

Meeting Freight Challenges through Effective Regional Planning and Partnerships

Session : Meeting Freight Challenges through Maximizing Opportunities and Innovation

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Region of Peel
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Executive Summary

In April 2009, Peel Regional Council directed that the Peel Goods Movement Task Force be established in recognition of the importance of goods movement to Peel. There was a need for the private and public sector interests involved in goods movement to work together to address existing and future challenges and opportunities. The Task Force objective was to facilitate improved planning and implementation of goods movement infrastructure and services in partnership with the private sector and other levels of government. The Peel Goods Movement Task Force was formed to be a partnership. The mandate of the Task Force is to act as a change agent to bring about positive changes and impact. Members consult, communicate and collaborate to achieve common goals.

The transportation system and the movement of both goods and people within and through Peel are, however, being increasingly impacted by rising levels of congestion. According to a study commissioned by Metrolinx, in 2006 the total cost of congestion in the GTHA was \$6 billion (including \$3.3 billion in costs to commuters and \$2.7 billion in costs to the economy)¹. The increasing congestion affects the reliability and predictability of moving goods within and through Peel, and therefore threatens Peel's economic competitiveness.

Our vision is for Peel to have a safe, convenient, efficient, multi-modal, sustainable and integrated goods movement transportation system that supports a vibrant economy, respects the natural and urban environment, meets the diverse needs of industries and residents and contributes to a higher quality of life.

The mission of the Task Force is it to support businesses with a transportation system that moves goods and delivers services quickly and efficiently, maximizes economic opportunities and reduces the associated environmental and community impacts.

Goals of the Goods Movement Program

There are two (2) major goals of the Goods Movement Program:

- (1) Support and influence sustainable transportation systems to ensure that goods are transported in an efficient and timely manner.
- (2) Optimize the use of existing infrastructure and capacity, and minimize adverse environmental, social and economical impacts caused by goods movement transportation.

Members of the Peel Goods Movement Task Force and its Technical Working Group identified a number of potential actions to improve how goods are moved within and through Peel. The potential action items have been categorized into four (4) Strategic Directions:

1. Pursue Infrastructure Improvements
2. Partnership, Communication and Advocacy
3. Systems Optimization of Existing Infrastructure
4. Planning and Forecasting

¹ The study also estimated that the economic, social and environmental costs of congestion will more than double over the next 25 years if increasing congestion is not addressed. Peel was seen as having the highest cost per capita of congestion in the GTHA in 2006 (\$730).

Twenty three (23) action items have been identified for the Task Force to champion over the course of the next five (5) years to help move goods more efficiently, manage congestion and mitigate its effects on health and the environment.

Performance measures will include both quantitative and qualitative measures: data collected by the public sector and/or supplied by the private sector, feedback, experience, and input from users of the goods movement system.

A strong goods movement system exists in Peel through the private and public sector companies and agencies. The bottom line is to maximize system capacity and mitigate congestion.

The paper provides details of the Strategic Directions and potential actions and a five-year plan for the Goods Movement Program.

Peel Region Goods Movement Strategic Plan

Table of Contents

Executive Summary.....	iii
1. Background.....	1
1.1 Peel Region.....	1
1.2 Importance of Goods Movement to Peel's Economy.....	2
1.3 Trends.....	4
2. The Goods Movement Transportation System in Peel.....	8
2.1 Highways and Arterial Roads (Truck Movements).....	8
2.2 Freight Rail.....	9
2.3 Air.....	10
2.4 Marine.....	11
2.5 Pipeline.....	11
3. Roles and Responsibilities for Goods Movement.....	12
3.1 Private Sector.....	12
3.2 Public Sector.....	12
3.3 Peel Goods Movement Task Force.....	13
4. Vision and Goals.....	13
5. Action Plan and Evaluation Methodology.....	14
6. Conclusion.....	25
Appendix I – Peel Goods Movement Task Force Membership.....	26
Appendix II – Terms of Reference: Peel Goods Movement Task Force.....	27
References.....	28

1. Background

This document provides an overview of the goods movement transportation system in Peel, lays out a vision for the future goods movement system, and provides a blueprint for action for improving how goods are moved within and through Peel Region. Peel, through the efforts of the private and public sector companies and agencies operating in the region, has a strong goods movement system. The plan and proposed actions focus on ways to improve the existing system by maximizing system capacity and mitigating the impacts of congestion.

1.1 Peel Region

Peel Region is situated in the west-central portion of the GTHA and borders the City of Toronto, York Region, Halton Region, Simcoe County, Dufferin County, Wellington County and Lake Ontario. Three municipalities make up the Region of Peel: the City of Mississauga, the City of Brampton and the Town of Caledon. Peel covers 1,225 square kilometres, including a mix of urban, suburban, rural, agricultural and natural landscapes.



Figure 1-1: The Region of Peel

Peel Region is situated at the junction of some of North America's most important east-west and north-south trade routes. In the past 15 years, Peel's location on major trade corridors, the availability of appropriately zoned and priced land, access to a skilled workforce, and proximity to major markets in the GTHA and beyond have led to strong growth in the number of manufacturing, warehousing and goods movement-related businesses locating in the region. This growth can also be, in part, attributed to the wealth of transportation infrastructure found in Peel. Peel is well served by its multi-modal transportation network. Important elements of the goods movement network include: the densest network of 400-series highways in the GTHA, Canada's largest international airport (Pearson), and mainline tracks and facilities for Canada's two major railroads, including the CN Brampton Intermodal Terminal and, adjacent to Peel, the CP Vaughan Intermodal Terminal. Many major North American and world markets are within a few days travel time – by road, rail or air – from Peel.

Peel's transportation system plays a key role in attracting and retaining a range of industries and businesses and directly impacts the competitiveness of Peel's businesses and the availability of high-

quality jobs. The performance of the transportation system is a priority issue for both residents and employers in Peel. In a recent survey, residents ranked traffic and congestion as a top concern. In December 2009, members of the goods movement industry, as represented by the Peel Goods Movement Task Force, identified alleviating traffic congestion and moving goods more efficiently as priorities for the industry.

The transportation system and the movement of both goods and people within and through Peel are, however, being increasingly impacted by rising levels of congestion. According to a study commissioned by Metrolinx, in 2006 the total cost of congestion in the GTHA was \$6 billion (including \$3.3 billion in costs to commuters and \$2.7 billion in costs to the economy)². The increasing congestion affects the reliability and predictability of moving goods within and through Peel, and, therefore, threatens Peel’s economic competitiveness.

1.2 Importance of Goods Movement to Peel’s Economy

Goods movement and manufacturing are key to Peel’s economic vitality and Peel is a significant freight hub for the GTHA, Southern Ontario and the rest of Canada. Some indicators of the importance of goods movement to Peel, and of Peel’s role in the broader goods movement sector, are that:

- Freight transportation and warehousing account for almost 11% of Peel’s employment (roughly twice the share of other regions in the GTHA). If manufacturing is added to the picture, the combined sectors account for nearly 27% of Peel’s employment;
- There are over 2,000 trucking companies in Peel;
- Pearson International Airport handles more air cargo than the Vancouver and Montreal airports combined;
- The CN Brampton and CP Vaughan intermodal terminals are two of the largest in Canada;
- Peel accounts for 15% of Ontario’s exports;
- Approximately \$1.5 billion worth of goods move through Peel every day on the east-west highways; and
- Truck activity in Peel represents about 25% of all truck activity in Ontario.

Goods Movement and Manufacturing are Major Contributors to Peel’s Economy



* Source: Census 2006- Employed Labour Force

Figure 1-2: Transportation and Warehousing Share of Total Employment

² The study also estimated that the economic, social and environmental costs of congestion will more than double over the next 25 years if increasing congestion is not addressed. Peel was seen as having the highest cost per capita of congestion in the GTHA in 2006 (\$730).

As noted in the 2004 *Study of Goods Movement in Peel: Strategic Overview*³, trends in population growth, manufacturing activity and foreign trade indicate a considerable expansion in the amount and value of goods transported within and through Peel Region in the future. The increase in population, for example, will require more food, clothing, and household goods; more homes, stores, and other buildings will have to be built; waste products have to be collected and transported to disposal yards. All of this involves an increased movement of goods, especially to, from and within Peel Region. Ministry of Transportation Ontario forecasts indicate that, by 2026:

- Truck trips in Ontario will grow by 71%;
- Commodity value will increase by 87%;
- Loads will be 67% lighter;
- More than \$1 billion worth of goods will flow to/from Peel every day; and
- Peel will continue to produce high-value goods.

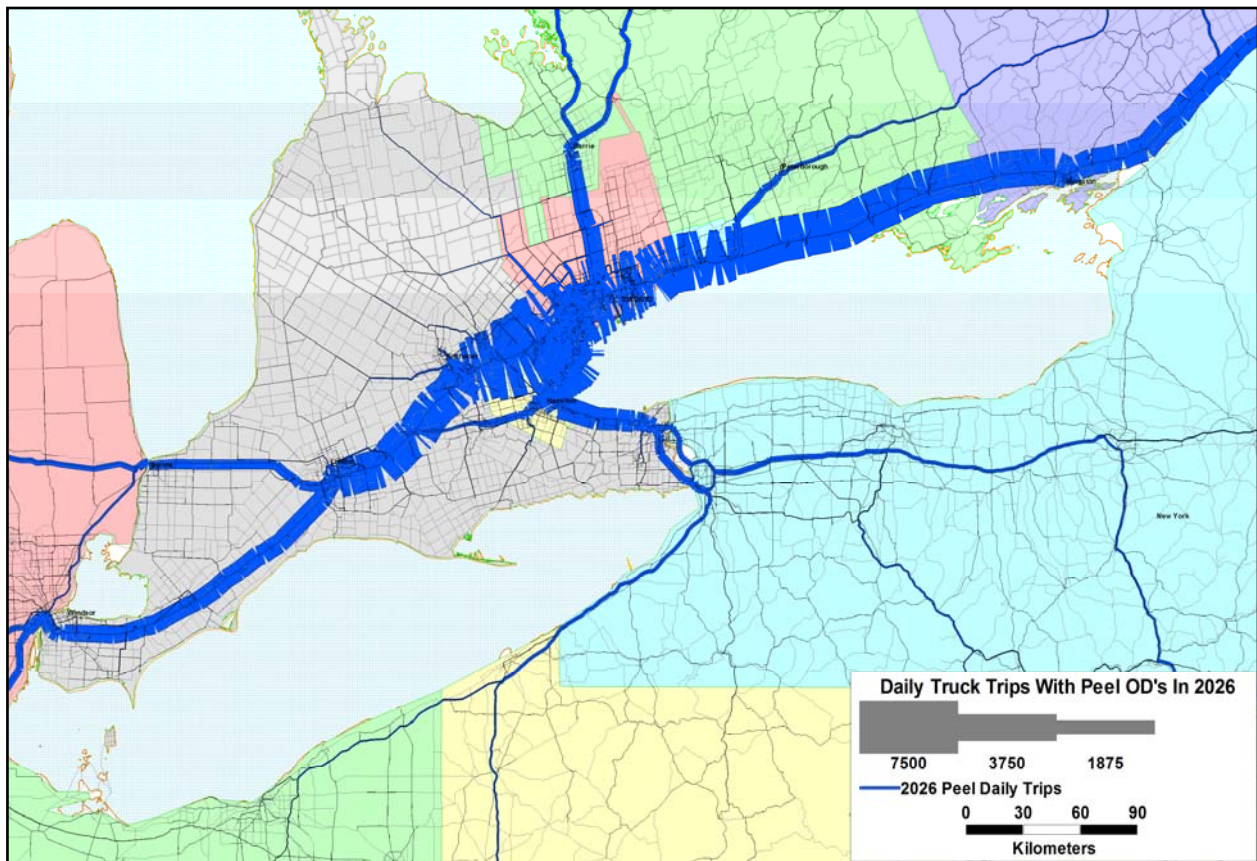


Figure 1-3: MTO Forecasts: Year 2026 Peel Region Daily Truck Volumes

³ Wilbur Smith Associates and IBI Group, November 2004 - Study of Goods Movement in Peel: Strategic Overview.

1.3 Trends

1.3.1 Population and Employment Growth

Population and employment in Peel have both seen strong growth over the past four decades. Population increased by over 400% between 1971 and 2011 (to 1,323,000 people). This is forecast to grow to 1,641,000 by 2031. Employment increased at an even stronger rate, growing by over 530% from 1971 to 2011 (to 665,000 jobs). Employment in Peel is forecast to grow to 870,000 by 2031.

The strong growth had, and will have, impacts on the transportation system in Peel. As noted earlier, Peel has a strong transportation system that has supported the movement of people and goods. The transportation system has grown over time to accommodate the increases in population and employment, but is at the stage where opportunities to construct new transportation infrastructure are limited. Peel cannot build its way out of congestion. In addition to opportunities to make selected additions and expansions to the transportation system, greater emphasis is being, and will need to continue to be, placed on improving and optimizing the efficiency of the system.

On the people moving side, more emphasis is being placed on transit and other transportation demand management measures (such as carpooling) to improve efficiency and sustainability. For goods movement, private sector companies and agencies have placed greater emphasis on efficiency and supply-side improvements. More will need to be done, however, by both public and private sector interests to ensure that the effects of congestion are mitigated and that people and goods are moved efficiently in the future.

Distribution of Population and Employment for the Greater Toronto and Hamilton Area 2001 – 2031 (figures in 000s)								
	Population				Employment			
	2001	2011	2021	2031	2001	2011	2021	2031
Region of Durham	530	660	810	960	190	260	310	350
Region of York	760	1,060	1,300	1,500	390	590	700	780
City of Toronto	2,590	2,760	2,930	3,080	1,440	1,540	1,600	1,640
Region of Peel	1,030	1,320	1,490	1,640	530	730	820	870
Region of Halton	390	520	650	780	190	280	340	390
City of Hamilton	510	540	590	660	210	230	270	300
GTHA Total	5,810	6,860	7,770	8,620	2,950	3,630	4,040	4,330

Table 1-1: Forecasted Population Growth in the GTHA between 2001 and 2031

Source: Hemson Consulting Ltd., "The Growth Outlook for the Greater Golden Horseshoe", January 2005

Note: Numbers rounded off to nearest 10,000 for GTHA municipalities & GTHA Total

Table adapted from Schedule 3 from Places to Grow, Growth Plan for the Greater Golden Horseshoe 2006

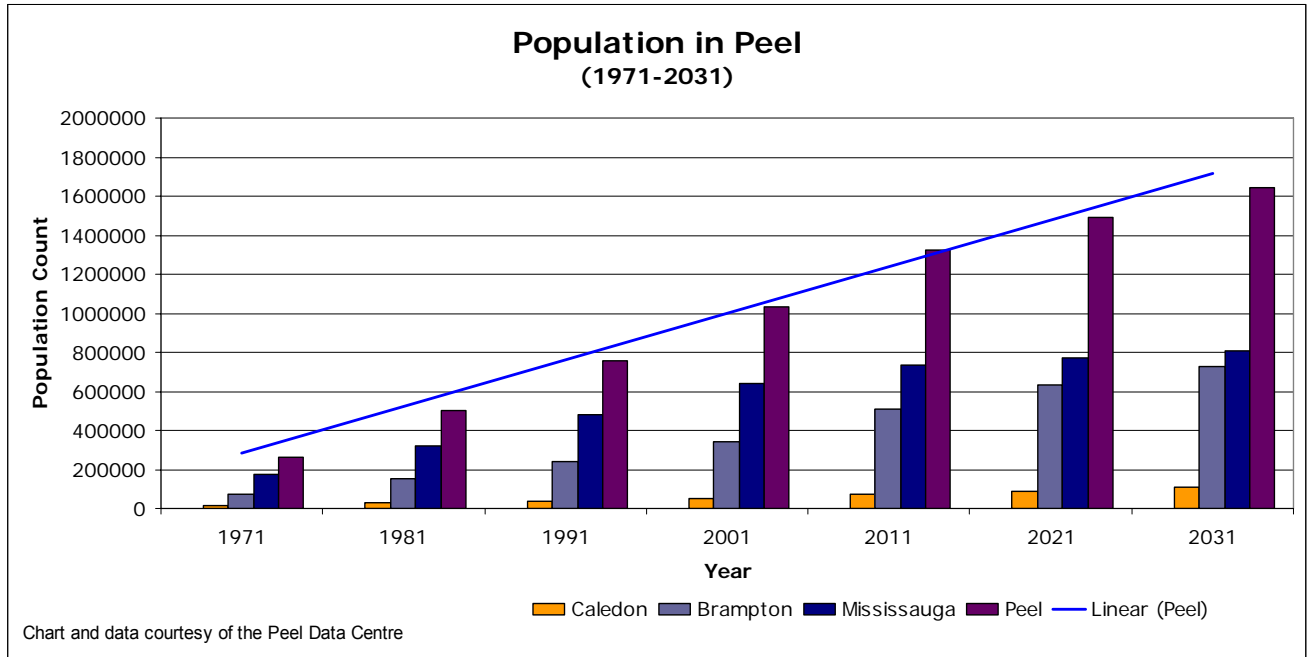


Figure 1-4: Population Growth in Peel

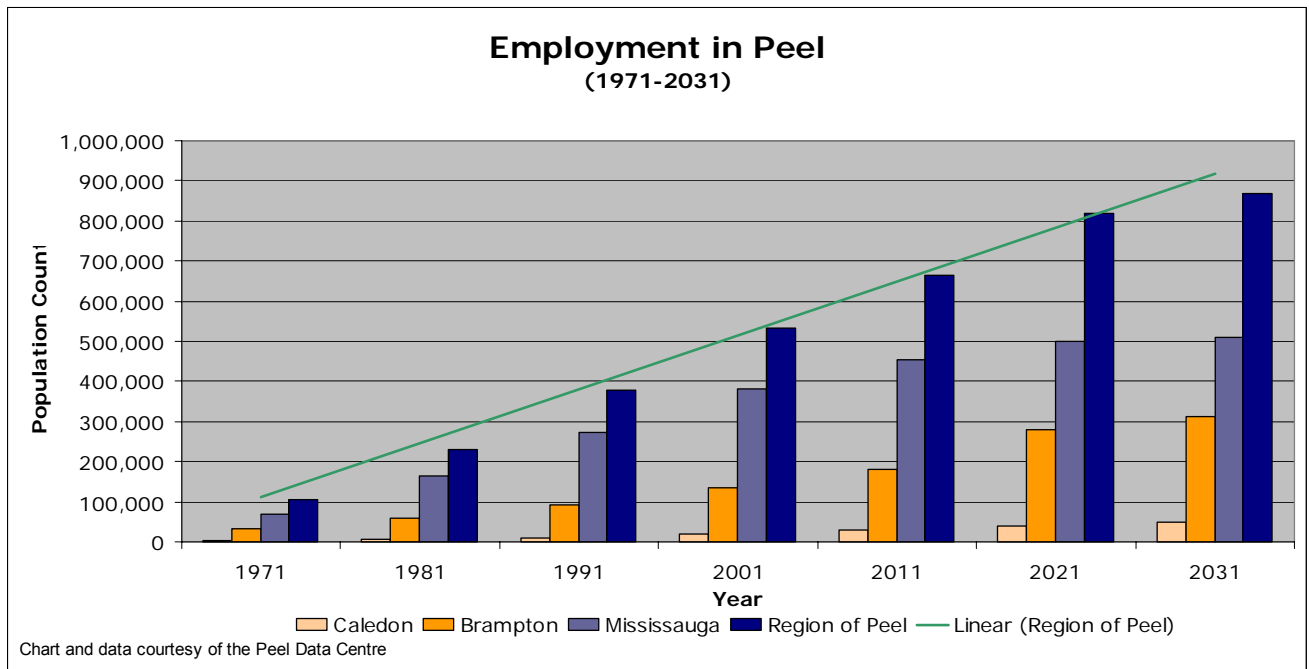


Figure 1-5: Employment Growth in Peel

1.3.2 Growth in Congestion

Congestion occurs when traffic volumes exceed, or comes close to exceeding, the capacity of road segments or signalized intersections. Congestion not only contributes to increased travel time, lost productivity and increased fuel consumption, but is also likely to lead to frustration amongst drivers, which may in turn lead to more collisions. Commuting in the GTA currently takes 32 per cent longer than it would in free-flowing conditions. By 2031, that will rise to 40 per cent. Congestion costs the GTHA \$6 billion each year.

COST COMPONENT	ANNUAL EXCESS COST OF CONGESTION (\$MILLIONS)
Time cost - auto users	\$2,245
Time cost - transit riders	\$337
Vehicle operating costs	\$479
Accidents	\$256
Vehicle emissions	\$29
COST OF CONGESTION	\$3,347
REDUCTION IN REGIONAL GDP	\$2,733

Table 1-2: Summary of Components of Congestion Cost in 2006, GTHA Average⁴

One measure of congestion is Level of Service (LOS), a measure of capacity and operating conditions. LOS describes traffic conditions in terms of factors such as travel time, average speed, freedom to manoeuvre, traffic interruptions, comfort and convenience, and safety. LOS is rated from A (free flow) to F (gridlock). LOS can be measured for both road segments and intersections.

LOS⁵ A describes free-flow operations. Free-flow speeds prevail and vehicles are almost completely unimpeded in their ability to manoeuvre within traffic stream.

LOS B represents reasonably free flow and free-flow speeds are maintained. The ability to manoeuvre within traffic stream is only slightly restricted.

LOS C provides for flow with speeds at or near the free-flow speed of the roadway. Freedom to manoeuvre within the traffic stream is noticeably restricted.

LOS D is the level at which speeds begin to decline slightly with increasing flows. Freedom to manoeuvre within the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort levels.

LOS E describes operation at capacity. Operations at this level are volatile because there are virtually no usable gaps in the traffic stream.

LOS F describes a breakdown in vehicular flow. Such conditions generally exist with queues forming behind breakdown points.

⁴ Metrolinx – 2006 Cost of Road Congestion Study in the Greater Toronto and Hamilton Area

⁵ Highway Capacity Manual 2000

Figure 1-6 provides the results of an intersection LOS “hot spot” analysis for Regional roads in Peel. It should be noted that many of the “hot spots” are located in areas with concentrations of industry and goods movement-related activities.

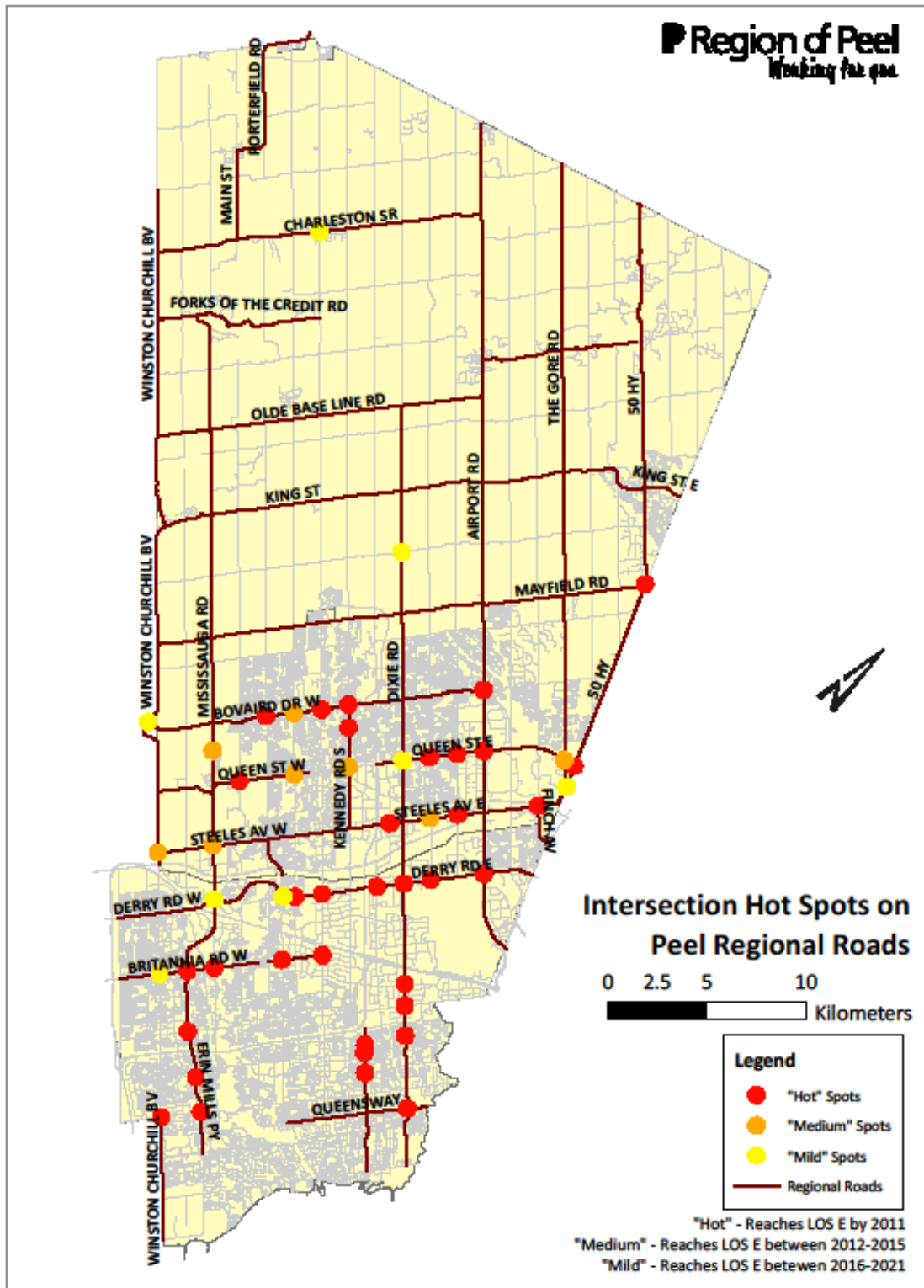


Figure 1-6: Congested Intersections on Peel Regional Roads

2. The Goods Movement Transportation System in Peel

The transportation system in Peel serves both residents and employers in the region. In addition to those trips that have an origin and/or destination in Peel, the transportation system must also serve those trips that pass through the region.

The transportation system is intended to accommodate current and projected travel demands. To do so, planning for the transportation system must be undertaken concurrently with land-use planning (i.e., the determination of where growth will occur). Planning for the transportation system in the region must also be coordinated, in order to protect existing rights-of-way and rights-of-way for future improvements and to ensure integration of the transportation systems of the area and adjacent municipalities.

Provided below are brief descriptions of the elements related to the goods movement transportation system in Peel and some of the challenges and opportunities these elements face.

2.1 Highways and Arterial Roads (Truck Movements)

Inter-regional and longer distance travel is facilitated by provincial highways. These include the QEW, 400-series highways, as well as the Highway 407 Express Toll Route. The province is also responsible for other routes in the Region, such as Highways 9 and 10.

The Regional road network is comprised of twenty-six roads or road sections. These roads are typically identified as critical routes for high volume movements within the Region, and may connect to the regional road networks of other municipalities.

All other roads in Peel are under the jurisdiction of the area municipalities (Mississauga, Brampton and Caledon). These roads typically serve as collectors to the regional and provincial road networks and as local roads.

The major road network in Peel Region, comprised of provincial, Regional and municipal roads, is shown in Figure 2-1.

Challenges faced when moving goods on the road network include:

- Increased congestion and travel times;
- Unpredictable travel times;
- Inadequate connections between Urban Growth Centres, commercial centres and inter-modal facilities; and
- Diversion of trucks to regional and local roads, which results in out-of-way travel with associated community, social, noise and safety concerns.



Figure 2-1: Major Roads in Peel Region

These challenges can result in significant economic impacts to shippers, distributors, local businesses and industries.



Highways 50 & 7 Intersection

2.2 Freight Rail

Freight rail service in and through Peel is provided by Canadian National Railway (CN) and Canadian Pacific Railway (CP). Rail lines connect Peel to the rest of Canada and the United States. There are two Intermodal facilities located in and around Peel: the CN Brampton Intermodal Terminal and the CP Vaughan Intermodal Terminal. These two intermodal terminals provide tremendous economic benefit to Peel Region and the rest of southern Ontario. Truck traffic generated to/from the terminals adds volume to the road system in Peel.

The CN Brampton Intermodal Terminal, located in the Airport Road and Steeles Avenue area, is one of the largest terminals in Canada. Its large capacity makes it attractive to many manufacturers in Peel, and its proximity to major arterial roads and highways makes it a strategic location for goods movement in the GTHA. As a result, it generates approximately 3,000 truck trips on an average weekday (loading and offloading containers from the freight trains).

The CP Vaughan Intermodal Terminal is located just outside of Peel Region in the City of Vaughan (on the east side of Regional Road 50 north of Rutherford Road). It generates 2,000 trucks per day. Due to its location, almost all of the trucks serving it travel on Regional Road 50 to access Highway 427, leading to high truck volume on Regional Road 50, particularly at the intersection of Highway 7.

Challenges for the movement of freight by rail in Peel include:

- Improving connections from inter-modal facilities to higher order roadways;
- Congestion on the highways and other roads in Peel;
- Limited access points to intermodal facilities, which can increase the difficulty of moving containers and other goods by rail and produce bottlenecks at the trucking interface; and

- Advancing the efforts of rail freight and passenger operators to develop balanced, efficient use of rail infrastructure in the GTA, as evidenced by the acquisition of key rail lines by Metrolinx to ensure the transit operator has control of major commuter corridors.



CN's Intermodal Yard in Brampton

2.3 Air

Toronto Pearson International Airport (TPIA) has ranked in the top 30 of the world's busiest airports for the last decade in terms of both passenger traffic and aircraft movements. Currently, 79 scheduled and charter airlines serve Toronto Pearson, providing non-stop service to 37 domestic and 83 U.S. destinations, as well as same plane service to 100 international cities. Toronto Pearson is also important from a goods movement perspective, both in terms of flights carrying cargo that depart from or arrive at the airport and the location of manufacturing and warehousing activities in the employment areas adjacent to the airport.

Similar to freight rail, congestion on the road system in Peel (i.e. transporting goods on the initial or final legs of their journey) is a concern for Toronto Pearson. Another consideration will ultimately be runway capacity. Although plans are in place for an additional runway at Toronto Pearson, passenger and air cargo movements at the airport are expected to grow significantly over the next 25 years, which will ultimately challenge runway capacity and place further pressure on the surrounding area road network.



Toronto Lester B. Pearson International Airport

2.4 Marine

Marine plays only a small role in the movement of goods to/from Peel. Peel has two private port facilities: the refinery and at the cement plant in Clarkson for petrochemicals and limestone respectively. As for freight rail and air cargo, ensuring easy access to the port facilities by trucks is a challenge.

2.5 Pipeline

Pipelines also play a small role in the movement of goods to/from Peel. The one major pipeline in Peel, running through northern and western Brampton, is operated by TransCanada and carries natural gas. TransCanada is proposing to increase the capacity of the existing pipeline by constructing a parallel pipeline in western Brampton.

3. Roles and Responsibilities for Goods Movement

Many public and private sector agencies and interests are involved in providing transportation services in Peel. Coordination between all of these players is required to keep Peel's transportation system running smoothly and to improve the efficiency of goods movement in Peel. This section outlines the roles and responsibilities of each of the sectors and the need for the two sectors to work together to address challenges and take advantage of opportunities.

3.1 Private Sector

The discussion of roles must start with the primary user of the transportation system: the private sector. The private sector is made up of a multitude of private businesses, which compete with each



December 2009 Meeting of the Peel Goods Movement Task Force

other in gaining and maintaining a share of the goods movement market and revenues. These businesses use the goods movement system, some of which is in public hands (highways, roadways, etc.) to deliver goods to their customers. Other elements of the system are privately held (e.g., most railroads). Nevertheless the private sector is an important source of funding for the goods movement transportation system through various user fees and taxes.

The private sector has a vital role in the development, operation, and support of the goods movement system. This can take the form of advocacy for infrastructure improvements and regulatory changes and

operational improvements to increase efficiency. Many private sector players have worked hard to improve the efficiency of their fleets and operations, benefiting both their bottom line and the transportation system.

3.2 Public Sector

Public agencies are charged with providing a safe, efficient and effective transportation system for the movement of both people and goods. The public sector provides much of the transportation infrastructure used to move goods. The various levels of government have not always worked in unison to plan for, provide and operate transportation infrastructure. This has led to inefficiencies and confusion, but governments are working to harmonize their policies and actions.

The federal government's role in goods movement involves regulation of airports, railways, ports and international border crossings. The federal government also regulates fuel options and emission standard for vehicles.

The provincial government tends to focus more on roads. This includes being responsible for the provincial highway network, establishing regulations on vehicle weight, size and speed, and being responsible for licensing. Differences between regulations in neighbouring provinces can create challenges for the private sector (such as different gross vehicle weight restrictions). While there have been considerable efforts and progress to harmonize weights and dimensions across Canada and with states in the USA, this can still be a major problem for long-distance truckers.

Regions and local municipalities plan for and construct the roads that link businesses and residences to each other and to the provincial highway network. From a regulatory perspective, municipalities focus on impacts that relate to the specific movement of vehicles within local boundaries. This can include the imposition of truck restrictions on roads, parking and loading zones and efforts to limit noise from trains, airplanes and trucks. The municipal road networks must serve a number of users and uses, ranging from trucks to cyclists. Accommodating the competing interests and finding the right balance is a challenge. The goods movement industry, for example, has expressed concern over regulations that impede business and argue that local regulations do not adequately consider their needs for truck access, routing and time of day, loading, and parking, including overnight truck parking. Many of the regulations, however, address citizen concerns about noise and safety.

The importance of goods movement to Canada, Ontario and Peel is reflected in policy documents prepared by various levels of government. These include:

- Region of Peel's Official Plan and Official Plans of Mississauga, Brampton and Caledon
- Metrolinx's The Big Move Plan (2008) and GTHA Urban Freight Study (2011)
- Province of Ontario's Places to Grow Act (2006) and Provincial Policy Statement (2005)
- Transport Canada's Integration Technologies for Sustainable Urban Goods Movement, 2004

The above mentioned and other documents form the foundation for public sector-led improvements to the goods movement transportation system.

Only through continued and expanded dialogue between public agencies and private sector will these role and responsibility issues be addressed.

3.3 Peel Goods Movement Task Force

Neither the private nor the public sectors can address the challenges and opportunities facing the movement of goods within and through Peel. In recognition of this, the Peel Goods Movement Task Force was established in 2009 with the objective of facilitating better planning and implementation of goods movement infrastructure and services through partnerships between levels of government and the private sector. The Task Force was formed with the understanding that, in order to be successful, it would have to be a partnership, with members acting through consultation, communication and collaboration to achieve common goals.

The achievements of the Task Force have demonstrated to benefits of the private and public sectors working together to address good movement issues and have laid the groundwork for future actions to improve how goods are moved within and through Peel.

4. Vision, Mission and Goals

A prelude to the selection and implementation of actions to improve the goods movement system in Peel is the identification of a vision for the system. What do the private and public sectors, collectively, expect and desire from the system and how will it contribute to improving the economy and quality of life in Peel? How do we plan to achieve this vision?

4.1 Vision

“Peel Region will have a safe, convenient, efficient, multi-modal, sustainable and integrated goods movement transportation system that supports a vibrant economy, respects the natural and urban environment, meets the diverse needs of industries and residents and contributes to a higher quality of life.”

The vision will be realized through a set of goals and objectives.

4.2 Mission Statement

The intended mandate of the Task Force is to act as a change agent and, therefore, help bring about positive changes and impact to those whom it serves. The mission of the Task Force then is to:

“Support businesses with a transportation system that moves goods and delivers services quickly and efficiently, maximizes economic opportunities and reduces the associated environmental and community impacts.”

4.3 Goals

There are two (2) major goals of the Goods Movement Program:

- (1) Support and influence sustainable transportation systems to ensure that goods are transported in an efficient and timely manner.
- (2) Optimize the use of existing infrastructure and capacity, and minimize adverse environmental, social and economical impacts caused by goods movement transportation.

5. Action Plan and Evaluation Methodology

Members of the Peel Goods Movement Task Force and its Technical Working Group identified a number of potential actions to improve how goods are moved within and through Peel. These were identified at Task Force meetings, a Task Force conference, through an Action Planning Table Survey and by Technical Working Group members. At the inaugural meeting of the Task Force in December 2009, it was agreed that the role of the Task Force should be that of a “change agent” with a focus on the here and now; taking concrete short-term measures while identifying the policies and actions needed to bring about long-term system-wide changes. The proposed actions reflect this, ranging from “Quick Wins” to address existing and short-term challenges to actions aimed at influencing longer-term improvements. The actions are not presented in any particular order or priority, however, some actions need to be achieved before others could be initiated.

5.1 The potential action items have been categorized into four (4) Strategic Directions:

1. Pursue Infrastructure Improvements
2. Partnership, Communication and Advocacy
3. Systems Optimization of Existing Infrastructure
4. Planning and Forecasting

Strategic Direction 1: Pursue Infrastructure Improvements

Mobility and access are core aspects of the transportation system. Traffic congestion and travel delay have been identified as a major challenge by the goods movement industry. Potential actions identified to mitigate the effects of congestion are:

Action 1: Prioritize intersection improvements to allow better truck traffic flow on key corridors with assistance from the area municipalities, the private-sector and the Region’s traffic and roads-capital teams.

Objective: Identify & prioritize intersections for improvements to allow better truck

traffic flow

Expected Deliverable: List of intersections for improvements

Timeframe: Short (or up to 1 year)

Action 2: Identify and implement access improvements to Toronto Pearson Airport.

Objective: Improve access to Toronto Pearson Airport

Expected Deliverable: List of access improvements and implementation of actions

Timeframe: Medium (or up to 2 years)

Action 3: Identify and implement access improvements to CN Brampton and CP Vaughan Intermodal facilities.

Objective: Improve access to CN Brampton and CP Vaughan Intermodal facilities

Expected Deliverable: List of intermodal/access improvements and implementation of actions

Timeframe: Medium (or up to 2 years)

Action 4: Prioritize improvements to at-grade rail crossings to increase safety and minimize conflict between passenger and freight traffic movements.

Objective: Increase safety and minimize conflict

Expected Deliverable: Ongoing discussions and identification of grade level crossings

Timeframe: Medium (or up to 2 years)

Action 5: Research truck-only lanes and implement a pilot project on a Regional Road that experiences heavy truck traffic to help manage commercial vehicle congestion.

Objective: Truck-only lane on a Regional Road as pilot project

Expected Deliverable: Install a truck-only lane

Timeframe: Medium (or up to 2 years)

Strategic Direction 2: Partnership, Communication and Advocacy

Collaboration and support for improvements to Peel's goods movement transportation system will require leadership, partnerships and the active participation of all interested parties. The private sector must not only be consulted but actively and fully engaged in the planning and implementation of future actions. Most goods are transported over the "last mile" by a truck to the retailer or distributor. This provision of goods contributes to the well-being of residents. However, most residents are very averse to seeing large trucks on the roadways as they are seen as clogging up lanes, as heavy and slow, and as making driving conditions worse. Raising the awareness of the importance of the goods movement industry to the general public to change perception can repay huge dividends in the future.

Members of the Task Force, through the Office of the Chair and individual organization, should continue to lobby the Provincial and Federal Governments for increased investments in goods movement infrastructure to ensure that there exists a sustained transportation network and consistent funding for the GTHA.

The Task Force should design and execute a communication plan and advocacy strategy to raise awareness about goods movement that will:

Action 6: Identify border crossing delay issues and recommend changes to improve crossing for truck traffic.

Objective: Improve border crossings for truck traffic and avoid delays

Expected Deliverable: List of border crossing delay issues and recommendations

Timeframe: Short (or up to 1 year) / Ongoing

Action 7: Advocate for changes to the employment density targets in *Places to Grow* that support freight hubs and not to preclude growth and increased employment in the logistics, transportation and warehousing sectors.

Objective: Advocate for changes to employment targets in *Places to Grow*

Expected Deliverable: Advocacy letters and other outreach efforts

Timeframe: Short (or up to 1 year) / Ongoing

Action 8: Advocate for improved provincial and federal goods movement planning and greater inter-regional co-operation.

Objective: Preserve and protect goods movement corridors and land-uses

Expected Deliverable: Advocacy letters and other outreach efforts

Timeframe: Short (or up to 1 year) / Ongoing

Action 9: Identify additional federal and provincial funding sources for the 400 series highway with 401 as a high priority corridor.

Objective: Advocate for infrastructure improvements to mitigate congestion

Expected Deliverable: Advocacy letters and other outreach efforts

Timeframe: Short (or up to 1 year) / Ongoing

Action 10: Advocate for streamlining and expediting the Environmental Assessment process.

Objective: Advocate for a shortened timeframe for environmental assessments

Expected Deliverable: Advocacy letters and other outreach efforts

Timeframe: Short (or up to 1 year) / Ongoing

Action 11: Identify opportunities to strengthen connections between government and private-sector industry.

Objective: Strengthen collaboration and support

Expected Deliverable: Increased partnerships and collaborative efforts

Timeframe: Short (or up to 1 year) / Ongoing

Action 12: Develop a data sharing program between the government and industry.

Objective: Develop a standard written agreement/template as a Memorandum of Understanding in protecting sensitive freight data between public and private sectors

Expected Deliverable: Non-disclosure agreement (NDA)

Timeframe: Short (or up to 1 year)

Strategic Direction 3: Systems Optimization of Existing Infrastructure

Peel Region should optimize the use of the Region's transportation infrastructure and services by maximizing the capacity of the transportation system through transportation demand management and transportation supply management strategies.

Action 13: Enhance traffic signals to accommodate and increase better traffic flow along key goods movement corridors with assistance from the area municipalities, the private-sector and the Region's traffic engineering team.

Objective: Enhance traffic signals to accommodate and increase better traffic flow

Expected Deliverable: Increase better traffic flow

Timeframe: Short (or up to 1 year)

Action 14: Develop and implement a backhaul freight matching program and pilot project.

Objective: Develop a backhaul freight matching program

Expected Deliverable: Pilot project to help reduce empty backhauls

Timeframe: Short (or up to 1 year)

Action 15: Create a Peel truckers' map that employs GPS and includes routes and by-law references.

Objective: Distribute a Peel Truckers' map to industry for proper usage of Regional roads

Expected Deliverable: A Peel Truckers' Map and outreach program

Timeframe: Short (or up to 1 year)

Action 16: Develop and implement a Regional Intelligent Transportation Systems Strategic Plan and Network that is tied into municipal and provincial networks.

Objective: Regional Intelligent Transportation Systems Network

Expected Deliverable: Implementation of an ITS Network

Timeframe: Long (or 3+ years)

Action 17: Develop an enforcement mechanism for road construction projects with assistance from the area municipalities.

Objective: Better management of road construction projects

Expected Deliverable: Reduce delays due to construction projects

Timeframe: Short (or up to 1 year) / Ongoing

Action 18: Improve incident management with assistance from Ontario Ministry of Transportation (MTO), law enforcement officials and the area municipalities.

Objective: Improve incident management turnaround time

Expected Deliverable: Reduce delays due to collision/incidents

Timeframe: Short (or up to 1 year) / Ongoing

Strategic Direction 4: Planning and Forecasting

Forecasts of freight transportation demand are required for planning transportation facilities, for corridor planning, and for strategic planning of the entire transportation system. Growth and intensification in Peel Region are placing constraints on goods movement. Proactive planning

approaches are needed to support development, to enable the efficient location and concentration of freight facilities, including accessibility to intermodal facilities.

Action 19: Advance Freight Transport Management Study (FTMS) recommendations to help the freight industry move goods more efficiently.

Objective: Assist the freight industry to move goods more efficiently

Expected Deliverable: Report on best practices

Timeframe: Short (or up to 1 year)

Action 20: Develop and implement a Strategic Goods Movement Network Study that includes transport of dangerous goods and truck restrictions.

Objective: Identify, protect and preserve goods movement corridors

Expected Deliverable: A network of corridors for efficient goods movement

Timeframe: Short (or up to 1 year)

Action 21: Develop an economic case for the freight village concept. Initiate planning with local area municipalities to identify potential sites.

Objective: Raise the awareness of land-use for goods movement and incorporate it into the planning process

Expected Deliverable: Identify suitable land for freight village or logistics parks

Timeframe: Medium (or up to 2 year)

Action 22: Quantify economic benefits of freight to Peel's economy. Develop an outreach plan to educate stakeholders on importance of freight to the local economy.

Objective: Build a strong economic case for goods movement and the vitality of the economy

Expected Deliverable: Economic report on goods movement and implementation of results

Timeframe: Short (or up to 1 year)

Action 23: Support the establishment of a goods movement Centre of Excellence.

Objective: Establish a Centre of Excellence for goods movement as the go-to centre for studies, reports, long-term planning ideas/opportunities and discussions

Expected Deliverable: Centre of Excellence at a University

Timeframe: Medium (or up to 2 years)

The actions selected for implementation should improve Peel Region's transportation system in several ways. The number of congestion hotspots or bottlenecks will be reduced, safety should be improved, goods movement traffic flow should be enhanced, cooperation and coordination will be increased, and better information will be provided to customers and decision-makers.

Further, less congestion will contribute to better air quality and improving the quality of life of all Peel's residents. A robust transportation system will help build and sustain economic prosperity by retaining industries presently in Peel Region, attract investment and help to create new jobs for Peel's residents.

In the future, every mode of transportation will be carrying more freight/cargo. Peel Region's busy roads, highways, railroads and airport will become busier. The Goods Movement Strategic Plan seeks to improve the flow of goods traffic and safety, reducing costs of freight transport and benefiting the economy, and helping to expand partnerships and understanding of how the transportation system works.

5.2 Action Plan: Summary of Strategic Directions and Potential Actions

STRATEGIC DIRECTION		ACTION ITEM	PROJECT PARTNERS*	TIMEFRAME (YEARS)	STATUS
INFRASTRUCTURE IMPROVEMENTS	Action 1	■ Prioritize intersection improvements to increase truck traffic flow on key corridors	Peel & Area Municipalities	1	Project Initiation – Mar. 2012
	Action 2	■ Identify and implement access improvements to Toronto Pearson Airport	TC, MTO, GTAA, Peel, Mississauga	2	Project Initiation – Mar. 2012
	Action 3	■ Identify and implement access improvements to CN Brampton and CP Vaughan Intermodal facilities	TC, MTO, CN, CP, Peel, Brampton	2	Project Initiation – Mar. 2012
	Action 4	■ Prioritize improvements to at-grade rail crossings	TC, CN, CP, Peel, Municipalities	2	Project Initiation – Mar. 2012
	Action 5	■ Research truck-only lanes and implement a pilot project	Metrolinx, TAC, Peel & Municipalities	2	Metrolinx - Under contract
PARTNERSHIP, COMMUNICATION & ADVOCACY		Execute a communication (actions 6 to 12):	Peel	1 / Ongoing	In Progress
	Action 6	■ Advocate for improvements to border crossings	Task Force	1 / Ongoing	Project Initiation – Mar. 2012
	Action 7	■ Advocate for changes to the employment density targets that support the freight industry	Industry	1 / Ongoing	Project Initiation – Jan. 2013
	Action 8	■ Advocate for improved provincial and federal goods movement planning and greater inter-regional co-operation	Task Force	1 / Ongoing	Project Initiation – Jan. 2013
	Action 9	■ Identify additional federal and provincial funding sources for the 400 series highway with 401 as a high priority corridor	Peel & Municipalities	1 / Ongoing	Project Initiation – Feb. 2013
	Action 10	■ Advocate for streamlining and expediting the Environmental Assessment process	Peel	1 / Ongoing	Project Initiation – Apr. 2012
	Action 11	■ Identify opportunities to strengthen connections between government and private-sector industry	Task Force	1 / Ongoing	Project Initiation – Mar. 2013
	Action 12	■ Develop a data sharing program between the government and industry	TC, Metrolinx & Industry	1	Project Initiation – Mar. 2015

* External project partner participation does not necessarily indicate funding requirement for the development and/or implementation of the action

STRATEGIC DIRECTION		ACTION ITEM	PROJECT PARTNERS*	TIMEFRAME (YEARS)	STATUS
SYSTEMS OPTIMIZATION	Action 13	■ Enhance traffic signals to accommodate and increase better traffic flow along goods movement corridors	Peel & Area Municipalities	1	Project Initiation – Mar. 2012
	Action 14	■ Develop and implement a backhaul freight matching program and pilot project	Industry	1	Project Initiation – Jan. 2013
	Action 15	■ Create a Peel truckers' map that employs GPS and includes routes and by-law references	Peel	1	Project Initiation – Mar. 2013
	Action 16	■ Develop and implement a Regional ITS Strategic Plan and Network	TC, Peel & Area Municipalities	3	Under Contract
	Action 17	■ Develop an enforcement mechanism for road construction projects	Peel & Area Municipalities	Ongoing	Project Initiation – Mar. 2012
	Action 18	■ Improve incident management	MTO, Peel & Area Municipalities	Ongoing	Project Initiation – Apr. 2012
PLANNING AND FORECASTING	Action 19	■ Advance Freight Transport Management recommendations	Peel	1	Under Contract Apr. 11 – Mar. 12
	Action 20	■ Develop and implement a Strategic Goods Movement Network	Peel	1	RFP - Dec. 2011
	Action 21	■ Develop an economic case for freight village	Peel	2	Project Initiation – Apr. 2013
	Action 22	■ Quantify economic benefits of freight to Peel's economy	Peel	1	Project Initiation – Apr. 2013
	Action 23	■ Support the establishment of a goods movement Centre of Excellence	TC, MTO, Metrolinx	2	Jan. 2016

* External project partner participation does not necessarily indicate funding requirement for the development and/or implementation of the action

Table 5-1: Summary of Strategic Directions and Potential Actions

5.3 Five (5) Year Action Plan for Goods Movement

YEAR 1: 2012

ACTION	ACTION ITEM	STRATEGIC DIRECTION	TIMEFRAME (YEARS)	PROJECT PARTNERS*	STATUS
Action 1	■ Prioritize intersection improvements to increase truck traffic flow on key corridors	Infrastructure Improvements	1	Peel & Area Municipalities	Project Initiation - Mar. 2012
Action 2	■ Identify and implement access improvements to Toronto Pearson Airport	Infrastructure Improvements	2	TC, MTO, GTAA & Peel	Project Initiation - Mar. 2012
Action 3	■ Identify and implement access improvements to CN Brampton and CP Vaughan Intermodal facilities	Infrastructure Improvements	2	TC, MTO, CN, CP & Peel	Project Initiation - Mar. 2012
Action 4	■ Prioritize improvements to at-grade rail crossings	Infrastructure Improvements	2	TC, CN, CP & Peel	Project Initiation - Mar. 2012
Action 6	■ Advocate for improvements to border crossings	Partnership, Communication & Advocacy	1 / Ongoing	Task Force	Project Initiation - Mar. 2012
Action 10	■ Advocate for streamlining and expediting the Environmental Assessment process	Partnership, Communication & Advocacy	1 / Ongoing	Peel	Project Initiation - Apr. 2012
Action 13	■ Enhance traffic signals to accommodate and increase better traffic flow along goods movement corridors	Systems Optimization	1	Peel & Area Municipalities	Project Initiation - Mar. 2012
Action 16	■ Develop and implement a Regional ITS Strategic Plan and Network	Systems Optimization	3	TC, Peel & Area Municipalities	In progress, Strat. Plan \$227K, complete Feb. 2012
Action 17	■ Develop an enforcement mechanism for road construction projects	Systems Optimization	1 / Ongoing	Peel & Area Municipalities	Project Initiation - Mar. 2012
Action 18	■ Improve incident management	Systems Optimization	1 / Ongoing	MTO, Peel & Area Municipalities	Project Initiation - Apr. 2012
Action 19	■ Advance Freight Transport Management recommendations	Planning & Forecasting	1	Peel	In progress; \$75K funded by TDM
Action 20	■ Develop and implement a Strategic Goods Movement Network	Planning & Forecasting	1	Peel	RFP - Dec. 2011

* External project partner participation does not necessarily indicate funding requirement for the development and/or implementation of the action

YEAR 2: 2013

ACTION	ACTION ITEM	STRATEGIC DIRECTION	TIMEFRAME (YEARS)	PROJECT PARTNERS*	STATUS
Action 7	<ul style="list-style-type: none"> Advocate for changes to the employment density targets that support freight hubs 	Partnership, Communication & Advocacy	1 / Ongoing	Industry	Project Initiation – Jan. 2013
Action 8	<ul style="list-style-type: none"> Advocate for improved provincial and federal goods movement planning and greater inter-regional co-operation 	Partnership, Communication & Advocacy	1 / Ongoing	Task Force	Project Initiation – Jan. 2013
Action 9	<ul style="list-style-type: none"> Identify additional federal and provincial funding sources for the 400 series highway with 401 as a high priority corridor 	Partnership, Communication & Advocacy	1 / Ongoing	Peel & Municipalities	Project Initiation – Feb. 2013
Action 11	<ul style="list-style-type: none"> Identify opportunities to strengthen connections between government and private-sector industry 	Partnership, Communication & Advocacy	1 / Ongoing	Task Force	Project Initiation – Mar. 2013
Action 14	<ul style="list-style-type: none"> Develop and implement a backhaul freight matching program and pilot project 	Systems Optimization	1	Industry	Project Initiation – Jan. 2013
Action 15	<ul style="list-style-type: none"> Create a Peel truckers' map that employs GPS and includes routes and by-law references 	Systems Optimization	1	Peel	Project Initiation – Mar. 2013
Action 22	<ul style="list-style-type: none"> Quantify economic benefits of freight to Peel's economy 	Planning & Forecasting	1	Peel & Municipalities	Project Initiation – Apr. 2013

* External project partner participation does not necessarily indicate funding requirement for the development and/or implementation of the action

YEAR 3: 2014

ACTION	ACTION ITEM	STRATEGIC DIRECTION	TIMEFRAME (YEARS)	PROJECT PARTNERS*	STATUS
Action 5	■ Research truck-only lanes and implement a pilot project	Infrastructure Improvements	2	Metrolinx, TAC, Peel & Municipalities	Metrolinx - Under contract
Action 21	■ Develop an economic case for freight village	Planning & Forecasting	2	MTO, Brampton & Caledon	MTO – research phase In Progress
	■ Implementation of project / study recommendations from years 1 to 2				

* External project partner participation does not necessarily indicate funding requirement for the development and/or implementation of the action

YEAR 4: 2015

ACTION	ACTION ITEM	STRATEGIC DIRECTION	TIMEFRAME (YEARS)	PROJECT PARTNERS*	STATUS
	■ Implementation of project / study recommendations from years 1 to 3				
Action 12	■ Develop a data sharing program between the government and industry	Partnership, Communication & Advocacy	1	TC, Metrolinx & Industry	Project Initiation – Mar. 2015

* External project partner participation does not necessarily indicate funding requirement for the development and/or implementation of the action

YEAR 5: 2016

ACTION	ACTION ITEM	STRATEGIC DIRECTION	TIMEFRAME (YEARS)	PROJECT PARTNERS*	STATUS
	■ Implementation of project / study recommendations from years 1 to 4				
Action 23	■ Support the establishment of a goods movement Centre of Excellence	Planning & Forecasting	2	TC, MTO & Metrolinx	Project Initiation - Jan. 2016

* External project partner participation does not necessarily indicate funding requirement for the development and/or implementation of the action

Table 5-2: Five (5) year Action Plan for Goods Movement

5.4 Evaluation Methodology / Performance Measures

Performance measures need to be developed to gauge the effectiveness of specific actions and of the set of actions as a whole. The measures should also help determine whether the actions are providing the most benefit from the limited funding available for transportation improvements. The measures must take into consideration desired outcome, current system performance, and the evaluation of potential actions to increase system performance.

The development of performance measures for the actions selected by the Peel Goods Movement Task Force can benefit from recent work done on this topic in the USA and elsewhere. The Technical Working Group will be tasked with identifying and implementing appropriate measures.

The identified set of performance measures will likely include both quantitative and qualitative measures. Quantitative measures will rely on data collected by the public sector and/or supplied by the private sector. Qualitative measures will be measured through feedback, experience, and input from users of the goods movement system.

5.5 Implementation of the Action Plan

Execution and implementation of the action plan will most certainly require resources, partnership and collaboration between public and private-sector members of the Peel Goods Movement Task Force. Sub-committees from the Task Force will be established as working groups based upon areas of expertise to steer select initiatives to completion. The sub-committees shall meet on a quarterly basis or as required to review progress made on the action items to ensure that they are on track to be delivered on time and within budget. Once initiatives or studies have been completed, the sub-committees will be charged with the responsibility to educate the Peel Goods Movement Task Force about their recommendations and seek the Task Force's endorsement to advance those recommendations to Regional Council for approval, as needed, to implement. Regional Council's approval will be on a case by case basis depending on the initiative being implemented and its impact to the transportation system, the economy, on the environment and, most importantly, to Peel's residents.

The next steps are to establish the sub-committees to oversee the implementation of the Action Plan, develop an implementation plan for each action item listed under this Plan and launch the action items earmarked for year 1 (2012).

The major achievement of the Peel Goods Movement Task Force is the level of trust and respect that now exists among both public and private-sector members, and that a huge sense of urgency is now needed to deliver quick wins to the transportation system in Peel if congestion is to be managed and its effects mitigated.

6. Conclusion

A systems approach is needed in order to achieve the vision for goods movement in Peel Region (such as reduced delay, better travel time reliability, safer travel across all modes and trip types, and broader shipping choices and better customer service to help Peel Region's businesses to remain competitive). Such an approach must also consider the economic context in which projects are established and implemented, using measures such as return on investment to link transportation investment decisions to the local, regional and national economies.

Through continued collaboration, members of the Peel Goods Movement Task Force can, and will, bring about positive changes to the efficiency, effectiveness and safety of Peel's goods movement transportation system so as to preserve jobs, attract potential investors to the Region and be open for business.

Acknowledgements:

This paper has been prepared in collaboration with Peel Goods Movement Task Force members and Peel region and area municipal staff. The authors want to thank and acknowledge contribution of several Task Force members and staff for their assistance in preparing the Strategic Plan.

Appendix I – Peel Goods Movement Task Force Membership

As of October 2011

Task Force Members

Brampton Board of Trade
Caledon Chamber of Commerce
Canadian Courier & Logistics Association
Canadian Manufacturers and Exporters
Canadian National Railway
Canadian Pacific Railway
Canadian Tire Corporation
Cavalier Transportation Services Inc.
City of Brampton
City of Mississauga
Government of Ontario
Greater Toronto Airports Authority
Maritime-Ontario Freight Lines Ltd.
Metrolinx
Mississauga Board of Trade
Ontario Chamber of Commerce
Ontario Ministry of Economic Development and Trade
Ontario Ministry of Transportation
Ontario Trucking Association
Purolator Inc.
Region of Peel
Supply Chain and Logistics Association of Canada
Town of Caledon
Transport Canada
Walmart Stores Inc.

Technical Working Group Members

Region of Peel Transportation Planning
Region of Peel Office of Strategic Innovation and Policy
City of Brampton Planning, Design and Development Department
City of Brampton Economic Development and Communications Department
City of Mississauga Transportation and Infrastructure Planning Department
City of Mississauga Economic Development Office
Town of Caledon Planning and Development Department
Town of Caledon Economic Development Department

Appendix II – Terms of Reference: Peel Goods Movement Task Force

Mandate:

The mandate of the Peel Goods Movement Task Force is as follows:

- To develop a common vision for goods movement in the Peel area;
- To provide a forum to bring together key public and private sector stakeholders to guide future improvements to the goods movement system, to facilitate the exchange of information and to develop common messages on issues affecting goods movement;
- To monitor, review and provide input and feedback to regional, provincial and federal initiatives related to goods movement; and
- To develop an action plan, and the required partnerships, for the implementation of short, medium and long-term improvements to the goods movement network in Peel.

Membership:

The Peel Goods Movement Task Force functions as a partnership, with members acting through consultation, communication and consensus-building. Membership of the Task Force includes representatives from private and public sector organizations involved in goods movement in Peel.

The Peel Regional Chair is an ex-officio member of the Task Force. Three Peel Regional Councillors (one each from the City of Mississauga, the City of Brampton and the Town of Caledon) have been appointed to the Task Force.

In accordance with the Region of Peel Procedural By-law, members of the Task Force may designate an alternate to attend on their behalf. Alternate members are afforded all Task Force privileges.

Chair and Vice-Chair:

Peel Regional Chair, Emil Kolb, serves as the Chair of the Peel Goods Movement Task Force. Peel Regional Councillor (Town of Caledon), Allan Thompson, serves as the alternate to Chair Kolb.

Quorum:

To be determined by the Task Force.

Meeting Frequency:

The Peel Goods Movement Task Force meets quarterly or as required at the call of the Task Force Chair.

Staff Resources:

A Technical Working Group, consisting of senior staff from the Region of Peel and the area municipalities, has been formed to support the Peel Goods Movement Task Force. The Technical Working Group may be augmented by representatives from other Task Force member organizations as necessary.

References:

- California Transportation Plan, Statewide Goods Movement Strategy, August, 1998
- Metrolinx GTHA Urban Freight Study, Final Draft, February, 2011
- Ontario Ministry of Municipal Affairs and Housing Provincial Policy Statement 2005
- Ontario Ministry of Transportation, GTA West Environmental Assessment Study, Draft Transportation Development Strategy Report (February 2011)
- Portland (Oregon, USA) Regional Freight Plan, June, 2010
- Southern Ontario Gateway Council Economic Impact Study – Final Report, October 23, 2006
- Study of Goods Movement in Peel, Strategic Overview, November, 2004
- Transport Canada: Integration Technologies for Sustainable Urban Goods Movement, 2004