
URBAN GOODS MOVEMENT

EXECUTIVE SUMMARY

Technical Paper 5 to support the ***Discussion Paper*** for the
Next Regional Transportation Plan



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TRANSPORTATION POLICY AND RESEARCH

The text 'DAVID KRIGER' is in a blue, sans-serif font. Below it is a row of seven small icons representing different modes of transport: a truck, a train, a ship, a tractor, a car, an airplane, and a bus. Below the icons is the text 'TRANSPORTATION POLICY AND RESEARCH' in a smaller, blue, sans-serif font.

METROLINX
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Executive Summary

The mandate to create a Regional Transportation Plan (RTP) is embodied in the *Metrolinx Act, 2006*. Along with the Greenbelt Plan and Growth Plan for the Greater Golden Horseshoe, the RTP is part of an approach by the provincial government to prepare the Greater Toronto and Hamilton Area (GTHA) for growth and sustainability. Together these three initiatives will lead to the development of more compact and complete communities that make walking, cycling, and transit part of everyday life. Consideration of goods movement is key to the RTP.

The Metrolinx Board of Directors adopted The Big Move RTP in November 2008. A review of the RTP must be completed every 10 years from when the Act came into force. The formal review of the RTP is expected to be substantially completed in 2016. The updated RTP will be released in 2017.¹

The Big Move is the blueprint for a more sustainable transportation future. It reaches out 25 years into the future to guide and direct decision-making. It sets out priorities, policies, and programs for a future of complete mobility. The aim of the RTP is to achieve a transportation system for the GTHA that is effective, integrated, and multi-modal. The RTP presents a vision for the future in which transportation within the GTHA is seamless, coordinated, and efficient, as well as a blueprint for how to get there.

The RTP was built upon nine “Big Moves,” or strategies. The eighth of these addressed goods movement. It called for the development of a comprehensive strategy to improve goods movement within the GTHA and with adjacent regions. Two factors determined the need:

- The adverse financial impact of congestion on the GTHA’s residents as well as on its ability to compete in a global economy, given the real costs that delays impose on the price of consumer products and on business operations.
- The adverse environmental impact of truck-generated greenhouse gas emissions. Trucks are by far the dominant mode used to move goods in the GTHA and, even with improvements in vehicle emissions control technologies, GHGs from heavy trucks are expected to increase significantly as goods movement grows.

The strategy recognized the need for a multi-pronged approach and a strong partnership with shippers (those who generate goods) and carriers (those who move the goods).

To meet this need, Metrolinx prepared the GTHA Urban Freight Study, which the Metrolinx Board of Directors approved in February 2011. The study was driven by extensive consultations with public agencies and private sector thought leaders. It resulted in five strategic directions and 17 actions that provided a strong basis for addressing urban goods movement challenges in the GTHA. This Action Plan comprised a broad range of planning and operational improvements, predicated on increased collaboration and support among and between public and private goods movement stakeholders.

¹ The Province is currently reviewing the Growth Plan for the Greater Golden Horseshoe and the Greenbelt Plan, as well as the Oak Ridges Moraine Conservation Plan and the Niagara Escarpment Plan.

One initial outcome was Metrolinx’s establishment of the GTHA Urban Freight Forum (UFF), which regularly brings together a group of public agencies, private industries, intermodal freight terminals, industry associations and researchers to exchange information, generate action, inspire innovation, and review the delivery of the Action Plan.

In November 2012, the UFF issued its first Status Update on the Action Plan. The Update is a compendium of policies, data collection, actions, and research initiatives conducted by Metrolinx and individual members of the Urban Freight Forum. Taken together, the RTP, the GTHA Urban Freight Study and Action Plan, and the Status Update serve as the main points of reference for this Backgrounder.

The sections that follow provide a summary of the research undertaken for the Backgrounder.

The Multi-modal Goods Movement Network and Its Use

Key stakeholders in goods movement include both public sector and private sector entities. Key public sector stakeholders include Metrolinx, the Ontario Ministry of Transportation, the ports and airports, and the municipalities. Key private sector stakeholders include all large goods movement companies operating in the GTHA, including transportation and logistics business such as the railways, trucking companies, couriers, and logistics providers, as well as the shippers such as the major retailers, construction companies, and manufacturers.

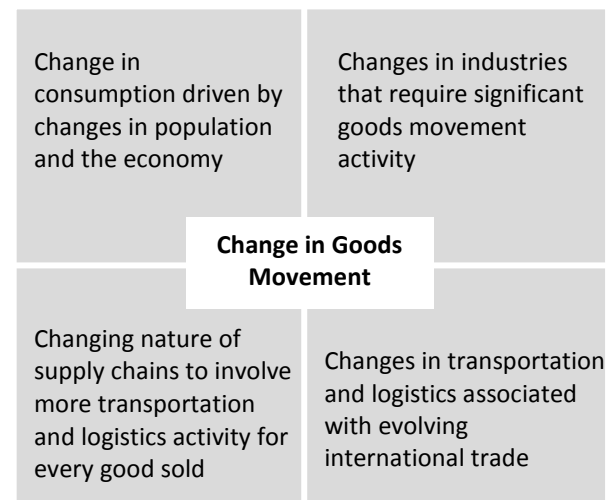
The GTHA has a truly multi-modal network of infrastructure. Goods flow by air, marine, pipelines, rail, and road, and are interchanged between modes at major terminals including airports, marine ports, rail intermodal and transload facilities, and pipeline terminals.

Demographics and Economics

Goods movement is fundamental to the functioning of our economy, and therefore our quality of life. Every good and very many services require transportation to get to market. The cost of transportation is the human and material resources required to move goods and services. This cost buys varying levels of speed, reliability, pollution, and safety. Goods movement can be said to be cost effective when it achieves desired levels of speed, reliability, pollution, and safety at the lowest possible cost.

Changes in the volume and nature (origin/destination, mode, etc.) of goods movement are driven by four key factors:

Figure 1-1: Key Drivers of Change in Goods Movement



While some trends have an uncertain impact, we believe that the continued growth of consumption (driven by population and income growth) in the GTHA, coupled with the position of the GTHA as Canada's premier logistics cluster/hub, mean that volume of goods moving in the area will continue to grow over the next 10 years.

Progress to Date on Urban Goods Movement

The Big Move set out a comprehensive set of goals and objectives, but only limited key performance indicators associated with goods movement specifically. On the 17 actions from the regional goods movement Action Plan, progress – much of it spearheaded by Metrolinx – has been made on most fronts. Goods movement performance must be measured with key performance indicators to take into account public and private sector perspectives on travel times, reliability, cost, environmental sustainability, and safety.

RTP Vision for Goods Movement

The RTP articulates a vision in which urban goods movement is quick, efficient, reliable, convenient, safe, low carbon, efficient in its use of resources, including road capacity, seamless across modes and jurisdictions, fair and equitable, and cutting edge.

Visions from other jurisdictions in the GTHA, Canada, the United States, and overseas can inform the development of an RTP vision for goods movement. In terms of the scope of the vision, the examples reviewed for this Backgrounder suggest that the vision must speak to all existing Provincial, Metrolinx and municipal policies.

It is recommended that the proposed Goal E of the updated RTP vision introduce the concepts of economy, reliability, and efficiency, which are terms that are especially meaningful to partners from the goods movement industry, while reinforcing safety and environmental sustainability, which are important to everyone.

Goods Movement Challenges, Issues, and Opportunities

There are three key issues in urban goods movement in the GTHA: congestion, managing land use compatibility, and reducing the environmental impact of goods movement.

For private sector stakeholders congestion is overwhelmingly the most important issue, as it affects their ability to move goods quickly and reliably around the region. Goods movement vehicles shoulder a disproportionate share of the burden of congestion owing to relatively high values of goods transported. Solutions to congestion specifically related to goods movement include off-peak delivery, goods movement priority measures such as truck-priority lane, and the prioritization of goods movement corridors for infrastructure and operational improvements.

Land use planning and goods movement are strongly related. Ensuring that goods-movement-intensive land uses are appropriately located is a major issue for both the public and private sectors. Planning that incorporates goods movement is key to reducing conflicts.

The environmental performance of goods movement is also a key issue. Reducing

truck-km and regulatory initiatives are the key opportunities.

Strategic Directions and Actions, and Gaps

Metrolinx, Peel Region, the Southern Ontario Gateway Council, and the Western Golden Horseshoe Municipal Network have all set out goals and objectives for urban goods movement.

All goals and objectives of the GTHA Urban Freight Study are sufficiently high level that they remain relevant to the current challenges of urban goods movement identified in Chapter 6.

The Technical Backgrounder to the Metrolinx Urban Freight Study generally remains current. Chapter 6 of this Backgrounder provides updates to specific elements. The separate project Urban Goods Movement Data Phase II will update data availability and issues.

Many of the actions in the 2011 Urban Freight Study have either been accomplished (Actions 1, 2, 3, and 10) or have been explored and deemed unfeasible at this time (Action 9). Action 16 has been subsumed into Action 15. However, most actions remain relevant today to addressing the key issues in urban goods movement identified above: congestion, land use compatibility, and environmental impact. In addition, MTO has proposed two new actions, regarding the promotion of long combination vehicles and the promotion of road freight safety.

Many of the opportunities identified as potential measures to help address these issues will require new actions beyond

those remaining from the 2011 Urban Freight Strategy.

In some cases new actions will result from other processes now underway, such as the separate backgrounder: Scope for a High Level Strategic Goods Movement Network in the GTHA, and the separate Metrolinx project Urban Goods Movement Data Phase II. Others are not currently being addressed.

Finally, in order to measure progress on urban goods movement metrics are required both of the specific actions to be undertaken, but also for the broader performance of the transportation system, as it relates to goods movement. This broader performance is ultimately the reason for undertaking actions. Proposed key performance metrics and the associated outcome they are measuring are set out below.

Outcome	Metric
Travel Time	Goods movement travel time
Reliability	Goods movement buffer index
Cost	Transportation and logistics price index
Environment	Goods movement air pollution index
Safety	Goods movement vehicle road incidents involving injuries or fatalities
	Freight train incidents involving injuries or fatalities