Commodity flows by mode in Canada: Canadian Freight Analysis Framework, 2017

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In 2017, the vast majority of the 72.9 million freight shipments in Canada were hauled by truck (90%). Shipments by rail accounted for about 9% of the total, and shipments by air accounted for the rest.

Each mode of transportation caters to a certain segment of the freight transportation market in terms of distance and type of commodity shipped. In 2017, for example, the average shipment for the for-hire trucking industry weighed just over 11 tonnes, had an average shipment value of \$33,786 and travelled an average distance of 584 kilometres.

The top five commodities trucked by weight were minerals, general freight, fuel oils and crude petroleum, forest products, and base metals and articles of base metals. Combined, these commodities accounted for over two-thirds (71%) of the total tonnage moved by truck in 2017.

In 2017, 95% of mineral shipments transported by truck moved intra-provincially. These shipments had an average weight of 30 tonnes and travelled an average distance of 85 kilometres. The three provinces with the most mineral shipments moved by truck were Ontario, Alberta and British Columbia.

In 2017, each rail shipment or rail car weighed an average of just over 46 tonnes and was transported about 2,212 kilometres. Agricultural products were the top commodity by weight, followed by plastic and chemical products, coal, minerals, and forest products. Together, these commodities accounted for over two-thirds (69%) of the total weight moved by rail.

Export shipments accounted for one-quarter of the total weight moved by rail in 2017. The weight of fuel oils and crude petroleum exported rose by over one-third (37%) from 2016, to 14.5 million tonnes in 2017.

Each air shipment of freight weighed approximately 3 tonnes and travelled almost 2,300 kilometres, on average, in 2017. Air freight tends to consist of products with lower weights and higher values, such as pharmaceuticals, perishable goods (e.g., live lobster) or precision machinery parts.

Note to readers

The development of the Canadian Freight Analysis Framework, supported by Transport Canada, provides users with high-quality data to make informed decisions concerning the Canadian transportation sector.

Data on air freight for certain cities were suppressed to meet the confidentiality requirements of the Statistics Act. As a result, data from the Canadian Freight Analysis Framework underestimate the total volume of commodity shipments by air.

Data for the for-hire trucking industry exclude trucking activities undertaken by businesses classified to other industries, such as manufacturing or retail sales.

For the air and for-hire trucking industries, a shipment represents the movement of a single commodity from an origin to a destination. For rail, it represents the number of cars.

Data from previous years may be revised based on updated information.

The Transportation Data and Information Hub, a website launched by Statistics Canada and Transport Canada, provides Canadians with online access to comprehensive statistics and measures on Canada's transportation sector.

Correction: On July 7, 2021, corrections were made to the 2017 trucking data, particularly data on shipments of automobiles and other transportation equipment from the Toronto census metropolitan area to the United States and Mexico. The values associated with these shipments were adjusted downward.





Available tables: table 23-10-0142-01.

Definitions, data sources and methods: survey number 5264.

The Canadian Freight Analysis Framework (50-503-X) is now available.

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; **STATCAN.infostats-infostats.STATCAN@canada.ca**) or Media Relations (613-951-4636; **STATCAN.mediahotline-ligneinfomedias.STATCAN@canada.ca**).