



PEEL LONG RANGE TRANSPORTATION PLAN

Update 2012

SYNOPSIS



INTRODUCTION



What is the 2012 Update of the Long Range Transportation Plan?

The Region of Peel's Long Range Transportation Plan (LRTP) is a study that addresses the major transportation challenges Peel expects to face over the next few decades. The study was first completed in 2005, and has since been updated in 2012. The updated study was adopted by Regional Council in June 2012.

Purpose of the Study

This 2012 update of the LRTP provides a policy framework for Regional Official Plan Amendment (ROPA) 22 and 26, serving as a technical basis for these amendments.

The study is also a transportation master plan for the Region of Peel, conducted under the Municipal Class Environmental Assessment (EA) process in compliance with Ontario's Environmental Assessment Act. This study addresses Phases 1 and 2 of the Municipal Class EA process, and involves defining the problem, identifying alternative solutions, and selecting a preferred solution in consultation with the public and key stakeholders.

DOCUMENT OUTLINE

- Trends and Challenges
- Ongoing and Planned Initiatives
- Finding Solutions
- Implementing the Plan

This document summarizes the major findings and recommendations of the 2012 update of the LRTP. The full report is available at peelregion.ca/LRTP

About the Region

The Regional Municipality of Peel is located in the west-central area of the Greater Toronto and Hamilton Area (GTHA) and consists of three area municipalities: the City of Brampton, the Town of Caledon and the City of Mississauga.

If you travel through Peel, you'll notice many differences in the land use throughout the region, including urban, suburban, rural, agricultural and undeveloped land. The Region is a place of diverse people, diverse lifestyles, and diverse transportation needs.

As a fast-developing region in both population and employment, we must plan carefully for both our present and future needs. We need to ensure that our transportation system will help cultivate a sustainable and liveable future for the Region of Peel.

TRENDS AND CHALLENGES



Between 1971 and 2006, the population of the Region of Peel increased 340 per cent, and is expected to grow by another 42 per cent by 2031. Similarly, employment increased by 260 per cent between 1976 and 2006, translating into 440,000 new jobs.

As expected, this increase in population and employment has resulted in a growing number of morning trips during rush hour, which will continue to increase congestion levels on our roads. With this comes a wide array of challenges that go far beyond concerns regarding our transportation system.

In particular:

- Increasing environmental concerns** – growth in the volume of greenhouse gas (GHG) emissions produced by the transportation sector
- Lack of accessible transportation** for the elderly and those with disabilities
- Increasing health concerns** – obesity and diabetes can be linked to physical inactivity, which is further aggravated by a sprawling neighbourhood and an auto-dependent lifestyle
- Disturbance of cultural land** – potential impacts on aboriginal lands during road construction and other infrastructure project guidelines for roadways within their respective jurisdictions
- Loss of economic resources** – resulting from lost time and money due to excessive congestion

In 2031, the over-75 age group will be the largest age group in the Region, with over 260,000 people.

The following is a snapshot of the major transportation trends and challenges the Region of Peel expects to face in the next few decades:

POPULATION GROWTH

The population of Peel has increased by 340% between 1971 and 2006. Of all GTHA regions, Peel ranks second in the rate of population growth – an increase of 36% per year.

INCREASING CONGESTION

From 1996 to 2006, the number of peak-period trips in Peel increased at a higher rate than that of those in the GTHA. The morning peak-period trips have been increasing steadily, in proportion to the total number of trips in a day.

DEPENDENCE ON CARS

In 2006, auto drivers constituted 62% of all trips in the morning peak period. Walking and cycling trips for Peel residents declined from 8.4% in 1996 to 7.6% in 2006.

INCREASING WORK TRIP LENGTHS

The typical work trip in Peel (23.1 km) is significantly longer than the GTHA average (14.3 km).

RISING NUMBER OF INTRA-REGIONAL TRIPS

Over 65% of all trips are intra-regional – within and between the three area municipalities. About 15,000 through-trips (from Halton Region, Hamilton to Toronto, and from Dufferin and Simcoe Counties to the GTA) place an additional significant load on the Regional network.

NEED TO MAINTAIN ECONOMIC COMPETITIVENESS

Goods movement trips remain an important economic indicator for the Region of Peel. It is important that the movement of trucks be effectively facilitated to reduce peak-period congestion. In 2009, truck trips accounted for 7.9% of all vehicle trips crossing Peel Region – about 120,000 truck trips.

NEED TO INCREASE TRANSIT MODAL SHARE

Between 2001 and 2006, there was a gradual shift to more sustainable modes of transportation. The increase, however, is not enough. Since the majority of trips in Peel are internal, there is potential for converting existing drivers to transit riders.

NEGATIVE ENVIRONMENTAL IMPACTS OF TRANSPORTATION

The transportation sector is responsible for 34% (56.8 Mt) of total greenhouse gas emissions in Ontario, with the bulk of these emissions resulting from gasoline combustion for personal vehicle use.

AGING POPULATION

By 2021, 15% of the Region's population will be aged 65 and older. As the population ages, there will be a greater need to provide accessible transportation to those with mobility impairments. It is estimated that there will be an annual increase of 18.3% in TransHelp use from 2011 to 2031.



Because transportation is interconnected with health, quality of life, social equity and the environment, road improvement cannot be the sole answer to our congested roads.

Instead, the Region of Peel needs to develop a broad strategy that encourages a fundamental shift in mindset, from an auto-oriented lifestyle to a more sustainable way of living.

Specifically, the Region of Peel needs transportation solutions that will:

- Encourage sustainable modes of transportation such as transit, carpooling, cycling and walking
- Provide a connected and balanced transportation network that supports all modes of travel and improves travel efficiency
- Maintain the Region's economic competitiveness by facilitating goods movement
- Meet the transportation needs of the elderly and those with disabilities
- Support and conform to the Provincial Policy Statement, the Provincial Growth Plan (Places to Grow), the Greenbelt Plan, the Niagara Escarpment Plan and Regional Official Plan policies

Every extra kilometre walked can result in a 5% reduction in diabetes risk and obesity.

Every hour spent in a car increases the risk of obesity by 6%.

ONGOING AND PLANNED INITIATIVES



The Transportation Network

In order for Peel's Regional roads to provide safe and efficient travel for all modes of transportation, the Region is continually working to improve and maintain our transportation network.

Initiatives include:

Roads Improvement Program (2011–2031)

- Response to existing congestion and the forecasted 2031 travel needs
- Construction and maintenance of 1,551 lane kilometres of arterial roads, 110 bridges, and 39 major culverts in Caledon, Brampton and Mississauga
- Implementation of safety measures to minimize collisions

Highway Expansion Initiatives

- Development of Highway 427 Extension Plan, Greater Toronto Area West Corridor Study, Halton-Peel north-south transportation corridor recommendation

Transit

- Working with and supporting Brampton Transit, Mississauga Transit and GO Transit to maximize the efficiency of their transit systems

Intelligent Transportation Systems

- Optimizing the use of existing and new transportation infrastructure and services through innovative technologies

Accessible Transportation Services

- Improvements by 2021 in response to a forecasted increase of persons aged 65 and older
- Improving accessible transportation services to meet a wide array of needs
- Improving conventional transit accessibility



Managing Transportation Demand

Considering the congestion, population growth, health and environmental challenges that the Region faces today (and will face in the future), we must recognize the connection between our transportation system and our everyday choices to use a particular mode of transportation. While the state of our transportation system is affected by our choices, our choices are also influenced by the availability of different modes of transportation around us.

Transportation Demand Management (TDM) strategies play an important role in changing our travelling behaviours in the Region, and ultimately in improving our quality of life.

This can be made possible by maximizing travel during off-peak periods, the use of travel routes, transit services, as well as pedestrian/bicycle paths, while reducing trip frequencies and distances.

Walk + Roll Peel
is committed to
getting more people
walking and cycling
in Peel communities
instead of driving.
Visit their website at
walkandrollpeel.ca for
more information!

Current TDM activities and programs include:

- Participation and promotion of the GTHA Smart Commute Initiative
- Walk + Roll Peel program encouraging cycling and walking
- Active Transportation Study addressing pedestrian and cycling improvements in Peel
- Children and youth outreach initiatives to encourage safe and walkable neighbourhoods

TDM will continue to expand through the development of social marketing programs and feasibility studies for future projects.



Goods Movement

The movement of goods through the Region of Peel is closely linked to the Region's economic health. As a major hub for industrial and manufacturing activity, the Region attracts and retains many industries and businesses. In order to maintain the health of our economy, the transportation network needs to also provide efficient means to transport goods.

The Goods Movement Task Force is currently at work to address freight challenges and opportunities, communicating with both private and public sector stakeholders to facilitate better planning and implementation for goods movement infrastructure and services.

Peel accounts for 15% of Ontario exports.

Freight transportation, warehousing and manufacturing account for almost 30% of employment in Peel.



FINDING SOLUTIONS



Addressing our Challenges

In response to the major transportation challenges we will face, four transportation planning alternatives have been developed after thorough research and analysis.

ALTERNATIVE 1: “DO NOTHING” assumes that current conditions of the roadway network are complemented with aggressive investments in improving TDM, active transportation and conventional transit.

ALTERNATIVE 2: “TRANSPORTATION DEMAND MANAGEMENT ONLY” reflects the current condition of the roadway and transit networks carried over to 2031, without roadway or transit capacity improvements.

ALTERNATIVE 3: “ROAD AND HIGHWAY IMPROVEMENTS ONLY” builds on road and highway widening/expansion as recommended in the road improvement Capital Plans and Master Plans from Peel, area municipalities, the Province and other regions/municipalities in the GTHA.

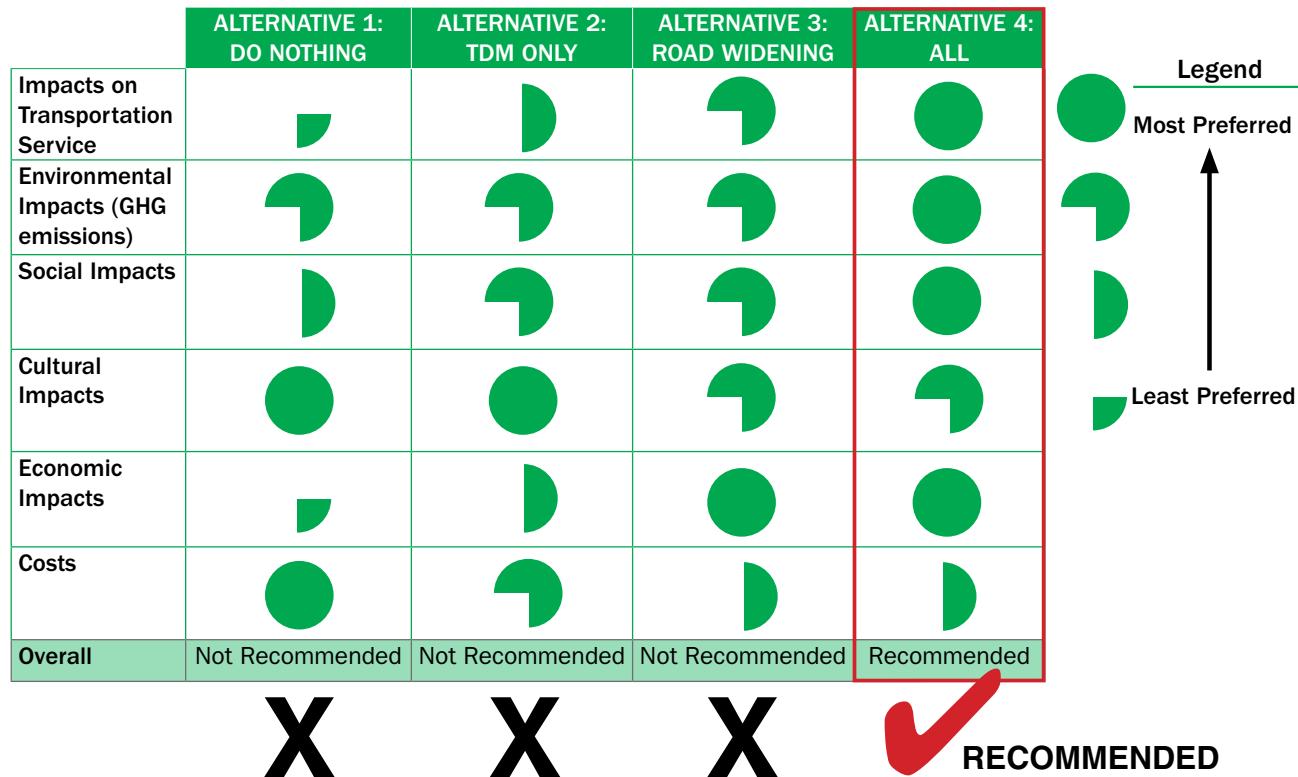
ALTERNATIVE 4: “COMBINATION OF ALTERNATIVES 2 AND 3” provides for the needed roadway capacity/improvements while also investing in TDM and active transportation.

Six evaluation criteria and their measures were identified, as seen below:

EVALUATION CRITERIA	EVALUATION MEASURES
Transportation	<input type="checkbox"/> Volume/capacity ratio at screenlines <input type="checkbox"/> Congested vehicle kilometre travelled <input type="checkbox"/> Network connectivity and continuity <input type="checkbox"/> Support for transit
Environment	<input type="checkbox"/> Greenhouse gas emissions <input type="checkbox"/> Potential impacts/encroachments on any environmental sensitive areas such as wetlands, woodlots or other
Social	<input type="checkbox"/> Health issues related to air quality <input type="checkbox"/> Appropriateness for the changing demography, such as aging population and persons with disabilities <input type="checkbox"/> Support for a healthier commute, such as transit-friendly development <input type="checkbox"/> Potential impacts, such as aircraft noise exposure composite contours, Regional intensification corridor, and urban system
Cultural Heritage	<input type="checkbox"/> Potential impacts on major structures, places of worship or cemeteries, existing and historical settlement areas and hamlets
Economy	<input type="checkbox"/> Cost of congestion <input type="checkbox"/> Network connectivity and continuity – access to the employment lands and provincial network
Other – costs or impact on utility corridors	<input type="checkbox"/> Qualitative discussion about potential costs and/or impacts on utility corridors

Through evaluation of each planning alternative, it was found that Alternative 4 would be most effective in addressing the Region's transportation challenges.

Alternative 4 addresses both the transportation system as well as our travel behaviours. It presents a combination of infrastructure measures (road construction/improvement, implementation of rapid transit corridors) and transportation demand management measures that promote active transportation and a change in travel behaviour and choice of travel mode.



Source: Peel Region 2011

The planning process and the preliminary preferred alternative were presented to the general public and stakeholders in a public consultation process compliant with the requirements of the Master Plan process under the Municipal Class EA Phases 1 and 2.

IMPLEMENTING THE PLAN



Alternative 4 demonstrates how we can manage our transportation system both efficiently and sustainably.

The proposed implementation plan takes on a multifaceted approach that includes many different areas of expertise as well as many types and levels of involvement. Collaboration with stakeholders, Peel area municipalities and the Province is vital in bringing the plan to fruition.

Specific implementation measures include:

- Inform Regional Council about the results of the LRTP Update to guide future decisions about Peel's transportation system
- Enhance the value of the GTHA Smart Commute Program for employers and employees
- Work with area and neighbouring municipalities to develop a GTA High Occupancy Vehicle Network Strategy, a Peel Region HOV Network Plan, and a Peel Region Carpool Lot Plan
- Develop and implement the Peel Goods Movement Strategic Plan and Action Plan
- Develop and implement the Peel Active Transportation Plan and its marketing strategies
- Initiate the Road Characterization Study to develop a road classification system, harmonize transportation and prioritize competing right-of-way demands
- Enhance transportation options and service levels for persons with disabilities and initiate a review of the Peel Accessible Transportation Master Plan
- Find funding opportunities to support TDM measures, transit improvements and goods movement
- Monitor and assess the performance of the transportation system in Peel, providing regular monitoring reports to Regional Council goods movement infrastructure and services.

Visit Smart Commute's website at smartcommute.ca/en to get involved with Smart Commute Mississauga and Smart Commute Brampton-Caledon!

The Road Characterization Study will bring together multiple stakeholders to develop a set of design guidelines that will improve transportation and land use integration.

Performance Objectives

In an effort to keep the LRTP Update accountable and to measure its performance, the following performance objectives were chosen:

- 1) Move people and goods efficiently through Peel
- 2) Ensure transportation safety
- 3) Meet the mobility needs of the elderly and persons with disabilities
- 4) Encourage alternative modes of transportation
- 5) Provide an integrated transportation network
- 6) Support sustainable economic development
- 7) Reduce air emissions from transportation sources

**Participants in
the Transportation
Tomorrow Survey
provide information
about their travel
choices and
preferences.**

The data required to evaluate the performance objectives will come primarily from the Transportation Tomorrow Survey (TTS), the Cordon Count Survey and the Travel Time Study.

Funding

In order to support long-term planning and strategic investment, long-term, predictable and stable funding is needed. Funding through the growth component of the Regional Development Charges Act can only comprise a part of the funding program needed – it must be supplemented with new and creative ways of financing in order to make the construction and operation of transportation facilities possible.

Potential sources of financing for transportation infrastructure include:

- Working fund reserves
- Capital reserves
- Development Charges (DC) reserve funds
- Public-Private Partnerships (PPP)
- Ontario Gasoline Tax

The Region is currently in the process of developing a Transportation Funding Strategy that will assess current funding mechanisms and explore future opportunities.

CONCLUSION



Transportation issues are intrinsically complex, interconnected and interrelated to many other aspects of our lives. Thus, in order to create a liveable and sustainable future for the Region of Peel, we must be both focused on the transportation solutions we implement, as well as mindful of the broader context. Looking ahead, the Region of Peel will continue to improve existing infrastructure and ensure that the movement of goods through Peel is efficient and beneficial to the Region. However, the Region is also taking a multi-modal planning approach that supports and encourages alternative modes of transportation, such as transit, cycling and walking.

Ultimately, it is a call for a communal effort to adapt our lifestyles and move together towards a more sustainable, vibrant and liveable future.

The Long Range Transportation Plan Update 2012 is available at peelregion.ca/LRTP

For more information, please contact:

Sabbir Saiyed, PhD., P. Eng.
Manager, Transportation System Planning
Transportation Division, Public Works
Region of Peel
10 Peel Centre Drive, Suite B, 4th Floor
Brampton, ON L6T 4B9
Tel: 905-791-7800 ext. 4352
Email: sabbir.saiyed@peelregion.ca

Eric Chan, P. Eng.
Principal Planner, Transportation System Planning
Transportation Division, Public Works
Region of Peel
10 Peel Centre Drive, Suite B, 4th Floor
Brampton, ON L6T 4B9
Tel: 905-791-7800 ext. 4417
Email: eric.chan@peelregion.ca

PEEL LONG RANGE TRANSPORTATION PLAN

10 Peel Centre Drive, Suite B
Brampton, ON L6T 4B9
Tel: 905-791-7800
peelregion.ca/L RTP