

Date May 12, 2016
To Members of York Region Rapid Transit Board of Directors
Copy Bruce Macgregor, Christopher Raynor, Carol Clark
From Mary-Frances Turner, York Region Rapid Transit Corporation, President
Subject York Region Rapid Transit – 2015 Annual Report
Ref: Edocs #6676046

York Region Rapid Transit Corporation (YRRTC) is pleased to present its **2015 Annual Report** to York Region Council (attached). This report highlights YRRTC's strategic mandate, governance, milestones achieved in 2015 and presents a year-end financial update.

YRRTC's Annual Report is a comprehensive document that clearly conveys its mandate, demonstrates its expertise and successes in project management, and makes the case for further investments in York Region's rapid transit plan.

The 2015 Annual Report includes updates to reflect recent changes to YRRTC's governance and the Regional transit network, significant milestones YRRTC achieved while advancing funded projects, and the status and benefits of the unfunded rapid transit projects, including the Yonge North Subway Extension and the remaining segments of the Viva bus rapid transit program.

Year-end financial and procurement highlights for 2015 are also included in the report, incorporating the 'triple bottom line' business principle which demonstrates financial, social and environmental benefits of the Corporation.

The annual report will be provided to senior levels of government and other elected officials as a comprehensive source of information about YRRTC's core business and results.

Our main distribution for the annual report will be online, supported by hand-to-hand delivery when meeting with stakeholders. In addition to being posted on vivanext.com and shared through our social media channels. The YRRTC 2015 Annual Report will also be posted on The Regional Municipality of York's website.

For more information on this report, please contact Dale Albers, Chief Communications Officer, York Region Rapid Transit Corporation, at 905-886-6767, ext. 71020.

Mary-Frances Turner, President

Attachment: (1)



Highway 7, City of Markham



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message from the Chairman of the Board

“Connecting York Region’s transit system with the frequent service the Province has planned for Regional Express Rail will create strong transit hubs and new options for commuters.”



York Region’s plans for smart growth recognize transit as a key component. A strong rapid transit network is a vital part of defining where intensification will happen, and managing traffic congestion. Connecting York Region’s transit system with the frequent service the Province has planned for Regional Express Rail will create strong transit hubs and new options for commuters. Increased ridership along the GO train lines will create even more demand to move commuters the first and last mile with local rapid transit.

That’s why *viva*Next continues to build a faster, more convenient transit system, connecting our mobility hubs in Markham, Newmarket, Vaughan and Richmond Hill. Over the past five years, we’ve opened 8.6 kilometres of bus rapidways, a park and ride station, an operations facility, and awarded contracts for the remaining projects. By 2021, \$3.2 billion in rapid transit projects will be completed, including an additional 26 kilometres of rapidways with 23 stations, an 8.6-kilometre subway extension to the City of Vaughan with six stations, three bus terminals and several park and ride facilities.



The rapid transit plan is well underway and we’re starting to see results. In 2015, *Viva* travel times along the Highway 7 East rapidway were up to 42% faster than travelling in mixed traffic. The *Davis Drive* rapidway opened for service on November 29, and preliminary results are comparable.

In the next 25 years, York Region will grow by approximately 724,000 people and 390,000 jobs. With this anticipated growth and increased economic prosperity, it is important to have a faster, more convenient and connected transit network in place. I appreciate the patience and support of our communities as York Region’s key infrastructure is built to support generations to come.

We look forward to continuing to deliver on our commitment to improve mobility in York Region.

Frank Scarpitti
Chairman of the Board, York Region Rapid Transit Corporation
Mayor, City of Markham



message from the CEO

"I can assure you that your regional government will continue working to improve access to modern public transit throughout York Region. It's not just about moving people and strengthening the economy, it's about creating sustainable, functional and liveable communities."



I truly appreciate the important work being carried out by all of the staff at the York Region Rapid Transit Corporation. They have dedicated themselves to creating a seamless, modern, safe and secure transportation system for the benefit of all our residents. Viva provides an excellent service that continues to improve with the completion of each new segment.

Improving access to public transit has become a priority for your regional government. Traffic congestion has been identified as the number one issue in York Region. As a result, we have developed a 25-year Transportation Master Plan, along with a vivaNext rapid transit plan. These strategies are closely aligned with the priorities of our partners at the Government of Ontario and the Government of Canada. As partners, we have come together to invest billions of dollars in public transit throughout the region.



We have made tremendous progress to provide a viable alternative to driving, but as I am sure we all can appreciate, building rapid transit is complex and takes time to complete. If you look along Highway 7 in Markham or Davis Drive in Newmarket, you can see the evidence of innovative thinking. The Viva rapidways are impressive, but perhaps more importantly, very functional. They allow our buses to move people efficiently and in great comfort.

I can assure you that your regional government will continue working to improve access to modern public transit throughout York Region. It's not just about moving people and strengthening the economy, it's about creating sustainable, functional and liveable communities. Public transit is the backbone that, in many ways, connects society.



Wayne Emmerson
Chief Executive Officer, York Region Rapid Transit Corporation
Chairman and CEO, The Regional Municipality of York



message from the President

"Not only will our rapid transit projects improve mobility between our neighbouring communities, they will integrate with the Province's Regional Express Rail (RER) program – the most significant investment in rapid transit in the Province of Ontario in decades."



Significant progress was made in 2015 on the VivaNext rapid transit plan and 2016 marks the point where all our funded projects are either underway or completed.

Two rapidways, a new park and ride station and a modern operations facility are now open for service, and there's much more to come. With additional rapidways, facilities and terminals opening in stages over the next six years, the transformation of York Region's major transportation corridors into a connected rapid transit network is well underway.

Not only will our rapid transit projects improve mobility between our neighbouring communities, they will integrate with the Province's Regional Express Rail (RER) program – the most significant investment in rapid transit in the Province of Ontario in decades. VivaNext projects and RER will allow better connections at our major employment and residential hubs in Markham, Vaughan, Richmond Hill and Newmarket.

These important transit expansions will provide riders with more choices and flexibility for their daily commute, shopping and other activities. And it will add vital connectivity to transit routes already in service or under construction, allowing commuters to connect more easily at the "first and last mile" of their trip.



We continue to be focused on advancing the Yonge North Subway Extension. This critical missing link in the dedicated regional rapid transit system remains a vital gap in creating a seamless transit network for the Greater Toronto and Hamilton Area (GTHA). We are pleased that, in 2015, this top priority project was recommended and approved to advance preliminary design and engineering to ensure it remains "shovel ready" for the next wave of funding.

York Region continues to work collaboratively with our funding partners, neighbouring municipalities and all levels of government to complete these large infrastructure projects, building on our proven success, project management expertise and commitment to deliver a comprehensive transit network that stands the test of time.

Mary-Frances Turner
President, York Region Rapid Transit Corporation

mission



Our mission is to design and deliver an exceptional rapid transit system attracting, moving and connecting people to York Region's urban centres and destinations.

vision

Our mission supports our vision where:

- People can move quickly, conveniently and reliably without a vehicle
- Public transit is used extensively because it is attractive, easy to use, efficient and economical
- People live, work, shop and play in close proximity to public transit
- Employers locate in York Region because of its robust transit options for employees
- Development and public transit are planned together to shape communities, support a sustainable future and promote energy conservation

values

We are committed to the following values in how we carry out our mission, in an environment of respect, professionalism and dedication:

- Where quality ideas, innovation and creativity are nurtured
- Where financial and legislative integrity is fundamental
- Where staff are provided opportunities for continuous learning and self-improvement
- Where change is anticipated, managed and embraced
- Where initiative, outstanding performance and team growth are recognized
- Where working together and engaging with the community is our passion



corporate governance

mandate

York Region Rapid Transit Corporation (YRRTC) is responsible for the planning, design and construction of the rapid transit network and related infrastructure; for the pursuit of joint development opportunities; and for the strategic oversight of Viva operations to deliver on the transit priorities set out in the York Region Transportation Master Plan.

The expertise of YRRTC lies in project management – design and engineering, procurement and financial management and community relations. A proven record of disciplined, community-focused project implementation, transparency and collaboration helps get the job done. Project management is backed by knowledge, leadership and innovation in planning great cities centred on new urbanism.

governance

YRRTC is a wholly-owned subsidiary and share capital corporation of The Regional Municipality of York. Its Board of Directors comprises elected officials from York Region. There is no private sector or other public sector representation on the YRRTC Board of Directors at this time.



Chairman of the Board
Frank Scarpitti
Mayor
Markham



Vice-Chairman of the Board
Maurizio Bevilacqua
Mayor
Vaughan



Director & CEO
Wayne Emmerson
Chairman and CEO
The Regional Municipality of York



Director
Dave Barrow
Mayor
Richmond Hill



Director
Tony Van Bynen
Mayor
Newmarket



Director
Jim Jones
Regional Councillor
Markham



Director
Vito Spatafora
Regional Councillor
Richmond Hill

executive management team and reporting

The Executive Management Team reports to the Board of Directors and to YRRTC's Chief Executive Officer. Board meetings are held in the York Region Administrative Centre located in the Town of Newmarket. Public reports are posted online at www.york.ca.



President
Mary-Frances Turner



Chief Financial Officer and Treasurer
Michael Cheong



Chief Engineer
Paul May



Design Chief, Infrastructure and Development
Carolyn Ryall



Chief Communications Officer
Dale Albers



Chief Corporate Counsel and Corporate Secretary
Jamie Lin

corporate governance



track record of success

innovation

VivaNext projects start and finish with innovation.

When the first phase of Viva launched in 2005, the focus was comfort, convenience and frequent service.

With this next phase of Viva, projects were planned with new urbanism in mind. New urbanism – promoting compact, walkable and transit-oriented communities – was new to the car-oriented, rapidly emerging urban areas of the Greater Toronto and Hamilton Area.

The award-winning vivaNext bus rapid transit project has changed the way people in York Region view transit, with a steady increase to over 9.6 million boardings in 2015.

We're always thinking about the future, and what it will hold for transportation. The world of mobility is changing quickly, and we're responding by focusing on what current technology is capable of, and how transit needs to evolve and change to improve everyone's quality of life.

partnerships

YRRTC has worked extensively with different partnership models, working with multiple levels of government and completing reports and studies to ensure funding obligations are met. The experience and the tools are in place to allow delivery of a seamless rapid transit system.

As of 2015, \$3.2 billion in rapid transit projects have been funded in York Region, including \$1.4 billion shared among three levels of government, and \$1.8 billion from Metrolinx, the Province of Ontario's transportation agency.



Funds have been provided through the following sources:

- The Regional Municipality of York
- Province of Ontario
 - QuickWins Agreement
 - Metrolinx Master Agreement
 - Toronto-York Spadina Subway Extension (TYSSE) Contribution Agreement
- Government of Canada
 - Canada Strategic Infrastructure Fund (CSIF)
 - Toronto-York Spadina Subway Extension (TYSSE) Contribution Agreement

The remaining \$5.8 billion in priority projects included in York Region's Transportation Master Plan are key priorities, and YRRTC continues to work with senior levels of government to confirm funding:

- Yonge-North Subway Extension [\$4.0 billion]
- Remaining unfunded BRT segments of Yonge Street and Highway 7 [\$1.8 billion]

project management

YRRTC's experience and expertise as a project manager of major infrastructure projects includes managing the planning, design and construction of Bus Rapid Transit, subways and transit facilities. Each project is managed with careful attention to budgets and timelines, quality control and responsiveness to the community.

YRRTC has built on its knowledge and hands-on experience to carry out these complex projects, making improvements as we go.



As an organization, we've procured services for several large public-private partnerships, and two of these contracts have reached substantial completion. We have a full procurement and contract management system in place that ensures fairness and accountability.

At YRRTC, construction projects are managed carefully. Construction is always disruptive and these multi-year projects are no exception, but remaining open and available to each community helps raise awareness and solve issues. YRRTC also works closely with municipalities and utility companies before a project begins, to avoid unnecessary delays and ensure transparency of communications.

As a corporation, YRRTC reports progress regularly to maintain transparency and confidence in our projects.

YRRTC's projects are progressing well, showing that our team of innovators and experienced project managers can move large infrastructure projects from the initial design drawings to reality.





connecting transit and growth

smart growth

growth brings opportunities when it's managed well

When we plan ahead for what will be needed and where things should go, that's smart growth. It's very important that we stick with our growth and transportation plans, because York Region is the fastest growing region in Ontario with 724,000 new residents by 2041.¹ The Province's *Green Belt Act* and *Oak Ridges Moraine Act* protect 69% of York Region's land, so it's also important that we focus development on land that's available in our urban centres: Markham, Newmarket, Richmond Hill and Vaughan.

At a regional level, land-use policies and zoning are used to help manage growth, and a key part of the growth plan is transit. Development around fast, convenient transit is more likely to be compact and pedestrian-

friendly, making it easy to get around without a car. For those who drive, more people using transit also helps manage traffic congestion.

where we're growing

Ontario's *Places to Grow Act* (2005) sets out targeted growth and population densities for municipalities to limit suburban sprawl and establish more sustainable, intensive land-use. York Region uses the *Places to Grow* principles as a base for its Official Plan:

- Revitalize downtowns to become vibrant and convenient centres
- Create complete communities that offer more options for living, working, learning, shopping and playing
- Provide more housing options
- Curb sprawl and protect farmland and green spaces
- Manage traffic congestion by improving access to a greater range of transportation options

¹ Province of Ontario, 2006, *Growth Plan For The Greater Golden Horseshoe* (2013 Amendment), Toronto: Province of Ontario.



York Region's Centres and Corridors Strategy targets growth and development in existing downtown "Centres" in Markham, Newmarket, Vaughan and Richmond Hill. With the help of the *vivaNext* plan, key "Corridors" will be connected with rapid transit, making it easier for people to get around.

Transit-Oriented Development (TOD) land-use policies along these routes ensure our communities will evolve to have everything within walking distance of transit. This will mean compact and mixed-use development, and public spaces that are more welcoming, attractive and pedestrian-friendly.

bringing choices and flexibility

York Region's demographics are changing, with more seniors and young adults.² Many people are making it a priority to live a flexible life where they can have lots of choices and live independently. Residents need a variety of housing – everything from single-family houses to multi-unit apartments and condominiums. In York Region's urban centres, higher-density housing will be alongside commercial units for mixed-use, compact development with amenities on the doorstep.

In May, the City of Markham announced plans for a York University / Seneca College campus in Markham Centre – a transit-oriented community of mixed live-work-play developments near Warden Avenue and Highway 407. York Region was selected for a new York/Seneca campus in response to

² Ontario Ministry of Finance, 2013, *Ontario Population Projections Update: 2012-2036*, Toronto: Ontario Ministry of Finance.



Having rapid transit nearby was a key consideration in the decision to locate a new York/Seneca campus in Markham Centre.



working closely with our community

YRRTC interacts and communicates with residents, local organizations and businesses from the initial planning and environmental assessments to the completion of the project. We have staff dedicated to updating the local community about work in their area, and campaigns to encourage shopping and dining at local businesses.

An expected rapid growth of the population aged 18-21 – estimated at 18% in the next decade.

A new culture is evolving in mobility where there are many alternatives to car ownership, including transit, ride-sharing, car-sharing, bike-sharing and walking. Innovation is the name of the game, and technology plays a big part. YRRTC continues to review current and future trends in technology and mobility to improve and evolve transportation initiatives.

Ultimately, it's about providing choice and flexibility – important elements of a high quality of life.





a seamless transit network



the vivaNext plan

The vivaNext plan includes bus rapid transit (BRT), subways, facilities and terminals, operation centres, new vehicles and related infrastructure, including intelligent transportation systems technology.



a seamless transit network

York Region's Transportation Master Plan

The *vivaNext* plan is grounded in York Region's *Transportation Master Plan*, which works toward the vision of a sustainable transportation system, while at the same time:

- Preserving the environment
- Enhancing the economic viability of the region
- Seamlessly integrating with new and existing developments
- Offering more reliable travel choices to residents and employees

A primary part of the *Transportation Master Plan* is moving people faster and more efficiently along rapid transit corridors. The *vivaNext* rapid transit plan was developed as a clear path to a seamless, connected system. The *Transportation Plan* is currently being updated by The Regional Municipality of York, and will continue to guide YRRTC's business plan and priority rapid transit projects.

A secondary report is the *Pedestrian and Cycling Master Plan*, guiding York Region in developing a cycling and pedestrian network. YRRTC has designed rapid transit projects to include streetscapes that include enhanced sidewalks and bike lanes where possible, to ensure the streets are welcoming to generations of pedestrians and cyclists.

When developing the *Transportation Master Plan*, consideration was given to neighbouring regions and their planned transportation initiatives to ensure fast, convenient travel across the GTHA.



Davis Drive
• Yonge Street to Highway 404



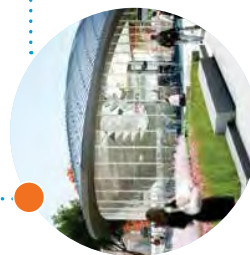
Yonge Street
• Highway 7 to 19th Avenue / Gamble Road
• Mullock Drive to Davis Drive



Highway 7 East
• Yonge Street to Warden Avenue

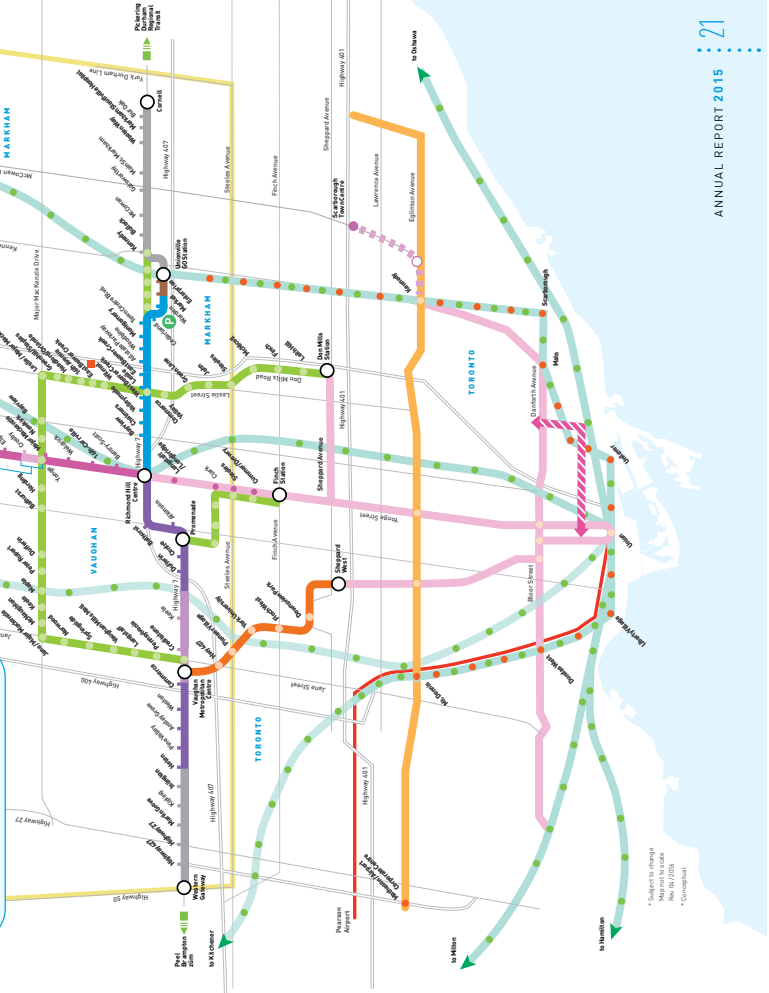


Highway 7 West
• Helen Street to Yonge Street



Toronto-York Spadina Subway Extension

- Open Rapidway
- Rapidway Construction (2012-2016)*
- Rapidway Construction (2014-2018)*
- Rapidway Construction (2014-2019)*
- Rapidway Construction (Itd-2021)*
- Future Rapid Transit
- Proposed Future Viva Service
- Spadina Subway Extension (2011-2017)*
- New Viva Curbside Service (2018-2020)*
- Proposed Yonge Subway Extension
- Proposed Relief Line
- Existing TTC Subway
- GO / REY / Metrolinx
- GO / REY / SmartTrack Plan
- Eglinton Crosstown
- Union Pearson Express
- Approved Subway Expansion
- Terminals
- Park and Ride
- OMSF



* Subject to change
* Construction
* Conceptual

a seamless transit network

all modes of transit

Different types of transit will be needed in York Region to meet current, medium and long-term needs. The vivaNext plan is tailored to match these needs with a combination of transit technology, including BRT and subway.



bus rapid transit technology

Bus Rapid Transit (BRT) is increasingly being chosen worldwide for low to medium-volume passenger routes, as governments look for rapid transit solutions that are effective in moving people quickly as well as being cost-efficient.

These are many advantages BRT offers for the vivaNext rapidways:

- Requires a significantly lower capital outlay to build when compared to subways and LRT
- Can be implemented much more quickly
- Can be installed in areas of highest congestion, with buses running in mixed traffic beyond the rapidways where traffic volumes are lighter

bus rapid transit rapidway routes

The rapidway was fully opened on January 4, 2015, and runs six kilometres along Highway 7 East, from Bayview Avenue to Warden Avenue, through the Town of Richmond Hill and City of Markham. The second rapidway opened for service November 29 in the Town of Newmarket, running along Davis Drive from Yonge Street to Roxborough Road.

VivaNext rapidways, which are dedicated lanes for Viva bus rapid transit vehicles, are being built on York Region's major corridors, including:

- Highway 7 / Centre Street / Bathurst Street from Helen Street to Yonge Street



- Highway 7 at Vaughan Metropolitan Centre (VMC) linking to the TYSSE
- Yonge Street north from the Richmond Hill Centre to 19th Avenue / Gamble Road, and north of Mullock Drive to Davis Drive

Segments are being built in order to address existing traffic congestion and their contribution to creating a seamless regional rapid transit network. When the vivaNext plan is fully built, riders will be able to make smooth, convenient connections from the viva system to the TTC subways and LRT routes. VivaNext will also provide direct connections to the 407 Transitway and GO buses and trains, creating links to destinations all across the GTHA as envisioned in Metrolinx's Big Move plan.

subway

Subways are the necessary rapid transit technology for high-volume routes where existing ridership and surrounding population densities warrant a subway's capacity. The vivaNext plan includes both the Toronto-York Spadina Subway Extension (TYSSE), and the Yonge North Subway Extension (YNSE), both of which meet the threshold for suitability for subway technology.

subway routes

YRRTC is collaborating with the Toronto Transit Commission in the construction of infrastructure surrounding Vaughan Metropolitan Centre Subway Station, including the Viva concourse and SmartREIT Terminal - Vaughan Metropolitan Centre, as part of the TYSSE.



Metrolinx and the Province of Ontario have identified the YNSE as one of the top 15 priorities in the proposed Metrolinx Next Wave of GTHA transit projects.

YRRTC has completed some critical reports and studies for this project, including the Environmental Project Report and Conceptual Design Study, and a Yonge Relief Network Study (YRNS) in partnership with Metrolinx, TTC and the City of Toronto.

We are ready to move ahead with a recommendation from Metrolinx to complete preliminary engineering for the project.

Until this project's full capital funding is confirmed, it will remain the critical missing link in the GTHA regional transit network and a vital gap in creating a seamless transit network in the GTHA.

The Yonge Subway Extension remains the critical missing link in the GTHA regional transit network, with potential ridership of 168,000 boardings/day.³



a seamless transit network

intelligent transportation systems

VivaNext incorporates intelligent transportation systems (ITS), which are among the most involved aspects of planning a BRT service and will have a fundamental impact on the performance of the vivaNext system. ITS includes all the components which will provide information to the traffic signals when rapid transit vehicles are approaching intersections, ensuring that transit vehicles are able to stay on schedule, as well as all of the passenger information, convenience and security systems.

facilities

- Operations, Maintenance and Storage Facility [OMSF] YRRTC completed the state-of-the-art OMSF in March, opening it for service in June. Built to LEED Silver standards, this 491,679 square-foot facility includes energy-efficient and environmentally-friendly features and will be used to maintain and store up to 196 Viva vehicles.
- Cornell Terminal This terminal will provide a connection point for YRT/Viva, Durham Transit and GO bus passengers in eastern York Region. It will be located at Highway 7 and Ninth Line near Markham-Stouffville Hospital.



streetscape and design

YRRTC is transforming each of York Region's major streets using an urban design and planning concept known as the "complete street." The complete street is based on the idea that streets should be welcoming and functioning for all users, and it emphasizes the importance of spending time in attractive public spaces.

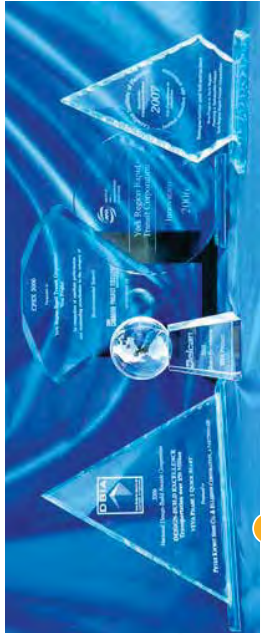
Now that two rapidways are open for service in York Region, the results are plain to see – 87% of residents living near an opened rapidway project support the vivaNext rapid transit plan. Highway 7 East and Davis Drive are complete transformations, showing that the look and function of a street are improved greatly by designing it to be attractive and accessible to everyone.

4 Forum Research Inc., 2015, Brand Perception And Benchmarking Study, VivaNext

87% of residents living near an opened rapidway support the vivaNext rapid transit plan.⁴



awards and recognition



- 2015 - Roads & Bridges Magazine, Top 10 Roads List
No. 2 Road in North America
- 2015 - Canadian Urban Transit Association (CUTA)
National Transit Corporation Recognition Award, Communications Project of the Year award
- 2014 - American Public Works Association (APWA)
Project of the Year award
- 2014 - Association of Marketing and Communication Professionals (AMCP)
Platinum Hermes award:
vivaNext website design and 2012 vivaNext annual report design
- Gold Hermes award:
vivaNext brand handbook design
- 2013 - Professional Engineers of Ontario - York Chapter (PEO)
Project of the Year award
- 2013 - Ontario Public Works Association (OPWA)
Project of the Year award
- 2008 - Delcan
Global Excellence award
- 2007 - Newmarket Chamber of Commerce
The Bell Technology award
- 2007 - Canadian Institute of Planners
Planning Excellence, Transportation and Infrastructure award
- 2006 - The Design-Build Institute of America
Transportation Over \$50 Million - Design-Build Excellence award
- 2006 - Association of Municipalities of Ontario
Peter J. Marshall Municipal Innovation award
- 2006 - American Public Transportation Association
Innovation award
- 2006 - Canadian Project of Excellence
Environmental Impact award
- 2005 - Transportation Association of Canada
Sustainable Urban Transportation award



future projects



Funding is still to be confirmed for a significant portion of the overall vivaNext plan worth \$5.8 billion. Each of these projects match federal, provincial and regional priorities to spur economic growth, support the middle class and reduce greenhouse gases.

Combined with the Toronto-York Spadina Subway Extension, Regional Express Rail, additional GO Train stations at Gormley and Bloomington and other transit projects, these projects will greatly improve the overall network for those who live, work and visit York Region.



Yonge North Subway Extension [YNSE]



project description

- Extends 7.4 kilometres north from Finch Station to the Richmond Hill/Langstaff Gateway Urban Growth Centre at Highway 7
- Includes five stations, two intermodal terminals and 2,000 commuter parking spaces

project status and timeline

- The YNSE is ready to move to full engineering and construction
- Over \$10 Million has been invested for studies and comprehensive community consultations to be completed
- York Region is currently awaiting the Provincial funding announcement confirming the dollars allocated for the approved preliminary engineering program
- Staff will continue to meet and work with municipalities to assess impacts of the various municipal transportation planning initiatives throughout the GTHA

1994

YNSE is reflected in York Region's Official Plan

2007

The Province of Ontario announces YNSE as a key priority project as part of *MoveOntario 2020*

2008

Metrolinx completes studies and identifies YNSE as one of the Top 15 Priority Projects in its Regional Transportation Plan *The Big Move*

2009

MOE unconditionally approves YNSE environmental assessment
Metrolinx Benefits Case Analysis set rationale for Conceptual Design Study

2012

York Region, TTC and YRRTC Board approve Conceptual Design Study

2013

Metrolinx releases YNSE Benefits Case

2014

York Region and TTC submit Tail Track Train Storage Addendum to MOE
YRRTC Board endorses findings of Addendum

2015

Metrolinx releases findings of Yonge Relief Network Study
Metrolinx Board approves recommendation to advance YNSE preliminary engineering to 15%



capital project cost

\$4.0 billion

(2015 dollars)

key benefits

- The critical missing link in the dedicated regional rapid transit system and a vital gap in creating a seamless transit network in the GTHA – to service this section of Yonge Street presently requires approximately 2,500 bus trips per day travelling to an outdated terminal that was built in 1973
- Fuels a proposed 48,000 residents and 31,000 jobs at the Richmond Hill/Langstaff Gateway Urban Growth Centre anchor hub
- Produces a lasting economic stimulus, especially during construction, creating up to 21,800 person-years of employment
- Services a demonstrated need – with a potential daily ridership of 165,000 for two people/second
- Builds on the existing \$3 Billion+ senior government investment in York Region rapid transit and matches Federal, Provincial and Municipal priorities to stimulate the economy, support the middle class and reduce greenhouse gas emissions

Meets the Province's smart growth objectives – the intensification and development being planned for the Richmond Hill/Langstaff Urban Growth Centre will create a Union Station of the North by linking GO service, subway service, bus rapid transit and BRT/express service along Highway 407 ETR

- Integrates with The Province's Regional Express Rail program

future ridership and capacity

- Metrolinx's recent Yonge Relief Network Study analyzed options for crowding relief to the existing Yonge Subway by examining new local and regional travel opportunities and improving mobility across the GTHA. Key findings from this study include:
 - Today, Yonge Subway is currently operating at about +11% over capacity
 - While population and employment growth will add new riders, significant relief to the Yonge Subway line will be achieved through already committed transit improvements, including the TTC's automatic train control and new subway trains, Toronto-York Regional Express Rail/SmartTrack
 - The Yonge North Subway Extension can be built and the Yonge Subway Line will still be under capacity in 2031
 - The Downtown Relief Line has become a long-term project that will not be needed until post 2031



frequently asked questions

1. How long will the Yonge Subway Extension take to construct?

To determine a more detailed schedule for the project, a thorough preliminary engineering program will need to be conducted. It is expected that this program will include a value for money analysis that will define the overall project schedule, cash flow and analyze the most suitable and cost effective procurement strategy.

2. How long will it take before shovels are in the ground?

The Preliminary Engineering [up to 15%] for this project has been approved by Metrolinx and the Region is currently waiting for the approved funding from the Province. Once funding is received, a Request For Proposals will be released to retain firms to assist with this work. Once engineering firms are on board, the preliminary engineering work program is expected to take approximately 24 months.

3. How will fares work when the subway crosses into York Region? Will I have to pay a second fare?

The transit fares between York Region and the City of Toronto have not yet been determined. Metrolinx is working with transit agencies and municipal governments to implement PRESTO, an integrated fare strategy.

Viva bus rapid transit project



project description

The Viva Bus Rapid Transit (BRT) Project is an additional 34.2 kilometres of dedicated, centre-lane bus rapidways and 26 vivastations along Highway 7, Yonge Street and Green Lane in some of the Region's most rapidly growing municipalities, Markham, Vaughan, Richmond Hill, Aurora, Newmarket and East Gwillimbury.

project status and timeline

- The remaining half of the Viva BRT project is currently unfunded
- The Environmental Assessments are completed for the entire project
- The project is ready to move to preliminary engineering, design and construction

Yonge Street	<ul style="list-style-type: none"> 14.5 km 9 stations
Highway 7 East	<ul style="list-style-type: none"> 9.5 km 8 stations
Highway 7 West	<ul style="list-style-type: none"> 5.8 km 6 stations
Yonge / Green Lane	<ul style="list-style-type: none"> 4.4 km 3 stations



capital project cost

\$1.8 billion

(2015 dollars)

key benefits

- Builds on the existing \$1.8 Billion Provincial investment in York Region to build the first half (34.6 km) of the BRT network
- Matches Federal, Provincial and Municipal priorities to stimulate the economy, support the middle class and reduce greenhouse gas emissions
- Improves mobility within the Region, between neighbouring communities, and improves inter-modal connectivity with system-wide integration – integrates with Province's Regional Express Rail program by connecting to major anchor hubs in Markham, Richmond Hill and Newmarket
- Adds critical reach and connectivity to vivaNext BRT routes already in service or under construction, allowing commuters to connect for "the last mile" of their trip

- Promotes mixed-use land development and increasing density while reducing urban sprawl
- Produces a lasting economic stimulus, especially during construction. Will also stimulate York Region's employment growth, which continues to steadily increase, outpacing the provincial and GTA averages in 2014 and averaging 3% rate of increase each year since 2010

frequently asked questions

1. How long will the completion of the Viva BRT Project take to construct?

To determine a more detailed schedule for the project, a thorough preliminary engineering program will need to be conducted. It is expected that this program will include a value for money analysis that will define the overall project schedule, cash flow and analyze the most suitable and cost effective procurement strategy.

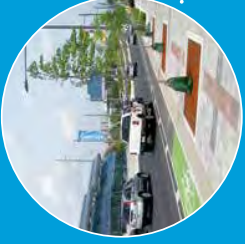
2. How long will it take before shovels are in the ground?

Currently, there is no funding for this project. Once funding is received, a Request For Proposals will be released to retain a contractor to design and build the project. Under our current design-build models, projects move to construction within approximately one to two years after the contract award.

3. How did you determine the locations of the rapidways?

The Viva rapidways corridors were first identified in the Regional Official Plan and the Transportation Master Plan. The detailed alignments were then identified through the Environmental Assessment process for each corridor. As York Region continues to grow there will be more people, more jobs and more demand on the current transit system. These segments ensure the Region is focusing its transformation and intensification along these corridors and centres.





2015

Capital highlights

bus rapidways and stations

- Davis Drive rapidway
- Highway 7 West rapidway
- Yonge Street rapidway
- Highway 7 East rapidway



Davis Drive rapidway

Newmarket

now open

- centre-lane vias station
- curbside station
- terminal location
- dedicated rapidway
- transit in mixed traffic



fun facts Davis Drive by the numbers

3 + 2
vias stations +
curbside stops

2.6 km
length of the rapidway

21,000+
shrubs and perennials
to be planted

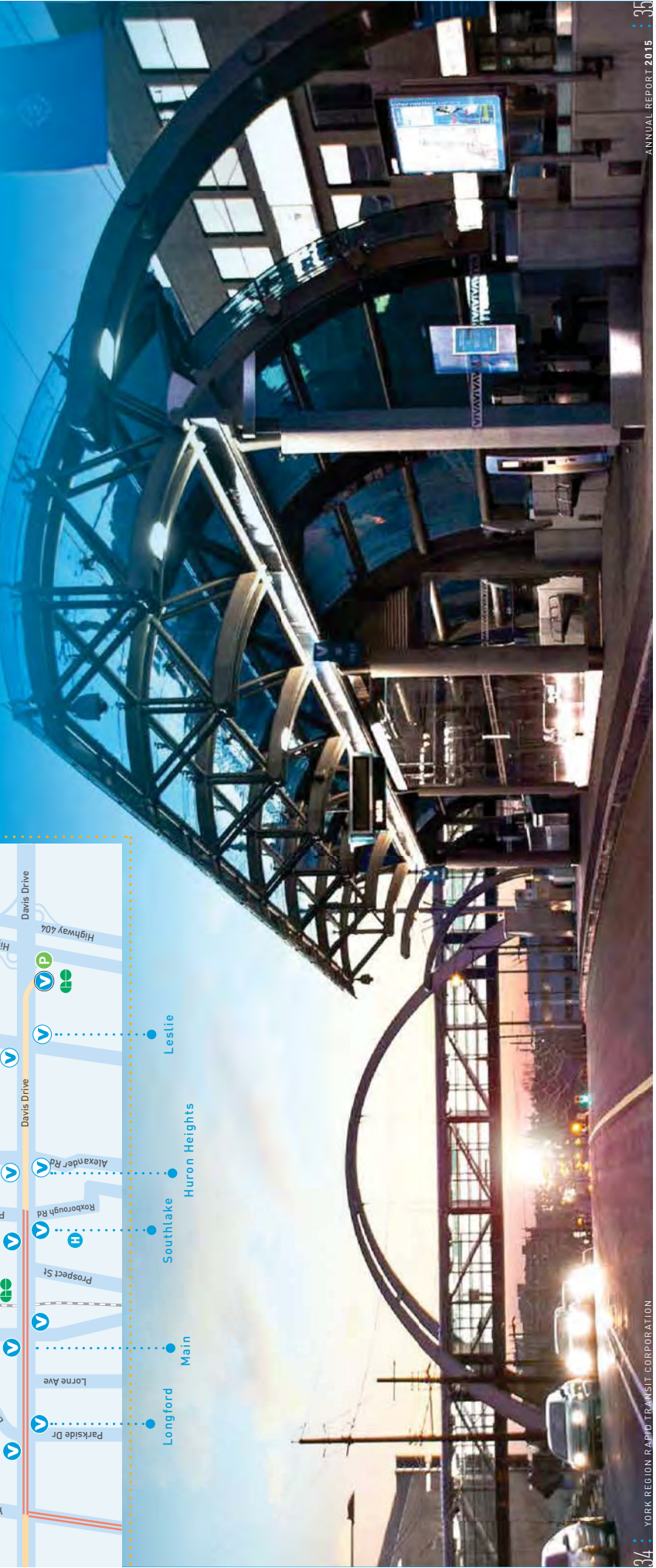
3
connections to GO Transit services at
new park and ride facility at Highway 404.

30
heritage
pedestrian poles

6+ km
of new sidewalk

140
traffic signal poles
and traffic light poles

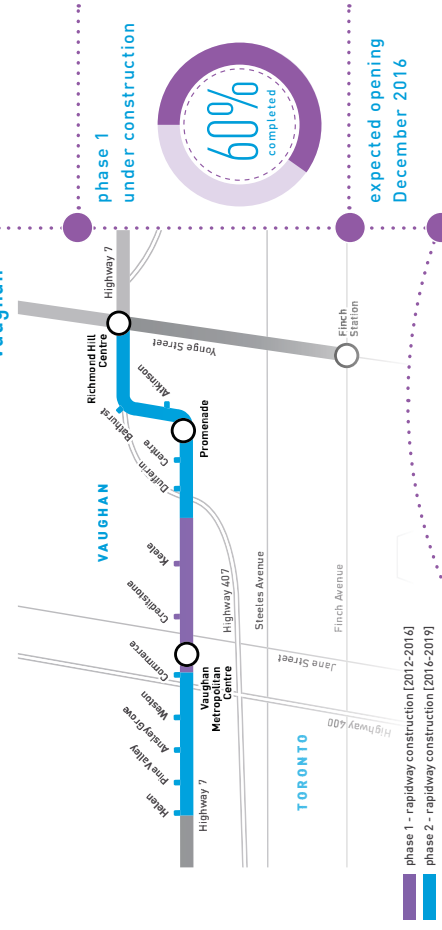
10
new intersections with
enhanced accessibility
and dedicated left-turns



HIGHWAY 7 WEST



Highway 7 West rapidway



phase 1 - Edgely Boulevard to Jane Street

- Schedule coordinated with Toronto-York Spadina Subway Extension (TYSSE) project
- Vaughan Metropolitan Centre - Spadina Subway viaduct on Highway 7 will include entrance to TYSSE
- Road widening completed and boulevard work ongoing

phase 1 - Jane Street to east of Bowes Road

- Four viaduct canopies installed at Keele Street and Creditstone Road
- CN MacMillan Bridge expansion completed
- Road widening completed and utility relocations nearing completion
- Boulevard work between Jane and Creditstone completed and permanent streetlight installation nearing completion

phase 2 - Heien Street to Edgely Boulevard / Bowes Road to Yonge Street via Bathurst and Centre

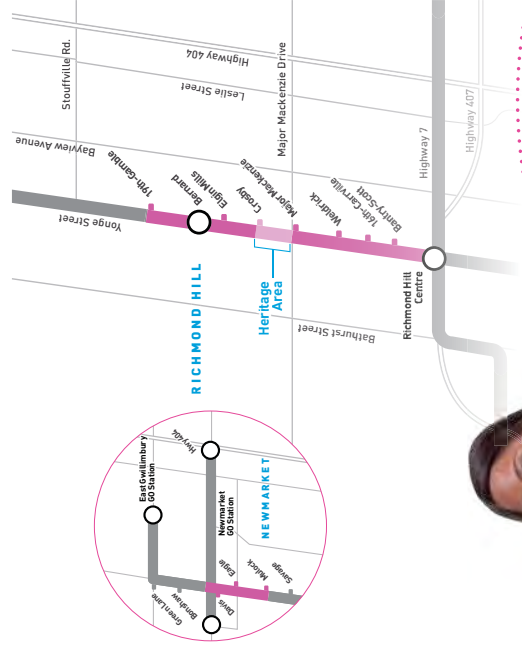
- Design-build-finance contract awarded in September for 12 kilometres of new rapidway
- Pre-construction work underway: environmental, geotechnical and utility investigations
- Utility work, including water main replacements, begins in 2016 with heavy construction starting in 2017



METROLINX | VIVA next
A Metrolinx VivaNext Project

Yonge Street rapidway

Richmond Hill and Newmarket



project status
under construction



expected opening
December 2018



- Detailed design is at 90%
- Pre-construction activities underway, including tree removals and surveying
- Utility relocations underway in Newmarket. Utility design for relocations in Richmond Hill are nearing completion with work scheduled to start in spring 2016

IN SERVICE



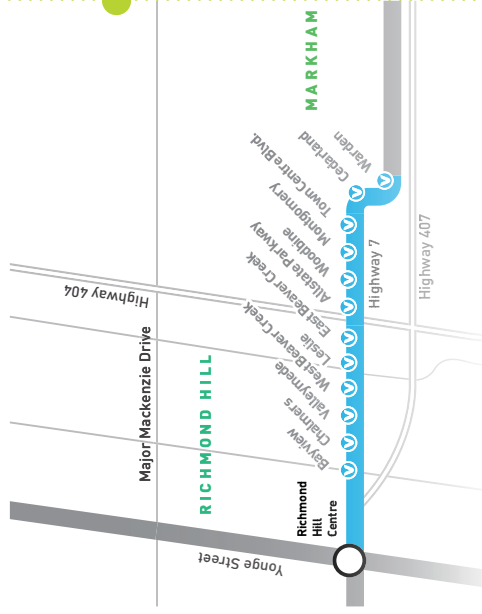
Highway 7 East rapidway

Richmond Hill and Markham



42%

travel time savings

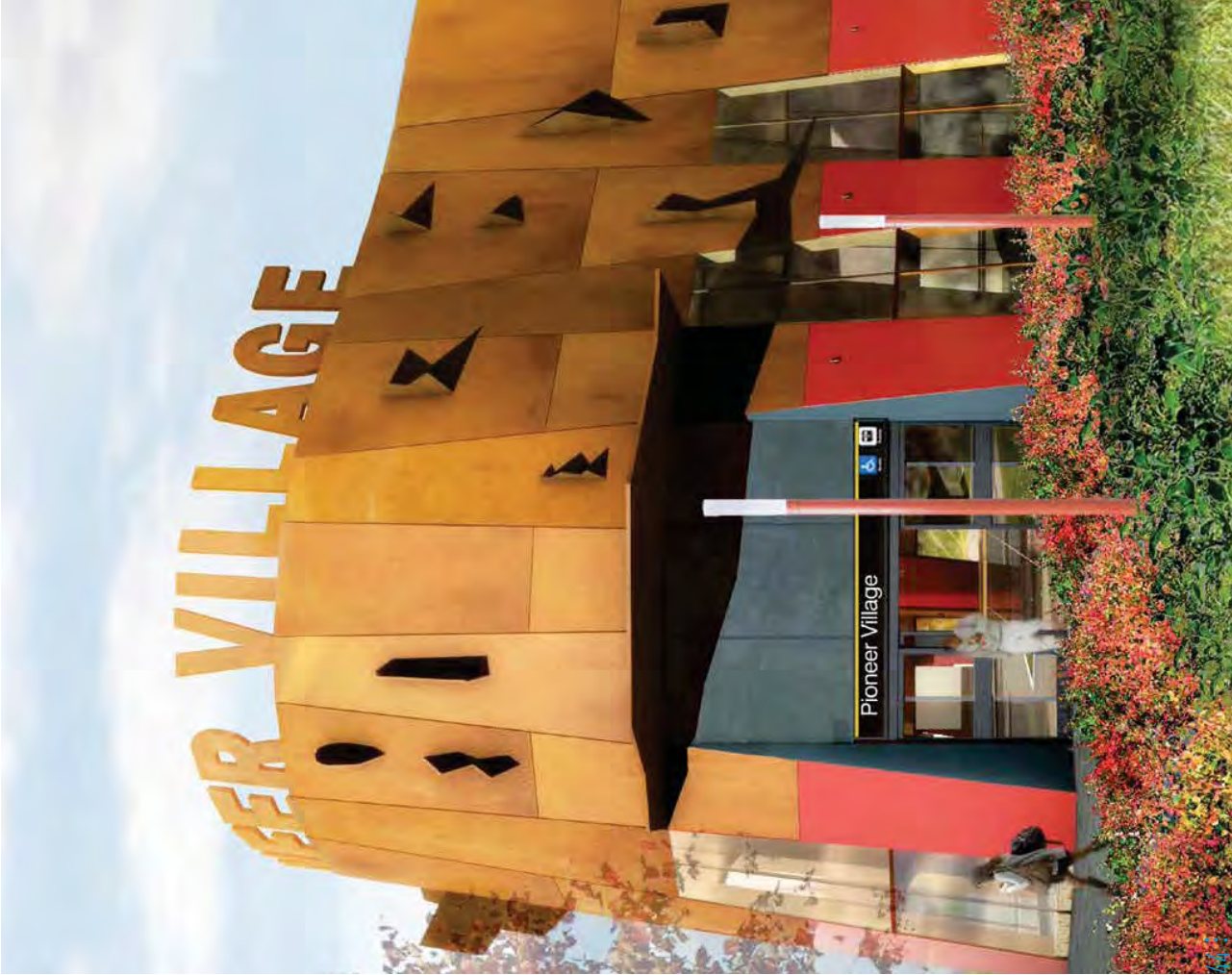


- Opened in stages in August 2013, August 2014 and January 2015
- Reached substantial completion on December 28, 2014, with construction complete after finishing touches, including landscaping and sidewalks in spring 2015
- Up to 42% travel time savings along Highway 7 between Bayview Avenue and Warden Avenue

HIGHWAY 7 EAST • HIGHWAY 7 EAST • HIGHWAY 7 EAST



METROLINX | VIVANEXT
A Metrolinx VivaNext Project



Pioneer Village Station rendering



2015

capital highlights

subways

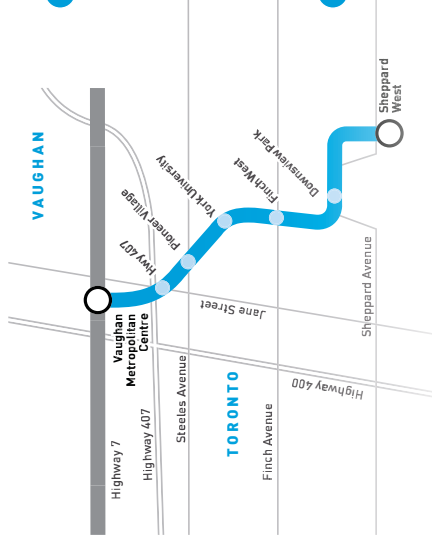
- Toronto-York Spadina Subway Extension [TYSSE]
- Yonge-North Subway Extension [YNSE]





Toronto-York Spadina Subway Extension

TY SSE



project status
under construction



expected opening
December 2017



- Progress continues at Vaughan Metropolitan Centre [VMC], including construction of the subway station with a concourse level connecting TY SSE to the surface-level Viva rapidway viaduct
- Building structures nearing completion at Highway 407 Subway Station and Pioneer Village Subway Station, with finishing works to be completed in 2017
- Work continues until 2017 on track, signal, and fare collection systems, communications and integrated controls



Yonge North Subway Extension

YNSE



project status
awaiting funding



key benefits

- The critical missing link in the dedicated regional rapid transit system and a vital gap in creating a seamless transit network in the GTHA – to service this section of Yonge Street presently requires approximately 2,500 bus trips per day travelling to an outdated terminal that was built in 1973
- Fuels a proposed 48,000 residents and 31,000 jobs at the Richmond Hill/Langstaff Gateway Urban Growth Centre anchor hub

status update

- Environmental Project Report and Conceptual Design Study completed
- Yonge Relief Network Study [YRNS] completed in partnership with Metrolinx, TTC and the City of Toronto
- York Region is currently awaiting the Provincial funding announcement confirming the dollars allocated for the approved preliminary engineering program





2015 capital highlights

facilities and terminals

- Operations, Maintenance and Storage Facility [OMSF]
- SmartREIT Terminal - Vaughan Metropolitan Centre
- Cornell Terminal
- Park and Ride

Icons: A small icon of a building, a circular inset showing an interior hallway with people, a circular inset showing a train on tracks, and a circular inset showing a modern glass building.

now open

OPERATIONS, MAINTENANCE AND STORAGE FACILITY • OPERATIONS, MAINTENANCE AND STORAGE FACILITY • OPERATIONS, MAINTENANCE AND STORAGE FACILITY



Operations, Maintenance and Storage Facility

OVSF



53 garage doors (34 exterior • 19 interior)

19 skylights

24 bus lanes in storage garage

5 rainwater tanks for washing buses (100,000 litres each)

8,437 landscape pavers

201 trees on property

42,480 m² reflective white roof material to save on cooling cost approx. 10 acres

26 repair garage bus bays



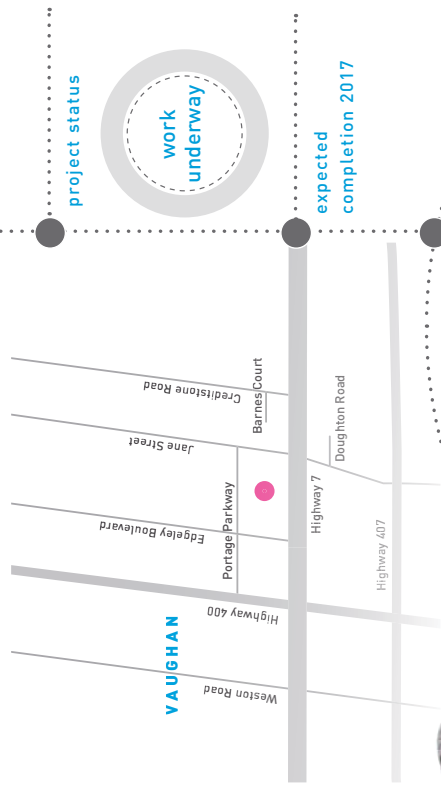
- Construction was completed in March
- Facility opened for service in June
- LEED silver application submitted and accreditation pending



SMARTREIT TERMINAL
VAUGHAN METROPOLITAN CENTRE



SmartREIT Terminal Vaughan Metropolitan Centre



project status



expected completion 2017



- Design and engineering for bus terminal underway – design to be completed in 2016
- Procurement for design and engineering services to extend Millway Avenue north to Portage Parkway underway, will be awarded in 2016
- Construction coordinated with Toronto-York Spadina Subway Extension project and SmartREIT teams and City of Vaughan
- Phase one Terminal opening in coordination with the opening of the Toronto-York Spadina Subway Extension Working with TTC as they design and build bus terminals at Highway 407 Station and Pioneer Village Station



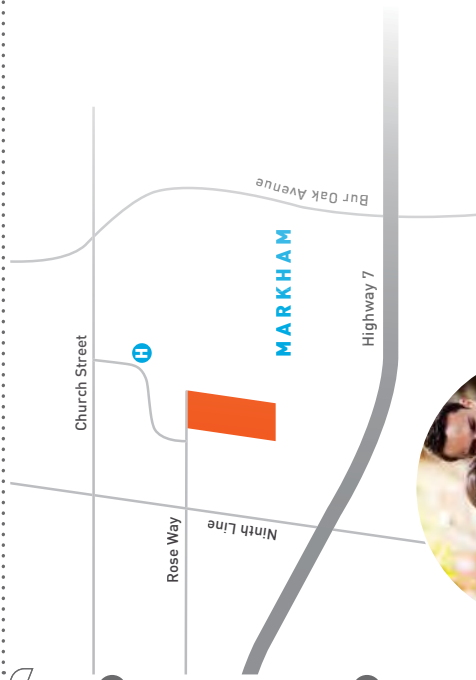
Cornell Terminal



project status

work
underway

expected opening
early 2018



- Land acquired at Highway 7 and Ninth Line in vicinity of Markham-Stouffville Hospital
- Procured engineering and design consultant services – contract awarded in 2015
- Construction scheduled to start in 2016 for 11-bay bus terminal



Park and Ride



now
open

project status

work
underway

expected completion
of entire Park and
Ride initiative by 2021



- Together with GO Transit, designed and built a joint GO/Viva park and ride station at Davis Drive and Highway 404, which opened for service on November 29, 2015
- Integrating Viva Park and Ride Strategy with updates to York Region's Transportation Master Plan
- Identifying overall governance and management of park and ride locations
- Procuring design services to build a facility near Warden Avenue and Highway 407 – contract to be awarded in 2016





2015

capital highlights

Viva vehicle fleet

VIVA VEHICLE FLEET • VIVA VEHICLE FLEET • VIVA VEHICLE FLEET



Viva vehicle fleet



- Delivery of 59 new articulated buses completed in 2015
- Viva fleet consists of 123 buses [40, forty-foot buses and 83 sixty-foot buses]
- Canada Strategic Infrastructure Fund contribution agreement completed



2015

financial and
procurement highlights



2015 financial and procurement highlights



financial highlights

Capital expenditures were \$448.9 million year-to-date, bringing total expenditures to \$2.0 billion since inception of the programs. The main drivers of the expenditures were from:

- Bus Rapidways and Stations program – \$200.6 million, mainly driven by completion of Davis Drive [in service November 2015] and construction activities along Highway 7 West and Yonge Street
- Completion of Operations, Maintenance and Storage Facility [OMSF] in service June 2015 – \$17.9 million
- Toronto-York Spadina Subway Extension [TYSSE] – \$230.1 million, primarily driven by rail, track and systems installation and construction on the stations



	Project expenditures 2015	Project expenditures inception-to-date	Project budget availability	Project budget remaining	Project budget remaining [as a %]
BRT Rapidways and Stations	200.6	912.0	1,783.6	871.6	49%
Facilities & Terminals	17.9	146.0	208.8	62.8	30%
Vehicle - viva Buses	0.0	46.6	46.6	0	completed
Toronto-York Spadina Subway Extension*	230.1	914.4	1,160.3	245.9	21%
Yonge North Subway Extension	0.2	3.9	4.3	0.3	6%
YR & YRRTC Strategic Initiatives	0.1	2.1	3.2	1.1	33%
Total	\$448.9	\$2,025.1	\$3,206.9	\$1,181.7	37%

*TYSSE budget includes Capacity Buy-in, via BRT Consortium & Downsview

funded projects

- Active projects under construction and forecasted completion timelines

funding source

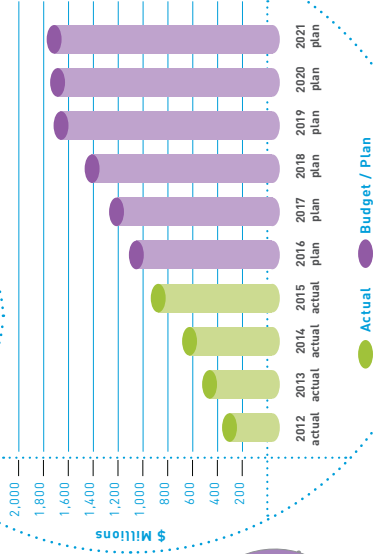
>> bus rapidways and stations

- Highway 7 East and West
- Davis Drive
- Yonge Street



100% Provincial

Metrolinx Capital Program \$1.8 billion



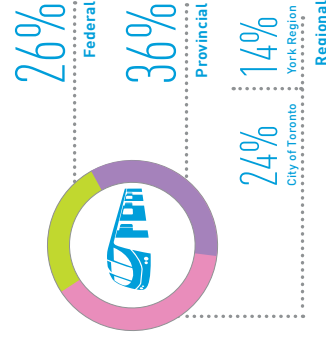
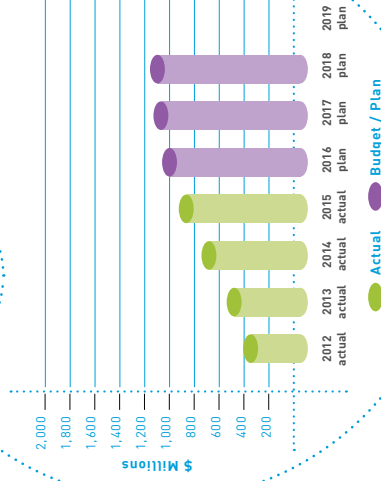
funding source

>>> subways

Regional Capital Program \$1.1 billion

- Toronto-York Spadina Subway Extension [TYSSE]

The total TYSSE project is \$2.8 billion of which \$1.2 billion is being constructed in York Region. Cost sharing principles for the TYSSE project includes the Federal and Provincial governments who contribute to two thirds of the funding. The remaining one third is split between the City of Toronto [69.96%] and York Region [40.04%], based on geography and length of project.

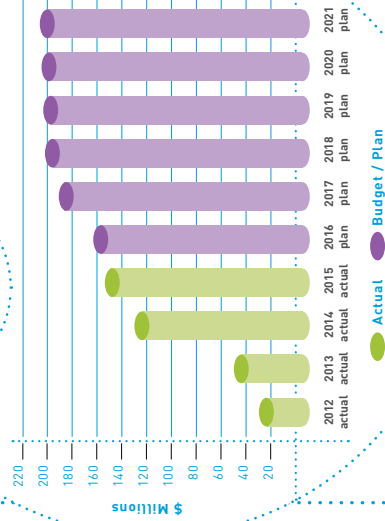
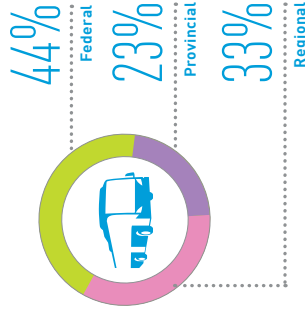


2015 financial and procurement highlights

Capital Program
\$0.2 billion

funding source

- >> facilities and terminals
 - Operations, Maintenance and Storage Facility
 - SmartREIT Terminal - Vaughan Metropolitan Centre
 - Cornell Terminal
 - Park and Ride Facilities



procurement highlights

In 2015, 24 new contracts with a total value of \$25 million were awarded and \$42 million in net contract increases. Of significance [>\$500 thousand]:

- > Utility Relocations contract for Y2.1, Y2.2 and Y3.2: \$21.1 million
- > Management Fees contract for SmartREIT - VMC Bus Terminal: \$1.4 million
- > Design and Preliminary Engineering contract for Cornell Terminal: \$1.0 million
- > 12 Existing contracts of a total net increase of \$42 million were amended

8%
of \$3.2 billion

- Projects remaining:
- Cornell Terminal
 - SmartREIT Terminal - Vaughan Metropolitan Centre
 - Park and Ride Facilities

92%
of \$3.2 billion

At the end of 2015, 92% of the budget availability out of \$3.2 billion is committed.





2015 sustainability >>>

the triple bottom line

the triple bottom line



Beyond the transportation benefits offered by the vivaNext rapid transit plan, YRRTC is creating a range of socially significant, measurable benefits. YRRTC supports the *triple bottom line* business principle, which holds that business activities should result in financial, social and environmental benefits. It's even reflected in our mission statement, stating our vision as one ...where *development and public transit are planned together to shape communities, support a sustainable future and promote energy conservation.*

YRRTC also has a broader goal: to transform York Region's formerly suburban, car-dependent culture to a transit-oriented urban culture. This transformation benefits our community in many ways, and is in line with federal and provincial priorities to spur economic growth, support the middle class, and reduce greenhouse gas emissions.

more businesses, jobs and housing

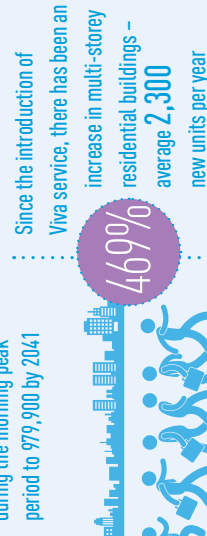
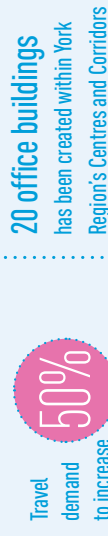
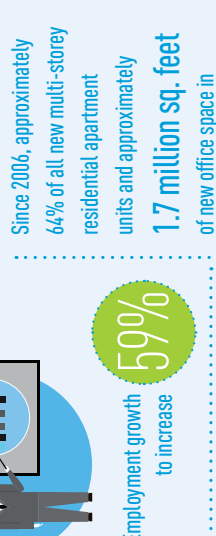
Quality transit attracts sustainable, mixed-use development, including new businesses, jobs and a variety of housing options.

In areas zoned for intensification, new residents will have more choices in purchasing or renting higher density units, such as condominiums, and the convenience of having commercial development nearby. Based on experiences across North America, some property value increases can be expected for land within walking distance to transit stations, benefitting existing property owners.

Increased revenue from development charges and property taxes can contribute to each community's high quality of life by reinvesting in local infrastructure and services. Updated utilities and infrastructure improvements included in every rapid transit project (ie fibre) ensures each corridor is prepared for future development.

As York Region's vibrant urban transit corridors evolve and attract new residents, they will attract new retail and restaurants interested in the increased population, and other new employers wanting to be near transit and a well-educated workforce. These infrastructure projects support more than transit – they support future economic and social growth.

Preparing for future growth* between 2014 to 2041:



* Transportation Master Plan, The Regional Municipality of York



the triple bottom line



vibrant, welcoming communities
York Region's changing demographics call for mobility infrastructure that supports flexibility and options for how people will want to travel now, and in the decades to come. With the increasing senior and young adult population, preferences in housing and transportation have already started to change. YRRTC's rapid transit plan is tailored to welcome people of all ages, incomes and abilities.

The new urban centres in York Region will provide more choices in places to live, and more choices in how to get around. With great transit at the doorstep, those who don't want to be tied down to owning a vehicle can still be mobile. Establishing a sense of place is important in our growing regional centres. People identify with where they live, and great cities build a sense of pride and connection in the community.

healthy environments

Rapid transit infrastructure leaves a lasting positive effect on each community, by encouraging less reliance on the car, and more active transportation choices, and by reducing traffic congestion and carbon emissions.

Modal shift (from car-dependency to transit) happens over time as people make decisions in their lives. For some it's deciding not to invest in that first car, and for others it's reducing the household cars from two to one. The environmental benefits are clear: every busload can replace 70 cars, and fewer cars on the road mean reduced carbon emissions.



of residents living near an opened rapidway believe the project added value to the community.⁵

80%



innovation brings change

The role of mobility is changing very quickly in cities around the world –

often faster than governments can keep up with. People are now more interested in flexibility and choices, and innovations in technology are shaping all aspects of life. The emerging sharing economy is rapidly growing includes ride-sharing, bike-sharing, room-sharing, and also includes transit.

With more frequent trips, Viva riders have more leeway in when they need to catch their ride. At YRRTC, we're continually looking at the newest innovations to see how it could improve mobility options for those who don't live in urban mobility areas.

Staying ahead of the changes in mobility, and keeping up with technology is important to delivering the right mobility infrastructure at the right time, and seeing the benefits.

YRRTC's rapid transit projects include wide, tree-lined sidewalks and bike lanes where possible, encouraging active transportation such as walking and cycling. Having an active commute in attractive surroundings has health benefits including physical fitness and a sense of well-being.

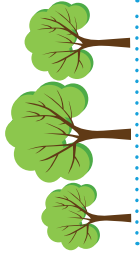
York Region's green infrastructure will have lasting improvements from the VivaNext rapid transit projects. We have added new trees and shrubs, making public spaces more attractive and welcoming, and expanding our urban forest for improved air quality. With careful plant selection and use of innovative planting techniques, we have created the best possible conditions for the new trees and shrubs to thrive. Our infrastructure work on culverts and bridges includes natural restoration plans that create better conditions for wildlife and aquatic species.

Green infrastructure investments like these have been shown to result in higher property values, increased business outcomes and reduced energy costs, and are all part of supporting a sustainable future.

5 Forum Research Inc., 2015. Brand Perception And Benchmarking Study. vvaNext.



New plantings included as part of the Highway 7 East and Davis Drive rapidway projects:



1,720 new trees
1,250 Highway 7 East • 470 Davis Drive



31,000 shrubs
10,000 Highway 7 East • 21,000 Davis Drive

social responsibility

YRRTC has committed to engaging and listening to the public, and we've taken great care to minimize the impacts of construction on residents, businesses and commuters as much as possible.



accessibility

VivaNext supports York Region's accessibility commitment mandate of, "...meeting the accessibility needs of people with disabilities in a timely and proactive manner and will use reasonable efforts to provide equitable access to Regional programs, goods, services and facilities in a way that respects a person's dignity and independence."

We are an active participant in creating an Accessible York Region, which is mandatory training that explores how York Region is creating accessible communities and meeting the Province's legislated accessibility requirements under the *Integrated Accessibility Standards Regulation* (IASRI). It also identifies how the *Accessibility for Ontarians with Disabilities Act, 2005* (AODA) and Ontario's *Human Rights Code* work together to create accessible and inclusive communities. All VivaNext facilities are constructed to meet AODA guidelines.

environmental assessments

The foundations of YRRTC projects are federal and provincial Environmental Assessment (EA) processes. The EA processes are in place to ensure that each project has minimal negative effects on the natural, social and structural environment, and fits into the community's visions for the future. They also give all members of the public the opportunity to understand the planned project, including any impacts it may have, and provide comments. EAs were completed for all the VivaNext projects, prior to construction.

Commitments made during the EA are tracked and monitored annually to ensure they are met, and each EA is documented and publicly available on vivanext.com.

responsible construction management

Major infrastructure projects inevitably cause inconveniences, especially when construction is on major roads.



YRRTC has paid close attention to the project management of our construction, ensuring our contractors carefully schedule and stage construction for minimal impact to local businesses, transit users, drivers and pedestrians.

YRRTC has a communications

team dedicated to keeping the local community aware of upcoming work. Our Community Liaisons work closely with business owners, property owners and local communities, making special arrangements to reduce impacts where possible. Community Liaisons also meet with larger organizations to provide information and ensure they are aware of the VivaNext project objectives.

business support program

YRRTC has developed a Business Support Program to help local businesses during construction. We collaborated with local chambers of commerce, boards of trade and municipal staff to create a program offering businesses in the construction zone information, tools and resources for their continued success as they operate and market their products and/or services to the community.



In addition, YRRTC conducts our own marketing campaigns encouraging people to shop in the construction area, and we profile different businesses through social media. We also provide directional signs for drivers and pedestrians to help them access businesses.

YRRTC contributions

As staff working in York Region, we are also committed to making a personal, positive impact. In 2015, we again participated in Earth Day clean-up, book recycling events, supported the PANAM Games, contributed to a Syrian Refugee Fund for families arriving in Stouffville and had 100% staff participation in internal United Way fundraising activities.



corporate directory

York Region Rapid Transit Corporation Senior Management

Mary-Frances Turner

President

Michael Cheong

Chief Financial Officer and Treasurer

Paul May

Chief Engineer

Carolyn Ryall

Design Chief, Infrastructure and Development

Date Albers

Chief Communications Officer

Janie Lin

Chief Corporate Counsel and Corporate Secretary



mailing address

York Region Rapid Transit Corporation

3601 Highway 7 East | Floor 12 | Markham | ON L3R 0M3

☎ 905.886.6767 | 📠 877.464.9675 | 📞 905.886.6969

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vivanext.com



