

Subject: Communicating Real-Time Information to Customers

File Number: ACS2023-TSD-TS-0004

Report to Transit Commission on 11 May 2023

Submitted on May 2, 2023 by Pat Scrimgeour, Director, Transit Customer Systems and Planning

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Ward: Citywide

Objet : Communication d'information en temps réel aux clients

Dossier : ACS2023-TSD-TS-0004

Rapport au Commission du transport en commun

le 11 mai 2023

Soumis le 2 mai 2023 par Pat Scrimgeour, Directeur, Systèmes-clients et Planification du transport en commun

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Quartier : À l'échelle de la ville

REPORT RECOMMENDATION(S)

That the Transit Commission receive this report for information.

RECOMMANDATION(S) DU RAPPORT

Que la Commission du transport en commun prenne connaissance du present rapport.

BACKGROUND

At the February 9, 2023, Transit Commission meeting, Commissioner Hill submitted Inquiry TC 2023-01 – Communicating Live Information to Riders. The inquiry requested staff to provide information on OC Transpo's processes, budget and proposed future improvements for communicating live information to riders.

On March 30, 2023, staff responded to Commissioner Hill's inquiry stating that a presentation would be brought to the May meeting of the Transit Commission. The presentation will outline the current status of the real-time information provided to customers and future plans for improvements.

DISCUSSION

OC Transpo staff are committed to rebuilding our customers' trust. We understand that consistent and reliable real-time bus and train information is important to our customers; part of a positive customer experience is providing accurate bus arrival predictions to help customers plan their trip and make decisions on when to start that trip. Further, it is important for customers to know that, if there is a disruption to service, they can easily access reliable information that may affect their trip.

In 2010, OC Transpo was one of the first agencies in Canada to provide real-time bus arrival predictions. Using the current system, a customer can request the predicted arrival time of a bus at their stop using an app, by calling 613-560-1000, or by sending a text message to 560560. The system will generate an estimated arrival time based on the real-time GPS position of the in-service bus and the scheduled travel time from that position to the customer's bus stop. This GPS-adjusted arrival time is an estimate; the closer the bus is to the requested stop, the more accurate the estimate.

In the years since real-time bus arrival predictions were first introduced, technology has advanced past OC Transpo's existing systems, and it is now time to update our real-time information systems to match industry standards.

With the launch of O-Train Line 1, the most significant operational change in OC Transpo's history, we have been adapting our scheduling, dispatch, and customer information technologies to meet evolving requirements and to replace life-expired systems. Approximately \$1.05 million was approved since 2020 to improve real-time information and through the 2023 budget another \$2.45 million was approved.

In 2022, a multi-year technology transformation was completed to upgrade software used by the control room for vehicle location and dispatching. This upgrade also

included a new integrated arrival prediction application that uses GPS location and scheduling data to calculate the arrival time of buses in real-time.

In conjunction with these software changes, and for successful interfacing, a new real-time Application Programming Interface (API) was released in 2020. The API provides a way for software systems to request and receive arrival data automatically. It is used by our website, our own iPhone app, our 560-1000 phone service and our 560560 text message service. Third-party app developers can subscribe to the API via the City's Open Data Policy. Customers can choose from a number of independent apps, as featured in our app gallery at octranspo.com, to get real-time information.

As part of Council's additional investment this year, a project to improve our digital platform is being implemented. This project focuses on four main areas:

1. Data feed
2. Data quality
3. Customer alerts
4. Travel tools

The project will result in:

- A new real-time data feed based on the industry standard GTFS-RT and enhanced customer information tools for travel planning.
- A new customer alerts system, improving the quality and timeliness of alerts by reducing the manual steps needed to send them to customers and integrating alerts into the real-time data feed.
- A new customer alerts portal on octranspo.com, allowing customers to subscribe to and customize alerts for their specific routes.
- Updates to octranspo.com to provide new tools and features, such as real-time travel planning.
- A pilot of e-ink digital information screens at high-volume stops to provide real-time arrival predictions.
- Updated design of our transit information screens at stations, with more accurate real-time predictions and enhanced alerts, and the expansion of transit information screens across more of the network.

These upgrades are expected to be implemented from 2023-2025. New features will be released as they become available. Improvements have already been made in 2023. The server infrastructure and capacity has been increased to better support API

requests and prediction calculations. In April, a system configuration change increased the availability of real-time predictions by approximately 5 per cent.

Improving communications

Beyond technological improvements, OC Transpo continues to be committed to improving communications with customers through multiple channels. On May 1, 2023, OC Transpo launched two new Twitter accounts, @OC_TranspoHelps and @OC_TranspoAide, to better support customers. These customer service focused accounts respond to inquiries from customers and provide updates on detours and major disruptions as they arise.

Along with the core system improvements described above, staff will continue to work with the independent developers who provide the smartphone apps that many customers use. More information about these independent apps is available at <https://www.octranspo.com/en/plan-your-trip/travel-tools/app-gallery/>

The web site, octranspo.com, continues to be the best place for customers to get the latest information about their trip. Customers can check next departure information, detours and other important trip information, and sign up for text message alerts. Customers may also text 560560 or call 613-560-1000 for information on their trip. We continue to look at new ways to provide customers with information on the website and through other tools to help customers plan their trips and understand the services available to them.

FINANCIAL IMPLICATIONS

There are no financial implications to receiving this report for information.

LEGAL IMPLICATIONS

There are no legal impediments to receiving this report for information.

ACCESSIBILITY IMPACTS

Staff will continue to engage persons with disabilities and accessibility stakeholders to ensure that their perspectives are considered and incorporated, and to promote inclusion. Staff will also ensure that any applicable accessibility legislation, standards, and guidelines are adhered to during the execution of the project and initiatives identified in this report. In addition, websites, web content and web applications developed to communicate real-time information to customers will conform to the

requirements of the City's Web Accessibility Policy and Web Content Accessibility Guidelines (WCAG).

TERM OF COUNCIL PRIORITIES

The 2019-2022 Term of Council Priorities include:

- Integrated Transportation: Enable effective mobility through a sustainable, accessible, and connected city transportation system.
- Service Excellence Through Innovation: Deliver quality services that are innovative and continuously improve to meet the needs of individuals and communities.

DISPOSITION

Staff will continue to develop and implement new technology to improve the customer experience on the OC Transpo transit system, including advancing real-time information. The department will action any direction received as part of consideration of this information report.