

4. IDENTIFICATION OF SPECIFIC TRANSPORTATION PROBLEMS WITHIN THE STUDY AREA

4.1 Introduction

The primary function of the inter-regional transportation system is to facilitate the movement of people and goods within and through the Study Area by all modes. At a baseline level, the road network connects all modes of the transportation system for moving people and goods by private automobiles, commercial vehicles, transit, air, marine and rail services. From earlier sections of this report, it is understood that the transportation system and the movement of people and goods are influenced by policy, land use, economy and tourism and recreation.

Forecasts for the GTA West Study Area show substantial growth to 2031: population and employment are expected to more than double between 2001 and 2031, including growth of more than 1 million people and more than 450,000 jobs.

Accordingly, Study Area travel is expected to increase significantly: PM peak period person trips are forecast to increase by over 170% between 2001 and 2031 (by approximately 700,000 trips), based on Greater Golden Horseshoe (GGH) Model outputs. In addition to the increase in commuting trips, the GGH's growth in population and employment will result in increased tourism and recreation trips to/from and through the GTA West Corridor. The projected growth will also result in increased goods movement throughout the GGH. Trucks will continue to be the dominant mode for shipping in the Study Area.

The overarching problem of the inter-regional transportation system in 2031 relates to the road network. Much of the higher order road system (i.e., highways and inter-regional roads) is expected to be heavily congested during peak periods and increasingly throughout the day. Road congestion in summer is higher due to the overlay of tourism and recreation travel. The fact that every mode connects to and relies on the road network creates significant issues for the efficient movement of people and goods in the future.

Transportation in the GTA West Study Area in 2031 can be considered in the context of two sub-areas with differing geographic, land use and transportation system characteristics:

East Study Area – Milton to Vaughan

The Study Area's highways (Highways 401, 400, 410, 427 and 407 ETR) are concentrated in the east and south of the GTA West Corridor. While a number of inter-regional road connections are in place, all highways in the Study Area (with the exception of some sections of the 407 ETR) will continue to experience major congestion throughout the day, particularly as population and employment growth intensifies to the west and north of existing built up areas. Highway 401 provides the major east-west connection across the Study Area's southern boundary and continues to be heavily congested.

Inter-regional rail transit service will be provided by GO Transit and will include rail expansion/improvements to Brampton, Bolton and Milton. The Metrolinx RTP identifies

Bus Rapid Transit service along the 407 ETR and Other Rapid Transit into the southeast portion of the Study Area.

Major congestion along the area highways constrains commuter travel and trucking transport, and is a major concern for economic growth and prosperity.

West Study Area – Milton to Guelph

There are few highway and transit connections to the west and north of the Study Area. Highway 7 provides a lower capacity east-west connection to Guelph, and is expected to operate with minor congestion by 2031. Highway 6 runs north-south along the Study Area's western boundary, and is expected to operate with major congestion south of Guelph. Higher order inter-regional GO Transit service is being examined to extend to Guelph/Kitchener but there are limited planned inter-regional transit services between communities north and west of Toronto. There are opportunities in this portion of the GTA West Corridor for improved roadway and transit connections to Toronto and to areas farther west and south toward Hamilton, Niagara and the U.S. border in the Niagara to GTA Corridor.

4.2 Moving People

The movement of people in the GTA West Study Area is predominantly comprised of trips for commuting and for tourism and recreation. Although these types of travel have different characteristics and service requirements, many of the future transportation problems are similar. In general, the limited choice of alternate travel modes in the Study Area increases reliance on the automobile.

In order to better identify transportation problems and opportunities, the Study Team adopted a two-pronged approach. Firstly, a range of background reports and secondary sources was reviewed to understand the views of others studying this area and the transportation problems and opportunities identified. These include area municipalities' Official Plans, Transportation and Transit Master Plans, and Metrolinx reports. Subsequently, the Study Team initiated a thorough consultation with Business and Commercial Stakeholders (BCS) and Transportation Service Providers (TSP), through face-to-face interviews, phone interviews and mail-back questionnaires. These stakeholders represent a range of large corporations, business associations, logistics specialists as well as rail, marine and transit operators. In general, these stakeholders confirmed that a number of transportation problems do currently exist and are likely to continue through the foreseeable future. Further details of stakeholder consultation are provided in **Appendix A**.

4.2.1 Commuter – Transit

The Study Area's planned increase in population and employment, as per the Growth Plan, alongside the significant transit improvements contained in the Metrolinx RTP and GO Transit's Strategic Plan, are expected to result in a substantial number of additional transit trips in 2031. While the automobile is expected to remain the dominant mode of travel, PM peak period transit trips in the GTA West Corridor are forecast to increase by more than 540%, increasing the PM peak period transit mode share from 4% of total trips in 2001 to 9% in 2031.

Inter-regional transit services are generally focused on connecting urban centres and major gateways that are integrated with local transit service or integrated with park-and-ride facilities. A number of bus and rail services operate throughout the GTA West Study Area, including GO Rail, VIA Rail, GO Bus, Greyhound Bus and Coach Canada Bus. The inter-regional buses generally follow the main Study Area highways discussed in Section 4.2.2, and rail services generally operate radially into Toronto's Central Business District (CBD). **Exhibit 4-1** shows the existing regional rapid transit and highway network, including peak and full-day rail services, subways, and bus and light rail rapid transit. Inter-regional transit services within the context of the Study Area are shown in **Exhibit 4-2**, including inter-regional bus services.

The following constraints have been identified relating to the GTA West Study Area transit system: there is limited community-to-community inter-regional transit, with some services such as VIA Rail passing through without serving any communities within the Study Area; municipal transit operators may not provide for convenient transfers between different services; and there is no overarching mechanism to make inter-regional travel seamless. Increased roadway congestion limits the efficiency of bus transit services, and increases travel times and unpredictability.

A substantial effort is being made toward improvements in transit in the GTHA. Initiatives such as MoveOntario 2020, GO Transit's Strategic Plan and Metrolinx's RTP will increase transit provisions and improve existing services. Both GO Transit and Metrolinx are committed to work actively with public and private sector transportation providers to provide co-ordinated, convenient, integrated transit services in the GO Transit service area.

The provincial gas tax program supports such transit improvements through its provision of funding to municipalities for expansion and improvement of transit services. Since 2004, the province has committed over \$1.3 billion in gas tax funding to Ontario municipalities, including more than \$183 million to transit systems in the Regions of York, Peel and Halton, County of Wellington, and City of Guelph. The 2008/2009 program year includes up to \$321 million for transit systems across the province.

The Metrolinx 25-year plan for the regional rapid transit and highway network is presented in **Exhibit 4-3**; it includes plans to more than double the length of rapid transit service within the region, provide increased transit capacity and introduce new bus and rail services. Although these initiatives will improve the transit system, issues such as limits of transit frequency and service areas outside of urban centres, and impacts of road congestion on bus services will still affect its efficiency and ability in providing inter-regional transportation services to commuters. The inter-regional transit market could also be potentially limited due to the Growth Plan objective toward more self-contained urban centres.

Exhibit 4-1: Existing Regional Rapid Transit and Highway Network (Metrolinx)

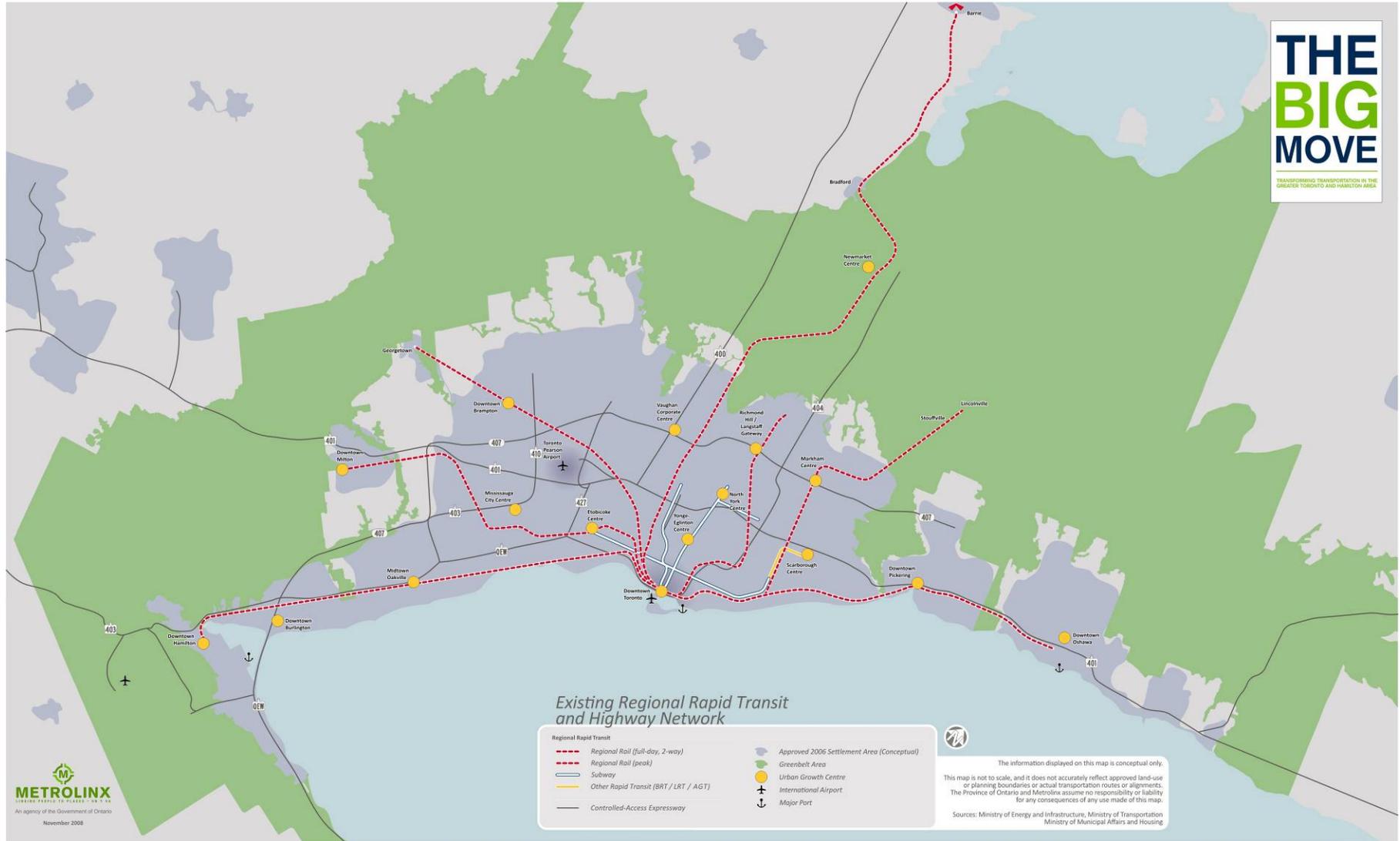


Exhibit 4-2: Existing Inter-Regional Transit Services

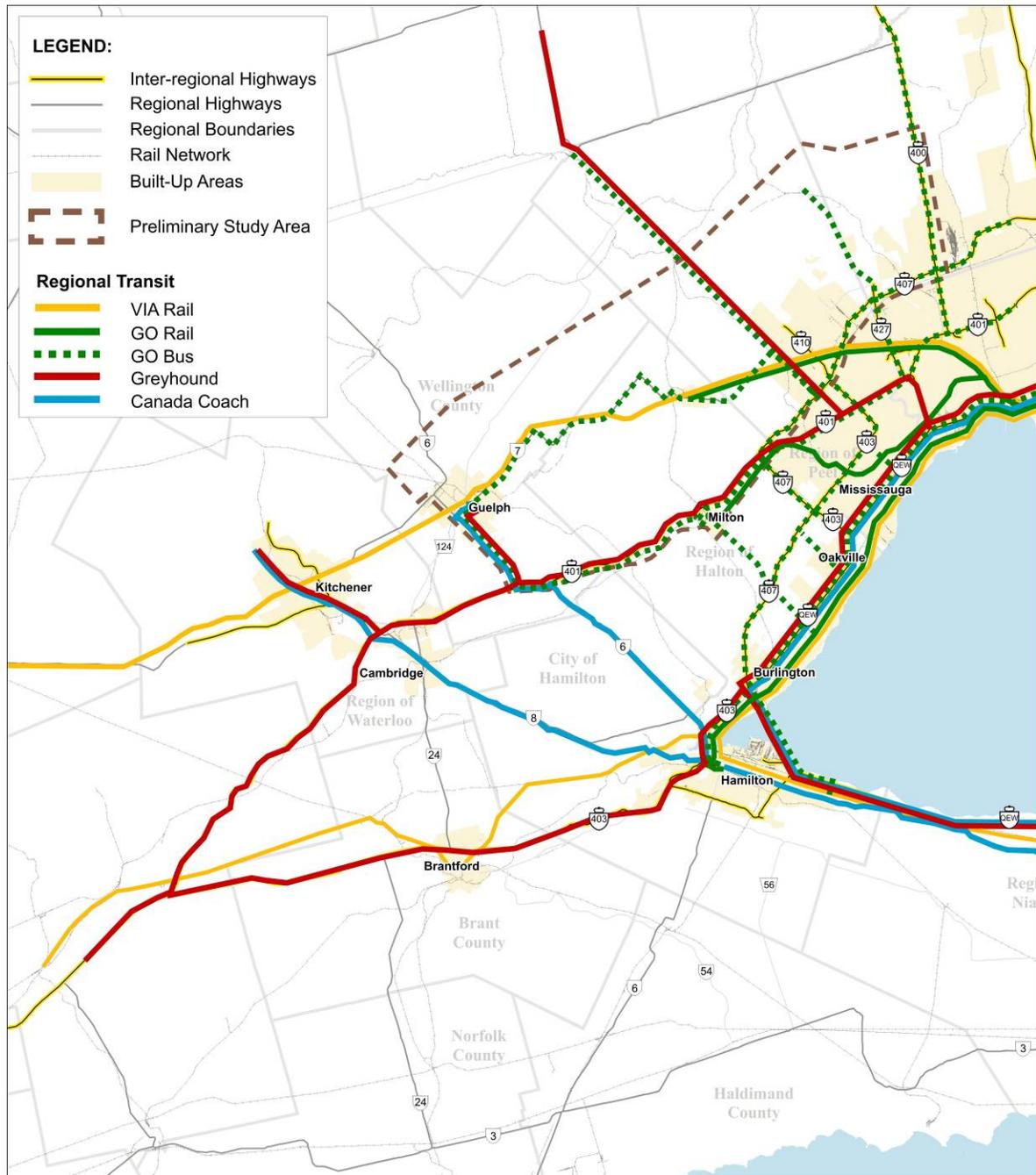
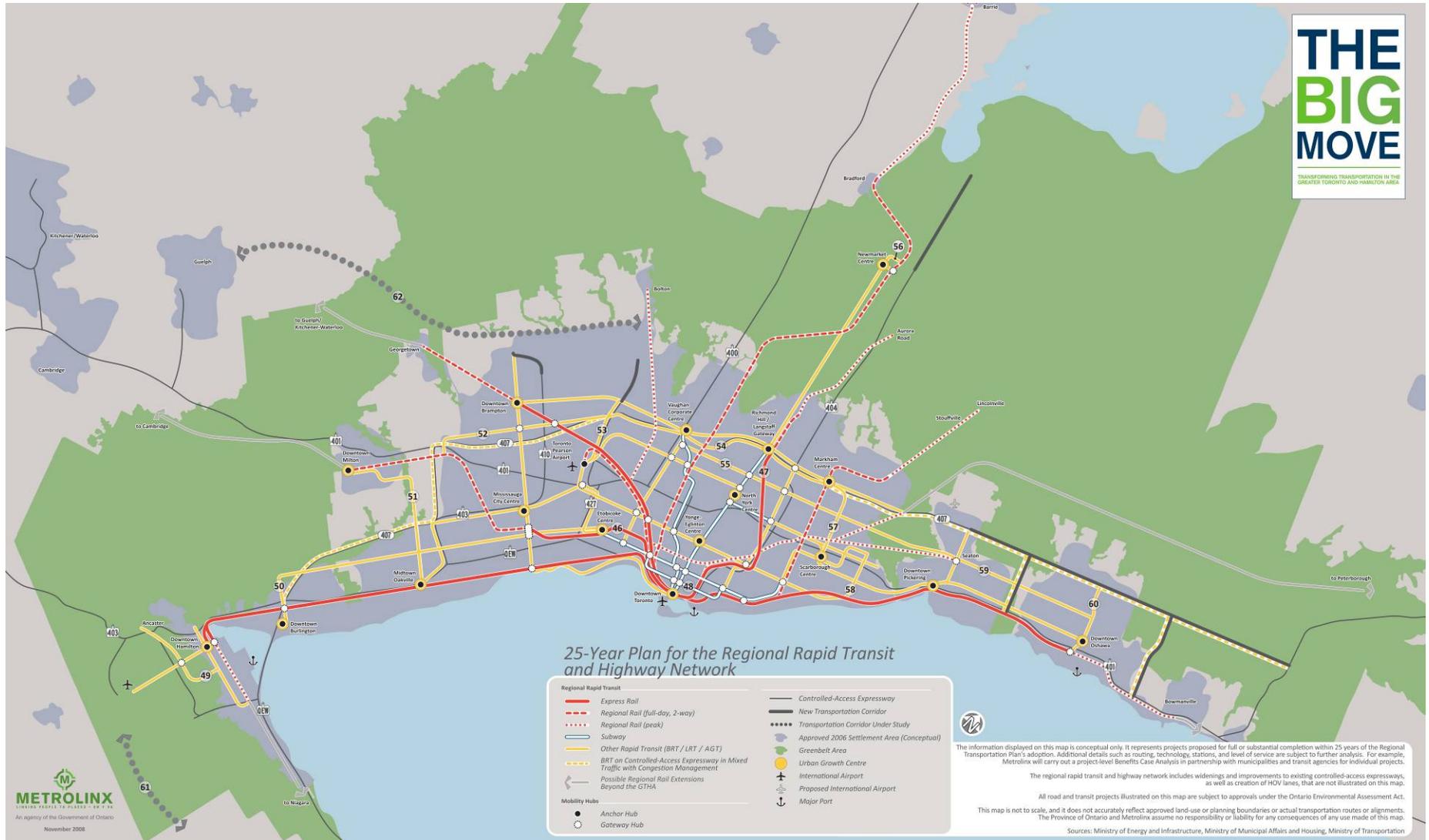


Exhibit 4-3: 25-Year Plan for the Regional Rapid Transit and Highway Network (Metrolinx)



As discussed in **Section 2.2.7** and **Section 2.6.5**, there are a number of GO Transit plans in various stages of planning and development and with varying degrees of committed funding. The initiatives within the GTA West Study Area include the following:

- GO Rail expansion to Guelph/Kitchener
- GO Transit service extension from Milton to Cambridge
- GO Transit service extension from Hamilton to Brantford
- GO Rail expansion to Bolton
- GO Rail frequent all day service between Mount Pleasant, Brampton and Union Station
- GO Rail frequent all day service between Meadowvale and Union Station
- Brampton Acceleride (enhanced bus rapid transit along five arterial corridors)
- Main Street/Hurontario Rapid Transit
- GO Transit BRT linking Oakville, Square One in Mississauga, and Vaughan City Centre
- GO Bus to Kitchener-Waterloo

As discussed, the automobile is currently the predominant mode for commuting travel in the GTA West corridor. It is intended that future transit improvement initiatives will increase the competitiveness of transit compared to the automobile and thereby increase transit's mode share for commuter travel. **Exhibit 4-4** presents the 2031 PM peak period person trips and transit mode shares anticipated to the Study Area's Urban Growth Centres (Guelph, Milton, Brampton and Vaughan). PM peak transit mode shares from Downtown Toronto to these Urban Growth Centres are expected to be significant, upwards of 50%.

Outside of Toronto (Downtown and other areas), there is greater variability in PM peak period inter-regional transit mode shares. Transit mode shares for trips to Guelph range from 0% from Milton and Cambridge to 7% from Brampton. Trips to Milton range from 0% transit use from Guelph and Cambridge to 14% from Markham. To Brampton, transit mode shares are as low as 0% from Cambridge and as high as 12% from Vaughan and Oakville and 15% from Mississauga. Finally, PM peak period transit mode shares to Vaughan are 1% from Cambridge and up to 16% and 23% from Mississauga and Oakville, respectively. Generally speaking, experience in Ontario suggests that the inter-regional transit mode share between communities at the fringe of urban areas will range between 5% and 15%.

Exhibit 4-4: 2031 PM Peak Period Total Person Trips and Transit Mode Share

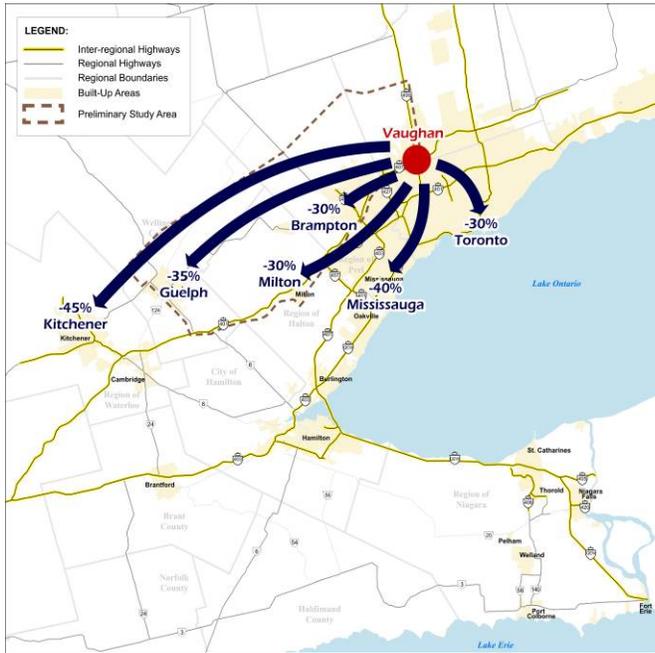
| Origin | 2031 P.M. Peak Period Total Person Trips | | | | Modelled 2031 Transit Mode Shares | | | |
|--------------------|---|--------|----------|---------|--------------------------------------|--------|----------|---------|
| | Guelph | Milton | Brampton | Vaughan | Guelph | Milton | Brampton | Vaughan |
| Guelph | 84,800 | 1,490 | 920 | 200 | 6% | 0% | 7% | 2% |
| Milton | 1,270 | 43,480 | 4,080 | 260 | 0% | 10% | 2% | 4% |
| Brampton | 1,070 | 6,270 | 210,080 | 11,430 | 7% | 3% | 11% | 12% |
| Vaughan | 130 | 420 | 17,040 | 90,770 | 4% | 7% | 12% | 9% |
| Toronto (Downtown) | 520 | 2,440 | 16,090 | 12,480 | 50% | 78% | 91% | 78% |
| Toronto (Other) | 1,770 | 5,630 | 47,920 | 64,590 | 7% | 9% | 34% | 19% |
| Kitchener-Waterloo | 4,600 | 1,010 | 590 | 30 | 2% | 1% | 13% | 5% |
| Cambridge | 3,390 | 1,290 | 290 | 10 | 0% | 0% | 0% | 1% |
| Mississauga | 1,700 | 13,510 | 103,990 | 8,100 | 3% | 5% | 15% | 16% |
| Markham | 100 | 130 | 1,720 | 27,520 | 3% | 14% | 25% | 8% |
| Oakville | 570 | 16,310 | 3,300 | 730 | 1% | 1% | 12% | 23% |

Transit travel times between many Urban Growth Centres should decrease between now and 2031 with the implementation of the 25-year RTP. PM peak period transit travel times from the GTA West corridor's four Urban Growth Centres were assessed for 2001 and 2031. As shown in **Exhibit 4-5**, transit travel times from these Urban Growth Centres are expected to decrease considerably. These model results are a reflection of the significant growth in automobile travel on an increasingly congested road network, and the planned transportation measures throughout the GGH.

The anticipated decrease in transit times assumes the significant infrastructure and service improvements for transit that are included in the RTP. Presently, these linkages and high frequencies are not in place and the measures that will be required to improve transit services and therefore increase transit mode shares are substantial. The province has charged Metrolinx with the responsibility of moving forward with the implementation of the RTP, in consultation with all municipalities in the GTHA.

Exhibit 4-5: Change in PM Peak Period Transit Travel Times to 2031 between Urban Growth Centres

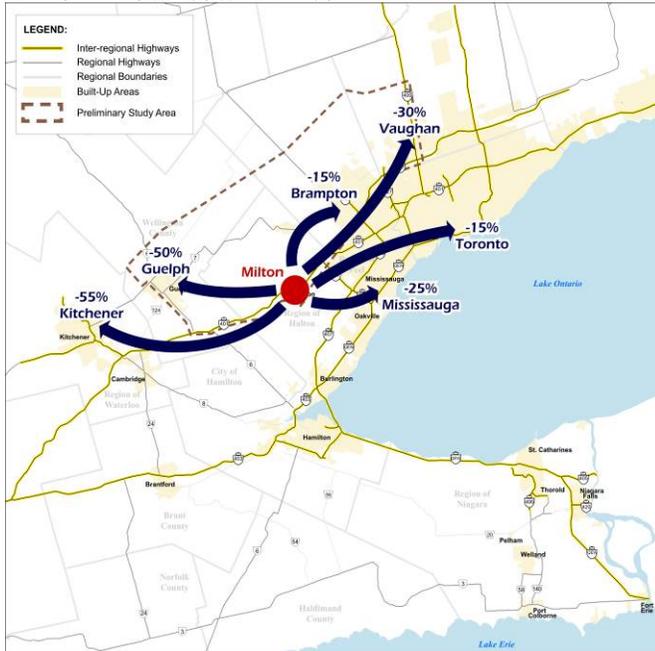
From Vaughan Corporate Centre



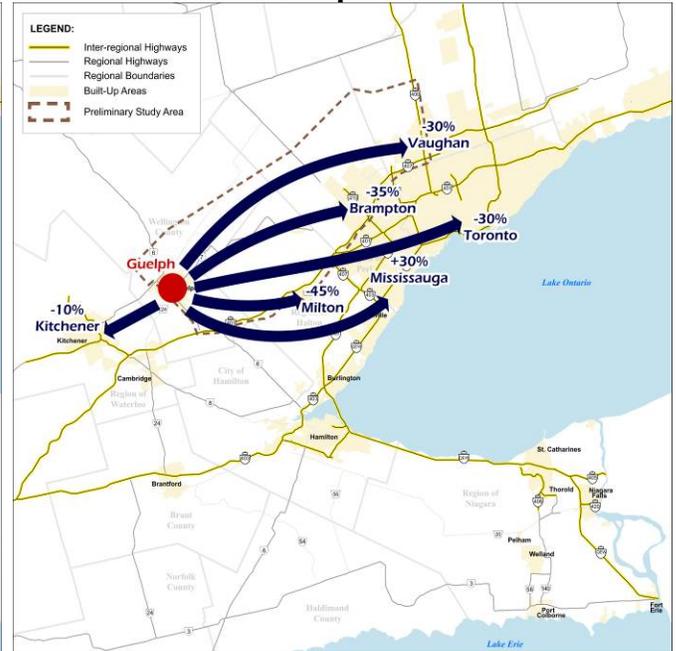
From Downtown Brampton



From Downtown Milton



From Downtown Guelph



| | |
|---|--|
| <p>Analysis conducted for the current study, supported by background reports and findings from stakeholder consultation, identifies future problems on the inter-regional commuter transit network. There are four main future problems associated with commuting by the inter-regional transit system:</p> | |
| <p>Limited integration between local and inter-regional transit, particularly beyond corridors served by GO Transit, reduces transit's attractiveness to commuters and its competitiveness compared to the automobile</p> | <ul style="list-style-type: none"> • The lack of integration results from: <ul style="list-style-type: none"> • Limited connections between local transit and inter-regional transit • Incompatible fare structure and payment systems • Differing timetables and hours of operation • Inadequate waiting/transfer areas and amenities |
| <p>Limited community to community transit service can result in extra transfers between services, decreasing convenience and increasing travel times</p> | <ul style="list-style-type: none"> • Transit services are generally radially oriented, providing connections to Toronto • Even with the planned connections, transit between UGCs such as Milton-Brampton and Milton-Guelph is more limited and indirect, requiring transfers and circuitous routes • 2031 PM transit mode shares indicate the low usage expected for inter-regional trips between UGCs: <ul style="list-style-type: none"> • Guelph-Milton – 0% • Guelph-Brampton – 7% • Guelph-Vaughan – 2-4% • Milton-Brampton – 2-3% • Milton-Vaughan – 4-7% • Brampton-Vaughan – 11-12% |
| <p>Passenger rail services can conflict with freight for use of rail capacity</p> | <ul style="list-style-type: none"> • Expansion of passenger and freight rail services within existing rail corridors creates potential for conflicts, particularly during peak commuting periods, as well as issues of scheduling and integration of rail services |
| <p>Buses are impacted by road congestion, increasing unreliability and travel times</p> | <ul style="list-style-type: none"> • Issues of congestion, increasing travel time, and unreliability due to non-recurring incidents limit the efficiency and attractiveness of bus services operating in mixed traffic |

4.2.2 Commuter – Automobile

The substantial growth in population and employment in the Study Area, as per the Growth Plan, is expected to result in an increase in PM peak period automobile trips of

approximately 140% between 2001 and 2031. While the automobile is expected to remain the transportation mode of choice in the GTA West Corridor, its PM peak period mode share is anticipated to decrease from approximately 79% in 2001 to 70% in 2031, largely due to the substantial transit improvements planned for the Greater Golden Horseshoe (GGH).

Mode choice for commuter travel depends on a number of factors, including trip purpose, origins and destinations of trips and available network connections, as discussed in **Section 2.1**. The origin-destination analysis reveals significant numbers of trips made internally within the Study Area’s upper tier municipalities. Approximately 77% of trips in Wellington, 71% in Peel and 70% in Halton are expected to remain within each respective region during the weekday PM peak hour. This represents a slight reduction from 2006 levels (83% in Wellington, 77% in Peel and 73% in Halton). Trips across municipal boundaries are expected to be more substantial between Peel and Toronto/York/Durham Regions, with the numbers of cross-boundary trips decreasing toward the west.

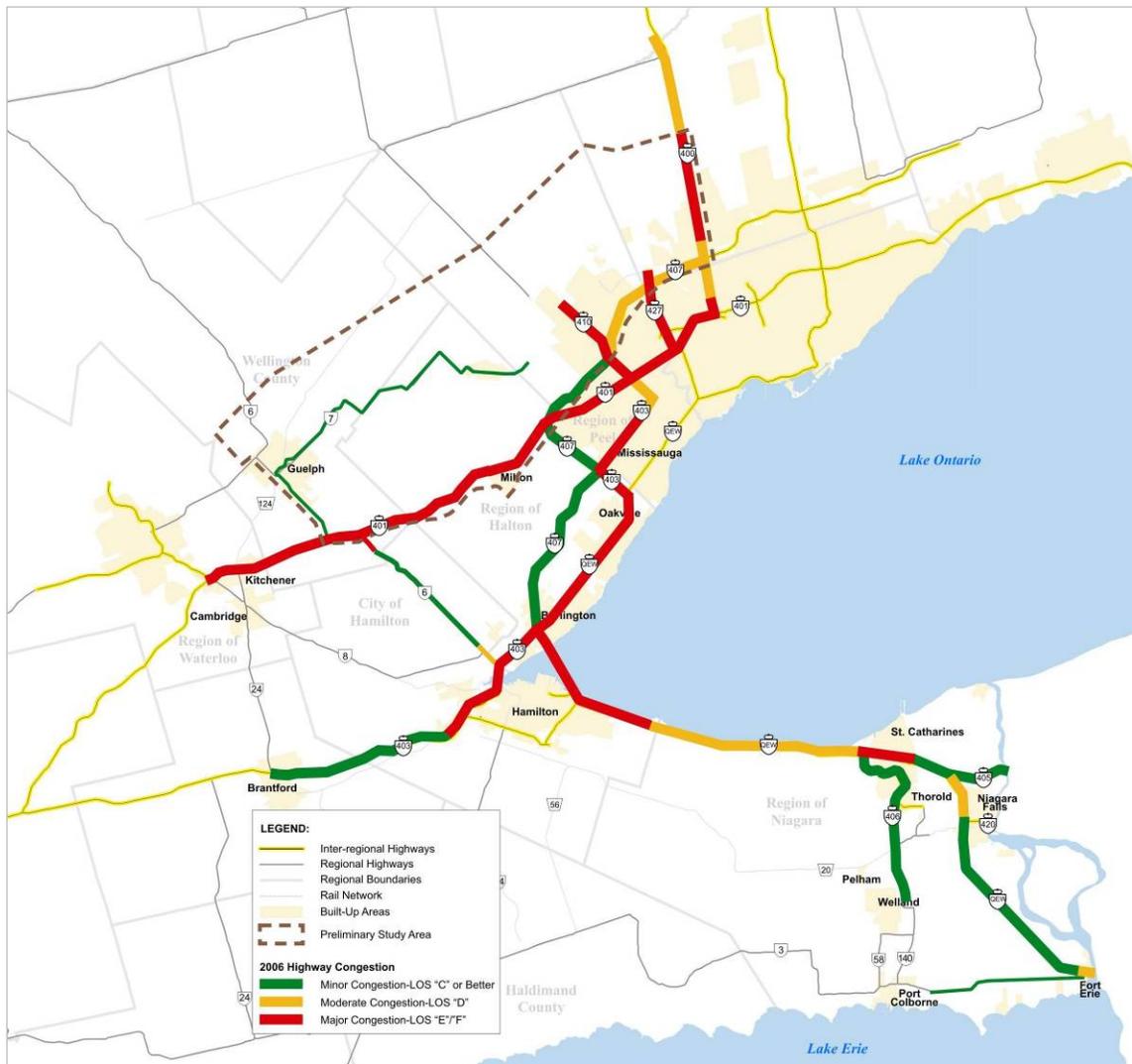
The road transportation system is the main mode used for commuting in the Study Area, especially where trips are not served by a higher order transit alternative. Although transit mode shares are expected to remain low, transit does play an important role in commuter travel, where connections are available. Travel for commuting generally occurs in the AM and PM peak periods and this has an impact on the overall operation of the transportation network. As traffic volumes increase throughout the day, the traditional AM and PM peak periods are becoming longer, resulting in major roadways, such as Highway 401, being congested throughout much of the day. Significant growth is expected in commuter travel demand through to 2031, resulting in significant capacity deficiencies on the road and transit networks.

Highway 401 is the main highway corridor through the Study Area, with Highways 400, 427 and 410 providing key highway links for automobile commuters. There are a number of heavily congested links on the major highways. **Exhibit 4-6** illustrates PM peak hour congestion in 2006. Significant congestion is experienced along much of Highway 401 in the GTA West Study Area, as well as on Highways 400, 427 and 410. All of these major routes experience Levels of Service of E or F, indicating that the volume/capacity ratio is over 0.9 and Congested, “Stop-and-Go” conditions are experienced, as described in the table below. Traffic volumes are increasing throughout the day such that congestion is spreading beyond the traditional AM and PM peak periods.

| Congestion Type | Approximate V/C | Description |
|------------------------|------------------------|------------------------------------|
| Minor | Less than 0.80 | Non-recurring Congestion* |
| Moderate | 0.80 to 0.90 | Unstable Conditions |
| Major | 0.90 and above | Congested Conditions (Stop-and-Go) |

* Traffic conditions may be adversely affected by incidents, accidents, weather, and construction / maintenance activities

Exhibit 4-6: 2006 Weekday (AADT) Highway Congestion



The highways within the Study Area currently operate with considerable peak hour congestion, with the following major automobile commuter transportation system constraints:

- Highway 401 along its entire length in the Study Area, with the most severe constraints in the Region of Peel and City of Toronto
- Highway 400 south of Major Mackenzie Drive, north of the 407 Electronic Toll Route (ETR)
- Highway 427 between Highway 401 and Highway 7
- Highway 410 north of the 407 ETR

Summer average daily traffic (SADT) is generally greater than the AADT that occurs throughout the year. SADT is characterized by longer peak periods and more balanced traffic volumes by direction as commuter and tourism and recreation trips overlap. As discussed in **Section 4.2.4**, tourism and recreation traffic contributes to summer roadway

congestion, with trips to, from and through the Study Area. As shown in **Exhibit 4-7**, 2006 SADT conditions are more congested than AADT conditions, with additional congestion on Highway 400 south to Highway 401, and on the 407 ETR between Highways 400 and 410.

Exhibit 4-7: 2006 Weekend (SADT) Highway Congestion

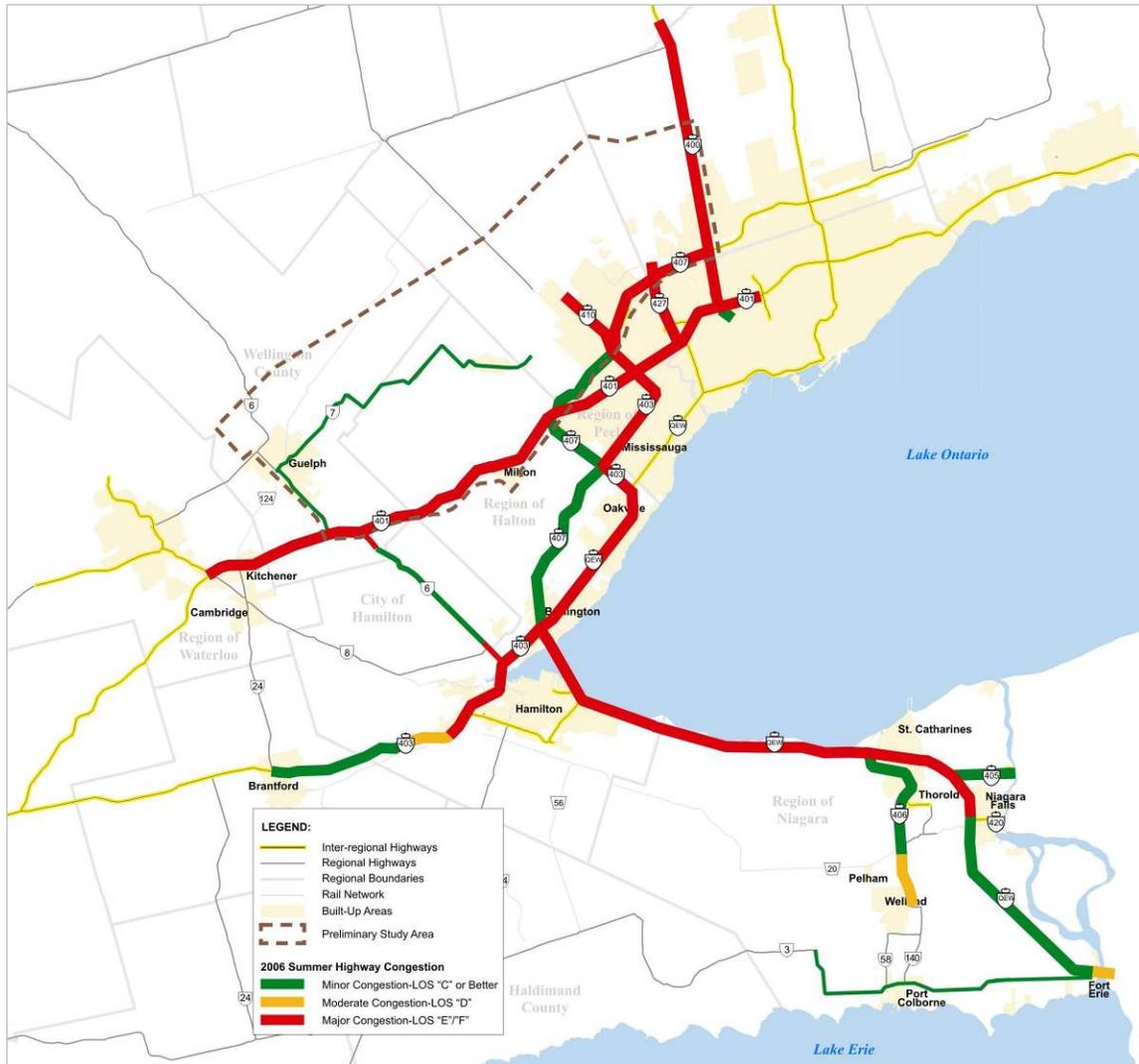
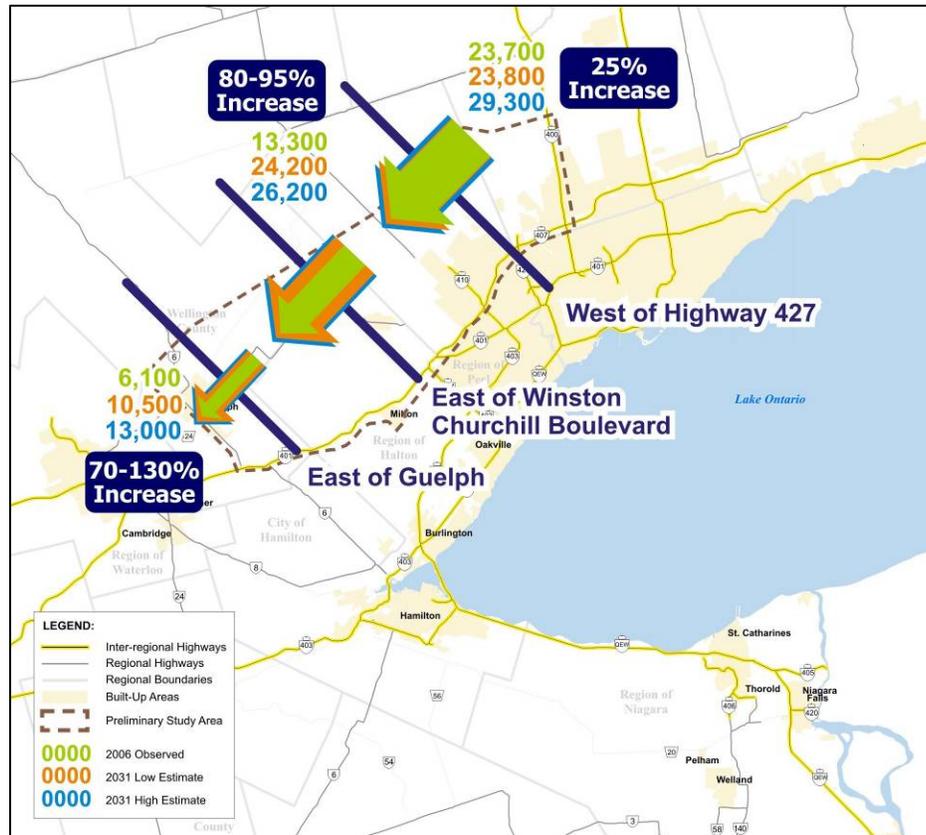


Exhibit 4-8 illustrates the substantial growth forecast for westbound PM peak period travel by automobile, at specific GTA West screenlines (a boundary that defines a broad corridor across which traffic flows). In the eastern part of the Corridor, west of Highway 427, westbound PM peak hour flows are expected to increase by as much as 25%. Traffic volumes farther west, east of Winston Churchill Boulevard, are to increase significantly, by 80% to 95%. In the western-most part of the GTA West Study Area, east of Guelph, PM peak hour traffic flows are expected to increase by 70 to 130% by 2031. The large range of percentage growth by screenline is reflective of large differences in existing traffic volumes as well as future growth volumes to 2031.

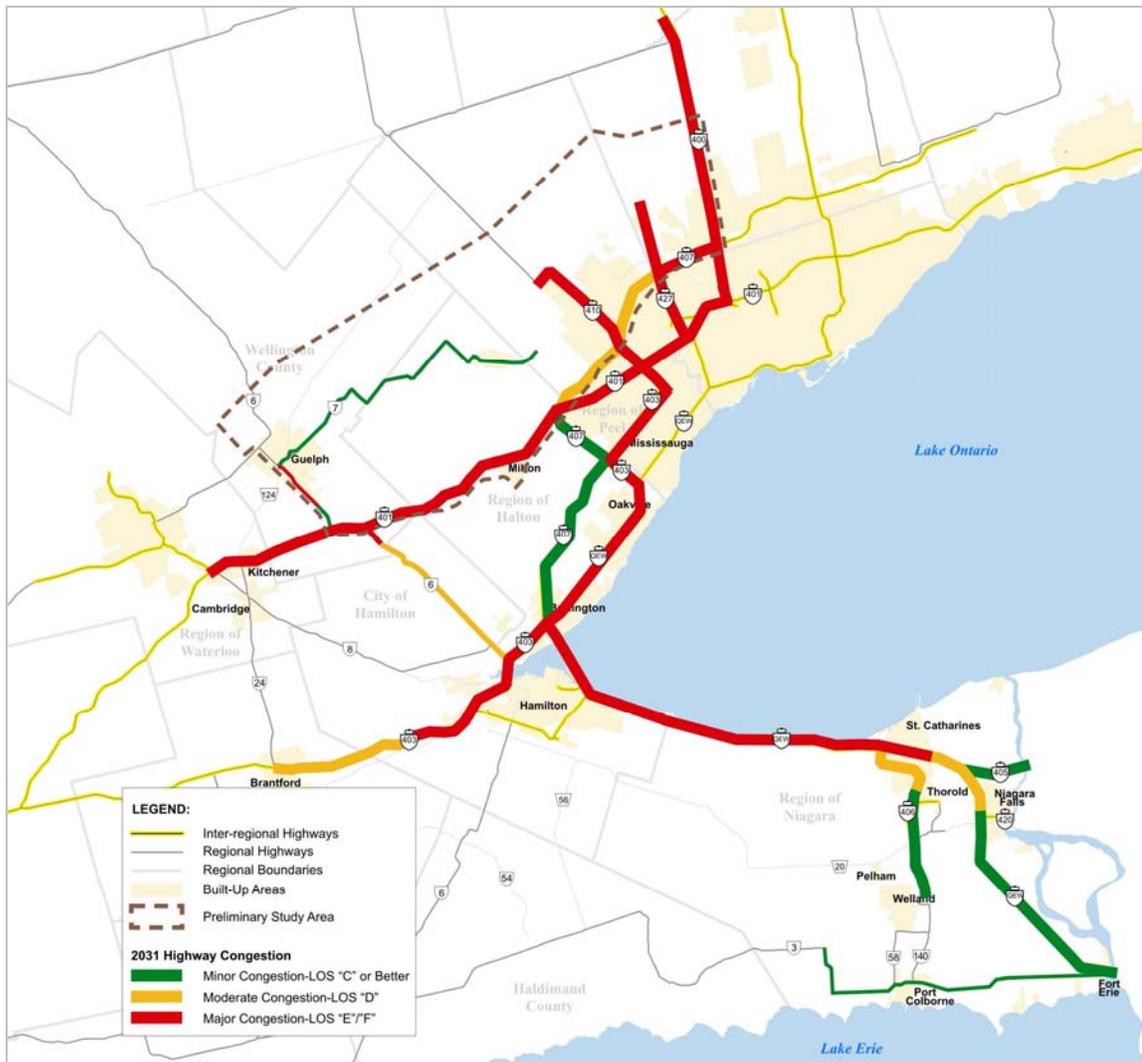
Exhibit 4-8: Future Regional PM Peak Hour Auto Flows



With the additional population and employment projected for the Study Area and its surroundings, 2031 highway volumes and associated congestion are expected to increase. This projected rise in traffic volumes is anticipated to be accompanied by worsening congestion and travel conditions during peak periods and throughout the day. Much of the highway network is expected to operate at capacity throughout the Study Area in 2031 (particularly Highways 401, 400, 427 and 410), as shown in **Exhibit 4-9**. The 407 ETR is anticipated to operate with major congestion between Highways 400 and 427, and minor congestion between Highways 427 and 401.

Future roadway congestion is expected even with the highway improvements planned by MTO and area municipalities, and the transit improvements planned by the Metrolinx RTP.

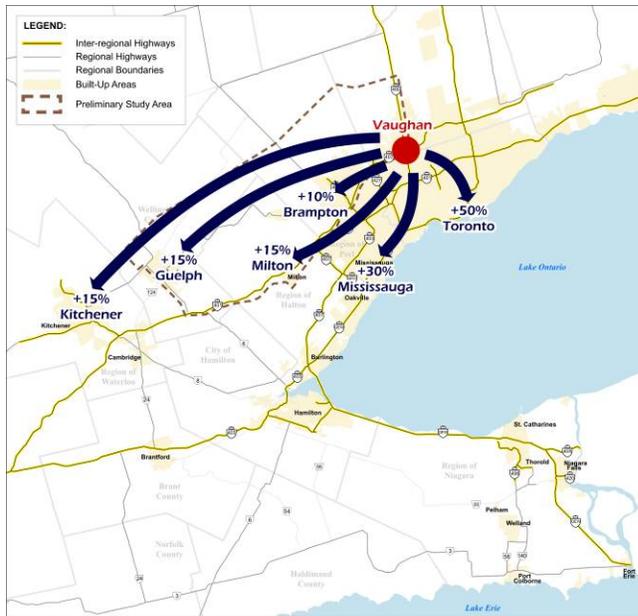
Exhibit 4-9: 2031 Weekday (AADT) Highway Congestion



In 2031, SADT volumes are expected to continue to be higher than AADT volumes, with corresponding worsening of highway congestion. Travel conditions on the main highways used for tourism and recreation (Highways 401 and 400) will continue to deteriorate. **Exhibit 4-10** presents 2031 daily summer highway congestion, showing worsening conditions on the 407 ETR, which will experience major congestion on the segments between Highways 400 and 410. These summer conditions represent the greatest pressure on the highway network.

Exhibit 4-11: Change in PM Peak Hour Auto Travel Times to 2031 between Urban Growth Centres

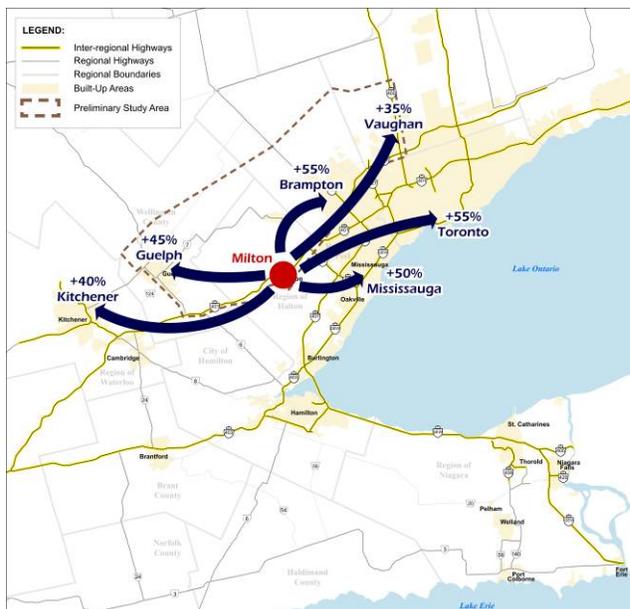
From Vaughan Corporate Centre



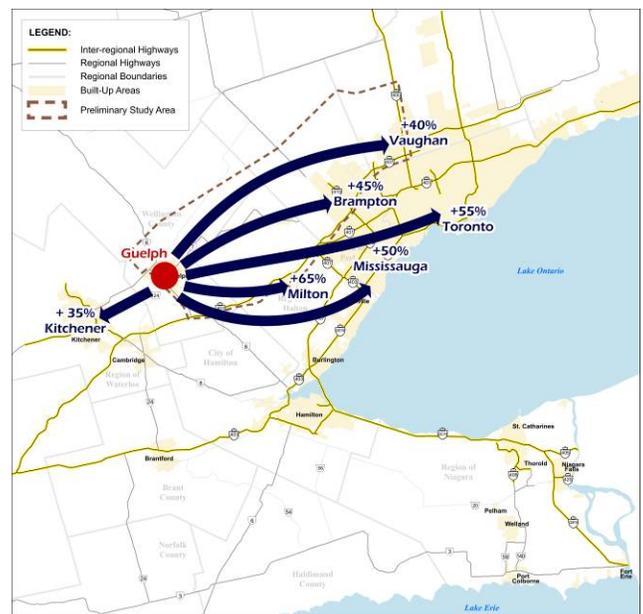
From Downtown Brampton



From Downtown Milton



From Downtown Guelph



As presented in **Section 3.4.5**, screenline analyses (across a boundary that defines a broad corridor across which traffic flows) were undertaken to identify roadway capacity problems at specific locations throughout the GTA West Corridor. The analysis included a review of the existing (2006) and future (2031) roadway capacity at each screenline and

assessment of existing and future vehicle demand. In 2031, congested conditions are expected at each of the Study Area’s north-south screenlines (assessing east-west travel) in the absence of roadway capacity improvements. The addition of future planned capacity is expected to result in Unstable and Congested conditions at a number of locations. Similarly, congested 2031 conditions are expected at each of the Study Area’s east-west screenlines (assessing north-south travel) in the absence of additional roadway capacity. The addition of the planned roadway capacity is expected to relieve congestion at some locations, but the majority are expected to operate in a Congested state. These screenline analyses indicate that capacity shortfalls are anticipated at a number of locations on the planned future roadway network.

Additionally, individual facility analysis concluded that capacity shortfalls and corresponding major congestion are expected on the main highways in the Study Area. Within the extent of the Study Area’s screenlines, analysis of locations along Highways 401, 400 and 410 was conducted to determine these expected future capacity shortfalls. **Section 3.4.7** provides details of this analysis, illustrating that AADT and SADT volumes are expected to increase significantly. SADT volumes are generally greater than AADT volumes, and are projected to remain greater through to 2031.

Forecast 2031 AADT and SADT volumes were used to identify the capacity shortfall in equivalent number of highway-lanes. The order of magnitude of the anticipated 2031 capacity problem, in relation to existing and planned facility capacity, is presented in equivalent lane deficiencies for specific highway corridors, beyond future planned roadway capacity, within the Study Area. A summary of the analysis is presented in **Exhibit 4-12**, based on AADT and SADT volumes and the future planned roadway capacity. Analysis indicates that two additional lanes of capacity are expected to be required on Highways 401, 410 and 400 (except for Highway 401, between the 407 ETR and Highway 410). Some of the identified capacity deficiencies could be addressed through transportation strategies, potentially including optimization of the existing network and improvements to other modes. Such options will be examined as part of the generation and evaluation of alternatives in the next stage of this study.

Exhibit 4-12: Summary of Year 2031 Hour Lane Deficiency by Highway Corridor

| Highway Corridor | Existing Number of Lanes | Planned Number of Lanes | 2031 Demand in Equivalent Number of Lanes | Equivalent Lane Deficiency |
|--------------------------------|--------------------------|-------------------------|---|----------------------------|
| Highway 401 | | | | |
| Guelph to Highway 25 | 6 | 8 | 10 | 2 |
| Highway 25 to Highway 407 | 6 | 10+HOV | 14 | 2 |
| Highway 407 to Highway 410 | 8 | 12+HOV | 14 | - |
| West of Highway 427 | 12 | 12 | 14 | 2 |
| West of Highway 400 | 14 | 14 | 16 | 2 |
| Highway 410 | | | | |
| South of Bovaird Drive | 6 | 6 | 8 | 2 |
| Highway 400 | | | | |
| North of Highway 407 | 10 | 10 | 12 | 2 |
| North of Major Mackenzie Drive | 6 | 8+HOV | 12 | 2 |

The 2031 travel characteristics and flows on Highway 401 to the west and east of Milton (in the central portion of the Study Area) are illustrated in **Exhibit 4-13** and **Exhibit 4-14**, respectively. On Highway 401 west of Milton, the concentration of westbound flows is expected to generally originate to the southeast, in Toronto (29%) and Mississauga (26%), and 7% of trips to originate in Milton. Trip destinations are generally expected to be toward the north and west: to the Region of Waterloo (28%), Guelph (25%) and beyond the Region of Waterloo (24%).

East of Milton, westbound flows on Highway 401 are anticipated to have similar but slightly different characteristics. Similar to the link west of Milton, the main origins of travel are expected to be Mississauga (37%) and Toronto (31%). Milton is projected to be the destination of 44% of the westbound trips, followed by the Region of Waterloo (16%), beyond the Region of Waterloo (15%) and Guelph (14%).

Exhibit 4-13: Future Highway 401 Westbound Flows West of Milton

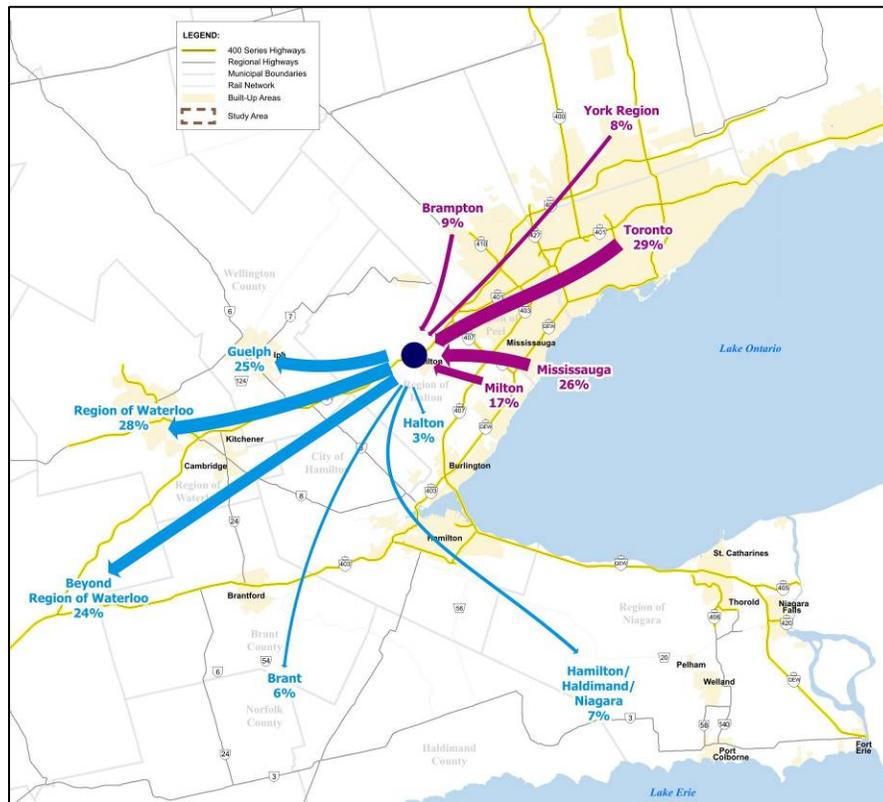
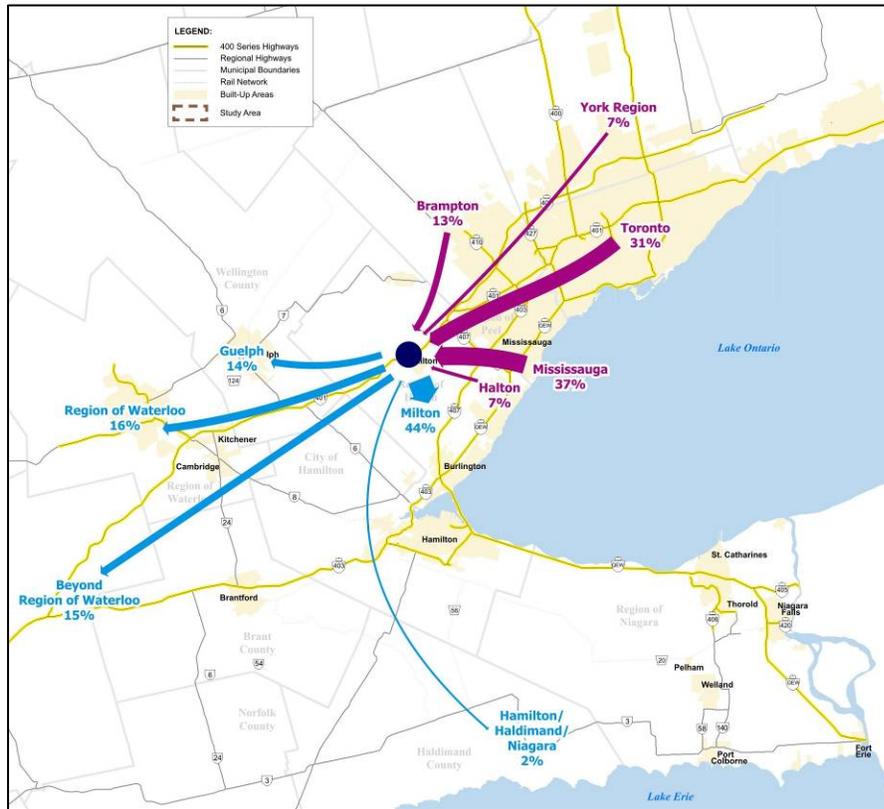


Exhibit 4-14: Future Highway 401 Flows East of Milton



The road transportation system is the main mode used for commuting in the Study Area, especially where trips are not served by a higher order transit alternative. The three key commuter problems associated with the future inter-regional road transportation system are as follows:

Congestion will increase during weekday commuting periods, particularly on the provincial highway network during AM and PM peak periods and increasingly throughout the day

- Major congestion is forecast for the length of Highways 401, 400, 410 and 427, and on parts of the 407 ETR
- Demand is anticipated to exceed capacity with substantial capacity shortfalls (in equivalent lane deficiencies):
 - Highway 401 – 2 lanes between Guelph and Hwy 400 (except between Hwy 407 ETR and Hwy 410)
 - Highway 410 – 2 lanes south of Bovaird Dr.
 - Highway 400 – 2 lanes between 407 and Major Mackenzie Dr.

| | |
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| <p>Travel times for commuter trips will increase and become less predictable as a result of increasing congestion, on highways as well as on regional and local roadways</p> | <ul style="list-style-type: none"> • The projected capacity shortfall will increase travel times between the Study Area’s Urban Growth Centres, with 2031 travel time increases ranging as high as 30% to 40% for some commuter trips |
| <p>Variability and duration of travel times on the area road system will be affected by non-recurring incidents</p> | <ul style="list-style-type: none"> • Delays that occur due to such non-recurring incidents (collisions, inclement weather, maintenance, construction) will contribute to future congestion • There is a lack of alternate higher order inter-regional routes to avoid congested conditions, particularly for travellers using the Highway 400/Highway 401 corridors |

4.2.3 Tourism and Recreation –Transit

Tourism to the GTA West Study Area includes trips made by Ontarians, other Canadians, Americans and overseas tourists. In 2007, a total of 9.2 million trips were made to the region, and 15.7 million trips were made by residents of the GTA West Corridor (13.8 travelled out of the Study Area and 1.9 million remained within it). As discussed in **Section 2.5**, intra-provincial trips make up the vast majority of tourism and recreational travel to the Study Area.

The vast majority of tourism and recreation trips within the GTA West Study Area are made by automobile. Although there are area bus and rail transit services, they are generally not designed to provide linkages to tourist and recreational centres. Much of the above discussion about the inter-regional transit-based commuter transportation system (**Section 4.2.1**) is relevant to tourism and recreation travel by transit, including the constraints of limited community-to-community inter-regional transit, lack of provision for convenient transfers between services, and the impacts of road congestion on bus transit.

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| <p>The Study Team’s analysis, background reports and stakeholder consultation point toward three major future problems for tourism and recreation travel on the inter-regional transit-based transportation system:</p> | |
| <p>Inadequate transit connections between urban centres, tourist gateways (airports, rail stations), and tourist destinations</p> | <ul style="list-style-type: none"> • Where connections are available, there is a lack of direct services • Increased travel times and decreased convenience makes transit less competitive compared to the automobile for tourist travel |
| <p>Public transit schedules cater to commuters rather than tourists</p> | <ul style="list-style-type: none"> • Where publicly funded transit services are in place or planned, schedules tend to cater to commuters rather than tourists, with services |

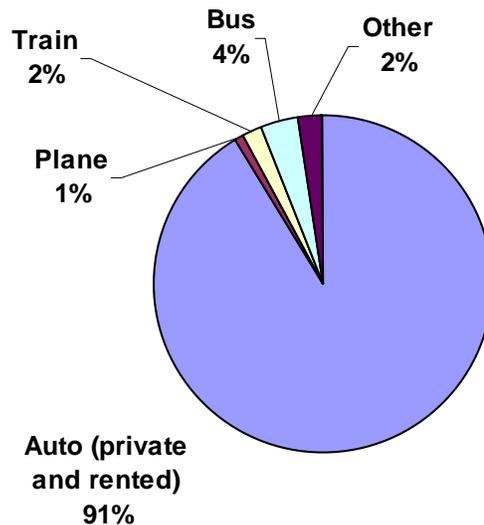
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| | <p>focused on AM and PM commuting times and limited during weekends</p> <ul style="list-style-type: none"> • There is limited availability of transit for tourism and recreation purposes, especially to tourist destinations that are outside of urban centres |
| <p>Limited multi-modal connections (e.g., train stations, airports) to key destinations (i.e., a lack of choice using transit)</p> | <ul style="list-style-type: none"> • Limited connections between tourist gateways, urban centres and tourist destinations result in the automobile being the only viable option for some tourism and recreation trips • Lack of modal options can increase car use even for those who travel to the Study Area by rail or air |

4.2.4 Tourism and Recreation – Automobile

The area’s tourism and recreation travel is served by the major 400 series highways (401, 400, 427 and 410) and a number of bus and rail lines. The Toronto Pearson International Airport and the Hamilton International Airport (HIA) are in close proximity, as well as smaller, regional airports such as Buttonville Municipal Airport, Guelph Aerodrome, the Toronto City Centre Airport and the Region of Waterloo International Airport. However, almost all tourists to the GTA West Study Area use the highway network to reach their destinations. As there is currently no rail link to Toronto Pearson International Airport or to other area airports, even those travelling by plane must use Highway 401 for local travel. Domestic visitors are the most likely to use the automobile as their mode of transportation, followed by visitors from the U.S. and overseas.

Of all 2007 inbound trips, approximately 91% travelled by automobile, almost 4% of trips were made by bus and about 2% by train, as shown in **Exhibit 4-15**. This predominance of automobile use by tourists is expected to continue into the future.

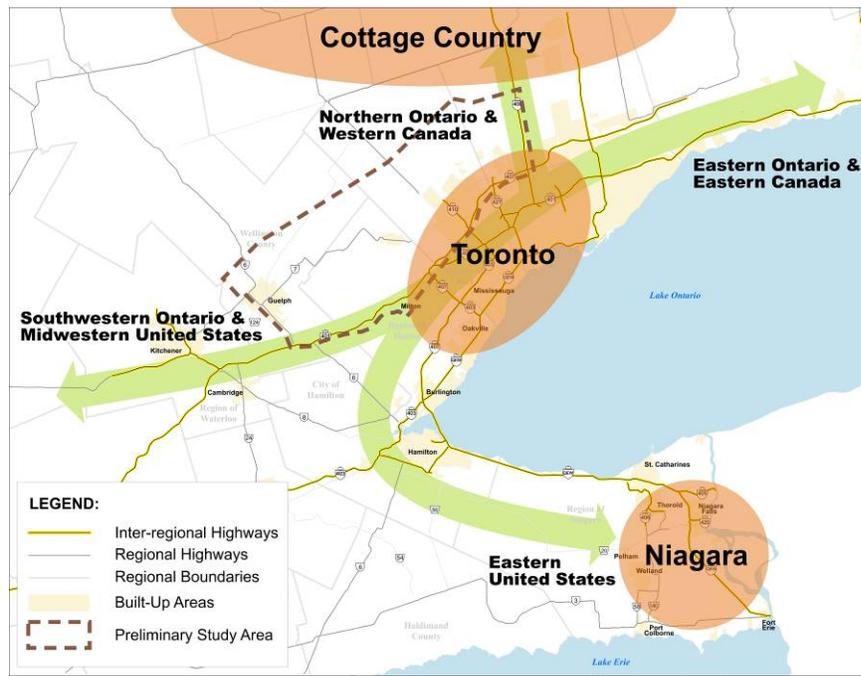
Exhibit 4-15: Visitor Mode of Transportation (2007)



Source: PKF Consulting, TSRC/ITS 2007

Continued growth in tourism and recreation trips to the Study Area through to 2031 will be affected by the anticipated capacity deficiencies on the road and transit networks. **Exhibit 4-16** shows the linkages between the major tourist centres of Toronto, northern Ontario (“Cottage Country”) and the Niagara region, all connected by highways and with limited accessibility by other modes. In addition to travel to and from the GTA West Study Area, trips through this area are another important aspect of tourism and recreation travel. Highways 401 and 400 are heavily used to reach tourism and recreation destinations in Toronto and northern Ontario, and some travellers from origins outside of the Study Area need to use these corridors to reach their tourism and recreation destinations.

Exhibit 4-16: Major Tourist and Recreational Destinations



As discussed in **Section 4.2.2**, SADT volumes are greater in the Study Area than the AADT volumes that occur throughout the year. SADT volumes are typically used in the assessment of the tourism and recreation road transportation network, to correspond with the peak tourist and recreational travel periods. Note that, unlike typical tourist travel, which peaks during the summer months, visits to the GTA West Study Area peak during the fall and are relatively well distributed throughout the year, due to the high proportion of trips to visit friends and relatives. Tourism and recreation trips originating in the Study Area peak during the summer but are also well distributed throughout all seasons. Trips through the Study Area, to destinations in Toronto, Niagara and especially northern Ontario/Cottage Country via Highway 400, are more likely to be oriented to the summer season.

All of the highways used for reaching tourist and recreational destinations will continue to experience heavy AADT and SADT congestion, as illustrated in **Exhibit 4-7** (2001 SADT) and **Exhibit 4-10** (2031 SADT). As shown, Highways 401, 400, 427 and 410 are

anticipated to be heavily congested, which will increase travel times. Such conditions can negatively impact the experience of tourism and recreation travel.

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| <p>The analysis conducted for the current study, supported by background reports and stakeholder consultation, indicates that four key future problems are expected for tourism and recreation travel on the inter-regional road transportation system:</p> | |
| <p>Travel delays result from recurring congestion during peak tourism and recreation travel times</p> | <ul style="list-style-type: none"> • Major congestion is forecast for the length of Highways 401, 400, 410 and 427, and on parts of the 407 ETR • Summer traffic volumes – and therefore congestion – are higher than the average throughout the year, negatively affecting the tourism and recreation trip experience • Demand is anticipated to exceed capacity with substantial capacity shortfalls (in equivalent lane deficiencies): <ul style="list-style-type: none"> • Highway 401 – 2 lanes between Guelph and Hwy 400 (except between Hwy 407 ETR and Hwy 410) • Highway 410 – 2 lanes south of Bovaird Dr. • Highway 400 – 2 lanes between 407 and Major Mackenzie Dr. |
| <p>Unpredictable travel times on inter-regional roads result when incidents occur on an already congested road system</p> | <ul style="list-style-type: none"> • Unreliable travel times due to non-recurring incidents (collisions, inclement weather conditions, maintenance, construction) contribute to high levels of congestion • There is a lack of alternate higher order inter-regional routes to avoid delays • A lack of higher order route options can divert inter-regional travellers to regional and local roadways and circuitous routes |
| <p>Inadequate road connections between tourist gateways (airports, rail stations), urban centres and tourist destinations</p> | <ul style="list-style-type: none"> • Inadequate connections can place increased demand on the highway system and increase traffic on roadways that were not intended as inter-regional routes • Hwy 400 is the primary highway to northern Ontario for tourism and recreation activities, and Hwy 401 is the major highway for visitors to Toronto • There is no equivalent recourse if there are major delays or highway closures |
| <p>Truck traffic on inter-regional roads can conflict with tourism</p> | <ul style="list-style-type: none"> • Goods and people movement compete for limited road space |

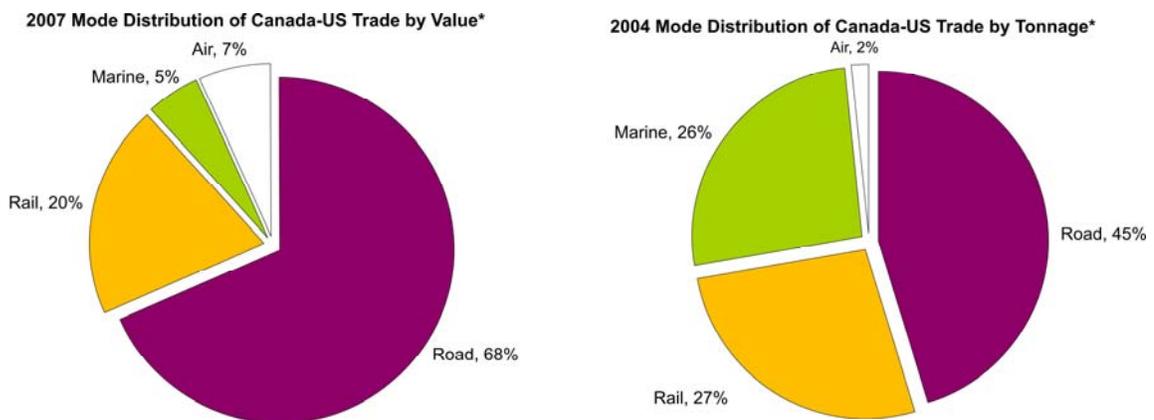
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| and recreation travel | <ul style="list-style-type: none"> • High volumes of truck traffic on major corridors can be a deterrent to tourism and recreation travel, especially during the summer months |
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4.3 Moving Goods

Goods movement is a vital part of transportation demand within the GTA West Study Area. A range of information sources were consulted and referenced to identify and assess the future problems associated with goods movement, including a review of background information, interviews with Transportation Service Providers (TSPs) and Business and Commercial Stakeholders (BCS) and modelling and forecasting analysis conducted by the Study Team. These sources of information indicate future problems in the Study Area relating to the movement of goods by the truck, rail, air and marine transportation systems.

Although most goods experience a multi-modal journey, trucking accounts for almost 70% of the trade value between Canada and the U.S. in terms of mode distribution and 45% of all tonnage (refer to **Exhibit 4-17**). These values indicate the importance of trucks and the road system to the movement of goods through and within the Study Area. Marine and rail transport play a very important role in terms of tonnage, capturing more than half of all tonnage of trade between Canada and the U.S. Air transport plays an important role in moving goods; however, the mode distribution by value and tonnage is much lower at 7% and 2%, respectively.

Exhibit 4-17: Goods Movement Mode Use by Value and Tonnage



Source: Transport Canada, Transportation in Canada 2007: An Overview, May 2008

The population and employment growth identified in the Growth Plan (discussed in previous sections of this report) will result in the increased movement of goods within and through the Study Area. The historical trends indicate a general increase in goods movement by road, rail, air and marine. Although discussions with TSPs indicate that

rail, marine and air have the capacity to absorb increased goods movement, trucking will continue to play a major role in the transportation of goods.

The following sections discuss each mode individually in terms of existing conditions, constraints, future conditions and specific problems identified.

4.3.1 Truck

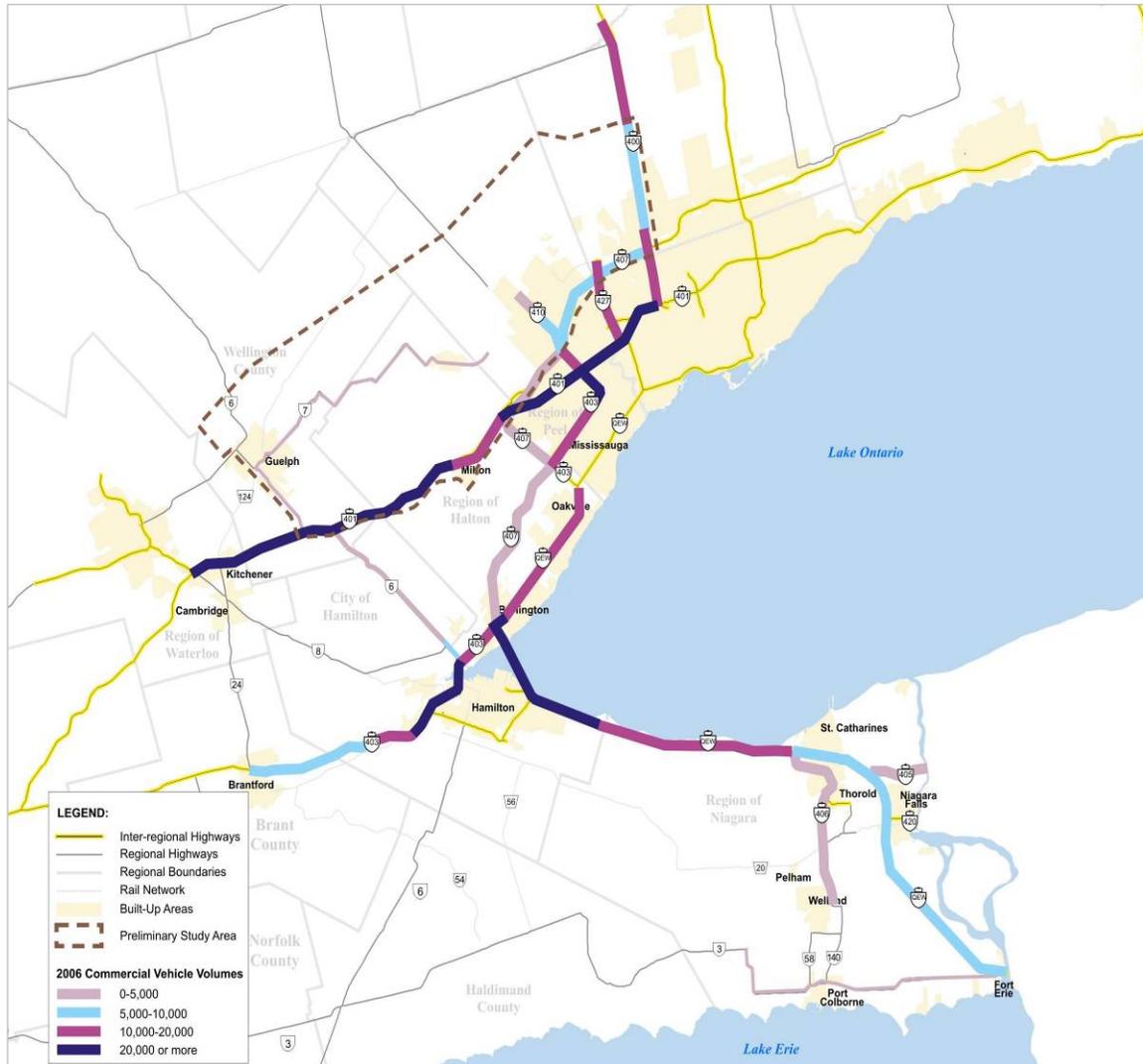
The inter-regional road system is the primary mode for goods movement in the area. A Commercial Vehicle Survey (1999, recorded at Putnam) indicates that over half (57%) of all commercial vehicle trips are 500 km or less in length. Additionally, almost half (46%) of all truck trips are within Ontario with an annual commodity value of over \$200 million; 52% of all commercial vehicle trips are international in nature with an annual commodity value of over \$400 million and a mean travelling distance of more than 1,000 km.

| Route Type | Percent of Trips | Annual Commodity Value (M\$) | Mean Distance (km) |
|-------------------|-------------------------|-------------------------------------|---------------------------|
| Intra-Ontario | 46% | 209 | 255 |
| Inter-Provincial | 2% | 11 | 1,095 |
| International | 52% | 414 | 1,150 |
| All Trips | 100% | 634 | 2,500 |

Highway 401 is the largest and busiest highway in the GTA West Study Area. As shown in **Exhibit 4-18**, all of the 400 series highways are heavily used for goods movement throughout the day. In 2006, commercial vehicle volumes in the Study Area were highest on Highway 401, which carries more than 20,000 trucks per day along the majority of its length in the Study Area, with the exception of the section at Milton that carries 10,000-20,000 trucks per day. The Kitchener-Waterloo area is an emerging trucking hub, as industries and logistic firms are relocating from the Toronto Pearson International Airport area to the west along the Highway 401 corridor.

Daily truck volumes are also relatively high (between 10,000 and 20,000) on Highway 427 and stretches of Highway 400 (from Highway 401 to north of Highway 407 and again at the Study Area's northern boundary). The shift in trucking logistics firms is expected to result in higher truck volumes on Highway 401 west of Mississauga than would be anticipated with historical trend growth.

Exhibit 4-18: 2006 Daily Commercial Vehicle Volumes



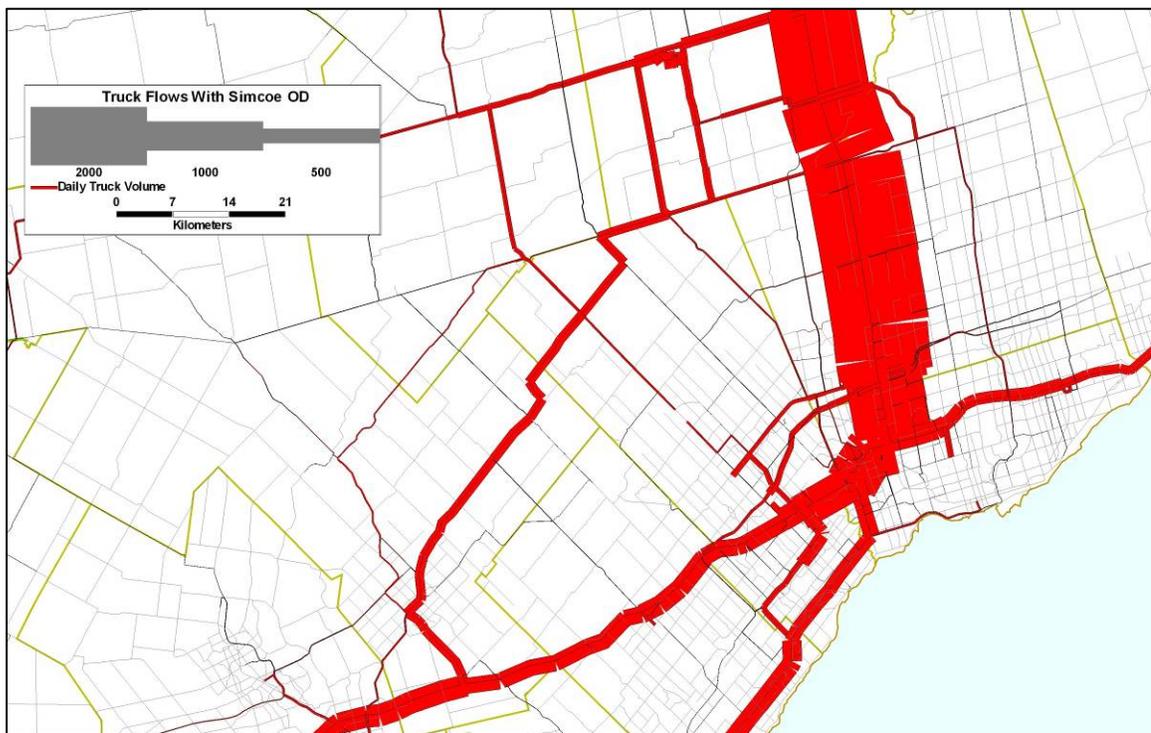
As illustrated in **Exhibit 4-6** (Annual Average Daily Traffic - AADT) and **Exhibit 4-7** (Summer Average Daily Traffic – SADT) in **Section 4.2.2**, all of the Study Area’s 400 series highways experience major congestion in 2006 (with the exception of some sections of the 407 ETR, which is not heavily used for truck movements). This congestion is an issue for goods movement, as trucks are the principal means of transporting goods in south-central Ontario, and the existing provincial highway system links to all major manufacturing centres and international border crossings. Further, trucking provides connectivity between rail and marine transport facilities using provincial highways and arterial road networks. The problems associated with commercial vehicle goods movement are therefore of significant concern.

It is evident that the major congestion on highway facilities impacts the efficient movement of goods, as Highways 400 and 401 are the primary roads used for the movement of goods within and through the Study Area.

Although the majority of the commercial vehicle trips uses the 400 series highways, the extensive road congestion within the GTA West Study Area can result in commercial vehicles shifting to regional and local roads. The extent of the commercial vehicle

diversion that can occur is presented in **Exhibit 4-19**, a “snapshot” of daily commercial vehicle trips to and from Simcoe County located to the north of the Study Area. This area includes the Honda manufacturing plant and several automobile parts manufacturers. Data from the MTO Commercial Vehicle survey indicates that the congestion and unreliability of the Highway 400/Highway 401 interchange complex results in longer distance truck travel using the secondary road network to travel from Simcoe/Highway 400 to Guelph/Highway 401. The secondary roads being used include Highway 89, Highway 9, Highway 50, RR 124 and Hanlon Expressway. This “cut-through” practice of commercial vehicles using the secondary road system to avoid severely congested areas on the provincial 400 series highways is currently commonplace and will continue to increase as traffic flows increase, thereby increasing associated community, social, noise and safety concerns.

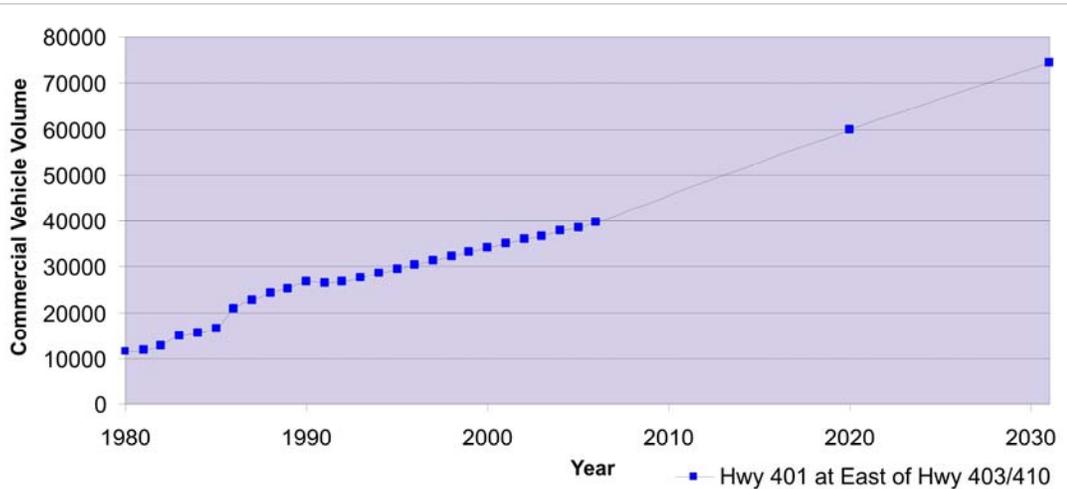
Exhibit 4-19: Daily Commercial Vehicle Trips to and from Simcoe County (2006)



As the automobile manufacturing industry is one of the major drivers of the trucking industry, reduced activity of the automobile plants will impact trucking activities, especially in the Windsor, Oakville, Oshawa and Alliston areas. However, with the substantial population and employment growth forecast for the GGH in the next 25 years, along with the continued desire of Canada and Ontario to build upon a world class transportation system that will drive international trade and economic growth, the forecast of commercial vehicle volumes increasing by approximately 90% over the next 25 years is considered reasonable.

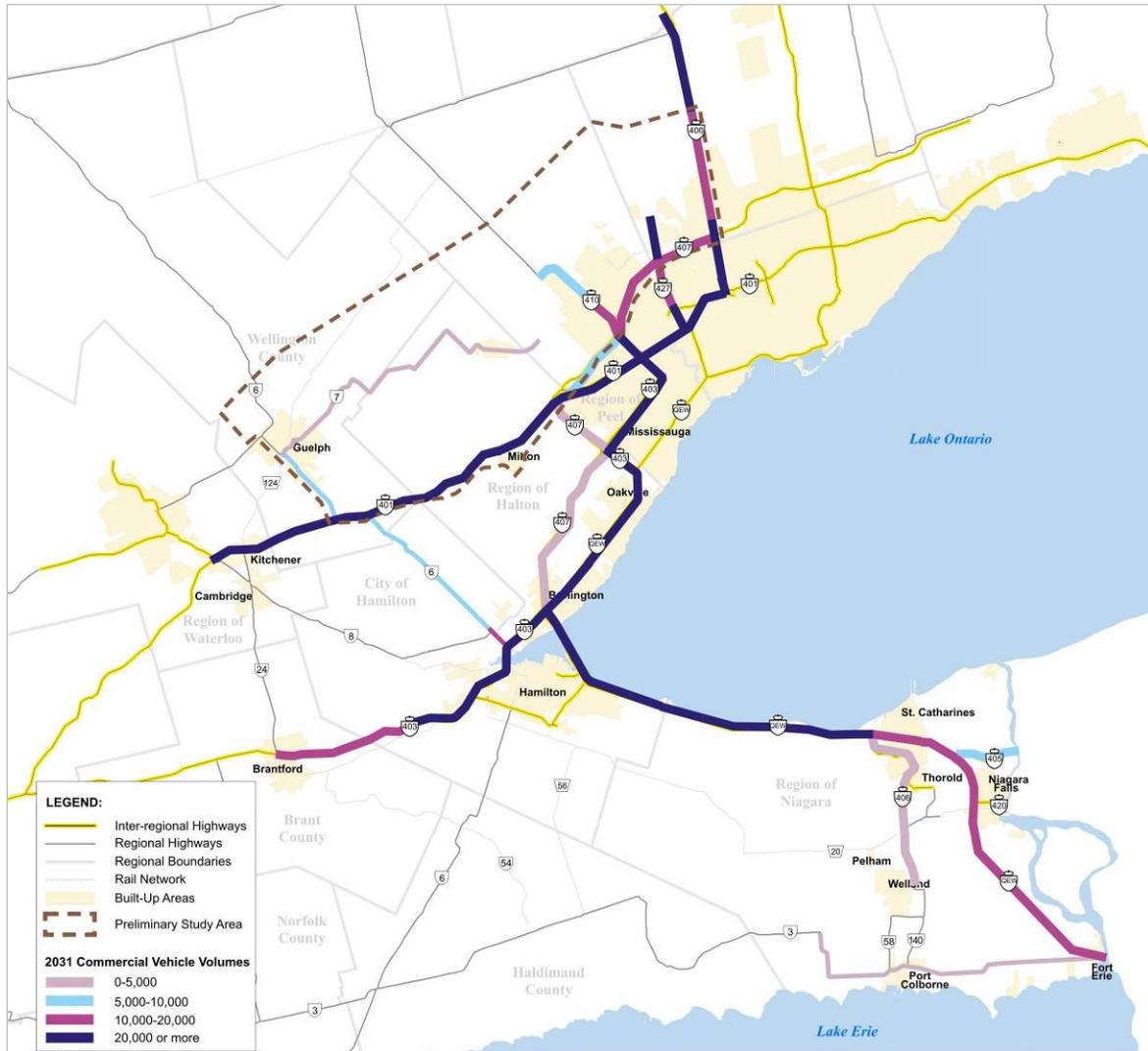
Goods movement in the GTA by commercial vehicles is expected to continue to increase through to 2031. **Exhibit 4-20** shows the steady increase in commercial vehicle volumes on Highway 401 since 1980.

Exhibit 4-20: Commercial Vehicle Traffic Projections (Hwy 401 East of Highways 403/410)



By 2031, truck volumes are expected to increase substantially on all major highways in the Study Area, resulting in increased congestion and delays, particularly on Highways 401, 400, 410 and 427. It is apparent that this major congestion will impact the efficient movement of goods within and through the Study Area. **Exhibit 4-21** illustrates the forecast increases in commercial vehicle volumes to 2031. The heavy congestion projected on these trucking routes is shown in **Exhibit 4-9** (AADT) and **Exhibit 4-10** (SADT) in **Section 4.2.2**.

Exhibit 4-21: 2031 Daily Commercial Vehicle Volumes

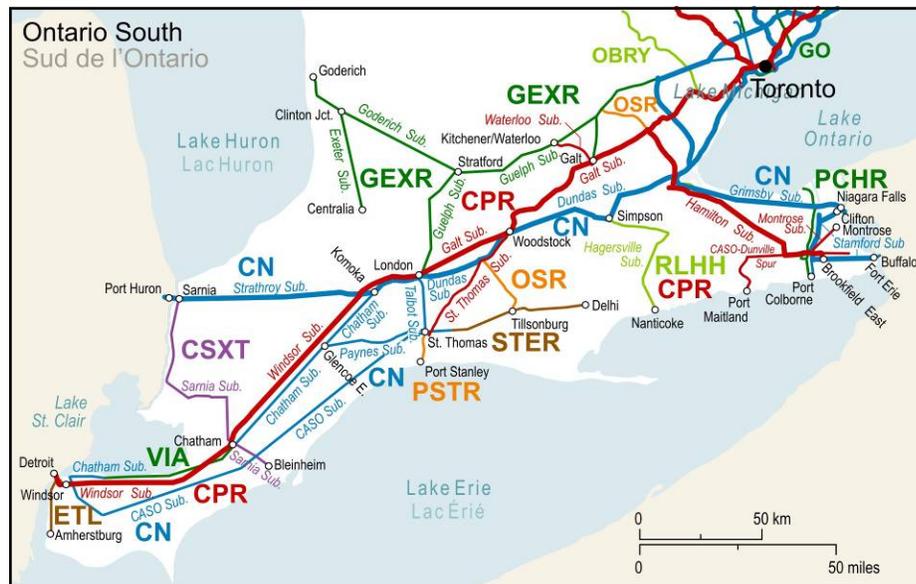


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| <p>The problems for commercial vehicles travelling in the Study Area are similar to those for commuter and tourism/recreation travel by road. Four key problems emerged from research, consultation and analysis for goods movement by the inter-regional commercial vehicle system:</p> | |
| <p>Travel delays result from recurring congestion during peak periods and increasingly throughout the day</p> | <ul style="list-style-type: none"> • Major congestion is forecast for the length of Highways 401, 400, 410 and 427, and on parts of the 407 ETR, resulting in increased travel times • Demand is anticipated to exceed capacity with substantial capacity shortfalls (in equivalent lane deficiencies): <ul style="list-style-type: none"> • Highway 401 – 2 lanes between Guelph and Hwy 400 (except between Hwy 407 ETR and Hwy 410) • Highway 410 – 2 lanes south of Bovaird Dr. • Highway 400 – 2 lanes between 407 and Major Mackenzie Dr. |
| <p>Unpredictable travel times on inter-regional roads are a result of incidents on an already congested road system</p> | <ul style="list-style-type: none"> • 2031 travel times are expected to increase, in some cases substantially, between Urban Growth Centres • Unreliable travel times due to non-recurring incidents (e.g., collisions, inclement weather, maintenance, construction) contribute to high levels of congestion |
| <p>Inadequate road connections between Urban Growth Centres, commercial centres and inter-modal facilities</p> | <ul style="list-style-type: none"> • Inadequate connections result from a lack of infrastructure and from congestion on existing facilities, and can result in the use of regional and local roads and circuitous routes • Lack of connections impacts the efficiency of goods movement and can create a disincentive to the use of inter-modal facilities |
| <p>Diversion of inter-regional trucks to regional and local roads</p> | <ul style="list-style-type: none"> • Diversion can occur due to a lack of equivalent parallel routes, to avoid congested routes or to avoid unexpected delays • A lack of alternate routes suitable for trucks can result in use of regional and local roads, causing community, social, noise and safety concerns |

4.3.2 Rail

A number of rail lines provide services for goods movement within and through the GTA West Study Area, including Canadian Pacific (CP), Canadian National (CN) and a number of shortline railways including the Goderich - Exeter Railway (GEXR). CP and CN provide Class I rail service in south-central Ontario (i.e., they are the largest area freight railways, as classified based on operating revenue) and Class II service is provided by the smaller railroad companies. Inter-modal facilities accommodate the movement of freight between transportation modes. Such facilities within the Study Area include the CP Vaughan Terminal, the CP Trafalgar Road-Rail Terminal, the CN Brampton (Toronto) Terminal and the CN MacMillan Yard Road-Rail Terminal. Typically, rail and inter-modal transportation is used to move bulk goods and containers, including forest products, chemicals, automotive commodities and ores/minerals. **Exhibit 4-22** provides an overview of the area rail connections.

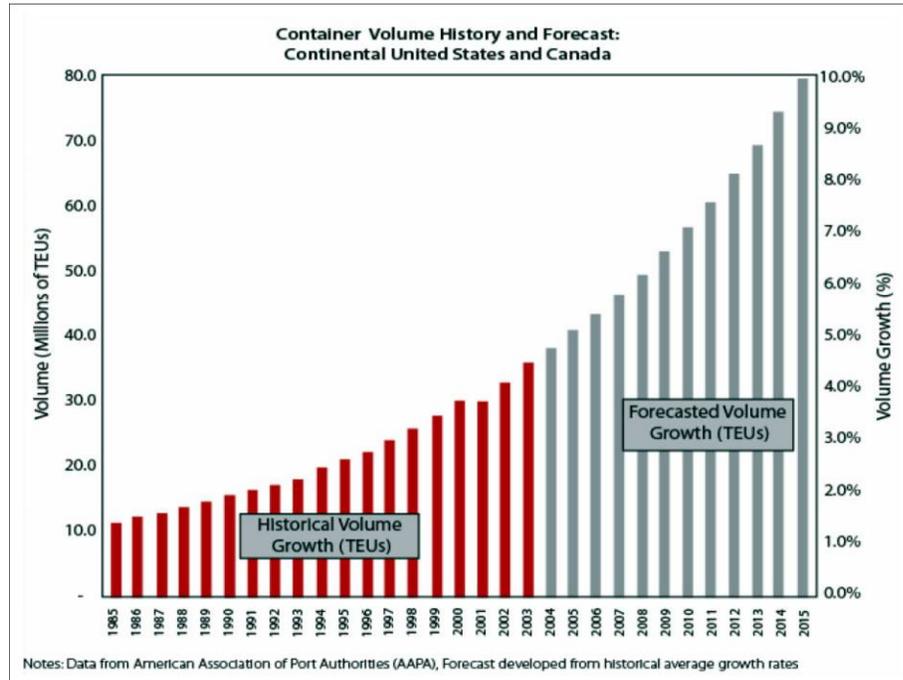
Exhibit 4-22: Southern Ontario Rail Lines



Source: Railway Association of Canada – Railway Atlas, November 2004

Rail traffic has experienced strong growth, with a steady increase between 1995 and 2003. Much of this growth was driven by marine imports by container. Moving forward, the volume of goods carried by rail is anticipated to increase, as shown in **Exhibit 4-23**. This growth in volume is expected to be driven largely by continued growth in the movement of containerized units.

Exhibit 4-23: Volume of Goods Carried by Rail



Source: Trends in Containerization and Capacity at Canadian Ports, Economics Division, January 2006

Rail connections between Urban Growth Centres in the GTA West Corridor are limited in some areas, requiring transfers and circuitous routes:

- Guelph to Milton – no direct connection, circuitous and exchange of traffic required from GEXR to CN to CP
- Guelph to Brampton – connection in place, terminus needed at Brampton
- Guelph to Vaughan – no direct connection, possible exchange of traffic from GEXR to CN to CP
- Milton to Brampton – connection in place
- Milton to Vaughan – no direct connection, exchange of traffic required from CP to CN
- Brampton to Vaughan – no direct connection, exchange of traffic from CN to CP

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| <p>Analysis conducted for the current study, supported by background reports and the findings from stakeholder consultation, indicates that three future problems are expected for inter-regional rail goods movement:</p> | |
| <p>Limited connectivity of inter-modal facilities and growth centres poses constraints to non-road travel and can produce bottlenecks at the trucking interface</p> | <ul style="list-style-type: none"> • Limited rail and road connections reduce efficiency and viability of rail options and increase travel times for deliveries • Road congestion at rail inter-modal facilities increases travel times and can affect scheduling to/from local customers • Road congestion is affecting the CN Brampton inter-modal terminal and MacMillan yard (Vaughan) • Road access at CP Vaughan inter-modal terminal is an issue; improvement is expected from Hwy 427 extension |
| <p>Operational constraints in some areas limit rail options for goods movement</p> | <ul style="list-style-type: none"> • Potential constraints: introduction/ expansion of passenger services on CP MacTier (Toronto) and Guelph corridors, and CN Halton corridor may require new infrastructure • Rail expansion may be constrained by road grade and rail to rail grade separations |
| <p>Conflicts with transit for the use of rail capacity</p> | <ul style="list-style-type: none"> • Progression toward sustainable choices for moving people is occurring in an environment of limited rail capacity and expansion • Potential CN passenger-freight conflicts: <ul style="list-style-type: none"> • Bramalea-Georgetown: GO Transit is planning service expansions in primary CN corridor just outside of major freight terminals • Potential CP passenger-freight conflicts: <ul style="list-style-type: none"> • currently no passenger services in the Study Area • potential GO service from Toronto-Bolton could conflict with freight, particularly at Vaughan inter-modal terminal • additional GO service from Toronto-Milton could conflict with Toronto-Chicago corridor |

4.3.3 Air

Although no air transportation facilities are located within the GTA West Corridor, there are several air transportation services in close proximity to the Study Area, as shown in **Exhibit 4-24**. The Toronto Pearson International Airport, approximately 3 km to the southeast of the Study Area, is Canada’s largest international airport for moving people and goods. Pearson International Airport served over 30 million passengers in 2006 and is ranked 29th globally for total passenger movements; it is projected to accommodate 66

million passengers per year by 2030. Also in 2006, 517,000 metric tons of cargo were moved through the airport, positioning the airport as the 28th busiest in the world for air cargo. Cargo volumes are projected to reach 1.27 million tons by 2030¹². Other airports in the vicinity include Waterloo International, Hamilton International, Buttonville Municipal, Guelph Aerodrome and Toronto City Centre.

Air transportation is typically used to ship high value, time-sensitive goods over long distances. Products travelling by air generally include light machinery/electrical goods, manufactured goods, perishable foods, transportation equipment, medical supplies and plastic/chemical products.

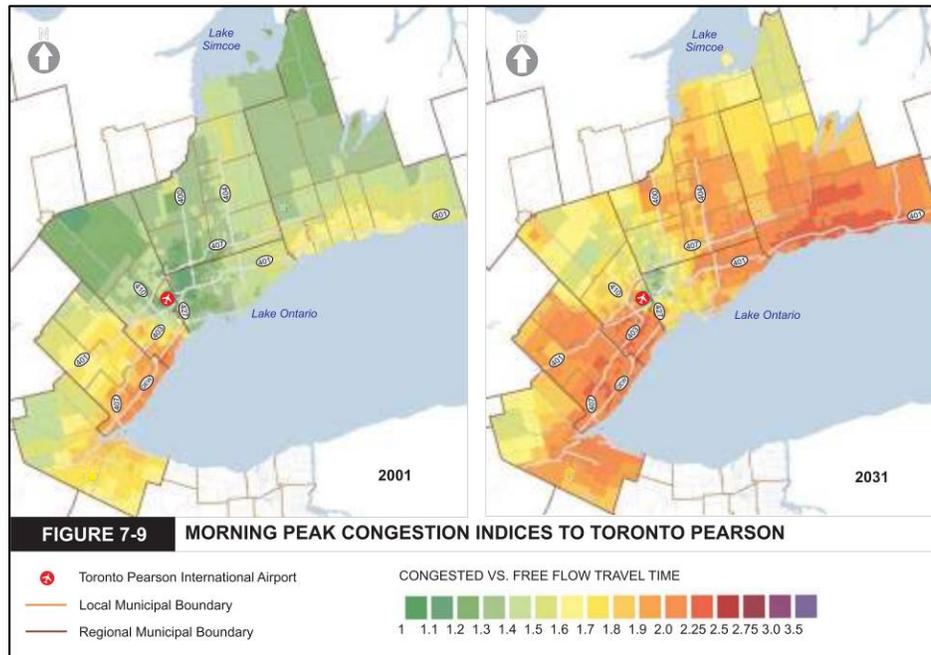
Exhibit 4-24: Airport Locations



Goods movement by air relies on trucking for some portion(s) of the journey to/from the Study Area. Therefore, the problems associated with goods movement by commercial vehicles, discussed in **Section 4.3.1**, also apply here. Anticipated increased road congestion in the vicinity of Pearson International Airport will increase future travel times to and from the airport in the vicinity of the Study Area, in peak periods and throughout the day, as shown in **Exhibit 4-25**.

¹² Taking Flight: The Airport Master Plan 2008-2030, GTAA December 2007, Chapter 3

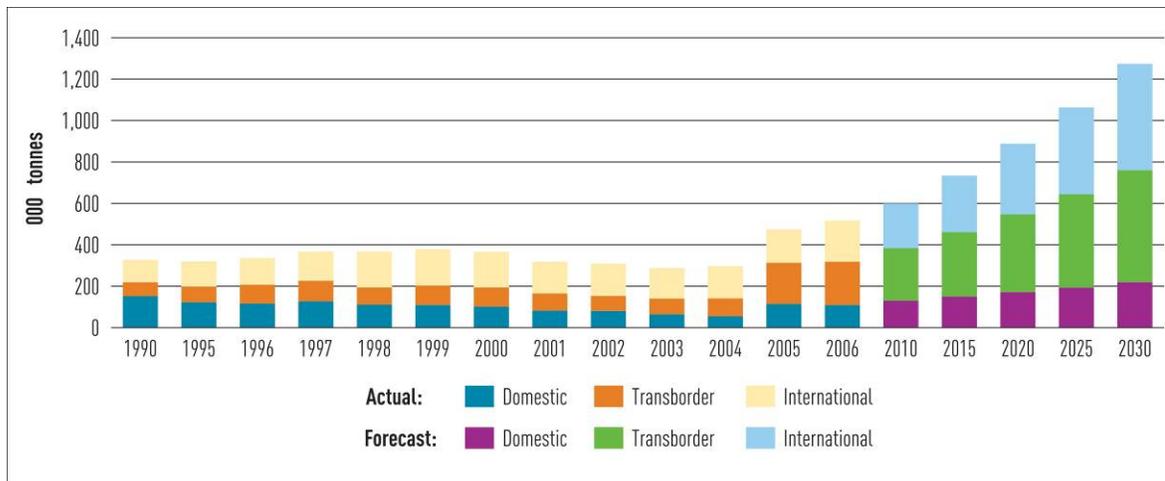
Exhibit 4-25: Morning Peak Congestion Indices to Toronto Pearson International Airport 2001 and 2031



Source: Taking Flight: The Airport Master Plan 2008-2030, GTAA December 2007.

Global air cargo is anticipated to grow significantly through to 2031. **Exhibit 4-26** shows the expected increase in air cargo demand at Pearson International, particularly trans-border and international air cargo, over the next 25 years. Goods movement by air is also becoming increasingly important at HIA, and Waterloo International Airport also provides some air cargo services.

Exhibit 4-26: Pearson International Airport Air Cargo Demand Forecast



Source: Taking Flight: The Airport Master Plan 2008 – 2030, GTAA December 2007

As air cargo movements increase into the future, ground transportation requirements will also become greater. Expected increases in road congestion will ultimately affect goods shipped by air, within and through the Study Area. **Exhibit 4-25** shows the decrease in morning peak period road accessibility to Pearson International Airport in 2031. Runway

capacity for goods movement is another issue as passenger and air cargo demand at the airport are forecast to increase significantly. Based on Transport Canada forecasts, airside congestion could begin to develop in 2013-2019, with maximum capacity reached by 2019¹³. Environmental approval has already been obtained for an additional runway at Toronto Pearson but no definite plans for construction are in place. Plans for a potential airport in Pickering, currently on hold, could relieve some of the capacity constraints at Pearson International Airport but would not be likely to considerably alter the movement of people and goods to, from and through the GTA West Study Area.

Future problems associated with goods movement by air have been determined by the Study Team’s analysis as well as information gathered from background reports and stakeholder consultation. Again, as trucking is required for the final connection to suppliers and markets, the problems associated with the commercial vehicle transportation system affect air transportation of goods.

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| Two major future problems associated with goods movement by the air transportation system have been identified as follows: | |
| <p>Limited multi-modal connections to airports can result in increased dependence on the (often congested) road network</p> | <ul style="list-style-type: none"> Existing area roadways are already congested and the forecast is for congestion to worsen A lack of connectivity limit options for goods movement to market/suppliers, which can result in increased travel times and further increased roadway congestion as air cargo movements increase |
| <p>Limited runway capacity at Toronto Pearson International Airport will influence the future growth of goods movement by air</p> | <ul style="list-style-type: none"> Passenger and goods movements will be restricted by runway capacity constraints in the 2013-2019 period and, although environmental approval has been obtained, no firm plans for construction of an additional runway are currently in place |

4.3.4 Marine

Although there are no major marine transportation facilities within the GTA West Study Area, the Port of Hamilton and the Port of Toronto are two major facilities in relatively close proximity to the south and east, along the Great Lakes St. Lawrence Seaway. Other marine facilities in the vicinity of the Study Area include the Welland Canal, Port Dalhousie, Port Colborne and Petro Canada-Oakville.

Marine transportation is generally used to carry bulk goods and containers, including grain, coal, iron ore and steel, as well as general cargo and consumer goods. Typically, this mode is used for long distance shipments of large quantities of goods, and is cost-effective for long distance shipments compared to other transportation options.

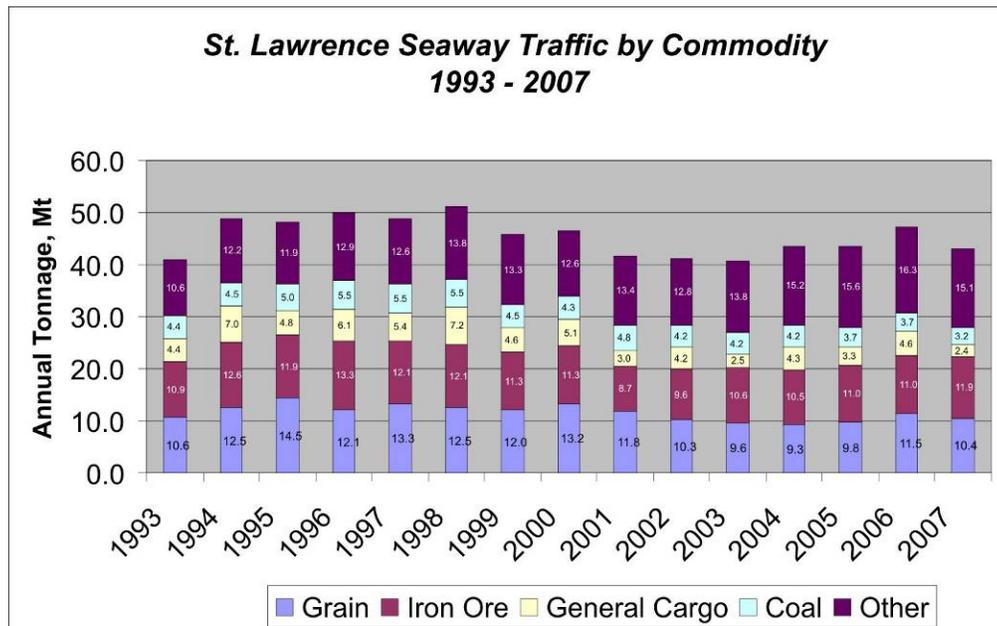
¹³ Source: Taking Flight: The Airport Master Plan 2008 – 2030, GTAA December 2007

There are a number of major marine facilities in the vicinity of the Study Area, including the following:

- The St. Lawrence Seaway – the Seaway is a deep waterway connecting the Atlantic Ocean to the Great Lakes, extending from Montreal to Lake Erie, and the Welland Canal is a component of it connecting Lake Ontario and Lake Erie. The Seaway can accommodate vessels with a maximum length of 225.5 m¹⁴ (a number of large container ships are over 300 m in length¹⁵). Area marine transportation facilities have a limited operating period as the St. Lawrence Seaway closes during the winter season.
- Port of Hamilton – in 2007 the Port of Hamilton handled approximately 11.8 million tons of cargo and was visited by 750 vessels¹⁶.
- Port of Toronto – the Port of Toronto (located outside of the Study Area) is one of the largest city and inland ports in Canada, moving 2.1 million tonnes of cargo in 2007¹⁷.

Marine transportation is generally used more for overseas trade than for trade between Canada and the U.S.¹⁸. Trends in marine cargo traffic indicate a relatively consistent movement of goods by this mode over the past fifteen years. As shown in **Exhibit 4-27**, the main commodities transported by the St. Lawrence Seaway in 2007 were iron ore and grain.

Exhibit 4-27: St Lawrence Seaway Traffic by Commodity



Source: Transport Canada, Transportation in Canada 2007: An Overview, May 2008

¹⁴ St Lawrence Seaway web site (<http://www.greatlakes-seaway.com/en/seaway/facts/index.html>)

¹⁵ Container ship database (<http://containerinfo.comohost.de/>)

¹⁶ Hamilton Port Authority web site (<http://www.hamiltonport.ca/commercial/cargostats.aspx>)

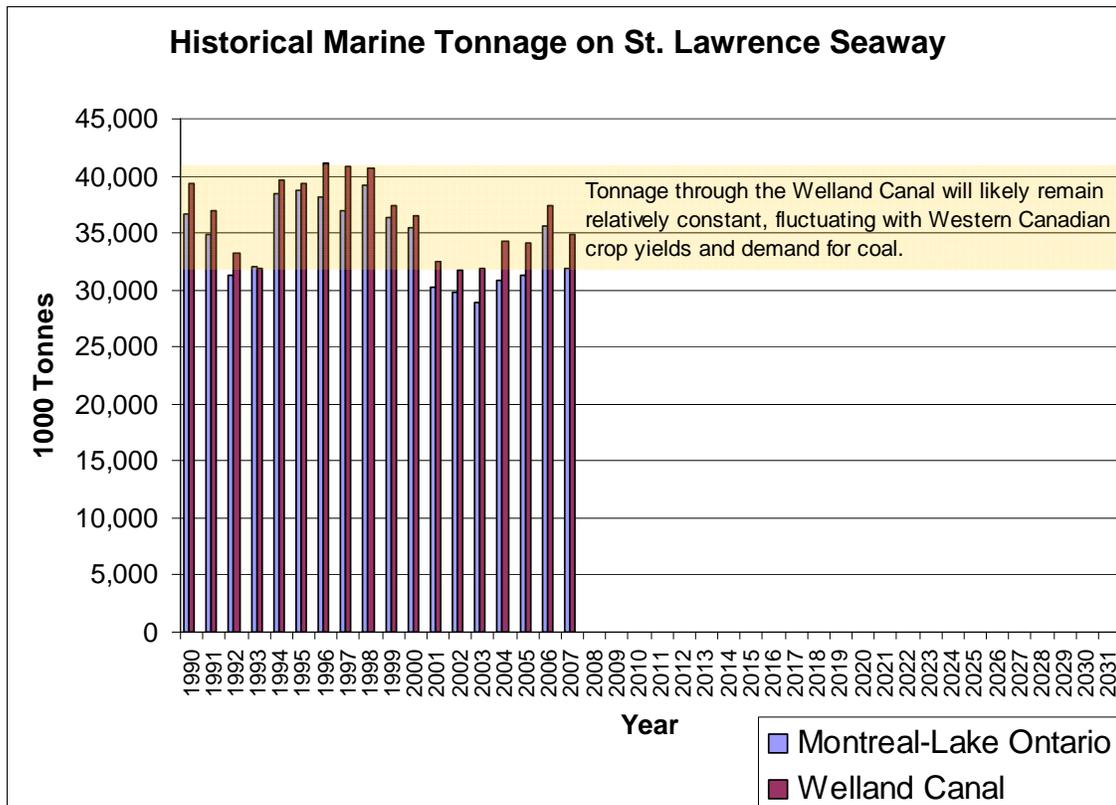
¹⁷ Toronto Port Authority web site (http://www.torontoport.com/PortAuthority/port_information.asp?id=95)

¹⁸ Transport Canada, Transportation in Canada 2007: An Overview, May 2008

Goods movement by marine transportation can be limited by bottlenecks at locations that interface with rail/trucking. From the Great Lakes/St. Lawrence Seaway ports, a multi-modal transportation network extends across the province and beyond. As marine transportation eventually relies on trucking to connect with suppliers and markets, the problems associated with goods movement by commercial vehicles also apply to it.

Due to the global nature of marine shipping, conditions around the world impact the future potential of marine transportation within the Study Area. As seen in **Exhibit 4-28**, trends on the St. Lawrence Seaway indicate that cargo tonnage is expected to remain relatively consistent, fluctuating with western Canadian crop yields and demands for coal.

Exhibit 4-28: Historical Marine Tonnage on the St. Lawrence Seaway



Source: Transport Canada, Transportation in Canada 2007: An Overview, May 2008 (historical data only)
 * Trends based on extrapolation from reported past St. Lawrence Seaway shipments

There is potential for this flat growth trend to change by improved infrastructure and policy measures for short-sea shipping (movement of cargo by inland waterways, within the same continent). Such services could provide environmental benefits and relieve highway congestion, and have been actively promoted in Europe by the European Commission since the early 1990s. Transport Canada and the U.S. Maritime Administration are investigating the feasibility of short-sea shipping across the Great Lakes.

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| <p>Analysis, background reports and stakeholder consultation indicate that future problems associated with goods movement by marine transportation are anticipated. Future problems associated with goods movement by the marine transportation system are as follows:</p> | |
| <p>Inadequate connections between inland ports and the inter-regional road system, and limited capacity of the road system pose constraints on the effectiveness and efficiency of marine transportation of goods</p> | <ul style="list-style-type: none"> • Congestion can result in increased travel times for shipments and further increased roadway congestion where rail-marine connections are unavailable • Insufficient connections to the higher order roadway network can result in the use of local and regional roads |
| <p>Large ocean vessels being unable to enter the St. Lawrence Seaway results in goods being transferred to rail or truck</p> | <ul style="list-style-type: none"> • Early transfer from marine to rail and truck can reduce the effectiveness of marine transportation for goods movement to south-central Ontario • The Seaway’s limitations increase the importance of multi-modal connections with trucking/rail routes into the Study Area • The result can be additional trucks shipping goods for longer distances than would be required where vessels can reach ports farther inland |
| <p>Winter Seaway closure limits the shipping season, which reduces potential year-round customers and can result in increased dependence on other modes</p> | <ul style="list-style-type: none"> • The Seaway’s winter limitations increase dependence on rail and truck transportation into south-central Ontario |

4.4 Community, Environment and Economic Effects

The transportation problems associated with the inter-regional movement of people and goods have wider implications for the implementation of provincial policies relating to the community, environment and economy.

As outlined in **Section 1.5.2**, goals and objectives for this study were developed based on relevant approved planning policies and in support of the “triple bottom line” philosophy comprised of the following three factors:

- Compact, vibrant and complete communities;
- A prosperous and competitive economy; and
- A protected environment.

The effects on these key factors are outlined below.

| | |
|--------------------|---|
| Community | <ul style="list-style-type: none">• Road congestion results in increased costs (i.e. travel time, fuel costs) for goods movement which is passed on to consumers• Congested roadways increase potential for traffic collisions• Trucks using secondary routes impact communities, increase deterioration of infrastructure and increase conflicts with cyclists and pedestrians• Reduced quality of life from time lost to commuting• Lack of transit services and large volumes of heavy trucks on the inter-regional road system may deter tourists/recreational travellers• Potential for job losses with reduced tourism |
| Environment | <ul style="list-style-type: none">• Congestion increases fuel consumption and increases air and noise emissions |
| Economic | <ul style="list-style-type: none">• Congestion and travel time uncertainty reduces economic competitiveness of local businesses and industries and results in excessive wear on vehicles• Businesses are less likely to expand or be attracted to areas with major congestion• Congestion negatively impacts the shipping industry and the effectiveness of all inter-modal travel• Reduced tourism negatively affects the economies of GTA |

5. IDENTIFICATION OF SPECIFIC TRANSPORTATION PROBLEMS OUTSIDE THE STUDY AREA

The transportation system problems and opportunities discussed in the previous sections focused on the specific problems and opportunities within the Study Area as well as the broader transportation system issues adjacent to the Study Area.

Within the area of influence shown in **Exhibit 1-4**, there are specific areas where existing transportation problems indirectly impact the GTA West transportation network. The following discussion provides an overview of these issues.

5.1.1 400 & 401 Interchange

The Highway 401 and Highway 400 interchange complex currently accommodates weekday daily traffic volumes in the order of 600,000 vehicles and upwards of 650,000 vehicles on a typical summer weekday. The significant traffic volume in conjunction with current ramp configurations and a high percentage (10%) of commercial vehicles results in this interchange complex operating in a congested state for several hours every day of the week. These factors contribute to major collision occurrences on the ramps. It is not uncommon to have an overturned tractor-trailer that effectively prevents traffic flows at specific ramps for a long period of time until the debris has been collected and the vehicle towed off site.

The extremely high traffic flows in a congested environment at the interchange complex result in a certain degree of travel unreliability (operating Level of Service, travel time, etc.) that motivates the travelling public to alter their travel routes by using the secondary road system (highways, arterial roads, etc.). At the GTA West Public Information Centres (PICs) held in March 2009, several members of the public noted that residents of Wellington County and North Halton (Milton, Georgetown) areas prefer to utilize the secondary roads to travel to the tourist/recreation areas of Muskoka and Haliburton due to the travel reliability of these roads over the unreliability of the Highway 400/Highway 401 interchange complex.

The trucking industry also changes travel patterns to avoid the unreliable travel characteristics. Public comments from both PIC #1 and PIC #2 indicated that over the last decade, there has been a noticeable increase in the amount of truck traffic that uses the secondary road system to travel between the Highway 400 corridor and the Guelph/Highway 6/Highway 401 area. An example of the recorded truck diversion using the secondary road system is shown in **Exhibit 4-19**.

The transportation system congestion and unreliability of travel associated with the Highway 400 and Highway 401 interchange complex is an important element of the transportation system that has a bearing on traffic operations in the GTA West Study Area.

5.1.2 Cambridge to Guelph Link (Regional Road 24/124)

Originally, Highway 24 provided a major north-south transportation link in the province of Ontario extending from Lake Erie northerly some 250 km to Collingwood on the shores of Georgian Bay. In 1998, the Ministry of Transportation (MTO) transferred jurisdiction for the 64 km section of Highway 24 from Highway 401 at Cambridge to

Highway 9 to municipalities that it passed through (Waterloo Region, Wellington County and Peel Region).

Specific to the 11 km section of Former Highway 24 (RR 24 / CR 124) between the City of Cambridge (Highway 401) and the City of Guelph (Highway 6), MTO undertook an Environmental Study Report in 1996 that indicated that there was justification for this section of road to be widened to a four-lane facility.

The County of Wellington Report, *Role and Function of Former Highway 24 from Highway 401 at Cambridge to Highway 10 at Caledon* (2007), indicated that this section of road functions as an integral part of a significant longer economic corridor, and that this corridor serves as a bypass for the congested GTA highway system for travel between Highway 401 west of Waterloo Region and locations north of the GTA.

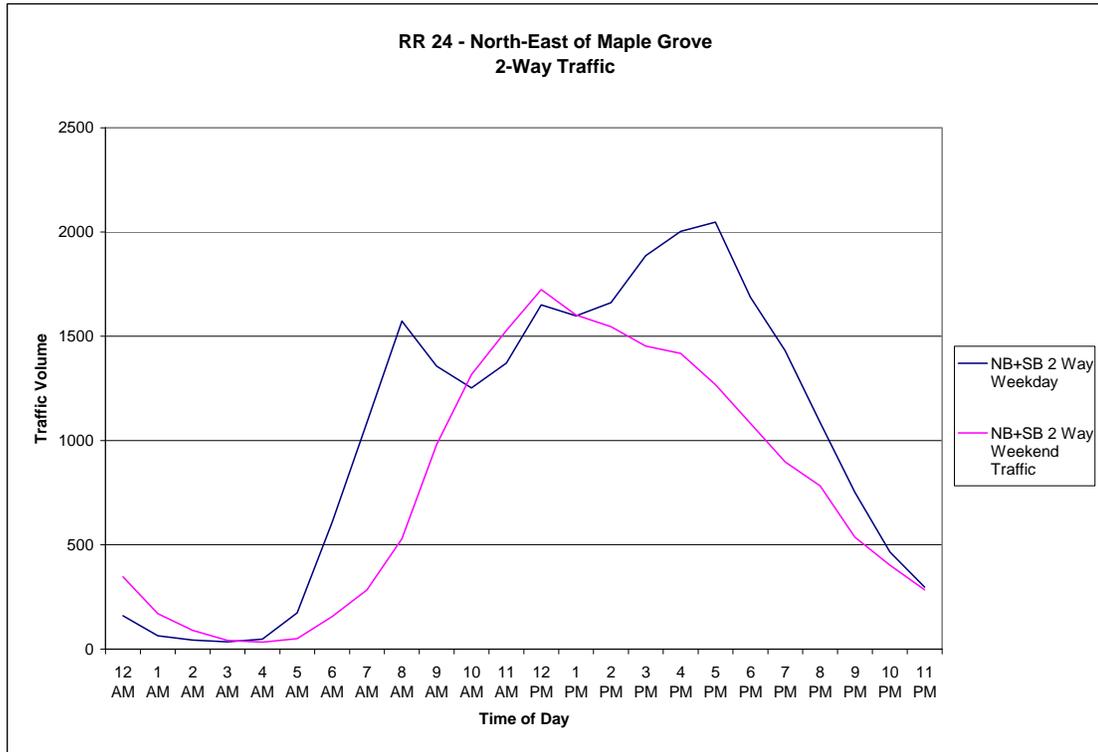
Traffic counts undertaken in 2007 indicate that the section of Former Highway 24 (RR 24/CR 124) between Highway 401 and Highway 6 accommodates upwards of 24,000 vehicles per day on the existing two-lane cross-section with upwards of 1,000 vehicles observed in the peak direction in the afternoon peak hour. A summary of the typical weekday and weekend daily traffic flows are presented in **Exhibit 5-1**. Generally, the weekend traffic flows are approximately 25% to 30% lower than the weekday traffic flows.

Exhibit 5-1: Summary of Year 2007 Weekday and Weekend Traffic Flows

| RR 24 / CR 124 Traffic Count Locations | Weekday Daily Vehicles | | | Weekend Daily Vehicles | | |
|---|---------------------------|--------|--------|---------------------------|-------|--------|
| | NB | SB | Total | NB | SB | Total |
| North of Wellington Road 32 | 7,130 | 7,250 | 14,380 | 5,070 | 5,180 | 10,250 |
| Wellington Road 32 to Township Road 1 | 9,140 | 9,090 | 18,230 | 6,080 | 5,970 | 12,050 |
| Township Road 1 to Maple Grove Road | 11,710 | 12,630 | 24,340 | 8,800 | 9,720 | 18,520 |
| South of Maple Grove Road to Highway 401 | 11,830 | 11,740 | 23,570 | 7,780 | 7,620 | 15,400 |

A typical weekday and weekend traffic profile for RR 24 northeast of Maple Grove Road is presented in **Exhibit 5-2**. The weekday traffic profiles indicate that the morning commuter travel peak occurs between 7:00 AM and 8:00 AM on a typical weekday, whereas the afternoon commuter travel peak occurs between 5:00 PM and 6:00 PM. The weekend traffic profile indicates that traffic peaks during the midday (10:00 AM to 5:00 PM).

Exhibit 5-2: RR 24 Typical Weekdays and Weekend Traffic Profiles



To assess existing and future operating conditions, roadway Levels of Service (LOS) calculations were performed for both existing and forecast PM peak hour volumes at specific road sections along RR 24/CR 124. The ‘HCS-2000 Two Lane Capacity Analysis Process’ was applied to assess LOS for the two-lane highway segments and the ‘HCS- 2000 Multilane Capacity Analysis Process’ was used to assess LOS for the four-lane segment. The existing (2007) peak hour volumes and resulting LOS analysis for the existing lane geometry are presented in **Exhibit 5-3**.

The LOS analysis indicates that CR 124 north of Wellington Road 32 is currently operating at LOS D which reflects an Unstable condition (see **Section 3.4.5** for operating condition descriptions). The roadway segment from Wellington Road 32 to Maple Grove Road is currently operating at LOS E, which reflects a Congested condition. RR 24 from south of Maple Grove Road to Highway 401 is a 4-lane highway facility. The LOS analysis for this segment indicates that it is currently operating at LOS B.

Exhibit 5-3: Existing (2007) PM Peak Hour Volumes and Operation LOS

| RR 24 / CR 124 Traffic Count Locations | Existing PM Peak Hour Vehicles | | | Operating Level of Service and V/C Ratio |
|--|-----------------------------------|-------|-------|---|
| | NB | SB | Total | LOS |
| North of Wellington Road 32 | 624 | 618 | 1242 | D |
| Wellington Road 32 to Township Road 1 | 734 | 1,044 | 1,778 | E |
| Township Road 1 to Maple Grove Road | 1,174 | 892 | 2,066 | E |
| South of Maple Grove Road to Highway 401 (4-lane Highway) | 1,033 | 1,044 | 2,077 | B |

The forecast (2031) total vehicles were calculated by using assigned automobile volumes from the GGH Model and assuming that trucks and buses represent 10% of total vehicles. The forecast 2031 PM peak hour traffic volume and associated LOS by road segment are presented in **Exhibit 5-4**.

The LOS analysis indicates that the road section of CR 124 from north of Township Road 1 is anticipated to operate at LOS E, reflecting a congested operating condition. The CR 124 / RR 24 road segments from Township Road 1 to Maple Grove Road are forecast to operate at a Congested state.

The four-lane segment of RR 24 from south of Maple Grove Road to Highway 401 is anticipated to operate at LOS D, which reflects Unstable operating condition.

The LOS analysis in relation to the existing lane geometry indicates that RR 24 north of Maple Grove Road is expected to operate in a Congested state if no additional road capacity is provided.

Exhibit 5-4: Future (2031) PM Peak Hour Volumes and Operation LOS

| RR 24 / CR 124 Traffic Count Locations | Year 2031 PM Peak Hour Vehicles | | | Operating Level of Service |
|--|------------------------------------|-------|--------|----------------------------------|
| | NB | SB | Total | LOS |
| North of Wellington Road 32 | 868 | 920 | 1788 | E |
| Wellington Road 32 to Township Road 1 | 1,109 | 1,101 | 2,210 | E |
| Township Road 1 to Maple Grove Road | 1,286 | 1,297 | 2,583 | F |
| South of Maple Grove Road to Highway 401 (4-lane Highway) | 1,745 | 1,856 | 3,6011 | D |

As noted, CR 124 provides a key transportation linkage between the City of Guelph and the City of Cambridge. The 2006 Transportation Tomorrow Survey (TTS) database indicates upwards of 1,900 person trips interact between the Cities during the PM peak hour. This interaction is forecast to increase by over 30% by year 2031.

A review of future 2031 PM peak hour travel flows on CR 124 northeast of Maple Grove Road indicate that approximately 30% of the forecast traffic on CR 124 is traffic travelling between the City of Cambridge and the City of Guelph. These travel characteristics suggest that CR 124 currently provides an inter-regional travel role for longer distance travel in the overall GGH transportation system.

6. IDENTIFICATION OF TRANSPORTATION OPPORTUNITIES

This section describes the Study Team’s assessment of the inter-regional transportation opportunities in the Study Area.

While prior sections of this report have focused on the inter-regional transportation problems that have been identified with the multi-modal transportation system within the Study Area, transportation opportunities are an equally important consideration. A key measure of the success of this study will be its ability to not only address the current and future transportation problems, but also to capitalize on the significant opportunities of providing a more balanced, robust and higher order transportation system which offers greater reliability, flexibility and choice for moving people and goods in the western part of the Greater Toronto Area (GTA) and beyond.

In the context of this study, the term “transportation opportunities” refers to the “big picture” strategic benefits of an efficient transportation system. Given the scale and strategic nature of this study as well as the early planning stage that this study represents, a visionary approach is required, which entails viewing the multi-modal transportation system within the Study Area as a whole and identifying ways of using the system to achieve the broader strategic goals and objectives of the study. These goals and objectives are summarized in **Section 1.5.2** of this report and again in later paragraphs of this chapter. The Study vision built upon existing approved provincial planning policies on community and economic development, and environmental protection.

The identification of transportation opportunities at this stage of the process does not involve identifying solutions to specific transportation safety, operational or capacity problems within the Study Area. Rather, the focus is on identifying ways of enhancing the existing inter-regional multi-modal transportation system to support the principles of the “triple bottom line” philosophy consistent with the provincial planning context upon which this project is founded: compact, vibrant and complete communities, a prosperous and competitive economy, and a protected environment.

While the transportation opportunities identified are relatively broad in nature, it is envisioned that as the project proceeds through the development of the transportation alternatives, and ultimately to the identification of a multi-modal Transportation Development Strategy (TDS), the opportunities will continue to become more refined but will remain generally consistent with the broader opportunities described in this report.

These transportation opportunities stem from the study goals and objectives, building upon existing approved provincial planning policies on community and economic development, and environmental protection.

These policies, which are described in greater detail in **Section 2.2** of this report, include the Growth Plan, the Provincial Policy Statement and the Greenbelt Plan, among many others. In addition, the Study Team reviewed municipal official plans of each upper and single tier municipality – Region of Peel, Region of Halton, Region of York, City of Guelph and the County of Wellington. The policies embodied in each of these approved planning documents formed the foundation for the study goals and objectives that have been identified by the Study Team as described in **Section 1.5.2**.

6.1 Transportation Opportunities

The transportation opportunities further build upon the study goals and objectives discussed above, and are described in the following paragraphs.

1. Support Future Municipal Land Use Planning in Accordance with the Growth Plan

The Metrolinx RTP has been developed based on an assumed future land use allocation for the GTHA that has been derived through consultation with GTHA municipalities, and is in accordance with the requirements of the Growth Plan. As the conformance exercise is ongoing, the land use allocation assumed for the Metrolinx RTP is based on current municipal thinking but may be further refined as the conformity exercise progresses.

The Study Team has consulted with the Region of Peel, Region of York, Region of Halton, City of Guelph and County of Wellington to obtain insight as to how they plan to allocate the Growth Plan's future population and employment growth. This knowledge will enable the Study Team to model and forecast future transportation demands as accurately as possible and to develop transportation alternatives that will accommodate these demands.

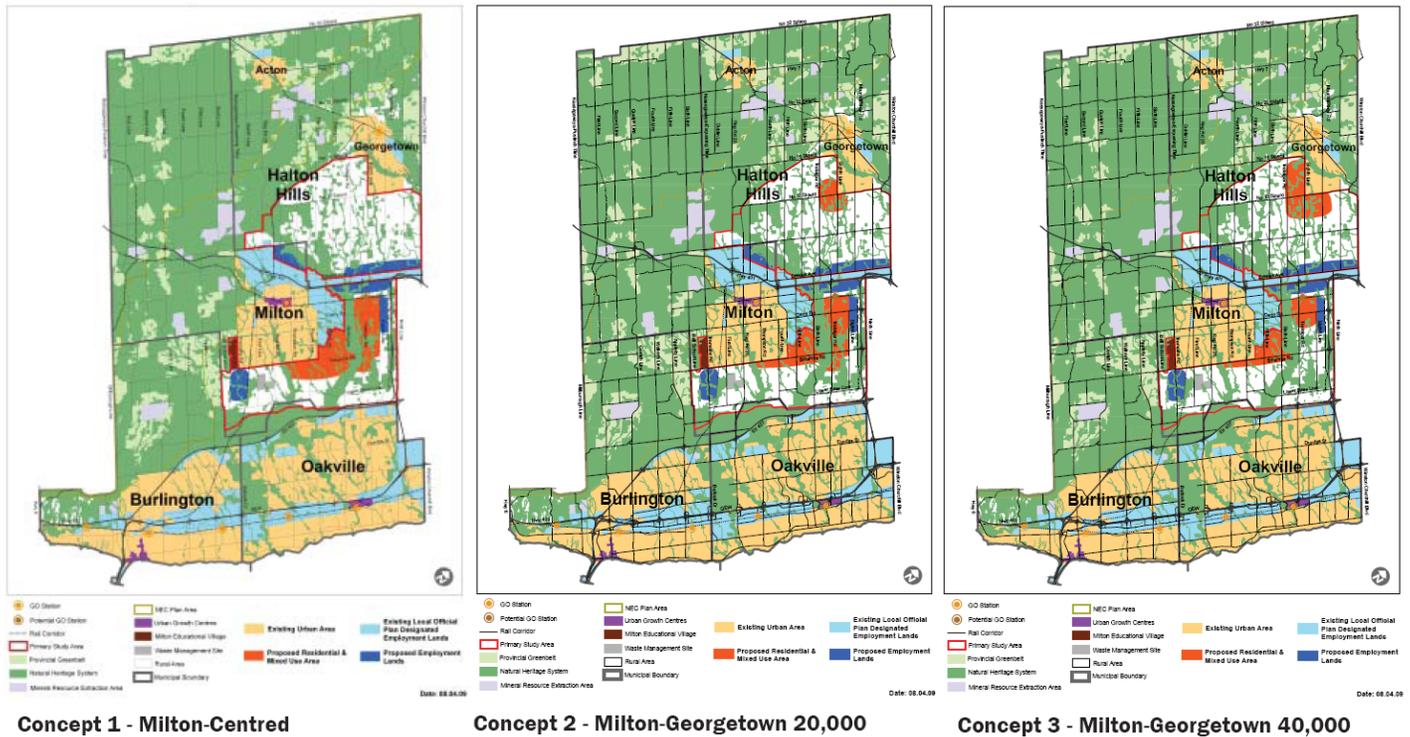
Ongoing consultation with each municipality will be undertaken throughout the remainder of the study to stay abreast of their plans with regard to future land use allocation and to co-ordinate the development of the transportation alternatives with the planning work that is being undertaken by these municipalities.

The Region of Halton has provided the Study Team with insight into their future land use allocation intentions. There are currently five scenarios under consideration, which include:

- Scenario 1: Milton-Centred – all new mixed-use/residential development area is located in Milton;
- Scenarios 2a and 2b: Milton-Georgetown (Low) – approximately 20,000 people are allocated around Georgetown in two potential configurations, with the remaining mixed-use/residential lands in Milton; and
- Scenarios 3a and 3b: Milton-Georgetown (High) – approximately 40,000 people are accommodated in Georgetown, again in two potential configurations, with a smaller amount of remaining mixed-use/residential land in Milton.

The broader land use concepts are illustrated in **Exhibit 6-1**. There is an opportunity to co-ordinate with the Region of Halton during the development of the transportation alternatives as a preferred land use option is identified.

Exhibit 6-1: Sustainable Halton Land Use Concepts



Source: Sustainable Halton Working Paper #3, Options Under the Preferred Concept, Regional Municipality of Halton, April 2009

In addition to developing alternatives that support the land use aspirations of the municipalities, the opportunity exists to co-ordinate with municipal land use planning staff in developing land use scenarios that optimize potential transportation alternatives, such as inter-modal facilities. Co-location of warehouse/ distribution centres in proximity to a potential inter-modal facility would support industrial/ employment development in the municipality while at the same time optimizing the function of the inter-modal facility. This type of arrangement could improve the efficiency of moving goods in the Study Area, as well as reduce some truck traffic between warehouses and retail outlets.

Similarly, considering connections to the Study Area’s designated Urban Growth Centres (Vaughan Corporate Centre, Downtown Brampton, Downtown Milton and Downtown Guelph) during the development of the transportation alternatives provides the opportunity to create quality communities for a diverse population, an enhanced environment with heritage and culture, and a vibrant economy.

In addition, through review of the Region of Peel’s Official Plan, as well as consultation with the Region, it is understood that the Region has begun a new initiative, Liveable Peel, which extends the goals and objectives of the province to the Region’s municipalities. This initiative complements the province’s strong commitments to a policy framework that improves future communities through balanced planning with respect to environmental, social, economic and cultural issues. The Liveable Peel policy framework has been established with the following objectives:

- To manage the impacts of growth and affect change;
- To achieve a sustainable land use and transportation system;
- To balance the demands of social, economic, environmental and cultural interests;
- To increase recognition and support of long-term planning; and
- To capitalize on community capacity and stakeholder involvement.

Planning transportation infrastructure that reflects these objectives represents an important opportunity to be considered in developing the transportation alternatives.

Similarly in the City of Vaughan, the Vaughan Corporate Centre is a planned new downtown area that will incorporate business offices, recreational and cultural facilities and pedestrian shopping areas. The Vaughan Enterprise Zone comprises more than 1,000 ha in the City's west end, designated as employment lands. Considering connections to these areas during the development of the transportation alternatives provides the opportunity to create quality communities for a diverse population, an enhanced environment with heritage and culture, and a vibrant economy.

There is also an opportunity to co-ordinate with municipal land use planning by developing a corridor protection strategy that calls on both the province and municipalities to work collaboratively to keep all reasonable options open while the EA is underway.

2. Maintain the Character and Integrity of Rural and Agricultural Lands

The Provincial Greenbelt is an important feature which traverses large sections of the Study Area, and strong policies have been developed to preserve rural and agricultural lands. As noted in Section 3.1 of the Greenbelt Plan:

“The Protected Countryside contains an Agricultural System that provides a continuous and permanent land base necessary to support long-term agricultural production and economic activity. Many of the farms within this system also contain important natural heritage and hydrologic features, and the stewardship of these farms has facilitated both environmental and agricultural protection. The Agricultural System is therefore integral to the long-term sustainability of the Natural Heritage System within the Protected Countryside. It is through evolving agricultural and environmental approaches and practices that this relationship can continue and improve”.

In addition to the protection, enhancement and preservation principles embodied in the Greenbelt Plan, the Growth Plan conformance work undertaken by municipalities will focus population and employment growth in Urban Growth Centres, Built Up Areas, and Designated Greenfield Areas, thereby serving to preserve key agricultural lands.

By co-ordinating the development of transportation alternatives with the planning by municipalities, and accommodating the preservation principles embodied in the Provincial Greenbelt Act and Plan, Niagara Escarpment Act and Plan, and Oak Ridges Moraine Conservation Act and Plan, there is an opportunity to minimize potential impacts to prime agricultural areas such that they can be preserved to the greatest possible extent.

3. Provide Transportation Choice, Improved Connections and Increased Reliability for Commuters

The Metrolinx RTP has been developed and endorsed by the Metrolinx Board of Directors. The recommendations embodied in Metrolinx's 15 year and 25 year plans have been incorporated into the future transportation network assumed for this study.

While the Metrolinx RTP and GO Transit's Strategic Plan will provide greater choice for commuters in the GTHA, the opportunity exists to build upon this plan and provide a robust transportation system which offers commuters reliable and convenient alternatives to the automobile.

As noted previously, one of the key transportation problems that has been identified is congestion on the highway system, which is central to all other modes of transportation, and must operate efficiently in order to allow the other modes of transportation to operate efficiently as well. There is an opportunity to provide improved transportation services for commuters in the Study Area, which may reduce the pressure on the highway system. By providing expanded transit services, as well as improved connections between inter-regional transit services and local transit services, the opportunity exists to provide commuters with more choice, convenience and flexibility in making their travel choices during weekday morning and afternoon peak periods. This would reduce the demands on the highway system during these periods, which could improve the efficiency of all modes of transportation for moving people and goods.

In addition to making commuter travel more convenient and flexible, there is also an opportunity to facilitate a healthier lifestyle by incorporating active transportation considerations into the development of the transportation alternatives, such as providing lockers and bicycle storage facilities at transit terminals, and aboard transit vehicles.

A more balanced transportation network with greater choice for commuters that encourages active transportation could result in a greater balance of demands on the transportation system which would improve travel times and quality of life for commuters in Peel, Halton, York, Guelph and Wellington.

4. Provide Transportation Choice, Improved Connections and Increased Reliability for Goods Movement

The GTA West Study Area is a major trade corridor in Ontario, and the export and import industry is a major economic driver. While trucks will continue to play an integral role in goods movement, there is an opportunity to encourage increased utilization of other modes of travel for goods movement, including rail, marine and air, and to provide better connections between all modes, particularly through inter-modal facilities.

Canada's "distribution economy" has generally grown faster than the economy as a whole, with sectors such as wholesale trade, logistics, and transportation expanding rapidly; this is in part due to ongoing growth in global trade. Serving the distribution economy will require expanded transportation capacity.

The expansion of third party and fourth-party logistics providers, and the expansion of the scale of their facilities is reshaping the distribution economy, providing increased focus on access to key nodes, and increasing the importance of targeted investments in capacity by transportation service providers.

Improved transportation system performance for connections between Pearson International Airport and related clusters of logistics uses, industries and urban centres within the Study Area would facilitate goods movement.

The concentration of major automotive and warehousing facilities in the northwest portion of the GTA makes this area an important local and regional transportation hub. Further development of inter-modal transportation yards located in Vaughan, Milton, and Brampton present an important opportunity to increase transportation efficiency throughout the Study Area.

In addition, given the importance of the border crossings (e.g. Niagara, Sarnia, Windsor) to the Ontario economy, improved connections between these areas and the GTA represent a significant opportunity. Again, improvements to the highway system and rail system would represent key areas of focus to facilitate these connections.

A more balanced utilization of available transportation modes, coupled with better inter-connection between the modes and international gateways, could enhance the level of trade within the Study Area, and, by extension, the economic competitiveness of Ontario.

5. Provide Improved Transportation Service for Tourists

Tourism and recreation trips are discretionary in nature and are therefore greatly affected by external forces such as fluctuations in currency rates, gas prices, etc., which tend to be globally influenced. However, trip experience is a factor which has a significant effect on the level of tourism in an area, and can be greatly influenced by the quality of transportation services.

Trip experience includes not only the experience that a tourist has at a particular tourist destination, but also the quality of travel experienced while travelling to/from and within the destination. The latter component of trip experience can be significantly influenced by factors such as the overall duration of travel, overall travel convenience (which includes the degree of choice and range of costs associated with the various available modes of transportation), as well as the reliability and frequency of services.

Although moderate tourism growth is anticipated in the coming decades, there is an opportunity to enhance the growth of tourist trips to the Study Area by providing improved connections and greater modal choice for tourists arriving at gateways such as Pearson International Airport, and destined to the GTA West Corridor.

In addition, there is an opportunity to provide better connections to local transportation services that exist within the tourist destinations, and to facilitate active transportation by accommodating the storage of bicycles and other forms of active transportation in the services available to tourists.

These measures will enable convenient access to tourism and recreational destinations within the Study Area, and movement within these destinations without necessarily requiring an automobile.

6. Optimize Existing Transportation Infrastructure

While Ontario enjoys a world class provincial transportation system, there are opportunities to optimize the existing system without inducing the capital costs and environmental impacts associated with new transportation infrastructure.

Transportation Demand Management (TDM) strategies such as high occupancy vehicle (HOV) lanes and carpool lots can be implemented on our existing provincial highways and highways to encourage increased vehicle occupancy, thereby reducing the number of vehicles using the highway system.

Similarly, Transportation Systems Management (TSM) strategies such as Intelligent Transportation Systems (ITS), use of changeable message signs, highway cameras, and “real time” adaptive transportation systems can provide travellers with “real time” information on traffic conditions, enabling improved decision making and consequently a better distribution of travel on the existing transportation system during times of heavy congestion, poor weather conditions and incidents.

Other strategies, including speed harmonization, high occupancy toll lanes (HOT) and road pricing, may also provide significant benefits in terms of optimizing our existing transportation infrastructure. Speed harmonization involves the use of variable message signs to continually update the posted speed on a roadway based on the level of congestion. As congestion increases, the posted speed is reduced to promote a more even flow of traffic and eliminate the “wave effect” that is caused by acceleration/deceleration cycles.

The removal of operational constraints within the transportation system can improve travel flows, thereby increasing the capacity, operational and safety characteristics of the system. Such constraints include at-grade rail-to-rail and road-to-rail crossings.

Such opportunities to improve the existing multi-modal transportation system will be fully explored by the Study Team before considering new roadway and/or non-roadway transportation infrastructure.

7. Minimize Impacts to the Natural, Social, Economic and Cultural Environments to the Extent Possible

Given the significant growth that is projected for the GTA West Corridor, this study presents an important opportunity in and of itself. Through wise and careful planning that makes best use of existing infrastructure, and reflects the requirements of approved provincial environmental protection policies when developing, assessing and evaluating all reasonable transportation alternatives, there is an opportunity to minimize and potentially avoid impacts to important natural, social, economic and cultural environmental features at the earliest planning stages.

7. DEFINITIONS

| | |
|-------------|---|
| AADT | Annual Average Daily Traffic The total volume of traffic passing a point or segment of a highway facility in both directions for one year, divided by the number of days in the year |
| ALU | Alternate Land Use Allocation A scenario developed by the Study Team to reflect current (2008) land use planning information from the municipalities within the Study Area |
| BAU | Business as Usual A trend forecast of automobile flows established by extrapolating the 2001 Transportation Tomorrow Survey (TTS) peak hour automobile trips, based on the population and employment growth in the Metrolinx RTP |
| BCS | Business and Commercial Stakeholder Includes large corporations / industries, business associations, logistics providers, shipping associations; and universities / colleges – consulted to assist with development of Study Area knowledge |
| CAG | Community Advisory Group Established as a forum to provide ongoing advice to the Study Team, comprising members of the communities and organizations interested in or potentially affected by the current study (residents and ratepayers with representation throughout the municipalities of the Study Area; environmental and conservation NGOs, business and agricultural sectors; and others including academia, and unique groups concerned about the Niagara Escarpment, Oak Ridges Moraine, etc.) |
| EA | Environmental Assessment Decision-making process that promotes good environmental planning by assessing the potential effects of proposed activities, undertaken under the Ontario Environmental Assessment Act; the purpose of the EA is to provide for the protection, conservation and wise management of Ontario's natural, social/cultural and economic environment |
| ETR | Express Toll Route The 407 ETR is an all-electronic, barrier-free toll highway currently extending from Burlington to Pickering |

| | |
|------------------|---|
| GGH | Greater Golden Horseshoe The geographic area designated as the Greater Golden Horseshoe growth plan area in Ontario Regulation 416/05 |
| GGH Model | Greater Golden Horseshoe Model Comprehensive travel demand forecasting model, designed for use in all major provincial studies in the GGH including the Metrolinx RTP; considers automobile and transit commuter trips and truck freight trips |
| GTA | Greater Toronto Area The metropolitan region encompassing the City of Toronto and the four surrounding Regional municipalities (Durham, Halton, Peel and York) |
| GTHA | Greater Toronto and Hamilton Area The metropolitan region encompassing the City of Toronto, the four surrounding Regional municipalities (Durham, Halton, Peel and York) and the City of Hamilton |
| HOV Lane | High Occupancy Vehicle Lane A roadway lane designated for use only by vehicles with a specified minimum number of occupants (>1); can also be opened to buses, taxis and carpools |
| LOS | Level of Service A qualitative measure describing operational conditions within a traffic stream, based on service measures such as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience |
| MAG | Municipal Agencies Group Comprised of representatives from the City of Guelph, County of Wellington, and Regions of Halton, Peel, and York, to consult with the Study Team throughout the duration of the EA Study on relevant municipal issues |
| MTO | Ontario Ministry of Transportation Provincial agency responsible for Ontario's transportation and roads |
| RAAG | Regulatory Agency Advisory Group Established for Study Team consultation with potentially affected provincial ministries, agencies and federal departments |
| RTP | Regional Transportation Plan/ "The Big Move" |

A long-term strategic plan for the GTHA for an integrated, multi-modal regional transportation system, developed by Metrolinx with a mandate from the Greater Toronto Transportation Authority Act 2006

- SADT** **Summer Average Daily Traffic**
Average twenty four hour, two way traffic for the period July 1st to August 31st, including weekends
- SDF Model** **Strategic Demand Forecasting Model**
Planning approach used to forecast trips not included in the GGH Model: goods movement by rail, marine and air freight and tourism and recreation travel by all modes; considers historical growth trends (Business as Usual – BAU) as well as future influences
- TSP** **Transportation Service Providers**
Stakeholders include: municipal transit; inter-regional transit; freight rail service; air and marine service; transportation associations/organizations; and trucking organizations - consulted to assist with development of Study Area knowledge
- UGC** **Urban Growth Centres**
Twenty-five centres designated in the provincial Growth Plan, planned as focal areas for investment in institutional and region-wide public services, as well as commercial, recreational, cultural and entertainment uses; to accommodate and support major transit infrastructure; to serve as high density major employment centres; and to accommodate a significant share of population and employment growth
- V/C Ratio** **Volume / Capacity Ratio**
A level-of-service measure for roadways comparing roadway demand (vehicle volumes) with roadway supply (carrying capacity); <0.8 typically considered minor, non-recurring congestion; 0.8-0.9 typically considered moderate congestion/ approaching unstable conditions; >0.9 typically considered major congestion/ unstable, “stop and go” conditions

APPENDICES

APPENDIX A – SUMMARY OF INPUT RECEIVED THROUGH OUTREACH AND CONSULTATION

APPENDIX B – POLICY FRAMEWORK

APPENDIX C – SUMMARY OF INPUT RECEIVED ON DRAFT PROBLEMS AND OPPORTUNITIES REPORT – DRAFT FOR CONSULTATION (2009)

APPENDIX A

SUMMARY OF INPUT RECEIVED THROUGH OUTREACH AND CONSULTATION

SUMMARY OF INPUT RECEIVED THROUGH OUTREACH AND CONSULTATION

The transportation problems and opportunities were defined in consultation with all relevant stakeholders, including the general public, local community and interest groups, federal and provincial ministries and agencies, upper- and lower-tier municipalities and First Nations.

Community Advisory Group

A Community Advisory Group (CAG) was established as a forum to provide ongoing advice to the Study Team. The CAG is comprised of members of the communities and organizations interested in or potentially affected by the current study, including:

- Residents and ratepayers with representation throughout the municipalities of the Study Area;
- Environmental and conservation NGOs;
- Business and agricultural sectors; and
- Others including academia, and unique groups concerned about the Niagara Escarpment, Oak Ridges Moraine, etc.

The mandate of the CAG is to:

- Act as a sounding board where the CAG and the Study Team can test ideas and findings;
- Provide advice, critiques and suggestions to see that study is comprehensive, and that data is adequately collected and analyzed;
- Provide a sense of the broader community reactions and concerns and how these might be addressed;
- Provide a direct, face-to-face channel of communications between and among CAG members, the residents, environmental community, the developers, and the Study Team; and
- Identify and discuss potential issues, challenges and opportunities in a timely fashion, and assist in developing mechanisms to identify satisfactory outcomes.

During the problems and opportunities phase of this study, the CAG held its second meeting on December 4, 2008 to discuss the project goals and objectives, the identified transportation problems, and the framework for Public Information Centre (PIC) #2. The table below provides a summary of the CAG's input on the transportation problems identified by the Study Team, and a list of other problems and opportunities identified by the CAG.

CAG Meeting #2 - Input Received Regarding Problems & Opportunities

| Comment | Suggestions on P&O Identification Process | CAG Identified Problem | CAG Identified Opportunity |
|--|---|------------------------|----------------------------|
| With respect to commuting by transit, the CAG listed the following problems as being most important: 1. Limited integration between local and inter-regional transit; 2. Limited community to community transit service; and 3. Conflicts with freight for use of rail capacity. | | ✓ | |
| With respect to commuting by private vehicle, the CAG listed the following problems as being most important: 1. Recurring congestion during peak periods; 2. Inefficient road connections between Urban Growth Centres; and 3. Lack of residual capacity to accommodate rerouting of traffic during non-recurring incidents (accidents, weather, roadwork). | | ✓ | |
| With respect to goods movement by truck, the CAG listed the following problems as being most important: • Recurring congestion during peak periods; • Inefficient road connections between Urban Growth Centres, commercial centres and inter-modal terminals; and • Infiltration of local communities by inter-regional trucking. | | ✓ | |
| With respect to goods movement by rail, the CAG listed the following problems as being most important: • Few railway connections between growth areas; and • Track capacity constrained in some areas. | | ✓ | |
| With respect to goods movement by air, the CAG listed the following problems as being most important: • Limited multi-modal connections to airports. | | ✓ | |
| Another problem is congestion caused by the amount of time (including jurisdictional issues) it takes to clear roadway accidents (including investigations and vehicle removal). | | ✓ | |
| For long distance travel, solutions could involve “drive-on, drive-off” services that blur the line between railways, transit and personal vehicle use. | | | ✓ |
| Rationale/suggestions for transit related problems: • Use data to show the absence of public transit service, low frequency of service, quality of service, and schedule delays; • Use examples that prove you cannot take public | ✓ | | |

| Comment | Suggestions on P&O Identification Process | CAG Identified Problem | CAG Identified Opportunity |
|--|---|------------------------|----------------------------|
| <p>transit to/from certain places;</p> <ul style="list-style-type: none"> • Use data to show that some routes only run in certain directions; • Show that transit service runs mostly east-west, not north-south; • Show the effects that transit strikes have on those that depend on transit; • Use cost analysis – compare the cost of taking a family to downtown Toronto using public transit vs. the cost of driving in a personal vehicle and parking; • The use of the car is so ingrained in our society that progress in the realm of transit is hindered. The concept of “build it and they will come” should be employed for transit infrastructure; • Compare data on peoples’ perceptions of the transit system vs. reality; and • Show travel times to different destinations by car and transit. | | | |
| <p>Rationale/suggestions for goods movement problems:</p> <ul style="list-style-type: none"> • Show the effect on goods movement of rail lines being owned by different entities; • Show the limitations posed by having only two major rail freight corridors in the Study Area; • Use historical data/trends; • Show where routes currently do not exist to meet the needs of particular shippers; • Review the number of trucks infiltrating local communities that could be by-passing via an alternate route; • Show how roads are not designed to accommodate certain vehicle sizes/loads; • Provide data on what is being shipped in the Study Area, how it is being transported and where it is going; • Compare the data on the amount of goods going through the Study Area to the goods being shipped to the Study Area; and • Show the impact of “just-in-time” deliveries on the congestion on the roadways. | ✓ | | |
| <p>Rationale/suggestions for tourism and recreation problems:</p> <ul style="list-style-type: none"> • Show that there is currently no way to get to Pearson Airport by rail and provide data on how many passenger trains currently pass by Pearson; • Show the impacts that grid vs. radial road patterns | ✓ | | |

| Comment | Suggestions on P&O Identification Process | CAG Identified Problem | CAG Identified Opportunity |
|--|--|-------------------------------|-----------------------------------|
| have on making the appropriate transportation connections; and <ul style="list-style-type: none"> • “Air” should be a type of mode added to the tourism and recreation market – a number of tourists use and need access to/from airports (including smaller ones) in the Study Area. | | | |

The CAG held its third meeting during the problems and opportunities phase of this study on February 4, 2009 to provide an update on the project status, discuss the updated transportation problems, and review the content for PIC #2. The following table provides a summary of the CAG’s input regarding the transportation problems identified by the Study Team.

CAG Meeting #3 - Input Received Regarding Problems & Opportunities

| Question Posed By Study Team | CAG Response |
|---|---|
| Overall, what are your views of the transportation problems as presented? | Problems have been underestimated. For example, the assumptions of improve future live/work relationships, transit usage, etc., have been overestimated. As a result, the forecasting seems overly optimistic. |
| | A diagram should be created to show what the problems would be if historical trends continue. This could be compared to the optimistic predictions that result when the Metrolinx RTP is modelled. |
| | The large volume of commercial vehicles on Highway 401 leaves no lanes on the highway for commuters. |
| | Goods are moved during all hours. |
| | More inter-modal terminals are needed. |
| | Need to address road and rail needs for tourism. |
| What, if anything, would you add or change about the transportation problem statements? | The right kinds of problems were identified. |
| | Road is the only way to access airports. |
| | Waterloo Airport and the corridor between Woodstock, Kitchener, and Guelph have not been mentioned. |
| | Some of the data does not seem to be accurate, particularly the estimated automobile travel times. If the model does not accurately predict current travel times, the all resulting projections must be questioned. |
| Do you have any feedback on the data used in the presentation to support the transportation problem statements? What other supporting data might be used? | Need more Highway 407 data. |
| | Incorporate influences from the perimeter and outside of the Study Area boundaries. For example, when outside towns and cities do not meet their transportation infrastructure growth, how does this influence the problem statements identified? |
| | The validity of certain assumptions is questionable. |
| | More time should be spent on analyzing the relationship between goods and people movement. |
| In your view, which of the problems are the greatest priority? | Transit commuting. |
| | Lack of encouragement for commuters to work in their own |

| Question Posed By Study Team | CAG Response |
|------------------------------|--|
| | cities or take transit. |
| | Lack of a northern transit hub – Union Station is the only current hub. |
| | Shipping of garbage – the GTA should deal with its own garbage instead of shipping to the U.S. |
| | The data needs to be corrected before priorities can be determined. |

Regulatory Agency Advisory Group

The Regulatory Agency Advisory Group (RAAG) was established as a means to consult with potentially affected provincial ministries, agencies and federal departments. The RAAG is comprised of members from:

- Ontario Provincial Police
- Grand River Conservation Authority
- Toronto and Region Conservation Authority
- Credit Valley Conservation
- Conservation Halton
- Niagara Escarpment Commission
- Hydro One Networks
- Canadian Pacific Rail
- Metrolinx / GO Transit *[formerly separate agencies]*
- Greater Toronto Airports Authority
- Ministry of Culture
- Ministry of Municipal Affairs and Housing
- Ministry of Natural Resources
- Ministry of Energy and Infrastructure *[formerly the Ministry of Public Infrastructure Renewal]*
- MTO Freight Policy Office
- MTO Modal Policy and Partnerships Branch
- Canadian Environmental Assessment Agency
- Environment Canada

The RAAG held its second meeting during the problems and opportunities phase of this study on February 12, 2009 to provide an update on the project status, discuss the project goals and objectives, review the existing conditions within the Study Area, review how the Study Team predicted future transportation conditions, discuss the transportation problems and opportunities, and discuss corridor planning and protection. A summary of the RAAG’s input regarding the transportation problems and opportunities identified by the Study Team is provided below.

RAAG Meeting #2 - Input Received Regarding Problems & Opportunities

| Issue | RAAG Comments |
|--|---|
| Future Commuter Problems | The Study Team should consider increased telecommuting and off-peak trucking in the transportation modelling. |
| Future Goods Movement Problems | Connectivity between modes of goods movement is important. The Study Team should encourage intensification of proper land use around major terminals and distribution centres through land use planning measures. This would make the best use of existing inter-modal infrastructure and decrease overall truck mileage. |
| Future Tourism and Recreation Problems | The Study Team should consider the amount of trips made to cottage country from the Study Area. |

Municipal Outreach and Consultation

Municipal Agencies Group

Based on the geographic context of the Study Area, the City of Guelph, County of Wellington, and Regions of Halton, Peel and York (including lower tier municipalities) were invited to join the Municipal Agencies Group (MAG), as a means for consultation with the Study Team throughout the duration of the EA Study. The MAG is comprised of representatives from:

- Region of Peel
- York Region
- Halton Region
- Region of Waterloo
- City of Brampton
- City of Guelph
- City of Mississauga
- Town of Caledon
- City of Vaughan
- Township of King
- Town of Halton Hills
- Town of Milton
- Wellington County
- Town of Erin
- Town of Puslinch
- Township of Guelph/Eramosa
- Township of Centre Wellington

The MAG held its second meeting during the problems and opportunities phase of this study on February 3, 2009 to provide an update on the project status, discuss the project goals and objectives, review the existing conditions within the Study Area, review how the Study Team predicted future transportation conditions, discuss the transportation problems and opportunities, and discuss corridor planning and protection. The table below provides a summary of the MAG’s input regarding the transportation problems and opportunities identified by the Study Team.

MAG Meeting #2 - Input Received Regarding Problems & Opportunities

| Issue | MAG Comments |
|--------------------------------|--|
| Future Commuter Problems | The modelling has assumed an aggressive shift towards transit use; however the transit travel times predicted for 2031 still aren’t competitive with the predicted automobile travel times. Transit is the first priority outlined in the Growth Plan, thus the model should take into account ideal transit times and quantify the amount of investment needed to achieve this. |
| | A sensitivity analysis should be performed that considers advancing a potential GTA West Corridor prior to other planned corridor improvements. |
| Future Goods Movement Problems | The graph which displays the lack of reliable connection between Simcoe County and Highway 401 is effective. A graphic that displays the relationship between Guelph and Highway 401 would be useful. |
| | The Southern Ontario Gateway Council has flagged the interchange at Highway 401 and Highway 400 as a problem. The GTA West Corridor could be an important strategic alternative to the unpredictable flow in that area. |

Halton Planning and Public Works Committee

The Study Team met with the Halton Planning and Works Committee during the problems and opportunities phase of the study on February 4, 2009 to provide an update on the project status, review how the Study Team predicted future transportation conditions, discuss the transportation problems and opportunities, and discuss corridor planning and protection. A summary of the committee’s input regarding the transportation problems and opportunities identified by the Study Team is provided below.

Halton Planning and Public Works Committee – Input Received Regarding Problems & Opportunities

| Issue | Halton Planning and Public Works Committee Comments |
|-----------------------|--|
| Air Emissions | The Study Team should consider innovative ways to reduce emissions through vehicle technologies. |
| Rail Opportunities | The province should find a way to ensure rail is considered to its fullest potential, disregarding current conflicts and rivalry issues. |
| | The Study Team should consider the European experience and rail transit model. |
| Unused Rail Corridors | The Study Team should prevent the loss of rail network sections (i.e. unused rail corridors being converted to |

| Issue | Halton Planning and Public Works Committee Comments |
|--------------------------------|---|
| | recreational uses). |
| Trucking Restrictions | The Study Team should consider harsh trucking restrictions, such as: <ul style="list-style-type: none"> ○ A 500 mile threshold for trucking; and ○ No trucks on highways during peak periods. |
| Elevated Route on Lake Ontario | The Study Team should consider a new road-based structure in Lake Ontario. |
| HOV and BRT | The Study Team should provide for higher-order transit as part of the solution. |

York Region Planning and Economic Development Committee

The Study Team met with the York Region Planning and Economic Development Committee during the problems and opportunities phase of the study on March 4, 2009 to provide an update on the project status, review how the Study Team predicted future transportation conditions, discuss the transportation problems and opportunities, and discuss corridor planning and protection. Below is a summary of the committee’s input regarding the transportation problems and opportunities identified by the Study Team.

York Region Planning and Economic Development Committee – Input Regarding Problems & Opportunities

| Issue | York Region Planning and Economic Development Committee Comments |
|---|--|
| Consultation Regarding Problems and Opportunities | It is important that the public are being educated about the purpose of the study, the opportunities to provide input and the public consultation process. It is key that they are engaged in the study at an early stage so that they are well informed when the study concludes that transportation improvements are proposed. |
| Future Goods Movement Problems | It is important to understand that there is a steady growth in freight and goods movement, and they are directly linked to the economy. We have to find the right answer to address these transportation issues. |

Region of Peel Council

During the problems and opportunities phase of this study, the Study Team met with the Region of Peel Council on February 5, 2009 to provide an update on the project status, review how the Study Team predicted future transportation conditions, discuss the transportation problems and opportunities, and discuss corridor planning and protection. The table below provides a summary of Council’s input regarding the transportation problems and opportunities identified by the Study Team.

Region of Peel Council – Input Regarding Problems & Opportunities

| Issue | Region of Peel Council Comments |
|-------------------|---|
| Areas of Interest | The Winston Churchill/Terra Cotta area is an area of interest to the Town of Caledon. The Town of Caledon would like to work closely with the Study Team so as to benefit the employment growth along the future GTA West corridor while protecting agricultural lands. |
| | There are significant areas of interest in south Bolton. This area should be looked at before the whole corridor. |
| | It is critical to identify the areas of interest as soon as possible, and to consider how the GTA West corridor may potentially connect to other transportation facilities such as Highway 427. |

Wellington County Council

During the problems and opportunities phase of this study, the Study Team met with the Wellington County Council on February 26, 2009 to provide an update on the project status, review how the Study Team predicted future transportation conditions, discuss the transportation problems and opportunities, and discuss corridor planning and protection. A summary of Council’s input regarding the transportation problems and opportunities identified by the Study Team is provided below.

Wellington County Council – Input Regarding Problems & Opportunities

| Issue | Wellington County Council Comments |
|---|---|
| Preferred Transportation System Alternative | The Study Team should ensure that the problem statements include previously identified needs such as a connection of Highway 6 to Highway 24, and Highway 7 to Kitchener. |
| | Concern from the southern portion of Wellington County regarding the location of a GTA West corridor and whether access would be provided to/from the smaller towns. |

Transportation Service Providers & Business and Commercial Stakeholders

The Study Team engaged the Business and Commercial Stakeholders (BCSs) and Transportation Service Providers (TSPs) to identify transportation problems and opportunities within the Study Area.

It should be noted that numerous BCSs and TSPs are represented within both the GTA West Study Area and the Study Area for the NGTA Corridor Planning and Environmental Assessment Study. BCSs and TSPs that are relevant to both studies were consulted only once, while all additional consultation undertaken as part of the GTA West Study was for the BCSs and TSPs that are located strictly within the GTA West Study Area. Between October 2007 and February 2008, the NGTA Study Team consulted (via face-to-face interviews, telephone interviews and electronic questionnaires) with various BCSs and TSPs, many of which operate within the GTA West Study Area as well. As such, the consultation for the GTA West study was developed to be consistent with, and build upon, the consultation completed as part of

the NGTA Study. This streamlined the consultation process between the two studies and built a consistent body of knowledge that can be referenced by both Study Teams.

The BCS stakeholders consulted during the problems and opportunities phase included:

- Large Corporations / Industries;
- Business Associations;
- Logistics Providers;
- Shipping Associations; and
- Universities / Colleges.

The TSP stakeholders consulted during the Problems and Opportunities phase included:

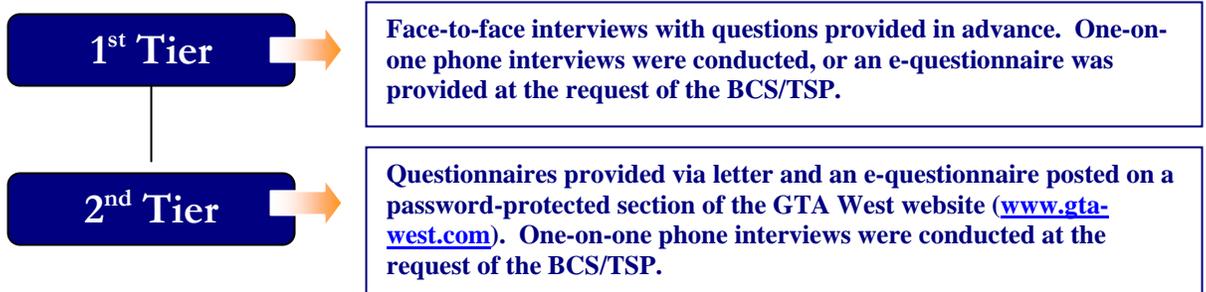
- Municipal transit;
- Inter-regional transit;
- Freight Rail service;
- Air service;
- Transportation Associations / Organizations; and
- Trucking Organizations.

The consultation approach was the same for the BCS and TSP stakeholders and involved a two-tiered approach.

Tier One BCS and TSP Stakeholders: The strategy for consulting with the Tier One BCS stakeholders was to focus on obtaining insights from agencies/organizations which provide transportation service within the larger Study Area, and those primarily business/organizations which have a broad knowledge of the business/sector, and trends and policy implications. These groups have the most comprehensive and consolidated information on various aspects of business operations and issues relative to the movement of people and goods. The input received from these groups is critical to developing freight and passenger profiles and understanding transportation problems, opportunities, trends, and limitations.

Tier Two BCS and TSP Stakeholders: Organizations/agencies that provide locally based transportation services, and those businesses/organizations that can provide a more localized context on various aspects of business operations and issues relative to the movement of people and goods were consulted to better understand the transportation problems, opportunities, trends, and limitations within the Study Area.

The following outlines the consultation tools and techniques that were employed for each of the above-noted BCS and TSP stakeholder groupings:



Consultation began in April 2008. The following is a list of the conclusions from the consultation with the BCSs and TSPs as can be drawn from information received through both studies:

Insufficient and inefficient public transportation results in low transit ridership:

- Improve connections between transit providers/regions;
- Construct dedicated transit lanes; and
- Provide funding/support for improvements (e.g. higher order transit, more routes and vehicles).

Existing roadways are at capacity which causes delays, decreases productivity and costs money:

- Widen existing roadways (e.g. Highway 401) and designate the new lanes as truck lanes to increase the capacity of the existing infrastructure;
- Convert existing east-west roadways to controlled access to improve operations;
- Improve connections to highways to reduce traffic on local roads;
- Approve new technologies to increase the capacity on existing roadways (e.g. combination vehicles, longer trailers);
- Focus on transportation demand management (e.g. flexible working hours, restricting hours for shipping via truck, etc) to relieve congestion on existing roadways;
- Install changeable message signs at the interface of all major highways to provide updates on traffic and alternate routes; and
- Provide a traffic update system (like GIS) to truckers so they can obtain instantaneous updates on traffic.

Limitations to making inter-modal transportation a viable mode:

- Provide better roadway access to inter-modal facilities since you still need trucks to transport goods to the rail/marine facilities;
- Reduce the congestion at the inter-modal facilities;

- Allow flexibility in the transportation schedules of each mode since they are dependent on one another and need to accommodate the “just-in-time” deliveries;
- Provide more rail infrastructure to accommodate shorter hauls;
- Expand the type of goods that can be shipped via rail and marine (weight, size, materials); and
- Provide funding/support for rail/marine improvements (e.g. expansion of existing rail yards and lines, expansion existing ports and construction of new ports).

Lack of alternate routes in the GTA West Corridor:

- Construct a new multi-use corridor for transit, automobiles, and trucks. Or construct a new corridor dedicated to truck traffic - this corridor should not be a toll highway since the cost is prohibitive.

Land Use Planning Can Positively or Negatively Impact Transportation:

- Intensify development to make transit more efficient and supportable;
- Restrict residential development in the vicinity of existing or future inter-modal facilities; and
- Situate industrial areas near rail lines.

Other:

- Centralize transportation governing bodies to streamline approval processes;
- Integrate major, related transportation environmental assessments (e.g. NGTA, GTA West)

Public Information Centre #2

The second round of PICs was held in March 2009 to provide the public with an opportunity to view and comment on maps and displays that illustrate the problems and opportunities within the GTA West Study Area. The dates and locations of the PICs were as follows:

| | | |
|--|--|--|
| <p>Wednesday March 4, 2009 River Run Centre Canada Company Hall 35 Woolwich Street Guelph, ON 4:00 PM. – 8:00 PM</p> | <p>Thursday March 5, 2009 Brampton Fairgrounds Hall 12942 Heart Lake Road Caledon, ON 4:00 PM. – 8:00 PM</p> | <p>Monday March 9, 2009 Mold-Master Sportsplex Alcott Hall 221 Guelph Street Georgetown, ON 4:00 PM – 8:00 PM</p> |
| <p>Wednesday March 11, 2009 Le Jardin Special Events Centre Venetian Room 8440 Highway 427 Woodbridge, ON 4:00 PM – 8:00 PM</p> | <p>Thursday March 12, 2009 Pearson Convention Centre Hall C 2638 Steeles Avenue East Brampton, ON 4:00 PM – 8:00 PM</p> | |

A total of 338 members of the public chose to sign the visitor’s register at the five locations, and 43 comments sheets were submitted to the Study Team. The following table provides a summary of Council’s input regarding the transportation problems and opportunities identified by the Study Team.

PIC#2 - Input Regarding Problems & Opportunities

| Issue | Public Comments |
|---|---|
| Transportation Problems, Opportunities and System Alternatives | Congestion is an issue for all system users, particularly for truckers. |
| | Truck infiltration into stable residential neighbourhoods is a concern. |
| | Data may be outdated/inaccurate, particularly the future projections given the current economic state. |
| | Walking and hiking tourism opportunities should be considered by the Study Team. |
| | Bicycle lanes and a lower speed limit should be implemented on Highway 6 between Woodlawn Road and Conservation Road. |
| | Highway 407 should be extended westerly and a highway should be built between Barrie and Guelph. |
| | If the Study Team already knows where the new corridor will be, just show it on a map now. |
| | Support for multi-modal options, however public transit and rail alternatives should be the priority. |
| | The Study Team should improve existing infrastructure (particularly rail and other transit) before constructing new infrastructure. |
| | The Study Team should develop bold/visionary transportation solutions. |
| | More goods should be moved via rail, not truck. |
| | Need to protect agricultural lands/rural areas, recreational areas, and the natural environment. |
| | Question how a GTA West corridor can be placed through the Greenbelt or Niagara Escarpment. |
| Question how areas of interest were determined, and if these areas will determine the route for the new corridor. | |

APPENDIX B

POLICY FRAMEWORK

| Places to Grow – Growth Plan for the Greater Golden Horseshoe (GGH) | |
|--|--|
| Policy | |
| <i>Where and How to Grow (s. 2.2)</i> | |
| Population and employment growth will be accommodated by: (s. 2.2.2.1) | |
| e) providing convenient access to intra- and inter-city transit. | |
| g) planning and investing for a balance of jobs and housing in communities across the GGH to reduce the need for long distance commuting and to increase the modal share for transit, walking and cycling. | |
| <i>Infrastructure to Support Growth (s. 3.2)</i> | |
| <i>Transportation – General (s. 3.2.2)</i> | |
| The transportation system within the GGH will be planned and managed to - (s. 3.2.2.1) | |
| a) provide connectivity among transportation modes for moving people and for moving goods | |
| b) offer a balance of transportation choices that reduce reliance upon and single mode and promotes transit, cycling and walking | |
| c) be sustainable, by encouraging the most financially and environmentally appropriate mode for trip-making | |
| d) offer multi-modal access to jobs, housing, schools, cultural and recreational opportunities, and goods and services | |
| e) provide for the safety of system users. | |
| Transportation system planning, land use planning, and transportation investment, will be co-ordinated to implement this Plan. (s. 3.2.2.2) | |
| In planning for the development, optimization, and/or expansion of new or existing transportation corridors, the Ministers of Public Infrastructure Renewal and Transportation, other Ministers of the Crown, and other public agencies and municipalities will – (s. 3.2.2.3) | |
| a) ensure that corridors are identified and protected to meet current and projected needs for various travel modes | |
| b) support opportunities for multi-modal use where feasible, in particular prioritizing transit and goods movement needs over those of single occupant automobiles | |
| c) consider increased opportunities for moving people and moving goods by rail, where appropriate | |
| d) consider separation of modes within corridors, where appropriate | |
| e) for goods movement corridors, provide for linkages to planned and existing inter-modal opportunities where feasible. | |
| <i>Moving People (s. 3.2.3)</i> | |
| Public transit will be the first priority for transportation infrastructure planning and major transportation investments. (s. 3.2.3.1) | |
| All decisions on transit planning and investment will be made according to the following criteria: (s. 3.2.3.2) | |
| b) Placing priority on increasing the capacity of existing transit systems to support | |

| Places to Grow – Growth Plan for the Greater Golden Horseshoe (GGH) | |
|---|---|
| Policy | |
| | intensification areas; |
| | c) Expanding transit service to areas that have achieved, or will be planned so as to achieve, transit-supportive residential and employment densities, together with a mix of residential, office, institutional and commercial development wherever possible; |
| | d) Facilitating improved linkages from nearby neighbourhoods to urban growth centres, major transit station areas, and other intensification areas; |
| | e) Consistency with the strategic framework for future transit investments outlined on Schedule 5; |
| | f) Increasing the modal share of transit. |
| <i>Moving Goods (s. 3.2.4)</i> | |
| The first priority of highway investment is to facilitate efficient goods movement by linking inter-modal facilities, international gateways, and communities within the GGH. (s. 3.2.4.1) | |
| The Ministers of Transportation and Public Infrastructure Renewal, other appropriate Ministers of the Crown, and municipalities will work with agencies and transportation service providers to – (s. 3.2.4.2) | |
| | a) co-ordinate and optimize goods movement systems |
| | b) improve corridors for moving goods across the GGH consistent with Schedule 6 of this Plan |
| | c) promote and better integrate multi-modal goods movement and land-use and transportation system planning, including the development of freight-supportive land-use guidelines. |
| The planning and design of highway corridors, and the land use designations along these corridors, will support the policies of this Plan, in particular that development is directed to settlement areas, in accordance with policy 2.2.2.1(i) (s. 3.2.4.3). | |

| |
|---|
| Ontario Environmental Assessment Act |
| Policy |
| Objectives |
| 1. To provide for the protection, conservation, and wise management of Ontario's environment. |

| |
|---|
| Greenbelt Plan (2005) |
| Policy |
| Vision and Goals (s. 1.2) |
| The Greenbelt is a broad band of permanently protected land which: (s. 1.2.1) Protects against the loss and fragmentation of the agricultural land base and supports agriculture as the predominant land use; |
| Gives permanent protection to the natural heritage and water resource systems that sustain ecological and human health and that form the environmental framework around which major urbanization in south-central Ontario will be organized; and |
| Provides for a diverse range of economic and social activities associated with rural communities, agriculture, tourism, recreation and resource uses. |
| To enhance our urban and rural areas and overall quality of life by promoting the following matters within the Protected Countryside: |
| 1. Agricultural Protection (s. 1.2.2) Protection of specialty crop area land base while allowing supportive infrastructure and value added uses necessary for sustainable agricultural uses and activities; and |
| Support for the Niagara Peninsula specialty crop areas as a destination and centre of agriculture focused on the agri-food sector and agri-tourism related to grape and tender fruit production. |
| 2. Environmental Protection (s. 1.2.2) Protection, maintenance and enhancement of natural heritage, hydrologic and landform features and functions, including protection of habitat for flora and fauna and particularly species at risk; |
| Protection and restoration of natural and open space connections between the Oak Ridges Moraine, the Niagara Escarpment, Lake Ontario, Lake Simcoe and the major river valley lands, while also maintaining connections to the broader natural systems of southern Ontario beyond the Golden Horseshoe; and |
| Protection, improvement or restoration of the quality and quantity of ground and surface water and the hydrological integrity of watersheds. |
| 3. Culture, Recreation and Tourism (s. 1.2.2) Support for the conservation and promotion of cultural heritage resources. |
| 4. Settlement Areas (s. 1.2.2) Sustaining the character of the countryside and rural communities. |
| 5. Infrastructure and Natural Resources (s. 1.2.2) |

| Greenbelt Plan (2005) |
|--|
| Policy |
| Support for infrastructure which achieves the social and economic aims of the Greenbelt and the Growth Plan while seeking to minimize environmental impacts; and |
| Recognition of the benefits of protecting renewable and non-renewable natural resources within the Greenbelt. |

| Provincial Policy Statement, 2005 (PPS) |
|---|
| Policy |
| <i>Transportation Systems (s. 1.6.5)</i> |
| Transportation systems should be provided which are safe, energy efficient, facilitate the movement of people and goods, and are appropriate to address projected needs. (s. 1.6.5.1) |
| Efficient use shall be made of existing and planned infrastructure. (s. 1.6.5.2) |
| Connectivity within and among transportation systems and modes should be maintained and, where possible, improved including connections, which cross-judicial boundaries. (s. 1.6.5.3) |
| A land use pattern, density and mix of uses should be promoted that minimize the length and number of vehicle trips and support the development of viable choices and plans for public transit and other alternative transportation modes, including commuter rails and bus. (s. 1.6.5.4) |
| Transportation and land use considerations shall be integrated at all stages of the planning process. (s. 1.6.5.5) |
| <i>Transportation and Infrastructure Corridors (s. 1.6.6)</i> |
| Planning authorities shall plan for and protect corridors and rights-of-way for transportation, transit and infrastructure facilities to meet current and projected needs. (s. 1.6.6.1) |
| Planning authorities shall not permit development in planned corridors that could preclude or negatively affect the use of the corridor for that purpose(s) for which it was identified. (s. 1.6.6.2) |
| The preservation and reuse of abandoned corridors for purposes that maintain the corridor's integrity and continuous linear characteristics should be encouraged, wherever feasible. (s. 1.6.6.3) |
| When planning for corridors and rights-of-way for significant transportation and infrastructure facilities, consideration will be given to the significant resources in Section 2: Wise Use and Management of Resources. (s. 1.6.6.4) |
| <i>Other Sections with Transportation Related Policies</i> |
| Healthy, liveable and safe communities are sustained by: <ul style="list-style-type: none"> g) ensuring that necessary infrastructure and public service facilities are or will be available to meet current and projected needs. (s. 1.1.1) |
| Planning authorities shall promote economic development and competitiveness by: <ul style="list-style-type: none"> d) ensuring the necessary infrastructure is provided to support current and projected needs. (s. 1.3.1) |
| Infrastructure and public service facilities shall be provided in a co-ordinated, efficient and cost- |

| Provincial Policy Statement, 2005 (PPS) |
|--|
| effective manner to accommodate projected needs. Planning for infrastructure and public service facilities shall be integrated with planning for growth so that these are available to meet current and projected needs. (s. 1.6.1) |
| The use of existing infrastructure and public service facilities should be optimized, wherever feasible, before consideration is given to developing new infrastructure and public service facilities. (s. 1.6.2) |
| Infrastructure and public service facilities should be strategically located to support the effective and efficient delivery of emergency management services. (s. 1.6.3) |
| Long term economic prosperity should be supported by: (s. 1.7.1) |
| <ul style="list-style-type: none"> d) providing for an efficient, cost-effective, reliable multi-modal transportation system that is integrated with adjacent systems and those of other jurisdictions, and is appropriate to address projected needs; and |
| <ul style="list-style-type: none"> e) planning so that major facilities (such as...transportation/transit/rail infrastructure and corridors, and inter-modal facilities...) and sensitive land uses are appropriately designed, buffered and/or separated from each other to prevent adverse effects from odour, noise and other contaminants, and minimize risk to public health and safety. |

| Go Green Action Plan on Climate Change, August 2007 |
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| Policy |
| <i>Objectives</i> |
| 1. Reduce Ontario's greenhouse gas emissions to 6 per cent below 1990 levels by 2014 (a reduction of 61 megatonnes relative to business-as-usual). |
| 2. By 2020 Ontario will reduce greenhouse gas emissions to 15 per cent below 1990 levels (a reduction of 99 megatonnes relative to business-as-usual). |
| 3. By 2050 we will reduce greenhouse gas emissions to 80 per cent below 1990 levels. |

| Straight Ahead – A Vision for Transportation in Canada, February 2003 |
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| Policy |
| <i>Objectives</i> |
| 1. Concrete steps to preserve and improve the benefits of competition, including improved recourse for rail shippers against the market power of railways; |
| 2. Confirming our made-in-Canada policy on airline competition, with gradual and reciprocal liberalization of our international air markets; |
| 3. New measures to improve transparency in advertising airfares; |
| 4. Maintaining safety and security as the cornerstones of Canada's transportation policy, with a clear focus on the need to continually improve safety and security for Canadians; |
| 5. A comprehensive review process for transportation merger proposals, for example between Canadian and American railways; |

Straight Ahead – A Vision for Transportation in Canada, February 2003

| Policy |
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| 6. An emphasis on infrastructure investments aimed at reducing congestion in our cities and bottlenecks at the Canada-U.S. border and in our trade corridors; |
| 7. A clear focus on environmental issues, with specific measures - such as promoting vehicles and fuels that produce fewer emissions, increased use of alternative modes of transportation for passenger travel, and more efficient transportation of goods - to support the government's Climate Change Plan; |
| 8. New legislation for VIA Rail and legislative amendments to strengthen publicly funded passenger rail services; and |
| 9. Support for partnerships to address skills shortages and innovation challenges in the transportation sector. |

Niagara Escarpment Plan (2005)

| Policy |
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| <i>Purpose</i> |
| The purpose of this Plan is to provide for the maintenance of the Niagara Escarpment and land in its vicinity substantially as a continuous natural environment, and to ensure only such development occurs as is compatible with that natural environment. |
| <i>Objectives</i> |
| 1. To protect unique ecologic and historic areas; |
| 2. To maintain and enhance the quality and character of natural streams and water supplies; and |
| 3. To ensure that all new development is compatible with the purpose of the Plan. |

| Oak Ridges Moraine Conservation Plan, 2002 | |
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| Policy | |
| Purpose | |
| <p>The Oak Ridges Moraine Conservation Plan is an ecologically based plan established by the Ontario government to provide land use and resource management direction for the 190,000 hectares of land and water within the Moraine.</p> | |
| Objectives | |
| 1. Protecting the ecological and hydrological integrity of the Oak Ridges Moraine Area; | |
| 2. Ensuring that only land and resource uses that maintain, improve or restore the ecological and hydrological functions of the Oak Ridges Moraine Area are permitted; | |
| 3. Maintaining, improving or restoring all the elements that contribute to the ecological and hydrological functions of the Oak Ridges Moraine Area, including the quality and quantity of its water and its other resources; | |
| 4. Ensuring that the Oak Ridges Moraine Area is maintained as a continuous natural landform and environment for the benefit of present and future generations; | |
| 5. Providing for land and resource uses and development that are compatible with the other objectives of the Plan; | |
| 6. Providing for continued development within existing urban settlement areas and recognizing existing rural settlements; | |
| 7. Providing for a continuous recreational trail through the Oak Ridges Moraine Area that is accessible to all including persons with disabilities; and | |
| 8. Providing for other public recreational access to the Oak Ridges Moraine Area; and | |
| 9. Any other prescribed objectives. | |

| National Tourism Strategy (2006) | |
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| Policy | |
| Goals | |
| <p>F/P/T governments working in close partnership and in collaboration with the private sector to ensure Canada is among the world's top 10 tourist destinations, in terms of international arrivals and expenditures, and to increase domestic and international tourism revenues to \$75 billion by 2010.</p> | |
| Strategic Objectives | |
| 1. Exceptional Hosts: Canadians continue to be renowned as welcoming, friendly and truly exceptional hosts to our visitors. | |
| 2. Exceptional Experiences: Canada offers truly exceptional and authentic tourism experiences that provide opportunities for visitors to continue exploring Canada. | |

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| National Tourism Strategy (2006) |
| Policy |
| 3. Accessible Destination: Getting to and around Canada is efficient, affordable and secure. |
| 4. Exceptional Reputation: Canada is renowned as an exciting, yet sustainable and safe destination. |

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| Ontario's Tourism Strategy (2004) |
| Policy |
| <i>Purpose</i> |
| <p>This strategy recognizes the vital role that tourism plays in the continuing economic success and development of Ontario.</p> <p>The priority of Ontario's Tourism Strategy is to focus on opportunities for growth and development on destinations that have the potential to become or are currently international icons, including Toronto and Niagara. The Ministry of Tourism has identified infrastructure as one of the "enablers" to building a strong and sustainable tourism industry, including the need for:</p> <ul style="list-style-type: none"> • Smooth border crossings; • Welcoming international airports; • The ability of visitors to move around easily; • Improvements to all modes of transportation – road, train, air, water and transit – from a tourism perspective; and • Improved linkages between Toronto and Niagara. |
| <i>Objectives</i> |
| 1. Working with the Ministry of Transportation to promote ongoing investment in highways, regional connecting roads, and public transit to support the tourism industry; and |
| 2. Maintaining open, safe and efficient border flows and enhancing first experiences at international airports as a priority. |

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| Ontario Budget (2007/2008) |
| Policy |
| <i>Objectives (2007 Budget)</i> |
| 1. Major new investments to make transit an attractive and green alternative for more people, including the Toronto-York subway, Brampton's AcceleRide, Mississauga's Transitway, improved GO Transit services, and investments of gasoline tax revenues towards municipal transit; and |

| Ontario Budget (2007/2008) | |
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| Policy | |
| 2. Improving and expanding highways in southern and northern Ontario, as well as border crossings. | |
| Objectives (2008 Budget) | |
| 1. Funding for all of Metrolinx’s recommended “Quick Win” projects including: B-Line Improvements, King-Main Corridor, A-Line Improvements, James-Upper James Corridor with service to HIA, James Street North GO/VIA Station Gateway to Niagara, and Dundas Street Bus Rapid Transit; | |
| 2. Funding for MoveOntario 2020 projects; | |
| 3. Provide gas tax revenues to public transit; | |
| 4. New funding for infrastructure investments in GO Transit. These investments will improve services, modernize infrastructure and help address concerns raised in the Auditor General’s 2007 Annual Report; | |
| 5. Investment in GO Transit projects identified by Metrolinx, including the purchase of 20 new bi-level passenger rail coaches, 10 new double-decker commuter buses, and track expansions on GO Transit rail corridors; | |
| 6. New funding over the next five years to accelerate projects to rehabilitate bridges that are part of the provincial highway network; | |
| 7. Investment (through the five-year ReNew Ontario infrastructure plan and Southern Ontario Highways Program) to improve the provincial highway network in southern Ontario; and | |
| 8. Protecting and improving Ontario’s natural environment. | |

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| 2 | The Natural Environment |
| 2.2 | Large Environmental Systems |
| 2.2.9.3.20 | Transportation, Utilities, and Infrastructure |
| | Prohibit, subject to jurisdictional limitations, transportation, utility, and infrastructure uses in all land use designations and key natural heritage features and hydrologically sensitive features unless the requirements of the ORMCP have been addressed to the satisfaction of the applicable approval authority, such as the Region of Peel and the Town of Caledon, in consultation with other relevant agencies, as appropriate. |
| 2.2.9.3.20.1 | In planning for the Regional Transportation and Road network, the Region will consider, jointly with the Town of Caledon, restrictions on haulage routes for transportation of chemicals and volatile materials in wellhead protection areas and in areas of high aquifer vulnerability. |
| 2.2.9.3.20.2 | Prohibit the construction or expansion of partial services unless the following appropriate circumstances apply: <ul style="list-style-type: none"> a) To address a serious health concern or environmental concern; b) The construction or expansion of partial services approved under the <i>Environmental</i> |

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| | <p><i>Assessment Act</i> before November 17, 2001 provided that the period of time during which the construction or expansion may begin has not expire.</p> <p>c) To service existing uses and new uses that are established in accordance with the Region of Peel Official Plan and Town of Caledon Official Plan within the approved partial service area identified on Figure 14.</p> |
| 2.5 | Restoration of the Natural Environment |
| 2.5.2.5 | Ensure that the possibility of the Parkway Belt West Plan Area providing Natural Areas and Corridors in the Greenlands System is explored, evaluated and <i>protected, as appropriate</i> , in co-operation with the area municipalities and the Ministry of Municipal Affairs and Housing. |
| 5 | Regional Structure |
| 5.1.2 | Goal |
| | <p>To provide a diversity of <i>healthy communities</i> for those living and working in <i>Peel Region</i>, offering a wide range and mix of housing, employment, and recreational and cultural activities. These communities will be served and connected by a multi-modal transportation system and provide an efficient use of land, public <i>services</i>, finances and <i>infrastructure</i>, while respecting the natural environment, hazards and resources, and the characteristics of existing communities in <i>Peel</i>.</p> |
| 5.1.3 | General Policies |
| 5.1.3.1 | Plan for major facilities (such as transportation corridors, airports, sewage treatment facilities, <i>waste</i> management system and industrial and aggregate activities) and sensitive land uses to be appropriately designed, buffered and/or separated from each other to prevent adverse effects from odour, noise and other contaminants. |
| 5.2 | The 2021 Regional Urban Boundary |
| | The 2021 Regional Urban Boundary indicates where urban growth is planned to occur in a phased manner over the longer term, subject to the financial capabilities of <i>the Region</i> , area municipalities, province and other government agencies. <i>Development</i> and <i>redevelopment</i> within this 2021 Regional Urban Boundary will take place in a timely, orderly and sequential manner, making the most efficient use of available <i>services</i> , and prolonging existing agricultural uses. |
| 2.3 | Greenlands System in Peel |
| 5.3.3 | Regional Urban Nodes |
| 5.3.3.1.2 | To achieve Regional Urban Nodes that support safe and secure communities, <i>public transit</i> , walking and cycling. |
| 5.6 | Transportation System in Peel |
| | The transportation system in <i>Peel</i> refers to the network of freeways, <i>major roads</i> and <i>public transit</i> systems linking communities in <i>Peel Region</i> and other areas in the <i>GTA</i> . While all of the freeways are under provincial jurisdiction, parts of the major roads are under provincial, regional or area municipal jurisdiction. The <i>public transit</i> systems are under provincial or area municipal jurisdiction. Of the transportation system in <i>Peel</i> , only the Regional roads identified on Schedule F are under the jurisdiction of the <i>Region of Peel</i> . |
| | The concurrent planning of urban and rural growth and the transportation system is required to provide an integrated, safe and efficient system for transporting people and goods. This system is intended to accommodate projected travel demands. In addition |

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| | the transportation system in <i>Peel</i> serves commuters and through traffic. |
| | Co-ordinated planning of the transportation system in <i>the region</i> is required to protect rights-of way for future improvements and to ensure integration with the area municipalities and neighbouring municipalities. |
| 5.6.1 | General Objectives |
| 5.6.1.1 | To achieve convenient and efficient movement of people and goods in <i>the region</i> and the <i>GTA</i> . |
| 5.6.1.2 | To ensure the provision of an integrated transportation system in <i>Peel</i> that balances travel demand with the <i>transportation capacity</i> of transportation facilities. |
| 5.6.1.3 | To plan and implement a transportation system in <i>Peel</i> that is safe, sensitive to the protection of the Greenlands System, environmentally responsible and cost effective. |
| 5.6.1.4 | To encourage an increased <i>public transit modal share</i> . |
| 5.6.1.5 | To encourage greater accessibility by road and <i>public transit</i> to the Lester B. Pearson International Airport from <i>Peel</i> and the <i>GTA</i> . |
| 5.6.1.6 | To integrate the transportation system in <i>Peel</i> with the transportation plans of the area municipalities, neighbouring municipalities and the province. |
| 5.6.1.7 | To <i>support</i> the objectives and policies in this Plan and <i>area municipal official plans</i> , especially the Regional Structure policies of this chapter of the Plan. |
| 5.6.1.8 | To provide for bicycle and pedestrian opportunities in the design of roadways. |
| 5.6.2 | General Policies |
| 5.6.2.1 | Minimize adverse social, environmental and resource impacts when developing and planning for transportation facilities, by ensuring consistency with the objectives and policies in this Plan. |
| 5.6.2.2 | Consider, as part of the <i>development</i> review approval process, the magnitude and timing of <i>development</i> proposals relative to the anticipated transportation demand of the proposed <i>development</i> , and anticipated cumulative transportation effects on Regional facilities. |
| 5.6.2.3 | Identify, in co-operation with the area municipalities and the province, transportation improvements to the provincial, regional and area municipal systems required to <i>support</i> future <i>development</i> or <i>redevelopment</i> , and determine region-wide impacts through comprehensive transportation studies. |
| 5.6.2.4 | Ensure, in accordance with the requirements of <i>the Region</i> and the area municipalities, that <i>development</i> only proceed with adequate existing or committed improvements to regional <i>transportation capacity</i> and, if necessary, <i>development</i> be phased until that capacity is or will be available. |
| 5.6.2.5 | Encourage the provincial government and neighbouring municipalities to increase <i>public transit</i> usage and ridesharing as well as other <i>travel demand management</i> programs. |
| 5.6.2.6 | Pursue, in co-operation with the appropriate agencies, the improvement of the transportation system in <i>Peel</i> and connections to the Lester B. Pearson International Airport from all parts of the <i>GTA</i> and particularly from <i>Peel</i> . |
| 5.6.2.7 | Encourage the area municipalities, and the adjacent regions and area municipalities, in co-operation with <i>the Region</i> , to identify any regional and provincial transportation implications as part of their official plan review. |
| 5.6.2.8 | Encourage the area municipalities and the Ministry of Transportation of Ontario to implement <i>travel demand management</i> strategies including <i>car or van pooling</i> and ride-share programs. |

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| 5.6.2.9 | <i>Support</i> the identification by the area municipalities and the Ministry of Transportation of Ontario, in co-operation with <i>the Region</i> , of opportunities for incorporating a <i>bicycle route</i> or route network into the transportation system in <i>Peel</i> . |
| 5.6.2.10 | Work co-operatively with the area municipalities and other municipalities to develop an appropriate integrated transportation plan across the <i>GTA</i> . |
| 5.6.2.11 | Co-ordinate planning with adjacent regions and municipalities, to establish a planned transportation network which considers and co-ordinates the road linkages across municipal boundaries that will accommodate cross-boundary traffic. This includes the recommendations of the York/Peel Boundary Transportation Study, which is intended to be implemented by official plan amendment. |
| 5.6.3 | The Provincial Highway Network |
| | The Provincial Highway Network provides for inter-regional travel and is comprised of controlled access freeways (the QEW and 400 series freeways and tollways) and other highways (such as provincial routes 9 and 10). Continuing improvement of the Provincial Highway Network and the integration of provincial highways with other roads in <i>Peel</i> and neighbouring municipalities are essential for the effective and efficient movement of people and goods within and through <i>Peel</i> and the <i>GTA</i> in the future. |
| 5.6.3.1 | Objective |
| | To advocate the provision and maintenance of a reliable, efficient and safe Provincial Highway Network to facilitate the movement of people and goods within and through <i>Peel</i> into neighbouring municipalities. |
| 5.6.3.2 | Policies |
| 5.6.3.2.1 | Request the Ministry of Transportation of Ontario, in co-operation with the <i>GTA</i> municipalities and neighbouring municipalities, to provide an efficient and safe Provincial Highway Network in <i>Peel</i> that can accommodate regional and inter-regional travel demands at an acceptable <i>level of service</i> . |
| 5.6.3.2. | <i>Support</i> the planning, corridor protection and the early construction of the following facilities: |
| | a) staged widening of Highway 7, Hurontario to Winston Churchill Boulevard |
| | b) the construction of <i>High Occupancy Vehicle (HOV)</i> lanes on Highway 403 between Highway 401 and the Halton- <i>Peel</i> boundary; |
| | c) the investigation and provision of HOV or reserve bus lanes on Highway 410 from Highway 401 to Bovaird Drive; |
| | d) the extension of Highway 410 north-westward to join with Highway 10; |
| | e) the widening to 12 lanes of Highway 401 between Highway 410 and Erin Mills Parkway and to 10 lanes between Erin Mills Parkway and Winston Churchill Boulevard; |
| | f) widening and other improvements of Highway 10 through the Town of Caledon, consistent with the policies of the Niagara Escarpment Plan, the Town of Caledon Official Plan and Caledon Community Resource Study (CCRS) where applicable; |
| | g) intersection and widening improvements to Highway 9; and, |
| | h) the completion of the Courtney Park Drive/Highway 410 interchange, by adding ramps to provide access to and from the north. |
| 5.6.3.2.3 | <i>Support</i> , in co-operation with the province, the Region of York, the City of Vaughan, the City of Brampton, the Town of Caledon and private road providers if appropriate, the planning corridor protection and early construction of a <i>major road</i> facility running from the intersection of Highway 427 and Highway 7 northward by official plan |

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| | amendment and/or secondary plans that integrate land and transportation planning development. |
| 5.6.4 | Major Road Network |
| | The Major Road Network in <i>Peel</i> , with the exception of freeways and tollways, is comprised of <i>major roads</i> under the jurisdiction of the province of Ontario, <i>the Region</i> and the area municipalities. <i>The Region</i> co-operates with the area municipalities to plan for transportation on a region-wide basis, and operates Regional roads that typically provide a high <i>transportation capacity</i> inter-municipal service. |
| 5.6.4.1 | Objectives |
| 5.6.4.1.1 | To have a reliable and efficient Major Road Network to enhance the safe movement of people and goods. |
| 5.6.4.1.2 | To achieve a Major Road Network as shown on Schedule E. |
| 5.6.4.2 | Policies |
| 5.6.4.2.1 | Ensure the provision, in conjunction with the province and the local municipalities, of the Major Road Network shown on Schedule E, regardless of road jurisdiction. A jurisdictional transfer between area municipal and Regional roads will not require an amendment to Schedule F or this Plan. |
| 5.6.4.2.2 | Direct the area municipalities to identify in their official plans rights-of-way for portions of the Major Road Network shown on Schedule E which are under area municipal jurisdiction. |
| 5.6.4.2.3 | Locate, where possible, activities generating substantial truck traffic near <i>major roads</i> or <i>expressways</i> . Haul routes will be determined <i>jointly</i> by <i>the Region</i> and the area municipalities. |
| 5.6.4.2.4 | Ensure that adequate <i>transportation capacity</i> on Regional roads is based on a “Level of Service Policy” adopted and periodically reviewed by <i>Regional Council</i> . |
| 5.6.4.2.5 | Encourage the area municipalities to integrate transportation modes at transit nodes. |
| 5.6.4.2.6 | Protect the designated Regional road rights-of-way, as shown on Schedule F, to accommodate future road widenings and improvements consistent with Section 7.7 of this Plan. Require wider rights-of-way where necessary at the intersection of all its designated rights-of-way. However, within the 36/45 metre (120/150 feet) designation the basic right-of-way shall be 36 metres except within 150 metres (495 feet) of an intersection. At the centre line of the intersection the designated right-of-way is 45 metres which tapers to 36 metres over a 150 metre distance on either side of the intersection. |
| 5.6.4.2.7 | <i>Protect</i> and preserve the natural environment, consistent with the objectives and policies in this Plan, the <i>area municipal official plans</i> , the Environmental Assessment procedures, and if applicable, the Niagara Escarpment Plan where Regional roads are proposed to be widened, reconstructed or improved. Where portions of Regional roads have scenic, environmental, or cultural heritage characteristics, it is intended to retain and protect the unique features of the road section. For rural villages and settlements in <i>the region</i> appropriate exceptions have been made and will be considered for reduced Regional rights-of-way to maintain historic streetscapes and heritage characteristics of the village or settlement. |
| 5.6.4.2.8 | Generally locate Regional two lane roads within 20-30 metre (66-100 feet) rights-of-way, four lane roads within 30-45 metre (100-150 feet) rights-of-way and six lane roads within 36-50 metre (120-165 feet) rights-of-way in urban and rural settings. |

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| 5.6.4.2.9 | Notwithstanding the right-of-way widths identified on Schedule F, ensure that future road widenings within the Niagara Escarpment Plan Area are consistent with the policies of the Niagara Escarpment Plan. |
| 5.6.4.2.10 | Control frontage <i>development</i> and vehicular access onto Regional roads consistent with relevant Regional By-laws. |
| 5.6.4.2.11 | Control access to Regional roads so as to optimize traffic carrying capacity and control the number and location of intersections with Regional roads in consultation with the affected area municipality. |
| 5.6.4.2.12 | Protect residential <i>development</i> adjacent to Regional roads from vehicular noise through appropriate noise mitigating, planning and design, and by ensuring the provision of appropriate noise attenuation measures at the time of <i>development</i> . |
| 5.6.4.2.13 | Determine the priority for improvements to the Regional road system periodically in the context of monitoring reports, system status reports, studies on growth and other indicators related to the Regional Structure, in consultation with the area municipalities. |
| 5.6.4.2.14 | Implement, in co-operation with the area municipalities and the province, the <i>Region of Peel's High Occupancy Vehicle (HOV) Network 2021</i> , as shown on Figure 5 in the Appendix, on Regional roads and encourage the area municipalities to implement HOV facilities on roads under their jurisdiction. |
| 5.6.4.2.15 | Work with the area municipalities to integrate the <i>High Occupancy Vehicle (HOV) system</i> shown on Figure 5 in the Appendix with neighbouring municipalities. |
| 5.6.4.2.16 | Encourage the area municipalities to identify and integrate a network of <i>bicycle routes</i> and lanes in greenbelts and along local streets. Where necessary, <i>bicycle routes</i> along Regional roads may be considered where they provide essential linkages to the local <i>bicycle route</i> network. <i>Bicycle routes</i> along Regional roads should be separated from motorized traffic travel lanes to satisfy safety and road <i>transportation capacity</i> considerations. |
| 5.6.4.2.17 | Investigate, in concert with the on-going <i>GTA Transportation Plan Study</i> and/or inter-regional transportation planning studies, and with the Ministry of Transportation of Ontario and appropriate municipalities, the need and demand for an east-west transportation corridor north of Highway 407. |
| 5.6.4.2.18 | Study the need and demand for a future alternate route around Caledon Village in consultation with the Town of Caledon and the province. |
| 5.6.4.2.19 | Identify Conceptual Corridors for the Bolton Rural Service Centre as shown on Schedule E. |
| 5.6.5 | Inter- and Intra-Regional Transit Network |
| | <p>Inter-regional transit for municipalities in the <i>Greater Toronto Area</i> and vicinity is in part provided by the Government of Ontario's "<i>GO</i>" <i>Commuter Rail</i> and <i>Bus services</i>, with some limited private carrier service. In <i>Peel</i>, the City of Brampton and the City of Mississauga provide municipal transit <i>services</i>, with connections to the Toronto Transit Commission (TTC), other neighbouring municipal transit <i>services</i> and the <i>GO Transit</i> system. In the future, it is anticipated that both inter- and intra-regional transit <i>services</i> will be operated within <i>Peel</i> on provincial freeways and highways, and on <i>major roads</i>, as buses in mixed traffic, on <i>High Occupancy Vehicle (HOV) lanes</i>, on <i>reserved buslanes</i> and on <i>transitways</i>.</p> <p>It is recognized that the existing road network, even with additions and expansions, will not accommodate the long-term travel demands of the projected population and</p> |

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| | <p>employment base at an acceptable <i>level of service</i>. A <i>significant</i> portion of trips will have to be accommodated by <i>public transit</i> to reduce the growth rate of the number of private automobiles using the road network. Fare integration and service co-ordination of local municipal transit systems and other transit systems would help reduce automobile traffic in <i>Peel</i> and the <i>GTA</i>, and would provide commuters with a viable alternative to the car. An integrated transit system would assist in reducing the impact of automobiles on the natural environment.</p> <p>The demand for transit travel that crosses <i>Peel's</i> local and regional municipal boundaries needs to be met and enhanced through effective co-ordination in planning and implementation by all levels of government.</p> |
| 5.6.5.1 | Objectives |
| 5.6.5.1.1 | To <i>support</i> and encourage a higher use of <i>public transit</i> and an increase in <i>transit modal share within the region</i> . |
| 5.6.5.1.2 | To encourage an economically feasible, effective, efficient and safe inter- and intra-regional transit network. |
| 5.6.5.1.3 | To encourage greater <i>public transit</i> accessibility to the Lester B. Pearson International Airport. |
| 5.6.5.1.4 | To <i>support</i> and encourage transit-supportive <i>development</i> densities and patterns particularly along <i>major bus transit corridors</i> . |
| 5.6.5.2 | Policies |
| 5.6.5.2.1 | <i>Support</i> the implementation of the <i>High Order Transit</i> Network, as shown on Schedule G, and protect the right-of-way. Any changes to the <i>High Order Transit</i> Network shown on Schedule G will require an amendment to this Plan. |
| 5.6.5.2.2 | Encourage the area municipalities to designate in their official plans transit strategies which <i>support</i> the <i>High Order Transit</i> Network shown on Schedule G, and protect the necessary local road rights-of-way. The area municipalities may show in their official plans other transit routes and facilities in addition to those shown on Schedule G. |
| 5.6.5.2.3 | Encourage the area municipalities to achieve a minimum target of 20% Peak Period modal split within the Urban System served by transit by 2021. |
| 5.6.5.2.4 | Request the province to plan, protect and construct a <i>transitway</i> along or adjacent to the Highway 407 corridor. |
| 5.6.5.2.5 | <p>Request the province to improve the level of GO <i>commuter rail</i> and bus service through and to <i>Peel</i>, and in particular:</p> <p>a) to maintain and improve existing GO <i>commuter rail</i> stations and provide the proposed GO <i>commuter rail</i> line and stations, as shown on Schedule G, as <i>development</i> and <i>redevelopment</i> occurs;</p> <p>b) to provide all-day two-way GO <i>commuter rail</i> service on the Milton and Georgetown lines as soon as possible;</p> <p>c) to improve the frequency of service on the Lakeshore GO <i>commuter rail</i> line; and</p> <p>d) to provide GO service on other rail lines and increased inter-municipal/inter-regional GO bus service in corridors where there is sufficient demand.</p> |

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| 5.6.5.2.6 | Provide preferential treatment for transit vehicles on Regional roads, when and where appropriate. 5.6.5.2.7 Integrate the Regional special needs transit service (Transhelp) with similar <i>services</i> provided by neighbouring municipalities. |
| 5.6.5.2.8 | Participate with the area municipalities, the province and neighbouring municipalities in the planning and development of an inter-regional transit network. |
| 5.6.5.2.9 | <i>Support</i> transit stations and terminals in urban nodes and corridors, as identified in this Plan and the <i>area municipal official plans</i> . |
| 5.6.5.2.10 | <i>Support</i> the fare integration and service co-ordination of transit <i>services</i> , especially at transfer points, within <i>Peel</i> with <i>services</i> in neighbouring municipalities and with GO Transit. |
| 5.6.5.2.11 | Encourage the area municipalities, in co-operation with <i>the Region</i> and having regard for the Provincial Guidelines for Transit Supportive Land Uses to plan for intra-regional transit connections and to integrate transit plans into secondary plans. |
| 5.6.5.2.12 | <i>Support</i> gateways and interconnections between the local bus network and future <i>transitways</i> , especially at Regional Urban Nodes. |
| 5.6.5.2.13 | Pursue improved transit service to the Lester B. Pearson International Airport, initially through express bus connections to the GO <i>commuter rail</i> service and eventually through a rapid transit connection to the Mississauga Transitway, the Eglinton West Rapid Transit facility and the Georgetown GO Rail line on alignments to be determined through the Environmental Assessment process. Alignments and technologies for rapid transit <i>services</i> to Pearson International Airport must be the subject of further studies to be co-ordinated with the Ministry of Transportation of Ontario and involving all affected municipalities. The Lester B. Pearson International Airport Master Plan must make provision for these and other connections to the local and regional transit <i>services</i> , especially to the west. |
| 5.6.5.2.14 | <i>Support</i> improved passenger service to the Lester B. Pearson International Airport through the integration of taxi, mini bus and other forms of ground transportation. |
| 5.6.5.2.15 | <i>Support</i> provincial, municipal and privately run transit <i>services</i> to rural communities, where feasible. |
| 5.6.5.2.16 | Investigate with the area municipalities, at an appropriate time in the future, the need, feasibility and implications of a regionally integrated transit system. |
| 5.6.6 | Airports |
| | <p>Lester B. Pearson International Airport (L.B.P.I.A.) is an important element of <i>infrastructure</i> in the <i>Greater Toronto Area</i>. L.B.P.I.A. is a <i>significant</i> generator of positive economic benefits and is directly responsible for attracting a broad range of industries and businesses to the <i>Region of Peel</i> and the <i>Greater Toronto Area</i>.</p> <p>The presence of L.B.P.I.A. within the Region of Peel provides both opportunity and responsibility. It provides national and international transportation linkages, creates <i>significant</i> employment and generates many direct and indirect economic benefits.</p> <p>Because of its significance, it is a priority of this Plan to ensure that new <i>development</i> is compatible with Airport operations and allows the Airport to function efficiently while recognizing approved land uses and other considerations. In addition to the role of Lester B. Pearson International Airport, consideration should be given to the potential for The Brampton Flying Club airport to become of greater significance in <i>Peel</i> and the <i>GTA</i> over the next 30 years.</p> |
| 5.6.6.1 | Objectives |

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| 5.6.6.1.1 | To optimize the full economic potential of Lester B. Pearson International Airport and The Brampton Flying Club airport to the <i>Region of Peel</i> and the <i>GTA</i> having regard for: a) existing and future industry, business and employment opportunities; and b) the interests of existing and future residents. |
| 5.6.6.1.2 | To <i>support</i> the recreational opportunities of airports in <i>Peel</i> where appropriate. |
| 5.6.6.2 | Policies |
| 5.6.6.2.1 | <i>Support</i> the improvement and enhancement of the facilities, access to and capacity of the Lester B. Pearson International Airport, taking into account the concerns of existing and future residents of <i>Peel Region</i> , to maintain the importance of the Airport to the <i>Region of Peel</i> , the <i>Greater Toronto Area</i> , the province and Canada. |
| 5.6.6.2.2 | Study <i>jointly</i> , with the Town of Caledon, and in consultation with the City of Brampton, the potential role of The Brampton Flying Club airport. |
| 5.6.6.2.3 | Protect the Lester B. Pearson International Airport (L.B.P.I.A.) Operating Area to ensure that development adjacent to the Airport is compatible with airport operations and the needs of residents. |
| 5.6.6.2.4 | Prohibit the development, redevelopment and infill of new residential and sensitive land uses specifically, hospitals, nursing homes, daycare facilities and public and private schools in L.B.P.I.A Operating Area outlined on Schedule “H”. |
| 5.6.6.2.5 | Direct the Cities of Mississauga and Brampton, in consultation with the Greater Toronto Airports Authority and the Region, to include in their official plans: i) Airport Operating Area policies consistent with Policy 5.6.6.2.4; ii) Definitions and illustrations of the areas to which the Airport Operating Area policies apply; and iii) Definitions of the term sensitive land uses, redevelopment and infill. |
| 5.6.6.2.6 | Direct the Cities of Mississauga and Brampton, in consultation with the Greater Toronto Airports Authority and the Region, to define specific exceptions to Policy 5.6.6.2.4 in the municipal official plan, which may be considered for Malton, Meadowvale Village and East Credit, within the L.B.P.I.A. Operating Area subject to: i) Prohibit, above the 35 NEF/NEP contour, development, redevelopment or infilling which increases the number of dwelling units, and development, redevelopment and infill for new sensitive land uses, specifically hospitals, nursing homes, daycare facilities and public and private schools; ii) Define the areas to which the exceptions would apply; and, iii) Requiring that MOE acoustical design standards be met. |
| 5.6.6.2.7 | Update Figure 6 in the Appendix with the latest provincially issued Aircraft Noise Exposure Contours, as they become available. |
| 5.6.7 | Goods Movement |

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| | The safe and efficient movement of goods on rail and road networks is an important component of a regional economy in attracting and retaining a range of industries and businesses. The existing and proposed 400 series provincial freeway network, the 407 tollway, the <i>major road</i> network and inter-modal rail facilities are all important components of the transportation system in <i>Peel</i> for the movement of goods. |
| 5.6.7.1 | Objective |
| 5.6.7.1.1 | To facilitate the safe and efficient movement of goods within <i>Peel</i> and between <i>Peel</i> and neighbouring municipalities. |
| 5.6.7.2 | Policies |
| 5.6.7.2.1 | Work with other levels of government, agencies and the private sector to minimize the risks and help ensure the safe and efficient movement of goods by either rail or road in <i>the region</i> . |
| 5.6.7.2.2 | <p><i>Support</i> a safe and efficient railway network by:</p> <ul style="list-style-type: none"> a) recognizing the importance of <i>the Region's</i> rail classification facilities as key components of the rail network; b) securing grade separation of railways and <i>major roads</i>, where warranted, in co-operation with the Canadian Transportation Agency and railways; and c) ensuring that noise, vibration and safety issues are addressed for land uses adjacent to railway corridors and terminal facilities. |

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| Nodes and Corridors | |
| 78. | The objectives of Nodes and Corridors are: |
| 78(1) | <ul style="list-style-type: none"> • To provide an urban form that is complementary to existing developed areas, uses space more economically, promotes live-work relationships, fosters social interaction, enhances public safety and security, reduces travel by private automobile, promotes cycling and walking, and is environmentally more sustainable. |
| 78(2) | <ul style="list-style-type: none"> • To provide opportunities for more cost-efficient and innovative urban design. |
| 78(3) | <ul style="list-style-type: none"> • To provide a range of employment opportunities, facilities and services in centralized locations that is readily accessible by public transit. |
| 78(4) | <ul style="list-style-type: none"> • To promote a greater mix of land uses. |
| 78(5) | <ul style="list-style-type: none"> • To create a vibrant, diverse and pedestrian-oriented urban environment. |
| 79. | Nodes and Corridors are areas designated in Regional and/or Local Official Plans that exhibit or will exhibit the following characteristics: |
| 79(1) | <ul style="list-style-type: none"> • presence of both residential and employment lands that would allow residents to live and work within the Node or along the designated Corridor; |
| 79(2) | <ul style="list-style-type: none"> • an appropriate mix of various land uses without a single dominant land use or form; |
| 79(3) | <ul style="list-style-type: none"> • an urban design that favours pedestrian traffic and public transit over the private automobile; |

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| 79(4) | <ul style="list-style-type: none"> • their strategic location on the inter-municipal/inter-regional rapid transit network; |
| 79(5) | <ul style="list-style-type: none"> • development densities and patterns supportive of a high level of transit service; and |
| 79(6) | <ul style="list-style-type: none"> • an open space system that complements and enhances the urban environment. |
| 80. | Nodes may be Primary Nodes or Secondary Nodes. Primary Nodes are those of Regional scale and complementary to the development of the inter-regional rapid transit network. The general locations of Primary Nodes are shown on Map 1. Local Official Plans will designate the locations of Secondary Nodes and Corridors. |
| 81. | It is the policy of the Region to: |
| 81(4) | Require Secondary Plans for Nodes and Corridors to include: <ol style="list-style-type: none"> a) guidelines for the integration of local transit services with the road network and the inter-municipal/inter-regional rapid transit network; and b) urban design guidelines to promote transit supportive land uses in Nodes and Corridors in accordance with Regional standards under Section 81(5). |
| 81(5) | Adopt alternative design standards for Major Arterial Roads through Nodes and along Corridors to promote pedestrian-oriented development and transit-friendly facilities while maintaining the mobility function of the Major Arterial Road. |
| 81(8) | Encourage the local municipalities to adopt parking standards and policies within Nodes and Corridors to promote the use of public transit. |
| Parkway Belt Areas | |
| 82. | The objectives of the Parkway Belt Areas are: |
| 82(1) | To direct into one area as many as possible of the major transportation, communication and utility facilities and ancillary uses that link urban areas to each other and connect them to areas beyond. |
| 82(2) | To provide land reserves to accommodate future linear facilities whose nature, demand or land needs cannot be set out specifically at the date of approval of this Plan. |
| 82(3) | To provide physical, identifiable boundaries to urban areas by including such linear facilities as major transportation, communication and utility facilities. |
| 82(5) | To locate major transportation, communication and utility rights-of-way so that they do not cut through urban communities. |
| 83. | Subject to other policies of this Plan and applicable Local Official Plan policies and Zoning Bylaws, the following uses may be permitted: |
| 83(8) | <ul style="list-style-type: none"> • linear transportation, communication, and utility facilities, including necessary accessory facilities and installations such as interchanges, transformer stations, and treatment plants that are part of the linear distribution or collection networks. |
| Transportation | |
| 173. | It is the policy of the Region to: |
| 173(1) | <ul style="list-style-type: none"> • Adopt a Functional Plan of Major Transportation Facilities, as shown on Map 3 and described in Table 3, for the purpose of meeting travel demands for year 2021 as well as protecting key components of the future transportation system to meet travel demands beyond year 2021. |
| 173(2) | <ul style="list-style-type: none"> • Ensure that the development of the transportation system in and around Halton |

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| | supports the development of Nodes and Corridors. |
| 173(3) | <ul style="list-style-type: none"> Encourage the respective agencies having jurisdiction over any major transportation facilities of regional significance in Halton, including but not necessarily limited to those shown in Map 3, to have regard to the contents of Table 3 of this Plan and to consult the Region in the planning, design and construction of such facilities. |
| 173(4) | <ul style="list-style-type: none"> Adopt a Right-of-Way Plan of Arterial Roads, as shown on Map 4, for future highway widenings for transportation purposes. |
| 173(6) | <ul style="list-style-type: none"> Adopt a set of Highway Dedication Guidelines to guide the specific application of Section 173(5). Development process under Section 173(5) includes plans of subdivision and condominium, part-lot control applications, consents, re-zonings, site plan agreements, minor variances, and Parkway Belt and Niagara Escarpment applications. |
| 173(7) | <ul style="list-style-type: none"> In conjunction with the province and the local municipalities , establish, and require proposed developments to comply with, minimum setback standards, parking provision policies, access control policies, and other design criteria on major transportation facilities in Halton consistent with the function and design guidelines of these facilities as described in Table 3. |
| 173(8) | <ul style="list-style-type: none"> In conjunction with the local municipalities , restrict access of land uses to Arterial Roads in accordance with Council-adopted access management policies that balance providing access to land uses, meeting urban design objectives within Nodes and Corridors and maintaining a satisfactory level of service for traffic on the Arterial Road. |
| 173(10) | <ul style="list-style-type: none"> Co-ordinate with the province and the local municipalities the planning, development and funding of both highway and inter-regional rapid transit projects in Halton to ensure the provision of a balanced transportation system with a satisfactory level of service. |
| 173(12) | <ul style="list-style-type: none"> Promote and support travel demand management initiatives, including the formation of a Regional transportation management association, to reduce travel by single-occupancy vehicles and to reduce congestion on Halton’s transportation network. |
| 173(13) | <ul style="list-style-type: none"> Require, in the planning and design of Arterial Roads in Halton, the consideration of incorporating transportation supply management facilities and/or measures that would maximize network efficiency, give priority to transit vehicles, and increase safety. |
| 173(14) | <ul style="list-style-type: none"> In co-operation with the province and local municipalities , develop and adopt a strategic plan for implementing intelligent transportation systems, including action plans for emergency road closures, in Halton’s transportation network. |
| 173(15) | <ul style="list-style-type: none"> In conjunction with the local municipalities , identify and implement a network of high-occupancy-vehicle lanes on Arterial Roads in Halton that would integrate with other provincial and municipal networks. |
| 173(23) | <ul style="list-style-type: none"> Participate with other municipalities in the Greater Toronto Area and the City of Hamilton in the planning and development of an interregional transportation network, including a rapid transit system throughout the Greater Toronto Area and into the City of Hamilton. In particular, the Region, in consultation with the Town of Halton Hills, will participate with the Region of Peel and the province where necessary, in a study to identify the long term transportation and transit network requirements and other |

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| | <p>transportation solutions along the north Halton/Peel boundary. That study is intended to be completed on a timely basis and may lead to an amendment to this.</p> <ul style="list-style-type: none"> • Plan and other appropriate implementation mechanisms. |
| 173(24) | <ul style="list-style-type: none"> • Support and invest, in partnership with the province and other upper tier or single tier municipalities in the Greater Toronto/Hamilton Area, in the continuous enhancement of the provincial GO transit network. |
| 173(25) | <ul style="list-style-type: none"> • Secure, through the development process and/or strategic property acquisitions, the necessary rights-of-way and sites for stations and inter-modal transfer centres for the implementation of an inter-municipal/inter-regional rapid transit system within Halton as shown in Map 3. |
| 173(26) | <ul style="list-style-type: none"> • In developing and implementing an inter-municipal/inter-regional rapid transit system in Halton as shown in Map 3, consider: <ul style="list-style-type: none"> ○ the mid-Halton corridor of Highway 407 and Dundas Street as the highest priority; ○ the two north-south corridors of Appleby Line and Trafalgar Road as the next priorities to complement the mid-Halton corridor; and ○ site acquisition and early development of the two Regional Intermodal Transfer Centres at Highway 401/Highway 407 and Regional Road 25/Highway 407/Dundas Street areas as essential components of the rapid transit infrastructure in Halton. |
| 173(27) | <ul style="list-style-type: none"> • Seek provincial and federal funding and advocate other revenue sources to support strong local transit systems characterized by: <ul style="list-style-type: none"> ○ a good state of repair; ○ excellent feeder services to the inter-municipal/inter-regional rapid transit network; and ○ timely services for new and existing communities. |
| 173(28) | <ul style="list-style-type: none"> • Investigate, jointly with the local municipalities and the province, the integration of fare and service between local transit systems and between local and provincial systems, including the need for and feasibility of a single transit operating authority in Halton. |
| 173(29) | <ul style="list-style-type: none"> • Encourage and support the adaptation of local and provincial transit systems to make them fully accessible to persons with physical disabilities. |
| 173(30) | <ul style="list-style-type: none"> • Support, through co-ordination and/or provision, a transportation service for Halton residents who, because of physical, developmental and/or medical conditions, cannot utilize the conventional transit services even after their adaptation for persons with physical disabilities. |
| 173(31) | <ul style="list-style-type: none"> • Support the provision of a safe and efficient railway network by: <ul style="list-style-type: none"> ○ securing grade separations of railways and Arterial Roads where warranted; ○ supporting the continuous monitoring and necessary actions to improve the safety of the movement of dangerous goods by rail; and ○ ensuring, where possible, compatible land uses adjacent or in proximity to railway corridors and terminal facilities including railway yards. |
| 173(32) | <ul style="list-style-type: none"> • Require proposed development adjacent or in proximity to railway lines/yards or |

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| | within railway right-of-way to ensure that appropriate safety measures such as setbacks, berms and security fencing are provided to the satisfaction of the Region and the Local municipality to mitigate any safety concerns by the railway agency and/or abutting residents. |
| 173(33) | <ul style="list-style-type: none"> • Investigate, jointly with municipalities in the Greater Toronto Area and the City of Hamilton, the following issues related to air transportation: <ul style="list-style-type: none"> ○ existing operational deficiencies of the system of airports in or near the Greater Toronto Area; ○ Halton's role in a local airport authority; ○ the role of Burlington Air Park, as identified by symbol on Map 3, in Halton and within the Greater Toronto Area airport system, taking into account social, economic and environmental impact; ○ options for maximizing the utilization of John C. Munro HIA; and ○ improved highway and transit access to Lester B. Pearson International Airport and HIA. |
| 173(34) | <ul style="list-style-type: none"> • Review and comment on any proposal of water transportation service for commuters based on its compatibility with the goals, objectives and policies of this Plan. |

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| 3. | Healthy Communities |
| 3.2 | Air Quality and Climate Change |
| 3.2 (3) | To reduce vehicle emissions by ensuring that communities are designed to prioritize pedestrians and cyclists, reduce single occupancy automobile use, and support public transit and transportation demand management initiatives. |
| 3.3 | Provision of Human Services |
| 3.3 (5) | To ensure that public buildings and facilities are designed to be accessible, and are located in proximity to pedestrian, cycling and transit systems. |
| 3.4 | Cultural Heritage |
| 3.4 (9) | To encourage access to core historic areas by walking, cycling and transit, and to ensure that the design of vehicular access and parking complements the historic built form. |
| 3.5 | Housing Our Residents |
| 3.5 (14) | To encourage that <i>special needs housing</i> , and emergency, <i>affordable</i> , and seniors' housing be located in proximity to rapid transit and other human services. |
| 4. | Economic Vitality |
| 4.2 | City Building |
| 4.2 (4) | To require a mixed-use pedestrian environment in Regional Centres and Corridors that promotes transit use and enhances these areas as destinations for business, entertainment and recreation. |
| 4.3 | Protecting Employment Lands |
| 4.3 (13) | That employment land development be designed to be both walkable and transit accessible where possible. |

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| 4.4 | Planning for Retail |
| 4.4 (1) | To require that new retail be designed to be walkable, transit-supportive, and integrated into communities and pedestrian and cycling networks, with high-quality urban design. |
| 4.4 (9) | That new retail facilities in excess of 30,000 gross leasable square metres shall require a Regional impact analysis that addresses the following: a. transportation requirements; c. pedestrian, cycling and transit access to the facilities. |
| 4.5 | Financial Management |
| 4.5 (11) | To advocate for revisions to the Development Charges Act for the recovery of costs that place greater emphasis on projected service levels, particularly for those service areas that are maturing or have had historically lower levels of capital investment, such as transit and emergency medical services. |
| 4.5 (14) | To require that an economic/fiscal impact analysis be completed for secondary plans, comprehensive plans and any other significant proposal, as determined by the Council. This analysis shall be co-ordinated between the Region and local municipalities, boards and agencies and shall include but not be limited to: a. an assessment of Regional service costs including transportation, water, wastewater, police, community and health services. |
| 5. | An Urbanizing Region: Building Cities and Complete Communities |
| 5.1 | Forecasting and Phasing Growth |
| 5.1 (6) | To require local municipalities to develop a phasing plan for <i>new community areas</i> that is co-ordinated with the following Regional plans and policies: e. the York Region Transportation Master Plan. |
| 5.1 (9) | To require local municipalities to prepare detailed sequencing plans within each secondary plan that are supported by water, wastewater and transportation infrastructure, and the provision of human services. |
| 5.1 (11) | That the forecasts in Table 1 be monitored annually and reviewed at least every 5 years, taking the following into account: d. York Region Transportation Master Plan. |
| 5.2 | Sustainable Cities, Sustainable Communities |
| 5.2 (3) | That communities be designed to ensure walkability through interconnected and accessible mobility systems. These systems will give priority to pedestrian movement and transit use, provide pedestrian and cycling facilities, and implement the York Region Pedestrian and Cycling Master Plan. |
| 5.2 (4) | That <i>development</i> requiring Regional approval shall be supported by a transportation study that assesses the impacts on the Region's transportation system and surrounding land uses. Significant <i>development</i> shall prioritize walking, cycling and transit. |
| 5.2 (8) | To employ the highest standard of urban design, which: g. follows the York Region Transit-Oriented Development Guidelines. |
| 5.2 (9) | That retail, commercial, office, and institutional structures be carefully designed in a compact form and be pedestrian-oriented, transit-supportive, and multi-storey where appropriate. |
| 5.2 (10) | That secondary plans and zoning by-laws shall, in consultation with the Region and related agencies, incorporate parking management policies and standards that include: a. reduced minimum and maximum parking requirements that reflect the walking distance to transit and complementary uses. |
| 5.2 (40) | To work with local communities and the building and land development industry to provide each resident, worker, and employer with information on the sustainability features of their communities including water and energy conservation, transit |

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| | information, ride share, car share, and carpooling options. |
| 5.3 | Intensification |
| 5.3 (3,b) | Identify the role for each of the following: ii. GO Transit trains stations, bus terminals, and subway stations; iv. other major streets. |
| 5.3 (4) | That the distance to a transit stop be generally no more than 500 metres (a 5-to10 minute walk) for 90% of the residents and no more than 200 metres for 50% of residents. |
| 5.3 (5) | That <i>intensification</i> areas are planned and designed to meet: a. the York Region Transit-Oriented Development Guidelines. |
| 5.3 (11) | That human services facilities be located in close proximity to public transit. |
| 5.4 | Regional Centres and Corridors |
| 5.4 (5) | That <i>development</i> within Regional Centres and Corridors be of an urban form and design that is compact, mixed-use, oriented to the street, pedestrian- and cyclist-friendly, and transit-supportive. |
| 5.4 (6) | That comprehensive secondary plans for Regional Centres and <i>key development areas</i> along Regional Corridors be prepared by local municipalities and implemented in co-operation with the Region and related agencies. These secondary plans shall include: d. a concentration of the most intensive <i>development</i> and greatest mix of uses within a reasonable and direct walking distance of rapid transit stations and/or planned subway stations; f. policies that sequence <i>development</i> in an orderly way, co-ordinated with the provision of human services, transit and other infrastructure. |
| 5.4 (8) | That secondary plans and zoning by-laws shall, in consultation with the Region and related agencies, incorporate parking management policies and standards that include: a. reduced minimum and maximum parking requirements that reflect the walking distance to transit and complementary uses. |
| 5.4 (12) | To prepare, in consultation with local municipalities, a comprehensive and innovative suite of implementation guidelines for the Regional Centres and Corridors. The guidelines will address: a. transit-oriented development. |
| 5.4 (14) | To require innovative approaches for the delivery of infrastructure that support city building in Regional Centres and Corridors, including: a. working with utility providers to ensure appropriate utility design and placement, including burying cables and structures, consistent with Transit-Oriented Design guidelines for Regional Centres and Corridors; and, b. transit and surface and subway infrastructure, including transformer stations, vent shafts, turning loops, transit stations and emergency exits. |
| 5.4 (15) | To require local municipalities to adopt official plan policies and related zoning by-law provisions, to provide community benefits in Regional Centres and Corridors in exchange for additional height and density, consistent with the Increased Density provision of the Planning Act. Community benefits shall include consideration of: a. transit station improvements, in addition to lands required as a condition of development approval; c. direct pedestrian connections to transit stations. |
| 5.4 (20) | That the planning and implementation of Regional Centres will provide: c. mobility choices and associated facilities for all residents and employees for walking, cycling, transit, and carpooling, which shall be supported through the preparation of a mobility plan; f. sequencing of <i>development</i> that is co-ordinated with infrastructure availability, including transportation, water and wastewater, and human services. |
| 5.4 (28) | That Regional Corridors are planned to function as urban main streets that have a compact, mixed-use, well-designed, pedestrian-friendly and transit-oriented built form. |

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| 5.4 (31) | That the most intensive and widest range of uses within the Regional Corridors be directed to specific <i>intensification</i> areas, identified by local municipalities as <i>key development areas</i> . These areas shall include the following segments of the Regional Corridor: a. lands within a reasonable and direct walking distance from all planned subway stations, and select rapid transit stations as identified by local municipalities; b. major transit areas immediately adjacent to transit stations and terminals, including GO Transit. |
| 5.4 (32) | That secondary plans, consistent with criteria in policy 5.4.6, shall be prepared by local municipalities for the following key development areas: a. all planned subway stations outside of Regional Centres; b. lands immediately adjacent to transit terminals, including GO Transit terminals and key gateway hubs. |
| 5.4 (33) | That minimum densities for <i>key development areas</i> be established in secondary plans, consistent with: a. a 3.5 <i>floor space index</i> per development block at, and adjacent to, the Steeles West Station on the Spadina Subway Extension, and the Steeles Station on the Yonge Subway Extension; b. a 2.5 <i>floor space index</i> per development block at, and adjacent to, the 407 Transitway Station on the Spadina Subway Extension, and the Clark and Royal Orchard Stations on the Yonge Subway Extension; and c. an appropriate <i>floor space index</i> per development block for lands at or adjacent to other rapid transit stations and/or other select areas, as determined by the local municipality, in consideration of community context and character. |
| 5.4 (35) | To consider extensions to existing Regional Corridors, and the designation of new Regional Corridors, in consultation with local municipalities and based on the following: b. opportunities for the extension of well-planned and transit-supportive intensification; and, c. the introduction of new or expanded rapid transit services to Regional streets. |
| 5.5 | Local Centres and Corridors |
| 5.5 (3,i) | That land use and transit is co-ordinated to ensure that Local Centres are focal points for current and/or future public transit services and infrastructure and that they prioritize pedestrian movement, transit use and access. |
| 5.5 (4,c) | That new employment uses be generally located within 200 metres of transit stops. |
| 5.5 (6) | That Local Corridors located on existing or planned rapid transit corridors consider the Regional Corridor policies of Section 5.4 of this Plan. |
| 5.6 | Building Complete, Vibrant Communities |
| 5.6 (5) | That <i>new community</i> areas shall be designed to contain community core areas, which will be the focus of local retail, personal services, human services, community services and provide connections to rapid transit. The community cores shall be within a reasonable walking distance from the majority of the population. |
| 5.6 (12) | That mobility plans shall be completed to ensure that: a. communities are designed to have interconnected and accessible mobility systems, with a priority on pedestrian movement, and on transit use and access; b. communities are designed to include a system of pedestrian and bicycle paths linking the community internally and externally to other areas, and providing access to the transit system; c. a transit plan is completed in consultation with York Region Transit, which identifies transit routes and corridors, co-ordinates transit with land use patterns and ensures the early integration of transit into the community; d. the distance from a transit stop is generally no more than 500 metres for 90% of the population, and no more than 200 metres for 50% the population; e. all schools and communities centres shall be integrated into the community mobility system and provide the ability to walk, cycle, transit and carpool |

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| | to these locations; f. the street network includes continuous collector streets that run both north-south and east-west and/or a grid system of streets linked to the Regional Street network; g. <i>new community areas</i> are designed to meet the York Region Transit-Oriented Development Guidelines; h. a rapid transit corridor and/or transit terminal that connects to a rapid transit corridor is included in the community; i. parking standards, consistent with policy 5.2.10, encourage and support transit use and include reduced minimum and maximum parking standards; and, j. trip-reduction strategies consistent with the policies of Section 7.1 are promoted. |
| 5.6 (13) | That <i>new community areas</i> shall be designed to implement the York Region Pedestrian and Cycling Master Plan. |
| 6. | Agricultural and Rural Areas |
| 6.1 | The Greenbelt Plan |
| 6.1 (7) | That transportation, infrastructure and utilities are permitted in the Greenbelt Plan Area, in all land use designations shown on Map 8, and <i>key natural heritage features and key hydrologic features</i> , where the provisions of the Greenbelt Plan have been met. Demonstrated need for a project and conformity with the Greenbelt Plan will be assessed and included as part of an Environmental Assessment Act process. If an Environmental Assessment Act process does not apply, the requirements of the Greenbelt Plan will be met through Planning Act, Condominium Act, Local Improvement Act processes, or other applicable approval processes. |
| 6.2 | The Oak Ridges Moraine Conservation Plan |
| 6.2 (16) | That transportation infrastructure and utilities are permitted in all Oak Ridges Moraine land use designations, and <i>key natural heritage features and key hydrologic features</i> , where the Infrastructure provisions of the Oak Ridges Moraine Conservation Plan have been met. Demonstrated need for a project and conformity with the Oak Ridges Moraine Conservation Plan will be assessed and included as part of an Environmental Assessment Act process. If an Environmental Assessment Act process does not apply, the requirements of the Oak Ridges Moraine Conservation Plan will be met through Planning Act, Condominium Act, Local Improvement Act processes, or other applicable approval processes. The opening of a street within an unopened street allowance is prohibited unless all other requirements of the Oak Ridges Moraine Conservation Plan are met. |
| 7. | Servicing Our Population |
| 7.1 | Reducing the Demand for Services |
| 7.1 (1) | To require that appropriate transportation demand management measures to reduce single occupancy automobile trips are identified in transportation studies and in <i>development applications</i> . |
| 7.1 (2) | To work with local municipalities, Metrolinx and other stakeholders to support local Smart Commute associations. |
| 7.1 (3) | To manage the supply of parking in Regional Centres and Corridors, consistent with the policies in Section 5.4 of this Plan. |
| 7.1 (4) | To investigate establishing a Regional Parking Authority or municipal parking authority framework in conjunction with local municipalities. |
| 7.1 (5) | To work with local municipalities to develop a co-ordinated approach to parking and parking management, consistent with the parking policies in Chapter 5 of this Plan. |
| 7.1 (6) | To work with local municipalities to update the York Region Transit-Oriented Development Guidelines to provide greater emphasis on trip reduction and to identify |

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| | key benchmarks and targets. |
| 7.1 (7) | To require new <i>development</i> applications to demonstrate that the <i>development</i> meets or exceeds the York Region Transit-Oriented Development Guidelines. |
| 7.1 (8) | To work with developers to provide all new-home buyers with information on available pedestrian, cycling and transit facilities and carpooling options within the community, including local transit routes and schedules. |
| 7.1 (9) | To require that new institutional, commercial and industrial <i>development</i> applications include a transit demand strategy that considers preferential carpool parking, bicycle facilities, employee transit passes, and alternative work arrangements. |
| 7.1 (10) | To work with institutional, commercial and industrial employers to undertake transit demand strategies to encourage preferential carpool parking, bicycle facilities, employee transit passes, and alternative work arrangements. |
| 7.1 (11) | To require local municipalities to adopt land use and site design policies that promote alternative modes of transportation, including walking, cycling, transit, and carpooling. |
| 7.1 (12) | To implement transit pass bulk-buying programs for employers and to encourage employers to provide transit passes in lieu of parking. |
| 7.1 (13) | To partner with the Province and Metrolinx to provide transit services to carpool lots along 400-series highways. |
| 7.1 (14) | To promote, in partnership with Smart Commute, employer-based initiatives and policies that reduce the need for peak-period trips, including alternative work arrangements, transit incentives, and carpooling. |
| 7.1 (15) | To encourage retailers and community facilities to provide discounts and incentives to those using transit and active forms of transportation. |
| 7.1 (16) | To develop a discounted university and college transit pass program with educational institutions. |
| 7.1 (17) | To partner with Metrolinx, the private sector and non-governmental agencies to deliver real-time information on commuting options. |
| 7.1 (18) | To explore leverage opportunities for funding from the Province and Federal government, as well as from other funding sources, for transportation demand management measures and programs. |
| 7.2 | Moving People and Goods |
| | Active Transportation |
| 7.2 (1) | To implement the Regional Cycling Network shown on Map 10. |
| 7.2 (2) | To update the York Region Pedestrian and Cycling Master Plan at least every 5 years, concurrent with the 5-year review of this Plan. |
| 7.2 (3) | To apply the York Region Pedestrian and Cycling Master Plan's Planning and Design Guidelines in the implementation of the Regional pedestrian and cycling network. |
| 7.2 (4) | To develop an integrated Regional cycling network connecting people to places of recreation, services and employment and transit. |
| 7.2 (5) | To provide safe, comfortable and accessible pedestrian and cycling facilities that meet the needs of York Region's residents and workers, including children, youth, seniors and people with disabilities. |
| 7.2 (6) | To partner with local municipalities and other stakeholders to implement pedestrian and cycling programs. |
| 7.2 (7) | To partner with local municipalities to co-ordinate infrastructure within Regional rights-of-way for operating and capital components, including street lighting, sidewalks and cycling facilities. |

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| 7.2 (8) | To work with local municipalities to ensure that sidewalks and street lighting are provided on both sides of all local arterial and collector streets with transit services. |
| 7.2 (9) | To ensure the safe year-round operation of Regional pedestrian, cycling and transit facilities through design, signage, enforcement and effective maintenance. |
| 7.2 (10) | That the construction of proposed pedestrian and cycling routes will protect and enhance the Regional Greenlands System. |
| 7.2 (11) | To integrate pedestrian, cycling and transit activities through improvements such as bicycle racks and storage at transit stops, bicycle racks on buses, and improved access for pedestrians and bicycles at transit stops, stations and terminals. |
| 7.2 (12) | To encourage property owners to provide facilities such as benches, shelters and secure bicycle storage at major destinations, including employment, educational, institutional and shopping locations. |
| 7.2 (13) | To co-ordinate Regional and local pedestrian and cycling networks with trail connections to the Regional Greenlands System trails network, where appropriate. |
| 7.2 (14) | To develop and promote a continuous pedestrian and cycling path from Lake Simcoe to Lake Ontario in partnership with local municipalities and the City of Toronto. |
| 7.2 (15) | To encourage the development and implementation of local municipal pedestrian and cycling master plans. |
| 7.2 (16) | To partner with York Region District and Catholic School Boards to implement the Active and Safe Routes to School program, and to design and locate school campuses to promote walking, cycling and transit as a primary means of transportation. |
| 7.2 (17) | To work with the Province, Metrolinx and other partners to develop innovative programs that support active transportation, such as cycling safety training, education and information, bicycle sharing programs and bicycle libraries. |
| 7.2 (18) | To encourage the Province and Federal government to provide funding and tools to support the development and promotion of active transportation as part of a healthy, active lifestyle. |
| | Transit |
| 7.2 (19) | To recognize transit as a strategic investment priority and a key element of York Region's urban structure. |
| 7.2 (20) | To develop effective transit services to connect rural communities. |
| 7.2 (21) | To develop transit corridors and related infrastructure necessary to establish the York Region Transit and Viva network as illustrated on Map 11. |
| 7.2 (22) | To work with partners to complete the transit network, as illustrated on Map 11, including subway line extensions, Metrolinx enhancements, the 407 Transitway and other rapid transit corridors. |
| 7.2 (23) | To ensure communities are planned with the early integration of transit. |
| 7.2 (24) | To provide preferential treatment for transit vehicles on Regional streets, including the construction of <i>high-occupancy vehicle lanes</i> , dedicated transit lanes, transit signal priority and other transit priority measures. |
| 7.2 (25) | To achieve high transit usage by supporting improvements in service, convenient access and good urban design, including the following: a. minimizing walking distance to planned and existing transit stops through measures such as the provision of walkways, sidewalks and more direct street patterns. The Region will plan to provide transit service so that the distance to a transit stop is within 500 metres of 90% of residents, and within 200 metres of 50% of residents in the Urban Area; b. connecting transit stops directly to sidewalks and adjacent building in the Urban Area; c. providing |

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| | bus bays, transit shelters and bus loops with sufficient lighting and accessibility features; d. directing medium- and high-density urban development to rapid transit corridors; e. creating a system of parking and drop-off facilities for commuters; f. providing intermodal terminals or hubs; g. providing transit service on mid-block collectors; h. giving priority to pedestrian and cycling access to transit through the planning and development approval process; i. utilizing the York Region Transit-Oriented Development Guidelines and related tools in the review and evaluation of development applications and related studies; and, j. requiring all new <i>development</i> applications to prepare a mobility plan and demonstrate the proposal's approach to transit. |
| 7.2 (26) | To achieve an overall transit modal split of 30% during peak periods in the Urban Area and 50% in the Regional Centres and Corridors by 2031. |
| 7.2 (27) | To work with local municipalities to provide multi-use paths, sidewalks and street lighting along Regional streets serviced by transit. |
| 7.2 (28) | To work with local municipalities to ensure that sidewalks and street lighting are provided on all streets within the Urban Area, and Towns and Villages that are serviced by transit. |
| 7.2 (29) | To encourage the provision of sidewalks and street lighting on all streets in York Region. |
| 7.2 (30) | To support and implement an equitable transit fare strategy that is integrated with transit services in adjacent regions and with Metrolinx. |
| 7.2 (31) | To require, at no expense to the Region, the dedication of public transit rights-of-way and lands for related facilities for the purpose of implementing the Transit Network shown on Map 11. |
| 7.2 (32) | To support the transit network shown on Map 11 by securing lands, at no expense to the Region, for facilities such as: a. transit stations including intermodal terminals, mobility hubs, subway, bus and light rail stations and related passenger drop-off and commuter parking areas; b. related infrastructure, including vent shafts, <i>transit operation and maintenance facilities</i> , passenger standing pads and passenger pick-up and drop-off areas, electrical substations and passenger safety facilities; c. pedestrian and cycling facilities; d. intelligent transit and travel information systems; and, e. public streetscape enhancements. |
| 7.2 (33) | That the transit network is generally described in one or more of the following documents: a. approved environmental assessments or approved transit project assessments; b. the York Region Transit 5-Year and annual Service Plans; c. the York Region Transportation Master Plan; d. Regional Rapid Transit Standards; e. the Regional Rapid Transit Network Plan; and, f. the Pedestrian and Cycling Master Plan. |
| 7.2 (34) | To manage the movement of traffic in the Regional Rapid Transit Corridors shown on Map 11 to improve the safety and efficiency of all movements including that of pedestrians, cyclists and transit vehicles. |
| 7.2 (35) | To provide accessible and integrated public transit to people with disabilities. |
| 7.2 (36) | To require local municipalities to include all policies in local official plans to implement the Transit Network shown on Map 11, consistent with the policies of this Plan. |
| 7.2 (37) | To co-ordinate the planning, integration and operation of existing and new transit services with local municipalities, the Toronto Transit Commission, the Province, Metrolinx and adjacent municipalities. |
| 7.2 (38) | To work with local municipalities, the Toronto Transit Commission, Metrolinx and |

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| | adjacent municipalities to encourage the Province and the Federal government to provide sustainable capital and operational funding and tools to support transit. |
| | Streets |
| 7.2 (39) | That the hierarchy of streets on Map 12 supports the Region’s proposed urban structure. These corridors are to accommodate all modes of transportation including walking, cycling, transit, automobile use and the movement of goods, as well as public and private utilities. |
| 7.2 (40) | To improve the street network identified on Map 12, based on the following: a. the York Region Transportation Master Plan and the 10-Year Capital Plans; b. the completion of the necessary planning and environmental assessment studies for each project; c. street improvement projects that take into account the needs and requirements of all forms of transportation including walking, cycling, transit, automobiles, and goods movement; and, d. priority accorded to the needs of pedestrians, cyclists and transit uses and the integration of adjacent land uses in Regional Centres and Corridors, to promote these forms of transportation. |
| 7.2 (41) | To implement transit improvements on urban streets as identified on Map 12, which may include transit lanes, <i>high-occupancy vehicle lanes</i> , queue jump lanes, bicycle lanes and other transit signal priority needs. |
| 7.2 (42) | To require transit or <i>high-occupancy vehicle lanes</i> and bicycle lanes within the right-of-way of 6-lane Regional streets. |
| 7.2 (43) | To encourage the planning and implementation of <i>high-occupancy vehicle lanes</i> on all 400-series highways within and/or adjacent to York Region. |
| 7.2 (44) | To investigate establishing a continuous alternative east-west corridor(s) in the central part of the Region. |
| 7.2 (45) | That street widening and proposed Regional streets shall protect and enhance the Regional Greenlands System. |
| 7.2 (46) | That within the Oak Ridges Moraine, all improvements to the Regional Transit and Street Networks shall conform with the policies of the Oak Ridges Moraine Conservation Plan. |
| 7.2 (47) | That priority be given to protecting existing heritage streetscapes using techniques such as variable rights-of-way widths, as identified on Map 12, and innovative street cross-section standards. |
| 7.2 (48) | That the street widths shown in Map 12 be considered as basic rights-of-way widths, and additional widths may be required for elements such as sight triangles, cuts, fills, streetscaping and extra turn lanes at intersections, and shall be conveyed at no expense to the Region. |
| 7.2 (49) | That, in general, street widening shall be taken equally from the centre line of the street. Landowners will be required to provide land at no expense to the Region for street widening based on the following principles: a. that land will be conveyed to the Region for street widening as a result of new development, changes in uses that generate significant traffic volumes, or additions that substantially increase the size or usability of buildings or structure; b. that unequal or reduced widenings may be required where topographic features, public lands, historic buildings or other cultural heritage resources such as archaeological features, significant environmental concerns or other unique conditions necessitate talking a greater widening or the total widening on one side of the existing street right-of-way; and, c. that additional land may also be required to construct future grade separations where there is an existing at-grade crossing of a Regional street and a railway line. |

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| 7.2 (50) | That land required for new or realigned Regional streets to accommodate land development be conveyed, at no expense to the Region, up to and including the first 36 metres of the required right-of-way. |
| 7.2 (51) | To restrict vehicle access from developments adjacent to Regional streets to maximize the efficiency of the Regional street system through techniques such as suitable local street access, shared driveways and interconnected properties. Exceptions may be made to this policy in Regional Centres and Corridors, and main streets. |
| 7.2 (52) | To request that the Province work with York Region and the local municipalities to expedite the planning, corridor protection and early construction of the following facilities: a. Highway 427 north beyond Highway 7; b. Highway 404 north beyond Green Lane to the Highway 48/Highway 12 junction; c. the Bradford Bypass; d. the GTA West Corridor; and, e. interchanges on 400-series highways at Regional and other arterial street crossings as identified in the York Region Transportation Master Plan. |
| 7.2 (53) | To require local municipalities to design street systems to accommodate pedestrian, cycling and transit facilities. |
| 7.2 (54) | To work with local municipalities to complete missing sidewalk links on Regional streets in the Urban Area. |
| 7.2 (55) | That arterial streets identified on Map 12 that are currently not part of the Regional street network may be considered for a transfer in jurisdiction to York Region, and such a transfer shall not require an amendment to this Plan. |
| 7.2 (56) | To require local municipalities to protect arterial streets under local jurisdiction, as illustrated on Map 12, as major transportation corridors. |
| 7.2 (57) | To require local municipalities to plan and implement, including land takings necessary for, continuous collector streets in both east-west and north-south directions in each concession block, in all new urban developments, including <i>new community areas</i> . |
| 7.2 (58) | To require local municipalities to plan and implement, including land takings necessary for, mid-block crossings of 400-series highways, as shown on Map 12. |
| 7.2 (59) | To encourage all appropriate agencies to expedite the construction of street/railway grade separations where warranted. |
| 7.2 (60) | To plan and co-ordinate cross-boundary transportation needs with adjacent municipalities and appropriate agencies. |
| 7.2 (61) | To update the York Region Transportation Master Plan at least every 5 years concurrent with the 5-year review of this Plan. |
| 7.2 (62) | To update and implement York Region's Towards Great Regional Streets study. |
| | Goods Movement |
| 7.2 (63) | To promote an interconnected goods movement network that links local municipalities and surrounding areas, utilizing Provincial highways, Regional streets and rail corridors. |
| 7.2 (64) | To work with Metrolinx, the Province, local municipalities, and surrounding jurisdictions to plan for an effective and integrated goods movement system throughout the Greater Toronto and Hamilton Area. |
| 7.2 (65) | To support the optimization of the existing transportation network for goods movement, through methods such as access management and intelligent transportation systems. |
| 7.2 (66) | To support the protection of existing rail lines and promote rail as an efficient goods movement method. |

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| 7.2 (67) | To encourage the protection of abandoned railway rights-of-way for public uses such as trails, cycling paths, and transit. |
| 7.2 (68) | To ensure that noise, vibration and safety issues are carefully managed for land uses in proximity to rail facilities, rail corridors and intermodal yards. |
| 7.2 (69) | To encourage freight and logistics uses to locate in clusters that create synergies within the goods movement industry. |
| 7.2 (70) | To encourage employment uses and activities that require heavy truck traffic to locate in areas near and adjacent to Provincial highways. |
| 7.2 (71) | To support an interconnected and efficient system for goods movement through: a. the completion of the 400-series highway network, including the GTA West Corridor, the Highway 427 Extension, the Highway 404 Extension, and the Bradford Bypass; and, b. the addition of 400-series highway interchanges and overpasses. |
| 7.2 (72) | To recognize that Provincial highways and Regional streets are generally corridors for goods movement, subject to existing truck and load restrictions. |
| 7.2 (73) | To promote an urban structure and street network in Regional Centres and Corridors that allows for the efficient movement of goods. |
| 7.2 (74) | To work with other levels of government, agencies and the private sector to minimize risks and ensure the safe and efficient movement of goods by either rail or streets in the Region. |
| 7.2 (75) | To direct the movement of hazardous goods to rail and roadways outside of the Urban Area, where possible. |
| 7.2 (76) | To consider restrictions on the haulage of chemicals and volatile materials in <i>Wellhead Protection Areas</i> , shown on Map 6 and Areas of High Aquifer Vulnerability, shown on Map 7. |
| 7.2 (77) | To encourage grade separation of railways and major streets, where warranted. |
| 7.2 (78) | To encourage businesses to move towards more energy efficient and effective freight modes and technologies. |
| 7.2 (79) | To encourage rail and truck operators to investigate new technologies and increase the efficiency of the design and operations of their facilities. |

APPENDIX C

SUMMARY OF INPUT RECEIVED ON DRAFT AREA TRANSPORTATION SYSTEM PROBLEMS AND OPPORTUNITIES REPORT – DRAFT FOR CONSULTATION (2009)

| Correspondence | Reference | Comments Received / Concerns Identified | Response and Actions Planned / Taken | Change to Revised Draft Report |
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| Regional Municipality of Halton Email of August 4, 2009 | N/A | What is the deadline for providing comments on the Draft Area Transportation System Problems & Opportunities Report for the GTA West Corridor Environmental Assessment Study? | Question addressed – relevant deadline provided. | No change to report |
| Region of Halton Letter of November 19, 2009 | N/A | This will confirm that the Council of the Regional Municipality of Halton, at its meeting held Wednesday, November 18, 2009, adopted the following resolution: 1. THAT Report No. PW-48-09 re: "Greater Toronto Area West Corridor Environmental Assessment - Area Transportation System Problems and Opportunities Report" be endorsed by Regional Council. 2. THAT the Regional Clerk forward a copy of Report No. PW-48-09 to the Ministry of Transportation, the GTA West Corridor Project Team and Local Municipalities for their information. 3. THAT the Ministry of Transportation be requested to assess the effect of road pricing strategies. Enclosed please find a copy of Report No. PW-48-09 for your information. Please note that the resolution adopted by Council differs from the staff recommendation in the report. | Comments noted – explanation that tolling is not currently being assessed as part of the study but may be reviewed at a later stage | No change to report |
| | N/A | The study is being carried out within a policy framework of approved provincial (Provincial Policy Statement, Metrolinx Regional Transportation Plan, Growth Plan for the Greater Golden Horseshoe, etc.) And municipal (Official Plans, Transportation Master Plans, Land Use Designations, etc.) Planning policies, | Comments noted – any new information will be incorporated into the next study process | No change to report |

| Correspondence | Reference | Comments Received / Concerns Identified | Response and Actions Planned / Taken | Change to Revised Draft Report |
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| | | and does not address how changes to provincial or municipal policies could potentially impact transportation problems and opportunities identified within the report. Within this context it is noted that the report and technical analysis need to be updated to reflect most current population and employment information available through Sustainable Halton and the Regional Official Plan Amendment (ROPA) 38. | | |
| | N/A | The report explains the application of the Southern Ontario Highway Programs to the Greater Toronto Area West Corridor Study Area in the assessment of the 2031 transportation network conditions, however it was suggested that further discussion be provided regarding projects such as Highway 401 from Mississauga to Milton and Highway 403 from QEW to Highway 407 which are of interest to Halton Region. These projects will impact transportation conditions in the Study Area and should be documented as such. | Comments noted – clarification provided on how these projects have been considered in study | No change to report |
| | N/A | It was also noted that work underway through the Halton Peel Boundary Area Transportation Study (HPBATS) needs to be considered through the GTA West work. Ontario Ministry of Transportation's study team has been closely liaising with the HPBATS steering committee. | Comments noted – will continue to incorporate relevant findings of this work | No change to report |
| | N/A | The report notes that the proportion of internal trips within Halton Region is expected to decrease between 2006 and 2031. It was requested that the study team review this finding in light of the Sustainable Halton Study and Region's growth management strategy to 2031. | Comments noted – will review findings of study and determine their impact on assessment of alternatives | No change to report |

| Correspondence | Reference | Comments Received / Concerns Identified | Response and Actions Planned / Taken | Change to Revised Draft Report |
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| | N/A | <p>The Regional Transportation Advisory Committee emphasized the importance of recognizing the significant congestion issues within Halton, and the potential impact of national and international initiatives on traffic volumes in the study area. It was also noted that proposed timelines for the next steps of the studies are very aggressive.</p> <p>The Committee also requested that the study team consider environmental impacts identified through previous work in the study area when evaluating alternatives under Phase 2 of the Study.</p> <p>In summary, the report provides data and broadly identifies problems and opportunities, but does not present any new significant information. This is not a concern at this point in the Study, however staff understand the importance of this Study in establishing the nature of inter-regional transportation to 2031 and will continue to work closely with the study team.</p> | Comments noted – explanation that environmental issues are a key component of the study and provision of link to access further information | No change to report |
| Region of York Email of August 17, 2009 | Page 48 and Appendix B | York Region has completed an Official Plan update and it is currently available for public review in draft form (I have attached the link to our website where you can download the material). It is expected to be approved by the end of 2009. The references in your Draft Area Transportation System Problems and Opportunities Report should be updated accordingly. | Comments noted – text will be revised to reflect updated York Region Official Plan | References on Page 48 and in Appendix B updated accordingly |
| City of Mississauga Email of September | N/A | At this point, City of Mississauga has no comments or concerns with regard to the Draft Transportation System Problems and Opportunity report. We would | Interest noted | No change to report |

| Correspondence | Reference | Comments Received / Concerns Identified | Response and Actions Planned / Taken | Change to Revised Draft Report |
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| 9, 2009 | | like to be further involved in the study and monitor the proceedings. | | |
| City of Brampton Emails of October 29, 2009 and November 2, 2009 | Section 2.3.1 and Appendix B | Why are lower-tier municipal Official Plans not included in the discussion in Section 2.3.1 and Appendix B? Brampton OP contains specific policies related to corridor protection in west and east Brampton (relating to the North-South Transportation Corridor currently being studied through HPBATS, and the Hwy 427 and arterial network are in east Brampton). | Question addressed – guidance on relevant sections of report provided | No change to report |
| | Page 78 | Pg 78, Section 3.2, Road Network Assumptions: It mentions that the traffic analysis accounted for proposed road improvements by upper and single tier municipalities in their tmps. Does this mean that lower tier municipalities such as Brampton were not included? The City of Brampton’s Transportation & Transit Master Plan (TTMP 2009) should be included in the modeling and traffic analysis | Question addressed – explanation that Plan was included in modelling | No change to report |
| | N/A | Previous transportation studies undertaken by the City of Brampton have identified the need for a new North-South Transportation Corridor along the Halton-Peel boundary including the City’s Transportation and Transit Master Plan (TTMP) and preliminary findings from the Halton-Peel Boundary Area Transportation Study (HP BATS). The purpose of the study and problem statement should be explicit regarding future north-south transportation infrastructure needs. The traffic analysis should identify the traffic growth issues associated with planned development in Brampton and Georgetown along the Halton-Peel boundary and the opportunity to provide north-south | Comments noted – guidance on relevant reports provided | No change to report |

| Correspondence | Reference | Comments Received / Concerns Identified | Response and Actions Planned / Taken | Change to Revised Draft Report |
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| | | transportation infrastructure (such as a new North-South Transportation Corridor). | | |
| | Page 92 | Pg 92, Exhibit 3-17, screenlines were analyzed at South of Hwy 407 and South of Mayfield Road. These screenlines do not capture the significant future traffic volumes between Hwy 407 and south of Mayfield Road (most of Brampton not captured), particularly between WCB and Hurontario St. The only screenline capturing traffic volumes in Brampton is south of Mayfield Road, which would be significantly less at the north end of Brampton than the south end of Brampton. A new screenline needs to be added in the south end of Brampton in the vicinity of north of Hwy 407 to capture the higher traffic volumes. | Comments noted – as part of the ‘alternatives to’ analysis, new screenlines will be added to reflect flows north of Highway 407 | No change to report - new screenlines added for subsequent study analysis and the results are provided in the Transportation Alternatives Report. |
| | N/A | At the appropriate stage in this EA Study, the extension of existing Highways such as Highways 410 and 427 needs to be identified as connecting with GTA West Corridor. | Comments noted | No change to report |
| | N/A | Need to proceed with this EA study as quickly as possible in order to protect the lands for a North-South Transportation Corridor as well as future extension of Highway 427 in NE Brampton. | Comments noted | No change to report |
| | N/A | Does the GGH model use the same methodology to project LRT and BRT trips? | Question addressed – affirmative response | No change to report |
| | Page 78 | Page 78, “Highway 410 extension from Mayfield Road to Highway 10”: what is the northerly terminus of 410 in the GGH 2006 scenario? | Question addressed – Bovaird Drive as based on 2006 data | No change to report |
| | Page 79 | Page 79: There appears to be some confusion in describing the RT corridors in Brampton. The | Comments noted – will amend Page 79 of the | Description of relevant corridors |

| Correspondence | Reference | Comments Received / Concerns Identified | Response and Actions Planned / Taken | Change to Revised Draft Report |
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| | | <p>Brampton acceleride BRT initiative (now rebranded as “Züm”) includes Queen St, Main St, Steeles Ave, Bovaird Dr, a yet-to-be-defined corridor in the east (either Airport Rd or Bramalea Rd), and Mississauga Rd in the west (added as part of the recent Transportation & Transit Master Plan update) – 6 arterial corridors in total. Of these, Queen, Main, and Steeles are identified as RT corridors in the Metrolinx RTP 15-Year Plan, and Steeles in the 25-Year Plan. Hurontario Street is represented in the RTP 15-Yr Plan in 3 sections: Mayfield to Downtown Brampton, Downtown Brampton to Highway 407, and Hwy 407 to Port Credit. The latter two sections comprise the Main Street/Hurontario High Order Transit corridor study, which is looking at potential LRT service. The section north to Mayfield is not included in the Hurontario HOT study, but is part of the acceleride/Züm network as a BRT corridor, though its identification in the RTP does not discount future LRT on this section. Transit (BRT or LRT)-Extension of a line on Hurontario Street north to Mayfield Road”. Based on the foregoing, please clarify bullets 6 and 7 of the “Metrolinx RTP/GO Transit” section and the 1st bullet under the “Other Rapid Transit (BRT or LRT)” section. Also, clarify whether Hurontario LRT in the GGH model extends to Mayfield Rd in 2031.</p> | <p>report to reflect comments</p> | <p>amended on Page 79</p> |
| | <p>N/A</p> | <p>Has road capacity been reduced on those arterial corridors with RT service? (e.g. Hurontario/Main St, five Brampton arterial corridors)</p> | <p>Question addressed – assumption that RT services will be accommodated through additional lanes</p> | <p>No change to report</p> |

| Correspondence | Reference | Comments Received / Concerns Identified | Response and Actions Planned / Taken | Change to Revised Draft Report |
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| | Page 80 | Page 80: how is parking cost determined for new paid parking areas in 2031? | Question addressed – use of GGH model assumptions | No change to report |
| | Page 81 | Page 81, Exhibit 3-4: Clarify the assumption/what is meant by “2031 current trends” | Question addressed – reference to relevant report provided | No change to report |
| | Page 85 | Page 85, Exhibit 3-10: clarify what is meant by “Highway 401-west of Highway 401”. | Comments noted – will amend to read ‘west of Highway 407’ | Amendment made to Exhibit 3-10 accordingly |
| | Page 86 | Page 86: BAU analysis appears to use a Furness/Fratar methodology, based on land use growth and 2001 TTS data; is it able to forecast trips in new growth areas? | Question addressed – explanation provided on methodology | No change to report |
| | Page 87 | Page 87, Exhibit 3-11: The table should include interregional trip interchanges between Brampton and Vaughan. | Comments noted – will amend Exhibit 3-11 to include relevant data | Amendment made to Exhibit 3-11 accordingly |
| TRCA Letter of October 2, 2009 | N/A | The report provides very little discussion on the natural environment. While general statements are provided throughout the report, staff was expecting to review a greater level of detail with respect to the natural environment. The report goes into great detail on the future transportation problems and opportunities, specific transportation problems within the study area, but does not highlight the known environmental sensitivities and the constraints they may impose, or how they will be incorporated into the decision making process. A greater emphasis should be provided on the known natural heritage features and how they will be incorporated into the decision making process. | Comments noted – guidance on relevant reports provided | No change to report |

| Correspondence | Reference | Comments Received / Concerns Identified | Response and Actions Planned / Taken | Change to Revised Draft Report |
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| | N/A | It is mentioned several times throughout the report under 'Environment' that congestion increases fuel consumption and increases air and noise emissions. Staff acknowledges that congestion is a problem in certain areas of the GTA, however, there is no mention of natural features or impacts to the natural features. As mentioned above, a greater emphasis on impacts to the natural heritage features will need to be included in the EA. | Comments noted – see above | No change to report |
| | Page xiv | Section 6, item 7 (page xiv) states that planning will give due regard to the requirements of approved provincial environmental protection policies. Other policies also need to be considered, as not all natural heritage features and functions are captured in provincial policies. A statement indicating that other policies, such as the <i>Conservation Authorities Act</i> , should be included in the report. It is also noted in the report that there is an opportunity to minimize, and potentially avoid impacts to important natural, social, economic and cultural features at the earliest planning stages. Please indicate when this opportunity will be provided in this EA process. | Comments noted – a reference to the Conservation Authorities Act will be included | Reference included in Page xv |
| | Page 10 | The Problems and Opportunities Development Framework outlined on page 10 should also incorporate a 'natural heritage features' opportunities and constraints phase. It appears as if the options to provide better linkages between urban growth centres in the GTA West Corridor Study Area do not consider natural heritage features or functions, based on what is provided in the framework. | Comments noted – will give consideration to renaming to 'Transportation Problems and Opportunities Development Framework' | Framework outlined on Page 10 renamed accordingly |
| | Page 23 | Section 2.2.1 (page 23) Provincial Policy Statement | Comments noted – | No change to report |

| Correspondence | Reference | Comments Received / Concerns Identified | Response and Actions Planned / Taken | Change to Revised Draft Report |
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| | | should include a section on Natural Heritage Features. It provides a brief overview of the PPS on employment, and infrastructure, but nothing on natural heritage. | guidance on relevant section of report provided | |
| | N/A | Once the EA has been developed to a point where stormwater management will need to be addressed, staff will require that any proposed structure be constructed such that it: Minimizes the number of watercourse crossings; Provides the largest span crossings possible based on fluvial geomorphologic considerations; Crosses watercourses at as straight a reach as possible; Provides appropriate stormwater management controls. | Comments noted for future reference | No change to report |
| Member of the Public Webform of August 16, 2009 | N/A | No mention of the Guelph-Junction Railway and the role of industrial rail in the City of Guelph's economic plans No mention of lower tier municipal consultation with the Township of Guelph/Eramosa or Centre Wellington. Both of these municipalities will likely experience social, economic and environmental problems and opportunities with respect to the outcomes of the GTA-West Corridor EA decisions. These municipalities should receive consideration for resources to conduct independent municipal planning studies with respect to the GTA-West corridor so that they are able to coordinate municipal plans with the likely outcomes of the EA process. In particular, land use and economic development | Comments noted – text will be revised to include Townships of Guelph/Eramosa and Centre Wellington | List of MAG members on Page 164 revised accordingly |

| Correspondence | Reference | Comments Received / Concerns Identified | Response and Actions Planned / Taken | Change to Revised Draft Report |
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| | | <p>studies associated with the likely corridor route(s) would provide the constituents of these lower tier municipalities with chances for meaningful comment on ways to manage the opportunities and problems that will result from the GTA-West Corridor EA decisions.</p> <p>The Township of Guelph/Eramosa and Centre-Wellington should be considered for representation on the MAG.</p> <p>There exist opportunities for the coordination of multi-modal transportation and land use planning with municipal land use planning to support municipal growth aspirations specific to the Guelph Junction Railway and the municipalities of Guelph and the Township of Guelph/Eramosa. Engagement of the Township of Guelph/Eramosa is particularly important in this respect given the Guelph Junction Railways' customers in the agri-food sector: "Co-ordinating with and improve developing land use scenarios to be compatible with potential inter-modal facilities. Co-location of warehouse/ distribution centres in proximity to a potential inter-modal facility would support industrial/employment development in the municipality and optimize function of the inter-modal facility, improving the efficiency of goods movement..." (page xii) This is important with respect to supporting sustainable agricultural development in the area.</p> | | |