Summary of Draft Issue Papers
Transportation Master Plan Update

PAPER NO. 1: FOSTERING THE PUBLIC'S UNDERSTANDING ABOUT SUSTAINABLE TRANSPORTATION ISSUES

Getting the Message Out

York Region is continuing to make strides to support its sustainability goals and undertake initiatives that make it a national leader in promoting sustainable development. The *Fostering the Public's Understanding About Sustainable Transportation* Issue Paper indicates that the Region has taken modest steps to promote its sustainable transportation initiatives through newsletters, printed materials, symposia, school programs, public meetings, and its Web site. However, it suggests that the Region should embrace other forms of communications and actively "get the message out" to:

- foster a much wider understanding of the Region's 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.

Unlike typical public awareness campaigns where a product or service is being marketed, this Paper stresses that a campaign which encourages the adoption of sustainability practices requires a change in philosophy or lifestyle or even making a sacrifice. There is a critical need for the message to be well-reasoned and connect personally with the audience.

Key ways to promote sustainability include public service announcements, media stories on local television programs, op-ed pieces in the local newspapers, Web site blogs and internet bulletin boards and newsletters distributed through the mail or e-mail. Also, interpersonal dialogue with residents or specific stakeholder groups is a persuasive way to encourage people to make lifestyle or behavioural changes. For example, educational programs that engage children are a powerful means to influence sustainable practices, behaviours and values for the long-term.

Regardless of the effectiveness of the message or its method of implementation, successful public awareness campaigns must be consistent, repeatedly reinforced and maintain a level of unrelenting effort.

Local Initiatives and Programs

This Paper identifies several current comprehensive initiatives by York Region and the marketing plans which complement these initiatives including campaigns to promote Viva and YRT services to businesses, ethnic groups and students. The avenues for promoting transit services include newspaper ads, transit service announcements, posters/flyers, advertorials, university student kits, and high school student

"ambassadors". York Region also has other programs which currently promote sustainable transportation such as:

- *Walk to School Day* and the *Iwalk Club* where schools encourage their students to walk to school;
- The *"Bus It" Program*, a partnership between the school boards and York Region Transit to provide bus transportation to school; and
- Participation in the annual *Windfall Ecology Festival* to promote Clean Air Day and increased use of Public Transit.

Other Public Awareness Campaigns to Promote Sustainability

A brief description of other successful public awareness campaigns employed globally to promote sustainable transportation programs and initiatives are identified in the Paper. The best practices of programs and initiatives highlighted include those from Europe, the United States, and other parts of Canada.

Recommended Policies and Strategies for Building Awareness

Based on the analysis in the Paper, the following educational and promotional-related policy and program recommendations are proposed for York Region's Transportation Master Plan Update:

1. Aggressively promote sustainable transportation programs and initiatives to residents, businesses and institutions through different media sources.

2. Explore more creative approaches to market sustainable transportation programs and initiatives to new residents and immigrants.

3. Intensify efforts to market sustainable transportation programs and initiatives to school-aged children, high school, college and university students.

4. Explore new strategies to market sustainable transportation programs and initiatives to seniors and individuals with physical disabilities.

5. Monitor the impacts key messages are having on residents' travel behaviour.

Specific implementation strategies supporting each of the above recommended policies are outlined in Chapter 5 of the Issue Paper. These policies and strategies are to stimulate discussion on the Region's approach to build awareness on the sustainable transportation issues.

PAPER NO. 2: MANAGING TRAFFIC CONGESTION

Why is Traffic Congestion a Problem?

Some people may argue that traffic congestion is beneficial and reflects a high level of economic activity in an area. This Issue Paper on *Managing Traffic Congestion* acknowledges that a reasonable amount of traffic is good and expected in a thriving urban area, however, challenges arise when traffic growth is unsustainable – a phenomenon that is becoming more common in York Region.

The inability to accommodate more vehicles on the existing transportation infrastructure results in more traffic congestion. It is a challenge because traffic congestion negatively affects our quality of life and our economy, including the effects on delay and productivity, changes in collision frequency and characteristics, wasted fuel costs. It also produces an increase in air pollutants and Greenhouse Gas (GHG) emissions, vehicle operating costs, and noise pollution.

The Paper indicates that traffic congestion is now considered by many as York Region's number one problem. With appropriate measures, it is suggested that the phenomenon can be managed and controlled.

Traffic Congestion will get Worse in York Region

A depiction of travel conditions in York Region highlights some areas of the southern tier municipalities with severe congestion, including along Highway 7, Yonge Street, and the 400-series highways. Observations throughout these municipalities indicate significant queuing and delays during both weekday and weekend peak periods.

One continuing trend noted by the Paper is new residential development "leap-frogging" over York Region into Simcoe County. The increasing number of Simcoe County residents that work in southern York Region, Toronto, Peel Region and other areas will contribute significantly to congestion in York Region if there is no pro-active strategy to manage travel demands.

This Issue Paper also notes that traffic congestion has the potential to become an "all day" and "all week" issue, as more and more vehicles occupy our roads. Congestion within the Region will soon worsen, and reach severe levels if proper measures are not implemented to help manage traffic. By 2031, it is possible that under a "do nothing" scenario, the Region may experience extensive areas of severe congestion, from the southern areas of Vaughan and Markham north to Aurora and extending into Newmarket. The results of the travel demand forecasting for the TMP Update show that even with the implementation of all of the road and transit improvements proposed in the 2002 TMP, congestion levels in the Region will still worsen and spread geographically.

This would severely impact the Region's road network and the Region's ability to remain economically competitive.

What Can be Done to Manage Traffic Congestion?

This Issue Paper identifies several measures and practical initiatives that can assist in managing congestion.

One of the measures identified to improve transportation options is Travel Demand Management (TDM). This is a term used to describe strategies aimed at reducing the total number of single-occupant automobile trips including strategies related to land use, housing, transit, carpooling, parking, alternative travel modes and alternative work arrangements. Incentives to use alternative modes of transportation include commuter financial incentives with regular performance evaluation of the programs. The intended result is not to force people to abandon their cars, but rather offer them convenient, reliable and affordable transportation choices.

TDM supporting measures recommended in the 2002 TMP study and currently applicable in the Region are identified in the Paper including a full time staff position for a TDM Coordinator, working with businesses and area municipalities to establish Transportation Management Associations (TMAs) and Smart Commute, and implementing a trip reduction program (Smart Commute York Region) for Regional employees.

Intelligent Transportation Systems (ITS) are also identified in the Paper to combat recurring and non-recurring congestion. The application of ITS allows for more advanced traffic management beyond traffic signs and road markings. The technologies allow for:

- Adaptive traffic control systems which have the ability to effectively change signal timing plans with changing traffic demands,
- Traffic conditions data collection and information dissemination,
- On-board navigation, information access and transfer, and
- Global positioning systems (GPS) to be used for tracking vehicles and fleets.

The Region's 10 year ITS Strategic Plan adopted by Council in December 2007 was also referenced. The Paper noted that, with the implementation of the ITS Strategic Plan, the Region expects improved management of traffic flow and congestion, as well as an increased ability to respond to emergencies.

Some of the ITS new and revised applications mentioned in the Paper for consideration in York Region include:

- Detector loop placement locations for left turn lanes,
- Pedestrian pushbutton improvements,
- Web-based travel time and traffic information delivery, and
- Changeable message sign systems for route and mode choice to assist drivers.

Examples of sustainable transportation initiatives that have been implemented in other North American jurisdictions to help address traffic congestion are provided in the Paper.

Recommended Policies and Strategies for Managing Traffic Congestion

The recommended policies and initiatives to manage traffic congestion in York Region's Transportation Master Plan Update include the following:

1. Adopt a "putting pedestrians and transit first" policy approach in the urban areas of the Region, where pedestrian and transit movements are the first priority. Focusing on this approach will lead the Region in a sustainable direction.
2. Expand the application of Intelligent Transportation Systems (ITS) to facilitate the smooth flow of both transit and private vehicles.
3. Continue to develop a convenient and reliable transit system that effectively serves individuals without vehicles, as well as "choice" riders.
4. Proactively manage the parking supply and fee structure to minimize single occupant vehicle trips.
5. Encourage practical commuting options through education and social marketing, as well as the promotion of relevant services.
6. In partnership with local municipalities, develop appropriate land uses to support transit, pedestrian, and cycling trips.
7. Manage goods movement to minimize impacts on peak period commuting travel.
8. Work with the local municipalities to implement a coordinated network of commuter bike lanes and supporting bike facilities as identified in the Region's Cycling and Pedestrian Master Plan.
9. Encourage the use of transit and other sustainable modes of travel through Commuter Trip Reduction programs. These include financial incentives for commuters, rideshare matching, teleworking, and guaranteed ride home programs.

Specific implementation strategies supporting each of the above policy recommendations are identified in Chapter 4 of the Issue Paper.

PAPER NO. 3: IMPLEMENTATION OF TRANSIT ORIENTED DEVELOPMENT

York Region Adopted Transit Oriented Development (TOD) Guidelines

In September 2006, the York Region Transit Oriented Development (TOD) Guidelines were adopted with a goal to shape development to respond to the needs of transit users and the transit service itself. The Guidelines comprise of six key elements: Pedestrians, Parking, Land Use, Built Form, Connections, and Implementation.

With respect to implementation, the Guidelines require that TOD strategies be applied at the onset of the planning process, and that a wide array of stakeholders be involved including municipal councils, developers, and residents. This Issue Paper recommends policies which complement the implementation of TOD and the Guidelines.

TOD Planning Context and Best Practices in North America

An overview of the Provincial and Regional planning context for TOD is provided in this Paper. It describes how the implementation of TOD will enable York Region to meet both sustainability goals and conform to the Province's Places to Grow policy. Concentrating intensification and new development along activity nodes and corridors will provide a focus for transit and infrastructure investments to support future growth. Also, TOD supports the growth management policies developed for the Regional Official Plan, the Regional Centres and Corridors Strategy and the Regional Growth Management Plan.

Although York Region is one of only a few Ontario municipalities to have adopted TOD Guidelines, several other North American cities have implemented policies and initiatives to take it one step further. This Paper highlights some best practices in cities including Calgary, Ottawa, Vancouver, Denver, and Portland.

Key Elements of TOD and Potential Applications in York Region

Elements of TOD are discussed in the Paper including transit station planning, transit-supportive densities and site design guidelines. It recommends the Region strive to achieve the minimum density target of 200 residents and jobs combined per hectare in its Regional Centres by 2031 in order to accommodate and support major transit infrastructure. Also, developments and features that should be encouraged along transit corridors should include:

- Location of major trip generators such as office towers, shopping centres, schools and entertainment facilities close to transit stops;
- Maximum building setbacks so that parking is located behind the buildings rather than between the building and the street;
- Infill, redevelopment and intensification of under-utilized properties, including brownfield sites;

- Pedestrian and transit user amenities, such as wide, well-lit sidewalks, accessible bus shelters and waiting areas, street trees and landscaping, and canopies or arcades along buildings, with careful attention to aesthetic design;
- If possible, transit malls – even if only designated during certain times of the day.

The Region's TOD Guidelines are not explicitly part of the Regional Official Plan, and local area municipalities are only encouraged to utilize these guidelines when promoting TOD. This Issue Paper recommends that the Region fully integrate the guidelines in it Official Plan to promote sustainable development and implement a policy compelling local municipalities to achieve the minimum densities to sustain higher order transit.

Potential policies for retrofitting traditional patterns of low density development are also discussed in the Paper. Collaboration with local municipalities and stakeholders is key to ensuring that developments within the vicinity of major transit corridors and nodes are supportive of Regional Strategies.

Recommended Policies and Strategies for Implementing TOD

The recommended policies contained in this Paper for the Implementation of TOD include the following:

1. Provide adequate connections between the pedestrian environment and transit.
2. Limit parking around transit oriented developments by initiating transportation demand management (TDM) programs or other initiatives that discourage driving.
3. Ensure type and location of land uses promote transit use throughout the urban areas, and particularly in the Regional Centres and Corridors.
4. Implement urban design standards in the Regional Centres and Corridors and at all transit oriented development locations to enhance the pedestrian environment and encourage transit use.
5. Develop partnerships with local municipalities and key stakeholders to ensure TOD initiatives are planned and implemented successfully.

A detailed list of recommended implementation strategies is also provided in Chapter 4 of this Issue Paper. It is recognised that the implementation strategies require commitment from a large number of Regional staff and stakeholders to make TOD work.

PAPER NO. 4: ASSESSING IMPACTS ON NATURAL HERITAGE AND ENVIRONMENTAL FEATURES

Existing Natural Heritage and Environmental Features in York Region

York Region is home to a significant number of natural areas including wetlands, forests, lakes, river systems, and major landscape features such as the Oak Ridges Moraine. These areas are the habitat of a variety of animal and plant species and play an important role in the Region's ecosystem. This Issue Paper stresses that each of the systems and features have different sensitivities and critical elements that must be considered when determining appropriate land use, development intensity, and design and placement of any new transportation infrastructure.

The Region's existing natural heritage and environmental features described in this Paper include:

- The Regional Greenlands System – consisting of forest natural areas, complex surface and subsurface water systems, plant and animal communities with unique functions, attributes, and linkages;
- Natural Environmental Features – which are identifiable land and water areas providing habitat for a variety of plant and animal species such as Environmental Policy Areas, Wetland Areas, Forest Resource Areas, and Landforms;
- Water – systems encompassing underground aquifers, the water table, rivers, streams, ponds, wetlands and lakes;
- The Oak Ridges Moraine – a significant landform with a unique concentration of environmental, geological and hydrogeological features dividing the watersheds draining south into Lake Ontario from those draining north into Georgian Bay, Lake Simcoe, and the Trent River system; and
- Significant Woodlands – consisting of forests with an estimated current (2005) coverage of 23% in the Region compared to 80% at the time of settelment.

Legislation That Addresses the Impacts on the Environment

Current legislation and policies under the Federal, Provincial, and Regional levels which ensure assessment of project environmental impacts are identified in this Issue Paper. The list of applicable legislation and policies for each agency level include the following:

<u>Federal</u>

- Canadian Environmental Assessment Act (CEAA)
- Fisheries Act
- Migratory Birds Convention Act

<u>Provincial</u>

- Ontario Environmental Assessment Act

- Ontario Environmental Protection Act
- Ontario Water Resources Act
- Provincial Policy Statement 2005 (PPS)
- Oak Ridges Moraine Conservation Plan
- The Greenbelt Plan
- Places to Grow – Growth Plan for the Greater Golden Horseshoe 2006

Regional

- Flood and Fill Regulation
- Forest Conservation By-law
- York Region Official Plan
- Regional Greenlands Property Securement Strategy
- Toronto and Region Conservation Authority's (TRCA) Terrestrial Natural Heritage System Strategy
- Rouge Park Management Plan
- Rouge Park North Management Plan
- York Region Significant Woodlands Study

Each of the above legislation and policies were tabulated on its ability to address the range of natural heritage features.

Case Studies on Innovative Mitigation Measures to Minimize Environmental Impacts

Several case studies on innovative mitigation measures to minimize environmental impacts are presented in this Issue Paper. The case studies include:

- The Banff National Park Management Plan – With an update in 2004, the Plan emphasizes and sets a priority on wildlife corridor protection. It outlines strategies to protect wildlife from the development and expansion of ground transportation infrastructure in the park. It also recommends the need to study ways to make existing wildlife over and underpasses along the Trans-Canada Highway more effective.
- British Columbia Ministry of Transportation: Wildlife Accident Reporting – A system for recording the number and types of wildlife accidents since 1978 to monitor trends, techniques and plans. Based on the database, mitigation measures are used including habitat modification, warning signs, reflectors, wildlife exclusion and integrated wildlife management systems.
- Ontario Ministry of Transportation (MTO): Wildlife and Transportation Reference for the Oak Ridges Moraine – A document in draft form prepared by MTO which discusses both motorist and wildlife behaviour modifications, and highway lighting measures to mitigate highway impacts on wildlife.

Recommended Policies and Strategies for Assessing Natural Heritage and Environmental Impacts

Based on the information and case studies presented in this Issue Paper, the following policies for addressing the Region's natural heritage features are recommended for consideration in the Transportation Master Plan Update:

1. Plan the location of transportation system elements to avoid significant natural heritage features, including the habitats of threatened and endangered species, wetlands and Areas of Natural and Scientific Interest.
2. Develop and enforce Environmental Best Management Practices for stormwater management, erosion and runoff during construction.
3. Develop measures to minimize environmental impacts resulting from construction activities.
4. The environmental study of individual project elements should be used to fully document the characteristics of natural heritage features within the study area of a specific project. This includes not only significant habitats and features, but also corridors of movement of both fish and wildlife that may also be significant.
5. Provincial legislation, such as the Greenbelt Plan, the Oak Ridges Moraine Conservation Plan, Places to Grow, and the Provincial Policy Statement require that York Region preserve and maintain greenways to the extent possible.
6. Modify existing and future road lighting infrastructure to lessen the impact on the surrounding environment and wildlife habitat and corridors.

Implementation strategies for each of the above recommended policies are detailed in Chapter 4 of this Issue Paper. These strategies help to build mitigation practices into the development of infrastructure projects as early as possible in order to minimize impacts on the natural and environmental features of the Region.