



GTA West



GTA West Corridor Environmental Assessment

Presentation to
York Region Planning and
Economic Development Committee

March 4, 2009



**McCORMICK
RANKIN
CORPORATION**



AECOM

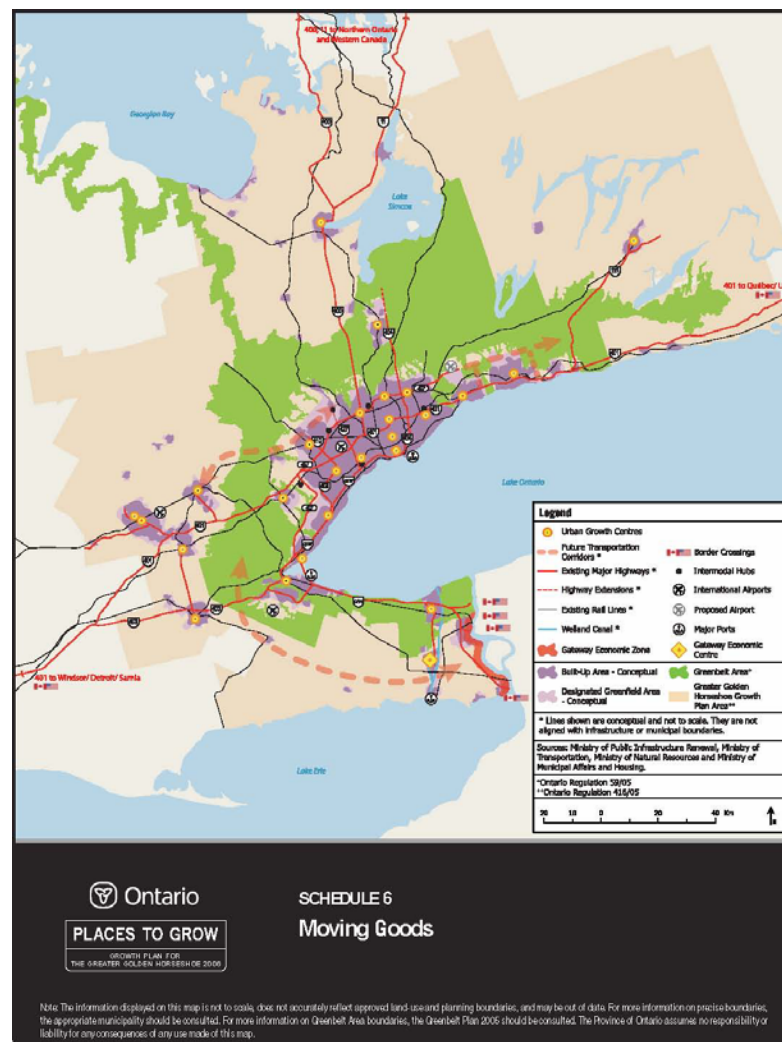




GTA West

Study Purpose

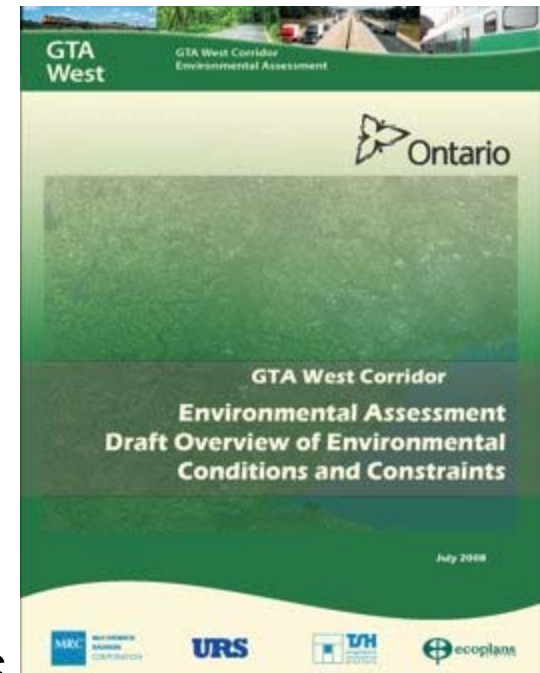
- To support the policy direction of the Growth Plan, MTO launched the GTA West Planning and EA Study to:
 - Examine long-term transportation problems and opportunities, and
 - Consider alternatives to provide better linkages to *Urban Growth Centres* within the GTA West Corridor





Recent Events

- EA Terms of Reference approved March 2008
- Release of 2 Draft Overview Reports (July 2008)
- Discussions with Transportation Industry
- Forecasting of Future (2031) Transportation Conditions
- Identification of Inter-Regional Transportation Problems & Opportunities
- Addressing Local Development Pressures



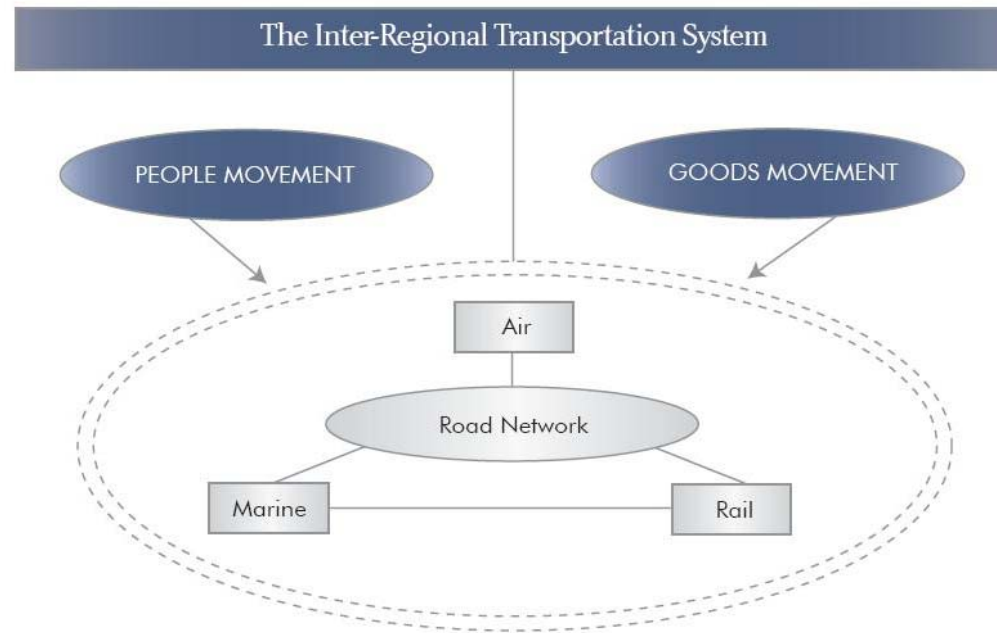


GTA West

Predicting Future Transportation Conditions Inter-Regional Transportation System

Focus is on:

- Movement of people and goods within and through the study area by all modes.
- An efficient road system allows for the other modes to operate more efficiently.



Virtually every trip touches the road network.



GTA West

Transportation Problems Goods Movement - Outlook

- **Population and employment growth identified in *Places to Grow* will result in the increased movement of goods.**
- **Historical trends indicate a general increase in goods movement by road, rail and air.**
- **Discussions with Transportation Service Providers indicate that rail, marine and air have the capacity to absorb increased goods movement.**
- **Trucks will continue to play a major role in the transportation of goods.**



GTA West

Predicting Future Transportation Conditions Inter-Regional Transportation System

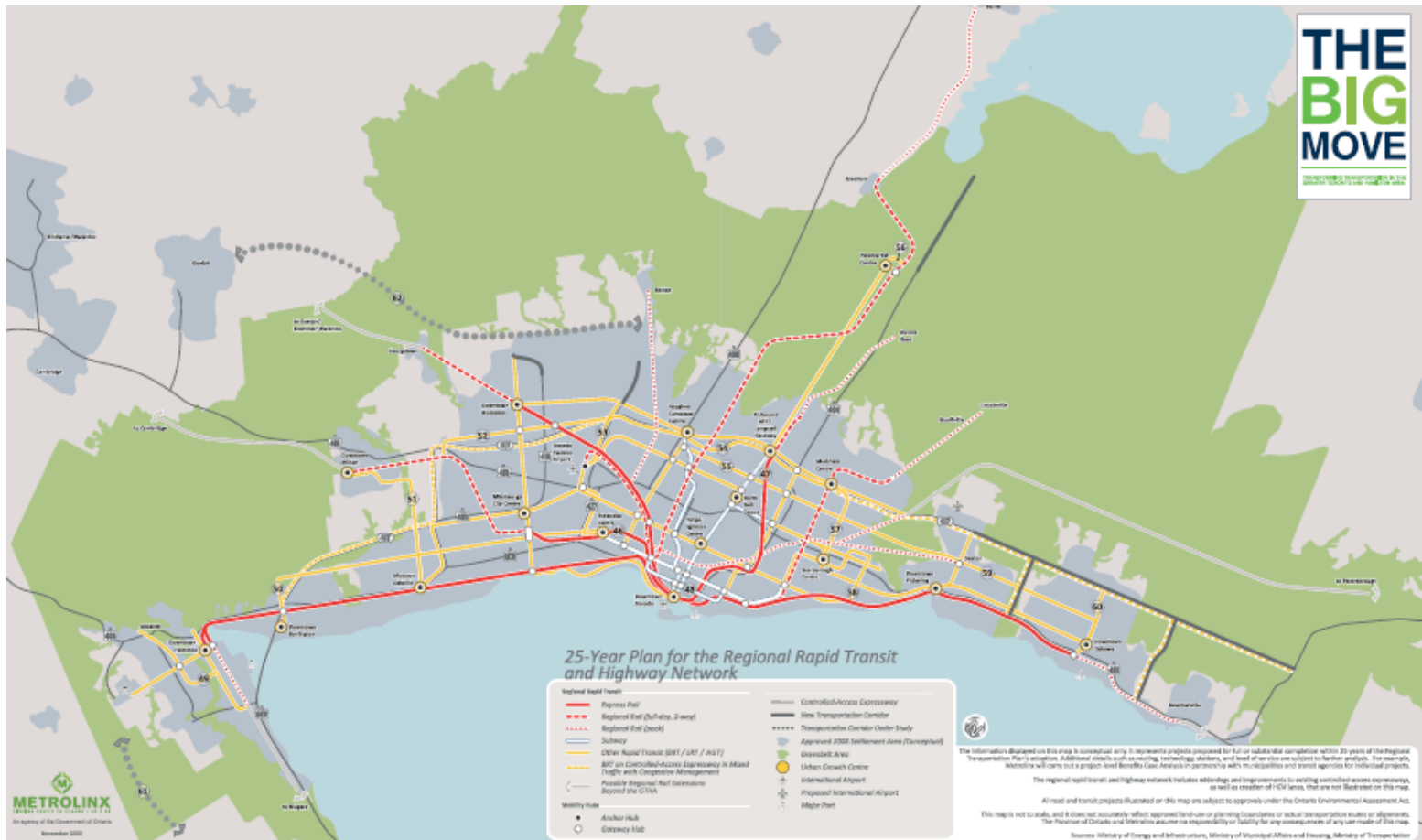
- **Over-arching problem:**
 - Parts of the system at or beyond capacity
 - Future inter-regional transportation demand forecast to exceed capacity
 - Limited integration between local and inter-regional transit services
- **Process of predicting future transportation conditions considers several influences and acknowledges a range of future conditions is possible:**
 - *Policy Influences*
 - *Economic Influences*
 - *Trade / Tourist / Recreation Influences*



GTA West

Predicting Future Transportation Conditions

Policy Influence: Metrolinx – The Big Move (November 2008)





Predicting Future Transportation Conditions

Policy Influence: Metrolinx – The Big Move (November 2008)

Indicator	2006	2031 Current Trends	2031 RTP Forecast
Transit Mode Split in The Greater Toronto and Hamilton Area	16.5%	16.4%	26.3%
AM Peak Hour Auto Trips in the GTHA	2,068,000	3,206,490	2,603,722

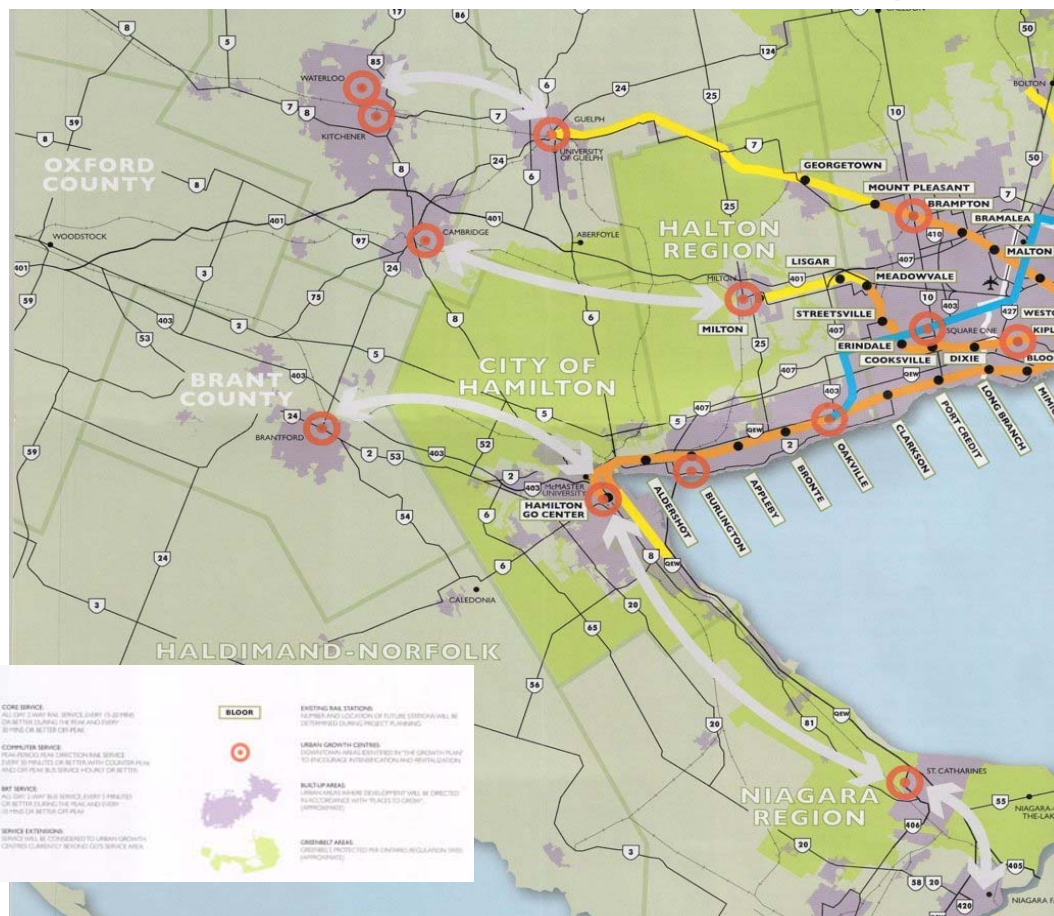
Figures are taken from *The Big Move*, chapter 5 – Looking Forward



GTA West

Predicting Future Transportation Conditions

Policy Influence: GO Transit 2020 Service Plan (December 2008)

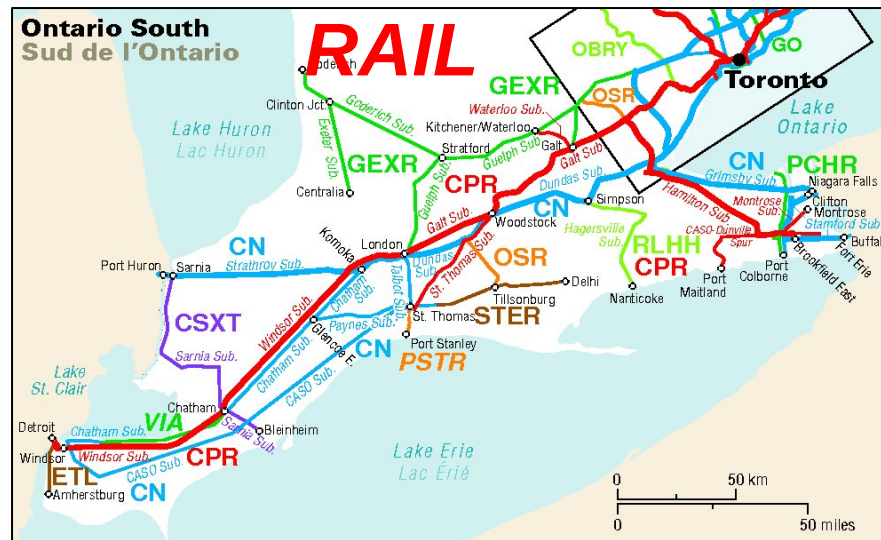




GTA West

Predicting Future Transportation Conditions

- **Trade / Tourism / Recreation Influences:**
 - Highway 401, CN Mainline and CP mainline are the primary transportation corridors in the GTAW preliminary study area to serve trade / tourism / recreation trips





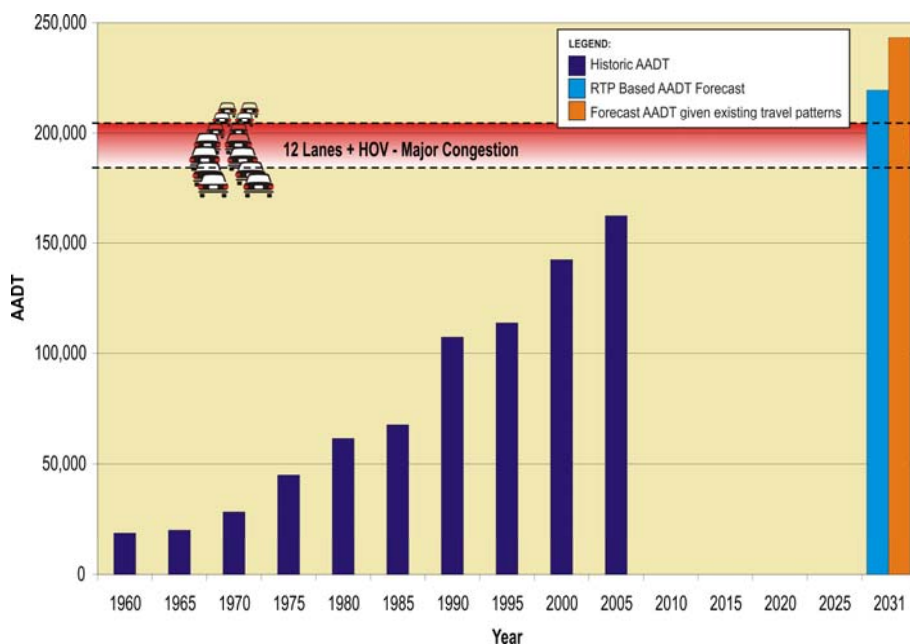
Predicting Future Transportation Conditions

- **Trade / Tourism / Recreation Influences:**
 - *It is expected that trucking will continue to be a dominant mode for goods movement in the future although there is a move towards a balanced goods movement system.*
 - *It is expected that automobiles will continue to be a dominant mode for tourism and recreation travel although there are plans to expand rail passenger service (VIA and Montreal – Windsor High Speed Rail).*

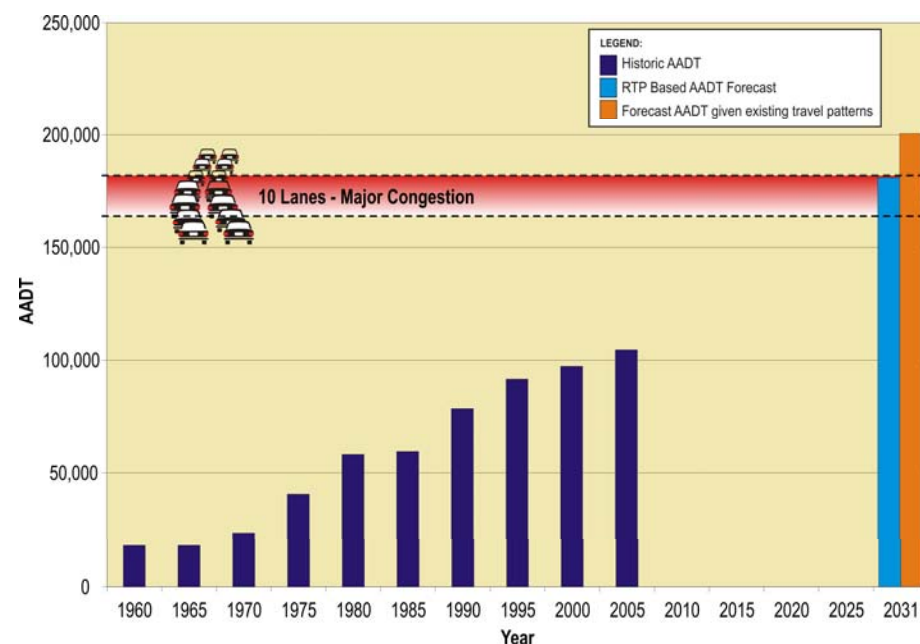


Transportation Problems Commuters

Highway 401 – West of Hurontario Street



Highway 400 – North of Highway 407

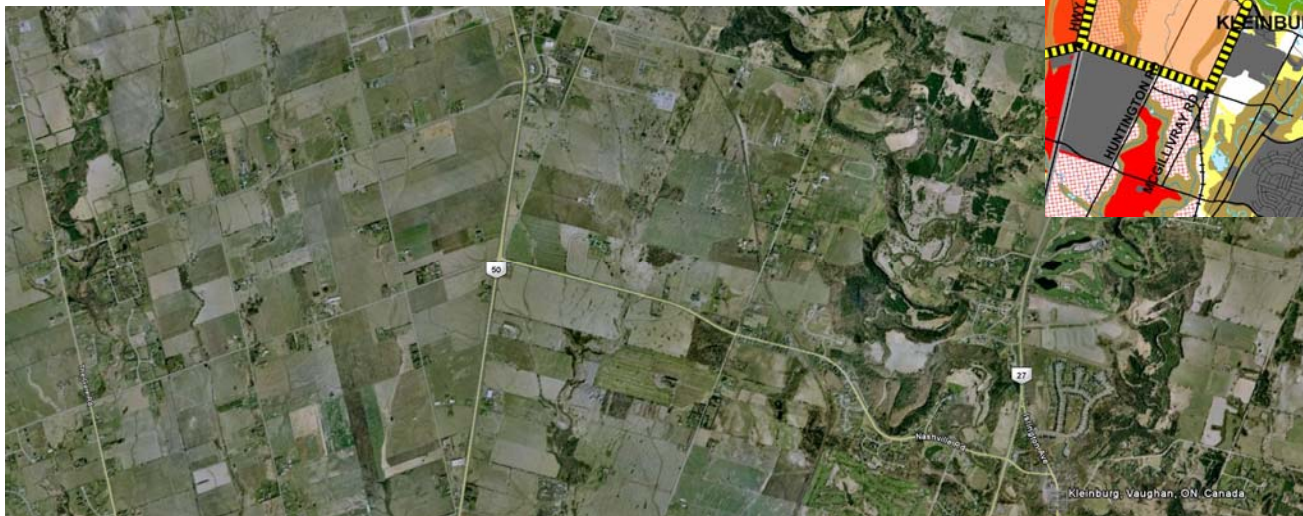
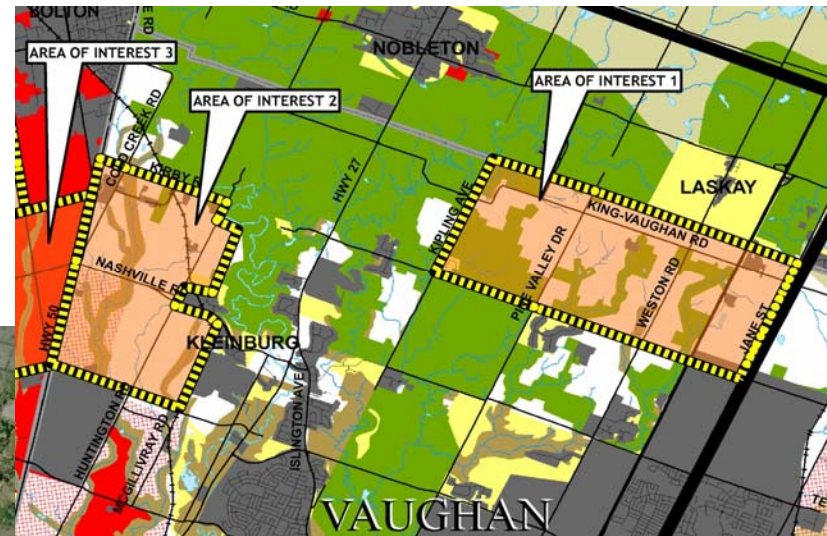


Highway 401 will be over capacity through Peel Region after consideration of Metrolinx 25 year plan and widening Highway 401 to 12 lanes + HOV west of Hurontario Street. Similar congestion levels anticipated on Highway 400 north of Highway 407 in York Region.



Development Pressures

- Land development in some areas is significantly reducing opportunities for a potential transportation corridor





Corridor Planning and Protection

Challenge and Initiatives

- **Need to address immediate local planning needs and development pressures**
- **Need to uphold integrity of the planning and EA process**
- **MTO is working with MMAH, MEI and municipalities to explore strategies to retain corridor opportunities**
- **Land Use Control Tools and Options Reviewed**
- **Need to continue to work with municipalities to identify and refine strategic, critical locations – “areas of interest”**



Ongoing Consultation

Council and Committee Presentations	February / March, 2009
Advisory Group Meetings	February 2009
Public Information Centre #2	•Guelph March 4 •Caledon March 5 •Georgetown March 9 •Woodbridge March 11 •Brampton March 12
First Nations Discussions	Ongoing
Release of Draft Problems & Opportunities Working Paper	May 2009



Next Steps

To Follow Consultation

- **Consider input and respond to questions and comments received**
- **Confirm criteria for assessing transportation system alternatives**
- **Development and evaluation of transportation system alternatives**



GTA West



GTA West Corridor Environmental Assessment



**McCORMICK
RANKIN
CORPORATION**



AECOM





GTA West



GTA West Corridor Environmental Assessment

Municipal Advisory Group

Meeting # 2

February 3, 2009

Provided for Information Purposes



**McCORMICK
RANKIN
CORPORATION**



AECOM





Meeting Purpose

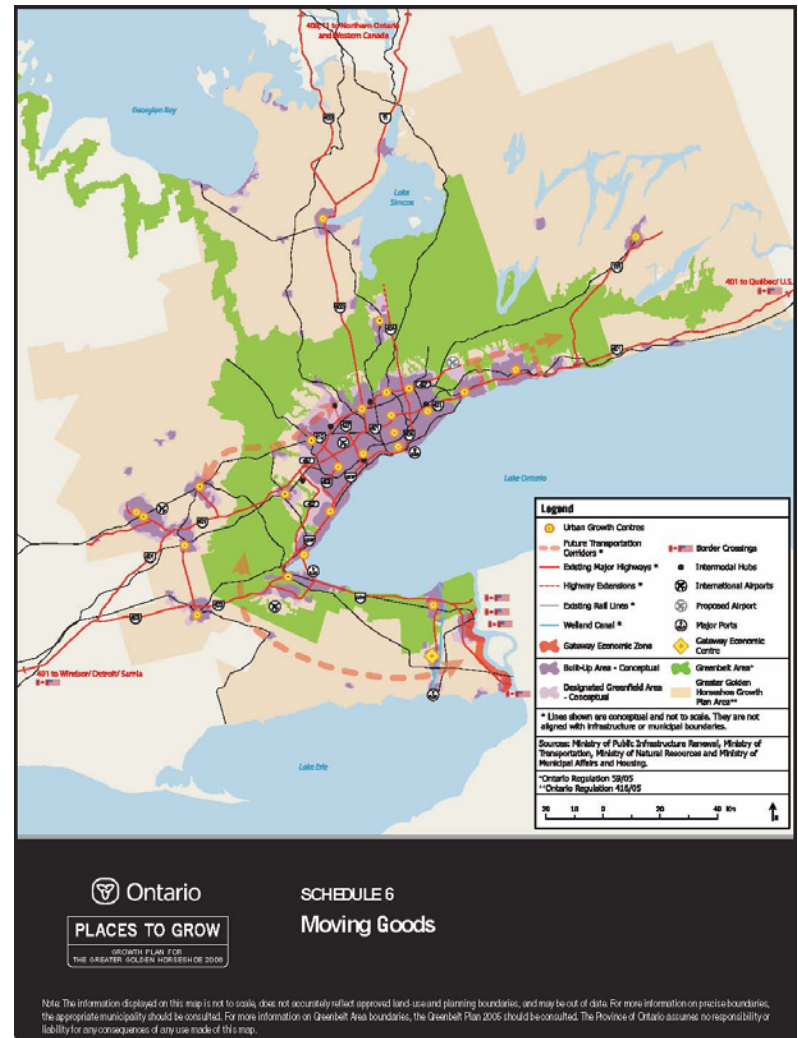
- Study Purpose
- Update on Study Progress & Process
- Project Goals & Objectives
- Existing Conditions
- Predicting Future Transportation Conditions
- Transportation Context, Problems and Opportunities
- Upcoming Consultation
- Next Steps



GTA West

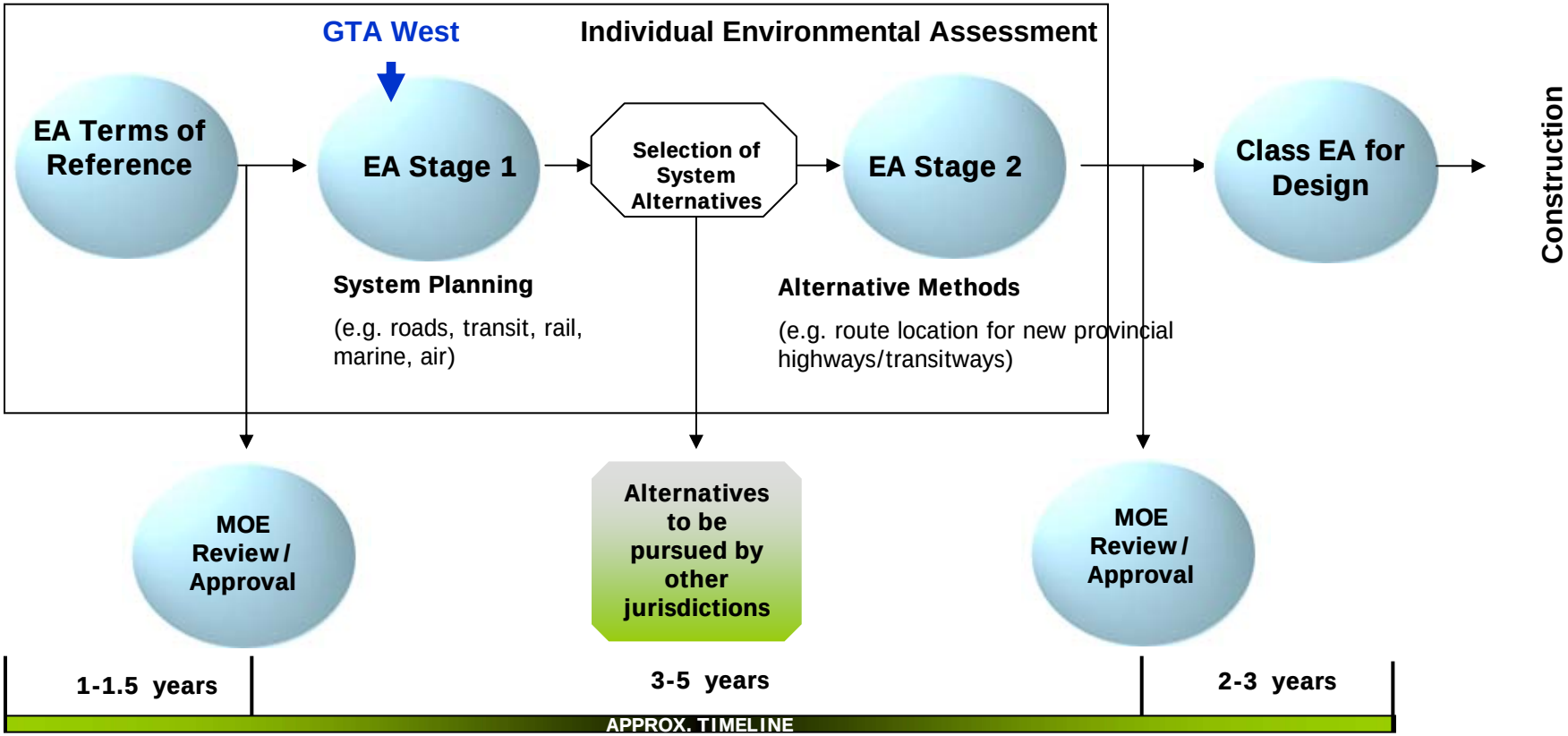
Study Purpose

- To support the policy direction of the Growth Plan, MTO launched the GTA West Planning and EA Study to:
 - Examine long-term transportation problems and opportunities, and
 - Consider alternatives to provide better linkages to *Urban Growth Centres* within the GTA West Corridor





EA Study Process





EA Study Stage 1

- Determine Transportation Problems and Opportunities
(PIC #2 March 2009)
 - Identify and quantify the need for transportation improvements
- Develop a Transportation Development Strategy
(PIC #3 Fall 2009)
 - Evaluate and select Transportation Planning Alternatives
- Preliminary Planning Roadway, if new provincial highways / transitways are recommended
(PIC #4 Spring 2010)
 - Identify general corridors / study areas for new facilities



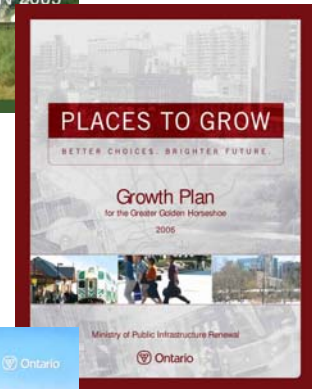
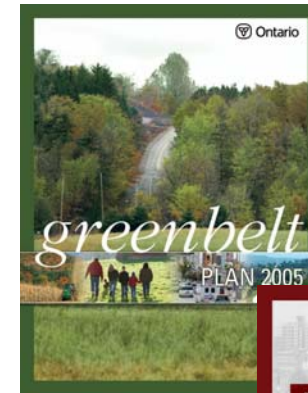
EA Study Stage 2

- Generate, evaluate and select the preferred **route location**
 - **Develop** Concept Design (typically at 1:10,000 scale) for the selected route for new provincial highways/transitways
 - **Identify Right-Of-Way (110m, 170m if alternative includes transitway)**



Project Goals & Objectives

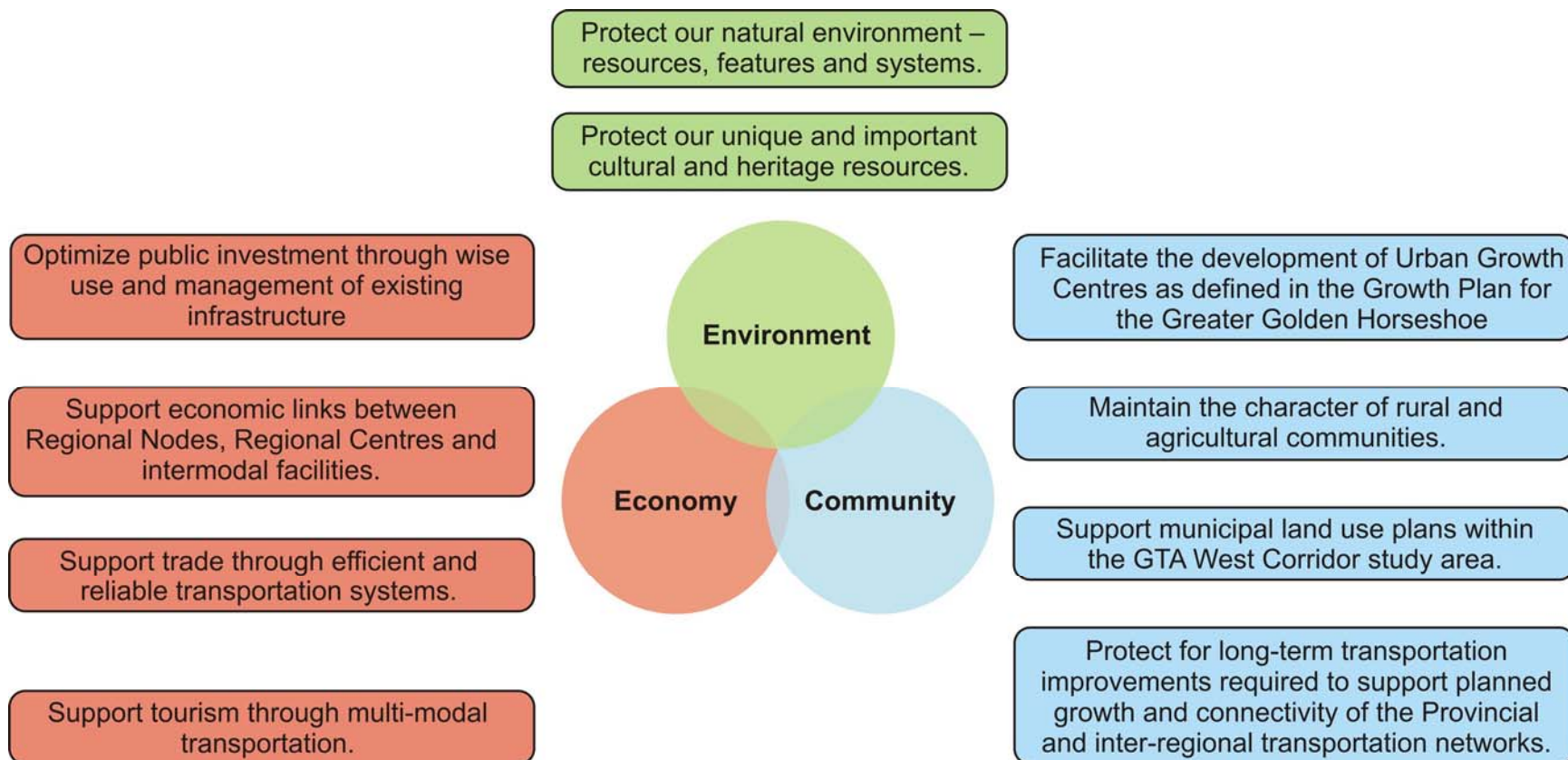
- Incorporate policies from Growth Plan, Greenbelt Plan, Niagara Escarpment Commission Plan, Provincial Policy Statement, Oak Ridges Moraine Conservation Plan, and upper tier municipal official plans.
- Define specific goals and objectives for preliminary study area. Focusing on:
 - **Movement of People**
 - **Movement of Goods**





Project Goals & Objectives

• 10 Goals Identified





GTA West



GTA West Corridor Environmental Assessment

- Project Goals and Objectives
 - Existing Conditions
- Predicting Future Transportation Conditions
- Transportation Problems and Opportunities
 - Corridor Planning and Protection



McCORMICK
RANKIN
CORPORATION



AECOM



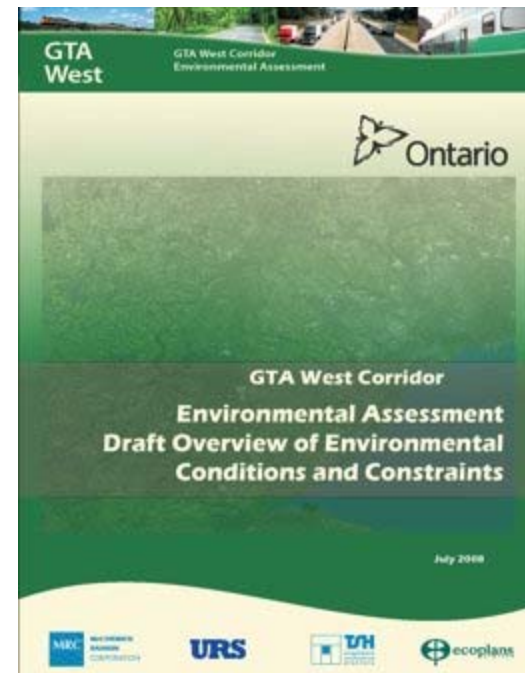


GTA West

Existing Conditions – Environment

Draft Overview of Environmental Conditions and Constraints Report (July 2008)

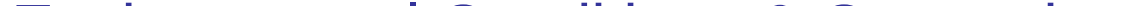
- Features environmental conditions and constraints in the preliminary study area including significant and sensitive features:
 - Natural environment
 - Social environment
 - Cultural environment
 - Economic environment
 - Land use



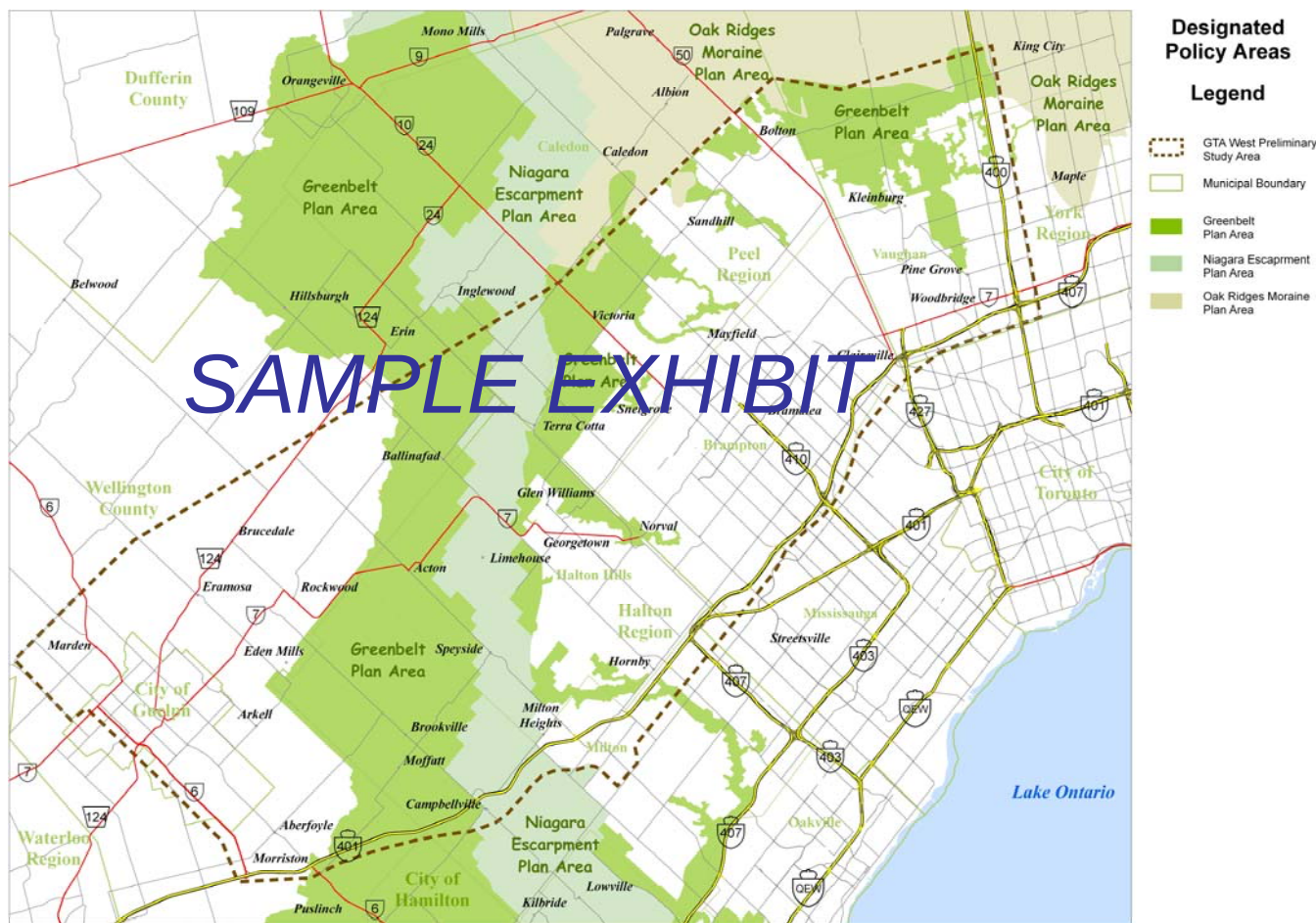


Overview of Environmental Conditions & Constraints

(Draft July 2008)



Designated Policy Areas





GTA West

Existing Conditions – Environment

Overview of Environmental Conditions & Constraints (Draft July 2008)

Agricultural Land Classifications



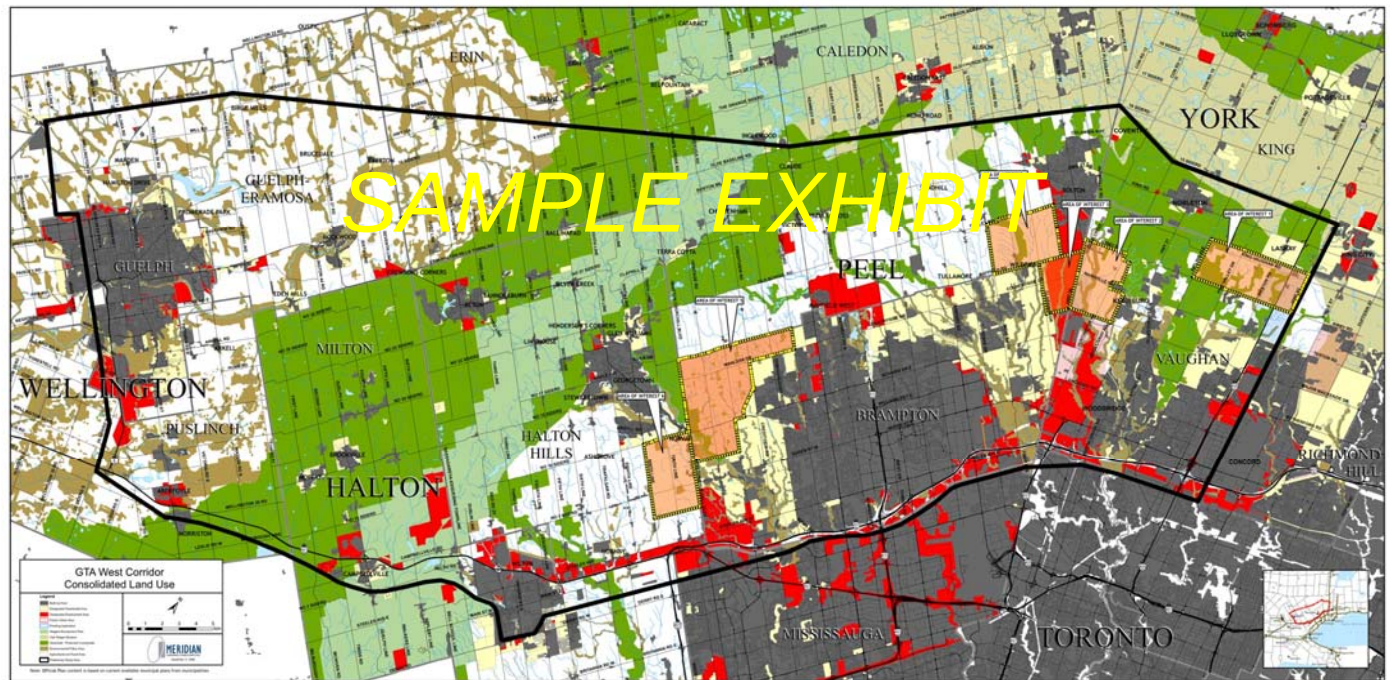


GTA West

Existing Conditions – Environment

Overview of Environmental Conditions & Constraints (Draft July 2008)

*Consolidated
Land Use*





Existing Conditions – Environment

- Overview of Environmental Conditions & Constraints (Draft July 2008) - Available Maps
 - Niagara Escarpment, Oak Ridges Moraine, Greenbelt
 - General Quaternary and Bedrock Geology
 - Wellhead Protection Areas
 - Aquatic Resources
 - Species of Conservation
 - Wetlands
 - Wildlife Habitat
 - Wooded Areas
 - Interior and Deep Interior Forest
 - Niagara Parks and Open Space / Type of Areas



Existing Conditions – Environment

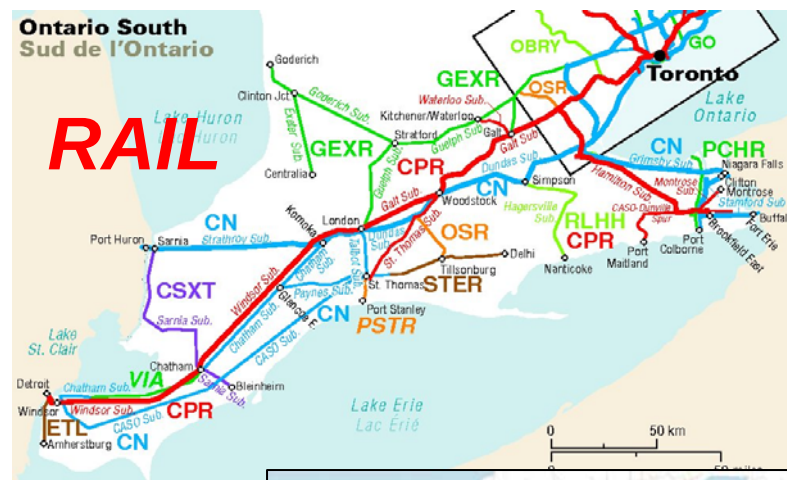
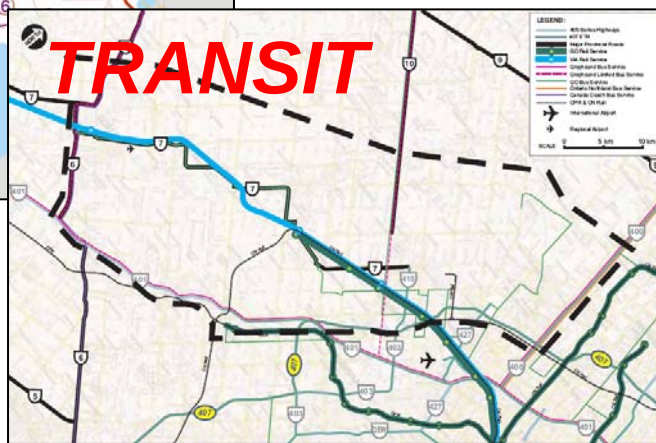
- Overview of Environmental Conditions & Constraints (Draft July 2008) – Available Maps
 - Areas of Natural and Scientific Interest
 - Municipal Land Uses
 - Land Capability for Agriculture
 - Recreation and Trail Maps
 - Pits and Quarries
 - Utility Lines
 - Location Map Bruce to Milton Transmission Reinforcement Project
 - Waste Sites
 - Zone of Archaeological Potential



GTA West

Existing Conditions – Transportation

- *Draft Overview of Transportation & Economic Conditions Report (July 2008)*
- Reviewed existing multi-modal transportation network and travel characteristics





GTA West



GTA West Corridor Environmental Assessment

- Project Goals and Objectives
 - Existing Conditions
- Predicting Future Transportation Conditions
- Transportation Problems and Opportunities
 - Corridor Planning and Protection



McCORMICK
RANKIN
CORPORATION



AECOM



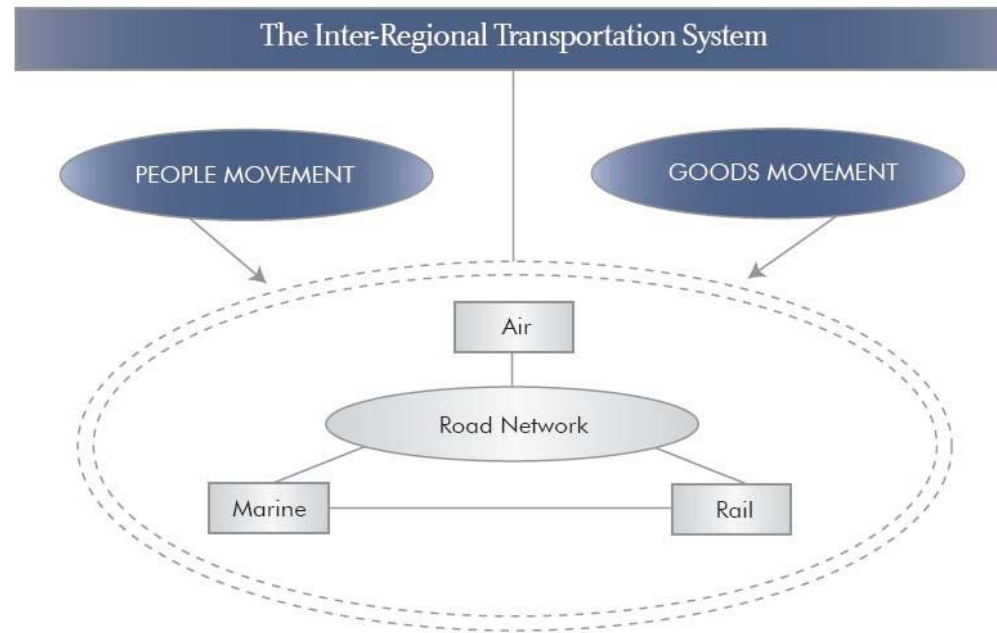


GTA West

Predicting Future Transportation Conditions Inter-Regional Transportation System

Focus is on:

- Movement of people and goods within and through the study area by all modes.
- An efficient road system allows for the other modes to operate more efficiently.



Virtually every trip touches the road network.



GTA West

Predicting Future Transportation Conditions Inter-Regional Transportation System

- **Over-arching problem:**
 - Parts of the system at or beyond capacity
 - Future inter-regional transportation demand forecast to exceed capacity
 - Limited integration between local and inter-regional transit services
- **Process of predicting future transportation conditions considers several influences and acknowledges a range of future conditions is possible:**
 - *Policy Influences*
 - *Economic Influences*
 - *Trade / Tourist / Recreation Influences*



Predicting Future Transportation Conditions

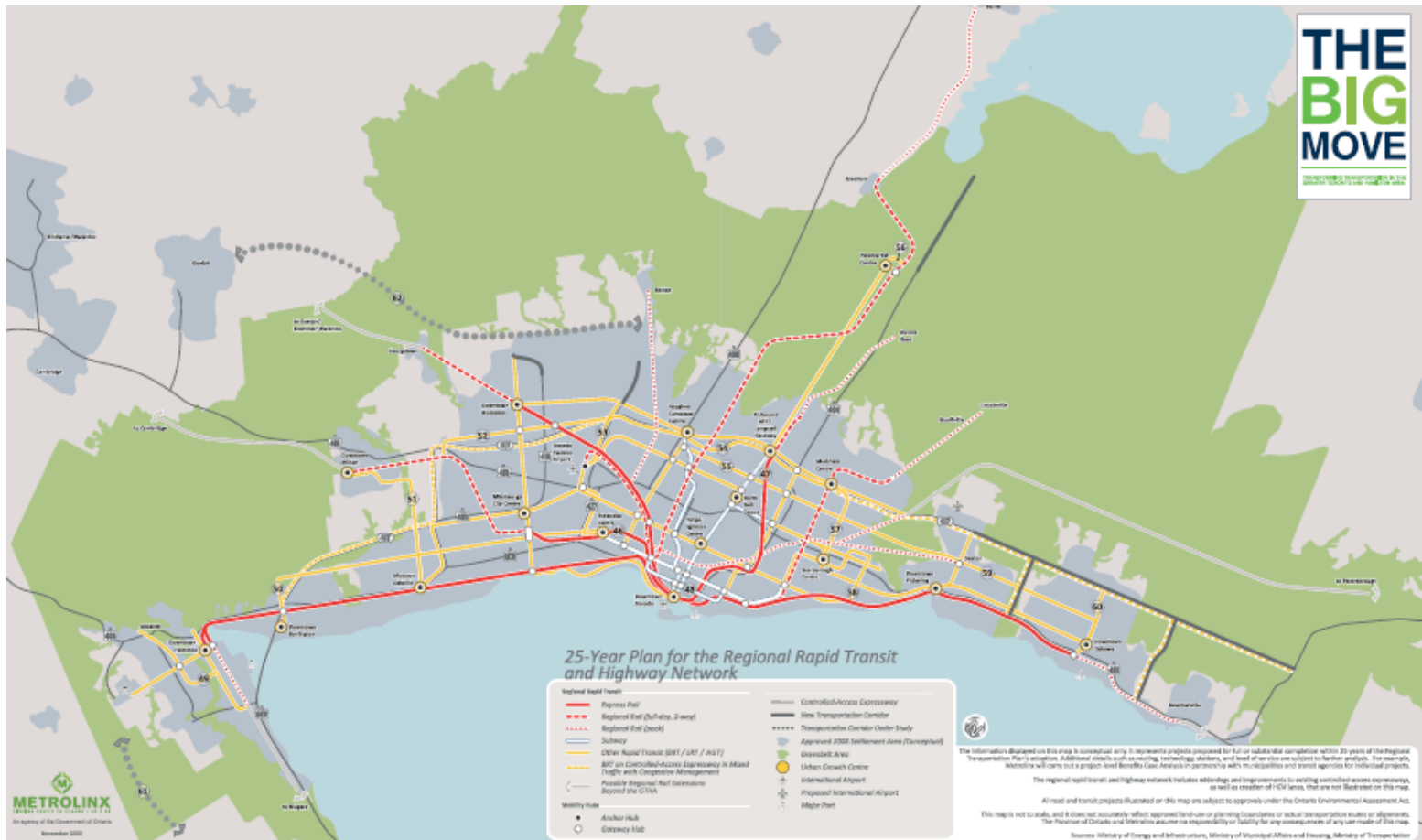
- **Policy Influences Considered:**
 - **Growth Plan for Greater Golden Horseshoe**
 - **Managing Land Use Growth and Development**
 - **Greenbelt Plan**
 - **Minimize the impact on environment**
 - **Municipal Policies**
 - **Shape patterns of demand and mode use**
 - **Niagara Escarpment Plan**
 - **Balance development, preservation and public use**
 - **Metrolinx Regional Transportation Plan**
 - **Significant shift to providing transit infrastructure**
 - **GO 2020**
 - **Future Service Extensions**



GTA West

Predicting Future Transportation Conditions

Policy Influence: Metrolinx – The Big Move (November 2008)

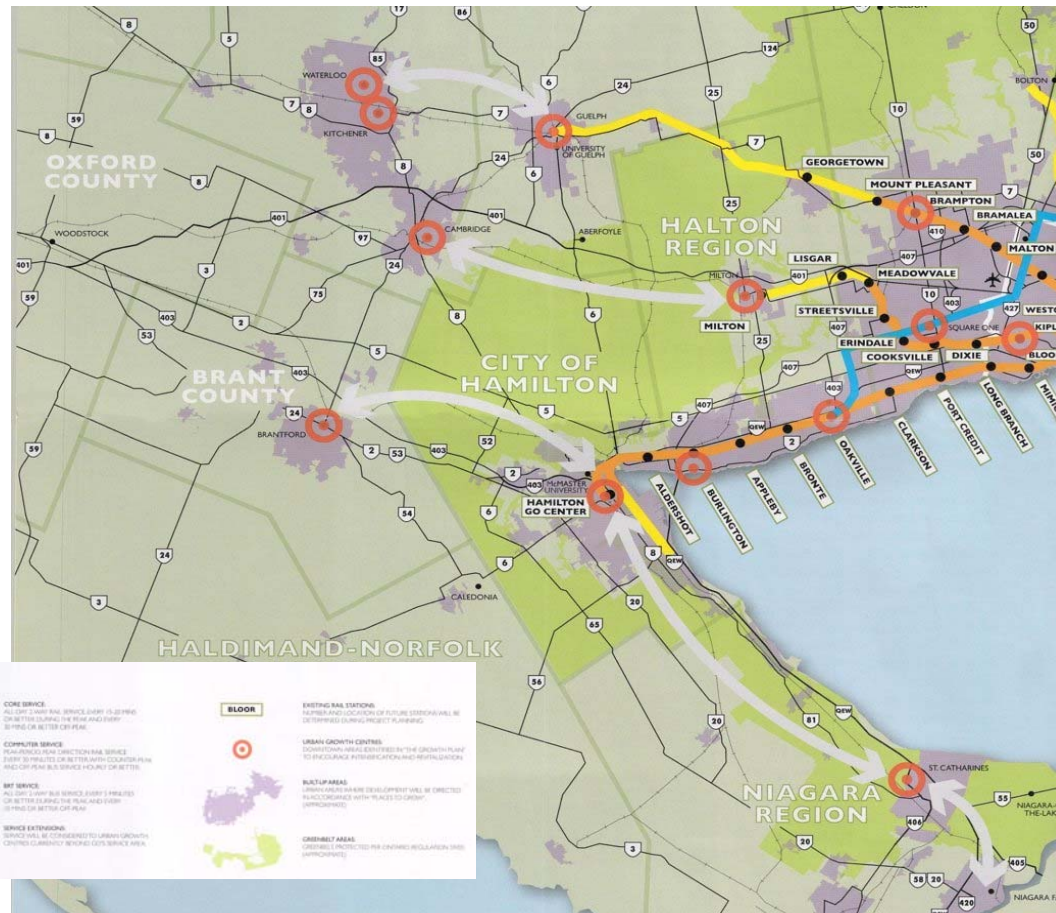




GTA West

Predicting Future Transportation Conditions

Policy Influence: GO Transit 2020 Service Plan (December 2008)



Disclaimer:

The information displayed on this map has been compiled from various sources. Boundaries of the Built-up Area and Greenbelt are approximate. While every effort has been made to accurately depict the information, this map should not be relied on as being a precise indicator of locations of features or roads nor as a guide to navigation.



Predicting Future Transportation Conditions

- **Economic Influences**

- GTAW Employment Sectors

- Current Employment - Trend

- **Wholesale/Transportation/Warehouse/Retail/Business**

- “**More People – More Autos : More Goods (Trucks)**”

- Forecast Employment – Growth Plan

- **Growth in Health/Education/Retail/Business**

- “**More People – More Local Trips: More Transit Use**”

- Ontario’s Economy

- Export based – US is major trading partner

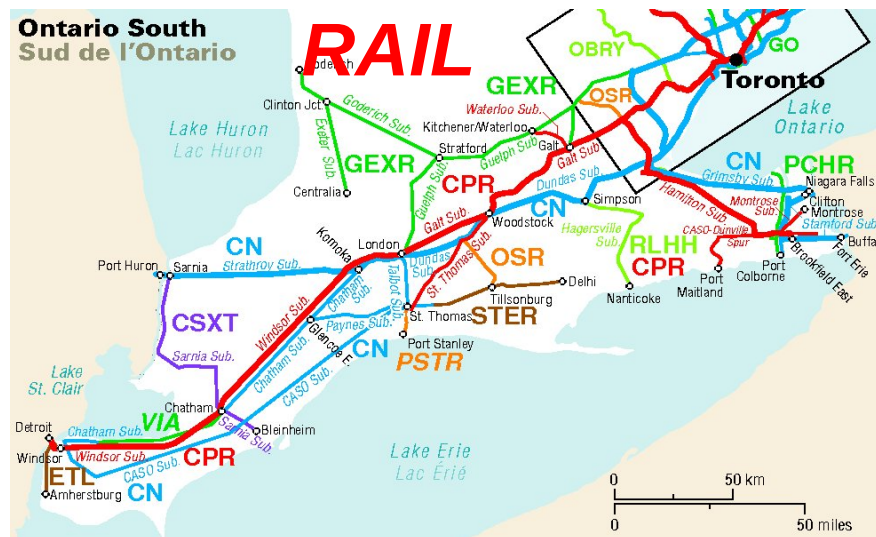
- **Currency exchange / strength of other economies / efficient supply chains**



GTA West

Predicting Future Transportation Conditions

- **Trade / Tourism / Recreation Influences:**
 - Highway 401, CN Mainline and CP mainline are the primary transportation corridors in the GTAW preliminary study area to serve trade / tourism / recreation trips





Predicting Future Transportation Conditions

- **Trade / Tourism / Recreation Influences:**
 - *It is expected that trucking will continue to be a dominant mode for goods movement in the future although there is a move towards a balanced goods movement system.*
 - *It is expected that automobiles will continue to be a dominant mode for tourism and recreation travel although there are plans to expand rail passenger service (VIA and Montreal – Windsor High Speed Rail).*



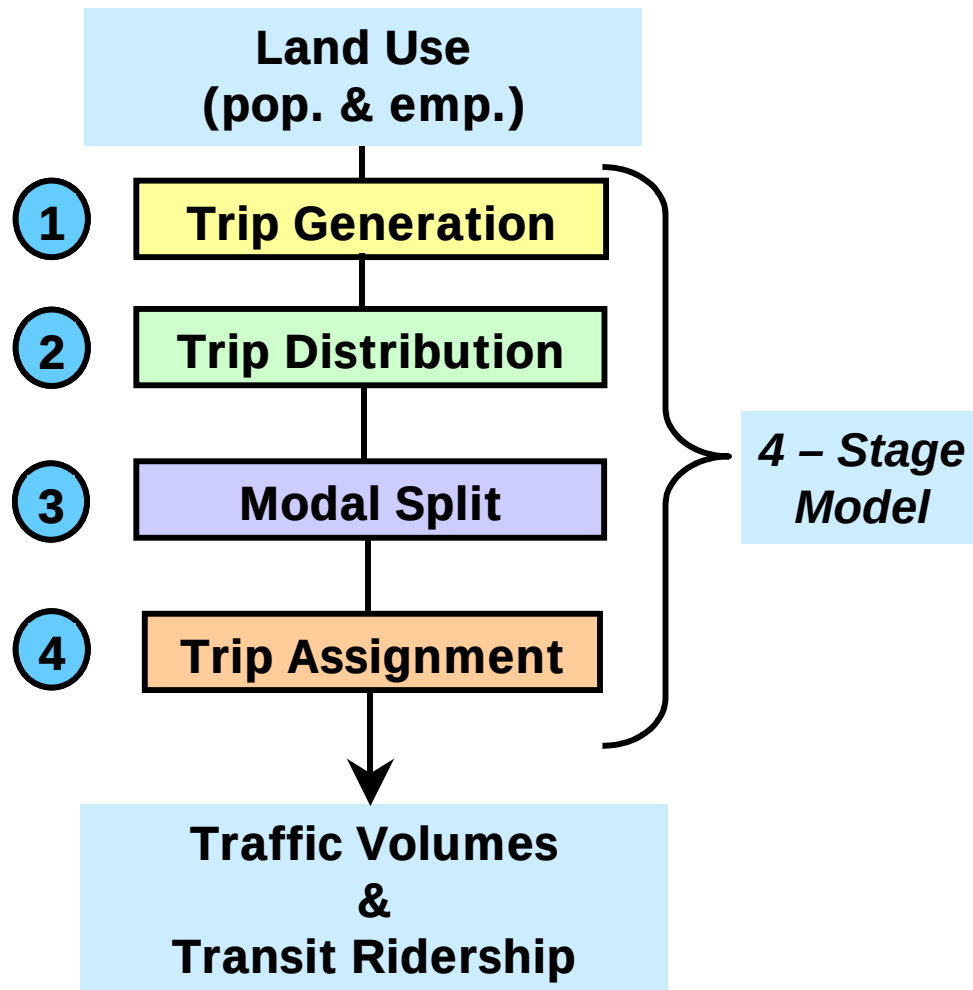
Predicting Future Transportation Conditions

Influences are considered in Forecasting Approach

Two parallel approaches are being used:

1. GGH Model – focuses on commuter trips (transit and auto) and freight trips (trucks)

2. Strategic Demand Forecasting Model – focuses on freight trips (rail, marine, air) and tourist trips (auto, rail, marine, air)





Predicting Future Transportation Conditions

Model Inputs

- Population/Employment
- Road Network Improvements
 - MTO Highway
 - Regional Roads (TMP)
- Metrolinx 25 year plan
 - Express and Commuter Rail
 - BRT / LRT throughout GTA



Model Assumptions

- Auto costs increase by 100% and parking costs increase by 50% (in real terms) by 2031
- Transit fares maintained at 2006 levels with fare integration
- Optimized high order transit headways and average operating speeds





Predicting Future Transportation Conditions

Model Outputs

•Network Assignment

- Auto
- Transit
- Trucks

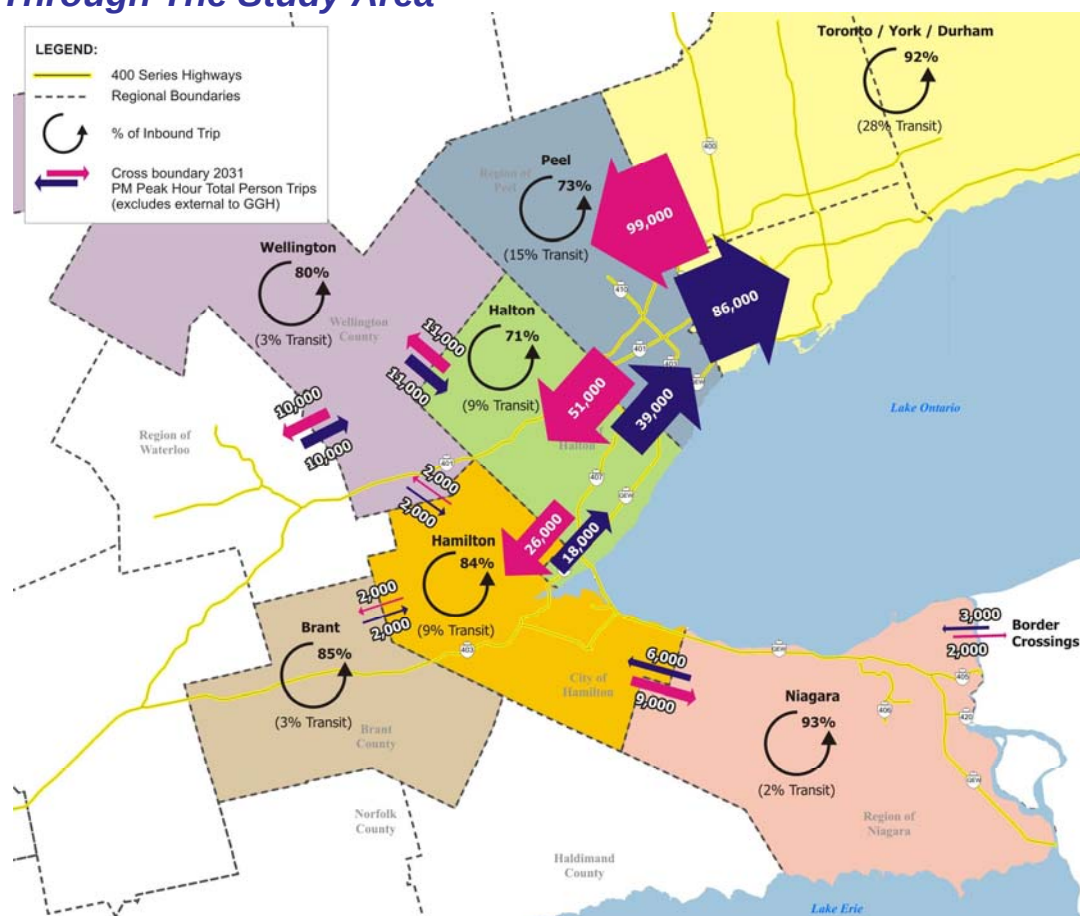
•Trip Characteristics

- Self-containment
- Mode Choice
- Inter-regional flows

•Transportation System Performance

- Travel Time
- Veh/ km travelled

2031 PM Peak Hour Inter-Regional Total Person Flows Through The Study Area





GTA West



GTA West Corridor Environmental Assessment

- **Project Goals and Objectives**
 - **Existing Conditions**
- **Predicting Future Transportation Conditions**
- **Transportation Problems and Opportunities**
 - **Corridor Planning and Protection**



**McCORMICK
RANKIN
CORPORATION**



AECOM





GTA West

Transportation Problems Commuters

Transit System

- Limited community to community (inter-regional) transit service
- Limited integration between local and interregional transit
- Conflicts with freight for use of rail capacity



Road System

- Recurring congestion during commuter peak travel periods
- Increased and unpredictable travel times from congestion and incidents
 - *Collisions, Weather, Maintenance, Construction*
- Inefficient road connections between Urban Growth Centres





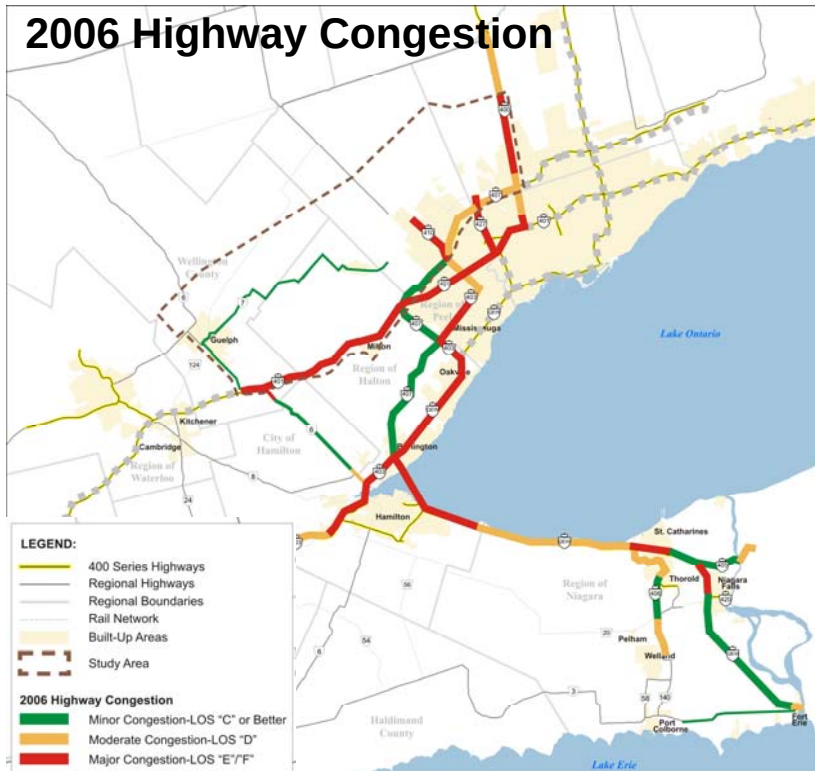
GTA West

Transportation Problems Commuters

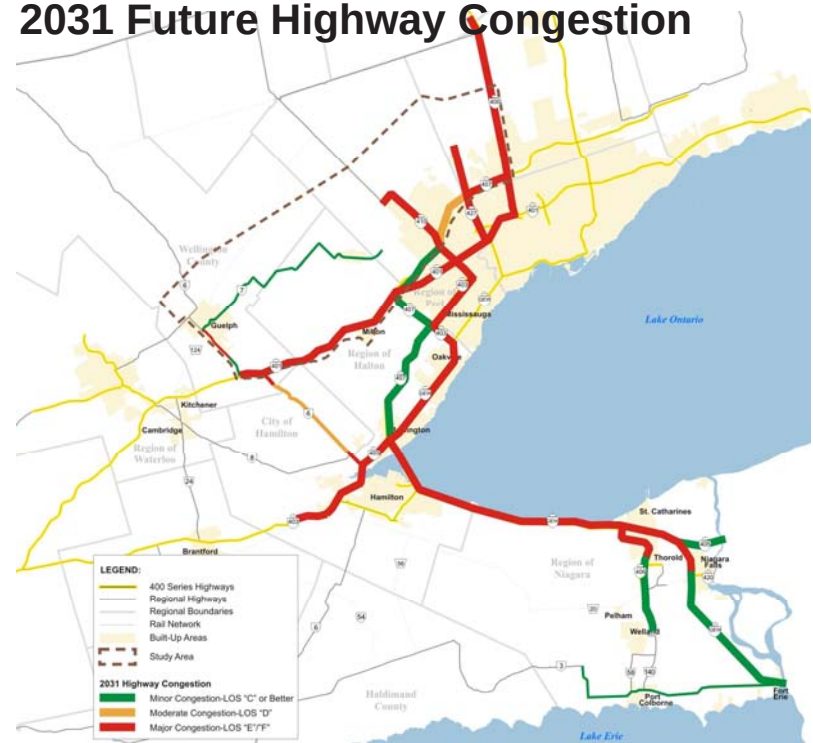
By 2031, traffic volumes on Highway 401, 400, 427 and 410 are all forecast to increase substantially. Not withstanding Metrolinx 25 year plan and committed highway improvements:

- the increase in traffic volume will further increase road congestion in the GTA West Corridor***

2006 Highway Congestion



2031 Future Highway Congestion



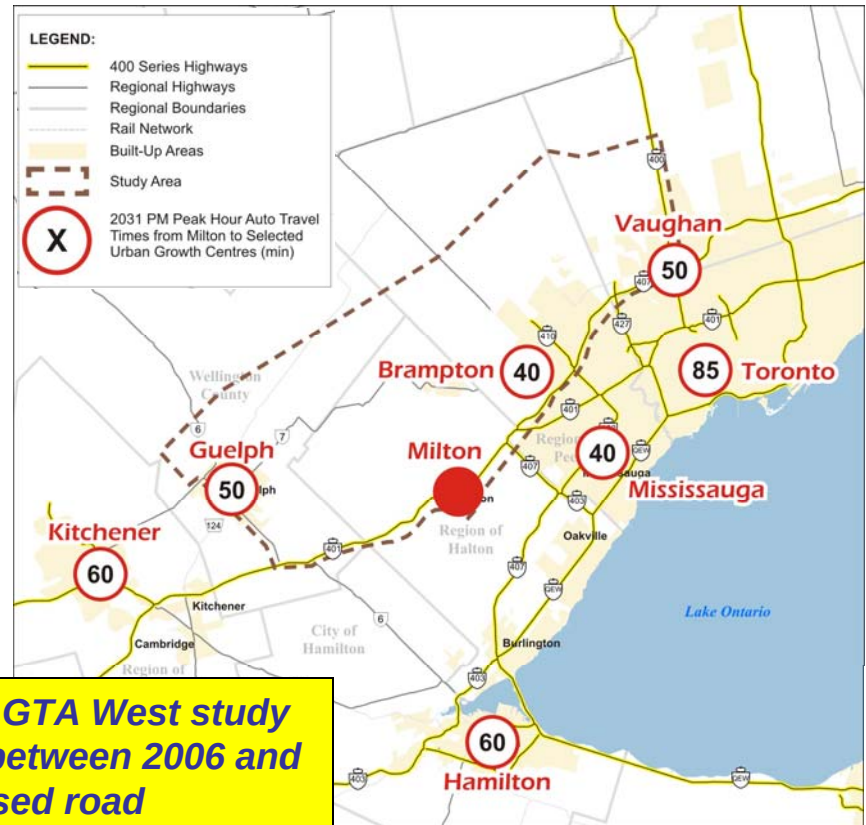


Transportation Problems Commuters

Existing PM Peak Hour Auto Travel Times (From Milton)



2031 PM Peak Hour Auto Travel Times (From Milton)

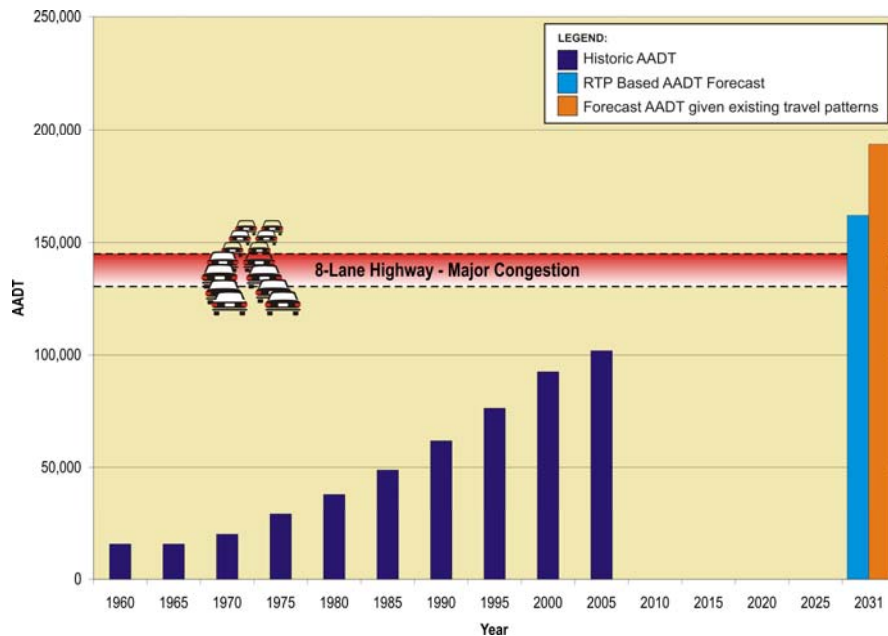


Travel times in the GTA West study area will increase between 2006 and 2031 due to increased road congestion

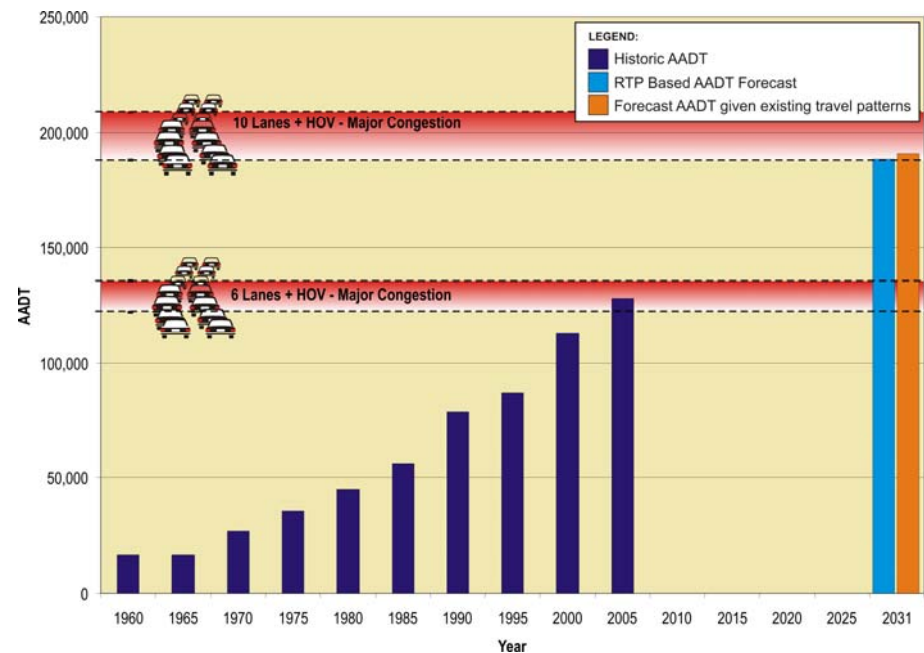


Transportation Problems Commuters

Highway 401 – West of Milton



Highway 401 – East of Milton

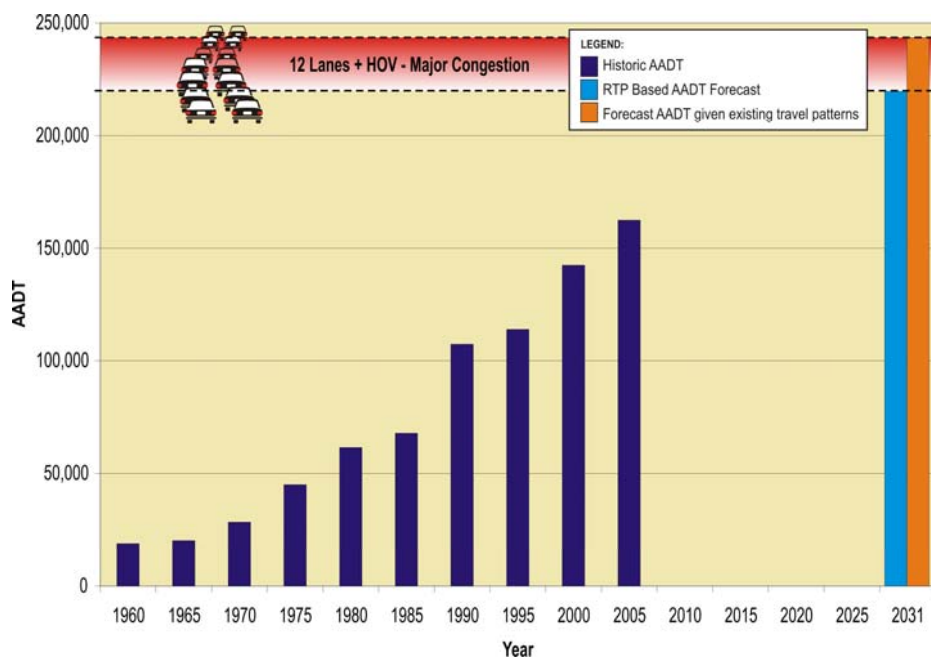


Highway 401 will be over capacity through Halton Region after consideration of Metrolinx 25 year plan and widening Highway 401 to 8 lanes west of Milton and 10+ lanes east of Milton.

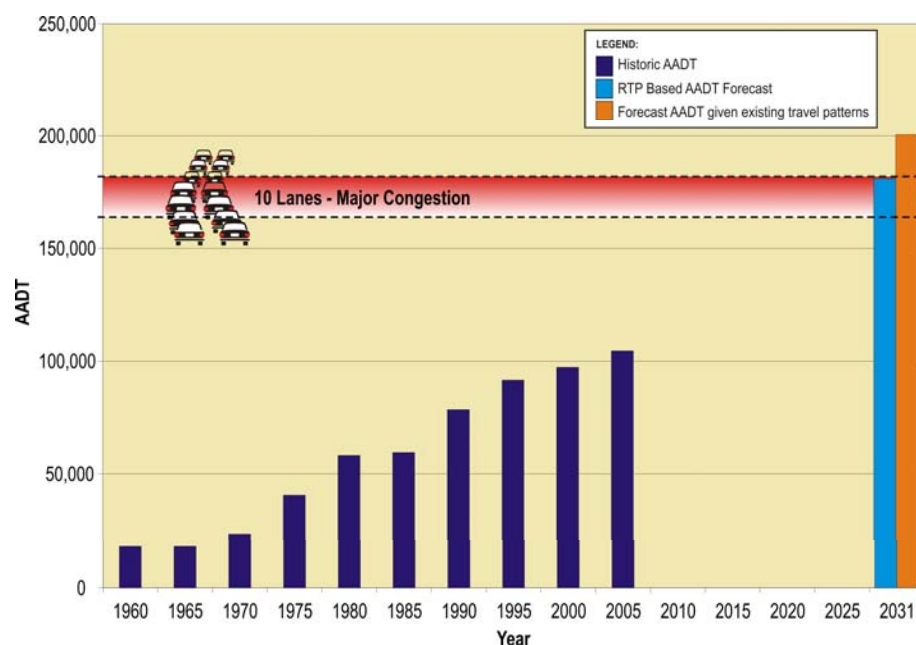


Transportation Problems Commuters

Highway 401 – West of Hurontario Street



Highway 400 – North of Highway 407



Highway 401 will be over capacity through Peel Region after consideration of Metrolinx 25 year plan and widening Highway 401 to 12 lanes + HOV west of Hurontario Street. Similar congestion levels anticipated on Highway 400 north of Highway 407 in York Region.



Transportation Problems Goods Movement

Practically all goods are moved at least once via road system on a truck.



•Consumer Goods



•Bulk Goods
•Containers



•Bulk Goods
•Containers



•Machinery
•Manufactured Goods



GTA West

Transportation Problems Goods Movement

Truck

- Delays during rush hours and delays resulting from incidents
 - Collisions, weather, construction, maintenance
- Insufficient road and inter-modal connections
- Infiltration of local communities by inter-regional trucking

Rail

- Few railway connections between growth areas
- Operationally constrained in specific areas

Marine

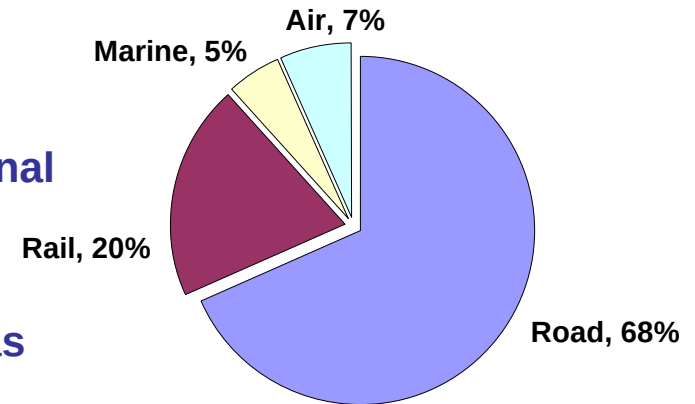
- St. Lawrence Seaway System cannot accommodate large ocean vessels
- Inadequate connections between ports and the inter-regional road system
- Limited shipping season

Air

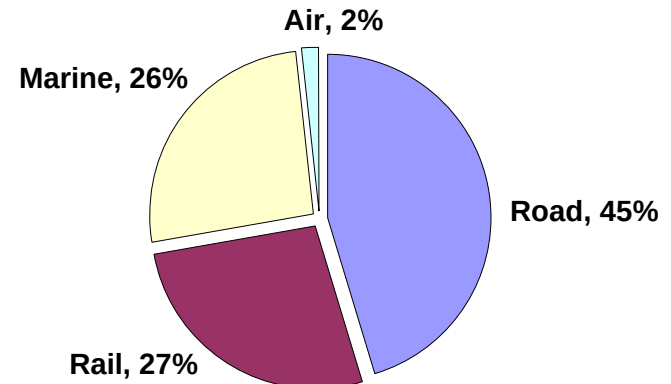
- Limited capacity
- Limited multi-modal connections to airports

Goods Movement by Mode

2007 Mode Distribution of Canada-US Trade by Value*



2004 Mode Distribution of Canada-US Trade by Tonnage*



* Excludes goods shipped by pipeline and other modes

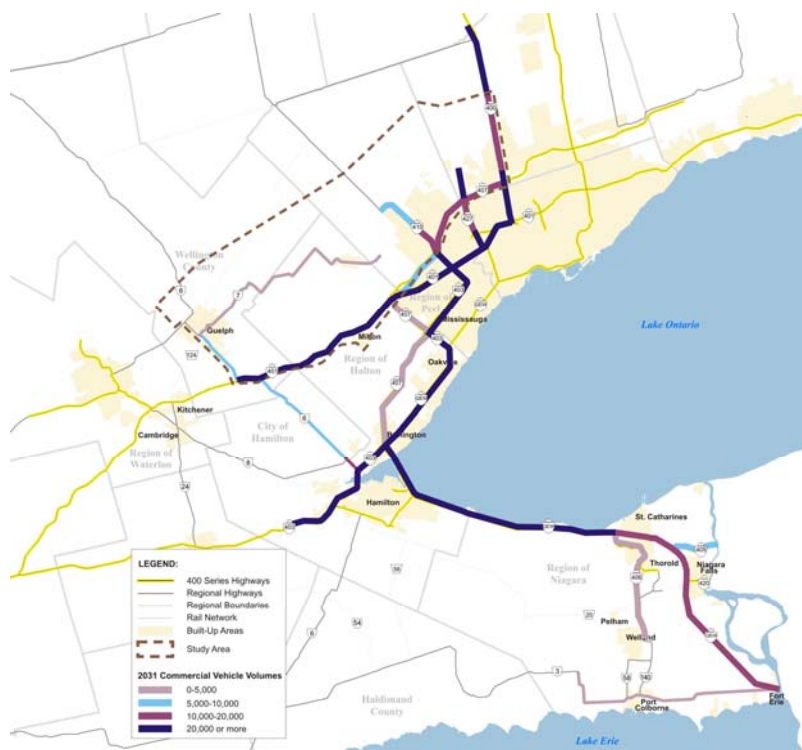


GTA West

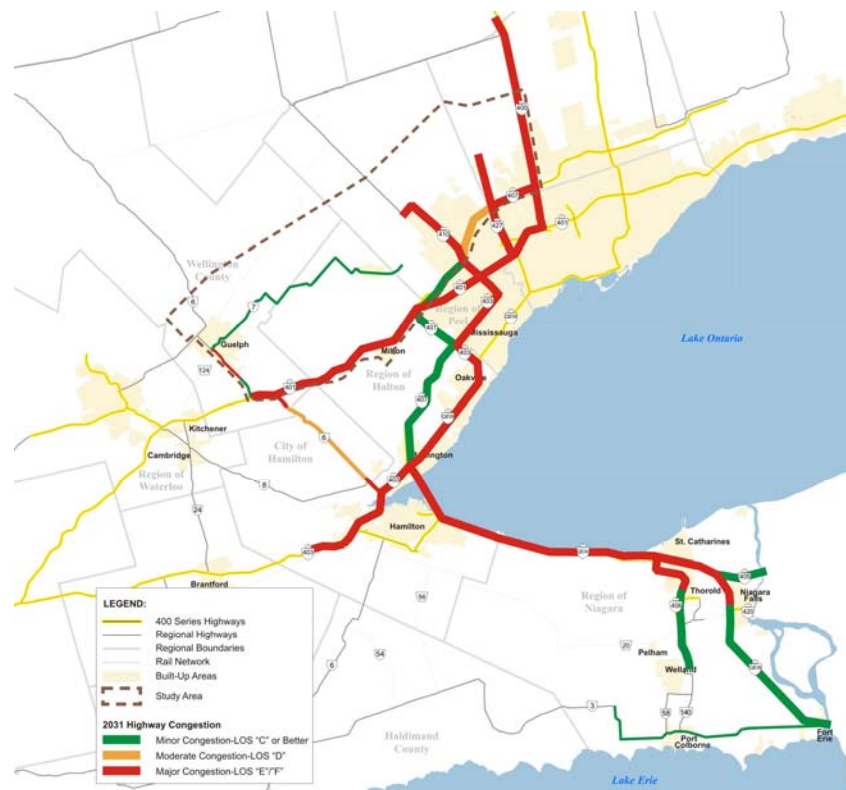
Transportation Problems Goods Movement - Truck

By 2031, truck volumes will have increased substantially on all major freeways in the study area, travelling on more congested highway system.

2031 Commercial Vehicle Volume



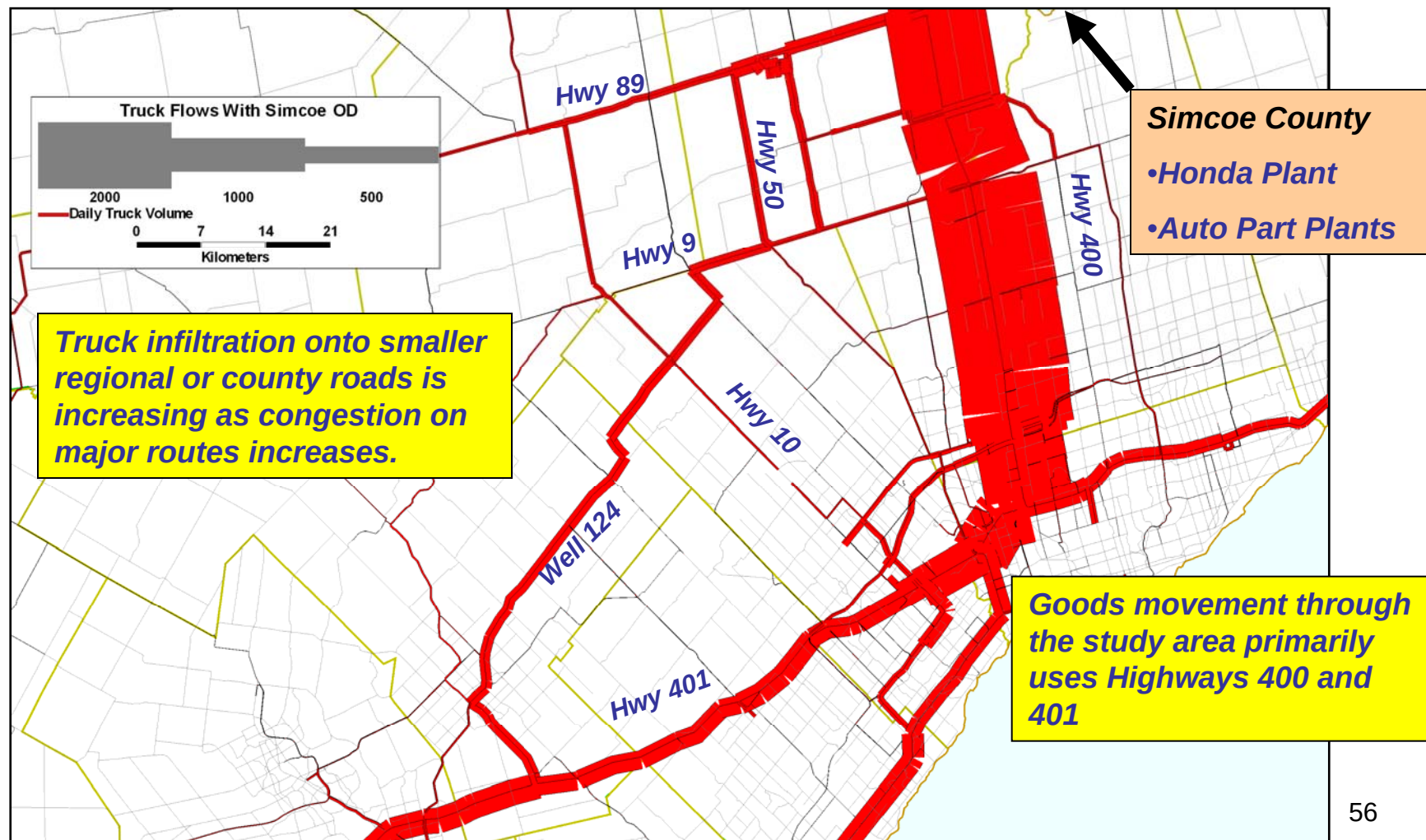
2031 Future Highway Congestion





Transportation Problems Goods Movement - Truck Infiltration

Representative Daily (2002) Truck Trips To and From Simcoe County

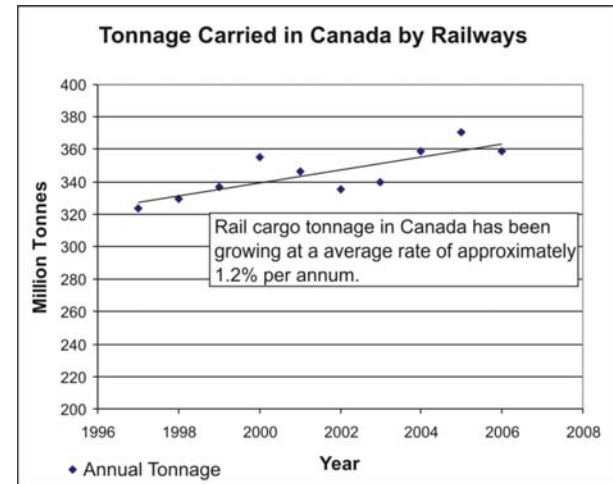




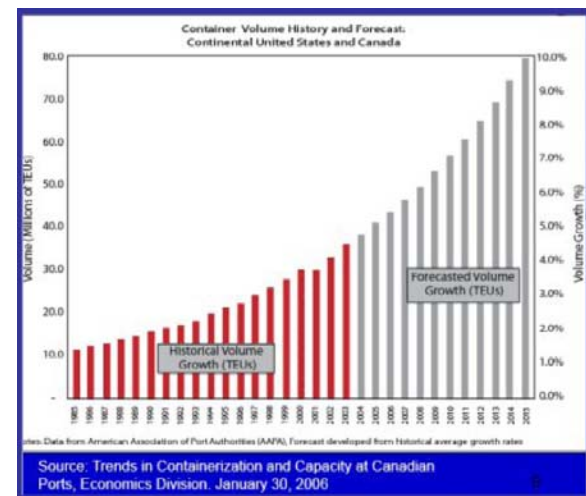
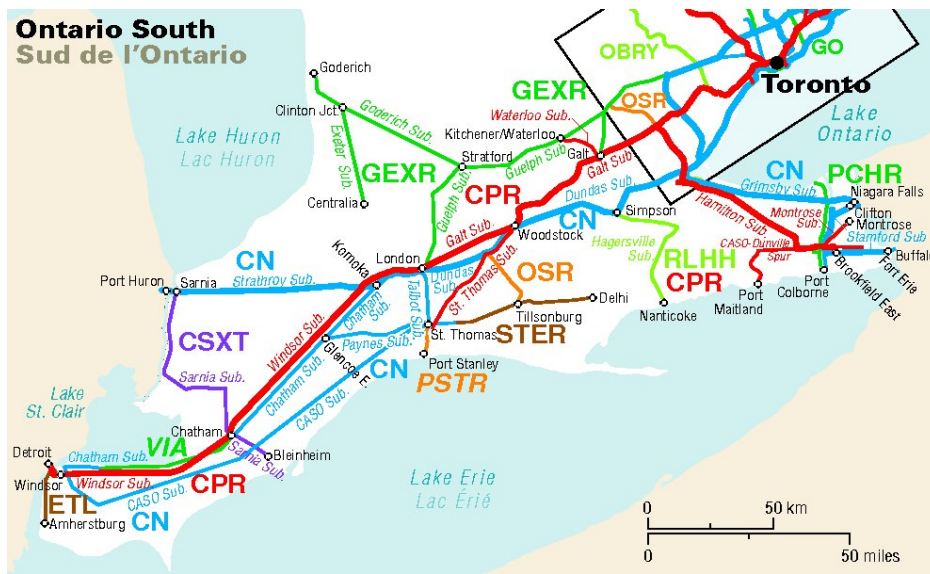
GTA West

Transportation Problems Goods Movement - Rail

- Rail inter-modal traffic averaging annual growth of 4.9% over the last 10 years
- Growth was driven by marine imports to major west and east coast ports.



Southern Ontario Rail Network



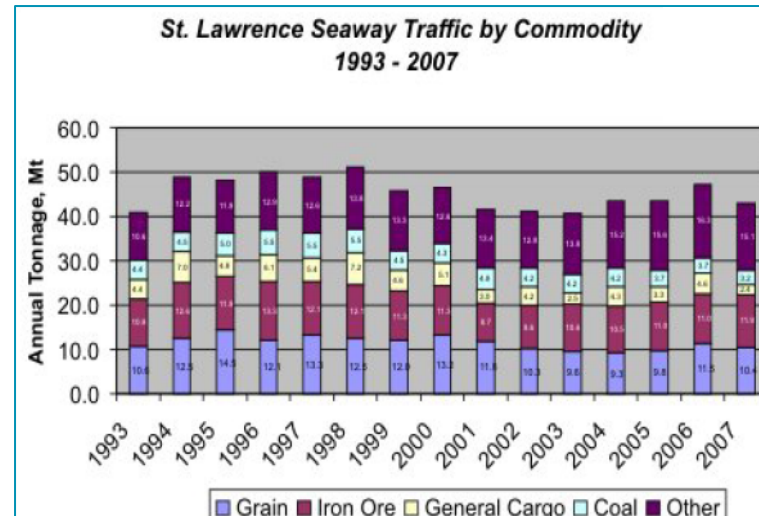


Transportation Problems

Goods Movement – Marine and Air

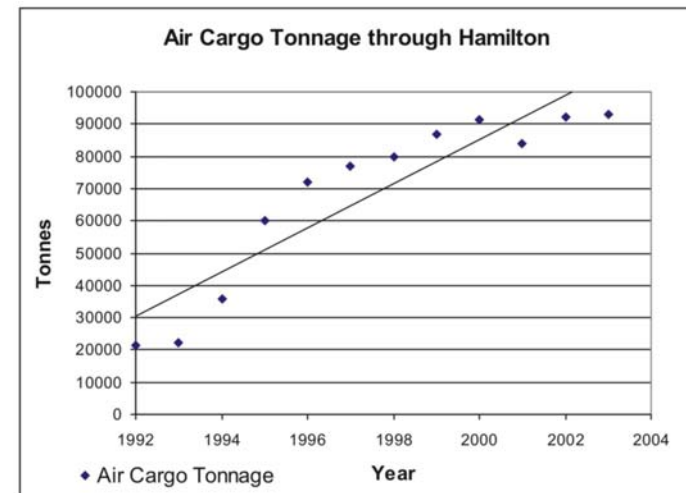
Marine

- Tonnage carried on the St. Lawrence Seaway relatively stable over last 15 years
- Ports influencing the study area:
 - Port of Hamilton
 - Port of Toronto
- Of the Canadian Port Authorities, Hamilton is ranked the 8th busiest handling domestic and international traffic



Air

- Major Airports
 - John C. Munroe International Airport
 - Lester B. Pearson International Airport
- Hamilton air cargo volume increased four fold between 1992 and 2003





Transportation Problems Goods Movement - Outlook

- **Population and employment growth identified in *Places to Grow* will result in the increased movement of goods.**
- **Historical trends indicate a general increase in goods movement by road, rail and air.**
- **Discussions with Transportation Service Providers indicate that rail, marine and air have the capacity to absorb increased goods movement.**
- **Trucks will continue to play a major role in the transportation of goods.**



Transportation Problems Tourism and Recreation

Road System

- Congestion delays during peak tourist/recreation travel periods
- A lack of multi-modal connections between tourist gateways and key tourist/recreational destinations
- Conflicts between truck and tourist/recreational traffic during peak tourist periods



Transit System

- Public transit schedules cater to commuters rather than tourists
- Limited multi-modal connections to key tourist/recreational destinations

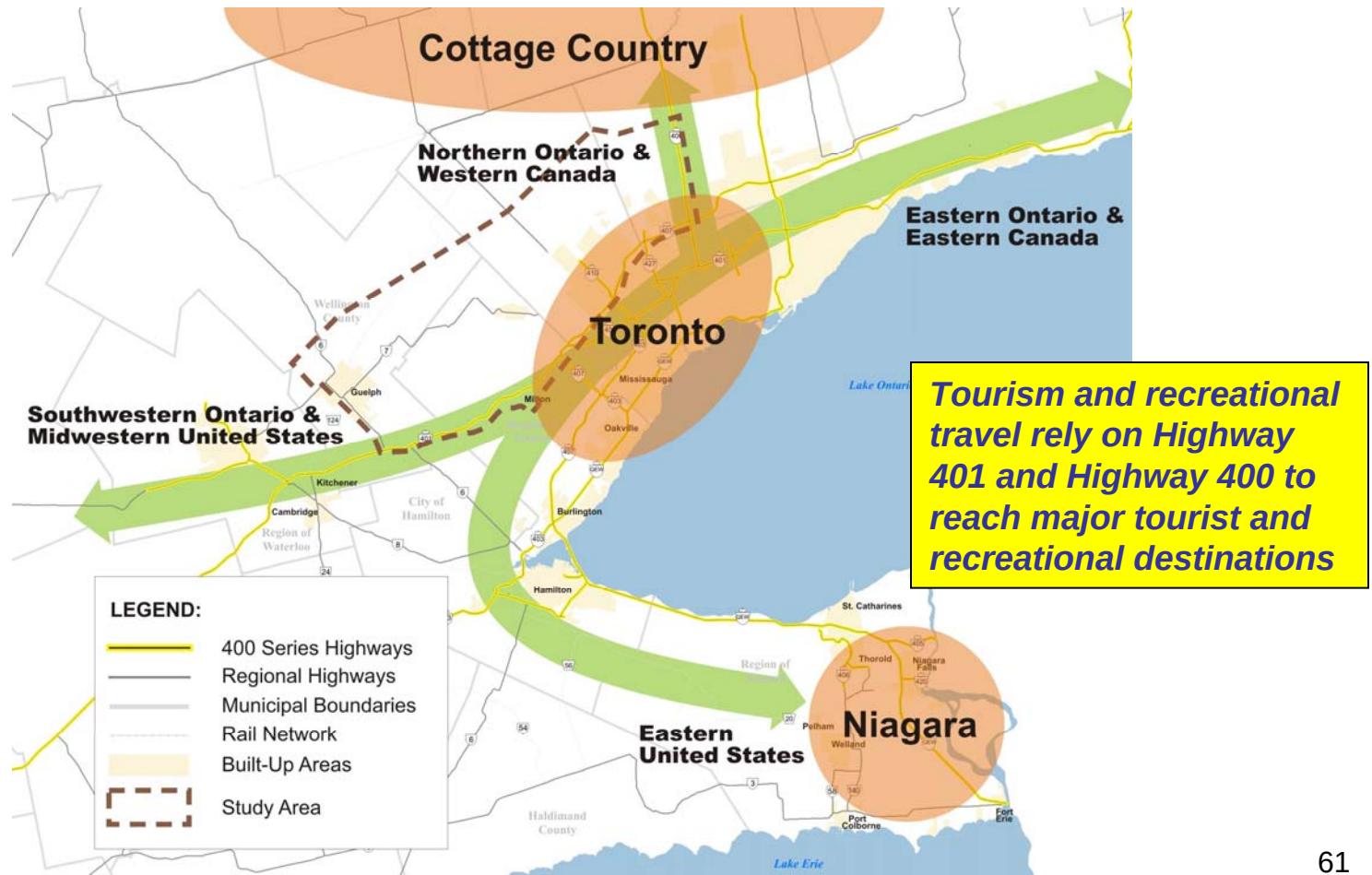




GTA West

Transportation Problems Tourism and Recreation

Major Tourist and Recreational Destinations





Transportation Problems & Opportunities

Transportation Opportunities

- Opportunities are found where improvements or enhancement to the transportation system allow for the enhancement or protection of the environment, economy and/or community
- Opportunities go beyond addressing the specific transportation problems and are intended to create:
 - Compact, vibrant and complete community
 - A prosperous and competitive economy
 - A protected environment
- The decisions we make in developing a multi modal transportation infrastructure solutions will influence the broader community, economy and environment





GTA West



GTA West Corridor Environmental Assessment

- Project Goals and Objectives
 - Existing Conditions
- Predicting Future Transportation Conditions
- Transportation Problems and Opportunities
- Corridor Planning and Protection



McCORMICK
RANKIN
CORPORATION



AECOM





Corridor Planning and Protection

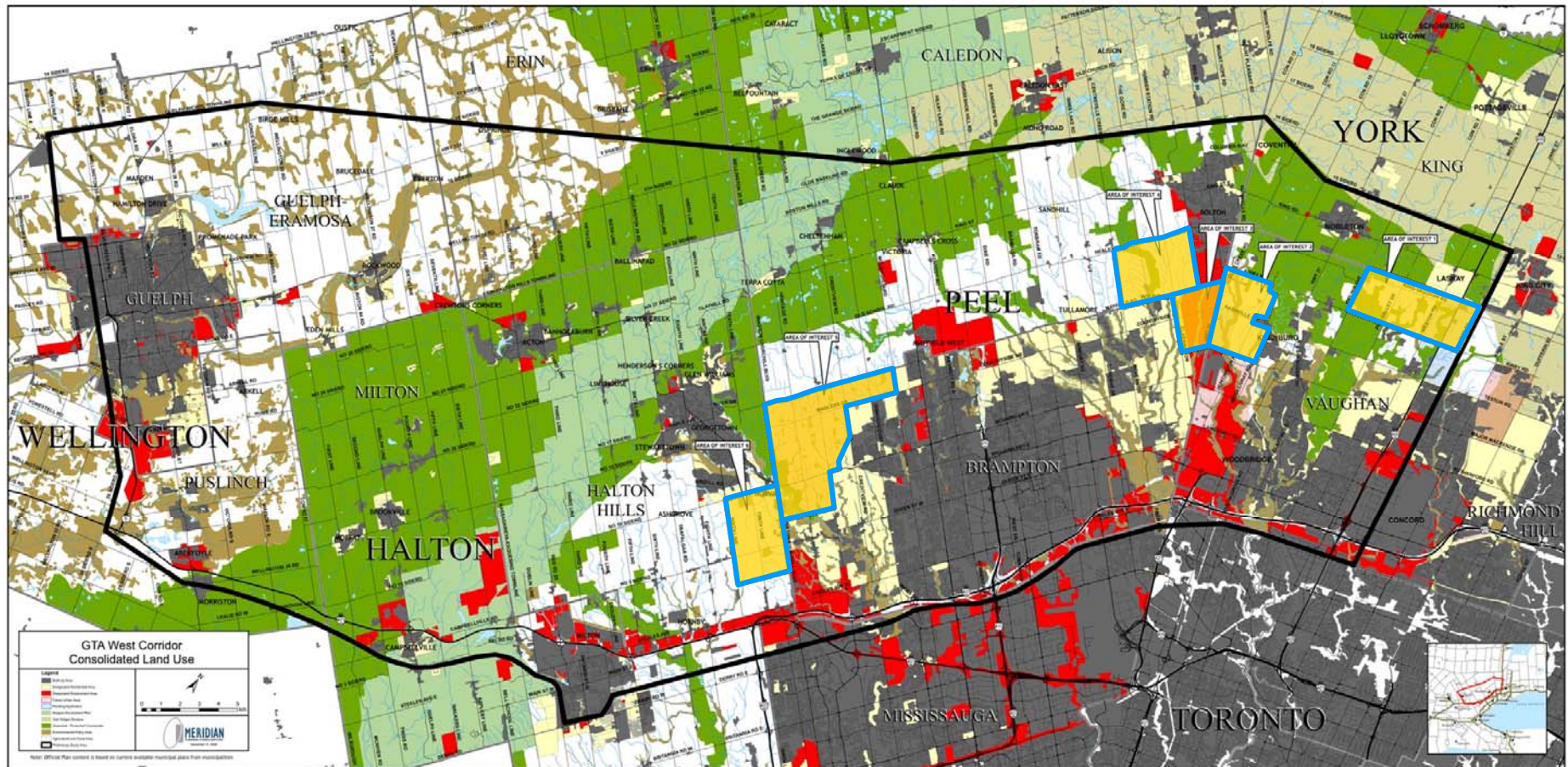
Current Initiatives

- **Fast-paced land development in certain areas in Peel and York has potential to significantly reduce opportunities for transportation corridors**
- **MTO is working with MMAH, MEI and municipalities to explore strategies to retain corridor opportunities**



GTA West

Corridor Planning and Protection





Corridor Planning and Protection

Challenge

- Uphold integrity of the planning and EA process
- Be effective – address immediate local planning needs and development pressures

Land Use Control Tools and Options Reviewed

- **Municipal Tools**
 - OP designation
 - Interim Control By-law
 - Holding Provision By-law
- **Provincial Tools**
 - Corridor Designation
 - Plan created by statute
 - Minister's Zoning Order
 - Plan review & approval process

“Areas of Interest” identified in the Preliminary Study Area

- Individual workshops being arranged with affected municipalities to refine



Corridor Planning and Protection

- **Continue to work with municipalities to identify and refine strategic, critical locations – “areas of interest”**
- **Province requests early notification of potentially affected development applications**
- **Review applications to determine applying various land use control tools on a case by case basis**



GTA West



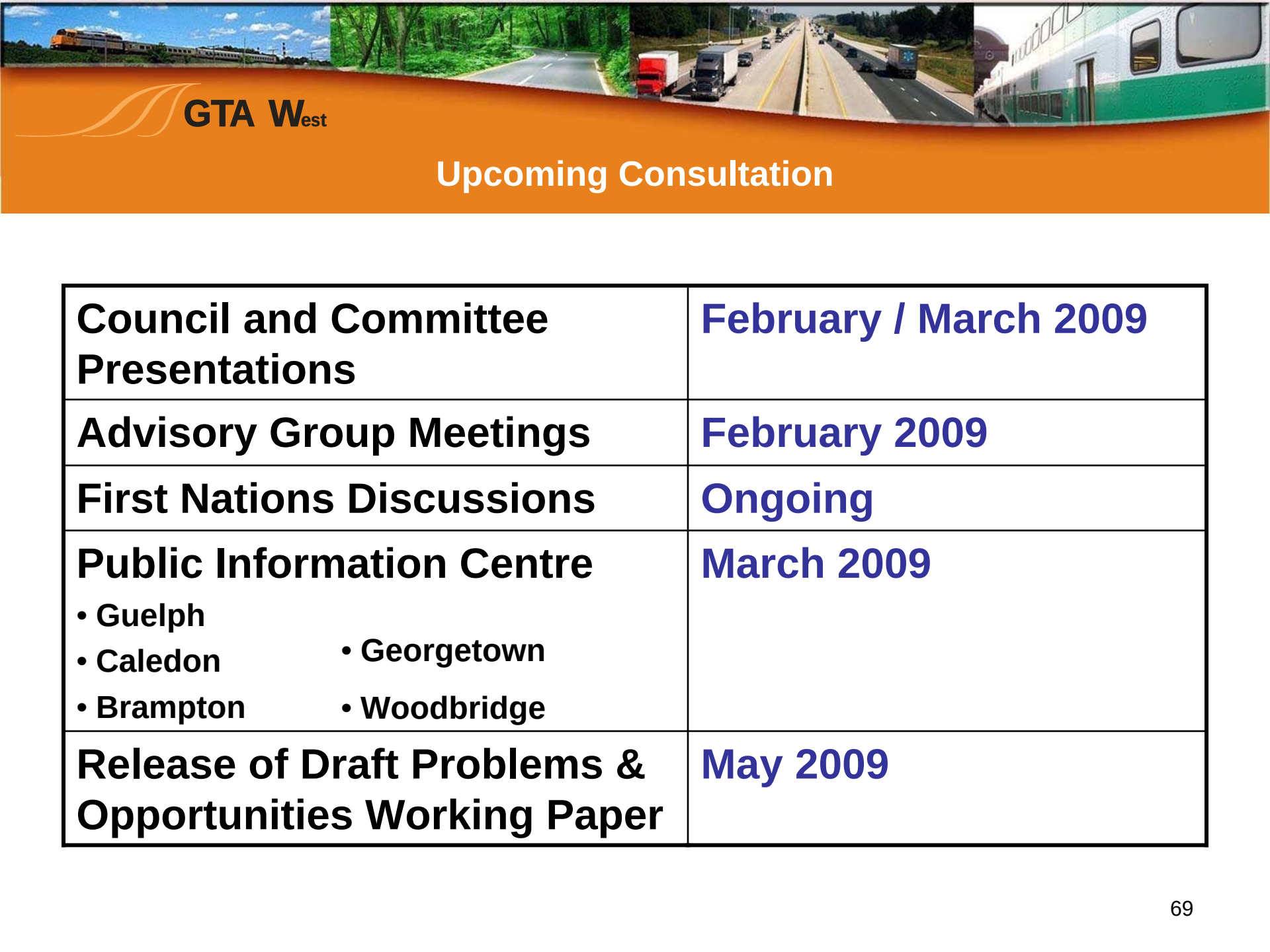
GTA West Corridor Environmental Assessment

- Project Goals and Objectives
 - Existing Conditions
- Predicting Future Transportation Conditions
- Transportation Problems and Opportunities
 - Corridor Planning and Protection
- Upcoming Consultation / Next Steps



McCORMICK
RANKIN
CORPORATION





Upcoming Consultation

Council and Committee Presentations	February / March 2009
Advisory Group Meetings	February 2009
First Nations Discussions	Ongoing
Public Information Centre • Guelph • Caledon • Brampton • Georgetown • Woodbridge	March 2009
Release of Draft Problems & Opportunities Working Paper	May 2009



Next Steps

To Follow Consultation

- **Consider input and respond to questions and comments received**
- **Development and evaluation of transportation system alternatives**
- **Further discussions to identify land protection strategies**



Next Steps

Municipal Input is Important

- **Land Use Designation**
- **Population & Employment Projections**
- **Ongoing Transportation Studies**
- **Arterial and Transit Network Program**
- **Pending Development Applications**
- **Input on Draft Overview Reports**