Southern Ontario Gateway Council

Transportation Via The Marine Mode

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Southern Ontario
GATEWAY COUNCIL

Agenda

- The Marine Industry
- The St. Lawrence Seaway & the Ports of Southern Ontario
- Domestic Trade & International Trade
- Ships as Tools of International Trade
- A Marine Industry SWOT Analysis
- Why the SOGC is important to our industry

The Marine Industry
an essential part of the Canadian & Ontario economy

- Transport is a derived demand which is influenced by:

  Inventory of raw materials

  Economic conditions

  Climactic conditions

  Social and political changes

  Distance of transport

  Productivity of ships

The Marine Industry
an essential part of the Canadian & Ontario economy

- Waterborne trade comprises 90% of world goods movement
- Essential link in the transportation chain
- Ability to move mass quantities of goods (raw materials, semi-finished and finished consumer goods)
- Transportation of raw materials to producer nations
- Distribution of finished goods to consumer nations
- A safe, efficient and inexpensive mode

The Marine Industry
an essential part of the Canadian & Ontario economy

- World trade volumes
- Commodities carried by sea:

  Energy products (45% of seaborne trade)

  Metal products (25%)

  Agricultural products (13%)

  Industrial materials (9%)

  Forest products (5%)

  Textiles, machinery and consumer goods (3%)

The St. Lawrence Seaway & the Ports of Southern Ontario

- Head office in Cornwall, Ontario
- Niagara Regional office in St. Catharines, Ontario
- Maisonneuve Region office in Montreal, Quebec
- Maximum vessel dimensions for Seaway locks is 740ft LOA x 78ft beam
- Maximum Seaway draft of 26ft 6 inches
- Seaway season length – 2006 was a record 283 days
- Seaway benefits – plenty of ready capacity, infrastructure upgrade plans have progressed

T he St. Lawrence Seaway & the Ports of Southern Ontario

- The marine highway Highway H20
- 3740 km artery linking the Atlantic Ocean to the industrial heartland of North America
- SLSMC (Cdn.) and SLSDC (US) to manage assets of the system
- 15 locks:

7 in the Montreal – Lake Ontario section

8 in the Welland Canal

The St. Lawrence Seaway & the Ports of Southern Ontario

- Serves as both an inland transportation tool (providing direct access to the North American hinterland) and an international gateway (providing access to world markets)
- Accommodates both domestic and ocean going vessels and permits both to sail deep into the centre of the continent

The St. Lawrence Seaway & the Ports of Southern Ontario

- Most efficient route to serve import and export markets to/from South America, Europe and Mediteranean
- System allows for relatively balanced directional cargo flows to maximize the cost efficiency of trade

The Marine Industry
an essential part of the Canadian & Ontario economy

- Marine legislation – Canada Marine Act

Passed in 1998 to provide for a more commercialized system through:

Rationalization of ports by creating CPA's

- CPA structure – 19 major ports in Canada received CPA status under criteria:

Strategic significance to domestic & int'l trade

Financial self sufficiency

Links to major rail lines and highway infrastructure

Diversified traffic

The St. Lawrence Seaway & the Ports of Southern Ontario – traffic stats

- Port of Hamilton – 2006 tonnage 12.6 M
- Port of Toronto – 2006 tonnage 2.1 M
- Port of Oshawa – 2006 tonnage 0.4 M

TOTAL = 15.1 M

Domestic Trade
carried by inland laker fleet

- Main flow of trade is iron ore in and grain out
- Upbound – iron ore from Quebec mining centres to Great Lakes steel mills
- Downbound – grain from Great Lakes ports to lower St. Lawrence ports where it is transshipped to ocean going vessel destined for Europe and other world ports

Domestic Trade
carried by inland laker fleet

- Vessels are built to maximize efficiency in the system
- Lakers reach max payload capacity at about 29,000 tonnes
- Many lakes vessels are equipped with self-unloading booms for discharge of bulk cargo to land or ship to ship transfer

Self-unloading bulk carrier

International Trade
carried by foreign flag deepsea vessels

- New generation of Seaway sized ocean carriers being built by Fednav, Polsteam, Canfornav and Wagenborg are being primarily for Seaway trade
- Multi-purpose vessels operated by BBC and Beluga are calling the system with greater frequency

Bulk Carrier

Multi-purpose vessel

International Trade
carried by foreign flag deepsea vessels

- Vessels are able to fit Seaway lock dimensions affording trade throughout the system and Great Lakes
- Inbound – finished consumer products, manufactured iron and steel and general cargo
- Outbound – grain and other products from Great Lakes industrial centres

International Trade
carried by foreign flag deepsea vessels

- Ocean going vessels of 30-35,000 DWT cargo capacity are typically limited to max capacity of 18,000 to 20,000 tonnes of cargo
- Specialty built “salties” can load up to 25,000 tonnes and still navigate the Seaway

International Trade
carried by foreign flag deepsea vessels

- These ships must be as flexible and easily adaptable to other trades as possible due to the constraints of the 9 month Seaway season
- The development of export cargoes for these vessels has been identified as a strategic priority for the system

Ships as Tools of International Trade
Tramp and Liner shipping

- Tramp – irregular routes, pick up cargo only when chartered, typically carry bulk or low value cargo for which relatively inexpensive transportation is required
- Liner – sail according to pre-established schedules on specific routes between advertised ports, typically carry higher valued cargo

Ships as Tools of International Trade
What ship for what commodity?

- Bulk ships carry large parcels of individual cargo consignments that are large enough to fill and entire ship or cargo hold and moves via tramp vessels
- General cargo ships carry small parcels of general cargo that are not large enough to fill and entire ship or cargo hold and moves via liner shipping (includes containers)

Container vessel

Ships as Tools of International Trade
General Cargo

- Loose cargo
- Palletized cargo
- Pre-slung cargo
- Refrigerated cargo
- Heavy lift and oversized cargo
- Containerized cargo

Ships as Tools of International Trade
Bulk Cargo

- Liquid bulk – crude oil, oil products, liquid chemicals, vegetable oils, wine, etc.
- Major bulks – iron ore, grain, coal, phosphates, bauxite
- Minor bulks – steel products, cement, gypsum, sugar, salt, sulphur, forest products, woods chips
- Specialized bulk cargo – motor vehicles, steel products, refrigerated cargo, etc.

Current issues facing the industry

- Security – enhanced requirements for receiving international traffic are outlined in new port security plans and protocols

- Environment – invasive species, ballast water, environmental assessment processes are all top of the priority list

Marine Industry SWOT Analysis

- **Strengths**

  Capacity - room to grow.

  Versatility - the marine industry's ability to integrate every other mode.

  Efficiency & reliability - the Systems uptime record, it's an outstanding 99.66% percent

- **Weaknesses**

  Seasonality – the Seaway is closed for 20% of the year

  Size - We are limited in ship size, for containers to about a 1,200 TEU feeder ship

  Reach – marine is not a door to door delivery system - need cooperation from other modes

Marine Industry SWOT Analysis

- **Opportunity**

  Growth in world trade – Every potential distribution channel into will need to be optimized

  Limits to growth in other modes - Infrastructure deficits, manpower crisis, gridlock

  Bi-national support for short sea shipping is encouraging innovation in services and ship design

- **Threats**

  Apathy & ignorance, by the trade, by other modes, by governments at all levels (changing slowly!)

  Bureaucracy and over-regulation – governments sees marine primarily as a revenue source

  Misguided environmentalists – close the seaway to foreign traffic; put all the trade on road and rail. And this will help the environment in what way??

Marine Industry SWOT Analysis

- **Strength-Opportunity strategy**

Pursue opportunities that have a good fit with strengths -the weaknesses and threats are mitigated.

Capacity– bringing feeder vessels into the Great Lakes will add immediate capacity to our transportation system

Versatility-interconnectivity with other modes, the ability of ships to carry not only the freight, but also the door to door delivery system should encourage the proliferation of strategic alliances between vessel operators and trucking companies - truck and/or trailer ferries

Trade expansion – will require us to do more than stick with the status quo, restrictions such as hours of work legislation and a shortage of drivers will mandate efficiencies. This efficiency will only come about through innovation and closer cooperation…THE RATIONALE BEHIND THE SOUTHERN ONTARIO GATEWAY COUNCIL

The SOGC – What it means

- Bringing together all modes in pursuit of common objectives
- Determine ways the modes can cooperate
- Reduce demands on scarce infrastructure resources
- Trade should bring opportunities and benefits for all modes of transport

Questions & Discussion

THANK YOU