Southwestern Ontario Transportation Planning Study Phase 2 Summary

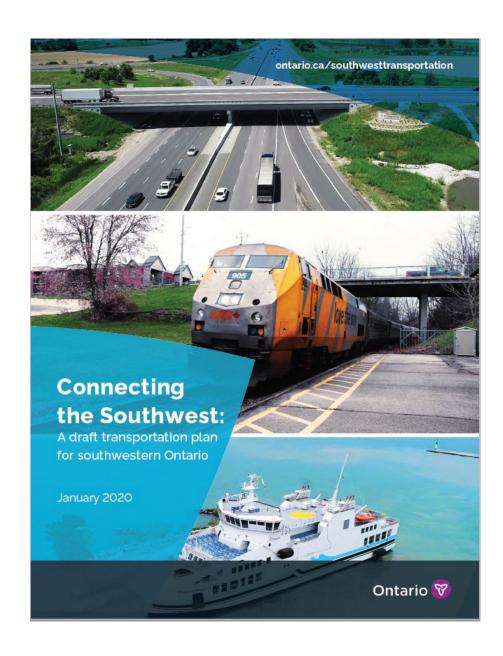
Environmental Registry of Ontario (ERO) posting #019-7709 Supporting Material



Study Overview

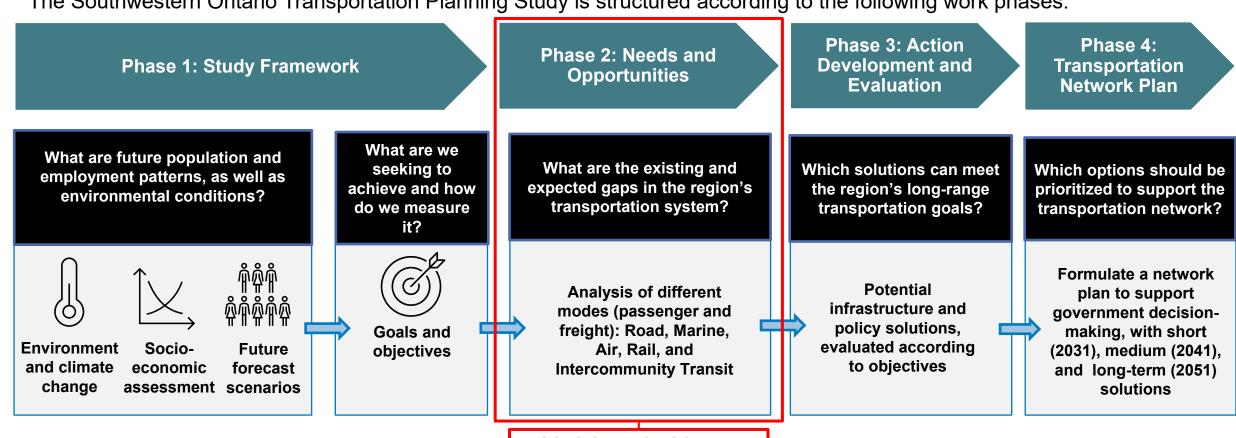
The Southwestern Ontario Transportation Planning Study will identify recommended transportation initiatives in the region over a 30-year horizon, such as:

- Infrastructure improvements, including maximizing the efficiency of existing infrastructure
- Service and operational improvements
- Safety and emergency management improvements
- Improvements to ancillary transportation facilities such as rest stops
- Approaches and processes or models to implement innovative solutions, as appropriate



Transportation Planning Study Phases

The Southwestern Ontario Transportation Planning Study is structured according to the following work phases:



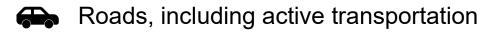
FOCUS OF THIS DOCUMENT

Ongoing engagement with Indigenous communities and organizations, municipalities, and private sector stakeholders as well as outreach to the public at key points in the study

Identification of Needs and **Opportunities**

The Southwestern Ontario Transportation Planning Study is a long-range technical multimodal study that will examine the current and future transportation demand, assess existing infrastructure and services, and identify gaps and opportunities to improve the transportation network across southwestern Ontario and connections to the USA and the rest of Ontario.

Needs and Opportunities were identified through technical analysis, covering the following modes of travel:

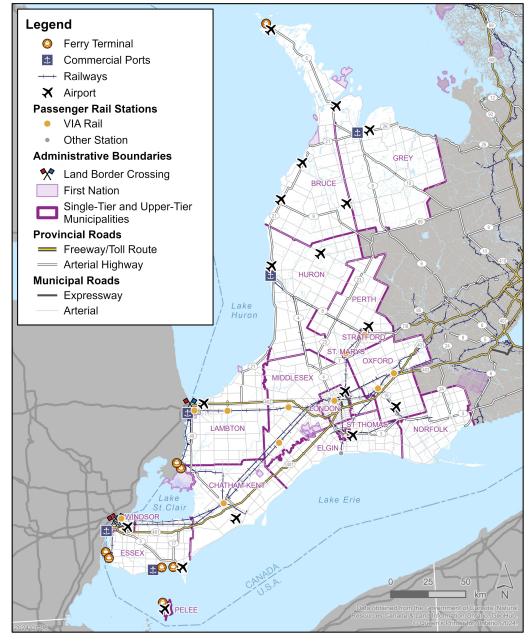






Rail





Southwestern Ontario Transportation Planning Study Area Map

Definitions

- Vision: Broad statement that describes a desired end state
- Goal: General outcomes that represent aspects of the overall vision
- Objective: A more specific or targeted way of attaining a goal in a measurable manner (the objectives help inform how actions are evaluated in Phase 3)
- Needs: Gaps that are currently not being met in the region
- Opportunities: Circumstance or events that advance goals



Goal 1: Connecting People and Places



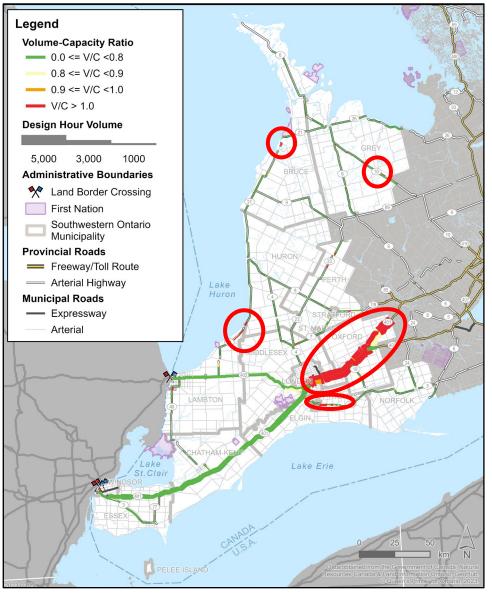
Goal 1. Connecting People and Places

Need: Highway operational improvements to address congestion

This includes consideration for the following needs:

- Improved performance and resilience of Highway 401 between Highway 402 and the Greater Golden Horseshoe (GGH).
- Targeted improvements along provincial highways with high traffic volumes that lead to and increase congestion.
- Congestion mitigation in locations with heavy seasonal demand.

Forecasted Congestion on Provincial Highways (2051)



Goal 1. Connecting People and Places

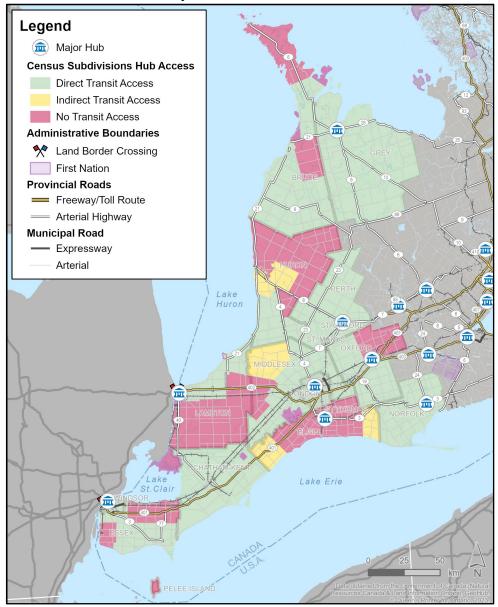
Opportunity: Building and strengthening passenger transportation connections

This includes consideration for the following needs:

- Leveraging existing infrastructure to create a 'hub-andspoke' transit network.
- Creating multi-modal transportation hubs at passenger rail stations.
- Building new cross-border passenger rail services.
- Supporting access for communities not accessible by road

Major hubs have been defined in the transit analysis as places with a hospital and post-secondary institution within southwestern Ontario and in major GGH cities directly connected to SWON through transit.

Transit Access to Hubs by Census Subdivision



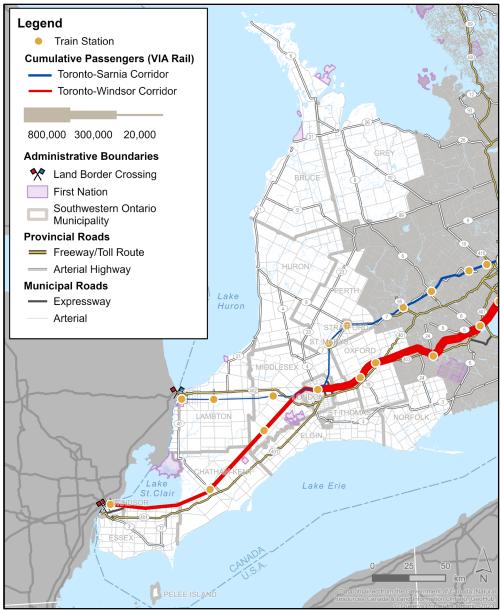
Goal 1. Connecting People and Places

Opportunity: Supporting passenger travel through infrastructure improvements

This includes consideration for the following opportunities:

- Metrolinx infrastructure and service improvements.
- Supporting the federal government in exploring opportunities to enhance passenger rail services in Southwestern Ontario, including through VIA Rail High Frequency Rail improvements.

Cumulative Annual Ridership by VIA Rail Corridor (2018)



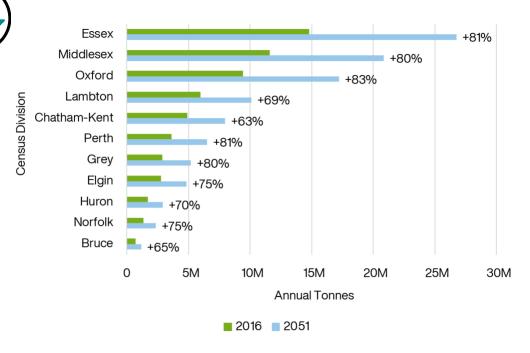


Need: Infrastructure improvements to facilitate goods movement

This includes consideration for the following needs:

- Landside access for goods movement at ports.
- Port expansion requirements.
- Infrastructure improvements to address rail bottlenecks and slow orders.
- Enhanced road-rail grade separation.
- Reliable border crossing travel times.

Projected Change in Total Annual Commodity Tonnage by Census Division (2016 to 2051)



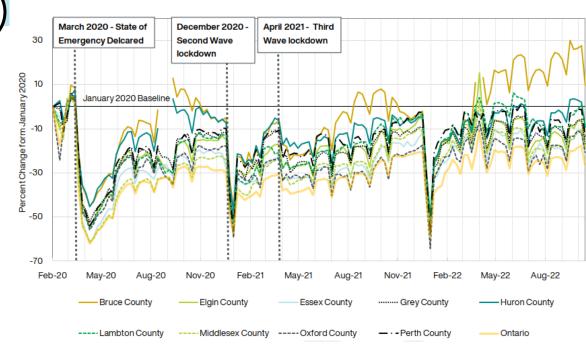
Need: Support post-pandemic recovery



This includes consideration for the following needs:

- Post-pandemic travel patterns of transit passengers.
- COVID-19 recovery for ferry services.
- Skilled labour shortages in the transit and marine sectors.

Percent Change in Workplace Auto Trips in Southwestern Ontario Counties and Province-Wide (2020 to 2022)

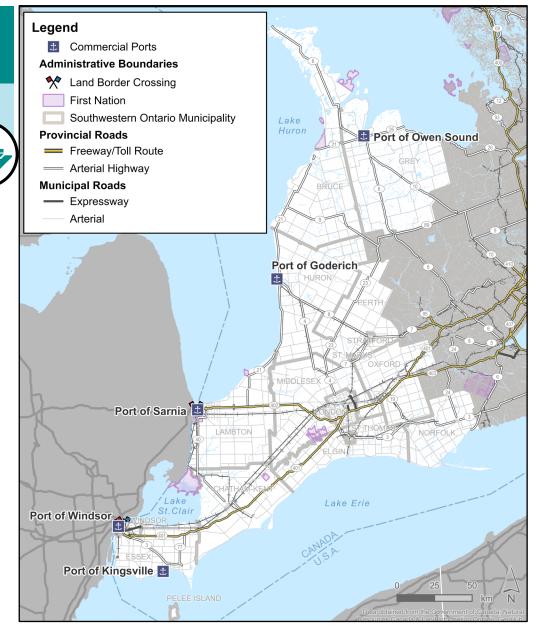


Opportunity: Facilitate economic development and growth

This includes consideration for the following opportunities:

- Supporting local industrial economies through the transportation system.
- Developing southwestern Ontario as an aviation education and maintenance destination.
- Collaborating and coordinating with airports across southern
 Ontario to meet growing travel demand efficiently.
- Leveraging longer operating seasons and other seaway improvements.
- Improving connectivity between freight modes.

Southwestern Ontario Marine Ports

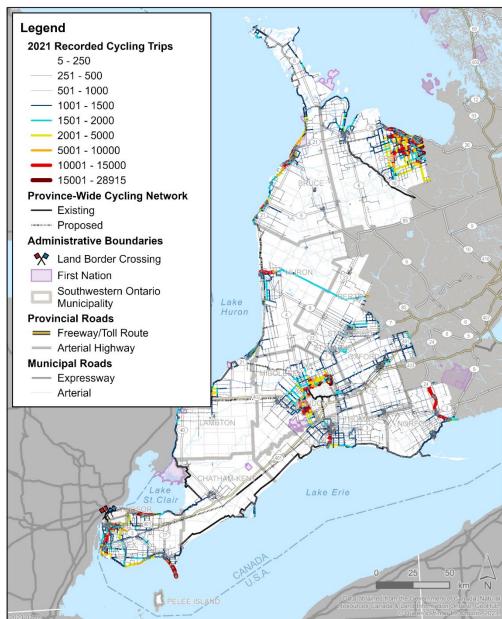


Opportunity: Increasing access to recreational and tourism opportunities

This includes consideration for the following opportunities:

- Fostering interregional cycling trips towards expanding cycling tourism.
- Supporting and encouraging potential growth in marine tourism, including cruises and ferry services.
- Mitigating road congestion in locations with heavy seasonal demand.

Annual Cycling Trips Recorded in Strava (2021)



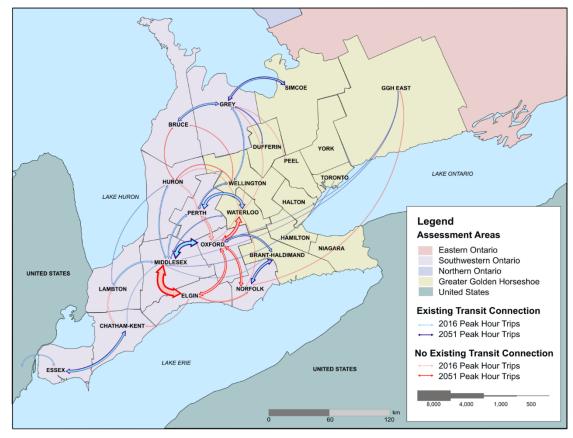


Need: Improved access and geographic coverage of services

This includes consideration for the following needs:

- Intercommunity and local transit access to essential services and opportunities.
- Rail access in underserved and growing communities.
- New cross-border passenger rail services.
- Service to tourism destinations.

Regional and Inter-Regional Overall Travel Demand by Presence of Intercommunity Passenger Transportation Connection

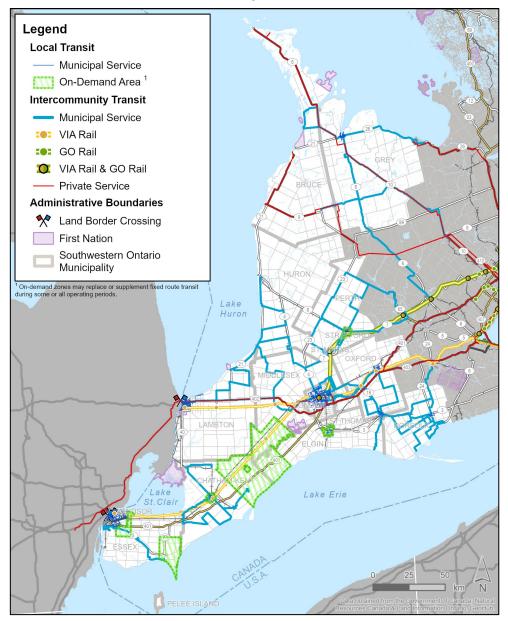


Need: Centralized organization for regional coordination

This includes consideration for the following needs:

Regional coordination initiatives to expand and integrate transit services.

Transit Services in Southwestern Ontario

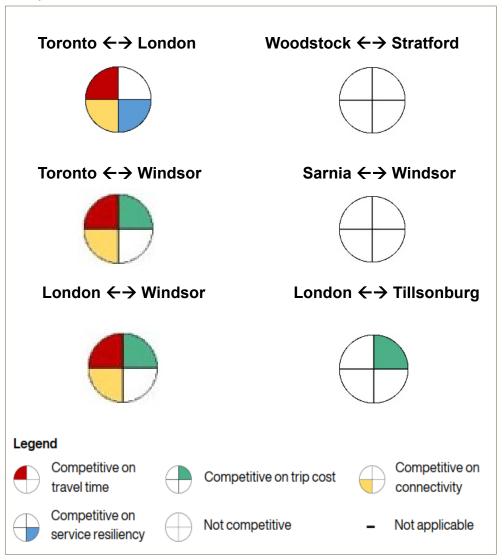


Need: Reliable and convenient transit and rail service that is competitive with auto

This includes consideration for the following needs:

- Transit and passenger rail services that are competitive with driving.
- Enhanced separation between passenger and freight rail to improve travel times.
- Transit and rail access to essential services and opportunities.

Passenger Rail + Intercommunity Transit Competitiveness Compared to Auto

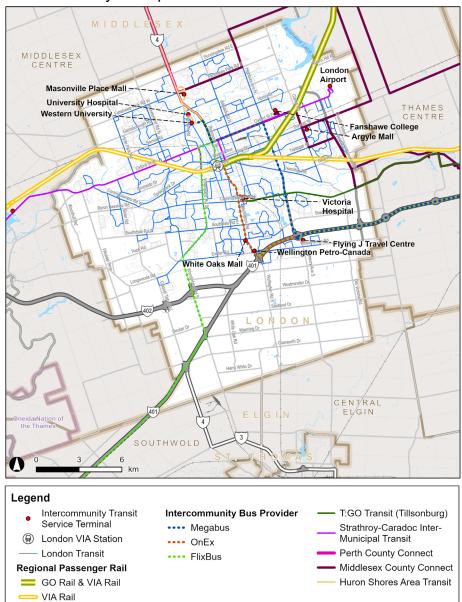


Opportunities: Providing seamless transitions between services and modes

This includes consideration for the following opportunities:

- Supporting and expanding regional coordination initiatives.
- Increased carpool lot capacity.

Intercommunity Transportation Hubs in London



Goal 4: Increasing Health, Safety and Inclusion



Goal 4. Increasing Health, Safety and Inclusion

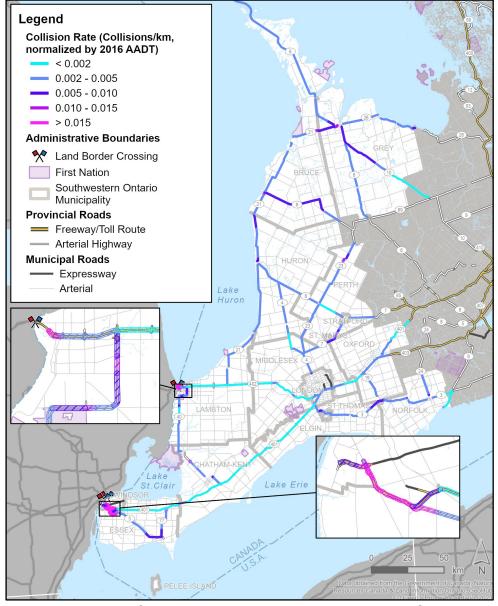
Need: Improve highway safety



This includes consideration for the following needs:

- The continued reduction in collisions for passenger and commercial vehicles.
- The availability and quality of rest areas for commercial and passenger vehicles.
- Network resilience and reliability.

Frequency of Highway Collisions



Note: Frequency of collisions calculated as total collisions from 2011-2021, normalized by vehicle-kilometres travelled in 2016.

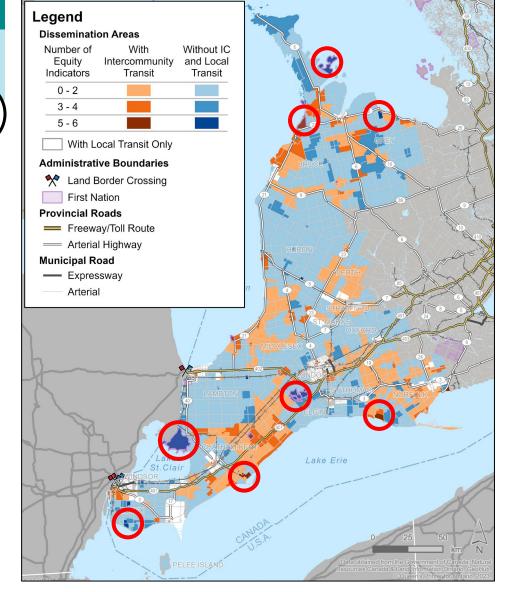
Goal 4. Increasing Health, Safety and Inclusion

Need: Improve mobility options for equity-deserving groups

This includes consideration for the following needs:

- Passenger transportation service gaps in communities with high prevalence of equity-deserving populations.
- Accessible passenger transportation services for people with disabilities.
- Intercommunity and local transit access to essential services and opportunities.

Equity Indicator Totals by Census Dissemination Area and Intercommunity Transit Service Provision



Goal 4. Increasing Health, Safety and Inclusion

Opportunity: Leveraging new technologies to improve safety outcomes

This includes consideration for the following opportunities:

 Preparing the provincial highway network and border crossings for new and emerging technologies. Province-wide Cooperative Truck Platooning Pilot Program Authorized Network





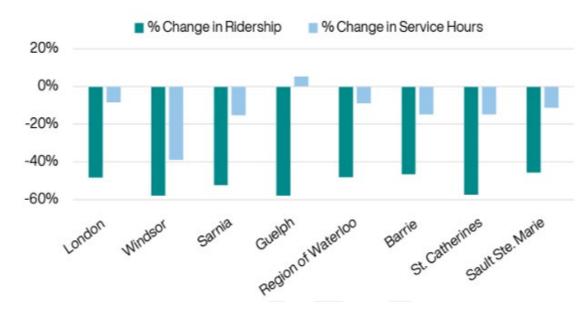
Need: Sustain critical service provision



This includes consideration for the following needs:

- Increased network resiliency and redundancy
- Continued service provision and financial viability for the air sector.
- Fostering transit ridership growth and service sustainability.
- Continued support of essential services and economic activity from the marine sector.

Change in Transit Ridership (2019 to 2020)



Needs: Data collection and monitoring



This includes consideration for the following needs:

- Data collection in the marine sector.
- Consistent and accessible data on intercommunity and local transit.



Opportunity: Leveraging available funding

This includes consideration for the following opportunities:

- Coordinating and planning a more cohesive and reliable funding arrangement for airports.
- Leveraging available funding to enhance transportation equity and to guide the development of better utilized transit services.
- Building on federal-provincial joint funding agreements elsewhere in Ontario for passenger rail services.

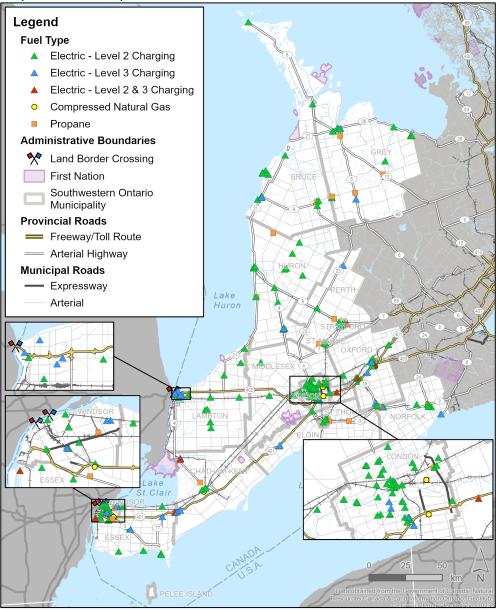


Opportunity: Preparing for emerging and disruptive technologies.

This includes consideration for the following opportunities:

- Preparing the provincial highway network, border crossings, and the air sector for new and emerging technologies.
- Supporting the adoption of current and future transit technologies, such as modernizing data collection processes.
- Monitoring changes in the manufacturing sector to identify potential opportunities for marine goods movements demand.
- Leveraging and deploying new and emerging railway technologies.

Alternative Fuel Stations in Southwestern Ontario (as of September 2022)



Goal 6: Ensuring Environmental Sustainability



Goal 6. Ensuring Environmental Sustainability

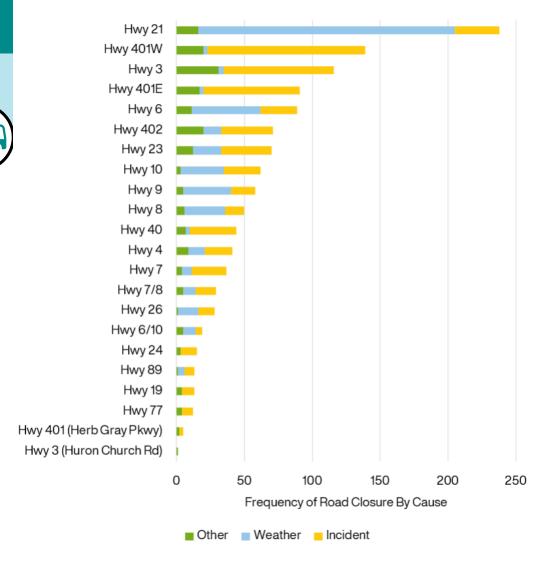
Need: Climate resilience and adaptation



This includes consideration for the following needs:

- Climate resilience in commercial port and ferry terminal operations.
- Highway infrastructure that is resilient to climate change, particularly on Highway 401 between Highway 402 and the GGH.
- Reliability in the transportation network.
- Supportive infrastructure and policies for electric vehicles.

Frequency of Road Closures by Cause (2014 to 2022)



Goal 6. Ensuring Environmental Sustainability

Opportunity: Reducing the environmental impact of goods movement

This includes consideration for the following opportunities:

- Reducing environmental and traffic impact of freight railbased goods movement.
- Reducing the environmental impact and pressure on road and rail systems through increased marine freight movement.

Kilometres Travelled Using 1 Litre of Fuel and Moving 1 Tonne of Cargo Per Mode



Phase 2 Engagement Summary

MTO undertook the following engagement activities with Indigenous communities and organizations, municipal, and transportation-sector stakeholders between June 2023 and October 2023 to seek feedback on the needs and opportunities identified in the second phase of the study:

- A Technical Advisory Committee (TAC) meeting, which comprised representatives from municipalities, transportation industry stakeholders, and other relevant agencies
- Six engagement meetings with Indigenous communities located in southwestern Ontario
- One-on-one meetings with interested parties by request

The objectives of the Phase 2 engagement were to present the study vision, goals and objectives and to confirm the multi-model needs and opportunities identified through the technical analysis.

The needs and opportunities identified in Phase 2 will support the development of a long list of options in Phase 3, which will undergo evaluation to identify a short list of actions intended to support an ideal transportation network for the region in 2051.

Key themes from the comments received include:

- Increase connectivity of rural communities to hubs via transit and/or rail services.
- Address labour shortages across all sectors, including trucking, rail, and marine industries.
- Improve efficiency of existing corridors, particularly Highway 401, in support of the trucking industry.
- Address gaps in marine infrastructure, such as the lack of deep-water ports connecting to the Atlantic Ocean through the St. Lawrence Seaway.
- Increase funding for ports and regional airports to support maintenance and infrastructure upgrades.
- Encourage passenger mode shift to alleviate congestion on highways, especially to high-capacity modes such as regional rail.
- Improve transit, cycling, or rail access to national and provincial parks and other tourism destinations, which will address equity needs and provide congestion relief.

Next Steps

The Needs and Opportunities are being used to inform the development of a long list of potentially implementable options that can help achieve an optimal transportation network for the region.

Please refer to the summary of Phase 3 to learn more about the Long List of Options.

