

Southwestern Ontario Transportation Planning Study Phase 1 Summary

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

Supporting Material

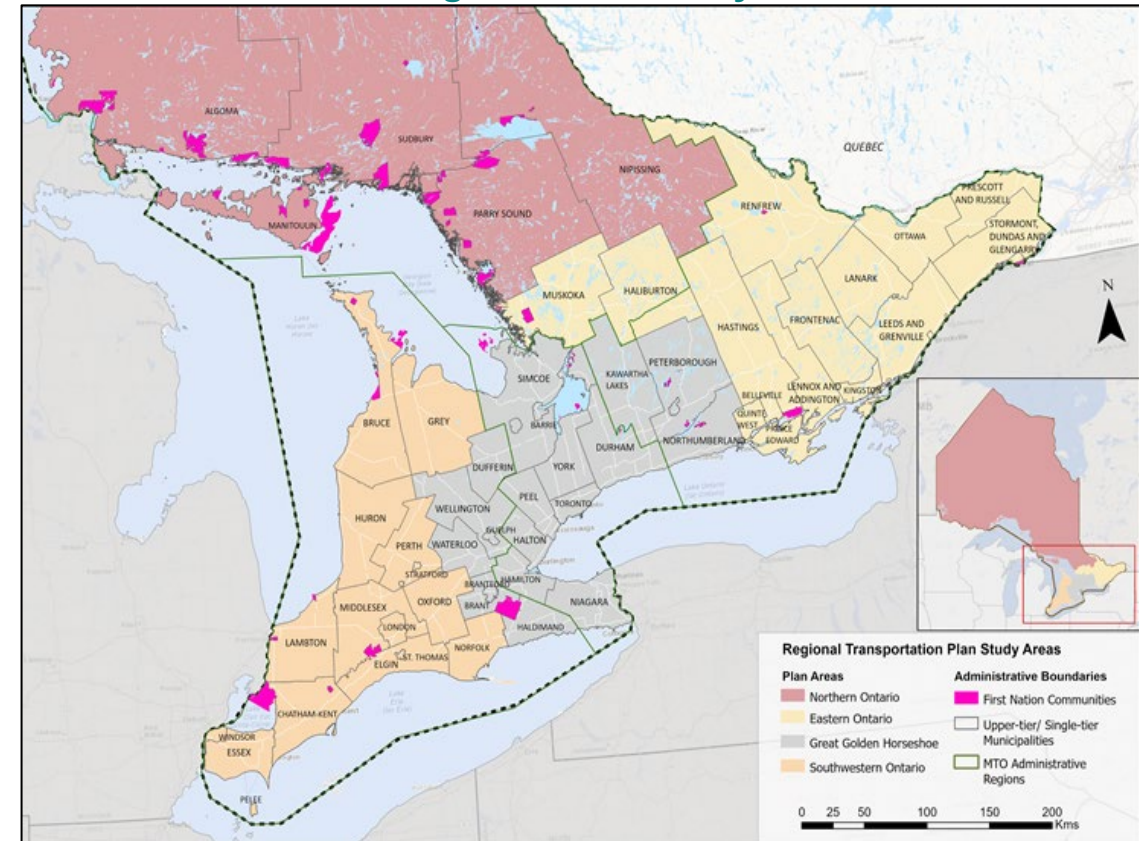
Regional Transportation Planning

Transportation planning is a core activity of MTO. Regional transportation plans identify future transportation needs for all modes and actions that could be pursued to address those needs, with the goal of improving the system's connectivity, efficiency, and accessibility.

















Transportation planning allows the province to:

- **Assess current and future needs of a full system** including all modes and users and consider integration with land use as well as the impacts of future conditions (e.g., technology changes, economic drivers, growing/aging population, travel preferences, congestion, more severe weather conditions)
- **Identify future networks** including supporting policies and phasing plans to a 30-year plan horizon
- **Communicate priorities and provide guidance/direction** to stakeholders and partners such as Indigenous communities, municipalities, federal government, transit/transportation operators and the public

MTO Regional Plan Study Areas



Each Region Faces Unique Transportation Challenges and Needs

Spotlight	Southwestern Ontario	Northern Ontario	Greater Golden Horseshoe	Eastern Ontario
Regional Facts	 Population: 1.7M (12% of ON) 2.4M residents by 2051  71% urban  29% rural  Land Mass: 30,400 km ² Density: 54 person/km ²	 Population: 0.8M (5% of ON) 0.84M residents by 2051  51% urban  49% rural  Land Mass: 802,000 km ² Density: 1 person/km ²	 Population: 10.3M (70% of ON) 14.9M residents by 2051  93% urban  7% rural  Land Mass: 32,000 km ² Density: 300 person/km ²	 Population: 1.9M (13% of ON) 2.4M residents by 2051  72% urban  28% rural  Land Mass: 44,000 km ² Density: 41 person/km ²
Key Transportation Issues	<ul style="list-style-type: none"> • The need for improved rural-urban transit connections to access services and connect urban labour force to rural jobs. • Speed and reliability of connections into the Greater Golden Horseshoe (GGH) (including rail). • Volume and mix of road users on peak summer routes to key tourist destinations. 	<ul style="list-style-type: none"> • Long distances and dispersed population; challenges with reliability on key highways and limited infrastructure in Far North (access dependent upon remote airports, winter roads). • Accommodating increasing truck traffic (which will drive highway traffic growth). • Critical access to rail, marine, air. 	<ul style="list-style-type: none"> • Rapid population growth from 10 million people today to almost 15 million by 2051. • Increasing congestion and delays caused by growing demand. • A complex multimodal system requiring coordination and alignment towards a common vision. • Era of significant change: economic transitions, new technologies like AVs, e-commerce and job automation. 	<ul style="list-style-type: none"> • Managing impacts and leveraging value from high volume of through traffic on the Ontario-Quebec trade corridor. • Congestion on highways in the Ottawa region. • Intercommunity bus service gaps. • Reliance on ferry services to connect island communities with the mainland.

Current Status: Regional Plans

Plan Components	Southwestern Ontario	Northern Ontario	Greater Golden Horseshoe	Eastern Ontario
Release Status	Draft plan released in January 2020	Draft plan released in December 2020	Final plan released in March 2022	Draft plan released in April 2022
Actions	Over 40 current and near-term actions	Over 60 current and near-term actions	Over 100 current and near-term actions; 2051 network vision and future infrastructure, service and policy solutions	Over 50 current and near-term actions

- Ontario’s 2019 Fall Economic Statement committed to developing regional plans for all four regions of the province. Upon completion of this work, the province committed to present a comprehensive Ontario-wide transportation plan.
- The plans are living documents that can be updated based on further analysis. The “draft” titles reflect that the plans do not include a long-range network vision.
- New infrastructure projects identified in the plans are subject to additional prioritization and project-specific studies and approvals such as environmental assessment. New policies and services are similarly subject to further program development/analysis.

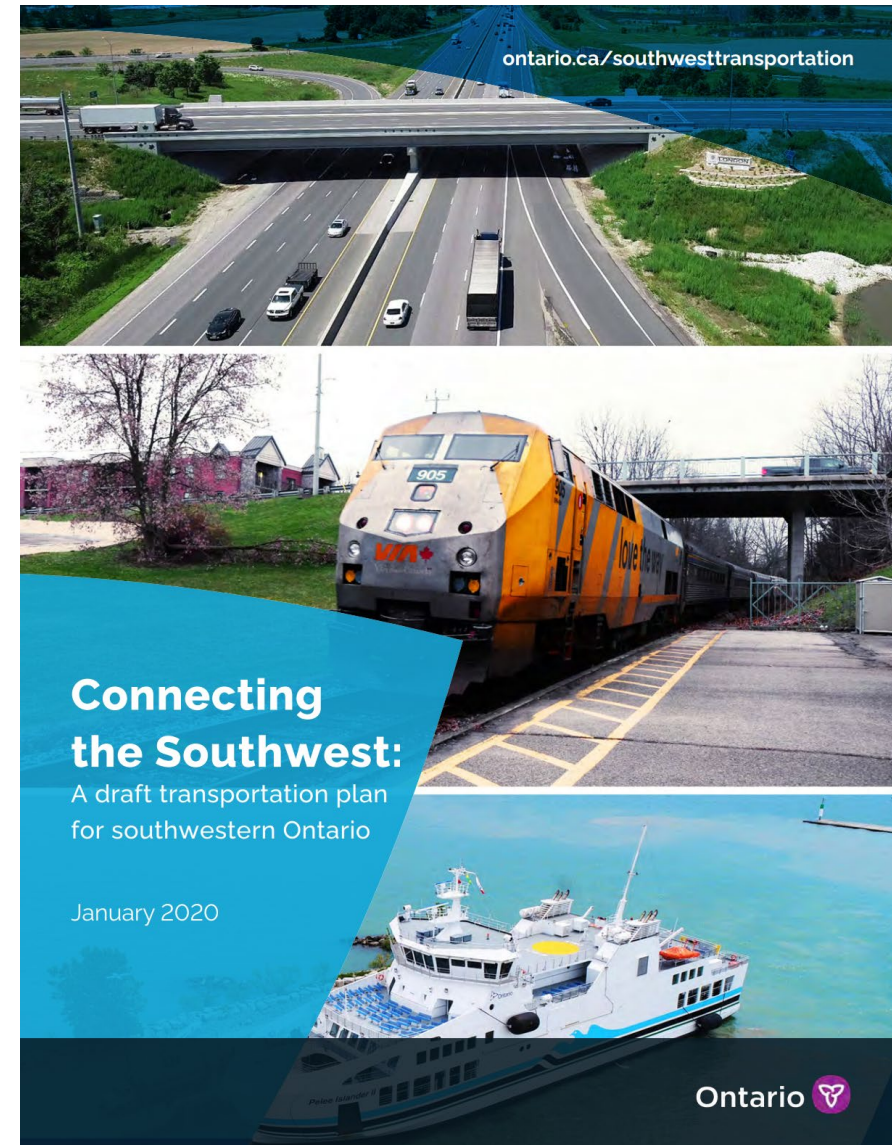
Introduction to Southwestern Ontario

In January 2020, MTO released *Connecting the Southwest: a draft transportation plan for southwestern Ontario* which identified 43 current and near-term actions to improve transportation in the southwestern Ontario region.

The draft plan has five overarching goals:

1. Get people moving and connect communities
2. Support a competitive open for business environment
3. Improve safety
4. Provide more choice and convenience
5. Prepare for the future

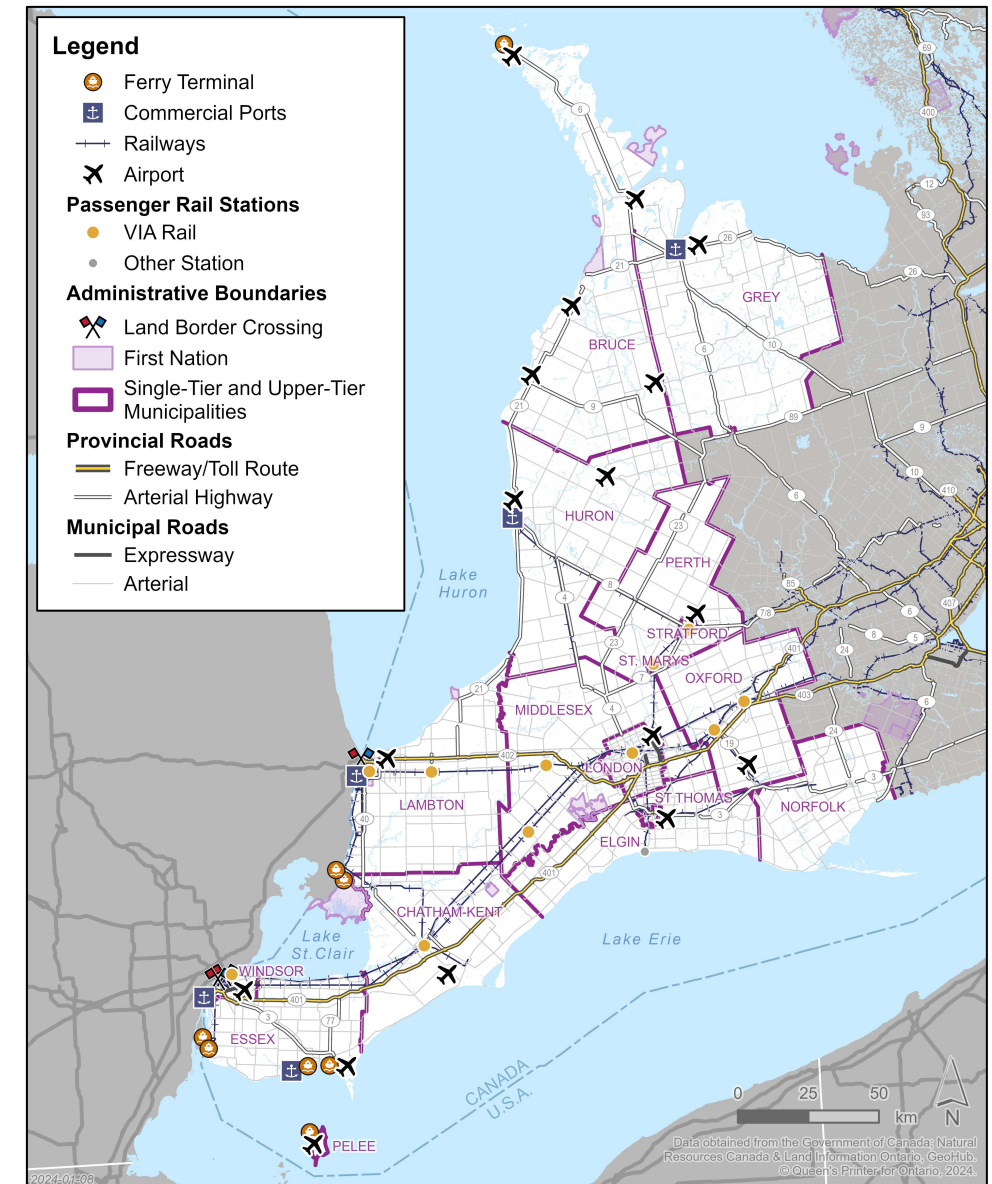
MTO has undertaken the Southwestern Ontario Transportation Planning Study, a long-range multimodal transportation planning study that will develop a set of recommended actions to improve the transportation network for the region for the horizon year of 2051.



Study Overview

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

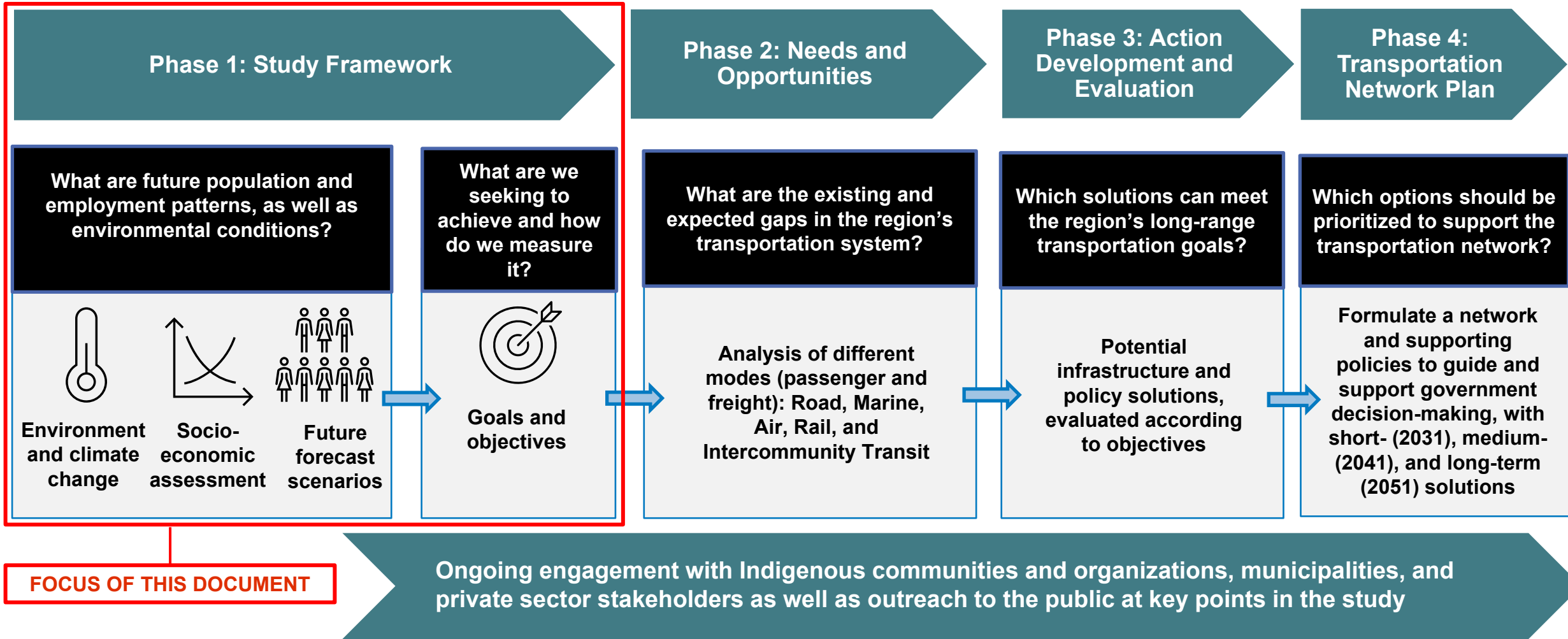
- **Infrastructure** improvements, including maximizing the efficiency of existing infrastructure
- **Service and operational** improvements
- **Safety and emergency management** improvements
- Improvements to **ancillary transportation** facilities such as rest stops
- Approaches and processes or models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



Southwestern Ontario Transportation Planning Study Area Map

Transportation Planning Study Phases

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



Environmental and Climate Change Assessment

Environmental and Climate Change Assessment

An environmental and climate change assessment describes how current and anticipated climate change trends will impact transportation infrastructure and operations in southwestern Ontario.

With an increasing trend of extreme weather events in recent years, climate change predictions for the coming decades include:

- Warming across the province of Ontario
- Additional precipitation, particularly greater snowfall and higher chances of rain or freezing rain in winter in the Great Lakes basin
- Increasing prevalence of flood risks
- Larger fluctuations in extreme heat and cold weather between the seasons



Chatham-Kent Flooding Blocking the Roadway (2018)



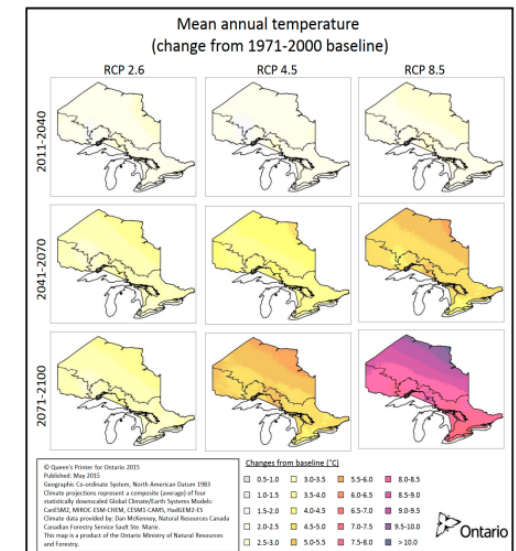
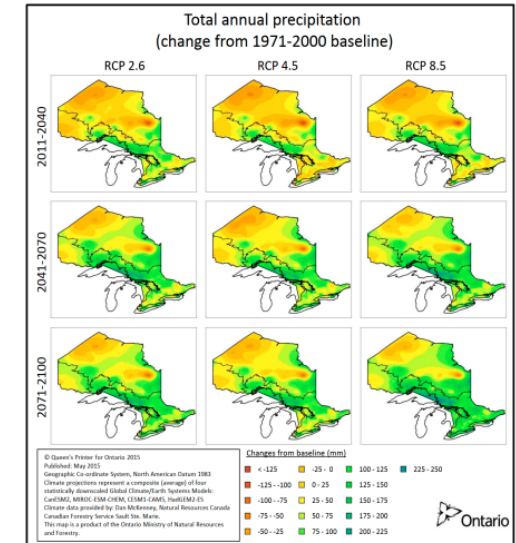
Record Flooding in Windsor-Essex (2017)

Environmental and Climate Change Assessment

The adoption of adaptive measures across all modes is a key component that will be included in the Southwestern Ontario Transportation Planning Study.

To prepare for the coming decades, the Environmental and Climate Change Assessment supports the Study by outlining the following recommendations:

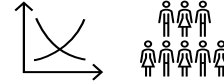
- **Assess transportation emission sources in southwestern Ontario:** Conduct detailed quantitative emissions inventories
- **Monitor climate change trends and events:** Use up-to-date weather and climate data, to establish climate monitoring programs, conduct risks assessments for all impacts of climate change, and develop climate projection models
- **Adapt to climate change:** Implement actions to increase the resilience of the transportation network
- **Implement mitigation measures:** Seek to avoid or reverse climate warming trends



Socio-economic Assessment and Future Forecast Scenario



Socio-economic Assessment and Future Forecast Scenarios

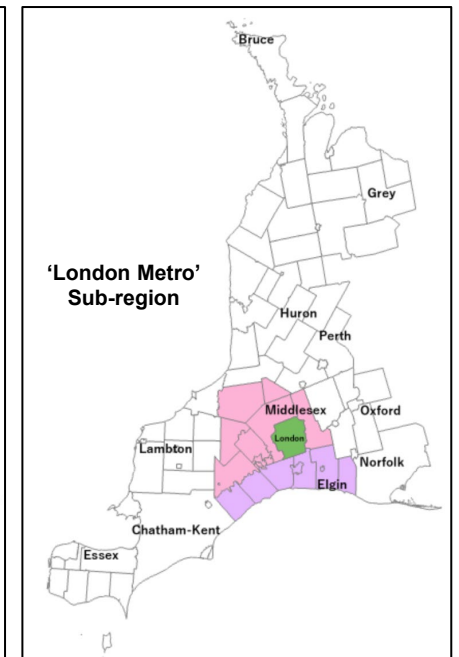
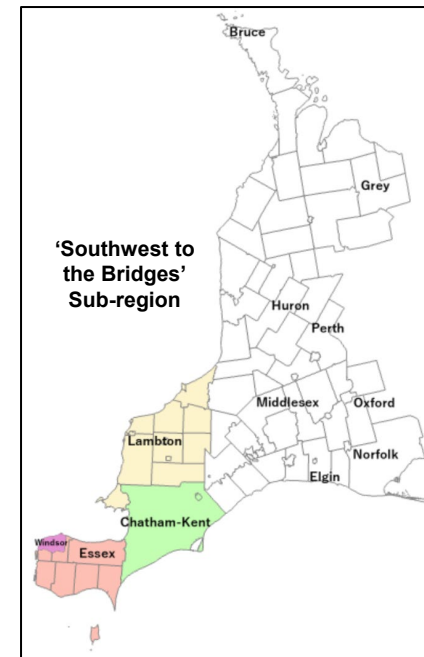
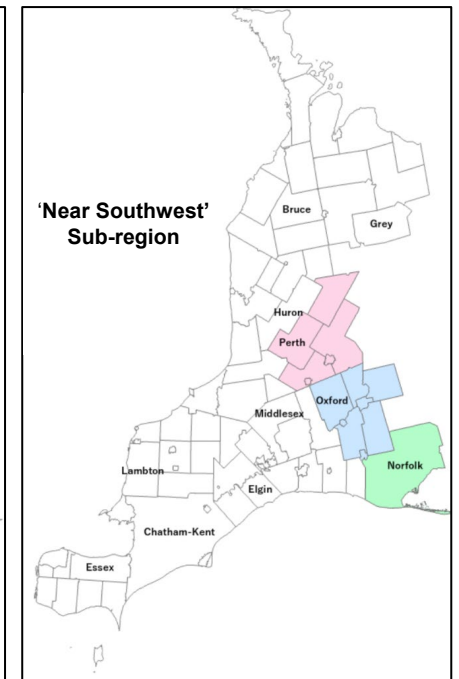
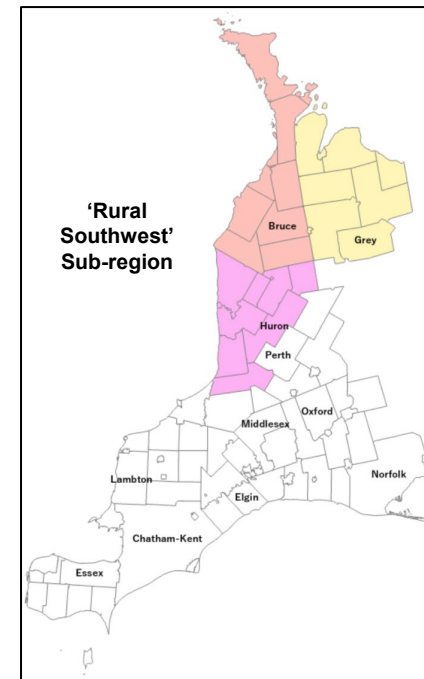


Southwestern Ontario includes 13 First Nation communities and 89 municipalities:

- 9 Single-tier Municipalities
- 9 Upper-tier Counties
- 71 Lower-tier Municipalities

The southwestern region was organized into four sub-regions for the socio-economic assessment and future forecasts:

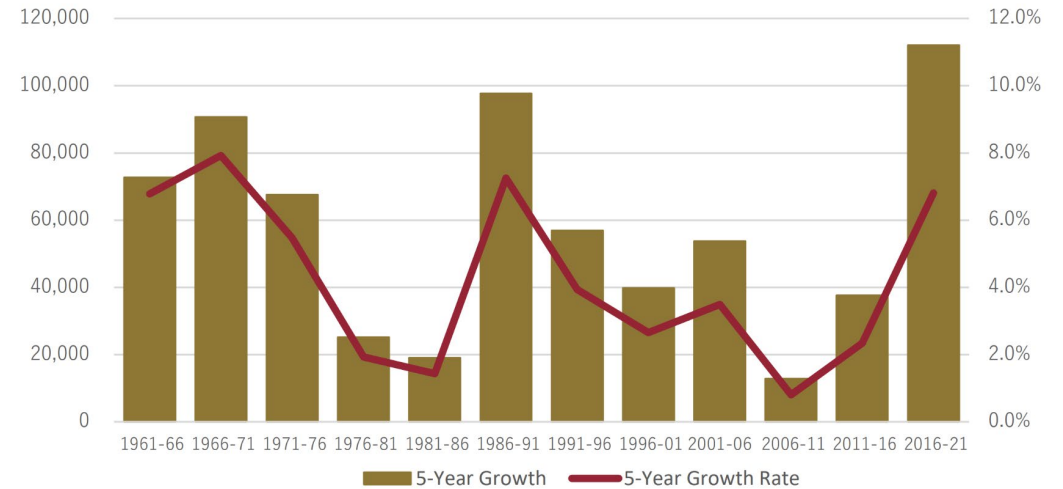
- **‘Near Southwest’** including Perth, Oxford, and Norfolk Counties
- **‘Rural Southwest’** including Bruce, Grey, and Huron Counties
- **‘London Metro Southwest’** including London and Middlesex and Elgin Counties
- **‘Southwest to the Bridges’** including Chatham-Kent, Windsor, and Lambton and Essex Counties



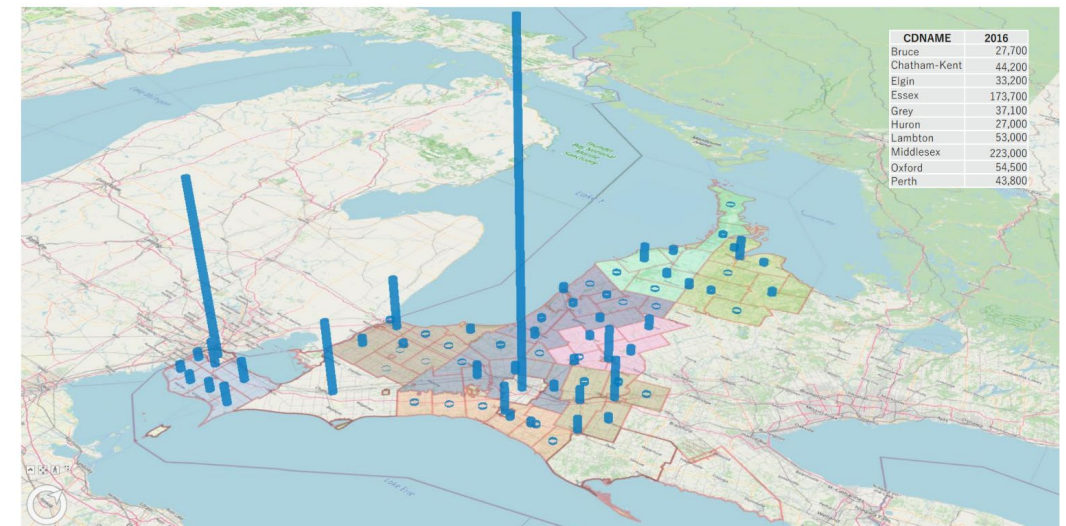
Southwestern Ontario: Four Sub-Regions

Socio-economic Assessment and Future Forecast Scenarios

- Historically, population and employment have been highly concentrated in a few centres
- Employment growth in all parts of the region has been slower than the provincial trend for the past 30 years
- The London Economic Region (Elgin and Middlesex) and Stratford-Bruce Peninsula Economic Region (Perth, Huron, Bruce and Grey) have largely maintained employment growth
- The Windsor-Sarnia Economic Region (Chatham-Kent, Essex and Lambton) has seen much less employment growth and has not yet recovered to pre-2008/2009 recession employment levels
 - Contributing factors include auto sector changes especially following the 2008/2009 recession and concurrent corporate restructurings
- Generally, the region has seen a shift from goods producing to service sectors

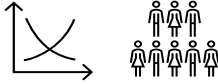


Southwestern Ontario Population Growth and Growth Rate (1961 to 2021)



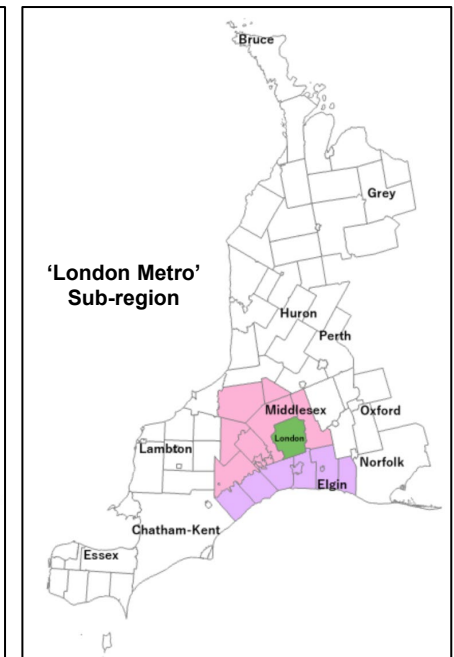
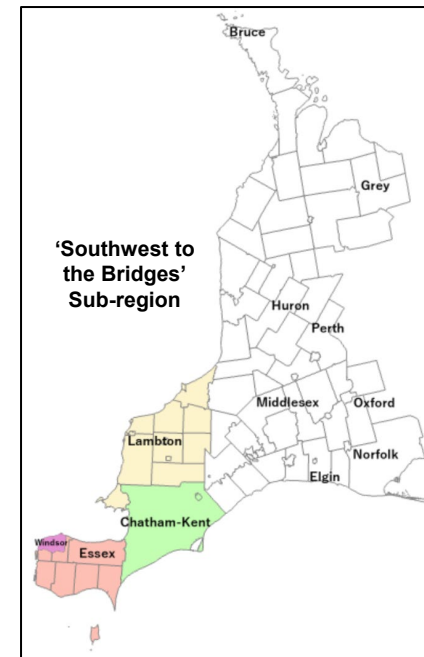
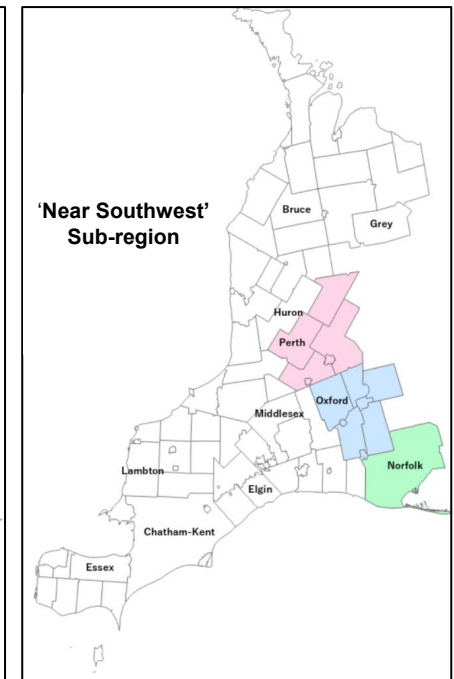
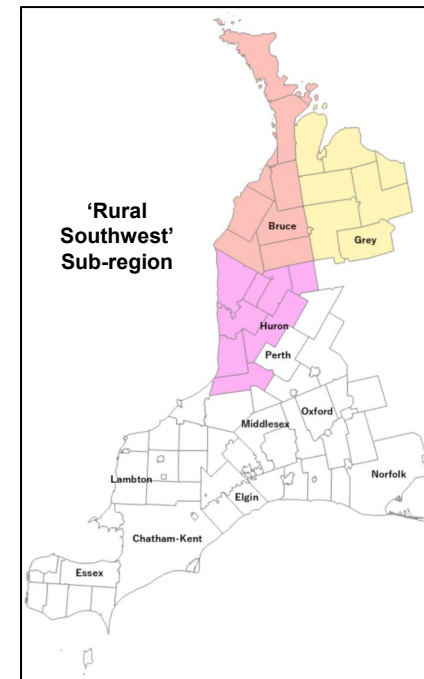
Southwestern Ontario Total Employment by Census Subdivision (2016)

Socio-economic Assessment and Future Forecast Scenarios



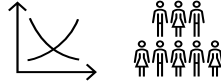
Looking forward to 2051, population and employment are expected to continue to grow across southwestern Ontario. A “reference” forecast (based on the [Ontario population projections](#)) was developed to represent the expected growth with the following findings:

- Overall, the population is expected to increase by 49% to approximately 2.4 million, while employment increases by 58% to approximately 1 million
- Relatively high growth in most of the ‘Near Southwest’ and ‘London Metro’, more moderate growth in ‘Rural Southwest’, and lower growth in ‘Southwest to the Bridges’ sub-region
- A significant portion of the growth will occur in Middlesex County and the City of London, driven by the continued rapid economic growth in London
- Areas closer to either the GGH or the City of London (e.g., Grey, Elgin and Oxford) are expected to experience higher population and employment growth rates relative to the region overall
- Population and employment growth is expected to be slower than the province-wide growth overall



Southwestern Ontario: Four Sub-Regions

Socio-economic Assessment and Future Forecast Scenarios



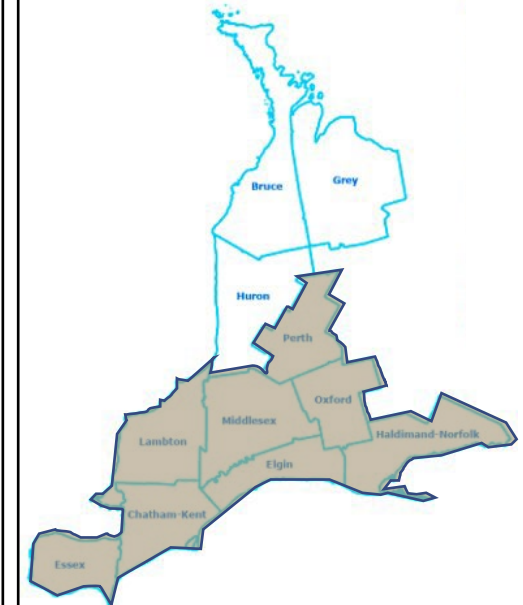
Two alternative distributions of population and employment were developed to enable the exploration of transportation impacts if the future conditions are different than what is currently expected. These will be used throughout the study.

- **Alternative Land Use Forecast #1 – Greater Golden Horseshoe-Focused Growth:** This alternative distribution represents a future where the southwest region’s growth is more focused near the Greater Golden Horseshoe (GGH), where ‘Near Southwest’ and ‘Rural Southwest’ are increasingly in the orbit of the GGH with higher growth trends. ‘London Metro’ growth remains relatively high and ‘Southwest to the Bridges’ growth remains slow.
- **Alternative Land Use Forecast #2 – Balanced Growth:** This alternative distribution represents a future where a resurgence in the industrial economy, driven by expanding e-commerce and logistics, results in more population growth across southwestern Ontario. ‘Southwest to the Bridges’ returns to being a growth area. ‘London Metro’ growth remains relatively high, and growth in ‘Rural Southwest’ and ‘Near Southwest’ are slightly more restrained.

Alternative Land Use Forecast #1:
GGH-Focused Growth



Alternative Land Use Forecast #2:
Balanced Growth



Goals and Objectives

Definitions of Vision, Goals and Objectives

Vision: Broad statement that describes a desired end state

Goal: General outcomes that represent aspects of the overall vision (*e.g., Connecting People and Places*)

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. (*e.g., Increase access to jobs and services by public transportation*)



Study Vision, Goals and Objectives

The *Southwestern Ontario Transportation Planning Study* vision, goals and objectives are based on the draft plan *Connecting the Southwest*. The goals have been updated to align with other regional planning initiatives and to reflect stakeholder feedback received to date. Objectives have been added to articulate how a goal can be attained.

Vision: Individuals, families and businesses across southwestern Ontario have access to a safe and reliable transportation system that connects local communities, and contributes to the health, well-being and economic prosperity of the entire region.

Study Goals:

1. Connecting People and Places
2. Supporting a Competitive Business Environment
3. Providing More Choice and Convenience
4. Increasing Health, Safety and Inclusion
5. Preparing for the Future
6. Ensuring Environmental Sustainability

Goal 1. Connecting People and Places

Ensure people get where they want to go as efficiently as possible

Objectives

1. Ensure people can travel where they want to go with minimal delays.
2. Improve connections between urban and rural areas, including connections to Indigenous communities.
3. Better connect communities not directly accessible by road.

Goal 2. Supporting a Competitive Business Environment

Make sure the transportation system supports business needs and goods movement

Objectives

1. Ensure minimal delays for goods movement.
2. Provide more convenient travel to recreational and tourist attractions.
3. Ensure goods movement is facilitated by a flexible, resilient, multimodal system of roads, rail, ports, and airports.
4. Support the needs of commercial vehicle operators who travel the region.
5. Strengthen local and regional transportation connections to jobs.

Goal 3. Providing More Choice and Convenience

Offer good options for those who don't want to or can't use cars

Objectives

1. Provide a range of transportation services and options.
2. Improve the competitiveness and general appeal of non-auto options and active transportation modes (e.g., cycling, walking, etc.).
3. Improve reliability of service connections (e.g., wait time).
4. Improve integration across transportation services and modes.

Goal 4. Increasing Health, Safety and Inclusion

Make sure the transportation system supports health, keeps people safe, and is inclusive of everyone's transportation needs

Objectives

1. Minimize the number of collisions, accidents, and injuries.
2. Strengthen the local and regional public transportation connections to critical services, such as hospitals, provincial courts, and social services.
3. Reduce and mitigate adverse effects caused by the transportation system, such as impacts to air quality.
4. Ensure active transportation networks are safe and integrated to promote active travel.
5. Ensure safe access and transfers between different transportation modes and services (e.g., an attendant at stations, lighting, etc.).
6. Improve equitable access through more convenient, coordinated, reliable, and affordable public transportation services.
7. Ensure input from Indigenous communities and organizations is incorporated in service planning.

Goal 5. Preparing for the Future

The transportation system needs to be adaptable to the risks and opportunities of the future

Objectives

1. Ensure the transportation system is resilient to the impacts of emergencies, such as collisions and flooding, by ensuring multiple route options.
2. Ensure value for money in the investment of public funds.
3. Ensure travelers, residents, and visitors can more easily access the information they need to make informed travel decisions.
4. Where transportation policy goals support them, ensure emerging technologies can be incorporated into the transportation system.

Goal 6. Ensuring Environmental Sustainability

The transportation system must be environmentally sustainable

Objectives

1. Reduce greenhouse gas (GHG) emissions from the transportation sector.
2. Minimize and mitigate the adverse impacts of the transportation system on natural heritage, cultural heritage, and archaeological resources.
3. Ensure the transportation system is designed, constructed, and operated to be resilient to climate change.

Next Steps

The Environmental and Socio-economic Assessments are being used to inform the Needs and Opportunities analysis.

Please refer to the summary of Phase 2 to learn more about the outcomes of the Needs and Opportunities analysis.

The Goals and Objectives are being used to inform the evaluation 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.

