

# Staff Report



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| To           | <b>City Council</b>   |
| Service Area | Public Services   |
| Date         | Monday, August 24, 2020                                     |
| Subject      | <b>RideCo Pilot Project Transition to Permanent Program</b> |

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## Recommendation

1. That the Guelph Transit pilot project, as recommended through the Guelph Transit Business Service Review be approved and transitioned into a permanent program through a single source procurement award to RideCo.
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## Executive Summary

### Purpose of Report

Guelph Transit Mobility Service has completed the pilot project for Intelligent On-Demand Transit software as outlined in recommendation #11 of the [Guelph Transit Business Service Review Final Report](#). All goals of the pilot were met and additional efficiencies were identified through the use of the RideCo software to enhance service to Mobility users. This took eight months of partnership to ensure the proper algorithms provided optimal performance for both Mobility riders and dispatchers. In order to maintain the significantly improved service levels, Guelph Transit must transition the program from a pilot to a permanent program. Guelph Transit is seeking approval to continue with RideCo software.

### Key Findings

The pilot with RideCo was developed to test the service gains (improved scheduling and increased capacity) from Intelligent On-Demand Transit Software with Guelph Transit Mobility Service, and assess the feasibility for low density and low utilization applications.

The positive outcomes of the pilot are as follows:

1. Passenger per vehicle hour increase by four per cent resulting in a revenue increase
2. On-time pick up of 96 per cent resulting in fewer complaints
3. On-time drop offs of 98 per cent resulting in increased rider satisfaction
4. Decrease in vehicle kilometres per trip by four per cent resulting savings of fuel and maintenance
5. Total available bus hours increased three per cent, resulting in a seven per cent increase in passenger counts
6. Mobility riders can now book appointments through the use of a mobile app allowing riders to book anytime, anywhere.

This was accomplished due to:

1. All scheduled vehicle itineraries and routes are built autonomously based on algorithms refined between Transit and RideCo
2. Online ride bookings by both dispatch and riders
3. The software takes all factors into account automatically, including expected time of day, traffic, and re-routing based on real-time traffic and vehicle locations. This includes the continual updating of the software to take into account new bookings, changes in traffic, or vehicle slowdowns
4. Vehicle(s) are autonomously re-routed if a vehicle is taken out or added into service
5. RideCo developing new features to meet specific Guelph Transit requirements. These include:
  - a. Ability to override booking constraints to book urgent rides for priority customers.
  - b. Ability for Mobility operators to see passenger type of customer i.e. mobility device, ambulatory, etc.
  - c. Passenger stored locations such as home or work addresses.

## **Financial Implications**

Initial purchase of the RideCo software, including four years of hosting and warranty, is already approved within the 2020 capital budget, capital project TC0073. The initial cost is \$286,000 plus HST. Beginning in 2025, annual operating costs associated with hosting and warranty will be approximately \$85,000 per year. This cost will be included as an operating impact from capital as part of the 2025 operating budget. Council has approved a Transit service level revenue/cost (R/C) ratio target to be in the range of 40 to 45 per cent. These additional costs will be managed within the Council approved Transit service level budgets.

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## **Report**

### **Details**

In addition to the goals outlined in the Business Service Review Report, RideCo's key goal was to identify product feature gaps for Mobility Services and close critical gaps for Mobility riders. In partnership with RideCo, they developed a product tailored to Transit Mobility's current and future requirements. Those requirements will be ready in a future software release. They are:

1. Customer notes to dispatch
2. Customer notes to drivers
3. Built in expiry of customer program eligibility
4. Day before reminder calls to customers
5. Management of key points of interest
6. Management of stored addresses
7. Loading of subscription bookings into schedules
8. Changes to driver schedule templates
9. Built in driver navigation; particularly helpful for onboarding new operators, and ensuring the shortest distance between pickups and drop-offs

10. Text messages to customers when driver is en route, and when they have arrived
11. Email confirmations to customers upon booking a trip
12. Customer vehicle tracking via the app that shows the vehicle location in real-time
13. Daily key performance indicator reporting customizable by the RideCo Analyst team; used for snapshot of program health to key stakeholders

The service review goals and outcomes were as follows:

| Goals   | Outcome  |
|---|--|
| Autonomously scheduled vehicle itineraries and routes   | All vehicle itineraries and routes are fully autonomously scheduled. Preferred pickup times are requested by the dispatcher or the customer and the software autonomously considers the best options across the available fleet and provides the dispatcher or customer with a list of available pickup times, to meet the needs of mobility services and the customer.  |
| Online ride bookings by both dispatch and customer  | Dispatch bookings are made via a browser-based booking site. Customers can also book trips via the same site, once approved as a client with Mobility services. Customers can also use a mobile device to book trips, the app can be found in both the Google Play store and the Apple store.<br><br>The booking website and the app were created for the end consumer; steps for creating a booking are user friendly. A user manual with details on booking a ride is also in production.<br><br>Customer feedback has been positive with customers and dispatchers, as well as customers' families of different ages and abilities, using the app to schedule advance and same day rides. |
| All factors are taken into account automatically, including expected time of day traffic and re-routing based on real-time traffic and vehicle location | The RideCo software automatically updates expected trip times with traffic estimates based on location, day of the week, and time of day. The traffic estimates are updated at least weekly to reflect seasonal changes such as winter weather or summer vacation.   |

| <u>Goals</u>  | Outcome  |
|---|--|
| <p>Continual updating of the system to take into account new bookings, changes in traffic, or vehicle slowdowns</p> <p>Vehicles are automatically re-routed if a vehicle is taken out or added into service</p> | <p>The RideCo software is constantly looking for the best solutions across the vehicle fleet. RideCo software has tuned the definition of the best solutions to Guelph Transit's needs and goals.</p> <p>When new bookings, traffic changes, or vehicle slowdowns occur, the software will continuously work to find the best schedule under the new parameters.</p> <p>The re-routing when a vehicle is taken out of service has been very successful. Rides are nearly always able to be serviced with reasonable on-time performance rates.</p> |

### Key Performance Indicators

The following table outlines some of the key operational benefits that this pilot has made in Mobility service.

|                                   | February 2019 | February 2020 | Change      |
|-----------------------------------|---------------|---------------|-------------|
| Passengers per vehicle hour (PVH) | 2.64          | 2.74          | +4 per cent |
| Kilometres per passenger trip     | 6.67          | 6.38          | -4 per cent |
| On-time pick up percentage        | Not available | 96 per cent   |             |
| On-time drop-offs percentage      | Not available | 98 per cent   |             |
| Total passengers                  | 4,069         | 4,350         | +7 per cent |
| Total available bus hours         | 1,542.78      | 1,586.88      | +3 per cent |
| Total kilometres driven           | 27,121        | 27,733        | +2 per cent |

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costs associated with hosting and warranty will be approximately \$85,000 per year. This cost will be included as an operating impact from capital as part of the 2025 operating budget and managed within the Council approved Transit service level revenue/cost (R/C) ratio target to be in the range of 40 to 45 per cent.

## **Consultations**

Finance

## **Strategic Plan Alignment**

Making this pilot project a continuous program for Mobility Services will line up with the City of Guelph's Strategic Plan, more specifically "Navigating our Future". This program will not only foster easy, accessible movement within the city of Guelph, it will provide attractive, affordable and reasonable transportation options for everyone. It will also improve connections to workplaces in Guelph, and improve the safety, efficiency and connectivity of the whole transportation network.

## **Attachments**

None

## **Departmental Approval**

Robin Gerus

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