

# Transportation Master Plan Update



Submission for the 2009  
Transportation Association of Canada  
Sustainable Urban Transportation Award



# **TAC's Sustainable Urban Transportation Award**

## **Application Form**

### **NOMINATION BY**

TAC Member Organization: The Regional Municipality of York

Key employee representative: Loy Cheah, Director, Transportation Planning

### **NOMINATION FOR**

Title: Transportation Master Plan Update

Program  Project  Process or  Other

Please provide a brief summary about the initiative being nominated:

An innovative study process to ensure a more balanced sustainable  
transportation system that addresses the needs and challenges  
associated with growth based on sustainability principles and  
transportation solutions.

TAC Member Organization: The Regional Municipality of York

Contact Person: Loy Cheah

Title: Director, Transportation Planning

Address: 17250 Yonge Street, Newmarket, Ontario, L3Y 6Z1

Telephone : 905-830-4444 Ext. 5024 Email: loy.cheah@york.ca

### **ATTACHED**

- six paper copies of complete nomination submission package (no longer than 7 pages - 8.5" x 11")
- one PDF electronic file of submission on CD
- supporting documents (diagrams, photos, etc.) if needed

**Deadline:** Friday, March 12, 2010

**Send to:** 2323 St. Laurent Boulevard, Ottawa, Ontario K1G 4J8

Please note that information on the evaluation criteria and process is provided at

<http://www.tac-atc.ca/english/awards/tacawards/urban.cfm>

If you have any questions or need clarification, please call (613) 736-1350, ext. 227 or email [kcvetkovic@tac-atc.ca](mailto:kcvetkovic@tac-atc.ca).





**BRYAN W. TUCKEY**  
Commissioner  
Planning and Development Services Department

March 12, 2010

Katarina Cvetkovic  
Program Manager  
Transportation Association of Canada  
2323 St. Laurent Blvd  
Ottawa, ON K1G 4J8

Dear Ms. Cvetkovic:

**Re: 2009 TAC Sustainable Urban Transportation Award Nomination  
York Region Transportation Master Plan Update**

The Regional Municipality of York's Planning and Development Services Department is pleased to submit our Transportation Master Plan (TMP) Update study for the 2009 TAC Urban Transportation Award. This recently completed and approved Master Plan reflects York Region's commitment to sustainable transportation while addressing the needs and challenges associated with growth in a suburban municipality.

We wish to thank TAC staff for their continuing commitment to the development and enhancement of sustainable urban transportation, and providing us with this opportunity to submit our nomination. If you have any questions or require additional information, please contact the undersigned or Loy Cheah, Director of Infrastructure Planning, at 905-830-4444, Ext. 5024.

Sincerely,

A handwritten signature in blue ink, appearing to read "Bryan W. Tuckey".

Bryan W. Tuckey, MCIP, RPP  
Commissioner of Planning and Development Services

Encl.

G:\Transportation\T01 - Transportation Studies\Transportation Master Plan Update - 2007\Award Applications\TAC Sustainable Urban Transportation Award\cover letter.doc

The Regional Municipality of York, 17250 Yonge Street, Newmarket, Ontario L3Y 6Z1  
Tel: 905-830-4444, 1-877-464-9675, Fax: 905-895-3482  
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Transportation Master Plan Update

**2009 TAC Nomination Package**





## Statement to Nominate York Region’s Transportation Master Plan Update for the 2009 TAC Sustainable Urban Transportation Award

York Region’s evolution into a diverse and robust urban system within the Greater Toronto and Hamilton Area (GTHA) is the result of planning and policies based on innovation, place making, and decision making that integrates the environment, community and economy. Located immediately north of Toronto, the Region, with its nine local area municipalities has evolved to consist of a series of centres and corridors surrounded by the Urban Area, and a number of rural towns, villages, and hamlets. York Region also contains some of the most significant and environmentally sensitive geological land forms in Ontario with 69% of its 1,776 square kilometre land base protected as natural and/or greenbelt areas.

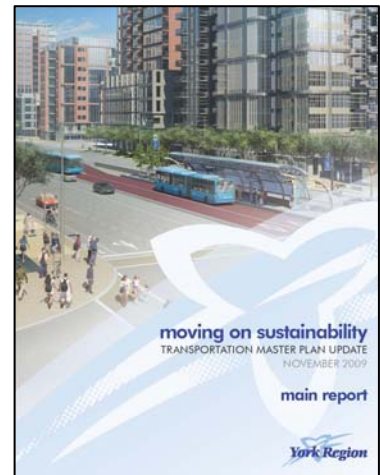


With its diverse communities, emerging urban centres, competitive industries, attractive natural environment, and strategic location in the GTHA, York Region is anticipated to reach 1.5 million residents and 780,000 jobs by 2031. This growth is mandated by the Province of Ontario and represents a significant growth from the one million residents and 490,000 jobs in York Region today. The Transportation Master Plan (TMP) Update was guided by an innovative study process to ensure that a more sustainable transportation system could be achieved to support this growth while recognizing the environmental, social, and economic challenges for a suburban municipality.

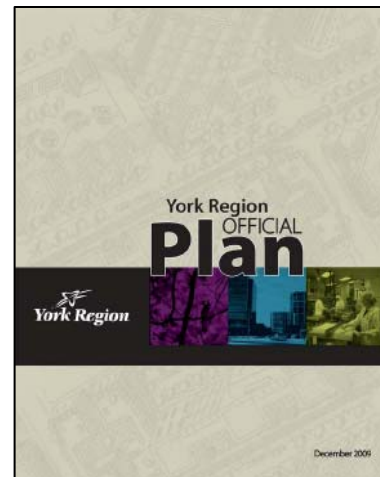
The TMP Update study project was undertaken to further refine the transportation opportunities and challenges first identified in the Region’s 2002 TMP. Its mandate also included the need to address future transportation plans, programs, and policies in a sustainable and integrated manner given the new Provincial initiatives and additional growth in the Region. A goal of the TMP Update was to promote alternative modes of transportation through its focus on active transportation and transit as priorities to achieve a more sustainable urban form.



Through an extensive public and stakeholder consultation process, the TMP Update, initiated in 2006, was unanimously endorsed by York Regional Council in November 2009. The final project documents included an Executive Summary, a Main Report, a comprehensive set of Technical Appendices, and a Consultation Record. Throughout the project, and as part of the consultation process with local area municipalities and stakeholders, extensive information was disseminated through vehicles such as newsletters, presentations, and the project website. The degree of consultation and innovation in the study process has garnered general support by residents and stakeholders for the recommended ultimate (2031) transit and road network plans along with its phasing plans, 5-Year Action Plan, and policies and programs.



Completion of the TMP Update with its integrated study process has allowed the Region to include key transportation planning policies and initiatives into the recently adopted Regional Official Plan (December 2009) for building cities and complete communities within the Region.



For its promotion of a sustainable approach and key strategies embodying the vision of creating cities with more efficient, environmentally friendly, and liveable communities, the York Region TMP Update project is being nominated for the 2009 TAC Sustainable Transportation Award.

## Development and Enhancement of Sustainable Urban Transportation

York Region is one of the fastest growing municipalities in Canada. The Region is committed to plan for the growth in a sustainable way while providing a high quality of life for its residents. To address this commitment, the TMP Update was developed in coordination and integrated with the Region's key comprehensive studies with the goal of enhancing the urban structure through city building, intensification, complete communities, and a sustainable transportation system. The comprehensive studies that were carried out in parallel with the TMP Update during the 2006-2009 period included:

- Planning for Tomorrow: Growth Management Program;
- York Region Sustainability Strategy (winner of 2008 LivCom Award);
- Water and Wastewater Master Plan study;
- Pedestrian and Cycling Master Plan;
- 25- Year Fiscal Impact study;





- Environmental Analysis; and,
- Land Use Analysis.

The study process provided an integration between land use, infrastructure, environment, and fiscal planning, while complementing the Region’s other sustainable programs and initiatives. The study fully explored a variety of scenarios taking population and employment growth data through a transportation demand modelling exercise, and formulated policy and program recommendations in “bold directions”. This coordinated process resulted in the development of a transportation plan which addressed key land use and infrastructure integration, and allowed sustainable transportation policies to be incorporated into the Regional Official Plan document.

Key recommendations in the TMP Update recognized the social aspects of the “triple bottom line approach” to sustainability. The priority placed on active transportation and transit elements reflect the commitment to build healthy community lifestyles and provide mobility and access for everyone. The TMP Update in coordination with the Pedestrian and Cycling Master Plan (April 2008) and Regional Official Plan has an objective to reduce automobile dependence by enhancing opportunities for residents and workers to walk, cycle, take transit, and carpool.



Another social element that is recognized in development of the Plan is the sensitivity of some residents to road widenings solely for improving automobile lane capacity. The TMP Update has addressed this sensitivity by focusing on transit priority and rapid transit improvements on major arterial roads. It has taken some bold directions in recommending road improvements supportive of sustainable urban transportation including:

- Constructing HOV lanes for all road segments scheduled for widening to six lanes, excluding rapid transit segments on Yonge Street and Highway 7; and
- Limiting road widenings to a maximum of six through lanes, including transit lanes.

Special Study Areas were also recommended to provide more detailed studies and assessments of key transportation issues of importance to residents and stakeholders.

In terms of economic objectives, the Plan provides good integration between transportation and land use through its coordination with the Growth Management exercise. Population and employment forecasts reflect the vibrant economy in the Region and strategic placement of future residents and jobs with accessible and choice of alternative modes of transportation, particularly in key Centres and higher order transit corridors. The efficient use of infrastructure to move people and goods is emphasized in the Plan where over 80% of the estimated \$18.3 billion (2008 Canadian dollars) transportation infrastructure cost to year 2031 is attributed to transit-related improvements.

The TMP Update policy direction also adopted a conservation-first approach by serving the travel needs of residents through the efficient use of existing and future infrastructure.

At the forefront of this approach is a comprehensive transportation demand management program that promotes walking, cycling, and transit use, and a per capita reduction in trips taken. Its emphasis on diverting single occupancy vehicle usage towards more sustainable modes will reduce the need to expand infrastructure, reduce GHG emissions, enhance air quality, and protect the Region’s natural heritage. Through involvement of key stakeholders such as the Conservation Authorities on the study Technical Advisory Committee, sustainability guiding principles and environmentally conscious programs and recommendations were developed.



### **Degree of Innovation**

In terms of innovation, this TMP Update project demonstrated how an upper-tier municipality can partner with other local governments and agencies, while performing extensive public consultation to build transportation and policy recommendations that take a Region-wide perspective and create a strong vision for the future. This Master Plan project complements the goals of regional plans at various levels, including that of York Region’s newly adopted 2009 Official Plan. The TMP helped develop the transportation policies and principles of the Official Plan to ensure that the Region’s overall transportation services and infrastructure needs can be achieved. The TMP project is considered a key milestone in the integrated planning process of the Region to address growth and the public interest.

The study provided opportunities to ensure potential solutions are judged more sustainably through a proactive consultation process with the public and stakeholders. The project included a Steering Committee consisting of staff representatives from various departments and a Technical Advisory Committee consisting of staff representatives from York Region’s nine local area municipalities, its adjacent regional municipalities, Provincial Ministries, Transit, and Conservation Authority agencies. Further, two significant Symposiums with stakeholders consisting of senior representatives from major businesses and agencies were carried out to receive input at the beginning and mid-way through the project. With input from these stakeholders and providing opportunities for regular public consultation through information dissemination on the project website, newsletters, and regular meetings, the quality of the consultation process in the project was demonstrated.

The TMP also used a set of sustainability principles to guide infrastructure and policy/program priorities, and process resulting in a transportation strategy that meets the long-term growing needs of the Region. It took a ‘pedestrian and transit-first’ approach to address capacity



deficiencies to meet growth demands, which emphasized investment in and access to public transit.

The study developed 11 sustainability principles to properly guide the development and evaluation of the initiatives recommended by the Region. Each of the 11 Principles looked at sustainability and its relationship to transportation planning. For example, the principles ranged from:

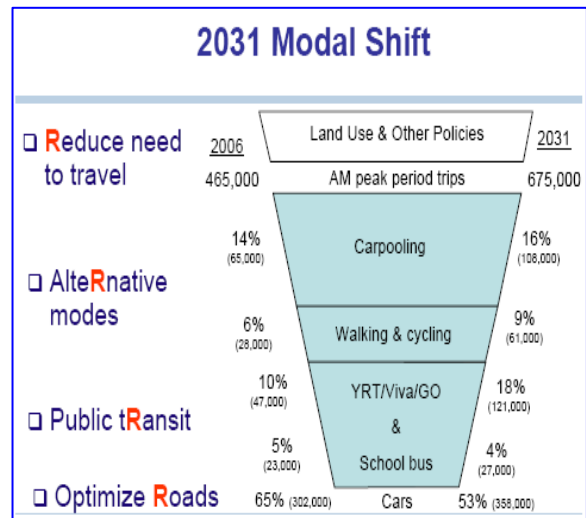


- Principle 1: integrate land use and transportation planning with several “bold directions” listed as well as planning and design initiative recommendations, to
- Principle 4: Provide access and mobility for everyone, which formulated recommendations for pedestrians, cyclists and transit users, to
- Principle 11: Conduct on-going performance measurements and monitoring which identified the need to regularly monitor trends through ITS and surveys.

In addition to the sustainability principles, the project took a unique and innovative approach to transportation planning, termed the four “R” approach taking on the analogy of the three “R”s in waste management. This is an approach to sequence the priority criteria for transportation planning to reduce the use of single-occupant vehicle travel in the Region. In its order of priority, the four “R”s are:

1. Develop initiatives and strategies that **R**educe the need to travel;
2. Provide more convenient and reliable **a**lte**R**native modes;
3. Enhance public **t**Ransit by improving existing infrastructure and services; and,
4. Optimize **R**oads to accommodate all modes of travel, and expand roadways only when necessary.

This approach is typically illustrated in a “funnel” graphic highlighting the four “R”s with the current and forecasted percentage and trip impacts associated with the various modal shares and strategies.



The study also recognized the need to secure long-term alternative funding sources including:

- Continue to seek support for transit subsidies from the Federal and Provincial governments,
- Work with the Province to modify the Development Charges Act to guarantee more support for transit and other sustainable transportation services, and

- Consider private sponsorship of major infrastructure elements.

### **Transferability to Other Canadian Communities and Organizations**

The TMP Update is transferable to other suburban municipalities and agencies facing growth challenges with the need to integrate transportation planning and growth management. The project recognized the importance of integrating land use with transportation infrastructure and strategies for longer term sustainable urban development. As the TMP study encompassed aspects from fiscal expenditure, to potential environmental impacts, to marketing and education to the public, it can breathe light into the coordination of the various components of master planning, as well as stakeholder consultation and engagement.

The TMP Update incorporated strategies and policies that will guide York Region’s future in a sustainable and responsible approach, with a pedestrian and transit first attitude. The Region has continually taken steps forward that are at times beyond our goals and become leaders in a number of areas among the municipalities in the Greater Toronto Area, and perhaps, in Canada. York Region is a leader in implementing Transportation Demand Management programs, cycling programs, and transit infrastructure and programs. These strong strategies and policies can also provide guidance to other regional municipalities in developing planning initiatives such as transportation demand management and active transportation in order to reach their sustainability goals.

The simple messaging with the “4R” approach and use of sustainability principles sets the framework for other municipalities and agencies to consider and refine the approach in order to address growth and outreach challenges to residents and stakeholders.

The extensive consultation process which involved Technical Advisory Committee members representing key stakeholders was important to the success of the project. This along with the two all day Symposiums with senior representative from agencies and businesses provided opportunities for input and information which enhanced the quality of the consultation and final Plan. The elements of the consultation process in the TMP Update can also be transferred to similar projects.



### **Added Value**

The study reports, main report, executive summary, technical appendices and public consultation record, provide the full documentation of the project and clearly demonstrate the comprehensive nature of the project. All of these reports can be found on the project website:

[http://www.york.ca/Services/Regional+Planning/Infrastructure/TMP\\_Overview.htm](http://www.york.ca/Services/Regional+Planning/Infrastructure/TMP_Overview.htm)





The project website for the Transportation Master Plan Update study was a key aspect of the communication strategy between the team, stakeholders, as well as the general public. This added value feature allowed the study team to keep stakeholders and the general public regularly informed throughout the project. The study process was documented through regular updates to the website, and includes relevant background documentation, public consultation material, notices, newsletters and related internet links. This added value feature of the Plan can be used by others as a model for public and stakeholder consultation.

As part of the comprehensive Technical Appendices, there are several other report documents that provide solid background and research leading to the development of a sustainable transportation master plan. These include the following:

- Best Practices Review which examined four North American cities considered “champions” of sustainability including Calgary, Ottawa, Portland (OR) and Vancouver. The report highlighted innovative sustainable transportation programs implemented by the four communities and draft sustainability principles for the TMP Update.
- Issue Papers to stimulate discussion on the topics of
  - Managing Traffic Congestion
  - Transit-Oriented Development
  - Assessing Impacts on Natural Heritage and Environmental Features, and
  - Public Education.
- 2002 Transportation Master Plan Assessment providing a “report card” on the progress of the previous master plan.

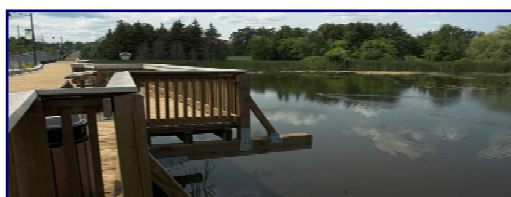
These background reports can be used by members of the community interested in enhancing their master plans.

## **Conclusion**

The TMP Update reflects York Region’s commitment to sustainable transportation while addressing the needs and challenges associated with growth and creating cities with more efficient, environmentally friendly, and liveable communities.

## **Credits**

This submission is being made by The Regional Municipality of York. The preparation of the Transportation Master Plan Update was managed by the Planning and Development Services Department’s Infrastructure Planning Branch with assistance by MMM Group Ltd., Richard Soberman, Sue Cumming, Dick Gordon, and David Crowley.





Transportation Master Plan Update

Appendix





**Transportation Master Plan Update**

**Executive Summary**





# moving on sustainability

TRANSPORTATION MASTER PLAN UPDATE

NOVEMBER 2009

## executive summary





## MOVING ON SUSTAINABILITY | EXECUTIVE SUMMARY

*The future will be green, or not at all. This truth lies at the heart of humankind's most pressing challenge: to learn to live in harmony with the Earth on a genuinely sustainable basis.*

*-Sir Jonathon Porritt, Environmentalist*

### THE 2002 YORK REGION TRANSPORTATION MASTER PLAN: A PROUD LOOK BACK

In 2002, York Region approved an innovative Transportation Master Plan (TMP) that defined the Region's long-term transportation vision and provided a framework upon which transportation decisions would be made through the year 2031. The TMP also established policies and programs to support the long term vision and plan, and included an implementation strategy and Five Year Action Plan to meet the Region's future transportation needs.

In recognition of its progressive integration of land use and transportation growth management policies, the York Region Transportation Master Plan was the recipient of the 2001 Transportation Association of Canada's Sustainable Urban Transportation Award.

Since 2002, York Region has undertaken several initiatives in support of the bold vision of the original Transportation Master Plan, including:

- Commencing VIVA - the first phase of a regional Bus Rapid Transit (BRT) system
- Undertaking Environmental Assessments for subway extensions and rapid transit service
- Initiating the Spadina Subway Extension with the Toronto Transit Commission (TTC)
- Developing an implementation program for the next phase of the BRT system (dedicated rapidways) and working with Metrolinx to secure funding
- Adopting Transit Oriented Development guidelines
- Completing a Cycling and Pedestrian Master Plan





- Developing Transportation Management Associations (TMAs) through the Smart Commute initiative
- Implementing Transportation Demand Management (TDM) programs

Several programs recommended in the original TMP received financial support from both the Provincial and Federal governments. The VIVA rapid transit system is the most notable project funded equally by both senior levels of government and York Region. The Region's initiative to develop Transportation Management Associations through

the Smart Commute program was recommended in the TMP, and received partial funding from the Federal government to meet the government's Kyoto commitments.

## THE YORK REGION TRANSPORTATION MASTER PLAN UPDATE: MOVING ON SUSTAINABILITY

In 2006, York Region initiated an update of its TMP to address future transportation needs in a sustainable and integrated manner to address new Provincial initiatives and additional growth in the Region. The TMP update was also undertaken to further refine the transportation opportunities and challenges first identified in the Region's 2002 Transportation Master Plan.

### WHAT IS SUSTAINABILITY?

Sustainability is what many communities in North America are striving to achieve. And yet few communities know exactly what Sustainable Transportation is; moreover, those communities that do pursue sustainable transportation policies and initiatives may define it differently than other similar locales.

'Sustainable Transportation' has many definitions. Several international organizations accept the definition developed by the Canadian Centre for Sustainable Transportation, which states that a sustainable transportation system is one that:

- Allows the basic access needs of individuals and societies to be met safely and in a manner consistent with human and ecosystem health, and with equity within and between generations;
- Is affordable, operates efficiently, offers choice of transport mode, and supports a vibrant economy; and
- Limits emissions and waste within the planet's ability to absorb them, minimizes consumption of non-renewable resources, limits consumption of renewable resources to a sustainable yield level, reuses and recycles its components, and minimizes the use of land and the production of noise.



*Transport Canada* adopted seven strategic challenges to promote sustainable transportation practices "to preserve and strengthen Canada's transportation system and advance Canadians' quality of life...{to} provide a framework that addresses the three elements of sustainable transportation - social, economic and environmental." The seven strategies adopted to promote sustainability in Canada, include:

- Encourage Canadians to make more sustainable transportation choices;
- Enhance innovation and skills development;
- Increase system efficiency and optimize modal choices;
- Enhance efficiency of vehicles, fuels and fuelling infrastructure;
- Improve performance of carriers and operators;
- Improve decision-making by governments and the transportation sector; and
- Improve the management of Transport Canada operations and lands.

In 1987, the World Commission on Environment and Development (WCED) published a ground-breaking report for the United Nations entitled "Our Common Future". Also known as the "Brundtland Report" after the Commission's chairwoman, the report developed guiding principles for sustainable development as it is generally understood today. The Brundtland Report defines sustainability as development that, "meets the needs of the present without compromising the ability of future generations to meet their own needs."

York Region accepted the Brundtland Report's definition and addressed it in its own "Triple Bottom-Line" approach to sustainability. The philosophy behind the "Triple Bottom-Line" approach is that all of York Region's initiatives should aim to simultaneously create environmental, social and economic benefits. This approach, emphasizing transparency, equity, accountability and community involvement as well as monitoring and continuous improvement towards sustainability, is integrated into many of the Region's initiatives.

### MASTER PLAN GUIDED BY AN INNOVATIVE STUDY PROCESS

York Region developed an innovative study process to ensure that a more balanced, sustainable transportation system could be readily achieved. Key components of the study process included:

- Establishing the need for future transportation improvements based on growth projections;
- Undertaking a rigorous assessment of existing conditions, both in York Region and throughout North America, to identify potential measures to address the needs;
- A methodology to ensure potential transportation solutions would be judged more on their ability to be sustainable; and





- A proactive consultation process that included public meetings or workshops in each of the Region's nine municipalities.

### SUSTAINABILITY PRINCIPLES USED TO EVALUATE POTENTIAL TRANSPORTATION SOLUTIONS

In consultation with residents and key stakeholders, York Region developed a set of Sustainability Principles or "themes" to guide the selection of transportation infrastructure and services in the Region. The Principles included a number of specific objectives, as well as key measures to ensure that the Region's future transportation initiatives and policies properly reflect the conditions established by each principle. The 11 Sustainability Principles are provided below. A more detailed description of each principle is included in **Chapter 5** of the complete Master Plan Report.

1. Integrate Transportation, Land Use and Design
2. Protect and Enhance our Environment and Cultural Heritage
3. Support our Economic Well-Being
4. Provide Access and Mobility for Everyone
5. Adopt Energy Efficient Transportation Systems
6. Put Pedestrians and Transit First
7. Implement and Support Transportation Demand Management
8. Implement and Support Transportation Supply Management
9. Ensure Fiscal Sustainability and Equitable Funding
10. Further Encourage Communications, Consultation and Engagement
11. Conduct On-Going Performance Measurement and Monitoring

### RESIDENTS: TO SEEK SUSTAINABLE SOLUTIONS TO TRAFFIC CONGESTION & GROWTH

In 2008, EKOS Research Associates, an independent market research firm, conducted a telephone survey with 1,011 York Region residents on issues about traffic and public transit. The survey was designed to gauge resident's views on traffic congestion, as well as to identify citizens' opinions on potential solutions to address the congestion.

Key results of the survey included:

- Traffic congestion, and the lack of transit services in York Region, are major issues of York Region residents;
- Support for public transit, cycling and pedestrian infrastructure is strong across all municipalities; and
- A majority of residents oppose measures such as widening roads only for cars, or building more roads and highways as a way to address congestion.

## BOLD DIRECTIONS FOR A HEALTHIER, MORE SUSTAINABLE YORK REGION

In response to the growing need to address future growth and traffic congestion, and in support of Provincial legislation that sets clear standards for new development, the York Region Transportation Master Plan Update has developed a set of practical transportation solutions that will:

- Preserve and enhance the Region's sustainable natural environment;
- Support the Region's economic vitality; and
- Encourage healthier neighbourhoods and communities.

The recommended solutions, developed in close consultation with residents and stakeholders, support the notion to 'put pedestrians and transit first' - a common theme heard throughout the undertaking of this Master Plan Update. The Region's recommended infrastructure improvements that support a more sustainable transportation system are illustrated on pages 7 and 8.

Included among the more than 100 policies and strategies developed to address Regional growth is a set of Bold Directions that will have the most profound impact on the Region's transportation system. Twenty of the more significant 'Bold Directions' identified for this Transportation Master Plan Update are provided across the following pages. The full list of recommended solutions comprising of infrastructure and policy improvements is identified in **Chapter 6** of the complete Master Plan Report.

# sustainable





# bold directions



## TRANSIT INFRASTRUCTURE AND POLICY IMPROVEMENTS

- Implementing transit priority improvements to enhance transit operations along most urban arterials.
- Building or expanding Bus Rapid Transit (BRT) or Light Rail Transit (LRT) service on portions of Steeles Avenue, Highway 7, Major Mackenzie Drive, Bathurst/Dufferin Streets, Warden Avenue, Jane Street, Leslie Street, Yonge Street and Davis Drive/Green Lane.
- Improve rural transit links to King Township, Georgina, East Gwillimbury and Whitchurch-Stouffville.
- Providing queue jump lanes and transit priority at all traffic signals where transit service would benefit from this technology.
- Working with other agencies to implement fare integration and a pay-by-distance fare structure that would reduce or eliminate inequities for passengers crossing a zone or Regional boundaries.
- Working with local municipalities, particularly those that are already urbanized, to establish the minimum densities needed to support local transit or rapid transit service along designated transit spines.
- Developing 'mobility hubs' and local gateways at major entry points to the Region, the York Region Transit (YRT) system and at GO Transit stations.
- Expanding the VIVA/ YRT Intelligent Transportation System (ITS) program to improve transit performance compared to single occupant vehicles.

# YORK REGION 2031 TRANSIT NETWORK

## Transit Network Improvements

- Existing GO Rail Station
- Proposed GO Rail Station
- Commuter / HOV Parking
- Local Gateway to Transit Network
- Gateway Hub
- Anchor Hub / Regional Centre
- Special Study Area (see footnote)
- GO Rail Service
- 407 Transitway
- Rural Links
- Expressway Bus Service
- GTA West Corridor Concept
- Subway Extension
- Rapid Transit Corridor
- Transit Priority Network
- TTC Rapid Transit
- Recommended New Corridor

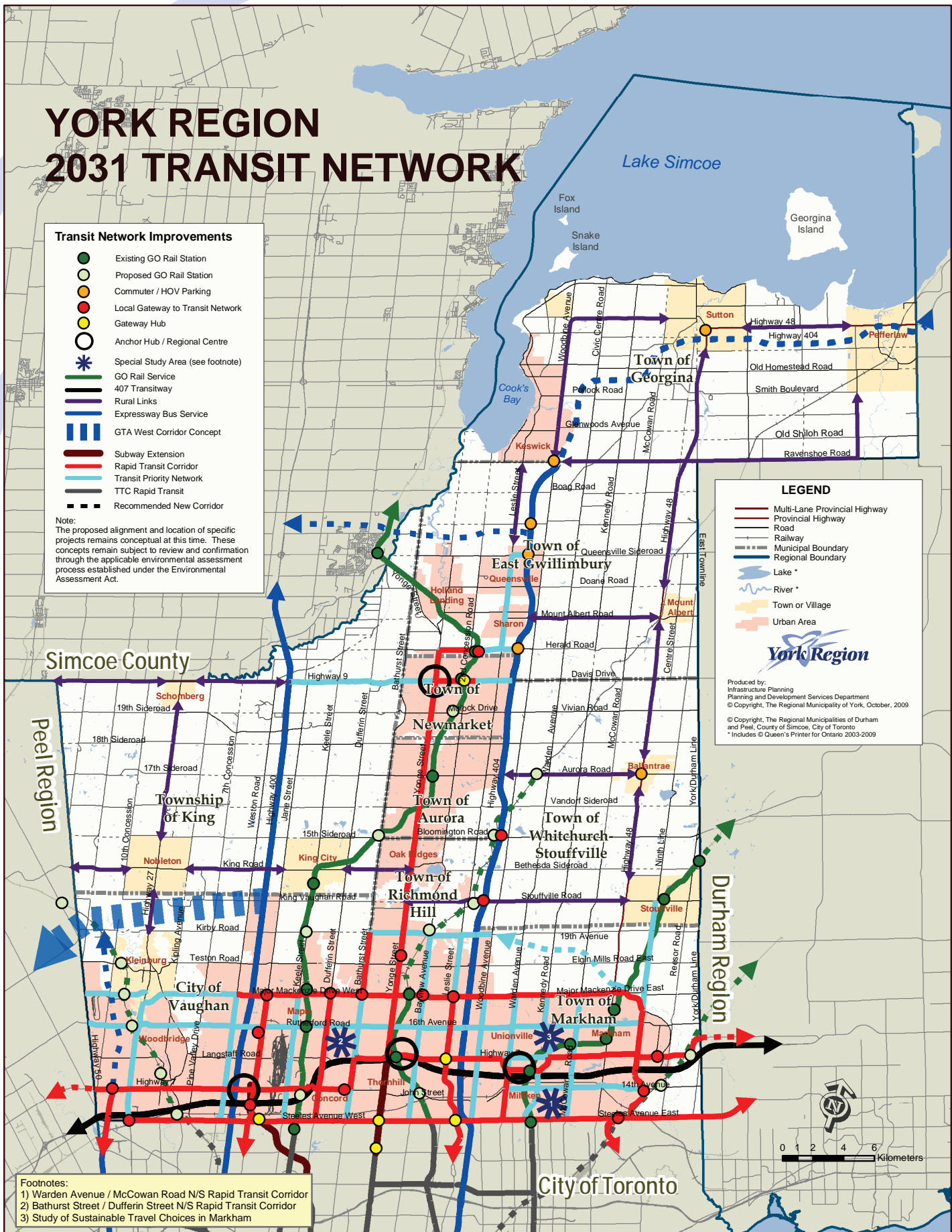
Note:  
The proposed alignment and location of specific projects remains conceptual at this time. These concepts remain subject to review and confirmation through the applicable environmental assessment process established under the Environmental Assessment Act.

## LEGEND

- Multi-Lane Provincial Highway
- Provincial Highway
- Road
- Railway
- Municipal Boundary
- Regional Boundary
- Lake \*
- River \*
- Town or Village
- Urban Area



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Footnotes:  
1) Warden Avenue / McCowan Road N/S Rapid Transit Corridor  
2) Bathurst Street / Dufferin Street N/S Rapid Transit Corridor  
3) Study of Sustainable Travel Choices in Markham

# YORK REGION 2031 ROAD NETWORK

## Road Network Improvements

- Jog Elimination
- New or Improved Highway Interchange
- Grade Separation
- Special Study Area (see footnote)
- Anchor Hub / Regional Centre
- New Local/Regional Road
- Arterial Road Improvement for Capacity
- Arterial Road Improvement to 6 lanes
- Road improvements to support Transit
- New Provincial Road
- GTA West Corridor Concept
- Provincial Road Improvement
- Recommended New Corridor

Note:  
The proposed alignment and location of specific projects remains conceptual at this time. These concepts remain subject to review and confirmation through the applicable environmental assessment process established under the Environmental Assessment Act.

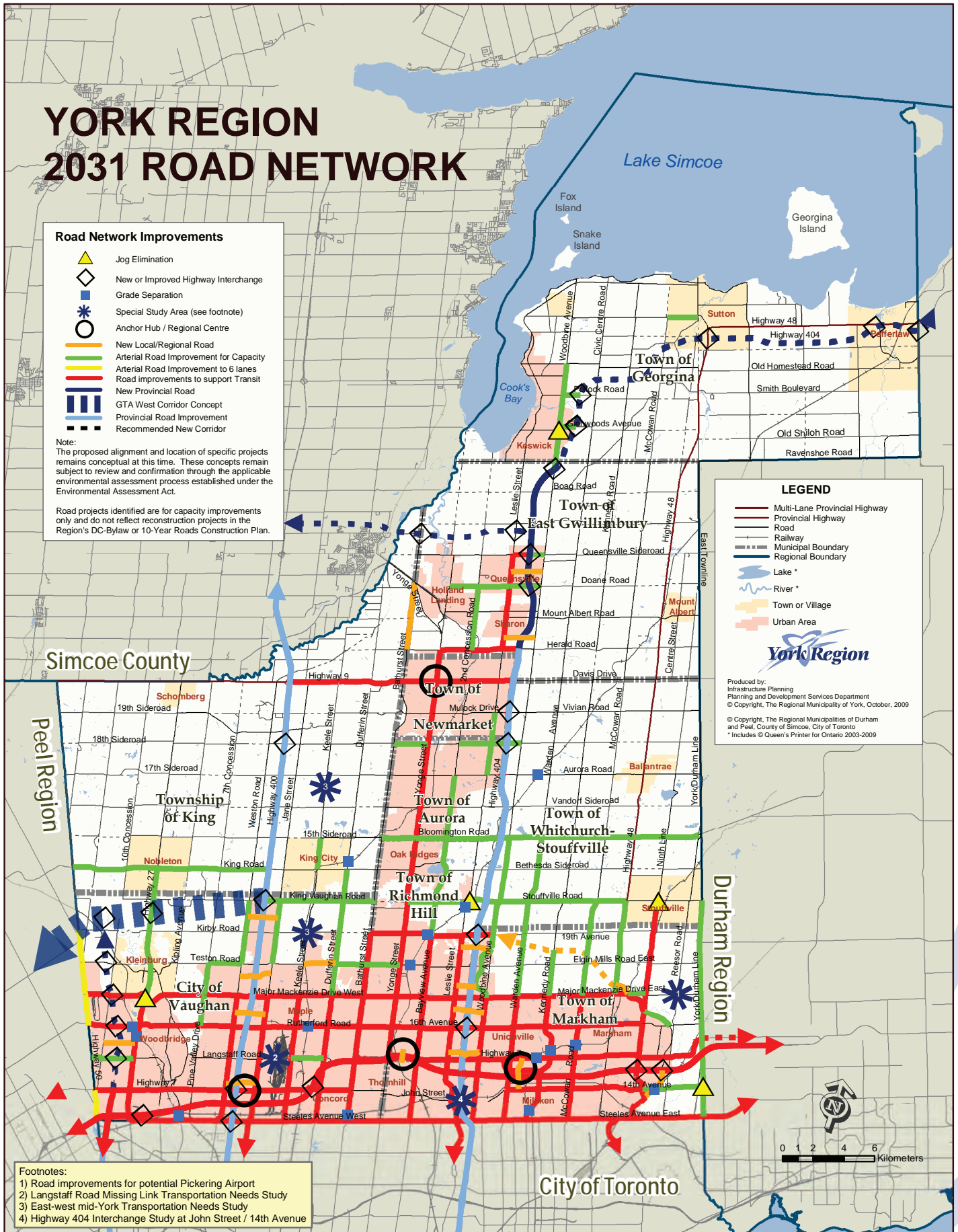
Road projects identified are for capacity improvements only and do not reflect reconstruction projects in the Region's DC-Bylaw or 10-Year Roads Construction Plan.

## LEGEND

- Multi-Lane Provincial Highway
- Provincial Highway
- Road
- Railway
- Municipal Boundary
- Regional Boundary
- Lake \*
- River \*
- Town or Village
- Urban Area

**York Region**

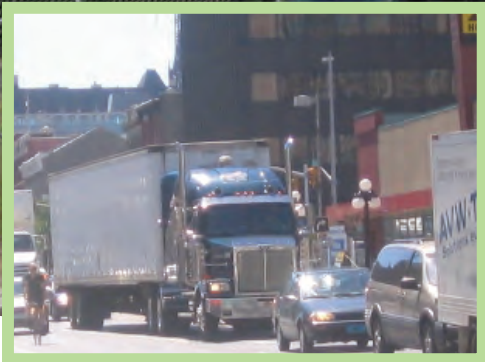
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Footnotes:  
1) Road improvements for potential Pickering Airport  
2) Langstaff Road Missing Link Transportation Needs Study  
3) East-west mid-York Transportation Needs Study  
4) Highway 404 Interchange Study at John Street / 14th Avenue



seamless



# bold directions



## ROAD IMPROVEMENTS SUPPORTIVE OF SUSTAINABILITY

- Constructing HOV lanes for all road segments scheduled for widening to six lanes, excluding rapid transit segments on Yonge Street and Highway 7.
- Limiting road widenings to a maximum of 6 through lanes, including transit lanes.
- Working with local municipalities to plan for and design continuous collector roads to accommodate local transit services, walking and cycling.
- Coordinate with each municipality to develop a Parking Authority to set a parking policy within York Region and ensure that an effective governance model is adopted in selecting individuals with appropriate experience and expertise to serve as Board Members of the Authority.
- Working with local municipalities to introduce maximum parking standards in Regional Centres and Corridors.
- Exploring road user fees in highly congested urbanized areas in coordination with Metrolinx and local municipalities.



active





# bold directions

## OTHER POLICIES AND STRATEGIES SUPPORTIVE OF SUSTAINABILITY

- Implementing the Regional and municipal pedestrian and cycling master plan policies and recommendations that give equal weight to infrastructure, implementation strategies and outreach programming.
- Partnering with local municipalities to plan for retail, institutional and commercial uses that are focused on the street, with parking positioned behind the buildings.
- Exceeding the requirements of the environmental assessment process in York Region to ensure local and adjacent municipalities minimize infrastructure needs while enhancing natural heritage and environmental features.
- Designing innovative public awareness campaigns to market sustainable transportation initiatives and strategies to all residents, particularly children, the elderly and new Canadians.
- Implementing effective freight movement systems that minimize impacts on the road network, including potential dedicated road links and rail services, as well as intermodal facilities.
- Restricting heavy vehicle delivery times to mid-day periods (outside of peak commuter travel times) within the Regional Centres and along Regional Corridors.

accessible



## MOVING ON SUSTAINABILITY: AN INVESTMENT IN OUR FUTURE

Since York Region released its initial Transportation Master Plan in 2002, the transportation landscape has changed significantly. Now, more than ever, the benefits of sustainable transportation choices are being recognized and given priority over simply building new, or expanding existing roadways.

The pressure to build sustainable transportation services and the escalating cost to build, operate and maintain public infrastructure services is an ongoing concern to municipal organizations in Ontario, as it is to government jurisdictions everywhere. This has required transportation agencies around the world to look at new and innovative ways of delivering and financing transportation projects.

The Ontario government's commitment to MoveOntario 2020 provides the necessary financial support to initiate the capital expansion of much needed transportation infrastructure in the GTHA, including York Region. Under the leadership of Metrolinx and with the support of 1/3 funding by the Federal government, the Province will fund the remaining 2/3 of the capital expenditures for transit. While this is a welcome and significant contribution to the Region's immediate transportation funding needs, Metrolinx must also be a key partner in addressing the long term cost implications for the operation, maintenance and future rehabilitation of these new systems. Many decisions must still be made concerning the role and responsibilities of the Regional Municipalities with respect to future operations, maintenance and the cost-sharing of these systems.

York Region's ability to deliver the network outlined in the Transportation Master Plan Update will be dependent on secure sustainable funding, locally and from senior levels of government.

Key recommendations for York Region to explore for long-term alternative funding sources include:

- Continue to seek support for transit subsidies from the Federal and Provincial governments;
- Work with the Province to modify the *Development Charges Act* to guarantee more support for transit and other sustainable transportation services; and
- Consider private sponsorship of major infrastructure elements.

### ESTIMATED 2031 COSTS

Total Capital Investment - \$18.3B

Annual Operating Cost - \$800M





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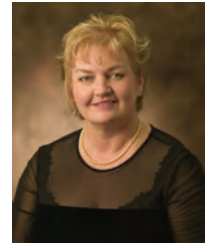
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## A Message from York Regional Council

The Regional Municipality of York has witnessed tremendous change over the past decade as more than a million people now call our area home. With our communities intensifying and our employment base expanding, the need for advanced transportation planning has never been greater.

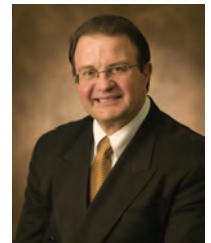
York Region introduced our first Transportation Master Plan in 2002 to help manage our infrastructure as our population blossomed. With a renewed focus on intensifying development instead of simply growing, the Region undertook a Transportation Master Plan Update exercise in 2006.

This Transportation Master Plan Update Executive Summary, titled *Moving on Sustainability*, provides a succinct overview of the three years of study, planning and public consultation that went into the development of the 2009 update. It focuses on expanding transit and rapid transit, while transforming our network of roads into more pedestrian-friendly transportation routes that encourage transit use, walking, cycling and carpooling.

It is a bold vision that will require working in partnership with our local municipalities and senior levels of government to help create and maintain the safe, healthy and caring communities that have made York Region the destination of choice for our residents.



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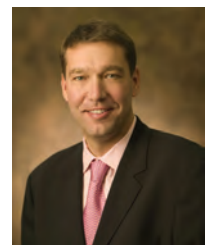
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**Transportation Master Plan Update**

**Main Study Report**





# moving on sustainability

TRANSPORTATION MASTER PLAN UPDATE

NOVEMBER 2009

**main report**







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# 1.0 INTRODUCTION

## 1.1 YORK REGION MOVING ON SUSTAINABILITY

This York Region Transportation Master Plan (TMP) Update will serve as the “blueprint” for all major transportation initiatives in the Region through the year 2031. It is an important undertaking - for the efficiency of our transit system, the safety of our roads and the economic well-being of our communities. Most importantly, the Transportation Master Plan builds on the previous plan by addressing transportation challenges and strategies that will promote sustainable development in York Region. This will complement other initiatives that the Region has championed to support the Regional goals of Sustainable Natural Environment, Economic Vitality and Healthy Communities.

## 1.2 STUDY BACKGROUND

In 2002, York Region approved an innovative Transportation Master Plan (TMP) that defined the Region’s long-term transportation vision and provided a framework upon which future transportation decisions would be made through the year 2031. The TMP also established policies and programs to support the long term vision and plan. It included an implementation strategy and 5-Year Action Plan to meet the Region’s immediate transportation needs.



In recognition of its progressive integration of land use and transportation growth management policies, the York Region Transportation Master Plan was the recipient of the 2001 Transportation Association of Canada's Sustainable Urban Transportation Award.

Since 2002, York Region has undertaken several initiatives in support of the original TMP, including:

- Increasing York Region Transit ridership growth by a significant 10% each year since the 2001 amalgamation of transit services (cumulative 2001-2008 increase of 38%);
- Completing the first phase of Viva - a Regional Bus Rapid Transit (BRT) system;



- Undertaking Environmental Assessments for subway extensions and rapid transit service along key transportation corridors;
- Initiating the Spadina Subway Extension with the City of Toronto and TTC;
- Developing an implementation program for the next phase of Bus Rapid Transit (BRT) implementation (dedicated rapidways) and working with Metrolinx, the Greater Toronto and Hamilton Area's transportation agency, to secure funding;
- Adopting Transit Oriented Development (TOD) guidelines;
- Completing a Pedestrian and Cycling Master Plan;
- Developing Transportation Management Associations (TMAs) through the Smart Commute initiative; and
- Implementing Transportation Demand Management (TDM) programs.

Several programs recommended in the original TMP received financial support from both the Provincial and Federal governments. The Viva rapid transit system is the most notable project funded equally by both senior levels of government and York Region. The Region's initiative to develop Transportation Management Associations through the Smart Commute Initiative was recommended in the TMP, and received partial funding from Transport Canada. Successful planning and implementation of York Region's transportation services and infrastructure must also be achieved in close collaboration with adjacent jurisdictions, as well as Metrolinx—the agency created by the Government of Ontario to develop and implement an integrated multi-modal transportation plan for the Greater Toronto and Hamilton Area (GTHA).

### 1.3 COMPLIANCE WITH THE MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT PROCESS

The York Region Transportation Master Plan Update adheres to the Planning and Design Process of a Municipal Class Environmental Assessment (EA), incorporating the key principles of successful environmental planning under the Ontario Environmental Assessment Act.



### 1.3.1 What is a Class EA?

The Municipal Class Environmental Assessment document (October 2000, amended in 2007), provides a

process in accordance with the EA Act for municipal infrastructure projects. The Class EA establishes a process whereby projects defined within the municipal Class EA and any subsequent modifications can be planned, designed, constructed, operated, maintained, and rehabilitated. These projects will not require project specific approval under the EA document, provided the approved environmental assessment planning process is followed.

The Municipal Class EA process is to be completed following a five phase process, which includes:

- Phase 1 – Identify the problem (deficiency) or opportunity;
- Phase 2 – Identify alternative solutions to address the problem or opportunity by considering the existing environment, and establishing the preferred solution;
- Phase 3 – Examine alternative methods of implementing the preferred solution;
- Phase 4 – Complete an Environmental Study Report that documents the rationale, plus the planning, design and consultation process of the project; and
- Phase 5 – Complete contract drawings and documents, then proceed to construction and operation.

Master Plans are required to address Phases 1 and 2 of the Municipal Class EA Process to include the required public consultation and the evaluation of alternative solutions.

Class EA Master Plans are long range plans which integrate infrastructure requirements for existing and future land use with environmental assessment planning principles. The Class EA Master Plan process examines infrastructure systems or groups of related projects in order to outline a







framework for implementation of subsequent projects and/or developments with environmental protection and mitigation measures integrated into the project.

The Class EA Master Plan typically differs from project-specific studies in several key respects. Long range infrastructure planning enables the proponent (i.e. York Region) to comprehensively identify their transportation needs and establish broader infrastructure options. The opportunity to integrate transportation with land use planning also enables the Region to consider different perspectives when looking at the full impact of decisions (MEA, 2007). Finally, Transportation Master Plans recognize the importance of all modes of travel, and emphasize that the increased use of transit is a key component of an integrated transportation strategy.

Once complete, the York Region Transportation Master Plan Report will be filed and made available for review by the public and any public agency that expresses interest in the study. Requests to the Minister of the Environment for a Part II Order (to require an Individual EA) are possible only for specific projects identified in the Master Plan, not the Plan itself.

### 1.3.2 Major Infrastructure Improvements Require Additional EA Studies

The EA process addresses projects by classifying them into different “Schedules” according to their environmental significance (Schedule A, A+, B or C). The level of complexity and the potential impacts of a project will determine the Schedule of the project that, in turn, will determine which phases will need to be addressed. A detailed description of each Schedule can be found in the EA document noted above.

The York Region Transportation Master Plan Update addressed Phases 1 and 2 of the Municipal Class EA process, taking a strategic, system-wide approach to planning for new services and

*The York Region Transportation Master Plan Update may be used in support of further work carried out for specific Schedule B projects, as well as Phases 3 and 4 for specific Schedule C projects.*

infrastructure. For some of the infrastructure projects, the requirements of Phases 1 and 2 will have been satisfied by this Master Plan. Alternatively, Phases 1 and 2 may need to be revisited for more comprehensive projects. For Schedule B projects, it will be necessary to fulfill the consultation and documentation requirements. For Schedule C projects, it is necessary to fulfill the additional requirements of Phases 3 and 4, and consider the site-specific issues which are beyond the scope of the Master Planning process. Requests for an order to comply with Part II of the EA Act (previously referred



to as a “bump up” provision) are possible only for specific projects identified in the Master Plan, and not the Plan itself.

For all major infrastructure improvements requiring the completion of Phases 3 and 4, York Region is required to prepare a detailed inventory of the natural, social and economic environment. This analysis is undertaken to identify the potential impacts of alternative alignments for new or expanded infrastructure while attempting to reduce our carbon footprint. Depending on the complexity or magnitude of the project, this analysis may involve detailed environmental studies to ensure that sufficient and appropriate information is available on which to base ensuing decisions, and to allow the public to fully understand the environmental implications of the project.

In addition to describing the potential impacts of a project, appropriate mitigating measures should be identified and evaluated. For example, if a new bridge is being considered to extend an existing road, York Region must identify all measures necessary to minimize the negative impacts on residents and environmental features resulting from the undertaking.

Several provincial approvals will be required in advance of implementing the recommended infrastructure improvements. For example, under the new provincial criteria associated with Ontario Regulation 179/06, the Conservation Authority is required to specifically identify and regulate natural hazards such as shorelines, wetlands, watercourses, floodplains and stream valley slopes. Likewise, under the Fisheries Act, no one may carry out a work or undertaking that will cause the harmful alteration, disruption or destruction of fish habitat unless it has been authorized by Fisheries and Oceans Canada (DFO).

## 1.4 THE IMPORTANCE OF SUSTAINABILITY

Sustainability is what many communities in North America strive to achieve and yet few communities know exactly what Sustainable Transportation is. Moreover, those communities that do pursue sustainable transportation policies and initiatives may define it differently than other similar locales.

‘Sustainable Transportation’ has many definitions. Several international organizations accept the definition developed by the *Canadian Centre for Sustainable Transportation* which states that a sustainable transportation system is one that:



- Allows the basic access needs of individuals and societies to be met safely and in a manner consistent with human and ecosystem health, and with equity within and between generations;
- Is affordable, operates efficiently, offers choice of transport mode, and supports a vibrant economy; and
- Limits emissions and waste within the planet's ability to absorb them, minimizes consumption of non-renewable resources, limits consumption of renewable resources to the sustainable yield level, reuses and recycles its components, and minimizes the use of land and the production of noise.

Transport Canada (TC) adopted seven strategic challenges to promote sustainable transportation practices “to preserve and strengthen Canada’s transportation system and advance Canadians’ quality of life {to} provide a framework that addresses the three elements of sustainable transportation – social, economic and environmental.” The seven strategies adopted by TC to promote sustainability in Canada, as well as in its own practice, include:

- Encourage Canadians to make more sustainable transportation choices;
- Enhance innovation and skills development;
- Increase system efficiency and optimize modal choices;
- Enhance the efficiency of vehicles, fuels and fuelling infrastructure;
- Improve the performance of carriers and operators;
- improve decision-making by governments and the transportation sector; and
- Improve the management of Transport Canada operations and lands.

In 1987, the World Commission on Environment and Development (WCED) published a groundbreaking report for the United Nations entitled “Our Common Future”. Also known as the “Brundtland Report” after the Commission’s chairwoman, the report developed guiding principles for sustainable development as it is generally understood today. The Brundtland Report defines sustainability as development that “meets the needs of the present without compromising the ability of future generations to meet their own needs.”



York Region accepted the Brundtland Report's definition and addressed it in its own "Triple Bottom-Line" approach to sustainability. The philosophy behind the "Triple Bottom-Line" approach is that all of York Region's initiatives should aim to simultaneously create environmental, social and economic benefits and value. This approach, emphasizing transparency, equity, accountability, and community involvement, as well as monitoring and continuous improvement towards sustainability, is integrated into many of the Region's transportation initiatives.

## 1.5 REGIONAL PARTNERSHIPS

York Region values its partnerships with all levels of government — especially the nine municipalities that make up the Region: the City of Vaughan, King Township, and the Towns of Aurora, Newmarket, Whitchurch-Stouffville, Markham, Richmond Hill, Georgina, and East Gwillimbury. In addition to the municipalities, York Region has other partnerships with local provincial agencies, Regional municipalities and outside stakeholders.



A strong partnership between Metrolinx and York Region is critical to ensure that the implementation and funding of new transportation services and infrastructure are well-coordinated, and support the goals of both York Region and the GTHA as a whole. York Region fully supports the Metrolinx Regional Transportation Plan (*The Big Move*) adopted in 2008 which guides the long-term strategic plan for an integrated, multi-modal, regional transportation system. Strong partnerships are also essential with the neighbouring City of Toronto, Regions of Peel and Durham, and Simcoe County to coordinate the provision of inter-regional transit services and optimize road network connectivity

## 1.6 ORGANIZATION OF THE STUDY REPORT

This Master Plan has been organized to provide a clear understanding of the transportation planning process, ensuring that a sustainable environment, society and economy be maintained and further developed. This will be done through the support of the three pillars of sustainability as well as the eleven sustainability principles developed





for this process. Both the pillars and the principles will be further outlined in full detail in the chapters to follow. The report is organized as follows:

<b>Chapter</b>	<b>Description</b>
<b>1</b>	Introduction and study background.
<b>2</b>	Identifies existing transportation services and infrastructure in York Region.
<b>3</b>	Presents the Federal, Provincial and Regional policies that impact any Regional transportation enhancements.
<b>4</b>	Details the extensive public engagement process that included Public Consultation Centres in each of the Region's nine municipalities.
<b>5</b>	Summarizes the study process that was developed to ensure the Master Plan was well positioned to address sustainability.
<b>6</b>	Identifies the transit, roadway and policy recommendations, and their corresponding support for the 11 Sustainability Principles.
<b>7</b>	Describes the proposed phasing plan for each of the recommendations.
<b>8</b>	Details the implementation and investment strategy for the master plan.
<b>9</b>	Presents the 5-year action plan and the monitoring process to ensure that the plan is implemented successfully and in a coordinated manner.



## 2.0 YORK REGION TODAY

### 2.1 UNPRECEDENTED REGIONAL GROWTH

In 2008, York Region's population grew by nearly 28,300 people and 9,000 new homes, increasing the Region's population to 1,011,360. According to the 2006 Census, 43% of York Region's population is comprised of new Canadians, far exceeding that of other Ontario municipalities. By 2031, York Region's population is projected to increase by almost 50% to 1.5 million residents, spanning all municipalities and municipal centres of the Region.

In addition to the significant population increase, the Region is projected to add between 10,000 and 15,000 jobs annually to its current 29,000 businesses and 490,000 jobs. Markham, Vaughan and East Gwillimbury are projected to experience the most significant growth over the next 30 years.



**Figures 2.1** and **2.2** illustrate the projected population and employment growth, respectively, through 2031. The information is intended for broad region wide master plan purposes and is not to be used for detailed planning purposes in traffic zones, pressure districts or sanitary service areas. Forecast information for non-designated expansion areas should be viewed with sensitivity and as one possible growth scenario for long-term infrastructure requirements.

### 2.2 OUR TRANSPORTATION SYSTEM

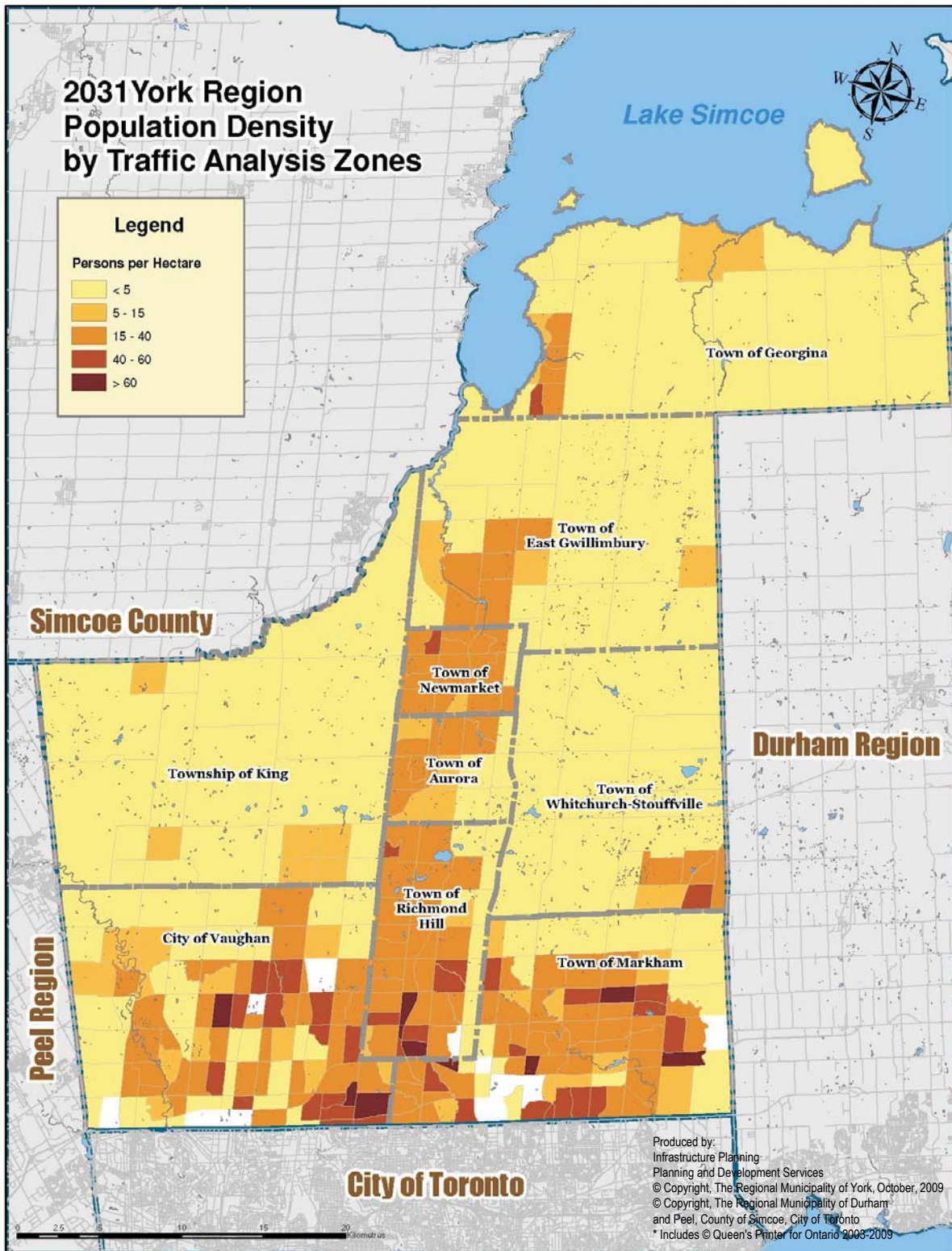
In recent years, York Region has sought a more balanced approach to accommodate population and employment growth, reflected in the 2002 Transportation Master Plan. A summary of the Region's existing transportation services and infrastructure is provided below.

#### 2.2.1 Existing Transit Service

**Figure 2.3** illustrates existing public transit routes within York Region, including:

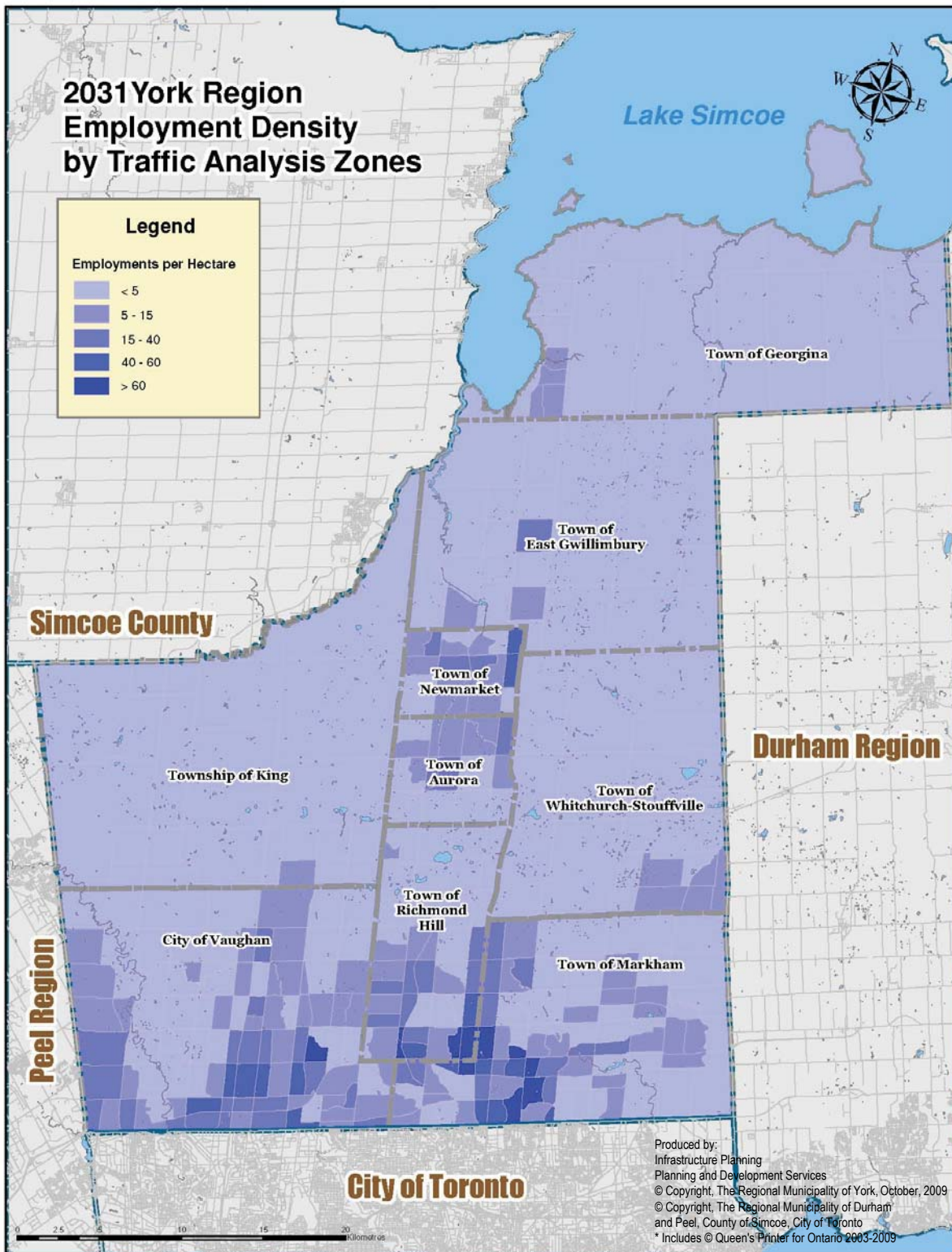
- Local and express service operated by York Region Transit, Brampton Transit and the Toronto Transit Commission.
- Viva rapid transit service operated by York Region Transit; and
- Inter-regional rail and bus service provided by GO Transit.

# FIGURE 2.1

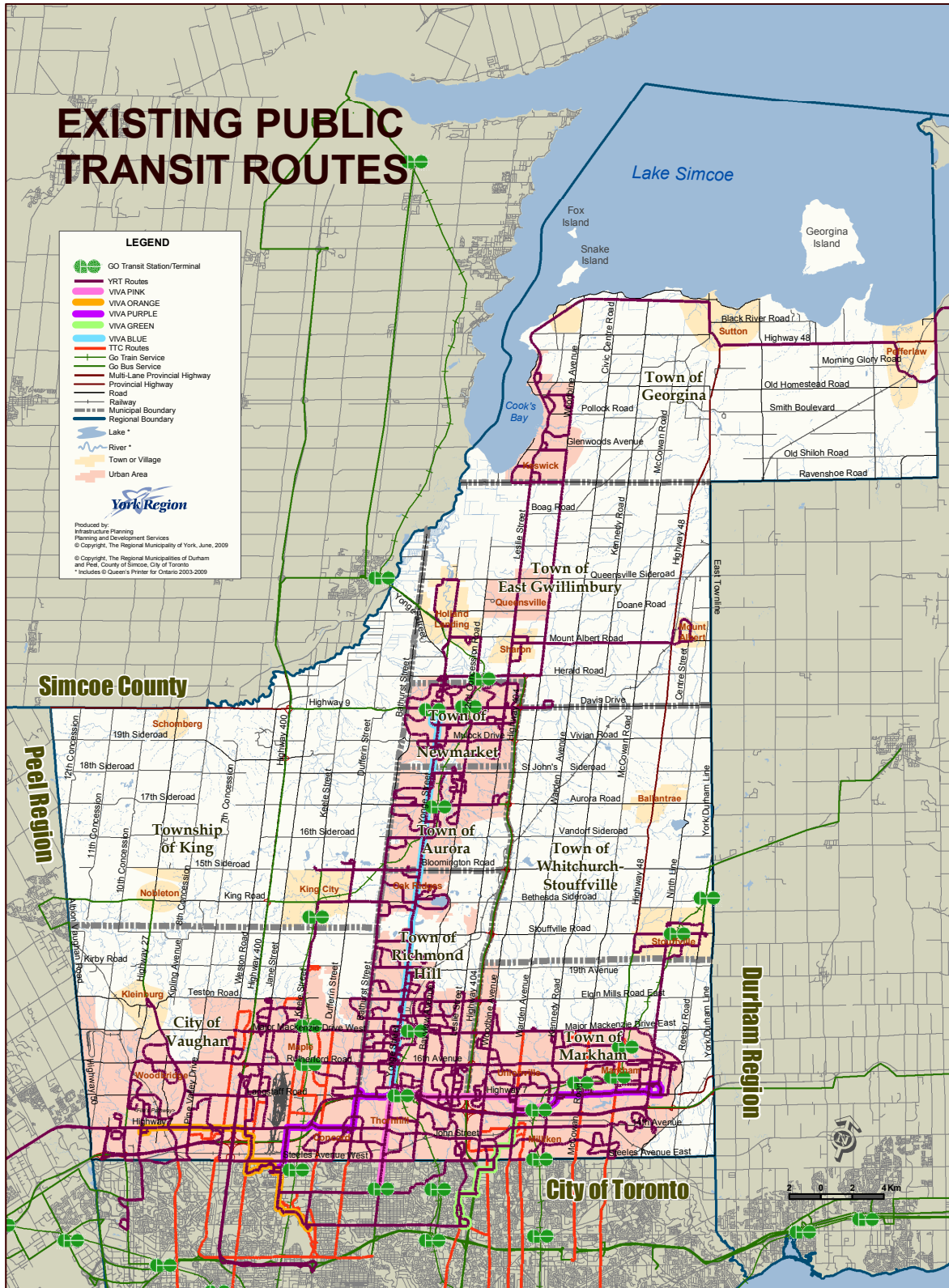




# FIGURE 2.2









**Figure 2.3** also illustrates the local York Region transit routes, which comprise 271 conventional transit buses, 85 Viva rapid transit buses and 20 community buses. The TTC service provides a total of 12 routes throughout the southern part of York Region under contract to YRT.



As of 2008, York Region supported five YRT/Viva transit terminals, 780 conventional bus shelters, 112 Viva stations and 4,500 bus stops. GO Transit operates 14 rail stations and one GO bus terminals within York Region. In total, York Region's transit service area covers 81% of the urban area within the Region.

### 2.2.2 Existing Roadways

York Region has a three-tiered road system that is structured in the following way:

- Local municipalities own and maintain the local road network including residential, commercial and industrial local and collector roads, plus sidewalks on both local and Regional roads.
- York Region owns and maintains the majority of the arterial roads in the Region, as well as some former Provincial highways. The alignment of the arterial roads generally follows the original two-kilometre concession road grid system.
- The Province of Ontario owns and maintains the Provincial highway system.

**Figure 2.4** depicts York Region's road network, which includes roads operated by local municipalities, the Region and the Province of Ontario. **Figure 2.5** illustrates the number of lanes found on the existing Regional road network. The existing road network varies from two to seven lanes. The typical road allowance for Regional roads as established in the Region's Official Plan is 36 metres, with right-of-way widths of up to 45 metres.











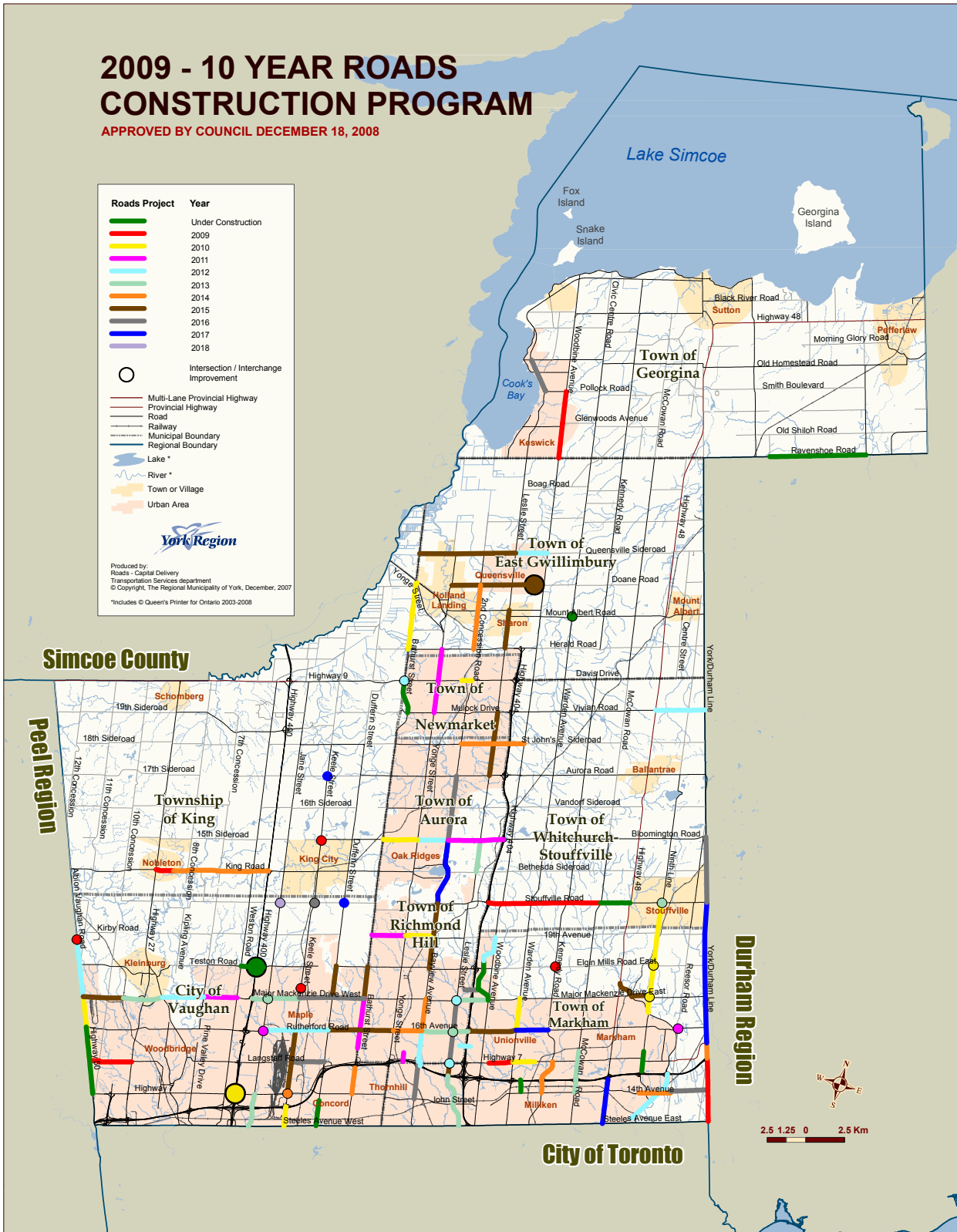
**Figure 2.6** illustrates the 2009 10-year roads construction program. These enhancements generally reflect the planned road improvements that were identified in the 2002 Transportation Master Plan to accommodate future growth.

The following roads projects have been completed in 2009 or are on-going to be completed in 2010. These improvements have been incorporated in the Master Plan analysis:

- Major Mackenzie Drive from Woodbine Avenue to Kennedy Road
- Teston Road from Weston Road to Jane Street
- New interchange at Highway 400 and Teston Road
- Ravenshoe Road from Prout Road to Weir's Sideroad
- Bathurst Street from Mulock Drive to Davis Drive West
- Warden Avenue at Mount Albert Road intersection improvement
- Ninth Line from Highway 407 to Rose Way
- Dufferin Street from Steeles Avenue to Glen Shields Avenue
- Stouffville Road from McCowan Road to Highway 48
- Mount Albert Road from east of Colonel Wayling Blvd. to Woodbine Avenue
- Woodbine Avenue By-pass (Victoria Square) from north of Major Mackenzie Drive to south of 19th Avenue
- Kennedy Road at Elgin Mills Road intersection improvements
- 9th Line at Millard Street intersection improvements
- Davis Drive West at Keele Street intersection improvements
- Highway 50 at Highway 7 intersection improvements
- Dufferin Street from Glen Shields Avenue to Langstaff Road

Environmental Assessments (EAs) and preliminary engineering activities are continuing on a number of key corridors in preparation for future work as approved in the 2009 10-Year Roads Construction Program. These include:

- Western Vaughan Arterial Road Improvements Individual Environmental Assessment.
- Keele Street from Steeles Avenue to Rutherford Road
- Leslie Street from Wellington Street to Mulock Drive
- Bathurst Street from Green Lane to Yonge Street
- Vaughan Metropolitan Centre Ramp Connections to Highway 400
- 2nd Concession from Green Lane to Queensville Sideroad
- Doane Road from Yonge Street to Woodbine Avenue
- Bathurst Street from Highway 7 to Teston Road/Elgin Mills Road
- Don Mills Road/Leslie Street from Steeles Avenue to Major Mackenzie Drive rapid transit corridor





It should be noted that several EAs have recently been completed and have achieved Environmental Assessment Act clearance to proceed to the implementation phase of the project. These include:

- Leslie Street from Bethesda Sideroad to Bloomington Road
- Doane Road at Highway 404 Extension Interchange
- Yonge Street from Mulock Drive to Green Lane (incorporated with VivaNext)
- Davis Drive from Yonge Street to Highway 404 (incorporated with VivaNext)
- Ninth Line from Major Mackenzie Drive to Main Street (including the jog elimination at Main Street, Stouffville)

Work is also continuing on the Sustainable Travel Choices (STC) study in the Town of Markham. This study has been designed to further review the transportation alternatives for several corridors within the Town of Markham including:

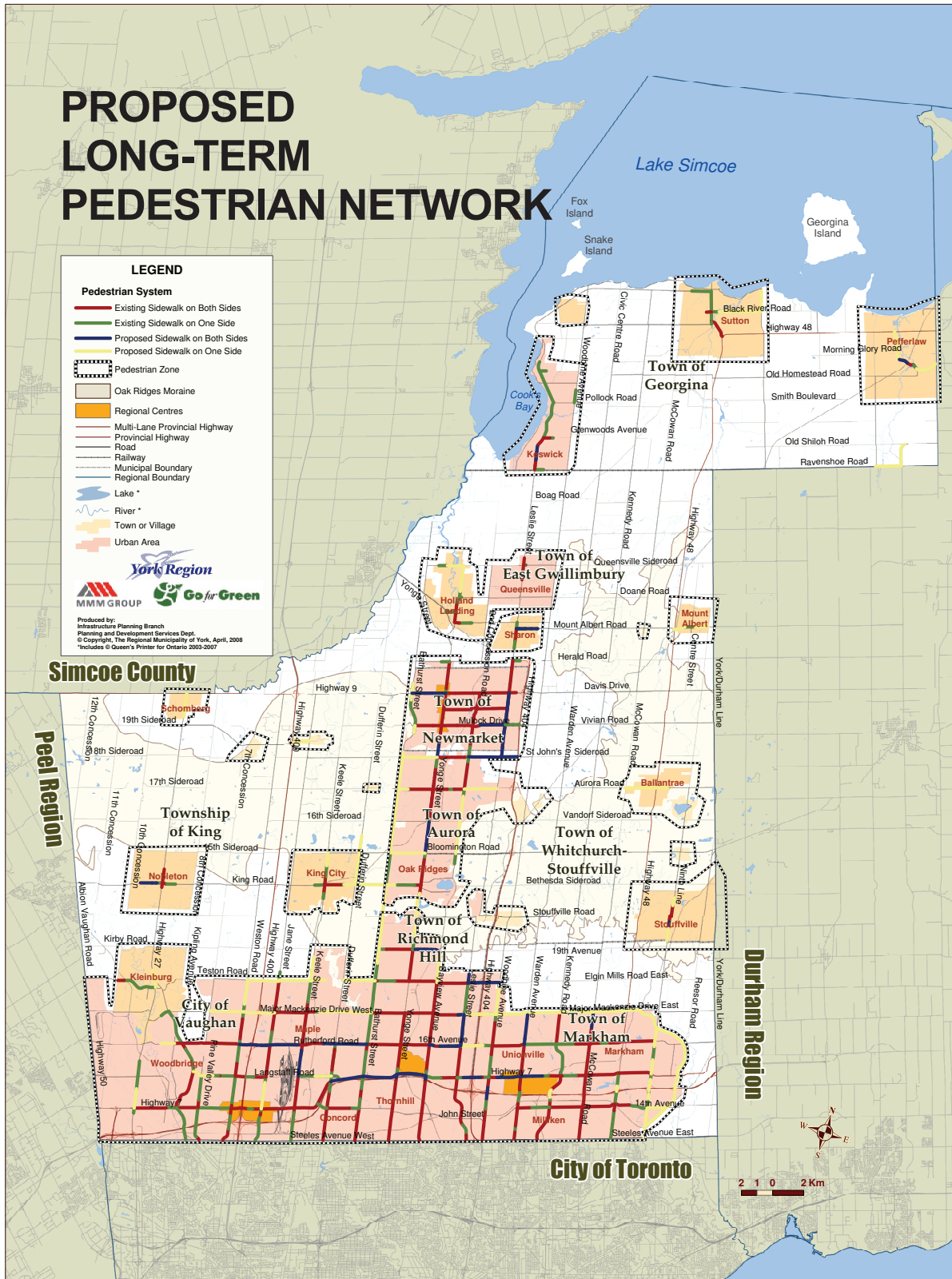
- Bayview Avenue, from John Street to Major Mackenzie Drive
- 16th Avenue, from Yonge Street to York/Durham Line
- Kennedy Road, from Steeles Avenue to 16th Avenue
- McCowan Road, from Steeles Avenue to 16th Avenue

### 2.2.3 Pedestrian and Cycling Facilities

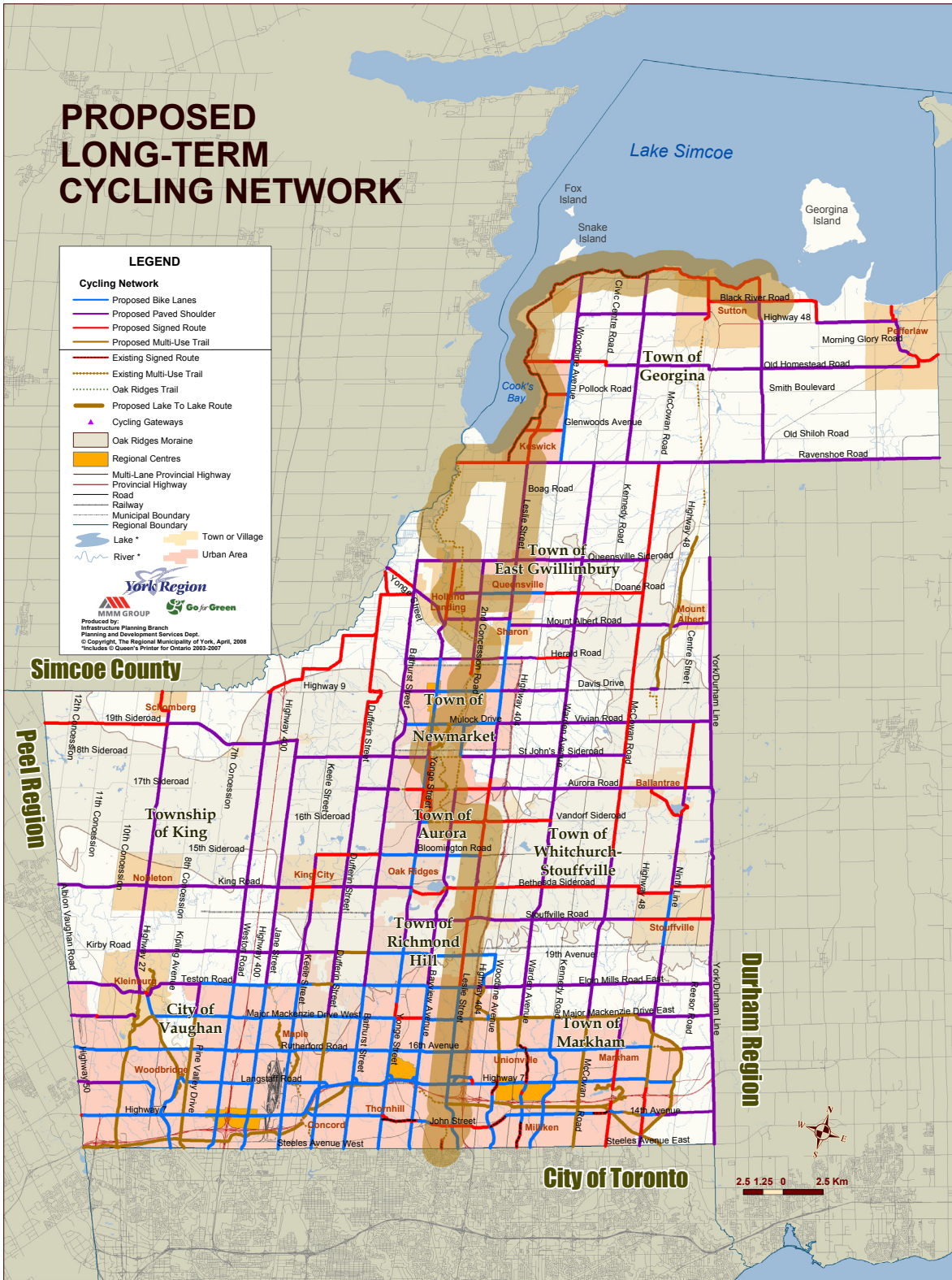
York Region maintains several cycling and walking facilities for both leisure and utilitarian purposes. In April 2008, York Regional Council adopted a Pedestrian and Cycling Master Plan (PCMP) to further enhance the pedestrian and cycling opportunities within the Region. This plan represents a coordinated and integrated Regional cycling system serving both the urban and rural areas of the Region. In support of the PCMP, the Region adopted several policies in their



Official Plan that support cycling and pedestrian opportunities both on and off-street. **Figure 2.7** illustrates the recommended long-term pedestrian routes while **Figure 2.8** illustrates the proposed long-term cycling routes. More details on the phasing and implementation of the short term (5 year), medium term (6-10 years), and long term pedestrian and cycling networks can be found in the PCMP (April 2008).









## 2.2.4 Transportation Demand Management Programs

York Region recently implemented several Transportation Demand Management (TDM) programs. Transportation Demand Management is defined as a set of strategies that foster increased efficiency of the transportation system by influencing travel behaviour by mode, time, frequency, trip length, cost or route. Some existing TDM examples in York Region include: carpooling, vanpooling, discount transit pass programs, telecommuting, flexible work hours, compressed work weeks and shuttle buses.

York Region is a primary partner in the GTA + Hamilton Smart Commute Initiative. The goal of the Initiative is to decrease the dependence on auto use by providing travel choices and supporting programs that reduce travel demand. The programs are implemented by local Transportation Management Associations (TMA). Three TMA's have been established in York Region: Vaughan, Markham-Richmond Hill, and Newmarket-Aurora. In conjunction with YRT and GO Transit, York Region has also developed a Regional network of carpool and commuter parking lots to accommodate commuters. **Figure 2.9** illustrates these facilities in York Region.

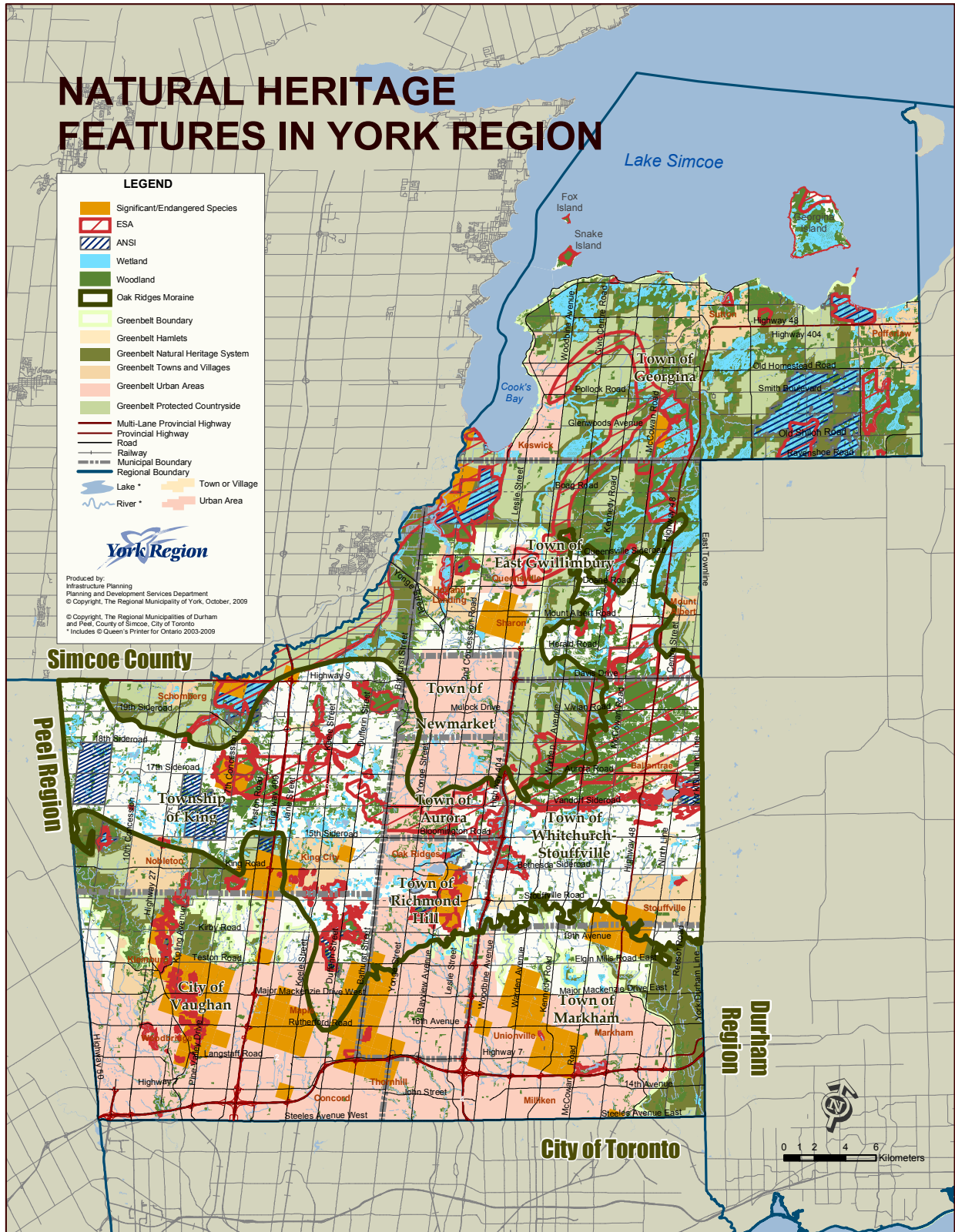
## 2.3 NATURAL HERITAGE FEATURES

In addition to the existing transportation, cycling and pedestrian facilities found throughout York Region, it is also important to identify and assess the natural heritage features located within the Regional boundaries. A key step in the network development process was to assess and evaluate natural heritage impacts. Provincial legislation requires the identification of any natural heritage features which may conflict with the proposed road or transit projects. A map was prepared in this regard showing the following natural heritage features and **Figure 2.10** is a representation of that map:

- Significant / Endangered Species
- Areas of Natural and Scientific Interest (ANSI)
- Environmentally Sensitive Areas (ESA)
- Lakes and Watercourses
- Wetlands
- Significant Woodlands
- The Oak Ridges Moraine
- The Greenbelt











## 3.0 YORK REGION: A CHAMPION OF SUSTAINABLE DEVELOPMENT

York Region's planning initiatives make it a national leader in promoting sustainable transportation policies. Other communities across Canada and in the Province of Ontario have followed suit, developing their own sustainable transportation programs.

This Transportation Master Plan Update will allow the Region to address future transportation needs in an efficient and integrated manner, while meeting and exceeding Federal, Provincial and Regional initiatives that support sustainable development.

Recent legislation and programs that support sustainable development practices throughout Canada are summarized below. Full versions of some key Regional policies and the 2002 Transportation Master Plan Overview Report are included in **Appendix A**.

### 3.1 FEDERAL INITIATIVES

#### 3.1.1 Auditor General Act (1995)

In Canada, the concept of sustainable development has been integrated into federal legislation and into amendments to the *Auditor General Act* in 1995, which established the Office of the Commissioner of the Environment and Sustainable Development. Departments are required to prepare sustainable development strategies and to table them in Parliament. The strategies set out goals, objectives, and specific commitments, and are an important tool by which the federal government can advance sustainable development<sup>1</sup>.

#### 3.1.2 Federal Sustainable Development Act (2008)

The Federal Sustainable Development Act (FSDA) requires the development of a federal sustainable development strategy. The FSDA will strengthen sustainable development practices within the federal government. It is a positive step towards being more accountable to Canadians in the implementation of environmentally sustainable practices. It allows the Government of Canada to set environmental sustainability priorities more effectively and to align the work of federal departments to support these priorities. The federal strategy will include federal goals and targets for sustainable development along with implementation strategies for each.



Environment Canada is implementing the FSDA and will lead the development of the Federal Sustainable Development Strategy, which must be tabled in Parliament no later than June 26, 2010.

### 3.1.3 National Vision for Urban Transit to 2020

The report, commissioned by Transport Canada, supports the notion that public transit has numerous benefits to the environment beyond GHG emissions reductions. These other benefits include:

- A reduced need for new road construction;
- Improved air quality due to less vehicles on the road;
- Reduced traffic congestion;
- Healthier downtowns;
- Improved social mobility; and
- Positive impacts on economic sectors such as tourism and export development.

## 3.2 SUPPORTIVE PROVINCIAL POLICIES AND PLANS

### 3.2.1 Oak Ridges Moraine Conservation Plan

The Government of Ontario established a clear policy framework for the protection of the Oak Ridges Moraine through the *Oak Ridges Moraine Conservation Act, 2001*, and the Oak Ridges Moraine Conservation Plan (ORMCP).



Municipal planning decisions must conform to the ORMCP, which takes precedence over municipal official plans. The ORMCP builds on the efforts of the Regions of York, Durham and Peel, the Conservation Coalition, Moraine area municipalities, and key stakeholders to provide clarity and certainty with respect to the long-term protection and management of the Oak Ridges Moraine. A large portion of the Oak Ridges Moraine is located within central York Region.



The recommendations developed for the York Region Transportation Master Plan Update were developed in accordance with Section 41 of the ORCMP, which addresses transportation, infrastructure and utilities. Section 41 outlines specific policies for lands identified as Natural Linkage Areas and Natural Core Areas, including measures to prevent and minimize potential impacts.

### 3.2.2 The 2005 Provincial Policy Statement

The Provincial Policy Statement (PPS) establishes the foundation for regulating land use and development within the Province. The PPS provides for appropriate development and protects resources of provincial interest. The vision of the land use planning system in the PPS is that the “long-term prosperity and social well-being of Ontarians depend on maintaining strong communities, a clean healthy environment and a strong economy” (Provincial Policy Statement, Ministry of Municipal Affairs and Housing, 2005).

The PPS promotes a variety of transportation choices. The term “transportation systems” under the PPS means a system of corridors and rights-of-way for the movement of people and goods and the associated transportation facilities.

### 3.2.3 Places to Grow Act, 2005 (Ontario Bill 136)

Bill 136, or the *Places to Grow Act*, enables the Province to play a lead role in determining how the Greater Golden Horseshoe and GTA will grow in the future. Section 3.2.2 of *Places to Grow* outlines policies related to Transportation. *Places to Grow* states that public transit will be the first priority for transportation infrastructure planning and major transportation investments. The development of new infrastructure in York Region, including transit infrastructure, will be designed to shape growth and plan for high residential and employment densities that ensure the efficiency and viability of existing and planned transit service levels.

### 3.2.4 The Greenbelt Act, 2005 (S.O. 2005, Chapter 1)

The Province passed legislation under the *Greenbelt Protection Act* (Bill 135), which established a Greenbelt Plan for the Greater Toronto Area and Golden Horseshoe. The Greenbelt Plan incorporates the Oak Ridges Moraine and Niagara Escarpment Plan areas, plus an additional 1.8 million acres of permanent countryside area, which will be protected from urban sprawl and development. A key provision of the Plan is to “ensure that the development of transportation and infrastructure proceeds in an environmentally sensitive manner.”



### 3.2.5 The Growth Plan for the Greater Golden Horseshoe, 2006

Adopted under the *Places to Grow Act*, the Growth Plan is a comprehensive, 25-year strategy that sets clear standards for growth and development, while giving local governments the flexibility they need to address local circumstances. Among the key provisions of the Growth Plan is the establishment of an integrated transportation network that will offer more transportation choices for getting from place to place, reducing congestion on provincial roads.

### 3.2.6 Bill 51- Planning and Conservation Land Statute Law Amendment Act

Enacted in January 2007, Bill 51 provides the legislative framework for land use planning in Ontario. Bill 51 incorporates changes to the planning process that are intended to support intensification, sustainable development, and protection of green space by giving municipalities greater powers, flexibility and tools to use land, resources and infrastructure more efficiently. Bill 51 corresponds with Ontario's recent policy shift towards sustainable land use development and planning. For instance, it permits municipalities to require environmental sustainability design features for both individual buildings and entire neighbourhoods. It also adds sustainable development as a provincial interest in the Provincial Policy Statement.



### 3.2.7 High Occupancy Vehicle Lanes - Plan 2007

The Province developed a vision for managing traffic congestion on Ontario highways by adding high occupancy vehicle lanes to many highways, including several in York Region. The following policies and operating standards developed by the Ministry of Transportation will be applied when constructing and operating HOV lanes on 400-series highways:

- Provisions for HOV lanes will be considered in the planning for any new highway corridors





- HOV lanes will be constructed as new lanes when it is feasible, so the overall highway capacity for all vehicles is increased
- HOV lanes will be designed to ensure the highest safety standard possible; this will include wide shoulders and buffers separating the HOV lane from the adjacent regular lane and consideration of designated entry/exit points
- Passenger vehicles, small trucks, taxis and motorcycles with two or more occupants will be permitted to use the lanes, in order to meet the primary goal of moving more people in fewer vehicles
- All buses will be permitted to use the HOV lanes at all times, regardless of the number of occupants to ensure reliable and on-time bus service and to allow them to return to the beginning of their routes more quickly and consistently
- All emergency vehicles will be permitted to use the lanes when responding to an incident
- Larger trucks will not be permitted for safety reasons, as well as to ensure a consistent flow of traffic in the HOV lane
- The HOV requirement will be in effect 24 hours a day, seven days a week, to address congestion that occurs outside of peak commuting hours and to further encourage carpooling and transit use for all types of trips

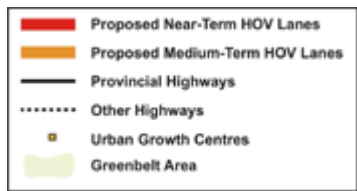
The maps below show the Provincial highway HOV network plans. HOV lanes are implemented on Highway 404 from Highway 401 to Beaver Creek (north of Highway 7).



## HOV LANE NETWORK IN THE GREATER GOLDEN HORSESHOE

Medium-Term Priorities (2011-2016)

Longer-Term HOV Additions (2017+)



### 3.2.8 Metrolinx Regional Transportation Plan (2008)

The Metrolinx Regional Transportation Plan provides the “vision, goals and objectives for the future in which transportation within the GTHA is seamless, coordinated, efficient, equitable and user centred”. The Plan includes new transportation projects that amount to \$50.2 billion over the next 25 years – the largest public transit expansion in half a century. Additionally, the Plan proposes to build over 1,200 km of rapid transit facilities, more than triple what exists today. Metrolinx has targeted York Region for a significant portion of this investment.

The Final Regional Transportation Plan was approved by Metrolinx in November 2008. It was submitted to Provincial Cabinet for adoption, following which legislation will be passed requiring planning and investment decisions of municipalities and the Province to



be consistent with the Plan's directions. A prescribed process for 5-year Plan reviews and amendments will also be established with this legislation.

**Figure 3.1** and **3.2** highlight Metrolinx's recommended rapid transit improvements or "Big Moves", including several key initiatives proposed for York Region within the next 15 and 25 years. **Chapter 7** further details these local initiatives over the next 15 years and beyond.

Recently Bill 163, the Metrolinx Implementation Act, merged Metrolinx with GO Transit under the Metrolinx banner and replaced the current Metrolinx board with a provincially-appointed board. This is to implement the actions set out in Metrolinx's Regional Transportation Plan more efficiently. The funding of 5 rapid transit projects including the VivaNext project was also announced earlier this year.

### 3.2.9 Lake Simcoe Protection Act (2008)

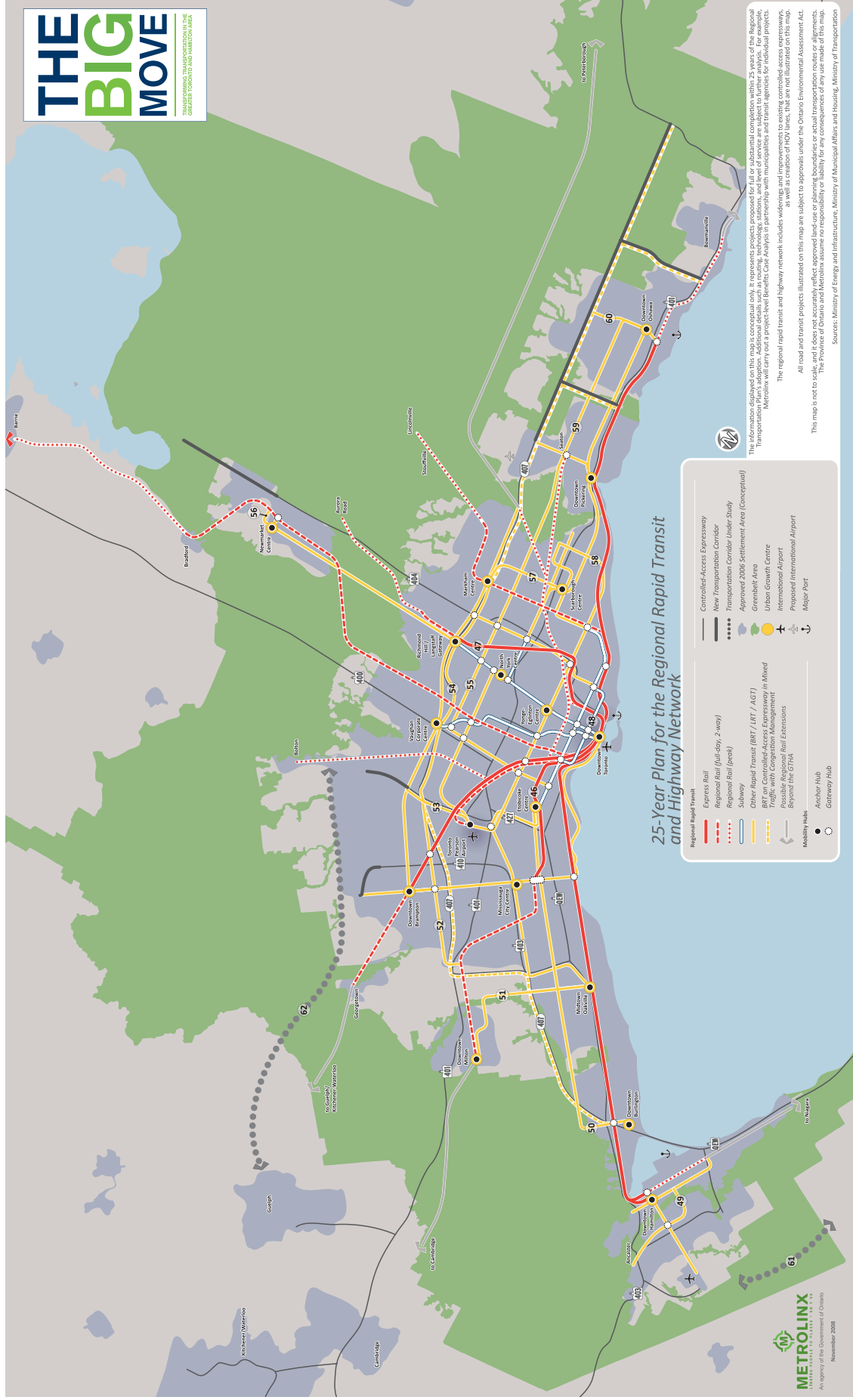
The goal of developing Bill 99 was to ensure the protection of the 'ecological health of the Lake Simcoe watershed'. When the Act was passed, the Lake Simcoe protection plan was established, outlining specific goals and objectives for the watershed. As of June 2009, the Lake Simcoe Regional Conservation Authority, in collaboration with the Ministry of Environment and Ministry of Natural Resources developed this protection plan for Lake Simcoe and those areas surrounding the body of water. More specifically, the visions and goals identified for the watershed included enhancing the quality of life, preserving the natural wildlife, increasing community involvement and sustainable development for future generations.

FIGURE 3.1





FIGURE 3.2





### 3.3 SUPPORTIVE REGIONAL POLICIES AND PLANS

#### 3.3.1 York Region Official Plan, 2005

The York Region Official Plan (ROP) is a set of policies intended to help guide economic, environmental and community-building decisions which affect the use of land up to 2026. The policies in the ROP have helped coordinate and set the stage for more detailed planning by the area municipalities. The ROP also provides a framework for coordinated planning with adjacent municipalities, as well as with other jurisdictions in the Greater Toronto Area.

The ROP strongly supports the need for an expanded, well-integrated public transit system, as well as a more sustainable transportation system. Two key objectives are:

- To provide transit service that is convenient, accessible and equitable to all residents of York; and
- To provide rapid transit services as early as possible linking the Regional Centres with adjacent urban areas.

#### 3.3.2 Planning for Tomorrow, Growth Management Initiative, 2006

In 2006, Regional Council initiated a process to solicit public and partner input to ensure that growth management decisions are sustainable and meet the needs of current and future communities. The Growth Management initiative, entitled Planning for Tomorrow, will culminate in an update to the Regional Official Plan anticipated for 2009.

There are five primary components to this Growth Management work:

- Development of a Sustainability Strategy to provide a new approach to decision-making;
- Assessing the potential impact of population and employment forecasts defined by the Province;
- Undertaking several infrastructure master plan updates— including this Transportation Master Plan— to address the Region's current and future infrastructure needs;



- Pro-actively consulting with residents and stakeholders to obtain input on the future Policies of York Region; and
- Revising and updating the Regional Official Plan.

### 3.3.3 *Transit-Oriented Design Guidelines (2006)*

The purpose of Regional Transit-Oriented Development (TOD) Guidelines is to advance the implementation of York Region's planned urban structure of Regional Centres linked by Regional Corridors, served by public transit. The guidelines are designed to shape development in a way that is transit-supportive, pedestrian-friendly, and well-designed. This approach is consistent with the Regional Official Plan, and is further supported by initiatives that aim to advance the ROP's themes of Economic Vitality, Environmental Sustainability and Healthy Communities. Regional Council adopted the Regional TOD Guidelines in September 2006.

### 3.3.4 *York Region Sustainability Strategy: Toward a Sustainable Region (2007)*

York Region prepared a Sustainability Strategy to provide a long-term framework for making smarter decisions about growth management and municipal responsibilities that better integrate the economy, environment and community. The strategy underscores the importance of recognizing how choices of everyday life can have lasting impacts on sustainability. The Sustainability Strategy is guided by the following principles:



- Provide a long-term perspective on sustainability;
- Evaluate transportation options using the triple bottom-line elements of environment, economy and community;
- Create a culture of continuous improvement, minimizing impact and maximizing innovation;



- Identify specific, short-term, achievable actions that contribute to a sustainable legacy;
- Set targets, monitor and report progress;
- Foster partnerships and public engagement;
- Raise the level of sustainability awareness through education, dialogue and reassessment; and
- Promote sustainable lifestyles and re-evaluation of our consumption and expectations.

In 2008, York Region was awarded first place and the gold award at the 2008 International Liveable Community Awards in the "whole city" population category of 750,000 and over for this important document.





## 4.0 PUBLIC ENGAGEMENT

### 4.1 IMPORTANCE TO THE PLANNING PROCESS

Meaningful and effective public and stakeholder consultation was critical to the success of the Transportation Master Plan Update. The Region's public consultation strategy actively involved local municipalities, key stakeholders and residents early and often throughout the study. While consultation is a requirement of the Municipal Class EA, York Region exceeded those standards for this Master Plan Update. The Region employed multiple consultation techniques to ensure that residents were engaged in the planning process.



### 4.2 ELEMENTS OF THE PUBLIC ENGAGEMENT PLAN

#### 4.2.1 First Nations Consultation

The First Nation Consultation was conducted in collaboration with the Water and Wastewater Master Plan. Prior to engaging in the consultation with First Nations, the Study Team consulted a number of provincial and federal agencies and experts on First Nations regarding recommended methods of consultation. These included representatives from the Ontario Secretariat for Aboriginal Affairs and the Department of Indian and Northern Affairs.

The main phases of the First Nation consultation involved:

- Development of the list of First Nations to be contacted
- Mail-out of initial contact letter regarding the Region's Master Plan process and inviting participation at the public forums with background information
- Follow-up phone calls to solicit feedback on initial contact letter
- Mail-out of a second letter informing First Nations of the Public Consultation Centres with a Notice of Public meeting



- Follow-up phone calls were made to solicit feedback and input

More details on the contacts and background information for First Nations consultation are contained in the Consultation Record under separate cover.

#### 4.2.2 Public Consultation Centres

York Region hosted three rounds of Public Consultation Centres (PCCs) during key study milestones. The Region deemed it critical that the PCCs would be held in each of its nine municipalities to ensure a broad cross-section of participation. Similarly, each of the three PCCs included interactive displays and opportunities for one-on-one consultation with project team members. Highlighting the integrated and coordinated process of the Growth Management Initiative and infrastructure planning, the first two rounds of PCCs were joint public meetings with the Region’s Water and Wastewater Master Plan study. A summary of each PCC follows.

##### 4.2.2.1 PCC #1- November 2006

<b>Attendees/Locations</b>	<b>Aurora (11.21.06)</b>	<b>Georgina (11.22.06)</b>	<b>Vaughan (11.23.06)</b>	<b>TOTAL</b>
Transportation Master Plan Attendees	39	16	44	99
Water / Wastewater Master Plan Attendees	44	13	45	102
<b>Total Public Attendees</b>	<b>52</b>	<b>19</b>	<b>55</b>	<b>126</b>

The focus of the first PCC was to introduce the study, identify existing conditions and generally ask residents: “*What defines a sustainable community?*”

A summary of participant comments from the first Public Consultation Centre is provided below, separated into different aspects of the Transportation Master Plan Update. **Appendix B** provides more information on the comments received at PCC #1.



### Land Use, Infrastructure and Communities:

- Intensify major arteries, such as Yonge Street.
- Develop new liveable communities that do not rely solely on the automobile.
- Ensure public necessities are within a reasonable walking distance from every home.
- Municipalities should create carpooling programs for neighbourhoods.
- Intensify York Region's existing infrastructure.
- Eliminate urban sprawl.
- Reduce truck traffic through small communities connected to the 400-series highways.
- Promote live-work communities to reduce commuting.
- Coordinate and integrate planning with other regions.

### Public Transit

- Develop LRT along major corridors and nodes.
- Increase service frequency.
- Increase transit routes.
- Extend transit service to rural areas.
- Implement dedicated lanes for Viva.
- Connect York Region's public transit with other regional transit systems.
- Decrease travel time on vehicles.
- Create a seamless transit system.
- Provide free door-to-door transit rides.

### Walking and Cycling

- Incorporate bicycle lanes on existing roads.
- Incorporate convenient and accessible bicycle storage.

### Road Network

- Stop focusing on road widening projects.
- Reduce the width of existing and future roads.
- Enforce strict speed limits.
- Maximize productivity and efficiency of arterial roads and highways to support the movement of people, goods and services.
- Incorporate a goods movement plan.

Residents also identified potential solutions to make travel in York Region more sustainable, including:

- Refraining from using automobiles.



- Moving to a major corridor such as Yonge Street.
- Taking public transit more frequently.
- Cycling more often.
- Encouraging family, friends and neighbours to take transit.
- Reducing car-ownership.
- Carpooling.
- Raising gas taxes to reduce automobile use.
- Inducing a tax on large vehicles such as SUVs.
- Reducing vehicle idling.
- Eliminating “drive-through providers” (restaurants, coffee shop, etc).
- Recognizing and learning from leaders in transportation planning, such as various European cities or Curitiba, Brazil.

4.2.2.2 PCC #2- November 2007

Attendees/Locations	East Gwillimbury (11.06.07)	Markham (11.15.07)	King City (11.21.07)	TOTAL
Total Attendees	31	53	34	118

Like the initial PCC held one year earlier, residents attending the second PCC reviewed information for both the Region’s Water and Wastewater and Transportation Master Plans. Residents assessed projected growth data and were asked to comment on the study’s sustainability principles, objectives and measures. Results of the discussion are provided below. **Appendix B** provides more information on the comments received during each of the three PCC #2 sessions.

Land Use, Infrastructure and Communities

- Promote live-work-play communities (i.e. mixed use) to eliminate commuting.
- Support compact communities by not widening roads.
- York Region is too late...stop the runaway development until you have a strategy in place.
- No thought is given to where people are going to work or how they are going to get there once a new subdivision is approved.





**Public Transit**

- Increase high speed transit alternatives.
- Don't overspend on transit.
- Transit stops should be more convenient and safer (include climate-proof shelters, bicycle lockers).
- Increase all-day service for YRT & GO Transit.
- New subdivisions are not transit-friendly.
- More public transit in rural communities.
- Provide better transit options along major arterials, like Elgin Mills and Leslie.

**Walking and Cycling**

- Ensure a more balanced transportation system, which includes more trails and sidewalks.

**Road Network**

- No new highways or road widenings – not cost effective, bad for the environment.
- Reconsider 6-lane widenings, even if they include HOV lanes.
- HOV lanes won't work because there is no enforcement.
- Make it crystal clear why the Region is considering widening roads.

**4.2.2.3 PCC #3- November 2008**

<b>Attendees/ Locations</b>	<b>Whitchurch- Stouffville (11.12.08)</b>	<b>Vaughan (11.18.08)</b>	<b>Markham (11.20.08)</b>	<b>Newmarket (11. 25.08)</b>	<b>Richmond Hill (11.27.08)</b>	<b>Total</b>
<b>Total Attendees</b>	<b>16</b>	<b>20</b>	<b>25</b>	<b>23</b>	<b>38</b>	<b>122</b>

York Region hosted the third round of PCCs in five municipalities during the fall of 2008. The event included a presentation of the preliminary transit, roadway and policy recommendations developed by Regional staff, as well as several interactive display panels designed to stimulate discussion. Results of the input are provided below. **Appendix B** provides more information on the comments received during the five PCC #3 sessions.



### Land-use, Infrastructure & Communities

- Develop mobility hubs and local gateways sooner rather than later.
- Restrict commercial and big box development.
- Use sustainable development methods to decrease the need to travel, protect and enhance the environmental and cultural heritage.
- Ensure the adequacy of parking at transit stations to promote an increase in modal usage.
- Consider preferred parking for efficient personal vehicles.
- Integrate more employment lands closer to residential areas so people can work in York Region.

### Public Transit

- GO transit service should be upgraded to all day service immediately.
- Implement a terminal at the juncture of Highway 407 and 404 to transfer to the proposed express bus at Highway 404.
- Provide GO transit links at Langstaff to access Viva and YRT.
- Standardize transit costs.
- Consider more efficient transit vehicles.
- Consider increasing the number of buses on routes for off-peak trips to make transit more competitive.
- Reconsider transit improvements along Major Mackenzie.

### Walking and Cycling

- Consider a pedestrian underpass below Highway 407 with people movers to transfer passengers from Viva/YRT bus terminals to GO stations.
- Ensure the implementation of the Pedestrian and Cycling Master Plan.
- Consider the implementation of cycling lanes as a part of the sidewalk for increased safety.

### Road Network

- Widening roads to six or seven lanes is too wide to accommodate HOV lanes during peak hours and may negatively impact residential areas along regional roads.
- Implement reversible lanes and bus bay priority.
- Consideration should be given to other transportation modes such as Vespas, scooters, and motorcycles.



- Current roads should be optimized rather than creating new roads; do not widen roads to six lanes.

#### Communication

- Implement public education programs.
- Increase resident understanding of TDM options.
- Host public consultation events in malls to increase awareness of transportation options.
- Provide more incentives for the public to become involved in sustainability.

#### 4.2.3 Public Opinion Survey

EKOS Research Associates, an independent market research firm, conducted a telephone survey in July 2008 with 1,011 York Region residents to discuss issues about transportation and public transit. The survey was designed to gauge resident's views on transportation issues, as well as to identify citizens' opinions on potential solutions to address their concerns.

In order to compare and contrast responses from residents of different municipalities, approximately 250 residents were surveyed in each of four areas: Markham, Vaughan, Richmond Hill, and the six remaining municipalities that make up the Region.

Key results of the survey include:

- Traffic congestion, and the lack of transit services in York Region, are major issues in York Region residents;
- Support for public transit, cycling and pedestrian infrastructure is strong across all municipalities; and
- A majority of residents oppose measures such as widening roads only for cars, or building more roads and highways as a way to address congestion.

The results of the survey were used to help guide the Transportation Master Plan Update in developing the strategies to manage traffic congestion and future growth. **Appendix C** displays the public opinion survey questionnaire and summary of results.



#### 4.2.4 Sustainability Focus Group

York Region hosted a focus group on October 9, 2007 to engage stakeholders on the sustainability principles developed for the Master Plan. Agency participants included:

- Toronto Region Conservation Authority
- Lake Simcoe Region Conservation Authority
- Ontario Nature
- Environmental Defense
- STORM Coalition
- David Suzuki Foundation
- Rouge Park Alliance
- South Aurora Ratepayers
- Richmond Hill Naturalists
- North East Sutton Ratepayers Association
- Newmarket Chamber of Commerce
- GTA Agricultural Action Committee

A summary of the focus group discussion is included in **Appendix D**.

#### 4.2.5 Transportation Symposiums

On June 28, 2006, York Region hosted a one day transportation symposium to publicly 'kick-off' the Transportation Master Plan Update study. The symposium, *Planning for Tomorrow: Crucial Directions for Moving York*, included over 100 senior level stakeholders from York Region area municipalities, major businesses and industries, Chambers of Commerce, provincial officials, Conservation Authorities, environmental organizations, public health departments and transportation service providers.

On September 14, 2008, York Region invited the same group of stakeholders back for a *Moving on Sustainability* symposium to elicit their response to the draft transit, roadway and policy recommendations developed in the Master Plan Update.

**Appendix E** summarizes the results from both events.

#### 4.2.6 Steering Committee

A project steering committee was assembled to guide the direction of the study, review draft products and deliverables and ensure the participation of staff from various Regional departments.





## 4.2.7 Technical Advisory Committee

A project Technical Advisory Committee (TAC) was convened to ensure that the Transportation Master Plan Update was coordinated with municipal and agency activities. The TAC was comprised of representatives from each local municipality, adjacent cities and Regions, Conservation Authorities and provincial bodies. More specifically, TAC members represented:

### Local & Regional Municipalities

- City of Vaughan
- Town of Aurora
- Town of East Gwillimbury
- Town of Georgina
- Town of Markham
- Town of Newmarket
- Town of Richmond Hill
- Town of Whitchurch-Stouffville
- Township of King
- City of Toronto
- Simcoe County
- Region of Durham
- Region of Peel

### Provincial Government

- Metrolinx / GO Transit
- Ontario Growth Secretariat
- Ontario Ministry of the Environment
- Ontario Ministry of Transportation
- Ontario Ministry of Municipal Affairs and Housing
- Ontario Ministry of Culture
- Ontario Ministry of Energy and Infrastructure
- Ontario Ministry of Natural Resources

### Agencies

- Rouge Park Alliance
- STORM Coalition
- Sierra Club
- Greater Toronto Airport Authority
- University of Waterloo

### Conservation Authorities

- Lake Simcoe Region Conservation Authority
- Toronto and Region Conservation Authority



#### 4.2.8 Project Newsletters

York Region produced three newsletters to inform area residents about the Transportation Master Plan Update. The newsletters were distributed prior to each round of Public Consultation Centres, describing the progress to date while inviting residents and stakeholders to attend session. **Appendix F** includes the three newsletters developed for the project.

#### 4.2.9 Project Website

York Region hosted a project website to update the status of the Transportation Master Plan Update, post relevant meeting dates and provide project materials on-line. **Appendix G** illustrates the website site map, available at [www.york.ca](http://www.york.ca).

#### 4.2.10 Public Notices & Media Promotions

As per Municipal Class EA requirements, York Regional staff published a Notice of Commencement, Notice of Completion and all PCC Notices in the local newspapers (see **Appendix H**). To increase the awareness of public meetings, Regional staff promoted the events on mobile message boards and through media releases.

#### 4.2.11 Consultation Record

Throughout the planning process, York Region staff received an abundance of e-mails, letters and calls from residents and stakeholders who had questions or comments about the Transportation Master Plan Update. **Appendix I (under separate cover)** documents these comments and staff responses to them. It also contains other consultation actions conducted over the course of the study.



## 5.0 YORK REGION'S TRANSPORTATION MASTER PLAN: AN INNOVATIVE STUDY PROCESS

York Region developed an innovative study process that included:

- Establishing the Need for future transportation improvements based on growth projections;
- Undertaking a rigorous assessment of existing conditions - both in York Region and throughout North America - to identify potential measures to address the Need;
- A methodology to ensure potential transportation solutions would be judged more on their ability to be sustainable;
- A proactive consultation process that included public meetings or workshops in each of the Region's nine municipalities; and
- Regular meetings of a Technical Advisory Committee (TAC), which included membership from York Region's local municipalities, adjacent communities, MTO, GO Transit, YRT and conservation authorities.



### 5.1 A UNIQUE AND INNOVATIVE STUDY PROCESS

**Figure 5.1** illustrates the study process that was developed for the Transportation Master Plan Update. As is detailed in the later sections, this study was one of several studies that were integrated and coordinated. The other studies include:

- Growth management Initiative;
- Sustainability Strategy study;
- Water and Wastewater Master Plan study;
- Pedestrian and Cycling Master Plan;



- 25-Year Fiscal Impact Study;
- Environmental Analysis;
- Land Use Analysis;

The objective to this overall process was to integrate land use, infrastructure, environment and fiscal planning.

Specific to the Transportation Master Plan Update, the study process was unique and innovative in that it:

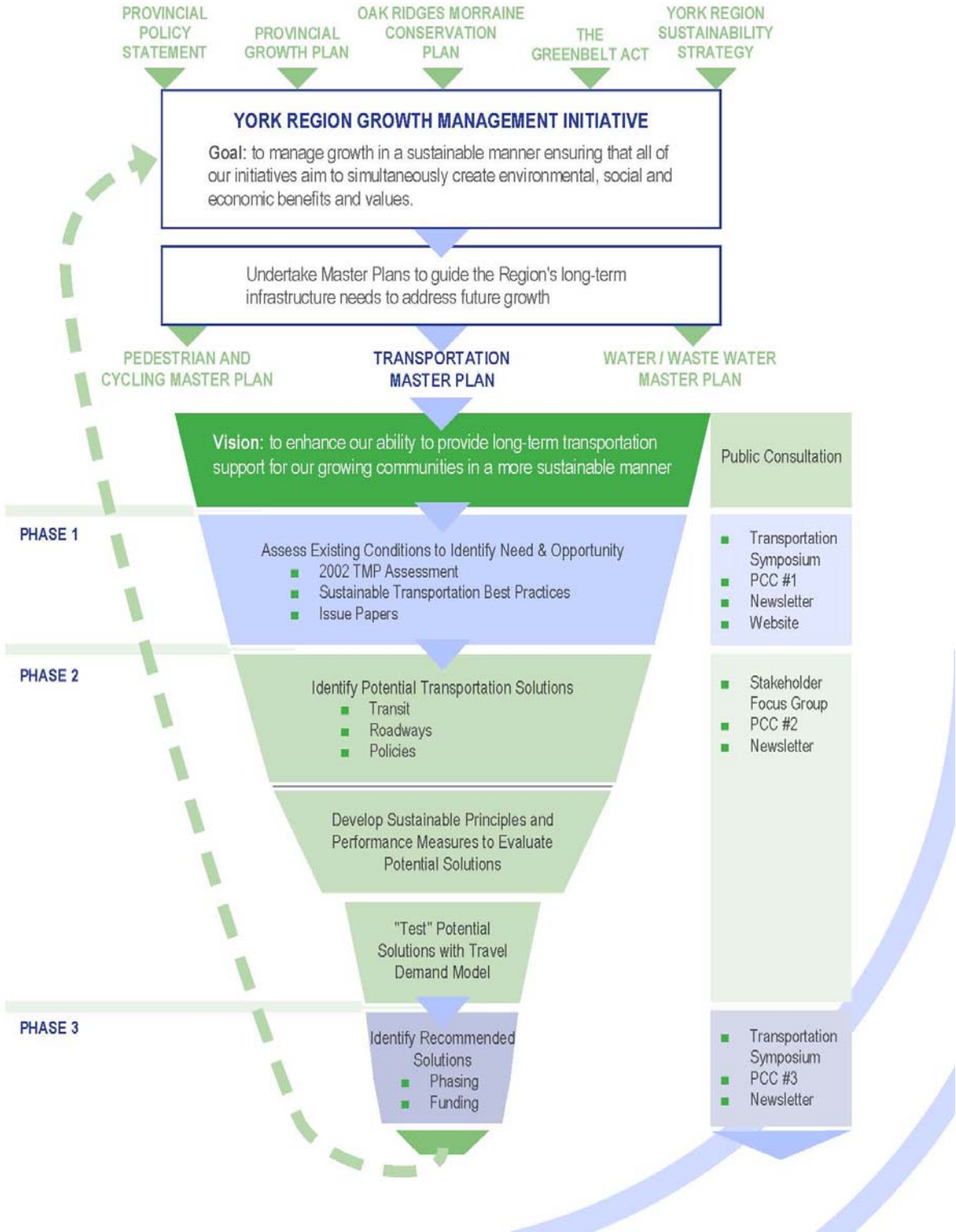
- was Integrated and coordinated with the above studies;
- used a set of sustainability principles to guide selection of the preferred solution;
- used a transit-first approach to address capacity deficiency to meet growth demands;
- ensured that residents and stakeholders were engaged throughout the study.

This unique and innovative approach is further represented by the Four “R”s approach to sustainable transportation planning described in Section 5.4.





Figure 5.1 York Region Transportation Master Plan Study Process





## 5.2 THE GROWTH MANAGEMENT INITIATIVE: ESTABLISHING THE NEED FOR FUTURE TRANSPORTATION IMPROVEMENTS

In June 2006, the Province of Ontario released its Places to Grow growth plan for the Greater Golden Horseshoe Area, wherein it projects

*The Goal is to manage growth in a sustainable manner ensuring that all of our initiatives aim to simultaneously create environmental, social and economic benefits and value.*

*-Planning for Tomorrow*

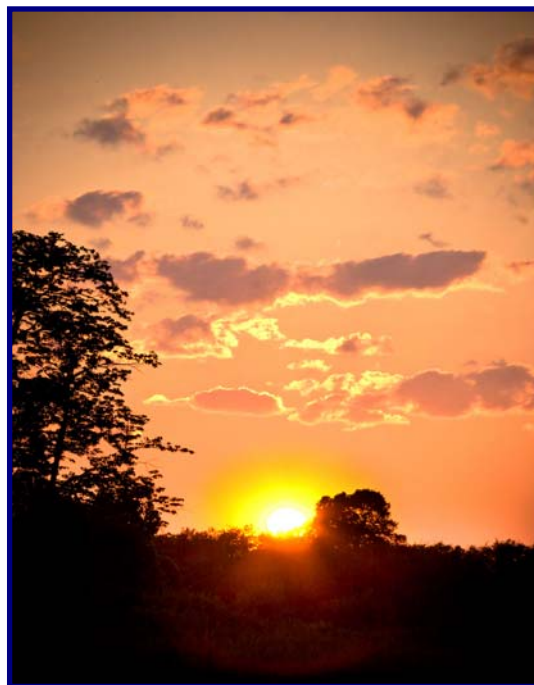
population and employment to grow from 7.8 million people and 3.8 million jobs in 2001 to 11.5 million people and 5.6 million jobs in 2031.

Virtually all GTHA municipalities are currently assessing the transportation implications of revised population and employment projections consistent with the directions in the Places to Grow plan.

Over the last three years, the Region has conducted a Growth Management Initiative (GMI) entitled *Planning for Tomorrow* which will culminate in an update to the Regional Official Plan anticipated for completion in 2009. The GMI was undertaken to respond to the Places to Grow plan that redefined the way that growth will occur in the Greater Golden Horseshoe Area, over the next 25 years.

In response to the new growth projections, York Region identified the need to enhance the liveability and quality of life of the Region's residents through improvements in land use planning, infrastructure planning and preservation of natural heritage features. This approach required the Region and its partners to:

- Ensure that a minimum of 40% of growth occurs through intensification in existing built-up areas;
- Strengthen connections between land use, transit, built form, public health, natural heritage and pedestrians;





- Develop new standards for construction and development that use green technologies to improve air quality, reduce energy consumption and enhance water efficiency;
- Integrate land use, infrastructure, environment and fiscal planning;
- Protect and enhance the natural environment, through the Region’s Greening and Securement Strategies and an updated Natural Heritage System; and
- Focus on the economy and jobs, and provide human services to all residents.

As a key part of this effort, the Regional Planning Department assessed whether and how York Region could accommodate the population and employment projections assigned to the Region. As a result, York Region, in consultation with the local municipalities, concluded that the following allocation by local municipality was feasible and could meet the “40% intensification within urbanized areas” guideline required by the Province.

Table 5.1 Municipal Population and Employment Growth – (2006-2031)

	Population			Employment		
	2006	2031	Growth	2006	2031	Growth
<b>Markham</b>	272,500	423,500	151,000	144,800	248,500	103,700
<b>Vaughan</b>	248,800	418,800	170,000	162,200	275,900	113,700
<b>Richmond Hill</b>	169,500	242,800	73,300	61,100	100,600	39,500
<b>Aurora</b>	49,600	70,400	20,800	20,300	34,700	14,400
<b>Newmarket</b>	77,400	97,300	19,900	42,100	49,700	7,600
<b>King</b>	20,300	35,100	14,800	7,100	12,100	5,000
<b>Whit.- Stouffville</b>	25,400	60,800	35,400	10,900	23,700	12,800
<b>E. Gwillimbury</b>	21,900	88,000	66,100	5,900	31,800	25,900
<b>Georgina</b>	44,500	70,700	26,200	8,000	21,700	13,700
<b>Total York</b>	<b>929,900</b>	<b>1,507,400</b>	<b>577,500</b>	<b>462,400</b>	<b>798,700</b>	<b>336,300</b>

Important factors in arriving at this allocation were environmental/open space constraints, the amount of Greenfield areas remaining within urban boundaries, and the amount of developable areas outside urban boundaries.



As illustrated in **Table 5.1** (above), a large portion of the Regional growth (both population and employment) will be accommodated in Markham and Vaughan. Within these two municipalities, growth outside of the existing urban boundaries will generally be located north of Major Mackenzie Drive and will be built at higher densities than existing developments.

More detailed information about the Growth Management Initiative is available at [www.york.ca](http://www.york.ca).

### 5.3 INFRASTRUCTURE MASTER PLANS ADDRESS THE NEED TO SUPPORT NEW GROWTH

As part of *Planning for Tomorrow*, the Region embarked on infrastructure Master Plan updates for transportation and water

*The Vision is to enhance our ability to provide long-term transportation support for our growing communities in a more sustainable manner.*

*-York Region Transportation Master Plan Update*

and wastewater. As well, recognizing the rising importance of alternative modes of travel, the Region undertook a separate Pedestrian and Cycling Master Plan. The Master Plans were initiated to:

- Examine the entire infrastructure system to outline a framework for planning for subsequent projects or studies;
- Evaluate potential technology options and system capacity for transit, roads, water and wastewater facilities based on various growth scenarios;
- Coordinate infrastructure servicing plans with other capital expansion and construction programs; and
- Demonstrate how the Region's current and future infrastructure can best meet its sustainability goals.

The Transportation Master Plan Update and the Pedestrian and Cycling Master Plan will serve as the “blueprint” for all major transportation initiatives in the Region through the year 2031 and beyond; the Water and Wastewater Master Plan timeframe is 40 to 50 years.





## 5.4 REGIONAL GOALS OF SUSTAINABLE TRANSPORTATION: THE FOUR “R’s”

In support of York Region’s Vision to develop its transportation system in a more sustainable manner, the Region identified four key objectives (Four “R’s”) to reduce single-occupant vehicle (SOV) travel.

The Region’s Four “R’s” plays off of the three “R’s” (reduce, reuse, recycle) used globally to limit the production of solid waste. In order to minimize the number of SOV’s, four objectives must be achieved:

1. Develop initiatives and strategies that **R**educe the need to travel;
2. Provide more convenient and reliable alte**R**native modes;
3. Enhance public t**R**ansit by improving existing infrastructure and services; and
4. Optimize **R**oads to accommodate all modes of travel, and expand roadways only when necessary.

## 5.5 TRANSPORTATION MASTER PLAN UPDATE - PHASE 1: ASSESSING EXISTING CONDITIONS

The initial phase of the York Region Transportation Master Plan Update included an assessment of the Region’s existing transportation services and infrastructure, as well as an evaluation of new transportation programs and initiatives implemented since the first Master Plan was completed in 2002. Additionally, the Region undertook a Best Practices Review and produced Issue Papers to explore the practicality of pursuing various sustainable transportation policies and strategies in York Region.

### **Phase 1: Key Questions Answered**

*-How are the Region’s transportation infrastructure and services performing? Where can we make improvements?*

*-How has the Region done since the 2002 Transportation Master Plan? What are resulting challenges and opportunities?*

*-What are other communities doing to make their transportation systems more sustainable? What can we learn from them?*



### 5.5.1 2002 Transportation Master Plan Assessment

York Region completed an assessment of the 2002 Transportation Master Plan by evaluating the progress of the 43 action items contained within that plan. The findings of the assessment helped guide the direction of the current Master Plan Update by identifying potential opportunities and challenges worthy of being evaluated in the updated plan.

The relative progress in completing each action item was rated similar to a “report card” using a 0 to 4 point scale. The results were broken down into three categories: transit improvements (Actions 1 to 10), road improvements (Actions 11 to 19) and supportive policies and programs (Actions 20 to 43).

The results of the assessment indicated a high level of follow-through commitment by Regional staff and Council, especially relative to improving public



transit. In particular, the transit improvements recommended in the 2002 Transportation Master Plan resulted in the highest transit ridership in York Region since YRT’s inception in 2001. In aggregate, the achievements from both the Transportation Master Plan and other recent Regional initiatives, including the Towards Great Regional Streets Report, the support and pursuit of the Spadina subway extension to Vaughan Metropolitan Centre, and the adoption of a policy for the mitigation of traffic noise on Regional roads, represented significant progress “towards sustainable transportation”. Subsequent to the completion of the 2002 TMP assessment document, the following additional advances have been achieved:

- Regional Council has adopted a specific policy that all widenings of arterial roads to six lanes will only be undertaken to implement High Occupancy Vehicle (HOV) and bike lanes;
- Provincial and Federal funding has been secured for the Spadina subway extension to the Vaughan Metropolitan Centre, and detailed design for the extension is well underway; and
- Metrolinx prepared a Regional Transportation Plan (RTP) for the Greater Toronto and Hamilton Area that identified several rapid transit projects within York Region as RTP priority projects to be implemented over the next 15 and 25 years, among



them both the Spadina and Yonge subway extensions to Highway 7 and the upgrading of Viva Bus Rapid Transit service to exclusive right-of-way operations along Highway 7 and Yonge Street.

It should be noted that, as a result of issues expressed during the commencement of the 16th Avenue Corridor Environmental Assessment in Markham, the Region is exploring ways to achieve transit priority other than through widening of arterials to six lanes. This review impacts all transit/HOV lane projects in Markham and Richmond Hill that were identified in the 2002 TMP.

The full 2002 Transportation Master Plan Assessment is located in **Appendix J**.

### 5.5.2 Best Practices Review

York Region completed a Best Practices Review of North American cities considered “champions” of sustainability. The analysis included a rigorous internet search as well as interviews with key practitioners representing Calgary, Ottawa, Portland (OR) and Vancouver.



The report highlights innovative sustainable transportation programs implemented by the four communities, including:

- Major Transit Services;
- Sustainable Development Practices;
- Supportive Financial Incentives;
- Supportive Parking Policies and Programs; and
- Supportive Transportation Demand Management (TDM) Policies and Programs.

This Best Practices Review was initiated for the Region’s TMP Update to answer such questions as:

- What sustainable transportation policies/programs/initiatives adopted by these “champion” North American cities are innovative or unique?
- Why did some sustainable transportation programs in these cities succeed while others failed?



- What policies/programs/initiatives adopted in these cities may further enhance York Region's sustainable transportation program objectives?
- What policies/programs/initiatives adopted in these cities may be worth assessing further in the Transportation Master Plan Update?

The Best Practices Review is located in **Appendix K**.

### 5.5.3 Initiatives and Priorities of Neighbouring Municipalities

Another important part of the study process involved being aware of and understanding transportation initiatives and priorities in adjacent municipalities. This was particularly the case for the City of Toronto whose Council, in addition to supporting the two subway extensions into York Region, recently adopted a "Transit City" Plan to establish a City-wide network of Light Rail Transit lines, including those on Jane Street and Don Mills Road extending north from the Bloor - Danforth subway to Steeles Avenue. While priorities have not yet been firmly established by the City, all eight Transit City projects could be implemented by 2015, pending availability of funding.

In addition, Brampton, through its AcceleRide program is vigorously pursuing Bus Rapid Transit service on Queen Street (Highway 7) extending to the Peel Region / York Region boundary. This project is fully funded and among the Top 15 Metrolinx priorities.

### 5.5.4 Issue Papers

York Region completed several Issue Papers to stimulate discussion on the direction for the Transportation Master Plan Update, and to provide a better understanding of sustainability in the Region. These issues span the range of elements that affect transportation. The focus areas included:

- Managing Traffic Congestion: how it impacts York Region, and what strategies may be implemented to manage traffic congestion more effectively;
- Transit-Oriented Development: how to implement the strategies that emerge from the Region's new guidelines;
- Assessing Impacts on Natural Heritage and Environmental Features: strategies to enhance, or at least minimize, the impacts to natural features when planning for new transportation infrastructure; and
- Public Education: how to foster the public's understanding of sustainable transportation programs and initiatives.

Each Issue Paper is located in **Appendix L**.





## 5.6 TRANSPORTATION MASTER PLAN UPDATE - PHASE 2: IDENTIFYING & EVALUATING POTENTIAL SOLUTIONS

Phase 2 of the York Region Transportation Master Plan Update involved the development and evaluation of potential transit, roadway and policy solutions that would support the Transportation Master Plan's Vision to provide a more balanced, sustainable transportation system. York Region developed a two-screen process to evaluate the potential solutions, which are discussed below.

### 5.6.1 Screen 1: Sustainability Principles, Objectives and Measures

In consultation with residents and key stakeholders, York Region developed a set of study-specific Sustainability Principles or "themes" to guide the selection of preferred solutions for servicing transportation needs in the Region.

#### ***The Sustainability Principles***

*Much like the foundation of a new house, these principles will ensure that the Transportation Master Plan is based on a solid theme of sustainability.*

More specifically, the Principles were developed through:

- Information gleaned from the Best Practices report;
- A review of the Region of York's 2002 Transportation Master Plan;
- A review of sustainable transportation principles developed by other agencies, such as Transport Canada; and
- Input received during the TMP public meetings held in the municipalities of Aurora, Georgina and Vaughan during November of 2006.

The draft set of Principles developed for this project recognizes the strong connection between transportation and the Region's Three Pillars of Sustainability: healthy communities, a sustainable natural environment, and economic vitality. The Principles also recognize the need to develop meaningful ways to engage the public in the planning process, and to foster cooperation and coordination with the local municipalities.

Several key performance measures were developed to evaluate potential infrastructure improvements while ensuring that the goals of each Sustainability Principle were met.

The Sustainability Principles and their performance measures are provided in **Table 5.2**.



Table 5.2 Transportation Sustainability Principles

Sustainability Principle	Goals	Key Performance Measure for Alternatives Analysis
<b>I. Healthy Communities</b>		
<b>Put Pedestrians and Transit First</b>	1. York Region recognizes that each transportation trip begins and ends with a pedestrian trip, and is committed to designing a transportation system that promotes an active lifestyle and community well-being.	<ul style="list-style-type: none"> <li>• Modal Split breakdown as follows:               <ul style="list-style-type: none"> <li>○ Along Regional Corridors</li> <li>○ York-York trips</li> <li>○ York-Toronto trips</li> <li>○ Trips between each pair of Regional Centres</li> </ul> </li> <li>• Estimated increase in pedestrian and cycling trips, based on proportions from comparative municipalities</li> <li>• Jobs within walking and cycling distance</li> </ul>
<b>Provide Access and Mobility for Everyone</b>	1. York Region is committed to ensuring all residents (especially those with low incomes, the disabled, recent immigrants, youth and the elderly) have barrier-free, reliable and affordable access to all aspects of the transportation system.	<ul style="list-style-type: none"> <li>• % change in transit trips / % change in population</li> <li>• Transit trips per capita based on income level, disability, immigration, age etc.</li> <li>• Kilometres of Regional cycling routes</li> <li>• Kilometres of sidewalks on Regional roads</li> </ul>
<b>Integrate Transportation And Land Use Planning</b>	<p>1. York Region is committed to integrating transportation planning into an urban form that is compact, mixed-use and creates a sense of community.</p> <p>2. York Region is committed to transportation planning as one component of a growth management system that also includes human services, the environment and fiscal capacity.</p>	<ul style="list-style-type: none"> <li>• Self-containment in York Region (% of trips beginning and ending in York)</li> <li>• Mean trip length for auto, transit</li> <li>• Mean trip travel time for auto, transit</li> </ul>
<b>Further Encourage Communications, Consultation and Public Engagement</b>	1. York Region will plan for and implement transportation infrastructure and services in an open, transparent and accountable manner based on broad consultation, citizen engagement and strong communications.	N/A – this is not a principle that could be measured in evaluating potential infrastructure improvements



Sustainability Principle	Goals	Key Performance Measure for Alternatives Analysis
<b>II. Sustainable Natural Environment</b>		
<b>Protect and Enhance Our Environment and Cultural Heritage</b>	<ol style="list-style-type: none"> <li>1. York Region will (through integrated growth, system planning, and advanced construction and operations practices) protect, restore and enhance the natural environment.</li> <li>2. York Region respects and protects its First Nation heritage.</li> <li>3. York Region respects and protects its cultural heritage.</li> </ol>	<ul style="list-style-type: none"> <li>• Greenhouse gas and other emissions from vehicle travel or vehicle km of travel</li> <li>• Estimate of road construction avoided (lane-km) in the Greenbelt</li> <li>• % of lane-kms of congested roads in the Greenbelt</li> </ul>
<b>Adopt Energy Efficient (Carbon Neutral) Transportation Systems</b>	<ol style="list-style-type: none"> <li>1. York Region will design a transportation system that is energy efficient and mitigates and adapts to the impacts of climate change.</li> </ol>	<ul style="list-style-type: none"> <li>• Auto vehicle-kilometres of travel</li> <li>• GHG emissions</li> </ul>
<b>Implement &amp; Support Transportation Demand Management Initiatives</b>	<ol style="list-style-type: none"> <li>1. York Region is committed to reducing single-occupant vehicle trips and promoting a preference for sustainable transportation choices by providing more reliable and convenient alternative modes of travel.</li> </ol>	<ul style="list-style-type: none"> <li>• Average vehicle occupancy (proxy for HOV use)</li> </ul>
<b>III. Economic Vitality</b>		
<b>Support Our Economic Well-Being</b>	<ol style="list-style-type: none"> <li>1. York Region is committed to ensuring that its transportation systems support economic development.</li> </ol>	<ul style="list-style-type: none"> <li>• % of lane-kms of congested roads</li> <li>• Jobs located within 30 minutes travel by transit</li> </ul>
<b>Ensure Fiscal Sustainability and Equitable Funding</b>	<ol style="list-style-type: none"> <li>1. York Region is committed to providing full cost accounting for all transportation infrastructure projects and services.</li> <li>2. York Region is committed to value-for-money in delivering transportation services.</li> </ol>	<ul style="list-style-type: none"> <li>• Estimated comparison between capital and operating costs for road improvements to costs of sustainable network improvements and other programs and services</li> </ul>
<b>Implement &amp; Support Transportation Supply Management Initiatives</b>	<ol style="list-style-type: none"> <li>1. York Region is committed to managing its transportation system in an efficient and cost-effective, socially and environmentally responsible manner.</li> </ol>	<ul style="list-style-type: none"> <li>• Proportion of transit priority network that is supportable based on projected ridership</li> <li>• Net transit cost per capita</li> <li>• Length of new roadway required per additional resident</li> </ul>
<b>Conduct On-going Performance Measurement and Monitoring</b>	<ol style="list-style-type: none"> <li>1. York Region will monitor and report on sustainable transportation initiatives through a series of defined performance measures.</li> </ol>	<p>N/A – this is not a principle that could be measured in evaluating potential infrastructure improvements</p>



## 5.6.2 Screen 2: Travel Demand Modelling

### 5.6.2.1 Explanation

For this study — and most studies like it — it was essential that decisions be based on a thorough assessment of existing and projected future conditions. A travel demand forecasting model is a tool that estimates how travelers could utilize the transportation infrastructure while assessing the impact on the transportation system. Like any other forecasting tool, it is limited in terms of its accuracy to project travel behaviour. However, if used in good judgment with other key aspects of the planning process, travel demand modelling can help establish the foundation for what is reasonable and practical in the long term.

The EMME/2 travel demand model currently operated by York Region was used to assess the existing transportation network for this Master Plan. It also provided the direction for future transportation improvements through 2031 relative to:

- Major transit improvements;
- Major road improvements; and
- Major policy initiatives.

The socio-economic input data developed for the Region reflects the 40% growth scenario adopted by Regional Council in 2008 that serves as the basis for the Region's Growth Plan to 2031. The 40% growth scenario incorporates the requirements of the Provincial Growth Plan (*Places to Grow*) by accepting:

- 1.5 million population and approximately 800,000 jobs;
- Minimum 40% intensification within the built-up area;
- Minimum densities of 50 people and jobs per hectare in new communities in Designated Settlement and Whitebelt areas; and
- 200 people and jobs per hectare in the Regional Centres.

### 5.6.2.2 “Sustainability” Built into the Travel Demand Model

The 2002 TMP adopted a “Transit Focus” approach in order to meet the Region’s Official Plan target of 33% transit usage during peak periods. The 2002 TMP attempted to achieve this by developing a better “balanced” network, through emphasis on major transit projects and the policies and programs to support them.

For the purpose of this Transportation Master Plan Update, a “Transit First” approach was adopted. The key difference between the two approaches is the realization that a “balanced” network of roads and transit will not achieve the Region’s Official Plan targets and make the transportation system truly sustainable. In other words, for one





transportation mode to succeed, the capacity on competing modes must be constrained or limited.

This approach represents a fundamental shift in the traditional decision-making process used to develop future recommended networks, for the following reasons:

- As noted above, it acknowledges that a “balanced” road and transit network cannot achieve sustainability targets outlined by the Region;
- It initiates the decision-making process by heavily favouring a particular transportation mode (transit in this case) with the intention of forecasting the “theoretical maximum” usage of the transit mode (bold transit network);
- The “constrained” (minimal auto network) transportation mode (auto mode) includes only those committed projects that are already in the planning or design phase based on the Region’s 10-Year Capital Plan. This creates a heavily transit-oriented horizon year network and an extremely congested auto network; and
- It employs an iterative process whereby transit projects (the favoured transportation mode) that do not exhibit sufficient ridership levels needed to support that particular transit technology are moved to a “lower rung” in the transit technology ladder, while new road projects are added to the network to reduce auto congestion, in subsequent iterations of the model run.

York Region’s travel demand modelling process favours the development of a sustainable set of transportation solutions. Equilibrium in the model was achieved when the key performance measures, developed to evaluate potential infrastructure improvements, indicated that the goals of each Sustainability Principle were met.

**Appendix M** details the travel demand modelling process used for the York Region Transportation Master Plan.

### 5.6.2.3 Transit Ridership Threshold

In order to develop the 2031 transit network and the different transit technologies across the Region, a detailed analysis was carried out to establish transit ridership thresholds for each technology. The primary source to review and develop the transit threshold for each technology was the “Transit Capacity and Quality Manual”, 2<sup>nd</sup> Edition, published by the Transportation Research Board. It is important to note that the final ridership thresholds shown in Table 14 of the Modelling Appendix are cognizant of the perceptions of commuters and the public in York Region, as well as local conditions and experiences gained from the Viva project implemented by the York Region Rapid Transit Corporation. The final transit ridership thresholds were developed in consultation with York Region Rapid Transit Corporation staff. **Table 5.3** documents the thresholds used in the analysis.



Table 5.3 Transit Ridership Thresholds

Mode	Demand (passengers/hour)	Desirable Vehicle Loading	Frequency (minutes)
Conventional Bus	20-400	10-30	30-5
Transit Priority Network (TPN)*	400-1,000	35-55	5.5-3.5
Bus Rapid Transit (BRT)	1,000-2,400	55-100	3.5-2.5
Light Rail Transit (LRT)	2,400-8,400	270-400	6.5-3
Subway	> 8,400	1,250	< 8

*\*The TPN constitutes HOV lanes and transit signal priority plus queue jump lanes for regular buses*

As noted in Table 5.3, the BRT/LRT technology category has a considerable ridership range. This was done to account for the significantly different “grades” (BRT light, full BRT, LRT at-grade, LRT grade-separated etc.) of rapid transit service that can exist within the system. Detailing these different technologies and their final transit corridors is expected to be completed as part of the Transit Project Assessment Processes that will be carried out for each of the major transit projects. Further, the type of rapid transit technology is heavily influenced by factors other than transit ridership alone, such as right-of-way acquisition, construction feasibility, and detailed environmental analysis, which are beyond the scope of this Master Plan.

#### 5.6.2.4 Transitioning to Rapid Transit

The feasibility and success of a rapid transit line depends on a number of factors. A key consideration is the need to grow ridership through continuous improvements to the conventional bus service over time either through service frequency or running way improvements. This evolution of service improvements and increasing ridership will eventually reach a point where mixed traffic transit operation is no longer able to handle the ridership level due to traffic congestion. At that point, the preferred solution is to separate the transit service from general traffic through the provision of dedicated transit lanes. Beyond dedicated transit lanes, the next step to meet increasing ridership levels is to improve the vehicle technology from bus to light rail and then to heavy rail.



One typical step prior to the provision of dedicated transit lanes is the use of different methods to provide some level of priority to the transit service. The different methods include:

- using ITS technology to improve the reliability of mixed traffic operation through such measures as traffic signal priority for buses, off-board fare collection and real-time service information at transit stops;
- basic running-way improvements such as adding queue-jump lanes for transit vehicles and turning or through lanes for general traffic at pinch points;
- building high-occupancy-vehicle (HOV) lanes to provide a semi-dedicated lane to the bus service.

Transit service in York Region is no different. Where appropriate, major transit corridors are being transitioned through these technologies before rapid transit is proposed. An example is Dufferin Street where HOV lanes are being built from Steeles Avenue to Langstaff Road to provide priority to buses due to existing traffic congestion in that area.



## 6.0 THE UPDATED PLAN

York Region's Transportation Master Plan process has resulted in a set of progressive transit, roadway and policy recommendations that support the Region's Vision of a more sustainable transportation system. The need for such a transportation system is clear: the fast pace of growth projected in York Region between now and 2031 must be complemented by a transportation system that preserves the environment, enhances the Region's economic viability, seamlessly integrates with new and existing developments, and offers more reliable travel choices for residents and employees. The major elements of the Region's sustainable transportation system include:

- Rapid transit corridors that move more people faster and more efficiently from place to place;
- Local transit services that are connected to and complement rapid transit corridors in order to serve more communities within the Region;
- Innovative technologies, such as universal transit signal priority and Smartcards, that improve the speed and reliability of transit operations;
- A road system that supports existing and future sustainable transportation enhancements through queue jump lanes, cycling-only lanes, exclusive transit lanes and HOV lanes; and
- Efficient use of the road network (e.g., signal progression).

### 6.1 RECOMMENDED ROAD AND TRANSIT NETWORK

#### 6.1.1 Transit

**Figures 6.1 to 6.5** highlight the proposed transit network or “transit improvements” through to the horizon year 2031. **Figure 6.6** illustrates the recommended transit network which encompasses all services and infrastructure that would foster transit use. Transit policies and strategies, identified in Section 6.3, were developed to complement the network improvements and build upon the successful implementation of Viva and other initiatives identified in the 2002 Master Plan.

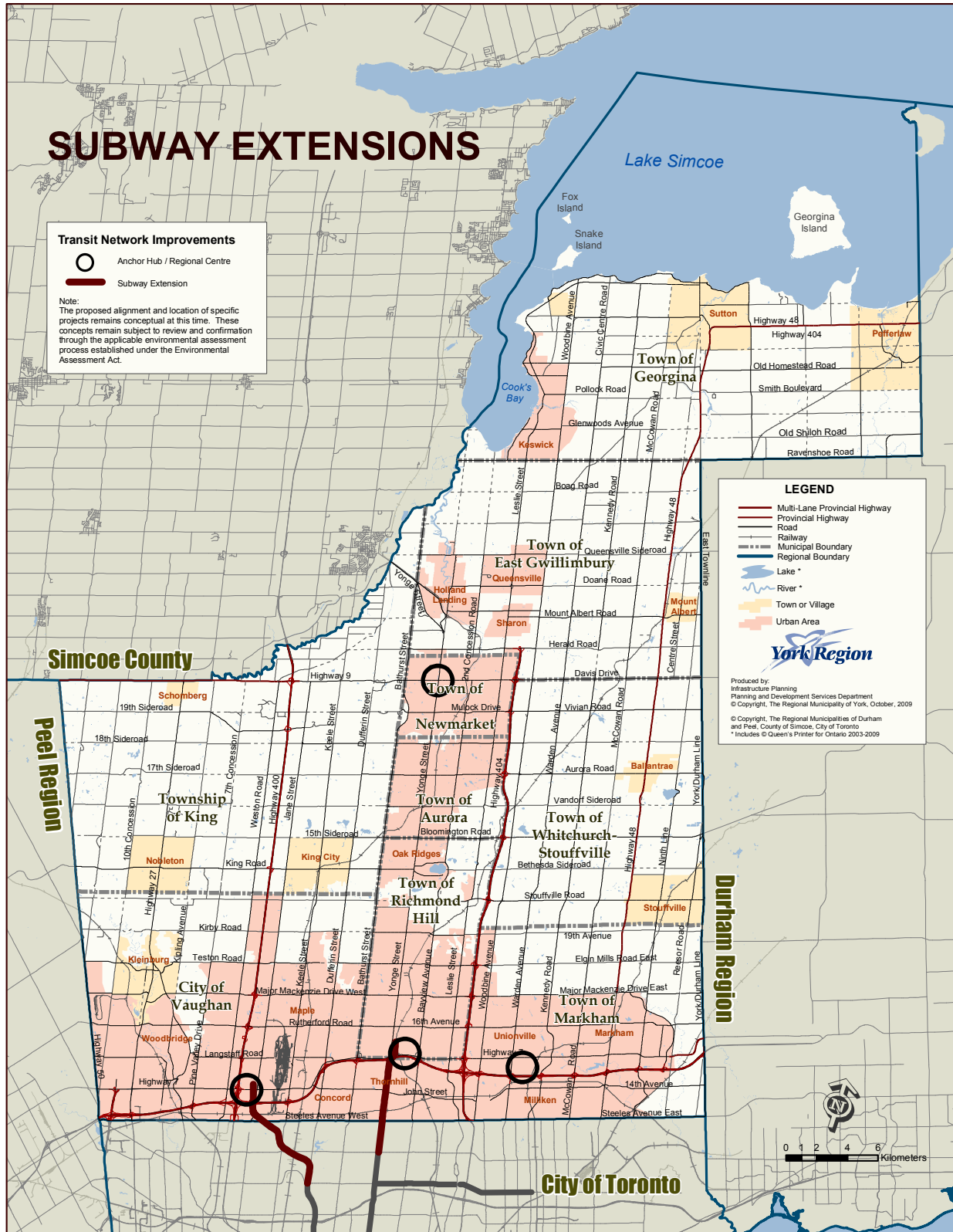
The recommended transit network includes:

- GO Transit rail extensions or new routes to Markham, Richmond Hill, Vaughan and Whitchurch-Stouffville, illustrated in **Figure 6.1**;

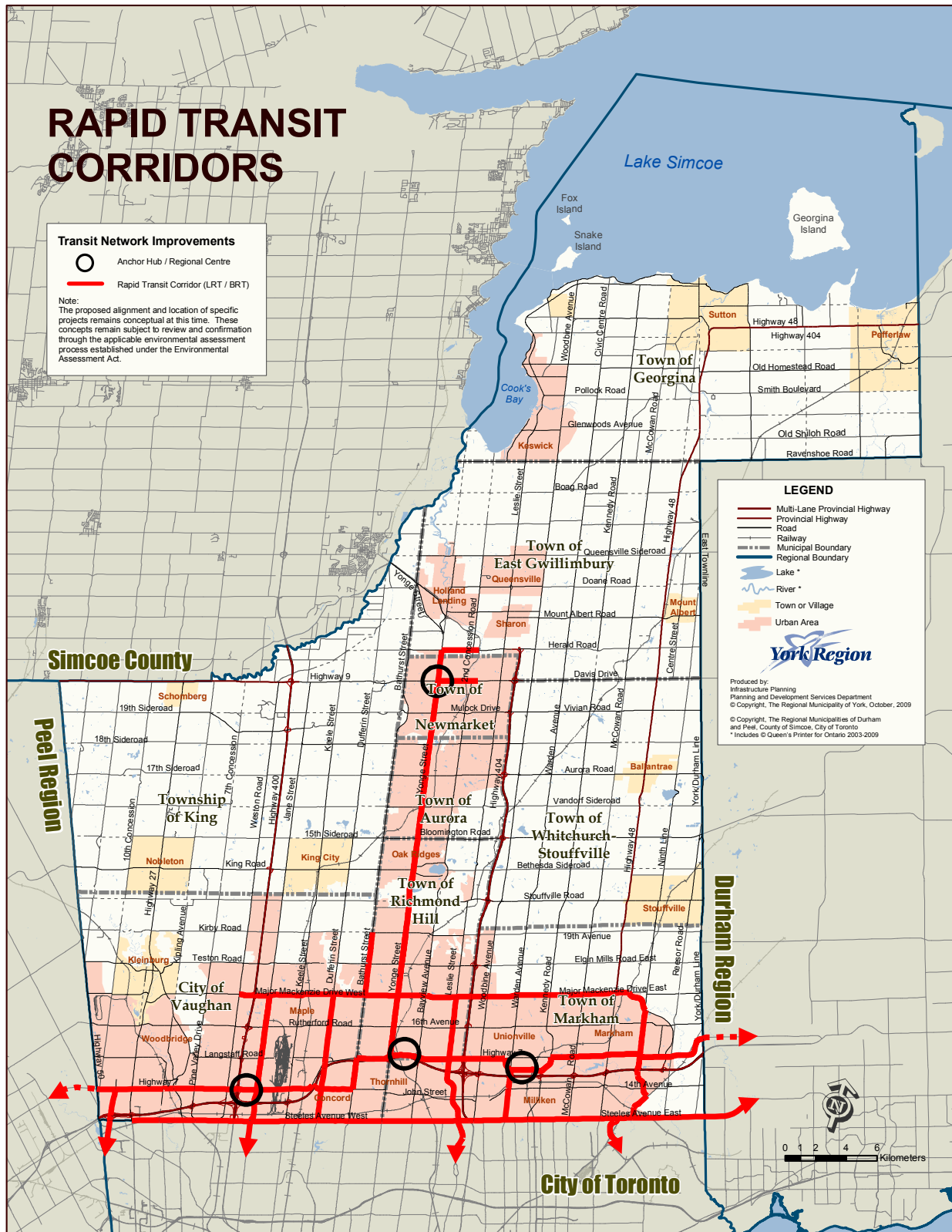


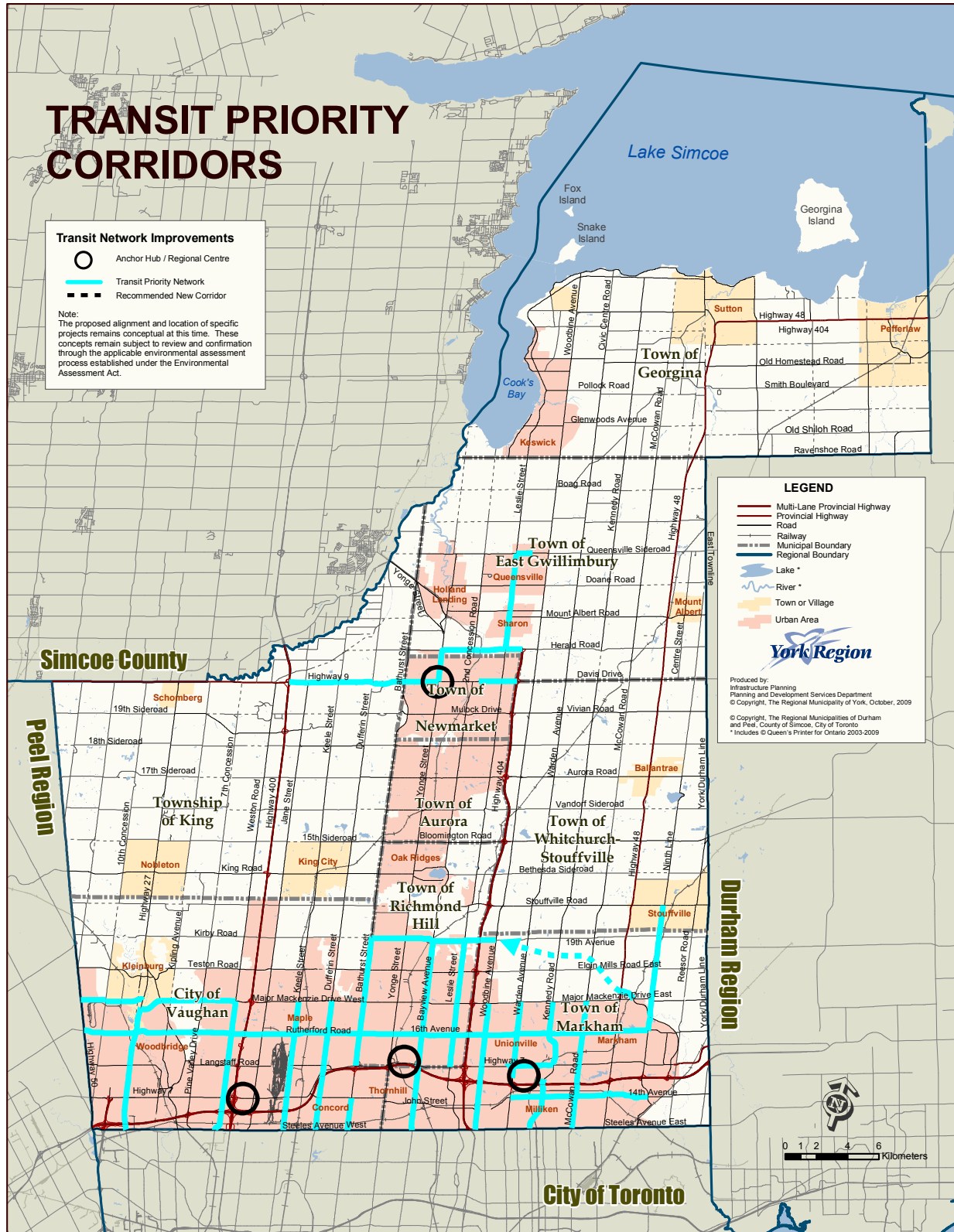


# FIGURE 6.2

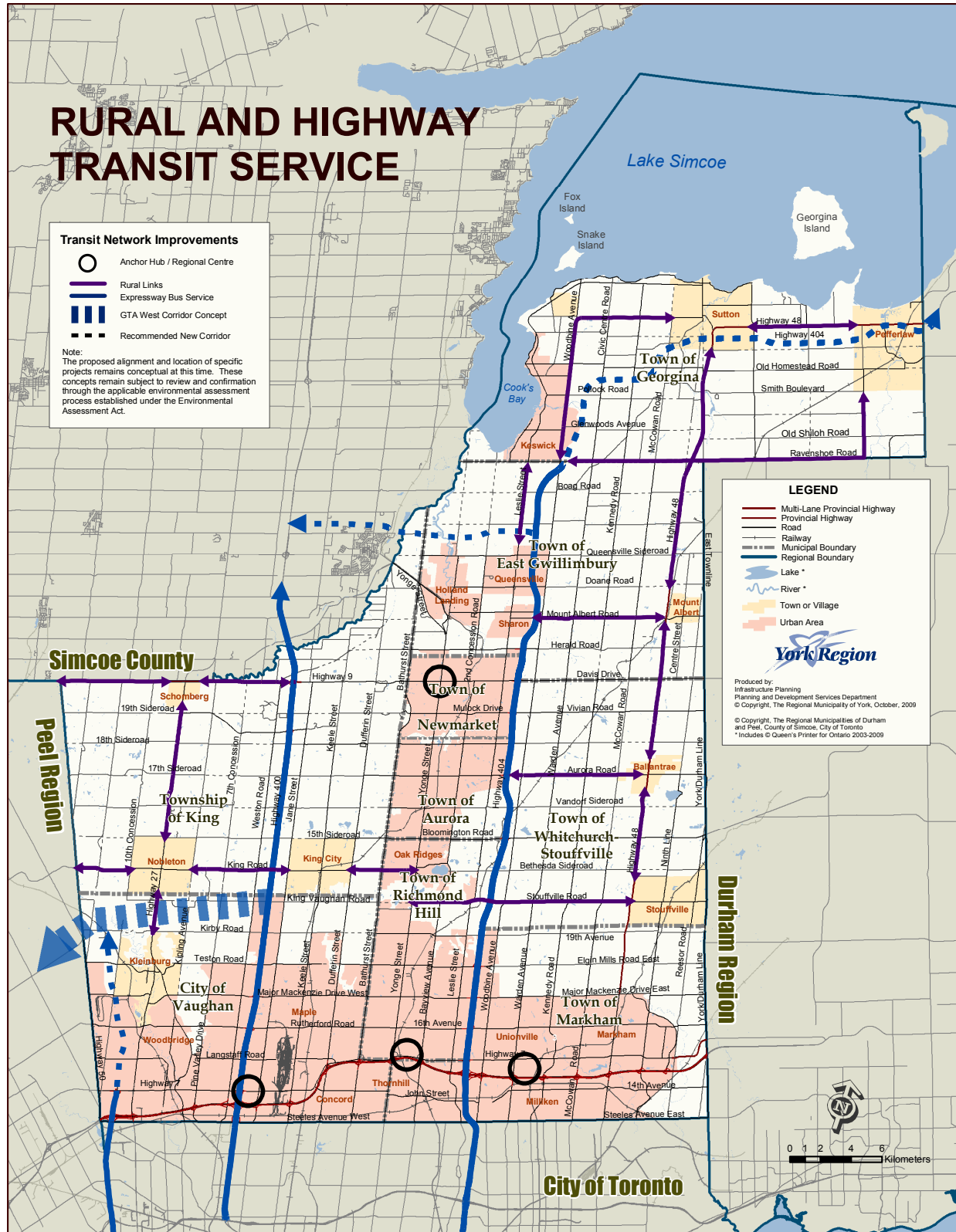


# FIGURE 6.3

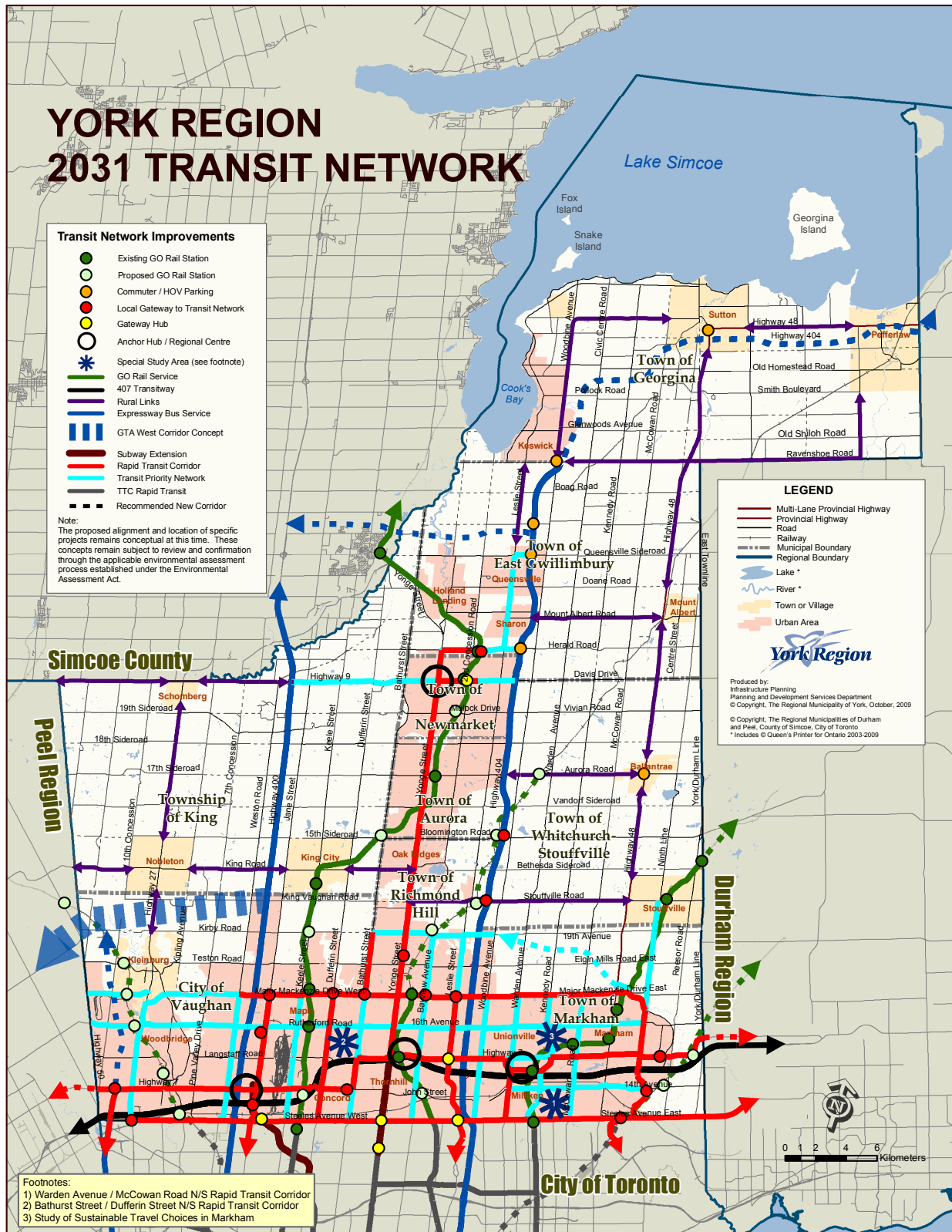














- Subway extensions to the Vaughan Metropolitan Centre and the Richmond Hill Centre, illustrated in **Figure 6.2**;
- Rapid Transit service (BRT or LRT) along portions of Bathurst Street/Dufferin Street, Davis Drive, Green Lane, Highway 7, Jane Street, Leslie Street, Major Mackenzie Drive, 9<sup>th</sup> Line, Steeles Avenue, Yonge Street and Warden Avenue/McCowan Road, which is illustrated in **Figure 6.3**;
- Several transit priority corridors that may include HOV/transit lanes, transit signal priority measures and/or queue jump lanes to ensure more efficient transit operations, as displayed in **Figure 6.4**;
- Improved rural transit service to East Gwillimbury, Georgina, King Township and Whitchurch-Stouffville, illustrated in **Figure 6.5**.

**Figure 6.6**, displays the complete transit network proposed for York Region through 2031.

The transit network also includes three special study areas:

1. Warden Ave/McCowan Road North-South Rapid Transit Corridor – to determine the most logical rapid transit route serving Markham through the Warden Ave and McCowan Road corridor in order to connect appropriately with Toronto’s Transit City plan and Metrolinx’s regional rapid transit network plan.
2. Bathurst Street/Dufferin Street North-South Rapid Transit Corridor – to determine the rapid transit route alignment in the Bathurst Street and Dufferin Street corridor based on more detailed transit ridership forecasts, network connectivity and area development potential.
3. Sustainable Travel Choices for Markham – York Region initiated a number of environmental assessments for improvements in the Town of Markham as part of a larger strategy to increase transit use, manage travel demand and promote alternative modes of

### Proposed *Rapid Transit* Technologies for York Region

**Subway:** Multiple unit trains of electric vehicles usually operated in tunnels.

**Light Rail Transit (LRT):** Multiple unit trains of modern streetcars usually operated in dedicated surface rights-of-way.

**Bus Rapid Transit (BRT):** Combines modern vehicles in a dedicated right-of-way and convenient fare collection to enhance system reliability, speed and comfort.

**GO Rail:** Locomotives and passenger cars operated between the City Centre and the outer suburbs and commuter towns.

### Proposed *Transit Priority* Technologies for York Region

**High Occupancy Vehicle (HOV) Lanes:** Refer to facilities open to all vehicles—including private automobiles and buses—carrying more than the specified number of occupants.

**Transit Signal Priority:** Employs technological measures to give transit vehicles preferential treatment over other vehicular traffic.

**Queue Jump Lanes:** Allow buses to get a “jump” on traffic queued at an intersection by providing either a short lane, a dedicated bus lane, or an exclusive right turn lane.



travel. This study will address transportation questions and concerns, present improvement options, explain recent enhancements to the transportation network and provide an overview of the Region's vision for coordinated and integrated transportation improvements.

The overall 2031 transit network plan also illustrates conceptual locations of Regional Centres/Anchor Hubs. These Anchor Hubs are consistent with the strategic growth centres identified in Metrolinx's Regional Transportation Plan (RTP) as focal areas for directing significant high density population and employment growth, major transit infrastructure, and a mix of land uses to act as anchors of the regional transportation system.

In addition, Gateway Hub locations are conceptually shown on the plan and are consistent with Metrolinx's RTP. These are places of connectivity between regional rapid transit services, and where other modes of transportation come together seamlessly. Although these hubs can have a concentration of employment, population, shopping and enjoyment around a major transit station, they are mobility hubs which are not classified as Anchor Hubs.

Another node category with interface between urban form and the transportation system is identified in this Master Plan as a "Local Gateway to Transit Network". These local gateways are recommended at locations where two or more major transit lines intersect and as such could potentially support higher density land uses.

A summary of the benefits of the new rapid transit corridors proposed in York Region is identified in **Table 6.1**.



Table 6.1 Benefits Summary of New Rapid Transit Corridors

Benefits Initiative	Significantly Expanded Coverage	Service to New Growth Areas/Centres	Subway Feeder Service	High Projected Ridership
1. Jane Street (Steeles to Major Mackenzie)	✓	✓	✓	✓
2. Bathurst/Dufferin (Steeles to Elgin Mills)	✓	✓	✓	✓
3. Leslie/Don Mills (Steeles to Hwy. 7)	✓	✓	✓	✓
4. 9 <sup>th</sup> Line (Hwy. 7 to Major Mackenzie)	✓	✓		✓
5. Major Mackenzie Drive (Weston to 9 <sup>th</sup> Line)	✓	✓		✓
6. Steeles Avenue (Hwy. 27 to C.P. Havelock Sub for future GO Rail)	✓		✓	✓

### 6.1.2 Roads

Proposed road improvements in York Region include infrastructure and technology enhancements to improve general traffic flow and goods movement and to facilitate the movement of local and rapid transit services (**Figure 6.11**).

The road enhancements proposed for York Region through 2031 include:

- Arterial road widenings of select two-lane roads to accommodate new population and employment in the emerging growth areas of York Region as is illustrated in **Figure 6.7**;
- New mid-block collector roads crossing 400-series highways in East Gwillimbury, Markham, Richmond Hill and Vaughan to provide direct access to local communities while accommodating transit, cycling and pedestrian facilities, and a number of new Regional road segments designed to complete the arterial grid system, are illustrated in **Figure 6.8**;
- Provincial highway improvements, to facilitate goods movement and inter-regional travel, consisting of extensions of Highways 427 and 404, HOV widenings of Highways 400 and





404, the Bradford Bypass to link Highways 400 and 404, and the GTA West Corridor, are illustrated in **Figure 6.9**;

- New or improved interchanges, road/rail grade separations and major arterial road jog eliminations are also shown in **Figure 6.9**; and
- Arterial road improvements for select four-lane roads to accommodate the rapid transit and transit priority networks are designed to promote transit use and carpooling are shown in **Figure 6.10**.

The recommended phasing for both the transit and road network improvements is provided in Chapter 7.

For the purposes of this Master Plan and taking into consideration the requirements of Phases 1 and 2 of the Municipal Class EA process, the “potential benefits” and “potential environmental considerations” for individual road and transit improvement projects were identified. **Appendix Q** provides a matrix list of all the proposed road and transit improvement projects and their potential impacts. Included in the list are transit improvements which may go through the Transit Project Assessment Process (TPAP).

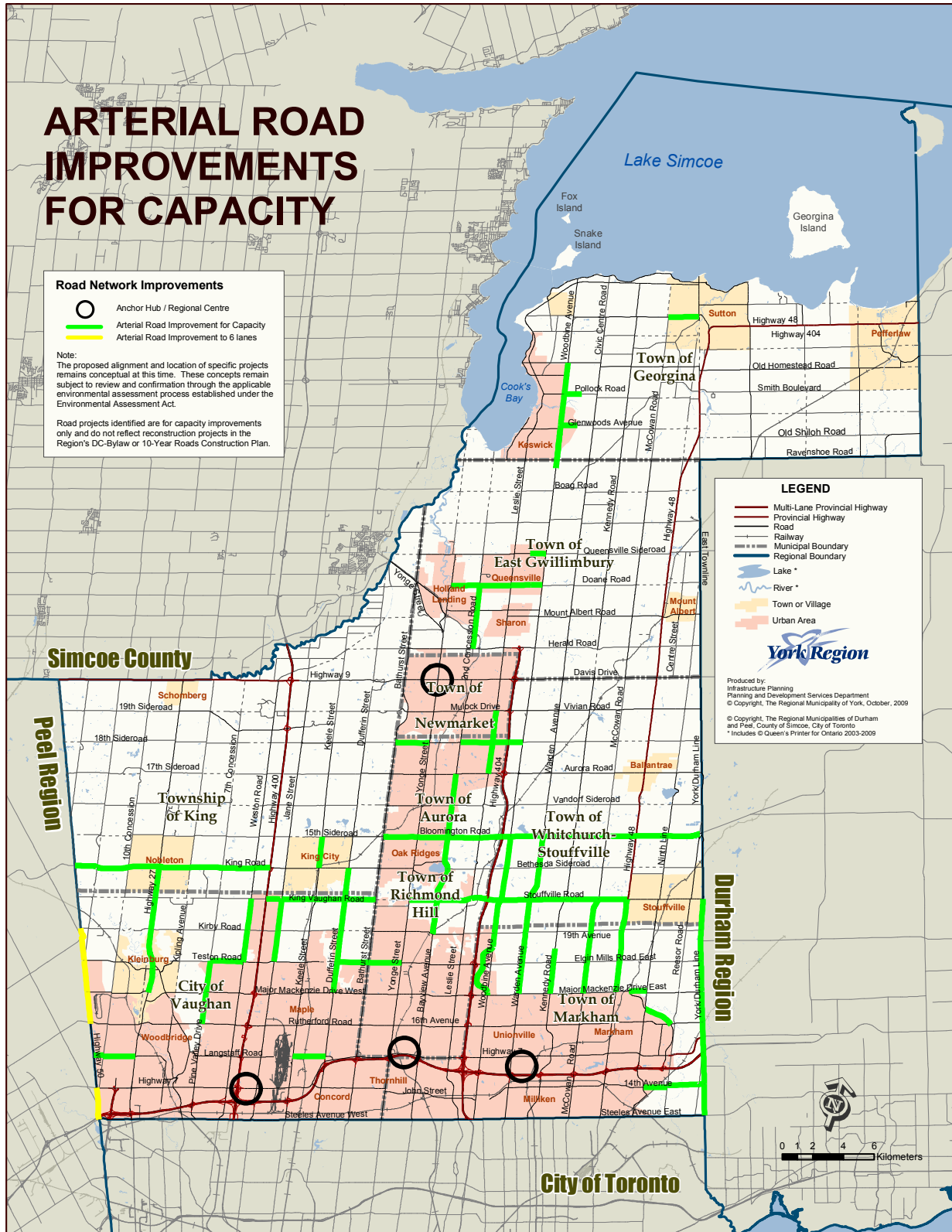
The matrix confirms the need and justification for proposed roadways to satisfy the first two phases of the EA process. The following are the factors that were used to assess the need and justification. The bases for developing these factors were both the requirements for EAs as well as the analysis summarized above.

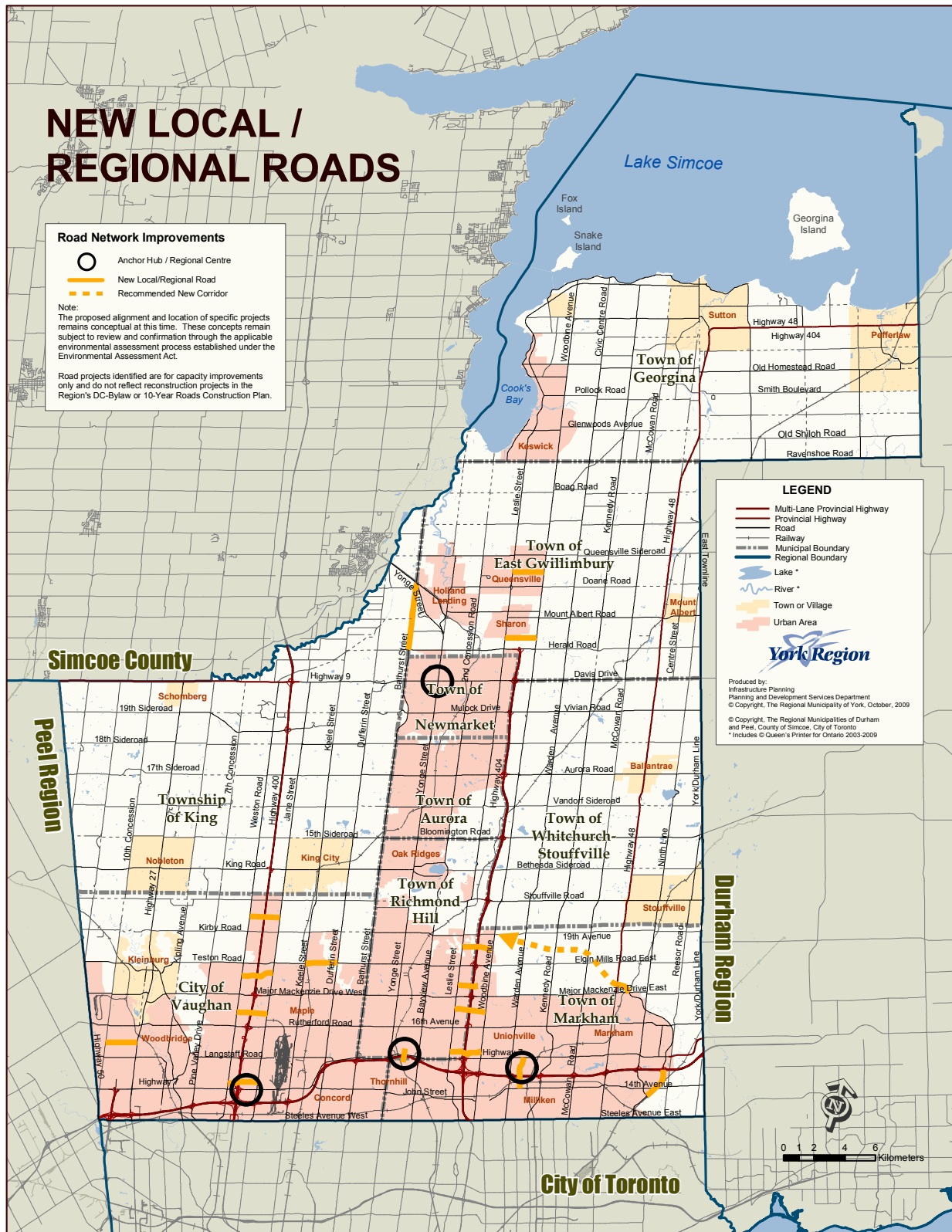
- Accommodates population growth
- Accommodates employment growth
- Accommodates local and regional transit
- Improves goods movement
- Improves connectivity
- Relieves congestion on adjacent roadways
- Accommodates seasonal and recreational traffic

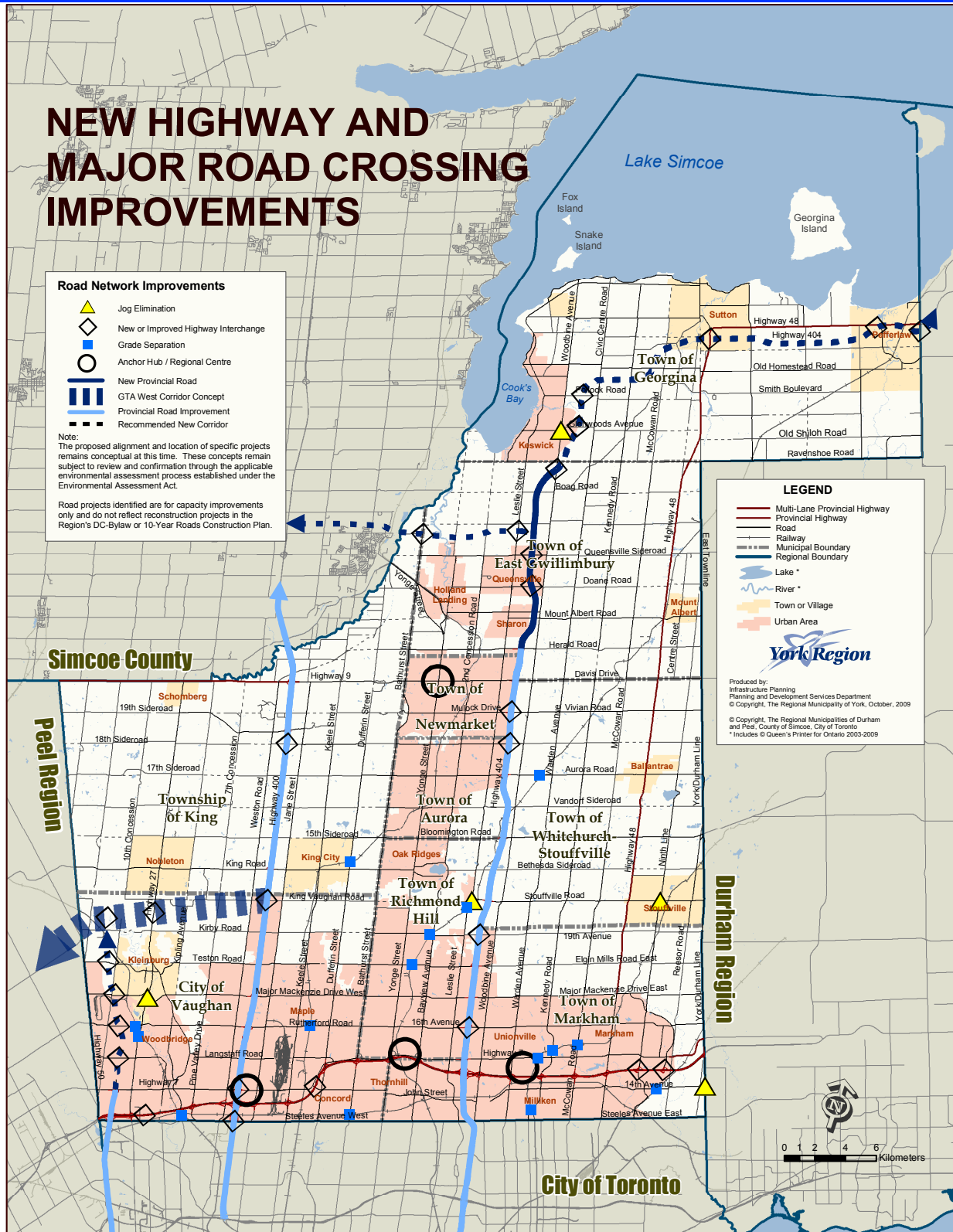
Each of these factors plays an integral role in the future of transportation throughout York Region. The focus was to identify the elements which provide the greatest overall benefit to the Region while supporting the principles of the Transportation Master Plan Update. The majority of the proposed roadways will support the growth in population and employment as outlined in Figures 2.1 and 2.2 while being an effective tool in the areas of enhancing connectivity, reducing roadway congestion, and supporting Regional and local transit initiatives. Goods movement is another key benefit to roadway development since it provides Regional economic support. In addition, the promotion of multi-modal transportation choices is a key goal of the TMP, and can be used to assess roadways through their ability to support seasonal and recreational traffic.



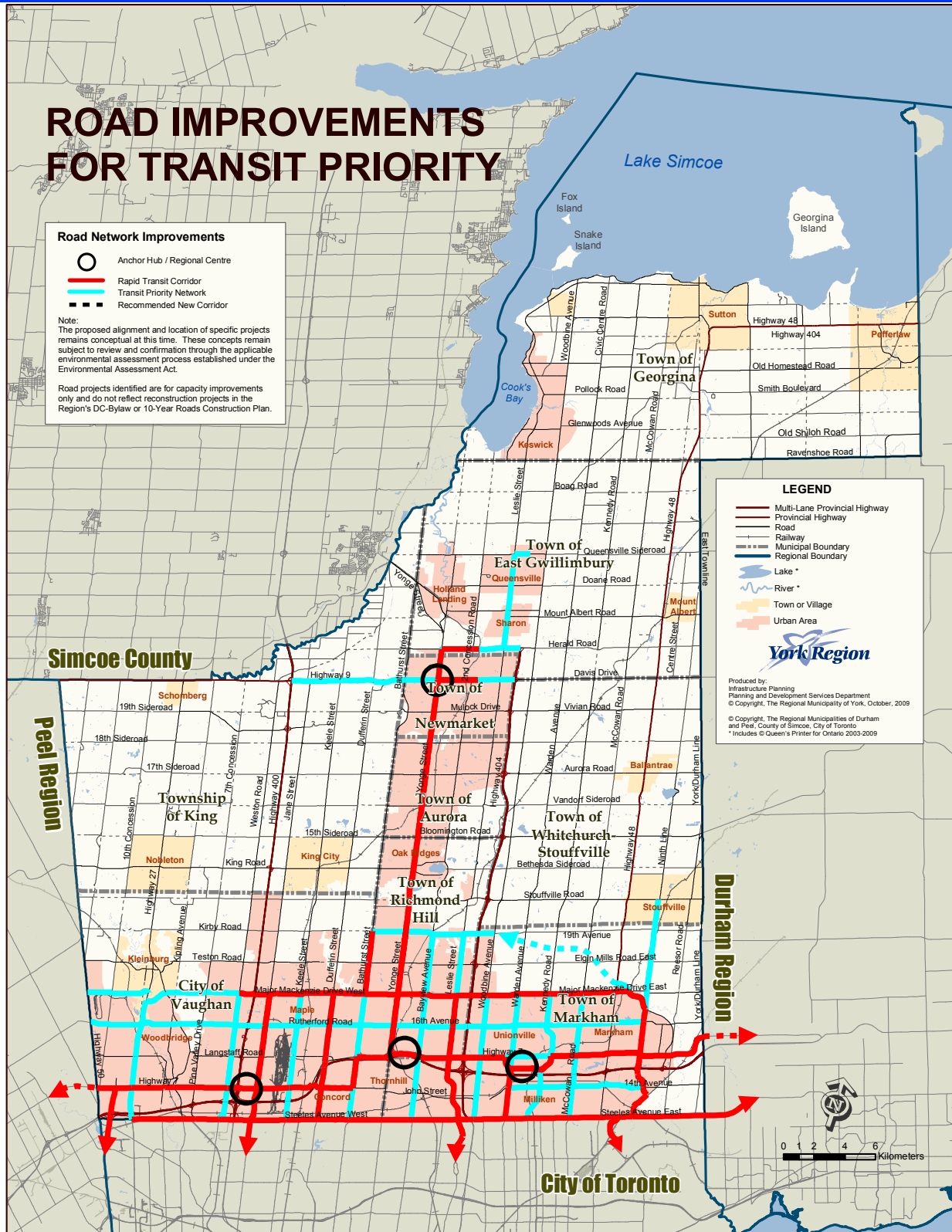
In addition to these benefits, a detailed assessment of the impact of each roadway project on the Regional environmental features is provided. By using Figure 2.10, environmentally sensitive areas and the potential impact of proposed roadways on them were identified. The detailed assessment contained in **Appendix Q** will provide the Region with the base analysis for the EA schedules outlined in the matrix.

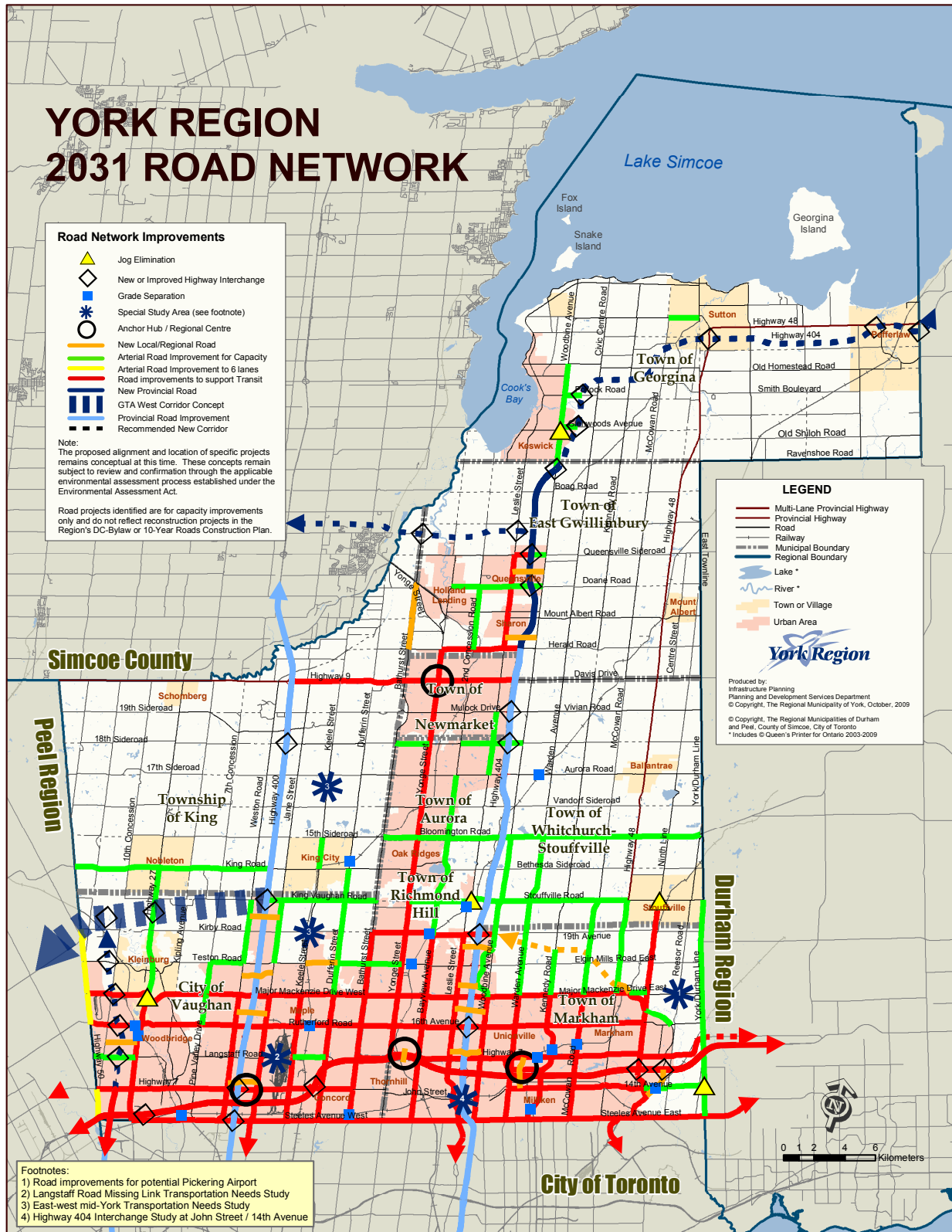














The Road Network Plan also has a set of four special study areas as follows:

1. Road Improvements for the potential Pickering Airport. This study would provide a detailed analysis of the regional and local road needs to serve the future Pickering Airport. Both east-west and north-south connectivity to accommodate the significant travel demands in the area would need to be assessed.
2. Langstaff road missing link transportation needs study. A special study to examine the potential benefits and costs for constructing the Langstaff Road missing link over the CN Rail yards. The transportation capacity implications in the area including travel demands along Highway 7, Highway 407, and Rutherford Road, and its major intersection operations would be assessed as part of the study. Due to the importance of this link to the planning of the Vaughan Metropolitan Centre, this study should be conducted as soon as possible in coordination with the City of Vaughan.
3. East-West mid-York transportation needs study. Encompassing the mid-York area bounded to the north by Highway 9 and to the south by Teston Road, this study will examine the arterial road capacity requirements to serve current and future east-west travel demand between Highway 400 and Highway 404 and the potential to address traffic relief on King Road through King City. The study area and potential arterial roads included in the analysis will be confirmed through the drafting of the study terms of reference.
4. John Street/14<sup>th</sup> Avenue at Highway 404 interchange study. The study would examine the implications of a partial or full interchange at Highway 404 and John Street or 14<sup>th</sup> Avenue. Along with potential travel pattern changes due an interchange and redevelopment potential in the industrial areas to the east, the opportunities for improved transit service in the Woodbine Avenue corridor should be examined as part of the study.

In addition to the improvements presented above, there are also road improvements in the area of jog elimination, reconstruction and rail-road grade separation that are needed to maintain capacity and efficiency to the road network.

### 6.1.3 Potential Additions to the Arterial Road Network

In the recommended road network, some improvements are identified for local municipal concession roads such as King-Vaughan Line in the City of Vaughan and 19th Avenue in the Town of Markham. Discussions will have to be conducted with the local municipalities on how these improvements are to be implemented.



Further, as a result of growth moving into new greenfield areas and expansion of the York Region urban boundaries as well as growth in adjacent regional municipalities, other local municipal concession roads may become heavily-used commuter routes.

These conditions may lead to requests from the local municipalities for York Region to assume some of these roads into the Regional arterial road network. In each case in general, the existing Regional Policy on Road Assumption will be used to assess the feasibility of the subject road becoming a Regional road.

## 6.2 NEED AND JUSTIFICATION FOR A BOLD TRANSIT NETWORK

To develop the need for a “bold” vision (“transit first” approach) and consequently identify the specific projects that will help the Region achieve this vision, it is important to understand the major challenges the Region’s transportation system would experience under a “business-as-usual” (BAU) scenario for 2031. These challenges are further magnified by the new 2031 growth forecasts developed by the Province, which requires 40 percent of the new growth within the existing urban area. The BAU scenario for the purpose of this TMPU is the recommended 2031 road and transit network developed by the 2002 Transportation Master Plan.

The 2002 TMP included an extensive set of new or strengthened Official Plan policies, Council policies, strategies, plans, guidelines and standards to support:

- Modal shifts to transit;
- Integration with land use planning and community/urban design;
- TDM and telecommuting;
- Parking;
- Walking and cycling;
- Transportation Systems Management and Intelligent Transportation Systems; and
- Goods Movement.

### **Modal Split**

The percentage of travellers using a particular type of transportation.

### **Vehicle Kilometres Travelled (VKT)**

Refers to the distance travelled by a trip maker, using a specified mode.

### **Vehicle Hours Travelled (VHT)**

A statistic that estimates the hours spent by the trip maker in a particular mode.

There is a need to quantify the improvements to the 2031 projected transportation operations that the “transit first” approach is projected to achieve, in comparison to the 2031 BAU scenario. The justification for the “bold” vision adopted as part of this Master Plan is dependent, to a certain extent, on the improvements between the two scenarios: BAU and “transit first”. If these improvements are sizeable enough to induce significant changes in travel behaviour, this “transit first” approach would be justified, from a purely transportation perspective.



The adopted Regional land use intensification scenario (40% intensification) was tested on the BAU network using the Region's EMME/2 model. Some of the key metrics from the 2031 recommended network and BAU scenario are documented in **Table 6.2**.

**Table 6.2 Transportation Sustainability Indicators**

Key Performance Measures	2006 Modeled	2031 BAU	2031 Recommended
Vehicle km of travelled in York Region (a.m. peak hour)	2,481,000	4,079,926	3,916,802
Relative Increase in VKT	-	64%	57%
Vehicle hours of travelled (a.m. peak hour) in York Region	46,000	79,300	75,900
Relative Increase in VHT	-	72%	65%
Transit trips per capita (a.m. peak period)	0.051	0.069	0.082
York vehicle km of travel per capita (a.m. peak hour)	2.67	2.71	2.6
% of veh-km-travelled with (v/c>1) within York Region (a.m. peak hour)	12.60%	17.25%	16.36%
York Lane Km	8,300	10,000	9,600
Transit Modal Split (York-York)	5.3%	8.8%	12.4%
Transit Modal Split (York-Centres&Corridors)	6.6%	13.6%	21.3%
Transit Modal Split (Centres&Corridors-York)	6.8%	12.1%	16.7%
Transit Modal Split (York-Toronto(except PD1))	8.6%	13.9%	17.1%
Transit Modal Split (York-(GTA+H))	11.7%	16.2%	19.2%
Transit Modal Split (Urban-Toronto)	25.0%	-	36.7%
Transit Modal Split (Centre&Corridors-Toronto)	28.7%	-	43.0%
Transit Modal Split (Centre&Corridors-PD1)	68.6%	-	78.0%





Note: Transit Modal Split represents the percentage of transit trips relative to the total number of trips by all modes (auto, transit, walking, cycling, etc.) for various trip origins and destinations as follows:

- York – York: Trips with origins in York Region and destinations within York Region
- York – Centres & Corridors: Trips with origins in York Region which are destined to the 4 Regional Centres (Markham, Richmond Hill, Vaughan, and Newmarket) and Highway 7 and Yonge Street Corridors
- York – PD1: Trips from York Region to the downtown area of Toronto (Planning District 1 (PD1))
- York – GTA-H: Trips from York Region to the Greater Toronto and Hamilton Area (GTA-H)
- Urban – Toronto: Trips from urban areas of York Region including Centres and Corridors to the City of Toronto
- Centres & Corridors – Toronto: Trips from the Centres and Corridors in York Region to the City of Toronto
- Centres & Corridors – PD1: Trips from the Centres and Corridors in York Region to the downtown area of Toronto (Planning District 1 (PD1))

The above table suggests that the 2031 transit and road network developed using the “transit first” approach is projected to significantly improve transportation conditions as compared to the BAU scenario, especially transit modal splits, vehicle kilometres travelled (VKT) and vehicle hours travelled (VHT).

The sustainability metrics estimated for the “transit first” scenario would also represent a significant improvement over existing (2006) conditions. Of note, the Region is projected to experience over 60% population growth between 2006 (930,000) and 2031 (1.5 million); however, the VKT is projected to increase by only 57 percent for the 2031 recommended network. The BAU scenario is expected to witness an increase of nearly 64 percent. This suggests an increasing reliance on transit for travel in the am peak hour in the case of the “transit first” scenario. In summary, the 2031 “transit first” recommended network is projected to result in significant sustainable travel patterns as compared to both existing (2006) and BAU conditions.

### 6.3 ROAD NETWORK ISSUES

For all major infrastructure improvements requiring the completion of Phases 3 and 4 of the Municipal Class Environmental Assessment process, York Region is required to prepare a detailed inventory of the natural, social and economic environment. This analysis is undertaken to identify the potential impacts of alternative alignments for new or



expanded infrastructure while attempting to reduce our carbon footprint. Depending on the complexity or magnitude of the project, this analysis may involve detailed environmental studies to ensure that sufficient and appropriate information is available on which to base ensuing decisions, and to allow the public to fully understand the environmental implications of the project.

In addition to describing the potential impacts of a project, appropriate mitigating measures should be identified and evaluated. For example, if a new bridge is being considered to extend an existing road, York Region must identify all measures necessary to minimize the negative impacts on residents and environmental features resulting from the undertaking.

For more complicated projects that will have significant environmental impacts, Individual Environmental Assessment (IEA) studies may have to be conducted. For example, the Region has committed to conducting an Individual Environmental Assessment for the unopened road allowance of Teston Road between Keele Street and Dufferin Street when the project is pursued. The IEA would include a comprehensive network analysis and environmental impact assessment to determine a preferred transportation strategy in the corridor.

York Region will work with the Conservation Authorities and other stakeholders to ensure that the EA process for individual projects addresses all issues. For projects such as the 14<sup>th</sup> Avenue improvements which traverse through the Bob Hunter Memorial Park and Rouge Park, it is recognized that there are environmentally sensitive areas that would be impacted as a result of road improvements. York Region will work in coordination with Rouge Park Alliance and other stakeholders to assess the need and justification for improvements. Improvements could range from traffic signalization, turning lanes, accommodation of bike lanes to the addition of through traffic lanes.

The following list of major road network improvements are recommended in the plan and the rationale for their inclusion are presented below.

**Bradford Bypass – includes a 4-lane Provincial expressway between Highway 400 and Highway 404**

- An Environmental Assessment was approved in 2002 and the Province has designated it as a controlled access highway
- Key infrastructure for accommodating future travel demand from Simcoe County
- Supports economic development in East Gwillimbury
- Diverts inter-regional traffic and relieves significant pressure on Regional and municipal roads
- Inter-regional corridor for goods movement between Highway 400 and 404, and
- Completes a comprehensive network of expressway bus services



**GTA West Corridor - includes a 4-lane Provincial expressway from Highway 400 west into Peel Region and beyond**

- Diverts traffic from congested Highway 400 and provides bypass of West Vaughan
- Inter-regional corridor for goods movement
- Diverts inter-regional traffic and relieves congestion on Regional and municipal roads, and
- Provides for a comprehensive network of expressway bus service

**Highway 427 Extension to GTA West Corridor - extend the existing Provincial expressway north to the GTA West Corridor**

- Diverts traffic from congested Highway 400 and provides bypass of West Vaughan
- Inter-regional corridor for goods movement
- Diverts inter-regional traffic and relieves congestion on Regional and municipal roads, and
- Provides for a comprehensive network of expressway bus service

**Highway 427 Extension to Highway 9 and Beyond - Provincial expressway extension needed beyond 2031**

- Relieves congestion on Highway 400 and improves goods movement network

**Mid-York East-West Corridor and King-Vaughan Road Improvements - add two additional arterial lane capacity between Highway 400 and Bathurst Street, and further study of travel demand needs in the corridor**

- Best option is to construct as the east extension of the GTA West Corridor to Bathurst Street
- Provides additional capacity to meet growth demands; and
- Address some of the traffic concerns on King Road through King City



#### North Markham East-West Arterial - add two additional arterial lane capacity between Bathurst Street and 9th Line

- Needed to address growth in north Markham
- Allow transit services into north Markham area and connection to north-south rapid transit and commuter rail services, and
- Provide an extension of the Markham Bypass (Don Cousens Parkway) connecting to a future interchange at Highway 404 and 19th Ave

#### 400-series highway mid-block crossings - include as 4-lane crossings of the highways

- Provides better transit service coverage
- Improves walking and cycling opportunities
- Improves local traffic connectivity, and
- Relieves the need to widen adjacent arterial roads to six or more lanes

#### Transit/HOV Lanes - include selective widenings where constraints to transit service occurs

- Needed to support transit services where ridership levels do not reach rapid transit service and to encourage car and van pooling
- Specific locations for widening will be determined through project level Environmental Assessment studies

#### Teston Road between Dufferin and Keele - need for 4 lane arterial connection identified

- Provides east-west network connectivity
- Part of the mid-York E-W corridor solution
- More efficient utilization of the Teston Road-Highway 400 interchange, and
- If link is deleted, additional capacity on other east-west corridors to the north would have to be provided



## Highway 404 Extension North of Ravenshoe Road Completion

- An Environmental Assessment was approved and the Province has designated it as a controlled access highway
- Key infrastructure for accommodating future travel demand in northern York Region and beyond, and
- Key connection for seasonal and recreational traffic

It should be noted that the GTA West Corridor and the Highway 427 Extension to the GTA West Corridor are in the Provincial Growth Plan and are currently under study by the Province. The need for such additional transportation infrastructure and alternatives to be considered (such as the nature of the infrastructure and specific alignments) has not been finalized. Any new interchanges and/or alignments of a potential highway facility in the GTA West Corridor are subject to the on-going EA study.

The Bradford Bypass and Highway 404 Extension north of Ravenshoe Road are currently not in the Provincial Growth Plan or the Ministry of Transportation's 5-year capital plan. These facilities have not been identified as priorities of the Provincial government at this time. However, in addition to York Region, the Town of East Gwillimbury, Simcoe County and Town of Bradford-West Gwillimbury all support the Bradford Bypass by including it in their Official Plans.

## 6.4 RECOMMENDED POLICIES AND STRATEGIES

All of the proposed policies and strategies developed by York Region for this Transportation Master Plan Update support *at least* one of the Sustainability Principles developed earlier in the study process. As such, each policy and strategy has been grouped under one of the 11 principles. Included among the

more than 100 policies and strategies developed to address Regional growth is a set of **Bold Directions** that will have the most profound impact on the Region's transportation system. A summary of each recommended strategy and policy is provided below. A more detailed description is presented in **Appendix N**.

### Bold Directions

Strategies and policies that will have the most profound impact on the Region's transportation system by fostering sustainable development and infrastructure.





## Principle 1: Integrate Land Use and Transportation Planning

York Region supports “complete communities” that are compact, mixed use, provide transportation choices and encourage live-work opportunities. The following policies and strategies embody the Region’s Vision to grow in a more sustainable, integrated manner.

“York Region is committed to integrating transportation planning into an urban form that is compact, mixed-use and creates a sense of community.”

## bold directions

- Adopt a policy in the Region’s Official Plan (ROP) which requires local municipalities, particularly those that are already urbanized, to establish the minimum densities needed to sustain higher order transit and promote Transit Oriented Development (TOD), as per the Provincial Places to Grow Strategy.
- Partner with local municipalities to plan for retail, institutional and commercial uses that are focused on the street, with parking positioned behind the buildings. “Big Box” retail plazas which are auto-focused should be strongly discouraged.
- Develop “mobility hubs” and local gateways at major entry points to the Region and to the YRT system and GO Stations. These hubs and gateways should be the focus of transit-oriented development.
- Work with local municipalities to introduce maximum parking standards in Regional Centres and Corridors.
- Planning and Design
  - Work with local areas municipalities to implement minimum density requirements that are supportive of higher order transit.
  - Amend the ROP to include TOD Guidelines as policy guidelines, thereby effectively promoting sustainable development for transit and other sustainable modes.
  - Co-ordinate zoning by-laws, urban design guidelines, parking standards, and site plan controls to ensure they are consistent with the TOD Guidelines and the Regional Centres and Corridors strategy.
  - Implement Community Improvement Plans for TOD at high priority locations and at Regional Centres, in cooperation with



the local municipalities.

- Work with the local municipalities to implement a coordinated program of site design that is oriented to transit and pedestrians, and to review zoning along transit corridors to ensure that land use densities support rapid transit.
- Implement a policy allowing the Region to declare a particular interest in development applications that take place in the vicinity of the Regional Corridors, Centres and nodes, as a means to ensure a sustainable pattern of development for higher order transit.
- Develop financial incentive programs to encourage TOD in all Regional Centres and Corridors.
- Work with existing major auto-focused retail sites as these redevelop, to plan for transit-focused intensification within Regional Centres and Corridors.
- Recommend the hiring of a TOD Coordinator who can manage all matters related to TOD, and advocate for its importance with stakeholders, such as developers, local municipalities and residents.
- Include on-street parking as part of the supply for development, where possible.
- Encourage shared parking arrangements among neighbouring properties, and reflect this in the parking supply for developments.



## Principle 2: Put Pedestrians and Transit First

York Region developed the following initiatives to ensure future transportation planning efforts provide the means to support walking, cycling and transit use.

“York Region recognizes that each transportation trip begins and ends with a pedestrian trip, and is committed to designing a transportation system that promotes an active lifestyle and community well being.”

## bold directions

- Implement the Regional and municipal pedestrian and cycling master plan policies and recommendations that give equal weights to infrastructure, implementation strategy and outreach programming.
- Transit
  - Continue to co-ordinate YRT/Viva services with adjacent transit systems, including the TTC, Brampton Transit and Durham Region Transit through initiatives such as interlining and shared terminals.
  - Install bikes racks on all buses, and request MTO to amend the Public Vehicles Act to permit the use of bicycle racks on buses crossing municipal boundaries.
- Active Transportation
  - Encourage the study and implementation of local municipal pedestrian and cycling master plans.
  - Promote and support local bike-sharing programs as demonstration projects.
  - Partner with Metrolinx and others to implement Regional bike-sharing programs.
- Planning and Design
  - Connect all transit stops directly to sidewalks and adjacent buildings in urban areas.
  - Update policies regarding the provision of sidewalks on Regional roads in urban areas; consider a provision to require sidewalks on both sides of the street (in urban areas and major roadways).
  - Review and update design standards for sidewalks and the pedestrian environment.
  - Explore opportunities to coordinate and implement lighting, sidewalk and road improvements for Regional roads which have transit service.
  - Promote pedestrian safety and comfort through building and site



design by including this consideration in the review of all development applications.

- Require developers to provide high quality pedestrian connections to the Regional road network as part of site plan approvals in urban areas, as well as effective pedestrian permeability through the site.
  - Review policies on pedestrian push-buttons at signalized intersections to improve tactile and visual response, as well as the adequacy of walk time and the universal application of countdown displays.
  - Implement intersection designs and improvements that enhance pedestrian and cycling movements in urban areas.
  - Discontinue the use of pedestrian push-buttons at signalized intersections for pedestrian phases across the “minor” street that has a short pedestrian walk distance, beginning with signalized intersections in Regional Centres and on Regional Corridors.
  - Work with local municipalities to develop alternative Regional street design parameters to encourage walking and cycling in Centres and Corridors.
- Parking
    - Work with the local municipalities to adjust the quantity of long-term parking for commercial, employment and residential uses to reflect the level of transit services and other sustainable modes.



### Principle 3: Protect and Enhance Natural Environment and Cultural Heritage

In coordination with its local municipalities, York Region will develop several transportation policies and strategies to ensure the preservation and enhancement of the natural environment. Many of these strategies will exceed existing guidelines established in the provincial environmental assessment process. The following policies and strategies will be implemented to ensure that these goals are achieved.

“York Region will protect, restore and enhance the natural environment. York Region also respects and protects its First Nation heritage as well as all cultural heritage.”

## bold directions

- Exceed the requirements of the environmental assessment process in York Region to incorporate the following policies and strategies:
  - Plan new transportation facilities to avoid, where possible, significant natural heritage features, including the habitats of threatened and endangered species, greenways, wetlands, woodlands, areas of natural and scientific interest, wellhead protection zones, and natural hazard areas.
  - Consider the introduction of stormwater management and water balance measures to counter the adverse impacts of urbanization.
  - Coordinate the Region's road and transit networks, as well as planning regimes with the local and adjacent municipalities, to minimize infrastructure needs and enhance natural heritage and environmental features and functions.
- Enhance natural heritage features and functions throughout York Region by incorporating the following policies and strategies:
  - Improve environmental functions and habitat connectivity through upgrades of existing crossing structures that are sized as 'eco-passages' to facilitate wildlife movement.
  - Design transportation facilities to celebrate the environment, through preservation of view corridors, design of bridges to highlight the presence of watercourses, and other elements.
  - Review and update the Region's maintenance management policies and practices to ensure that these minimize damage to the natural environment, while still providing a safe transportation environment.
  - Work with local municipalities and the construction industry to develop Environmental Best Management Practices to minimize





the impact of road construction on the environment.

- Develop environmental protection measures for transportation system elements to reduce vehicular-animal interaction and impact on animal pathways.
- In rural areas, consider roadside plantings to discourage habitat immediately adjacent to infrastructure that would conflict with wildlife.
- Enhance, preserve and maintain greenways to the extent possible in accordance with provincial legislation requirements.
- Work with the local municipalities and developers to minimize the effects of parking facilities on the natural environment.
- Introduce roadside warning signs in areas of significant wildlife movement.
- Implement temporary or seasonal speed limits in high wildlife mortality zones.
- Develop a roadway directional lighting strategy that avoids too much lighting in environmentally vulnerable sites.

● Active Transportation

- Identify a Regional Trails Network which includes a Natural Heritage Trails Concept Study to determine the Region's role in trail planning and development, and to coordinate trail connections, where appropriate, with the Region's and local municipal Pedestrian and Cycling networks.



## Principle 4: Provide Access and Mobility for Everyone

York Region supports new policies and initiatives that will ensure all residents and employees are provided safe, reliable, convenient and economical transportation options. Additionally, the Region will ensure that all transportation plans, services and infrastructure respond to the diversity of community needs.

“York Region will ensure that all residents (especially those with disabilities, those of low income, recent immigrants, youth and the elderly) have barrier-free, reliable and affordable access to all aspects of the transportation system.”

- Transit
  - Work closely with GO Transit to maximize YRT/Viva access to GO Transit rail stations, bus stations and park-and-ride lots in York Region, and to increase shuttle and community bus services that meet train departures and arrivals in areas around GO stations.
  - Develop services targeting seniors. For example, some communities operate bus services that exclusively serve retirement communities, grocery stores, hospitals, medical clinics and pharmacies.
- Planning and Design
  - Ensure transit service and infrastructure are built into new subdivisions, employment areas and major commercial centres within the first three years.
  - Minimize walking distances between new development sites and transit stops through the location of site accesses.
  - Partner with school boards to plan for schools and other facilities that are located on transit routes.
  - Accommodate people with disabilities and special needs on all pedestrian and transit systems, consistent with the Accessibility for Ontarians with Disabilities Act.



## Principle 5: Support our Economic Vitality

York Region undertook the Transportation Master Plan Update to manage the movement of both people and goods through 2031. A sustainable transportation system must promote efficient goods movement in support of economic development including linking intermodal facilities with area industries.

“York Region is committed to ensuring that its transportation systems support economic development.”

## bold directions

- Plan for effective freight movement systems that minimize impacts on the road network, including potential dedicated road links and rail services, as well as intermodal facilities.
- Restrict delivery times by heavy vehicles to periods outside of peak commuter travel times within the Regional Centres and along Regional Corridors
- Planning and Design
  - Work with local municipalities to develop a mechanism to assess the redevelopment potential of sites in Regional Centres and Corridors and review potential “quick win” sites for TOD.
  - Partner with local municipalities and major industries to advocate for improvements to the Provincial highway system.
- Goods Movement
  - Develop an ITS plan for goods movement.
  - Ensure that all new site plan approvals are based on off street loading and unloading facilities.
  - Work with the Province and Metrolinx to encourage and promote efficient, safe and sustainable goods movement.



## Principle 6: Adopt Energy Efficient Transportation System

As York Region grows, so will the demand for our natural resources like water, air and land. In support of the *Growth Plan for the Greater Golden Horseshoe*, the Region has identified a set of transportation strategies that will promote a culture of conservation and energy efficiency.

"York Region will design a transportation system that is energy efficient and mitigates and adapts to the impacts of climate change."

- Planning and Design
  - Adopt Canadian Institute of Transportation Engineers (CITE) site design guidelines to promote sustainable transportation.
  - Design a site plan checklist to gauge TOD elements of a proposed development.
  - In areas of low pedestrian activity, consider roundabouts as an alternative to signaling an intersection.

## Principle 7: Further Encourage Communications, Consultation and Public Engagement

York Region's transportation planning initiatives make it a national leader in promoting sustainable development. However, one must keep in mind that before adopting these important initiatives, there must be an appropriate level of public awareness and support. Without this, the initiatives may not provide a sufficient rationale for making significant behavioural and lifestyle changes.

The Region recognizes the need to embrace other communication strategies that will: foster a much wider understanding of the Region's sustainable transportation initiatives; encourage residents and businesses to adopt new practices that support the Region's sustainable policies; and provide a means to regularly inform and engage the public on sustainable transportation issues.

"York Region will plan for and implement transportation infrastructure and services in an open, transparent and accountable manner based on broad consultation, citizen engagement and strong communication."

# bold directions

- Celebrate sustainable transportation success stories through initiatives such as annual awards for volunteers, programs and projects.
- Work with local municipalities to plan and implement regular car-free festival days to create a culture of sustainability.
- Planning and Design
  - Develop and provide a detailed Best Practices Planning Handbook to York Region and municipal staff, as well as the development community.
  - Develop a procedure to ensure local municipalities, YRT/Viva and GO Transit together explore TOD opportunities around Viva and GO stations.
  - Develop materials and create a link from York Region's website as a resource for planners, developers, policy makers and citizens who are interested in the implementation of TOD.
- Intelligent Transportation Systems & New Technologies
  - Work with local Smart Commute associations to develop a web-based delivery of real-time traffic information to assist drivers in determining times and routes for travel.
  - Continue to improve YRT's trip planner to include weather info and real-time alerts of service disruptions, and make them available through mobile communication devices.
- TDM
  - Work with local Smart Commute Associations to develop a TDM promotional plan in conjunction with municipalities and key stakeholders (e.g. major employers and 'green' organizations).
- Marketing and Education
  - Encourage developers to provide information about transportation alternatives, including local transit routes and schedules, to new home buyers.
- Regional Collaboration
  - Define a mechanism for ongoing co-ordination with local municipalities and stakeholders relative to research or future sustainable transportation planning needs.
  - Work with other jurisdictions to develop television programming focused on sustainable transportation issues.





- Produce a recurring newsletter highlighting the Region's sustainable development practices.
- Work with the local media to develop op-ed pieces or other articles/segments highlighting the Region's sustainable transportation initiatives developed in response to growing congestion.
- Invite local media to attend an annual transportation "fair" exhibiting the many programs and services initiated by the Region, Smart Commute and other green organizations to promote sustainability.
- For all residents moving into York Region, mail a package of materials to them explaining the transportation services offered in the Region. Consider incentive packages for transit as well.
- Produce all educational materials in key languages spoken in York Region.
- Host seminars to engage different ethnic groups in discussing sustainable transportation initiatives.
- Develop curricula/courses/programs that promote the Region's sustainable transportation initiatives in partnership with school boards and higher education institutions.
- Work directly with large independent living facilities and retirement communities to promote relevant programs and initiatives.

### **Principle 8: Implement and Support Transportation Demand Management Initiatives**

York Region recognizes the need to bolster existing Transportation Demand Management programs in the Region by providing more convenient and reliable transportation alternatives. Additionally, the Region is committed to exploring new initiatives that would entice residents to consider alternatives to the automobile.

"York Region is committed to reducing single-occupant vehicle trips and promoting a preference for sustainable transportation choices by providing more reliable and convenient alternative modes of travel."

- Transportation Demand Management
  - Finalize TDM strategies in consultation with municipal agencies, school boards, hospitals, colleges and major employers that includes actions, timelines and targets.
  - Require TDM plans or strategies for major development applications.



- Encourage all employers to implement TDM programs.
  - Partner with major retail stores to develop incentive programs for high school and university students (or others) who use transit.
  - Partner with major retail stores to develop incentive programs for seniors who use transit.
  - Explore opportunities to develop a discounted university and college transit pass program (“U-Pass”) with YRT/Viva.
  - Consider incentives that promote transit and discourage all-day parking (e.g. subsidize auto share programs).
  - Develop sample templates and pilot commuter trip reduction programs for businesses in York Region.
  - Pilot employee individualized commuter plans that promote lower single occupancy vehicle use.
  - Adopt Regional policies that promote the replacement of corporate fleets (Viva/YRT, public works, police) with hybrid or alternative-fuelled vehicles.
- **Parking**
    - Mandate the provision of preferential carpool parking for employment uses.
    - Offer carpoolers preferential parking at all Regional facilities and for fuel efficient vehicles including those with high fuel economy, hybrids, and vehicles powered by alternative fuels.
    - Investigate the utility of car-share programs at YRT/Viva terminals, GO stations and major employment areas, and if they are found to be of benefit, consider subsidizing them for a start-up period.
    - Support the use of the existing HOV lanes in Highway 404, as well as any future highway HOV lanes, through the addition of park-and-ride and carpool lots at strategic locations.
- **Marketing and Education**
    - Work directly with area community and cultural centres to promote relevant sustainable transportation initiatives.
    - Actively work with the school boards to implement Safe Routes to School programs, and continue to expand the YO! Program at York Region high schools.
- **Intelligent Transportation Systems & New Technologies**
    - Partner with others to develop a trip planner for all modes that provide the shortest time path for walking/cycling/transit (with links to Smart Commute for carpooling).



## Principle 9: Implement and Support Transportation Supply Management

York Region has developed several strategies that make the best use of its existing transportation infrastructure through the addition of HOV lanes and system-wide technologies.

“York Region is committed to managing its transportation system in an efficient and cost-effective, socially and environmentally responsible manner.”

# bold directions

- Expand the Viva/YRT ITS program and introduce traveller information systems, improved signal progression and queue jump lanes throughout the Region to improve transit performance.
- Initiate HOV 2+ lanes for all road segments scheduled for widening to six lanes, and explore opportunities to convert existing six-lane roads.
- Cap road widenings to a maximum of six through lanes including transit lanes.
- Work with local municipalities to plan for and design comprehensive collector roads to accommodate and facilitate local transit services, walking and cycling.

- Intelligent Transportation Systems & New Technologies
  - Implement a comprehensive Advanced Traffic Management System in key areas in York Region, particularly on Highway 7 in the area of Highway 404 and Highway 400.
  - Review the location of left turn lane detector loops on arterial roads, and ensure that they are set back from the stop bar to the location of the third vehicle in the turning stream.
  - Introduce a system of adaptive signal control on key urban arterials, where appropriate.
  - Integrate system-wide traffic signals through a centre-to-centre (C2C) interface to support daily operations, provide traveller information and emergency response.
  - Develop and implement a Transit Video Survey Tool once YRT has completed the system-wide deployment of on-board video surveillance systems.
- Roadways and Highways
  - Strongly encourage all local municipalities to implement



continuous east-west and north-south mid-concession collectors in all new urban developments (two per direction per concession).

- Ensure that transportation planning for each concession block is based on an integrated assessment of needs for surrounding arterials and internal collectors.

### Principle 10: Ensure Fiscal Sustainability and Equitable Funding

In the time since York Region released its initial Transportation Master Plan in 2002, the transportation landscape has changed significantly. Now more than ever, the benefits of sustainable transportation choices are being recognized and given priority over simply building new, or expanding existing roadways. The pressure to build sustainable transportation services and the escalating cost to build, operate and maintain public infrastructure services is an ongoing concern to municipal organizations in Ontario, as it is to government jurisdictions everywhere. This has required transportation agencies around the world to look at new and innovative ways of delivering and financing transportation projects.

"York Region is committed to providing full cost accounting for all transportation infrastructure projects and services. In addition, the Region is committed to Value-for-money in delivering transportation services."

In response, York Region has developed several strategies to ensure appropriate levels of financing are available for sustainable transportation initiatives.

**bold directions**

- Coordinate with each municipality to develop a Parking Authority to set a parking policy within York Region and ensure that an effective governance model is adopted in selecting individuals with appropriate experience and expertise to serve as Board Members of the Authority
- Develop parking strategies in each Regional Centre and on Regional Corridors (within 500 metres along each corridor) to avoid over-supply, provide the appropriate form of parking, and structure fees that discourage all-day parking through Regional or Municipal parking authorities.
- Explore road user fees in highly congested urbanized areas in coordination with Metrolinx and local municipalities.



- Funding
  - Seek additional forms of transit subsidies for stable transit funding from the provincial and federal governments.
  - Request the Province to modify the Development Charges Act to better support transit and sustainable transportation services in conjunction with Metrolinx.
  - Pursue Public-Private Partnerships (P3s) to fund sustainable transportation initiatives.

### **Principle 11: Conduct On-going Performance Measurements and Monitoring**

The world around us is always changing. To ensure the Region understands the transportation needs of its residents, several measures will be implemented regularly to monitor trends and identify new solutions that are more energy efficient and sustainable.

"York Region will monitor and report on sustainable transportation initiatives through a series of defined performance measures."

- Intelligent Transportation Systems & New Technologies
  - Require the Region's traffic control system to be compliant with the National Transportation Communications for ITS Protocol (NTCIP) to ensure ITS measures are implemented properly.
  - Host annual or biennial focus groups with randomly selected residents and businesses to: identify marketing strengths and weaknesses; test new marketing strategies; and develop other means to educate the public.
  - Conduct a random sample public opinion survey with York Region residents and businesses every two years to assess changes in travel behaviour and evaluate whether the Region's sustainable transportation message is understood and recognized.
- Environmental Protection Measures
  - Monitor natural heritage and environmental feature impacts resulting from transportation projects and publish a biennial report card.





## 6.4 CARBON MANAGEMENT

The over-riding principle that this Master Plan update has been based on is the principle of sustainability. From the lens of transportation planning, sustainability is achieved when the least amount of travel demand and infrastructure is needed to accommodate the projected growth in population and employment. Generally speaking, this scenario should also lead to the least cost plan in terms of funding needs and least impacts on the natural environment.

Through the integration and coordination of this study with the growth management, water and wastewater master plan update and the pedestrian and cycling master plan studies, and the innovative process used to develop this Master Plan, the minimum amount of road improvements is recommended. On the transit side, a doubling of the rapid transit network and a corresponding increase in the YRT bus services that supports and feeds the rapid transit network is recommended. Complementing these infrastructure improvements, this Master Plan is recommending very bold policies and strategies that push the limits in trip reduction opportunities to maximize the person-carrying capacity of the road network through carpooling. It further maximizes the attractiveness of transit use and walking and cycling through service improvements, incentives and education and marketing. Together, these recommendations form a Transportation Master Plan that is as sustainable as can be achieved given the conditions that bound the development of this plan.

Implicit, therefore, to this Transportation Master Plan is the minimum carbon footprint that will be generated from the infrastructure and services recommended in accommodating the projected 2031 scenario of 1.5 million people and 800,000 jobs in York Region.



## 7.0 RECOMMENDED PHASING PLAN

York Region recognizes that elements of the Transportation Master Plan Update must now begin to complement the many sustainable transportation initiatives that are already ongoing, as well as lay the groundwork for more long-term infrastructure improvements. As such, the Region has developed a practical phasing plan through 2031 to ensure that the appropriate strategies and policies are in place in advance of making some of the more significant infrastructure improvements. The goal of the proposed phasing plan is to ensure that the aim of the Region's 4 "R's" are met by developing initiatives that **R**educe the need to travel; providing more convenient and reliable **a**lternative modes; enhancing public **t**ransit infrastructure and services; and optimizing **R**oads to accommodate all modes of travel.

### 7.1 CURRENT TRANSPORTATION PROJECTS AND INITIATIVES

The following outlines the transportation projects which are currently being implemented in York Region. These projects and initiatives serve as the foundation for the development of sustainable policies and strategy recommendations as well as the transit and road systems proposed for the Transportation Master Plan Update.

#### Transitway EAs and Studies

- Yonge Street Transitway (Richmond Hill Centre to 19<sup>th</sup> Avenue)
- Yonge Subway Extension
- Spadina Subway Extension
- North Yonge Transitway Class EA – 19<sup>th</sup> Avenue to Newmarket/East Gwillimbury
- Highway 7 Transitway
- Markham N-S Link Transitway
- MTO – 407 Transitway Class EA
- Viva – Maintenance and Storage Facility
- YRT Maintenance and Storage Facility at 8300 Keele Street
- CEAA approval for all Viva projects

#### Pedestrian and Cycling Master Plan Implementation

- Municipal Partnership Program
- Active Transportation Coordinator
- Outreach and Promotions
- Planning and Design Guidelines
- Inclusion of bike facilities in road construction program



## Travel Demand Management Initiatives

- Development Conditions for TDM Initiatives
  - Blocks 11, 12, and 18 Web portal and other measures
  - Keswick Commuter Parking Lot
- Bike racks on buses and at stops
- Smart Commute York Region Staff Trip Reduction Program
  - Carpool parking spaces
  - Emergency Ride Home program
  - Bike parking facilities and amenities
  - Employee transit discount (ECO) program
  - Compressed work week and flex time
- Support of TMAs, events, and projects (e.g., bike library feasibility project with Smart Commute Central York)
- Establishment of TOD Guidelines and TDM checklist

To build on these initiatives, the Region has developed an aggressive – yet practical – planning and implementation schedule that addresses both short-term and long-term needs and opportunities. The proposed phasing plan is described below.

## 7.2 PROPOSED PHASING: POLICIES & STRATEGIES

As discussed in Chapter 6, the York Region Transportation Master Plan Update's recommended policies and strategies cover a wide array of issues, which all support the development of a more robust transit, cycling and pedestrian network, including:

- Transit;
- Active Transportation;
- Travel Demand Management;
- Environmental Protection Measures;
- Planning & Design;
- Marketing & Education;
- Parking;
- Funding;
- Intelligent Transportation Systems;
- Roadways & Highways; and
- Goods Movement.

A general description of the proposed phasing plan for the recommended policies and strategies is provided below. It is important to note that many of the policies and strategies proposed in the immediate and short terms will carry through to 2031.



### 7.2.1 Immediate Actions (0-2 years)

Policies and strategies to be implemented within the immediate time frame will provide the basis for sustainable initiatives throughout the Region. The goal of these policies and strategies is to make provisions for the significant number of transit and roadway infrastructure improvements which will be developed over the next 30 years.

**Transit:** will focus on enhancing the coordination of transit services and infrastructure with adjacent municipalities and other transit providers, including TTC and GO Transit. These will include policies such as:

- Working closely with GO Transit to maximize YRT access to GO Transit facilities;
- Co-ordinate YRT services with adjacent transit systems;
- Working with Brampton Transit to integrate AcceleRide with YRT/Viva services along Highway 7; and
- Amend the Highway Traffic Act and Public Vehicles Act to allow the installation of bike racks on buses that cross Regional boundaries.

**Active Transportation:** immediate action will be taken to enhance the Region's pedestrian and cycling opportunities. More specifically, the Region will:

- Implement the Regional and municipal pedestrian and cycling master plan policies;
- Encourage the study and implementation of local municipal pedestrian and cycling master plans; and
- Support the directions introduced in the Natural Heritage Discussion Paper.

**Travel Demand Management:** initially, York Region will work more closely with major employers to reduce single-occupant driving. In the next two years, the Region will:

- Require TDM plans or strategies for major development applications.

**Environmental Protection:** stricter measures will be imposed in the immediate future to enhance the environmental assessment process minimize impacts resulting from the planning and implementation of transportation infrastructure. These will include policies such as:

- When planning transportation corridor improvements and transportation facilities, the surrounding natural environment should be either avoided or enhanced;



- Co-ordinating the Region's road and transit networks as well as planning regimes with local and adjacent municipalities to minimize infrastructure needs and enhance the natural environment;
- Taking the opportunity to improve environmental functions and habitat connectivity through upgrades of existing crossing structures; and
- Developing a detailed roadway directional lighting strategy to minimize light pollution effects.

**Planning and Design:** will focus on the land use planning policies required to support future transit infrastructure plus improved cycling and pedestrian connections. General policies will include: improving site design guidelines, requiring minimum densities to support transit-oriented developments and ensuring that all transit stops are properly connected to sidewalks. More specific strategies will include:

- Amending the ROP to include TOD guidelines as Regional policy to promote sustainable development for higher order transit;
- Connecting all transit stops directly to sidewalks and adjacent buildings in urban areas;
- Adopting the Canadian Institute of Transportation Engineers (CITE) site design guidelines to promote sustainable transportation; and
- Working with local municipalities to develop alternative Regional street design parameters to encourage walking and cycling in Centres and Corridors.

**Marketing and Education:** in the immediate term, the focus will be on creating more awareness of sustainable transportation initiatives for residents of all ages and backgrounds. Programs and initiatives the Region wishes to initiate include:

- Actively working with the school boards and local municipalities to implement a number of programs which promote alternative and safe routes to school;
- Working with the municipalities to plan and implement regular car-free days to promote sustainability.
- Conducting a random sample public opinion survey with York Region residents and businesses every two years.

**Parking:** The immediate focus will be on making it easier for residents to carpool. As such, York Region will:

- Offering carpoolers preferential parking at all Regional facilities. Also offer preferential parking for vehicles powered by alternative fuels.





**Funding:** will focus on providing more funding for transit or transit-related projects. This will include the following policy:

- Requesting the province to modify the Development Charges Act to better support transit and sustainable transportation services in conjunction with Metrolinx.

**Intelligent Transportation Systems:** will include new technologies to enhance the safety and efficiency of transit vehicles cyclists, pedestrians and auto users. These policies will include:

- Reviewing the location of left turn lane detector loops on arterial roads;
- Reviewing the policy on pedestrian pushbuttons to improve tactile and visual response; and
- Discontinuing the use of pedestrian pushbuttons for pedestrian phases across the “minor” street that has a short pedestrian walk distance.

**Goods Movement:** to support the economic vitality of York Region and encourage environmentally sustainable goods movement, the Region will look for opportunities to provide input to goods movement studies, including:

- Working with the Province and Metrolinx to encourage and promote efficient, safe and sustainable goods movement.

**Roadway and Highways:** key policy and strategy pursuits will focus on making the Region’s transportation infrastructure more efficient and transit-supportive. Relevant policies will include:

- Initiating HOV2+ lanes for all road segments scheduled for widening to 6 lanes;
- Capping road widenings to a maximum of 6 through lanes, including transit lanes; and
- Working with local municipalities to plan and design comprehensive collector roads to accommodate YRT service, walking and cycling.

### 7.2.2 Short-term Actions (2-5 years)

York Region’s sustainable transportation policies and strategies recommended over the next five years will further support the major rapid transit improvements proposed in the Region through 2031.

**Transit:** in addition to many of the other transit initiatives in which the Region will be involved over the first five years, close co-operation with other agencies is essential to implement policies such as:



- Working with other agencies to implement fare integration and eliminate the zone based fare system;

**Environmental Protection:** specific measures will be developed in conjunction with local municipalities to design Environmental Best Management Practices to minimize the impact of infrastructure improvements on the environment. These include strategies such as:

- When planning new transportation facilities, consider all natural environment and heritage features;
- Working with local municipalities and the construction industry to develop Environmental Best Management Practices to minimize environmental impacts; and
- Reviewing and updating the Region’s winter maintenance management policies and practices.

**Planning and Design:** land use planning policies will require the densities and designs to support transit and pedestrian use. A key strategy will ensure municipalities move away from “big box” development towards more efficient mixed uses along rapid transit corridors. Additional policies include:

- Ensuring transit services and infrastructure are built into new subdivisions, employment areas and major commercial centres;
- Co-ordinating zoning bylaws, urban design guidelines, parking standards and site plan controls to ensure consistency with TOD guidelines; and
- Working with the local municipalities to implement a co-ordinated program of site design to fully accommodate transit and pedestrians.

**Travel Demand Management:** the Region’s TDM policies and strategies will be nearly fully developed at all levels in consultation with municipal agencies, school boards, hospitals, colleges and major employers. Strategies will include incentive programs designed to entice new transit users including employees, students and the elderly. Specific policies include:

- Finalizing the TDM strategy in consultation with municipal agencies, school boards, hospitals, colleges and major employers;
- Developing a TDM promotional plan in conjunction with municipalities and key stakeholders; and
- Encouraging all employers to implement TDM programs.



**Marketing and Education:** continued focus on creating more awareness of sustainable transportation initiatives for residents of all ages and backgrounds, which will include policies such as:

- Working with the local media to develop op-ed pieces or other articles/segments highlighting the Region's sustainable transportation initiatives developed in response to growing congestion;
- Working directly with area community and cultural centres to promote relevant sustainable transportation initiatives; and
- Working directly with large independent living facilities and retirement communities to promote relevant programs and initiatives.

**Parking:** key initiatives include mandating the provision of carpool preferential parking for employment uses, coordinating with local municipalities to establish a Parking Authority and developing specific parking strategies that support Regional Centres and Corridors. More specifically:

- Working with local municipalities to establish a Parking Authority that would set parking policy within York Region;
- Including on-street parking as part of the supply for development where possible; and
- Investigating the parking requirements and utility of car-share programs in close proximity to YRT/Viva terminals, GO stations and major employment centres.

**Intelligent Transportation Systems:** a continued focus will be on pursuing technologies to expand traveler information and provide signal priority for all Viva and YRT vehicles. These include policies such as:

- Expanding the Viva/YRT ITS program, to improve transit performance relative to single occupant vehicles;
- Developing and implementing a Transit Video Survey Tool once YRT has completed the system-wide deployment of on-board video surveillance systems; and
- Creating a web-based delivery of real-time traffic information to assist drivers in determining times and routes for travel;

**Roadway and Highways:** in addition to the important policy and strategy pursuits described within the next two years, the Region will "greener" designs of roads, including:

- In areas of low pedestrian activity, considering roundabouts as an alternative to signaling an intersection.



### 7.2.3 Medium-term Actions (5-10 years)

The medium-term policies will further support sustainable transportation infrastructure improvement. It is important to recognize that many of the policies planned and developed in the first five years will be more formally adopted in this time period.

**Travel Demand Management:** as a continuation of the TDM policies and strategies developed earlier, the Region will implement the policy to:

- Piloting employee individualized commuter plans that promote lower single occupant vehicle use.

**Environmental Protection:** builds on earlier measures developed to protect the environment, with the focus on working with local municipalities and developers to minimize the effects of parking facilities on the natural environment. Other policies include:

- Designing transportation facilities to celebrate the environment, through preservation of view corridors, design bridges to highlight the presence of watercourses, and other elements;
- Monitoring natural heritage and environmental feature impacts resulting from transportation projects and publish a bi-annual report card; and
- Developing environmental protection measures for transportation system elements to reduce vehicular-animal interaction and impacts on animal pathways.

**Planning and Design:** land use planning policies will continue to support and enhance transit and pedestrian use. Specific policies to be developed in the medium term include:

- Develop and provide a detailed Best Practices Planning Handbook to York Region and municipal staff, as well as the development community;
- Develop financial and zoning incentive programs to encourage TOD in the Regional Centres and Corridors; and
- Work with existing major auto-focused retail sites as these redevelop, to plan for transit-focused intensification within Regional Centres and Corridor.

**Marketing and Education:** continued focus on creating more awareness of sustainable transportation initiatives, including developing materials in several languages, developing curriculum, courses and programs to promote sustainable transportation initiatives to children, and providing a package of materials to new residents outlining the sustainable transportation services provided by York Region. These will include policies such as:

- Developing television programming on sustainable transportation throughout the Region;



- Mailing packages of materials regarding transportation services in the Region to all residents; and
- Developing curriculum/courses/programs with school boards and higher education institutions that promote the Region's sustainable transportation initiatives.

**Parking:** in the medium term, the focus is to implement the following policy:

- Adjust the quantity of long-term parking for commercial, employment and residential uses to reflect the level of transit services and other sustainable modes provided at those locations.

**Funding:** to support future sustainable transportation infrastructure and services, the Region will implement the following policies:

- Formulating models for more predictable transit subsidies that provide stable transit funding from the provincial and federal government; and
- Pursuing Public-Private Partnerships (P3) to fund sustainable transportation initiatives through such mechanisms as Design, Build, Maintain (DBM).

**Intelligent Transportation Systems:** will include the implementation of additional technologies to improve mobility, including policies such as:

- Implementing a comprehensive Advanced Traffic Management system throughout key areas of York Region;
- Integrating system-wide traffic signals through centre-to-centre (C2C) interface; and
- Requiring the Region's traffic control system to be compliant with the National Transportation Communications for ITS Protocol (NTCIP) to ensure ITS measures are implemented properly.

**Goods Movement:** the Region will develop specific strategies to ensure the efficient movement of freight, including:

- Developing an ITS plan for goods movements; and
- Planning for effective freight movement systems that minimize impacts on the road network.

#### 7.2.4 Long-term Actions (10+ years)

Many of the policies proposed to be implemented in the first ten years will be carried forward well past their initial point of implementation. Beyond the first ten years, in support





of the Region's desire for sustainable transportation initiatives, two important long-term initiatives will be explored. A description of the long-term actions considered by the Region is provided below.

**Funding:** As a means to fund sustainable transportation infrastructure and services, as well as to discourage SOV use, the Region will:

- Explore road user fees in highly congested urbanized areas. (this may just redistribute traffic in inappropriate ways. Road user fees should be area wide throughout the GTA in a manner that does not disadvantage one municipality with respect to another – implementing user fees within York Region alone would leave the Region at a disadvantage).

**Goods Movement:** the Region will consider pursuing the following policy within the most urbanized areas:

- Restricted delivery times by heavy vehicles to mid-day periods outside of peak commuter travel times within Regional Centres and along Regional Corridors.

### 7.3 PROPOSED PHASING: RAPID TRANSIT CORRIDORS

York Region has identified several potential rapid transit corridors that are considered at the heart of the Region's Vision to address growth in a more sustainable manner. The rapid transit corridors will operate in most urbanized communities – providing connections to cycling and pedestrian routes, local feeder buses, employment centres and other York Region attractions. Plans are now in motion for some rapid transit corridors to be operating by 2013, while others are more long term.

A basis for the phasing of rapid transit corridors was provided by the Metrolinx Regional Transportation Plan and by its Top 15 priorities. Projects from Metrolinx's priority list that directly impact York Region are listed below in the funding categories used for the Top 15 priority projects.

#### **Those being funded by other sources (not included in Metrolinx Capital Plan)**

- Toronto York Spadina Subway Extension
- Peel Queen Street Rapid Transit

#### **Category A (ready to proceed to Implementation in 2009/10)**

- York VIVA
- Sheppard East LRT



### Category B (remaining quick win projects)

- Bolton GO Transit

### Category C

- North Yonge subway Extension
- Finch West LRT

In the Spring of 2009, the Province announced funding totaling about \$10 billion for the following 5 projects which are to be constructed over the next 5 to 6 years:

- York Viva (VivaNext) rapidways
- Scarborough Rapid Transit expansion
- Eglinton Avenue LRT
- Finch Avenue LRT
- Sheppard Avenue East LRT

A description of the proposed phasing plan for the recommended rapid transit corridors is provided below. The phasing was developed to address future residential densities, population and employment growth, as well as projected transit ridership along individual corridors. A more rigorous assessment of the feasibility of rapid transit service along each corridor will be undertaken in separate environmental assessment studies. Through this process, and in consultation with residents and stakeholders, a preferred rapid transit technology will be identified, as will an alignment that best suits the needs of the study area.

#### 7.3.1 Short-term (0-5 years) – Figure 7.1

##### VivaNext Bus Rapid Transit Corridors (*on Yonge Street, Highway 7 and Davis Drive*)

York Region recently completed a Municipal Class Environmental Assessment evaluating the potential for bus rapid transit service on Yonge Street from 19th Avenue to Davis Drive in Newmarket and extending further north to Green Lane in East Gwillimbury, including rapid transit on Davis Drive and Green Lane. This completes the Environmental Assessment for all four rapid transit corridors identified in the 2002 TMP. This will allow York Region to embark on the VivaNext implementation of rapidways along the following segments of the Viva network:



- Highway 7 from Pine Valley Drive to the Kennedy GO Station;
- Yonge Street from the Highway 7 to 19th Avenue;
- Yonge Street from Mulock Drive to Davis Drive; and
- Davis Drive from Yonge Street to the Southlake Regional Health Centre.

In the March 2009 Provincial Budget, \$1.4 billion was announced for the VivaNext program. Detailed design works for various components of VivaNext are progressing well and construction is scheduled to begin in the Fall of 2009.

### **Spadina Subway Extension** *(to the Vaughan Metropolitan Centre)*

**Subway extension by 2015:** The Toronto - York Spadina Subway Extension is an 8.6 kilometre extension from Downsview Station north-west through York University, and north to the Vaughan Metropolitan Centre in York Region. There are three station sites currently planned in York Region: the Steeles West station east of Jane Street at Northwest Gate; the Highway 407 station west of Jane Street; and the Vaughan Metropolitan Centre station near Highway 7 west of Jane Street. All funding approvals have been obtained and construction of this project is underway.

### **Yonge Street Subway Extension** *(to the Richmond Hill Centre)*

**Subway extension by 2018:** York Region partnered with the City of Toronto and the TTC to assess the feasibility of extending the Yonge Street subway from the Finch Station to the Richmond Hill Centre (at Yonge Street and Highway 7). Conceptual and Functional Planning studies provided an evaluation of alignment alternatives, station locations and associated facilities in consultation with public and government stakeholders to develop a technically feasible solution, including preliminary construction methods. The project included planned improvements to address current service levels and existing capacity.

Toronto City Council and York Regional Council approved a Staff Report with amendments supporting the submission of an Environmental Project Report as part of the Transit Project Assessment Process. A Notice of Completion was issued and published on February 2nd, 2009. An unconditional approval of the Yonge subway extension EA was received on April 6, 2009.



### 7.3.2 Mid-term (10 years) – Figure 7.2

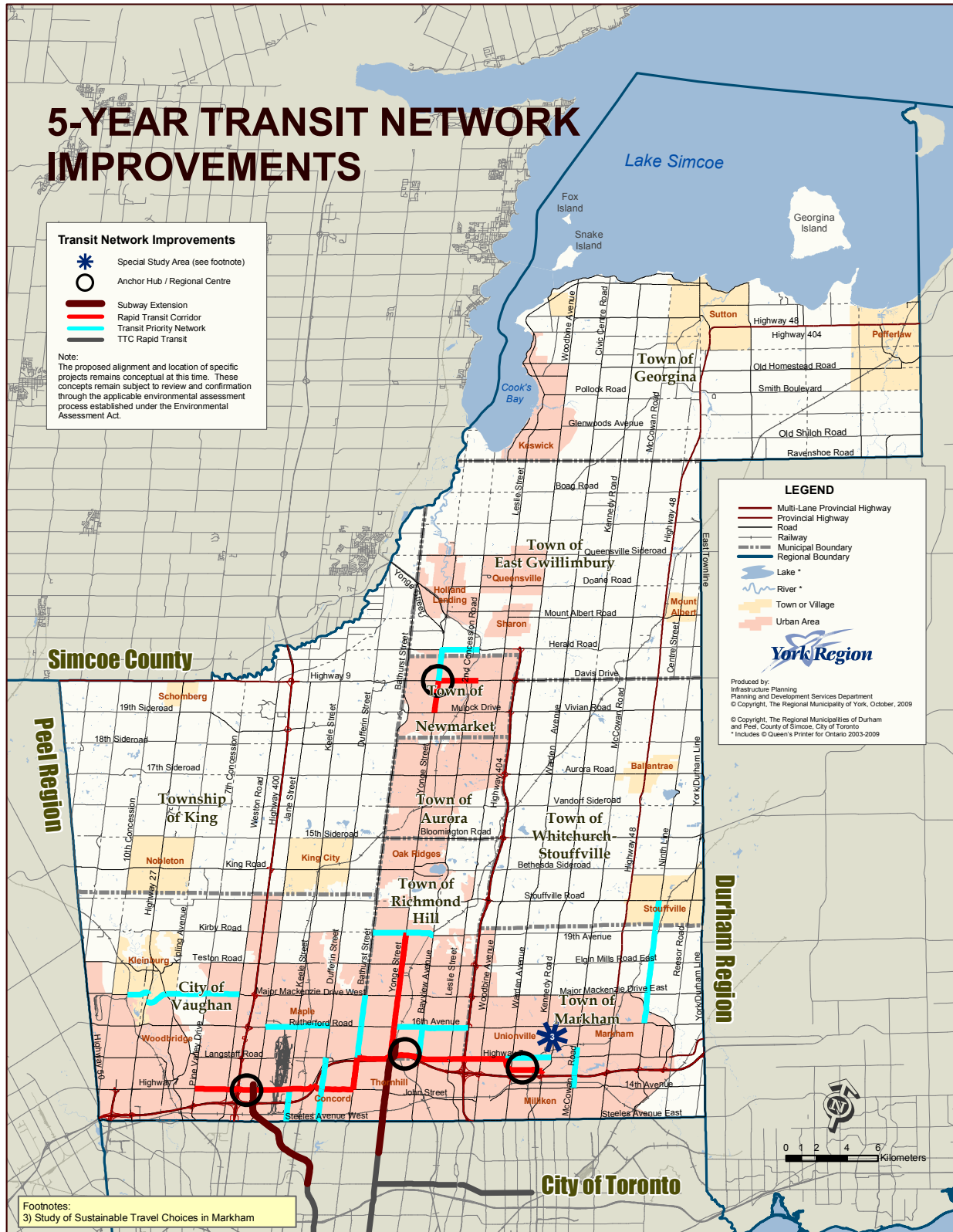
#### Leslie Street Rapid Transit Corridor (*Steeles Avenue to Highway 7*)

This rapid transit corridor has been identified as an extension of the Don Mills LRT proposed as part of the Toronto Transit City initiative. Outside of the Central Business District in the City of Toronto, the area in the vicinity of the Leslie Street and Highway 7 intersection in York Region has one of the largest concentrations of professional and technical jobs in the Greater Toronto Area. This represents a strong base of captive riders that are currently using YRT, Viva or the TTC to access this area, or using private vehicles as the preferred mode of choice because of the lack of a high speed, high capacity and reliable transit alternative.

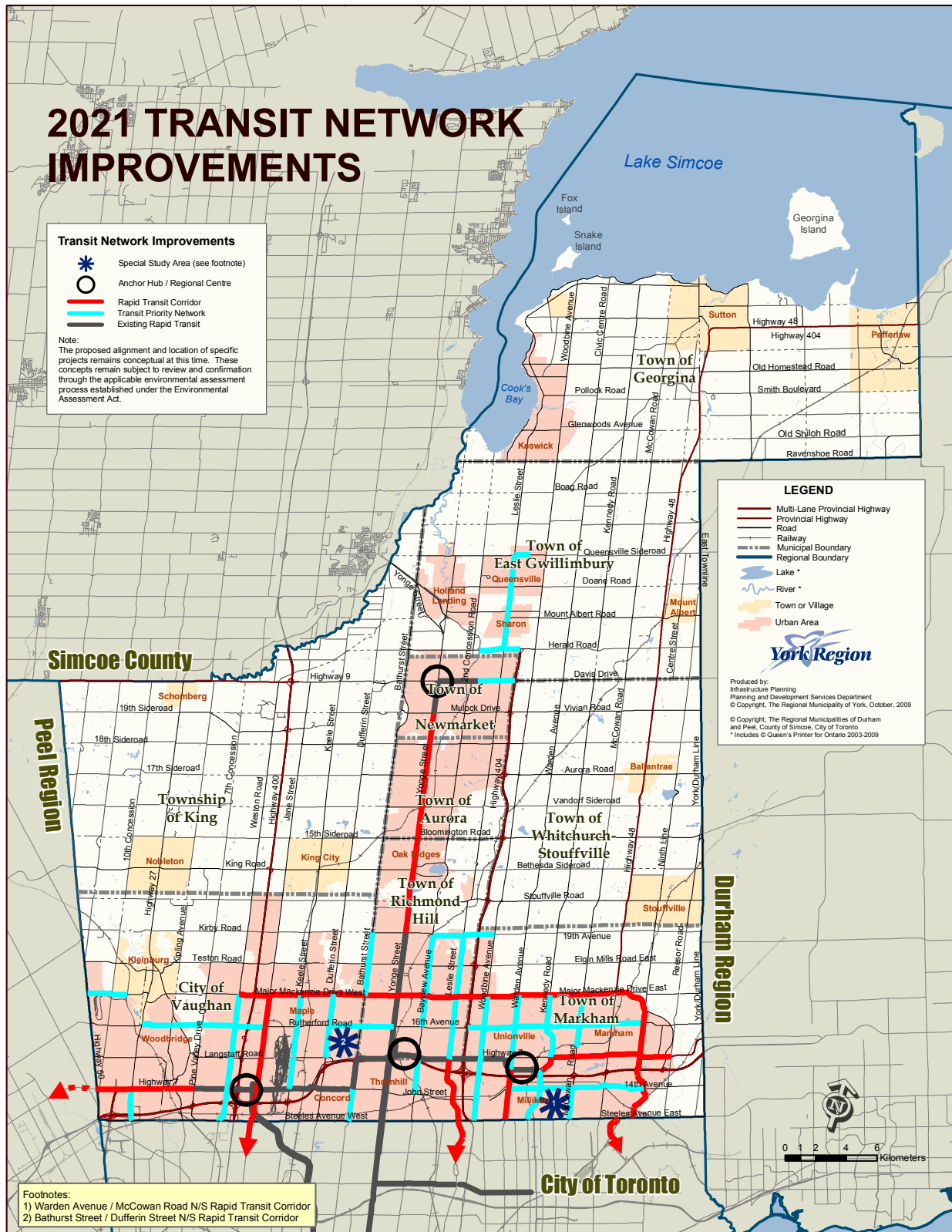
#### Major Mackenzie Drive Rapid Transit Corridor (*Weston Road to Ninth Line*)

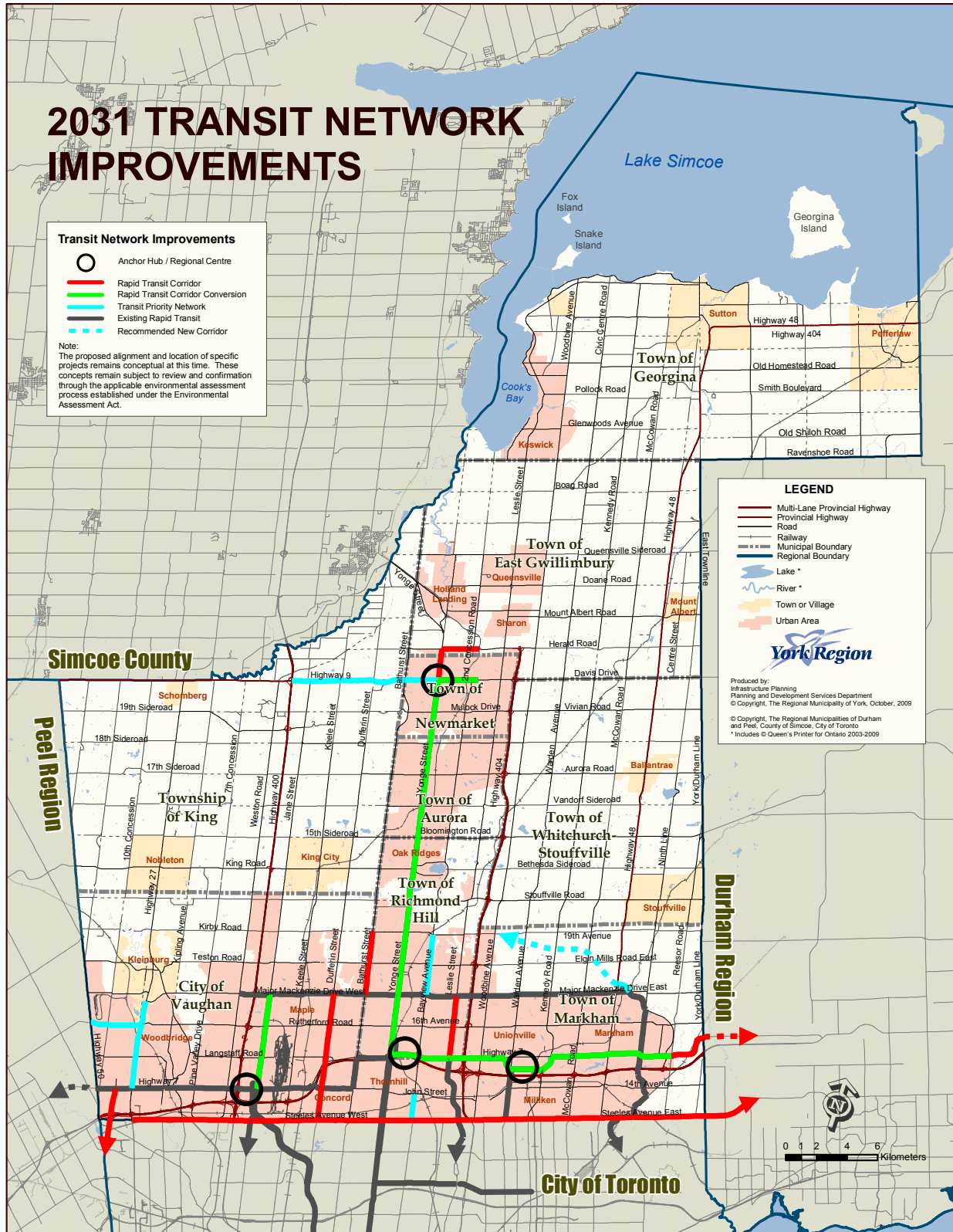
Major Mackenzie Drive is one of the more densely populated corridors in Vaughan, Richmond Hill and Markham, with the highest densities adjacent to Highway 400, Yonge Street and McCowan Road. By 2031, the travel demands on the east-west arterials in the southern portion of York Region are projected to be far greater than the potential roadway capacity of the system. Further, significant transit ridership (2,000 in the peak hour and peak direction) is projected along this corridor by 2021 because it would act as the primary mid-Regional rapid transit route serving east-west travel demands. The significant population and employment growth projected along Major Mackenzie Drive and in the three municipalities in general, combined with high levels of traffic congestion projected in the immediate area, justifies the need to consider rapid transit service along this corridor by 2021.

Appropriate mitigation measures should be identified in further studies to minimize or avoid impacts to environmental features, including several small woodlands and creeks.











### Jane Street Rapid Transit Corridor (*Steeles Avenue to Major Mackenzie Drive West*)

The Spadina subway extension is projected to be in place by 2015 providing a flexible, high capacity and high speed alternative for trips to and from the Vaughan Metropolitan Centre and the Region in general. Additionally, the Jane LRT proposed by the City of Toronto is anticipated to be built by 2021. Extending a rapid transit corridor along Jane Street is expected to tap into Vaughan's employment and population growth planned along the Highway 400 and Weston Road corridors. Close to 1,700 riders are projected to use this transit line in the peak hour and peak direction.

Rapid transit service along this corridor by 2031 is foreseen as an extension of the Jane LRT line proposed by the City of Toronto. It is expected to greatly improve mode choices for the population and employment at the Vaughan Metropolitan Centre and adjoining areas. The rapid transit corridor would provide a direct connection to the Spadina subway extension at the Vaughan Metropolitan Centre, and as noted above, to the Jane LRT proposed by the Toronto as part of the Transit City initiative. It will connect significant catchment areas, such as the proposed employment lands along Weston Road and Highway 400, Canada's Wonderland and Vaughan Mills Mall to the Vaughan Metropolitan Centre, and further south to York University.

### Ninth Line Rapid Transit Corridor (*Steeles Avenue to Major Mackenzie Drive East*)

This segment of the rapid transit network would improve connections to the Cornell community and Markham-Stouffville Hospital. By 2021, over 1,000 riders are projected to use this line in the peak hour and peak direction; and by 2031, ridership is projected to exceed 1,400 riders during the peak hour. As noted above, both an increase in population to the west of Ninth Line as well as increases in employment at Highway 7 and Ninth Line will provide the appropriate support for the Ninth Line rapid transit corridor.

### Warden Avenue – McCowan Road Rapid Transit Corridor (*Steeles Avenue to Highway 7*)

The Warden Avenue rapid transit line is contingent on the implementation of the Steeles Avenue rapid transit corridor. It would provide a north-south rapid transit connection between the Highway 7 and Steeles Avenue rapid transit corridors improving mobility and accessibility to the new Markham Centre mobility hub. In the Metrolinx RTP, a rapid transit line connecting Markham Centre to the Scarborough Town Centre is identified in the 25-year network plan. In this TMP Update, a further study is recommended to analyze the need for one or two north-south rapid transit corridors in Markham by 2021.



### 7.3.3 Long-term (20 years) – Figure 7.3

#### Steeles Avenue Rapid Transit Corridor (*Highway 27 to York-Durham Boundary*)

Steeles Avenue is one of the more heavily traveled roads in the Region, with traffic volumes ranging between 45,000 and 58,000 vehicles per day.<sup>1</sup> This is due in large part to the robust commercial activity along Steeles Avenue in Vaughan and Markham, as well residential intensification that exists at Ninth Line, McCowan Road, Yonge Street and Bathurst Street. Regional projections suggest that Steeles Avenue will continue to develop, with especially large employment growth projected in western Vaughan through 2031. Projected transit ridership is estimated to be 2,000 riders in the peak hour and in the peak direction by 2031, which meets the threshold established for a rapid transit corridor. Past studies completed for the Toronto Transit Commission (TTC) have already identified Steeles Avenue as an appropriate corridor for rapid transit service, connecting to other proposed or existing transit corridors in southern York Region. It is important to acknowledge that this project is identified in Metrolinx's Regional Plan as an approved project for the future.

#### Bathurst - Dufferin Street Rapid Transit Corridor (*Steeles Avenue to Gamble Road/19th Avenue*)

Bathurst Street through Vaughan and Richmond Hill is one of York Region's most congested roads, with traffic volumes ranging between 40,000 and 44,000 vehicles per day.<sup>2</sup> Likewise, Dufferin Street experiences very high traffic volumes (41,000 to 77,000 vehicles per day<sup>2</sup>). Medium residential and commercial densities extend along much of Bathurst Street, with lower densities existing along Dufferin Street. Significant population and employment growth along Bathurst Street is projected north of Steeles Avenue up to Major Mackenzie Drive; and along Dufferin Street between Rutherford Road and 19<sup>th</sup> Avenue. As a result of this projected growth, and to serve the nearly 1,200 riders in the peak hour and peak direction projected to use transit along this corridor, rapid transit service along the Bathurst-Dufferin Street corridor should be explored further to determine alignment and limits of the potential rapid transit line.

### 7.3.4 Transit Priority Network Improvements

The use of Transit/HOV lanes is identified as a Region-wide initiative for enhancing and giving priority to transit service and promoting transit-oriented development. The forecasted employment and population growth for the Region will warrant the widening of some roadways. Road widenings for Transit/HOV lanes will only be recommended through an Environmental Assessment study and only after other less intrusive measures

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<sup>1</sup> Average Annual Daily Traffic (AADT) measured by the City of Toronto

<sup>2</sup> Average Annual Daily Traffic (AADT) measured by York Region



such as queue-jump lanes and transit signal priority have been considered. These potential improvements are needed to support improvements in transit service which would otherwise be caught in traffic congestion and is needed to support compact, community-based development.

In concert with the phasing of the new rapid transit corridors, major trunk and feeder bus services must be given preferential treatment over automobiles to maintain service levels in terms of speed, frequency and reliability. The performance of these local transit corridors is critical to the success of the rapid transit network. To that end, the transit priority network improvements are phased to accommodate the phasing of growth and the rapid transit network as depicted in Figures 7.1 to 7.3.

### 7.3.5 Conversion of Transit Technologies

Figure 7.3 also depicts transit corridors that are recommended for conversion of transit technologies in the 2031 timeframe. As ridership levels increase, some of the lines that are recommended as part of the initial short term Transit Priority Network will need to transition from HOV and/or queue jump lanes to rapidways. The travel corridors that are recommended for this transition from Transit Priority Network to rapid transit include:

- Leslie Street from Highway 7 to Major Mackenzie Drive;
- Dufferin Street from Steeles Avenue to Langstaff Road;
- Yonge Street from Davis Drive to Green Lane; and
- Green Lane from Yonge Street to the East Gwillimbury GO Station.

Rapid Transit Corridors recommended for conversion from BRT to LRT by the 2031 horizon include the following segments:

- Yonge Street from Highway 7 to Davis Drive;
- Highway 7 from Yonge Street to Reesor Road;
- Jane Street from Highway 7 to Major Mackenzie Drive; and
- Davis Drive from Yonge Street to the Southlake Regional Health Centre.

Conversion of these transit corridors will depend on the level of ridership and travel demands in the future. As the initial technologies for the corridors are implemented, the ridership levels on the various segments will be monitored. Refinement of the segments, timing of the implementation, and the appropriate technologies will be based on the monitoring and adjusted as needed in future assessments of the transit corridors.





### 7.3.6 Conformance with the Metrolinx Regional Transportation Plan (The Big Move)

The approved Metrolinx RTP contains policies that require municipal plans to conform to the RTP. Enabling legislation is being developed to put these policies into effect.

The York Region Master Plan Update is closely aligned with the Metrolinx Regional Transportation Plan. The two plans are consistent in the following areas:

- focus on sustainability and non-auto modes of travel;
- transit network recommendations that are similar if not identical; and
- policies and initiatives that are complementary.

As to be expected, the recommended rapid transit network in the Transportation Master Plan is slightly different from the RTP network plan for York Region. The majority of rapid transit lines in the recommended transit network are included in the Metrolinx 25-year Network Plan. However, York Region has undertaken a more thorough analysis of its needs and taken a more aggressive approach to sustainable transportation. Not identified in the Metrolinx 25-year network plan is the Bathurst-Dufferin line. As well, the Major Mackenzie Drive line is identified by Metrolinx as needed beyond the 25-year timeframe, whereas the Region has determined that this will be a vital corridor in the nearer future.

The slight network differences are likely the result of differences in the base assumptions of future conditions, that primarily being the growth projections and development phasing.

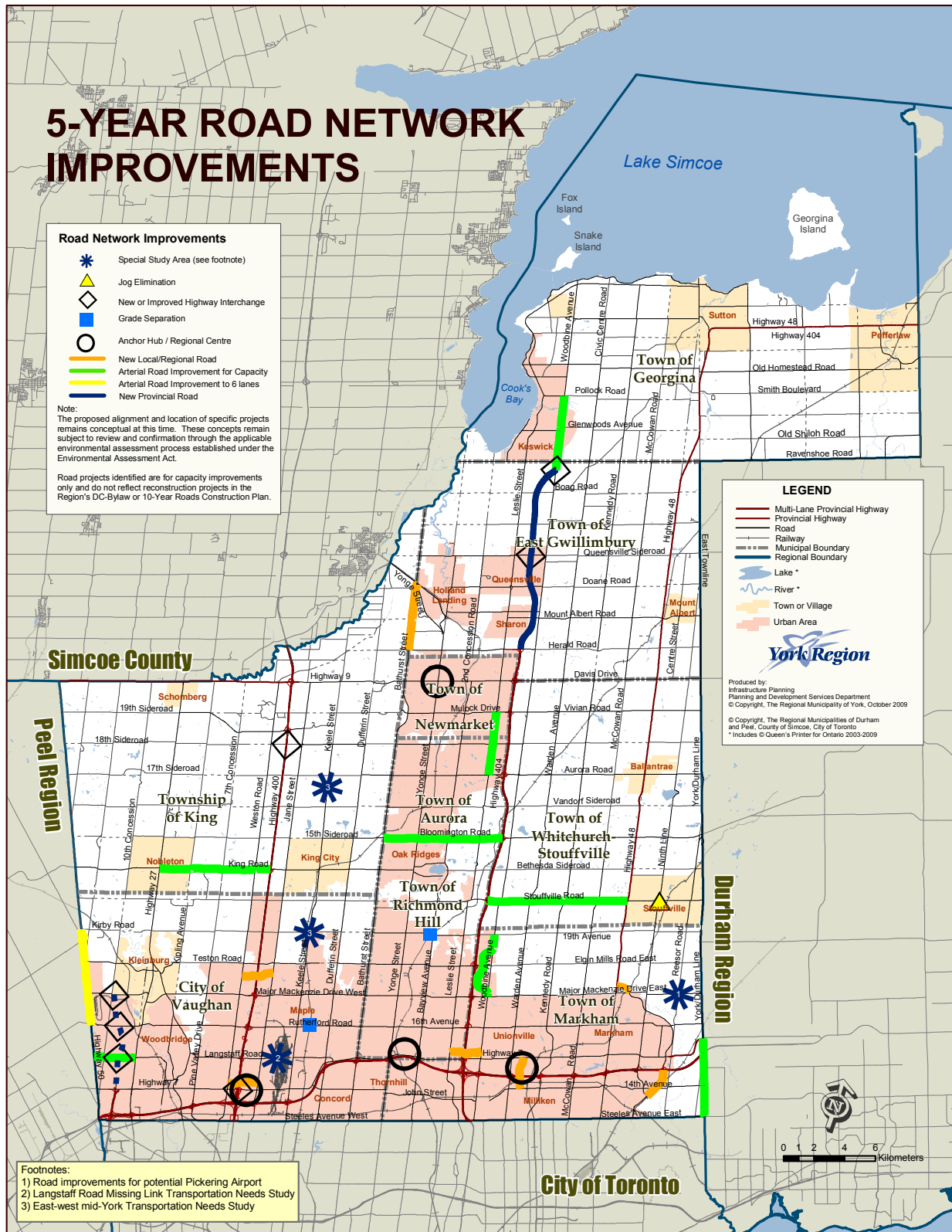
On the assumption that consistency and complementary network plans and policy recommendations define conformance, the updated Transportation Master Plan meets this condition and is therefore in conformity with the Metrolinx RTP. Ultimately, the definition of conformance will be determined by the Province through the Provincial Transportation Planning Policy Statement which is being developed for approval in mid-2010.

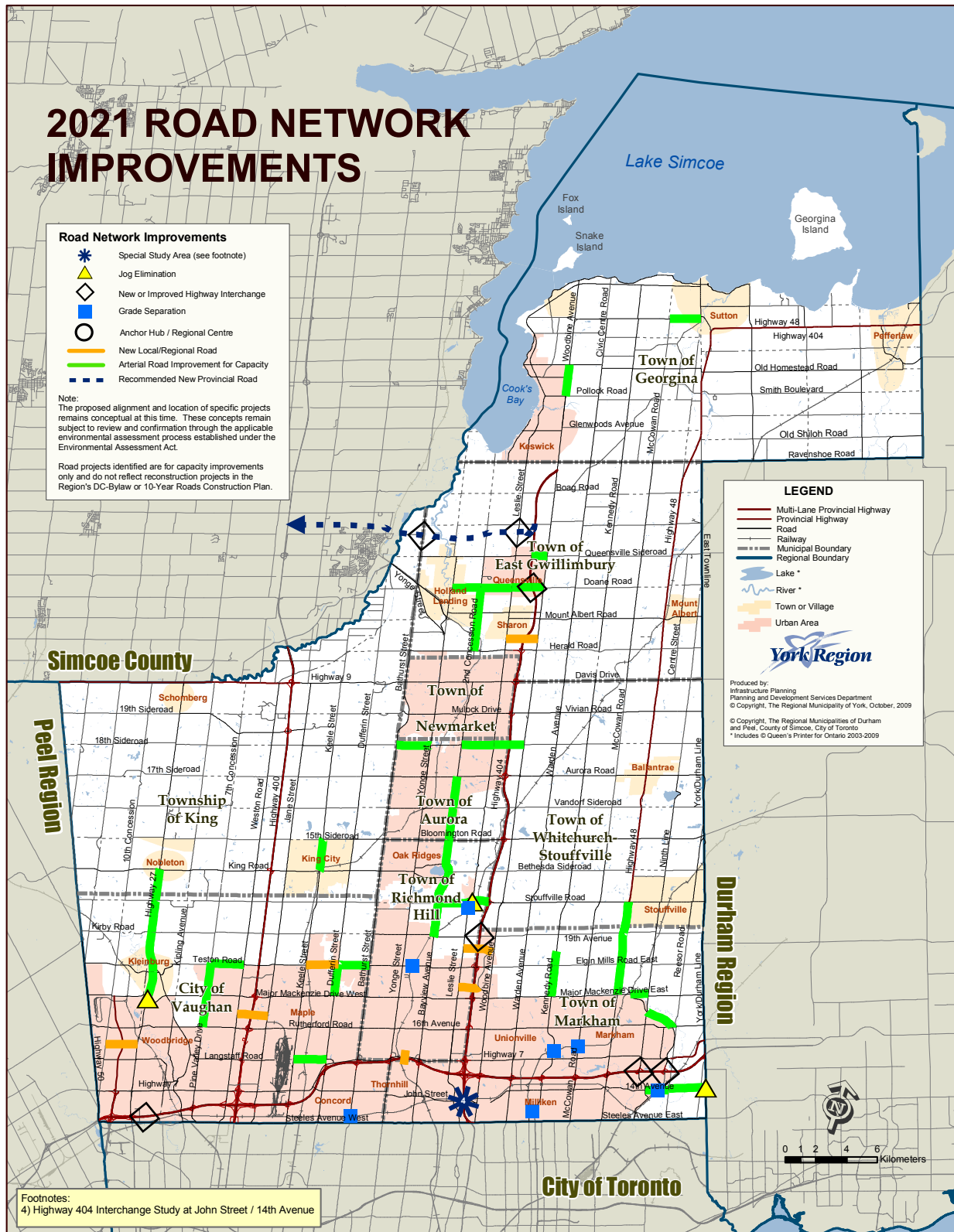
## 7.4 PROPOSED PHASING: ROADWAYS

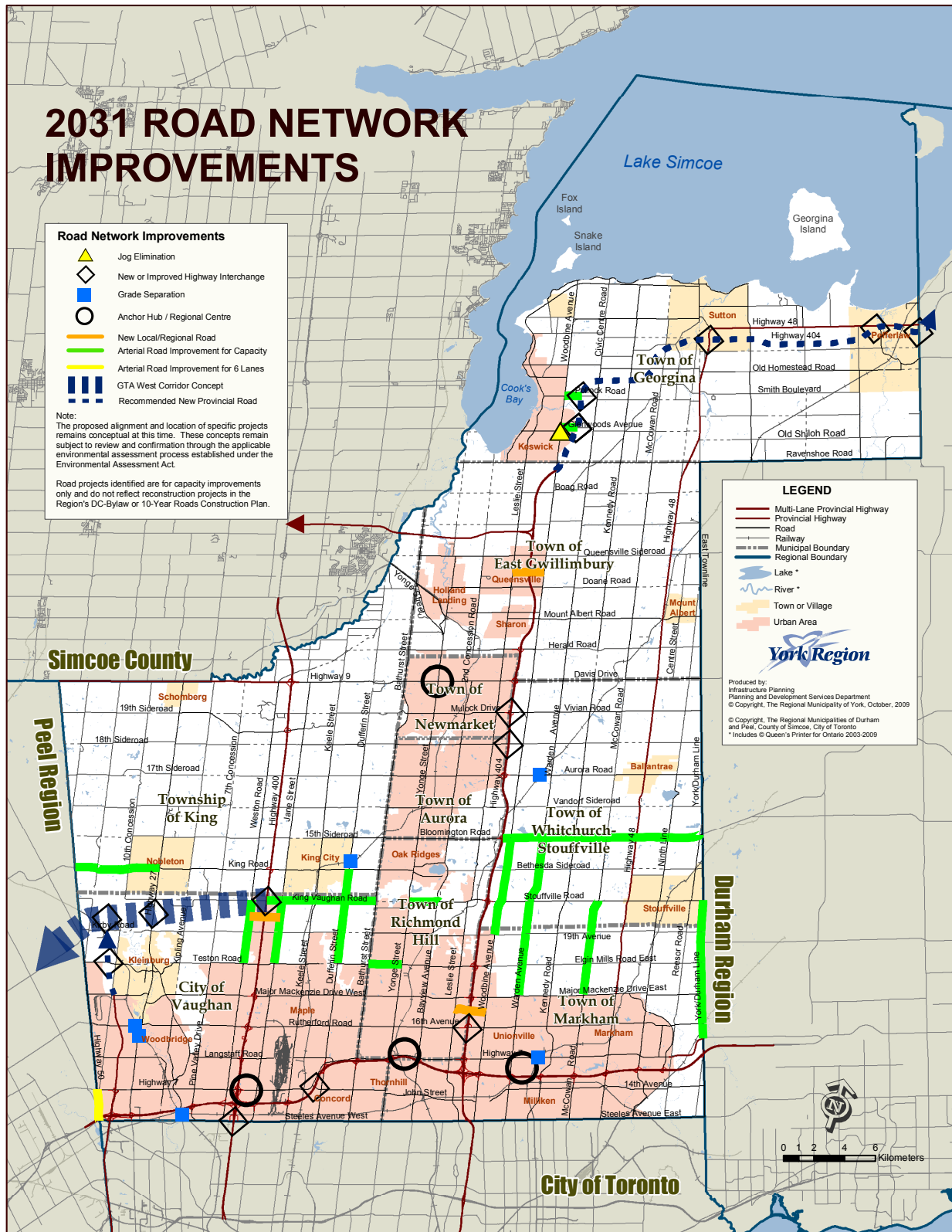
Based on the proposed enhancements to the Regional roadways, phasing plans have been developed which will provide a schedule for the roadway widenings and new road links that are necessary to accommodate the future growth in Regional population.

The road improvement phasing plans illustrated in **Figures 7.4, 7.5 and 7.6** are developed to support completion of the Regional road grid and to support major growth areas as early as possible.

Many other roadway improvements are also planned but are required primarily to provide transit priority. These roadway transit priority improvements are described in Section 7.3.4.









## 8.0 IMPLEMENTATION STRATEGY

To-date the implementation of the rapid transit plan, Phase 1, has been a complete success, thanks to the direction of Regional Council, the financial commitment of senior levels of government, the support of regional staff and a clear and effective action plan. Building on the Region's tremendous success, the Region needs to continue to advance a long term strategy and plan. This strategy must be based on sustainability and aim to serve the "4 R's":

- Developing initiatives and strategies to **R**educe the need for travel;
- Providing more convenient and reliable **a**lte**R**native modes;
- Enhancing public **t**Ransit by improving existing infrastructure and services; and
- Optimizing **R**oads to accommodate all modes of travel, and expand roadways only when necessary.

In order to ensure continued success, the Region will need to evaluate and review its transportation organizational, governance and financial structure, to ensure that the new sustainable transportation strategies are being addressed and put into effect through a predictable financing model. This is discussed in greater detail in Section 8.2.

As might be expected, funding the plan will be the most significant challenge to realizing the transportation objectives. Construction cost increases and the doubling of rapid transit corridors required by 2031 have all contributed to a significant jump in the overall cost of the Master Plan relative to the 2002 TMP figures. The plan as developed is ambitious but it is also essential to address York Region's growing needs. York Region will not be able to do it alone without the financial assistance of both the provincial (Metrolinx) and federal governments.

### 8.1 PRICING THE TRANSPORTATION MASTER PLAN

The Transportation Master Plan Update is an undertaking that can only be implemented to the extent that funding is available. The recognition of the Region's transportation needs is acknowledged by the commitment to-date in transit infrastructure investments by the Province and Federal governments. Capital investments in the Region by the Province and the Federal government are vital to the successful implementation and continuation of the initiatives laid out in this update. From the Region's perspective, the Plan will have to consider long term financing solutions such as bold, new and sustainable funding sources.

The following table provides a breakdown of the Transportation Master Plan Update projected costs. The TMP projects that transit expenditures up to and including 2031 are





in the order of \$14.7 billion, plus an additional \$3.5 billion for roads. A detailed breakdown of the transit and road cost by corridor is provided in **Appendix O**.

Table 8.1 Preliminary 2031 Cost Estimates

	COSTS (Millions) <sup>1</sup>	
	Capital	Annual Operating
<b>REGIONAL TRANSIT</b>		
Infrastructure Expansion <sup>2</sup>	12,500	
Rehab/replacement	2,150	
<b>Subtotal</b>	<b>14,650</b>	<b>700</b>
<b>REGIONAL ROADS</b>		
Infrastructure Expansion <sup>3</sup>	2,540	
Rehab/replacement	1,000	
<b>Subtotal</b>	<b>3,540</b>	<b>80</b>
<b>PROGRAMS &amp; INITIATIVES</b>	<b>150</b>	<b>10</b>
<b>TOTAL</b>	<b>18,340</b>	<b>800</b>

Notes:

1. 2008 dollars
2. Excludes GO Rail improvements
3. Excludes provincial highway and interchange improvements

The 2031 TMP costs were estimated based on a number of factors. Site specific costing information was available for some corridors such as the Spadina Subway extension, what was identified in the capital budget and a number of other rapid transit corridors previously examined by the York Region Rapid Transit Corporation. Where more detailed information on specific corridor plans is not available, generalized per kilometre rates and unit values were used to estimate the costs. The unit rates for transit and road infrastructure costs were generated from actual York Region experience, where available, or from industry established estimates and adapted to suit York Region's needs. Annual road and transit maintenance and operating costs are again based on York Region's experience, where available, as well as industry costs elsewhere such as from the TTC.

### Doubling of rapid transit network contributes to Master Plan cost increase

The total Transportation Master Plan Update costs up to 2031 are estimated to be \$18.3 billion dollars, in 2008 dollars. When compared to the previous 2002 Master Plan the estimated costs were \$11.7 billion dollars, in equivalent 2008 dollars. The roads portion of the estimates has not changed significantly since 2002, having increased from \$2.7B in the 2002 TMP (adjusted to 2008 dollars) to approximately \$3.5 B in this Update. The increase in estimated costs over the 2002 estimate can be explained by the following four reasons:



- A significant amount of additional rapid transit infrastructure is needed to address growth;
- The overall recommended plan is designed to meet the sustainability goals of the Region, which means a higher emphasis on transit-related solutions;
- The cost of construction for various components of transportation projects has increased; and
- As the network of transit service is expanded and levels of service are enhanced, there will be substantial increases in operating costs.

These factors in combination drive the estimated cost of the updated Transportation Master Plan up when compared to the adjusted figure for the 2002 TMP.

### Senior level government investment will be key to the success of this Master Plan

In terms of funding, it is assumed that all of the major rapid transit projects in York Region will be funded by Metrolinx or cost-shared with senior levels of government. All of the funding arrangement details may not be known at this time, but the basic premise is that most if not all capital infrastructure costs will be shared with senior levels of government. York Region will be responsible for all the transit and road operating costs, rehabilitation costs and other minor capital transit and road costs.

Of the proposed \$14.7B overall transit expenditure, it is estimated that York Region's preliminary share of the rapid transit network cost could be as low as \$2.6B, based on the following assumptions:

- That all projects in the draft Metrolinx Regional 25-year Network Transportation Plan will be fully funded by senior levels of government;
- Similar to the other projects in the Metrolinx Plan, the Major Mackenzie Drive line, the links to Major Mackenzie and the Bathurst-Dufferin line costs will be fully funded by the Province and Federal Government;
- The conversion cost of BRT lines to LRT technology are shared equally at one-third each by York Region, the Province and Federal Government; and
- Two-thirds of the cost to extend the Spadina Subway to Highway 7 has been committed by senior levels of government. The Region's share of the remaining one-third is approximately \$391M.

### Asset maintenance and management will become important issues for York Region

The asset rehabilitation and replacement costs are also estimated to be much higher than today for both the transit and road components. The Region's infrastructure is aging and demanding greater resources and attention. It is estimated that over the next 20 to 25 years, the cost of maintaining our transit and road system will total \$2.2B and \$1B,



respectively. The Region will need to develop a comprehensive asset management strategy to help manage its transportation system.

With an expanding transit and road system, the gross operating costs will also be substantially higher. The transit system cost will increase most rapidly to over \$700M per year by 2031. The road operating costs are estimated at \$80M per year by 2031.

Programs and policies to optimize and maximize the capacity and efficiency of the transportation networks will be important components of the transportation system.

Policies and programs costs have been estimated to be approximately \$150M. Unlike the infrastructure costs associated with the transit and road networks where unit costs are available, the costs of programs and strategies associated with the draft policy recommendations are more difficult to estimate. The programs and strategies include transportation demand management (TDM) measures, outreach and incentive programming for sustainable travel modes, special transportation studies and additional staffing resources. Without the benefit of having defined these components to a higher level of detail, it has been estimated that the costs of programs and strategies should be capped at 1% of the total transit and road infrastructure capital costs, which is \$150M.

#### Key considerations to successfully implement the Master Plan

In terms of costing and the subsequent funding of the Plan, the following key points must be noted:

- The transportation investment needed to address legislated growth in York Region is significant;
- York Region alone cannot bear the burden of the capital and operating cost requirements;
- The work of Metrolinx through its Regional Transportation Plan and associated Investment Strategy, and Provincial and Federal government funding to support the RTP will determine York Region's ability to accommodate the legislated growth; and
- York Region, its local municipalities, Metrolinx, the Province and Federal government must work together to ensure that continuous and necessary transportation investments are made in York Region over the next 25 years.

To address the growth projected over the next 25 years and to meet the sustainability goals of York Region, the Transportation Master Plan Update has recommended an extensive list of transit and road network improvements and policies and programs. These recommendations represent a significant increase in capital investment compared to the 2002 Transportation Master Plan, particularly for the rapid transit system. The gross investment needed to implement the recommendations of this study is in the range of \$18.3B. The current best estimate is that York Region's share of the capital cost of the recommended rapid transit network is about \$4.7B and \$3.5B for roads. This estimate is



based on a set of assumptions that must be discussed and negotiated with Metrolinx and the Province over the next months and years. It assumes significant contributions each from the governments of Ontario and Canada for projects within and outside the 25-year network of the Metrolinx Regional Transportation Plan.

## 8.2 FUNDING

The following are four recommendations for the Region to follow in order to achieve the necessary level of funding for the TMP:

- Based on the Region's 25-year Fiscal Impact Analysis, the Region should work with Metrolinx to consider appropriate funding mechanisms and levels; and recommend a strategy for the future that is sustainable and in concert with the Metrolinx Investment Strategy Plan. It is important that the Region advocate that its needs are met while maintaining consistency with the Metrolinx Plan and complementary federal funding;
- Continue to seek support for guaranteed cash flows from the federal and provincial governments that can be used to service debt and accelerate investment;
- Work with the Province to modify the Development Charges Act to guarantee more support for transit and other sustainable transportation services; and
- Consider alternative methods of delivery for major infrastructure projects.

In terms of funding, the Metrolinx Plan references the MoveOntario 2020 plan which commits the Province to fund two-thirds of identified rapid transit projects with the remaining one-third anticipated to be provided by the Government of Canada. The \$17.5B MoveOntario 2020 announcement, of which \$11.5B has been committed by the Province, will fund the first part of the \$50B Metrolinx Plan. Within five years, Metrolinx in cooperation with the all the GTHA regions, will finalize an investment strategy to fund the remaining part of the plan.

Several alternative financing options are available to the Region, some of which are more suitable than others to implement. A discussion of potential financing options is provided below:

### 8.2.1 Improved Development Charges Act

For several years, the Region has used development charges and debt financing to finance a significant portion of its capital costs. In many cases, debt issued to finance a project is repaid, in part, by development charges. The use of debt financing continues to be a sound practice as it essentially spreads the cost of the asset over its useful life and is paid, at least in part, by those that are benefitting from the use of that asset. York Region may wish to consider a similar debt financing approach for the TMP projects and more specifically on all future purchases of standard buses, as well as LRT and BRT vehicles.



Development charges, currently employed by the Region, are an equitable form of taxation to pay for the public infrastructure necessary to support new developments. Development charges are imposed by York Region to recover the growth-related capital costs from residential and non-residential development that creates the need for the capital works. As the majority of York Region's capital expenditures are due to growth, development charges are a major source of funding for York Region's capital plan.

The Development Charges Act, 1997 states that costs eligible to be recovered from Development Charges must be calculated using a service level based on the average of the previous ten years. This penalizes municipalities like York Region that are introducing new services, as there is a minimal historic service level, which results in a smaller component of future costs that can be recovered. As well, transit services are treated differently from roads in two significant ways. First, unlike capital expenditures on roads, a mandatory 10% reduction in costs eligible for recovery from development charges must be applied to transit capital expenditures. Second, although municipalities plan roads and transit as an integrated transportation system, a separate calculation of historical service levels must be undertaken for transit services. This further reduces the total transit capital expenditures eligible for recovery. Therefore, York Region, in partnership with other GTA municipalities, will be persuading and working with the Province to amend the Development Charges Act to provide more support for transit and other sustainable transportation services.

### 8.2.2 Tax Increment Financing (TIF)

Tax Increment Financing (TIF) is a tool that has been used primarily in the United States to finance redevelopment and community improvement projects. The principle of a TIF is to use the potential of higher property taxes resulting from the proposed improvements to finance the improvements themselves. TIF financing is normally applied only to larger infrastructure projects, due to the complexities of the contractual arrangements involved.

Although there has been no application so far, there is recent legislation in Ontario that permits Tax Increment Financing tools to be used to incentivize development opportunities. Although additional regulations are still required, TIFs are currently available for use on the Spadina Subway extension and on the Toronto Waterfront to assist in funding the revitalization of the lands adjacent to the Gardiner Expressway, should a decision be made to alter or remove the expressway. It should be noted that TIFs in Ontario are applied differently than they are applied in the United States.

York Region is embarking on some major new transportation projects, such as the Spadina and Yonge Subway extensions, which may have the potential to significantly increase development densities, higher activity uses, the value of land and the tax base. York Region should consider the opportunity to partially fund transportation projects using Tax Increment Financing tools. TIFs may be used to fund major transit infrastructure projects





located around Regional Centres or Regional Corridors or large-scale road projects that could include exclusive transit or cycling lanes. In order to have the authority to collect TIF based revenues, the Region needs to first undertake feasibility studies which must be endorsed by the Province before passing the necessary regulations.

### 8.2.3 Joint Development Opportunities

One of the most successful prospects for value capture involves new development or redevelopment. Developers can often benefit directly by cooperating with transit agencies to make transit investments more productive. Developers can profit from being close to transit in several ways, such as: higher density zoning, reducing costs through lower parking ratios and targeting their development to Transit Oriented Development. A huge advantage can be achieved by integrating the transit planning and municipal planning functions to satisfy a common goal. As an example, Translink, the Greater Vancouver Transportation Authority, is a strong advocate of capitalizing on joint development opportunities and actively pursues the purchasing of properties around stations to assist in the development and value capture opportunities.

### 8.2.4 Public-Private Partnerships and Alternative Financing Procurement Methods

The term Public-Private Partnership (P3) is used to cover a wide range of contractual relationships and opportunities, where public agencies share the risks and benefits of infrastructure and service projects with the private sector. These contracts are sometimes referred to as Alternative Financing Procurement (AFP) projects and take the form of Design, Build & Finance (DBF), Design Build Maintain (DBM) or Design, Build, Finance, Operate and Maintain (DBFOM). This strategy does not help to provide additional sources of revenue but rather provides greater overall project Value for Money (VFM) and alternative financing options (streamlining of payments).

There is substantial Value for Money (VFM) that can be achieved in following an AFP method due to the benefits achieved in risk transfer and reduction. *Infrastructure Ontario* is in the process of undertaking a VFM analysis on all transportation projects that include provincial funding contributions, to determine if they should follow an AFP process. If the VFM analysis determines a positive result, *Infrastructure Ontario* will procure these projects using private sector financing as a base component of the contract. York Region will continue to work closely with the provincial and federal governments and follow their lead in this regard.

It should be noted that even if financing is not part of a P3 contract, there are still significant advantages to P3 initiatives. P3 contracts can usually be delivered much faster, at lower overall project costs, with the contractor assuming some of the project risks and



with contractor warranties. These contracts usually take the form of Design Build (DB), Design Build Maintain (DBM) or Design Build Operate Maintain (DBOM).

York Region has developed some experience in this contract methodology through the procurement of Phase I of the York Region Rapid Transit Plan (Quick Start) contract.

### 8.2.5 Fuel Tax

Fuel taxes are one of the most equitable forms of user pay taxation. The amount of fuel purchased (and taxes paid) by motorists is a reflection of the amount of road travel, the vehicle fuel efficiency, the potential harm to the environment and wear and tear on the road infrastructure.

The recent Federal Gas Tax Transfer program has been well received by municipalities. It forms the basis for establishing a longer term, predictable funding source which will provide York Region with the additional resources to address its long term transportation needs.

The provincial government also announced a program in 2004 to share gas tax revenues with municipalities to help improve transit systems. The current program allocates two cents per litre to municipalities based on a formula that accounts for ridership (70%) and population (30%). This program provides a significant contribution to help offset York Region's investment in public transit. In 2009, it is estimated that the Region will receive \$14 million in gas tax revenue from the Province.

### 8.2.6 Parking Fees

Parking fees are another mechanism used by government agencies to subsidize transportation budgets and influence transit ridership.

Typical examples are paid on-street parking, public parking garages in urban centres, public parking lots in smaller retail centres, and parking lots associated with rapid transit facilities. The revenue generated by the parking fees can either go back into the municipal general revenues or be dedicated to a specific service such as transit.

Policies such as payment-in-lieu of parking can also benefit programs of development intensification. Payment-in-lieu involves developers providing a monetary payment to the government, in lieu of building required parking on site. The monies collected are grouped together to assist in developing central public parking facilities. This minimizes over-supply, and relieves developers of the burden of constructing and maintaining parking. Payment-in-lieu can be applied to commercial or residential developments. Commercial payment-in-lieu is more common, but residential payment-in-lieu can help promote intensification, particularly in areas involving adaptive re-use or expansion of small buildings.



A very distinct form of parking tax was established in Vancouver, British Columbia as a user fee. *TransLink*, the Greater Vancouver Transportation Authority, was authorized to assess the parking tax, which was applied to non-residential parking sites within the Greater Vancouver Regional District (GVRD). The parking tax was set up to help fund the expansion of roads and transit services in the region. A Rate Bylaw established the rate per square metre of taxable parking area. The parking tax was calculated by multiplying the taxable parking area by the parking tax rate and included in the property tax notice issued by the municipality. It is noted that the application of the parking tax was controversial and has since been abandoned.

Although parking fees are not currently envisioned to be a primary funding opportunity, they must be considered a viable option for a longer term strategy. As outlined in more detail in Section 7.1 Proposed Phasing: Policies & Strategies, the Region should work with local municipalities to establish a Regional Parking Authority and develop specific parking strategies for the short term and longer term future.

### 8.2.7 Road User Fees – License Fees

Although there is special legislation in place for a number of Ontario municipalities, with the exception of the City of Toronto, the ability to raise revenue is generally that defined in the Municipal Act 2001. Powers are limited to property based taxation, user fees and charges and development charges which are governed by the *Development Charges Act 1997*. The Region's traditional means of raising revenues is currently limited to development charges, property taxes, user rates for water and wastewater and debt financing.

The recent City of Toronto Act is unique in that it applies very specifically to the City and greatly expands Toronto's ability to raise revenues through new powers of direct taxation. Although there are significant restrictions limiting the City's abilities, Toronto has used this legislation to impose its own land transfer and vehicle registration tax. This ability to impose direct taxation is unique to Toronto and would not be available as an option to York Region without similar legislation.



Very generally, the City of Toronto can now impose direct taxation with the exception of:

- Income tax
- Capital tax
- Tax on machinery used in R&D
- Hotel tax (note sales tax exemptions)
- Tax relating to gasoline sales
- Tax on energy used
- Wealth/inheritance tax
- Poll tax
- Tax on the generation/extraction etc. of natural resources
- Sales tax, with the exception of a permitted sales tax on:
  - Admission to places of amusement
  - Purchase of liquor for use or consumption
  - Production of beer or wine at a brew on premise facility for use or consumption
  - Purchase of tobacco

It appears that this leaves the City with significant revenue generating powers such as the ability to charge tolls, access fees, etc. From the legislation it also appears that there are no restrictions on how revenues raised are to be used; that is, there is no need to link, for example, revenues from license fees to roads expenditures.

### 8.2.8 Road User Fees – Congestion Pricing

Road user fees are not a new idea. Road tolls have been used for centuries as a means to fund the construction and maintenance of transportation infrastructure. There are many forms of user fees in existence in Ontario, including the aforementioned license fees, but also include: highway tolls, parking fees and transit fares.

The premise behind congestion pricing is three-fold: charge fees to those who benefit from the infrastructure, create the need for the infrastructure and impose societal costs related to the implementation or use thereof.

As many North American communities now recognize, traffic congestion is one of our most significant problems. The problem is not only one of convenience - it is having a major impact on the health and vitality of urban areas and a detrimental effect on the economy by impacting on the ability to move goods and conduct business. Recently, there has been a move to try to control traffic congestion by discouraging automobile travel and influencing the transportation mode choice through application of road user fees. Although congestion pricing has been applied in a number of cities around the world such as Singapore, Stockholm, Oslo, Trondheim and Bergen, recent congestion pricing implemented in



London, England has made headlines by being the first large scale application of this system.

The London program applies a charge that targeted automobile use within the downtown perimeter during specific hours of the day. Since its inception in February 2003, there have been a number of adjustments made to the way the charge is applied, including increasing the charge itself. On the first day of implementing the fee, there was a 25% reduction in traffic volumes; in the first month, traffic lowered 15% from pre-charge levels; and in the first six months, 60,000 fewer vehicles per day had entered the central zone. A larger than anticipated reduction in traffic numbers meant that annual revenues (£68M) were well below the 2001 estimate of £200M.

There are a number of other 'lessons learned' from the London experience:

- Significant ITS equipment is required to collect, monitor and enforce congestion charge payments. Systems such as CCTV cameras, optical character recognition systems and staff to confirm and issue violation notices are required;
- Fines must be established and collected. Arguably, more money could be made from the fines than the charge itself;
- In mixed zones of residential, commercial and industrial uses, residential users could be unfairly targeted to carry a larger proportion of the costs, while those living outside the area do not have to incur this cost;
- Some critics state that congestion pricing is a discriminatory tax, unfairly targeting lower income groups that cannot afford to pay the price of privileged admission; and
- Some critics also claim that the congestion charge affects business and industry in the target area by making it more difficult for customers, employees and trades people to access the area.

York Region, with its multiple business centres, some of which are adjacent to provincial highways or are centred on major arterial routes, would be a difficult area to implement a London-style congestion pricing plan. For this to be feasible there must be a destination with a "critical mass", and a workable plan to deal with through traffic.

It is likely that congestion pricing would also be contentious at this stage in the Region's movement to urbanize. Road user fees would likely also cause significant diversion to other municipal roads and could be expensive to administer and enforce.

Metrolinx will undoubtedly be considering road user fees as part of their investment strategy tools. York Region may wish to follow the lead set by Metrolinx since road user fees are likely more effective and impartial on a GTHA scale than a Regional scale.





### 8.3 ORGANIZATIONAL RESOURCE NEEDS

Ever-growing development and the resulting movement of people and goods in and around York Region have put tremendous pressure on both Regional and municipal authorities to develop strategies and to establish an implementation plan to deal with the anticipated challenges. Appropriate governance models are essential to ensuring the right things are done and that things are done right.

York Region is looking to emerge as the leader in building sustainable transportation services on a Regional scale. In order to implement all components of the TMP Update, it is critical that the appropriate organization structure, staff and processes be put in place to support the Regional Official Plan (ROP) policies, once the necessary changes are made to the appropriate Provincial legislation. These changes are necessary in order to provide the Region with the ability to implement the initiatives where authority does not presently exist.

The Regional strategies and initiatives identified in Sections 6 and 7 covers the following areas:

- Transit;
- Active Transportation;
- Planning and Design;
- Intelligent Transportation System & New Technologies;
- Roadways and Highways;
- Transit Oriented Development;
- Transportation Demand Management;
- Parking;
- Regional Collaboration;
- Goods Movement;
- Funding;
- Marketing and Education; and
- Environmental Protection Measures.

For each of the categories listed above, it is desirable that staff members have the following skills, capabilities and attributes:

- Managers and supporting staff members should build upon their skill sets by attending relevant training courses, seminars and conferences. Staff members should be encouraged to join applicable associations or organizations in order learn the current trends and advancements in their respective fields;
- Staff members should be innovators and educators who are capable of inspiring others;



- Technical expertise will be of the utmost importance; however, this expertise must be complemented by exemplary communications skills; and
- Staff creativity will also be a strong asset. As this TMP Update moves forward, new challenges will undoubtedly arise, and many of the solutions will come from thinking “outside the box”.

This corporate strategy, in regard to the TMP, will focus on maximizing York Region’s resources in order to successfully implement these policies. There are number of considerations that require a well thought-out strategy and an organizational model, which are outlined in Table 8.2.

York Region’s ability to deliver the Transportation Master Plan will be dependent on the current and future strength of its staffing resources, and the corresponding policy support and organizational “tools”. Early success in the marketing and communications of the TMP to key stakeholders will be vital to the successful implementation of the major components of the TMP. As such, there are a number of key short and long term measures that must be implemented, including:

- Establish a Pedestrian and Cycling & TDM Implementation Group
  - To consist of planners and engineers who will oversee all Active and Alternative Transportation initiatives including the Pedestrian and Cycling Master Plan and the TDM recommendations outlined in the Background Paper on TDM (**Appendix P**).
  - To deliver effective education and marketing of Regional programs;
- Expand existing resources
  - To ensure efficient and reliable integration and coordination of all current and future local and rapid transit services; and
  - To ensure that the improvements detailed in this TMP follow the appropriate processes and that all legal matters relating to authority are dealt with in an appropriate manner.
- Resource needs to implement the Intelligent Transportation System Strategy
- Resource needs to develop and implement an asset management strategy
- Resource needs to develop a strategy and to establish a Regional Parking Authority



**Table 8.2 Funding Consideration and Goals**

<b>CONSIDERATION</b>	<b>GOAL</b>
i. The Transit and Active Transportation components require close coordination with other agencies such as GO Transit, TTC, Brampton Transit and Durham Region Transit.	To discuss initiatives such as shared terminals, integrated fares, and the installation of bike racks on buses.
ii. The Planning and Design component requires amendments in the existing municipal and Regional policies and by-laws.	Of particular interest will be the inclusion of Transit Oriented Development and associated changes in the ROP. This will require additional staffing to ensure that these initiatives can be completed within a reasonable time frame.
iii. Review of existing standards and adoption of the CITE guidelines.	To promote sustainable transportation infrastructure.
iv. Integration of the transit network with the network of pedestrian and cycling facilities, and developing the necessary guidelines and standards.	To ensure inter-modal connectivity.
v. Development of Best Practices Handbooks.	To aid in the development and implementation of Regional initiatives.
vi. Introduction of regulations that would require developers to provide high-quality pedestrian connections as part of the approvals process in urban areas.	To promote active and sustainable transportation in the Region.
vii. Development of Financial Incentive Programs to promote sustainable modes.	To ensure that sustainable alternatives are properly funded.
viii. Development of websites and associated materials for planners, developers, policy makers and citizens.	To assist in the dissemination of information for employers, employees and residents of the Region.
ix. Develop a mechanism to assess the redevelopment potential of sites and review potential sites for TOD.	To help reduce the reliance on the single occupant vehicle use while promoting transit.
x. The ITS component requires specialized resources in terms of staff and equipment.	To ensure the complete and proper implementation of ITS technologies.
xi. Development of a web-based delivery of real time traffic information to assist drivers in determining times and travel routes.	To help reduce congestion in the Region and aid in the promotion of sustainable transportation alternatives.
xii. Development of a discounted university and college transit pass program.	To promote public transportation usage amongst a large, highly specific demographic.
xiii. Development of TDM promotional plans.	To ensure that people in the Region are aware of TDM initiatives.
xiv. Establish a Regional Parking Authority to introduce new provisions in order to implement parking strategies and a Parking Management Program at the Regional level.	To solidify the shift in thinking towards sustainable transportation choices.
xv. Goods movement within and outside of the Region is a complex issue and requires extensive coordination between concerned agencies and stakeholders.	To ensure that goods movement does not significantly contribute to congestion during peak hours.
xvi. Marketing and education is an essential component to create awareness amongst all citizens, employees and employers in York Region.	To encourage and promote the initiatives and services outlined in this TMP.



## 9.0 MOVING FROM CONCEPT TO REALITY

### 9.1 5-YEAR ACTION PLAN

As a result of this Transportation Master Plan, the Region of York is poised to implement several bold sustainable transportation initiatives over the next 30 years. The next five years will, in many respects, serve as the foundation for what is to come relative to enhancements to York Region’s transportation system. A new immediate action plan is therefore needed to focus all Regional efforts on supportive initiatives that will ensure these actions and investments are coordinated and as cost-effective as possible. The next few years will be the dawn of a new era in sustainability in York Region. Every effort must be made to prove these investments have value. **Table 9.1** depicts the Region’s Five Year Key Action Plan in support of a more sustainable environment.

Table 9.1 Five Year Action Plan - Transit, Roadway and Policy Improvements

Transit Improvements	York Region Actions
Yonge Subway Extension	<ul style="list-style-type: none"> <li>▪ Continue to work with Metrolinx, the Provincial and Federal Governments to prioritize and fund this project.</li> </ul>
Environmental Assessment (EA) Studies of new Rapid Transit Service	<ul style="list-style-type: none"> <li>▪ Initiate and complete conceptual and functional planning studies to better define the alignments of the Bathurst-Dufferin Street and new Markham North-South corridors.</li> <li>▪ Initiate and complete Municipal Class EA studies for rapid transit corridors identified in Chapter 7.2 to identify feasible technologies, alignment and station locations (excluding those EA’s already undertaken).</li> </ul>
Sustainable Travel Choices and EA Studies for the Transit Priority Network in Markham	<ul style="list-style-type: none"> <li>▪ Complete the study to identify and assess options for the Transit Priority Network in the Town of Markham.</li> <li>▪ Complete the associated transit priority improvement EA studies.</li> </ul>
New GO Transit Stations	<ul style="list-style-type: none"> <li>▪ Partner with GO Transit, Metrolinx and local municipalities to assess the feasibility of new park-and-ride stations along several existing rail lines.</li> <li>▪ Develop further promotion of walking, cycling and transit connections to and from GO Rail Stations.</li> </ul>



Roadway Initiatives	York Region Actions
Bradford Bypass	<ul style="list-style-type: none"> <li>Work with the Province and Metrolinx to re-confirm the need for the Bradford Bypass, and ensure that this important freeway link is included in the Provincial growth plan.</li> </ul>
GTA West Transportation Corridor	<ul style="list-style-type: none"> <li>Assist MTO and the City of Vaughan to determine the location of the alignment and interchange with Highway 400 and Highway 427 extension.</li> </ul>
Mid-York E-W Transportation Corridor	<ul style="list-style-type: none"> <li>Complete a needs assessment and initiate the corresponding environmental assessment studies.</li> </ul>
Mid-block collector road crossings of 400-series highways	<ul style="list-style-type: none"> <li>Explore and report to Regional Council on an expanded Regional policy on these vital roadways.</li> </ul>
Highway 427 Extension	<ul style="list-style-type: none"> <li>Work with the Province in concert with the City of Vaughan and Peel Region to include this project in the Provincial highway 5-year capital plan (Southern Ontario Highway Program) as soon as the environmental assessment is approved.</li> </ul>
Highways 400 and 404 HOV lanes	<ul style="list-style-type: none"> <li>Work with the Province to ensure that these HOV lane widenings are included in the Provincial highway 5-year capital plan for construction.</li> </ul>
Integrated Intelligent Transportation System (ITS)	<ul style="list-style-type: none"> <li>Develop and implement an integrated ITS strategy that encompass transit and traffic management systems as well as traveller information systems.</li> </ul>

Policies and Strategies	York Region Actions
Update policies regarding provision of sidewalks on Regional and key collector roads in urban areas.	<ul style="list-style-type: none"> <li>Consult with local municipalities to develop an extensive plan for the provision of sidewalks along all Regional roads where York Region Transit operates, as well as key collector roads with YRT routes.</li> <li>Identify Regional and local roads in urban areas and along major roadways where sidewalks are currently lacking.</li> </ul>





Policies and Strategies	York Region Actions
<p>Create a site plan checklist to gauge TOD elements of a proposed development.</p>	<ul style="list-style-type: none"> <li>▪ Identify an internal team to develop the site plan checklist and review with local municipalities.</li> <li>▪ Develop a checklist to assess the redevelopment potential of lands adjacent to transit stations within Regional Centres and Corridors where there is a good opportunity for TOD.</li> </ul>
<p>Require TDM plans or strategies for major development applications.</p>	<ul style="list-style-type: none"> <li>▪ Undertake a Best Practices of North American municipalities who require TDM plans for large businesses - to assess various approaches.</li> <li>▪ Develop a Regional policy and amend the Official Plan to require plans or strategies for major developments</li> </ul>
<p>Transit Incentives</p>	<ul style="list-style-type: none"> <li>▪ Undertake a Best Practices of North American municipalities who have implemented similar incentive programs for employees, students, the elderly and others.</li> </ul>
<p>Coordinate with local municipalities to develop a Parking Authority that would set a parking policy within York Region.</p>	<ul style="list-style-type: none"> <li>▪ Undertake a Best Practices of North American municipalities who have Parking Authorities in place; identify roles, responsibilities and organizational arrangements.</li> <li>▪ Explore the development of a Parking Authority in consultation with local municipalities and others.</li> </ul>
<p>Cycling and Pedestrian Master Plan Recommendations</p>	<ul style="list-style-type: none"> <li>▪ Work with local partners to implement the short-term policies and recommendations in the Region's Pedestrian and Cycling Master Plan.</li> <li>▪ Develop an annual assessment to evaluate the progress of the municipal pedestrian and cycling master plan implementation.</li> </ul>
<p>Partner with Metrolinx and other agencies to implement Regional bike-sharing programs</p>	<ul style="list-style-type: none"> <li>▪ In partnership with Metrolinx, explore the opportunities and challenges to implement a bike sharing program in York Region.</li> <li>▪ Identify municipalities and specific areas or districts where a bike-sharing program may be practical.</li> <li>▪ Identify potential funding sources for bike sharing program.</li> </ul>



The Region will undertake additional measures to ensure that priorities identified in the Master Plan are appropriately carried through, including:

- Inclusion of road and transit recommendations into the Region's 10-Year Capital Works Plan;
- Incorporation of recommendations into the Region's Official Plan;
- Strengthening regional and local partnerships in support of sustainable transportation policy initiatives; and
- Updating the Development Charges Bylaw to reflect the transportation recommendations proposed in this Master Plan.

## 9.2 MEASURING PROGRESS...AND SUCCESS

*The turtle makes progress only when he sticks his neck out.*

-James Bryant Conant, former Harvard University President and Scientist

York Region recognizes that the success of this document depends on our ability to “stick out our necks” by regularly tracking the progress of the Transportation Master Plan's recommended actions and strategies. As such, progress will be monitored in several key ways:

- Preparation of an annual report to Council that updates the progress of the five-year action plan;
- Conducting a random sample public opinion survey with York Region residents and businesses approximately every two years to assess changes in travel behaviour, and to evaluate whether the Region's sustainable transportation message is understood and recognized. This survey would supplement the data collected in the Transportation Tomorrow Survey which is undertaken every five years;
- Monitoring statistical trends of transit users, cyclists and pedestrians; and
- Measuring annual greenhouse gas and other emissions to reduce the Region's carbon footprint.



### 9.3 FREQUENCY OF MASTER PLAN UPDATES

This update to the Transportation Master Plan is based on the planning, senior level government funding and economic conditions that prevailed in and around 2008-2009. As evidenced in the last 10 years, these conditions can change rapidly and significantly, and often are the results of global or national economic and political changes.

When these changes occur, they have direct impacts on the ability of York Region to implement the TMP as the base assumptions on development phasing, funding availability and financial sustainability of proposed transportation infrastructure are no longer valid.

Therefore, the case can be made that updates to the Transportation Master Plan should be made more frequently than the normal 5-year cycle. Logically, the TMP should be updated when the major base assumptions of the TMP are no longer appropriate given the conditions that exist at that time. The monitoring and annual report on the progress of the Five-Year Action Plan could also include an assessment of the above conditions to determine if an update of the TMP is necessary.


















### 9.4 MOVING TOWARDS A SUSTAINABLE REGION

From Planning to Implementation to Monitoring, York Region is committed to a quality of life second to none in Canada. This Transportation Master Plan represents the vehicle in which we will manage growth in a sustainable manner ensuring that all of our initiatives aim to simultaneously create environmental, social and economic benefits and value. The innovative process that we have developed for this undertaking, as well as the bold strategies that we have recommended clearly - and proudly illustrate - that we are making great strides Towards a Sustainable Region.













# YORK REGION 2031 TRANSIT NETWORK

## Transit Network Improvements

-  Existing GO Rail Station
-  Proposed GO Rail Station
-  Commuter / HOV Parking
-  Local Gateway to Transit Network
-  Gateway Hub
-  Anchor Hub / Regional Centre
-  Special Study Area (see footnote)
-  GO Rail Service
-  407 Transitway
-  Rural Links
-  Expressway Bus Service
-  GTA West Corridor Concept
-  Subway Extension
-  Rapid Transit Corridor
-  Transit Priority Network
-  TTC Rapid Transit
-  Recommended New Corridor

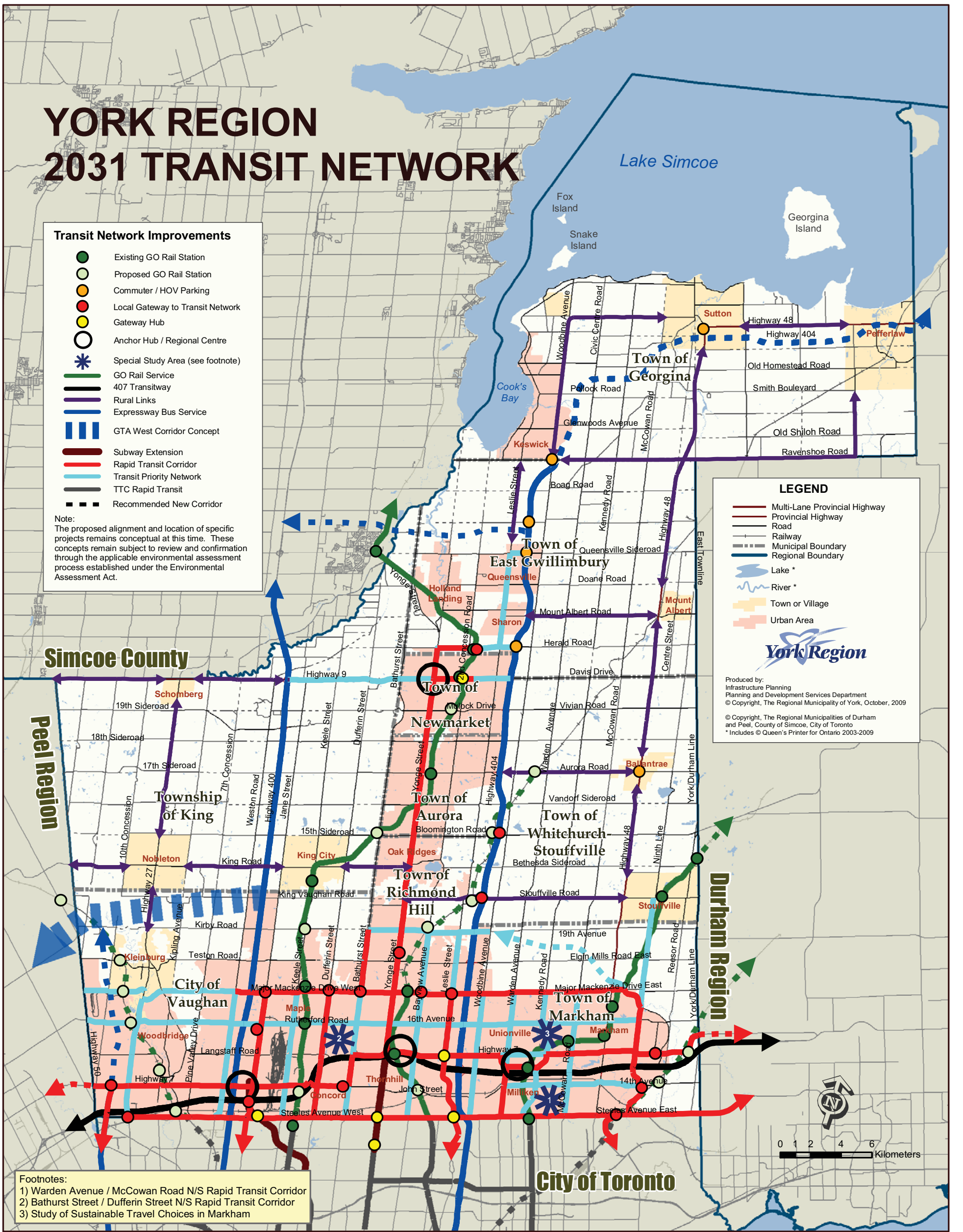
Note:  
The proposed alignment and location of specific projects remains conceptual at this time. These concepts remain subject to review and confirmation through the applicable environmental assessment process established under the Environmental Assessment Act.

## LEGEND

-  Multi-Lane Provincial Highway
-  Provincial Highway
-  Road
-  Railway
-  Municipal Boundary
-  Regional Boundary
-  Lake \*
-  River \*
-  Town or Village
-  Urban Area



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Footnotes:  
1) Warden Avenue / McCowan Road N/S Rapid Transit Corridor  
2) Bathurst Street / Dufferin Street N/S Rapid Transit Corridor  
3) Study of Sustainable Travel Choices in Markham





# YORK REGION 2031 ROAD NETWORK











## Road Network Improvements

-  Jog Elimination
-  New or Improved Highway Interchange
-  Grade Separation
-  Special Study Area (see footnote)
-  Anchor Hub / Regional Centre
-  New Local/Regional Road
-  Arterial Road Improvement for Capacity
-  Arterial Road Improvement to 6 lanes
-  Road improvements to support Transit
-  New Provincial Road
-  GTA West Corridor Concept
-  Provincial Road Improvement
-  Recommended New Corridor

Note:  
The proposed alignment and location of specific projects remains conceptual at this time. These concepts remain subject to review and confirmation through the applicable environmental assessment process established under the Environmental Assessment Act.

Road projects identified are for capacity improvements only and do not reflect reconstruction projects in the Region's DC-Bylaw or 10-Year Roads Construction Plan.

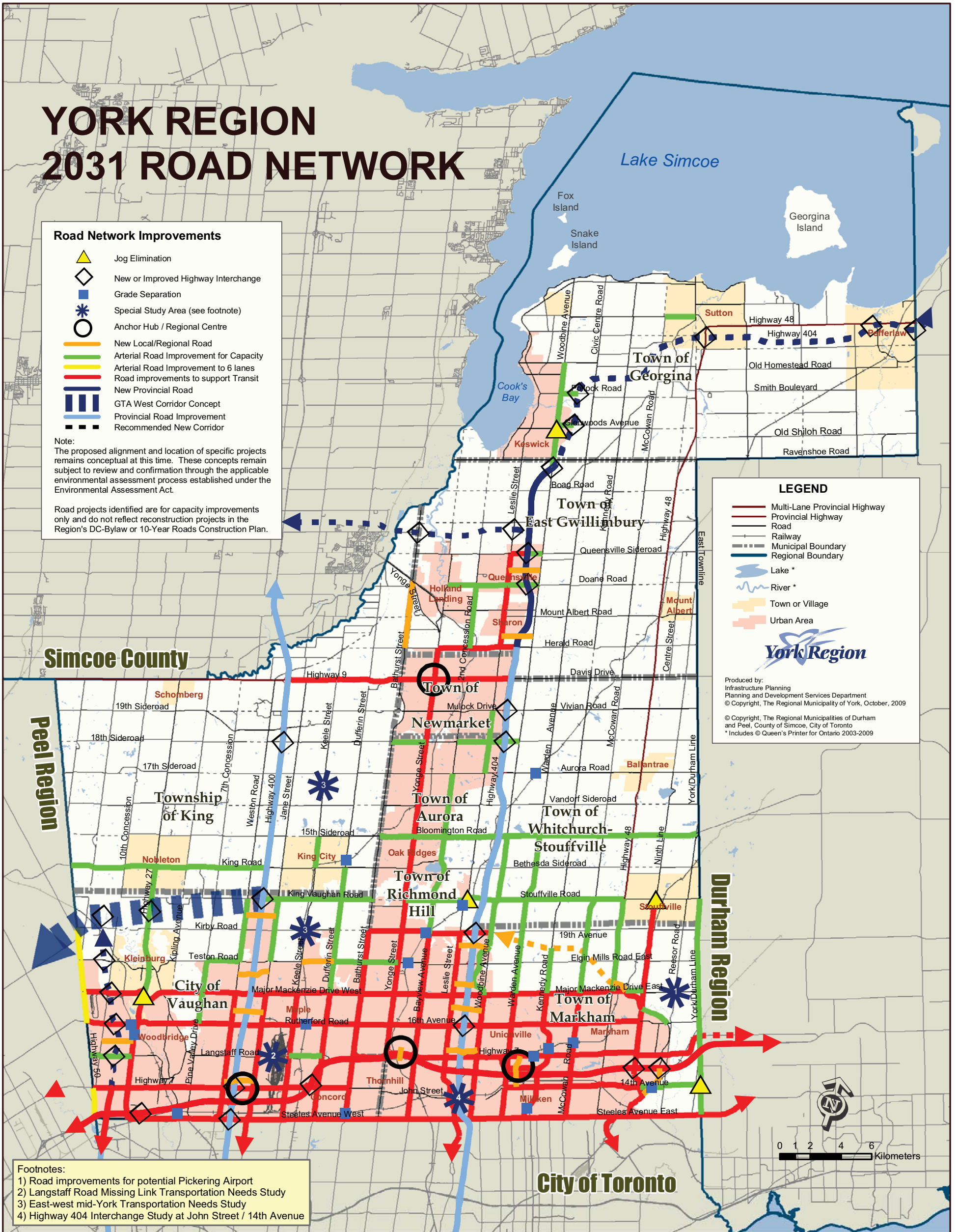
## LEGEND

-  Multi-Lane Provincial Highway
-  Provincial Highway
-  Road
-  Railway
-  Municipal Boundary
-  Regional Boundary
-  Lake \*
-  River \*
-  Town or Village
-  Urban Area

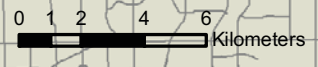


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Footnotes:  
1) Road improvements for potential Pickering Airport  
2) Langstaff Road Missing Link Transportation Needs Study  
3) East-west mid-York Transportation Needs Study  
4) Highway 404 Interchange Study at John Street / 14th Avenue











**Transportation Master Plan Update**

**Sample Project Newsletters**





# Transportation and Water and Wastewater Master Plan Update Studies

**Transportation  
Master Plan  
Update**



**UPDATE  
Water and  
Wastewater  
Master Plan**

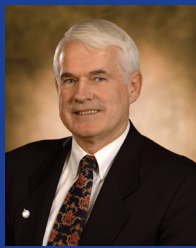


## Newsletter 2

FALL 2007



Mayor  
Frank Scarpitti  
Town of Markham



Regional Councillor  
Jim Jones  
Town of Markham



Regional Councillor  
Jack Heath  
Town of Markham



Regional Councillor  
Tony Wong  
Town of Markham



Regional Councillor  
Gordon Landon  
Town of Markham



Mayor  
David Barrow  
Town of Richmond Hill



Mayor  
Linda D. Jackson  
City of Vaughan



Chairman and CEO  
Bill Fisch



Regional Councillor  
Brenda Hogg  
Town of Richmond Hill



Regional Councillor  
Joyce Frustaglio  
City of Vaughan

## Message from York Regional Council

York Regional Council is pleased to present our second Transportation and Water and Wastewater Master Plan Update newsletter. York Region faces a number of issues, including a fast-pace of growth, protecting and restoring our natural heritage system and providing supportive infrastructure and human services.



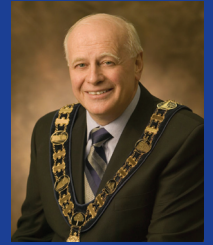
Regional Councillor  
Vito Spatafora  
Town of Richmond Hill

These challenges warrant a new and fresh approach to our operations and decision-making processes – a sustainability perspective. The Transportation and Water and Wastewater Master Plans support our overall Sustainability Strategy. They provide a model for municipal decision making that integrates the values of sustainable natural environment, healthy communities and economic vitality. This model also addresses the way we engage our public, monitor our progress and improve on our successes.



Regional Councillor  
Mario Ferri  
City of Vaughan

Before York Regional Council finalizes these Master Plans, we need your thoughts and comments. Your input is vital to the overall process.



Mayor  
Tony Van Bynen  
Town of Newmarket

## We encourage you to get involved. Help plan York Region's future!



Regional Councillor  
Gino Rosati  
City of Vaughan



Regional Councillor  
John Taylor  
Town of Newmarket



Mayor  
Robert Grossi  
Town of Georgina



Regional Councillor  
Danny Wheeler  
Town of Georgina



Mayor  
Phyllis M. Morris  
Town of Aurora



Mayor  
Wayne Emmerson  
Town of Whitchurch-Stouffville



Mayor  
James Young  
Town of East Gwillimbury



Mayor  
Margaret Black  
Township of King



## It's Time Again to Seek Input from the Public

The Regional Municipality of York initiated the first phase of the Master Plan Study Updates for Water and Wastewater Servicing and Regional Transportation in the fall of 2006. These studies are being updated in partnership with York Region's Growth Management and Sustainability Initiative which will adapt to a series of new and approved Provincial plans. The Provincial framework has profoundly changed the way planning and development occurs in Ontario.

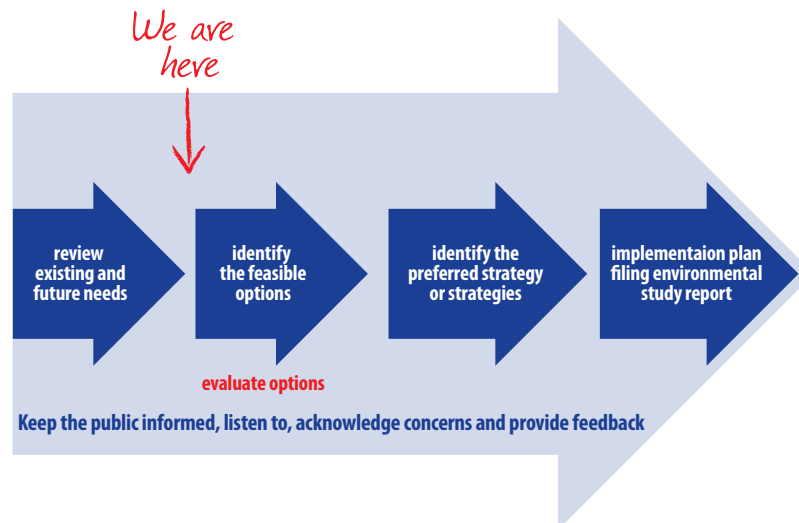
Over the last year, we have completed numerous activities for both Master Plans. This has included:

- Working with community partners to develop Sustainability Principles to guide the Transportation Master Plan Update and the Water and Wastewater Master Plan
- Engaging community groups, technical experts, university specialists, Provincial authorities and international associations on various aspects of both master plans
- Examining how *Places to Grow* and other Provincial legislation will impact the future of York Region
- Analyzing population projections and future land-use scenarios to evaluate the Region's infrastructure needs
- Developing a Best Practices Review that incorporates sustainable transportation practices across North America, and identifying initiatives with the greatest potential for application in York Region
- Assessing the Region's existing High Occupancy Vehicle (HOV) lane system, and developing general guidelines to implement HOV lanes
- Studying the most current data available on traffic flows, wastewater flows and water supply and demand
- Developing strategies to service the Region based on design criteria and recommendations from the public and project experts on water and wastewater infrastructure requirements

With the previous stage of these studies now completed, residents can now examine the study findings and provide comments to be considered by study teams in advance of final recommendations for the servicing plans and the implementation of new policies and programs.

Public consultation is critical to the overall success of these Master Plans. Residents and business owners have a wealth of knowledge that can assist our Region as we plan for the future of water, wastewater and transportation services for the next 30 years.

## Master Plan Study Process





## Objectives of the Infrastructure Master Plans

The Transportation Master Plan and Water and Wastewater Master Plan are components of our Growth Management Strategy to address York Region's population and employment growth between now and 2036. Master Plans are long-range plans that integrate infrastructure requirements for existing and future land use with environmental assessment principles. These plans examine the entire infrastructure system as a group of related projects, or an overall system, in order to strategically plan the infrastructure needs of the Region. These studies will update the approved Transportation Master Plan (2002), Wastewater Master Plan (2002), and Water Master Plan (2004).

### Water and Wastewater Master Plan Study objectives include:

- Forecasting water and wastewater needs for the next 40 to 50 years
- Addressing servicing demands to protect the natural environment and existing ecological corridors
- Estimating infrastructure costs
- Preparing a detailed implementation plan for the capital construction program

### Transportation Master Plan Study objectives include:

- Addressing traffic congestion
- Providing reliable, convenient transportation choices
- Ensuring the transportation needs of the elderly and zero-car households are met
- Mitigating air pollution
- Facilitating healthy lifestyles
- Making residents more aware about transit, carpooling and other alternative modes of travel

## What We Heard in the First Round of Public Meetings

The first round of Public Consultation Centres (PCCs) was completed late last year. We engaged many residents over the course of three nights. The key issues raised for each Master Plan included:

### Water and Wastewater

- Water conservation and water recycling
- Cost of infrastructure renewal
- Capacity of existing infrastructure
- Defining sustainability
- Aquifers vs. surface water
- Phosphate management
- Intra-basin water transfers

### Transportation

- Intensify major arteries such as Yonge Street
- Develop liveable communities that do not rely on the automobile
- Reduce urban sprawl development
- Develop high order transit, including bus rapid transit and subways, along major corridors
- Increase transit routes and service frequency
- Incorporate bicycle lanes on existing roads
- Stop focusing on road widening projects
- Develop incentives or disincentives to reduce single occupant driving



***There was strong support for sustainable transportation and water and wastewater infrastructure.***

# Sustainable Infrastructure Planning: The Foundation of the Master Plans

York Region has developed a corporate-wide, long-term vision embodied in our Sustainability Strategy - *Towards a Sustainable Region*. The strategy provides a long-term framework for making smarter decisions about growth management and municipal responsibilities that better integrate the economy, environment and community.

The Transportation and Water and Wastewater Master Plans will use the 'Triple Bottom Line' approach (economy, environment and community) within the studies to determine servicing and program alternatives that meet this sustainable vision.

York Region's approach in coordination with the Sustainability Strategy includes the development of specific "Sustainability Principles" for the Transportation and Water and Wastewater Master Plan Update studies.

## What Does Sustainability Mean?

- Evaluating the community, environmental and economic effects of our actions
- Making smarter decisions about our lifestyles, community design, infrastructure and finances
- Thinking differently, and being more innovative and collaborative
- Leaving our communities, our Region and our world in a healthy state for our children and grandchildren



## Sustainability Principles for Infrastructure Master Plan Update Studies

Each study team for the Master Plan updates has developed a set of study-specific sustainability themes to guide the preferred solutions for servicing transportation, water and wastewater needs in York Region.

### Water and Wastewater

1. Ensuring safe and clean drinking water
2. Maintaining healthy watersheds
3. Respecting our natural and cultural heritage
4. Using water wisely
5. Protecting community well-being
6. Providing full and equitable funding and value for money
7. Promoting timely and integrated service delivery
8. Planning for climate change and enhance energy efficiency
9. Encouraging more communication, consultation, and stakeholder engagement
10. Monitoring performance and using adaptive management

### Transportation

1. Integrating transportation and land use planning
2. Protecting and enhancing environment and cultural heritage
3. Supporting our economic well-being
4. Providing access and mobility for everyone
5. Adopting energy efficient transportation systems
6. Putting pedestrians and transit first
7. Implementing and supporting transportation demand management
8. Implementing and supporting transportation supply management
9. Ensuring fiscal sustainability and equitable funding
10. Encouraging more communication, consultation, and stakeholder engagement
11. Conducting ongoing performance measurement and monitoring

The Sustainability Principles are in draft form

# We appreciate your input

Please visit [www.york.ca](http://www.york.ca)





Growth



Environment



Economy



Intensification



## Integration of Sustainability Principles

In addition to the sustainability principles, York Region has defined common transportation and water and wastewater principles including:

1. Restoring and enhancing the natural environment and protecting First Nation and archaeological heritage
2. Meeting the needs of customers, while being cost-effective
3. Full and equitable funding of infrastructure and providing value-for-money in delivering services
4. Supporting economic growth through the timely delivery of services
5. Recognizing the reality of climate change and adapting the design and operation of services/facilities
6. Planning and implementing transportation and water and wastewater services in an open and transparent manner based on broad consultation, strong communications and the building of public consensus
7. Monitoring and reporting on transportation and water and wastewater services through a range of objective performance measures



Infrastructure



Quality of Life



Quality Communities

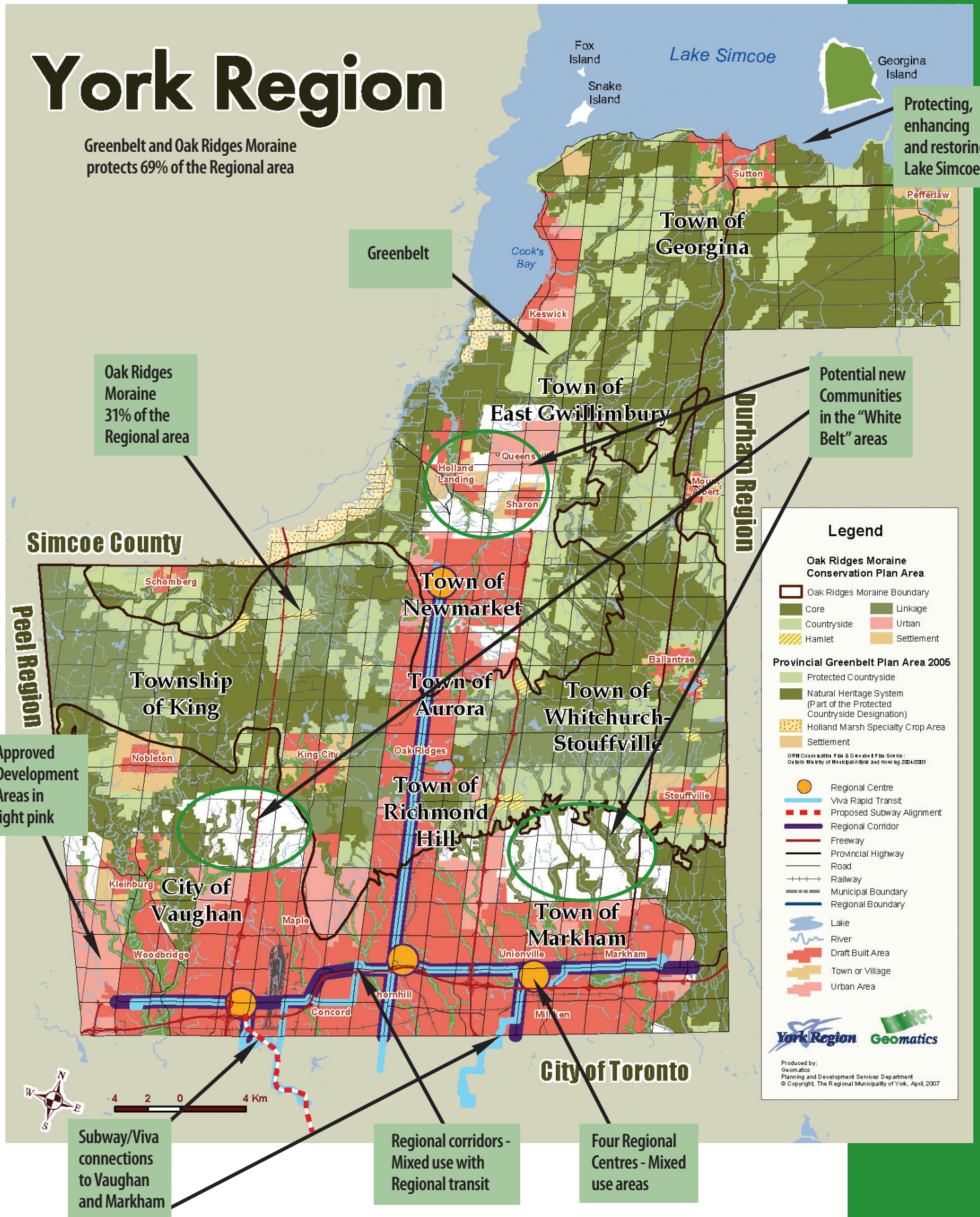


Fiscal Responsibility

# Opportunities and challenges for the Regional Growth Management Strategy

## York Region

Greenbelt and Oak Ridges Moraine protects 69% of the Regional area



Protecting, enhancing and restoring Lake Simcoe

Greenbelt

Oak Ridges Moraine  
31% of the Regional area

Potential new Communities in the "White Belt" areas

Approved Development Areas in light pink

Subway/Viva connections to Vaughan and Markham

Regional corridors - Mixed use with Regional transit

Four Regional Centres - Mixed use areas



# Second Round of Public Meetings Scheduled

The first round of Public Consultation Centres (PCCs) was completed in the fall of 2006, with the study team visiting Aurora, Keswick and Vaughan. They dealt primarily with defining the study objectives and scope of the work under consideration.

The PCCs were well attended, with excellent feedback and suggestions provided by the participants. The comments received have already been taken into consideration as part of the Master Plan study process.

The second round of PCCs is scheduled for fall 2007 when the study team will visit East Gwillimbury, Markham and King City. Input from all parts of York Region will be essential in guiding the project and residents are encouraged to attend any of these meetings to provide input.

## The next PCC Dates and Locations are:

Tuesday, November 6th East Gwillimbury	Town of East Gwillimbury Civic Centre 19000 Leslie Street, Sharon Council Chambers
Thursday, November 15th Town of Markham	Markham Civic Centre (Anthony Roman Centre) 101 Town Centre Boulevard, Markham Council Chambers
Wednesday, November 21st Township of King	King City Community Centre 25 Doctors Lane, King City Auditorium, 2nd Level (Arena)

6:30 p.m. to 9 p.m. - Open House  
7 p.m. to 7:30 p.m. - Presentation  
7:30 p.m. to 8 p.m. - Facilitated Discussion

For more information on the processes and issues related to the Master Plans, or to send us your comments, please contact us using one of the following methods.

### Transportation Master Plan

Loy Cheah, P.Eng.  
Manager, Transportation Planning  
Phone: 905 830-4444, ext. 5024  
Toll Free: 1-877-464-9675, ext. 5024  
Fax: 905 895-0191  
Email: Loy.Cheah@york.ca

### Water and Wastewater Master Plan

Hamid Hatami, P.Eng.  
Manager, Water and Wastewater Planning  
Phone: 905 830-4444, ext. 1573  
Toll Free: 1-877-464-9675, ext. 1573  
Fax: 905 895-0191  
Email: Hamid.Hatami@york.ca

**For more information about York Region,  
the Transportation Master Plan Update  
or the Water and Wastewater Update,  
please visit [www.york.ca](http://www.york.ca)**



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Seeking Input from the Public

## HOW CAN YOU GET INVOLVED IN THIS STUDY?

Both public and stakeholder involvement will be critical to the success of our Master Plan updates. Our Public Outreach Program will actively involve residents, key stakeholders and the local municipalities of the Region. The elements of the consultation program include:

- A regularly updated project Web page
- A Technical Advisory Committee comprised of key agency, municipal and regional staff
- A series of focus groups
- Project newsletters updating the study's progress at key milestones
- Public Consultation Centres designed to engage the public in every York Region municipality

## FIND US ON THE INTERNET

To keep you informed, we've set up a study Web site at [www.york.ca](http://www.york.ca) under Services → Regional Planning → Infrastructure.



Throughout the duration of the study, the Web site will be used to distribute key study material and information.

Please bookmark our site and visit it often. Our goal is to use the Internet to provide information to the public and also to receive invaluable public input through interactive applications. Should you have comments or suggestions on how the Web site can be improved, please let us know.

## WE WANT TO HEAR FROM YOU

If you would like to be added to our study mailing list for future newsletters and other project materials, please contact one of the project managers below:

### TRANSPORTATION MASTER PLAN

Loy Cheah  
 Manager, Transportation Planning  
 Phone: 905-830-4444, ext. 5024  
 Toll Free: 1-877-464-9675, ext. 5024  
 Fax: 905-895-0191  
 Email: [Loy.Cheah@york.ca](mailto:Loy.Cheah@york.ca)

### WATER & WASTEWATER MASTER PLAN

Hamid Hatami  
 Manager, Water & Wastewater Planning  
 Phone: 905-830-4444, ext. 1573  
 Toll Free: 1-877-464-9675, ext. 1573  
 Fax: 905-895-0191  
 Email: [Hamid.Hatami@york.ca](mailto:Hamid.Hatami@york.ca)

### MAILING ADDRESS

Planning & Development Services Department  
 The Regional Municipality of York  
 17250 Yonge Street  
 Newmarket, ON  
 L3Y 6Z1

## WHAT IS A MASTER PLAN?

The Transportation, Water & Wastewater Master Plan Updates will follow the Municipal Class Environmental Assessment process prescribed by the Ministry of Environment. Master Plans are long range plans that integrate infrastructure requirements for existing and future land use with environmental assessment principles. These plans examine the entire infrastructure system as a group of related projects, or an overall system, in order to strategically plan out the future needs of the Region.

This overall planning approach recognizes that there are real benefits to the process when long-range comprehensive studies are undertaken for projects that have some common elements. Master planning provides the Region with a complete framework where the need and justification for specific projects can be established and the environmental assessment process initiated.



# Infrastructure Master Plan Updates



Newsletter 1 - Fall 2006

## HOW ARE WE PLANNING FOR TOMORROW?

The Transportation Master Plan and Water & Wastewater Master Plan updates are two pieces of a much larger puzzle to address York Region's population and employment growth between now and 2036.

In the past several years, the context of growth and planning has been changing in South Central Ontario. The changes are the result of a number of recent provincial initiatives, including the release of the Province's Growth Plan for the Greater Golden Horseshoe, approval of the Greenbelt Plan and establishment of new growth forecasts. The Province's population and employment growth targets have been updated and are more than our Regional estimates.

The Government of Ontario forecast that over the next 25 years, York Region will add 600,000 residents, expanding our population to 1.5 million people. Simultaneously, the Region is projected to add 340,000 jobs, increasing our employment base to 780,000.

To sufficiently plan for this growth with a sustainable approach, York Region, in partnership with our local municipalities and the Province, must address several key issues:

- How can we maintain and improve the health and safety of our residents?
- How can we protect and enhance our natural environment?
- How can we properly plan our communities?
- How can we preserve our vibrant economy?
- How can we best serve the transportation needs of our residents?
- How can we ensure our water and wastewater demands will be efficiently met?

continued on Page 2

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## A MESSAGE FROM

### YORK REGIONAL CHAIR & CEO, BILL FISCH

York Region is updating our Transportation and Water & Wastewater Master Plans and I look forward to your active involvement in this process. These Master Plans will serve as the "blueprints" for all major transportation and water & wastewater initiatives in the Region through to the year 2036. These updates are important undertakings – for the safety of our roads, efficiency of our transit system, quality of our water system and the economic well-being of our communities. Most importantly, the Master Plans must build on previous plans by addressing the growth challenges and strategies that will support sustainable development in York Region. This will complement other initiatives that we have championed to support the Regional goals of Sustainable Natural Environment, Economic Vitality and Healthy Communities.



I encourage you to get involved. Help plan York Region's future!





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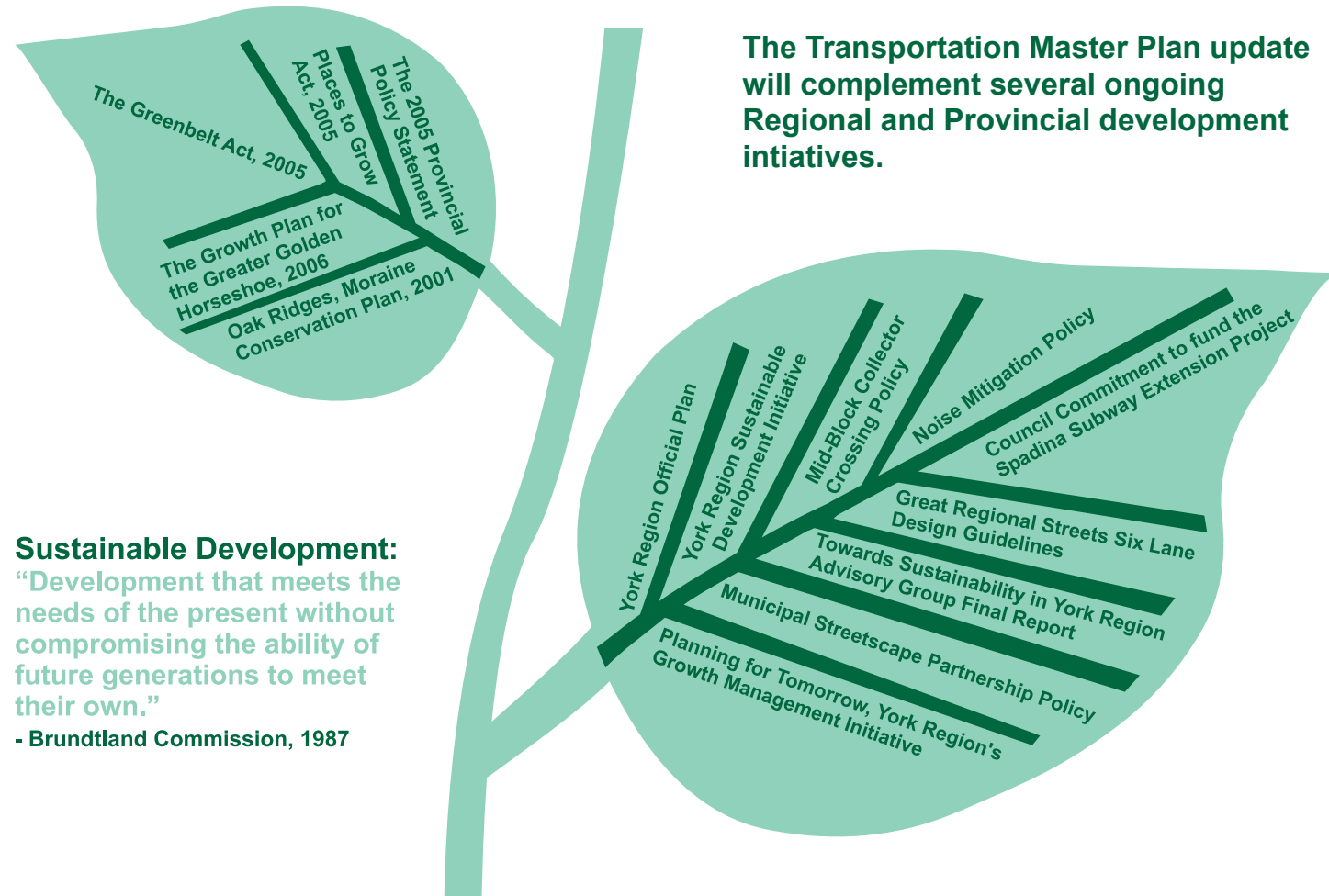
York Region's Growth Management Initiative called *Planning for Tomorrow* will serve as the Region's sustainability "blueprint", guiding our infrastructure needs for roads, transit, water and wastewater to position us to address future needs and challenges. Sustainable development is vital for the Region to manage our growth, ensuring that all of our initiatives aim to simultaneously create environmental, social and economic benefits and value. This is referred to as York Region's "Triple Bottom Line" approach.

In co-ordination with the Growth Management Initiative and to address the Province's growth forecasts, York Region is updating its infrastructure master plans. This newsletter is the first in a series designed to inform you about York Region's Transportation Master Plan and Water & Wastewater Master Plan updates, provide you with ideas and options as the studies progress and advise you on how to get involved.



"TRIPLE BOTTOM LINE" APPROACH

### YORK REGION'S SUSTAINABILITY CONTEXT



The Transportation Master Plan update will complement several ongoing Regional and Provincial development initiatives.

**Sustainable Development:**  
 "Development that meets the needs of the present without compromising the ability of future generations to meet their own."  
 - Brundtland Commission, 1987

# Transportation Master Plan Update



## A TRANSPORTATION "BLUEPRINT" FOR THE REGION

York Region is updating the 2002 Transportation Master Plan (TMP) to enhance our ability to provide long-term support to our growing communities through to the year 2036. The TMP update is needed to address new Provincial growth projections and ensure that existing transportation decisions and policies are consistent with recent development trends and legislative changes. It is also being undertaken to further address the transportation opportunities and challenges first identified in the 2002 TMP. Conducting ongoing reviews and updates will ensure that the TMP continues to work towards the goals of a sustainable natural environment, economic vitality and healthy communities while providing affordable and efficient transportation systems. With a sustainability focus, the TMP update will prioritize the Region's short, medium, and long-term transportation goals through to 2036.

## ACCOMPLISHMENTS TO DATE

York Region's 2002 Transportation Master Plan was awarded the Transportation Association of Canada's Sustainable Urban Transportation Award in recognition of its integration of land use and transportation growth management policies. The Region is proud of this accomplishment and looks forward to building on our success during this new undertaking.

In 2002, there was a general acknowledgement that the existing Regional road network would start to degrade without appropriate policies and plans to significantly improve transit services and sustainable land uses.

In response to this, York Region carried out several sustainable transportation initiatives, including:

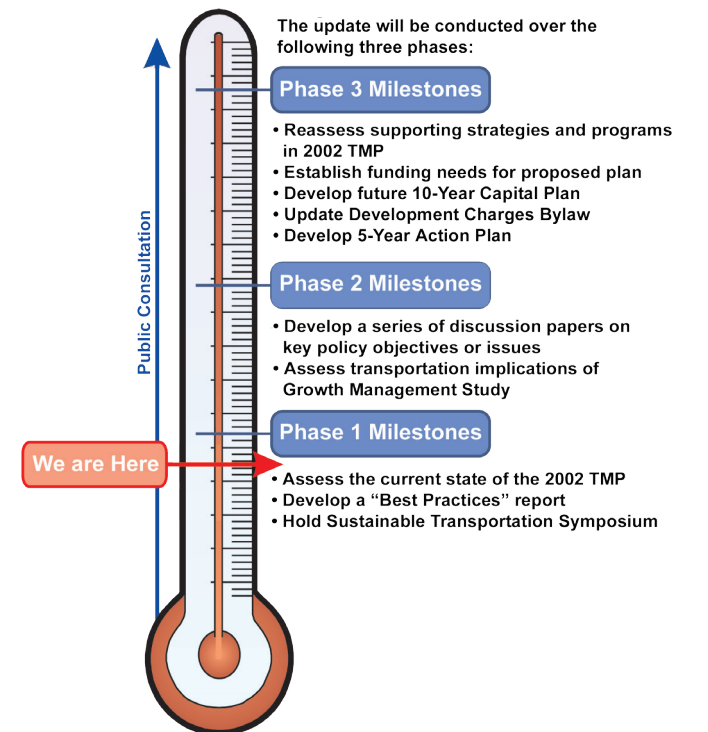
- York Region Transit (YRT) service expansion
- Viva - the first phase of a Bus Rapid Transit system
- Environmental Assessment for a subway extension and rapid transit service
- Five-Year YRT Service Plan
- 250 lane-kilometres of new arterial roads
- 109 new signalized intersections
- Support for a Regional Official Plan Amendment
- Transit oriented development guidelines
- Cycling & Pedestrian Master Plan
- Transportation Demand Management (TDM) initiatives

## STUDY PROCESS

The TMP update will adhere to the Municipal Class Environmental Assessment Master Planning process. The study will be conducted in two parallel streams:

- Technical Analyses
- Public Consultation

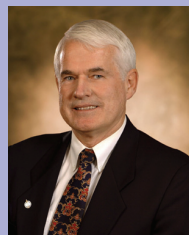
These will be coordinated and integrated with the Growth Management Initiative, and follow the three phases outlined below:







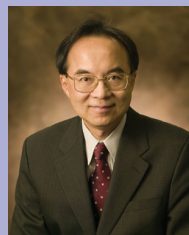
Mayor  
Frank Scarpitti  
Town of Markham



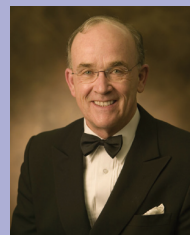
Regional Councillor  
Jim Jones  
Town of Markham



Regional Councillor  
Jack Heath  
Town of Markham



Regional Councillor  
Tony Wong  
Town of Markham



Regional Councillor  
Gordon Landon  
Town of Markham



Mayor  
David Barrow  
Town of Richmond Hill



Mayor  
Linda D. Jackson  
City of Vaughan



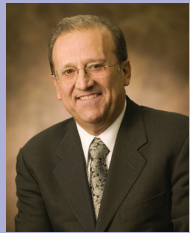
Chairman and CEO  
Bill Fisch



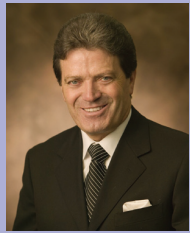
Regional Councillor  
Brenda Hogg  
Town of Richmond Hill



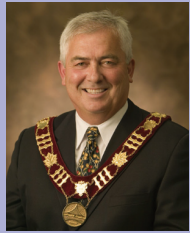
Regional Councillor  
Joyce Frustaglio  
City of Vaughan



Regional Councillor  
Mario Ferri  
City of Vaughan



Regional Councillor  
Gino Rosati  
City of Vaughan



Mayor  
Robert Grossi  
Town of Georgina



Regional Councillor  
Danny Wheeler  
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Mayor  
Phyllis M. Morris  
Town of Aurora



Mayor  
Wayne Emmerson  
Town of Whitchurch-Stouffville



Mayor  
James Young  
Town of East Gwillimbury



Mayor  
Margaret Black  
Township of King

### MESSAGE FROM YORK REGIONAL COUNCIL

The Regional Municipality of York remains one of the fastest growing communities in Canada and is expected to continue to experience extensive growth over the coming decades. To ensure we meet our growing travel demands in an economically sound and environmentally sustainable manner, York Regional Council is determined to continue to work with residents, stakeholders and partners and further develop our transportation infrastructure.

The Transportation Master Plan Update study incorporates the Province's significant increases in population and employment forecasts, changes in land use planning and environmental policies, in addition to the Region's growth management initiative, *Planning for Tomorrow*. The update also integrates our sustainability objectives – to preserve and enhance our natural environment, economic vitality and healthy communities while providing safe, affordable and efficient transportation for people and goods.

Throughout the study, York Region residents and stakeholders have provided valuable input to the study team that has worked hard to prepare draft policies, programs and transportation networks for recommended implementation over the next 30 years.

Please share your thoughts and comments now – they are vital during this important planning process. Help plan York Region's future!






# Transportation Master Plan Update

# Moving on Sustainability

## Regional Initiatives

The Regional Municipality of York will remain a vibrant community by continuing to provide a reliable and efficient transportation system to move people and goods. Our communities are slated for significant growth over the next two decades. To accommodate this growth, transportation planning that includes new roads, transit and rapid transit services, alternate travel options and opportunities for more walking and cycling are paramount. This is what our Transportation Master Plan Update Study hopes to achieve.



York Region began the Transportation Master Plan Update in the spring of 2006. The Study is part of York Region's Growth Management and Sustainability Initiative, a program to bring the Region's growth management policies into conformance with the Provincial Growth Plan Places to Grow, as well as the Oak Ridges Moraine Conservation Plan and the Greenbelt Plan. The provincial government has forecasted that York Region will grow to 1.5 million residents and 800,000 jobs by 2031. Through the integration of these studies, the Region has positioned itself to approach this growth in a more sustainable manner.

The Transportation Master Plan Update is one of many successful initiatives undertaken by York Region relating to growth management and sustainability. The others include:

- Public Transit and Viva Rapid Transit
- Water for Tomorrow
- Greening and Land Securement Initiatives
- Human Services Plan/Housing Strategy
- Sustainability Strategy
- Tom Taylor Place: Energy Efficient Affordable Housing
- Pedestrian and Cycling Master Plan
- Corporate Clean Air Strategy
- LEED Buildings Program and Retrofits
- Smart Commute Initiative
- Centres and Corridors Strategy
- Water Diversion Strategy



## Activities to Date

In updating the Transportation Master Plan, we have:

- Collaborated with community partners to develop Sustainability Principles to guide the update
- Analyzed population and employment projections
- Developed a Best Practices Review of sustainable transportation practices for York Region
- Produced several Issue Papers to develop a better understanding of how the Region can address major features of the transportation system
- Conducted a comprehensive consultation program, including:
  - A public opinion survey of more than 1,000 York Region residents on transportation issues
  - Two rounds of Public Consultation Centres
  - Two stakeholder symposiums
  - Five Technical Advisory Committee meetings
  - Published a website of study materials
  - Three study newsletters

# You're Invited!

## York Region Transportation Master Plan Update Community Meetings

York Region is pleased to host open house meetings in five communities to outline the Master Plan's draft recommendations. The study team will be on-hand in each community to present the recommendations, followed by a question-and-answer period and one-on-one discussions.

The schedule is as follows:

DATE	LOCATION
Wednesday, November 12th Town of Whitchurch-Stouffville	Latcham Hall 8 Park Drive South
Tuesday, November 18th City of Vaughan	Vaughan Council Chambers 2141 Major Mackenzie Drive
Thursday, November 20th Town of Markham	Markham Council Chambers 101 Town Centre Boulevard
Tuesday, November 25th Town of Newmarket	Newmarket Council Chambers 395 Mulock Drive
Thursday, November 27th Town of Richmond Hill	York Region South Service Centre- Rooms ABC 50 High Tech Road, 1st Floor

### MEETING AGENDA

6 p.m. to 7 p.m. - Open House / 7 p.m. to 7:30 p.m. - Presentation / 7:30 p.m. to 9 p.m. - Facilitated Discussion

## Other Ways to Provide Input

Those unable to attend the upcoming community meetings can provide input by contacting the Region's Manager of Transportation Planning:

**Loy Cheah, P.Eng.**

Email: [masterplan@york.ca](mailto:masterplan@york.ca) | Phone: 905 830-4444 ext 5024 | Toll Free: 1 877 464-9675 ext 5024 | Fax: 905 895-0191



## For More Information

For more information on the Transportation Master Plan Update, please visit:

[www.york.ca/tmp](http://www.york.ca/tmp)



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Background

Let's discuss the plan!



## What we Heard from the Public

This past summer, EKOS Research Associates, an independent market research firm, conducted a telephone survey of more than 1,000 York Region residents to gauge their opinions on transportation issues facing the Region. The survey was designed to collect resident's views on traffic congestion, public transit and opinions on potential strategies.

In order to compare and contrast responses from residents of different municipalities, 250 residents were surveyed in each of four areas: Markham, Vaughan, Richmond Hill and the other six communities combined. This survey, in addition to the comprehensive public and stakeholder meetings, provided significant input to the development of the plan.

Key suggestions from the public and stakeholder meetings and survey included:

- Transportation and traffic congestion are most important issues in York Region
- Providing bold ideas and initiatives are required
- Public transit solutions are favoured
- Engaging residents is critical
- Expand the road network
- Consider other solutions - High Occupancy Vehicle (HOV) lanes, Transportation Demand Management (TDM) strategies and pedestrian and cycling networks
- We don't need more plans, we need more implementation

The results of the survey were used to help guide the Transportation Master Plan in developing practical strategies to address traffic congestion and future growth. For an electronic copy of the survey, please visit our website at [www.york.ca/tmp](http://www.york.ca/tmp)



## Proposed Policies & Strategies

More than 100 policies and strategies have been developed in the Transportation Master Plan. Some of the key initiatives include:

- Developing mixed land uses that support transit stations and corridors (such as an apartment building or condominium with offices and stores)
- Developing a framework to establish a Regional or Municipal Parking Authority that would set parking policy within York Region
- Adopting a "Putting Pedestrians and Transit First" policy into the Official Plan
- Aggressively implement our Pedestrian and Cycling Master Plan
- Developing new approaches to market sustainable transportation programs and initiatives to youth, the elderly, the disabled and various ethnic groups
- Pursuing creative funding strategies that support sustainable transportation initiatives

To learn more about the policies and strategies and draft network plans, please attend one of our upcoming community meetings.

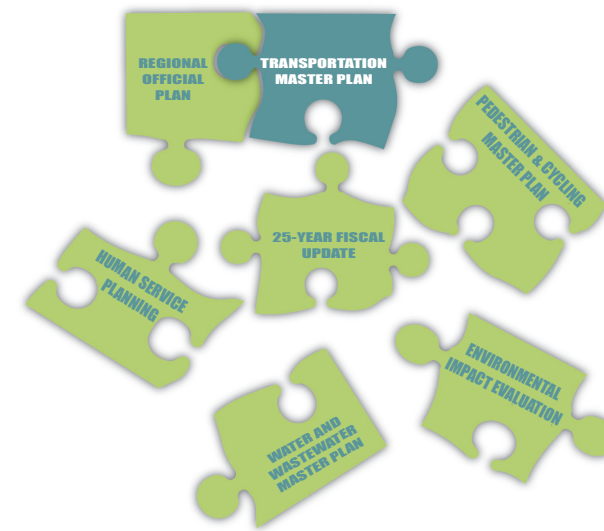


## A new approach to Transportation Planning!

### Study Objectives

Here is what we set out to do when we began this Study:

- Make sustainability the cornerstone of our Transportation Master Plan
- Integrate and co-ordinate infrastructure with other components of long range planning
- Confirm York Region's transportation needs for the next 30 years
- Estimate the cost of providing the infrastructure needed to accommodate forecasted growth
- Address the Region's transportation demands while providing solutions that protect the natural environment
- Establish an Implementation Plan



### Co-ordinated Effort

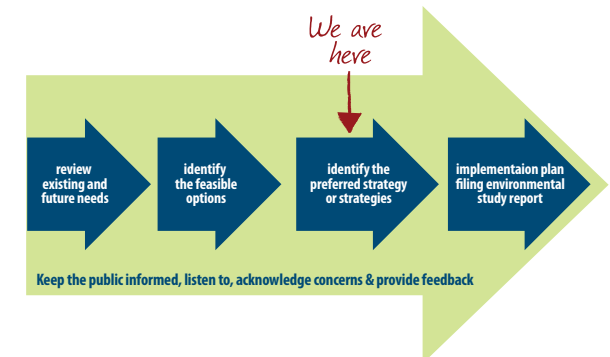
York Region is committed to an integrated and co-ordinated approach to planning. When complete, the Transportation Master Plan will be part of the Region's integrated approach to growth management.

Other key growth management initiatives include:

- Regional Official Plan
- Water and Wastewater Master Plans
- Pedestrian and Cycling Master Plan
- Human Services Plan
- 25-Year Fiscal Update
- Environmental Impact Evaluation

### Current Status

We have identified a preferred Transportation Network and Transportation Sustainability Strategy and would appreciate your feedback prior to finalizing the study.





# York Region 2031 Transit Network

**DRAFT**



# York Region 2031 Road Network

**DRAFT**

