terminal signage; trip planner; Buscheck telephone information system; open data feed with vehicle locations and schedule adherence; updated Google transit trip planner; Metrolinx Regional Transit Traveller Information System; and including timelines, capital and operating budget commitments, additional relevant details by the end of January, 2014.

Information:

The Transportation Division provides transit service throughout the City of Hamilton, and is responsible for providing information to riders about that service. To date, schedule information has been provided through a variety of means, both traditional print media and through electronic means via the City of Hamilton website and through the telephone system using Interactive Voice Response. The IVR system has been available to Hamiltonians since 1985. In 2006, the system was upgraded to newer technology and consolidating phone numbers from approximately 1500 individual numbers to one telephone number with individually numbered stops. Also in 2006, an

**SUBJECT: Transit Customer Information Service Enhancements Suite
(PW14005) - (City Wide) - Page 2 of 3**

online trip planner was introduced which allowed users to plan trips throughout the City. In 2008, schedule data was made available through the Google Transit trip planner and in 2010 schedule data was published for public use in the General Transit Feed Specification (GTFS) format.

In 2009, work began on replacing the automated vehicle location (AVLC) and radio communications systems which had been in use since 1985. The new system included as a priority next stop announcements to meet Ontario Human Rights and *Accessibility for Ontarians with Disability Act (AODA)* requirements. The system went live in early 2010, and has been regularly maintained and upgraded since. As part of that implementation, there were several customizations made to the software to make the system more user-friendly and acceptable to drivers. The first systems to utilize this data and to test its validity are the next bus departure and terminal signs at the MacNab Terminal. Once those systems have been finalized, and the prediction algorithm proofed, the data will be available for consumption by other systems, including a publicly available GTFS real-time feed.

In 2011, Hamilton joined the Steering Committee of Metrolinx's RTTIS project. The RTTIS project's goal is to provide a regional portal for Transit information throughout the GTHA prior to the 2015 Pan-Am games. Staff have advocated for the provision of Real-Time transit data as part of the RTTIS and reached an agreement with Metrolinx to provide Real-Time transit data to them to publish in an open data format.

This project is part of capital project ID 5300855100 in the amount of \$565,000 and is funded through Metrolinx QuickWins. The attached diagram Figure 1 below describes the system enhancements based on the information made available through the Metrolinx QuickWins Real-time Schedule Information database. This project provides the basis for all other systems providing integrated schedule and real-time data to other internal and public facing systems and contains the following items:

- The Metrolinx QuickWins Real-time Schedule Information database - the integration of scheduling data and real-time data;
- Metrolinx RTTIS with real-time schedule info and real-time service alert capability - a region wide multi-modal trip planner information system including GTFS Real-Time open data files fully integrated with other GTHA properties including GO Transit;
- Metrolinx QuickWins OnStreet and Wayside Signs - to be installed first at the MacNab Terminal, but expandable to other terminals/individual stops throughout the City.

This project includes the preparatory work to be ready for the RTTIS and is expected to be completed in the near future. Metrolinx anticipates the RTTIS will be available in a phased approach in late 2014 - early 2015 for the Pan-Am games.

A related approved capital project Customer Information Service Enhancements ID 5301185001 in the amount of \$150,000 includes the following items:

- Updated Web Trip planner system with real-time schedule information and real-time service alert capability;

**SUBJECT: Transit Customer Information Service Enhancements Suite
(PW14005) - (City Wide) - Page 3 of 3**

- Updated Telephone BusCheck system with real-time schedule information and real-time service alert capability;
- Ridership and Schedule Analysis System with real-time schedule information.

The Web trip planner and Telephone Buscheck portions of this project are expected to be completed in Spring 2014.

A proposed 2014 capital project in the amount of \$145,000 will:

In phase 1:

- Make Transit real-time data available to the RTTIS system;
- Make Transit real-time data available to the public in the GTFS real-time data format in an open data feed available to public/private software developers;
- Make Transit real-time data available to the public through the Google Transit trip planner;

In phase 2:

- Make the software available to provide real-time service alerts. Additional staffing for real-time service alerts is out of scope of the project.

The first phase of this project is expected to be completed within six months from project initiation depending on the selected implementation timeline option.

The second phase of this project would require further discussions and resourcing in order to initiate. These future phases of the projects, if approved, would provide the real-time service alert components to the above projects and a potential customer subscription service where customers could subscribe to receive real-time information regarding transit based on their preferences in a format of their choice - eg: a text message or email indicating the predicted next bus departure after 4:00 p.m. every weekday for their selected route and stop. These projects would require a capital commitment of \$128,000 and ongoing operating costs for staff to communicate service alerts.

As requested, this report provides a summary diagram (Appendix A) and accompanying project plan outlining the Transit Customer Information Service Enhancements Projects (Appendix B).

The work the Transportation Division is undertaking in terms of developing a plan with respect to real-time data aligns and is in conjunction with the corporate work being undertaken on open data under the leadership of the City Manager's Office. Transportation Division staff will continue to work with the City Manager's Office on Open Data, including consultation with stakeholders.



