



Sectoral Profile

Transportation and Warehousing

Region of Western Canada and the Territories

2018-2020



EXECUTIVE SUMMARY

The transportation and warehousing sector facilitates the transportation of cargo and passengers, as well as the warehousing and storage of goods. It also includes tourism transportation and other support activities. Transportation and warehousing accounted for 5.2% of Western Canada's gross domestic product (GDP) in 2017,¹ and employed 344,700 people across the region.² Employment growth in this industry saw a marked improvement in 2017 compared to one year prior, thanks to favourable economic conditions that encouraged higher trading volumes. Going forward, the outlook for the sector is expected to be positive due to the increasing demands of a growing population, and a weakened Canadian dollar that is facilitating exports.

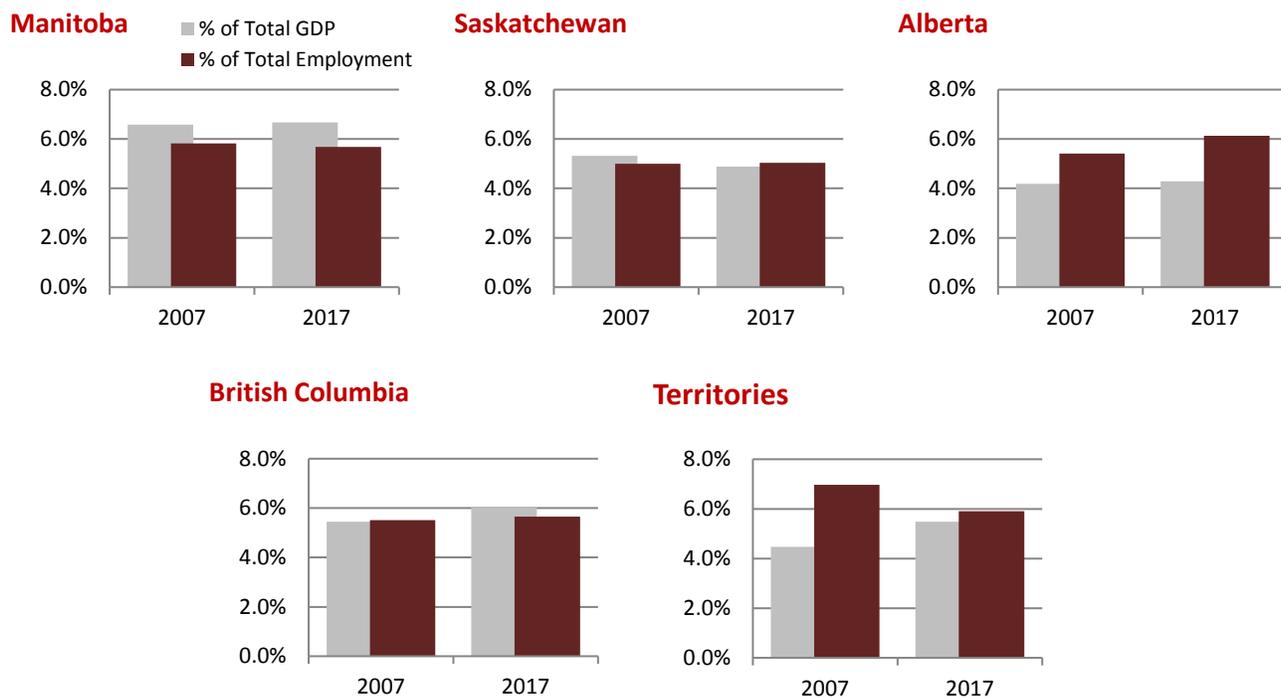
KEY DRIVERS

- The rise of e-commerce, at growth rates that have vastly exceeded sales at brick and mortar stores, has been a driving factor behind the expansion of the transportation and warehousing sector. Online shopping is expected to continue to have a positive impact on the sector over the medium-term.
- A weaker Canadian dollar and new direct flight connections to Canada have resulted in a record number of international arrivals by plane. The number of passengers visiting Canada from overseas, increased by 6.6 percent in 2017, a record-high. This trend is expected to continue as the sector works to meet the travel demands of a growing world population.
- Low oil prices have positively impacted many transportation firms as fuel costs represent a significant proportion of operational costs. Conversely, oil and gas extraction industries may see a reduced need for transportation services if global demand for their products remains weak.
- Pipeline capacity constraints in Western Canada are positively impacting the demand for shipment via rail. With Alberta now producing more oil than it can move to export markets, the oil and gas sector will have to compete with other industries such as agriculture and manufacturing for rail space.

BACKGROUND

The transportation and warehousing sector covers a diverse network of connected industries. The sector facilitates the transportation of cargo and passengers, as well as the warehousing and storage of goods. It also includes tourism transportation and other support activities. The sector is a major contributing factor to the health of regional goods-producing industries such as agriculture, oil and gas, and manufacturing. Over the last ten years, transportation and warehousing employment kept pace with overall employment growth in all western provinces.³

Transportation and Warehousing’s Provincial % Share of Employment and GDP, 2007 vs. 2017



Sources : 1. Statistics Canada CANSIM Table 379-0030 - Gross domestic product (GDP) at basic prices, by North American Industry Classification System (NAICS), provinces and territories, annual (dollars) 2. Statistics Canada Labour force estimates by detailed industry, age, sex, class of worker

The impact of the transportation sector on the economy at large varies widely from one jurisdiction to the next. In 2017, the smallest economic impact was felt in Nunavut, where transportation and warehousing accounted for 2.4% of the territory’s GDP.⁴ In contrast, the sector comprised 6.4% of Manitoba’s economy during the same year.

Demand for transportation services is driven by consumer spending and manufacturing output. Major companies within the industry benefit from large fleet sizes, and bulk fuel purchasing abilities, whereas smaller companies have the agility to better serve the rapidly changing demands of niche markets. To determine the level of activity and health of the transportation sector as a whole, a ratio of inventories-to-shipments is used. A healthy sector will have low inventories and high shipments. The inventories-to-shipments ratio has been steadily rising, which suggests that the sector is facing challenges.⁵ In 2015/2016, global uncertainties contributed to the pile-up of

inventories and a decline in overall demand for transportation services. Since then, activity has picked up as the overall health of the economy has improved. Relative stability in crude oil prices and a weaker Canadian dollar are driving up exports and improving trade volumes. In fact, railcar loadings of crude oil have set new records, as mounting oil production in Alberta bumps up against existing pipeline capacity.⁶

INDUSTRY TRENDS

The transportation and warehousing sector is comprised of nine sub-industries, each of which falls within one of the main modes of transportation: air, rail, road, water and pipeline. Among the sub-industries, truck transportation is the largest employer across Western Canada, with other sub-industries having varying degrees of importance by region. Over the last few years, the sector as a whole, has benefited from a weak loonie, a strong U.S. economy, and growing demand for e-commerce. During 2017, Canada's 150th anniversary celebration year, the number of international passengers moved across most modes set a new record high of 20.8 million trips of one or more nights, surpassing the previous record set in 2002.⁷ Meanwhile, the rise of online shopping has meant that consumers expect their orders to be processed faster, and delivered to their homes; this shift in consumer purchasing patterns has urged retailers to boost their warehousing space and services and potentially reduce their brick and mortar store footprint. The shift has also had a positive impact on regional employment in a number of transportation sub-industries. Going forward, the transportation and warehousing sector is expected to continue to grow on the back of increased federal spending (\$10 million) on trade and transportation projects.⁸

Air transportation: This industry employs 9.3% of all workers in the transportation and warehousing sector in Western Canada.⁹ The movement of passengers and cargo is the key component of air transportation. Western Canada houses five of the country's busiest airports by cargo – Vancouver, Calgary, Edmonton, Winnipeg, and Victoria. Calgary is also the base for WestJet operations. In 2017, Western Canada transported over 491,000 tonnes of cargo (domestic and international) by air, through nearly 45,800 flights¹⁰ - accounting for 37.4% of Canada's air freight that year. During the same time period, Vancouver International Airport handled 21.8% of Canada's air freight traffic.¹¹ Meanwhile, passenger traffic at Western Canada's airports reached nearly 65 million in 2017 – a 6.6% increase from the year prior and a record high for the region.¹² Most of this year over year growth occurred in BC (+60.1%), with passenger traffic increasing in all but one province (Saskatchewan).¹³ A weaker exchange rate, and new direct air connections have boosted the number of international visitors to Western Canada; a trend that will have positive spillover effects on transportation employment in tourism related sub-sectors.

Rail transportation: The resource-rich western provinces and territories ship the largest percentage of goods by rail in Canada. In 2017, Western Canada carried 59.6% (220 thousand rail cars) of all rail cargo in the country.¹⁴ Not surprisingly, the top five most transported goods (by rail cars) in the west are byproducts of agriculture and resource extraction; coal, wheat, potash, and canola.¹⁵ Export figures (January through October) show a 31.8% increase in the volume of crude oil shipped by rail in 2018 compared to the same period last year.¹⁶ This is set to rise further still; as producers in Alberta now extract more crude than can be exported by pipeline. To accommodate the increase in demand for rail services, the Government of Alberta invested about \$1.0 billion to increase rail take away capacity, with locomotives and tanker cars scheduled for delivery by the end of 2019.

Truck transportation: In 2017, truck transportation accounted for 32.8% (113,000) of all transportation and warehousing employment in the western provinces.¹⁷ Truck transportation represents a particularly large portion of all transportation and warehousing jobs both in Saskatchewan and Manitoba – 41.3% and 43.7% respectively. The 2017 signing of the Canada Free Trade Agreement, which aims to remove interprovincial trade barriers, is set to deliver significant economic gains for western provinces, and positively impact truck transportation employment in particular.¹⁸ Furthermore, recent technological advances in truck communication systems - such as GPS scheduling trackers, speed monitors and fuel consumption maximization - are increasing the trucking industry's productivity and improving its safety record.

Marine transportation: BC is home to a large water transportation industry, both for passenger and freight traffic. In 2017, international cruise ships carried over 1,328,000 passengers to major Canadian ports, mainly in Vancouver (842,530 passengers), Halifax (292,750) and Quebec City (192,400). Each ship represents an estimated \$2 million boost to the local economy. In terms of freight traffic, the Port of Vancouver was Canada's busiest port in 2017, handling 142.1 million metric tonnes of freight, a 5% increase from 2016 volumes. By comparison, Montreal, the country's second busiest port, handled 38.0 million tonnes in 2017.¹⁹

EMPLOYMENT OUTLOOK

- The Prairie Provinces should experience employment growth in transportation and warehousing between 2018 and 2020. Among the Prairie Provinces, Alberta will see the most rapid growth, with projected employment increases of 6,800.
- Among the territories, Yukon and Nunavut will see employment grow, while Northwest Territories will see a modest employment loss during that time.
- Sector growth will remain the strongest in BC, where employment is expected to advance by 7,700 between 2018 and 2020.
- Nearly one quarter of transportation and warehousing workers in Western Canada are aged 55 and over, making the sector vulnerable to labour shortages caused by the impending retirement of baby boomers. This is particularly concerning for long-haul drivers, who are older than the average Canadian worker.²⁰
- Another downside risk to the sector stems from recent changes to NAFTA, which could impede trade flow between Canada, the U.S. and Mexico, and negatively affect regional employment levels.

Projected employment change for the transportation and warehousing sector during the 2018-2020 forecast period

Economic Region	Projected Change in Employment	Projected Annual Growth
Manitoba	900	0.8%
Southern Manitoba		1.5%
Winnipeg		0.6%
Northern Manitoba		0.1%
Saskatchewan	400	0.5%
Regina & Southern Saskatchewan		0.5%
Saskatoon & Northern Saskatchewan		0.5%
Alberta	6,800	1.6%
Calgary & Southern Alberta		1.7%
Edmonton, Red Deer, Camrose, & Drumheller		1.4%
Northern Alberta and Banff		1.8%
British Columbia	7,700	1.8%
Vancouver Island & Coast		1.8%
Lower Mainland - Southwest		1.8%
Okanagan - Kootenay		1.8%
Northern BC		1.8%
Yukon	50	1.3%
Northwest Territories	-60	-1.6%
Nunavut	90	3.2%

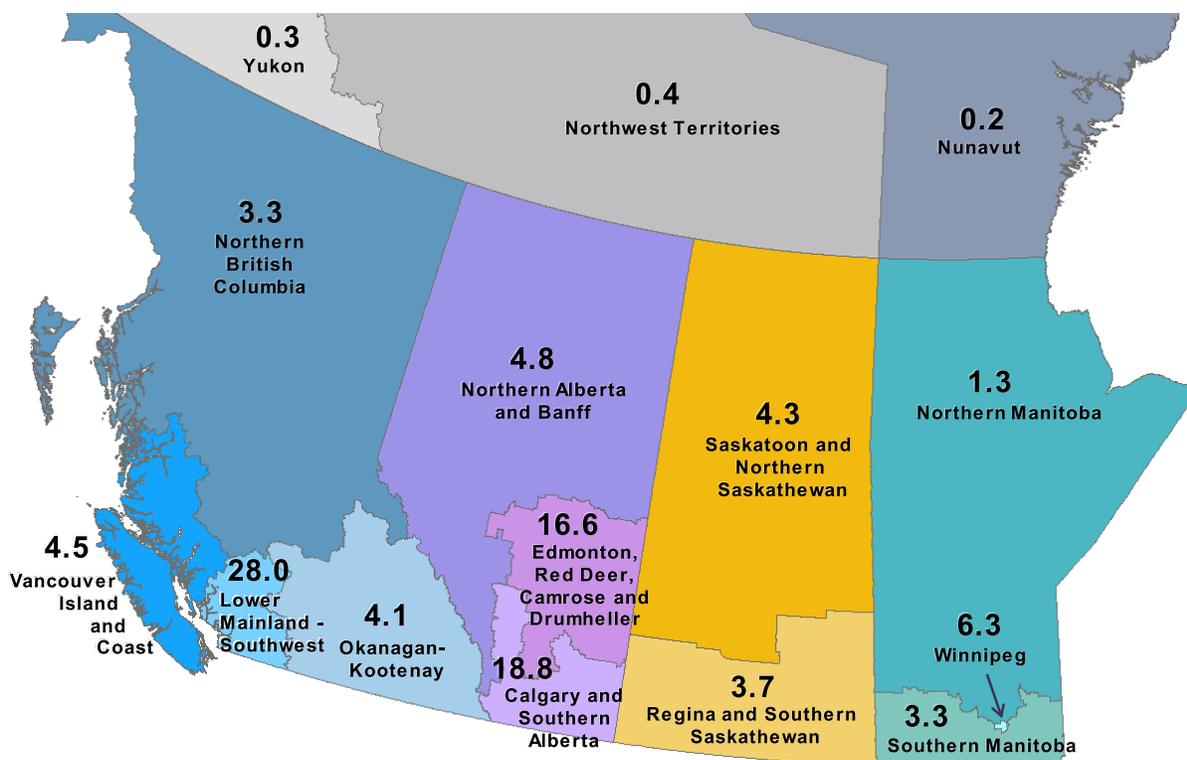
Source: Service Canada Regional Occupational Outlooks in Canada, 2018-2020

REGIONAL OVERVIEW

- Demand to move grain and other major commodities such as forest products, coal, crude oil and potash by rail has been rising in recent years. Although Western Canada's transportation system continues to set new railcar loading records, an acute shortage of crews and locomotives has resulted in a growing number of unforeseen disruptions. That combined with colder than average temperatures is expected to adversely affect fluidity across Western Canada. Once proposed pipeline projects come online - late 2019 at the earliest - demand for the transportation of oil by rail is expected to diminish substantially, in turn improving the sector's capacity to transport other commodities. If these pipeline projects fail to proceed or are delayed, demand for crude by rail could remain elevated for many years to come. Regardless of the outcome, Canadian National Railway is preparing for stronger demand yet by spending \$320 million in Alberta to build new railway lines and upgrade existing infrastructure.²¹
- As of October 2018, Greyhound Canada discontinued all of its passenger and freight services across Western Canada. The decision prompted the BC Government to launch a new bus service to replace discontinued routes in northern BC.²² Likewise, the Government of Alberta announced it is investing \$1.4 million over two years towards rural transportation pilot projects.²³

- In BC, the Ministry of Transportation and Infrastructure is working to improve driving conditions for truckers. Over the next three years, the province is investing \$9 million to improve rest areas, and Wi-Fi connectivity, as well as build new service stations. Meanwhile, talk of driverless or semi-autonomous trucks has gained momentum in the region. Suncor Energy is testing fully automated trucks on an isolated part of the company’s oil sands operations north of Fort McMurray.²⁴ That said this new technology will have to go through a rigorous regulatory process before autonomous trucks become commonplace.
- Also in BC, and as part of previously announced plans to improve transportation in Metro Vancouver, Translink is looking to hire over 500 bus drivers as the company adds new routes to its service.²⁵ The province also recently introduced legislation that begins the process of allowing ride-hailing companies to start operations in late 2019.²⁶ Meanwhile, in Saskatchewan, the city of Saskatoon approved bylaws that now allow companies such as Uber and Lyft to operate in the city.

Distribution of employment in the transportation and warehousing sector across Western Canada (%)



Source: Service Canada Regional Occupational Outlooks in Canada, 2018-2020

- One economic region that has faced several transportation challenges recently is Northern Manitoba. In August 2016, Onmitrax, the US-based owner of the Port of Churchill, shut down the port and major railroad freight operations after it failed to find a buyer. Shortly after, Churchill’s single rail line - its primary mode of transportation - was damaged by flooding and also shutdown. The closure resulted in a steep rise in the price of food and gas due to supplies being flown in; and a significant decline in tourism. A deal for new ownership of the Churchill rail line was finalized in August 2018, and a train pulled into town in December, the first in more than a year.²⁷

- In warehousing, Amazon Inc. hired 1,000 full-time employees for its new fulfilment centre near Calgary.²⁸ The company also plans to open a 1 million square foot warehouse near Edmonton; providing 600 new jobs when it opens in 2020.
- Funding for a project set to connect the proposed deep water port at Grays Bay to the winter road that services N.W.T.'s diamond mines was rejected by Transport Canada in April 2018. N.W.T. offered to build its own all-weather link however, Nunavut pulled its support for Grays Bay. A number of groups have vowed to continue advocating for the 227-kilometre all-season road and port project. If it goes ahead, the road could potentially spur exploration in the area and boost employment in Nunavut's transportation and warehousing sector.

Note: In preparing this document, the authors have taken care to provide clients with labour market information that is timely and accurate at the time of publication. Since labour market conditions are dynamic, some of the information presented here may have changed since this document was published. Users are encouraged to also refer to other sources for additional information on the local economy and labour market. Information contained in this document does not necessarily reflect official policies of Employment and Social Development Canada.

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¹ Statistics Canada. Table 379-0030 – Gross domestic product (GDP) at basic prices, by North American Industry Classification System, provinces and territories. (accessed: January 7, 2019)

² Statistics Canada. 2017. Labour Force Survey (LFS), Service Canada custom employment table by detailed industry. Ottawa. (accessed: January 7, 2019)

³ Ibid. Note that employment data related to transportation and warehousing is not available at the same level of detail for the territories.

⁴ Ibid

⁵ Statistics Canada. Table 304-0014 Manufacturers' sales, inventories, orders and inventory to sales ratios, by North American Industry Classification System (NAICS), Canada, monthly (dollars unless otherwise noted), CANSIM (database). (accessed: January 7, 2019)

⁶ Statistics Canada. Table 23-10-0216-01 Railway car loadings statistics, by commodity, by region, monthly. (accessed January 11, 2019) <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=2310021601&pickMembers%5B0%5D=1.3>

⁷ Transport Canada. 2017. Transportation in Canada 2017: Report Overview. (accessed January 11, 2019) <https://www.tc.gc.ca/eng/policy/transportation-canada-2017.html#toc3>

⁸ The Conference Board of Canada. Canadian Industrial Profile – Transportation and Warehousing Autumn 2018. (accessed January 11, 2019). Subscription required.

⁹ Ibid

¹⁰ Statistics Canada. Table 23-10-0254-01 Air cargo traffic at Canadian airports, annual (tonnes unless otherwise noted). (accessed January 11, 2019)

¹¹ Ibid

¹² Statistics Canada. Table 23-10-0253-01 Air passenger traffic at Canadian airports, annual (database). (accessed January 11, 2019)

¹³ Ibid

¹⁴ Ibid

¹⁵ Ibid

¹⁶ National Energy Board. 2018. Canadian Crude Oil Exports by Rail – Monthly Data. (accessed: January 11, 2019)

¹⁷ Ibid

¹⁸ Innovation, Science and Economic Development Canada. 2017 News Release. Historic trade accord strengthens Canada's economic union. (accessed January 10, 2019) <https://www.canada.ca/en/innovation-science-economic-development/news/2017/04/historic-trade-accordstrengthenscanadaseconomicunion.html>.

¹⁹ Ibid

²⁰ Ibid

²¹ Edmonton Journal. 2018. Alberta CN Rail infrastructure to get \$320-million overhaul. (accessed January 12, 2019) <https://edmontonjournal.com/news/local-news/alberta-cn-rail-infrastructure-to-get-320-million-overhaul>

²² BC Gov. News. Province launches BC Bus North for affordable, safe travel in northern BC. (accessed January 15, 2019). <https://news.gov.bc.ca/releases/2018PREM0037-001059>

²³ CBC News. 2018. Camrose, Grand Prairie regions to benefit from rural transportation pilot program. (accessed January 12, 2019) <https://www.cbc.ca/news/canada/edmonton/camrose-grande-prairie-regions-get-rural-transportation-1.4726712>

²⁴ Business in Vancouver, 2017. Long-haul trucking with Mr.Roboto. (accessed January 13, 2019). <https://biv.com/article/2017/05/long-haul-trucking-mr-roboto>

²⁵ Vancouver Sun. 2018. Translink looking to recruit hundreds of Metro Vancouver bus drivers. (accessed January 10, 2019). <https://vancouversun.com/news/local-news/translink-looking-to-recruit-hundreds-of-metro-vancouver-bus-drivers>

²⁶ The Province. 2018. B.C.'s Class 4 licence requirement could deter ride-hailing drivers. (accessed January 15, 2019). <https://theprovince.com/news/local-news/b-c-s-class-4-licence-requirement-could-deter-ride-hailing-drivers/wcm/7c54101a-ca80-43ff-9594-3c289f6d647d>

²⁷ CBC News. 2018. "Our hearts are just filled with joy": 1st train in over a year arrives in Churchill. (accessed January 15, 2019) <https://www.cbc.ca/news/canada/manitoba/churchill-first-train-arrives-1.4886923>

²⁸ Calgary Herald. 2018. Amazon nears opening of Balzac "fulfillment centre". (accessed January 8, 2019). <https://calgaryherald.com/business/local-business/amazons-new-alberta-facility-nears-opening-in-balzac>
