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York Region and the GTHA

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Making Our Vision a Reality

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What’s Next for Viva
york region and the gtha
We’re here to talk about York Region – a major Canadian region, which has been hugely successful in attracting new business, new residents, new investment.

- A region that has the potential to be among the great urban regions of the world with its diversity, economic strength and quality of life.

- A region that has attracted new residents from across the globe, the country and the GTA.

- But also a region that is being challenged by its success.

- YRT and Viva have tackled the challenges posed by growth through major investments in an emerging rapid transit system.

- This investment has paid off so far, in the increased ridership across our network.

- But the threat of continuing traffic congestion has not lessened, and in fact is worse than before.
The Greater Toronto Area is one of the fastest growing districts in North America. During the next 25 years, over one-quarter of the increase in population—and over 30% of the increase in employment—will land in York Region.
• Our automobile-dependent culture began shortly after the second world war to meet the demand for a house in the suburbs and a family car in the driveway

• Around major cities, agricultural lands and environmentally sensitive areas were replaced with urban sprawl, an extensive network of roads and highways and millions of acres of parking lots

• Much of the development in the GTA has been built on this model, which is reliant on the automobile for convenient transportation
• For residents in York Region, long drives in slowly moving traffic have become a reality throughout most of the day
• Less than 10% of all trips use public transit
changing travel patterns

- Inter-regional travel increasing across all four boundaries
- North-south travel most significant
- East-west travel growing at a faster rate

York Region’s travel demand is also affected by the growth taking place in neighbouring Regions

During peak travel periods, there are almost as many trips coming into the York Region as there are going out
congestion is a major problem across the GTHA

• York Region is not, of course, the only area dealing with this problem
• Today there is significant traffic congestion throughout the GTA H
• By 2031, if we do nothing, we are all facing imminent gridlock
• Currently planned investments seek to address this issue in a proactive manner through a combination of road, transit and policy enhancements.

• York Region is at the heart of a number of strategies, developed by the Province and by the Regional government, to manage growth across the Greater Toronto and Hamilton Area.
integrating inter-regional and provincial plans to manage growth

- York Region is at the heart of a number of strategies, developed by the Province and by the Regional government, to manage growth across the Greater Toronto and Hamilton Area
- *Places to Grow* prioritizes transportation systems that support increased population and employment densities and enhance inter-regional connections
- Urban and transit planning across the GTHA needs to reflect and integrate those strategies
Places to Grow:
- Growth must be accommodated through intensification of land use within existing urban areas in accordance with *Places to Grow*
- Very little development is allowed to occur in the areas designated as protected countryside, except for minor expansions or infilling within existing settlements
- The majority of York Region land outside of the Oak Ridges Moraine, designated urban areas, towns and villages is subject to the Greenbelt Plan approved in 2005
- This plan has real implications as to how York Region will grow

Centres and Corridors Strategy
- The Region’s Centres and Corridors strategy supports the Province of Ontario’s Greenbelt Plan by concentrating growth and development within the designated urban areas
- The Region’s Official Plan seeks to manage growth through intensification of land use in four urban centres in Vaughan, Richmond Hill, Markham and Newmarket
- A mix of residential, commercial and employment uses will reduce live-work-play distances and parking management will be introduced within the urban centres to discourage automobile trips
- The four centres are connected with an efficient rapid transit system
- 40% of all new growth will be concentrated within the urban centres and along the transit corridors that connect them
- The goal is to triple transit’s share within the urban centres—and to more than double transit use on a Region-wide basis
• The Toronto Chamber of Commerce estimates that gridlock costs the region’s economy $1.8 Billion a year

• To reduce reliance on cars as the primary mode of travel, Metrolinx—a provincial crown agency—is implementing a 25-year transit plan to improve travel times and inter-regional connectivity and reduce greenhouse gas emissions

• York Region and our rapid transit vision is at the heart of this GTA transit plan—both geographically, and as a leader in transit innovation
• Our vision for the future for our region will respond to the pressures – and opportunities – presented by growth

• The vision will shape our region and the quality of life it can offer all its citizens

• Making the vision a reality will require a range of various tools and strategies
• The experience of successful urban regions shows that well-planned and operated rapid transit has the potential to go well beyond moving people from A to B

• Rapid transit actually shapes communities, and contributes to the sense of community for everyone, whether they are riders, drivers, residents, or workers

• This is the concept of “transit-oriented development”

• Transit acts as the catalyst by setting the cues for “placemaking” in York Region

• State-of-the-art, planned and orchestrated beautification of areas that will be built around transit clusters
• As shown in this visualization on Highway 7, and on the next slide, our vision is to use Viva rapid transit as the catalyst for urban renewal and revitalization
• Around vivastations, evolving transit villages will become both origins and destinations for the traveling public
• With a vibrant mix of residential, employment and commercial land uses to:
  • Reduce live-work play distances
  • Encourage more pedestrian activity
  • Provide new opportunities for protecting the environment, and
  • Enhance quality of life for residents, employees and visitors
one viva vehicle can take up to 70 cars off the road
• It is important not to lose sight of the larger picture of how various projects fit together to form interesting, diverse communities
• Historic properties can be restored to their former glory
• Investments in government facilities encourage private-sector development
• Buildings should reinforce corridor use with enhanced architectural treatments
• Within 100 km of transit stations, the first floors of structures should be reserved for commercial use
• Buried utility lines, textured materials, night lighting and streetscaping all contribute to the overall sense of quality and design
• Major streets should never “turn their backs” on surrounding areas, but extend the facades to include pedestrian areas behind buildings
• This attention to detail improves the attractiveness of the urban environment and results in higher, more stable property values and increased transit use
• This vision was to be supported by a rapid transit program to be built in three phases and link investment in infrastructure with ridership and land use.
• Phase 1 is an early action plan to build ridership and public support.
• Phase 2 includes the construction of exclusive rapidways to separate transit vehicles from general traffic and reduce overall travel times by up to 40% as well as subway extensions to the urban centres.
• Phase 3 invests in light rail transit to significantly increase passenger capacity as population and employment continue to grow.
• All of the Region’s plans are dependent on sustainable funding commitments that
support the timely implementation of the required rapid transit infrastructure

• Phase 2 funding is shared among York Region and senior levels of government
• Design-build (DB) contract to shift risk for cost and schedule to private sector

• Design and operation (DBOM) contract to shift operating performance risk to private sector

• Joint development, franchises, lease arrangements and shared uses optimize equity and generate cash flows to offset operational subsidies

• On the basis of sustainable funding and cash flows, new funding models can examine opportunities to generate revenue to pay back public investment over time
• Joint development
• Inter-regional mobility hubs
• Dedicated tax base
• Sale of development rights to the private sector
• Amendments to Development Charges Act to promote sustainable transportation

• By partnering with developers, municipalities can advance joint development of transit stations and terminals in conjunction with institutional facilities, office towers or shopping malls
• Joint development can deliver new infrastructure more cost effectively, and frequently raises the bar for urban development standards
• By working together, Regional municipalities can implement major mobility hubs for mutually beneficial use
• Additional financing opportunities include:
• The application of a dedicated tax base, such as the gas tax
• Sale of development rights to the private sector, and
• Ongoing amendments to the Development Charges Act that support sustainable transportation infrastructure
To fast track delivery of the rapid transit network, York Region entered into a partnership agreement with York Consortium.

The consortium comprises seven firms with significant world-wide experience in rapid transit engineering, design, finance, construction and operations.
• Under the terms of a partnership agreement, York Region controls revenues and retains ownership of all assets, and full policy control

• The Region will have voting majority on PPP corporation which is required to report to Council

• The private sector provides technical staffing support and assumes risk on budgets and schedules

• Through a cost-confidence process, procurement is open, transparent and competitive:
  - PPP contractually gives Consortium first right to bid; does not guarantee contract at any price
  - Incorporates open, transparent price analysis by independent cost estimator
  - Ensures Region gets best value for public funds

• And projects are delivered within a guaranteed maximum price so that there will be no cost overruns

• Through the partnership Viva Phase 1 was delivered within budget—and in less than half of the time a similar project would normally take
• Deliver early transit improvements
• Take advantage of emerging technologies
• Integrate planning, design and construction
• Effectively manage capital costs on the basis of prior experience
• Provide flexible contracting and procurement
we aren't working alone

Working closely with a wide range of partners and stakeholders:
- Municipal Councils
- Planning Committees
- Operator

Open-door policy with the public through consultations, web surveys and workshops

Creating a process/program that is:
- Informative
- Transparent
- Responsive

• With such a critical public infrastructure project that covers the entire region, there is a long list of planning bodies, municipal committees, citizen groups, employer groups, and others who have a keen interest in what we’re doing, how we’re doing it, when it’s going to happen, and what it will mean for them

• We have established processes to ensure our working approach is consultative, collaborative and transparent

• As vivaNext continues to evolve and unfold, we have invested a huge amount of effort into ensuring that we are working with all our stakeholders and partners, and that we get input from as many people and groups as possible

• We not only collect that input, but we actually do respond to it. For example, public input shaped some of the key decisions for the Yonge subway extension, including the number and location of stations, and the way we will cross the East Don River
• The project to bring rapid transit to York Region has been unfolding in phases, since 2002
• Let’s go through the phases to see where we’ve been, and where we’re going
• Less than 3 years after the rapid transit business plan was originally written, the first phase of Viva was officially launched as the first BRT service of its kind in the Greater Toronto Area.

• Viva operates up to 18 hours a day, 7 days a week with a service frequency of 15 minutes or less.
• Viva’s vehicles are quiet, modern and comfortable, with air-ride suspension and low emissions
operations and control centre
State of the art electronics keep the system running, including a GPS based navigation system, and GSM and GPRS communication between drivers and the control centre
automated fare collection
• Electronic displays let passengers know when the next vehicles are due at stops and terminals
on-board systems

- Automatic passenger counters
- Mid-coach safety microphones
- On-board variable message sign
- Automated stop announcements
- WLAN at maintenance garages for data upload and download
web-based trip planning

rideQuest Trip Planner

If you know where you're going, but aren't quite sure how to get there, rideQuest, our new trip planning tool, can help you out. Just fill in a few items below and you'll get options sorted by ride duration, waiting time, or number of transfers—so you can connect to the perfect route.

From: Address, Intersection, Stop Number or Landmark
or Select a Landmark

To: Address, Intersection, Stop Number or Landmark
or Select a Landmark

When: Leaving At

Sort results by:
- Time
- Walking Distance
- Number of Transfers
on-board cameras

• Customer and operator safety
• Accident investigations
• Vandalism deterrent
• Evidence
• Dispute resolution

• Improved customer and operator safety:
  - Assault on driver / customer
  - Terrorist attack
  - Police investigation
• Accident investigations
• Deterrent to vandalism
• Quick response to incidents in progress
• Evidence against false and/or exaggerated claims
• Useful tool in providing better customer service – fare dispute and other complaints
Viva Phase 1 has been a great success
Since service was launched, annual transit boardings in York Region have grown by over 55% to reach almost 25 million
Service ratings indicate that Viva is exceeding customer expectations in terms of reduced travel times and clean, comfortable service
Public support for continuing transit improvements has never been higher
Over 90% of respondents to a recent public survey indicated that rapid transit should continue to be a medium to top priority for York Region
• Millions of square feet of transit-oriented development are now underway within the 4 urban centres and along the Viva corridors
• Here’s how the next phase of Viva – vivaNext – will help York Region move into the future
• VivaNext is the next phase of rapid transit improvements, with subway extensions and dedicated rapidways to significantly improve travel times
• Preliminary engineering and design are now moving forward to address traffic movements, the enhancement of boulevards and roadway medians along the rapidways and the vivastations
• We’ll cover these elements in more detail shortly
vivaNext includes dedicated rapidways along key segments of the rapid transit corridors and subway extensions into York Region

• The key elements of vivaNext include:
  - Connecting centres to centres across the Region
  - Creating convenient links with the transit systems in neighbouring regions through intermodal facilities
Now let’s look at the vivaNext rapidways, which will reduce travel times by up to 40% along the most congested sections of the transit corridors.
### Engineering and Construction Timelines

<table>
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<th>Description</th>
<th>2008</th>
<th>2009</th>
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<td>Yonge Subway Extension - Finch station to Richmond Hill Centre</td>
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**Legend**
- Preliminary Engineering / Land Acquisition / Concept Design
- Construction
- Four through lanes with left turn lanes
- Dedicated centre lane rapidways
- Fully landscaped boulevards and median plantings
- Bicycle route
• Rapidways and intersections are clearly identified with coloured paving
• Crosswalks and sidewalks are designed for continuous pedestrian movements
• Signal timings must take into account the diverse needs of general traffic, transit vehicles, pedestrians and cyclists
To provide safe, convenient access to properties located between intersections, signalized u-turns are required.
• Boulevards are approximately 5 ½ metres wide on both sides of the road
• A Transition Zone provides a hard surface at the back of the curb along the entire corridor
• It widens at intersections to support placemaking opportunities
• The Pedestrian Zone is approximately 2 metres wide
• We are looking at wider sidewalks with comfortable seating to create a welcoming environment
• The Furnishing/Planting Zone can be treated with a variety of hard and soft landscaping
• Wherever possible, existing trees will be preserved
• The specific details of the boulevard setback will be developed and finalized through discussions with landowners, businesses and other stakeholders
• During recent public consultations, York Region residents told us that they want a greener environment
• Tree plantings along the roadway medians will help to achieve this goal
• The rapidway stations play an important role in placemaking in communities connected by the rapidway

• The canopy helps to define the Viva brand and create a positive visual impact that signals the point of arrival and departure at a place

• A great deal of effort is going into planning vivastations, so they can transform the roadway median into a comfortable and welcoming place for people to await their viva vehicle

• Stations will provide a human scaled waiting place for passengers, ensuring their safety and security with handrails, splash walls and other protective elements

• Station canopy design is evolving to provide overhead weather protection, a sheltered waiting area and fully accessible amenities

• Customer amenities include indoor seating areas, fare equipment, trash containers, a telephone and bicycle racks
• Presto, an integrated fare policy based on travel distances, is currently being developed for use in Ontario, including across the GTA
• PRESTO will be phased in across participating systems starting in 2009
• Using smart card technology, Presto will allow riders to enter their card into a reader on the bus or at the station, with the lowest fare automatically deducted from the remaining balance on the card
8.6 km extension
• Runs 6.2 km from Downsview Station to Steeles West Station in Toronto
• Continues 2.4 km to Vaughan Corporate Centre Station in Vaughan

There will be 6 stations:
• Sheppard West, located in Downsview Park lands, adjacent to Bradford GO line
• Finch West at Keele Street and Finch Avenue
• York University, in the Common of York University
• Steeles West at North West Gate and Steeles Avenue, east of Jane Street
• Highway 407 Transitway at Highway 407 and Jane Street
• Vaughan Corporate Centre at Highway 7 and Jane Street

Project is funded for design and construction
- Project office opened last year
- Preliminary fieldwork is currently underway
- Property surveys and property acquisition underway

Key project milestones:
- Design: 2-3 years
- Construction, testing and commissioning: 3-4 years
- Open for service: 2015
The Yonge Subway extension is a 6.8 km extension of the Yonge Street Subway from Finch to Highway 7.

We are currently in the final stages of the environmental assessment process, and are awaiting final confirmation from the Province with capital funding.

Preliminary design work is nearing completion, with a great deal of public input having been sought on several key issues including:

- The number and location of stations, including a sensitive heritage district
- Approaches for crossing the East Don River
- Alignment at the Richmond Hill Centre

We are pleased that we have had such a high degree of involvement from the public, who have given us helpful and - for the most part - reasonable advice.

We believe that our very active outreach and communication to the community has resulted in strong expressions of support.
• At the north end, the Yonge subway extension project will terminate at Richmond Hill Centre terminal, which is located at the junction of viva’s two primary corridors.
• This area provides the greatest opportunities for transit integration in York Region with,
  - The Richmond Hill GO commuter rail Line
  - The planned 407 Transitway
  - VivaNext
  - Local YRT bus services
  - Possible other rail services, like a VIA Rail service
  - And the planned Yonge subway extension
• The terminal poses significant challenges to our designers, to ensure that transit connections are as convenient and efficient as possible for riders, and to accommodate the 28 bus bays that will be needed in close proximity to the subway.
Subway stations were planned on the basis of their:

- Connections to the broader transit network
- Potential for live/work opportunities, and
- Positive impact on the neighbouring community.
• vivaNext will not only reduce reliance on automobiles,
• It will make it easier for people to get around the GTA,
• Support more healthy forms of transportation such as walking and cycling,
• And help us achieve an more sustainable environment for future generations to enjoy
thank you.