



YORK
REGION
RAPID
TRANSIT
CORPORATION

VIVA

fast forward to a sustainable future

2005 TAC Sustainable Urban Transportation Award Nomination



VIVA FAST FORWARD TO A SUSTAINABLE FUTURE

Viva is being nominated for the 2005 TAC Sustainable Urban Transportation Award

Viva, the first bus rapid transit system of its kind in the GTA, was launched in September 2005 through an innovative public-private partnership. Five months later, total transit boardings along the Yonge Street corridor for the month of January were 34% ahead of the previous year.

Viva creatively combines innovative elements to replicate rapid transit service prior to the completion of environmental assessments:

- Real-time electronic displays to show passengers when the next vehicles are due to arrive;
- Modern, environmentally friendly vehicles with high-back seats, large windows, tables, WiFi and onboard television;
- Queue jumpers and transit signal priority for exclusive through-movement of rapid transit vehicles at congested intersections;
- Computer-aided dispatch, GPS, digital voice and data communications, and other intelligent transportation system applications.



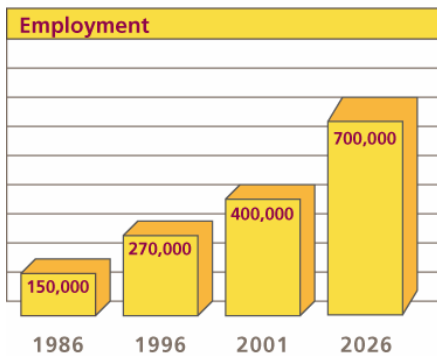
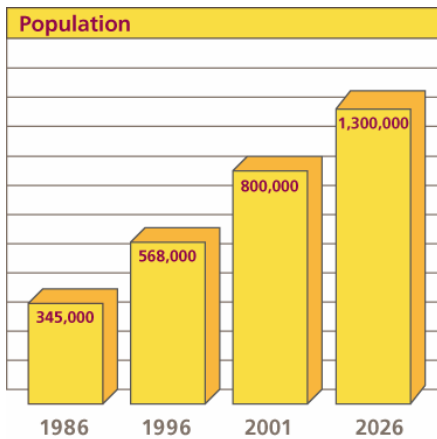
For a fraction of the cost of a light-rail system—and in record time—the implementation of Viva has jump started sustainable development in York Region.

Innovative marketing initiatives position Viva as unique, fun and appealing and set it apart from traditional transit services. An award-winning website promotes Viva with contests and interactive modules. A permission database supports cost-effective e-mail broadcasts and e-newsletters.



Although some observers originally stated that transit-oriented development could not occur without rail-based transit, Viva is proving them wrong. Millions of square feet of new development are now underway along the transit corridors. For a fraction of the cost of a light-rail system — and in record time — Viva has jump started sustainable development in York Region. It provides a working model that can be replicated in municipalities across Canada.





As a result of rapid population and employment growth, traffic congestion has become the number one concern of residents and the business community.



SUSTAINABLE URBAN PLANNING IN YORK REGION

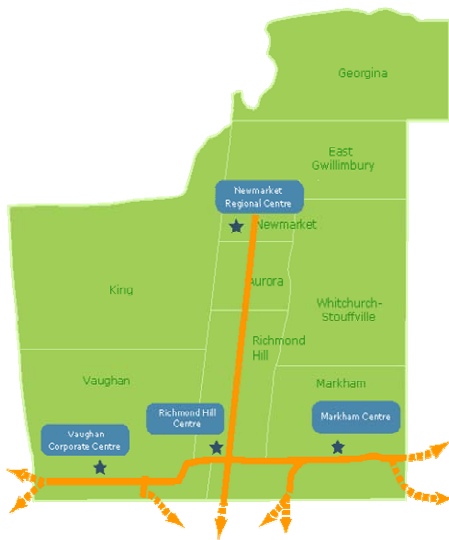
Centrally located within the Greater Toronto Area (GTA), York Region has grown rapidly from a predominantly rural and agricultural area to Canada's sixth largest regional municipality with a population of 920,000.

Less than 9% of peak period trips use public transit, and traffic congestion on regional roads and highways is now the number one concern of residents and local businesses. The problem is further compounded by changing travel patterns as York Region becomes a major destination for employees. For every 100 commuters traveling south from York Region to Toronto, there are 80 commuters traveling north. Trips entirely within the Region have also increased significantly.

York Region is adding 35,000 people and 16,000 new jobs every year. With population forecast to grow by a further 65% over the next 20 years to reach 1,300,000, York Region is facing the challenge of imminent gridlock.

The Regional *Official Plan* outlines a strategy to concentrate future growth within four urban centres—Vaughan City Centre, Richmond Hill Centre, Markham Centre and Newmarket Regional Centre—which are intended to become focal points for business, government, culture and recreation.

York Region's *Transportation Master Plan* provides a comprehensive blueprint for road and transit development through 2031, and identifies rapid transit as the catalyst for managing growth. An efficient rapid transit system along the Region's primary transportation corridors (Yonge Street and Highway 7) supports environmental, economic and social sustainability. It reduces greenhouse gas emissions by encouraging more people to leave their cars at home, improves access and mobility for all segments of the population, and reduces the rate of automobile congestion for more efficient movement of people and goods.



The Region's Centres and Corridor's Study supports the development of sustainable, mixed-use transit villages along rapid transit corridors.



The Province of Ontario has estimated that clogged transportation corridors in the GTA are costing upwards of \$5 billion in lost GDP each year. York Region's goal is to more than double transit ridership with a mode share exceeding 25% within the four urban centres.

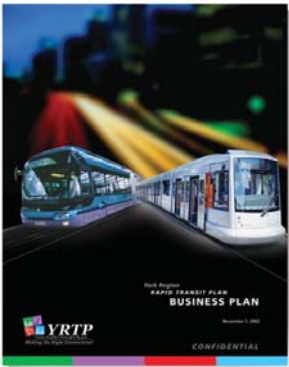
Making it Happen: The York Region Centres and Corridors Study connects the urban centres with rapid transit corridors to enable the development of vibrant transit villages. Increased land-use densities and a healthy mix of residential, employment and commercial uses will reduce live, work and play distances and encourage more pedestrians, cyclists and transit riders. Land that would normally be allocated for surface parking can instead be used for more productive purposes.

INNOVATIVE PUBLIC-PRIVATE PARTNERSHIP

The ongoing influx of people and jobs forced York Region to rethink standard operating policies and procedures. Needing to find a way to attract some of the best and brightest in the world to speed implementation of the rapid transit network, the Region decided to enter into the first public-private partnership of its kind in Canada for a major transportation infrastructure program.

York Region's partnership with York Consortium comprises seven private sector firms with extensive international experience in transit design, architecture, construction and operations. Under the terms of the partnership agreement, public sector responsibilities include establishing policies and service levels, ownership of all assets, and control of revenues and funding. Private sector responsibilities include staffing and procurement support, assuming risk on all budgets and schedules, and assisting York Region in its funding and financing requirements.

The partners developed a cost-confidence process to establish a guaranteed maximum price for each design/build project stage. An independent engineering consultant reviews York Consortium's plans, drawings, specifications and unit costs, and prepares a separate cost estimate. By comparing and



York Region's Rapid Transit Plan addresses immediate transportation concerns while providing the basis for future sustainability.



Phase 1 (2003-2006)



Phase 2 (2006-2012)



Phase 3 (2012-2022)

resolving any cost discrepancies, York Region avoids time consuming and costly tendering processes while retaining the cost optimizing effects of competitive quotes.

INNOVATIVE RAPID TRANSIT PLAN

Together the partners developed the *York Region Rapid Transit Plan (YRTP)*, which outlines a three-phase approach to link infrastructure investment with increased ridership and changing land patterns.

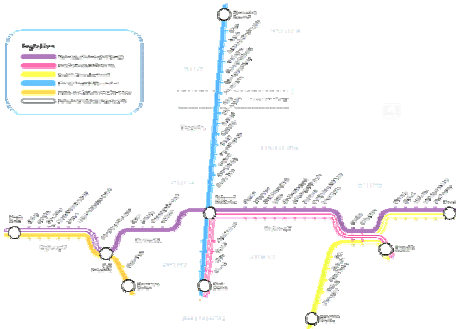
Rather than delay the program by two or three years while the required environmental assessments (EAs) were proceeding, the YRTP advocates early action:

- Phase 1 provides bus rapid transit (BRT) service elements that do not require, or have already obtained, EA approval to address immediate transportation concerns and attract new riders;
- Phase 2 constructs dedicated transitways to significantly reduce travel times along the most congested sections of the transit corridors; and
- Phase 3 increases capacity with light rail transit and potential subway extensions to accommodate future population and employment growth.

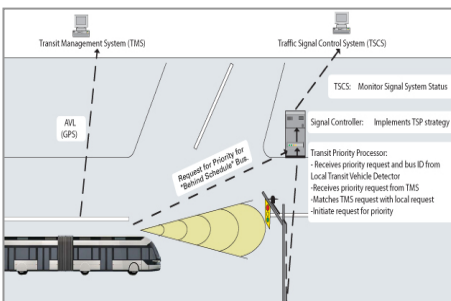
Following completion of the EAs, Phase 2 can then move forward with dedicated transitways, permanent stations and enhanced passenger facilities. Phase 3 supports population and employment growth with increased ridership capacity. Segments of the routes can be converted to light rail transit by taking advantage of the permanent stations and rights of way already constructed for BRT service.

INNOVATIVE APPLICATION OF BRT TECHNOLOGIES

Because increased ridership is the primary objective of the rapid transit system, York Region residents were asked during an EnviroNics survey to specify the features and benefits that would encourage them to use public transit more frequently. The results of this research indicated that public transit should



Phase 1 was specifically designed to deliver the frequency, coverage, shorter wait times and faster service required to grow transit ridership.



provide more frequent service, shorter wait times, greater coverage, faster service and increased value. Phase 1 was designed to address all of these requirements:

1. Peak period frequency of five minutes or less along the busiest sections of the rapid transit corridors;
2. Real-time electronic displays at stations to show passengers when the next vehicles will depart;
3. Intermodal terminals to reduce passenger waiting times;
4. Fully accessible rapid transit vehicles, the first of their kind in Canada, with low emissions, air-ride suspension, custom design features for passenger comfort (high-back seats, large windows, tables, WiFi and onboard television), and multiple wide doors, low floors and spacious interiors for fast passenger boarding and alighting;
5. Integration with York Region Transit's local bus routes to increase coverage throughout the Region for a single fare that is valid for travel in any direction for up to two hours;
6. Queue jumpers and transit-actuated signal priority at congested intersections to facilitate an exclusive through-movement for buses;
7. Prepaid, proof-of-payment fare system to reduce dwell times at stops;
8. Computer-aided dispatch, GPS vehicle location, digital voice and data communications, and other intelligent transportation systems.

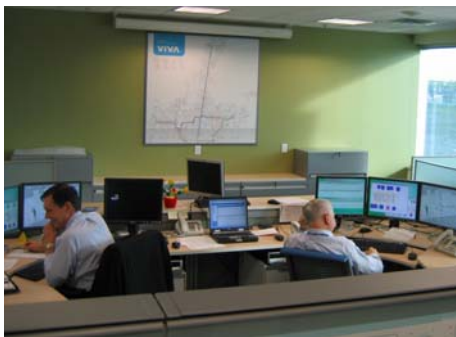
Due to York Region's central position within the GTA, Viva was designed to support a seamless "family" of transit services to and from the neighbouring Regions of Toronto, Durham and Peel. Seven intermodal terminals link Viva with the Toronto Transit Commission subway, GO Transit commuter rail and express buses, and Brampton Transit.

INNOVATIVE MANAGEMENT PRACTICES

Following the evaluation of proposals and contract negotiations, York Region entered into an agreement with Veolia (Connex) for the operations and maintenance of the rapid transit system. Veolia shares the Region's vision of



As the North American and European leader in transportation, the operations and maintenance contractor shares York Region's vision of sustainable urban communities and offers a broad range of knowledge in best practices and integrated solutions.



sustainable urban communities and, through the diversity of its resources, offers a broad range of knowledge in best practices and integrated solutions. The company's charter specifies 10 commitments to sustainable development, including environmental protection, education and research and development. As the leader in Europe and North America in transportation, Veolia provides unique access to transportation demand management programs as well as a forum for interchange through its Environmental Institute.

The Operations and Maintenance contract is performance based, with a focus on service frequency and reliability. Progress is monitored through operational benchmarks that measure sustainable practices. Since Phase 1 sets the foundation for subsequent phases, the contractor is working to establish strong relationships with the other transit providers operating in the GTA. This year, Veolia will also begin working on the methodology and indicators for a sustainable development laboratory to test new practices in York Region.

INNOVATIVE MARKETING INITIATIVES

One of the largest challenges for the project was to convey multiple messages to diverse stakeholders, who range from elected officials and the business community to the transit riders themselves. The decision was made early on to market the rapid transit project through strategic brand management, which provides a central focus from which to address a wide variety of issues. A strong brand delivers the personality and spirit required to stand out and initiate behavioural change.

The rapid transit brand is more than just a name since it is launching an exciting story about the future of life in York Region, and helping to bring that story to life. The brand needs to promote the features and benefits of rapid transit in ways that resonate with target audiences, and it must deliver on its promises. After considering over 500 names for the brand, Viva was chosen. Viva's promise is "uniquely great transit," delivered through innovative experiences and great everyday moments. This spirit of innovation makes Viva



Prominent members of the community were appointed Viva Ambassadors to provide advice and develop strategies to enhance community outreach.

unique, fun and appealing to potential riders, and sets it apart from traditional transit services.

As Viva progressed from the drawing board to the roadside, ongoing public involvement was critically important. As part of the EA process, the public was invited on numerous occasions to provide input. The project team sought local advice and guidance from Chambers of Commerce and Boards of Trade, historical societies, ratepayer associations and community advisory groups. Viva also began working closely with the Smart Commute Highway 404-7 Association to promote more sustainable travel choices and reduce the number of single occupant vehicles on the roads.



Prominent members of the community have been appointed *Viva Ambassadors* to provide advice and develop strategies to enhance business outreach. *Team Viva*, a group of energetic high school and college students, was initiated to increase community outreach at shopping malls and special events.



The marketing campaign focused on the brand attributes of convenience, comfort and fun to encourage people to try transit. Banners were installed on light poles in station areas along the routes to announce the coming of rapid transit. An award-winning website promoted Viva with contests and interactive modules.



A permission database was created to stay in touch with target markets through cost-effective e-mail broadcasts and e-newsletters. *Team Viva* hosted open houses and presentations, and interactive electronic kiosks were positioned in malls and community centres to attract the public's attention. Major milestones became newsworthy events that earned positive media coverage.



The Viva brand was extended to include all aspects of Viva's operations, from the custom design of uniforms, fare media and station signage to driver training programs. Service route openings were accompanied by a media advertising campaign that promoted Viva as a cost-efficient and enjoyable alternative to automobile travel.



“Viva is a model because it integrates more elements of bus rapid transit than anywhere else in Canada.” – Michael Roschlau, President and CEO, CUTA.



Within five months of the initial service launch, total transit boardings along the Yonge Street corridor for the month of January were already 34% ahead of the previous year.



To enhance customer relations, *Viva Greeters* were positioned at stations and terminals as each new route opening was launched.

SUCCESSFULL LAUNCH IN RECORD TIME

Since the *YRTP* was first written, the partners have made remarkable progress. Phase 1 was successfully implemented within three years (less than half the time it would normally take for a similar infrastructure project in North America). Viva was officially launched on September 6, 2005 as the first BRT service of its kind in the GTA. “In this era of high gas prices, rising greenhouse gas emissions, increasing congestion, deteriorating air quality,” said Michael Roschlau, President and CEO of the Canadian Urban Transit Association, “the bold initiative taken by York Region is a critical step...Viva is a model because it integrates more elements of bus rapid transit than anywhere else in Canada.”

Ridership has been increasing steadily. In January 2006, total transit boardings along the Yonge Street corridor were 34% ahead of the previous year. Recent market research shows that Viva is delivering on its promise of “uniquely great transit” and that assisted public awareness of the system exceeds 80%. Research shows that overall transit mode share is increasing within York Region, with ridership also growing on the connected TTC and GO Transit routes. Service ratings indicate that Viva is exceeding customer expectations in terms of reduced travel times and clean, comfortable service.

Since the launch of Viva, customer feedback has been overwhelmingly positive. One customer wrote, “Viva is a great leap forward for public transit...keep up the good work.” Another expressed appreciation for Viva’s focus on the passenger by writing, “How exciting...an intelligent, user friendly, customer service driven system.”

SUSTAINABLE DEVELOPMENT ACCELERATED

The swift implementation of Phase 1 has generated a groundswell of support from developers and the business



Millions of square feet of new mixed-use development are now underway along over 80 km of rapid transit corridors.



Heritage versions of the shelters and fare equipment were developed to preserve the integrity of historic districts.



community. Viva's routes comprise over 80 kilometres along arterial roadways. Millions of square feet of new mixed-use development is already underway along the corridors and within the four urban centres. Many stations are located in areas with significant opportunities for more viable land use. Innovative architectural designs, landscaping features and shared uses are integrating stations and terminals into their surroundings.

The impact of employee commuting patterns on the overall operation of a company is considered a major issue by many employers and companies. The stress of daily commuting on congested roads negatively affects a worker's quality of life and the quality of his or her work. Viva makes it easier for employers to recruit and retain staff, increases employee morale and productivity, reduces commuting stress and time lost due to illness, reduces parking requirements, improves traffic flows and lowers facility costs. By 2026, almost 300,000 jobs are forecast within one kilometre of the Highway 7 corridor alone.

There is growing interest in compact housing developments and condominiums within an easy walking distance of the transit system. To augment residential, commercial and employment land uses, new cultural, recreational and institutional facilities are also being provided to enhance quality of life and turn key nodes along the transit corridors into both origins and destinations.

Heritage districts provide additional opportunities to enhance and revitalize streetscapes with an urban renaissance of new amenities, services and housing, and the public-private partnership is working with heritage associations in this regard. For Viva Phase 1, heritage versions of the shelters and fare equipment were developed to preserve the integrity of historic areas.

Within the four urban centres, compact development is being combined with quality architecture and leading edge practices for protection of the environment and social and economic sustainability. Each of the local municipalities is actively



involving stakeholders in development decisions. In Markham Centre, for instance, the Citizens Advisory Group is comprised of residents and local business representatives. The Advisory Group has overseen a series of workshops and conferences to establish guiding principles for development. These principles have been incorporated into performance measures that translate community values into measurable goals and best practices for built form, greenlands, public spaces, green infrastructure and transportation.



By balancing growth, the protection of communities, heritage and the environment, and by involving stakeholders in decision-making processes, transit-oriented development will play a major role in delivering a sustainable future for York Region's residents.

POTENTIAL FOR REPLICATING THE PROJECT IN OTHER COMMUNITIES



Viva is not only the first bus rapid transit system of its kind in GTA, it was built on time, and on budget. It incorporates the latest transit technology and innovative practices, and provides a working model that can be replicated in municipalities across North America. To date, the team overseeing the development and implementation of Viva has been asked to share best practices with jurisdictions around the world by making presentations and submitting articles to a variety of associations, forums and publications.

Viva is committed to establishing performance measures to evaluate everything from increased ridership to air quality and customer satisfaction.

Another important component of the Viva project is its commitment to establishing performance measures to evaluate everything from reduced travel times to air quality and customer satisfaction.



Viva is a critical part of a much larger vision that is now an evolving reality because of a forward looking, innovative approach to the development of public transit infrastructure.