



# Transport Canada – Marine Statistics Program

## Presented at the International Maritime Statistics Forum

Centre of Expertise in Economics, Statistics, Analysis and Research (CEESAR)  
April 17<sup>th</sup>, 2013 – London, UK





# Objectives of this Presentation

- To present recent changes in Canadian marine information management;
- To provide an overview of Transport Canada's Marine Data Program:
  - Domestic Marine Origin/Destination Statistics (TC MODS)
  - International Marine O/D Data
  - Financial and Fuel Consumption Survey
- To explain Transport Canada's new approach; and
- To highlight the risks and challenges.



# Recent Changes in Canadian Marine Information Management

- New mandates:
  - i. responding to new demands and
  - ii. enhancing analytical capabilities with new data sources.
  
- New responsibilities:
  - i. transfer of data collection from one federal department to another (Statistics Canada to Transport Canada).
  
- Transport Canada's approach:
  - i. updating the data collection process to increase outputs
  - ii. addressing weaknesses and
  - iii. establishing a long term partnership with marine carriers.



# Background: Marine Origin Destination Statistics (MODS)

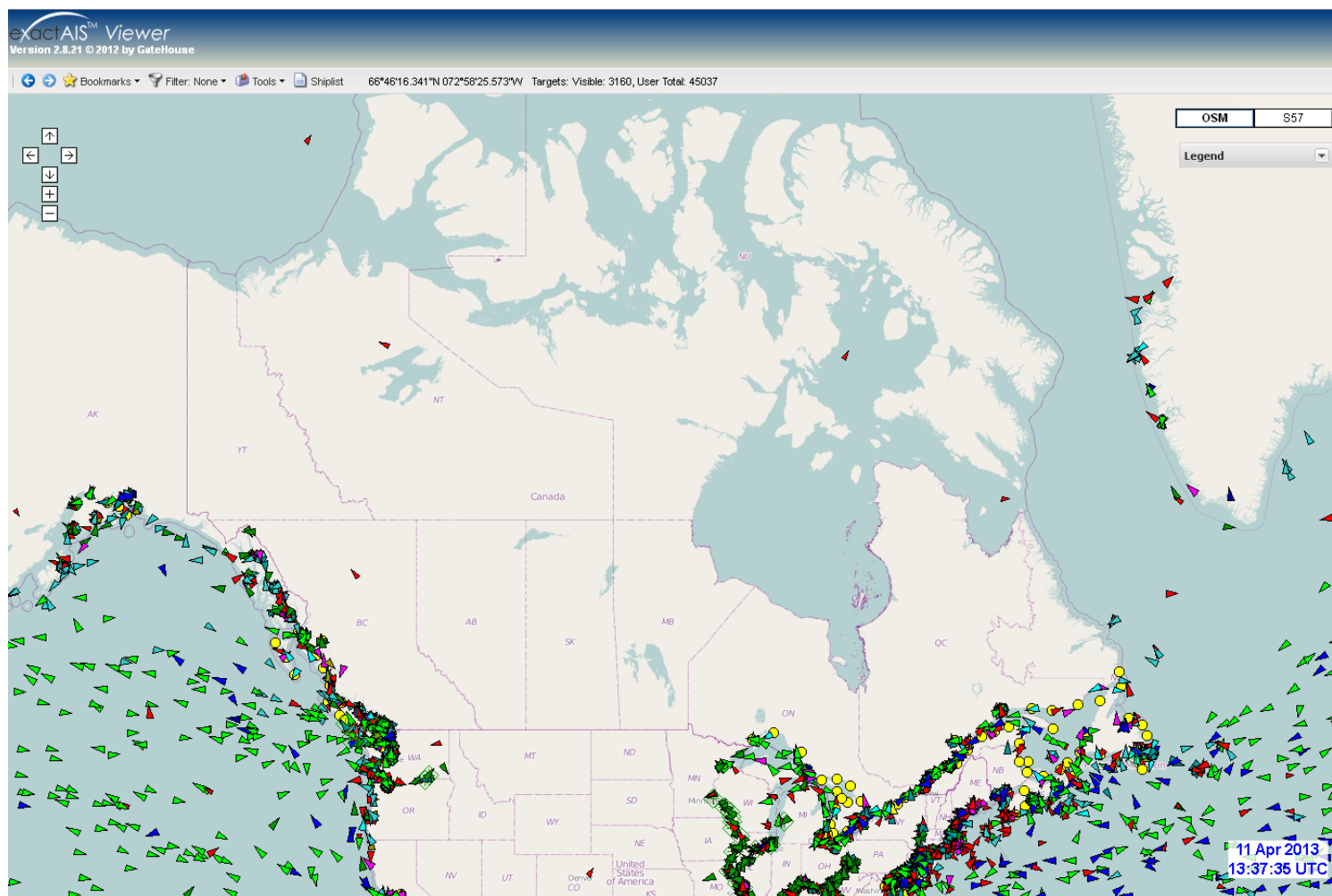
Marine Origin Destination Statistics (MODS) is the database on domestic and international marine transport, detailing the vessels involved in the transportation of cargo between Canadian ports as well as international voyages involving Canadian port (i.e. origin/destination movement, commodity, tonnage, volume, etc).

- Statistics Canada (STC) was collecting MODS information through S1 and S4 paper forms Canadian carriers for many years;
- Owing to federal budget reductions, STC cancelled the MODS survey in the spring of 2012;
- Marine Origin/Destination statistics are still **essential** and Transport Canada (TC) has engaged in collecting these statistics; and
- To enhance its analytical capabilities to monitor marine activity in Canadian waters, TC will now collect those statistics and augment them with additional marine data sources.



# Marine Activity in Canada

3 coasts, Great-Lakes and St. Lawrence River, 3 gateways.





# TC Marine Statistics Program

## TC Marine Statistics Program?

It consists of a framework of internal and external data sources of domestic and international marine activity with the addition of administrative information and fuel consumption data on the Canadian domestic fleet.

## Domestic Activity – Data Sources

- Domestic Marine Origin/Destination Survey – (Transport Canada)
- Domestic vessel movements and vessel characteristics (INNAV) – (Canadian Coast Guard (CCG))
- Automatic Identification System (AIS) data – (Canadian Space Agency and exactEarth)
- Canadian Vessel Registry (Transport Canada)

## International Activity – Data Sources

- Import/Export data – (Canada Border Services Agency (CBSA))
- Domestic portion of international vessel movements and vessel Characteristics (INNAV) – (CCG)
- AIS-S data – (Canadian Space Agency and exactEarth)
- PIERS U.S. Marine Import/Export with Canada – (UBM Global Trade Inc.)

## Financial and Fuel Consumption Information Data Source

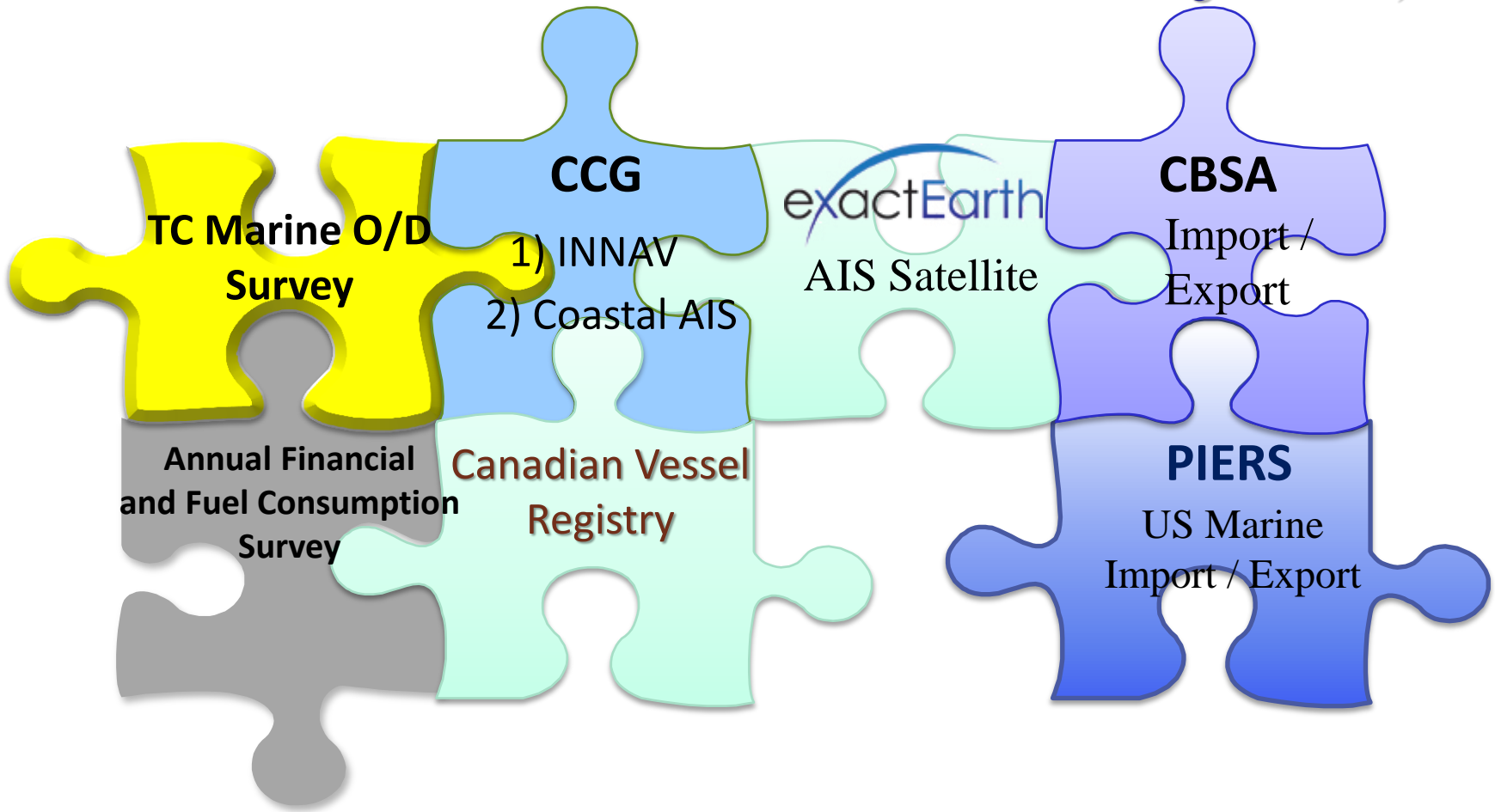
- Annual Financial and Fuel Consumption Survey for domestic carriers – (Transport Canada)



# The Marine Data Framework

Domestic Activity (Domestic carriers)

International Activity (Domestic and Foreign Carriers)





# Transport Canada's Strategy

## 1) Domestic Marine Origin/Destination Statistics:

Transport Canada is now conducting the survey and working with the industry to improve the collection process and to minimize response burden by:

- Implementing electronic data collection processes;
- Offering the industry different electronic communication vehicles options (web form and web services (B2B));
- Using complementary data sources (third party) to minimize collection from the industry; and
- Developing a reporting tool designed for both the government and the industry.





# Transport Canada's Strategy (cont'd)

## 2) International Marine O/D Data:

Working with our Customs Agency and the Canadian Coast Guard to gain access to international marine transportation data:

- To optimize electronic data transfer processes; and
- To create a partnership between government departments by sharing different data sources to minimize duplication and/or collection from the industry.

## 3) Annual Financial and Fuel Consumption Survey:

Informing the industry of TC's intention to re-launch this annual survey:

- To work with the industry to improve the survey questionnaire; and
- To introduce an electronic data collection process.

# An Innovative Approach

## Domestic Marine Origin/Destination Statistics:

### Web Application Survey:

- Carriers will now use a secure Web application to submit their movement reports and commodities carried (as opposed to relying on a manual/paper process).
- Secure Website: [https://stats.tc.gc.ca/Marine\\_Surveys](https://stats.tc.gc.ca/Marine_Surveys)

Government of Canada / Gouvernement du Canada | Canada.gc.ca | Services | Departments | Français

Transport Canada | Canada

Air Marine Rail Road Safety Security Environment Innovation Resources Regions

Home > Marine Surveys > Sign In

### Sign in to marine surveys

Company credential information

Account

Password

Date modified: 2013-02-08

Terms and conditions | Transparency

<b>About us</b> Our Mandate The Minister The Minister of State Organizational Structure	<b>News</b> News Releases Speeches Media Advisories Backgrounders	<b>Contact us</b> Address Telephone Numbers Emails Find an Employee	<b>Stay connected</b> Facebook YouTube Twitter Flickr
---	---	---	---



# An Innovative Approach

## Web Services (server to server):

Refer to a solution that facilitates the secure transfer of data from one computer to another through a network.

- Provides a fully automated electronic data collection option
- Minimizes carrier reporting burden
- Ensures a highly secure process

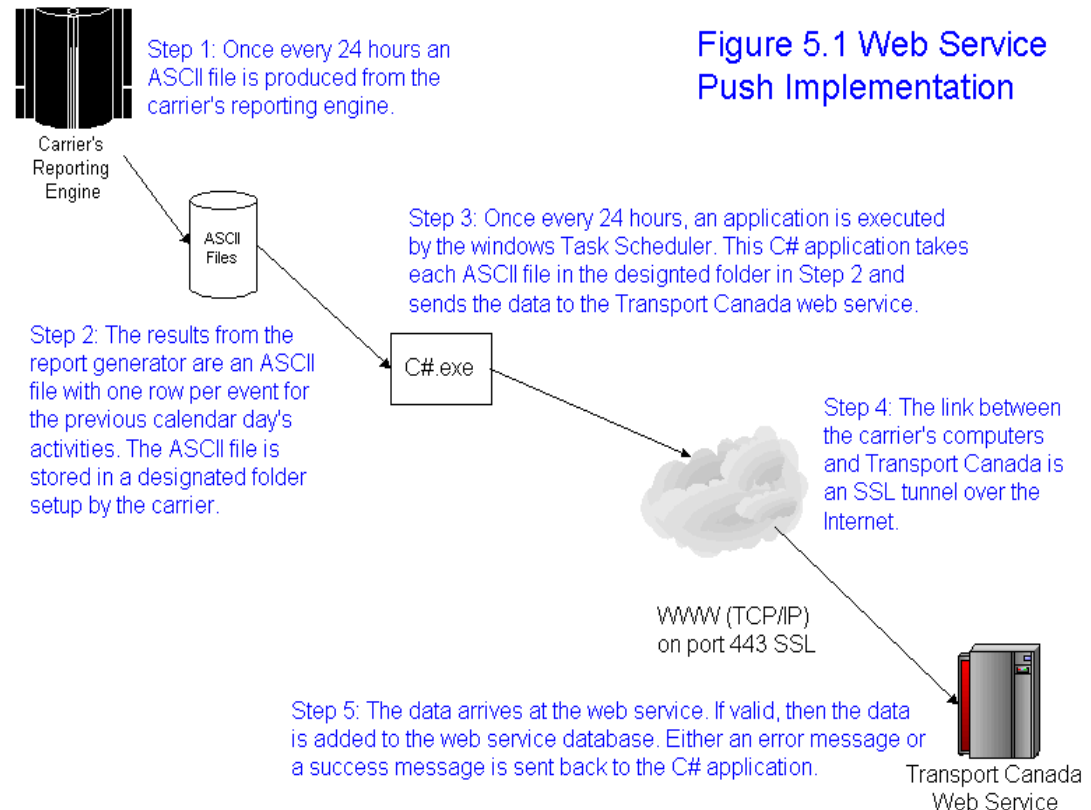
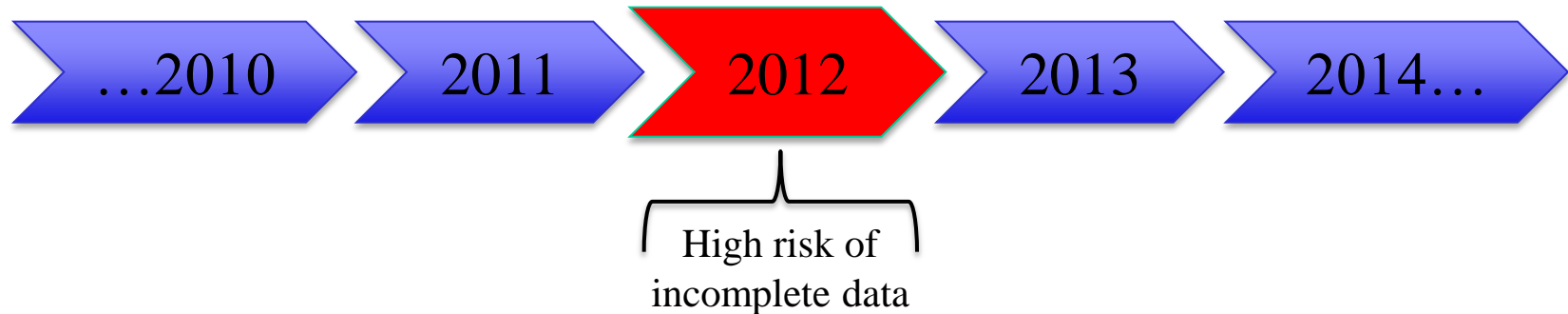


Figure 5.1 Web Service Push Implementation

# Risks

➤ **A potential break in data time series:**

- Incomplete time series data will impact our analytical capabilities
- Could have a impact on TC domestic and international mandates



➤ **Compatibility between data sources**

➤ **Solution to potential break:**

- To use other databases to recreate vessel movements and to use imputation process to estimate commodity and tonnage based on previous years reports.



# Challenges

- Transition – creating new partnerships;
- Recruiting carriers (approx. 350 including Tugs & Barges);
- Recovering 2012 data retroactively;
- Eliminating inconsistent or duplicate reporting from carriers;
- Validation process; and
- Addressing data gaps from AIS database.



# Transport Canada relies on marine statistics for:

## Some examples:

- Estimate the air emissions of the marine activities
- Estimate and report on the fluidity of the Canadian transportation system
- Develop a better appreciation of the activities in the Arctic and in major transportation corridors (coasts and St. Lawrence River)
- Enhance its Marine Preparedness and Response Measures
- Traffic pattern analysis and monitoring/reporting on the sector
- Transport Canada Annual Report and Addendum
- Marine ad hoc requests



# References

- Transport Canada's Annual Report and Statistical Addendum  
<http://www.tc.gc.ca/eng/policy/anre-menu.htm>
  
- Canada Transportation Act  
<http://laws-lois.justice.gc.ca/eng/acts/C-10.4/>
  
- Carriers and Transportation and Grain Handling Undertakings Information  
<http://laws-lois.justice.gc.ca/eng/regulations/SOR-96-334/FullText.html>



# Contact Information

**Patrice Côté**

Economic Analyst

Surface and Marine Statistics (ACACB)

Centre of Excellence in Economics, Statistics, Analysis and Research

613-993-4286

[patrice.cote@tc.gc.ca](mailto:patrice.cote@tc.gc.ca)





# Appendix

## Canadian Marine Statistics: General overview

**Table M18: Total Tonnage Handled in Canada's Port System, 2001 - 2010**

(Millions of tonnes)

	<i>Port System</i>			<i>Shares in per cent</i>	
	<i>Canada Port Authorities (CPAs)</i>	<i>Transport Canada and other ports</i>	<i>Total</i>	<i>CPAs</i>	<i>Transport Canada and other ports</i>
2001	220,4	174,3	394,7	55,8	44,2
2002	215,1	193,1	408,1	52,7	47,3
2003	227,5	216,3	443,8	51,3	48,7
2004	237,9	215,4	453,3	52,5	47,5
2005	250,7	220,6	471,3	53,2	46,8
2006	254,1	212,5	466,6	54,5	45,5
2007	253,9	215,4	469,3	54,1	45,9
2008	253,5	210,6	464,0	54,6	45,4
2009 <sup>R</sup>	234,6	173,4	410,0	57,2	42,8
2010 <sup>P</sup>	268,6	181,4	450,0	59,7	40,3
<b>AAGR 2001-2010 (in per cent)</b>	<b>1,8</b>	<b>0,2</b>	<b>1,1</b>		

Note: R= Revised data P= Preliminary data. AAGR= Average annual growth rate.

Source: Statistics Canada, *Shipping in Canada, Cat. 54-205*



**Table M19: St. Lawrence Seaway  
Cargo Traffic, 2001 – 2011**

(Millions of tonnes)

<i>Year</i>	<i>Montreal-Lake Ontario Section</i>	<i>Welland Canal Section</i>
2001	30.3	32.5
2002	29.8	31.8
2003	28.9	31.9
2004	30.8	34.3
2005	31.3	34.2
2006	35.6	37.4
2007	32.0	34.9
2008	29.3	33.6
2009	20.7 <sup>R</sup>	26.4
2010 <sup>R</sup>	26.9	29.2
2011 <sup>P</sup>	28.7	29.6

Note: R= Revised data. P= Preliminary data.

Source: St. Lawrence Seaway Management Corporation

**Table M20: St. Lawrence Seaway Traffic<sup>1</sup> by Commodity, 2001 - 2011**

(Millions of tonnes)

<i>Year</i>	<i>Grain</i>	<i>Iron Ore</i>	<i>General Cargo</i>	<i>Coal</i>	<i>Other</i>	<i>Total</i>
2001	11.8	8.7	3.0	4.8	13.4	41.7
2002	10.3	9.6	4.2	4.2	12.8	41.1
2003	9.6	10.6	2.5	4.2	13.8	40.8
2004	9.3	10.5	4.3	4.2	15.2	43.5
2005	9.8	11.0	3.3	3.7	15.6	43.3
2006	11.5	11.0	4.6	3.7	16.3	47.2
2007	10.4	11.9	2.4	3.2	15.1	43.0
2008	7.6	11.9	1.9	3.6	15.7	40.8
2009	8.2	7.0	0.9	2.9	11.7	30.7
2010 <sup>R</sup>	9.2	9.7	1.5	3.7	12.3	36.5
2011 <sup>P</sup>	8.6	8.8	1.5	3.7	14.9	37.6

Note: R= Revised data. P= Preliminary data.

<sup>1</sup> Combined traffic on the two sections of the Seaway.

Source: St. Lawrence Seaway Management Corporation



**Table M22: Canada's Marine Traffic Statistics by Sector, 2000 - 2010**

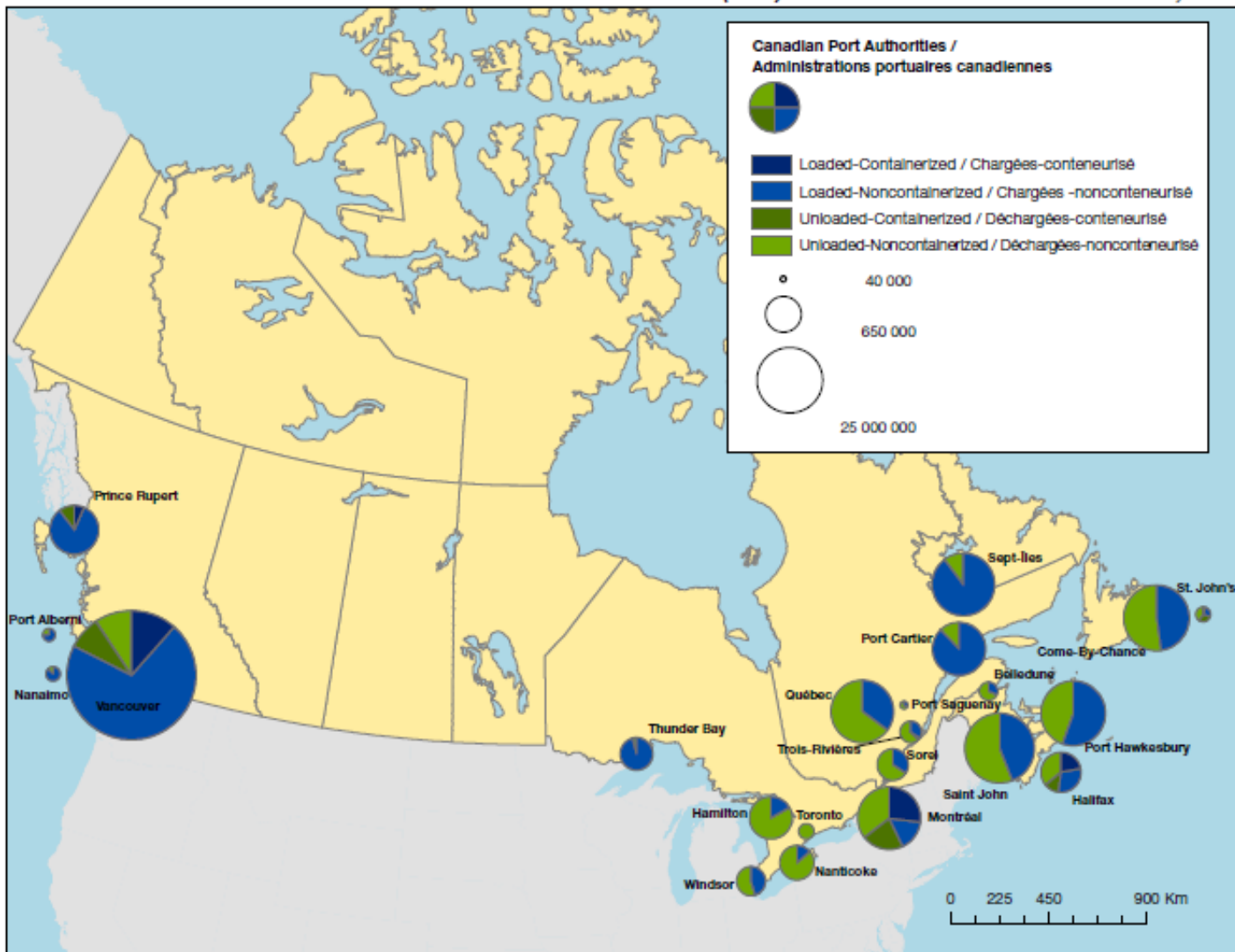
(Millions of tonnes)

<i>Year</i>	<i>-----Total Flows-----</i>			<i>Total Flows</i>	<i>Total Handled</i>	<i>Total Million Tonne- Kilometres<sup>R</sup></i>
	<i>Domestic</i>	<i>Transborder</i>	<i>Overseas</i>			
2000	54.5	108.8	185.0	348.3	402.8	1,947,113
2001	53.9	108.0	178.9	340.8	394.7	1,848,069
2002	62.6	114.3	168.4	345.4	408.1	1,752,026
2003	68.6	123.4	183.3	375.3	443.8	1,963,946
2004	69.1	123.3	191.7	384.2	453.3	2,037,446
2005	70.1	128.7	202.2	401.0	471.3	2,201,885
2006	68.2	126.9	203.4	398.5	466.6	2,259,403
2007	67.7	123.3	210.7	401.6	469.3	2,321,512
2008	69.1	118.6	207.4	395.1	464.0	2,216,584
2009 <sup>K</sup>	54.1	98.9	202.8	355.8	410.0	2,229,939
2010 <sup>P</sup>	58.4	102.9	230.7	391.9	450.0	2,501,070

Note: R= Revised data. P= Preliminary data.

Sources: Statistics Canada, *Shipping in Canada, Cat. 54-205*; Transport Canada

**TONNAGE LOADED AND UNLOADED AT CANADA PORT AUTHORITIES (CPA) AND TOP-5 NON-CPA PORTS IN 2010 /  
TONNAGE CHARGÉ ET DÉCHARGÉ AUX ADMINISTRATIONS PORTUAIRES CANADIENNES (APC) ET AUX 5 PLUS IMPORTANTS PORTS NON-APC, 2010**



Note: The tonnage shown does not include roll-on/roll-off cargo. See table M23 for more information.  
Source: Statistics Canada

Note : Le tonnage indiqué n'inclut pas les marchandises transportées sur des rouliers. Voir tableau M23 pour plus d'information.  
Source : Statistique Canada



**Table M23: Canada's Marine Domestic and International Traffic Handled  
at Canada Port Authorities (CPAs) and Other Ports, 2009 and 2010**

(Millions of tonnes)

<i>Port</i>	<i>Total Tonnes Handled</i>		<i>Annual Growth (per cent)</i>	<i>Port's Share (per cent)</i>	
	<i>2009</i>	<i>2010</i>		<i>2009</i>	<i>2010</i>
Port Metro Vancouver	90.4 <sup>R</sup>	104.7	15.9	22.0	23.3
Saint John	26.4	30.6	16.0	6.4	6.8
Montreal/Contrecoeur	23.8	24.8	4.2	5.8	5.5
Sept-Îles/Pointe-Noire	20.1	24.6	22.6	4.9	5.5
Quebec City/Levis	22.3	24.6	10.4	5.4	5.5
Prince Rupert	11.3	15.0	33.2	2.7	3.3
Hamilton	8.2	11.4	38.8	2.0	2.5
Halifax	10.2	10.2	(0.2)	2.5	2.3
Thunder Bay	7.2	6.8	(6.4)	1.8	1.5
Windsor Ontario	4.7	5.3	12.5	1.1	1.2
Trois-Rivières	2.5	2.9	18.2	0.6	0.6
Belledune	2.6	2.1	(17.5)	0.6	0.5
Toronto	1.6	1.5	(8.3)	0.4	0.3
St. John's	1.4	1.5	3.5	0.3	0.3
Nanaimo	0.8	1.3	71.9	0.2	0.3
Port Alberni	1.1	1.0	(1.3)	0.3	0.2
Chicoutimi (Port Saguenay)	0.3	0.4	27.0	0.1	0.1
<b>Total CPA Ports</b>	<b>234.6</b>	<b>268.6</b>	<b>14.5</b>	<b>57.2</b>	<b>59.7</b>
<b>Other Ports</b>	<b>175.3</b>	<b>181.4</b>	<b>3.4</b>	<b>42.8</b>	<b>40.3</b>
<b>Total Handled All Ports</b>	<b>410.0</b>	<b>450.0</b>	<b>9.8</b>	<b>100.0</b>	<b>100.0</b>

Note: Totals may not add up due to rounding. R= Revised data.

Source: Statistics Canada, *Shipping in Canada, Cat. 54-205*



Table M25: Canada's Marine International Traffic, by Foreign regions, 2001-2010

<i>Foreign regions</i>	(Millions of tonnes)										<i>AAGR<sup>1</sup></i> <i>2001-10</i>
	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009<sup>R</sup></i>	<i>2010<sup>P</sup></i>	
<b>United States</b>											
Loaded	62.0	72.9	81.2	83.7	85.8	84.6	80.8	74.1	67.6	68.6	1.1
Unloaded	45.9	41.4	42.2	39.6	42.9	42.3	42.5	44.5	31.3	34.3	(3.2)
<b>Total<sup>2</sup></b>	<b>108.0</b>	<b>114.3</b>	<b>123.4</b>	<b>123.3</b>	<b>128.7</b>	<b>126.9</b>	<b>123.3</b>	<b>118.6</b>	<b>98.9</b>	<b>102.9</b>	<b>(0.5)</b>
<b>Other International</b>											
Loaded	112.7	101.4	110.2	112.3	116.0	121.7	133.4	129.4	129.7	150.9	3.3
Unloaded	66.2	67.0	73.0	79.4	86.2	81.7	77.3	78.0	73.1	79.8	2.1
<b>Total<sup>2</sup></b>	<b>178.9</b>	<b>168.4</b>	<b>183.2</b>	<b>191.7</b>	<b>202.2</b>	<b>203.4</b>	<b>210.7</b>	<b>207.4</b>	<b>202.8</b>	<b>230.7</b>	<b>2.9</b>
<b>Total International</b>											
Loaded	174.7	174.3	191.4	196.0	201.8	206.3	214.2	203.5	197.3	219.4	2.6
Unloaded	112.1	108.5	115.2	119.0	129.2	124.0	119.7	122.5	104.4	114.1	0.2
<b>Total<sup>2</sup></b>	<b>286.9</b>	<b>282.7</b>	<b>306.6</b>	<b>315.1</b>	<b>330.9</b>	<b>330.3</b>	<b>333.9</b>	<b>326.0</b>	<b>301.7</b>	<b>333.5</b>	<b>1.7</b>
<i>Share of total</i>											
US (%)	37.6	40.4	40.2	39.1	38.9	38.4	36.9	36.4	32.8	30.8	
Other International (%)	62.4	59.6	59.8	60.9	61.1	61.6	63.1	63.6	67.2	69.2	

Note: R=Revised data. P=Preliminary data.

<sup>1</sup> AAGR= Average Annual Growth Rate.

<sup>2</sup> Loadings and Unloadings at Canadian ports.

Sources: Statistics Canada, *Shipping in Canada, Cat. 54-205*; Transport Canada



**Table M26B: Canada's Leading ports handling International Containerized freight, 2001-2010**

(Thousands of TEUs)											
Leading ports	2001	2002	2003	2004	2005	2006	2007	2008	2009 <sup>R</sup>	2010 <sup>P</sup>	AAGR <sup>1</sup> 2001-10
<b>Metro Vancouver<sup>2</sup></b>											
Loaded	596.0	721.0	791.0	840.0	884.0	1125.4	1192.4	1197.9	1029.6	1218.1	8.3
Unloaded	552.0	738.0	748.0	825.0	884.0	1173.0	1278.4	1294.4	1124.0	1297.0	10.0
<b>Total</b>	<b>1148.0</b>	<b>1459.0</b>	<b>1539.0</b>	<b>1665.0</b>	<b>1768.0</b>	<b>2298.4</b>	<b>2470.8</b>	<b>2492.3</b>	<b>2153.6</b>	<b>2515.0</b>	<b>9.1</b>
(Empty containers in %)	9.8	12.2	13.7	11.3	13.7	14.6	11.4	13.6	10.2	13.5	
<b>Montreal</b>											
Loaded	458.0	479.0	507.0	570.0	550.0	574.2	657.8	728.1	587.2	625.4	3.5
Unloaded	462.0	500.0	514.0	575.0	569.0	568.9	597.3	651.6	555.2	587.0	2.7
<b>Total</b>	<b>920.0</b>	<b>979.0</b>	<b>1021.0</b>	<b>1145.0</b>	<b>1119.0</b>	<b>1143.1</b>	<b>1255.1</b>	<b>1379.8</b>	<b>1142.5</b>	<b>1212.4</b>	<b>3.1</b>
(Empty containers in %)	7.7	7.2	5.4	6.9	3.6	4.1	4.4	7.4	7.5	7.9	
<b>Halifax</b>											
Loaded	258.0	248.0	245.0	250.0	260.0	254.5	230.5	178.5	172.7	208.6	(2.3)
Unloaded	244.0	238.0	254.0	242.0	250.0	241.8	216.7	165.4	141.9	183.7	(3.1)
<b>Total</b>	<b>502.0</b>	<b>486.0</b>	<b>499.0</b>	<b>492.0</b>	<b>510.0</b>	<b>496.3</b>	<b>447.1</b>	<b>344.0</b>	<b>314.6</b>	<b>392.3</b>	<b>(2.7)</b>
(Empty containers in %)	13.7	13.3	13.7	15.0	13.8	12.9	13.7	13.3	13.9	17.3	
<b>Prince Rupert</b>											
Loaded	0.0	0.0	0.0	0.0	0.0	0.0	1.9	77.1	109.0	148.2	
Unloaded	0.0	0.0	0.0	0.0	0.0	0.0	10.2	102.4	155.5	193.8	
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>12.1</b>	<b>179.5</b>	<b>264.4</b>	<b>342.0</b>	
(Empty containers in %)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.1	26.2	25.3	
<b>Other ports<sup>3</sup></b>											
Loaded	58.0	68.0	164.0	195.0	199.0	25.9	25.0	27.7	25.2	29.4	(7.3)
Unloaded	48.0	62.0	152.0	194.0	217.0	26.9	25.5	24.7	23.9	28.5	(5.6)
<b>Total</b>	<b>106.0</b>	<b>130.0</b>	<b>316.0</b>	<b>389.0</b>	<b>416.0</b>	<b>52.8</b>	<b>50.5</b>	<b>52.4</b>	<b>49.1</b>	<b>57.9</b>	<b>(6.5)</b>
(Empty containers in %)	28.8	19.4	18.5	19.6	20.9	40.1	46.2	44.0	45.8	44.4	
<b>Total Canada</b>											
Loaded	1370.0	1516.0	1707.0	1855.0	1893.0	1979.9	2107.6	2209.3	1923.8	2229.6	5.6
Unloaded	1306.0	1538.0	1668.0	1836.0	1920.0	2010.5	2128.0	2238.6	2000.4	2290.0	6.4
<b>Total</b>	<b>2676.0</b>	<b>3054.0</b>	<b>3375.0</b>	<b>3691.0</b>	<b>3813.0</b>	<b>3990.5</b>	<b>4235.6</b>	<b>4447.9</b>	<b>3924.2</b>	<b>4519.6</b>	<b>6.0</b>
(Empty containers in %)	10.6	11.1	11.6	11.3	11.5	11.7	9.9	12.7	11.2	13.6	
<b>Shares of total Canada:</b>											
- Metro Vancouver	42.9	47.8	45.6	45.1	46.4	57.6	58.3	56.0	54.9	55.6	
- Montreal	34.4	32.1	30.3	31.0	29.3	28.6	29.6	31.0	29.1	26.8	
- Halifax	18.8	15.9	14.8	13.3	13.4	12.4	10.6	7.7	8.0	8.7	
- Prince Rupert	0.0	0.0	0.0	0.0	0.0	0.0	0.3	4.0	6.7	7.6	
- Other ports	4.0	4.3	9.4	10.5	10.9	1.3	1.2	1.2	1.3	1.3	

Note: TEUs = Twenty-foot Equivalent Units. R=Revised data. P=Preliminary data.

<sup>1</sup> AAGR= Average Annual Growth Rate.

<sup>2</sup> On January 1, 2008, the three lower Mainland port authorities (Fraser River, North Fraser and Vancouver) amalgamated to continue as Port Metro Vancouver.

<sup>3</sup> Other ports : includes Fraser River containers from 2001 to 2005 period.

Sources: Statistics Canada, Shipping in Canada, Cat. 54-205; Transport Canada





**Table M27: Total Marine Imports/Exports by Country, 2009 and 2010**

(Millions of dollars)

<i>Destination</i>	<i>Exports<sup>1</sup></i>			<i>Origin</i>	<i>Imports</i>		
	<i>2009<sup>R</sup></i>	<i>2010</i>	<i>Percentage change</i>		<i>2009<sup>R</sup></i>	<i>2010</i>	<i>Percentage change</i>
United States	17,140	21,055	22.8	China, Peoples Republic	17,923	19,696	9.9
China, Peoples Republic	9,914	11,732	18.3	Japan	6,564	6,884	4.9
Japan	7,424	8,257	11.2	Germany	5,599	6,104	9.0
Korea, South	2,895	3,095	6.9	United States	4,721	5,788	22.6
United Kingdom	2,644	3,335	26.1	United Kingdom	2,904	3,111	7.1
Netherlands	1,997	2,381	19.3	Algeria	2,541	2,897	14.0
Norway	1,584	2,300	45.2	Norway	2,867	2,171	(24.3)
Germany	1,624	2,211	36.1	Italy	2,136	2,168	1.5
India	1,698	1,608	(5.3)	Korea, South	2,222	1,807	(18.7)
Brazil	959	1,596	66.4	France	2,150	1,843	(14.3)
France	1,411	1,118	(20.8)	Kazakhstan	1,617	2,195	35.7
Italy	1,130	1,315	16.4	Saudi Arabia	1,529	2,009	>100
Belgium	981	1,077	9.8	Brazil	1,378	2,076	50.7
Mexico	910	1,118	22.9	Iraq	1,173	1,642	40.0
Taiwan	932	1,075	15.4	Russia	1,295	1,266	>100
Indonesia	827	947	14.5	Taiwan	1,043	1,303	24.9
Hong Kong	813	941	15.7	Thailand	1,023	1,055	3.1
Australia	871	838	(3.8)	Netherlands	1,132	920	(18.7)
Other Countries	15,878	15,605	(1.7)	Other Countries	20,640	23,566	14.2
<b>Grand Total (Exports)</b>	<b>71,632</b>	<b>81,603</b>	<b>13.9</b>	<b>Grand Total (Imports)</b>	<b>80,456</b>	<b>88,500</b>	<b>10.0</b>

Note: R=Revised data.

<sup>1</sup> Includes domestic exports and re-exports.

Source: Statistics Canada, International Trade database and Transport Canada





**Table M28: Value of Marine Share of Canadian International Trade, 2010**

(Millions of dollars)

	<i>Marine</i>	<i>All Modes</i>	<i>Marine share (per cent)</i>
Transborder			
Exports <sup>1</sup>	21,055	299,076	7.0
Imports	5,788	203,389	2.8
<b>Total United States</b>	<b>26,843</b>	<b>502,465</b>	<b>5.3</b>
Other countries			
Exports <sup>1</sup>	60,548	100,225	60.4
Imports	82,712	200,362	41.3
<b>Total</b>	<b>143,260</b>	<b>300,586</b>	<b>47.7</b>

Note: Table may not add up due to rounding.

<sup>1</sup> Including domestic exports and re-exports.

Sources: Statistics Canada, International Trade database and Transport Canada



**Table M29: Total Marine Imports/Exports by Commodities, 2010**

**Canada-United States Trade**

<i>Commodity exported<sup>1</sup></i>	<i>Millions of dollars</i>	<i>Commodity imported</i>	<i>Millions of dollars</i>
Gasoline and Fuel	11,597	Gasoline and Fuel	2,497
Crude petroleum	5,809	Coal	846
Organic Chemicals	525	Iron Ore	767
Iron Ore	488	Other petroleum products	418
Other petroleum products	437	Inorganic Chemicals	287
Non-ferrous products and alloys	346	Non-ferrous metals	215
Primary Iron & steel products	330	Organic Chemicals	165
Residual <sup>2</sup>	215	Electrical machinery & electronic equipment	110
Grains	164	Other Chemicals	96
Cement	148	Machinery and related equipment	76
Coal	133	Residual <sup>2</sup>	75
Newsprint	110	Other food products	71
Fabricated steel products	109	Beverages	49
Engine & Parts	108	Grains	23
Other food products	91	Sand and gravel	13
Potash	65	Salt	13
Salt	64	Cement	11
Sand and gravel	50	Primary Iron & steel products	9
Other commodities	264	Other commodities	46
<b>Total (All Commodities)</b>	<b>21,055</b>	<b>Total (All Commodities)</b>	<b>5,788</b>

**Canada-Overseas Trade**

<i>Commodity exported<sup>1</sup></i>	<i>Millions of dollars</i>	<i>Commodity imported</i>	<i>Millions of dollars</i>
Grains	9,182	Crude petroleum	15,632
Other food products	7,327	Residual <sup>2</sup>	12,155
Non-ferrous products and alloys	6,821	Passenger Motor Vehicle	7,148
Coal	5,721	Machinery and related equipment	5,858
Woodpulp	3,872	Gasoline and Fuel	4,661
Residual <sup>2</sup>	3,381	Other food products	4,477
Machinery and related equipment	2,963	Electrical machinery & electronic equipment	4,265
Iron Ore	2,702	Furniture, major appliances and household equipment	3,729
Non-ferrous metals	2,149	Other Chemicals	3,342
Potash	2,074	Fabricated steel products	2,999
Lumber	1,993	Plastics and Rubber Products	2,407
Inorganic Chemicals	1,722	Inorganic Chemicals	2,051
Newsprint	1,184	Beverages	1,889
Plastics and Rubber Products	1,136	Non-ferrous products and alloys	1,618
Other Chemicals	1,010	Primary Iron & steel products	1,461
Primary Iron & steel products	979	Non-metallic products	1,347
Gasoline and Fuel	945	Engine & Parts	1,338
Organic Chemicals	646	Non-ferrous metals	1,061
Other commodities	4,739	Other commodities	5,276
<b>Total (All Commodities)</b>	<b>60,548</b>	<b>Total (All Commodities)</b>	<b>82,712</b>

<sup>1</sup> Includes domestic exports and re-exports.

<sup>2</sup> Residual commodities include: textiles, leathers, and other miscellaneous products (not else specified).