



City of Hamilton

**Development of Policy Papers for Phase Two of the  
Transportation Master Plan for the City of Hamilton  
PROVINCIAL HIGHWAY INITIATIVES POLICY PAPER**

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## 1. INTRODUCTION

### 1.1 Study Background and Objectives

The City of Hamilton *City-wide Transportation Master Plan* will provide inputs to the *Growth Related Integrated Development Strategy* (GRIDS) and make recommendations to Council on the adoption of a City-wide Transportation Policy that is cognisant of Vision 2020 and other City of Hamilton long-term planning objectives. The project has been divided into three distinct phases. The first phase consisted of the technical calibration of the existing transportation model to reflect current transportation conditions in Hamilton. The second phase, which is the object of this and other policy papers, will focus on the development of 23 policy papers in the following areas: Travel Demand, Urban Development, System Performance, Infrastructure Planning and Infrastructure Financing. Following the completion of the Policy Papers, the City will proceed to develop transportation scenarios (Phase 3 of the project) based upon the results of the policy work performed in Phase 2 and the land use scenarios developed through the broader GRIDS study and will test the efficiency and viability of these scenarios by integrating them into the calibrated model.

This policy paper addresses the issue of Provincial Highway Initiatives. The remainder of this introduction provides a description of Provincial Highway Initiatives, including benefits and examples. Section 2 provides an overview of the existing situation in Hamilton. Section 3 provides supporting information on highway functions and recent plans and proposals. Section 4 outlines the development and refinement of policy options and potential supporting actions. Section 5 presents the recommended policies and Section 6 summarizes the impacts of these policies.

### 1.2 Provincial Highways in Hamilton

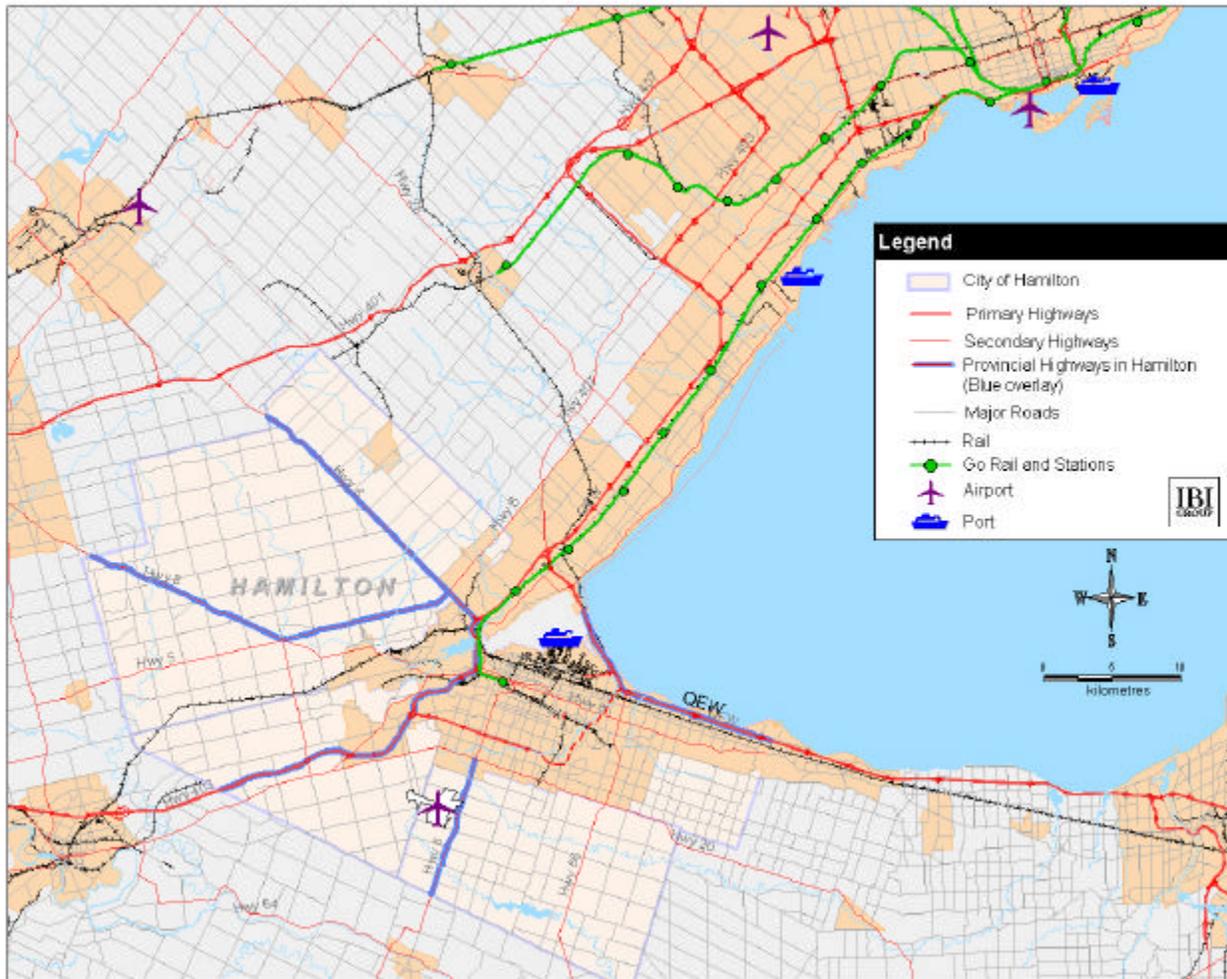
Although a number of provincial highway sections within the City of Hamilton have been transferred to the City over the past seven years, six provincial highway sections currently traverse the City boundaries, providing regional provincial, national and international linkages to the City's roadway system.

In Ontario, the term "highway" refers to all major roads under the jurisdiction of the Province, and for access control purposes includes Class III Special Controlled Access Highways, Class IV Major Highways and Class V Minor Highways. The term "expressway" and "freeway" apply to major roads with controlled access and grade-separated junctions intended for non-stop travel. The Province groups expressways and freeways into Class I facilities, and Class II staged facilities. These provincial highways in the City of Hamilton are listed on Exhibit 1.1 and shown geographically on Exhibit 1.2.

**Exhibit 1.1: Provincial Highways in the City of Hamilton**

Highway	Classification	Description
QEW	Class I Freeway	Links Niagara Gateway and Niagara area to Hamilton, and to the GTA via the QEW, Highway 407 and Highway 403
Highway 403	Class I Freeway	Links Hamilton east to the GTA via Highway 403, QEW and Highway 407, and west to Brantford and southwestern Ontario, and to the Michigan Gateway via Highway 401 and 402.
Highway 6	Class III Special Control Highway	Links Hamilton to the Lake Erie area of southwestern Ontario from the Lincoln M. Alexander Parkway southwest to the City boundary and the Highway 6 Bypass at Caledonia.  Also links Hamilton north to the Guelph and Region of Waterloo areas and Highway 401 from Highway 403.
Highway 8	Class IV Major Highway	Links the City of Hamilton with Cambridge, Highway 401 and the remainder of the Region of Waterloo
Highway 5	Class IV Major Highway	Connects Highway 6 and Highway 8 between Clappison's Corners and Peters Corners respectively.
Highway 6	Pending Class III Special Control Highway	Currently being constructed as a controlled access freeway facility from Highway 403 in the Ancaster area south to Highway 6 at White Church Road near the Hamilton International Airport.

### Exhibit 1.2: Hamilton's Provincial Highway System



## 1.3 Benefits and Effects of Provincial Highways to Hamilton

The provincial highway system within Hamilton is essential to the economic vitality and growth of the City. By linking Hamilton with the international gateways at Niagara and Windsor/Sarnia, and to the GTA market area, the highways significantly broaden the economic potential of the City within Ontario and Canada. Hamilton is situated in the centre of 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. About 16% of all Canada-U.S. trade moves through the Niagara Peninsula, including Hamilton, to cross the border. The QEW through Hamilton 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 QEW through Stoney Creek, hauling over \$400 million in goods<sup>1</sup>.

Provincial highways also provide the regional connections required by Hamilton residents and businesses to reach regional services and commute to employment within and beyond the City. In

<sup>1</sup> Figures extracted from Niagara Peninsula Transportation Needs Assessment Study, June 2001.

association with the City's urban and rural arterial roadway network, the highways connect many of the communities and business nodes that make up the City of Hamilton.

The highways can also place some negative impacts on the areas of the City that they traverse if the level of service they provide is not adequate. These effects can include air quality issues associated with highway traffic volume and congestion, diversion of highway traffic to connecting arterial streets under these conditions and the inducement of traffic onto the arterial streets that connect with highways.

An example of highway traffic inducement in Hamilton is documented in the Ancaster Comprehensive Transportation Study (November 2001) pertaining to Highway 403. One of the main conclusions gained from Ancaster area traffic condition forecasts to 2025 buildout is that chronic, growing capacity deficiencies are expected on routes experiencing more induced traffic to and from Highway 403, including Wilson Street, Fiddler's Green Road, Southcote Road and Mohawk Road. Long-term network improvement projects show the capability to resolve some network deficiencies at buildout south of Highway 403. In addition to these internal network problems, the forecasting shows Highway 403 being significantly affected by local and regional traffic growth as early as 2004 to 2009. Highway deficiencies improve after that with additional lane development.

Over the course of the next 10-20 years, residents of Hamilton will be faced with a number of choices on potential new provincial highways through the city, including the proposed mid-peninsula transportation corridor and others, which are discussed in this report. The challenge will be to weight the benefits of these highways on factors such as local and provincial economic growth vs. potential negative impacts such as promotion of sprawl and induced vehicle travel demand.

The purpose of this paper is to highlight some of the provincial highway initiatives being considered and how they may impact the planning of Hamilton's transportation system. It is not the intent of this paper to assess the economic, social and environmental benefits and disbenefits of each individual highway proposal, something that will be done in conjunction with the planning of any new facility.

## 2. REVIEW OF EXISTING CITY OF HAMILTON POLICIES

### 2.1 Current Roles and Responsibilities

Provincial highways in the City of Hamilton are operated and maintained under the jurisdiction of the Ministry of Transportation. The Ministry's Highway Corridor Management Office is also involved in the review and approval of adjacent land use and development.

At the City of Hamilton, the Strategic Planning Section, in consultation with the Traffic Engineering and Operations Department, also monitors and maintains the arterial network links to the provincial highways, including the review of adjacent development applications along these routes to ensure capacity optimization to and from the highways.

### 2.2 Hamilton Recommendations for Provincial Highways

The City of Hamilton can make recommendations in its transportation policies and plans for improvements to provincial highways within its boundaries. An example of such recommendations that have been acted upon by the Ministry (MTO) is found in the 2001 Ancaster Comprehensive Transportation Study involving:

- Construct new 2-lane Highway 6 Bypass from Highway 403 to Highway 6 at Airport (MTO);
- Improve Highway 403/Mohawk Road/LINC Interchange (MTO).

The City, through its transportation policies, can also highlight other provincial highway improvements that are deemed necessary in support of an efficient and effective City roadway network. Once again, examples of such policy statements from the Ancaster Study include:

- Widen Highway 403 with one additional lane/direction from the Highway 6 Bypass interchange to the Linc, (MTO);
- Widen Highway 403 with one additional lane in both directions from the Linc/Mohawk interchange to Aberdeen (MTO), and;
- Widen New Highway 6 with one additional lane/direction from the Highway 403 interchange to the Airport (MTO).

As this current study is primarily aimed at developing policies, no recommendations on specific highway improvements are made. These will be addressed in Phase 3.

### 3. REVIEW OF EXISTING PROVINCIAL HIGHWAY PLANNING

MTO plans for provincial highways in and around the City of Hamilton can be described at three levels; the Strategic level, the Corridor level and the Project-Specific level.

#### 3.1 Strategic Planning

The long-term growth strategy developed for Central Ontario<sup>2</sup> includes a number of potential strategic transportation changes for Hamilton, including:

- Maintenance of the existing provincial freeway routes through the City;
- Introduction of the Mid-Peninsula planned highway/economic corridor extending from the Niagara Gateway to Highway 401; and
- Inter-city rapid transit links extending from Hamilton to the GTA, Niagara and Brantford.

The Ministry of Transportation also produced a Draft Strategic Transportation Directions document in January 2002 that sets out a course of action for transportation in this part of the province. The study area includes the City of Hamilton, and extends from the Region of Waterloo east to Peterborough, and from the Barrie area south to Niagara. The overall strategy includes increasing the efficiency of the existing transportation system, and building system capacity to meet future demands. More specific highway strategies shown on Exhibit 3.1 that are relevant to the City of Hamilton include planning of new highway corridors including the Niagara Mid-Peninsula Transportation Corridor, and improved connections linking the Hamilton area to the Guelph and Region of Waterloo area.

#### 3.2 Hamilton-Related Provincial Highway Corridor Initiatives

There are three potential provincial highway initiatives of direct bearing on the City of Hamilton, summarized as follows:

**Niagara Mid-Peninsula Transportation Corridor (MPTC)** – The MPTC is considered one element of a balanced and integrated transportation strategy for central Ontario, and is consistent with the recommendations of the central Ontario Smart Growth panel. Exhibit 3.2 illustrates the approximate corridor for the proposed highway. The need for the Corridor is being driven by central Ontario population and economic growth, trade growth especially to the USA, tourism travel growth between the GTA, Niagara area and the USA, the need to preserve the Niagara tender fruitlands, access to the Hamilton International Airport and to southwestern Ontario, and to help reduce growing congestion on area highways in the western GTA.

Based on a needs assessment of a new mid-peninsula transportation corridor in the Niagara/Hamilton area, a number of alternative transportation corridors were considered that extend around Hamilton to connect with Highway 403. An Environmental Assessment Terms of Reference was completed and submitted to the Minister of the Environment in May 2003 to guide further steps in the EA process to finalize route planning and associated implementation issues. The MPTC project received the support of Hamilton and Niagara Region Councils, but objections were raised by Burlington and Halton Region Councils based on the possible corridor alignments across the Niagara Escarpment and associated socio-environmental impacts. In response to this opposition,

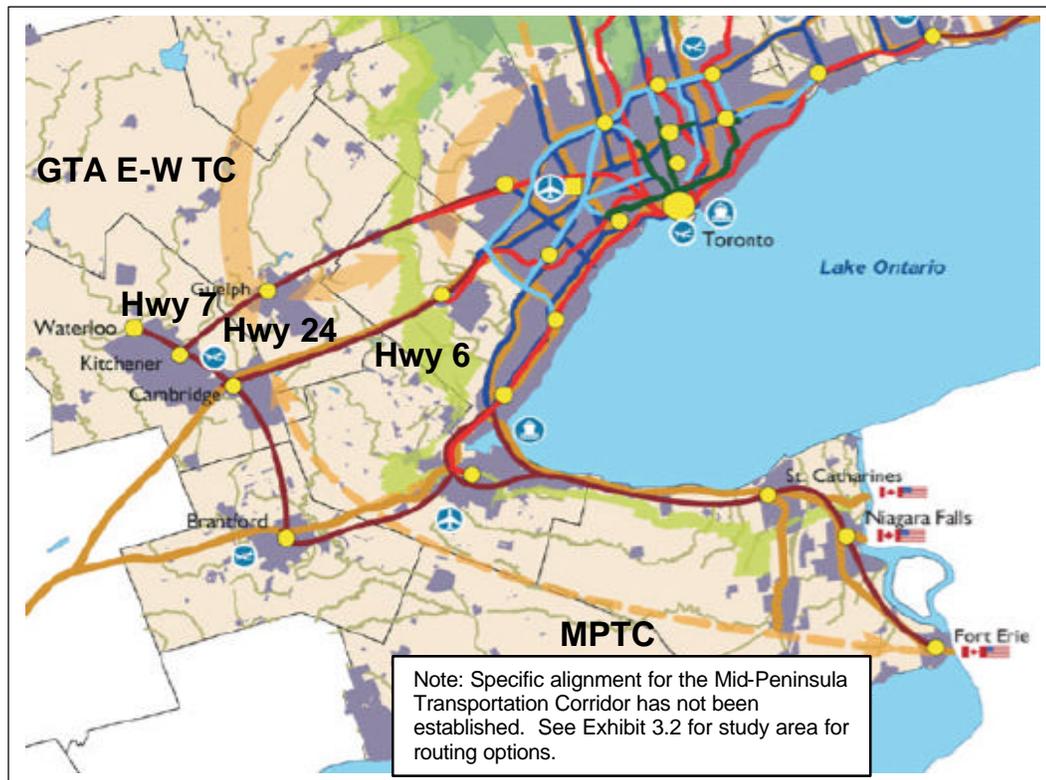
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<sup>2</sup> This was originally developed by the Central Ontario Smart Growth Task Force (2003). Recently, the Province released a new growth management strategy entitled "Places to Grow". The discussion herein is based on both reports.

and to a separate court challenge on preparation of Individual EA Terms of Reference, MTO withdrew the MPTC Terms of Reference and plans to develop a revised Terms of Reference.

Traffic analysis and forecasting in the Hamilton area has also shown that lack of capacity in the West GTA to Niagara highway connections create displaced Provincial highway travel demands from the Highway 403/QEW connection onto the Red Hill Creek Expressway. If the Provincial highway connection capacity between Highway 403 and the QEW is not expanded, this could ultimately require further widening of the Red Hill Creek Expressway and an alternative solution.

**Exhibit 3.1: – Former Smart Growth Concept 2035 and Beyond \***



\* Note: This map may not reflect current provincial government priorities, which have recently been updated as part of "Places to Grow: Better Choices. Brighter Future, 2004"

### Exhibit 3.2: Niagara Peninsula Transportation Needs Assessment Study Area



Source: Ministry of Transportation, Ontario, Mid-Peninsula Transportation Corridor, Environmental Assessment Terms of Reference, May 2003.

**Highway 6 Improvements** – As a Class III Special Control Highway, Highway 6 serves high volumes of traffic between Highway 401 and Highway 403 along a four lane facility, except at the north end where a two lane section enters Morriston and the Highway 401 interchange. MTO has developed a bypass plan and submitted an EA for approval for a new Highway 6 alignment around Morriston, but late opposition from area residents stalled the project. Efforts are currently underway to reach an acceptable alignment solution, and EA approval is anticipated by the end of 2004.

**Highway 24 Corridor Planning Study** – Although not directly connected to or traversing the City of Hamilton, this is a prime example of a provincial highway initiative that still affects regional accessibility to and from the City. MTO has completed an early Study Design Report that documents existing and forecasted traffic volumes along Highway 24 between Highway 401 and Highway 403. The conclusion is that additional capacity and operational capability will be required in the corridor to provide an acceptable level of service. A Study Area has been recommended for further Class EA study purposes, and it extends slightly east into the City of Hamilton along the Brant County boundary, and thereby brings Hamilton into the study as a recommended stakeholder. An improved highway in this area would also benefit Hamilton by improving highway access between the City, Highway 401 and the Guelph/Region of Waterloo area.

### 3.3 Project-Specific Highway Initiatives

MTO continues to monitor traffic conditions on the provincial highways in and around Hamilton, and invests in operational improvements where warranted. These traffic engineering works involve freeway ramp improvements, introduction of traffic signals and dedicated turn lanes at major highway intersections and plans for intersection reconstruction, for example at the Peters Corners intersection of Highways 5 and 8.

## 4. POLICY OPTIONS

Based on the review of existing provincial highway-related policies in the City of Hamilton, distinct from those of MTO, a number of policy directions have been identified for the City to consider in addressing provincial highway initiatives.

### 4.1 Project Need and Justification

The City's Traffic Engineering and Operations Department can assist in identifying provincial highway needs in the City by monitoring travel demands and operational conditions at the connecting arterials roadways. If this data suggests traffic diversion or intrusion problems associated with highway conditions, then the City has the option of either requesting MTO to address the highway condition, implementing City solutions on the affected City roadway network or entering into partnership agreements with MTO to mutually solve highway-related problems off the provincial highways.

### 4.2 Strategic Planning Alternatives

When the need for a provincial highway improvement has been identified, the City of Hamilton should ensure that all "reasonable" planning options to address the problem are considered. This may involve:

- highway capacity enhancement such as widening with additional travel lanes;
- highway capacity optimization through intersection or interchange capacity improvements (i.e. ramp redesign, signalized intersection timing, exclusive intersection turn lanes);
- reliance on alternative travel modes and TDM characteristics to reduce highway demand; and
- introduction of alternatives to vehicular highway service such as inter-city rail and transit service.

### 4.3 Provincial Highway Initiative Priorities

At times, the priority put on a provincial highway improvement by MTO may not be compatible with the priority of the host municipality, such as Hamilton. In balancing highway needs and available funding across the province, MTO may place a lower priority on a local action compared to what is desired by the City. In these cases, it is essential that the City's need be clearly and objectively translated not only to the MTO technical level, but also to the provincial political level so that this combination of technical and political understanding can result in action within a required timespan.

In cases where the provincial priority still does not match local needs, the City should consider either cost-sharing the required improvement with MTO (i.e. an intersection ramp improvement), or in the event of an extreme need where no resolution on action by MTO can be reached, the City may consider to fund the action in its entirety. Current MTO practice is to not fund highway and related projects that do not address a provincial highway interest.

### 4.4 Intercity Transit

While not a provincial highway initiative per se, intercity transit is closely related to the topic of provincial highways since the existing and/or future highway system will likely form the backbone of an inter-city transit system, in conjunction with the rail system. Intercity transit is also important in that it has the potential to off-set or delay highway expansion, as has been the case with GO Transit and the QEW corridor to Toronto.

A more detailed discussion of specific intercity transit proposals is provided in the Transportation Targets Paper, but a major proposal includes an intercity rapid transit link through Hamilton to Niagara.

It is appropriate, given the City of Hamilton's goals to become more sustainable and reduce the impacts of transportation activities on the environment, that in any future discussions of provincial highway initiatives, intercity transit play a key role.

## 5. RECOMMENDED POLICIES

The following policies are recommended for consideration in the Hamilton Transportation Master Plan:

<b>Recommended Policy</b>
Consider projects to maintain an adequate level of service on provincial highways through Hamilton not only as provincial initiatives, but also as effective ways to maximize the capacity and operational capability of the City's arterial roadway network.
<b>Implementation</b>
<ul style="list-style-type: none"> <li>• Continue to require City of Hamilton representation and participation in all provincial highway planning and implementation projects located within the City, including the provision of City traffic data for use in provincial initiatives.</li> <li>• Annually measure traffic diversion and inducement patterns on City arterial streets connecting with provincial highways, and regularly translate these findings to MTO.</li> </ul>

<b>Recommended Policy</b>
Continue to support provincial highway initiatives that technically benefit the City's transportation system, economically benefit the City's growth and vitality, and socio-environmentally benefit the City overall quality-of-life.
<b>Implementation</b>
<ul style="list-style-type: none"> <li>• Formal submission should be made to MTO and the Minister of Transportation supporting provincial highway initiatives within and beyond the City of Hamilton that are expected to benefit the City. Such submissions should be made either by the City, or in association with other surrounding municipalities depending on the highway need or issue under consideration.</li> <li>• The City should work in association with neighbouring municipalities in presenting a strong, unified front at the provincial and federal levels of government regarding area highway service and improvements.</li> <li>• Continue to support finalization of the Mid-Peninsula Transportation Corridor EA to identify the corridor alignment to and around Hamilton, as well as provincial initiatives to improvement operations on Highway 6 north to Highway 401, and Highway 24 between Highway 403 and Highway 401.</li> </ul>

<b>Recommended Policy</b>
Work with the Province to implement intercity-transit projects prior to, and in conjunction with, provincial highway construction projects, in order to encourage a balanced transportation network.
<b>Implementation</b>
<ul style="list-style-type: none"> <li>• Investigate the feasibility of a GTA to Niagara Commuter Rail or Bus Service as proposed by the Province and continue to advocate for early consideration and planned improvements to the Lakeshore West GO Transit corridor.</li> <li>• Consider the role of inter-city bus services in the planning/design of the Mid-Peninsula Transportation Corridor and other provincial highway corridors.</li> <li>• Investigate ways to provide intercity transit to major employment generators outside of the existing transit service area (e.g. Hamilton Airport)</li> </ul>

## 6. IMPACTS OF POLICY OPTIONS

### 6.1 Assessment Factors

Assessment of policy options is based on factors for achieving sustainable growth and development across all of the policy papers developed in this project. They fall under the three major categories of **social, economic and environmental** impacts, and they are described briefly below.

**Exhibit 6.1: Assessment Factors**

Impact	Acts on	Description (or examples)
<b>Social</b>	Residential communities	Improves quality of life in neighbourhoods
	Safety and security	Reduces collisions; improves personal safety and security
	Ease of implementation & governance	Provides clarity, measurability, accountability
<b>Economic</b>	Development	Attracts employment, capital, optimal use of transportation infrastructure capacity, and future land use
	Land value	Increases land value, or does not decrease land values
	Operating and capital costs	Reduces or defers public and private costs of transportation capital (construction or acquisition of fixed infrastructure and rolling stock) and operations (maintenance, enforcement, delay, fuel, etc.)
	Congestion	Maintains traffic flow at acceptable level
<b>Environmental</b>	Air quality	Reduction of Criteria Air Contaminants
	Noise and vibration	Minimizes noise impacts
	Natural environment	Improves water quality, green spaces, flora and fauna etc.

The rating system that will be used to apply these criteria is a visual five-point scale, to reflect a range from strong positive impact to strong negative impact. **(+, +, o, --, --)**

**+** Represents the strong positive impact, **o** represents absence of significant impact either way, and **--** represents strong negative impact.

### 6.2 Summary of Evaluation

The assessment factors have been applied to the three policy options associated with provincial highway initiatives in Hamilton as discussed in Section 5. The results of a preliminary qualitative assessment using the rating scheme described previously are provided in Exhibit 6.2.

**Exhibit 6.2: Impacts of Policy Options**

<b>Policy Option</b>	<b>Social</b>			<b>Economic</b>				<b>Environmental</b>		
	Residential Communities	Safety and Security	Ease of Implementation and Governance	Development	Land Value	Operating and Capital Costs	Congestion on City Streets	Air Quality	Noise and Vibration	Natural Environment
Initiatives to maintain an adequate level of service on provincial highways through Hamilton should be considered not only as provincial initiatives, but also as effective means of maximizing the capacity and operational capability of the City's arterial roadway network.	<b>+</b>	<b>+</b>	<b>-</b>	<b>+</b>	<b>0</b>	<b>+</b>	<b>+</b>	<b>+</b>	<b>0</b>	<b>+</b>
The City should continue to support provincial highway initiatives that technically benefit the City's transportation system, economically benefit the City's growth and vitality, and socio-environmentally benefit the City overall quality-of-life.	<b>+</b>	<b>+</b>	<b>-</b>	<b>+</b>	<b>+</b>	<b>+</b>	<b>+</b>	<b>+</b>	<b>+</b>	<b>+</b>
In order to encourage a balanced transportation network, the City should work with the Province to implement intercity-transit projects prior to, and in conjunction with, provincial highway construction project.	<b>+</b>	<b>0</b>	<b>+</b>	<b>+</b>	<b>0</b>	<b>-</b>	<b>+</b>	<b>+</b>	<b>0</b>	<b>0</b>