



2008 GLOBAL EXCELLENCE AWARDS

Location

Regional Municipality
of York, Ontario, Canada

Client

York Region

Project Manager

Rick Staples

YORK REGION VIVA RAPID TRANSIT VEHICLE NETWORK

In York Region, Canada's sixth largest and still rapidly-growing regional municipality, less than 9% of peak period trips were using public transit. As a result, increasing traffic congestion and gridlock had become primary public concerns. York Region's Official Plan outlined a strategy to concentrate growth within four urban centres. The Viva rapid transit network was designed to link the four centres and provide convenient connections with neighboring regions in the Greater Toronto Area. The goal was to increase York Region's transit use to 17% over a 25-year period, thereby reducing congestion, improving air quality and enabling more efficient land use.



York Region chose to implement the Viva system by entering into the first Public Private Partnership agreement of its kind for a major transit infrastructure program in Canada. York Consortium was selected as the private sector partner and Delcan, as a key member firm, along with IBI Group and DMJM Harris Canada Inc., was to provide environmental assessment services, project planning, engineering and service design.



Delcan worked with its partners to develop a three-phase business plan. The key components of the Phase 1 "Quick Start" project were early action and early benefits in a mixed traffic environment, and the most efficient use of capital investment. After completion of the required environmental assessments, the Phase 2 project constructs dedicated transitways along the most congested segments of the corridors to separate transit vehicles from general traffic flow to significantly improve travel times. Phase 3 invests in higher-order transit technologies to increase passenger capacity. In 2003,

the Federal and Provincial governments endorsed the rapid transit business plan and provided matching funds for the Phase 1 "Quick Start" project.

Record Results:

The Viva Phase 1 project began operations less than three years after the original business plan. The project was delivered on time and within budget. Since Viva service was launched, annual transit boardings have increased by more than 55% in York Region and millions of square feet of transit-oriented development are underway within the four urban centres and along the corridors that connect them.

Viva, the 2006 recipient of the American Public Transportation Association Innovation Award and the first bus rapid transit system of its kind in the Greater Toronto Area was launched in September 2005. Seven months later, total transit boardings along the Yonge Street corridor for May 2006 were 37 percent ahead of the previous year. Not only did Viva break ridership records; it accomplished its launch on budget in less than three years, or about half the time it would normally take to implement a similar project in North America.

Areas of Innovation

Viva incorporates innovative and creative approaches to planning, design, implementation of technology, operations and communications:

- **Innovative Solution for Growth Management:** York Region is using rapid transit as the catalyst to manage growth through transit-oriented development within four centers.
- **Innovative Public Private Partnership:** Public sector responsibilities include establishing policies and service levels, ownership of all assets, and control of revenues and funding. Private sector responsibilities include professional staffing and procurement support, assuming risk on all approved budgets and schedules, and assisting York Region in its funding and financing requirements.
- **Innovative Rapid Transit Plan:** Three-phase strategy to link infrastructure investment with increased ridership and changing land use. The plan allocates funding to implement three projects over a 20-year period.
- **Innovative Application of Bus Rapid Transit Technologies:** Key planning criteria for Viva Phase 1 included putting infrastructure elements on the ground as quickly as possible to mold new development in a transit-oriented direction; using only infrastructure elements that would not require Environmental Assessment approval; and minimizing resources that would be redundant when subsequent rapid transit projects were implemented.
- **Innovative Operations and Maintenance:** Veolia Transportation, Viva's operations and maintenance contractor, shares the Region's vision of sustainable urban communities and, through the diversity of its resources, offers a broad range of knowledge of best practices and integrated solutions.
- **Innovative Marketing Initiatives:** One of the greatest challenges for the project was to convey multiple messages to diverse stakeholders, including elected officials, other transit agencies, the business community, and existing and potential transit customers. The decision was made early to market the rapid transit project through strategic brand management, which provides a central focus from which to address a wide variety of issues and audiences.



Client Impact / Value

Delcan's commitment to the success of Viva Phase 1 "Quick Start" has gained kudos from the client who is approving the submission of an application for the 6th Annual Ontario Consulting Engineering Awards by Delcan in association with IBI Group and DMJM Harris Canada Inc. "This design consortium played a key role on the Viva project team, never hesitating to recommend innovative approaches to improving overall cost and efficiency while delivering the project in record time" said Mary-Frances Turner, Vice President of York Region Rapid Transit Corporation.

Industry Impact / Value

The resounding success of Viva Phase 1 "Quick Start" has been recognized by industry leaders internationally. "In this era of high gas prices, rising greenhouse gas emissions, increasing congestion and deteriorating air quality," said Michael Roschlau, President and CEO of the Canadian Urban Transit Association, "Viva is a model because it integrates more elements of bus rapid transit than anywhere else in Canada." By increasing the appeal of public transit as a viable mode of transportation, Viva provides the foundation to manage rapid population and employment growth in sustainable, mixed-use transit villages.

Community Impact / Value

Viva's return on investment includes major economic, transportation and environmental benefits. Since the Viva service was launched, annual transit boardings have increased by more than 55%, reducing the rate of automobile congestion and generating savings in vehicle operating and fuel costs. Viva is enabling more efficient land use patterns to reduce urban sprawl and make it easier to preserve green spaces, agricultural lands, and environmentally significant areas.

