

Port of Vancouver

2021 ECONOMIC IMPACT STUDY FINAL REPORT

25 June 2024



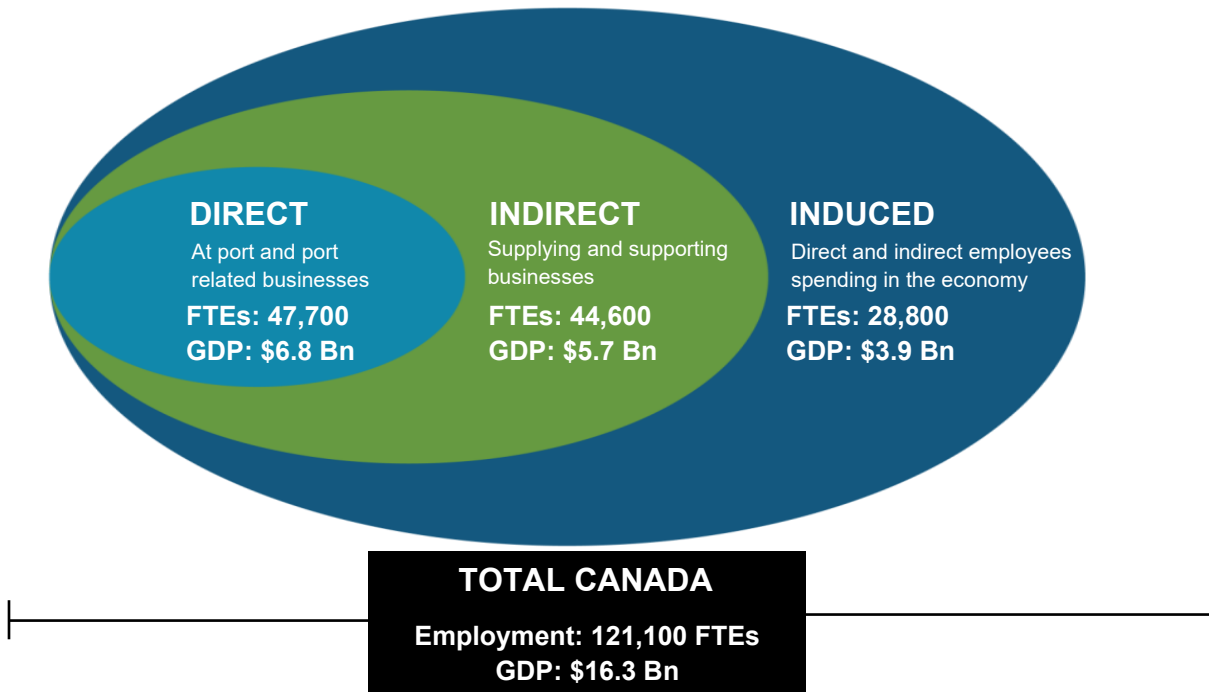
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Executive Summary

Marine ports are substantial economic generators, serving as key nodes to the country’s transportation infrastructure and facilitating the movement of goods and people through trade corridors. The Vancouver Fraser Port Authority (VFPA) commissioned this study to quantify and document the economic impact of the Port of Vancouver (port) to the Province of British Columbia and Canada. The study reviews the operations and activities of different participants within the Port of Vancouver’s marine ecosystem, such as the terminals, carriers, harbour services, warehousing, trucking, rail, and the port authority. Prior studies were completed in 2008, 2012, and 2016.

Economic impact is a measure of the employment and spending associated with a sector of the economy, a specific project, or a change in government policy or regulation. In this case, economic impact refers to the economic contribution associated with the ongoing activities of the Port of Vancouver and its related businesses. The three major components of economic impact are classified as *direct*, *indirect*, and *induced* impacts – collectively, these capture the economic impact of the port across Canada’s economy.

The Port of Vancouver is comprised of a wide network of businesses and organizations whose operations support a large share of economic activity in Canada. Its economic importance is reflected in the estimated 47,700 full-time equivalents (FTEs) of employment that are *directly* involved in port operations and the \$6.8 billion *directly* contributed to Canada’s Gross Domestic Product (GDP).¹



¹ This study is based on an analysis of port operations in 2021. Given that cruise operations were suspended in 2020 and 2021 and limited in 2022 due to COVID-19 restrictions, the analysis referred to the most recent year of cruise operations in 2023 as a representative year of regular cruise activity. Note that figures may not sum to totals due to rounding.

Overview of Port of Vancouver Operations

The Port of Vancouver is the largest port in Canada, the largest tonnage port on the North American West Coast, and North America's second largest export port.² The port facilitates trade with 140 to 170 world economies each year, with approximately 90% of port activity focused on Canadian import/export markets. In 2021, the port handled 146 million metric tonnes of cargo valued at \$279 billion. The Port of Vancouver provides a diverse range of facilities and services to the international shipping community, including 29 marine terminals, extensive on-dock rail facilities, and three Class 1 railroads.

The Port of Vancouver operates across five business sectors: automobiles, breakbulk, bulk, container, and cruise, summarized below. Its combination of deep-sea and freshwater facilities can accommodate a variety of transport needs, from short-sea shipments to major international loads on Super Post-Panamax ships carrying thousands of containers on each trip.

- **Automobiles** – the Port of Vancouver handles between 300,000 to 500,000 vehicles annually;
- **Breakbulk** – two of the port's terminals serve as consolidation centres for forest products, steel, machinery, and project cargo;
- **Bulk** – dry and liquid bulk cargo accounts for more than two-thirds of annual tonnage at the port, moving through 21 terminals;
- **Container** – the Port of Vancouver offers four container terminals with transload, cross-docking, and warehousing facilities; and
- **Cruise** – the Canada Place cruise terminal is the homeport for the Vancouver-Alaska cruise industry, welcoming nearly 1.1 million passengers in 2019 prior to the pandemic, then 1.2 million in 2023 in the first full season since the pandemic.

The VFPA is the federal agency responsible for the stewardship of the Port of Vancouver. As shown in **Figure ES-1**, the VFPA manages the use of port land and water, which includes approximately 350 kilometres of shoreline including 16,000 hectares of water along with more than 1,000 hectares of land.³

² Vancouver Fraser Port Authority.

³ Ibid.

Figure ES-1: Port of Vancouver Jurisdiction Map



Source: Vancouver Fraser Port Authority (<https://www.portvancouver.com/port-dashboard/jurisdictional-map/>)

Ongoing Economic Impact

Economic impact can be measured in a number of ways:

- Employment (jobs and full-time equivalents or FTEs);⁴
- Wages;
- Gross Domestic Product (GDP); and
- Economic output.

⁴ One full-time equivalent (FTE) of employment corresponds to 1,832 hours of work annually.

Economic Impact of Port of Vancouver’s Ongoing Operations in British Columbia

Ongoing operations at the Port of Vancouver make considerable contributions to local employment and the provincial economy. Direct employment created by ongoing operations at the port (e.g., terminal operator staff, longshore workers, tug operators, marine pilots, port authority personnel, freight forwarders, rail engineers, truck drivers, etc.) amount to 48,100 *direct* jobs,⁵ representing 43,200 *direct* FTEs (when part-time and seasonal employment are accounted for), in British Columbia. These direct employees earn approximately \$3.7 billion in wages. This amounts to an average direct wage of \$85,600 per FTE which exceeds the B.C provincial average of \$58,600 in 2021.⁶ Further, the *direct* contribution to the B.C. economy includes over \$5.5 billion in GDP and \$12.6 billion in economic output.

Including indirect and induced multiplier effects, the total impacts to British Columbia from ongoing operations related to Port of Vancouver are 103,000 total jobs, equivalent to 93,300 total FTEs, earning \$7.1 billion in total wages. The total contribution to the provincial economy includes approximately \$11.8 billion in GDP and \$24.1 billion in economic output.

The British Columbia economic impacts of ongoing operations at the Port of Vancouver are summarized in **Figure ES-2**.

Figure ES-2: 2021 Economic Impact of Port of Vancouver's Ongoing Operations (B.C. Impacts Only)

Impact	Employment (Jobs / FTEs)		Wages (\$ Millions)	GDP (\$ Millions)	Output (\$ Millions)
	Jobs	FTEs			
Direct	48,100	43,200	\$3,700	\$5,520	\$12,640
Indirect	34,200	31,300	\$2,390	\$3,720	\$7,490
Induced	20,700	18,800	\$1,030	\$2,570	\$3,940
Total	103,000	93,300	\$7,120	\$11,810	\$24,070

⁵ Port of Vancouver direct employment includes all jobs at businesses situated on land administered by Port of Vancouver and jobs at all off-site businesses directly related to Port of Vancouver trade and shipping.

⁶ Statistics Canada, Table 14-10-0204-01, Average weekly earnings by industry (all industries), 2021, British Columbia, calculated for annual earnings.

Economic Impact of Port of Vancouver's Ongoing Operations in Canada

The Port of Vancouver's economic impacts extend deep into B.C., the Prairies, and the rest of Canada. Since the port handles major bulk, breakbulk, and containerized commodities produced outside the Lower Mainland, the economic contributions of the logistics chains that depend on Port of Vancouver are also assessed.



Day-to-day activity at the Port of Vancouver directly employs 47,700 full-time equivalents across Canada.

At a local level, the port is a significant employment and economic activity generator in communities throughout the Lower Mainland from the North Shore to the U.S. border, and from the Georgia Strait to Hope. This is because the port authority's jurisdiction includes land alongside many Metro Vancouver municipalities. Outside of B.C., the largest direct employment impacts are located in Alberta, followed by Ontario and Manitoba. This includes supporting 1,500 direct jobs in Alberta and 1,000 direct jobs in Ontario. **Figure ES-3** shows the estimated *direct* employment impacts on a community-by-community basis in Metro Vancouver, and province-wide for B.C., Alberta, Saskatchewan, Manitoba, Ontario, and Québec.

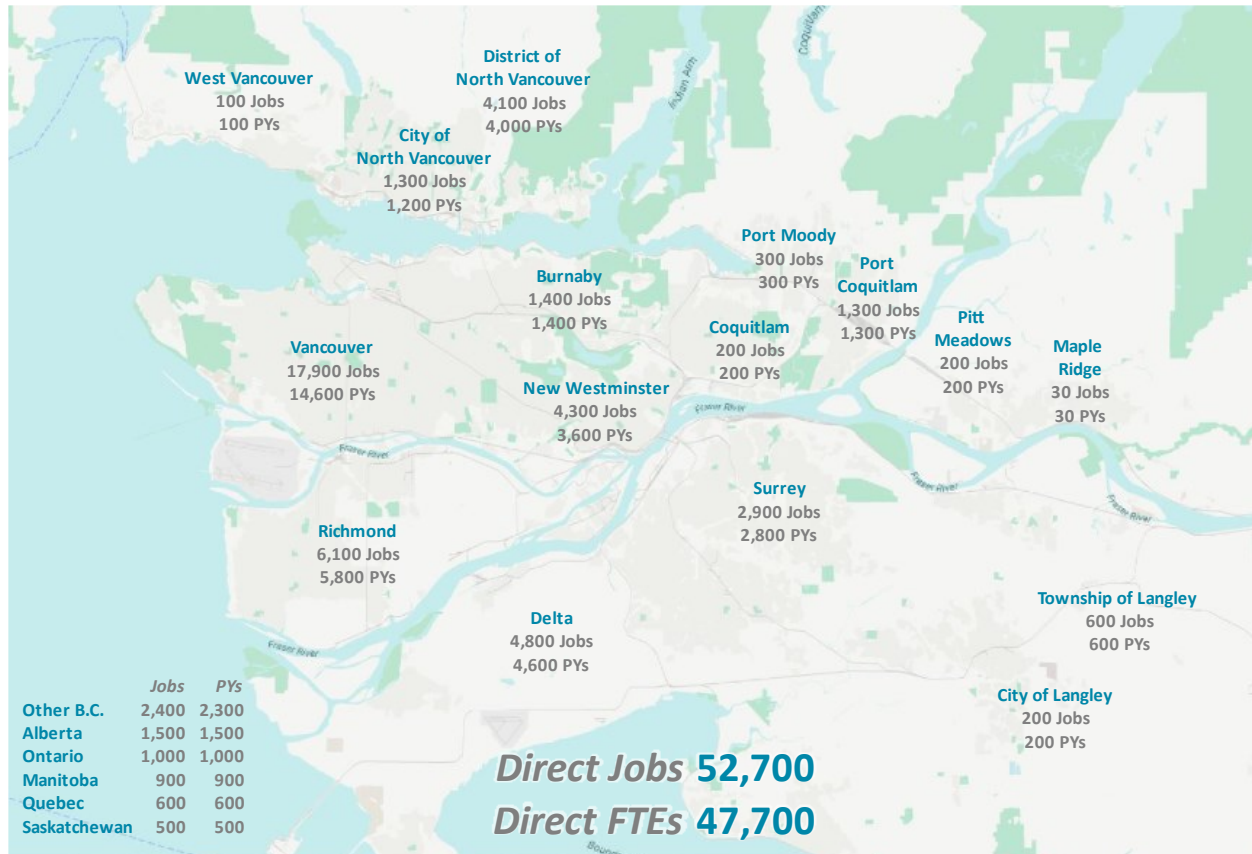
Across Canada, direct employment supported by ongoing operations at the Port of Vancouver amount to 52,700 jobs, equivalent to 47,700 FTEs. The direct wages earned by these employees are estimated to be \$4.2 billion. On average, direct employees earn roughly \$88,000 per FTE each year, which is higher than the average annual wage in Canada of \$58,800 and reflects the large

number of high skilled positions that are supported by port operations.⁷ Direct contributions by the port's ongoing operations to the national economy also include nearly \$6.8 billion in direct GDP, while direct economic output is estimated to be \$14.6 billion.

Adding in multiplier impacts (indirect and induced); the total employment nationwide supported by activities at the Port of Vancouver is estimated to be 132,400 jobs or 121,100 FTEs, earning a total of \$9.3 billion in wages. Total GDP is estimated to be \$16.3 billion, and economic output is estimated to be \$32.7 billion. **Figure ES-4** shows the total impacts of the Port of Vancouver across Canada.

⁷ Statistics Canada, Table 14-10-0204-01, Average weekly earnings by industry (all industries), 2021, Canada-wide, calculated for annual earnings.

Figure ES-3: 2021 Direct Employment of Port of Vancouver by Location (All Locations in Canada)



Note: due to changes in the study scope, the location breakdowns shown above are not directly comparable with prior years' studies.



Figure ES-4: 2021 Economic Impact of Port of Vancouver's Ongoing Operations (All Locations in Canada)

Impact	Employment (Jobs / FTEs)		Wages (\$ Millions)	GDP (\$ Millions)	Output (\$ Millions)
	Jobs	FTEs			
Direct	52,700	47,700	\$4,200	\$6,750	\$14,580
Indirect	48,300	44,600	\$3,480	\$5,720	\$11,730
Induced	31,400	28,800	\$1,660	\$3,870	\$6,380
Total	132,400	121,100	\$9,340	\$16,340	\$32,690

The direct employment by Port of Vancouver serves various sectors. Direct employment associated with handling maritime cargo at the Port of Vancouver amounted to 34,400 jobs or 31,900 FTEs (around two-thirds of all direct employment in all locations across Canada) with direct wages totalling \$3.0 billion. Job sectors included in this category include stevedores, rail, trucking, and tug services. Cruise is the port's second largest employment generator, directly contributing 9,500 direct jobs or 7,200 direct FTEs.⁸

Figure ES-5 shows the direct employment and wages related to Port of Vancouver's five main industry sectors.

Figure ES-5: 2021 Direct Employment by Major Industry Sectors (All Locations in Canada)

Rank	Industry Sector	Jobs	FTEs	Wages (\$ Millions)
1	Maritime Cargo	34,400	31,900	\$3,000
2	Cruise	9,500	7,200	\$530
3	Construction, Vehicle, Building & Repair	4,200	4,100	\$410
4	Non-Marine Related Services	3,900	3,800	\$200
5	Other Marine Related Services	700	700	\$60
Total		52,700	47,700	\$4,200

Note: due to recategorizations among employers and changes in the study scope, the industry sector breakdowns shown above are not comparable with prior years' studies.

Direct Economic Impacts by Location

Direct employment related to Port of Vancouver in British Columbia is concentrated in Metro Vancouver (95% of direct FTEs in British Columbia) but is not limited to this geographic region. The Port of Vancouver is a significant job generator elsewhere in B.C. and throughout Canada. A total of 4,500 direct jobs outside of British Columbia are dependent on the trade activity at Port of Vancouver. Employment for transport carriers, such as the rail lines, as well as shipping companies extend into the Prairies and beyond as they serve their export and import markets through Port of Vancouver.


⁸ Given that cruise operations were suspended in 2020 and 2021 and limited in 2022 due to COVID-19 restrictions, the analysis referred to the most recent year of cruise operations in 2023 as a representative year of regular cruise activity.

Of overall port-related employment in Metro Vancouver, approximately 90% of direct jobs are concentrated in eight municipalities: Vancouver, Richmond, Delta, New Westminster, the District of North Vancouver, Surrey, Burnaby, and Port Coquitlam, in descending job order.

Direct employment in British Columbia is estimated at 48,100 jobs, earning wages in the order of \$3.7 billion. This includes individuals employed in all Metro Vancouver municipalities (45,700 jobs) and outside of Metro Vancouver (2,400 jobs). The municipalities with the largest employment impacts are those in which the port owns assets and where significant logistics activity occurs, including: the City of Vancouver (represents 37% of total B.C. direct jobs), Richmond (13%), Delta (10%), New Westminster (9%), the District of North Vancouver (9%), Surrey (6%), and Burnaby (3%).

Direct employment in other Canadian provinces is equivalent to 4,500 jobs. The majority of these direct jobs are with rail carriers, with the rest of the services incidental to other shipping and logistics activity. The provinces with employment impacts attributable to port operations include: Alberta (represents 3% of all direct jobs), Ontario (2%), Manitoba (2%), Québec (1%), and Saskatchewan (1%). **Figure ES-6** provides a breakdown of the direct economic impacts for all locations in Canada.

Figure ES-6: 2021 Direct Economic Impacts by Location (All Locations in Canada)



Impact	Employment (Jobs / FTEs)		Wages (\$ Millions)	GDP (\$ Millions)	Output (\$ Millions)
Vancouver	17,900	14,600	\$1,230	\$1,780	\$4,070
Richmond	6,100	5,800	\$390	\$490	\$1,030
Delta	4,800	4,600	\$380	\$560	\$1,340
New Westminster	4,300	3,600	\$360	\$470	\$1,280
North Vancouver (District)	4,100	4,000	\$360	\$460	\$1,010
Surrey	2,900	2,800	\$250	\$260	\$940
Burnaby	1,400	1,400	\$120	\$170	\$410
Port Coquitlam	1,300	1,300	\$130	\$380	\$620
North Vancouver (City)	1,300	1,200	\$100	\$180	\$380
Langley (Township)	600	600	\$50	\$60	\$150
Port Moody	300	300	\$30	\$30	\$90
Pitt Meadows	200	200	\$20	\$20	\$100
Langley (City)	200	200	\$10	\$30	\$60
Coquitlam	200	200	\$10	\$20	\$40
West Vancouver	100	100	\$10	\$10	\$20
Maple Ridge	30	30	\$2	\$3	\$10
<i>Total Metro Vancouver</i>	<i>45,700</i>	<i>40,900</i>	<i>\$3,450</i>	<i>\$4,920</i>	<i>\$11,550</i>
Other BC	2,400	2,300	\$250	\$600	\$1,090
Total B.C.	48,100	43,200	\$3,700	\$5,520	\$12,640
Alberta	1,500	1,500	\$190	\$560	\$860
Ontario	1,000	1,000	\$100	\$240	\$400
Manitoba	900	900	\$100	\$220	\$340
Québec	600	600	\$60	\$100	\$150
Saskatchewan	500	500	\$40	\$110	\$190
Other Canada	-	-	-	-	-
Total Canada	52,700	47,700	\$4,200	\$6,750	\$14,580

Note 1: Impacts attributable to Other Canada were minor and do not show due to rounding.

Note 2: Due to changes in the study scope, the location breakdowns are not directly comparable with prior years' studies.



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