

The Economic Contribution of the International Cruise Industry in Canada in 2019

Published in 2021





The Economic Contribution of the International Cruise Industry in Canada

A Survey-based Analysis of the Impacts of Passenger, Crew and Cruise Line Spending



Prepared for:

Cruise Lines International Association

March 2021

*Business Research & Economic Advisors
201 Strykers Rd, - Suite 19-132
Phillipsburg, NJ 08865*

Table of Contents

I. Executive Summary	3
Background	3
Summary of Economic Impacts	6
<i>Direct Expenditures</i>	8
<i>Total Economic Impacts by Industry</i>	13
<i>Passenger Attributes (Based on 2016 BREA Study)</i>	14
II. Introduction	16
Background	16
Project Objectives	19
Methodology	19
<i>Survey of Cruise Lines</i>	19
<i>Passenger and Crew Visits and Expenditures</i>	22
<i>Additional Sources of Cruise-Related Expenditures</i>	33
Economic Impact Analysis	36
<i>Direct Economic Impacts</i>	36
<i>Indirect and Induced Economic Impacts</i>	37
III. National Economic Contribution	38
Canada Cruise Sector	38
<i>Direct Expenditures</i>	40
<i>Direct Employment, Wage and Tax Impacts</i>	48
<i>Total Employment, Wage and Tax Impacts</i>	50
IV. Economic Contribution by Province	53
British Columbia Cruise Sector	54
<i>Direct Expenditures</i>	55
<i>Direct Employment, Wage and Tax Impacts</i>	60
<i>Total Employment, Wage and Tax Impacts</i>	62
Québec Cruise Sector	66
<i>Direct Expenditures</i>	67
<i>Direct Employment, Wage and Tax Impacts</i>	72
<i>Total Employment, Wage and Tax Impacts</i>	73
Atlantic Canada Cruise Sector	77
<i>Direct Expenditures</i>	79
<i>Direct Employment, Wage and Tax Impacts</i>	84
<i>Total Employment, Wage and Tax Impacts</i>	85
Nova Scotia Cruise Sector	89
<i>Direct Expenditures</i>	89
<i>Direct Employment, Wage and Tax Impacts</i>	93
<i>Total Employment, Wage and Tax Impacts</i>	95
New Brunswick Cruise Sector	99
<i>Direct Expenditures</i>	99
<i>Direct Employment, Wage and Tax Impacts</i>	103
<i>Total Employment, Wage and Tax Impacts</i>	105

Newfoundland and Labrador Cruise Sector----- **109**
 Direct Expenditures ----- 109
 Direct Employment, Wage and Tax Impacts----- 114
 Total Employment, Wage and Tax Impacts----- 115

Prince Edward Island Cruise Sector----- **119**
 Direct Expenditures ----- 119
 Direct Employment, Wage and Tax Impacts----- 124
 Total Employment, Wage and Tax Impacts----- 125

I. Executive Summary

Business Research and Economic Advisors (BREA) was engaged by Cruise Lines International Association (CLIA) and its cruise destination partners in Canada to analyze the economic contribution of the international cruise industry to the Canadian national economy and the economies of selected provinces in 2019. The last time this study was undertaken was in 2017, for the 2016 cruise year. BREA, with the assistance of the CLIA member lines, collected more than 8,600 passenger and crew surveys at seven cruise destination ports¹ in Canada. Separately, for the 2016 study BREA also utilized passenger and crew spending data provided from studies conducted by the Vancouver Fraser Port Authority, and Tourisme Québec. The results of these surveys were used to estimate passenger and crew spending in these destinations. For the current 2019 study, BREA utilized new survey data provided by Vancouver Fraser Port Authority to estimate the Port of Vancouver. For the remainder of ports, BREA utilized the respective 2016 passenger and crew spending data and applied inflationary factors, by spending category. These new spending estimates were then applied to the 2019 passenger and crew counts to derive the 2019 passenger and crew spending totals. Cruise line spending was estimated using a combination of the port surveys, surveys returned by the major cruise lines, as well as estimates for the non-reporting cruise lines serving the Canadian cruise ports.

Background

The international cruise lines offer four primary cruise itineraries in the Canadian market as follows.

- Canada New England – These are primarily 3, 4 and 7-day roundtrip cruises which originate in northeastern U.S. ports. The 7-day itineraries usually make 2 port calls in Canada and 2 or 3 calls in New England ports.
- The St. Lawrence – These are typically 7 or 10-day one-way cruises that sail between Montreal or Québec City and a northeastern U.S. port. The northbound cruises originate in the U.S. and terminate in Montreal or Québec City while the southbound cruises originate in Montreal or Québec City and terminate in the United States. These cruises ordinarily make 2 or 3 port calls in the Province of Québec, including Montreal or Québec City, and 2 or 3 port calls at Atlantic Canada ports.
- Alaska – These are primarily 7 or 10-day cruises. There are two major Alaska itineraries. Roundtrip cruises that originate from Vancouver, Seattle or San Francisco, and one-way cruises that sail between Vancouver and an Alaska port, usually Seward or Whittier. The roundtrip cruises from a US homeport (Seattle or San Francisco) make at least one port call in Canada, primarily Victoria, and sometimes Prince Rupert, Nanaimo or Vancouver. There are also a variety of cruises at the beginning and end of the Alaska season (May-October)

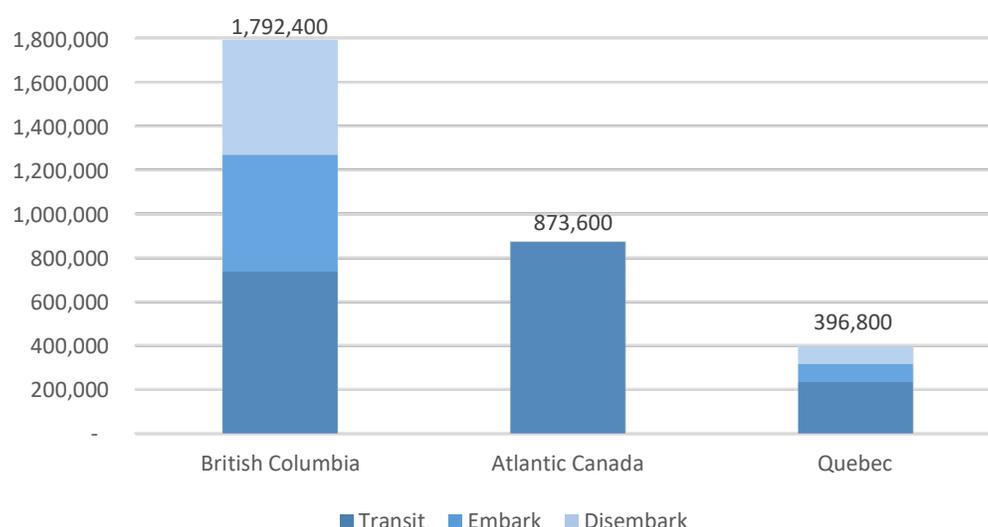
¹ The seven ports were: Charlottetown, PEI; Saint John, NB; St. John's and Corner Brook in Newfoundland and Labrador; Halifax and Sydney in Nova Scotia and Victoria, BC.

in which ships reposition between Pacific coast ports and other destinations (i.e. the Caribbean, Hawaii, Asia, and Mexico).

- Transatlantic – The transatlantic cruises are generally repositioning cruises from Europe to North America, primarily the Caribbean. These cruises will call at a number of Canadian and North America ports.

During 2019, approximately 1,400 cruise ship calls were made at Canadian cruise ports generating throughput of slightly more than 3.0 million passengers (embark, disembark, and transit) across the Canada and Alaska cruise season². On a regional basis, the British Columbia ports of Vancouver, Victoria, Nanaimo, Prince Rupert, accounted for 59 percent of the Canadian cruise passengers with nearly 1.8 million passengers (see **Figure ES-1**). Vancouver is primarily a port of embarkation and debarkation for Alaska cruises while the ports of Victoria, Prince Rupert and Nanaimo primarily serve as transit ports for Alaska cruises that originate at U.S. ports and Vancouver.

Figure ES-1 – Cruise Passenger Throughput in Canada by Region, 2019



Source: BREA survey of Canadian cruise ports - 2019.

The Atlantic Canada³ ports, led by Halifax, accounted for 29 percent of the passenger throughput for Canada in 2019 with just over 873,000 cruise passengers. These ports are primarily destinations on Canada New England cruise itineraries that originate in the northeastern United States, but calls are also made by expedition ships and ships cruising on transatlantic itineraries.

Finally, the St. Lawrence ports, including Montreal, Québec, Saguenay and several smaller ports, accounted for the remaining 13 percent of passenger throughput with nearly 397,000 cruise

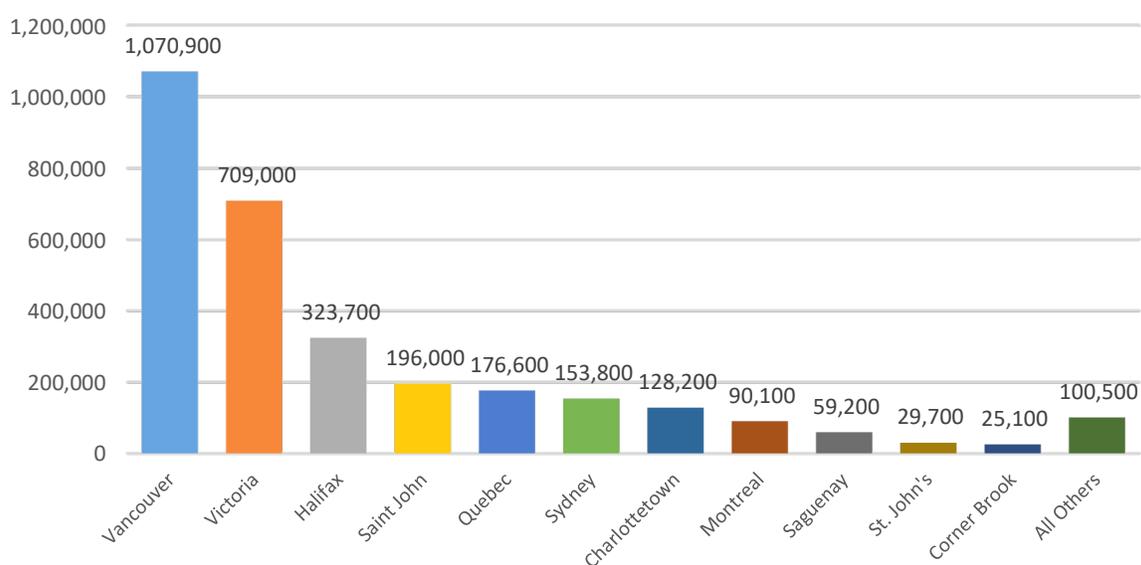
² The Canadian cruise season generally begins in May and ends in October. However, some ports will receive a few cruise ship calls in April and November. This is the sum of passenger embarkations, disembarkations and transit arrivals.

³ For the purposes of this study, the provinces of Atlantic Canada are: Nova Scotia, New Brunswick, Newfoundland and Labrador and Prince Edward Island.

passengers. Again, these are a mix of homeport and transit calls, with embarkations and disembarkations accounting for 41 percent of the cruise passenger arrivals in the province and transit passengers accounting for the remaining 59 percent.

As shown in **Figure ES-2**, Vancouver is the largest cruise port in Canada with nearly 1.1 million cruise passenger throughput which accounted for 35 percent of the passenger arrivals in Canada during 2019. Passenger embarkations and disembarkations accounted for 99 percent of all passengers in Vancouver. The second largest port, Victoria, is predominantly a transit port. The 709,000 cruise passenger arrivals accounted for 23 percent of all cruise passengers in Canada.

Figure ES-2 – Cruise Passenger Throughput in Canada by Port, 2019



Source: BREAsurvey of Canadian cruise ports - 2019.

Halifax, Saint John and Sydney are the three largest cruise ports in Atlantic Canada. Like Victoria they are predominantly transit ports.⁴ Combined, these three ports, with just over 673,000 passenger arrivals, accounted for 77 percent of the cruise passenger arrivals in Atlantic Canada. With nearly 324,000 transit passenger arrivals, Halifax accounted for 11 percent of the cruise passenger arrivals in Canada. Saint John accounted for another 6 percent with nearly 200,000 transit passenger arrivals and Sydney accounted for 5 percent with nearly 154,000 transit passenger arrivals.

The Port of Québec is the largest cruise port in the Province of Québec with nearly 180,000 passenger throughput, accounting for 6 percent of total cruise passengers in Canada. The Port of Québec has both homeport and transit calls, with transit passengers accounting for 56 percent of the passenger arrivals at the port. Montreal contributed another 90,100 passengers, 95 percent of which began or

⁴ Halifax and St. John's did report that they processed a total of 200 and 530 passenger embarkations and disembarkations, respectively during 2019.

terminated their cruise in Montreal. Combined, the two ports accounted for 67 percent of the 2019 cruise passenger throughput in the Province of Québec.

Charlottetown (128,200), Saguenay (59,200), St. John's (29,700) and Corner Brook (25,100) were the largest of the remaining ports. Combined these four ports accounted for 8 percent of total cruise passenger throughput in Canada. All other remaining ports accounted for about 3 percent of the cruise passengers' in Canada.

Summary of Economic Impacts

The economic benefits that accrue to the Canadian economy arise from five principal sources:

- spending by cruise passengers and crew for goods and services associated with cruise ship calls, such as shore excursions, food and beverages at restaurants and bars, retail goods, such as clothing, jewelry and souvenirs, but also including expenditures for travel to and from the ports of embarkation and disembarkation and pre- and post-cruise vacation spending;
- expenditures by the cruise lines for goods and services necessary for cruise operations, including food and beverages, fuel, vessel maintenance and repair, supplies, travel agent commissions and administrative costs such as advertising and promotion;
- shore-side staffing by the cruise lines for cruise, land transportation and shore excursion activities;
- spending by the cruise lines for port services at Canadian ports-of-embarkation and ports-of-call; and
- capital expenditures for equipment and facilities purchased from Canadian businesses.

As shown in **Table ES-1**, the resulting spending by cruise lines, passengers and crew associated with this cruise activity generated significant employment income and other economic benefits throughout Canada. These economic effects were felt throughout the Canadian economy, on both an industry and regional basis.

Table ES-1 – Summary of Cruise Industry Economic Impacts, 2019
Canadian Dollars in Millions⁵

	All Canada	British Columbia	Québec	Atlantic Canada	Rest of Canada
Cruise Passenger Arrivals*	3,062,800	1,792,400	396,800	873,600	N.A.
Direct Economic Impacts					
Cruise Industry Direct Spending	\$1,997.5	\$1,332.3	\$324.1	\$157.2	\$183.9
Employment	16,927	10,104	3,268	1,145	2,410
Wages and Salaries	\$670.6	\$443.3	\$116.3	\$45.8	65.3
Business and Income Taxes	\$225.4	\$138.4	\$31.1	\$13.8	42.2
Total Economic Impacts					
Total Output	\$4,277.9	\$2,717.8	\$711.8	\$347.2	500.2
Employment	30,257	17,379	5,095	2,085	5,698
Wages and Salaries	\$1,436.0	\$878.6	\$261.4	\$94.9	201.1
Business and Income Taxes	\$466.5	\$264.0	\$66.5	\$29.4	106.7

* Includes embarkation, disembarkation and transit passengers.

Note: Components may not sum to total due to rounding.

The major economic impacts of the international cruise industry during 2019 were as follows.

- Cruise ports across Canada reported that they received approximately 1,400 cruise calls and processed some 3 million cruise passengers during the 2019 cruise season, up 37 percent from 2016.
- These cruise calls in Canada generated almost \$2 billion in direct spending by the cruise lines and their passengers and crew, up about 35 percent from 2016. This spending generated an estimated 16,927 annualized full- and part-time jobs⁶ paying \$671 million in wages and salaries. (**Note:** all dollar denominated figures are in Canadian dollars).
- Including the indirect and induced economic impacts, the \$2 billion in direct cruise industry expenditures were responsible for the generation of nearly \$4.3 billion in total output in the Canadian economy. This, in turn, generated over 30,250 jobs paying a total of \$1.4 billion in wage income.
- The total output and income generated by the international cruise industry also generated nearly \$467 million in business and income taxes throughout Canada.
- British Columbia, benefiting from the Alaskan cruise traffic at the ports of Vancouver, Victoria, Nanaimo and Prince Rupert, was Canada's center of cruise activity. This province

⁵ All dollar denominated values are in Canadian dollars unless stated otherwise.

⁶ The economic impacts generated by the economic impact models are average annual impacts and include part-time (including seasonal) and full-time employees. Since these expenditures typically occur over a 6-month period of May through October, the peak employment impacts will actually be higher than those reported. It should be noted that some ports may receive a few calls in April and November. Because many of the seasonal workers will incur significant overtime, the six-month impacts, while larger than the average annual impacts, are not necessarily twice as large. Adjusting the employment figures for part-time employees, the direct employment impact is equivalent to approximately 12,140 full-time employees and the total employment impact is equal to approximately 22,650 full-time employees.

accounted for 57 percent of the total national impacts with \$2.7 billion in total economic benefit, resulting in nearly 17,400 jobs paying \$879 million in wage income.

- In eastern Canada, the ports of Québec and Atlantic Canada on a combined basis accounted for 24 percent of the cruise industry’s total impact on the overall Canadian economy. Nearly 7,200 jobs were generated throughout these regions, producing more than \$1.0 billion in output and \$356 million in wage income.
- The economic impacts of cruise tourism were not limited to just those provinces with cruise ports. The interior provinces were impacted as source markets for cruise passengers and goods and services purchased by the cruise lines. For example, the cruise lines purchased business services and advertising from firms located in Ontario, food and provisions from suppliers in Alberta, and pre- and post-cruise tours in the Yukon Territories. Combined, the remaining Canadian provinces benefited from cruise tourism with 5,700 jobs paying \$201 million in wage income and accounted for about 19 percent of the economic impacts throughout Canada.

Direct Expenditures

The direct expenditures generated by cruise tourism were analyzed for three segments: i) cruise lines; ii) cruise passengers and iii) crew members. The cruise lines purchased a variety of goods and services supporting their cruises, including food and beverages, hotel supplies, bunker fuels, and utilities while in port. In addition, cruise lines made payments for a variety of services in support of their global cruise operations, including travel agent commissions, expenditures for advertising and promotion and other professional and business services. Passengers purchased transportation to and from port cities, pre- and post-cruise vacations, shore excursions, souvenirs, and other retail goods while crew purchased a similar set of goods and services with a heavier concentration on retail goods. As noted above and shown in **Table ES-2**, the direct spending by cruise lines, passengers and crew in Canada totalled nearly \$2 billion during 2019.

Table ES-2 – Direct Cruise-Related Expenditures in Canada by Source, 2019
Millions of Dollars

Sources	Canada	Share	British Columbia	Québec	Atlantic Provinces	All Other Provinces
Cruise Lines	\$1,176.2	59%	\$750.9	\$173.8	\$78.2	\$173.2
Passengers	\$779.2	39%	\$553.8	\$147.1	\$67.6	\$10.7
Crew	\$42.2	2%	\$27.6	\$3.2	\$11.4	\$0.0
Total	\$1,997.5		\$1,332.3	\$324.1	\$157.2	\$183.9
Share of Total			67%	16%	8%	9%

Note: Components may not sum to totals due to rounding.

The major characteristics of this direct spending were as follows.

- Based upon 2019 data collected from the CLIA member lines, BREA has estimated that the international cruise lines spent nearly \$1.2 billion with Canadian businesses during 2019. This spending by the cruise lines also accounted for the highest share (59%) of direct cruise industry spending throughout Canada.
- Passengers spent an estimated \$779.2 million in Canada during 2019, accounting for 39 percent of direct cruise industry spending, while crew spent an estimated \$42.2 million at Canadian destinations, or 2 percent of direct spending.
- British Columbia, with the highest level of cruise activity among the provinces of Canada, accounted for 67 percent of direct expenditures with \$1.3 billion in total cruise-related expenditures. Passenger and crew expenditures accounted for 44 percent of direct expenditures in British Columbia.
- Direct spending in the Province of Québec totalled \$324.1 million during 2019. Spending by passengers and crew accounted for about 46 percent of total cruise industry expenditures in the province.
- Cruise lines, passengers and crew spent \$157.2 million in the Atlantic Canada provinces during 2019. Because Atlantic Canada's ports are primarily transit ports that are dependent upon onshore spending by passengers and crew, their spending accounted for 50 percent of direct spending in the region.
- With passenger and crew expenditures limited to source passengers, the cruise lines' expenditures accounted for 94 percent of the direct expenditures in the remaining provinces.

Expenditures by Cruise Lines

As shown in **Table ES-3**, direct spending by the cruise lines covered a broad range of expense categories. The five largest of these categories accounted for half of the total. Travel Agents was the largest category, with cruise lines reporting that they spent \$169 million with Canadian travel agents in 2019. This represents 14 percent of the total cruise line expenditures. Travel agent commissions included payments for the sale of cruises with itineraries within and outside of the Canada market. The second largest category of cruise line expenditures in 2019 was for Professional & Business Services, which accounted for 11 percent of total expenditures with Canadian businesses. The \$130.8 million in direct spending for these services included expenditures for legal services, insurance, environmental and engineering consultants, trade associations and computer and software consulting services to name a few. Fuel once again represented the third highest expenditure, with a reported \$122 million being spent with Canadian fuel suppliers during 2019.

Cruise lines also reported that \$83.7 million, or 7 percent of the total was spent for advertising and promotion. Rounding out the top 5 spending categories was expenditures for machinery and equipment. This includes purchases for such items as navigation and propulsion equipment; galley, HVAC and sanitation equipment; and onboard computer and communication equipment and totalled \$81.5 million.

Table ES-3 – Cruise Lines’ Expenditures in Canada by Expense Category, 2019
Millions of Dollars

Category	Spending	Share
Travel Agents	\$168.9	14%
Business & Professional Services	\$130.8	11%
Fuel	\$122.0	10%
Advertising & Promotion	\$83.7	7%
Machinery & Equipment	\$81.5	7%
Vessel Maintenance & Dry-dock Fees	\$77.1	7%
Wages & Salaries	\$75.6	6%
Food & Beverages	\$74.2	6%
Port Charges & Fees	\$74.0	6%
Hotel Supplies	\$60.2	5%
Other Expenses	\$228.2	19%
Total	\$1,176.2	

Note: Components may not sum to total due to rounding.

Expenditures by Passengers and Crew

As noted previously, just over 3 million passengers arrived at Canada cruise ports as embarking, disembarking and transit passengers during 2019. Of these over 2.5 million individual passengers made an onshore visit while in port. There were also an estimated 1.2 million crew members onboard these ships. BREA has estimated that approximately 39 percent, or 446,500 crew members, disembarked and made an onshore visit while in port.⁷ Thus, during 2019, cruise calls made by the international cruise lines generated a total of nearly 3.0 million passenger and crew onshore visits across all Canadian cruise ports (see **Table ES-4**).

Table ES-4 – Passenger and Crew Expenditures⁸ in Canada by Category, 2019
Dollar Denominated Values are in Millions

ca-4	SUM	British Columbia	Québec	Atlantic Canada
Passenger Expenditures				
Passenger Throughput	3,062,800	1,792,400	396,800	873,600
Passenger Onshore Visits	2,545,600	1,385,900	382,200	777,500
Lodging	\$191.4	\$115.3	\$76.0	**
Tours and Transportation	\$169.6	\$122.0	\$12.5	\$35.1
Food and Beverages	\$102.9	\$78.6	\$15.0	\$9.3
Other Retail	\$102.3	\$66.5	\$13.6	\$22.2
Total Passenger Spending	\$566.2	\$382.4	\$117.1	\$66.7
Avg. per Passenger Visit	\$222.41	\$275.91	\$306.42	\$85.72
Crew Expenditures				
Crew Arrivals	1,173,200	665,400	145,400	362,400
Crew Onshore Visits	446,500	248,400	56,700	141,400
Lodging	\$0.9	**	\$0.9	**
Tours and Transportation	\$2.2	\$1.2	\$0.2	\$0.7
Food and Beverages	\$12.3	\$7.1	\$1.0	\$4.1
Other Retail	\$26.9	\$19.2	\$11	\$6.5
Total Crew Spending	\$42.2	\$27.6	\$3.2	\$11.4
Avg. per Crew Visit	\$94.54	\$111.03	\$56.05	\$81.12

Note: Components may not sum to total due to rounding.

Note: The passenger spending in the table above does not include airfare or travel related cruise insurance.

** Less than \$50,000

⁷ Since a cruise ship will make multiple port calls on any cruise itinerary, the same passengers and crew will arrive at several ports. All embarking and disembarking passengers make an onshore visit by definition whether or not they make any purchases. Between roughly 70% and 95% of transit passengers will disembark and visit the port city. This percentage will vary by port and will be influenced by the time and length of the call and tour and purchase options. Fewer crew, approximately 38%, will disembark during both transit and turnaround calls.

⁸ These passenger and crew spending estimates represent those expenditures that were received by local businesses and therefore impact the local economy. Thus, these figures include an adjustment for shore excursions purchased through the cruise lines. The vast majority of cruise passengers, 80%, purchased their shore excursions directly from the cruise lines. This purchase price includes a mark-up by the cruise lines which has been estimated from data obtained from the cruise lines at about 30% and is retained by the cruise lines. We have netted this percentage from our calculations to more accurately reflect the local economic impact. If this adjustment was not made the economic impacts generated by passenger and crew expenditures would be overstated.

Combined, across the three regions, passengers and crew spent \$608 million during their visits.⁹ On a regional basis, total passenger and crew onshore spending during the 2019 cruise season ranged from \$410 million in British Columbia to \$120 million in the Province of Québec¹⁰ and to \$78 million in the Atlantic provinces. The major attributes of passenger and crew onshore spending is as follows.

- Across all ports, cruise calls in Canada generated just over 2.5 million passenger onshore visits and 446,500 crew onshore visits. The average spend per passenger onshore visit was \$222 and generated \$566 million in expenditures for lodging, food and beverages, shore excursions and retail goods. Crew spent an average of nearly \$95 per visit and generated \$42.2 million in onshore spending, primarily for retail goods and food & beverages.
- The ports of Québec had the highest average expenditures for passengers which were approximately \$306 per onshore visit, while British Columbia's ports had the highest average spend per crew visit at \$111. In terms of total expenditures, British Columbia led all regions with \$410 million, 67 percent of total passenger and crew onshore expenditures throughout Canada.
- Passenger spending was concentrated in the purchase of lodging and tours & local transportation. Combined, these two categories totalled \$361 million and accounted for 64 percent of total passenger expenditures. On a regional basis, British Columbia accounted for 66 percent of these lodging and tour expenditures due to the concentration of homeport activity in Vancouver while the ports of the province of Québec accounted for another 25 percent.
- The nearly 1.4 million passengers visiting the BC ports spent a total of \$382 million, for an average of \$276 per onshore passenger visit. The average expenditure rates ranged from \$398 per visit for turnaround calls in Vancouver to \$74 per visit for transit calls in the smaller ports of British Columbia. The 248,400 crew that visited British Columbia ports spent a total of \$27.6 million for an average of \$111 per crew onshore visit.
- In the Province of Québec with homeports in Montreal and Québec City, the nearly 382,200 cruise passenger onshore visits generated \$117.1 million in total expenditures during the 2019 cruise season for an average of nearly \$276 per passenger onshore visit. Crew spent an average of nearly \$56 per visit. With 50,700 crew visits, the crew spent a total of \$3.2 million across all ports in the province.
- Finally, 777,500 cruise passengers disembarked their ships and visited the cruise destinations of Atlantic Canada, spending an average of about \$86 per onshore visit. These visits generated total expenditures of \$66.7 million. The average passenger expenditure ranged from \$104 in Charlottetown to \$38 in the smaller ports of Atlantic Canada. There were approximately 141,000 crew onshore visits at the Atlantic Canada ports during 2019. These

⁹ Excludes approximately \$213 million in passenger spending for transportation to and from ports cities, travel insurance and customs fees and \$10.7 million in passenger spend

¹⁰ Adjusted for inflation, Tourisme Québec reported that crew onboard cruise ships visiting ports in the province spent an average of \$15.15 on lodging. This is discussed in more detail in the detailed analysis for Québec.

visits generated total crew spending of \$11.4 million in the region, for an average of \$81 per onshore visit.

Total Economic Impacts by Industry

The total economic impacts of the cruise industry are the sum of the direct impacts described above and the indirect and induced impacts. The indirect and induced economic benefits derived from the cruise industry result in part from the additional spending by the suppliers to the cruise industry and their employees. As shown in **Table ES-5**, the nearly \$2.0 billion in direct cruise industry expenditures generated \$4.3 billion in total (direct plus indirect and induced) output, just over 30,000 jobs¹¹ and \$1.4 billion in income. In addition, the cruise-related expenditures generated an estimated \$138 million in business taxes and \$322 million in income taxes.

Table ES-5 – Total Economic Impacts in Canada by Industry, 2019
Dollar Denominated Values are in Millions

Sectors	Output	Jobs	Income
Goods Producing Sector	\$1,856.6	6,740	\$375.6
Natural Resources, Utilities & Construction.	\$394.3	1,426	\$82.2
Manufacturing	\$1,462.5	5,314	\$293.5
Durable Goods	\$690.1	2,992	\$168.1
Nondurable Goods	\$772.4	2,322	\$125.2
Service Producing Sector	\$2,282.4	23,517	\$1,060.5
Wholesale & Retail Trade	\$96.9	1,505	\$49.9
Transportation & Warehousing	\$711.0	5,420	\$279.0
Financial Services	\$273.4	2,100	\$137.0
Professional & Technical Services	\$387.1	4,174	\$295.9
Information, Culture and Recreation	\$253.3	873	\$40.8
Accommodation & Food Services	\$403.7	6,348	\$127.7
Other Services & Government	\$156.9	3,097	\$130.5
Spending by Sector	\$4,139.2		
Business Taxes (Less Subsidies)	\$138.1		
Total Impacts	\$4,276.9	30,257	\$1,436.0
Income Taxes			\$321.5

*Includes wages and salaries of Canadian employees of the cruise lines.

Note: Components may not sum to total due to rounding.

Some of the major impacts by industry were as follows.

- The Goods Producing Sector accounted for 43 percent of the total output impacts but due to the relatively high productivity of this sector only 22 percent of the total jobs and 26 percent of the income impacts.

¹¹ This is equivalent to about 22,650 jobs on a full-time basis.

- The Service Producing Sector accounted for 53 percent of the total output impacts, 78 percent of the total jobs and 74 percent of the income impacts. The Transportation & Warehousing industry was the dominant industry, accounting for about 31 percent of the total economic impacts in the Service Producing Sector. This is due to the magnitude of the direct economic impacts at the Canadian cruise ports as well as the strong linkages between the transportation sector and all other sectors of the economy.
- The next largest industry was the Accommodation & Food Services industries, the cruise industry generated \$403.7 million in total output, an estimated 6,348 jobs and \$127.7 million in income. These impacts were generated primarily by passenger and crew spending. Due to the relatively low productivity and wages within these industries, they accounted for 12 percent of the total income and 18 percent of the total output in the Service Producing Sector, but 27 percent of the total jobs.
- The Professional & Technical Services industry accounted for approximately 17 percent of total output and 18 percent of the total jobs generated in the Service Producing Sector, however, due to the relatively high wages in this industry, it accounted for 28 percent of the total income impacts in the sector.

Passenger Attributes

As noted above, in addition to the 2019 passenger surveys conducted by the Vancouver-Fraser Port Authority, and the 2016 study conducted by Tourisme Québec, BREB with the assistance of the CLIA member lines conducted passenger and crew surveys throughout the 2016 cruise season at seven cruise ports¹² in Canada. The results of these surveys were used to estimate passenger satisfaction and passenger and crew spending at these ports. A total of 6,967 transit passenger surveys were completed and returned for tabulation. While the characteristics of passenger visits varied by destination, **Table ES-6** shows the major attributes of passenger visits across all destinations as derived from by the passenger surveys. For the purposes of this 2019 study, no passenger satisfaction data will be reported.

The major attributes of passenger visits were:

- Of the passengers who responded to the survey, 98 percent went ashore; and, of these 67 percent made at least one purchase other than a shore excursion while ashore.
- Just over half (52%) of the passengers that went ashore reported purchasing a shore excursion. Eighty percent (80%) of passengers who purchased a tour did so through the cruise lines and 11 percent purchased their shore excursion directly from a local tour operator. The remaining passengers reported having purchased their tour through a travel agent.
- The typical cruise party consisted of two passengers.

¹² The seven ports were: Charlottetown, PEI, Saint John, NB; St. John's and Corner Brook in Newfoundland and Labrador; Halifax and Sydney in Nova Scotia and Victoria, BC.

Table ES-6 – Major Attributes of Transit Passenger Visits – All Destinations
(BREA Administered Surveys)

Segments	Number	Percent
Total Respondents	6,967	
Number Ashore	6,832	98%
Number Making Onshore Purchases	4,668	67%
Average Size of Expenditure Party (Persons)	2.01	
Purchased a Shore Excursion (Tour)	3,553	52%
Purchased Onshore Tour from:		
Cruise Line	2,842	80%
Local Tour Operator	391	11%
Travel Agent	320	9%
Toured on Own/Did not Tour	3,279	

The demographic data extracted from the passenger surveys at Victoria and several Atlantic Canada ports indicated that U.S. residents accounted for 72 percent of the passengers visiting the seven Canadian cruise ports and that UK and Canadian residents each accounted for 11 percent of passenger visits, respectively. The average age of the respondents was 64 years with approximately two-thirds of the respondents being 65 years of age or older. Passengers that cruised to Canada had an average household income of \$110,000 with 23 percent of the passengers reporting household income over \$150,000.

Figure ES-3 – Passenger Age Cohorts Seven Canadian Cruise Ports

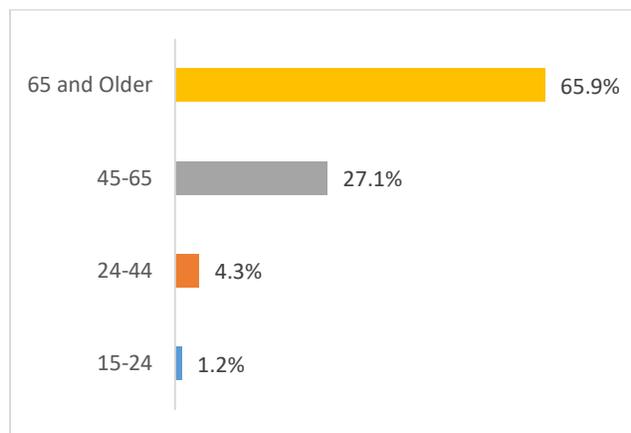
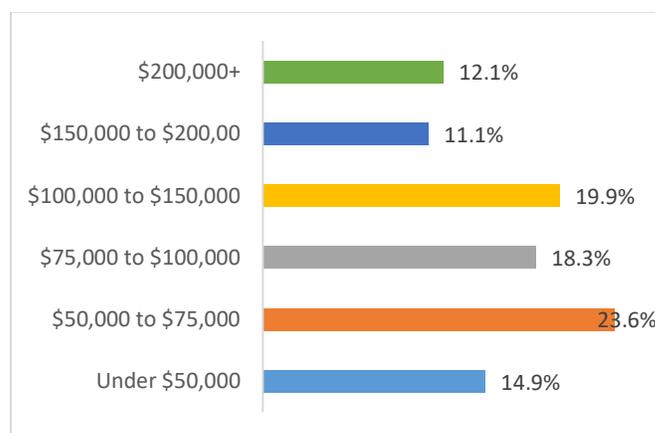


Figure ES-4 – Passenger Household Income Seven Canadian Cruise Ports



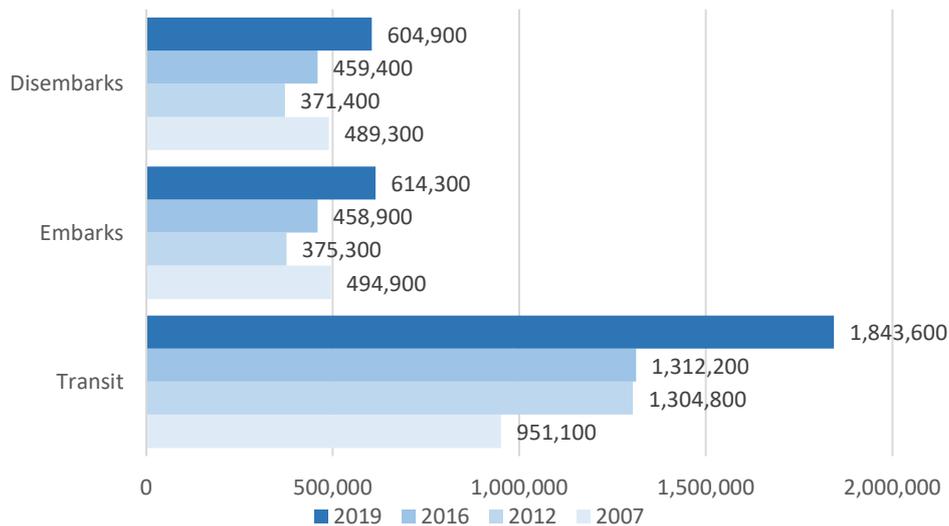
II. Introduction

As part of the analysis of the international cruise industry’s impact on the Canadian economy, BREa collected financial data on cruise operations in Canada from CLIA member lines, data on passenger arrivals and port fees from cruise ports throughout Canada, and data on passenger and crew spending from surveys conducted onboard visiting cruise ships as well as passenger and crew surveys by the Vancouver Fraser Port Authority and Tourisme Québec.

Background

The international cruise industry is an important and dynamic component of the Canadian tourism and maritime industries. Data collected from the Canada cruise ports showed that there were approximately 1,400 cruise ship calls throughout Canada during the 2019 cruise season that, in turn, generated an estimated throughput of just over 3 million passengers at Canadian ports in Atlantic Canada, Québec and British Columbia.¹³ This represents a 37 percent increase in cruise passenger arrivals from 2016 and a 49 percent increase since 2012. As indicated in **Figure IN-1**, the embark and disembark traffic during 2019 was about 33 percent higher than it was in 2016 and about 63 percent higher than it was in 2012.

Figure IN-1 –Cruise Passenger Arrivals in Canada by Type



Source: BREa survey of Canadian cruise ports - 2019.

The number of transit passenger arrivals at Canadian ports also grew considerably (40%) over 2016. This is after 2016 experienced virtually no growth over 2012. The increase in transit passengers is attributable to strong transit growth at most major ports throughout Atlantic Canada, British Columbia, and Québec.

Transit passengers accounted for 60 percent of total passenger arrivals in 2019, unchanged from 2016. These passengers arrived at Canadian ports primarily on Alaska and

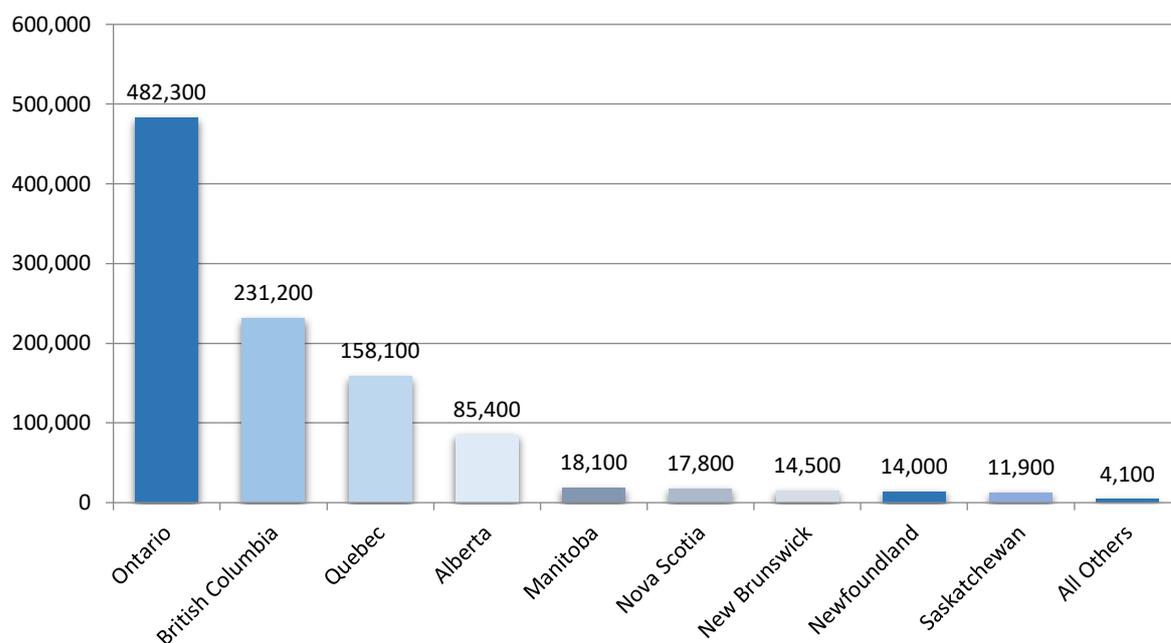
¹³ The Canadian cruise season generally begins in May and ends in October. However, some ports will receive a few cruise ship calls in April and November. This is the sum of passenger embarkations, disembarkations and transit arrivals.

Canada New England itineraries. In addition, expedition ships and ships sailing on transatlantic and global itineraries also call at Canadian ports. As indicated in Figure IN-1, the growth in transit passenger arrivals shows the importance of transit passenger arrivals, suggests the North American cruise industry continues to increase its deployment in the Alaska and Canada New England destination markets.

Another 20 percent of the cruise passenger arrivals were embarkations at Canadian ports in 2019, unchanged from 21 percent in 2016. Of these, approximately 87 percent boarded Alaska-bound cruises from the Port of Vancouver. The remaining 13 percent predominantly embarked on their cruises from the Ports of Montreal and Québec. Finally, 20 percent of the passenger traffic was cruise disembarkations. Again, most passengers (86%) ended their cruises in Vancouver.¹⁴

In addition to the cruise passenger arrivals reported above, just over 1 million Canadian residents purchased cruises in 2019. This is based upon 2019 data provided by CLIA. This was a 46 percent increase from the partial year estimate of Canadian residents that purchased cruises in 2016. Some of these residents embarked on their cruises in Canada while others boarded their cruises in the United States and other countries. As shown in **Figure IN-2**, four provinces (Ontario, British Columbia, Québec and Alberta) accounted for 92 percent of the Canadian residents that cruised in 2019.

Figure IN-2 –Canadian Residents Purchasing Cruises by Province, 2019



Source: Cruise Lines International Association

¹⁴ It should be noted that there are a significant number of open-jaw cruises in the Canadian cruise market. These consist of cruises where passengers may embark at a Canadian port and then end their cruise at a foreign port, for example Vancouver to Seward, AK. Another set of passengers then board at the foreign port and end their cruise in Canada. Consequently, about half of the passengers that embark on their cruises actually disembark at a foreign port, primarily Seward, while half of those passengers that disembark at a Canadian port began their cruise at a foreign port. The remaining passengers make round trip cruises, primarily from Vancouver.

In addition, cruise lines made significant expenditures in Canada, both within the provinces highlighted in this report as well as other provinces, to support their cruise operations. Cruise lines pay a variety of fees to each of the ports, purchase bunker fuel for their ships and food and beverages and other goods to support their onboard hotel operations and pay commissions to travel agents for cruises purchased in Canada to name just a few components of cruise line expenditures.

Project Objectives

Given the volume of cruise activity in Canada, that passengers and crew purchased goods and services at Canada's port cities, and that the cruise lines purchased goods and services from vendors throughout Canada, Business Research and Economic Advisors (BREA) was engaged by CLIA and its Canadian cruise destination partners to estimate the direct, indirect and induced economic impacts of the cruise industry on the Canadian economy in 2019 at a national and provincial level. With that primary objective, the economic impacts were estimated for major industrial and business sectors of the Canadian economy. Similar estimates were also developed for British Columbia, Québec and selected provinces of Atlantic Canada. To accomplish this, data had to be collected and estimated for various components or aspects of the industry. These included:

- direct expenditures by the cruise lines for goods and services produced or provided by Canadian businesses;
- passenger and crew arrivals and visits at Canadian port cities;
- passenger and crew expenditures for goods and services in Canada; and
- economic data by industry and province for such indicators as output, employment, wages and salaries and taxes.

Methodology

The economic impact analysis required the collection of a broad range of data that necessitated:

- surveying the lines that cruise to and from Canadian ports,
- gathering data on port fees and passenger and crew visits from the ports;
- conducting passenger and crew expenditures surveys for most Canada ports;
- estimating additional data on passenger and crew spending for the remaining ports; and
- collecting economic data at the industry and provincial level from Statistics Canada.

The collection methods and use of the data are described in the following sections.

Survey of Cruise Lines

A major component of the cruise industry's economic impact in Canada is generated by the expenditures made by the cruise lines with Canadian businesses and ports. To estimate these expenditures, the CLIA's member cruise lines were asked to provide data on their cruise-related expenditures in Canada. Data were requested for a range of operating and administrative expense categories as shown in **Table IN-1**. The returned surveys represented 13 cruise lines.¹⁵ Combined, these cruise lines reported spending nearly \$1 billion with Canadian businesses during 2019.

¹⁵ These cruise lines were: AIDA Cruises, Carnival Cruise Lines, Costa Cruises, Crystal Cruises, Carnival UK, Disney Cruise Line., Holland American Line, Princess Cruises, Royal Caribbean Group (Royal Caribbean International, Azamara, Celebrity Cruises, and Silversea), and Seabourn Cruise Lines.

Table IN-1 – Cruise Line Operating and Administrative Expense Categories

Operating Expenses	Administrative Expenses
Food and Beverages	Advertising and Marketing
Bunker Fuels	Accounting Services
Port Charges and Fees	Legal Services
On-board Entertainment	Computer Consulting Services
Vessel Maintenance and Repair	Other Professional Services
Passenger Airfares (Paid through Lines)	Telecommunications
Vessel Insurance	Travel and Entertainment
Canadian Crew Wages and Salaries	Rent
Other Operating Expenses	Utilities
Passenger Travel Insurance	Canadian Residents Shore-side Wages & Salaries
Other Operating Expenses	Other Administrative Expenses

As shown in **Table IN-2**, direct spending by the cruise lines covered a broad range of expense categories. The five largest of these categories accounted for half of the total. Travel Agents was the largest category, with cruise lines reporting that they spent \$169 million with Canadian travel agents in 2019. This represents 14 percent of the total cruise line expenditures. Travel agent commissions included payments for the sale of cruises with itineraries within and outside of the Canada market. The second largest category of cruise line expenditures in 2019 was for Business & Professional Services, which accounted for 11 percent of total expenditures with Canadian businesses. The \$130.7 million in direct spending for these services included expenditures for legal services, insurance, environmental and engineering consultants, trade associations and computer and software consulting services to name a few. Fuel once again represented the third highest expenditure, with a reported \$122.0 million being spent with Canadian fuel suppliers during 2019. Cruise lines also reported that \$83.7 million, or 7 percent of the total was spent for advertising and promotion. Rounding out the top 5 spending categories was expenditures for machinery and equipment. This includes purchases for such items as navigation and propulsion equipment; galley, HVAC and sanitation equipment; and onboard computer and communication equipment and totalled \$81.5 million.

Table IN-2 – Cruise Lines’ Expenditures by Major Expense Category, 2019
Millions of Dollars

Category	Spending	Share
Travel Agents	\$168.9	14%
Business & Professional Services	\$130.7	11%
Fuel	\$122.0	10%
Advertising & Promotion	\$83.7	7%
Machinery & Equipment	\$81.5	7%
Vessel Maintenance & Dry-dock Fees	\$77.1	7%
Wages & Salaries	\$75.6	6%
Food & Beverages	\$74.2	6%
Port Charges & Fees	\$74.0	6%
Hotel Supplies	\$60.2	5%
Other Expenses	\$228.2	19%
Total	\$1,176.2	

Cruise lines also spent \$74.2 million with Canadian vendors for food and beverages consumed onboard cruise ships. Port charges and fees across the provinces amounted to \$74.0 million. This includes fees paid to the ports for wharfage, dockage, stevedores, etc. Purchases of hotel supplies, which include linens, tableware, cleaning supplies and other soft and hard goods used in cruise ship hotel operations, totalled \$60.2 million. The remaining \$228.2 million was spent on a broad range of goods and services including wages and salaries of staff based in Canada, sanitation and utility services, security services and vessel and employee insurance to name a few.

Table IN-3 – Industries Impacted by Cruise Line Expenditures

Nondurable Goods - Mfg.	Durable Goods - Mfg.	Non-Manufacturing
Beverages	Electrical & Comm. Equip.	Accommodation & Food Svcs.
Chemicals & Pharmaceuticals	Fabricated Metal Products	Advertising
Food Processing	Furniture & Fixtures	Business & Computer Svcs.
Hosiery & Apparel	Machinery & Equipment	Communications Svcs.
Petroleum & Coal Products	Nonmetallic Mineral Products	Education
Printing & Publishing	Transportation Equipment	Health & Social Services
Textiles	Other Manufacturing	Nonresidential Construction
		Retail Trade
		Transportation & Warehousing
		Wholesale Trade
		Other Utilities
		Other Services

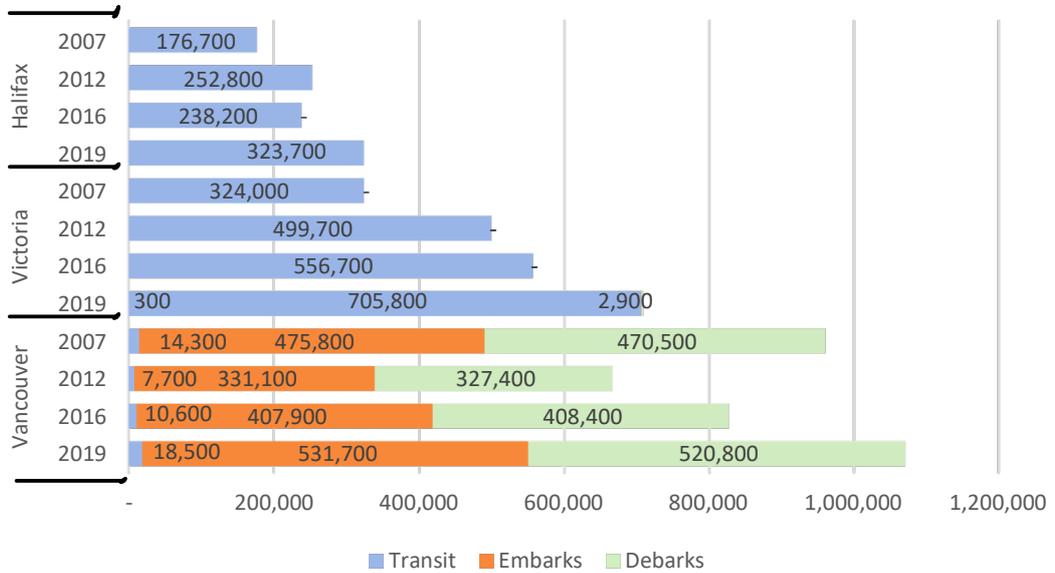
In addition to these aggregate data, and to support the industry level analysis, a separate sample of expenditures by category, vendor and province had been previously obtained from six cruise lines: Carnival Cruise Lines, Royal Caribbean International, Celebrity Cruises, Holland America Line, Norwegian Cruise Line and Princess Cruises. These six cruise lines accounted for more than 85 percent of the industry’s non-wage operating and administrative expenses in North America. These data were then aggregated by industry group and province and used to estimate total cruise industry expenditures by industry. Using this sample, the individual categories of operating and administrative expenses were allocated to the 26 industries shown in **Table IN-3**. These industry expenditures were then allocated to each of the provinces based upon the location of the vendors as reported by the cruise lines, number of cruise ship calls and the number of passenger and crew visits as appropriate.

Passenger and Crew Visits and Expenditures

Passenger and crew expenditures were estimated from 2019 data on passenger and crew arrivals and survey-based data on passenger and crew expenditures. These data were gathered from surveys sent to all the ports in 2020, passenger and crew surveys conducted in 2016 by BREA onboard cruise ships following their calls to 7 Canadian ports, 2019 passenger and crew spending studies conducted by the Vancouver Fraser Port Authority, and 2016 surveys conducted by Tourisme Québec and passenger and crew surveys conducted in 2016 by BREA onboard cruise ships following their calls to 7 Canadian ports. First, a survey requesting data on passenger statistics and cruise-related revenue and expenses was sent to member ports of two cruise associations in Canada, Cruise the St. Lawrence and Atlantic Canada Cruise Association and to four ports in British Columbia.

Responses were received from nineteen ports.¹⁶ All of the ports provided data on passenger arrivals and additional data on cruise-related revenues and expenses for 2019. Data on passenger and crew arrivals for some smaller cruise ports were obtained from their respective cruise associations, or from additional sources.

**Figure IN-3 –Cruise Passenger Arrivals in Canada by Type and Port
Ports with more than 225,000 Passenger Arrivals**



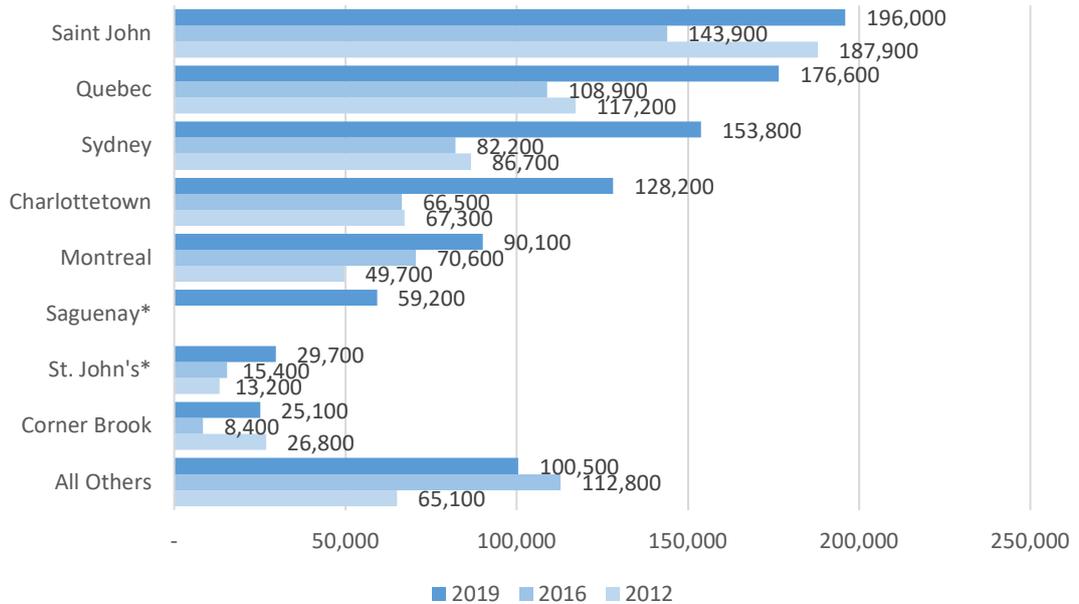
Source: BREA survey of Canadian cruise ports - 2019.

As indicated in the **Figure IN-3**, when looking at the largest cruise ports in Canada, those with 225,000 or more passenger arrivals, shows Halifax with a 36 percent increase in transit passenger arrivals from 2016. This is after a down year in 2016, There was an 83 percent increase in passenger arrivals since 2007. Cruise passenger arrivals in Victoria have steadily increased. Since 2007 passenger arrivals in Victoria have more than doubled from 324,000 to 709,000 in 2019. Vancouver had a total passenger throughput of over 1 million passengers during 2019, an increase of 30 percent from 2016, but only 11 percent over 2007, the previous high for Vancouver.

Combined, these three ports accounted for about 70 percent of all passenger arrivals across Canada in 2019.

¹⁶ These ports were: Vancouver, Victoria, Prince Rupert and Nanaimo in British Columbia; Montréal, Québec, and Saguenay, Havre St. Pierre, Gaspé, Sept-Îles, Baie-Comeau, Trois-Rivières and Iles de la Madeleine in Québec; and Halifax, Sydney, Corner Brook, Charlottetown, Saint John and St. John's in Atlantic Canada.

**Figure IN-4 – Total Cruise Passenger Traffic in Canada
Ports with less than 225,000 Passenger Arrivals**



Source: BREa survey of Canadian cruise ports - 2019.

***NOTE:** Details for Saguenay and St. John’s are reported for the first time in this study. Totals for all others have been reduced for the respective reporting periods.

The remaining Canadian cruise ports accounted for about 31 percent of the passenger arrivals in Canada during 2019 (see **Figure IN-4**). The vast majority of these were transit visits. Only Montreal and Québec had a significant number of passenger embarkations and debarkations. During 2019, passenger embarkations and debarkations combined to account for 97 percent of the cruise passenger arrivals in Montreal and 44 percent of cruise passenger arrivals in Québec. As also indicated in Figure IN-4, most of these ports have experienced a significant increase in cruise passenger arrivals between 2016 and 2019. Among the fastest growing ports are Corner Brook, Charlottetown and Sydney in Atlantic Canada and Québec City in Québec.

BREA, with the cooperation and assistance of the CLIA member cruise lines, previously conducted a series of passenger and crew surveys onboard cruise ships following their calls at seven Canadian cruise ports.¹⁷ The passenger and crew surveys were designed to collect data for onshore spending and visit satisfaction by both passengers and crew. While the crew survey was slightly shorter than the passenger survey, both surveys were designed to collect the following information:

- hours spent ashore;
- expenditures by category, including shore tours, food & beverages, clothing, etc.;
- visit satisfaction, including shore tour, safety, prices, shopping, etc.;

¹⁷ The seven ports were: Charlottetown, PEI, Saint John, NB; Corner Brook and St. John’s, NL; Halifax and Sydney in Nova Scotia and Victoria in British Columbia.

- likelihood of recommending and returning for a land-based vacation; and
- demographic characteristics, including country of residence, age group, income, etc.

As mentioned previously, this current report does not present passenger satisfaction figures.

The survey schedule was designed to generate a representative sample of cruise passengers by cruise line at each destination. Thus, each member cruise line was scheduled to have its passengers and crew surveyed at least once at each destination at which it had a port call during the survey period. The survey period commenced in May and concluded at the end of October of 2016.

On any given cruise itinerary, passengers and crew were surveyed following a single call. The surveys were placed in passenger cabins and crew living quarters during the day of a designated call. Passengers and crew, then, first viewed the survey upon their return from their onshore visit. They were asked to complete the survey in their quarters and to return the survey to a designated crew member. At the conclusion of the cruise, the surveys were returned to BREA for tabulation.

Over 70 survey distributions were conducted. A single survey distribution is counted as a distribution on a given day and on a single ship at a designated destination. Thus, the distribution of surveys on July 28 on the Celebrity Solstice following its call at Victoria is considered a single distribution. On any given day surveys might have been conducted aboard multiple ships at different destinations.

As indicated in **Table IN-4**, a total of 6,967 passenger and 1,658 crew surveys were completed and collected over the six-month period for the seven destinations. Given that the average size of the surveyed cruise parties was 2.0 passengers, the 6,967 completed passenger surveys represented 13,934 passengers.

For these ports, and the other ports of Atlantic Canada, the 2019 estimates of passenger and crew spending were based upon these 2016 data, with each spend category being individually adjusted for inflation. As indicated in the table, BREA did not survey passengers or crew following calls at Vancouver, Prince Rupert, Nanaimo and the Québec ports. Tourisme Québec conducted passenger and crew surveys for the Québec ports during the summer of 2016, the results of which were provided to BREA. BREA utilized these spend data and once again adjusted each individual spend category for inflation. In the case of Nanaimo and Prince Rupert surveys were not conducted due to the limited number of cruise calls. Estimates of passenger and crew spending for these two ports in 2019 were based upon the results for Victoria during 2016 which were then adjusted for inflation and to reflect the relative difference in average passenger and crew spending in the 2016 study. Finally, Tourism BC conducted turnaround and transit passenger surveys in Vancouver during the 2019 cruise season. The results of these surveys were used to estimate passenger expenditures in 2019.

Table IN-4 – Completed Passenger and Crew Surveys by Destination 2016 Study
(BREA Administered Surveys)

Destinations	Passengers	Crew
Charlottetown	1,173	117
Corner Brook	578	94
Halifax	1,344	147
Saint John	669	170
St. John's	989	156
Sydney	941	47
Victoria	1,273	927
All Destinations	6,967	1,658

Because the crew survey response rates were lower than anticipated among the individual ports of Québec, a single estimate of average crew spending for all Québec ports was utilized.

The expenditure data collected from the passenger and crew surveys provided several pieces of data that were critical for the economic impact analysis. First, average per passenger and per crew spending figures for the 10 expenditure categories shown in **Table IN-5** were derived from the surveys.

Table IN-5 – Passenger and Crew Expenditure Categories
(BREA Administered Surveys)

Expenditure Categories
Shore Excursions
F&B at Restaurants & Bars
Clothing
Local Crafts & Souvenirs
Taxis/Ground Transportation
Other Purchases
Watches & Jewelry
Retail Purchases of Liquor
Entertainment/Night Clubs
Telephone & Internet

In addition, the expenditure component of the survey generated data on passenger expenditure for shore tours by distribution channel, i.e., onboard cruise ship, onshore from local tour operator, travel agent and the Internet. For purposes of the economic impact analysis, it is the net payment to local tour operators that generates the local economic impacts. Thus, the share of the total value of tours purchased onboard cruise ships or from travel agents that was paid to local tour operators had to be determined. This share was estimated by port and averaged about 75 percent across all ports.

Passengers were asked whether they purchased their shore excursion from the cruise line, local tour operator, or travel agent. As indicated in **Table IN-6**, the vast majority of cruise passengers, 75 percent, purchased shore excursions directly from the cruise lines, either onboard the cruise ship or over the Internet. Only 10 percent of all cruise passengers purchased shore excursions directly from local tour operators while 15 percent purchased their tour from a travel agent.

Table IN-6- Percentage of Passengers Purchasing Shore Excursions by Destination
(BREA Administered Surveys)

Destinations	Purchased Tour From			
	Purchased Onshore Tour	Cruise Line	Tour Operator	Travel Agent
Charlottetown	65%	72.7%	10.1%	17.2%
Corner Brook	47%	77.5%	3.0%	19.5%
Halifax	58%	74.5%	10.2%	15.3%
Saint John	68%	77.9%	10.1%	12.0%
St. John's	40%	76.6%	12.2%	11.2%
Sydney	39%	79.0%	7.9%	13.1%
Victoria	49%	72.8%	13.1%	14.1%
Destination Average	54%	75.2%	10.1%	14.7%

The data in the table also shows some diversity in the percentage of passengers that purchase an onshore tour across destinations and through what channel. For example, 68 percent of passengers in Saint John purchased a tour while only 39 percent of passengers in Sydney did so. In terms of the purchase channel, there was a fairly uniform distribution across the various destinations. Across all destinations between 73 percent and 79 percent of the passengers that purchased a shore excursion did so through the cruise lines.

These percentages are important because data obtained from our survey of the cruise lines showed that only about 75 percent of the tour price charged by the lines is paid to the local tour operator. Also, about 90 percent of the purchase price paid to a travel agent is actually paid to the local tour operator. It is this effective price paid to the local tour operators that is used to estimate the economic impacts attributable to passenger expenditures. The passenger surveys also showed that passengers tend to pay less for tours when purchased onshore rather than from the cruise lines or travel agents.

For example, in the 2016 study, cruise passengers in Saint John reported paying an average of \$93.47 per passenger to the cruise lines and \$85.68 to travel agents for their shore excursion, while those that purchased their excursion directly from the tour operator paid an average of \$46.73. In addition, 78 percent of cruise passengers purchased their tour from the cruise line, 12 percent from a travel agent while only 10 percent purchased their tour directly from the local tour operator. Since only 75 percent of the payment to the cruise line and 90 percent of the payment to the travel agent is actually paid to the local tour operator, the average effective payment per passenger for a shore excursion in Saint John was estimated to be \$68.66.

$$\text{Effective Payment} = \$68.66 = (\$93.47 \times .75 \times .779) + (\$85.68 \times .9 \times .121) + (\$46.73 \times .101)$$

Similar calculations were made for each port.

As shown in **Table IN-7**, the cruise industry generated more than 4.2 million passenger and crew arrivals during 2019. These are the passengers and crew onboard cruises that arrived at the various cruise ports in Canada. Atlantic Canada's ports, with over 1.2 million passenger and crew arrivals accounted for about 29 percent of total arrivals in Canada. The ports of the Province of Québec accounted for another 13 percent with 542,200 arrivals. Finally, the ports of British Columbia saw nearly 2.5 million passenger and crew arrivals, 58 percent of the total throughout Canada.

Table IN-7 – Estimated Passenger and Crew Arrivals, 2019

Destinations	Passengers	Crew	Total
Atlantic Canada	873,600	362,400	1,236,000
Charlottetown	128,200	55,400	183,600
Corner Brook	25,100	11,600	36,700
Halifax	323,700	135,500	459,200
Saint John	196,000	75,200	271,200
St. John's	29,700	13,800	41,800
Sydney	153,800	60,700	214,500
Other AC Ports	17,000	10,200	27,200
Québec	396,800	145,400	542,200
Montreal	90,100	21,500	111,600
Québec	176,600	60,100	236,700
Saguenay	59,200	28,800	88,000
Other Québec Ports	70,900	35,000	105,900
British Columbia	1,792,400	665,400	2,457,800
Vancouver	1,070,900	383,700	1,454,600
Victoria	709,000	276,600	985,600
Other BC Ports	12,500	5,100	17,600
All Destinations	3,062,800	1,173,200	4,236,000

As shown in **Table IN-8**, the cruise industry generated nearly 3 million individual passenger and crew onshore visits during 2019.¹⁸ It is these onshore visits that generate the local spending that creates employment and income in each destination. Data on crew arrivals were estimated from data provided by the ports and cruise lines. After adjusting for open-jaw cruises, we have estimated that approximately 1.2 million crew members arrived at all ports in Canada during the 2019 cruise season. On any individual port call BREA estimates about 38 to 39 percent of the crew members will disembark and visit the port city. This is down from the 42 percent estimate used in 2016. Thus, there were an estimated 445,800 onshore crew visits among all Canadian cruise ports during 2019.

Table IN-8 – Estimated Passenger and Crew Onshore Visits, 2019

Destinations	Passengers Onshore Visits	Crew Onshore Visits	Total
Atlantic Canada	777,500	141,400	918,900
Charlottetown	114,100	21,600	135,700
Corner Brook	22,400	4,500	26,900
Halifax	288,100	52,900	340,900
Saint John	174,500	29,300	203,800
St. John's	26,500	5,400	31,900
Sydney	136,900	23,700	160,600
Other AC Ports	15,200	4,000	19,100
Québec	382,200	56,700	438,900
Montreal	89,600	8,400	98,000
Québec	176,800	23,500	200,300
Saguenay	52,400	11,300	63,700
Other Québec Ports	63,400	13,600	77,000
British Columbia	1,385,900	248,400	1,634,300
Vancouver	859,400	149,600	1,009,000
Victoria	515,500	96,800	612,300
Other BC Ports	10,900	2,000	12,900
All Destinations	2,545,600	446,500	2,992,100

¹⁸ There are three types of cruise itineraries that generate passenger visits in Canada. On one-way cruises passengers start their cruise in one port and end their cruise in another port. Thus, each passenger generates a single individual visit at each port. On return, or roundtrip cruises, passengers begin and end their cruise in the same homeport. Thus, each passenger makes two visits to the homeport, but only one individual passenger visit. Finally, on transit, cruise calls passengers arrive and depart with their ship. These passengers generate a single individual visit at each port-of-call. In Canada, most cruise ship calls are either one-way cruises, starting or ending at a single Canadian port or a transit call.

As shown in **Table IN-9**, the 2.5 million cruise passengers who visited the Canadian cruise destinations spent an estimated \$566.2 million for goods and services onshore during 2019. Average per passenger expenditures ranged from a low of \$34 in the smaller ports in Atlantic Canada to a high of \$390 in Vancouver and averaged about \$220 across all Canadian cruise destinations.

Table IN-9 – Passenger Expenditures by Destination, 2019

Destinations	Passenger Onshore Visits	Average Expenditure Per Passenger	Total Passenger Expenditures (\$Millions)
Atlantic Canada	777,500	\$85.72	\$66.7
Charlottetown	114,100	\$104.29	\$11.9
Corner Brook	22,400	\$75.89	\$1.7
Halifax	288,100	\$88.44	\$25.5
Saint John	174,500	\$86.60	\$15.1
St. John’s	26,500	\$77.66	\$2.1
Sydney	136,900	\$71.85	\$9.8
Other AC Ports	15,200	\$37.95	\$0.6
Québec	382,200	\$306.42	\$117.1
Montreal	89,600	\$198.19	\$17.8
Québec	176,800	\$184.89	\$32.7
Other Québec Ports	115,800	\$68.81	\$8.0
Add’l Lodging Exp ^①			\$58.7
British Columbia	1,385,900	\$275.91	\$382.4
Vancouver	859,400	\$390.33	\$336.5
Victoria	515,600	\$87.36	\$45.0
Other BC Ports	10,900	\$74.08	\$0.8
All Destinations	2,545,600	\$220.41	\$566.2

Note: Components may not sum to total due to rounding and/or statistical discrepancy.

^① Additional Lodging Expenditures are primarily spending by passengers in Québec but beyond the specific port areas. For example, passengers may have reported staying in Gatineau and purchased lodging during their visit there

The three destinations that serve as primary ports-of-embarkation, Vancouver, Montreal and Québec, had the highest average spend per passenger of \$390, \$198 and \$185, respectively. These high expenditure rates are primarily due to the lodging and dining expenditures generated by overnight stays. The remaining cruise destinations are primarily transit ports and typically have average expenditure rates under \$90 per passenger visit.

Table IN-10 shows total passenger expenditures in Canada by major category. All cruise passengers combined spent an estimated \$566 million on lodging, food and beverages, shore excursions, souvenirs and other goods and services in Canada during 2019. Approximately, 32 percent of these expenditures, \$183 million, were generated by transit passengers. Thus, passengers embarking and/or disembarking at Canadian ports accounted for the remaining \$383 million in passenger spending.

Table IN-10 – Passenger Expenditures in Canada during Port Visits, 2019
Millions of Dollars

Category	Expenditures	Share of Total
Passenger Arrivals	3,062,800	
Passenger Onshore Visits	2,545,600	
Lodging	\$191.4	34%
Tours* and Transportation	\$169.6	30%
Food and Beverages	\$102.9	18%
Other Retail	\$102.3	18%
Total Spending	\$566.2	
Average per Passenger	\$222.41	

* Passenger expenditures for tours purchased from cruise lines were adjusted for payments made to local operators.

Combined, lodging and purchases of food & beverages totalled \$294 million and accounted for 52 percent of passenger spending. Passenger purchases of tours and local transportation accounted for \$170 million, or 30 percent of total expenditures. Retail expenditures for souvenirs, clothing and other items accounted for 18 percent of passenger expenditures.

As shown in **Table IN-11**, the estimated 446,500 crew visits to the Canadian cruise destinations generated \$42.2 million in expenditures for goods and services during 2019. Average per crew expenditures ranged from a low of \$56 in the Province of Québec to a high of \$111 in British Columbia and averaged nearly \$95 across all Canadian destinations.

Table IN-11 – Crew Expenditures by Destination, 2019

Destinations	Individual Crew Onshore Visits	Average Expenditure per Crew*	Total Crew Expenditures (\$ Millions)
Atlantic Canada	141,400	\$81.12	\$11.4
Charlottetown	21,600	\$81.12	\$1.8
Corner Brook	4,500	\$77.43	\$0.3
Halifax	52,900	\$92.78	\$4.9
Saint John	29,300	\$75.56	\$2.2
St. John's	5,400	\$76.02	\$0.4
Sydney	23,700	\$71.51	\$1.7
Other AC Ports	4,000	\$33.48	\$0.1
Québec*	56,700	\$56.05	\$3.2
Montreal	8,400	\$40.90	\$0.3
Québec	23,500	\$40.90	\$1.0
Other Québec Ports	24,900	\$40.90	\$1.0
Add'l Lodging Exp ^①			\$0.9
British Columbia	248,400	\$111.03	\$27.6
Vancouver	149,600	\$107.20	\$16.0
Victoria	96,800	\$117.77	\$11.4
Other BC Ports	2,000	\$71.31	\$0.1
All Destinations	446,500	\$94.54	\$42.2

* Due to the small sample size of Québec crew surveys, the average expenditure rates were calculated at the provincial/regional level for the Québec ports.

① Additional Lodging Expenditures are primarily spending by crew in Québec but beyond the specific port areas. For example, crew may have reported traveling to Gatineau and purchased lodging during their visit there. These expenditures have been factored into the Avg spend per Québec crew members.

Note: Components may not sum to total due to rounding.

Unlike passengers, shore excursions and lodging are not a focus of crew spending; rather, crew expenditures are more heavily weighted toward food and beverages, local transportation, retail purchases of clothing and telephone and Internet services. As a consequence, expenditures for food and beverages and retail goods account for 93 percent of crew expenditures (see **Table IN-12**). The biggest difference was in the retail category which absorbed 64 percent of crew expenditures and only 18 percent of passenger expenditures.

Table IN-12 – Crew Expenditures in Canada during Port Visits, 2019
Millions of Dollars

Category	Expenditures	Share of Total
Crew Arrivals	1,173,200	
Crew Onshore Visits	446,500	
Lodging	\$0.9	2%
Tours* and Transportation	\$2.1	5%
Food and Beverages	\$12.2	29%
Other Retail	\$26.8	64%
Total Spending	\$42.2	
Average per Crew	\$94.54	

Additional Sources of Cruise-Related Expenditures

Additional cruise-related spending is generated in the air transportation, travel insurance and customs fees by cruise passengers. These impacts are principally generated by the 1 million plus Canadian residents who purchase cruises and foreign cruise passengers who travel to and from Canada for their cruises. The Canadian residents who purchased cruises during 2019 can be segmented into three groups:

1. those who embarked on their cruises at a Canadian port;
2. residents who embarked on their cruises outside Canada and cruised to Canada, such as on a Canada New England itinerary; and
3. those who embarked on cruises in a foreign port and did not sail to a Canada port.

After adjusting for open-jaw cruises, there were an estimated 1,009,600 individual passengers who began and/or ended their cruises in Canada. Based upon data obtained from the survey of Vancouver passengers referenced previously, an estimated 20 percent of passengers who embarked on their cruises in Vancouver were Canadian residents. Using this percentage, 201,900 Canadian residents were estimated to have traveled to and/or from their cruises within Canada. The remaining 835,300 Canadian residents traveled outside Canada for their cruises (see **Table IN-13**). However, a portion of these passengers, about 3 percent or 27,200 sailed back to Canada on their cruise, such as Canada New England and Alaska cruises originating in the United States. Thus, we have estimated that these 27,200 Canadian residents boarded cruises outside Canada during 2019 that were destined for Canada ports-of-call.

In total, then, 229,100 Canadian residents sailed on cruises that directly impacted the Canadian economy. The remaining 808,100 Canadians that purchased cruises in 2019 sailed

on cruises that had impacts outside of Canada. Finally, subtracting the 201,900 Canadian residents from the 1,009,600 individual passengers that embarked or disembarked on their cruise in Canada, we estimate that 807,700 foreign cruise passengers traveled to and/or from Canada for their cruise.

Table IN-13 – Cruise-Related Passenger Air Trips to and/or from Canada, 2019

Cruise Activity	Individual Passengers	Canadian Residents
Cruise Purchasers		1,037,200
Passengers Embarking or Disembarking in Canada	1,009,600	201,900
Passengers Cruising Outside of Canada		835,300
Sailed on a Canada Itinerary	807,700	27,200
Sailed on a Foreign Itinerary		808,100

Cruise-Related Air Travel

As shown in **Table IN-13**, 1,009,600 individual passengers embarked or disembarked on their cruises in Canada. Of these, 807,700 were foreign residents and 201,900 were Canadian residents. Another 27,200 Canadian residents boarded cruises outside of Canada, primarily in the U.S., which sailed on itineraries that included Canada ports-of-call. Thus, we have estimated that 1,036,800 cruise passengers traveled to and/or from Canada for Canada cruises, 229,100 of whom were Canadian passengers (see **Table IN-14**).

Table IN-14 – Cruise-Related Passenger Air Trips to and/or from Canada, 2019

Residency	Passengers	Travel by Air
Canadian Residents who Purchased Cruises	1,037,200	
Embarked or Disembarked In Canada	201,900	151,400
Sailed on Cruises Destined for Canada	27,200	27,200
Cruised outside of Canada	808,100	
Foreign Residents Cruising to or from Canada	807,700	605,800
All Passenger who travelled for Cruises	1,036,800	784,400

Based on the 2016 Canadian Contribution study and the 2019 study for Vancouver, BREA estimates that approximately three-quarters of embarking cruise passengers arrive at their Canadian departure ports by air. Thus, we have estimated that of the 1,036,800 passengers on Canada cruises 784,400 traveled by air to and/or from Canada(see **Table IN-14**) (Note: All Canadian residents who traveled for cruises outside of Canada have been excluded from this analysis.)

Table IN-15 – Cruise-Related Passenger Airfares to and/or from Canada, 2019

Type of Cruise	Travel by Air	Canada-Based Airfares (\$ Millions)
One-way Embarkations	303,600	\$69.7
One-way Disembarkations	297,100	\$68.3
Roundtrip Embarkations	156,500	\$51.5
Canadian Transit Passengers (One-way)	27,200	\$6.3
Total Passengers Who Traveled by Air	784,400	\$195.8

For the purposes of estimating airfare expenditures, there are two groups of passengers, roundtrip passengers and one-way cruise passengers. There were an estimated 156,500 roundtrip passengers that traveled to and from Canada ports for their cruise. Based upon an average roundtrip airfare of approximately \$660 for international and domestic cruise passengers, BREA has estimated that the air travel costs for the roundtrip passengers related to Canada cruises totalled \$103.1 million. Of these expenditures, half, \$51.5 million, impacted the Canada economy. There were also an estimated 627,800 one-way passengers that traveled either to or from Canada for their cruise. Based upon an average one-way airfare of \$460 for international and domestic cruise passengers, BREA has estimated that the air travel costs for the one-way cruise passengers related to Canada cruises totalled \$288.5 million. Of these expenditures, half, \$144.2 million, impacted the Canadian economy. Thus, Canadian cruises generated a total of \$195.8 million in direct airfare expenditures impacting the national economy.

Cruise-Related Travel Insurance

Finally, some Canadian residents who purchased cruises would be expected to purchase travel insurance prior to their cruise. Based upon the BREA cruise line survey, 20 percent of cruise passengers purchase such insurance at an average cost of \$75 per passenger. Thus, we have estimated that the 1 million Canadian sourced passengers who purchased cruises in 2019 paid \$15.6 million for travel insurance.

Economic Impact Analysis

As noted previously, the primary objective of this project was to estimate the contribution of the cruise industry to the Canadian economy during the 2019 cruise season. Using the Canadian and provincial input-output tables the direct, indirect and induced economic impacts were estimated. Economic impacts were generated for spending/output, employment, wages and salaries and taxes for major economic sectors of the Canadian national and provincial economies.

Direct Economic Impacts

All of the Canadian-based cruise line, passenger and crew expenditures discussed above were combined and allocated to the appropriate industries. The industry groups were listed in Table IN-3. Since these represent final sales, the expenditures were also adjusted for trade and transportation margins and business taxes. Thus, the value of total industry output directly generated by cruise-related spending was estimated.

The share of output absorbed by wages and salaries for employees for 2019 was calculated from data reported by Statistics Canada. Direct earnings were estimated by multiplying direct output in each industry by its corresponding earnings share. The direct employment impact in each industry was then estimated by dividing the direct earnings by the average annual earnings in that industry. These earnings are an average for all workers (full- and part-time) within that industry and include overtime (See **Table IN-16**).

For the provincial level analyses, provincial earnings shares of output were used to estimate direct earnings by industry while average annual earnings specific to each industry in each province were used to estimate direct employment in each industry.

The economic models and data used in this study are fundamentally annual models and treat expenditures as though they were annual expenditures. Thus, economic impacts generated by the models are average annual impacts and include part-time (including seasonal) and full-time employees. Since these expenditures generally occur over a 6 to 7-month period, the peak employment impacts will actually be higher than those reported. Because many of the seasonal workers will incur significant overtime, these impacts, while larger than the average annual impacts, are not necessarily twice as large. We do provide a full-time equivalent for the direct, indirect and induced employment impacts.

Table IN-16 – Average Annual Wages and Salaries by Sector, 2019

Industry	Average Annual Earnings
Total, all industries	\$53,482
Goods-producing sector	\$66,985
Forestry, fishing, mining, oil and gas	\$101,893
Utilities	\$98,331
Construction	\$66,734
Manufacturing	\$60,589
Durables	\$64,634
Non-durables	\$59,211
Services-producing sector	\$50,529
Wholesale trade	\$64,935
Retail trade	\$32,258
Transportation & warehousing	\$56,748
Finance and insurance	\$70,762
Real estate and leasing	\$54,306
Professional, scientific and technical services	\$74,837
Business, building and other support services	\$48,222
Educational services	\$55,603
Health care and social assistance	\$48,691
Information, culture and recreation	\$54,454
Accommodation & Food services	\$21,828
Other services	\$44,455
Public administration	\$69,479

Impacts were also measured for business taxes, which includes sales and excise taxes among others, and income taxes. Business taxes were estimated from the national and provincial input-output tables while income taxes were estimated from data published by Statistics Canada. An implicit income tax rate of 21.0 percent was used to estimate total income taxes.

Indirect and Induced Economic Impacts

The indirect and induced economic impacts were estimated using the 2016 national and provincial input-output tables, (the latest available), published by Statistics Canada. Based upon the direct output impacts generated by the cruise industry, the indirect and induced output by industry was estimated. The corresponding indirect and induced earnings, employment and tax impacts were then estimated using the same procedures as discussed above.

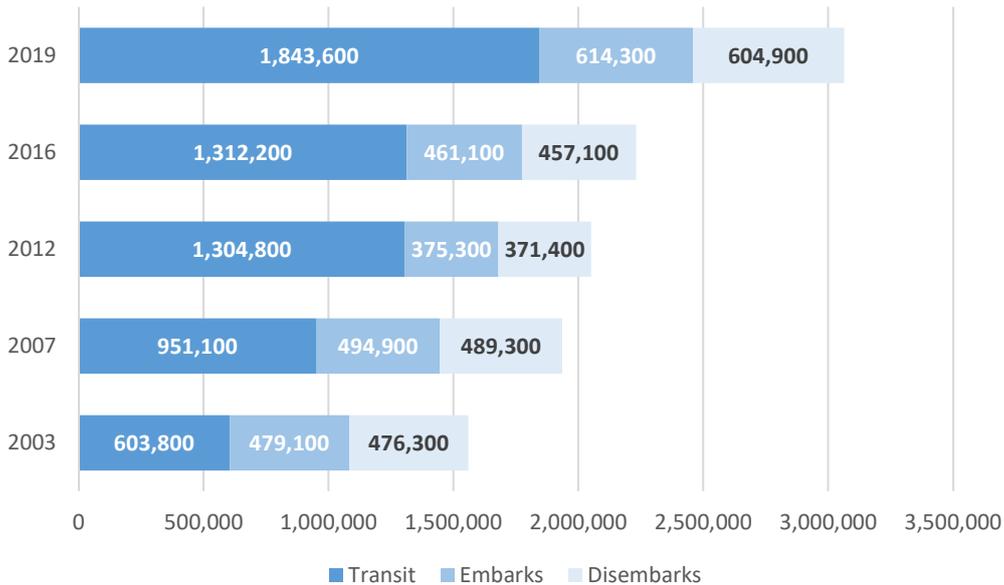
III. National Economic Contribution

Canada Cruise Sector

Cruise activity at Canadian ports generated significant economic activity throughout the Canadian economy on both an industry and regional basis. The economic benefits that accrue to the Canadian economy arise from five principal sources:

- I. spending by cruise passengers and crew for goods and services associated with their cruise, including travel to the port of embarkation and pre- and post-cruise vacation spending;
- II. expenditures by the cruise lines for goods and services necessary for cruise operations, including food and beverages, fuel, vessel maintenance and repair, ship's supplies and so forth;
- III. shore-side staffing by the cruise lines for their cruise and land transportation and excursion activities;
- IV. spending by the cruise lines for port services at Canadian ports-of-embarkation and ports-of-call; and
- V. capital expenditures for equipment and facilities purchased from Canadian businesses.

Figure CA-1– Cruise Passenger Arrivals in Canada

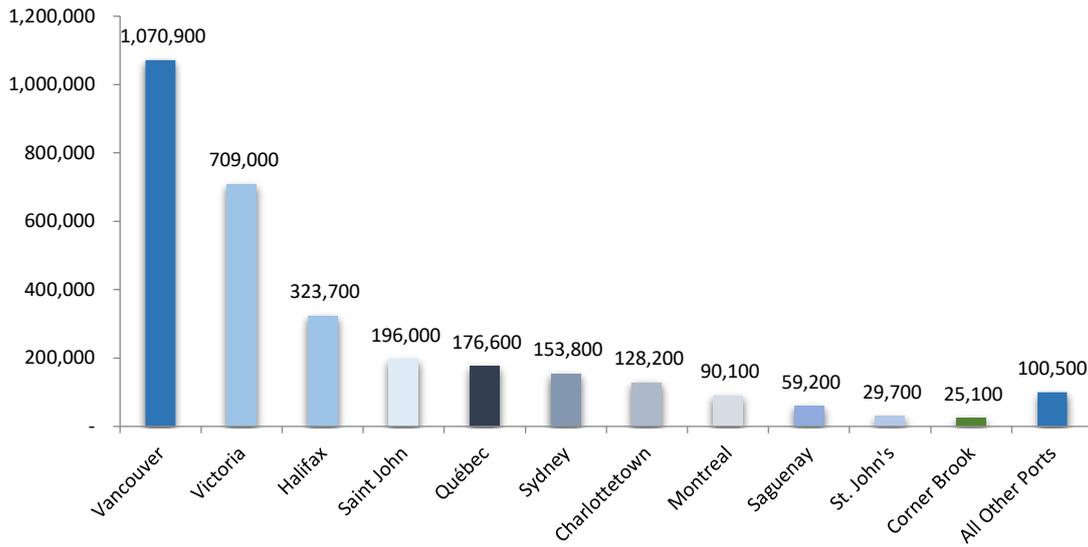


Source: BREA survey of Canadian cruise ports - 2019.

During 2019 about 1,400 cruise ship calls were made at Canadian cruise ports. As shown in **Figure CA-1**, more than 3.0 million passengers arrived at Canadian ports throughout the 2019 cruise season¹⁹. This is a 36 percent increase from the 2.2 million passengers in 2016.

As indicated in **Figure CA-2**, Canadian cruise arrivals were concentrated in the two British Columbia ports, Vancouver and Victoria, which accounted for 59 percent of total cruise passenger arrivals in Canada. Vancouver is primarily a port of embarkation and debarkation for Alaska cruises while Victoria serves as a transit port primarily for Alaska cruises that originate at U.S. ports.

Figure CA-2 –Cruise Passenger Arrivals in Canada by Port, 2019



Source: BRE survey of Canadian cruise ports - 2019

Halifax, Saint John and Sydney are the three largest cruise ports in Atlantic Canada. Like Victoria they are transit ports²⁰. Combined, these three ports with just over 673,000 passenger arrivals accounted for 77 percent of the cruise passenger arrivals in Atlantic Canada. With nearly 324,000 transit passenger arrivals, Halifax accounted for 11 percent of the cruise passenger arrivals in Canada. Saint John accounted for another 6 percent with nearly 196,000 transit passenger arrivals and Sydney accounted for 5 percent with nearly 154,000 transit passenger arrivals.

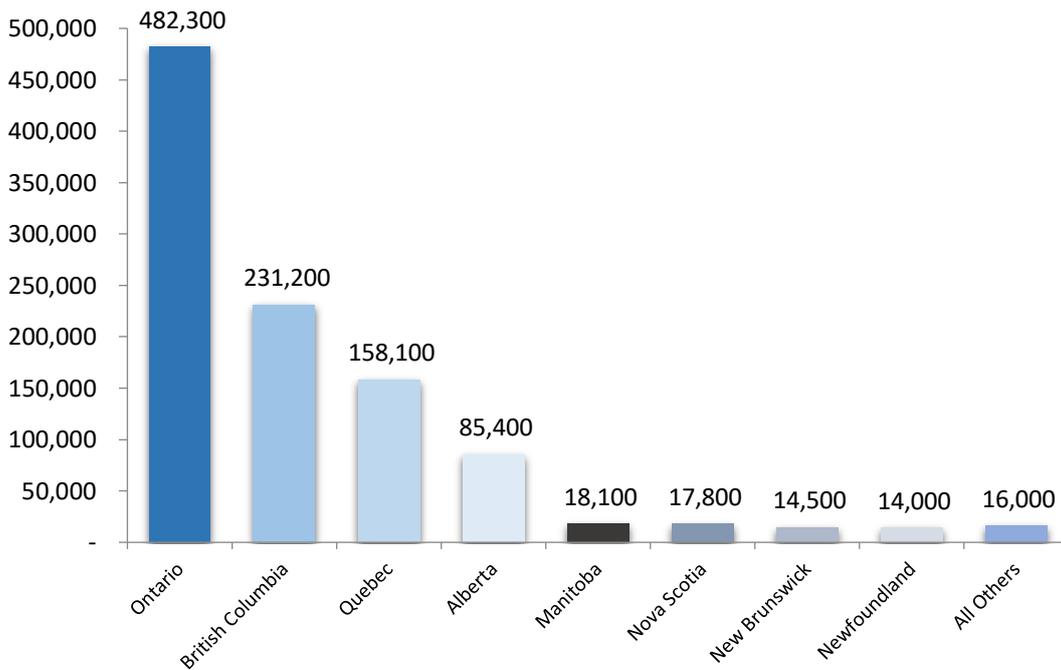
The Port of Québec is the largest cruise port in the Province of Québec with nearly 177,000 passengers, accounting for 6 percent of total cruise passenger arrivals in Canada. The Port of Québec has both homeport and transit calls with transit passengers accounting for 56 percent of the passenger arrivals at the port. Montreal contributed another 90,100 passengers, 95 percent of which began or terminated their cruise in Montreal. Combined, the two ports accounted for 73 percent of the 2019 cruise passenger arrivals in the Province of Québec.

¹⁹ The Canadian cruise season generally begins in May and ends in late October, however, some ports are receiving calls in April and November. This is the sum of passenger embarkations, debarkations and transit arrivals.

²⁰ Saint John did report that they processed a total of 76 passenger embarkations and disembarkations in 2019.

The remaining ports accounted for approximately 11 percent of the cruise passenger arrivals in Canada. Charlottetown, Saguenay, St. John’s and Corner Brook were the largest of these ports. Combined these 4 ports had over 242,000 transit passenger arrivals, accounting for 8 percent of total cruise passenger arrivals in Canada. In addition to the passenger arrivals reported above, Cruise Lines International Association (CLIA) indicated that 1.04 million Canadian residents purchased cruises in 2019. This is a 46 percent increase in sourced passengers from the 711,000 reported in 2016. Some of these residents embarked on their cruises in Canada while others boarded their cruises in the United States or other countries throughout the world. As shown in Figure CA-3, four provinces (Ontario, British Columbia, Québec and Alberta) accounted for 92 percent of the Canadian residents who cruised in 2019.

Figure CA-3 – Global Cruise Passengers Residing in Canada by Province, 2019



Source: CLIA

Direct Expenditures

There are three primary sources of cruise-related spending: i) cruise lines; ii) cruise passengers and iii) crew members. The cruise lines purchase a variety of goods and services supporting their cruises, including food and beverages, hotel supplies, bunker fuels, and utilities while in port and other port services to name a few. Passengers purchase transportation to and from port cities, pre- and post-cruise excursions, souvenirs and other retail goods while crew members will purchase a similar set of goods and services with a heavier concentration on retail goods.

During 2019, cruise-related spending totalled nearly \$2 billion. This is a 35 percent increase above the \$1.48 billion in cruise-related spending reported by BREA in 2016. As indicated in Table CA-1, the cruise lines accounted for 59 percent of the total, passengers accounted for 39 percent and crew the remaining 2 percent. The regional and industry

impacts, which are discussed in the following sections, vary significantly across the three sources.

Table CA-1 – Direct Cruise-Related Expenditures in Canada by Source, 2019
Millions of Dollars

Sources	Canada	Share
Cruise Lines	\$1,176.2	59%
Passengers*	\$779.2	39%
Crew	\$42.2	2%
Total	\$1,997.5	

Note: Components may not sum to totals due to rounding.

* Includes \$213 million in airfare, travel insurance and customs fees

Expenditures by Cruise Lines

Expense data collected through a survey of the various port authorities and CLIA member lines showed that the international cruise lines spent an estimated \$1.2 billion with Canadian businesses in 2019, a 26 percent increase from the 2016 estimates reported by BREA. As shown in **Table CA-2**, the five largest expense categories accounted for 50 percent of the total.

Table CA-2 – Cruise Lines’ Expenditures in Canada by Expense Category, 2019
Millions of Dollars

Category	Spending	Share
Travel Agents	\$168.9	14%
Business & Professional Services	\$130.8	11%
Fuel	\$122.0	10%
Advertising & Promotion	\$83.7	7%
Machinery & Equipment	\$81.5	7%
Vessel Maintenance & Dry-dock Fees	\$77.1	7%
Wages & Salaries	\$75.6	6%
Food & Beverages	\$74.2	6%
Port Charges & Fees	\$74.0	6%
Hotel Supplies	\$60.2	5%
Other Expenses	\$228.2	19%
Total	\$1,176.2	

Expenditures with Travel Agents was the largest category. Cruise lines reported that they spent nearly \$169 million with Canadian travel agents in 2019. Travel agent commissions included payments for the sale of cruises with itineraries within and outside of the Canada market. The second largest category, accounting for 11 percent of total expenditures with Canadian businesses, was Business & Professional Services with nearly \$131 million in expenses. This expense category includes a broad range of financial and professional services and includes expenses for legal services, insurance, environmental and engineering consultants, trade associations and computer and software consulting services, including POS software to name a few. Approximately 10 percent of these expenses represent the

cost for legal and accounting services. Software and other business consulting expenses accounted for about the same percentage. Another 30 percent was absorbed by insurance and financial services. Technical consulting expenses for such services as engineering, architectural design, environmental consulting accounted for about 25 percent of these professional expenses. Of the remaining 25 percent, most of the expenses were categorized as other cost of sales and administrative overhead and included expenses for marketing, direct mail, rent and communications.

A slightly lower total of \$122 million was reported for the purchase of fuel throughout Canada. Another \$84 million was spent on advertising and promotion. These expenditures primarily consist of the placement of advertising in newspapers and periodicals, as well as other promotional efforts undertaken with travel agents. Expenditures for machinery and equipment, including purchases for such items as navigation and propulsion equipment; galley, HVAC and sanitation equipment; and onboard computer and communication equipment, totalled almost \$82 million.

The cruise lines also reported that they spent \$77 million on vessel maintenance and drydock fees in Canada. The Canadian ports reported taking in approximately \$74 million in port charges and navigation fees from the cruise lines. These fees paid for items such as wharfage and dockage fees, piloting and harbor fees, and stevedoring and other port services. Cruise lines also reported that \$74 million was spent for the purchase of food and beverages consumed by passengers and crew on their cruise ships.

A total of \$60 million was spent on hotel supplies which include soft and hard goods for passenger cabins and restaurants, excluding food and beverages. The \$232 million in other expenses included payments for utilities and sanitation services, security services, training and miscellaneous administrative and operating expenses, such as crew medical expenses, staff T&E, uniforms and charitable and professional association expenses.

Finally, the cruise lines reported that they employed 2,855 Canadian residents during 2019. These include personnel that interact with the ports and travel agents and employees of tour operations owned by the cruise lines among others. These employees were paid an estimated \$76 million in wages and salaries.

While the regional distribution of the cruise lines' expenditures is primarily influenced by cruise activity, there are other factors, such as the place of residence of Canadian cruise passengers and the location of suppliers to the industry. The passenger residence influences travel agent commissions, air transportation impacts and advertising. With respect to vendors, food processors, machinery manufacturers, insurers, professional consultants and legal firms are not necessarily located in provinces that include the cruise ports.

Table CA-3 – Cruise Lines’ Expenditures in Canada by Province, 2019
Millions of Dollars

Province	Spending	Share
British Columbia	\$750.9	64%
Québec	\$173.8	15%
Atlantic Provinces	\$78.2	7%
Other Provinces	\$173.2	15%
<i>Total</i>	\$1,176.2	

British Columbia, as the cruise center in Canada, does capture the bulk of the cruise lines’ expenditures, accounting for 64 percent of the total (see **Table CA-3**). However, the group of Other Provinces that do not have cruise ports, captured \$173 million of the cruise lines’ expenditures, or 15 percent of the total expenditures made by the cruise lines. As previously shown in Figure CA-3, these inland provinces were the source of nearly 600,000 Canadian cruise passengers and thus captured approximately 58 percent of travel agent commissions. However, these provinces also benefit from cruise lines’ expenditures for food and beverages, equipment and business services, such as advertising and computer services,

Expenditures by Passengers

Passenger spending was analyzed on a port-by-port basis. Data on per passenger spending by category and type of passenger were utilized. Spending categories varied to some extent by port and were aggregated into the following categories:

- lodging;
- tours and transportation;
- food and beverages; and
- other retail.

Passenger groups were as follows:

- embarking and debarking passengers with overnight stays;
- embarking and debarking passengers without overnight stays; and
- port-of-call passengers.

In aggregate, cruise passengers spent \$566 million on goods and services onshore throughout Canada in 2019 for an average per passenger expenditure of \$222.41 (see **Table CA-4**). There were additional expenditures by passengers of approximately \$213 million for airfare, travel insurance and customs fees not included in the table below. These were made by both the 1 million Canadian sourced passengers and foreign passengers who fly into Canada to embark on their cruise ships in Canadian ports. British Columbia’s ports with nearly 1.4 million onshore passenger visits accounted for 54 percent of all passenger onshore visits in Canada. These onshore visits, in turn, generated \$382 million in passenger expenditures, 68 percent of all passenger expenditures. The ports in Québec had the highest average spend per passenger visit, \$306, and generated \$117.1 million in direct passenger expenditures, 21 percent of total passenger spending in Canada. Finally,

Atlantic Canada's ports with 777,500 passenger onshore visits generated nearly \$67 million in passenger onshore expenditures. The average spend per passenger visit of \$85.72 in Atlantic Canada is the lowest among the regions. This is because these ports are primarily transit ports and do not generate overnight stays by embarking and disembarking passengers which have much higher average expenditure rates as shown in **Table CA-4**.

Table CA-4 – Passenger Onshore Expenditures in Canada by Category and Province, 2019 Millions of Dollars

	Atlantic Canada	Québec	British Columbia	Total
Passenger Arrivals	873,600	396,800	1,792,400	3,062,800
Passenger Onshore Visits	777,500	382,200	1,385,900	2,545,600
Lodging	\$0.02	\$76.0	\$115.3	\$191.4
Tours and Transportation	\$35.1	\$12.5	\$122.0	\$169.6
Food and Beverages	\$9.3	\$15.0	\$78.6	\$102.9
Other Retail	\$22.2	\$13.6	\$66.5	\$102.3
Total Spending	\$66.7	\$117.1	\$382.4	\$566.2
Avg Spend Per Passenger Visit	\$85.72	\$306.42	\$275.91	\$222.41

Note: Provincial data and rows may not sum exactly to totals due to rounding.

Purchases of retail goods, such as clothing and souvenirs, accounted for 18 percent of passenger onshore expenditures and totalled \$102.3 million. The \$191.4 million in expenditures for lodging absorbed one-third (33%) of their expenditures. Expenditures for tours, including pre- and post-cruise excursions, and local transportation totalled \$169.6 million and accounted for 30 percent of total passenger expenditures while purchases of food and beverages accounted 18 percent of passenger onshore spending with \$102.9 million.

Other Passenger Expenditures

Other passenger expenditures consist of the airfare, travel insurance costs and customs fees incurred by cruise passengers that impact on Canadian economic activity. These combined costs totalled \$213.0 million. Both Canadian and foreign cruise passengers travel to Vancouver and other Canadian ports to embark on and/or disembark from their cruises. We have estimated that air travel related to cruises generated \$196 million in air travel expenditures that impacted the Canadian economy (see **Table CA-5**). In addition, the 1 million Canadian residents that purchased a cruise also spent an estimated \$15.6 million in travel insurance for their cruises. Adding this \$213.0 million in additional cruise passenger expenditures to the \$566.2 million in CA-4 above, leads to a total spending by cruise passengers in all of Canada to be \$779.2 million.

Table CA-5 – Canadian Residents Traveling by Air for Canada Cruises, 2019

Residency	Passengers	Travel by Air
Canadian Residents who Purchased Cruises	1,037,200	
Embarked or Disembarked In Canada	201,900	151,400
Sailed on Cruises Destined for Canada	27,200	27,200
Cruised outside of Canada	808,100	
Foreign Residents Cruising to or from Canada	807,700	605,800
All Passenger who traveled for Cruises	1,036,800	784,400
	Travel by Air	Airfare
One-way Embarkations	303,600	\$69.7
One-way Disembarkations	297,100	\$68.3
Roundtrip Embarkations	156,500	\$51.5
Canadian Transit Passengers (One-way)	27,200	\$6.3
Total Airfare Added		\$195.8

Based on the 2016 Canadian Contribution study and the 2019 study for Vancouver, BREA estimates that approximately three-quarters of embarking cruise passengers arrive at their Canadian departure ports by air. Thus, we have estimated that of the 1,036,800 passengers on Canada cruises 784,400 traveled by air to and/or from Canada(see **Table CA-5**) (Note: All Canadian residents who traveled for cruises outside of Canada have been excluded from this analysis.)

For the purposes of estimating airfare expenditures, there are two groups of passengers, roundtrip passengers and one-way cruise passengers. There were an estimated 156,500 roundtrip passengers that traveled to and from Canada ports for their cruise. Based upon an average roundtrip airfare of approximately \$660 for international and domestic cruise passengers, BREA has estimated that the air travel costs for the roundtrip passengers related to Canada cruises totalled \$103.1 million. Of these expenditures, half, \$51.5 million, impacted the Canada economy. There were also an estimated 627,800 one-way passengers that traveled either to or from Canada for their cruise. Based upon an average one-way airfare of \$460 for international and domestic cruise passengers, BREA has estimated that the air travel costs for the one-way cruise passengers related to Canada cruises totalled \$288.5 million. Of these expenditures, half, \$144.2 million, impacted the Canadian economy. Thus, Canadian cruises generated a total of \$195.8 million in direct airfare expenditures impacting the national economy.

Expenditures by Crew

Crew expenditures were also estimated by port and by category. Overall, nearly 1.2 million crew arrived at Canadian ports in 2019, with an estimated 446,500, or 38 percent, disembarking and visiting the respective ports. These crew members spent over \$42 million in 2019 (see Table CA-6) for an average expenditure of \$94.54 per onshore visit. The major difference between crew and passenger spending is the lack of reported lodging expenditures by crew, except in Québec, and their higher share of retail expenditures, 64 percent for crew and 18 percent for passengers²¹. British Columbia's ports reported the highest average expenditure rate of just over \$111 per onshore visit. This was followed by Atlantic Canada with an average rate of \$81 and Québec with an average expenditure rate of \$56 per visit.

Table CA-6 – Crew Onshore Expenditures in Canada by Category and Province, 2019
Millions of Dollars

	Atlantic Canada	Québec	British Columbia	Total
Crew Arrivals	362,400	145,400	665,400	1,173,200
Crew Onshore Visits	141,400	56,700	248,400	446,500
Lodging	\$0.0	\$0.9	\$0.0	\$0.9
Tours and Transportation	\$0.7	\$0.2	\$1.2	\$2.1
Food and Beverages	\$4.1	\$1.0	\$7.1	\$12.2
Other Retail	\$6.5	\$1.1	\$19.2	\$26.8
Total Spending	\$11.4	\$3.2	\$27.6	\$42.2
Avg per Crew Onshore Visit	\$81.12	\$56.05	\$111.03	\$94.54

Note: Provincial data and rows may not sum exactly to totals due to rounding.

Direct Expenditures by Industry

For purposes of the economic impact analysis, the nearly \$2 billion in direct cruise industry expenditures (shown previously in Table CA-1) were allocated to the appropriate industries. For example, after adjusting for trade and transportation margins and business taxes, cruise lines' purchases of food and beverages were allocated to the Food & Beverage manufacturing industry while passenger expenditures for lodging were allocated to the Accommodation & Food Services industry. These are shown in **Table CA-7**.

As indicated in the table, the Transportation & Warehousing sector accounts for 27 percent of the cruise industry's direct expenditures with \$531.1 million. This sector includes expenditures for cruise lines' purchases of port services, such as stevedoring, piloting and port agents, and trucking and warehousing. It also includes passenger and crew expenditures for air transportation, tours and other ground transportation.

Businesses in the manufacturing sector received \$431.1 million in cruise industry expenditures, 22 percent of direct expenditures. These expenditures consist primarily of cruise lines' expenditures for their cruise ship operations. The most important of which are food and fuel purchases but also included are purchases of crew uniforms, ropes and

²¹ Tourisme Québec reported that crew onboard cruise ships visiting ports in the province spent an average of \$14.06 on lodging. This is discussed in more detail in the detailed analysis for Québec.

other textiles, including linen, bedding and other hotel supplies. The cruise lines also purchased a variety of machinery and equipment, including equipment and parts for engines, HVAC, galley equipment, communications and navigation equipment and so forth.

Accommodation & Food Services is the third largest sector with \$378.2 million. These impacts were generated primarily by passenger and crew spending.

The Professional, Scientific & Technical Services sector is the next largest sector with \$258 million in direct expenditures accounting for 13 percent of the total. This industry captured a broad range of expenditures by the cruise lines for such services as travel agent commissions, advertising, engineering, architectural, legal, accounting and consulting services.

Table CA-7 – Direct Cruise Industry Expenditures in Canada by Industry, 2019
Millions of Dollars

Sectors	Direct Spend	Share
Goods Producing Sector	\$445.1	22%
Natural Resources, Utilities & Construction	\$13.9	1%
Manufacturing	\$431.1	22%
Durable Goods	\$223.1	11%
Nondurable Goods	\$208.0	10%
Service Producing Sector	\$1,461.1	73%
Wholesale & Retail Trade	\$93.8	5%
Transportation & warehousing	\$531.1	27%
Financial Services	\$27.0	1%
Professional & Technical Services	\$258.0	13%
Accommodation & Food Services	\$378.2	19%
Other Services & Government	\$173.0	9%
Spending by Sector	\$1,906.0	95%
Business Taxes (Less Subsidies)	\$91.3	5%
Direct Spending	\$1,997.6	

Note: Components may not sum to totals due to rounding.

Passenger and crew expenditures primarily impact three industries, Transportation & Warehousing, which we have already discussed, Wholesale & Retail Trade, and Accommodation & Food Services. These later two sectors accounted for 5 percent and 19 percent, respectively, of direct expenditures and totalled \$472 million combined.

Finally, the direct expenditures generated \$91.3 million in business taxes, 5 percent of direct expenditures.

Direct Employment, Wage and Tax Impacts

As shown in **Table CA-8**, the \$2 billion in direct cruise industry expenditures generated direct employment of nearly 17,000 annualized full- and part-time employees²² paying \$670.6 million in wage income and \$134.2 million in income taxes. Combining the business and income taxes, the direct spending generated by the cruise industry generated an estimated nearly \$226 million in business and income taxes during 2019.

Table CA-8 – Direct Cruise Industry Economic Impacts in Canada by Industry, 2019
Millions of Dollars

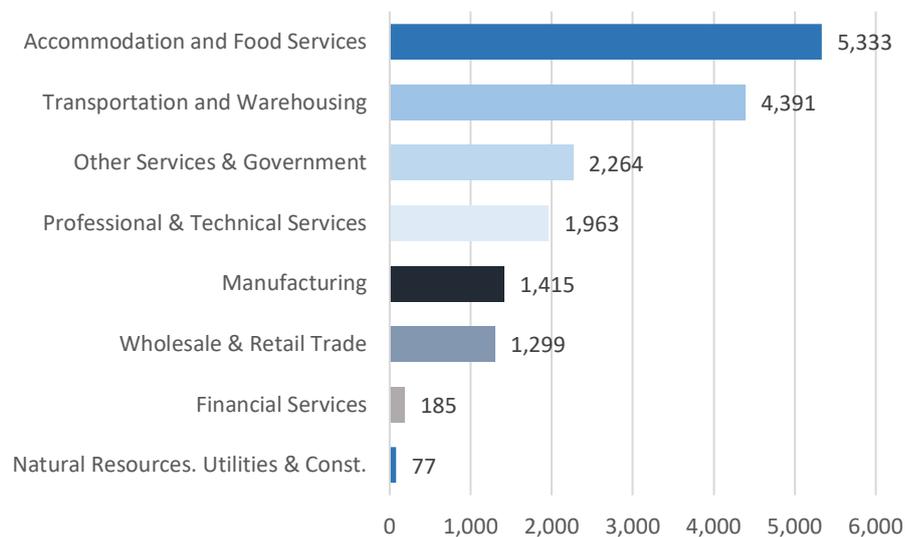
Sectors	Direct Spend	Jobs	Income
Goods Producing Sector	\$445.1	1,492	\$77.7
Natural Resources, Utilities & Const.	\$13.9	77	\$3.4
Manufacturing	\$431.1	1,415	\$74.3
Durable Goods	\$223.1	834	\$44.5
Nondurable Goods	\$208.0	577	\$29.5
Service Producing Sector	\$1,461.1	15,435	\$592.7
Wholesale & Retail Trade	\$93.8	1,299	\$41.0
Transportation and Warehousing*	\$531.1	4,391	\$214.4
Financial Services	\$27.0	185	\$11.5
Professional & Technical Services	\$258.0	1,963	\$132.2
Accommodation and Food Services	\$378.2	5,333	\$102.0
Other Services & Government	\$173.0	2,264	\$91.6
Spending by Sector	\$1,906.0		
Business Taxes (Less Subsidies)	\$91.3		
Total Direct Impacts	\$1,997.6	16,927	\$670.6
Income Taxes		0	\$134.2

The Goods Producing Sector accounted for 22 percent of direct expenditures, 9 percent of the direct jobs and 12 percent of the direct wage income. Due to the relatively high productivity in this sector, the employment impacts as a share of the total are lower than the direct spending and income shares. The Durable Goods and Nondurable Goods industries accounted for similar percentages of the direct expenditures in the manufacturing sector (52%, 48%). With passenger and crew spending accounting for 41 percent of the direct spending and spending for transportation services accounting for 27 percent of the direct expenditures, the Service Producing Sector accounted for 73 percent of the direct spending (net of business taxes), 91 percent of the direct jobs and 88 percent of the wage income. The Transportation & Warehousing industry accounted for 37 percent of the direct impacts within the Service Producing Sector. This industry accounted for the second most direct jobs and highest income; and included jobs at the cruise ports, among tour

²² The economic impacts generated by the models are average annual impacts and include part-time (including seasonal) and full-time employees. Since these expenditures typically occur over a 6-month period of May through October, the peak employment impacts will actually be higher than those reported. It should be noted that some ports may receive a few calls in April and November. Because many of the seasonal workers will incur significant overtime, the six-month impacts, while larger than the average annual impacts, are not necessarily twice as large. Adjusting the employment Figure CA-s for part-time employees, the direct employment impact is equivalent to approximately 12,140 full-time employees.

operators and air and ground transportation companies. With \$258 million in direct expenditures, the Professional & Technical Services industry accounted for 18 percent of the direct spending impacts and 22 percent of the direct income impacts in the Service Producing Sector, however, due to the relatively high wages and salaries and productivity in this industry, it accounted for only 13 percent of the direct employment impacts. As discussed above, the jobs generated in this industry included employees of travel agencies, advertising, accounting, security and other professional services companies.

Figure CA-4 – Distribution of Direct Employment Impacts in Canada by Sector, 2019



Combining the Trade and Accommodation & Food Services industries, the cruise industry generated \$472 million in direct spending, 6,632 annualized full- and part-time jobs and \$143 million in income impact. These impacts were generated primarily by passenger and crew spending. Due to the relatively low productivity and wages and salaries within the Retail Trade and Accommodation & Food Services industries, they accounted for 32 percent of the direct spending and 24 percent of the direct income in the Service Producing Sector, but 42 percent of the direct jobs.

Total Output, Employment, Wage Income and Tax Impacts

The total economic impacts of the cruise industry are the sum of the direct impacts described above and the indirect and induced impacts. The indirect economic benefits derived from the cruise industry result in part from the additional spending by the suppliers to the cruise industry. For example, food processors must purchase raw foodstuffs for processing; utility services, such as, electricity and water, to run equipment and process raw materials; transportation services to deliver finished products to the cruise lines or wholesalers; and insurance for property and employees.

The Canadian input-output table was used to estimate the indirect and induced impacts. The input-output table reflects the inter-industry links among industries in the Canadian economy. Use of the input-output table permits the estimation of the additional economic impacts that the direct spending by the cruise industry, its passengers and its suppliers has on all other industries in the Canadian economy. As discussed in the Methodology section, the direct expenditures were adjusted for transportation and trade margins and business taxes before estimating the indirect impacts²³. The input-output analysis indicated that the \$2 billion in direct cruise industry expenditures generated \$4.3 billion in total (direct plus indirect and induced) output, more than 30,000 annualized full- and part-time jobs²⁴ and \$1.4 billion in income impact. In addition, the industry generated an estimated \$138 million in business taxes and \$322 million in income taxes (see **Table CA-9**).

Table CA-9 – Total Cruise Industry Economic Impacts in Canada by Industry, 2019
Millions of Dollars

Sectors	Output	Jobs	Income
Goods Producing Sector	\$1,856.6	6,740	\$375.6
Natural Resources, Utilities & Construction.	\$394.3	1,426	\$82.2
Manufacturing	\$1,462.5	5,314	\$293.5
Durable Goods	\$690.1	2,992	\$168.1
Nondurable Goods	\$772.4	2,322	\$125.2
Service Producing Sector	\$2,282.4	23,517	\$1,060.5
Wholesale & Retail Trade	\$96.9	1,505	\$49.9
Transportation & Warehousing	\$711.0	5,420	\$279.0
Financial Services	\$273.4	2,100	\$137.0
Professional & Technical Services	\$387.1	4,174	\$295.9
Information, Culture and Recreation	\$253.3	873	\$40.8
Accommodation & Food Services	\$403.7	6,348	\$127.7
Other Services & Government	\$156.9	3,097	\$130.5
Spending by Sector	\$4,139.2		
Business Taxes (Less Subsidies)	\$138.1		
Total Impacts	\$4,276.9	30,257	\$1,436.0
Income Taxes			\$321.5

Note: Components may not sum to totals due to rounding.

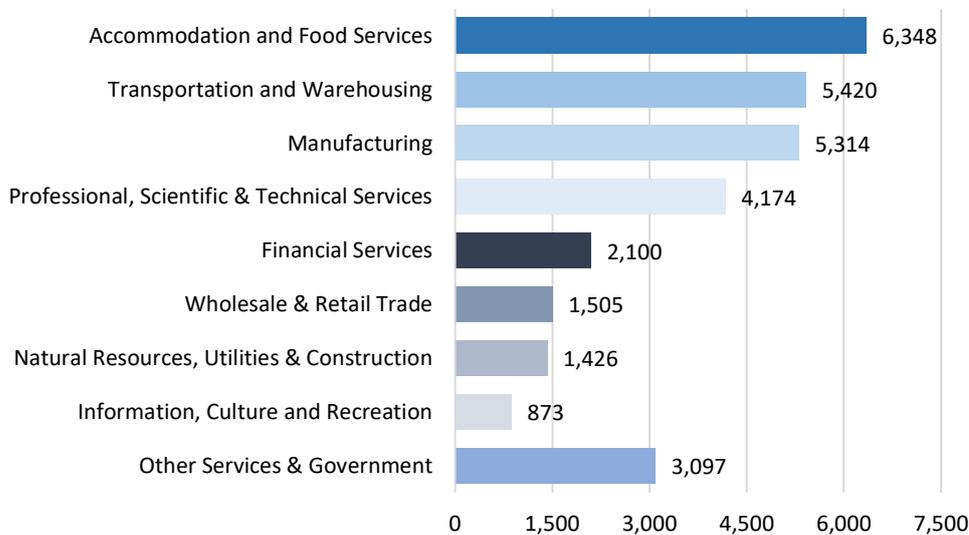
²³ Statistics Canada, *Industry Accounts Division, 2016*.

²⁴ This is equivalent to 22,645 jobs on a full-time basis.

The Goods Producing Sector accounted for 43 percent of the total output impacts but due to the relatively high productivity of this sector only 22 percent of the total jobs and 26 percent of the income impacts. The total economic impacts are more evenly distributed throughout the Goods Producing Sector than the direct impacts as the indirect and induced impacts spread throughout the economy, especially among the natural resource and construction industries.

Within the Services Producing sector, the Transportation & Warehousing industry remains the dominant industry accounting for about 31 percent of the total economic impacts in the Service Producing Sector. This is due to the magnitude of the direct economic impacts at the Canadian cruise ports as well as the strong linkages between the transportation sector and all other sectors of the economy. The output and employment impacts in the Professional & Technical Services industry were lower but still accounted for about 17 percent of total output and 18 percent total jobs generated in the Service Producing Sector. However, due to the relatively high wages and salaries in this industry, it accounted for 28 percent of the total income impacts in the sector.

Figure CA-5 – Distribution of Total Employment Impact by Sector, 2019



Combining the Trade and Accommodation & Food Services industries, the cruise industry generated \$500.6 million in total output, an estimated 7,853 jobs and \$177.6 million in income impact. These impacts were generated primarily by passenger and crew spending. Due to the relatively low productivity and wages and salaries within these industries, they accounted for 17 percent of the total income and 22 percent of the total output in the Service Producing Sector, but 33 percent of the total jobs.

In summary, the 1,400-cruise ship calls at Canadian ports during 2019 generated about 3 million passenger and crew onshore visits (see **Table CA-10**). In addition, an estimated 1.0 million Canadian residents purchased cruises both within and outside of Canada. Passengers, crew, and the cruise lines directly spent \$2 billion in Canada during the year, generating 16,927 annualized full- and part time jobs paying \$670.6 million in wages and salaries. In addition, the direct spending and wage income generated an estimated \$225.4 million in business and income taxes.

As a result of the subsequent indirect and induced spending by businesses and their employees, the cruise industry was responsible for generating an estimated \$4.3 billion in total output. It also supported over 30,000 annualized full- and part-time jobs, \$1.4 billion in wage income and \$466.1 million in business and income taxes throughout Canada during 2019.

Table CA-10 – Summary of Cruise Industry Economic Impacts, 2019

Passenger and Crew Onshore Visits	2,991,400
Direct Economic Impacts	
Cruise Industry Direct Spending (\$ Millions)	\$1,997.5
Employment	16,927
Wages and Salaries (\$ Millions)	\$670.6
2 Business and Income Taxes (\$ Millions)	\$225.4
Total Economic Impacts	
Total Output (\$ Millions)	\$4,276.6
Employment	30,257
Wages Income (\$ Millions)	\$1,436.0
Business and Income Taxes (\$ Millions)	\$466.1

IV. Economic Contribution by Province

The economic impact of the international cruise industry was also analyzed for British Columbia, Québec, and the Atlantic Canada provinces of Nova Scotia, New Brunswick, Newfoundland and Labrador and Prince Edward Island. Canada's cruise ports are located in these provinces and, consequently, the industry's economic impacts are concentrated in them. Combined, these provinces accounted for 88 percent of the total contribution of the cruise industry to the Canadian economy. The remaining impacts are spread throughout the other provinces and are the result of purchases made by the cruise lines from businesses in those provinces and the purchase of cruises and other transportation services by residents (sourced passengers) of those provinces.

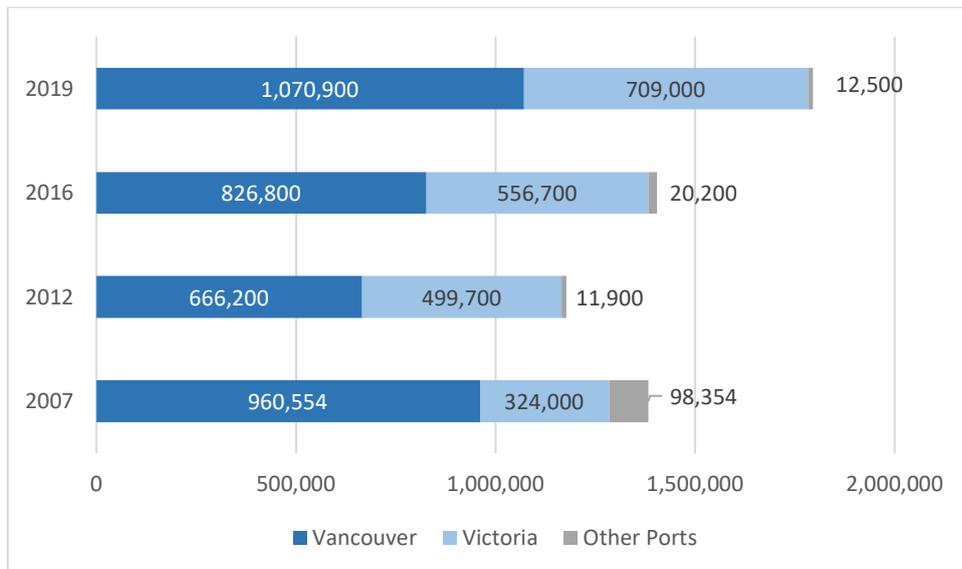
The economic impacts discussed in this section are based upon data provided by the respective ports as well as by the cruise lines that identify their expenditures by province. As discussed above, estimates of passenger and crew spending in each province is based upon arrival data obtained from the ports and trade associations and passenger and crew expenditure data obtained from surveys that were a component of this project, as well as, expenditure data collected from third-party consultants. Finally, the indirect and induced impacts were estimated using input-output tables for each of the provinces and the employment and wage impacts were calculated using provincial wage and employment data published by Statistics Canada.

British Columbia Cruise Sector

During 2019, almost 570 cruise ship calls were reported at British Columbia’s four principal cruise ports, Vancouver, Victoria, Prince Rupert and Nanaimo. As shown in **Figure BC-1**, the four BC ports handled nearly 1.8 million passengers (embark, disembark, transit) during the cruise season,²⁵ representing 1.59 million individual passengers. On a regional basis, the ports of British Columbia accounted for 59 percent of the Canadian cruise passenger throughput. Vancouver is primarily a port of embarkation and debarkation for Alaska cruises, while the ports of Victoria, Prince Rupert and Nanaimo primarily serve as transit ports for Alaska cruises that originate at U.S. ports and Vancouver.

The Port of Vancouver is certainly the largest of the four ports having processed 60 percent of the British Columbia passengers during 2019. The 1,070,900 passengers (embark, disembark, port of call) in Vancouver during 2019 was about 30 percent higher than the 2016 throughput.

Figure BC-1 – Cruise Passenger Throughput at the Ports of British Columbia



Source: Ports of Vancouver, Victoria, Prince Rupert and Nanaimo

U.S. law requires that foreign-flagged cruise ships sailing between U.S. ports must call at a “far foreign” port. Thus, ships sailing to Alaska from Seattle and other U.S. Pacific coast ports have primarily used Victoria as their foreign port-of-call. Victoria’s 709,000 passengers during 2019 set a new record for the port and is 27 percent higher than in 2016. The smaller ports, Prince Rupert and Nanaimo experienced significant reductions (-38%) from 2016.

In addition to cruise passenger arrivals, an estimated 231,200 residents of British Columbia purchased cruises during 2019. This represented 22 percent of all Canadian residents who purchased cruises during the year.

²⁵ The principal cruise season in British Columbia is six months long and generally begins in May and extends through October. The length of the cruise season will vary by port and there will be a few cruise calls in April and November in some of the ports.

Direct Expenditures

There are three primary sources of cruise-related spending: i) cruise lines; ii) cruise passengers and iii) crew members. The cruise lines purchase a variety of goods and services supporting their cruises, including food and beverages, hotel supplies, bunker fuels, utilities while in port and other port services to name a few. Passengers purchase transportation to and from port cities, pre- and post-cruise excursions, souvenirs and other retail goods while crew members will purchase a similar set of goods and services with a heavier concentration on retail goods.

Table BC-1 – Direct Cruise-Related Expenditures in British Columbia, 2019
Millions of Dollars

Sources	Spending	Share
Cruise Lines	\$750.9	56%
Passengers	\$553.8	42%
Crew	\$27.6	2%
Total	\$1,332.3	

Note: Components may not sum to totals due to rounding.

During 2019, cruise-related spending totalled over \$1.3 billion in British Columbia, or 67 percent of total cruise-related spending throughout Canada. As indicated in **Table BC-1**, the cruise lines' expenditures accounted for 56 percent of the total, passengers accounted for 42 percent and crew the remaining 2 percent. The industry impacts, which are discussed in the following sections, vary significantly across the three sources.

Expenditures by Cruise Lines

Expense data collected through surveys with the various port authorities and CLIA member cruise lines showed that the cruise lines spent \$751 million with businesses in British Columbia during 2019. As shown in **Table BC-2**, the cruise lines spent an estimated \$88 million in administrative and professional expenses with businesses in British Columbia. This represented 12 percent of total cruise line expenditures in the province and included expenditures for advertising and promotion, computer programming, legal, accounting and other professional consulting services.

In addition, the cruises lines spent \$663 million on operational expenses with businesses in British Columbia. The largest operational expenditure category was transportation and warehousing services for which the cruise lines spent \$219 million, or 29 percent of total spending by the cruise lines. This included the costs of port fees; payments to ship agents; stevedores; passenger and crew transportation paid by the cruise lines, excluding shore excursions; and storage and warehousing. Cruise lines also spent \$116 million on fuel during 2019 and another \$65 million on food and beverage stores. Cruise lines also spent a combined \$122 million on vessel maintenance and equipment with BC shipyards and equipment manufacturers.

Table BC-2 – Cruise Lines’ Expenditures in British Columbia by Category, 2019
Millions of Dollars

Category	Spending	Share
Administrative & Professional Expenses	\$87.8	12%
Operational Expenses	\$663.0	88%
Transportation & Warehousing	\$218.6	29%
Fuel	\$116.3	15%
Vessel Maintenance & Repair	\$112.4	15%
Food and Beverages	\$65.0	9%
Travel Agent Commissions	\$37.6	5%
Machinery & Equipment	\$9.5	1%
Other Operating Expenses	\$103.6	14%
Total	\$750.9	

Note: Components may not sum to totals due to rounding.

The 231,200 residents of British Columbia that purchased cruises during 2019 generated an estimated \$38 million in travel agent commissions. Other operating expenses, totalling \$104 million, included expenditures for security services, utilities and sanitation services, hotel supplies, chemicals and cleaning agents and wages and salaries paid to shore-side staff in the province.

Expenditures by Passengers

As shown in **Table BC-3**, of the 1.59 million individual cruise passengers that arrived in the four BC ports, it is estimated that 87 percent, or 1.39 million, disembarked and visited the ports. These visits resulted in \$382.4 million in purchases for goods and services throughout British Columbia in 2019 for an average expenditure of nearly \$276 per passenger onshore visit. The much higher average per passenger expenditure of \$390 in Vancouver reflects the fact that the Port of Vancouver is primarily a port of embarkation and debarkation, and thus generates longer visits with more overnight stays.

Expenditures for tours and local transportation accounted for 32 percent of passenger expenditures. Lodging was the second largest passenger expenditure category and generated \$115 million in expenditures and accounted for 30 percent of their total spending. With no direct lodging expenditures in the three transit ports (Victoria, Prince Rupert and Nanaimo) the non-lodging components of passenger spending each accounted for a larger share of passenger spending than in Vancouver. Retail goods, such as clothing and souvenirs, absorbed 17 percent of passenger expenditures and totalled \$66.5 million during 2019.

Table BC-3 – Passenger Expenditures in British Columbia by Category, 2019
Millions of Dollars

	Vancouver	Victoria	Other BC Ports	Total
Passenger Arrivals	1,070,900*	709,000*	12,500	1,792,400
Passenger Onshore Visits	859,400	515,600	10,900	1,385,900
Lodging	\$115.3	\$0.0	\$0.0	\$115.3
Tours and Transportation	\$97.8	\$23.7	\$0.4	\$122.0
Food and Beverages	\$71.8	\$6.7	\$0.1	\$78.6
Other Retail	\$51.6	\$14.6	\$0.3	\$66.5
Total Spending	\$336.5	\$45.0	\$0.8	\$382.4
Average per Passenger	\$390.33	\$87.36	\$74.08	\$275.91

Note: Components may not sum to totals due to rounding.

* Total Arrivals are the sum of embarks, disembarks and transit. There were 862,200 individual passengers who arrived at the port of Vancouver.

Other Passenger Expenditures

Other passenger expenditures consist of the airfare and travel insurance costs of cruise passengers that impact Canadian economic activity and totalled \$171 million (see **Table BC-4**). Both Canadian and foreign cruise passengers traveled to Vancouver to embark on and/or disembark from their cruises. In addition, the 231,200 BC sourced passengers travelled for cruises within and outside of British Columbia. We have estimated that the air travel related to these cruises generated \$168 million in air travel expenditures that impacted the British Columbia economy. In addition, the 231,200 residents of British Columbia who purchased a cruise also spent an estimated \$3.5 million in travel insurance for their cruises. Adding this \$171.4 million in additional expenditures to the \$382.4 million above, leads to a total spending by cruise passengers in British Columbia to be \$553.8 million.

Table BC-4 – Other Direct Passenger Expenditures in British Columbia, 2019
Millions of Dollars

Category	Expenditures
Airfares Impacting the British Columbia Economy	\$168.0
Cruise-Related Travel Insurance in British Columbia	\$3.5
Total	\$171.4

Expenditures by Crew

It is estimated that 248,400 crew, or 37 percent of those who arrived at the various British Columbia ports made an onshore visit and spent \$27.6 million in 2019 (see **Table BC-5**). Vancouver had the highest volume of crew visits and accounted for 58 percent of crew expenditures in the province. While tours and transportation absorbed 32 percent of passenger expenditures, this category only accounted for 5 percent of crew expenditures. Crew were estimated to have spent \$19.2 million for retail goods and accounted for 70 percent of their total spend.

Table BC-5 – Crew Expenditures in British Columbia by Category, 2019
Millions of Dollars

	Vancouver	Victoria	Other BC Ports	Total
Crew Arrivals	383,700	276,600	5,100	665,400
Crew Onshore Visits	149,600	96,800	2,000	248,400
Tours and Transportation	\$0.3	\$0.9	**	\$1.2
Food and Beverages	\$3.5	\$3.6	**	\$7.1
Other Retail	\$12.3	\$6.9	\$0.1	\$19.2
Total Spending	\$16.0	\$11.4	\$0.1	\$27.6
Average per Crew Visit	\$107.20	\$117.77	\$71.31	\$111.03

Note: Components may not sum to totals due to rounding.

** Less than \$50,000

Direct Expenditures by Industry

For purposes of the economic impact analysis, the \$1.33 billion in direct cruise industry expenditures in British Columbia were allocated to the appropriate industries. For example, after adjusting for trade and transportation margins and business taxes, cruise lines' purchases of food and beverages were allocated to the Food & Beverage manufacturing industry while passenger expenditures for lodging were allocated to the Accommodation & Food Services industry. These are shown in **Table BC-6**.

Table BC-6 – Direct Cruise Industry Expenditures in British Columbia, 2019
Millions of Dollars

Sectors	Expenditures	Share
Goods Producing Sector	\$402.0	30%
Agriculture, Utilities & Construction	\$4.9	0%
Manufacturing	\$397.1	30%
Service Producing Sector	\$885.0	66%
Wholesale & Retail Trade	\$68.6	5%
Transportation & Warehousing	\$383.7	29%
Financial & Business Services	\$96.2	7%
Accommodation & Food Services	\$251.4	19%
Other Services & Government	\$85.1	6%
Spending by Sector	\$1,287.0	
Business Taxes (Less Subsidies)	\$45.3	3%
Direct Spending	\$1,332.3	

Note: Components may not sum to totals due to rounding.

Businesses in the manufacturing sector received \$397 million in cruise industry expenditures, 30 percent of direct expenditures. These expenditures consist primarily of cruise lines' expenditures for their cruise ship operations. The most important of which are food and fuel purchases, which totalled a combined \$181 million. An estimated \$106 million was spent in the transportation equipment and machinery industries for such goods and services as ship repair and maintenance and lifeboats. The cruise lines also purchased a broad range of electronic equipment and machinery, including communications and navigation equipment and parts for engines, HVAC, galley equipment and so forth.

As indicated in the table, the Transportation & Warehousing industry accounted for 29 percent of the cruise industry's direct expenditures in the province. This included expenditures for cruise lines' purchases of port services, such as stevedoring, piloting and port agents, and trucking and warehousing. It also included passenger and crew expenditures for air transportation, tours and other ground transportation and the wages and salaries of shore-side employees of the cruise lines who work at facilities in the province.

The Financial & Business Services sector was impacted by a broad range of expenditures by the cruise lines for such services as advertising, travel agent commissions, engineering, architectural, legal, accounting and consulting services. The survey data obtained from the cruise lines indicated that they spent \$96.2 million in this sector in 2019.

Passenger and crew expenditures were primarily allocated to three industries, Transportation & Warehousing, which we have already discussed, Wholesale & Retail Trade and Accommodation & Food Services. These latter two sectors accounted for 24 percent of direct expenditures and totalled \$320 million combined.

Direct Employment, Wage and Tax Impacts

The \$1.3 billion in direct cruise industry expenditures in British Columbia generated direct employment of 10,100 annualized full- and part-time employees²⁶ paying \$443 million in wage income (see **Table BC-7**). Combining business and income taxes, the direct cruise-related spending in the province generated \$138 million in governmental tax payments.

The Goods Producing Sector accounted for 30 percent of direct expenditures, 14 percent of the direct jobs and 18 percent of wage income. Led by the food and beverage and petrochemical industries, the nondurable goods industries accounted for about half (56% output, 51% jobs, 49% wages income) of the economic impacts within the manufacturing sector.

With passenger and crew spending accounting for 44 percent of direct spending and spending for transportation services accounting for 29 percent of the direct expenditures, the Service Producing Sector accounted for 66 percent of the direct spending, 86 percent of the direct jobs and 82 percent of the wage income. The Transportation & Warehousing industry accounted for approximately 43 percent of the direct impacts within the Service Producing Sector. This industry accounted for the most direct jobs and income and included jobs at the cruise ports, among tour operators as well as air and ground transportation companies.

²⁶ The economic impacts generated by the models are average annual impacts and include part-time (including seasonal) and full-time employees. Since these expenditures typically occur over a 6-month period of May through October, the peak employment impacts will actually be higher than those reported. It should be noted that some ports will receive a few calls in April and November. Because many of the seasonal workers will incur significant overtime, the six-month impacts, while larger than the average annual impacts, are not necessarily twice as large. Adjusting the employment figures for part-time employees, the direct employment impact is equivalent to approximately 7,630 full-time employees.

Table BC-7 – Direct Cruise Industry Economic Impacts in British Columbia, 2019
Millions of Dollars

Sectors	Direct Spend	Jobs	Income
Goods Producing Sector	\$402.0	1,367	\$79.4
Agriculture, Utilities & Construction	\$4.9	29	\$0.9
Manufacturing	\$397.1	1,338	\$78.5
Service Producing Sector	\$885.0	8,737	\$363.9
Wholesale & Retail Trade	\$68.6	580	\$25.3
Transportation & Warehousing	\$383.7	3,194	\$169.1
Financial & Business Services	\$96.2	620	\$47.3
Accommodation & Food Services	\$251.4	3,186	\$72.1
Other Services & Government	\$85.1	1,157	\$50.1
Spending by Sector	\$1,287.0		
Business Taxes (Less Subsidies)	\$45.3		
Direct Impacts	\$1,332.3	10,104	\$443.3
Personal Income Taxes			\$93.1

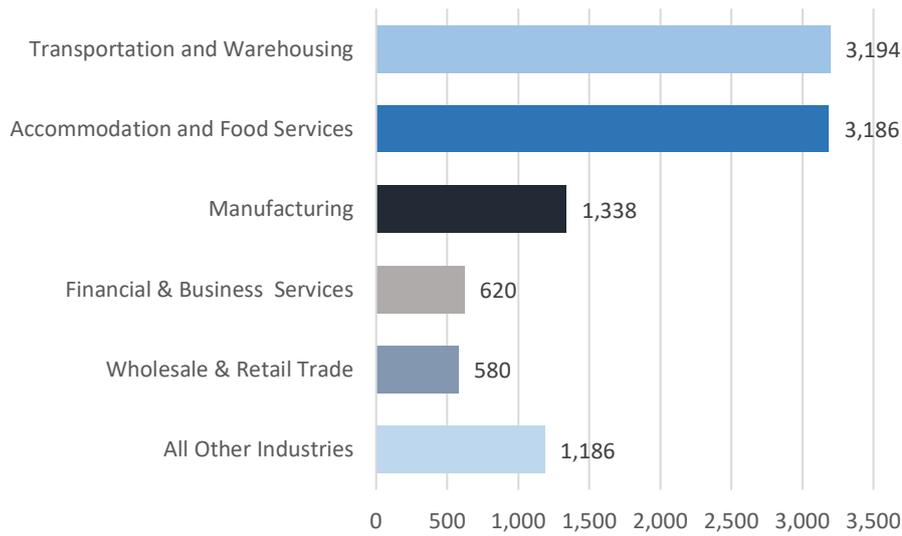
* Includes wages and salaries of employees of the cruise lines that reside in British Columbia.

Note: Components may not sum to totals due to rounding.

The direct impacts in the Financial & Business Services industry accounted for 11 percent of the direct spending and 7 percent of the direct employment impacts, but due to the relatively high wages and salaries in this industry, it accounted for 13 percent of the direct income impacts in the Service Producing Sector. As discussed above, the jobs generated in this sector included travel agents and employees of advertising and other professional services companies.

Combining the Trade and Accommodation & Food Services industries, the cruise industry generated \$320 million in direct spending, 3,766 annualized full- and part-time jobs and \$97 million in wages and salaries. These impacts were generated primarily by passenger and crew spending. Due to the relatively low productivity and wages and salaries within the Retail Trade and Accommodation & Food Services industries, these two industries accounted for 27 percent of the direct income in the Service Producing Sector, but 43 percent of the direct jobs and 36 percent of the direct spending.

Figure BC-2 – Direct Employment Impact in British Columbia by Industry, 2019



Total Employment, Wage and Tax Impacts

The total economic impacts of the cruise industry are the sum of the direct impacts described above and the indirect and induced impacts. The indirect economic benefits derived from the cruise industry result in part from the additional spending by the suppliers to the cruise industry. For example, food processors must purchase raw foodstuffs for processing; utility services, such as, electricity and water, to run equipment and process raw materials; transportation services to deliver finished products to the cruise lines or wholesalers; and insurance for property and employees.

An input-output specific to British Columbia was used to estimate the indirect and induced impacts.²⁷ This input-output table reflects the inter-industry links among industries in the BC economy. This input-output table-permits the estimation of the additional economic impacts that the direct spending by the cruise industry, its passengers and its suppliers has on all other industries in the province’s economy. As discussed in the Methodology section, the direct expenditures were adjusted for transportation and trade margins and business taxes before estimating the indirect and induced impacts.

²⁷ Statistics Canada, Industry Accounts Division, 2016.

As shown in **Table BC-8**, the input-output analysis indicated that the \$1.3 billion in direct cruise industry expenditures generated \$2.7 billion in total (direct plus indirect and induced) output, 17,379 annualized full- and part-time jobs²⁸ and nearly \$879 million in income impact. In addition, the industry generated an estimated nearly \$80 million in business taxes and \$185 million in income taxes.

Table BC-8 – Total Cruise Industry Economic Impacts in British Columbia, 2019
Millions of Dollars

Sectors	Output	Jobs	Income
Goods Producing Sector	\$1,286.5	4,476	\$269.7
Natural Resources, Utilities & Construction	\$302.0	1,168	\$75.8
Manufacturing	\$984.5	3,308	\$193.9
Durable Goods	\$363.6	1,583	\$96.0
Nondurable Goods	\$620.9	1,725	\$97.9
Service Producing Sector	\$1,351.8	12,903	\$609.0
Wholesale & Retail Trade	\$70.9	785	\$31.9
Transportation & Warehousing	\$475.7	3,875	\$210.6
Financial Services	\$160.1	1,369	\$95.3
Professional & Technical Services	\$170.7	1,448	\$111.0
Information, Culture and Recreation	\$126.4	553	\$18.1
Accommodation & Food Services	\$271.2	3,436	\$77.8
Other Services & Government	\$76.9	1,437	\$64.3
Spending by Sector	\$2,638.4		
Business Taxes (Less Subsidies)	\$79.5		
Total Impacts	\$2,717.8	17,379	\$878.6
Personal Income Taxes			\$184.5

* Includes wages and salaries of employees of the cruise lines that reside in British Columbia.

Note: Components may not sum to totals due to rounding.

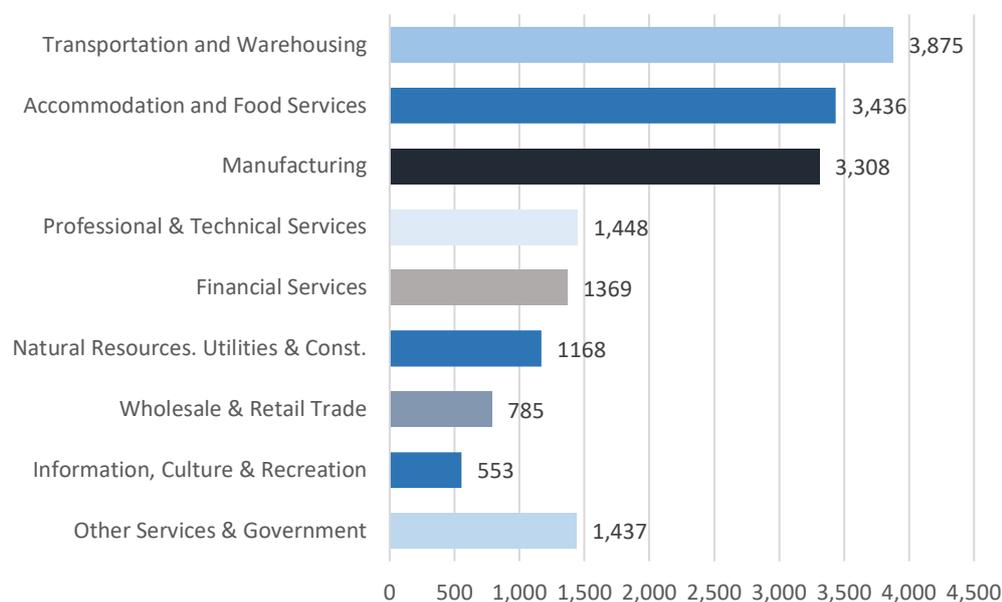
The Goods Producing Sector accounted for 47 percent of the total output impacts but due to the relatively high productivity of this sector only 26 percent of the total jobs and 31 percent of the income impacts. The total economic impacts are more evenly distributed throughout the Goods Producing Sector than the direct impacts as the indirect and induced impacts spread throughout the economy, especially among the natural resource and construction industries.

Within the Services Producing sector, the Transportation & Warehousing industry remains the dominant industry, accounting for about 35 percent of the total economic impacts in this sector. This is due to the magnitude of the direct economic impacts as well as the strong linkages between the transportation sector and all other sectors of the economy.

²⁸ Adjusting the employment figures for part-time employees, the direct employment impact is equivalent to approximately 13,125 full-time employees.

The share of the total economic impacts accounted for by the Trade and Accommodation & Food Services industries is slightly less than their share of the direct impacts. This is due to the fact that the indirect and induced impacts are more concentrated on business-to-business activity than travel and tourism related activity.

Figure BC-3 – Total Employment Impact in British Columbia by Industry, 2019



In summary, the 570 cruise ship calls at the four BC ports during 2019 generated more than 1.6 million passenger and crew onshore visits. In addition, an estimated 231,200 British Columbia residents purchased cruises from Canada and elsewhere. Passengers, crew and the cruise lines directly spent \$1.3 billion in the province during the year generating over 10,100 annualized full- and part-time jobs paying \$443 million in wages and salaries. The direct spending also generated an estimated \$138 million in business and income taxes.

Table BC-9 – Summary of Cruise Industry Economic Impacts in British Columbia, 2019

Passenger and Crew Onshore Visits	1,634,300
Direct Economic Impacts	
Cruise Industry Direct Spending (\$ Millions)	\$1,332.3
Employment	10,104
Wage and Salaries (\$ Millions)	\$443.3
Business and Income Taxes (\$ Millions)	\$138.4
Total Economic Impacts	
Total Output (\$ Millions)	\$2,717.8
Employment	17,379
Wage Income (\$ Millions)	\$878.6
Business and Income Taxes (\$ Millions)	\$264.0

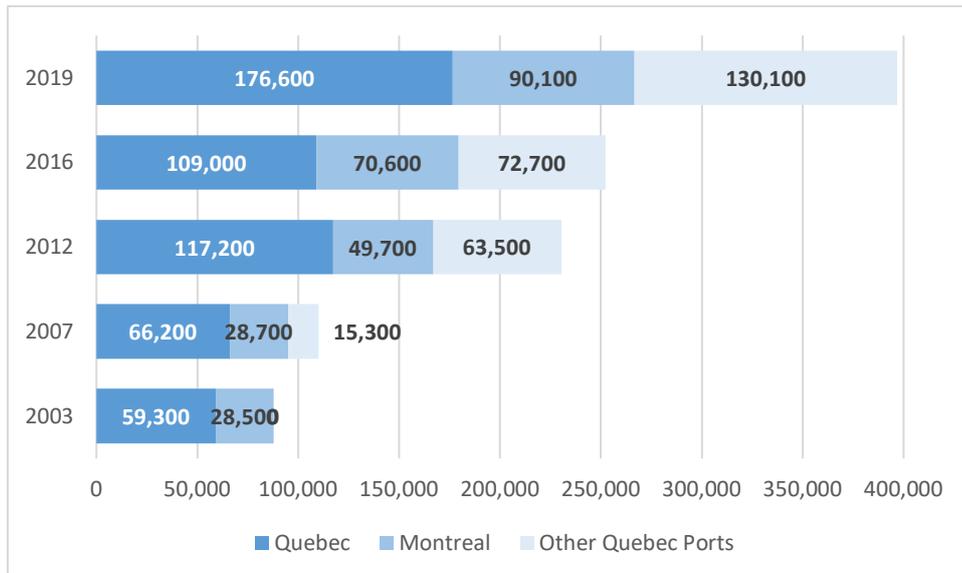
As a result of the subsequent indirect and induced spending by businesses and their employees, the cruise industry was responsible for generating an estimated \$2.7 billion in total output, nearly 17,400 jobs and \$879 million in wage income in British Columbia during 2019. Total business and income taxes were an estimated \$264 million.

Overall, the total economic impact of the cruise industry in British Columbia accounted for approximately 67 percent of the industry’s direct economic impact throughout Canada. The Goods Producing Sector accounts for a higher share of the provincial impacts than the national impacts. This is primarily due to the large volume of homeport activity in the province and the subsequent impacts on provincial manufacturers of food and beverages, machinery and equipment and petrochemicals.

Québec Cruise Sector

During 2019 about 385 cruise ship calls were made at the Ports of Montreal, Québec, Saguenay and the other ports of Québec²⁹. The cruise season in Québec generally consists of the six-month period from May through October, although some ports may see a few ships call in April and November. As shown in **Figure QC-1**, Québec ports handled a combined 396,800 passengers during the 2019 cruise season, 13 percent of total Canadian cruise passenger arrivals. This includes embarking, disembarking and transit passengers. Montreal is primarily a port of embarkation and debarkation for turnaround cruises in the Canada New England cruise market. Québec City serves primarily as a transit port for cruises sailing the same itinerary but also served as a homeport for 22 cruises during 2019. Finally, Saguenay and the other Québec ports served almost solely as transit ports during 2019 for cruises primarily originating in the United States and Canada.

Figure QC-1 – Cruise Passenger Arrivals at the Québec Ports, 2019



Source: Member ports of Cruise the Saint Lawrence.

Collectively, cruise passenger arrivals among all ports in the province increased by about 57 percent from 2016, increasing from 252,300 in 2016 to 396,800 in 2019. The Port of Québec is the largest of the three major ports having processed 45 percent of the passengers arriving at the Québec cruise ports. Cruise passenger arrivals at the Port of Québec experienced a 62 percent increase from 2016 while Montreal passenger arrivals increased by 28 percent. Passenger arrivals at the smaller Québec ports increased by 79 percent from 72,700 in 2016 to 130,100 in 2019. In addition to cruise passenger arrivals, an estimated 158,100 residents of Québec purchased cruises during 2019. This represented 15 percent of all Canadian residents who purchased cruises during the year.

²⁹ The other Québec ports are: Baie-Comeau, Gaspésie, Trois-Rivières, Havre-Saint-Pierre, Sept-Îles and Îles de la Madeleine.

Direct Expenditures

There are three primary sources of cruise-related spending: i) cruise lines; ii) cruise passengers and iii) crew members. The cruise lines purchase a variety of goods and services supporting their cruises, including food and beverages, hotel supplies, bunker fuels, utilities while in port and other port services to name a few. Passengers purchase transportation to and from port cities; onshore excursions, including pre- and post-cruise excursions; souvenirs and other retail goods while crew members will purchase a similar set of goods and services with a heavier concentration on retail goods.

During 2019, cruise-related spending totalled \$324 million in the Province of Québec, or 16 percent of cruise-related spending throughout Canada. As indicated in **Table QC-1**, the cruise lines' expenditures accounted for 56 percent of the total, passengers 43 percent and crew the remaining 1 percent. The industry impacts, which are discussed in the following sections, vary significantly across the three sources.

Table QC-1 – Direct Cruise-Related Expenditures in Québec, 2019
Millions of Dollars

Sources	Spending	Share
Cruise Lines	\$173.8	56%
Passengers	\$147.1	43%
Crew	\$3.2	1%
Total	\$324.1	

Note: Components may not sum to totals due to rounding.

Expenditures by Cruise Lines

Expense data collected through surveys with the various port authorities and CLIA member cruise lines showed that the cruise lines spent nearly \$174 million with businesses in the Province of Québec during 2019. As shown in **Table QC-2**, the cruise lines spent about \$18 million in administrative and professional expenses with businesses in the province. This represented 15 percent of total cruise line expenditures in the province and included expenditures for advertising and promotion, crew recruitment and training, computer programming, legal, accounting and other professional consulting services.

Table QC-2 – Cruise Lines' Expenditures in Québec by Category, 2019
Millions of Dollars

Category	Spending	Share
Administrative & Professional Expenses	\$18.1	15%
Operational Expenses	\$155.6	85%
Transportation & Warehousing	\$104.0	54%
Travel Agent Commissions	\$25.7	17%
Machinery & Equipment	\$16.3	5%
Food and Beverages	\$2.9	4%
Other Operating Expenses	\$6.7	6%
Total	\$173.8	

Note: Components may not sum to totals due to rounding.

In addition, the cruises lines spent \$156 million on operational expenses with businesses in Québec. A total of \$104 million was spent for transportation and warehousing services. This included the costs of port fees; ship agents; stevedores; passenger and crew transportation paid by the cruise lines, excluding shore excursions; and storage and warehousing. The estimated 158,100 residents of Québec that purchased cruises during 2019 generated an estimated \$25.7 million in travel agent commissions. Another \$16.3 million was spent on machinery and equipment, primarily sanitation and navigation equipment. The purchase of food and beverage stores for cruise ships from Québec businesses totalled \$2.9 million. Other operating expenses, totalling \$6.6 million, included expenditures for other products for cruise ship operations, such as navigation maps and equipment, furniture, crew health services and sanitation services.

Expenditures by Passengers

Data on passenger expenditures at the Québec ports were obtained from Tourisme Québec. The expenditure data were based on approximately 1,600 cruise passenger surveys administered during the 2016 cruise season at the Québec cruise ports. Data were collected for 16 expenditure categories which BREA subsequently aggregated to the four categories shown in **Table QC-3**. Expenditures for those shore tours purchased by passengers onboard cruise ships were adjusted by Tourisme Québec to reflect actual payments made to local tour operators. For the 2019 estimates, BREA utilized the 2016 survey data and applied inflationary factors, by each of the 16 expenditure categories, to estimate the average spend per passenger by category. These new spending estimates were then applied to the 2019 passenger counts.

Table QC-3 – Passenger Expenditures in Québec by Category, 2019
Millions of Dollars

	Montreal	Québec City ³⁰	Other Québec Ports	Sub-Total	Add'l Lodging Exp. ①	Total
Passenger Arrivals	90,100	176,600	130,100	396,800	396,800	396,800
Onshore Passenger Visits	89,600	176,800	115,800	382,200	382,200	382,200
Lodging	\$7.8	\$9.5	\$0.0	\$17.3	\$58.7	\$76.0
Tours and Transportation	\$3.0	\$6.2	\$3.3	\$12.5	\$0.0	\$12.5
Food and Beverages	\$4.1	\$9.3	\$1.6	\$15.0	\$0.0	\$15.0
Other Retail	\$2.8	\$7.8	\$3.1	\$13.6	\$0.0	\$13.6
Total Spending	\$17.8	\$32.7	\$8.0	\$58.4	\$58.7	\$117.1
Average/Passenger Visit	\$198.19	\$184.89	\$68.81	\$152.86	\$153.56	\$306.42

Note: Components may not sum to totals due to rounding and/or statistical discrepancy.³¹

① "Additional Lodging Exp." are primarily spending by passengers in Québec but beyond the specific port areas. For example, passengers may have reported staying in Gatineau and purchased lodging during their visit there.

Sources: Passenger Arrivals – Cruise the St. Lawrence Ports; Average Expenditures per Passenger – Tourisme Québec; Onshore Passenger Visits - BREA

³⁰ Ships on transit calls frequently spend an overnight in Québec City, resulting in more onshore visits than arriving passengers.

³¹ The estimates reported in the "Subtotal" column is not a strict sum of the port estimates. Rather these estimates are based upon average expenditure rates that were estimated by Tourisme Québec separately from the individual port estimates. The "Total" expenditures are the sum of the "Subtotal" and "Additional Lodging Exp." columns.

As shown in the table, of the 396,800 passengers that arrived at Québec’s ports, it is estimated that 96 percent, or 382,200 were either embarking passengers, or disembarked and visited the ports.³² In aggregate cruise passengers spent \$117.1 million on goods and services throughout Québec in 2019. With the additional lodging expenses factored in, the average expenditure was just over \$306 per onshore passenger visit. The Port of Montreal is primarily a port of embarkation and disembarkations and thus generates longer visits with more overnight stays than the other ports in the province. Consequentially, Montreal passengers reported the highest average per passenger expenditure of about \$198 among all Québec ports.

Lodging was the largest passenger expenditure category and generated \$76 million in expenditures and accounted for 65 percent of their total spending. Expenditures for tours, and food & beverages accounted for 11 percent and 13 percent of passenger expenditures, respectively. Since most cruise calls at the Port of Québec were transit calls, the tour and retail components of passenger spending were significantly higher in Québec City and accounted for a larger share of passenger spending than in Montreal, 43 percent in Québec City versus 33 percent in Montreal. Retail goods, such as clothing and souvenirs, absorbed 12 percent of passenger expenditures across the Québec ports and totalled \$13.6 million during 2019. The combined passenger spending for tours and retail items accounted for 80 percent of total passenger expenditures in the other provincial ports.

Other Passenger Expenditures

Other passenger expenditures that impact the Canadian economic activity consist of cruise passengers’ airfare and travel insurance costs. About 158,100 sourced passengers traveled from Québec to begin a cruise either within, or outside of Canada. We have estimated that air travel related to these cruise passengers added about \$30.0 million to the Québec economy (see **Table QC-4**). In addition, these residents of Québec purchased an estimated \$2.4 million in travel insurance for their cruises. Thus, when added to the \$117.1 million spending listed in Table QC-3, the total spend by passengers in Québec was approximately \$147.1 million.

Table QC-4 – Other Direct Passenger Expenditures in Québec, 2019
Millions of Dollars

Category	Expenditures
Airfares Impacting the Québec Economy	\$27.6
Cruise-Related Travel Insurance in Québec	\$2.4
Total	\$30.0

³² There are three types of cruise itineraries that generate passenger visits in Québec. On one-way cruises cruise passengers start their cruise in one port and end their cruise in another port. Thus, each passenger generates a single individual visit at each port. On return, or roundtrip cruises, passengers begin and end their cruise in the same homeport. Thus, each passenger makes two visits to the homeport. Finally, on transit, or port-of-call, cruises passengers arrive and depart with their ship. These passengers generate a single individual visit at each port-of-call. In Québec, almost all cruise ship calls are either one-way cruises, starting or ending at a Québec port or a transit call.

Expenditures by Crew

As shown in **Table QC-5**, an estimated 145,400 crew arrived at the Province of Québec ports, with 56,700, or 39 percent, estimated to have disembarked and made an onshore visit. These crew spent \$3.2 million in 2019 during their visits. The Port of Québec with the highest volume of cruise traffic generated about 41 percent of the crew visits and 30 percent of total crew spending in the province. While tours and transportation absorbed 11 percent of passenger expenditures, this category only accounted for 6 percent of crew expenditures. Crew were estimated to have spent nearly \$1.1 million for retail goods and accounted for 35 percent of their total spend.

Table QC-5 – Crew Expenditures in Québec by Category, 2019
Millions of Dollars

	Montreal	Québec City	Other Québec Ports	Subtotal	Lodging Exp. ^①	Total
Crew Arrivals	21,500	60,100	63,800	145,400	145,400	145,400
Crew Onshore Visits	8,400	23,500	24,900	56,700	56,700	56,700
Lodging	--	--	--	--	\$0.9	\$0.9
Tours & Transportation	\$0.03	\$0.08	\$0.08	\$0.18	--	\$0.2
Food & Beverages	\$0.15	\$0.43	\$0.45	\$1.03	--	\$1.0
Other Retail	\$0.16	\$0.46	\$0.49	\$1.11	--	\$1.1
Total Spending	\$0.34	\$0.96	\$1.02	\$2.32	\$0.9	\$3.2
Avg per Onshore Visit	\$40.90	\$40.90	\$40.90	\$40.90	\$15.15	\$56.05

Note: Rows and/or columns may not sum to the total due to rounding.

^①"Additional Lodging Expenditures" are primarily spending by crew in Québec but beyond the specific port areas. For example, crew may have reported traveling to Gatineau and purchased lodging during their visit there.

Sources: Passenger Arrivals – Cruise the St. Lawrence ports; Average Expenditures per Passenger – Tourisme Québec; Onshore Passenger Visits - BREA.

Finally, crew were estimated to have spent \$860,000 on lodging. These expenditures generally occur when cruise ships stay overnight in Montreal or Québec and crew have the night off. They also occur when crew utilize vacation time between one-way cruises. For example, cruise ships sail between New York and Montreal on one-way cruises. Thus, a crew member will disembark when the ship arrives in Montreal and vacation in the province. The ship may then sail on a one-week cruise back to New York and then another one-week cruise back to Montreal where the crew member will rejoin the cruise ship.

Direct Expenditures by Industry

For purposes of the economic impact analysis, the \$324 million in direct cruise industry expenditures in the Province of Québec were allocated to the appropriate industries. For example, after adjusting for trade and transportation margins and business taxes cruise lines' purchases of food and beverages were allocated to the Food & Beverage manufacturing industry while passenger expenditures for lodging were allocated to the Accommodation & Food Services industry. These are shown in **Table QC-6**.

The Transportation & Warehousing industry had the highest level of direct expenditures of \$117.2 million, 36 percent of the total. These included expenditures of cruise lines' purchase of port services, such as stevedoring, piloting and port agents, and trucking and warehousing. It also included passenger and crew expenditures for air transportation, tours and other ground transportation.

As indicated in the table, The Financial & Business Services industry accounted for 9 percent of the cruise industry's direct expenditures in the province, \$29 million. These included a broad range of expenditures by the cruise lines for such services as advertising, travel agent commissions, engineering, architectural, legal, accounting and consulting services.

Table QC-6 – Direct Cruise Industry Expenditures in Québec, 2019
Millions of Dollars

Sectors	Direct Spend	Share
Goods Producing Sector	\$51.6	16%
Agriculture, Utilities & Construction	\$0.6	**0%
Manufacturing	\$50.9	16%
Service Producing Sector	\$265.9	82%
Wholesale & Retail Trade	\$4.0	1%
Transportation and Warehousing	\$117.2	36%
Financial & Business Services	\$28.9	9%
Accommodation and Food Services	\$97.3	30%
Other Services & Government	\$18.5	6%
Spending by Sector	\$317.5	98%
Business Taxes	\$6.6	2%
Total Direct Spending	\$324.1	

Note: Components may not sum to totals due to rounding.

** Less than 1%

Businesses in the manufacturing sector received nearly \$51 million in cruise industry expenditures, 16 percent of direct expenditures. These expenditures consisted primarily of cruise lines' expenditures for their cruise ship operations, as well as products consumed by passengers and crew; the most important of which were food, fuel and machinery purchases. The cruise lines also purchased a broad range of supplies for their onboard hotel operations, including textile products, apparel and brochures and other printed material.

Passenger and crew expenditures were primarily allocated to three industries, Transportation & Warehousing, which we have already discussed, Wholesale & Retail Trade and Accommodation & Food Services. Combined, these later two sectors accounted for 31 percent of direct expenditures and totalled \$101.3 million combined.

Direct Employment, Wage and Tax Impacts

As shown in **Table QC-7**, the \$324 million in direct cruise industry expenditures generated direct employment of 3,268 annualized full- and part-time employees³³ paying \$116.3 million in wage income. Combining business taxes and personal income taxes, the direct cruise-related spending in the province generated \$31 million in governmental tax payments.

Table QC-7 – Direct Cruise Industry Economic Impacts in Québec, 2019
Millions of Dollars

Sectors	Direct Spend	Jobs	Income
Goods Producing Sector	\$51.6	170	\$9.7
Agriculture, Utilities & Construction	\$0.6	3	\$0.1
Manufacturing	\$50.9	167	\$9.6
Service Producing Sector	\$265.9	3,098	\$106.5
Wholesale & Retail Trade	\$4.0	38	\$1.7
Transportation and Warehousing	\$117.2	739	\$41.1
Financial & Business Services	\$28.9	195	\$13.8
Accommodation and Food Services	\$97.3	1,940	\$41.0
Other Services & Government	\$18.5	186	\$8.9
Spending by Sector	\$317.5		
Business Taxes	\$6.6		
Total Direct Impacts	\$324.1	3,268	\$116.3
Personal Income Taxes			\$24.4

Note: Components may not sum to totals due to rounding.

The Goods Producing Sector accounted for 16 percent of direct expenditures, 5 percent of the direct jobs and 8 percent of wage income. Nearly half of the impacts (51% output, 44% jobs, 42% wages and salaries) in the manufacturing sector occurred in the nondurable goods industry.

With passenger and crew spending accounting for about 43 percent of direct spending and spending for transportation services accounting for 37 percent of the direct expenditures, the Service Producing Sector accounted for 82 percent of direct expenditures, 95 percent of the direct jobs and 92 percent of wage income. The industry with the highest direct expenditure impact was the Transportation & Warehousing industry. The direct

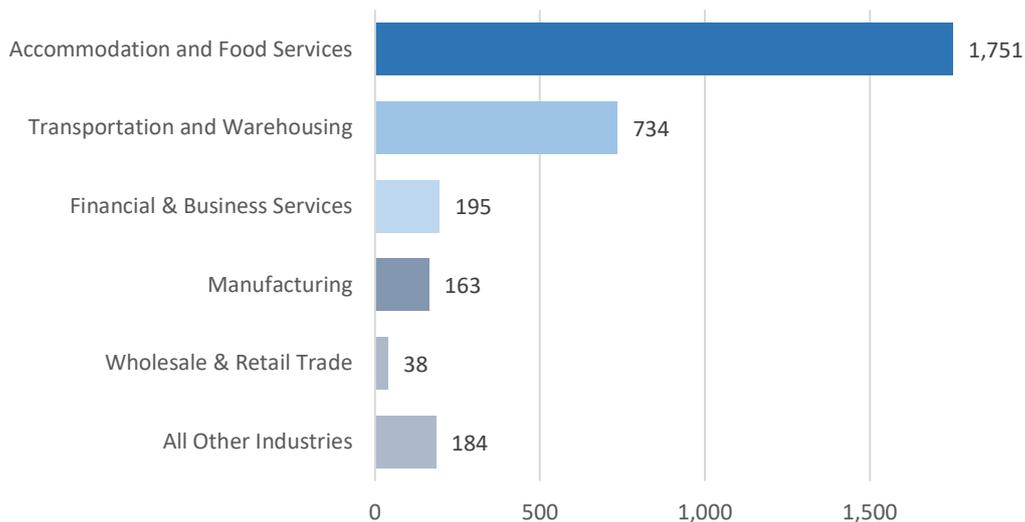
³³ The economic impacts generated by the models are average annual impacts and include part-time (including seasonal) and full-time employees. Since these expenditures typically occur over a 6-month period of May through October, the peak employment impacts will actually be higher than those reported. It should be noted that some ports will receive a few calls in April and November. Because many of the seasonal workers will incur significant overtime, the six-month impacts, while larger than the average annual impacts, are not necessarily twice as large. Adjusting the employment figures for part-time employees, the direct employment impact is equivalent to approximately 2,315 full-time employees.

impacts in this industry accounted for 44 percent of the direct spending and approximately 24 percent of the direct employment and 39 percent of the direct wage impacts in the Service Producing Sector. As discussed above, the jobs generated in this sector included employment at the cruise ports, among tour operators and air and ground transportation companies.

The Financial & Business Services industry accounted for 6 percent of the direct employment impacts within the Service Producing Sector and, due to the higher wages and salaries in this industry, 13 percent of the direct wage impacts in the sector. This industry accounted for the third most direct jobs income impacts. The employment impacts in this industry included jobs at travel agencies, advertising firms and other professional services companies.

The cruise industry generated \$97 million in direct spending in the Accommodation & Food Services industries, 1,940 annualized full- and part-time jobs and \$41 million in wage income. These impacts were generated primarily by passenger and crew spending. Due to the relatively low productivity and wages and salaries within the Accommodation & Food Services industries, these industries accounted for 37 percent of the direct expenditures and 38 percent of the direct wage income in the Service Producing Sector, but 63 percent of the direct jobs.

Figure QC-2 – Direct Employment Impact in Québec by Industry, 2019



Total Employment, Wage and Tax Impacts

The total economic impacts of the cruise industry are the sum of the direct impacts described above and the indirect and induced impacts. The indirect economic benefits derived from the cruise industry result in part from the additional spending by the suppliers to the cruise industry. For example, food processors must purchase raw foodstuffs for processing; utility services, such as, electricity and water, to run equipment and process raw materials; transportation services to deliver finished products to the cruise lines or wholesalers; and insurance for property and employees.

An input-output table specific to Québec was used to estimate the indirect and induced impacts.³⁴ This input-output table reflects the inter-industry links among industries in the Québec economy. This input-output table permits the estimation of the additional economic impacts that the direct spending by the cruise industry, its passengers and its suppliers has on all other industries in the Québec economy. As discussed in the Methodology section, the direct expenditures were adjusted for transportation and trade margins and business taxes before estimating the indirect impacts.

The input-output analysis indicated that the \$324 million in direct cruise industry expenditures generated nearly \$712 million in total (direct plus indirect and induced) output, 5,095 annualized full- and part-time jobs³⁵ and \$261 million in income. In addition, the industry generated an estimated \$21.4 million in business taxes and \$45.1 million in income taxes (see **Table QC-8**).

Table QC-8 – Total Cruise Industry Economic Impacts in Québec, 2019
Millions of Dollars

Sectors	Output	Jobs	Income
Goods Producing Sector	\$285.1	958	\$101.6
Natural Resources, Utilities & Construction	\$59.7	232	\$59.7
Manufacturing	\$225.4	726	\$41.9
Durable Goods	\$92.7	369	\$21.8
Nondurable Goods	\$132.7	357	\$20.1
Service Producing Sector	\$405.3	4,137	\$159.8
Wholesale & Retail Trade	\$4.5	45	\$1.9
Transportation and Warehousing	\$148.1	933	\$52.0
Financial & Business Services	\$92.1	714	\$43.9
Information, Culture and Recreation	\$40.9	126	\$6.7
Accommodation and Food Services	\$102.8	2,049	\$43.3
Other Services & Government	\$17.0	270	\$12.1
Spending by Sector	\$690.4		
Business Taxes (Less Subsidies)	\$21.4		
Total Impacts	\$711.8	5,095	\$261.4
Personal Income Taxes			\$45.1

Note: Components may not sum to totals due to rounding.

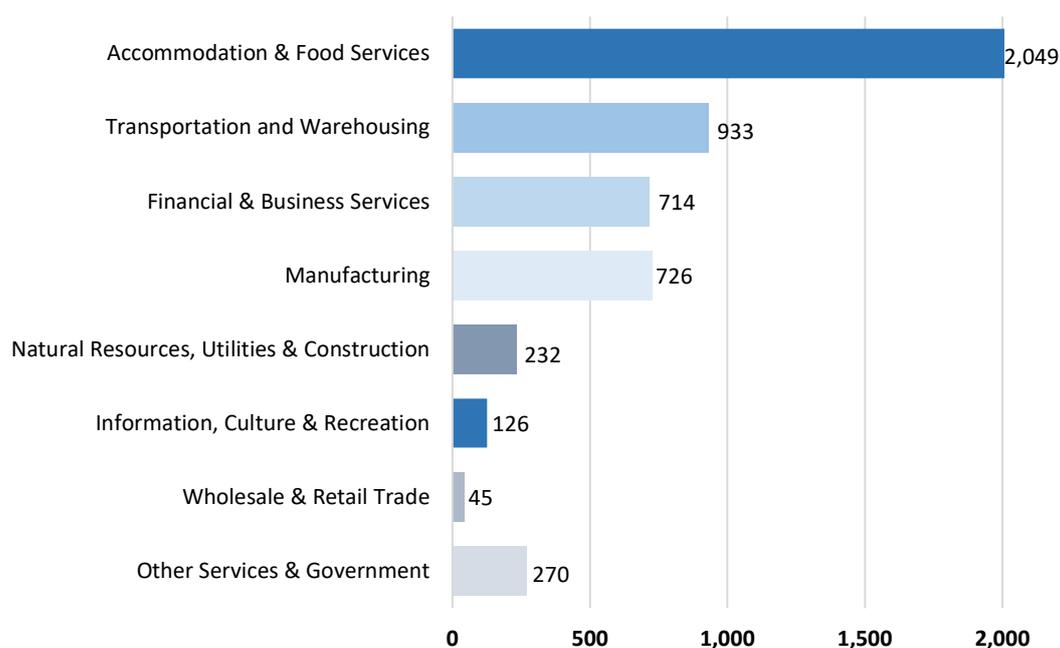
³⁴ Statistics Canada, *Industry Accounts Division*, 2016.

³⁵ Adjusting the employment figures for part-time employees, the direct employment impact is equivalent to approximately 3,640 full-time employees.

The Goods Producing Sector accounted for 40 percent of the total output impacts but due to the relatively high productivity of this sector only 19 percent of the total jobs and 39 percent of the income impacts. The total economic impacts are more evenly distributed throughout the Goods Producing Sector than the direct impacts as the indirect and induced impacts spread throughout the economy, especially among the natural resource and construction industries.

Within the Services Producing sector, the industry Transportation & Warehousing remains the dominant industry, accounting for 37 percent of the total output impacts and 23 percent of the employment and 33 percent of the direct wage impacts in this sector. The Accommodations & Food Services sector accounted for 25 percent of total output, 50 percent of the total employment impacts and 27 percent of the wage impacts in the services sector.

Figure QC-3 – Total Employment Impact in Québec by Industry, 2019



In summary, the 385 cruise ship calls at the ports in the Province of Québec during 2019 generated nearly 439,000 passenger and crew onshore visits (see **Table QC-9**). In addition, an estimated 158,100 Québec residents purchased cruises to Canada and elsewhere. Passengers, crew and the cruise lines directly spent \$324 million in the province during the year directly generating almost 3,300 annualized full- and part-time jobs paying \$116 million in wages and salaries. The direct spending also generated an estimated \$31 million in business taxes and income taxes.

As a result of the subsequent indirect and induced spending by businesses and their employees, the cruise industry was responsible for generating an estimated \$712 million in total output, 5,095 annualized jobs and \$261 million in wage income in Québec during 2019. Total business and income taxes were an estimated \$66.5 million.

Table QC-9 – Summary of Cruise Industry Economic Impacts in Québec, 2019

Passenger and Crew Onshore Visits	438,900
Direct Economic Impacts	
Cruise Industry Direct Spending (\$ Millions)	\$324.1
Employment	3,268
Wages and Salaries (\$ Millions)	\$116.3
Business and Income Taxes (\$ Millions)	\$31.1
Total Economic Impacts	
Total Output (\$ Millions)	\$711.8
Employment	5,095
Wage Income (\$ Millions)	\$261.4
Business and Income Taxes (\$ Millions)	\$66.5

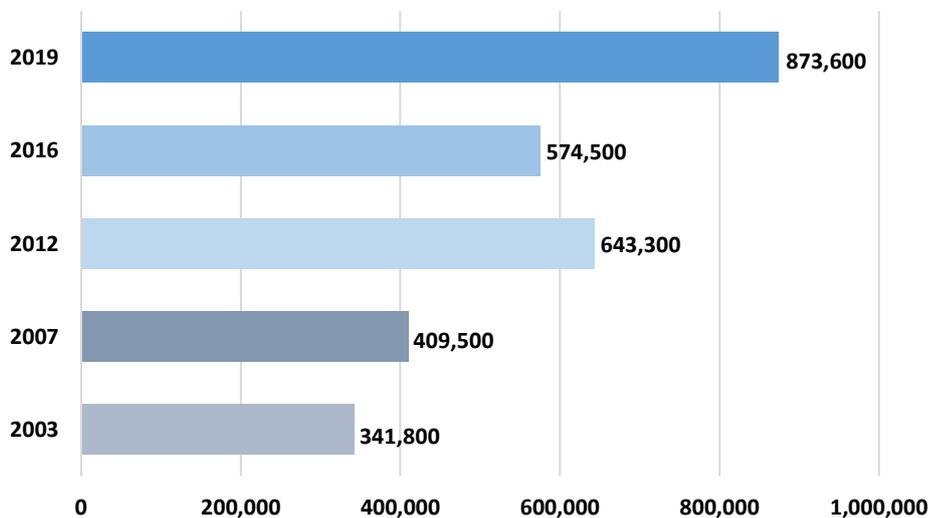
Overall, the economic impacts of the cruise industry in Québec accounted for approximately 16 percent of the industry’s direct impact throughout Canada. Relative to the national impacts, the economic impacts in Québec were more highly concentrated in the Service Producing Sector, especially the Transportation & Warehousing industry. This reflects the relatively high share of one-way cruises that originate in Montreal and Québec City and its impact on port revenues. On the contrary, there was a proportionately smaller impact within the Goods Producing Sector, especially manufacturing, due to the fact that the direct purchases of these support services are not as dependent upon proximity to ports and are spread throughout Canada.

Atlantic Canada Cruise Sector

Cruise activity at Atlantic Canada³⁶ ports generated significant economic activity throughout the economy on both an industry and regional basis. The economic benefits that accrue to the Canadian economy arise from five principal sources:

- VI. spending by cruise passengers and crew for goods and services associated with their cruise, including travel to the port of embarkation and pre- and post-cruise vacation spending;
- VII. expenditures by the cruise lines for goods and services necessary for cruise operations, including food and beverages, fuel, vessel maintenance and repair, ship's supplies and so forth;
- VIII. shore-side staffing by the cruise lines for their cruise and land transportation and excursion activities;
- IX. spending by the cruise lines for port services at ports-of-embarkation and ports-of-call; and
- X. capital expenditures for equipment and facilities purchased from Atlantic Canada businesses.

Figure AC-1 – Cruise Passenger Arrivals in Atlantic Canada



Source: BREA survey of Atlantic Canada cruise ports - 2019.

During 2019 over 550 cruise ship calls were made at Atlantic Canadian cruise ports. As shown in **Figure AC-1**, over 873,000 passengers arrived at Atlantic Canada ports throughout the cruise season³⁷. This was a 52 percent increase from the 575,000 passengers in 2016 and represents the highest total for passengers in the region. Previously, cruise passenger arrivals in the region had peaked at 643,000 in 2012.

³⁶ For the purposes of this study, Atlantic Canada consists of the following four provinces: Nova Scotia, New Brunswick, Newfoundland and Labrador and Prince Edward Island.

³⁷ The Atlantic Canadian cruise season generally begins in mid-April and ends in mid-November. This is the sum of passenger embarkations, debarkations and transit arrivals.

As indicated in **Figure AC-2**, Canadian cruise passenger arrivals were concentrated in four Atlantic Canada ports, Halifax, Saint John, Sydney, and Charlottetown, which accounted for 91 percent of total passenger arrivals in the region. Virtually all of the cruise traffic at Atlantic Canada ports are generated by transit calls by cruise ships sailing on Canada New England cruises that originate at U.S. ports and Transatlantic cruises.

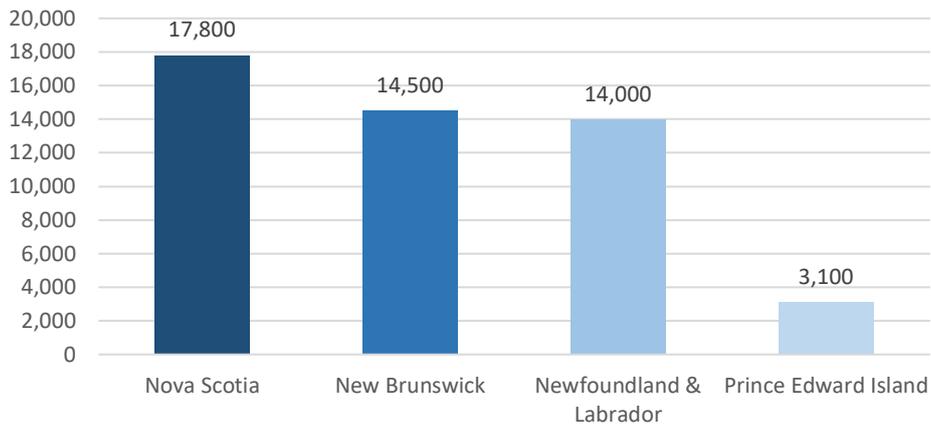
Figure AC-2 – Cruise Passenger Arrivals in Atlantic Canada by Port, 2019



Source: BRE A survey of Atlantic Canada cruise ports - 2019.

In addition to the passenger arrivals reported above, BRE A estimated that 49,400 residents of the four Atlantic Canada provinces purchased cruises in 2019 based upon data from the Cruise Lines International Association (CLIA). This is an 80 percent increase over the number of Atlantic Canada residents that purchased worldwide cruises in 2016. Some of these residents embarked on their cruises in Canada while others boarded their cruises in the United States and other countries across the globe. As shown in **Figure IN**, the top 3 provinces (Nova Scotia, New Brunswick, Newfoundland and Labrador) each accounted for more than 14,000 sourced passengers in 2019.

Figure AC-3 – Source Passengers from the Provinces of Atlantic Canada, 2019



Source: CLIA

Direct Expenditures

There are three primary sources of cruise-related spending: i) cruise lines; ii) cruise passengers and iii) crew members. The cruise lines purchase a variety of goods and services supporting their cruises, including food and beverages, hotel supplies, bunker fuels, and utilities while in port and other port services to name a few. Passengers purchase transportation to and from port cities, pre- and post-cruise excursions, souvenirs and other retail goods while crew members will purchase a similar set of goods and services with a heavier concentration on retail goods.

Table AC-1 – Direct Cruise-Related Expenditures in Atlantic Canada by Source, 2019 Millions of Dollars

Sources	Spending	Share
Cruise Lines	\$78.2	50%
Passengers	\$67.6	43%
Crew	\$11.4	7%
Total	\$157.2	

Note: Components may not sum to totals due to rounding.

During 2019, direct cruise-related spending totalled \$157.2 million. This is a 53 percent increase above the \$102.5 million in cruise-related spending reported by BREA in 2016. As indicated in **Table AC-1**, the cruise lines accounted for 50 percent of the total, passengers accounted for 43 percent and crew the remaining 7 percent. The regional and industry impacts, which are discussed in the following sections, vary significantly across the three sources.

Expenditures by Cruise Lines

Expense data collected through surveys of the various port authorities and CLIA member cruise lines showed that the international cruise lines spent an estimated \$78.2 million with Atlantic Canada businesses in 2019, a 56 percent increase from the 2016 estimates reported by BREA. As shown in **Table AC-2**, operating expenses accounted for 85 percent of cruise line expenditures in Atlantic Canada with administrative and professional expenses, primarily for advertising and promotion, accounting for the remaining 15 percent.

Table AC-2 – Cruise Lines' Expenditures in Atlantic Canada by Expense Category, 2016 Millions of Dollars

Category	Spending	Share
Administrative & Professional Expenses	\$6.2	15%
Operational Expenses	\$72.0	85%
Transportation & Warehousing	\$47.1	53%
Food and Beverages	\$5.7	9%
Travel Agent Commissions	\$7.5	6%
Other Operating Expenses	\$11.7	18%
Total	\$78.2	

Note: Components may not sum to totals due to rounding

The surveys indicated that the cruise lines spent approximately \$72 million on operational expenses with Atlantic Canada businesses. Cruise lines spent an estimated \$47 million for transportation and warehousing services. This included the costs of port services; ship agents; stevedores; passenger and crew transportation paid by the cruise lines, excluding shore excursions; and storage and warehousing. The cruise industry also spent nearly \$6 million with Atlantic Canada businesses for food products and hotel supplies. The estimated 49,400 residents of the Atlantic Canada provinces who purchased cruises during 2019 generated an estimated \$7.5 million in travel agent commissions. Other operating expenses, totalling \$11.7 million, included expenditures for vessel maintenance and equipment and other products and services for cruise ship operations, such as sanitation services, security and other products for onboard cruise operations.

Expenditures by Passengers

Passenger spending was analyzed on a port-by-port basis. Data on per passenger spending by category and type of passenger were utilized. Spending categories varied to some extent by port and were aggregated into the following categories:

- lodging;
- tours and transportation;
- food and beverages; and
- other retail.

As discussed above, Atlantic Canada's ports reported that 873,600 passengers arrived at their ports during 2019. Of these, it is estimated that approximately 89 percent, or 777,500 disembarked and visited the ports (see **Table AC-3**). In aggregate, cruise passengers spent \$66.6 million on goods and services throughout Atlantic Canada in 2019, for an average expenditure of nearly \$86 per passenger onshore visit. The ports of Nova Scotia (Halifax and Sydney) with \$35.3 million in passenger expenditures accounted for 55 percent of all passenger visits and 53 percent of all passenger expenditures. Combined, survey data for the two ports showed an average spend per passenger visit of just over \$83. The port of Saint John had an average spend per passenger visit of nearly \$87 that, in turn generated \$15.1 million of passenger onshore spending. Charlottetown experienced the highest passenger average expenditure of just over \$104 and benefited from \$11.9 million in passenger spending. Passengers visiting the ports in Newfoundland and Labrador spent a total of approximately \$4.3 million for an average expenditure of nearly \$68 per passenger visit. It should be noted, these expenditures do not include source passenger airfare and travel insurance, which are reported under 'Other Passenger Expenditures' below.

Table AC-3 – Passenger Onshore Expenditures in Atlantic Canada by Category and Port, 2019 Millions of Dollars

	Individual Passenger Visits	Tours & Local Transport	Food & Bev.	Other Retail	Total Spend ^①	Average per Passenger Visit
Halifax	288,000	\$12.6	\$4.2	\$8.7	\$25.5	\$88.44
Sydney	136,900	\$4.7	\$1.1	\$4.1	\$9.8	\$71.85
Saint John	174,500	\$9.1	\$2.0	\$4.0	\$15.1	\$86.60
Charlottetown	114,100	\$6.1	\$1.5	\$4.3	\$11.9	\$104.29
Corner Brook	22,400	\$1.2	\$0.1	\$0.4	\$1.7	\$75.89
St. John's	26,500	\$1.0	\$0.4	\$0.7	\$2.1	\$77.66
Other Ports	15,200	\$0.4	\$0.0	\$0.1	\$0.6	\$37.95
Total	777,500	\$35.1	\$9.3	\$22.2	\$66.7	\$85.72

Note: Port data and columns may not sum exactly to totals due to rounding.

^① Includes approximately \$120,000 in expenditures by 670 passengers reported to have embarked and disembarked in Saint John and Halifax.

Expenditures for tours and local transport totalled \$35.1 million and accounted for just over half, 53 percent, of total passenger spending in the province. Retail goods, such as clothing and souvenirs, accounted for 33 percent of passenger expenditures while food and beverages accounted for the remaining 14 percent of passenger expenditures.

Other Passenger Expenditures

Other passenger expenditures that impact the Canadian economic activity consist of cruise passengers' airfare and travel insurance costs. About 49,400 sourced passengers traveled from Atlantic Canada to begin a cruise either within, or outside of Canada. We have estimated that air travel related to these sourced cruise passengers added about \$190,000 to the Atlantic Canada economy (see **Table AC-4**). In addition, these residents of Atlantic Canada purchased an estimated \$740,000 in travel insurance for their cruises. Thus, the total spend by passengers in Atlantic Canada was approximately \$67.6 million.

Table AC-4 – Other Direct Passenger Expenditures in Atlantic Canada, 2019 Millions of Dollars

Category	Expenditures
Airfares Impacting the Atlantic Canada Economy	\$0.19
Cruise-Related Travel Insurance in Atlantic Canada	\$0.74
Total	\$0.93

Expenditures by Crew

Crew expenditures were also estimated by port and by category. Overall, over 362,000 crew members were onboard ships calling on Atlantic Canada's ports. An estimated 141,400, or 39 percent, made an onshore visit at these ports and spent \$11.4 million in 2019. As seen in **Table AC-5**, The ports of Nova Scotia reported the highest total expenditures, with \$6.6 million, 58 percent of total crew spending in the region. Crew visiting Saint John reported spending an average of \$75.56 per visit for a total of \$2.2 million

during 2019. Spending at the remaining ports in Atlantic Canada totalled approximately \$2.6 million, 23 percent of total crew expenditures in the region. The major difference between crew and passenger spending is that tours only accounted for 6 percent of crew expenditures while tours absorbed 53 percent of passenger expenditures.

Table AC-5 – Crew Onshore Expenditures in Atlantic Canada by Category and Port, 2019 Millions of Dollars

	Individual Crew Visits	Tours & Local Transport	Food & Beverages	Other Retail	Total Spend	Average per On-shore Visit
Halifax	52,900	\$0.4	\$2.5	\$2.0	\$4.9	\$92.78
Sydney	23,700	\$0.1	\$0.5	\$1.1	\$1.7	\$71.51
Saint John	29,300	\$0.1	\$0.5	\$1.6	\$2.2	\$75.56
Charlottetown	21,600	\$0.1	\$0.4	\$1.3	\$1.8	\$81.12
Corner Brook	4,500	\$0.0	\$0.1	\$0.2	\$0.3	\$77.43
St. John's	5,400	\$0.0	\$0.1	\$0.2	\$0.4	\$76.02
Other Ports	4,000	\$0.0	\$0.0	\$0.1	\$0.1	\$33.48
Total	141,400	\$0.7	\$4.1	\$6.5	\$11.4	\$81.12

Note: Provincial data and rows may not sum exactly to totals due to rounding.

Direct Expenditures by Industry

For purposes of the economic impact analysis, the \$157.2 million in direct cruise industry expenditures (shown previously in **Table AC-1**) were allocated to the appropriate industries. For example, after adjusting for trade and transportation margins and business taxes cruise lines' purchases of food and beverages were allocated to the Food & Beverage manufacturing industry while passenger expenditures for lodging were allocated to the Accommodation & Food Services industry. These are shown in **Table AC-6**.

Table AC-6 – Direct Cruise Industry Expenditures in Canada by Industry, 2019 Millions of Dollars

Sectors	Direct Spend	Share
Goods Producing Sector	\$34.8	22%
Agriculture, Utilities & Construction	\$1.0	1%
Manufacturing	\$33.8	21%
Service Producing Sector	\$118.2	75%
Wholesale & Retail Trade	\$3.4	2%
Transportation & Warehousing	\$75.6	48%
Financial & Business Services	\$8.5	5%
Accommodation & Food Services	\$20.8	13%
Other Services & Government	\$10.0	6%
Spending by Sector	\$153.0	
Business Taxes (Less Subsidies)	\$4.2	3%
Direct Spending	\$157.2	

Note: Components may not sum to totals due to rounding.

As indicated in the table, the Transportation & Warehousing sector accounts for 48 percent of the cruise industry's direct expenditures with \$75.6 million. This sector includes expenditures for cruise lines' purchases of port services, such as stevedoring, piloting and port agents, and trucking and warehousing. It also includes passenger and crew expenditures for air transportation, tours and other ground transportation.

Businesses in the manufacturing sector received \$33.8 million in cruise industry expenditures, 21 percent of direct expenditures. These expenditures consisted of manufactured goods purchased by all three channels - passengers, crew and cruise lines.

The Financial & Business Services sector is the fourth largest sector with \$8.5 million in direct expenditures accounting for 5 percent of the total. This industry captured a broad range of expenditures by the cruise lines for such services as advertising, engineering, architectural, legal, accounting and consulting services. It also includes the \$7.5 million in travel agent commissions reported previously.

Passenger and crew expenditures primarily impact three industries, Transportation & Warehousing, which we have already discussed, Wholesale & Retail Trade, and Accommodation & Food Services. These later two sectors accounted for 2 percent and 13 percent, respectively, of direct expenditures and totalled \$24.2 million.

Finally, the direct expenditures generated \$4.2 million in business taxes, about 3 percent of direct expenditures.

Direct Employment, Wage and Tax Impacts

As shown in **Table AC-7**, the \$157 million in direct cruise industry expenditures generated direct employment of 1,145 annualized full- and part-time employees³⁸ paying \$45.8 million in wage income. Combining the business and income taxes, the direct spending generated by the cruise industry generated an estimated \$13.8 million in taxes during 2019.

Table AC-7 – Direct Cruise Industry Economic Impacts in Atlantic Canada by Industry, 2019 Millions of Dollars

Sectors	Direct Spend	Jobs	Income
Goods Producing Sector	\$34.8	104	\$5.3
Agriculture, Utilities & Construction	\$1.0	5	\$0.2
Manufacturing	\$33.8	99	\$5.2
Service Producing Sector	\$118.2	1,041	\$40.4
Wholesale & Retail Trade	\$3.4	42	\$1.4
Transportation & Warehousing	\$75.6	458	\$22.9
Financial & Business Services	\$8.5	52	\$3.4
Accommodation & Food Services	\$20.8	366	\$7.5
Other Services & Government	\$10.0	123	\$5.2
Spending by Sector	\$153.0		
Business Taxes (Less Subsidies)	\$4.2		
Direct Impacts	\$157.2	1,145	\$45.8
Personal Income Taxes			\$9.6

Note: Components may not sum to totals due to rounding.

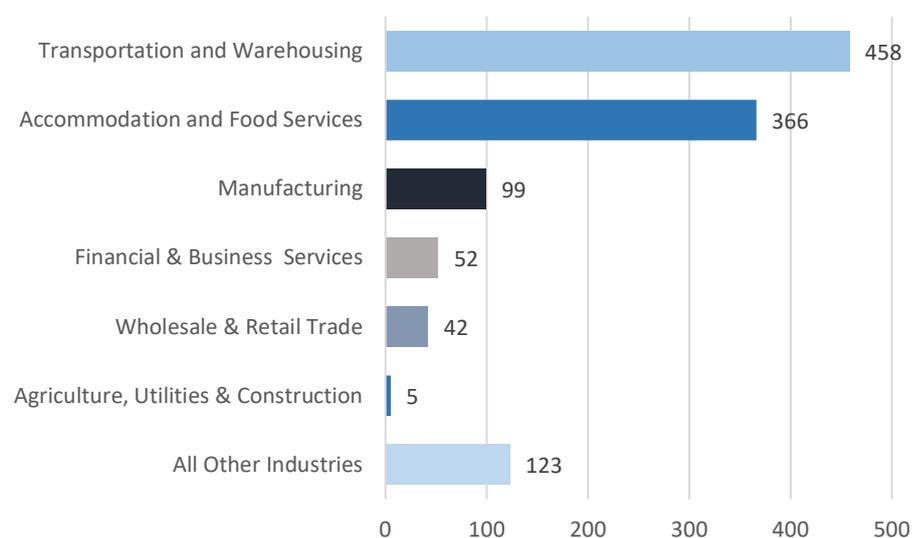
The Goods Producing Sector accounted for 22 percent of direct expenditures, 9 percent of the direct jobs and 12 percent of the direct wage income. Due to the relatively high productivity in this sector, the employment impacts as a share of the total are lower than the direct spending and income shares. The requirement of food and beverage stores and machinery equipment accounted for about half of the industry's purchases of manufactured goods. Consequently, the food processing and machinery manufacturing industries accounted for most of the manufacturing impacts.

The Service Producing Sector accounted for 75 percent of the direct spending, 91 percent of the direct jobs and 88 percent of the wage income. The Transportation & Warehousing industry accounted for approximately 64 percent of the direct impacts within the Service Producing Sector. This industry accounted for the most direct jobs and income and included jobs at the cruise ports, among tour operators and air and ground transportation companies.

³⁸ The economic impacts generated by the models are average annual impacts and include part-time (including seasonal) and full-time employees. Since these expenditures typically occur over a 6-month period of May through October, the peak employment impacts will actually be higher than those reported. It should be noted that some ports may receive a few calls in April and November. Because many of the seasonal workers will incur significant overtime, the six-month impacts, while larger than the average annual impacts, are not necessarily twice as large. Adjusting the employment figures for part-time employees, the direct employment impact is equivalent to approximately 865 full-time employees.

The direct impacts in the Financial & Business Services industry accounted for about 7 percent of the direct spending and 8 percent of the income impacts in the Service Producing Sector, however, due to the relatively high wages and salaries and productivity in this industry, it accounted for only 5 percent of the direct employment impacts. As discussed above, the jobs generated in this industry included employees of travel agencies, advertising, accounting, security and other professional services companies.

Figure AC-4 –Direct Employment Impacts in Atlantic Canada by Industry, 2019



Combining the Trade and Accommodation & Food Services industries, the cruise industry generated \$24 million in direct spending, 408 annualized full- and part-time jobs and \$8.9 million in income. These impacts were generated primarily by passenger and crew spending. Due to the relatively low productivity and wages and salaries within the Retail Trade and Accommodation & Food Services industries, they accounted for 20 percent of the direct spending and 22 percent of the direct income in the Service Producing Sector but 39 percent of the direct jobs.

Total Employment, Wage and Tax Impacts

The total economic impacts of the cruise industry are the sum of the direct impacts described above and the indirect and induced impacts. The indirect economic benefits derived from the cruise industry result in part from the additional spending by the suppliers to the cruise industry. For example, food processors must purchase raw foodstuffs for processing; utility services, such as, electricity and water, to run equipment and process raw materials; transportation services to deliver finished products to the cruise lines or wholesalers; and insurance for property and employees. These indirect and induced impacts were estimated at the provincial level using input-output tables and economic data specific to each province. The input-output tables reflect the inter-industry links among industries in each provincial economy. Use of the input-output table permits the estimation of the additional economic impacts that the direct spending by the cruise industry, its passengers and its suppliers has on all other industries in each provincial economy. As discussed in the Methodology section, the direct expenditures were adjusted for transportation and trade margins and business taxes before estimating the indirect impacts.

Table AC-8 – Total Cruise Industry Economic Impacts in Atlantic Canada by Industry, 2019 Millions of Dollars

Sectors	Output	Jobs	Income
Goods Producing Sector	\$151.9	514	\$27.4
Natural Resources, Utilities & Const.	\$41.8	177	\$9.8
Manufacturing	\$110.1	337	\$17.7
Durable Goods	\$34.7	132	\$7.3
Nondurable Goods	\$75.4	205	\$10.4
Service Producing Sector	\$185.8	1,572	\$67.5
Wholesale & Retail Trade	\$4.0	50	\$1.7
Transportation & Warehousing	\$97.6	657	\$32.8
Financial Services	\$19.6	80	\$4.9
Professional & Technical Services	\$16.7	164	\$10.5
Information, Culture and Recreation	\$14.0	35	\$1.6
Accommodation & Food Services	\$23.2	408	\$8.4
Other Services & Government	\$10.8	177	\$7.5
Spending by Sector	\$337.7		
Business Taxes (Less Subsidies)	\$9.4		
Total Impacts	\$347.2	2,085	\$94.9
Personal Income Taxes			\$19.9

Note: Components may not sum to totals due to rounding.

The input-output analysis indicated that the \$157 million in direct cruise industry expenditures generated \$347 million in total (direct plus indirect and induced) output, 2,085 annualized full- and part-time jobs³⁹ and almost \$95 million in income impact. In addition, the industry generated an estimated \$9.4 million in business taxes and just under \$20 million in income taxes (see **Table AC-8**).

The Goods Producing Sector accounted for 44 percent of the total output impacts but due to the relatively high productivity of this sector only 25 percent of the total jobs and 29 percent of the income impacts. The total economic impacts are more evenly distributed throughout the Goods Producing Sector than the direct impacts as the indirect and induced impacts spread throughout the economy, especially among the natural resource and construction industries.

Within the Services Producing sector, the Transportation & Warehousing industry remains the dominant industry, accounting for about 53 percent of the total economic impacts in the Service Producing Sector. This is due to the magnitude of the direct economic impacts as well as the strong linkages between the transportation sector and all other sectors of the economy.

Combined, the Trade and Accommodation & Food Services industries accounted for about 15 percent of the total output and income impacts in the Service Producing Sector. This is less than its share of the direct impacts which was approximately 20 percent. This is due

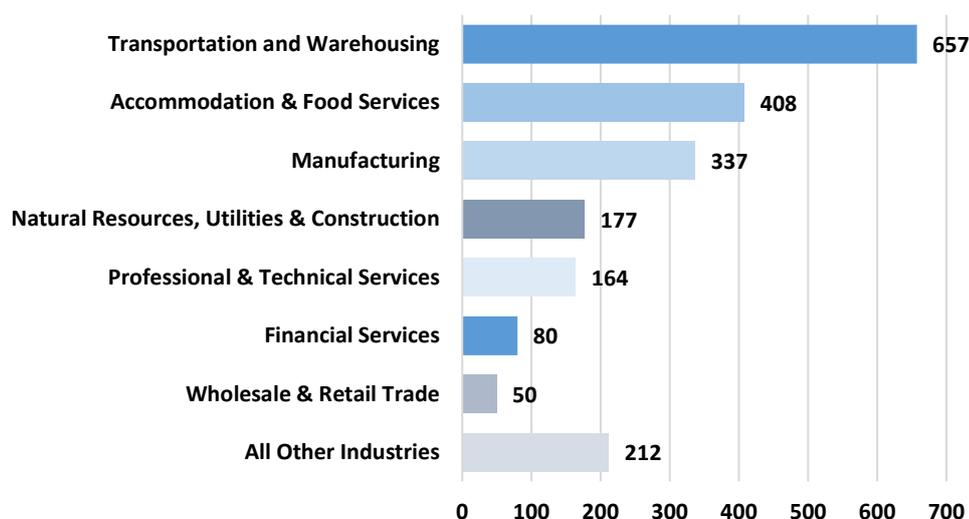
³⁹ This is equivalent to 1,065 jobs on a full-time basis.

to the fact that the indirect and induced impacts are more concentrated on business-to-business activity than travel and tourism related activity.

The output and employment impacts in the Professional & Technical Services industry were somewhat lower but still accounted for about 9 percent of the output and 10 percent of the employment impacts in the Service Producing Sector. However, given the high wages and salaries in this industry, it accounted for 16 percent of the income impacts in the sector.

The Trade and Accommodation & Food Services industries accounted for about 15 percent of the total output and income impacts in the Service Producing Sector. This is less than its share of the direct impacts which was approximately 20 percent. This is due to the fact that the indirect and induced impacts are more concentrated on business-to-business activity than travel and tourism related activity.

Figure AC-5 –Total Employment Impact in Atlantic Canada by Industry, 2019



In summary, the approximate 550 cruise ship calls at Atlantic Canada ports during 2019 generated nearly 919,000 passenger and crew onshore visits (see **Table AC-9**). In addition, an estimated 49,400 Atlantic Canada residents purchased cruises within and outside of Canada. Passengers, crew and the cruise lines directly spent \$157 million in Atlantic Canada during the year, generating 1,145 annualized full- and part-time jobs paying \$46 million in wages and salaries. In addition, the direct spending and wage income generated an estimated \$14 million in business and income taxes.

Table AC-9 – Summary of Cruise Industry Economic Impacts in Atlantic Canada, 2019

Passenger and Crew Onshore Visits	918,900
Direct Economic Impacts	
Cruise Industry Direct Spending (\$ Millions)	\$157.2
Employment	1,145
Wage and Salaries (\$ Millions)	\$45.8
Business and Income Taxes (\$ Millions)	\$13.8
Total Economic Impacts	
Total Output (\$ Millions)	\$347.2
Employment	2,085
Wage Income (\$ Millions)	\$94.9
Business and Income Taxes (\$ Millions)	\$29.4

As a result of the subsequent indirect and induced spending by businesses and their employees, the cruise industry was responsible for generating an estimated \$347 million in total output, 2,085 annualized full- and part-time jobs, \$95 million in wage income and \$29 million in business and income taxes throughout Atlantic Canada during 2019.

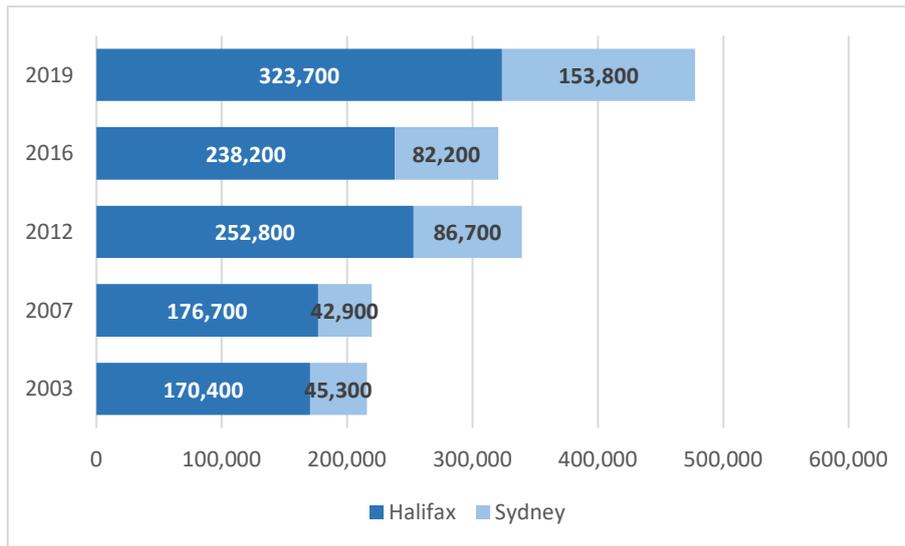
Overall, the economic impacts of the cruise industry in Atlantic Canada accounted for about 8 percent of the industry’s direct impact throughout Canada. Relative to the national impacts, the economic impacts in Atlantic Canada were slightly more concentrated in the transportation. On the contrary, there was a proportionately smaller impact within the Professional Services sector due to the fact that the direct purchases of these support services are not nearly dependent upon proximity to ports and are spread throughout the urban centers of Canada.

Nova Scotia Cruise Sector

During 2019 approximately 275 cruise ship calls were made at Nova Scotia’s two principal cruise ports of Halifax and Sydney. Both of these ports are primarily transit ports for Canada New England cruises which originate in the northeastern United States. However, both ports also receive cruise calls from expedition ships and European cruise ships.

As shown in **Figure NS-1**, the Nova Scotia ports handled 477,400 passengers during the cruise season⁴⁰, accounting for 17 percent of cruise passenger arrivals throughout Canada. The 477,400 passengers that arrived at the two ports represented an increase of 49 percent from the 320,400 who arrived in 2016.

Figure NS-1 – Cruise Passenger Arrivals at the Ports of Nova Scotia



Source: Ports of Halifax and Sydney

Halifax is the larger of the two Nova Scotia ports, traditionally having processed nearly three-fourths of the passengers at the province’s two ports, however, in 2019 Sydney now accounts for nearly a third of the passenger arrivals in Nova Scotia. Passenger traffic at Halifax grew by 36 percent, while Sydney was up by 87 percent from 2016. In addition to cruise passenger arrivals, an estimated 17,800 residents of Nova Scotia purchased cruises during 2019. This represented about 1.7 percent of all Canadian residents who purchased cruises during the year.

Direct Expenditures

There are three primary sources of cruise-related spending: i) cruise lines; ii) cruise passengers and iii) crew members. The cruise lines purchase a variety of goods and services supporting their cruises, including food and beverages, hotel supplies, bunker fuels, utilities while in port and other port services to name a few. Passengers purchase transportation to and from port cities, pre- and post-cruise excursions, souvenirs and other retail

⁴⁰ The principal cruise season in Nova Scotia is six months long and generally begins in May and extends through October, however, there may be a few cruise calls in April and November

goods while crew members will purchase a similar set of goods and services with a heavier concentration on retail goods.

During 2019, cruise-related spending totalled \$94.7 million in the Province of Nova Scotia, or approximately 5 percent of the direct cruise-related spending throughout Canada. As indicated in **Table NS-1**, the cruise lines' expenditures accounted for 55 percent of the total, passengers 38 percent and crew the remaining 7 percent. The industry impacts, which are discussed in the following sections, vary significantly across the three sources.

Table NS-1 – Direct Cruise-Related Expenditures in Nova Scotia, 2019
Millions of Dollars

Sources	Spending	Share
Cruise Lines	\$52.4	55%
Passengers	\$35.7	38%
Crew	\$6.6	7%
Total	\$94.7	

Note: Components may not sum to totals due to rounding.

Expenditures by Cruise Lines

Expense data collected through surveys of the various port authorities and CLIA member cruise lines showed that the cruise lines spent \$52.4 million with businesses in Nova Scotia during 2019. As shown in **Table NS-2**, the cruise lines spent an estimated \$4.9 million in administrative and professional expenses with businesses in the province. This represented 9 percent of total cruise line expenditures in the province and primarily included expenditures for advertising and promotion and other professional consulting services.

In addition, the cruises lines spent \$47.5 million on operational expenses with businesses in Nova Scotia. Cruise lines spent an estimated \$39.0 million for transportation and warehousing services. This included the costs of port services; ship agents; stevedores; passenger and crew transportation paid by the cruise lines, excluding shore excursions; and storage and warehousing. The cruise industry also spent \$2.2 million with Nova Scotia businesses for food products and hotel supplies. Another \$2.2 was spent with businesses in the province for vessel maintenance and equipment. The estimated 17,800 residents of Nova Scotia that purchased cruises during 2019 generated an estimated \$2.4 million in travel agent commissions. Other operating expenses, totalling \$1.7 million, included expenditures for other products for cruise ship operations, such as sanitation services and other products for onboard cruise operations.

Table NS-2 – Cruise Lines’ Expenditures in Nova Scotia by Category, 2019
Millions of Dollars

Category	Spending	Share
Administrative & Professional Expenses	\$4.9	9%
Operational Expenses	\$47.5	91%
Transportation & Warehousing	\$39.0	74%
Food and Beverages	\$2.2	4%
Vessel Maintenance & Equipment	\$2.2	4%
Travel Agent Commissions	\$2.4	5%
Other Operating Expenses	\$1.7	3%
Total	\$52.4	

Note: Components may not sum to totals due to rounding.

Expenditures by Passengers

As shown in **Table NS-3**, of the 477,400 cruise passengers that arrived in the two Nova Scotia ports, it is estimated that 89 percent, or 424,900 passengers, disembarked and spent \$35.3 million on goods and services in Nova Scotia during 2019. This equates to an average expenditure of \$83.10 per onshore passenger visit. Passengers visiting Halifax reported a significantly higher per passenger expenditure figure of \$88.45 versus \$71.86 for cruise passengers visiting Sydney.⁴¹

Table NS-3 – Passenger Expenditures in Nova Scotia by Category, 2019
Millions of Dollars

	Halifax	Sydney	Total
Passenger Arrivals	323,700	153,800	477,500
Passenger Onshore Visits	288,100	136,900	425,000
Tours and Transportation	\$12.6	\$4.7	\$17.3
Food and Beverages	\$4.2	\$1.1	\$5.3
Other Retail	\$8.7	\$4.1	\$12.8
Total Spending	\$25.5	\$9.8	\$35.3
Average per Passenger	\$88.45	\$71.86	\$83.10

Note: Rows and/or columns may not sum to the total due to rounding.

Expenditures for tours and transportation totalled about \$17.3 million and accounted for nearly half, 49 percent, of total passenger spending in the province. Retail goods, such as clothing and souvenirs, accounted for 36 percent of passenger expenditures while food and beverages accounted for 15 percent of total passenger expenditures.

Other Passenger Expenditures

In addition to the \$35.3 million passenger expenditures shown above, airfare and travel insurance costs of cruise passengers impact Canadian economic activity. Just over 17,800

⁴¹ The passenger spending figures for Halifax and Sydney used in this analysis were derived from passenger and crew surveys following cruise ship calls at both ports throughout the 2016 cruise season and inflated, by category to represent 2019 figures.

Nova Scotia source passengers traveled to and from the province to begin and return from their cruises. We have estimated that air travel related to these sourced cruise passengers added about \$100,000 to the Nova Scotia economy (see **Table NS-4**). In addition, these residents of Nova Scotia purchased an estimated \$270,000 in travel insurance for their cruises. Thus, the total spend by passengers in Nova Scotia is \$35.7 million.

Table NS-4 – Other Direct Passenger Expenditures in Nova Scotia, 2019
Millions of Dollars

Category	Expenditures
Airfares Impacting the Nova Scotia Economy	\$0.10
Cruise-Related Travel Insurance in Nova Scotia	\$0.27
Total	\$0.37

Expenditures by Crew

As shown in **Table NS-5**, of the 196,200 crew members who arrived on cruises to Nova Scotia, an estimated 76,600, or 39 percent, made an onshore visit at the two Nova Scotia ports and spent \$6.6 million in 2019. With both the higher volume of crew arrivals and a higher average spend per crew member, Halifax accounted for 74 percent of total crew expenditures in Nova Scotia with \$4.9 million. While tours and transportation absorbed 49 percent of passenger expenditures, this category only accounted for 7 percent of crew expenditures. Retail accounts for nearly half of all crew purchases.

Table NS-5 – Crew Expenditures in Nova Scotia by Category, 2019
Millions of Dollars

	Halifax	Sydney	Total
Crew Arrivals	135,500	60,700	196,200
Crew Onshore Visits	52,900	23,700	76,600
Tours and Transportation	\$0.4	\$0.1	\$0.48
Food and Beverages	\$2.5	\$0.5	\$2.99
Other Retail	\$2.0	\$1.1	\$3.14
Total Spending	\$4.9	\$1.7	\$6.60
Average per Crew Member	\$92.85	\$71.58	\$86.27

Note: Rows and/or columns may not sum to the total due to rounding.

Direct Expenditures by Industry

For purposes of the economic impact analysis, the \$94.7 million in direct cruise industry expenditures in Nova Scotia were allocated to the appropriate industries. For example, after adjusting for trade and transportation margins and business taxes cruise lines' purchases of food and beverages were allocated to the Food & Beverage manufacturing industry while passenger expenditures for tours were allocated to the Transportation & Warehousing industry. These are shown in **Table NS-6**.

As indicated in the table, the Transportation & Warehousing industry accounted for 53 percent of the cruise industry's direct expenditures in the province with \$50.5 million. These included expenditures for cruise lines' purchases of port services, such as stevedoring, piloting and port agents, and trucking and warehousing. It also included passenger

and crew expenditures for air transportation and other ground transportation paid by the cruise lines.

Businesses in the manufacturing sector received \$19.4 million in cruise industry expenditures, 20 percent of direct expenditures. These expenditures consisted of manufactured goods purchased by all three channels - passengers, crew and cruise lines.

Table NS-6 – Direct Cruise Industry Expenditures in Nova Scotia, 2019
Millions of Dollars

Sectors	Direct Spend	Share
Goods Producing Sector	\$19.9	21%
Agriculture, Utilities & Construction	\$0.5	1%
Manufacturing	\$19.4	20%
Service Producing Sector	\$72.7	77%
Wholesale & Retail Trade	\$0.6	1%
Transportation and Warehousing*	\$50.5	53%
Professional & Technical Services	\$6.7	7%
Accommodation and Food Services	\$10.0	11%
Other Services & Government	\$4.9	5%
Spending by Sector	\$92.7	
Business Taxes (Less Subsidies)	\$2.0	2%
Total Direct Spending	\$94.7	

Note: Components may not sum to totals due to rounding.

The Financial & Business Services industry received \$6.7 million in cruise industry expenditures in 2019. These included a broad range of expenditures by the cruise lines for such services as advertising, travel agent commissions, and consulting services.

Passenger and crew expenditures were primarily allocated to three industries: Transportation & Warehousing, which we have already discussed, Wholesale & Retail Trade and Accommodation & Food Services. Combined, these later two sectors accounted for 11 percent of direct expenditures and totalled \$10.6 million.

Direct Employment, Wage and Tax Impacts

As shown in **Table NS-7**, the \$94.7 million in direct cruise industry expenditures generated direct employment of 669 annualized full- and part-time employees⁴² paying \$27.9 million in wage income. Combining business taxes and income taxes, the direct cruise-related spending in the province generated \$7.9 million in governmental tax payments.

⁴² The economic impacts generated by the models are average annual impacts and include part-time (including seasonal) and full-time employees. Since these expenditures typically occur over a 6-month period of May through October, the peak employment impacts will actually be higher than those reported. It should be noted that some ports may receive a few calls in April and November. Because many of the seasonal workers will incur significant overtime, the six-month impacts, while larger than the average annual impacts, are not necessarily twice as large. Adjusting the employment figures for part-time employees, the direct employment impact is equivalent to approximately 505 full-time employees.

Table NS-7 – Direct Cruise Industry Economic Impacts in Nova Scotia, 2019
Millions of Dollars

Sectors	Direct Spend	Jobs	Income
Goods Producing Sector	\$19.9	65	\$3.4
Agriculture, Utilities & Construction	\$0.5	3	\$0.1
Manufacturing	\$19.4	62	\$3.3
Service Producing Sector	\$72.7	604	\$24.5
Wholesale & Retail Trade	\$0.6	8	\$0.3
Transportation & Warehousing	\$50.5	312	\$15.1
Financial & Business Services	\$6.7	42	\$2.7
Accommodation & Food Services	\$10.0	182	\$3.8
Other Services & Government	\$4.9	60	\$2.6
Spending by Sector	\$92.7		
Business Taxes (Less Subsidies)	\$2.0		
Direct Impacts	\$94.7	669	\$27.9
Personal Income Taxes			\$5.9

Note: Components may not sum to totals due to rounding.

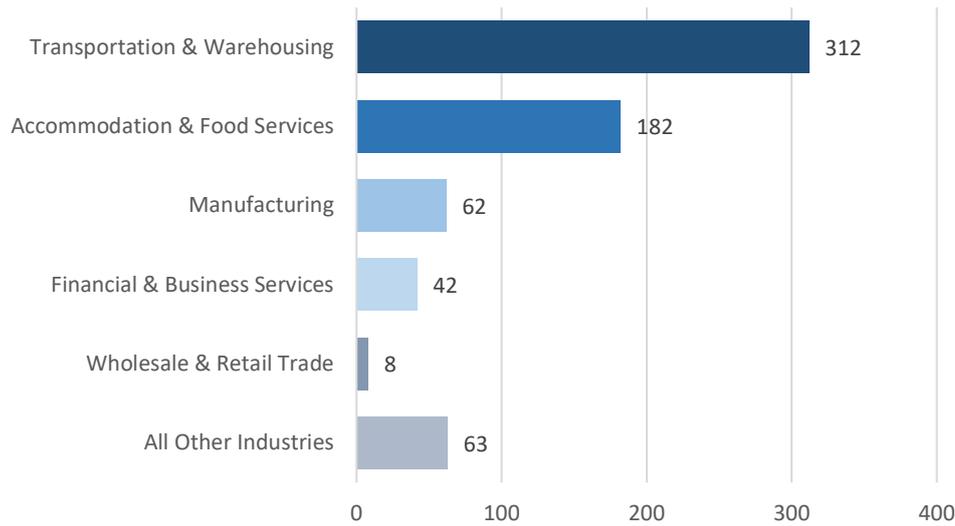
The Goods Producing Sector accounted for 21 percent of direct expenditures, 10 percent of the direct jobs and 12 percent of the wage income. The demand for food and beverage stores and machinery equipment accounted for about half of the industry's purchases of manufactured goods. Consequently, the food processing and machinery manufacturing industries accounted for most of the manufacturing impacts.

The Service Producing Sector accounted for 77 percent of the direct spending, 90 percent of the direct jobs and 88 percent of the wage income. The Transportation & Warehousing industry accounted for 52 percent of the direct employment and 62 percent of the direct wage impacts within the Service Producing Sector. This industry accounted for the most direct jobs and income and included jobs at the cruise ports, among tour operators and air and ground transportation companies.

The direct impacts in the Financial & Business Services industry accounted for 9 percent of the direct spending and 7 percent of the employment impacts within the Service Producing Sector, however, due to the relatively high wages and salaries in this industry, it accounted for 11 percent of the direct income impacts in this sector. As discussed above, the jobs generated in this sector included travel agents and employees of advertising and other professional services companies.

Combining the Trade and Accommodation & Food Services industries, the cruise industry generated \$10.6 million in direct spending, 190 annualized full- and part-time jobs and \$4.1 million in wage income. These impacts were generated primarily by passenger and crew spending. Due to the relatively low productivity and wages and salaries within the Retail Trade and Accommodation & Food Services industries, these two industries accounted for 15 percent of the direct spend in the Service Producing Sector, 31 percent of the direct jobs and only 17 percent of the wages.

Figure NS-2 –Direct Employment Impact in Nova Scotia by Industry, 2019



Total Employment, Wage and Tax Impacts

The total economic impacts of the cruise industry are the sum of the direct impacts described above and the indirect and induced impacts. The indirect economic benefits derived from the cruise industry result in part from the additional spending by the suppliers to the cruise industry. For example, food processors must purchase raw foodstuffs for processing; utility services, such as, electricity and water, to run equipment and process raw materials; transportation services to deliver finished products to the cruise lines or wholesalers; and insurance for property and employees.

An input-output table specific to Nova Scotia was used to estimate the indirect and induced impacts.⁴³ This input-output table reflects the inter-industry links among industries in the Nova Scotia economy. This input-output table permits the estimation of the additional economic impacts that the direct spending by the cruise industry, its passengers and its suppliers has on all other industries in the Nova Scotia economy. As discussed in the Methodology section, the direct expenditures were adjusted for transportation and trade margins and business taxes before estimating the indirect and induced impacts.

As shown in **Table NS-8**, the input-output analysis indicated that the \$94.7 million in direct cruise industry expenditures generated \$215.5 million in total (direct plus indirect and induced) output, 1,305 annualized full- and part-time jobs⁴⁴ and \$60.8 million in income. In addition, the industry generated an estimated \$5.2 million in business taxes and \$12.8 million in personal income taxes.

⁴³ Statistics Canada, *Industry Accounts Division, 2016*.

⁴⁴ Adjusting the employment figures for part-time employees, the direct employment impact is equivalent to approximately 985 full-time employees.

Table NS-8 – Total Cruise Industry Economic Impacts in Nova Scotia, 2019
Millions of Dollars

Sectors	Output	Jobs	Income
Goods Producing Sector	\$93.4	332	\$17.6
Natural Resources, Utilities & Construction	\$20.1	95	\$4.9
Manufacturing	\$73.3	237	\$12.7
Durable Goods	\$21.7	91	\$5.1
Nondurable Goods	\$51.6	146	\$7.6
Service Producing Sector	\$116.9	973	\$43.2
Wholesale & Retail Trade	\$0.9	13	\$0.4
Transportation & Warehousing	\$65.3	471	\$22.9
Financial Services	\$12.2	50	\$3.2
Professional & Technical Services	\$11.8	113	\$7.3
Information, Culture and Recreation	\$9.1	22	\$1.0
Accommodation & Food Services	\$11.5	209	\$4.4
Other Services & Government	\$6.0	95	\$4.0
Spending by Sector	\$210.3		
Business Taxes (Less Subsidies)	\$5.2		
Total Impacts	\$215.5	1,305	\$60.8
Personal Income Taxes			\$12.8

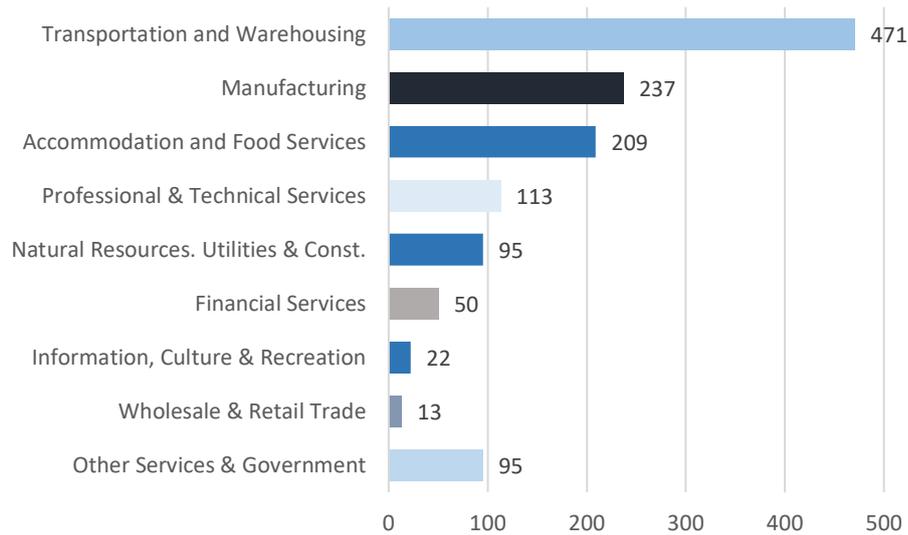
Note: Components may not sum to totals due to rounding.

The Goods Producing Sector accounted for 43 percent of the total output impacts but due to the relatively high productivity of this sector only 25 percent of the total jobs and 29 percent of the income impacts. The total economic impacts are more evenly distributed throughout the Goods Producing Sector than the direct impacts as the indirect and induced impacts spread throughout the economy, especially among the natural resource and construction industries.

Within the Services Producing Sector, the Transportation & Warehousing industry remains the dominant industry, accounting for about 56 percent of the total output, 48 percent of the employment, and 53 percent of the income impacts in this sector. This is due to the magnitude of the direct economic impacts as well as the strong linkages between the transportation sector and all other sectors of the economy. The Professional & Technical Services industry accounted for 12 percent of the employment impacts and 17 percent of the wage impacts in the Service Producing Sector.

The share of the total economic impacts accounted for by the Trade and Accommodation & Food Services industries is less than their share of the direct impacts. This is due to the fact that the indirect and induced impacts are more concentrated on business-to-business activity than travel and tourism related activity.

Figure NS-3 – Total Employment Impact in Nova Scotia by Industry, 2019



In summary, the approximately 250 cruise ship calls at the two Nova Scotia ports during 2019 generated an estimated 501,500 passenger and crew onshore visits (see **Table NS-9**). In addition, an estimated 17,800 Nova Scotia residents purchased cruises from Canada and elsewhere. Passengers, crew, and the cruise lines directly spent almost \$95 million in the region during the year generating 669 annualized full- and part-time jobs paying \$27.9 million in wages and salaries. The direct spending also generated an estimated \$7.9 million in business taxes and income taxes.

Table NS-9 – Summary of Cruise Industry Economic Impacts in Nova Scotia, 2019

Passenger and Crew Onshore Visits		501,500
Direct Economic Impacts		
Cruise Industry Direct Spending (\$ Millions)		\$94.7
Employment		669
Wages and Salaries (\$ Millions)		\$27.9
Business and Income Taxes (\$ Millions)		\$7.9
Total Economic Impacts		
Total Output (\$ Millions)		\$215.5
Employment		1,305
Wage Income (\$ Millions)		\$60.8
Business and Income Taxes (\$ Millions)		\$18.0

As a result of the subsequent indirect and induced spending by businesses and their employees, the cruise industry was responsible for generating an estimated \$215.5 million in total output, 1,305 annualized full- and part-time jobs and \$60.8 million in wage income throughout the province during 2019. Total business taxes and personal income taxes were an estimated 18.0 million.

Overall, the economic impacts of the cruise industry in Nova Scotia accounted for about 5 percent of the industry’s total output throughout Canada. Relative to the national impacts, the economic impacts in Nova Scotia were more highly concentrated in the transportation

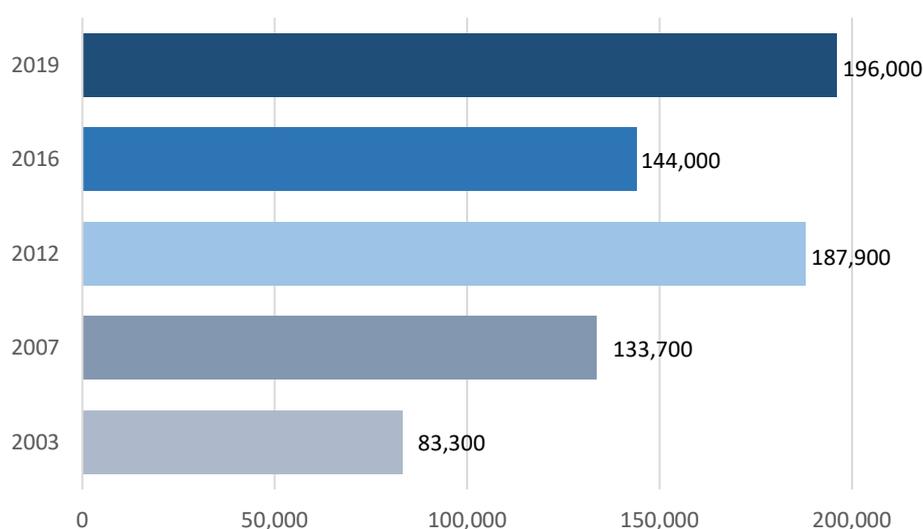
industries. On the contrary, there was a proportionately smaller impact within the Professional Services sector due to the fact that the direct purchases of these support services are not nearly dependent upon proximity to ports and are spread throughout the urban centers of Canada.

New Brunswick Cruise Sector

During 2019, a reported 79 cruise ship calls were made at Saint John, New Brunswick's principal cruise port. As shown in **Figure NB-1**, Saint John handled 196,000 passengers during the cruise season⁴⁵, accounting for 6 percent of the cruise passenger arrivals throughout Canada. Saint John is a transit port for Canada New England cruises which originate in the northeastern United States. However, it also received cruise calls from expedition ships and European cruise ships.

After a down year in 2016, the year of the previous study, cruise calls and passenger arrivals increased by 27 percent and 36 percent, respectively in 2019.

Figure NB-1 – Cruise Passenger Arrivals at Saint John



Source: Port of Saint John

In addition to cruise passenger arrivals, an estimated 14,500 residents of New Brunswick purchased cruises, both within and outside of Canada, during 2019. This represented just over 1 percent of all Canadian residents who purchased cruises during the year.

Direct Expenditures

There are three primary sources of cruise-related spending: i) cruise lines; ii) cruise passengers and iii) crew members. The cruise lines purchase a variety of goods and services supporting their cruises, including food and beverages, hotel supplies, bunker fuels, utilities while in port and other port services to name a few. Passengers purchase transportation to and from port cities, pre- and post-cruise excursions, souvenirs and other retail goods while crew members will purchase a similar set of goods and services with a heavier concentration on retail goods.

During 2019, cruise-related spending totalled \$31.5 million in the Province of New Brunswick, or approximately 1.6 percent of cruise-related spending throughout Canada. As

⁴⁵ The principal cruise season in Nova Scotia is six months long and generally begins in May and extends through October, however, there may be a few cruise calls in April and November

indicated in **Table NB-1**, the cruise lines' expenditures accounted for 44 percent of the total, passengers accounted for 49 percent and crew the remaining 7 percent. The industry impacts, which are discussed in the following sections, vary significantly across the three sources.

Table NB-1 – Direct Cruise-Related Expenditures in New Brunswick, 2019
Millions of Dollars

Sources	Spending	Share
Cruise Lines	\$13.9	44%
Passengers	\$15.4	49%
Crew	\$2.2	7%
Total	\$31.5	

Expenditures by Cruise Lines

Expense data collected through surveys with the port of Saint John, as well as CLIA member cruise lines showed that the cruise lines spent \$13.9 million with businesses in New Brunswick during 2019. As shown in **Table NB-2**, the cruise lines spent an estimated \$300,000 in administrative and professional expenses with businesses in the province. This represented just 2 percent of total cruise line expenditures in the province and primarily included expenditures for advertising and promotion.

Table NB-2 – Cruise Lines' Expenditures in New Brunswick by Category, 2019
Millions of Dollars

Category	Spending	Share
Administrative & Professional Expenses	\$0.3	2%
Operational Expenses	\$13.6	98%
Transportation & Warehousing	\$3.0	22%
Food and Beverages	\$3.5	25%
Travel Agent Commissions	\$2.4	17%
Other Operating Expenses	\$4.7	34%
Total	\$13.9	

In addition, the cruises lines spent \$13.6 million on operational expenses with businesses in New Brunswick. Cruise lines spent \$3.0 million for transportation and warehousing services. These included the costs of port services; ship agents; stevedores; passenger and crew transportation paid by the cruise lines, excluding shore excursions; and storage and warehousing. Cruise lines spent another \$3.5 million with New Brunswick businesses for food and beverages. The estimated 14,500 residents of New Brunswick that purchased cruises, both within and outside of Canada during 2019 generated an estimated \$2.4 million in travel agent commissions. Other operating expenses, totalling \$4.7 million, included expenditures for other products for cruise ship operations, such as sanitation services, chemicals and cleaning supplies and other products for onboard hotel operations and other products for onboard cruise operations.

Expenditures by Passengers

As shown in **Table NB-3**, of the 196,600 cruise passengers that arrived in Saint John, an estimated 89 percent, or 174,500 passengers, disembarked and went ashore. These passengers spent \$15.1 million on goods and services in New Brunswick during 2019, for an average expenditure of \$86.61 per passenger visit.⁴⁶ Purchases of shore excursions and local transportation accounted for over half (60%) of passenger expenditures. Expenditures for retail and food accounted for 27 percent and 13 percent of passenger expenditures, respectively.

Table NB-3– Passenger Expenditures in New Brunswick by Category, 2019
Millions of Dollars

	Saint John
Passenger Arrivals	196,000
Passenger Onshore Visits	174,500
Tours and Transportation	\$9.1
Food and Beverages	\$2.0
Other Retail	\$4.0
Total Spending*	\$15.1
Average per Passenger	\$86.61

Note: Components may not sum to totals due to rounding.

Other Passenger Expenditures

Other passenger expenditures that impact the Canadian economic activity consist of cruise passengers' airfare and travel insurance costs. About 14,500 of passengers traveled from New Brunswick to begin a cruise either within, or outside of Canada. We have estimated that air travel related to these sourced cruise passengers added about \$30,000 to the New Brunswick economy (see **Table NB-4**). In addition, these residents of New Brunswick purchased an estimated \$220,000 in travel insurance for their cruises. Thus, the total spend by passengers in New Brunswick was approximately \$15.4 million.

Table NB-4 – Other Direct Passenger Expenditures in New Brunswick, 2019
Millions of Dollars

Category	Expenditures
Airfares Impacting the New Brunswick Economy	\$0.03
Cruise-Related Travel Insurance in New Brunswick	\$0.22
Total	\$0.24

⁴⁶ The passenger spending figures for New Brunswick used in this analysis were derived from passenger and crew surveys following cruise ship calls at Saint John throughout the 2016 cruise season and inflated, by category to represent 2019 figures.

Expenditures by Crew

As shown in **Table NB-5**, of the 75,200 crew members who arrived at Saint John, an estimated 29,300, or 39 percent, made an onshore visit. These crew members spent \$2.2 million in 2019 for an average expenditure of \$75.47 per onshore visit. While tours and transportation accounted for 60 percent of passenger expenditures, this category only accounted for 4 percent of crew expenditures. Retail expenditures, which totalled \$1.6 million, was, by far the largest expenditure category for crew, accounting for 73 percent of their total expenditures in Saint John.

Table NB-5 – Crew Expenditures in New Brunswick by Category, 2019
Millions of Dollars

	Saint John
Crew Arrivals	75,200
Crew Onshore Visits	29,300
Tours and Transportation	\$0.1
Food and Beverages	\$0.5
Other Retail	\$1.6
Total Spending	\$2.2
Average per Crew Member	\$75.47

Note: Components may not sum to totals due to rounding.

Direct Expenditures by Industry

For purposes of the economic impact analysis, the \$31.5 million in direct cruise industry expenditures in New Brunswick were allocated to the appropriate industries. For example, after adjusting for trade and transportation margins cruise lines' purchases of food and beverages were allocated to the Food & Beverage manufacturing industry while passenger expenditures for tours were allocated to the Transportation & Warehousing industry. These are shown in **Table NB-6**.

As indicated in the table, the \$12.7 million was spent within the Transportation & Warehousing industry and accounted for 40 percent of the cruise industry's direct expenditures in the province. These included expenditures for cruise lines' purchases of port services, such as stevedoring, piloting and port agents, and trucking and warehousing. It also included passenger and crew expenditures for air transportation and other ground transportation paid by the cruise lines.

Table NB-6 – Direct Cruise Industry Expenditures in New Brunswick, 2019
Millions of Dollars

Sectors	Direct Spend	Share
Goods Producing Sector	\$5.1	16%
Agriculture, Utilities & Construction	\$0.2	1%
Manufacturing	\$5.0	16%
Service Producing Sector	\$24.8	79%
Wholesale & Retail Trade	\$2.1	7%
Transportation and Warehousing	\$12.7	40%
Financial & Business Services	\$0.6	2%
Accommodation and Food Services	\$6.9	22%
Other Services & Government	\$2.6	8%
Spending by Sector	\$30.0	
Business Taxes (Less Subsidies)	\$1.5	5%
Total Direct Spending	\$31.5	

Note: Components may not sum to totals due to rounding.

Businesses in the manufacturing sector received \$5.0 million in cruise industry expenditures, 16 percent of direct expenditures. These expenditures consisted of manufactured goods by all three channels - passengers, crew, and cruise lines. The Financial & Business Services industry received \$0.6 million in cruise industry expenditures in 2019. These included a broad range of expenditures by the cruise lines for such services as advertising, travel agent commissions, and consulting services.

Passenger and crew expenditures were primarily allocated to three industries, Transportation & Warehousing, which we have already discussed, Wholesale & Retail Trade and Accommodation & Food Services. These later two sectors accounted for 29 percent of direct expenditures and totalled about \$9.0 million combined.

Direct Employment, Wage and Tax Impacts

As shown in **Table NB-7**, the \$31.5 million in direct cruise industry expenditures generated direct employment of 264 annualized full- and part-time employees⁴⁷ paying \$9.5 million in wage income. Combining business taxes and income taxes, the direct cruise-related spending in the province generated \$3.5 million in governmental tax payments.

The Goods Producing Sector accounted for 16 percent of direct expenditures, 3 percent of the direct jobs and 5 percent of the wage income. The demand for food and beverage stores and hotel supplies accounted for more than half of the industry's purchases of

⁴⁷The economic impacts generated by the models are average annual impacts and include part-time (including seasonal) and full-time employees. Since these expenditures typically occur over a 6-month period of May through October, the peak employment impacts will actually be higher than those reported. It should be noted that some ports may receive a few calls in April and November. Because many of the seasonal workers will incur significant overtime, the six-month impacts, while larger than the average annual impacts, are not necessarily twice as large. Adjusting the employment figures for part-time employees, the direct employment impact is equivalent to approximately 200 full-time employees.

manufactured goods. Consequently, the nondurable goods manufacturing industries accounted for most of the manufacturing impacts.

Table NB-7 – Direct Cruise Industry Economic Impacts in New Brunswick, 2019
Millions of Dollars

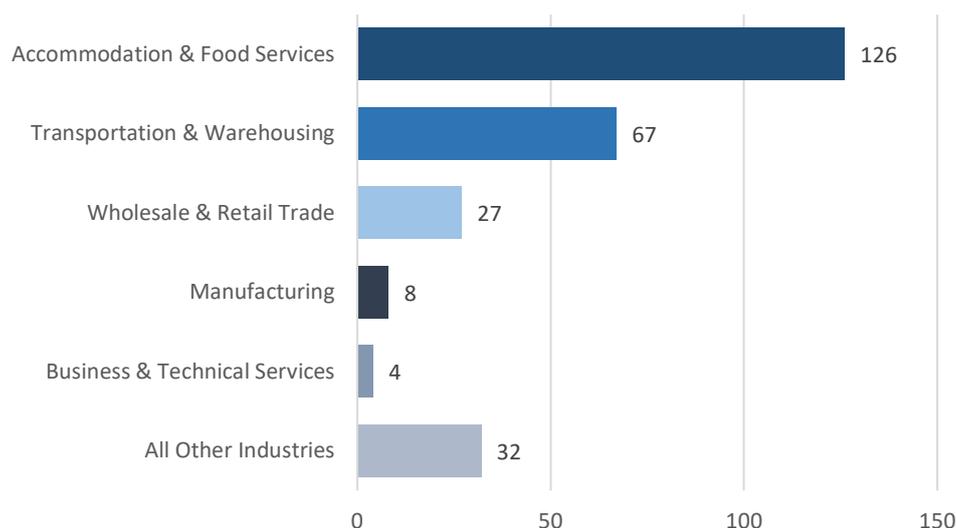
Sectors	Direct Spend	Jobs	Income
Goods Producing Sector	\$5.1	9	\$0.5
Agriculture, Utilities & Construction	\$0.2	1	\$0.0
Manufacturing	\$5.0	8	\$0.5
Service Producing Sector	\$24.8	255	\$9.0
Wholesale & Retail Trade	\$2.1	27	\$0.9
Transportation & Warehousing	\$12.7	67	\$3.9
Professional & Technical Services	\$0.6	4	\$0.2
Accommodation & Food Services	\$6.9	126	\$2.6
Other Services & Government	\$2.6	31	\$1.4
Spending by Sector	\$30.0		
Business Taxes (Less Subsidies)	\$1.5		
Direct Impacts	\$31.5	264	\$9.5
Personal Income Taxes			\$2.0

Note: Components may not sum to totals due to rounding.

The Service Producing Sector accounted for 79 percent of the direct spending, 97 percent of the direct jobs and 95 percent of the wage income. The Transportation & Warehousing industry accounted for 26 percent of the direct employment and 43 percent of the direct wage impacts within the Service Producing Sector. This industry accounted for the second most direct jobs but the most income and included jobs at the Port of Saint John as well as tour operators and air and ground transportation companies.

Combining the Trade and Accommodation & Food Services industries, the cruise industry generated \$9.0 million in direct spending, 153 annualized full- and part-time jobs and \$3.5 million in income. These impacts were generated primarily by passenger and crew spending. Due to the relatively low productivity and wages and salaries within the Retail Trade and Accommodation & Food Services industries, these two industries accounted for 39 percent of the direct income in the Service Producing Sector, but 60 percent of the direct jobs.

Figure NB-2 – Direct Employment Impact in New Brunswick by Industry, 2019



Total Employment, Wage and Tax Impacts

The total economic impacts of the cruise industry are the sum of the direct impacts described above and the indirect and induced impacts. The indirect economic benefits derived from the cruise industry result in part from the additional spending by the suppliers to the cruise industry. For example, food processors must purchase raw foodstuffs for processing; utility services, such as, electricity and water, to run equipment and process raw materials; transportation services to deliver finished products to the cruise lines or wholesalers; and insurance for property and employees.

An input-output table specific to New Brunswick was used to estimate the indirect and induced impacts.⁴⁸ This input-output table reflects the inter-industry links among industries in the New Brunswick economy. This input-output table permits the estimation of the additional economic impacts that the direct spending by the cruise industry, its passengers and its suppliers has on all other industries in the New Brunswick economy. As discussed in the Methodology section, the direct expenditures were adjusted for transportation and trade margins and business taxes before estimating the indirect and induced impacts.

⁴⁸ Statistics Canada, *Industry Accounts Division, 2016*.

As shown in **Table NB-8**, the input-output analysis indicated that the \$31.5 million in direct cruise industry expenditures generated \$68.4 million in total (direct plus indirect and induced) output, 398 annualized full- and part-time jobs⁴⁹ and \$17.6 million in income. In addition, the industry generated an estimated \$2.7 million in business taxes and \$3.7 million in personal income taxes.

Table NB-8 – Total Cruise Industry Economic Impacts in New Brunswick, 2019
Millions of Dollars

Sectors	Output	Jobs	Income
Goods Producing Sector	\$27.5	59	\$3.8
Natural Resources, Utilities & Construction	\$11.4	31	\$2.3
Manufacturing	\$16.1	28	\$1.5
Durable Goods	\$4.3	10	\$0.6
Nondurable Goods	\$11.8	18	\$1.0
Service Producing Sector	\$38.2	339	\$13.7
Wholesale & Retail Trade	\$2.2	29	\$0.9
Transportation and Warehousing	\$17.3	91	\$5.3
Financial Services	\$3.9	14	\$0.9
Professional & Technical Services	\$2.5	21	\$1.6
Information, Culture and Recreation	\$2.5	8	\$0.4
Accommodation and Food Services	\$7.3	133	\$2.8
Other Services & Government	\$2.6	43	\$1.9
Spending by Sector	\$65.7		
Business Taxes (Less Subsidies)	\$2.7		
Total Impacts	\$68.4	398	\$17.6
Personal Income Taxes			\$3.7

Note: Components may not sum to totals due to rounding.

The Goods Producing Sector accounted for 40 percent of the total output impacts but due to the relatively high productivity of this sector only 15 percent of the total jobs and 22 percent of the income impacts. The total economic impacts are more evenly distributed throughout the Goods Producing Sector than the direct impacts as the indirect and induced impacts spread throughout the economy, especially among the natural resource and construction industries.

Within the Services Producing Sector, the Transportation & Warehousing industry remains the dominant industry, accounting for 45 percent of the total output impacts, 27 percent of the employment impacts and 38 percent of the income impacts in this sector. This is due to the magnitude of the direct economic impacts as well as the strong linkages between the transportation sector and all other sectors of the economy. The Professional & Technical Services industry accounted for 6 percent of the employment impacts in this sector and 12 percent of the wage impacts in the Service Producing Sector.

⁴⁹ Adjusting the employment figures for part-time employees, the direct employment impact is equivalent to approximately 300 full-time employees.

The share of the total economic impacts accounted for by the Trade and Accommodation & Food Services industries (14%) is less than their share of the direct impacts (36%). This is due to the fact that the indirect and induced impacts are more concentrated on business-to-business activity than travel and tourism related activity.

Figure NB-3 – Total Employment Impact in New Brunswick by Industry, 2019



In summary, the 79 cruise ship calls at the Port of Saint John during 2019 generated an estimated 203,800 passenger and crew onshore visits (see **Table NB-9**). In addition, an estimated 14,500 New Brunswick residents purchased cruises in Canada and elsewhere. Passengers, crew and the cruise lines directly spent \$31.5 million in the region during the year generating 264 annualized full- and part-time jobs paying \$9.5 million in wages and salaries. The direct spending also generated an estimated \$3.5 million in business taxes and income taxes.

Table NB-9 – Summary of Cruise Industry Economic Impacts in New Brunswick, 2019

Passenger and Crew Onshore Visits	203,800
Direct Economic Impacts	
Cruise Industry Direct Spending (\$ Millions)	\$31.5
Employment	264
Wage and Salaries (\$ Millions)	\$9.5
Business and Income Taxes (\$ Millions)	\$3.5
Total Economic Impacts	
Total Output (\$ Millions)	\$68.4
Employment	398
Wage Income (\$ Millions)	\$17.6
Business and Income Taxes (\$ Millions)	\$6.4

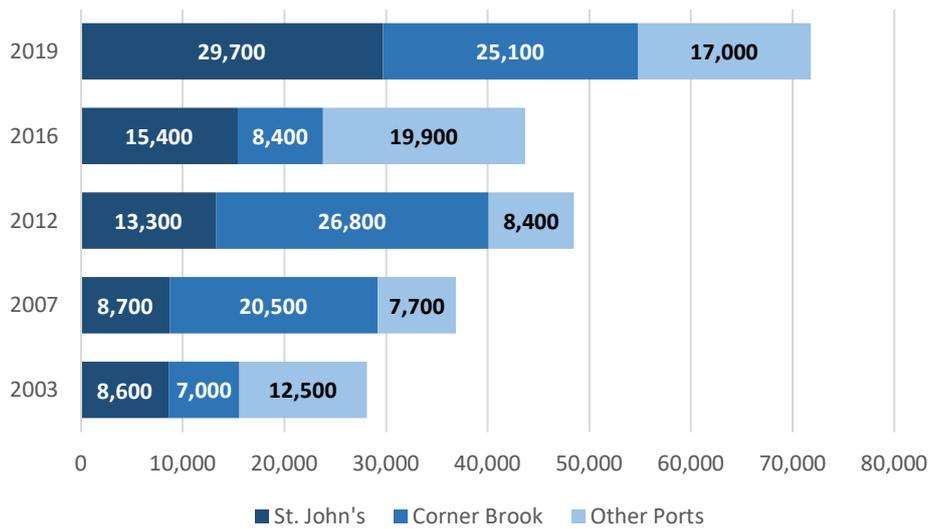
As a result of the subsequent indirect and induced spending by businesses and their employees, the cruise industry was responsible for generating an estimated \$68.4 million in total output, 398 annualized jobs and \$17.6 million in wage income throughout the province during 2019. Total business taxes and personal income taxes were an estimated \$6.4 million.

Overall, the economic impacts of the cruise industry in New Brunswick accounted for nearly 2 percent of the industry’s total output throughout Canada. Relative to the national impacts, the economic impacts in New Brunswick were more highly concentrated in the Transportation and Food Services industries. This reflects the high share of transit passenger and crew visits and related purchases of shore excursions, food and beverages and retail goods. On the contrary, there was a proportionately smaller impact within the Professional Services sector due to the fact that the direct purchases of these support services are not nearly dependent upon proximity to ports and are spread throughout the urban centers of Canada.

Newfoundland and Labrador Cruise Sector

During 2019 more than 50 cruise ship calls were made at the ports of Newfoundland and Labrador. As shown in **Figure NL-1**, Newfoundland and Labrador’s ports handled nearly 72,000 passengers during the cruise season⁵⁰, accounting for almost 3 percent of the cruise passenger arrivals throughout Canada. These are primarily transit ports for Canada New England cruises originating in the northeastern United States, expedition cruises originating in Canada, the United States and Europe, and transatlantic cruises.

Figure NL-1 – Cruise Passenger Arrivals at the Ports of Newfoundland and Labrador 2019



Source: Ports of St. John’s, Corner Brook and the Atlantic Canada Cruise Association

While serving all segments of the cruise market, most passengers that arrive in St. John’s and Corner Brook travel on the large mass-market cruise ships originating in the United States and Europe. There are at least 35 additional cruise ports and destinations throughout the province in addition to these two ports. While some of the large mass-market ships will call at these ports, most cruise calls to these smaller ports are by the smaller expedition cruise ships.

Since 2016, passenger arrivals in Newfoundland and Labrador have increased by 64 percent. In 2019, an estimated 14,000 Newfoundland and Labrador residents purchased cruises, both within and outside Canada, representing just over 1 percent of all Canadian residents who purchased cruises during the year.

Direct Expenditures

There are three primary sources of cruise-related spending: i) cruise lines, ii) cruise passengers and iii) crew members. The cruise lines purchase a variety of goods and services supporting their cruises, including food and beverages, hotel supplies, bunker fuels, utilities while in port, and other port services to name a few. Passengers purchase

⁵⁰ The cruise season in Newfoundland and Labrador generally includes a six month period from May through October, with most cruise calls occurring in August and September.

transportation to and from port cities, pre- and post-cruise excursions, souvenirs and other retail goods, while crew members will purchase a similar set of goods and services with a heavier concentration on retail goods.

During 2019, cruise-related spending totalled \$10 million in the Province of Newfoundland and Labrador. As indicated in **Table NL-1**, the cruise lines' expenditures accounted for 46 percent of the total; passengers accounted for 46 percent and crew the remaining 8 percent. The industry impacts, as discussed in the following sections, vary significantly across the three sources.

Table NL-1 – Direct Cruise-Related Expenditures in Newfoundland and Labrador, 2019

Millions of Dollars

Sources	Spending	Share
Cruise Lines	\$4.6	46%
Passengers	\$4.6	46%
Crew	\$0.8	8%
Total	\$10.0	

Note: Rows and/or columns may not sum to the total due to rounding.

Expenditures by Cruise Lines

Expense data collected through a survey of the various port authorities and CLIA member cruise lines showed that the cruise lines spent \$4.6 million with businesses in Newfoundland and Labrador during 2019. As shown in **Table NL-2**, the cruise lines spent an estimated \$1.0 million in administrative and professional expenses with businesses in the province. The spend represented 21 percent of total cruise line expenditures in the province and primarily included advertising and promotion expenditures and other professional services.

In addition, the cruise lines spent \$3.7 million on operational expenses with businesses in Newfoundland and Labrador. Cruise lines spent an estimated \$1.1 million with Newfoundland and Labrador ports for transportation and warehousing services, including the costs of port services; ship agents; stevedores; passenger and crew transportation paid by the cruise lines, excluding shore excursions; and storage and warehousing. The 14,000 residents of Newfoundland and Labrador that purchased cruises during 2019 generated an estimated \$2.3 million in travel agent commissions. Other operating expenses, totalling \$300,000, included expenditures for machinery and equipment for cruise ship operations, such as search and navigation and lifesaving equipment.

Table NL-2 – Cruise Lines’ Expenditures in Newfoundland and Labrador by Category, 2019 Millions of Dollars

Category	Spending	Share
Administrative & Professional Expenses	\$1.0	21%
Operational Expenses	\$3.7	79%
Travel Agent Commissions	\$2.3	49%
Transportation & Warehousing	\$1.1	24%
Other Operating Expenses	\$0.3	6%
Total	\$4.6	

Note: Rows and/or columns may not sum to the total due to rounding.

Expenditures by Passengers

As shown in **Table NL-3**, of the 71,800 cruise passengers that arrived in the ports of Newfoundland and Labrador, an estimated 89 percent, or 64,000 passengers, disembarked and spent \$4.3 million on goods and services in Newfoundland and Labrador during 2019 for an average expenditure of \$64.62 per passenger visit. Corner Brook passengers spent an average of \$75.89 per onshore visit, while passengers visiting St. John's spent an average of \$77.66. Average per passenger spending at the smaller ports was estimated to have averaged \$37.95.

Table NL-3 – Passenger Expenditures in Newfoundland and Labrador by Category, 2019 Millions of Dollars

	St. John's	Corner Brook	Other Ports	Total
Passenger Arrivals	29,700	25,100	17,000	71,900
Passenger Onshore Visits	26,500	22,400	15,200	64,000
Tours and Transportation	\$1.00	\$1.20	\$0.41	\$2.61
Food and Beverages	\$0.36	\$0.13	\$0.04	\$0.53
Other Retail	\$0.68	\$0.37	\$0.12	\$1.17
Total Spending^①	\$2.06	\$1.70	\$0.58	\$4.33
Average per Passenger	\$77.66	\$75.89	\$37.95	\$67.64

Note: Rows and/or columns may not sum to the total due to rounding.

^① Includes approximately \$18,000 in expenditures by 600 passengers reported to have embarked and disembarked in St. John's.

The cost of shore excursions and ground transportation accounted for 60 percent of passenger expenditures. Expenditures for retail goods and food accounted for 27 percent and 12 percent of passenger expenditures, respectively.

Other Passenger Expenditures

Other passenger expenditures that impact Canadian economic activity consist of cruise passengers' airfare and travel insurance costs. There were approximately 14,000 sourced passengers from Newfoundland and Labrador who began their cruise either within or outside Canada. We have estimated that air travel related to these cruise passengers added about \$20,000 to the Newfoundland and Labrador economy (see **Table NL-5**). In addition, the residents of Newfoundland and Labrador purchased an estimated \$210,000 in travel insurance for their cruises. Thus, the total spend by passengers in Newfoundland and Labrador was approximately \$4.6 million.

Table NL-4- Other Direct Passenger Expenditures in Newfoundland and Labrador, 2019

Millions of Dollars

Category	Expenditures
Airfares Impacting the Newfoundland and Labrador Economy	\$0.02
Cruise-Related Travel Insurance in Newfoundland and Labrador	\$0.21
Total	\$0.23

Expenditures by Crew

As shown in **Table NL-5**, 35,600 crew arrived at the ports of Newfoundland and Labrador, with 13,900, or 39 percent, estimated to have disembarked and made an onshore visit. These crew members spent an estimated \$840,000 in 2019. The significant difference between crew and passenger spending is that tours and transportation only accounted for 5 percent of crew expenditures while tours absorbed 60 percent of passenger expenditures. Retail expenditures, which totalled \$530,000, were by far the crew's largest expenditure category, accounting for 62 percent of their total expenditures in the province.

Table NL-5 – Crew Expenditures in Newfoundland and Labrador by Category, 2019
Millions of Dollars

	St. John's	Corner Brook	Other Ports	Total
Crew Arrivals	13,800	11,600	10,200	35,600
Crew Onshore Visits	5,400	4,500	4,000	13,900
Tours and Transportation	\$0.01	\$0.02	\$0.01	\$0.05
Food and Beverages	\$0.14	\$0.09	\$0.04	\$0.27
Other Retail	\$0.20	\$0.23	\$0.09	\$0.53
Total Spending	\$0.36	\$0.35	\$0.14	\$0.84
Average per Crew Member	\$76.02	\$77.43	\$33.85	\$63.78

Direct Expenditures by Industry

For purposes of the economic impact analysis, the \$10.0 million in direct cruise industry expenditures in Newfoundland and Labrador were allocated to the appropriate industries. For example, after adjusting for trade and transportation margins and business taxes, cruise lines' purchases of food and beverages were allocated to the Food & Beverage

manufacturing industry. In contrast, passenger expenditures for tours were allocated to the Transportation & Warehousing industry as shown in **Table NL-6**.

Businesses in the manufacturing sector received \$4.0 million in cruise industry expenditures, 40 percent of direct expenditures. These expenditures consisted of manufactured goods by all three channels - passengers, crew, and cruise lines.

As indicated in the table, the Transportation & Warehousing industry accounted for 25 percent of the province's cruise industry's direct expenditures. These included expenditures for cruise lines' purchases of port services, such as stevedoring, piloting and port agents, and trucking and warehousing. It also included passenger and crew expenditures for air transportation and other ground transportation paid by the cruise lines.

Table NL-6 – Direct Cruise Industry Expenditures in Newfoundland and Labrador, 2019 Millions of Dollars

Sectors	Expenditures	Share
Goods Producing Sector	\$4.1	41%
Agriculture, Utilities & Construction	\$0.1	1%
Manufacturing	\$4.0	40%
Service Producing Sector	\$5.7	57%
Wholesale & Retail Trade	\$0.3	3%
Transportation and Warehousing	\$2.5	25%
Financial & Business Services	\$0.9	9%
Accommodation and Food Services	\$1.2	12%
Other Services & Government	\$0.8	8%
Spending by Sector	\$9.8	
Business Taxes (Less Subsidies)	\$0.3	3%
Direct Spending	\$10.0	

Note: Components may not sum to totals due to rounding.

The Financial & Business Services industry received \$0.9 million in cruise industry expenditures in 2019. These included a broad range of expenditures by the cruise lines for services such as advertising, travel agent commissions, and consulting services.

Passenger and crew expenditures were primarily allocated to three industries, Transportation & Warehousing, Wholesale & Retail Trade and Accommodation & Food Services. The latter two sectors accounted for 14 percent of direct expenditures and totalled \$1.4 million when combined.

Direct Employment, Wage and Tax Impacts

As shown in **Table NL-7**, the \$10.0 million in direct cruise industry expenditures generated direct employment of 51 annualized full- and part-time employees⁵¹, paying \$2.6 million in wage income. Combining business taxes and income taxes, the direct cruise-related spending in the province generated \$0.8 million in governmental tax payments.

The Goods Producing Sector accounted for 41 percent of direct expenditures, 14 percent of the direct jobs and 17 percent of the wage income. The demand for food and beverage stores and equipment accounted for most of the industry's purchases of manufactured goods.

The Service Producing Sector accounted for 57 percent of the direct spending, 86 percent of the direct jobs and 83 percent of the wage income. The Transportation & Warehousing industry accounted for about 27 percent of direct employment and 38 percent of the Service Producing Sector's wage impacts. The industry's employment impacts included jobs at the cruise ports, among tour operators and air and ground transportation companies.

Table NL-7 – Direct Cruise Industry Economic Impacts in Newfoundland and Labrador, 2019 Millions of Dollars

Sectors	Direct Spend	Jobs	Income
Goods Producing Sector	\$4.1	7	\$0.4
Agriculture, Utilities & Construction	\$0.1	0	\$0.0
Manufacturing	\$4.0	7	\$0.4
Service Producing Sector	\$5.7	44	\$2.1
Wholesale & Retail Trade	\$0.3	1	\$0.1
Transportation & Warehousing	\$2.5	12	\$0.8
Financial & Business Services	\$0.9	5	\$0.4
Accommodation & Food Services	\$1.2	18	\$0.4
Other Services & Government	\$0.8	8	\$0.4
Spending by Sector	\$9.8		
Business Taxes (Less Subsidies)	\$0.3		
Direct Impacts	\$10.0	51	\$2.6
Personal Income Taxes			\$0.5

Note: Components may not sum to totals due to rounding.

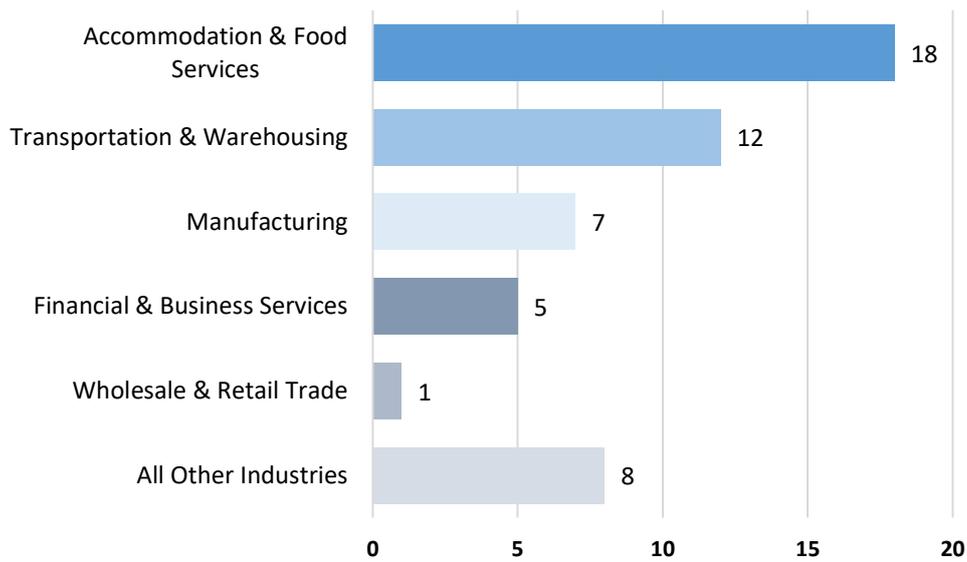
The Financial & Business Services industry's direct impacts accounted for 16 percent of the direct spending and 11 percent of the employment impacts within the Service Producing Sector. However, due to the relatively high wages and salaries in this sector, it accounted for 18 percent of this sector's direct income. As discussed above, the jobs

⁵¹ The economic impacts generated by the models are average annual impacts and include part-time (including seasonal) and full-time employees. Since these expenditures typically occur over a 6-month period of May through October, the peak employment impacts will actually be higher than those reported. It should be noted that some ports may receive a few calls in April and November. Because many of the seasonal workers will incur significant overtime, the six-month impacts, while larger than the average annual impacts, are not necessarily twice as large. Adjusting the employment figures for part-time employees, the direct employment impact is equivalent to approximately 39 full-time employees.

generated in this sector included travel agents and employees of advertising and other professional services companies.

Combining the Trade and Accommodation & Food Services industries, the cruise industry generated \$1.4 million in direct spending, 19 annualized full- and part-time jobs and \$500,000 in income. These impacts were generated primarily by passenger and crew spending. Due to the relatively low productivity, wages and salaries within the Retail Trade and Accommodation & Food Services industries, these two industries accounted for 25 percent of the direct income in the Service Producing Sector, but 43 percent of the direct jobs.

Figure NL-2 –Direct Employment Impact in Newfoundland and Labrador by Industry, 2019



Total Employment, Wage and Tax Impacts

The cruise industry’s total economic impacts are the sum of the direct impacts described above and the indirect and induced impacts. The indirect economic benefits derived from the cruise industry result in part from the additional spending by the suppliers to the cruise industry. For example, food processors must purchase raw foodstuffs for processing; utility services, such as electricity and water, to run equipment and process raw materials; transportation services to deliver finished products to the cruise lines or wholesalers; and insurance for property and employees.

An input-output table specific to Newfoundland and Labrador was used to estimate the indirect and induced impacts.⁵² This input-output table reflects the inter-industry links among industries in the Newfoundland and Labrador economy. This input-output table permits the estimation of the additional economic impacts that the direct spending by the cruise industry, its passengers and its suppliers has on all other industries in the Newfoundland and Labrador economy. As discussed in the Methodology section, the direct

⁵² Statistics Canada, *Industry Accounts Division, 2016*.

expenditures were adjusted for transportation and trade margins and business taxes before estimating the indirect and induced impacts.

As shown in **Table NL-8**, the input-output analysis indicated that the \$10.0 million in direct cruise industry expenditures generated \$21.0 million in total (direct plus indirect and induced) output, 88 annualized full- and part-time jobs⁵³ and \$5.0 million in income. The industry also generated an estimated \$0.5 million in business taxes and \$1.0 million in personal income taxes.

Table NL-8 – Total Cruise Industry Economic Impacts in Newfoundland and Labrador, 2019 Millions of Dollars

Sectors	Output	Jobs	Income
Goods Producing Sector	\$11.8	26	\$1.8
Natural Resources, Utilities & Construction	\$4.3	13	\$1.0
Manufacturing	\$7.5	13	\$0.8
Durable Goods	\$4.0	8	\$0.5
Nondurable Goods	\$3.5	5	\$0.3
Service Producing Sector	\$8.7	63	\$3.2
Wholesale & Retail Trade	\$0.3	2	\$0.1
Transportation and Warehousing	\$3.3	16	\$1.0
Financial Services	\$1.1	4	\$0.3
Professional & Technical Services	\$1.1	9	\$0.7
Information, Culture and Recreation	\$0.9	2	\$0.1
Accommodation and Food Services	\$1.3	20	\$0.5
Other Services & Government	\$0.7	9	\$0.5
Spending by Sector	\$20.5		
Business Taxes (Less Subsidies)	\$0.5		
Total Impacts	\$21.0	88	\$5.0
Personal Income Taxes			\$1.0

Note: Components may not sum to totals due to rounding.

The Goods Producing sector accounted for 56 percent of the total output impacts, but due to the relatively high productivity of this sector, only 30 percent of the total jobs and 35 percent of the income impacts. The total economic impacts are more evenly distributed throughout the Goods Producing Sector than the direct impacts as the indirect and induced impacts spread throughout the economy, especially among the natural resource and construction industries.

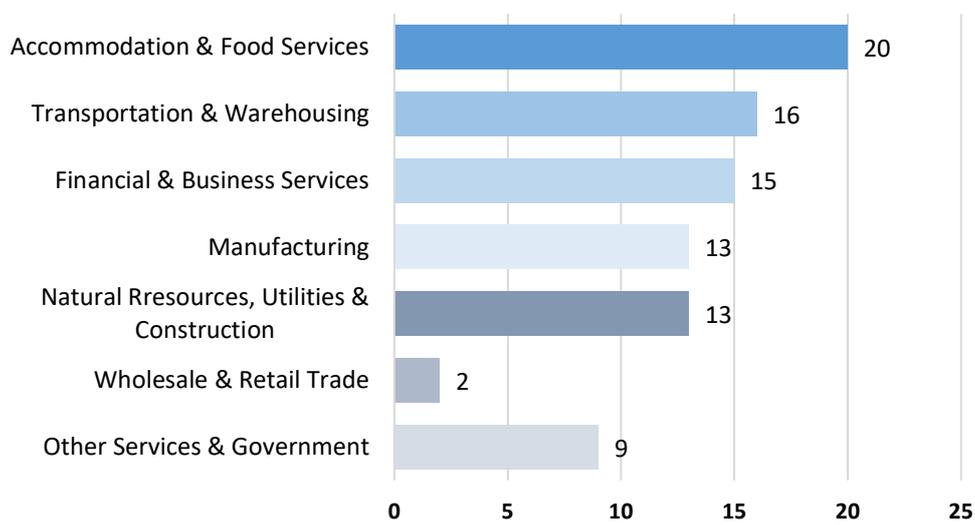
Within the Services Producing sector, the Transportation & Warehousing industry remains the dominant industry, accounting for approximately 38 percent of the output, 26 percent of the employment and 32 percent of the income impacts. This is due to the magnitude of the direct economic impacts as well as the strong linkages between the transportation sector and all other sectors of the economy. The Professional & Technical

⁵³ Adjusting the employment figures for part-time employees, the direct employment impact is equivalent to approximately 67 full-time employees.

Services industry accounted for 15 percent of the employment impacts in this sector and 23 percent of the wage impacts.

The share of the total economic impacts accounted for by the Trade and Accommodation & Food Services industries is slightly less than their share of the direct impacts. This is because the indirect impacts are more concentrated on business-to-business activity than travel and tourism-related activity.

Figure NL-3 – Total Employment Impact in Newfoundland and Labrador by Industry, 2019



In summary, the cruise ship calls at the Newfoundland and Labrador ports during 2019 generated an estimated 77,900 passenger and crew onshore visits (see **Table NL-9**). In addition, an estimated 14,000 Newfoundland and Labrador residents purchased cruises in Canada and elsewhere. Passengers, crew, and cruise lines directly spent \$10.0 million in the region generating 51 annualized full- and part-time jobs, paying \$2.6 million in wages and salary income. The direct spending also generated an estimated \$0.8 million in business taxes and income taxes.

As a result of the subsequent indirect and induced spending by businesses and their employees, the cruise industry was responsible for generating an estimated \$21.0 million in total output, 88 annualized jobs and \$5.0 million in wage income throughout the province during 2019. Total business taxes and personal income taxes were an estimated \$1.5 million.

The industry distribution of the economic impacts in Newfoundland and Labrador was similar to the national level. The principal difference is in the Natural Resource sector, which accounted for a higher share of the total economic impacts in the province relative to the overall national impacts. On the contrary, there was a proportionately smaller impact within the Professional Services sector due to the direct purchases of these support services are not nearly dependent upon proximity to ports and are spread throughout Canada's urban centers.

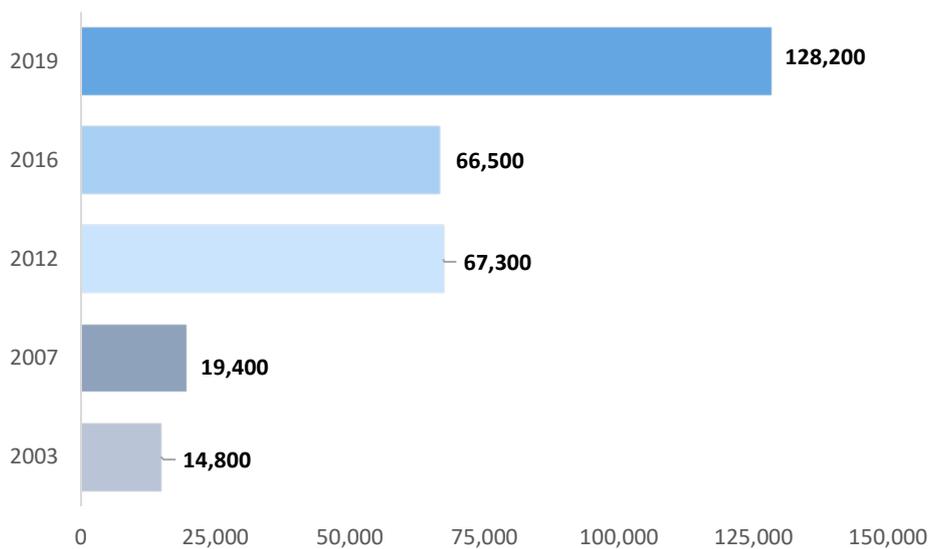
Table NL-9 – Summary of Cruise Industry Economic Impacts in Newfoundland and Labrador, 2019

Passenger and Crew Onshore Visits	77,900
Direct Economic Impacts	
Cruise Industry Direct Spending (\$ Millions)	\$10.0
Employment	51
Wage and Salaries (\$ Millions)	\$2.6
Business and Income Taxes (\$ Millions)	\$0.8
Total Economic Impacts	
Total Output (\$ Millions)	\$21.0
Employment	88
Wage Income (\$ Millions)	\$5.0
Business and Income Taxes (\$ Millions)	\$1.5

Prince Edward Island Cruise Sector

During 2019 a reported 87 cruise ship calls were made at the Port of Charlottetown. As shown in **Figure PE-1**, the port handled 128,200 passengers during the cruise season⁵⁴. Charlottetown accounted for approximately 4 percent of cruise passenger arrivals throughout Canada. Charlottetown is a transit port for Canada New England cruises originating in the northeastern United States, expedition cruises originating in Canada, the United States and Europe, and transatlantic cruises originating in Europe. While serving all segments of the cruise market, most passengers that arrive in Charlottetown travel on the large mass market cruise ships originating in the United States and Europe.

Figure PE-1 – Cruise Passenger Arrivals at Charlottetown



Source: Port of Charlottetown

After a slightly down year in 2016, cruise passenger arrivals in Charlottetown nearly doubled in 2019. In addition to cruise passenger arrivals, an estimated 3,100 residents of Prince Edward Island purchased cruises during 2019. This represented under 1 percent of all Canadian residents who purchased cruises during the year.

Direct Expenditures

There are three primary sources of cruise-related spending: i) cruise lines; ii) cruise passengers and iii) crew members. The cruise lines purchase a variety of goods and services supporting their cruises, including food and beverages, hotel supplies, bunker fuels, utilities while in port and other port services to name a few. Passengers purchase transportation to and from port cities, pre- and post-cruise excursions, souvenirs and other retail goods while crew members will purchase a similar set of goods and services with a heavier concentration on retail goods.

During 2019, cruise-related spending totalled \$21.0 million in the province of Prince Edward Island. As indicated in **Table PE-1**, the cruise lines' expenditures accounted for 35

⁵⁴ The cruise season generally includes a six month period from May through October.

percent of the total, passengers accounted for 57 percent and crew the remaining 8 percent. The industry impacts, which are discussed in the following sections, vary significantly across the three sources.

Table PE-1 – Direct Cruise-Related Expenditures in Prince Edward Island, 2019
Millions of Dollars

Sources	Spending	Share
Cruise Lines	\$7.2	35%
Passengers	\$12.0	57%
Crew	\$1.8	8%
Total	\$21.0	

Note: Components may not sum to totals due to rounding.

Expenditures by Cruise Lines

Expense data collected through a survey of the various port authorities and CLIA member cruise lines showed that the cruise lines spent \$7.2 million with businesses in Prince Edward Island during 2019.

Table PE-2 – Cruise Lines' Expenditures in Prince Edward Island by Category, 2019 Millions of Dollars

Category	Spending	Share
Administrative & Professional Expenses	\$*	*%
Operational Expenses	\$7.2	100%
Transportation & Warehousing	\$4.0	55%
Travel Agent Commissions	\$0.5	7%
Other Operating Expenses	\$2.8	38%
Total	\$7.2	

*Less than \$10,000

The cruise lines spent \$7.2 million on operational expenses with businesses in the province, including an estimated \$4.0 million with businesses in Prince Edward Island for transportation and warehousing services. This included the costs of port services; ship agents; stevedores; passenger and crew transportation paid by the cruise lines, excluding shore excursions; and storage and warehousing. The 3,100 residents of the province that purchased cruises during 2019 were estimated to have generated about \$500,000 in commissions to local travel agents.

All other operating expenses, totalling \$2.78 million included expenditures for other products for cruise ship operations.

Expenditures by Passengers

As shown in **Table PE-3**, of the 128,200 cruise passengers that arrived in Charlottetown, it is estimated that 89 percent, or 114,100 passengers, disembarked and spent just under \$12 million on goods and services during port calls for an average expenditure of just over \$104 per passenger visit.

Table PE-3 – Passenger Expenditures in Prince Edward Island by Category, 2019
Millions of Dollars

Charlottetown	
Passenger Arrivals	128,200
Passenger Onshore Visits	114,100
Tours and Transportation	\$6.1
Food and Beverages	\$1.5
Other Retail	\$4.3
Total Spending	\$11.9
Average per Passenger	\$104.29

Note: Components may not sum to totals due to rounding.

Expenditures for tours & transportation totalled \$6.1 million and accounted for half of all passenger expenditures, while expenditures for retail goods, at \$4.3 million, accounted for 36 percent of passenger expenditures. Consumption of food & beverages accounted for 13 percent of passenger expenditures at \$1.5 million.

Other Passenger Expenditures

In addition to the \$11.90 million shown above, airfare and travel insurance costs of cruise passengers impact the Canadian economic activity. About 3,100 passengers traveled from Prince Edward Island to begin a cruise either within, or outside of Canada. We have estimated that air travel and travel insurance expenditures related to these sourced passengers were about \$90,000 (see **Table PE-5**). Thus, the total spend by passengers in PEI is \$11.99 million.

Table PE-4 – Other Direct Passenger Expenditures in Prince Edward Island, 2019
Millions of Dollars

Category	Expenditures
Airmiles Impacting the PEI Economy	\$0.04
Cruise-Related Travel Insurance in PEI	\$0.05
Total	\$0.09

Expenditures by Crew

As shown in **Table PE-4**, of the 55,400 crew members who arrived on cruises to Prince Edward Island, an estimated 21,600 crew, or 39 percent, made an onshore visit at Charlottetown and spent nearly \$1.8 million in 2019 for an average expenditure of \$81 per onshore visit. Retail expenditures, which totalled \$1.3 million was, by far the largest expenditure category for crew, accounting for 72 percent of their total expenditures in Charlottetown. Food and beverages (\$0.4m) accounted for about 22 percent. While tours and transportation made up about half of passenger expenditures, this category only accounted for 6 percent of crew expenditures.

Table PE-5 – Crew Expenditures in Prince Edward Island by Category, 2019
Millions of Dollars

	Charlottetown
Crew Arrivals	55,400
Crew Onshore Visits	21,600
Tours and Transportation	\$0.1
Food and Beverages	\$0.4
Other Retail	\$1.3
Total Spending	\$1.8
Average per Crew Member	\$81.13

Note: Components may not sum to totals due to rounding

Direct Expenditures by Industry

For purposes of the economic impact analysis, the \$21.0 million in direct cruise industry expenditures in Prince Edward Island were allocated to the appropriate industries. For example, after adjusting for trade and transportation margins and business taxes cruise lines’ purchases of food and beverages were allocated to the Food & Beverage manufacturing industry while passenger expenditures for tours were allocated to the Transportation & Warehousing industry. These are shown in **Table PE-6**.

Businesses in the manufacturing sector received \$5.4 million in cruise industry expenditures, 26 percent of direct expenditures. While these expenditures consisted of manufactured goods supported by all three channels - passengers, crew and cruise lines, they consisted primarily of cruise lines’ expenditures for their cruise ship operations, such as fuel, food and other hotel supplies.

Table PE-6 – Direct Cruise Industry Expenditures in PEI, 2019
Millions of Dollars

Sectors	Direct Spend	Share
Goods Producing Sector	\$5.6	27%
Agriculture, Utilities & Construction	\$0.2	1%
Manufacturing	\$5.4	26%
Service Producing Sector	\$15.0	71%
Wholesale & Retail Trade	\$0.6	3%
Transportation and Warehousing	\$9.9	47%
Professional & Technical Services	\$0.2	1%
Accommodation and Food Services	\$2.7	13%
Other Services & Government	\$1.7	8%
Spending by Sector	\$20.6	
Business Taxes (Less Subsidies)	\$0.4	2%
Direct Spending	\$21.0	

Note: Components may not sum to totals due to rounding

As indicated in the table, the Transportation & Warehousing industry accounted for 47 percent of the cruise industry’s direct expenditures in the province with \$9.9 million. These included expenditures for cruise lines’ purchases of port services, such as stevedoring, piloting and port agents, and trucking and warehousing. It also included passenger and crew expenditures for air transportation and other ground transportation paid by the cruise lines.

Passenger and crew expenditures were primarily allocated to three industries, Transportation & Warehousing, which we have already discussed, Wholesale & Retail Trade and Accommodation & Food Services. These later two sectors accounted for 15 percent of direct expenditures and totalled \$3.2 million combined.

Direct Employment, Wage and Tax Impacts

As shown in **Table PE-7**, the \$21 million in direct cruise industry expenditures generated direct employment of 161 annualized full- and part-time employees⁵⁵ paying \$5.8 million in wage income in the province. Combining business taxes and income taxes, the direct cruise-related spending in the province generated \$1.6 million in governmental tax payments.

The Goods Producing Sector accounted for 27 percent of direct expenditures, 14 percent of the direct jobs and 17 percent of the wage income. The demand for fuel, food and other hotel supplies accounted for most of the industry's purchases of manufactured goods.

Table PE-7 – Direct Cruise Industry Economic Impacts in Prince Edward Island, 2019
Millions of Dollars

Sectors	Direct Spend	Jobs	Income
Goods Producing Sector	\$5.6	23	\$1.0
Agriculture, Utilities & Construction	\$0.2	1	\$0.0
Manufacturing	\$5.4	22	\$1.0
Service Producing Sector	\$15.0	138	\$4.8
Wholesale & Retail Trade	\$0.6	6	\$0.2
Transportation & Warehousing	\$9.9	67	\$3.1
Financial & Business Services	\$0.2	1	\$0.1
Accommodation & Food Services	\$2.7	40	\$0.7
Other Services & Government	\$1.7	24	\$0.8
Spending by Sector	\$20.6		
Business Taxes (Less Subsidies)	\$0.4		
Direct Impacts	\$21.0	161	\$5.8
Personal Income Taxes			\$1.2

Note: Components may not sum to totals due to rounding

The Service Producing Sector accounted for 71 percent of the direct spending, 86 percent of the direct jobs and 83 percent of the wage income. The Transportation & Warehousing industry accounted for about 49 percent of the direct employment and 63 percent of the direct wage impacts within the Service Producing Sector. The employment impacts included jobs at the cruise ports as well as tour operators and ground transportation companies.

Combining the Trade and Accommodation & Food Services industries, the cruise industry generated \$3.2 million in direct spending, 46 annualized full- and part-time jobs and about \$0.9 million in income. These impacts were generated primarily by passenger and crew spending. Due to the relatively low productivity, wages and salaries within the Retail

⁵⁵ The economic impacts generated by the models are average annual impacts and include part-time (including seasonal) and full-time employees. Since these expenditures typically occur over a 6-month period of May through October, the peak employment impacts will actually be higher than those reported. It should be noted that some ports may receive a few calls in April and November. Because many of the seasonal workers will incur significant overtime, the six-month impacts, while larger than the average annual impacts, are not necessarily twice as large. Adjusting the employment figures for part-time employees, the direct employment impact is equivalent to approximately 122 full-time employees.

Trade and Accommodation & Food Services industries, these two industries accounted for 18 percent of the direct income in the Service Producing Sector, but 33 percent of the direct jobs.

Figure PE-2– Distribution of Direct Employment Impact in PEI, 2019



Total Employment, Wage and Tax Impacts

The total economic impacts of the cruise industry are the sum of the direct impacts described above and the indirect and induced impacts. The indirect economic benefits derived from the cruise industry result in part from the additional spending by the suppliers to the cruise industry. For example, food processors must purchase raw foodstuffs for processing; utility services, such as, electricity and water, to run equipment and process raw materials; transportation services to deliver finished products to the cruise lines or wholesalers; and insurance for property and employees.

An input-output table specific to Prince Edward Island was used to estimate the indirect and induced impacts.⁵⁶ This input-output table reflect the inter-industry links among industries in the two provincial economies. Use of this input-output table permits the estimation of the additional economic impacts that the direct spending by the cruise industry, its passengers and its suppliers has on all other industries in the region. As discussed in the Methodology section, the direct expenditures were adjusted for transportation and trade margins and business taxes before estimating the indirect and induced impacts.

⁵⁶ Statistics Canada, *Industry Accounts Division, 2016*.

As shown in **Table PE-8**, the input-output analysis indicated that the \$21 million in direct cruise industry expenditures generated \$42.2 million in total (direct plus indirect and induced) output, 294 annualized full- and part-time jobs⁵⁷ and \$11.6 million in income. In addition, the industry generated an estimated \$1.0 million in business taxes and \$2.4 million in personal income taxes.

Table PE-8 – Total Cruise Industry Economic Impacts in Prince Edward Island, 2019
Millions of Dollars

Sectors	Output	Jobs	Income
Goods Producing Sector	\$19.2	97	\$4.2
Natural Resources, Utilities & Construction	\$6.1	38	\$1.6
Manufacturing	\$13.2	59	\$2.6
Durable Goods	\$4.7	23	\$1.1
Nondurable Goods	\$8.5	36	\$1.6
Service Producing Sector	\$22.0	197	\$7.3
Wholesale & Retail Trade	\$0.6	6	\$0.2
Transportation and Warehousing	\$11.7	79	\$3.6
Financial Services	\$2.3	12	\$0.6
Professional & Technical Services	\$1.3	21	\$0.8
Information, Culture and Recreation	\$1.5	3	\$0.1
Accommodation and Food Services	\$3.1	46	\$0.8
Other Services & Government	\$1.5	30	\$1.1
Spending by Sector	\$41.2		
Business Taxes (Less Subsidies)	\$1.0		
Total Impacts	\$42.2	294	\$11.6
Personal Income Taxes			\$2.4

Note: Components may not sum to totals due to rounding

The Goods Producing Sector accounted for 46 percent of the total output impacts but due to the relatively high productivity of this sector only 33 percent of the total jobs and 37 percent of the income impacts. The total economic impacts are more evenly distributed throughout the Goods Producing Sector than the direct impacts as the indirect and induced impacts spread throughout the economy, especially among the natural resource and construction industries.

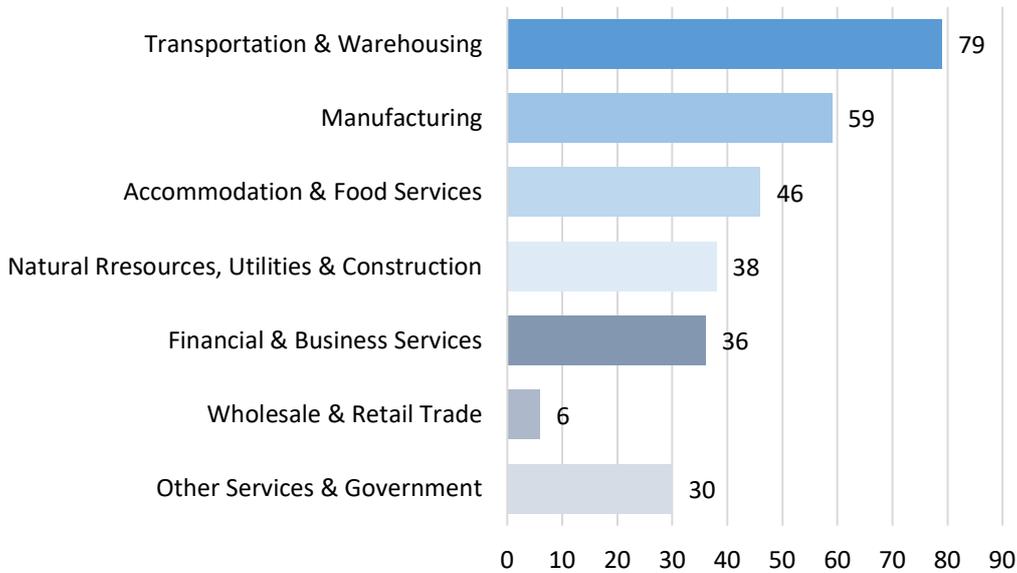
Within the Services Producing sector, the Transportation & Warehousing industry remains the top industry, accounting for 53 percent of the total output, 40 percent of the total jobs and 49 percent of the total wage impacts in this sector. This is due to the magnitude of the direct economic impacts as well as the strong linkages between the transportation sector and all other sectors of the economy.

The share of the total economic impacts accounted for by the Trade and Accommodation & Food Services industries (9%) is significantly less than their share of the direct impacts

⁵⁷ Adjusting the employment figures for part-time employees, the direct employment impact is equivalent to approximately 222 full-time employees.

(13%). This is due to the fact that the indirect and induced impacts are more concentrated on business-to-business activity than travel and tourism related activity.

Figure PE-3 – Total Employment Impact in Prince Edward Island by Industry, 2019



In summary, the 87 cruise ship calls in Charlottetown during 2019 generated over 135,700 passenger and crew onshore visits (see **Table PE-9**). In addition, an estimated 3,100 residents of the province purchased cruises from Canada and elsewhere. Passengers, crew and the cruise lines directly spent \$21.0 million in Prince Edward Island during the year generating 161 annualized full- and part-time jobs paying \$5.8 million in wage income. The direct spending also generated an estimated \$1.6 million in business taxes and income taxes.

As a result of the subsequent indirect and induced spending by businesses and their employees, the cruise industry was responsible for generating an estimated \$42.2 million in total output, 294 annualized jobs and \$11.6 million in wage income throughout Canada during 2019. Total business taxes and personal income taxes were an estimated \$3.4 million.

Overall, the economic impacts of the cruise industry in Prince Edward Island accounted for slightly less than 1 percent of the industry's total output throughout Canada. The industry distribution of the economic impacts in Prince Edward Island is similar to the national level. The principal difference is in the Transportation & Warehousing industry which accounted for a higher share of the total economic impacts in the province (24%) relative to the overall national impacts (17%). On the contrary, there was a proportionately smaller impact within the Professional Services sector (3% VS. 9%) due to the fact that the direct purchases of these support services are not nearly dependent upon proximity to ports and are spread throughout the urban centers of Canada.

Table PE-9- Summary of Cruise Industry Economic Impacts in Prince Edward Island, 2019

Passenger and Crew Onshore Visits	135,700
Direct Economic Impacts	
Cruise Industry Direct Spending (\$ Millions)	\$21.0
Employment	161
Wage and Salaries (\$ Millions)	\$5.8
Business and Income Taxes (\$ Millions)	\$1.6
Total Economic Impacts	
Total Output (\$ Millions)	\$42.2
Employment	294
Wage Income (\$ Millions)	\$11.6
Business and Income Taxes (\$ Millions)	\$3.4



BREA specializes in custom market analyses for clients throughout the private and public sectors. These unique market analyses integrate economic, financial, and demographic trends with primary market research, proprietary client data, and advanced statistical and modeling techniques. This approach results in comprehensive and actionable analysis, databases and models designed to support planning, sales and marketing, and public relations within client organizations.

BREA's principals each have more than twenty-five years of experience in consulting and forecasting with a wide range of international product and service companies, including consumer products, leisure, retailing, gaming, business services, telecommunications, utility and financial services. Their consulting assignments provide critical analysis and insight into market dynamics, product demand, economic trends, consumer behavior and public policy.

BREA's approach to market analysis focuses on determining market or product characteristics that can be summarized by three attributes: size, share, and growth. Since studies are designed to meet the specific needs of each client, they can incorporate many dimensions of the market and include a variety of ancillary services. To carry out this market analysis BREA provides the following services:

Market Research: design and implementation of primary market research instruments using telephone, mail, and intercept surveys. Test instruments are designed to collect information on product demand, attributes of consumers and users, perceived product attributes, and customer satisfaction.

Segmentation Analyses: segmenting demand attributes by product line, consumer demographics (age, income, region, etc.) and business characteristics using market research, government statistics and proprietary databases.

Statistical and Econometric Modeling: developing quantitative models relating market and product demand to key economic factors and demographic market/consumer attributes. Models can be used for forecasting, trend analysis and divergence/convergence analysis.

Market Studies and Trend Analyses: detailed descriptions of markets (defined as products, regions, industries, consumer segments, etc.) and comprehensive analyses of underlying market forces (such as economic and financial conditions, competitive environment, technology, etc.).

Economic Impact Studies: thorough analysis of industries and consumption behavior and their contribution to or impact on national and regional (state, metropolitan areas, counties, etc.) economies.



CRUISING.ORG