Niagara Peninsula Transportation Needs Assessment Study

Executive Summary Report







MESSAGE FROM THE MINISTER

Ontario's transportation system continues to drive Ontario's economy forward into the 21st century.

A safe, efficient and integrated transportation system supports economic investment, promotes job creation, and contributes to the preservation of the environment and the overall quality of life for all residents of the Province of Ontario.

MTO is taking the steps necessary to plan for the future of transportation in Ontario. Long-range transportation planning is underway across the province in support of the government's made-in-Ontario Smart Growth commitment to build a stronger economy, stronger communities and a healthy environment.

MTO is working closely with the Ontario SuperBuild Corporation, leading the largest infrastructure building program in Ontario's history, to develop new and innovative financing and public/private partnership approaches to create new infrastructure to meet Ontario's transportation needs over the next 30 years.

The Niagara Peninsula Transportation Needs Assessment initiative is a comprehensive transportation study that provides a multi-modal Transportation Development Strategy - a "road map" to guide transportation investment in the broader Niagara – Hamilton area.

This Transportation Development Strategy needs to support international trade and tourism, provide transportation choice, and encourage growth away from Niagara Region's unique tender fruitlands and the Niagara Escarpment.

MTO recognizes the importance of developing a vision for tomorrow's transportation system in concert with other levels of governments. Over the course of the study, MTO partnered with the Regional Municipality of Niagara and the City of Hamilton; and consulted with Halton Region and Haldimand County. Through this unique provincial-municipal partnership, a vision has been created to realize provincial and regional planning and economic development goals.

The Niagara Transportation Needs Assessment, and other similar initiatives under way across the Province, will give us a strong, competitive edge, as we strive to build an even stronger economy.

The Niagara Peninsula

The Niagara Peninsula area, strategically located within central Ontario, acts as an international trade and tourism gateway between the Greater Toronto Area, and southwestern Ontario and the United States. Some 120 million people and major markets lie within 500 kilometres of the Peninsula. International trade and goods movement through the peninsula into Canada's economic heartland are critical to the regional, provincial and national economies.

The Regional Municipality of Niagara itself is part of a unique, bi-national region spanning the Niagara River. With four road bridge crossings and several large tourist attractions, the Niagara area is both a major tourism gateway, and a vital tourism growth centre in Ontario.

The City of Hamilton is also in a unique position, functioning as a gateway between the Niagara area and the Greater Toronto Area (GTA). A number of key highways link Hamilton to Niagara and Halton Regions, Haldimand County and the Kitchener-Cambridge-Guelph areas.

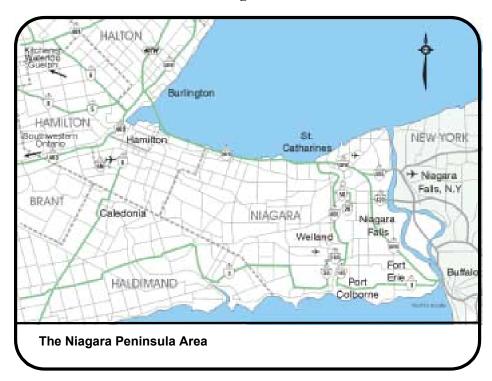


Exhibit 1: The Niagara Peninsula Area

The efficiency of the provincial highway system, in and through the Niagara Peninsula is therefore essential to the continued economic prosperity of the broader Golden Horseshoe area.

The QEW is the primary artery for trucks, tourists and commuters through the Niagara Peninsula, linking local communities, industry and markets. The QEW is situated along the north side of the Niagara Escarpment in a narrow corridor that is also home to both a substantial number of people and tender fruitlands. These different land uses are competing for limited space. At the same time, the unique soil and climate conditions make the tender fruitlands a valuable and irreplaceable resource in Ontario.

Border Crossings

There are four road bridge crossings across the Niagara River. The Peace Bridge and the Queenston-Lewiston Bridge are the only bridges that accommodate truck traffic. Over the period 1995 to 2000, Peace Bridge truck volumes rose by 26 per cent to 1.4 million vehicles annually, while the Queenston-Lewiston Bridge truck traffic increased by 32 per cent to just over 1 million vehicles during the same period. The long-term viability of the international crossings and the provincial highway system through the Niagara Peninsula is important to continued trade, tourism and economic growth and prosperity in the region and the broader Golden Horseshoe area.

Trade

International trade with the United States is crucial to the economy of Canada and Ontario. Canada and the United States enjoy the largest bi-national trading relationship in the world, at about \$590 billion in 2000. Approximately 87 per cent of Canadian exports and 93% of Ontario's exports go to the U.S. Total exports from Ontario accounted for 53 per cent of provincial Gross Domestic Product (GDP) in 2000 compared to 29 per cent in 1989 and support 1.6 million jobs. Increases in exports during the past four years account for 20 per cent of Ontario's economic growth. Rising productivity, the low value of the Canadian dollar and government fiscal policy have supported Ontario's global competitiveness, export growth and job creation.

The Niagara Peninsula is a key economic trade corridor connecting the eastern U.S. seaboard and north-eastern U.S. industrial centres to the GTA, Kitchener-Waterloo and southwestern Ontario. The Niagara frontier plays a significant role in this trade, as about 16% of all Canada-U.S. trade moves through the Peninsula to cross the border.

The QEW is a primary truck route linking the Niagara bridge crossings to the Greater Toronto Area (GTA) and the rest of southern Ontario. On an average workday, 15,000 trucks travel the OEW through Stoney Creek, hauling over \$400 million in goods.

Tourism

Tourism is currently Ontario's fifth largest export industry and is projected to become the fourth largest in the near future. Of the \$47.3 billion (1998) of tourism spending in Canada, \$11.5 billion was spent in Ontario. Expenditures in Niagara and Toronto were about \$2.1 billion and \$2.8 billion respectively.

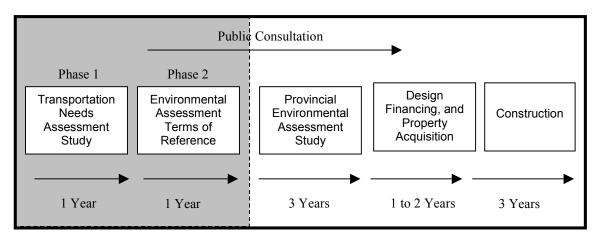
Niagara is Ontario's primary tourism gateway, with over 50% of tourists entering the province via the international crossings. Over 90% of tourists entering Ontario travel by auto.

Transportation Needs Assessment Study

The Niagara Peninsula Transportation Needs Assessment Study is a component of the Ministry of Transportation's strategic long-range transportation planning program to improve transportation through Ontario's major international gateways and key highway corridors.

Long-range planning is critical to ensure that transportation investment is made where required, when needed, and in the most cost-effective way. Transportation Needs Assessment Studies play an important role in this process, but represent only the first step in a longer implementation process. It can take between eight and ten years to plan, design and build new highways. Clearly, "smart-planning" is necessary to ensure that such costs, time and resources are wisely invested.

Transportation Planning Process



A Transportation Needs Assessment Study is primarily a technical exercise to determine the need and justification for transportation improvements and the feasibility of various transportation alternatives. It is a precursor to the formal environmental assessment process for major transportation infrastructure such as new highways or major extensions to existing highways. Needs assessment studies may be considered as doing our "homework", to determine what action, if any, should be initiated prior to undertaking costly and time-consuming environmental assessment studies. During this phase, the ministry works with municipal stakeholders and consults with transportation providers, agencies and other stakeholders.

In the event that a new highway or major extension is recommended, the Ministry begins Phase 2, which involves public consultation on the technical findings of the needs assessment study and development of a Terms of Reference for an Environmental

Assessment (EA) Study. The Terms of Reference outline the purpose, scope and consultative process for the EA study. It is subject to public review and Ministry of the Environment approval.

Depending on the project, there may also be a need for Federal approvals under the Canadian Environmental Assessment Act.

Study Goals and Objectives

Building upon the *Provincial Policy Statement* and the government's "Smart Growth" principles, the following Goals and Objectives were established for the Niagara Peninsula Transportation Needs Assessment Study.

Goal: To create a Transportation Development Strategy that provides a safe, efficient, effective and reliable transportation system.

Objectives

- Move people and goods more efficiently through the Niagara Peninsula, by minimizing delays and reducing congestion.
- Maximize use of existing infrastructure and resources at both a provincial and municipal level.
- Expand and enhance transportation choice through consideration of transportation alternatives.
- Promote technological innovation to improve system efficiency and reliability.

Goal: To support economic growth at the provincial and municipal levels.

Objectives

- Sustain economic growth and position the municipalities within the Niagara Peninsula to compete locally, provincially and internationally.
- Develop new opportunities for economic growth at the provincial and municipal level.
- Accommodate growth and change in ways that maintain or enhance quality of life and promotes housing and transportation choice.
- Improve overall accessibility within the Niagara Peninsula to facilitate new growth opportunities and to reduce pressure on the QEW corridor.

Goal: To create a Transportation Development Strategy that promotes a healthy environment.

Objectives

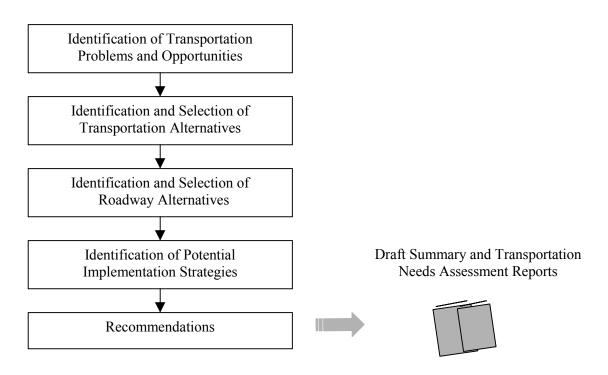
- Protect natural resources, including the tender fruitlands and Niagara Escarpment.
- Encourage growth in areas where it will have the least impact on the environment.
- Avoid and or minimize adverse impacts to significant environmental features.

These three goals take into consideration the linkage between transportation, land use/economic development and the environment. A Transportation Development Strategy for the area that supports these goals must recognize the significance of municipal planning and economic goals and the long-term well being of the residents, industry and businesses within the Niagara Peninsula, as well as the Province at large. In addition, the strategy must ensure the protection of natural resources including the tender fruitlands, the Niagara Escarpment, wetlands and other significant natural features.

Transportation Needs Assessment Process and Products

The Niagara Peninsula Transportation Needs Assessment Study included an assessment of the transportation network and long range planning problems, opportunities and transportation options in the Niagara-Hamilton area. In a long-term context, the Needs Assessment provides a multi-modal, *Transportation Development Strategy* for safe, efficient and cost-effective travel at all three levels - international, interprovincial and interregional. The process leading to the development of a Transportation Development Strategy is depicted below.

STUDY PROCESS AND PRODUCT



Transportation Alternatives

Transportation Alternatives Assessment

The needs assessment examines all travel needs – commuter, tourist, and goods movement in identifying long term problems and opportunities and considers all modes – road, rail, air and marine as possible options to improve the overall transportation system.

The transportation needs assessment process involves consideration of how proposed transportation planning alternatives meet the study goals and objectives. Reasonable options that meet the mobility and economic goals are carried forward into the Transportation Development Strategy. Roadway alternatives are then assessed in more detail in terms of transportation, economic and environmental considerations.

The preferred initiatives are then included in the Transportation Development Strategy. Through this approach a multi-modal transportation network plan can be developed consistent with provincial and municipal needs, objectives and policies.

Transportation Alternatives Assessment

Do-Nothing Recommended • Rail, Air, Marine **Alternatives** Transit **Carried Forward** Demand/Supply Mgt. Roads Others **Roadway Alternatives** QEW Widening Hwy 420 Extension Transportation Hwy 406 Extension Development Mid-Peninsula Corridor Strategy Others

The Transportation Outlook

The transportation network in the Niagara-Hamilton area consists of a combination of road, marine, air and transit service. In reviewing the performance and role of this multimodal network in the context of the social, economic and transportation service to the community, there are many significant issues and outlooks that must be considered.

Provincial Issues

- The Queen Elizabeth Way (QEW) currently represents the only Provincial highway that links the international bridge crossings in Niagara with the GTA.
- The QEW, at four lanes through St. Catharines, is currently operating at capacity and requires upgrading (an EA for a widening to 6 lanes is being completed and will be available for public review in late June of 2001). There is need to determine the ultimate configuration of the highway relative to other network improvements.
- Traffic analysis and forecasting indicates that beyond 2021, there will be at least a two lane (freeway lanes) peak hour deficiency in an east-west direction through the Niagara Peninsula. This assumes that the aforementioned six lane widening through St. Catharines has been implemented.
- Any disruption to traffic flow on the QEW results in delays for vehicles, including commercial vehicle traffic, as there is no major alternate east-west route capable of accommodating such traffic.
- Future rehabilitation/upgrading work on the Garden City Skyway could result in significant delays and user costs.
- Sections of Highway 403 through Hamilton are operating at capacity with limited opportunities for upgrading.
- The QEW from the Burlington Skyway to the Freeman Interchange will reach capacity in the future.
- Increases in commercial vehicle traffic as a result of changing economic and regulatory conditions (North American Free Trade Agreement), economic growth in Ontario and changing goods movement practices ("just-in-time delivery") has placed additional pressures on the transportation network, particularly the QEW.

Municipal Issues

- Protection of the tender fruitlands along the QEW corridor from further development is a concern to the Region of Niagara and its constituent municipalities.
- There is a desire to enhance overall transportation accessibility to places such as Welland, Port Colborne, South St. Catharines, Niagara Falls, Fort Erie, Haldimand, etc.
- Accessibility to Hamilton International Airport is poor and is affecting the ability to expand the airport.
- The area hosts a number of significant natural features that must be protected from invasive development and infrastructure.
- There is a need to enhance the experience for visitors to the area through the provision of convenient, high-order, and high quality transportation services using existing or new facilities.

Future Outlooks

Population and Employment Growth

The population of Hamilton and Niagara, based on current trends, is forecasted to increase by 17 per cent between 2000 and 2031. However, given the projected population and employment in the Greater Toronto Area (GTA), the ensuing growth pressures may result in a "spill-over" of people and jobs from the GTA to surrounding municipalities. This trend could increase the population of Hamilton and Niagara 34 per cent by 2031. This would generate greater commuting, recreational and other travel in the area and to the GTA.

Tourism

Tourist visitation to Niagara in 2000 was approximately 15 million. While Niagara Falls remains the key tourist attraction within the Peninsula, other areas such as the wine region are becoming more significant as a tourist generator. Forecasted visitations to Niagara range from about 22 million to upwards of 40 million, depending upon the investment level made in tourist facilities.

Goods Movement

On an average day, 7,100 trucks travel across the two Niagara bridges carrying a combined \$280 million worth of goods per day. On an average workday (Monday-Friday) the truck volume is even higher - 8,600 carrying some \$340 million worth of goods. Commercial vehicle traffic is expected to grow at between 2.6 and 3.7 per cent per year to 2031.

Rail facilities carry goods and people both into and through the analysis area. Currently, rail moves one-third of goods by value across the Peninsula. A review of economic factors affecting truck and rail traffic suggests that this share will likely remain stable over time.

It is expected that the tonnage of goods moved by marine will remain stable in the future as much of the goods carried are bulk commodity goods. Marine infrastructure is able to adapt to container shipping and intermodalism, which will allow it to remain competitive with rail for long distance bulk goods movement.

Passenger Movement

GO Transit operates daily commuter trains and buses from Hamilton to the GTA. VIA Rail provides service to Niagara Falls and St. Catharines as part of their Toronto-Niagara Falls-New York route. In the Hamilton to Niagara corridor, opportunities for commuting by rail appear to be limited, as a result of the low number of commuters that actually travel from Niagara to Hamilton or Toronto.

The Transportation Tomorrow Survey (TTS) data (1996) indicates that approximately 200 people commute by rail from the Niagara Region to the GTA on a daily basis. Estimates indicate that if a 5% market share is achieved, based on a similar GO Transit experience

from other hinterland communities, approximately 600-700 commuter trips (one-way) by rail, ferry or inter-city bus, would be made between Niagara Region and the GTA in 2031.

The potential market for new or upgraded rail, ferry or inter-regional bus service today, and in the future is limited, and would not negate the need for improvements to the highway network.

Existing and Future Problems

Today, there are capacity constraints on the QEW through St. Catharines and on the Burlington Skyway. Even with the widening to 6-lanes through St. Catharines, capacity problems on the QEW will be experienced in the near future. Overall, by 2021 and without additional transportation system capacity, there will be a two lane, peak hour deficiency in an east-west direction through the Niagara Peninsula.

As the QEW is the only provincial facility that links the international bridges to the GTA, it is clear that there is a significant problem through the Peninsula and that over the long term this problem will intensify, resulting in less reliable travel through the region.

Exhibit 2 illustrates the existing and future areas of concern in the Niagara Peninsula freeway network.

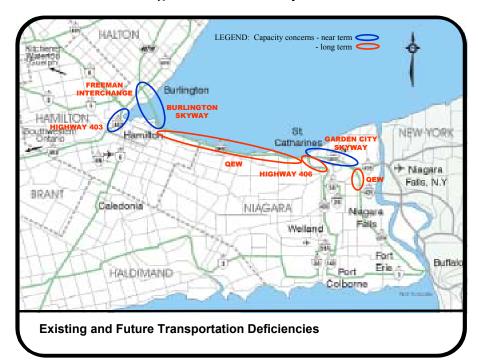


Exhibit 2: Existing and Future Transportation Deficiencies

The Transportation Development Strategy

The Niagara Peninsula Transportation Needs Assessment results in a Transportation Development Strategy that provides a safe, efficient, effective and reliable transportation system and also facilitates economic growth at both a provincial and regional/municipal level, while respecting critical environmental concerns. The strategy is consistent with the three basic guiding principles or pillars for "Smart Growth" in Ontario as identified by the Provincial Government:

- Sustaining a strong economy;
- Building strong communities; and
- Promoting a healthy environment.

There are fundamental elements regarding transportation in and through the Niagara Peninsula that were considered within the context of developing the Transportation Development Strategy:

- The efficient and reliable movement of commercial vehicles through the Niagara Peninsula area linking southern Ontario and the GTA to the international border crossings is vital to economic growth in the Region of Niagara, the City of Hamilton and the Province.
- The promotion of public transportation in the form of bus, rail and ferry services, provides transportation choice and the means to reduce automobile use; however, these modes can not address the diverse user needs nor significantly alleviate QEW traffic congestion.
- There are opportunities for improved transit and rail service to carry tourists/visitors between the GTA and the Region of Niagara.
- Rail currently plays a significant role in the movement of goods through the Peninsula and will continue to do so. However, it is unlikely that this share will increase due to the nature of the commodities transported and the trend towards greater use of "just-in-time" delivery.

The Transportation Development Strategy includes the following elements and is summarized in the attached **Tables 1** through **3**.

- Roadways;
- Transportation Systems Management;
- Passenger Rail Service:
- Travel Demand Management and Transit; and
- Ferry Service

These recommended initiatives are illustrated in the following **Exhibit 3** which shows the recommended roadway improvements and **Exhibit 4** which shows the recommended Transit, TDM and ITS Studies.

Roadways

The centrepiece of the Transportation Development Strategy is a new mid-peninsula corridor running from the QEW between Niagara Falls and Fort Erie, westward to south of Hamilton International Airport, and then around Hamilton and connecting to Highway 407 in Halton Region.

It has been concluded that a new Mid-Peninsula Corridor (MPC) will be required along with strategic upgrading of the QEW from Niagara Falls to Highway 403 to accommodate travel demand and to facilitate reliable goods movement, within, and through the study area. It is recommended that the MPC be constructed first and that strategic improvements to the QEW be made over the longer term. It is recommended that an Environmental Assessment Terms of Reference be initiated for the MPC to facilitate protection of the corridor. The MPC represents the platform around which other strategies have been formulated.

It should be acknowledged that the needs assessment study is proposing a possible corridor – not a definitive route. A formal environmental assessment would be utilized to examine route location options and impacts prior to determining a preferred route.

A new highway around Hamilton would provide direct access to Highway 407 and present a congestion free alternative to the Highway 403 and QEW routes through the Hamilton area. Such a highway could also connect to Highway 6 near Caledonia and Hamilton International Airport, Highway 403 serving Brantford and southwestern Ontario, and Highways 8 and 6 serving the Kitchener-Cambridge-Guelph area.

In Niagara Region, the new highway could connect to Highway 406 and Highways 58 and 140, providing an extensive provincial highway network through Niagara Region's southern tier.

Other elements of the suggested road strategy are also contained in **Tables 1** through **3** attached.

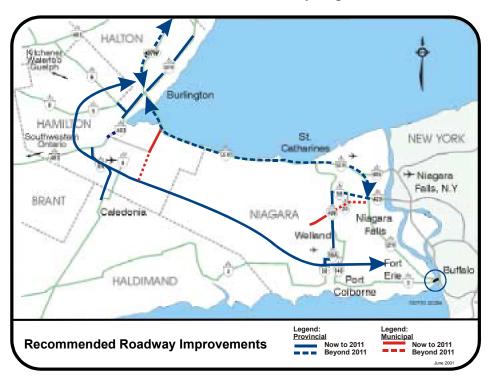
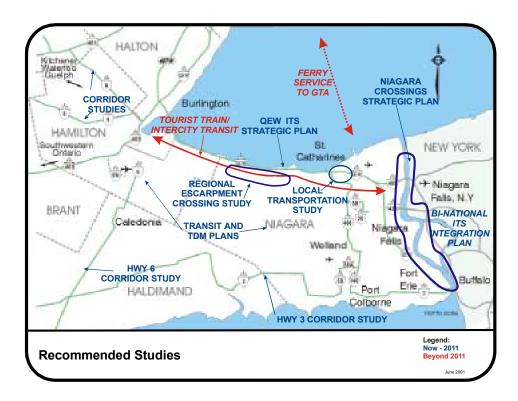


Exhibit 3: Recommended Roadway Improvements

Exhibit 4: Recommended Studies



Passenger Rail, Transit and Ferry Services

It is recommended that, in the Region of Niagara and the City of Hamilton, studies be undertaken to assess potential for upgrading local, inter-municipal and rural transit services using traditional and innovative strategies. This may include the examination of the need for regional transit service in Niagara. Inter-regional linkages should be considered in the context of these studies.

With respect to upgrading transit service to serve visitors and/or commuters between the study area and the GTA in particular, it is suggested that the local transportation agencies initiate discussions with GO Transit and VIA Rail with the objective of further investigating the feasibility of rail service to Niagara Region, and in particular, Niagara Falls. The study has identified limited opportunities for commuter type rail service to the Niagara Region. However, it has confirmed that significant opportunities exist to provide rail or other inter-city transit services for visitors travelling between the GTA and Niagara Falls.

The study also acknowledged that there is an existing ferry service between Queenston and Toronto, providing service for visitors on weekends. Analysis has revealed a small market for ferry services with limited potential to remove traffic from the highways in the Niagara Peninsula.

Improving Roadway Efficiency (Transportation Systems Management and Travel Demand Management)

In conjunction with expansion of the road network, a number of strategies are available to facilitate more efficient use of the roadway system by increasing system speed and capacity without requiring physical expansion. In addition, there are opportunities to implement intelligent transportation systems (ITS) as technologies continue to evolve and develop.

Other emerging trends that are becoming more accepted by the public should also be considered. These include issues relating to transportation demand management. Drivers are adapting their travel patterns to deal with traffic congestion. People will continue to choose their residential and employment locations in ways that minimize inconvenience. Internet commerce and telecommuting are increasing their market shares and these initiatives are likely to reduce peak period demands for shopping and employment-type travel.

It is suggested that both the Region of Niagara and the City of Hamilton undertake transit/transportation demand management (TDM) studies to identify opportunities to reduce auto use through the implementation of strategic policies, incentives and demand management programs.

Rationale for the Proposed Transportation Development Strategy

The proposed Transportation Development Strategy addresses both provincial and municipal policies and issues.

Provincial Significance

The proposed Transportation Development Strategy achieves the following benefits:

- Enhances the ability of the Niagara trade corridor to accommodate growth in goods movement and tourism.
- Provides benefits to the provincial highway network in the Hamilton area including the QEW and Highway 403, by providing a congestion-free alternative.
- Permits the ability to defer any QEW widening beyond the existing six lanes and planned expansion through St. Catharines.
- Provides a viable, high capacity alternative to the QEW for autos and commercial vehicles.
- Permits more efficient rehabilitation/improvement of various elements of the QEW including the Garden City Skyway.
- Provides a viable alternate route in case of QEW closure due to an accident, spill or local weather-related issues.
- Facilitates improved linkages between the Niagara border crossings and Southwestern Ontario, including Kitchener/Waterloo, Guelph, London, etc. for vehicles and commercial goods movement.
- Provides additional road network capacity to deal with potentially significant increases in visitation/tourism to the Peninsula.

Municipal Significance

The proposed Transportation Development Strategy achieves the following benefits:

- Combined with other local/regional legislative initiatives, the development strategy may assist in facilitating protection of tender fruitlands along the QEW corridor.
- There will be substantive benefit to the local and provincial roadway network in the Hamilton area.
- The provision of an MPC will enhance freeway level accessibility to: Welland, Port Colborne, Thorold, Niagara Falls, Fort Erie, Haldimand and Hamilton International Airport.

Moving Forward - The Environmental Assessment Process and the Mid - Peninsula Highway

The Mid-Peninsula Highway has been identified as the key element in the Transportation Development Strategy. A number of other strategy elements hinge on MPH implementation. As a result, it is recommended that MTO initiate the environmental assessment process for a Mid-Peninsula Highway. This will involve the preparation of an Environmental Assessment Terms of Reference and finalization of the Needs Assessment Report, followed by the initiation of a route location and concept design environmental assessment for the Mid-Peninsula Highway.

TABLE 1:
SHORT TERM RECOMMENDATIONS – NOW TO 2005

Transportation Improvement Initiative	Project Description	Proponency	
ROADWAYS	ROADWAYS		
QEW widening – Sand Plant Hill Implementation	Hwy 405 to Hwy420 – 4 to 6 lanes	Province	
QEW widening - St. Catharines Implementation	Hwy 406 to Garden City Skyway Bridge – 4 to 6 lanes	Province	
QEW widening – Burlington to Oakville Implementation	Burlington to Oakville - 6 to 8 lanes	Province	
Highway 6 New - Implementation	Hwy 403 to Hamilton International Airport – 2 lane highway	Province	
Highway 6 Widening - Implementation	Highway 403 to Highway 5 - 4 to 6 lanes	Province	
Highway 406 Widening – Implementation	Beaverdams Rd. to Port Robinson (Thorold) – 2 lanes to 4 lane Controlled Access Highway	Province	
Mid Peninsula Highway – Initiate EA Study	Niagara (QEW) to Halton (Hwy 407) 4 lane highway	Province	
Highway 420 Extension – Initiate EA Study	Hwy 420 (Niagara Falls) to Hwy 58 (Thorold Tunnel) 4- lane Controlled Access Highway	Province	
Highway 3 Corridor – Study	Fort Erie to St. Thomas	Province	
Red Hill Creek Expressway Implementation*	Lincoln Alexander Parkway to QEW - 5 lanes	Hamilton	
Improved Arterial Connection from Niagara Falls to Hwy 406 - Municipal Needs Study	Link Connecting Niagara Falls to Welland/Pelham area	Niagara	
St. Catharines Improved Arterial Roads - Municipal Needs Study	Improvement to municipal roads to alleviate QEW traffic problems	St. Catharines	
Niagara Regional Escarpment Crossing Study	Assessment of Regional Escarpment crossing requirements	Niagara	

TABLE 1: SHORT TERM RECOMMENDATIONS – NOW TO 2005

Transportation Improvement Initiative	Project Description	Proponency	
TRANSPORTATION SYSTEMS MANAGEMENT			
Niagara Crossings – Develop Strategic Plan	Four Niagara Bridges and roadway access	T.B.D.	
TRAVEL DEMAND MANAGEMENT AND TRANSIT			
Region of Niagara – Transit/TDM Study	Assessment of transit and travel demand management opportunities	Niagara	
City of Hamilton - Transit/TDM Study	Assessment of transit and travel demand management opportunities	Hamilton	
PASSENGER RAIL SERVICE			
Regional Rail Service - Rail Feasibility Study	Tourism (Weekend/ Seasonal) Niagara Region to GTA	T.B.D.	
FERRY SERVICE			
Ferry Service – Opportunities Study	Niagara Region to GTA	T.B.D.	

TABLE 2:
MEDIUM TERM RECOMMENDATIONS – 2006 TO 2011

Transportation Improvement Initiative	Project Description	Ргоропепсу		
ROADWAYS				
Mid Peninsula Corridor – Staged Implementation	QEW in Niagara to Hwy 407 in Halton - 4 lane highway	Province/Private Sector		
Highway 403 Widening – Implementation	QEW to Main St. (Hamilton) - 6 to 8 lanes	Province		
QEW Widening - Freeman Interchange Implementation	Burlington Bridge to Freeman Interchange - 6 to 8 lanes	Province		
Highway 6 New – Implementation*	Hamilton International Airport to Caledonia	Province		
Highway 406 Widening – Implementation	Port Robinson (Thorold) to East Main St. (Welland) – 2 lanes to 4 lane Controlled Access Hwy	Province		
Highway 406 Extension – Implementation*	East Main St. (Welland) to Hwy 58 or Mid-Peninsula Hwy – 2 lane Controlled Access Major Arterial	Province		
Highway 6 Improvements – Corridor Needs Study	Caledonia to Lake Erie Operational / Local bypasses	Province		
Highway 6 or Highway 8 and 24 Improvements - Corridor Needs Study*	Highway 5 to Highway 401	Province		
Improved Regional Road 20 Implementation	Link Connecting Pelham to Hwy 406	Niagara		
Hamilton North/South Links Municipal Needs Study*	Link connecting the Mid-Peninsula Highway to Red Hill Creek Expy.	Hamilton		
	* Need / Function dependent of Mid-Peninsula Highway Route Location			
TRANSPORTATION SYSTEMS MANAGEMENT				
QEW ITS – Develop Strategic Plan	Hamilton to Fort Erie including Highways 405, 406 and 420	Province		
Bi-National ITS integration - Roadways and Bridges Develop Strategic Plan	QEW, Mid-Peninsula Highway, Municipal roads, U.S. roads, Niagara Bridges	T.B.D.		

TABLE 2: MEDIUM TERM RECOMMENDATIONS – 2006 TO 2011

Transportation Improvement Initiative	Project Description	Proponency	
TRAVEL DEMAND MANAGEMENT AND TRANSIT			
Region of Niagara - TDM and Transit Strategy Implementation	TDM and Transit Strategies to support planning objectives	Niagara	
City of Hamilton – TDM and Transit Strategy Implementation	TDM and Transit Strategies to support planning objectives	Hamilton	
PASSENGER RAIL SERVICE			
Regional Rail Service - Implementation	Tourism (Weekend/ Seasonal) Niagara Region to GTA	T.B.D.	
Commuter Rail Service - Rail Feasibility Study	Niagara Region to GTA	T.B.D.	
FERRY SERVICE			
Ferry Service – Implementation	Niagara Region to GTA	Private Sector	

TABLE 3: LONG TERM RECOMMENDATIONS – BEYOND 2011

Transportation Improvement Initiative	Project Description	Proponency		
ROADWAYS	ROADWAYS			
QEW Strategic Upgrading –Staged Implementation*	Niagara Falls to Hamilton	Province		
Highway 403 widening Implementation*	Main St. Hamilton to Lincoln Alexander Parkway	Province		
Highway 407 Widening Implementation	Halton Region	Private Sector		
Hwy. 420 Extension - Implementation	Hwy. 420 (Niagara Falls) to Hwy. 58 (Thorold Tunnel) - 4 lane C.A.H.	Province		
Improved Arterial Connection from Niagara Falls to Hwy 406 – Implementation	Link Connecting Niagara Falls to Welland/Pelham area	Niagara		
Hamilton North/South Link – Implementation*	Link Connecting Mid-Peninsula Highway to Red Hill Creek Expressway	Hamilton		
PASSENGER RAIL SERVICE				
Commuter Rail Service - Implementation	Niagara Region to GTA	T.B.D.		
TRANSPORTATION SYSTEMS MANAGEMENT				
QEW ITS – Implementation	Hamilton to Fort Erie including Highways 405, 406 and 420	Province		
Bi-National ITS integration - Roadways and Bridges	QEW, Mid-Peninsula Hwy Municipal roads, U.S. roads, Niagara Bridges	T.B.D.		

^{*} Need / Function dependent of Mid-Peninsula Highway Route Location