

Northern Ontario Multimodal Transportation Studies

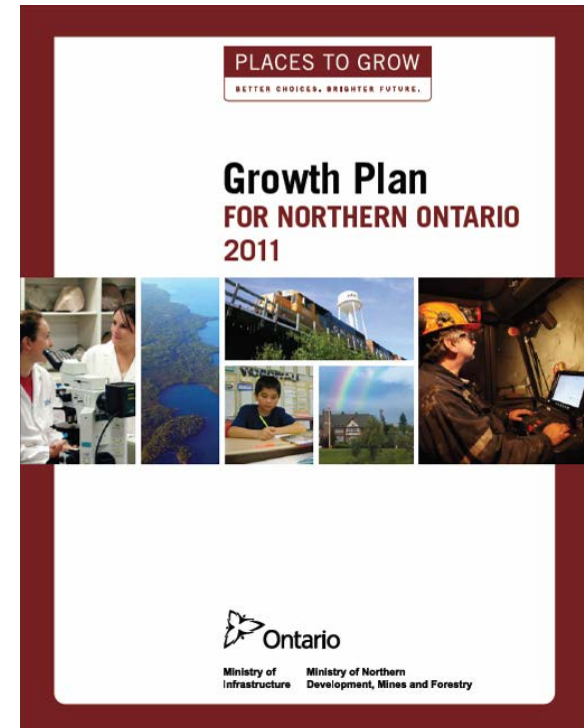
Bi-National Twin Sault's Regional Collaboration Conference

October 31, 2013



Planning Context

- To help position the northern region for economic growth, the Ontario government developed a Northern Ontario Growth Plan under the Places to Grow Act, 2005.
- The development of a Multimodal Transportation Strategy for Northern Ontario is a key implementation initiative.



Study Area



Legend	
	Major Highways
	Secondary Highways
	Winter Roads (2009-2010)
	All Weather Roads
	District Boundary
	Border Crossings
Northern Ontario Growth Plan Area*	

Sources: Ministry of Infrastructure, Ministry of Northern Development, Mines and Forestry, Ministry of Natural Resources, Ministry of Transportation, NAW Canada and Natural Resources Canada

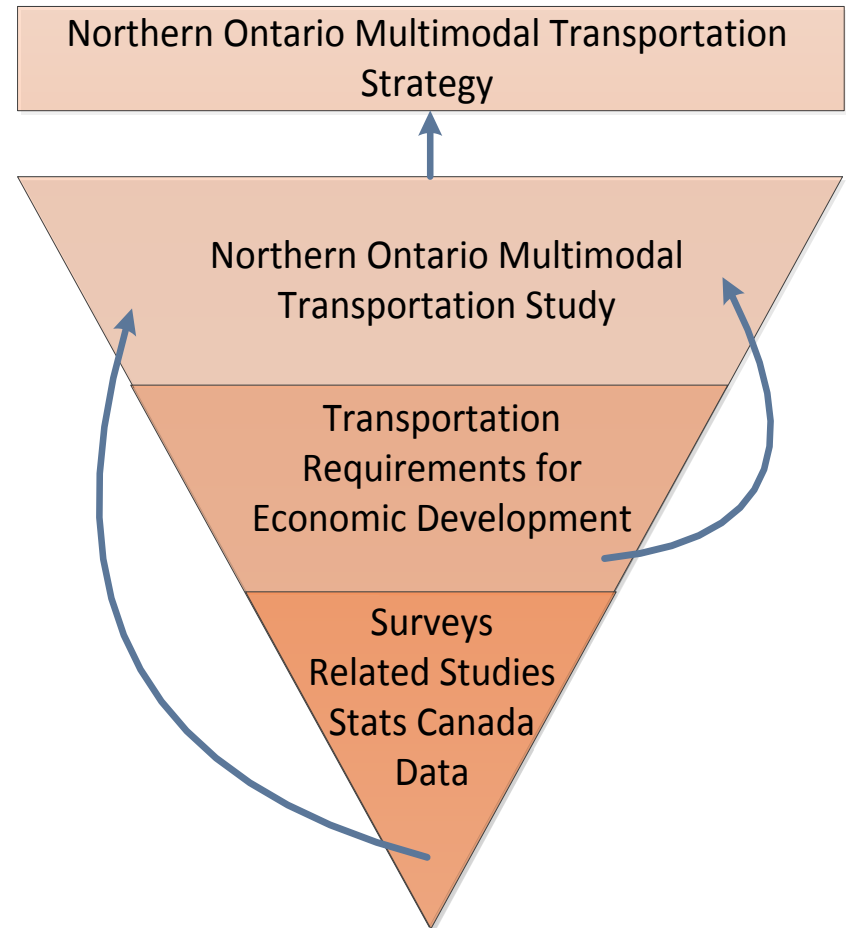
*Ontario Regulation 416/05, as amended



→ To Chicago

Study and Purpose

- A strategy will be developed through 3 study components. Together with consultation, the process will identify long-term directions for transportation infrastructure and services
- Studies will:
 - Review all modes for goods & passenger movements
 - Assess current transportation network and demand for travel
 - Provide long-term travel trends and forecast future demand
 - Identify strategic transportation network improvements
 - Identify strategies that support the regional economy
 - Provide support in establishing a coordinated investment plan
 - Promote integrated economic, land use, and transportation planning



Approach to developing the Transportation Strategy

- The Strategy is being developed through three transportation studies and extensive consultations with northern stakeholders
- The three Studies are:
 - Transportation Requirements for Economic Sector Development
 - Commercial and Passenger Vehicle Surveys
 - Multimodal Transportation Planning Study
 - ✦ Final deliverable - Multi-modal Transportation Strategy
- The strategy will be directed by an Inter-ministry Directors Steering Committee and supported by a Public/Private Sector Technical Advisory Committee (TAC), and First Nations & Métis Advisory Committees
- Transportation related topics and issues will be developed through Working Groups where key stakeholders will be invited to participate

Transportation Requirements for Economic Development

- This study will develop 5 expert reports on the transportation requirements for the following identified priority economic sectors (specific definitions for each sector have been developed based on NAICS codes)
 - ✦ Mineral and mining supply and services
 - ✦ Forestry and value-added forestry-related industries
 - ✦ Agriculture, aquaculture and food processing
 - ✦ Tourism
 - ✦ Manufacturing
- CPCS Transcom Ltd., a transport sector-focused management consulting firm, has been retained to undertake this study for MTO
- Expert reports to be developed through analysis of data and interviews with private sector, associations and transportation service providers
- Workshop of draft study results will be held very shortly

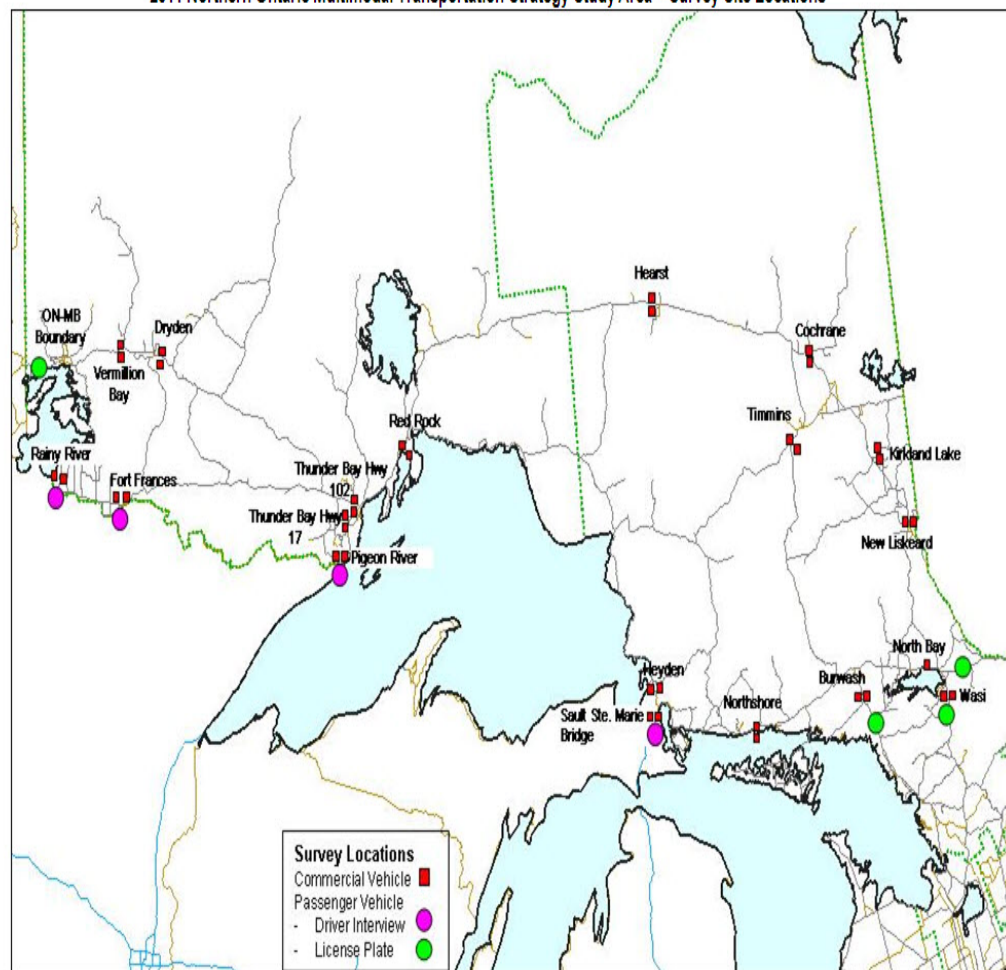
Transportation Requirements for Economic Development (Cont'd)

- This exercise has several purposes:
 - To gain insight into the local, provincial, national and global competitive market place and the economic significance of the economic sectors/industries, as well as their future prospects in the North;
 - To understand how the economic sector/industries operate in relation to the transportation system and;
 - To obtain information about the transportation requirements of specific economic sectors/industries in Northern Ontario.
- The study will provide:
 - **Economic Overview of the sector – broader trends that influence market**
 - ✦ Description of future trends of sector in northern Ontario that could effect supply & demand
 - ✦ Description of the dependency of the market, local, national and global
 - **An overview of each sector in northern Ontario**
 - ✦ Description of the economic sector locations
 - ✦ Description of inflows and outflows (volumes, origins/destinations of raw material)
 - **Trade Flow Overview of Market**
 - ✦ Shipment patterns, current and future, use of modes
 - ✦ Major customers and locations
 - ✦ Identification of logistics issues in northern Ontario

Commercial and Passenger Vehicle Origin & Destination Surveys

- Data gathering exercise for the purposes of understanding travel patterns and demand
- Survey field work largely completed in fall 2011,
- Data analysis to be completed fall 2012
- Excellent response rate of approximately 30% for passenger survey
- 37 commercial vehicle sites and 10 passenger vehicle sites were surveyed
- Survey sites included international bridges
- Additional passenger surveys collected in summer 2012, to collect summer tourist and recreation trip characteristics

Figure - 1
2011 Northern Ontario Multimodal Transportation Strategy Study Area – Survey Site Locations



Multimodal Transportation Planning Study

- The objective of this study is to identify actions and strategies to promote an integrated, sustainable, multimodal transportation system in support of economic prosperity, quality of life and with consideration of the natural environment.
 - Components of this work plan include:
 - ✦ Policy overview
 - ✦ Study area profile
 - ✦ Existing and future transportation profile (the Transportation Requirements for Economic Development Study – 5 sector specific reports will provide significant input into this component)
 - ✦ Natural environment profile and trends
 - ✦ Study area outlooks/future trends
 - ✦ Identification of transportation issues, problems and opportunities
 - ✦ Options, analysis and recommendations
 - Study components will be developed through extensive consultation, using various mechanisms, including working groups
 - **Final Product** – the Northern Ontario Multimodal Transportation Strategy with recommended actions for the short, medium and long term

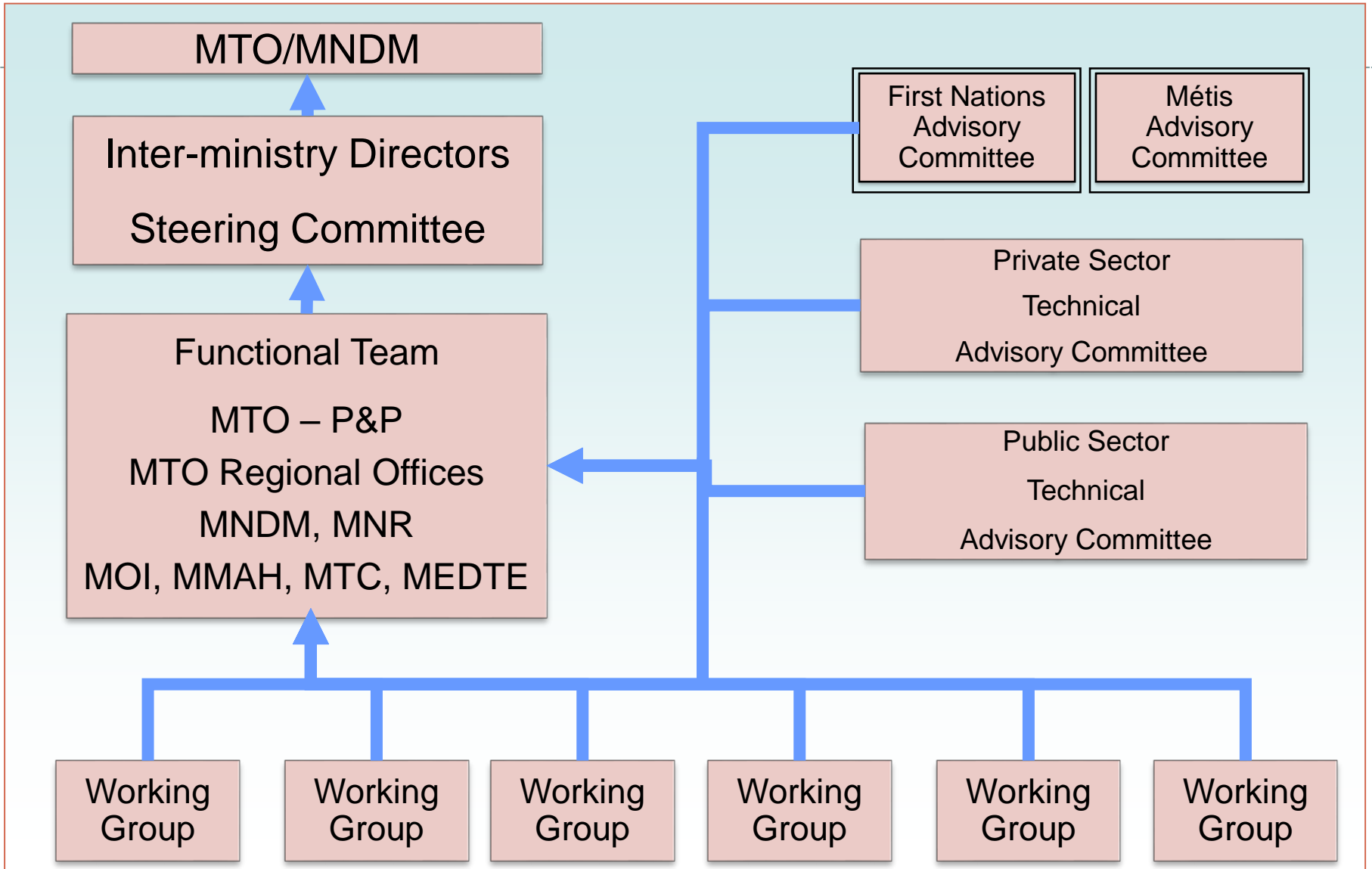
Northern Ontario Multimodal Transportation Strategy (Con'td)

- The strategy will illustrate observations, findings and recommended actions that are multimodal and multi-jurisdictional in nature and could consist of:
 - transportation network improvement strategies
 - environmental assessments that may be required for specific improvements
 - service level improvement strategies
 - operational improvement strategies
 - logistic and supply chain management improvement strategies
 - safety improvement strategies
 - strategies to meet the challenges of climate change
 - harmonization of regulations and policies
 - recommendations for sustainable funding

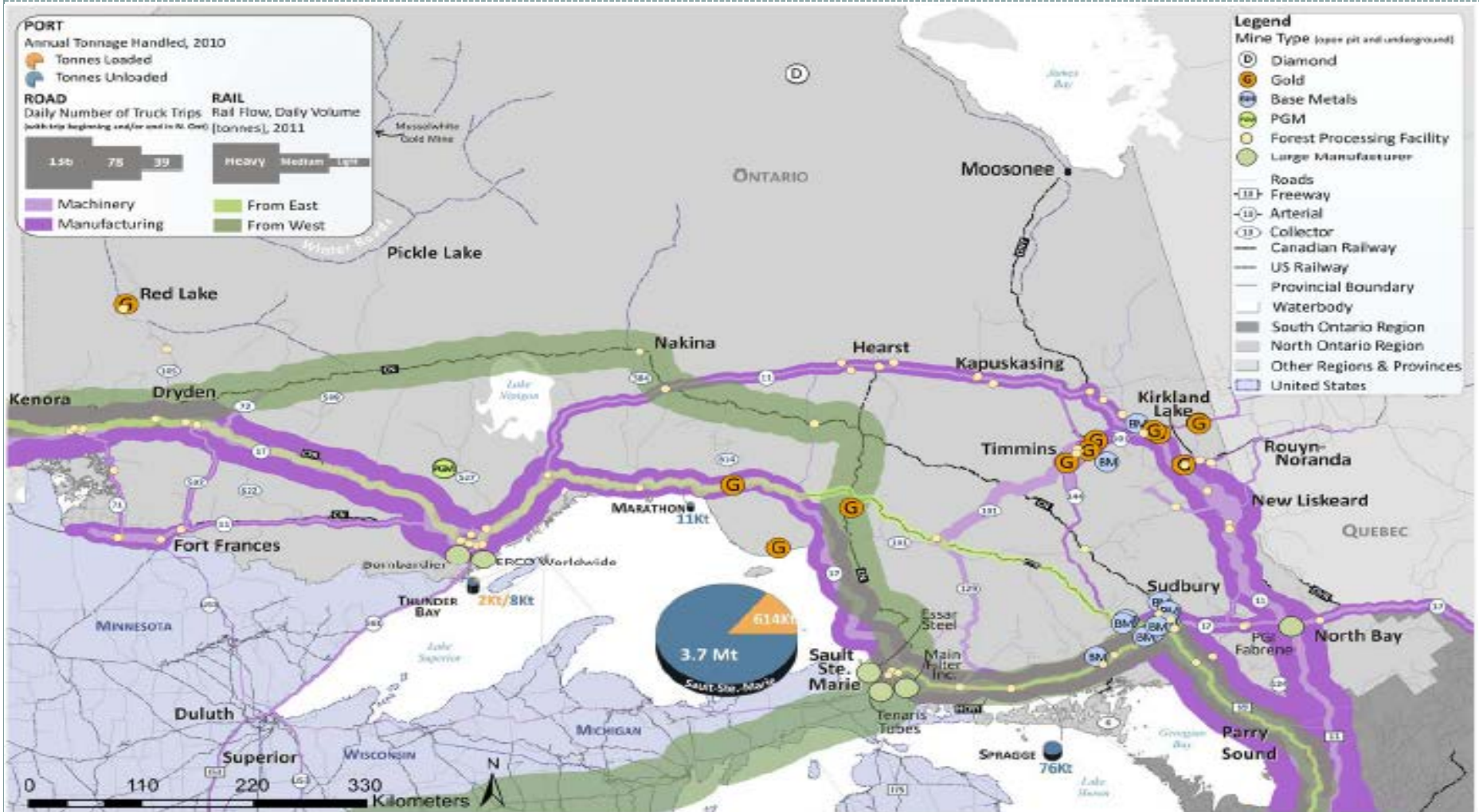
Stakeholder Consultations & Timing

- Public/Private Sector Technical Advisory Committee Meetings
 - 5 meetings planned throughout study process
 - First meeting held on April 18/19, 2012 in Thunder Bay
 - Next meeting is scheduled for December 2013
- First Nations / Métis Engagement
 - Engagement plan is integrated with Aboriginal Relations Branch First Nations/Métis Engagement Plan
- EBR posting
 - First posting April 2012 on project scope
 - Several postings as studies progress
- Public Information Centres
 - at key study milestones (2 milestones) in 5 locations in northern Ontario
- Project website
- Economic Sector Workshop
 - Draft results of Transportation Requirements for Economic Sectors
- Working Group Meetings
 - meetings on specific topics i.e., municipal airports, intercity bus

Project Structure



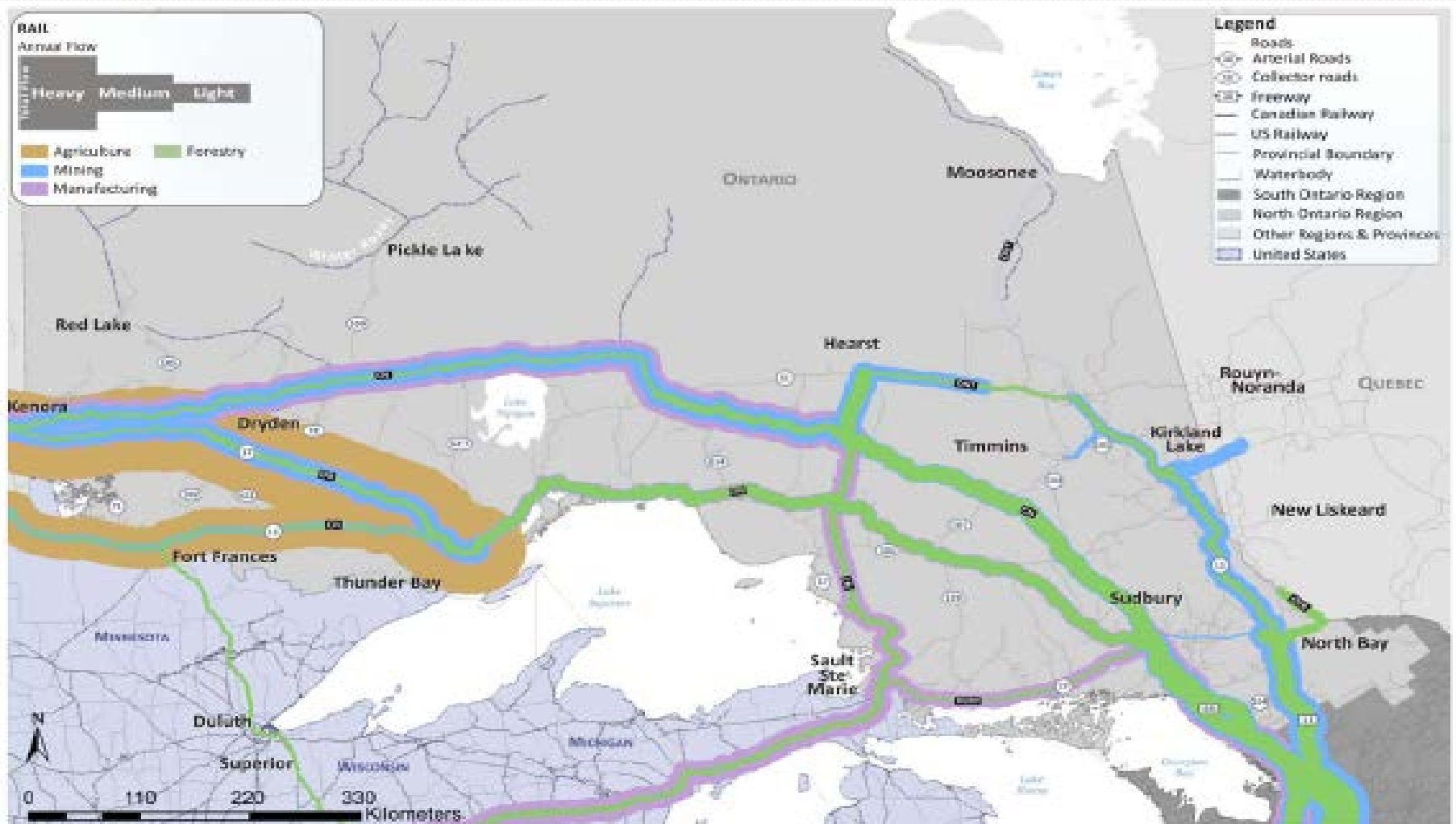
Transportation Flows, Manufacturing Sector



Source: CPCS analysis of MNR geodatabase and documentation, Statistics Canada Shipping in Canada 2010, MTO CVS 2011 data.

Cartographic projection: Lambert Conformal (NAD83)

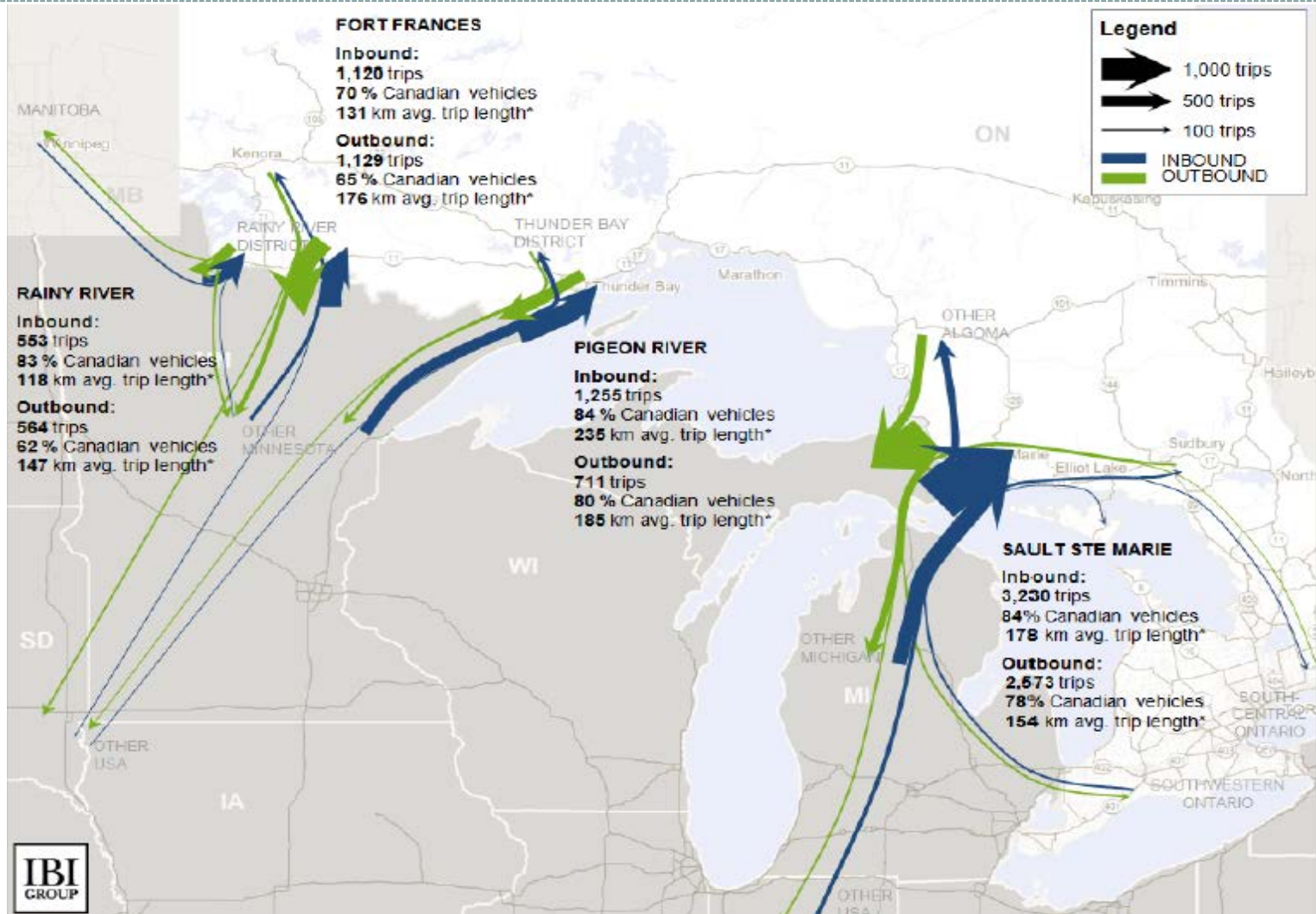
Rail Flows, All Sectors (except tourism)



Source: CPCS consultation.

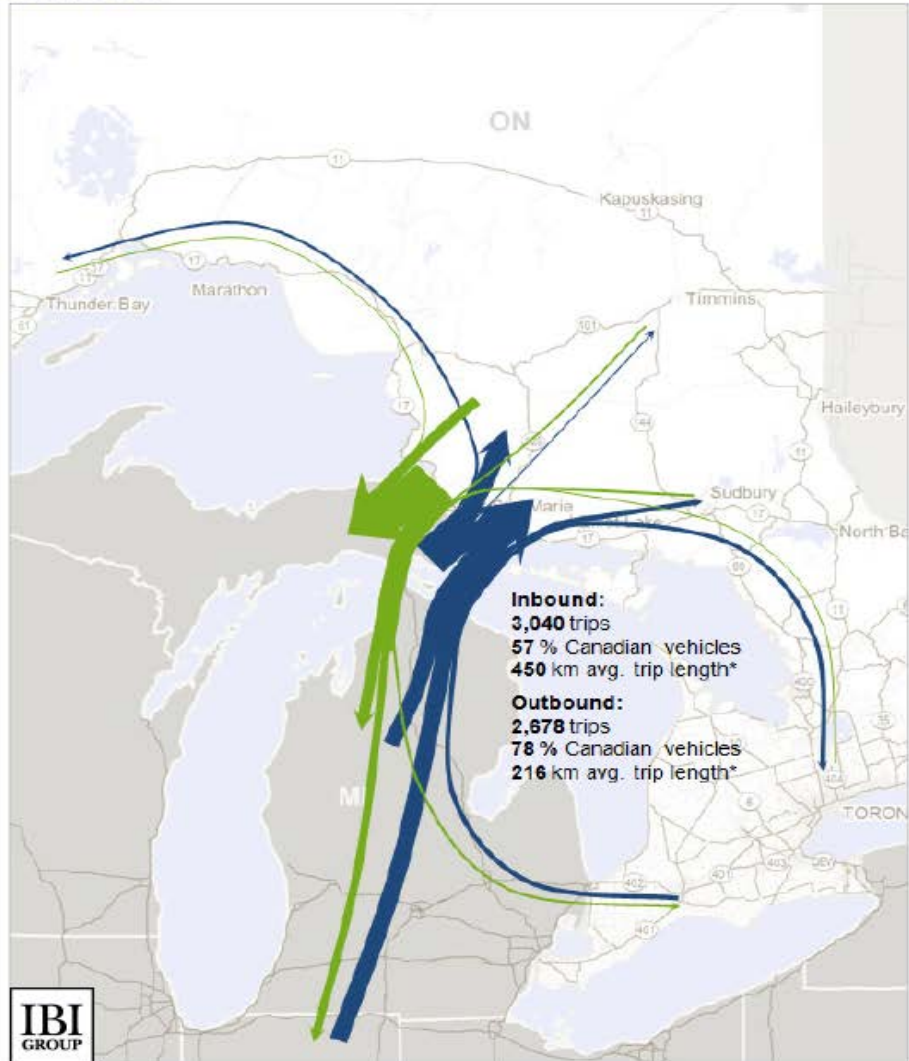
Cartographic projection: Lambert Conformal (NAD83)

Daily Border Crossings – Passenger – Fall 2011 Sunday

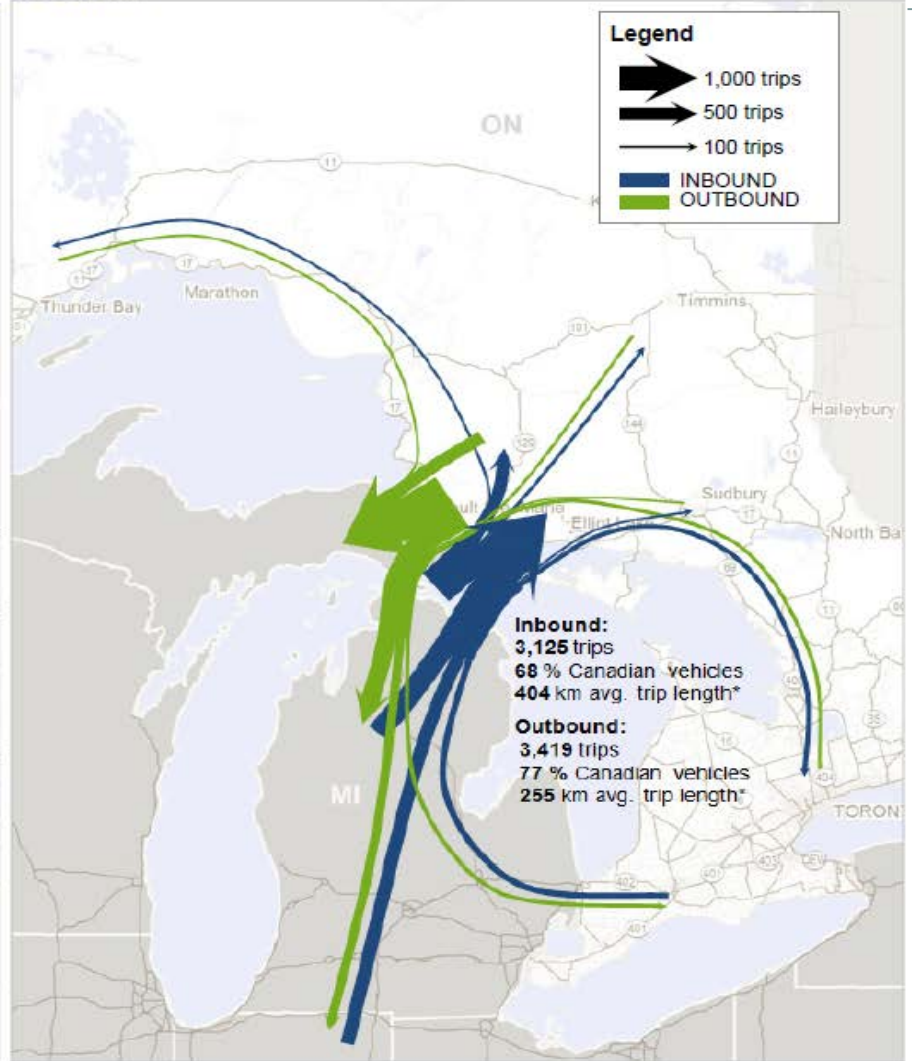


Daily Passenger Border Crossing Flows at Sault Ste. Marie Summer 2012

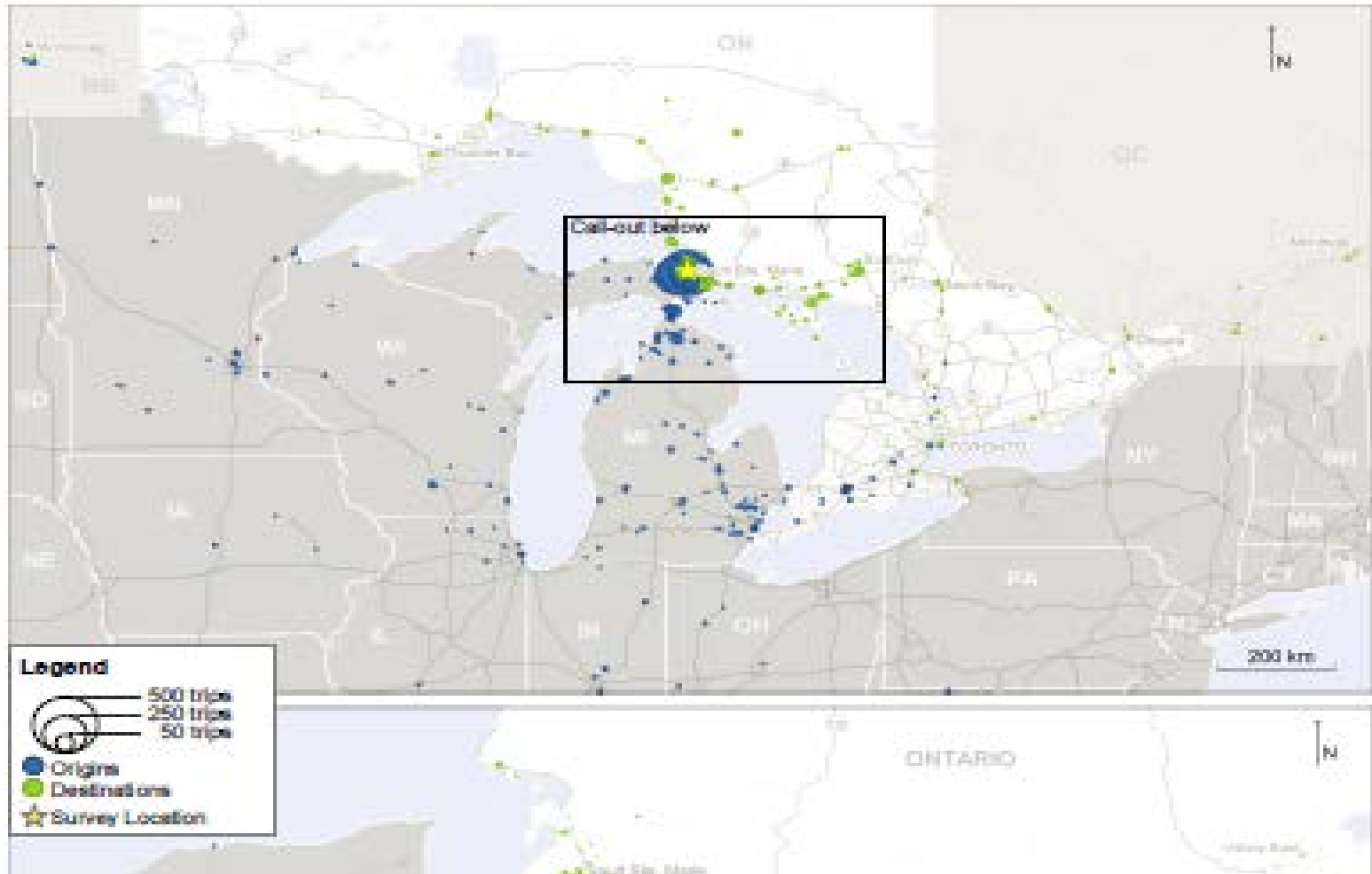
A. SATURDAY



B. SUNDAY

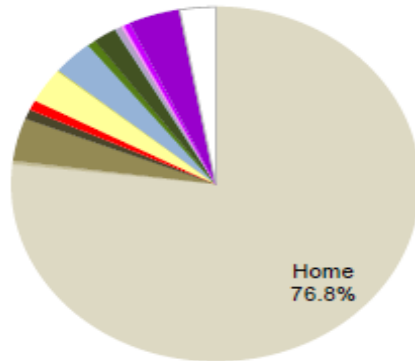


Sault Ste. Marie Border, Summer 2012 – Sunday Inbound Passenger Travel Origin and Destinations (24 hour)

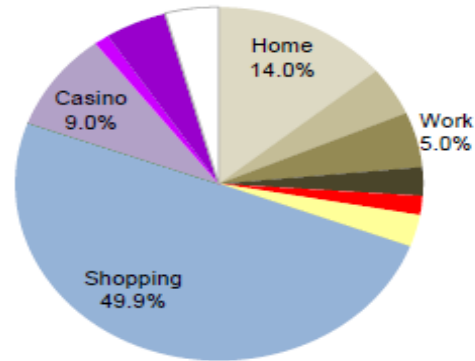


Sault Ste. Marie Border Summer 2012 Saturday Outbound Passenger Travel Statistics by Trip Purpose

Origin Activities



Destination Activities



LEGEND

- Home
- School
- Work
- Business
- Medical
- Visit friends/relatives
- Religious/Civic
- Shopping
- Mail/Post Office
- Fuel
- Hunting
- Fishing
- Golf
- Casino
- Sports Event
- Restaurant
- Theatre/Show
- Recreation / Entertainment
- Tourist attraction
- Vacation
- Other/Unknown/Refused

Travel Statistics by Trip Purpose

TRIP PURPOSE	Number of Trips	% of Total	Average Persons/Vehicle	% Canadian Vehicles	Average Distance (km) ^a			Trip Frequency (Proportion of Trips)				
					Canada	USA	Total	Daily	Weekly	Monthly	1-4 x Annually	One-Time
Work/Business/School	323	13.0%	1.01	83%	11	19	30	73%	19%	0%	3%	5%
Visit friends/relatives	124	5.0%	1.43	59%	32	134	166	35%	44%	0%	14%	6%
Shopping ^b	1,196	48.1%	1.66	94%	12	21	33	1%	73%	21%	3%	1%
Hunting	16	0.6%	1.37	63%	382	418	800	0%	0%	100%	0%	0%
Fishing	46	1.8%	1.87	0%	315	388	703	-	-	-	-	-
Casino	228	9.2%	1.96	95%	31	13	44	3%	79%	17%	0%	0%
Recreation/Entertainment ^c	183	7.4%	1.59	74%	66	69	135	3%	60%	22%	0%	15%
Vacation ^d	182	7.3%	1.44	38%	288	214	502	4%	36%	0%	3%	57%
Other/Unknown ^e	187	7.5%	1.84	88%	6	111	117	10%	59%	20%	11%	0%
Total	2,485	100%	1.59	83%	46	59	106	14%	59%	15%	4%	7%

Weekly International Truck Volumes Using Northern Ontario International Border Crossings



Sault Ste. Marie Trucks – Inbound USA weekly

Weekly Traffic Summary

Passenger Vehicles	18,831
Total Trucks	969
Single-Unit Trucks	235
Multi-Unit Trucks	734
TOTAL	19,992
Percentage Trucks	5%

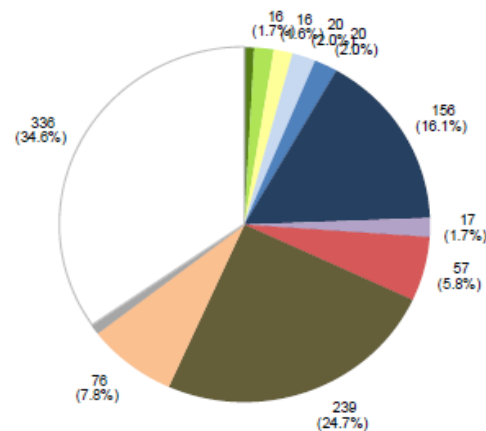
Weekly Truck Flows

ORIGIN	DESTINATION						
	Northwest Ontario	Northeast Ontario	Southern Ontario	Western Canada	Eastern Canada	USA	TOTAL
Northwest ON	-	-	-	-	-	44	44
Northeast ON	-	-	5	-	-	720	725
Southern Ontario	-	-	-	-	-	59	59
Western Canada	-	-	5	-	-	10	16
Eastern Canada	-	-	-	-	-	121	121
USA	-	-	-	-	-	4	4
TOTAL	-	-	10	-	-	959	969

Commodity Distributions

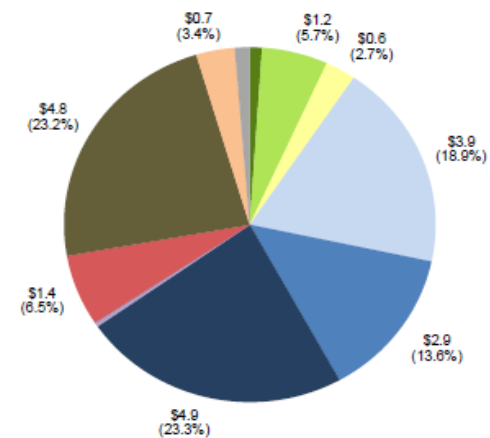
Commodity by Number of Trips

Total: 969 trucks



Commodity Value, in millions

Total: \$20.9 million



Legend

- Agricultural Products
- Food
- Chemicals
- Machinery
- Manufactured Products
- Metals & Products
- Minerals
- Petroleum & Products
- Transportation
- Wood & Products
- Waste & Scrap
- Mixed, Mail & Unknown
- Empty