

EasyGO Traveler Information System

Organization

Grand River Transit – Region of Waterloo.

Status

Implemented in June 2008. Ongoing.

Overview

Guided by the Places to Grow Plan for the Greater Golden Horseshoe (2006) and the Regional Growth Management Strategy (2003), the EasyGO Traveller Information System was implemented in 2008 to advance the goal of developing efficient, well-used and sustainable public transportation options.

The EasyGO Traveller Information System is designed to complement and enhance the existing iXpress bus service. Main features include an online trip planner, EasyGO next bus call and EasyGO text messaging to get scheduled arrival times at any stop, any time of day.

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Resources

EasyGO website –
<http://www.grt.ca/web/transit.nsf/vwArticles/TE-GR-ROU-LIN-2100?OpenDocument>

Regional Growth Management Strategy –
www.region.waterloo.on.ca/web/region.nsf/fmrgms?OpenForm

Grand River Transit –
<http://www.grt.ca/web/transit.nsf/fmFrontPage?OpenForm>

Community context

Waterloo Region is a rapidly growing mid-sized metropolitan area comprised of three cities and four townships, including the municipalities of Kitchener, Cambridge and Waterloo. The Region's population of 516,000 is served by Grand River Transit. The regional transportation provider was formed in 2000 from a merger of Kitchener Transit and Cambridge Transit. The system serves 14,400,000 riders per year, a daily average of 56,000 users.

As with most other urban regions and municipalities, encouraging transit ridership has been challenging because of low-density land uses, high auto ownership, moderate congestion and inexpensive parking. Despite these challenges, Grand River Transit's new and expanded services, including the iXpress rapid bus service and the EasyGO traveller information system, have helped realize notable gains in transit ridership.

Policy context

EasyGO is a key component of the Region's iXpress rapid bus service, which was initiated with the assistance of Transport Canada's Urban Transportation Showcase Program (UTSP). The new services and facilities were developed to help advance the Region's goals of encouraging a reduction in use of single-occupant vehicles, reducing greenhouse gas emissions and, over time, developing a rapid transit system to serve the region.

The EasyGO system is not a stand-alone action but rather is part of a larger transportation demand management (TDM) strategy. By encouraging user access to information, EasyGO acts as a 'soft measure' to complement the 'hard measure' infrastructure improvements.

Several policy initiatives guided the development and implementation of the EasyGO traveller information system, in coordination with existing transit strategies. These included:

- **Regional Transportation Master Plan.** Approved in 1999, this document sets out the long-term vision for transportation throughout the region that includes a doubling of transit ridership by 2016 and an auto reduction target. It is currently being updated through a new long-range transportation plan called *Moving Forward 2031*.
- **Regional Growth Management Strategy.** Adopted in 2003, the strategy provides direction to long-term planning in the region through a balanced approach to growth. This is forming the basis for a new Regional Official Plan that takes the principles laid out here into consideration, in particular plans to develop a compact urban form.
- **Places to Grow in the Greater Golden Horseshoe.** Finalized in 2006, this high-level and large-scale growth management strategy is the Ontario government's initiative to manage growth in a way that supports economic prosperity, protects the environment and helps communities achieve a high quality of life.
- **Rapid Transit Environmental Assessment.** Rapid Transit is identified in the above policies as one of the key catalysts to support downtown revitalization and reurbanization to avoid proliferation of urban sprawl.

Rationale and objectives

The goal of the EasyGO system was to increase transit use through improved information for users. By providing reliable, accurate and easy-to-use information the public's confidence in the transit system is increased. Existing transit users are expected to ride more frequently and more new riders will be attracted to the system.



Actions

EasyGO was designed to provide updated passenger information system-wide and related real time information for the iXpress service using online, telephone and text messaging technologies.

The iXpress service provides quick travel along a 35-kilometre central transit corridor in Waterloo Region. It is a core component of the regional transit strategy and now carries over 8,500 riders daily. iXpress includes an automatic vehicle location system and a passenger counting system. While some elements of EasyGO are system-wide, the real time and on-board information currently works on the iXpress only. The EasyGO Traveller Information System includes:

- **EasyGO trip planner:** A web-based interface to check schedules or to plan trips using landmarks, bus stops, addresses or intersections.
- **EasyGO text messaging:** Users text 57555 plus the four digit EasyGO stop number. EasyGO will text back the next three scheduled times the bus will be at the stop. Future enhancements will include real time information.
- **EasyGO next bus call:** Riders call 519-585-7555 plus the four-digit number located at the stop. This will provide scheduled times for the next buses at that stop. EasyGO call also connects to an automated menu for future schedules, live agents, out of town transit and para-transit. Future enhancements will include real time information.

- **In-vehicle announcements:** Visual LED signs & audible voice announcements alert riders of upcoming stop information.
- **Station displays:** LED displays at iXpress stations provide real time departure times for the next two buses.
- **Terminal displays:** Flat panel displays provide scheduled information for all routes with real time information for the iXpress route.



Results

Results are encouraging at this point. While still in the early stages of implementation, EasyGO usage is growing and customers are typically pleased with the system overall. A planned attitude and awareness survey will help GRT gauge the ridership growth attributable to EasyGO usage.

Overall, some changes in trip patterns have been detected. For each of the new EasyGO technologies (online trip planner, automated phone, text messaging), average daily use has more than doubled between June 2008 and September 2008.

User input, acquired through over 900 completed online surveys, has been positive and suggests that growth in ridership related to the implementation of the EasyGO system has been strong. Users have indicated that the new trip plans they have discovered have often made a difference in their desire to use transit, with many finding trip times shorter than previously thought.

Participants

The EasyGO system was developed with input from the public, Region of Waterloo staff, expertise

from consultants and technology vendors, and with the support of Transport Canada.

A consultant was brought on in the initial stages of the project to manage the process of identifying potential components of a Traveller Information System and to determine which would be most important based on the project objectives, existing infrastructure and available resources. This stage involved an internal workshop where staff from the transit division and other municipal departments provided input. The process also took into consideration requests from the public for new sources of information.

A single vendor was selected to provide all the technology needed for the EasyGO system.

Resources

Funding for the EasyGO system was provided to the Region of Waterloo through the Urban Transportation Showcase Program. The Province of Ontario also contributed through the Golden Horseshoe Transit Investment Partnerships (GTIP) while the Region of Waterloo contributed through their transit capital program.

Installations and upgrades needed for the EasyGO system were implemented alongside other improvements to the system (i.e. vehicle locating technologies). The total cost for this stage of the project was \$3.2 million in capital upgrades and improvements. An additional \$200,000 was needed for upgrades to support systems and infrastructure (i.e. computer upgrades, electrical infrastructure). Specific cost estimates for some components of the EasyGO system include:

- Online trip planner: \$200,000
- IVR phone system: \$137,000
- Flat panel displays: \$250,000
- Real time displays: \$250,000

Implementation of the EasyGO system was completed within the existing staff complement. New staff are currently being considered to help monitor the system, develop data systems and to maintain field equipment. These staff will include a network analyst, a programmer analyst and a

technician. The new staff would also be involved in other parts of the ITS system.

Conversely, there is the potential to defer the need for new staff in other areas due to the technology. For instance, the automated trip planner can relieve the amount of work required by customer service staff, so even with increasing transit usage, additional staff would not need to be hired.

Timeline

The EasyGO Traveller Information System was initially launched for testing in May 2008. Using an online form, user feedback was collected throughout the summer and modifications were made accordingly.

User feedback was also used to create a “wish list” of features that were found to be missing from the current options (e.g. a ‘saved favorites’ option on the online planner). Based on this, discussions on next steps have begun with vendors.

The official launch was in June of 2008. The UTSP funded portion of the program is due to end in March 2009.

Lessons learned

Based on evaluations of the program to date, several challenges have been identified. These include:

- **Knowledge gaps:** The EasyGO technologies (online, phone, text messaging) require specific skills among staff. These needed to be identified and, in some cases, cultivated within the organization for staff to implement them effectively. This ‘knowledge gap’ also required collaboration between staff and departments that had not formally worked together.
- **Time sensitive data needs:** It is critical that changes in the field are reflected immediately in the database so that patrons maintain their confidence in the EasyGO system.

- **Incorporating user feedback:** During the testing and rollout of the system, users provided information about how the system could be improved. Simple features, like a ‘saved favorites’ option to allow users to look up common trips at different times made the system easier to use. Customers have also asked for more flexibility in how trip plans are printed out and the ability to plan trips with multiple stops.
- **Staffing needs:** Dedicated staff and resources are needed to operate and maintain the system efficiently.



Next steps

An attitudes and awareness survey has been scheduled for the winter of 2008. Additional evaluation activities are also planned as part of the UTSP requirements. These will be completed during the spring of 2009.

Next steps for the EasyGO system and related services include:

- Making the Traveller Information System functional for Blackberries and other personal digital assistant (PDA) devices;
- Integrating vehicle location technology into the entire fleet (not just the iXpress route). This will include an expansion of display information to all routes and providing information in real time; and
- Installing audible on-board stop announcements for each bus stop.

These changes are under review for inclusion in Grand River Transit's 2009/2010 budget.