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RIBBONS OF STEEL: LINKING CANADA'S ECONOMIC FUTURE



Executive Summary

The objective of this study is to determine the makeup of commodities currently transported by the rail system in Canada and use that information combined with a perspective of future growth or decline on a commodity by commodity basis to establish a future view of the commodities that could be moving on the rail system in 2024. The base data available from Statistics Canada and other agencies that provided a snapshot of the commodities being transported on the rail network from an origin, destination and import/export basis at the level required for this analysis was determined to be year-end 2012 data (released by Statistics Canada on March 20, 2014).

In the context of this report the term “railcar” is defined as the “movement of a railcar” (box car, hopper car, automobile carrier, standard flat car, centre-beam flat car, intermodal car, gondola car or tank car) from a point of origin to a point of destination. Included in this definition are railcars that travel outside Canada (to the United States or Mexico) and railcars that enter Canada (from the United States or Mexico). The following is a brief description of the provincial forecasted change in railcars over the next 10 years and the top two commodities contributing to that change.

British Columbia: Total railcar traffic is expected to increase from 2,287,412 in 2012 to 2,929,650 railcars in 2024. This increase of 642,238 railcars (+28 percent) can be attributed to an increase of 470,605 railcars (73.4%) carrying Mixed Loads and Unidentified Freight and an increase of 62,813 railcars (9.7%) carrying Petroleum Products with all other commodities accounting for a net increase of 108,820 railcars (16.9%). Refer to page 67 for a breakdown of other commodities.

Alberta: Total railcar traffic is expected to increase from 2,248,059 in 2012 to 3,307,587 railcars in 2024. This increase of 1,059,528 railcars (+47 percent) can be attributed to an increase of 460,162 railcars (43.5%) carrying Mixed Loads and Unidentified Freight and an increase of 352,956 railcars (33.3%) carrying Petroleum Products with all other commodities accounting for a net increase of 246,410 railcars (23.2%). Refer to page 68 for a breakdown of other commodities.

Saskatchewan: Total railcar traffic is expected to increase from 2,009,078 in 2012 to 3,184,471 railcars in 2024. This increase of 1,175,393 railcars (+59 percent) can be attributed to an increase of 492,130 railcars (41.8%) carrying Mixed Loads and Unidentified Freight and an increase of 352,956 railcars (33.3%) carrying Petroleum Products with all other commodities accounting for a net increase of 292,672 railcars (24.9%). Refer to page 69 for a breakdown of other commodities.

Manitoba: Total railcar traffic is expected to increase from 1,715,362 in 2012 to 2,590,550 railcars in 2024. This increase of 1,175,393 railcars (+51 percent) can be attributed to an increase of 413,018 railcars (35.2%) carrying Mixed Loads and Unidentified Freight and an increase of 277,958 railcars (23.6%) carrying Petroleum Products with all other commodities accounting for

a net increase of 484,417 railcars (41.2%). Refer to page 70 for a breakdown of other commodities.

Ontario: Total railcar traffic is expected to increase from 2,537,233 in 2012 to 3,551,846 railcars in 2024. This increase of 1,014,613 railcars (+40 percent) can be attributed to an increase of 579,579 railcars (57.2%) carrying Mixed Loads and Unidentified Freight and an increase of 148,486 railcars (14.6%) carrying Petroleum Products with all other commodities accounting for a net increase of 286,188 railcars (28.2%). Refer to page 71 for a breakdown of other commodities.

Quebec: Total railcar traffic is expected to increase from 1,473,458 in 2012 to 2,067,839 railcars in 2024. This increase of 594,381 railcars (+40 percent) can be attributed to an increase of 359,958 railcars (60.6%) carrying Mixed Loads and Unidentified Freight and an increase of 100,014 railcars (16.8%) carrying Petroleum Products with all other commodities accounting for a net increase of 134,409 railcars (22.6%). Refer to page 72 for a breakdown of other commodities.

Atlantic Region: Total railcar traffic is expected to increase from 543,883 in 2012 to 714,627 railcars in 2024. This increase of 170,744 railcars (+32 percent) can be attributed to an increase of 87,107 railcars (51.1%) carrying Metals and Minerals and an increase of 61,531 railcars (36.0%) carrying Mixed Loads and Unidentified Freight with all other commodities accounting for a net increase of 22,106 railcars (12.9%). Refer to page 73 for a breakdown of other commodities.

Moving Petroleum Products (crude petroleum, crude bitumen, refined petroleum products, and gaseous hydrocarbons, including propane, butane and pentanes plus) by rail has captured the attention of the public and the governments as a direct result of several accidents that have led to loss of life and significant property damage. This coupled with a perception that the movement of Petroleum Products will expand in the future has led to several changes in the regulations that guide the rail industry in North America. Included are changes to the Transportation of Dangerous Goods Act, Railway Safety Act, the Canadian Labour Code, the Canadian Transportation Accident Investigation and Safety Act, the Canada Transport Act along with changes to rail regulations in the United States. The following are examples of changes in rail transport regulations. For a complete discussion refer to Appendix C.

- Protective Directive 31 requires that crude oil for transportation must be tested and classified.
- Phase-out or retrofit the DOD-111 railcars in favour of the CPC-1232 (sometimes referred to as the TP14877 or the TC-140) tanker railcars.
- All locomotives attached to tanker cars transporting dangerous goods must have two-person locomotive crews.
- Reduced speed limits for trains carrying dangerous goods limited to 50 miles per hour if the new CPC-1232 railcars are being used and 40 miles per hour if at least one DOT-111 railcar travels through areas that are deemed risky.
- Wayside detectors to be placed along major routes covered by key trains.

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- All unattended locomotives to be secured to prevent unauthorized entry along with stricter regulations regarding securing trains if unattended.