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# Turnover for Mainline Freight Rail Transportation Services in Canada

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# Definition of the service (1)



- By industry - NAICS 2007
  - 48211 Rail Transportation
    - 482112 Short-Haul Freight Rail Transportation US
    - 482113 Mainline Freight Rail Transportation CAN
    - 482114 Passenger Rail Passenger CAN

# Definition of the service (2)

**Table 1: NAPCS for Rail Freight Transportation**

<b>482002</b>	<b>Rail freight transportation services</b>
482002.1	Transportation of bulk liquids and bulk gases in intermodal tank containers by rail
482002.2	Transportation of bulk liquids and bulk gases, except in intermodal tank containers, by rail
482002.3	Transportation of dry bulk, except in intermodal containers, by rail
482002.4	Transportation of climate-controlled boxed, palletized and other packed goods, except in intermodal containers, by rail
482002.5	Transportation of boxed, palletized and other packed goods, not climate-controlled, not in intermodal containers, by rail
482002.6	Transportation of climate-controlled intermodal containers, n.e.c., by rail
482002.7	Transportation of intermodal containers, not climate-controlled, n.e.c., by rail
482002.8	Transportation of automobiles and light-duty trucks by rail
482002.9	Transportation of livestock by rail
482002.1	Transportation of waste by rail
482002.11	Transportation of other goods by rail
482002.11.1	Transportation of truck trailers by rail
482002.11.2	Transportation of all other goods by rail

# Survey program overview (1)



These surveys are:

- *The Monthly Railway Carloadings (MRC) Survey*
- *The Rail Commodity Origin/Destination Survey (RCODS)*
- *Railway Transport Survey (RTS)*

# Survey program overview (2)



## *The Monthly Railway Carloadings Survey*

- Provides data from approximately 40 carriers operating in Canada
- Information is collected on: the number of cars loaded, tonnage of revenue freight loaded (including intermodal), commodity groupings and region (east or west). s.

# Survey program overview (3)



## *The Rail Commodity Origin and Destination Survey*

- Collects commodity origin and destination statistics through an annual census of waybill records from the two major railways - the Canadian National and Canadian Pacific.
- The information collected on this survey includes tonnage, origin, destination and commodity (no revenues).

# Survey program overview (4)



## *Railway Transport Survey*

- Collects annual financial and operating statistics using a mail census of common carrier railways operating in Canada.
- Information is collected on: railway financial, operating and traffic, equipment and fuel, and employment.

# Market conditions (1)



- Total operating revenues for the Canadian railway industry rose 0.8% to \$10.5 billion in 2007, the 9th consecutive year an increase has occurred.
- Rail transport of freight was \$9.4 billion (90.0%) of the industry's total operating revenues.

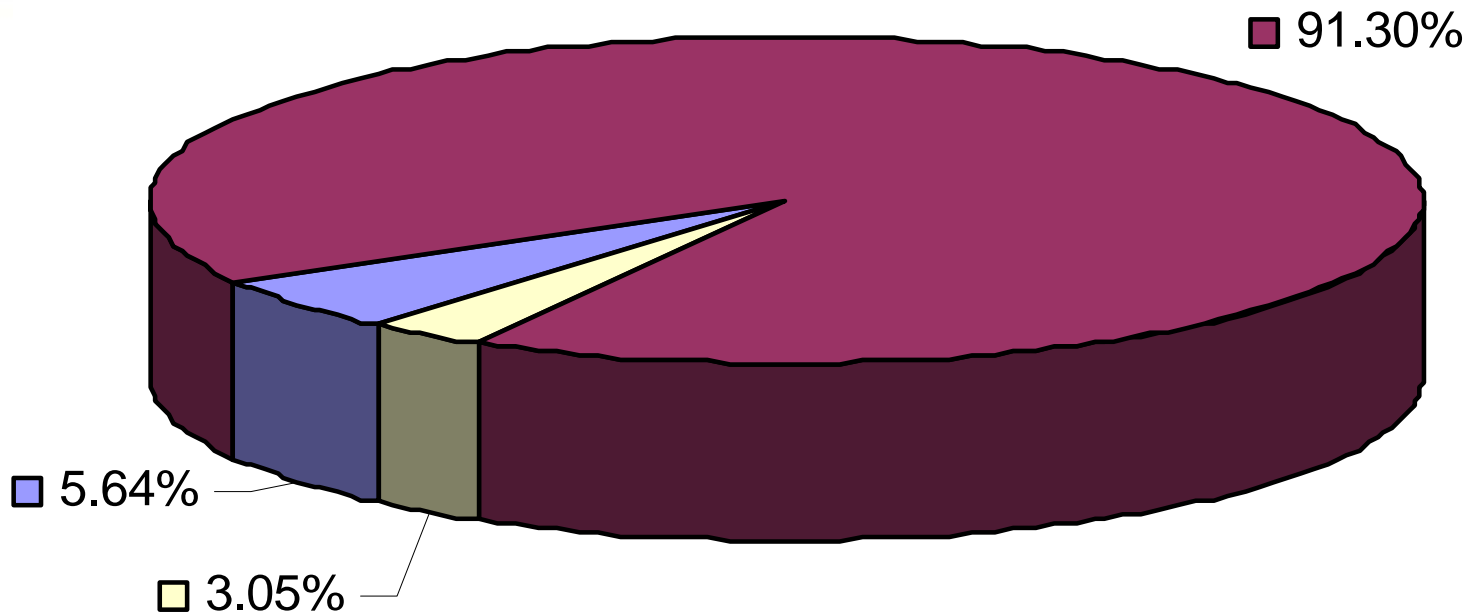


# Market conditions (2)

## Revenue breakdown



- NAICS 482112 - Short-Haul Freight
- NAICS 482113 - Mainline Freight
- NAICS 482114 - Passenger



# Market Conditions (3)



- 2 main carriers; Canadian National (CN) and Canadian Pacific (CP).
- In 2006, the revenue share of the rail freight carrier market held by CN was 53.92% and the share held by CP was 40.26%, while all other carriers contributed only 5.82%.

# Standard classification structure and product detail levels (1)



## Output - Main Variables

- Operating Revenues
- Operating Expenses
- Operating Ratio
- Ton-Kilometer Unit

# Main Classifications



- Industry  $\Rightarrow$  NAICS 2007
  
- Commodity classification
  - Standard Classification of Transported Goods (SCTG) and Harmonized System (HS)
  
  - Currently not NAPCS – in transition

# Evaluation of standard definition and market conditions

**Table 3: Top 10 Commodities Moved By Rail**

SCTG Code	Commodity	2006	Percent of Total Tonnage
		<i>tonnes</i>	<i>percent (%)</i>
15	Coal	31,971,009	11.30
42	Mixed loads or unidentified freight	25,422,961	8.99
02	Wheat	21,774,627	7.70
14	Iron ores and concentrates	20,476,705	7.24
26	Lumber	14,850,395	5.25
22	Potash	13,593,163	4.81
20	Other basic chemicals	10,719,670	3.79
27	Wood pulp	9,351,638	3.31
13	Sulphur	7,849,352	2.78
26	Other wood products (plywood, veneer)	7,670,458	2.71
	Total of the top ten commodities	163,679,978	57.88
	Other commodities	119,124,849	42.12
	Total tonnage of all rail commodities	282,804,827	100.00

*Source: Statistics Canada. Rail in Canada 2007*

# GDP estimates – monthly, by industry



- Rail categories use volume indicators of the output of the total industry at constant prices.
- Constant price revenue from freight transportation is calculated using base year revenues of one ton of freight through a distance of one kilometre, by commodity.

# GDP estimates - I/O tables by commodity



- Rail freight transportation industry is treated as a margin industry SNA
- Total operating revenues for this industry are distributed across all commodities based on results obtained from the RTS, RCODS, MRC.
- Transportation charges for a good form part of the eventual purchaser price concept - prior to other types of margins (i.e. wholesale, retail, etc.).


# Turnover/output data method(s)



- Statistics on the rail industry include the freight loaded by railways in Canada by commodity, freight origin and destination and the financial and operational statistics of railways that operate within Canada.
- Collected in accordance with the provisions of the Carrier Information Regulations under Section 50 of the *Canada Transportation Act* and Chapter S-19 of the [Statistics Act](#).
- Responding to these surveys is mandatory. Data are collected for all units of the target population, therefore no sampling is done.



# Comparability of turnover/output data with price indexes



- SPPI for freight transport under development
- Identical samples for both turnover and SPPI (CN and CP)
- Activity data collected from the turnover surveys (operating revenues, tonnage, type of commodity transported and corridors) is being used to refine the sampling and price selection methodology for the SPPI.
- As a result, the turnover/output data and the SPPI series will be directly comparable.

# Questions?

