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 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
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
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
Transportation Flows, Manufacturing Sector


Cartographic projection: Lambert Conformal (NAD83)
Rail Flows, All Sectors (except tourism)
Daily Border Crossings – Passenger – Fall 2011 Sunday

**FORT FRANCES**
- **Inbound:** 1,120 trips
- 70% Canadian vehicles
- 131 km avg. trip length*

**Outbound:**
- 1,129 trips
- 65% Canadian vehicles
- 176 km avg. trip length*

**RAINY RIVER**
- **Inbound:** 563 trips
- 83% Canadian vehicles
- 118 km avg. trip length*

**Outbound:**
- 564 trips
- 62% Canadian vehicles
- 147 km avg. trip length*

**PIGEON RIVER**
- **Inbound:** 1,255 trips
- 84% Canadian vehicles
- 235 km avg. trip length*

**Outbound:**
- 711 trips
- 80% Canadian vehicles
- 185 km avg. trip length*

**SAULT STE MARIE**
- **Inbound:** 3,230 trips
- 84% Canadian vehicles
- 178 km avg. trip length*

**Outbound:**
- 2,673 trips
- 78% Canadian vehicles
- 154 km avg. trip length*

A. SATURDAY

Inbound:
3,040 trips
57 % Canadian vehicles
450 km avg. trip length*

Outbound:
2,670 trips
78 % Canadian vehicles
216 km avg. trip length*

B. SUNDAY

Inbound:
2,126 trips
68 % Canadian vehicles
404 km avg. trip length*

Outbound:
3,419 trips
77 % Canadian vehicles
255 km avg. trip length*
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

- **Home**: 76.8%

#### Destination Activities

- **Shopping**: 49.9%
- **Casino**: 9.0%
- **Home**: 14.0%
- **Work**: 5.0%

#### Travel Statistics by Trip Purpose

<table>
<thead>
<tr>
<th>TRIP PURPOSE</th>
<th>Number of Trips</th>
<th>% of Total</th>
<th>Average Persons/Vehicle</th>
<th>% Canadian Vehicles</th>
<th>Average Distance (km)</th>
<th>Trip Frequency (Proportion of Trips)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Daily</td>
</tr>
<tr>
<td>Work/Business/School</td>
<td>323</td>
<td>13.0%</td>
<td>1.01</td>
<td>83%</td>
<td>11</td>
<td>73%</td>
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<tr>
<td>Visit friends/relatives</td>
<td>124</td>
<td>5.0%</td>
<td>1.43</td>
<td>59%</td>
<td>32</td>
<td>35%</td>
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<tr>
<td>Shopping</td>
<td>1,196</td>
<td>48.1%</td>
<td>1.66</td>
<td>94%</td>
<td>12</td>
<td>1%</td>
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<tr>
<td>Hunting</td>
<td>16</td>
<td>0.6%</td>
<td>1.37</td>
<td>63%</td>
<td>382</td>
<td>0%</td>
</tr>
<tr>
<td>Fishing</td>
<td>46</td>
<td>1.8%</td>
<td>1.87</td>
<td>0%</td>
<td>315</td>
<td>-</td>
</tr>
<tr>
<td>Casino</td>
<td>228</td>
<td>9.2%</td>
<td>1.96</td>
<td>95%</td>
<td>31</td>
<td>3%</td>
</tr>
<tr>
<td>Recreation/Entertainment</td>
<td>183</td>
<td>7.4%</td>
<td>1.59</td>
<td>74%</td>
<td>66</td>
<td>3%</td>
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<tr>
<td>Vacation</td>
<td>182</td>
<td>7.3%</td>
<td>1.44</td>
<td>38%</td>
<td>288</td>
<td>4%</td>
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<tr>
<td>Other/Unknown</td>
<td>187</td>
<td>7.5%</td>
<td>1.84</td>
<td>88%</td>
<td>6</td>
<td>10%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>2,485</strong></td>
<td><strong>100%</strong></td>
<td><strong>1.59</strong></td>
<td><strong>83%</strong></td>
<td><strong>46</strong></td>
<td><strong>14%</strong></td>
</tr>
</tbody>
</table>

### Notes

- **Number of Trips**: Total number of trips recorded.
- **% of Total**: Percentage of total trips for each category.
- **Average Persons/Vehicle**: Average number of people per trip.
- **% Canadian Vehicles**: Percentage of trips where Canadian vehicles were used.
- **Average Distance (km)**: Average distance traveled in kilometers.
- **Trip Frequency (Proportion of Trips)**: Frequency of trips for each category.
Weekly International Truck Volumes Using Northern Ontario International Border Crossings
Sault Ste. Marie Trucks – Inbound USA weekly

**Weekly Traffic Summary**

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Passenger Vehicles</td>
<td>18,831</td>
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<tr>
<td>Total Trucks</td>
<td>969</td>
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<tr>
<td>Single-Unit Trucks</td>
<td>235</td>
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<tr>
<td>Multi-Unit Trucks</td>
<td>734</td>
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<tr>
<td>TOTAL</td>
<td>19,992</td>
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<tr>
<td>Percentage Trucks</td>
<td>5%</td>
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**Weekly Truck Flows**

<table>
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<tr>
<th>ORIGIN</th>
<th>DESTINATION</th>
<th>North West Ontario</th>
<th>Northeast Ontario</th>
<th>Southern Ontario</th>
<th>Western Canada</th>
<th>Eastern Canada</th>
<th>USA</th>
<th>TOTAL</th>
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</thead>
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<tr>
<td>Northwest ON</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>44</td>
<td></td>
<td>44</td>
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<tr>
<td>Northeast ON</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>720</td>
<td></td>
<td>725</td>
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<tr>
<td>Southern Ontario</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>59</td>
<td></td>
<td>59</td>
</tr>
<tr>
<td>Western Canada</td>
<td>-</td>
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<td>-</td>
<td>-</td>
<td>10</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Eastern Canada</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>121</td>
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<td>121</td>
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<tr>
<td>USA</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>-</td>
<td>-</td>
<td>10</td>
<td>-</td>
<td>-</td>
<td>959</td>
<td></td>
<td>969</td>
</tr>
</tbody>
</table>

**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