

BREA

Business Research & Economic
Advisors

The Contribution of the International Cruise Industry to the Canadian Economy in 2003



Prepared for:

**North West CruiseShip Association
Vancouver Port Authority
St. Lawrence Cruise Association**

October 2004

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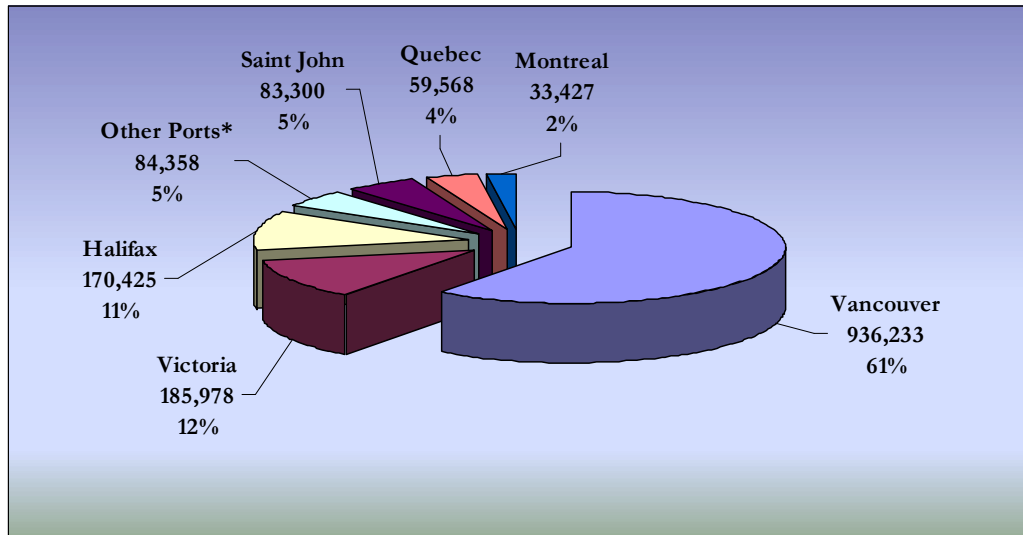
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I. Executive Summary

Business Research and Economic Advisors (BREA) was engaged by the North West CruiseShip Association (NWCA) and its partners to analyze the direct and indirect economic contribution of the cruise industry to the Canadian economy and the economies of selected provinces in 2003.

During 2003 more than 880 cruise ship calls were made at Canadian cruise ports generating 1.55 million passenger arrivals throughout the six-month cruise season¹. On a regional basis, the Pacific ports of Victoria and Vancouver accounted for 73% of the Canadian cruise passenger traffic. Vancouver is primarily a port of embarkation and debarkation for Alaska cruises while Victoria serves as a port of call for Alaska cruises that originate at U.S. ports. The Atlantic Canada² ports, led by Halifax, accounted for 21% of the Canadian passenger traffic in 2003. These ports are primarily destinations along the Canada/New England cruise itineraries that originate in the northeastern United States. Finally, the St. Lawrence ports of Montreal and Quebec accounted for the remaining 6% of Canadian passenger traffic. Again, these are primarily ports-of-call; however, about one-third of their passenger traffic consists of passenger embarkations and disembarkations.

Figure ES-1 – Cruise Passenger Arrivals in Canada by Port, 2003



* Includes other Atlantic Canada ports not shown in the figure.

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

¹ The Canadian cruise season generally begins in mid-April and ends in mid-November. This is the sum of passenger embarkations, debarkations and port-of-call arrivals.

² For the purposes of this study, the provinces of Atlantic Canada are: Nova Scotia, New Brunswick, Newfoundland and Labrador and Prince Edward Island.

economic benefits throughout Canada. Cruise activity at Canadian ports generated significant economic activity throughout the Canadian economy, on both an industry and regional basis.

Table ES-1 – Summary of Cruise Industry Economic Impacts, 2003

	Canada	British Columbia	Quebec	Atlantic Canada	Rest of Canada
Passenger Traffic	1,553,289	1,122,211	92,995	338,083	N.A.
<i>Direct Economic Impacts</i>					
<i>Cruise Industry Direct Spending (\$ Millions)</i>	\$ 965	\$ 660	\$ 71.3	\$ 67.5	\$ 166.2
<i>Employment</i>	8,696	6,013	667	530	1,486
<i>Wages and Salaries (\$ Millions)</i>	\$ 294	\$ 197	\$ 22.1	\$ 16.1	\$ 58.8
<i>Indirect Business and Income Taxes (\$ Millions)</i>	\$ 91	\$ 63	\$ 7.0	\$ 7.7	\$ 13.3
<i>Total Economic Impacts</i>					
<i>Total Output (\$ Billions)</i>	\$ 1,851	\$ 1,241	\$ 134.2	\$ 130.2	\$ 345.6
<i>Employment</i>	14,922	10,400	1,178	1,004	2,340
<i>Wages and Salaries (\$ Millions)</i>	\$ 539	\$ 374	\$ 40.3	\$ 32.6	\$ 92.1
<i>Indirect Business and Income Taxes (\$ Millions)</i>	\$ 182	\$ 126	\$ 14.5	\$ 13.4	\$ 28.1

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 their cruise, including travel to the port of embarkation 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, ship's supplies and so forth;
- shore-side staffing by the cruise lines for their cruise and land transportation and 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.

The major economic impacts of the international cruise industry during 2003 were as follows.

- Cruise calls in Canada generated \$965 million in direct spending by the cruise lines and their passengers and crew generating 8,696 full- and part-time jobs paying \$294 million in wages and salaries.

- Including the indirect economic impacts, the spending of the cruise lines and their crew and passengers was responsible for the generation of \$1.8 billion in total output in the Canadian economy. This, in turn, generated 14,922 full- and part-time jobs³ in Canada paying a total of \$539 million in wages and salaries.
- The total output and income generated by the international cruise industry also generated and estimated \$182 million in indirect business and income taxes in Canada.
- British Columbia, benefiting from the Alaskan cruise traffic at the Ports of Vancouver and Victoria, was Canada's center of cruise activity. This province accounted for over two-thirds of the national impacts with \$1.2 billion in industry output and 10,400 full- and part-time jobs paying \$374 million in wage income.
- In eastern Canada, the ports of Quebec and Atlantic Canada on a combined basis accounted for about 15 percent of the cruise industry's impact on the Canadian economy. More than 2,000 full- and part-time jobs were generated in the provinces of Quebec and Atlantic Canada. These workers produced an estimated \$260 million in output and received over \$72 million in wages and salaries.

The direct spending of the cruise industry was analyzed for three segments: i) cruise lines; ii) cruise passengers and iii) crew members. The cruise lines purchased a variety of goods and services in support of their cruises, including food and beverages, hotel supplies, bunker fuels, and utilities while in port and other port services to name a few. Passengers purchased transportation to and from port cities, pre- and post-cruise 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 totaled \$965 million during 2003.

Table ES-2 – Direct Cruise-Related Expenditures in Canada by Source, 2003
Millions of Dollars

Segments	Canada	Share	British Columbia	Share	Quebec	Share	Atlantic Canada	Share
Cruise Lines	\$ 616.7	64%	\$ 392.1	59%	\$ 49.5	69%	\$ 31.5	47%
Passengers	\$ 301.6	31%	\$ 229.2	35%	\$ 19.6	28%	\$ 29.9	44%
Crew	\$ 47.0	5%	\$ 38.7	6%	\$ 2.2	3%	\$ 6.1	9%
Total	\$ 965.3		\$ 660.0		\$ 71.3		\$ 67.5	

³ This is equivalent to 9,738 jobs on a full-time basis.

The major characteristics of this direct spending were as follows.

- Cruise lines calling at Canadian ports reported spending \$616.7 million with Canadian business during 2003. This spending by the cruise lines also accounted for the highest share of direct industry-related spending in Canada and each of the regions.
- Passengers spent an estimated \$301.6 million in Canada during 2003, accounting for 31 percent of direct industry spending, while crew spent an estimated \$47 million in Canadian port cities, or 5 percent of direct spending.
- British Columbia, with the most cruise activity among the provinces of Canada, accounted for the most direct spending from each of the three segments with \$660 million. With the highest volume of passenger and crew arrivals, passenger and crew spending in British Columbia accounted for a higher share of direct spending than the national average.
- Direct spending in Quebec totaled \$71.3 million during 2003. Because Quebec had the lowest volume of passenger and crew arrivals, spending by cruise lines, at 69 percent of total direct spending in the province, was relatively more important to the Quebec economy.
- Cruise lines, passengers and crew spent \$67.5 million in the Atlantic Canada provinces during 2003. Unlike the other regions, spending by passengers and crew accounted for more than half of the total direct spending.

During 2003, the international cruise industry generated 1.63 million onshore passenger and crew visits.⁴ Combined, passengers and crew spent a total of \$198.6 million during their visits.⁵

The major attributes of passenger and crew spending were as follows:

- Passengers spent an average of almost \$127 per passenger visit and generated an estimated \$151.6 million in spending in Canada during 2003. Per passenger expenditures were highest in Quebec at just over \$143 followed by British Columbia at \$139 and Atlantic Canada at \$92. Per passenger expenditures were higher in British Columbia and Quebec because they had a higher percentage of embarking and disembarking passengers, who generate overnight stays and longer visits, than Atlantic Canada.

⁴ Since a cruise ship will make multiple port calls on any cruise itinerary, the same passengers and crew will arrive at several ports. Approximately 95% of passengers aboard cruise ships that arrive on a port-of-call visit actually disembark and visit the port city. Like passengers only a portion of the crew (approximately 60%) disembarks the cruise ship at any call and visit the port city.

⁵ Excludes \$150 million in passenger spending for travel insurance and transportation to and from ports cities.

Table ES-3 – Passenger and Crew Expenditures in Canada by Category, 2003
Millions of Dollars

	Canada	British Columbia	Quebec	Atlantic Canada
<i>Passenger Expenditures</i>				
Passenger Onshore Arrivals	1,194,198	782,748	90,033	321,417
Lodging	\$ 41.5	\$ 39.2	\$ 2.3	*
Tours and Transportation	\$ 27.1	\$ 14.0	\$ 3.8	\$ 9.3
Food and Beverages	\$ 26.6	\$ 21.0	\$ 2.3	\$ 3.3
Other Retail	\$ 56.4	\$ 34.9	\$ 4.5	\$ 17.0
Total Spending	\$ 151.6	\$ 109.1	\$ 12.9	\$ 29.6
Average per Passenger	\$ 126.91	\$ 139.45	\$ 143.63	\$ 91.95
<i>Crew Expenditures</i>				
Crew Onshore Arrivals	440,558	320,503	21,740	98,315
Tours and Transportation	\$ 12.5	\$ 11.1	\$ 0.4	\$ 1.0
Food and Beverages	\$ 8.9	\$ 7.3	\$ 0.3	\$ 1.3
Other Retail	\$ 25.6	\$ 20.3	\$ 1.5	\$ 3.8
Total Spending	\$ 47.0	\$ 38.7	\$ 2.2	\$ 6.1
Average per Crew Member	\$ 106.60	\$ 120.79	\$ 99.08	\$ 62.24

* Less than \$10,000

- Retail generally accounted for the highest share of passenger spending, 37% across Canada. However, in British Columbia, with the highest percentage of passengers with overnight stays, lodging expenditures accounted for the largest share of passenger expenditures.
- Crew spent an average of almost \$107 per visit and generated an estimated \$47 million in spending in Canada during 2003. Per crew expenditures were highest in British Columbia at just under \$121 followed by Quebec at \$99 and Atlantic Canada at \$62.

Finally, the total economic impacts of the cruise industry are the sum of the direct impacts described above and the indirect impacts. The indirect economic benefits derived from the cruise industry result in part from the additional spending by the suppliers to the cruise industry. As shown in **Table ES-4**, the \$965 million in direct cruise industry expenditures generated \$1.8 billion in total (direct plus indirect) output, 14,922 full- and part-time jobs⁶ and \$539 million in income. In addition, the industry generated an estimated \$91 million in indirect business taxes and \$92 million in income taxes.

⁶ This is equivalent to 9,738 jobs on a full-time basis.

Table ES-4 – Total Economic Impacts in Canada by Industry, 2003
Millions of Dollars

Sectors	Output	Jobs	Income
Goods Producing Sector	\$ 718.9	3,287	\$ 145.0
Natural Resources, Utilities & Construction	\$ 127.4	698	\$ 32.9
Manufacturing	\$ 591.5	2,589	\$ 112.1
Durable Goods	\$ 243.0	1,308	\$ 52.6
Nondurable Goods	\$ 348.5	1,281	\$ 59.5
Service Producing Sector	\$ 1,132.6	11,635	\$ 393.9
Wholesale & Retail Trade	\$ 89.8	862	\$ 26.7
Transportation and Warehousing*	\$ 343.6	3,250	\$ 112.5
Finance, Insurance, Real Estate and Leasing	\$ 100.7	307	\$ 13.2
Professional, Scientific & Technical Services	\$ 241.5	3,436	\$ 163.3
Information, Culture and Recreation	\$ 111.3	449	\$ 9.8
Accommodation and Food Services	\$ 113.2	1,941	\$ 28.1
Other Services & Government	\$ 132.5	1,390	\$ 40.3
Total Impacts	\$ 1,851.5	14,922	\$ 538.9
Indirect Business Taxes	\$ 90.9		
Income Taxes			\$ 91.6

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

Some of the major impacts by industry were as follows.

- The Goods Producing sector accounted for 39% of the total output impacts but due to the relatively high productivity of this sector only 22% of the total jobs and 27% of the income impacts. Led by the food and beverage and petroleum industries almost half of the impacts occurred among nondurable goods industries.
- The Service Producing sector accounted for 61% of the total output impacts, 78% of the total jobs and 73% of the income impacts. The Transportation and Warehousing industry was the dominant industry, accounting for slightly less than 30% 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.
- The next largest industry was the Professional, Scientific and Technical Services industry. The total impacts in this industry accounted for approximately 20% of total output and 30% of the total jobs generated in the Service Producing sector, but due to the relatively high wages in this industry, it accounted for more than 40% of the total income impacts.
- Combining the Trade and Accommodation and Food Services industries, the cruise industry generated \$203 million in total output, over 2,800 full- and part-time jobs and \$54.8 million in income. These impacts were generated primarily by

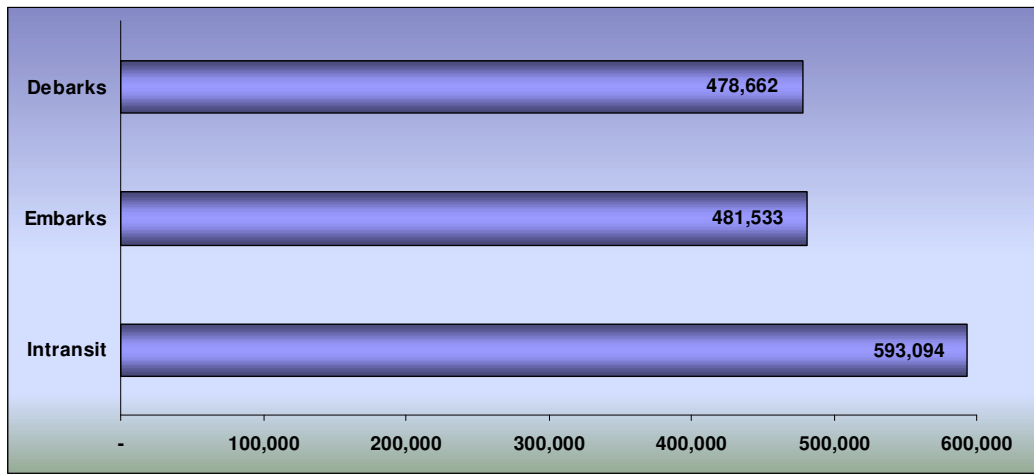
passenger and crew spending. Due to the relatively low productivity and wages within the Retail Trade and Accommodation and Food Services industries, they accounted for 14% of the total income in the Service Producing sector, but 24% of the direct jobs and 18% of the total output.

II. Introduction

II.A Background

The international cruise industry is an important and dynamic component of the Canadian tourism and maritime industries. As shown in **Figure 1**, more than 880 cruise ship calls generated an estimated 1.55 million passenger arrivals (visits) at Canadian ports in Atlantic Canada, Quebec and British Columbia in 2003. Just over 38 percent of these passengers were in-transit, or port-of-call passengers, visiting Canadian port cities as part of Alaska and Canada/New England itineraries. Another 31 percent of these cruise passengers embarked on their cruises from Canadian ports. Of these, 96 percent boarded Alaska-bound cruises from the Port of Vancouver. The remaining 4 percent embarked on their cruise from the Ports of St. John’s, Montreal and Quebec. Finally, 31 percent disembarked from their cruise at a Canadian port. Again, most passengers ended their cruises in Vancouver.⁷

Figure 1 –Cruise Passenger Arrivals in Canada by Type, 2003



In addition to the passenger arrivals, Cruise Lines International Association (CLIA) estimates that 404,404 Canadian residents purchased cruises in 2003. Some of these residents embarked on their cruises in Canada while others boarded their cruises in the United States and other countries.

Finally, the cruise lines made significant expenditures in Canada to support their cruise operations. Cruise lines pay various fees to each of the ports, purchase bunker fuel for

⁷ 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.

their ships and food and beverages and other goods to support their cruise ship hotel operations and pay commissions to travel agents for cruises purchased in Canada to name just a few components of cruise line expenditures.

Given the volume of cruise activity in Canada and the fact that passengers and crew purchase goods and services at Canada's port cities and that the cruise lines purchase goods and services from vendors throughout Canada, Business Research and Economic Advisors (BREA) was engaged by the NorthWest Cruiseship Association (NWCA) and its partners to analyze the direct and indirect economic impacts of the cruise industry on the national Canadian economy and the economies of selected provinces in 2003.

II.B Project Objectives

The primary objective of this project was to estimate the direct and indirect economic impacts of the cruise industry in Canada and selected provinces during 2003. The economic impacts were estimated for major industrial and business sectors of the Canadian economy. Similar estimates were also developed for British Columbia, Quebec and the provinces of Atlantic Canada as a group.⁸ 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 taxes.

II.C 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 passenger and crew visits from the ports;
- assembling recent reports on passenger and crew spending; 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.

⁸ For the purposes of this study, the provinces of Atlantic Canada are: Nova Scotia, New Brunswick, Newfoundland and Labrador and Prince Edward Island.

II.C.1 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 to Canadian businesses. To estimate these expenditures, the member lines of the NWCA were asked to provide data on their cruise-related expenditures in Canada. To support the industry level analysis, a three part survey was distributed to the cruise lines that requested data on operating and administrative expenses paid to Canadian businesses during 2003.⁹ Data were requested for a range of operating and administrative expense categories as shown in Table 1.

Table 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
Stevedoring	Telecommunications
Vessel Insurance	Travel and Entertainment
Canadian Crew Wages and Salaries	Rent
Other Operating Expenses	Utilities
Passenger Travel Insurance	Shore-side Wages and Salaries paid to Canadian Residents
Passenger Airfares (Paid through Lines)	
Other Operating Expenses	

Surveys were returned for eight cruise lines.¹⁰ Combined, the eight cruise lines reported spending \$617 million with Canadian businesses during 2003. As shown in **Table 2**, Business and Professional Services accounted for \$120.2 million of cruise lines' expenditures. These included expenditures for computer programming, legal, accounting and other professional consulting services and primarily represent administrative expenses.

⁹ This project was undertaken in conjunction with a similar study of the industry's economic impact on the U.S. economy. Cruise line expenditure data for global and U.S. cruise operations were collected in addition to data for Canada.

¹⁰ These cruise lines were: Carnival Cruise Lines, Celebrity Cruises, Crystal Cruises, Cunard Cruise Line Ltd., Holland American Line, Norwegian Cruise Line, Princess Cruises, and Royal Caribbean Int'l.

Table 2 – Cruise Lines' Expenditures by Major Expense Category, 2003
Millions of Dollars

Category	Spending
Business & Computer Services	\$ 120.2
Food & Beverages	\$ 55.5
Fuel	\$ 55.1
Travel Agents	\$ 50.3
Port Charges & Fees	\$ 44.7
Vessel Maintenance & Dry-dock Fees	\$ 35.9
Other Expenses	\$ 255.0
Total	\$ 616.7

The survey also showed that the cruise lines spent approximately \$350 million on operational expenses with Canadian businesses. Almost equal amounts, \$55 million, were spent on food and beverages and fuel. Commissions paid to Canadian travel agents were only slightly lower at \$50 million. The cruise lines also paid \$45 million in port charges and fees to port service providers, including Canadian port authorities. These included such items as wharfage and dockage fees, piloting and harbor fees, utilities while docked and stevedoring and other port services. The cruise lines also reported that they spent \$36 million on vessel maintenance and drydock fees at Canadian ports.

The remaining \$255 million was spent on a broad range of goods and services including wages and salaries of staff based in Canada, advertising and promotion, supplies for on-board hotel operations and vessel and employee insurance to name a few.

Table 3 – Industries Impacted by Cruise Line Expenditures

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

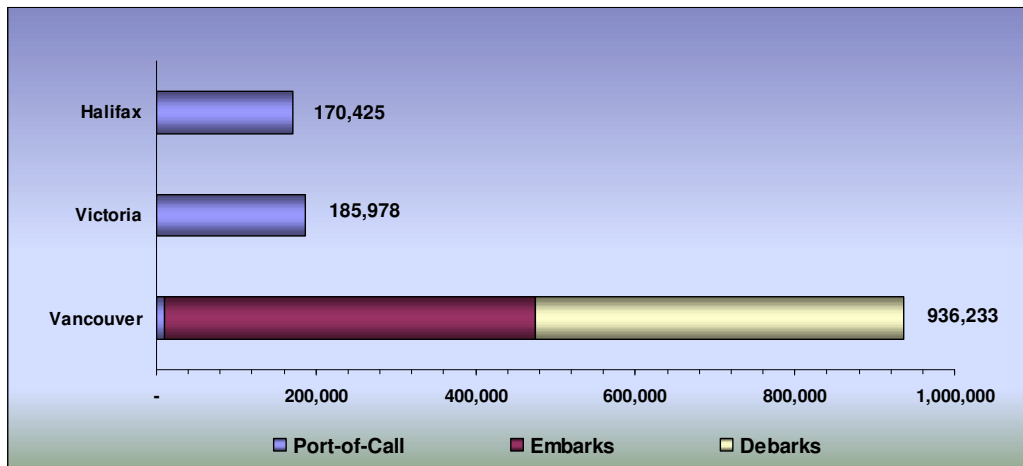
		Other Services
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In addition to these aggregate data, a sample of expenditures by category, vendor and province was obtained from five cruise lines: Carnival, Celebrity, Cunard, Holland America and Royal Caribbean. These vendor-specific expenditures totaled \$258 million for the five cruise lines, or 42% of the total cruise line expenditures made in Canada. Using this sample, the individual categories of operating and administrative expenses were allocated to the 27 industries shown in **Table 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.

II.C.2 Passenger and Crew Arrivals and Expenditures

Passenger and crew expenditures were estimated from data on passenger and crew arrivals and category-specific expenditures per passenger and crew collected for each of the ports. These data were gathered from a survey sent to all the ports, reports published by various trade associations and other reports on passenger and crew spending. First, a survey requesting data on passenger statistics, cruise-related revenue and expenses and per passenger spending by category was sent to seven ports in Canada.¹¹ All of the ports provided data on passenger arrivals and most also provided some data on cruise-related revenues and expenses, as well as passenger and crew spending. Data on passenger and crew arrivals for the smaller cruise ports in Atlantic Canada were obtained from the Atlantic Canada Cruise Association.

Figure 2 –Cruise Passenger Arrivals in Canada by Type and Port, 2003



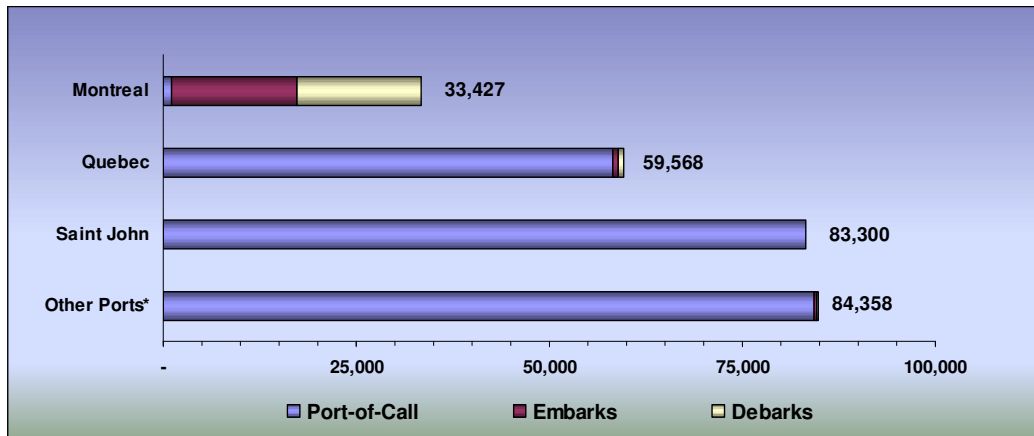
Passenger counts were reported for three categories: 1) embarkations, 2) debarkations and 3) port-of-call (in-transit) passengers for all ports. As reported above and shown in Figure 1, a total of 1.55 million passengers arrived at Canadian ports in 2003. As indicated in **Figure 2**, three ports, Vancouver, Victoria and Halifax, accounted for 83

¹¹ These ports were Vancouver, Victoria, Montreal, Quebec, Halifax, Saint John and St. John's.

percent of cruise passenger arrivals to Canada. All of the passenger visits to Halifax and Victoria were port-of-call visits, while 99 percent of passenger arrivals at Vancouver were made by embarking and disembarking passengers.

The remaining cruise ports, located in eastern Canada, accounted for 17 percent of the passenger arrivals in Canada (see **Figure 3**). Most of these were port-of-call visits to Atlantic Canada ports and Quebec. Ninety-seven percent of the cruise passenger visits to Montreal were made by embarking and disembarking passengers.

Figure 3 – Cruise Passenger Arrivals in Canada by Type and Port, 2003



* Includes other Atlantic Canada ports not shown in Figures 2 or 3.

Data on crew arrivals were estimated from passenger arrival data. The average cruise ship in the North American fleet carries 1 crew member for each 2.1 passengers. Thus, a 2,000 passenger ship arriving at a Canadian port will, on average, carry a crew of 950. Adjusting for the open-jaw cruises, we have estimated that approximately 734,000 crew members arrived at all ports in Canada during the 2003 cruise season.¹² On any individual port call about 60% of the crew will disembark and visit the port city. Thus, there were an estimated 441,000 onshore crew visits among all Canadian cruise ports during 2003.

Data on passenger and crew spending were collected from several sources. As mentioned above, some ports provided data on passenger spending for selected categories, including, lodging, food and beverages and sightseeing excursions. These data were supplemented with similar data from three reports covering the ports of Vancouver¹³, Montreal and Quebec¹⁴, and the Atlantic Canada ports¹⁵. Utilizing the per passenger

¹² Since a cruise ship will make multiple port calls on any cruise itinerary, the same passengers and crew will arrive at several ports.

¹³ Those ports that provided passenger expenditure data included the Ports of Victoria, Halifax, Saint John, St. John's and Montreal. These data were utilized in our analysis rather than the data included in the reports listed below.

¹⁴ 2003 Montreal and Quebec Cruise Passenger Survey, prepared by Impact Recherche for the St. Lawrence Cruise Association, January, 2004.

spending data from these sources, passenger spending was estimated for the following groups of passengers in each port city as they applied:

- Embarking/Disembarking Passengers with Overnight Stays;
- Embarking/Disembarking Passengers with no Overnight Stay; and
- Port-of-Call Passengers.

As indicated in **Table 4**, all cruise passengers combined spent an estimated \$151.6 million on lodging, food and beverages, shore excursions, souvenirs and other goods and services in Canada during 2003.

Table 4 – Passenger Expenditures in Canada during Port Visits, 2003
Millions of Dollars

Category	Expenditures
Lodging	\$41.5
Food & Beverages	\$26.6
Tours and Ground Transportation	\$27.1
Retail Goods	\$56.4
Total	\$151.6

Approximately, one-third of these expenditures, \$51 million, were generated by port-of-call or in-transit passengers. Thus, passengers embarking and/or disembarking at Canadian ports accounted for the remaining \$100 million in passenger spending. Of this amount, an estimated \$95 million was spent by passengers who spent one or more nights in Canada either prior to or following their cruise. The study of Vancouver passengers reported that 46% of cruise passengers spent at least one night in British Columbia and that the average length of stay of these passengers was 2.4 nights. The Montreal and Quebec study reported that 37% of Montreal passengers planned on staying one or more nights in Montreal before returning home.

These data do include spending for tours and excursions for embarking and disembarking passengers, as well as port-of-call passengers. However, it should be noted that the form of the spending questions, as well as, the spending categories are not uniform across the studies.

Crew expenditures were calculated for the Atlantic Canada ports and the Ports of Montreal and Quebec from data obtained in the previously referenced reports prepared for the Atlantic Canada Cruise Association and the St. Lawrence Cruise Association. Estimated crew spending for Victoria was estimated from crew spending data provided by the Port of Victoria. Finally, crew spending data for Vancouver was estimated from

¹⁵ Economic Impact of the Cruise Ship Industry in Atlantic Canada, prepared by MarketQuest Research Group, Inc. for the Atlantic Canada Cruise Association, February 2003.

data from a 2000 study of the Canadian cruise industry.¹⁶ These figures were then adjusted for inflation over the intervening years. As shown in **Table 5**, we estimated that crew spent \$47 million in Canada during 2003.

Table 5 – Crew Expenditures in Canada during Port Visits, 2003
Millions of Dollars

Category	Expenditures
Lodging	N.A.
Food & Beverages	\$8.9
Tours and Ground Transportation	\$12.5
Retail Goods	\$25.6
Total	\$47.0

Relative to passengers, crew spent less in aggregate in all categories. Lodging was not applicable and so the crew spent proportionately more in all of the other categories. However, the biggest difference was in the retail category which absorbed 54% of crew expenditures and 37% of passenger expenditures.

II.C.3 Additional Sources of Cruise-Related Expenditures

Additional cruise-related spending is generated in the air transportation, travel insurance and travel agent industries by cruise passengers. These impacts are generated by the 404,404 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 2003 can be segmented into three groups:

1. those who embarked on their cruises at a Canadian port;
2. residents who embarked on their cruises in the U.S. and cruised to Canada 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.

For purposes of this study, we are interested in the first two groups. After adjusting for open-jaw cruises, there were an estimated 725,000 individual passengers who began and/or ended their cruises in Canada. Based upon data in the Vancouver and St. Lawrence Cruise Association studies referenced previously, an estimated 15% of passengers who embark on their cruises in Canada are Canadian residents. Thus, just under 109,000 Canadian residents were estimated to have traveled to and/or from their cruises within Canada. The remaining 295,000 Canadian residents traveled outside Canada for their cruises (see **Table 6**). However, some of these passengers sailed back to Canada on Canada/New England cruises originating in the United States.

¹⁶ An Analysis of the Economic Impact of the Cruise Line Industry in Canada, prepared by CCG Consulting Group Limited for the NorthWest CruiseShip Association, May 2000.

The typical Canada/New England itinerary includes 3 or 4 calls at Canadian ports. Thus, an estimated 132,000 individual passengers generated the 397,000 passenger visits at eastern Canadian ports. The study published by the Atlantic Canada Cruise Association reported that 2.8% of passenger arrivals at Atlantic Canada ports were Canadian residents. Thus, we have estimated that 3,696 Canadian residents boarded Canada/New England cruises in the U.S. during 2003.

Table 6 – Cruise-Related Passenger Air Trips to and/or from Canada, 2003

Cruise Activity	Individual Passengers	Canadian Residents
Canadian Residents		404,404
Embarked or Disembarked In Canada	725,000	108,750
Cruised outside of Canada		295,654
Sailed on Canada/England Itinerary	132,000	3,696
Sailed on Foreign Itinerary		291,958

In total, then, 112,446 Canadian residents sailed on cruises that directly impacted the Canadian economy. The remaining 291,958 Canadians that purchased cruises in 2003 sailed on cruises that had impacts outside of Canada.

Finally, subtracting the 108,750 Canadian residents from the 725,000 individual passengers that embarked or disembarked on their cruise in Canada, we estimate that 616,250 foreign cruise passengers traveled to and/or from Canada for their cruise.

II.C.3.a Cruise-Related Air Travel

Combining, the 616,250 foreign passengers and the 112,446 Canadian residents that sailed on cruises that called at Canadian ports, we have estimated that 728,696 cruise passengers traveled to and/or from Canada port cities for Canada cruises (see **Table 7**). Again, the Vancouver study indicated that 64 percent of cruise passengers arrived in Vancouver via air, the remaining passengers traveled by car or motor coach to the port, many from the Seattle/Tacoma airport. Thus, we have estimated that of the 728,696 passengers on Canada cruises just under 468,000 traveled by air to and/or from Canada. (Note: All Canadian residents who traveled to cruises outside of Canada have been excluded from this analysis.)

The typical cruise passenger in North America, who traveled by air to their cruise spent an average of \$475 (US) or \$665 (CA) for a round-trip ticket.¹⁷ Thus, the 467,696 cruise passengers who traveled to and/or from Canada by air spent an estimated \$311 million (CA) on airfares. Since the economic impact of the air travel affects both the origin and

¹⁷ The Contribution of the North American Cruise Industry to the U.S. Economy in 2003, prepared by BREA for the International Council of Cruise Lines, August 2004.

destination cities, only a portion of the air fares paid by Canadian residents who travel outside Canada and foreign passengers who travel to and/or from Canada would be expected to affect the Canadian economy. Thus, an estimated \$179 million in airfares were estimated to have impacted the Canadian economy during 2003.

Table 7 – Cruise-Related Passenger Air Trips to and/or from Canada, 2003

Residency	Passengers	Travel by Air
Canadian Residents	404,404	
Embarked or Disembarked In Canada	108,750	69,600
Sailed on Canada/New England Cruise from the U.S.	3,696	3,696
Cruised outside of Canada	291,958	
Foreign Residents Cruising to or from Canada	616,250	394,400
All Passengers Who Traveled by Air for Canada Cruises¹⁸	728,696	467,696

II.C.3.b 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, 35% of cruise passengers purchase such insurance at an average cost of \$48 (CA) per passenger. Thus we have estimated that the 404,404 Canadian residents who purchased cruises in 2003 paid \$6.8 million for travel insurance.

II.C.3.c Cruise-Related Travel Agent Commissions

Both the air and cruise fares paid by Canadian residents generate commissions in the travel agent industry. These commissions are paid through the cruise lines. Our survey of the cruise lines showed that \$50.3 million in commissions were paid to travel agents in Canada.

Table 8 – Other Passenger Expenditures in Canada, 2003
Millions of Dollars

Category	Expenditures
Airfares Impacting the Canadian Economy	\$ 179.0
Cruise-Related Travel Insurance	\$ 6.8
Travel Agent Commissions	\$ 50.3
Total	\$ 236.1
Paid Directly by Passengers	\$ 150.0
Paid by Passengers through Cruise Lines	\$ 86.1

¹⁸ This figure excludes the 291,958 Canadian residents who sailed on cruises outside of Canada that did not have any port calls in Canada.

Thus, Canadian residents and foreign cruise travelers to Canada spent another \$236.1 million that impacted the Canadian economy. Approximately, \$86 million of these expenditures are actually included in cruise line expenditures. These are the airfares purchased through the cruise lines (about 20% of total airfares) and the travel agent commissions.

II.C.4 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. Using the Canadian (and provincial) input-output tables the direct and indirect 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.

II.C.4.1 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 3. Since these represent final sales, the expenditures were also adjusted for trade and transportation margins and indirect business taxes. Thus, the value of total output by industry directly generated by cruise-related spending was estimated.

The share of output absorbed by wages and salaries for employees for 2003 was calculated from data reported by Statistics Canada. A sample of these ratios or shares is shown in **Table 9**. Direct wage income was estimated by multiplying direct output in each industry by its corresponding income share.

The direct employment impact in each industry was then estimated by dividing the direct wage income by the average annual wages in that industry. These wages are an average for all workers (full- and part-time) and include overtime.

For the provincial level analyses, the national wage shares of output were used to estimate total direct wage income by industry while average annual wages 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 occur over a 6-month period, the peak employment impacts will actually be higher than those reported. 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. We do provide a full-time equivalent for the total direct and indirect employment impacts.

Impacts were also measured for indirect business taxes, which includes sales and excise taxes among others, and income taxes. Indirect 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 17% was used to estimate total income taxes.¹⁹

Table 9 – Average Annual Wages and Wage Share of Output by Sector, 2003

Industry	Average Annual Wages	Wages Share of Output
Total, all industries	\$ 35,679	32.0%
Goods-producing sector	\$ 44,596	19.6%
Forestry, fishing, mining, oil and gas	\$ 49,591	32.4%
Utilities	\$ 55,677	12.0%
Construction	\$ 42,674	39.9%
Manufacturing	\$ 44,300	18.5%
Durables	\$ 40,238	20.8%
Non-durables	\$ 46,447	17.6%
Services-producing sector	\$ 36,105	34.9%
Wholesale trade	\$ 41,083	24.4%
Retail trade	\$ 23,109	30.7%
Transportation and warehousing	\$ 39,670	26.6%
Finance and insurance	\$ 45,134	13.6%
Real estate and leasing	\$ 31,095	10.3%
Professional, scientific and technical services	\$ 47,530	52.3%
Business, building and other support services	\$ 28,170	58.8%
Educational services	\$ 38,994	44.0%
Health care and social assistance	\$ 31,866	51.5%
Information, culture and recreation	\$ 21,841	26.1%
Accommodation and food services	\$ 14,458	24.8%
Other services	\$ 27,381	39.6%
Public administration	\$ 44,623	55.6%

II.C.4.2 Indirect Economic Impacts

The indirect economic impacts were estimated using the 2000 national and provincial input-output tables published by Statistics Canada. Based upon the direct output impacts generated by the cruise industry, the indirect output by industry was estimated. The corresponding indirect wage income, employment and tax impacts were then estimated using the same procedures as discussed above.

¹⁹ Statistics Canada, CANSIM, Table 202-0501, Government Transfers and Income Tax

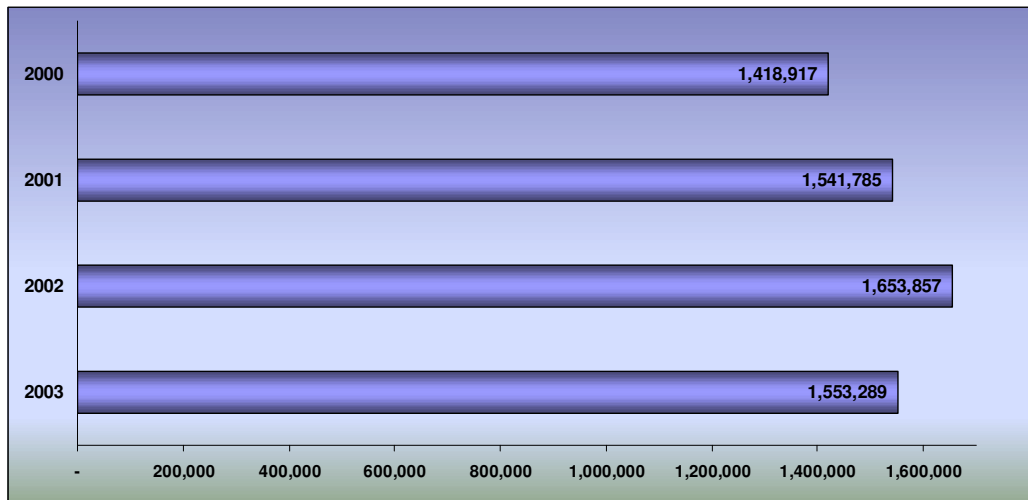
III. Contribution of the Cruise Industry to the Canadian Economy in 2003

III.A Background

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 4 – Cruise Passenger Arrivals in Canada, 2000 - 2003

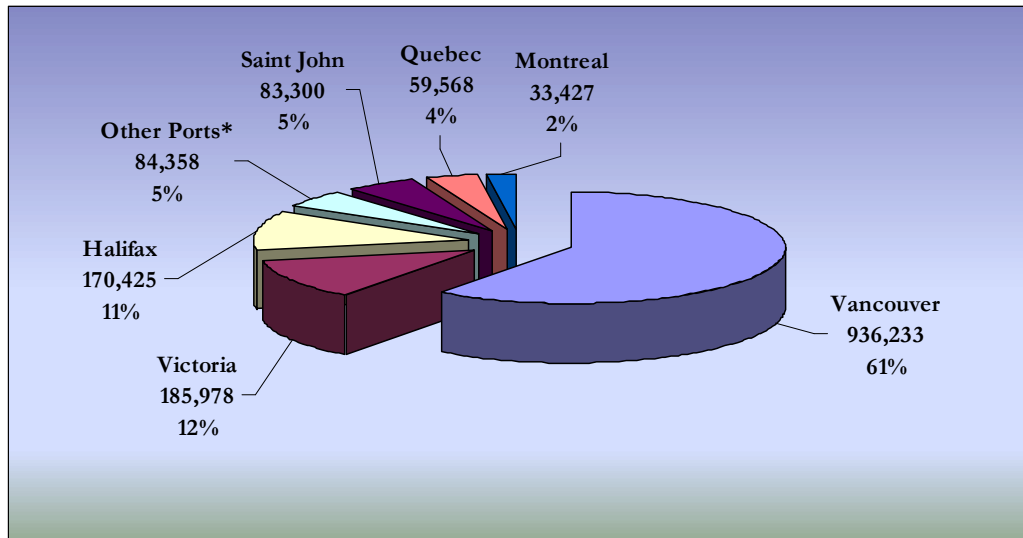


Source: BREA survey of Canadian ports and data from the Atlantic Canada Cruise Association.

During 2003 more than 880 cruise ship calls were made at Canadian cruise ports. As shown in **Figure 4**, 1.55 million passengers arrived at Canadian ports throughout the six-

month cruise season²⁰. The industry had shown year-over-year increases in passenger traffic through 2002 before the loss of just over 100,000 passengers in 2003. This decline is primarily attributable to the Port of Vancouver which experienced a loss in cruise traffic to the Port of Seattle. Nonetheless, as shown in **Figure 5**, Vancouver still accounted for 61% of the cruise passenger traffic among all Canadian ports in 2003.

Figure 5 –Cruise Passenger Arrivals in Canada by Port, 2003



* Includes other Atlantic Canada ports not shown in the figure.

On a regional basis, the Pacific ports of Victoria and Vancouver accounted for 73% of the Canadian cruise passenger traffic. Vancouver is primarily a port of embarkation and debarkation for Alaska cruises while Victoria serves as a port of call for Alaska cruises that originate at U.S. ports. The Atlantic Canada ports, led by Halifax, accounted for 21% of the Canadian passenger traffic in 2003. These ports are primarily destinations along the Canada/New England cruise itineraries that originate in the northeastern United States. Finally, the St. Lawrence ports of Montreal and Quebec accounted for the remaining 6% of Canadian passenger traffic. Again, these are primarily ports-of-call; however, about one-third of their passenger traffic consists of passenger embarkations and disembarkations.

In addition to cruise passenger arrivals, CLIA reported that over 404,000 Canadian residents took cruises during 2003 (see **Table 10**). Most Canadian residents who took cruises in 2003 lived in provinces that did not have cruise ports. These provinces, led by Ontario, accounted for 55% of Canadian cruise passengers. Based upon data obtained from other reports, we have estimated that about 73% of Canadian cruise passengers, or 295,654 Canadian residents, sailed on cruises that originated outside of Canada (see Table 6).

²⁰ The Canadian cruise season generally begins in mid-April and ends in mid-November. This is the sum of passenger embarkations, debarkations and port-of-call arrivals.

Table 10 – Canadian Cruise Passengers by Province, 2003

Province	Passengers	Share
Alberta	43,504	10.8%
British Columbia	119,964	29.7%
Manitoba	7,364	1.8%
New Brunswick	2,763	0.7%
Newfoundland	1,627	0.4%
Nova Scotia	4,248	1.1%
Ontario	166,548	41.2%
Prince Edward Island	477	0.1%
Quebec	53,910	13.3%
Saskatchewan	3,713	0.9%
Northwest Territories	137	0.0%
Yukon Territories	149	0.0%
Total	404,404	

Source: Cruise Lines International Association

III.B 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 in support of 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 will purchase a similar set of goods and services with a heavier concentration on retail goods.

Table 11 – Direct Cruise-Related Expenditures in Canada by Source, 2003
Millions of Dollars

Sources	Spending	Share
Cruise Lines ²¹	\$ 616.7	64%
Passengers ²²	\$ 301.6	31%
Crew	\$ 47.0	5%
Total	\$ 965.3	

During 2003, cruise-related spending totaled \$965 million. As indicated in **Table 11**, the cruise lines accounted for 64% of the total, passengers 31% and crew the remaining 5%.

²¹ Includes \$35.8 million in passenger airfares purchased through the cruise lines (20% of passenger airfares) and \$50.3 million in travel agent commissions.

²² Includes \$143.2 million in airfares purchased directly by passengers (80% of passenger airfares), \$6.8 million in purchases of travel insurance and \$151.6 million in passenger spending during port visits. See *Section I.C.3* for a more detailed explanation of airfares impacting the Canadian economy.

The regional and industry impacts, which are discussed in the following sections, vary significantly across the three sources.

III.B.1 Expenditures by Cruise Lines

Expense data collected through a survey of NWCA member lines showed that the international cruise lines spent \$616.7 million with Canadian businesses in 2003. As shown in **Table 12**, the ten largest expense categories accounted for 76% of the Canadian-based expenditures. Business and Professional Services (excluding Advertising & Promotion) accounted for the largest share of spending, \$120.2 million or 19.5% of the total. These included expenditures for computer programming, legal, accounting and other professional consulting services and primarily represent administrative expenses. The cruise lines spent another \$34.1 million on advertising and promotion, primarily the placement of advertising in newspapers and periodicals, as well as other promotional efforts undertaken with travel agents.

Table 12 – Cruise Lines’ Expenditures in Canada by Expense Category, 2003
Millions of Dollars

Category	Spending	Share
Business & Computer Services	\$ 120.2	19.5%
Food & Beverages	\$ 55.5	9.0%
Fuel	\$ 55.1	8.9%
Travel Agent Commissions	\$ 50.3	8.2%
Port Charges & Fees	\$ 44.7	7.2%
Vessel Maintenance & Dry-dock Fees	\$ 35.9	5.8%
Airfares	\$ 35.7	5.8%
Advertising & Promotion	\$ 34.1	5.5%
Wages & Salaries	\$ 22.1	3.6%
Hotel Supplies	\$ 15.0	2.4%
Other Expenses	\$ 148.1	24.1%
Total	\$ 616.7	

The survey indicated that the cruises lines spent approximately \$350 million on operational expenses with Canadian businesses. Almost equal amounts, \$55 million, were spent on food and beverages and fuel. Commissions paid to Canadian travel agents were only slightly lower at \$50 million. The cruise lines paid \$45 million in port charges and fees to port service providers, including Canadian port authorities. These included such items as wharfage and dockage fees, piloting and harbor fees, utilities while docked and stevedoring and other port services. The cruise lines also reported that they spent \$36 million on vessel maintenance and drydock fees at Canadian ports. A similar amount was spent on airfares in Canada. These are crew and passenger airfares that are purchased through the cruise lines.²³

²³ BREA’s analysis of global cruise industry activity shows that about 20% of passengers who travel by air to the port-of-embarkation purchase airfares as part of the cruise package.

Finally, the cruise lines reported that they employed slightly less than 1,000 Canadian residents. These include personnel that interact with the ports and travel agents, trade association staff and employees of tour operations owned by the cruise lines among others. These employees were paid \$22 million in wages and salaries during 2003.

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 agents 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.

British Columbia, as the major cruise center in Canada, does capture the bulk of the cruise lines' expenditures, accounting for 64% of the total (see **Table 13**). However, the group of Other Provinces, that do not have cruise ports, captured \$144 million of the cruise lines' expenditures, or 23% of the total expenditures made by the cruise lines. As previously shown in Table 10, these provinces were the source of 221,000 Canadian cruise passengers and thus captured 55% of travel agent commissions and 15% of the airfares. But, they also benefit from cruise lines' expenditures for business services, such as advertising, computer services, financial services and professional consulting services.

Table 13 – Cruise Lines' Expenditures in Canada by Province, 2003
Millions of Dollars

Province	Spending	Share
British Columbia	\$ 392.1	64%
Quebec	\$ 49.5	8%
Atlantic Provinces	\$ 31.5	5%
Other Provinces	\$ 143.6	23%
Total	\$ 616.7	

III.B.2 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 \$152 million on goods and services throughout Canada in 2003 for an average per passenger expenditure of just under \$127 (see **Table 14**). The ports of British Columbia with \$109 million in passenger expenditures accounted for 72% of all passenger expenditures. The ports in Quebec and British Columbia had similar per passenger expenditure figures of \$143.63 and \$139.45, respectively. These are higher than the Atlantic Canada figure of \$92.00 due to the impact of overnight stays by embarking and disembarking passengers and the larger and more urban centers in Quebec and British Columbia.

Table 14 – Passenger Expenditures in Canada by Category and Province, 2003
Millions of Dollars

	Atlantic Canada	Quebec	British Columbia	Total
Passenger Onshore Arrivals ²⁴	321,417	90,033	782,748	1,194,198
Lodging	\$ 0.0	\$ 2.3	\$ 39.2	\$ 41.5
Tours and Transportation	\$ 9.3	\$ 3.8	\$ 14.0	\$ 27.1
Food and Beverages	\$ 3.3	\$ 2.3	\$ 21.0	\$ 26.6
Other Retail	\$ 17.0	\$ 4.5	\$ 34.9	\$ 56.4
Total Spending	\$ 29.6	\$ 12.9	\$ 109.1	\$ 151.6
Average per Passenger	\$ 91.95	\$ 143.63	\$ 139.45	\$ 126.91

Retail goods, such as clothing and souvenirs, accounted for 37% of passenger expenditures while lodging absorbed just over one-fourth of their expenditures. Expenditures for tours and food each accounted for 18% of passenger expenditures.

III.B.3 Expenditures by Crew

Crew expenditures were also estimated by port and by category. An estimated 440,500 crew arrived at Canadian ports and spent \$47 million in 2003. The major difference between crew and passenger spending is the lack of lodging expenditures by crew and their higher share of retail expenditures, 54% for crew and 37% for passengers. British Columbia experienced the highest expenditure rate of just under \$121 per crew arrival. British Columbia also had the highest level of expenditures at \$38.7 million.

²⁴ This distinction primarily relates to port-of-call passengers. Approximately 95% of passengers aboard cruise ships that arrive on a port-of-call visit actually disembark and visit the port city.

Table 15 – Crew Expenditures in Canada by Category and Province, 2003
Millions of Dollars

	Atlantic Canada	Quebec	British Columbia	Total
Crew Onshore Arrivals ²⁵	98,315	21,740	320,503	440,558
Tours and Transportation	\$ 1.0	\$ 0.4	\$ 11.1	\$ 12.5
Food and Beverages	\$ 1.3	\$ 0.3	\$ 7.3	\$ 8.9
Other Retail	\$ 3.8	\$ 1.5	\$ 20.3	\$ 25.6
Total Spending	\$ 6.1	\$ 2.2	\$ 38.7	\$ 47.0
Average per Crew Member	\$ 62.24	\$ 99.08	\$ 120.79	\$ 106.60

III.B.4 Other Passenger Expenditures

Other passenger expenditures consist of the airfare and the cost of travel insurance for cruise passengers that impact on Canadian economic activity. As previously shown in Table 7, there were an estimated 467,696 passenger trips via air to and/or from Canada. Cruise passengers spent an average of \$665 per roundtrip ticket. Among cruise passengers who purchase air transportation, approximately 20% do so through the cruise lines. These expenditures have already been captured in our cruise line expenditure figures. Thus, 80% of the 467,696 passengers, or 374,157 passengers, directly purchased air tickets on their own (see Table 16).

Table 16 – Canada-based Passenger Airfare Expenditures, 2003
Millions of Dollars

<i>Residency</i>	<i>Passengers Who Purchased Plane Tickets Directly</i>	<i>Canada-Based Cost of Airfares</i>
Canadian Residents		
Embarked or Disembarked In Canada	55,680	\$ 37.1
Sailed on Canada/New England Cruise from the U.S.	2,957	\$ 1.0
<i>Foreign Residents Cruising to or from Canada</i>	315,520	\$ 105.1
Total Passengers Who Traveled by Air	374,157	\$ 143.2

Those expenditures by Canadian residents who cruised from Canada spent an estimated \$37 million on airfares. Since these roundtrips remained in Canada all of these expenditures had an impact in Canada. The air trips of the remaining Canadian residents and foreign residents had originations or destinations outside of Canada. Consequently only half of these airfares had an impact on the Canadian economy. These passengers

²⁵ The passenger spending figures for Atlantic Canada used in this analysis were provided by the Ports of Halifax, Saint John and St. John's. Passenger expenditure data for the remaining Atlantic Canada ports were obtained from the previously referenced Atlantic Canada Cruise Association report.

spent an estimated \$221.8 million in total airfares, half of which, \$106.1 million, impacted the Canadian economy. Thus, cruise passengers' direct expenditures on airfares had a \$143 million impact on the Canadian economy.

Finally, some Canadian residents who purchased cruises would be expected to purchase travel insurance prior to their cruise. Based upon data from another BREA study²⁶, 35% of cruise passengers purchase such insurance at an average cost of \$48 (CA) per passenger. Thus we have estimated that the 404,404 Canadian residents who purchased cruises in 2003 paid \$6.8 million for travel insurance.

III.B.5 Total Direct Expenditures by Industry

For purposes of the economic impact analysis, the \$965 million in direct cruise industry expenditures (shown previously in Table 11) were allocated to the appropriate industries. For example, 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 and Food Services industry. These are shown in Table 17.

Table 17 – Direct Cruise Industry Expenditures in Canada by Industry, 2003
Millions of Dollars

Sectors	Expenditures	Share
Goods Producing Sector	\$ 236.6	25%
Agriculture & Mining	\$ 5.3	1%
Utilities & Construction	\$ 8.4	1%
Manufacturing	\$ 222.9	23%
Food & Beverages	\$ 77.5	8%
Transportation Equipment	\$ 34.6	4%
Electrical & Communications Equipment	\$ 10.4	1%
Petroleum & Coal Products	\$ 66.3	7%
Other Manufactured Products	\$ 34.1	3%
Service Producing Sector	\$ 687.2	71%
Wholesale & Retail Trade	\$ 47.0	5%
Transportation and Warehousing*	\$ 288.4	30%
Finance, Insurance, Real Estate and Leasing	\$ 15.2	1%
Professional, Scientific & Technical Services	\$ 180.5	19%
Accommodation and Food Services	\$ 97.4	10%
Other Services & Government	\$ 58.7	6%
Spending by Sector	\$ 923.8	96%
Indirect Business Taxes	\$ 41.5	4%
Total Direct Spending	\$ 965.3	

* Includes \$22 million in wages of cruise line employees.

²⁶ The Contribution of the North American Cruise Industry to the U.S. Economy in 2003, prepared by BREA for the International Council of Cruise Lines, August 2004.

As indicated in the table, the Transportation & Warehousing sector accounts for 30% of the cruise industry's direct expenditures. This sector includes expenditures for cruise lines' purchases of port services, such as stevedoring, piloting and port agents, as well as trucking and warehousing. It also includes passenger and crew expenditures for air transportation, tours and other ground transportation.

Businesses in the manufacturing sector received \$223 million in cruise industry expenditures, 23% of total 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 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 and so forth.

The Professional & Technical Services sector is the third largest sector with \$181 million in direct expenditures accounting for 19% 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 \$50 million in travel agent commissions

Passenger and crew expenditures primarily impact three industries, Transportation & Warehousing, which we have already discussed, Wholesale & Retail Trade and Accommodation and Food Services. These later two sectors accounted for 5% and 10%, respectively, of total direct expenditures and totaled \$144 million combined.

Finally, the direct expenditures generated \$41.5 million in indirect business taxes.

III.C Direct Employment, Wage and Tax Impacts

As shown in **Table 18**, the \$965 million in direct cruise industry expenditures generated direct employment of 8,696 full- and part-time employees²⁷ paying \$294 million in wage income and \$50 million in income taxes. Combining the indirect business and income taxes, the direct spending generated by the cruise industry generated an estimated \$91 million in taxes during 2003.

The Goods Producing sector accounted for 25% of total direct expenditures, 12% of the total direct jobs and 15% 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 share. With 15% of the industry's direct expenditures being spent for food and beverages and bunker fuels, the Nondurable Goods industries accounted for over 60% of the direct economic impacts in the Goods Producing sector.

With passenger and crew spending accounting for 36% of total direct spending and spending for transportation services accounting for 30% of the direct expenditures, the

²⁷ These are equivalent to 6,083 full-time employees.

Service Producing sector accounted for 71% of the direct spending, 88% of the direct jobs and 85% of the wage income. The Transportation & Warehousing industry accounted for nearly 40% of the direct impacts within the Service Producing sector. This industry accounted for the most direct jobs and the second highest level of income and included jobs at the cruise ports, among tour operators and air and ground transportation companies.

Table 18 – Direct Cruise Industry Economic Impacts in Canada by Industry, 2003
Millions of Dollars

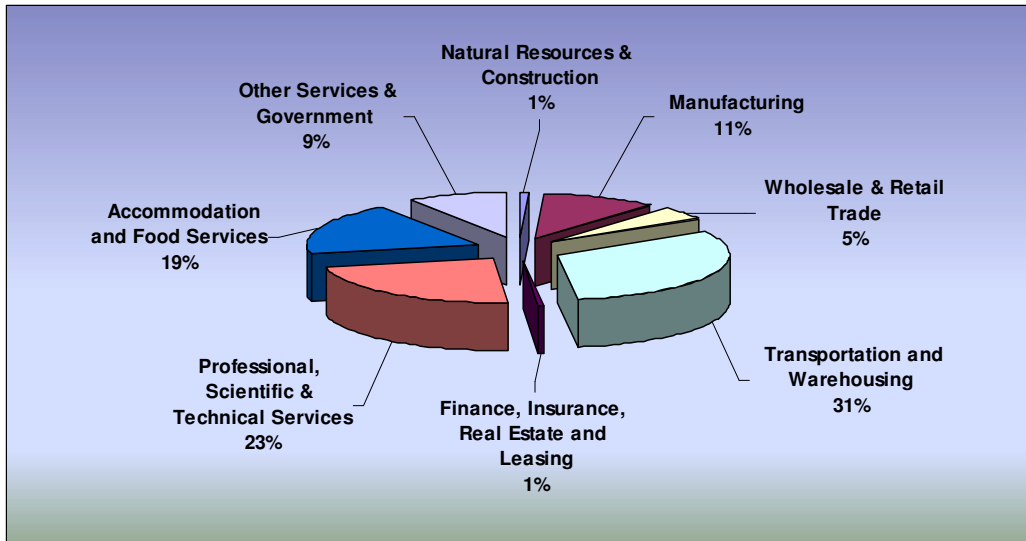
Sectors	Direct Spend	Jobs	Income
Goods Producing Sector	\$ 236.6	1,004	\$ 44.8
Agriculture & Mining	\$ 5.3	42	\$ 2.0
Utilities & Construction	\$ 8.4	28	\$ 1.4
Manufacturing	\$ 222.9	934	\$ 41.4
Durable Goods	\$ 65.7	339	\$ 13.7
Nondurable Goods	\$ 157.2	595	\$ 27.7
Service Producing Sector	\$ 687.2	7,692	\$ 249.7
Wholesale & Retail Trade	\$ 47.0	419	\$ 12.6
Transportation and Warehousing*	\$ 288.4	2,756	\$ 92.8
Finance, Insurance, Real Estate and Leasing	\$ 15.2	46	\$ 2.0
Professional, Scientific & Technical Services	\$ 180.5	1,985	\$ 94.4
Accommodation and Food Services	\$ 97.4	1,669	\$ 24.1
Other Services & Government	\$ 58.7	817	\$ 23.8
Spending by Sector	\$ 923.8		
Indirect Business Taxes	\$41.5		
Total Direct Impacts	\$ 965.3	8,696	\$ 294.5
Income Taxes			\$ 50.0

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

The next largest industry was the Professional, Scientific and Technical Services industry. The direct impacts in this industry accounted for approximately one-fourth of the direct spending and employment impacts in the Service producing sector, but due to the relatively high wages in this industry, it accounted for more than one-third of the direct income impacts. As discussed above, the jobs generated in this industry included employees of travel agencies, advertising, accounting, security and other professional services companies.

Combining the Trade and Accommodation and Food Services industries, the cruise industry generated \$144 million in direct spending, 2,088 full- and part-time jobs and \$36.7 million in income. These impacts were generated primarily by passenger and crew spending. Due to the relatively low productivity and wages within the Retail Trade and Accommodation and Food Services industries, they accounted for 15% of the direct income in the Service Producing sector, but 27% of the direct jobs and 21% of the direct spending.

Figure 6 – Distribution of Direct Employment Impacts in Canada by Sector, 2003



III.D 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 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 impacts.²⁸ 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 as well as indirect business taxes prior to estimating the indirect impacts.

The input-output analysis indicated that the \$965 million in direct cruise industry expenditures generated \$1.8 billion in total (direct plus indirect) output, 14,922 full- and part-time jobs²⁹ and \$539 million in income. In addition, the industry generated an estimated \$91 million in indirect business taxes and \$92 million in income taxes.

²⁸ Statistics Canada, *The Input-Output Structure of the Canadian Economy, 1999-2000*.

²⁹ This is equivalent to 9,738 jobs on a full-time basis.

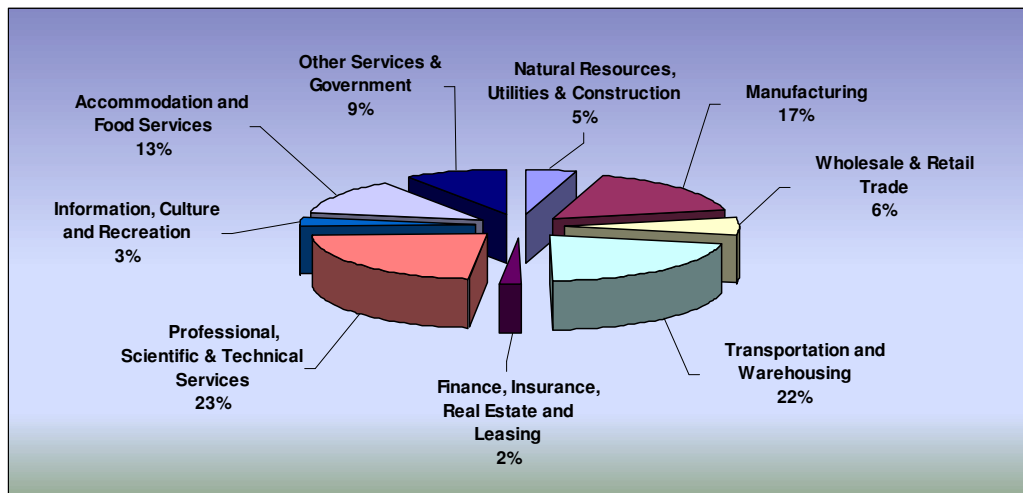
**Table 19 – Total Cruise Industry Economic Impacts in Canada by Industry, 2003
Millions of Dollars**

Sectors	Output	Jobs	Income
Goods Producing Sector	\$ 718.9	3,287	\$ 145.0
Natural Resources, Utilities & Construction	\$ 127.4	698	\$ 32.9
Manufacturing	\$ 591.5	2,589	\$ 112.1
Durable Goods	\$ 243.0	1,308	\$ 52.6
Nondurable Goods	\$ 348.5	1,281	\$ 59.5
Service Producing Sector	\$ 1,132.6	11,635	\$ 393.9
Wholesale & Retail Trade	\$ 89.8	862	\$ 26.7
Transportation and Warehousing*	\$ 343.6	3,250	\$ 112.5
Finance, Insurance, Real Estate and Leasing	\$ 100.7	307	\$ 13.2
Professional, Scientific & Technical Services	\$ 241.5	3,436	\$ 163.3
Information, Culture and Recreation	\$ 111.3	449	\$ 9.8
Accommodation and Food Services	\$ 113.2	1,941	\$ 28.1
Other Services & Government	\$ 132.5	1,390	\$ 40.3
Total Impacts	\$ 1,851.5	14,922	\$ 538.9
Indirect Business Taxes	\$ 90.9		
Income Taxes			\$ 91.6

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

The Goods Producing sector accounted for 39% of the total output impacts but due to the relatively high productivity of this sector only 22% of the total jobs and 27% of the income impacts. The total economic impacts are more evenly distributed throughout the Goods Producing sector than the direct impacts as the indirect impacts spread throughout the economy, especially among the natural resource and construction industries.

Figure 7 – Distribution of Total Employment Impact by Sector, 2003



Within the Services Producing sector, the Transportation and Warehousing industry remains the dominant industry, accounting for slightly less than 30% 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.

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

In summary, the more than 880 cruise ship calls at Canadian ports during 2003 generated just over 1.6 million passenger and crew onshore arrivals. In addition, more than 400,000 Canadian residents purchased cruises from both Canada and elsewhere. Passengers, crew and the cruise lines directly spent \$965 million in Canada during the year, generating just under 8,700 full- and part-time jobs paying \$294 million in wage income. In addition the direct spending and wage income generated an estimated \$91 million in indirect business and income taxes.

As a result of the subsequent indirect spending by businesses and their employees, the cruise industry was responsible for the generation of an estimated \$1.8 billion in total output, 14,922 jobs, \$539 million in wage income and \$182 million in indirect business and income taxes throughout Canada during 2003.

Table 20 – Summary of Cruise Industry Economic Impacts, 2003

Canadian and Foreign Passenger and Crew Onshore Arrivals (Millions)	1.63
<i>Direct Economic Impacts</i>	
<i>Cruise Industry Direct Spending (\$ Millions)</i>	\$ 965
<i>Employment</i>	8,696
<i>Wages and Salaries (\$ Millions)</i>	\$ 294
<i>Indirect Business and Income Taxes (\$ Millions)</i>	\$ 91
<i>Total Economic Impacts</i>	
<i>Total Output (\$ Billions)</i>	\$ 1,851
<i>Employment</i>	14,922
<i>Wages and Salaries (\$ Millions)</i>	\$ 539
<i>Indirect Business and Income Taxes (\$ Millions)</i>	\$ 182

IV. Economic Contribution by Province

The economic impact of the international cruise industry was also analyzed for British Columbia, Quebec and the provinces of Atlantic Canada. 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 more than 80 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 by residents of those provinces.

The economic impacts discussed in this section are based upon data provided 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 and expenditure data obtained from the ports, trade associations and other studies. Finally, the indirect impacts were estimated using input-output tables for each of the provinces³⁰ and the employment and wage impacts were calculated using provincial wage and employment data published by Statistics Canada.

³⁰ The input-output table for the Atlantic provinces was a weighted average of the Nova Scotia and New Brunswick tables. Combined these two provinces accounted for 90% of the direct cruise-related spending in Atlantic Canada.

IV.A British Columbia

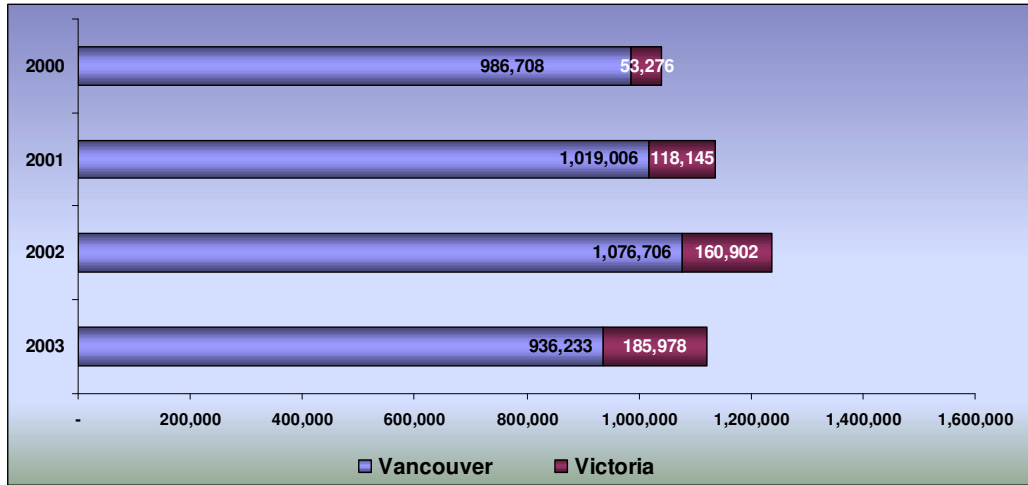
IV.A.1 Background

During 2003 more than 400 cruise ship calls were made at the Ports of Vancouver and Victoria. As shown in **Figure 8**, the two BC ports handled a combined 1.1 million passengers during the cruise season. On a regional basis, the Pacific ports of Victoria and Vancouver accounted for 72% of the Canadian cruise passenger traffic. Vancouver is primarily a port of embarkation and debarkation for Alaska cruises while Victoria serves as a port of call for Alaska cruises that originate at U.S. ports.

The Port of Vancouver is certainly the larger of the two ports having processed 83% of the passengers at the two ports. This reflects the fact that Vancouver is the largest homeport serving the Alaska market. At the same time the port is under increasing competition from U.S. ports, primarily the Port of Seattle. As a consequence, it experienced a 13% decline in passenger volume during 2003.

At the same time, the loss of embarkations at Vancouver has served to spur growth at the Port of Victoria. 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 have used Victoria as their foreign port-call upon their return voyage from Alaska. Consequently, passenger volume at the Port of Victoria has more than tripled since 2000.

Figure 8 – Passenger Arrivals at the Ports of Vancouver and Victoria, 2000 - 2003



Source: Ports of Vancouver and Victoria

In addition to cruise passenger arrivals, CLIA reported that just under 120,000 residents of British Columbia purchased cruises during 2003. This represented almost 30% of all Canadian residents who purchased cruises during the year.

IV.A.2 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 in support of 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 will purchase a similar set of goods and services with a heavier concentration on retail goods.

Table 21 – Direct Cruise-Related Expenditures in British Columbia, 2003
Millions of Dollars

Sources	Spending	Share
Cruise Lines	\$ 392.1	59%
Passengers	\$ 229.2	35%
Crew	\$ 38.7	6%
Total	\$ 660.0	

During 2003, cruise-related spending totaled \$660 million in British Columbia, or 68% of cruise-related spending throughout Canada. As indicated in **Table 21**, expenditures by the cruise lines accounted for 59% of the total, passengers 35% and crew the remaining 6%. The industry impacts, which are discussed in the following sections, vary significantly across the three sources.

IV.A.2.a Expenditures by Cruise Lines

Expense data collected through a survey of NWCA member lines showed that the cruise lines spent \$392 million with businesses in British Columbia during 2003. As shown in **Table 22**, the cruise lines spent an estimated \$101 million in administrative and professional expenses with businesses in BC. This represented 26% of total cruise line expenditures in the province and included expenditures for advertising and promotion, computer programming, legal, accounting and other professional consulting services.

Table 22 – Cruise Lines' Expenditures in British Columbia by Category, 2003
Millions of Dollars

Category	Spending	Share
Administrative & Professional Expenses	\$ 101.0	26%
Operational Expenses	\$ 291.1	74%
Food and Beverages	\$ 40.7	10%
Fuel	\$ 37.5	10%
Travel Agent Commissions	\$ 14.9	4%
Hotel Supplies	\$ 12.5	3%
Other Operating Expenses	\$ 185.5	47%
Total	\$ 392.1	

In addition, the cruise lines spent approximately \$291 million on operational expenses with businesses in British Columbia. Similar amounts were spent on food and beverages and fuel \$40.7 and \$37.5 million, respectively. Commissions paid to agents in the province totaled an estimated \$15 million. Other operating expenses, totaling \$186 million, included expenditures for vessel maintenance, port charges and fees and wages and salaries paid to shore-side staff in the province.

IV.A.2.b Expenditures by Passengers

As shown in **Table 23**, cruise passengers spent \$109 million on goods and services throughout British Columbia in 2003 for an average expenditure of over \$139 per passenger. The higher average per passenger expenditure of \$154 in Vancouver reflects the fact that the Port of Vancouver is primarily a port of embarkation and thus generates longer visits with more overnight stays.

Retail goods, such as clothing and souvenirs, accounted for about one-third of passenger expenditures while lodging absorbed 36% of their expenditures. Expenditures for tours and food accounted for 13% and 19% of passenger expenditures, respectively. With no direct lodging expenditures in Victoria, obviously, the non-lodging components of passenger spending each accounted for a larger share of passenger spending than in Vancouver.

Table 23 – Passenger Expenditures in British Columbia by Category, 2003
Millions of Dollars

	Vancouver	Victoria	Total
Passenger Onshore Visits	606,069	176,679	782,748
Lodging	\$ 39.2	\$ 0.0	\$ 39.2
Tours and Transportation	\$ 9.4	\$ 4.6	\$ 14.0
Food and Beverages	\$ 19.7	\$ 1.3	\$ 21.0
Other Retail	\$ 25.3	\$ 9.6	\$ 34.9
Total Spending	\$ 93.6	\$ 15.5	\$ 109.1
Average per Passenger	\$ 154.46	\$ 88.00	\$ 139.45

IV.A.2.c Expenditures by Crew

An estimated 320,500 crew arrived onshore at the two BC ports and spent \$38.7 million in 2003 (see **Table 24**). The major difference between crew and passenger spending is the lack of lodging expenditures by crew and their higher share of retail expenditures, 52% for crew and 32% for passengers. Vancouver, with a higher volume of cruise traffic, generated more crew arrivals and spending, as well as, a higher average spend.

Table 24 – Crew Expenditures in British Columbia by Category, 2003
Millions of Dollars

	Vancouver	Victoria	Total
Crew Onshore Arrivals	267,388	53,115	320,503
Tours and Transportation	\$ 10.6	\$ 0.5	\$ 11.1
Food and Beverages	\$ 6.6	\$ 0.7	\$ 7.3
Other Retail	\$ 18.2	\$ 2.1	\$ 20.3
Total Spending	\$ 35.4	\$ 3.3	\$ 38.7
Average per Crew Member	\$ 132.47	\$ 62.00	\$ 120.79

IV.A.2.d Other Passenger Expenditures

Other passenger expenditures consist of the airfare and travel insurance costs of cruise passengers that impact on Canadian economic activity and totaled \$120.1 million (see **Table 25**). Cruise passengers travel to Vancouver to embark on and/or debark from their cruises. We have estimated that this air travel related to cruises generated \$118 million in air travel expenditures that impacted the British Columbia economy. In addition, the residents of British Columbia purchased an estimated \$2 million in travel insurance for their cruises.

Table 25 – Other Direct Passenger Expenditures in British Columbia, 2003
Millions of Dollars

Category	Expenditures
Airfares Impacting the BC Economy	\$ 118.1
Cruise-Related Travel Insurance in BC	\$ 2.0
Total	\$ 120.1

IV.A.2.e Total Direct Expenditures by Industry

For purposes of the economic impact analysis, the \$660 million in direct cruise industry expenditures in British Columbia were allocated to the appropriate industries. For example, 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 and Food Services industry. These are shown in **Table 26**.

As indicated in the table, the Transportation & Warehousing industry accounts for one-third of the cruise industry's direct expenditures in the province. This industry includes expenditures for cruise lines' purchases of port services, such as stevedoring, piloting and port agents, as well as trucking and warehousing. It also includes 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.

Table 26 – Direct Cruise Industry Expenditures in British Columbia, 2003
Millions of Dollars

Sectors	Expenditures	Share
Goods Producing Sector	\$ 164.9	25%
Agriculture, Utilities & Construction	\$ 9.2	1%
Manufacturing	\$ 155.7	24%
Durable Goods	\$ 54.5	8%
Nondurable Goods	\$ 101.2	16%
Service Producing Sector	\$ 465.8	71%
Wholesale & Retail Trade	\$ 23.6	4%
Transportation and Warehousing*	\$ 208.1	32%
Finance, Insurance, Real Estate and Leasing	\$ 7.1	1%
Professional, Scientific & Technical Services	\$ 100.6	15%
Accommodation and Food Services	\$ 84.7	13%
Other Services & Government	\$ 41.7	6%
Spending by Sector	\$ 630.7	96%
Indirect Business Taxes	\$ 29.3	4%
Total Direct Spending	\$ 660.0	

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

Businesses in the manufacturing sector received \$156 million in cruise industry expenditures, 24% of total 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 totaled a combined \$95 million. An estimated \$35 million was spent in the transportation equipment industry 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.

The Professional & Technical Services industry is the third largest industry and includes 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 \$101 million in the province's Professional Services industry in 2003.

Passenger and crew expenditures were allocated to three industries, Transportation & Warehousing, which we have already discussed, Wholesale & Retail Trade and Accommodation and Food Services. These later two sectors accounted for 17% of total direct expenditures and totaled \$108 million combined.

IV.A.3 Direct Employment, Wage and Tax Impacts

The \$660 million in direct cruise industry expenditures in British Columbia generated direct employment of 6,013 full- and part-time employees³¹ paying \$197 million in wage income (see **Table 27**). Combining indirect business and income taxes, the direct cruise-related spending in the province generated \$63 million in governmental tax payments.

Table 27 – Direct Cruise Industry Economic Impacts in British Columbia, 2003
Millions of Dollars

Sectors	Direct Spend	Jobs	Income
Goods Producing Sector	\$ 164.9	719	\$ 31.9
Agriculture, Utilities & Construction	\$ 9.2	24	\$ 1.3
Manufacturing	\$ 155.7	695	\$ 30.6
Durable Goods	\$ 54.5	294	\$ 11.9
Nondurable Goods	\$ 101.2	401	\$ 18.7
Service Producing Sector	\$ 465.8	5,294	\$ 164.9
Wholesale & Retail Trade	\$ 23.6	273	\$ 8.8
Transportation and Warehousing*	\$ 208.1	2,217	\$ 77.8
Finance, Insurance, Real Estate and Leasing	\$ 7.1	26	\$ 1.2
Professional, Scientific & Technical Services	\$ 100.6	793	\$ 37.0
Accommodation and Food Services	\$ 84.7	1,385	\$ 21.4
Other Services & Government	\$ 41.7	600	\$ 18.7
Spending by Sector	\$ 630.7		
Indirect Business Taxes	\$ 29.3		
Total Direct Impacts	\$ 660.0	6,013	\$ 196.8
Income Taxes			\$ 33.5

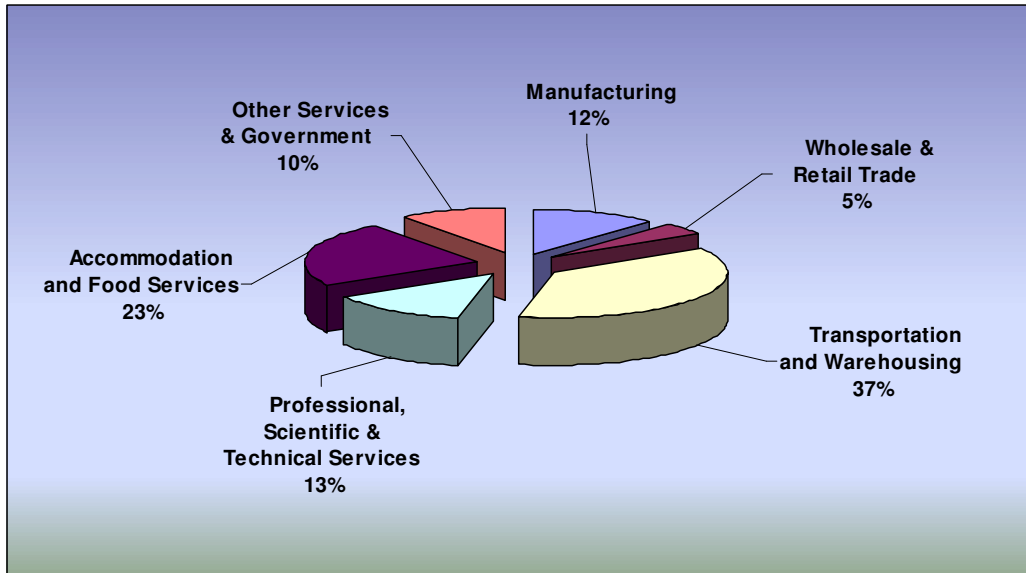
* Includes wages and salaries of Canadian employees of the cruise lines.

The Goods Producing sector accounted for 25% of total direct expenditures, 12% of the total direct jobs and 16% of the wage income. With 15% of the industry's direct expenditures being spent for food and beverages and bunker fuels, the Nondurable Goods industries accounted for approximately 60% of the direct economic impacts in the Goods Producing sector.

With passenger and crew spending accounting for 41% of total direct spending and spending for transportation services accounting for 32% of the direct expenditures, the Service Producing sector accounted for 71% of the direct spending, 88% of the direct jobs and 84% of the wage income. The Transportation & Warehousing industry accounted for approximately 45% 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.

³¹ These are equivalent to 4,146 full-time employees.

Figure 9 – Distribution of Direct Employment Impact in British Columbia, 2003



The next largest industry was the Professional, Scientific and Technical Services industry. The direct impacts in this industry accounted for 22% of the direct spending and 15% of the employment impacts, but due to the relatively high wages in this industry, it accounted for 22% 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 and Food Services industries, the cruise industry generated \$108 million in direct spending, 1,658 full- and part-time jobs and \$30.2 million in income. These impacts were generated primarily by passenger and crew spending. Due to the relatively low productivity and wages within the Retail Trade and Accommodation and Food Services industries, these two industries accounted for 18% of the direct income in the Service Producing Sector, but 31% of the direct jobs and 23% of the direct spending.

IV.A.4 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 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 BC input/output table was used to estimate the indirect impacts.³² The input-output table reflects the inter-industry

³² Statistics Canada, The Input-Output Structure of the Canadian Economy, 1999-2000.

links among industries in the BC 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 province's economy. As discussed in the Methodology section, the direct expenditures were adjusted for transportation and trade margins as well as indirect business taxes prior to estimating the indirect impacts.

As shown in **Table 28**, the input-output analysis indicated that the \$660 million in direct cruise industry expenditures generated \$1.2 billion in total (direct plus indirect) output, 10,400 full- and part-time jobs³³ and \$374 million in income. In addition, the industry generated an estimated \$62 million in indirect business taxes and \$64 million in income taxes.

The Goods Producing sector accounted for 37% of the total output impacts but due to the relatively high productivity of this sector only 19% of the total jobs and 24% of the income impacts. The total economic impacts are more evenly distributed throughout the Goods Producing sector than the direct impacts as the indirect impacts spread throughout the economy, especially among the natural resource and construction industries.

Table 28 – Total Cruise Industry Economic Impacts in British Columbia, 2003
Millions of Dollars

Sectors	Output	Jobs	Income
Goods Producing Sector	\$ 456.6	2,018	\$ 91.6
Natural Resources, Utilities & Construction	\$ 94.8	492	\$ 25.2
Manufacturing	\$ 361.8	1,526	\$ 66.4
Durable Goods	\$ 125.0	791	\$ 32.1
Nondurable Goods	\$ 236.8	735	\$ 34.3
Service Producing Sector	\$ 784.1	8,382	\$ 282.7
Wholesale & Retail Trade	\$ 53.9	1,167	\$ 44.1
Transportation and Warehousing*	\$ 252.0	2,663	\$ 97.0
Finance, Insurance, Real Estate and Leasing	\$ 67.8	247	\$ 11.1
Professional, Scientific & Technical Services	\$ 137.0	1,386	\$ 64.6
Information, Culture and Recreation	\$ 67.8	168	\$ 6.8
Accommodation and Food Services	\$ 95.7	1,564	\$ 24.1
Other Services & Government	\$ 109.9	1,187	\$ 35.0
Total Impacts	\$ 1,240.7	10,400	\$ 374.3
Indirect Business Taxes	\$ 62.2		
Income Taxes			\$ 63.6

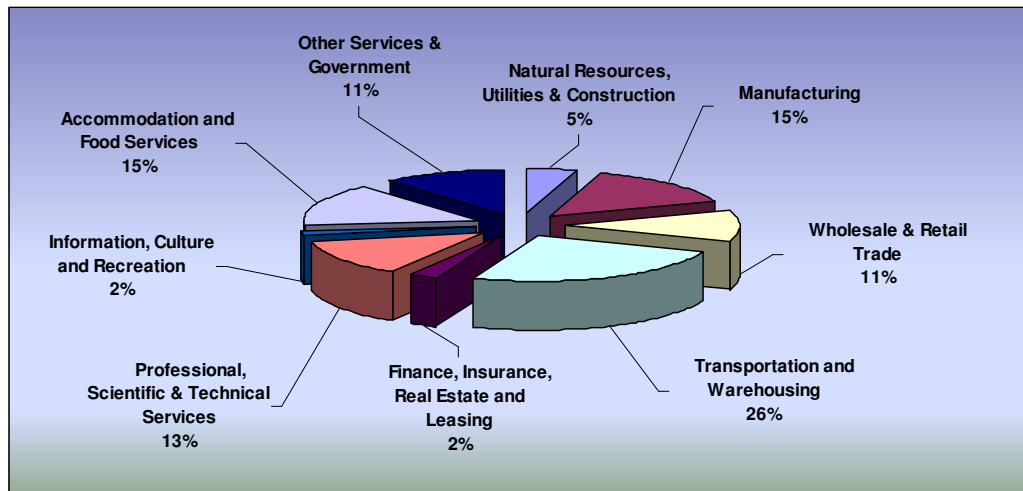
* Includes wages and salaries of Canadian employees of the cruise lines.

Within the Services Producing sector, the Transportation and Warehousing industry remains the dominant industry, accounting for about one-third of the total economic impacts in this sector. This is due to the magnitude of the direct economic impacts as

³³ This is equivalent to 7,063 jobs on a full-time basis.

well as the strong linkages between the transportation sector and all other sectors of the economy.

Figure 10 – Distribution of Total Employment Impact in British Columbia, 2003



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

Table 29 – Summary of Cruise Industry Economic Impacts in British Columbia, 2003

Canadian and Foreign Passenger and Crew Onshore Arrivals (Millions)	1.10
Direct Economic Impacts	
Cruise Industry Direct Spending (\$ Millions)	\$ 660
Employment	6,013
Wage Income (\$ Millions)	\$ 197
Indirect Business and Income Taxes (\$ Millions)	\$ 63
Total Economic Impacts	
Total Output (\$ Millions)	\$ 1,241
Employment	10,400
Wage Income (\$ Millions)	\$ 374
Indirect Business and Income Taxes (\$ Millions)	\$ 126

In summary, the more than 400 cruise ship calls at the two BC ports during 2003 generated over one million passenger and crew onshore arrivals. In addition, almost 120,000 British Columbia residents purchased cruises from both Canada and elsewhere. Passengers, crew and the cruise lines directly spent \$660 million in the province during the year generating just over 6,000 full- and part-time jobs paying \$197 million in wage

income. The direct spending also generated an estimated \$63 million in indirect business and income taxes.

As a result of the subsequent indirect spending by businesses and their employees, the cruise industry was responsible for the generation of an estimated \$1.2 billion in total output, 10,400 jobs and \$374 million in wage income in British Columbia during 2003. Total indirect business and income taxes were an estimated \$126 million.

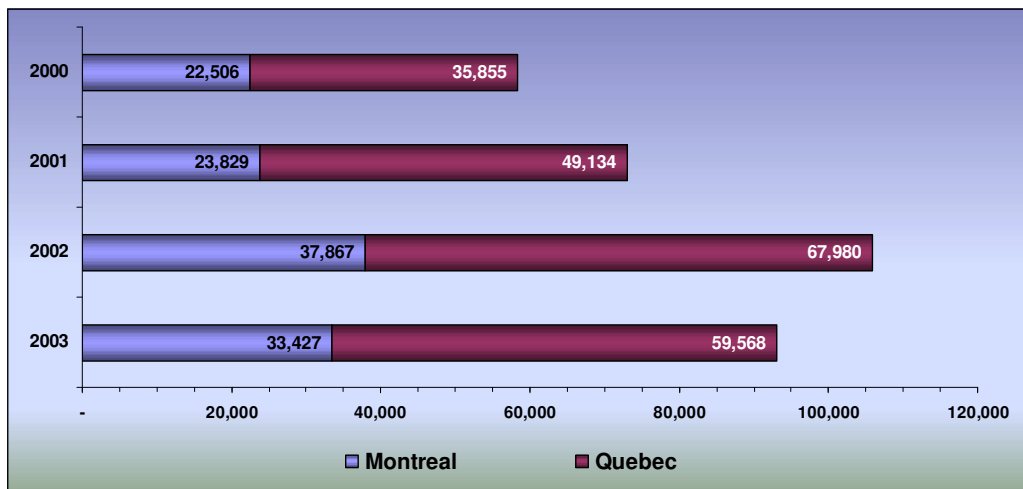
Overall, the economic impacts of the cruise industry in British Columbia accounted for just over two-thirds of the industry's impact throughout Canada. Relative to the national impacts, the economic impacts in BC were more highly concentrated in the Transportation, Trade and Accommodation and Food Services industries. This reflects the high volume of cruise activity in the province and the generally stronger economic impact created by homeport versus port-of-call spending. 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 as dependent upon proximity to ports and are spread throughout the urban centers of Canada.

IV.B Quebec

IV.B.1 Background

During 2003 more than 170 cruise ship calls were made at the Ports of Montreal and Quebec. As shown in **Figure 11**, the two ports handled a combined 93,000 passengers during the cruise season, 6% of total Canadian cruise passenger traffic. Montreal is primarily a port of embarkation and debarkation for Canada/New England cruises while Quebec serves as a port of call for cruises sailing the same itinerary. Most of these cruises originate at U.S. ports.

Figure 11 – Passenger Arrivals at the Ports of Montreal and Quebec, 2000 - 2003



Source: Ports of Montreal and Quebec

The Port of Quebec is the larger of the two ports having processed almost two-thirds of the passengers at the two ports. Even though both ports experienced an increase in the number of cruise ship calls in 2003 from 2002, they both also experienced a decline in the number of passenger arrivals. Nonetheless, passenger arrivals in 2003 at both ports were greater than arrivals in 2000 and 2001. Arrivals in 2003 at Montreal were almost 50% above those of 2000 and 66% greater at Quebec.

In addition to cruise passenger arrivals, CLIA reported that just under 54,000 residents of Quebec purchased cruises during 2003. This represented 13% of all Canadian residents who purchased cruises during the year.

IV.B.2 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 in support of 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 will purchase a similar set of goods and services with a heavier concentration on retail goods.

During 2003, cruise-related spending totaled \$71 million in the Province of Quebec, or 7% of cruise-related spending throughout Canada. As indicated in **Table 30**, expenditures by the cruise lines accounted for 69% of the total, passengers 28% and crew the remaining 3%. The industry impacts, which are discussed in the following sections, vary significantly across the three sources.

Table 30 – Direct Cruise-Related Expenditures in Quebec, 2003
Millions of Dollars

Sources	Spending	Share
Cruise Lines	\$ 49.5	69%
Passengers	\$ 19.6	28%
Crew	\$ 2.2	3%
Total	\$ 71.3	

IV.B.2.a Expenditures by Cruise Lines

Expense data collected through a survey of NWCA member lines showed that the cruise lines spent almost \$50 million with businesses in Quebec during 2003. As shown in **Table 31**, the cruise lines spent an estimated \$20 million in administrative and professional expenses with businesses in the province of Quebec. This represented 40% 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 31 – Cruise Lines' Expenditures in Quebec by Category, 2003
Millions of Dollars

Category	Spending	Share
Administrative & Professional Expenses	\$ 19.6	40%
Operational Expenses	\$ 29.9	60%
Food and Beverages	\$ 0.3	0%
Machinery & Equipment	\$ 0.2	0%
Travel Agent Commissions	\$ 6.7	14%
Transportation & Storage	\$ 19.7	40%
Other Operating Expenses	\$ 3.0	6%
Total	\$ 49.5	

In addition, the cruises lines spent approximately \$30 million on operational expenses with businesses in Quebec. The vast majority of these expenses were transportation-related services, \$19.7 million. This included the costs of port services, stevedores,

passenger and crew transportation and storage and warehousing. Another \$6.7 million was paid as commissions to travel agents in the province. Smaller, but similar amounts were spent on food and beverages and equipment \$300,000 and \$200,000, respectively. Equipment expenditures in Quebec included payments for maintenance and repair of ballast and bilge pumps, as well as engines. Other operating expenses, totaling \$3 million, included expenditures for other products for cruise ship operations, such as navigation maps and equipment, crew health services and sanitation services.

IV.B.2.b Expenditures by Passengers

In aggregate cruise passengers spent almost \$13 million on goods and services throughout Quebec in 2003 for an average expenditure of over \$143 per passenger. The higher average per passenger expenditure of \$202 in Montreal reflects the fact that the Port of Montreal is primarily a port of embarkation and thus generates longer visits with more overnight stays.

Table 32 – Passenger Expenditures in Quebec by Category, 2003
Millions of Dollars

	Montreal	Quebec	Total
Passenger Onshore Visits	33,372	56,661	90,033
Lodging	\$ 2.0	\$ 0.3	\$ 2.3
Tours and Transportation	\$ 1.6	\$ 2.2	\$ 3.8
Food and Beverages	\$ 1.6	\$ 0.7	\$ 2.3
Other Retail	\$ 1.7	\$ 2.8	\$ 4.5
Total Spending	\$ 6.9	\$ 6.0	\$ 12.9
Average per Passenger	\$ 208.82	\$ 104.33	\$ 143.63

Retail goods, such as clothing and souvenirs, accounted for about one-third of passenger expenditures while lodging absorbed 18% of their expenditures. Expenditures for tours and food accounted for 29% and 18% of passenger expenditures, respectively. With only a relatively few embarkations generating limited lodging and dining expenditures in Quebec City, the tour and retail components of passenger spending in Quebec were significantly higher in Quebec City and accounted for a larger share of passenger spending than in Montreal.

IV.B.2.c Expenditures by Crew

As shown in **Table 33**, an estimated 21,740 crew arrived onshore at the two Province of Quebec ports and spent \$2.2 million in 2003. The major difference between crew and passenger spending is the lack of lodging expenditures by crew and their higher share of retail expenditures, 68% for crew and 35% for passengers. The Port of Quebec with a higher volume of cruise traffic generated more crew arrivals and spending.

Table 33 – Crew Expenditures in Quebec by Category, 2003
Millions of Dollars

	Montreal	Quebec	Total
Crew Onshore Arrivals	4,930	16,810	21,740
Tours and Transportation	\$ 0.1	\$ 0.3	\$ 0.4
Food and Beverages	\$ 0.1	\$ 0.2	\$ 0.3
Other Retail	\$ 0.3	\$ 1.2	\$ 1.5
Total Spending	\$ 0.5	\$ 1.7	\$ 2.2
Average per Crew Member	\$ 99.08	\$ 99.08	\$ 99.08

IV.B.2.d Other Passenger Expenditures

Other passenger expenditures consist of the airfare and travel insurance costs of cruise passengers that impact on Canadian economic activity. Cruise passengers travel to and from Montreal to embark on and/or debark from their cruises. We have estimated that this air travel related to cruises generated \$5.8 million in air travel expenditures that impacted the Quebec economy. In addition, the residents of Quebec purchased an estimated \$1 million in travel insurance for their cruise.

Table 34 – Other Direct Passenger Expenditures in Quebec, 2003
Millions of Dollars

Category	Expenditures
Airfares Impacting the Quebec Economy	\$ 5.8
Cruise-Related Travel Insurance in Quebec	\$ 0.9
Total	\$ 6.7

IV.B.2.e Total Direct Expenditures by Industry

For purposes of the economic impact analysis, the \$71 million in direct cruise industry expenditures in Quebec were allocated to the appropriate industries. For example, 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 and Food Services industry. These are shown in **Table 35**.

As indicated in the table, the Transportation & Warehousing industry accounts for 41% of the cruise industry's direct expenditures in the province. This industry includes expenditures for cruise lines' purchases of port services, such as stevedoring, piloting and port agents, as well as trucking and warehousing. It also includes passenger and crew expenditures for air transportation, tours and other ground transportation.

The Professional & Technical Services industry had the second highest level of direct expenditures which 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. The survey data obtained from the cruise lines indicates that they spent \$22 million in the province's Professional Services industry in 2003.

Table 35 – Direct Cruise Industry Expenditures in Quebec, 2003
Millions of Dollars

Sectors	Expenditures	Share
Goods Producing Sector	\$ 4.3	6%
Agriculture, Utilities & Construction	\$ 1.0	1%
Manufacturing	\$ 3.3	5%
Service Producing Sector	\$ 63.8	90%
Wholesale & Retail Trade	\$ 2.6	4%
Transportation and Warehousing	\$ 29.1	41%
Professional, Scientific & Technical Services	\$ 21.6	30%
Accommodation and Food Services	\$ 6.9	10%
Other Services & Government	\$ 3.6	5%
Spending by Sector	\$ 68.1	96%
Indirect Business Taxes	\$ 3.2	4%
Total Direct Spending	\$ 71.3	

Businesses in the manufacturing sector received \$3.3 million in cruise industry expenditures, 5% of total direct expenditures. These expenditures consist 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 which totaled a combined \$2.6 million. 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 allocated to three industries, Transportation & Warehousing, which we have already discussed, Wholesale & Retail Trade and Accommodation and Food Services. These later two sectors accounted for 14% of total direct expenditures and totaled \$9.5 million combined.

IV.B.3 Direct Employment, Wage and Tax Impacts

As shown in **Table 36**, the \$71 million in direct cruise industry expenditures generated direct employment of 667 full- and part-time employees³⁴ paying \$22.1 million in wage income. Combining indirect business and income taxes, the direct cruise-related spending in the province generated \$7 million in governmental tax payments.

³⁴ These are equivalent to 529 full-time equivalent employees.

The Goods Producing sector accounted for 6% of total direct expenditures, 3% of the total direct jobs and 4% of the wage income. With 4% of the industry's direct expenditures being spent for food and beverages and bunker fuels, the Nondurable Goods industries accounted for approximately two-thirds of the direct economic impacts in the Goods Producing sector.

Table 36 – Direct Cruise Industry Economic Impacts in Quebec, 2003
Millions of Dollars

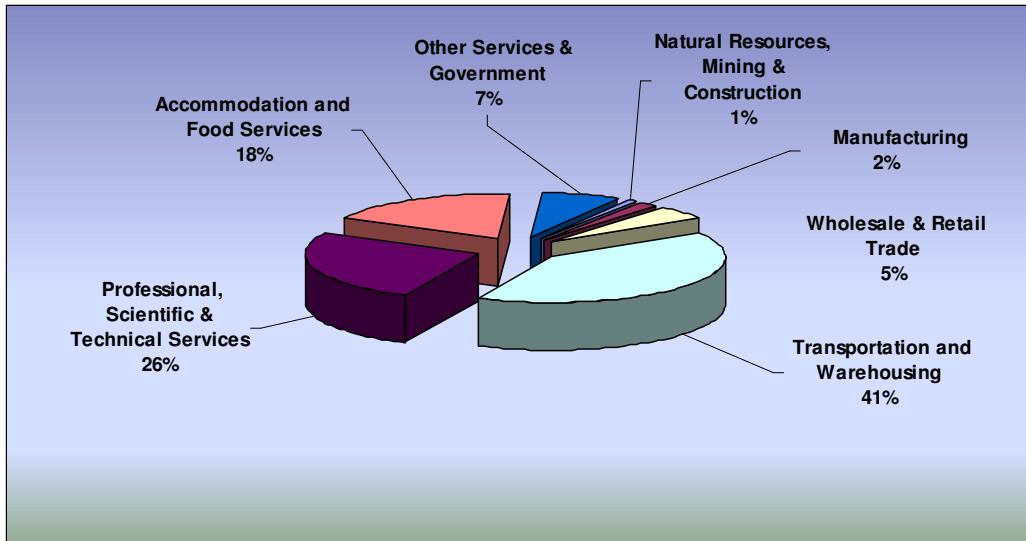
Sectors	Direct Spend	Jobs	Income
Goods Producing Sector	\$ 4.3	19	\$ 0.8
Agriculture, Utilities & Construction	\$ 1.0	6	\$ 0.3
Manufacturing	\$ 3.3	13	\$ 0.5
Service Producing Sector	\$ 63.8	648	\$ 21.3
Wholesale & Retail Trade	\$ 2.6	32	\$ 0.9
Transportation and Warehousing	\$ 29.1	273	\$ 9.9
Professional, Scientific & Technical Services	\$ 21.6	172	\$ 7.3
Accommodation and Food Services	\$ 6.9	122	\$ 1.8
Other Services & Government	\$ 3.6	49	\$ 1.4
Spending by Sector	\$ 68.1		
Indirect Business Taxes	\$ 3.2		
Total Direct Impacts	\$ 71.3	667	\$ 22.1
Income Taxes			\$ 3.8

With passenger and crew spending accounting for 31% of total direct spending and spending for transportation services accounting for 41% of the direct expenditures, the Service Producing sector accounted for 90% of the direct spending, 97% of the direct jobs and 96% of the wage income. The Transportation & Warehousing industry accounted for more than 40 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.

The second largest industry was the Professional, Scientific and Technical Services industry. The direct impacts in this industry accounted for 34% of the direct spending and 27% of the employment impacts, but due to the relatively high wages in this industry, it accounted for 34% of the direct income impacts in this 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 and Food Services industries, the cruise industry generated \$9.5 million in direct spending, 154 full- and part-time jobs and \$2.7 million in income. These impacts were generated primarily by passenger and crew spending. Due to the relatively low productivity and wages within the Retail Trade and Accommodation and Food Services industries, these two industries accounted for 13% of the direct income in the Service Producing sector, but 24% of the direct jobs and only 15% of the direct spending.

Figure 12 – Distribution of Direct Employment Impact in Quebec, 2003



IV.B.4 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 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 Quebec input/output table was used to estimate the indirect impacts.³⁵ The input-output table reflects the inter-industry links among industries in the Quebec 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 Quebec economy. As discussed in the Methodology section, the direct expenditures were adjusted for transportation and trade margins as well as indirect business taxes prior to estimating the indirect impacts.

The input-output analysis indicated that the \$71 million in direct cruise industry expenditures generated \$134 million in total (direct plus indirect) output, 1,178 full- and part-time jobs³⁶ and \$40.3 million in income. In addition, the industry generated an estimated \$7.6 million in indirect business taxes and \$6.9 million in income taxes (see **Table 37**).

³⁵ Statistics Canada, *The Input-Output Structure of the Canadian Economy, 1999-2000*.

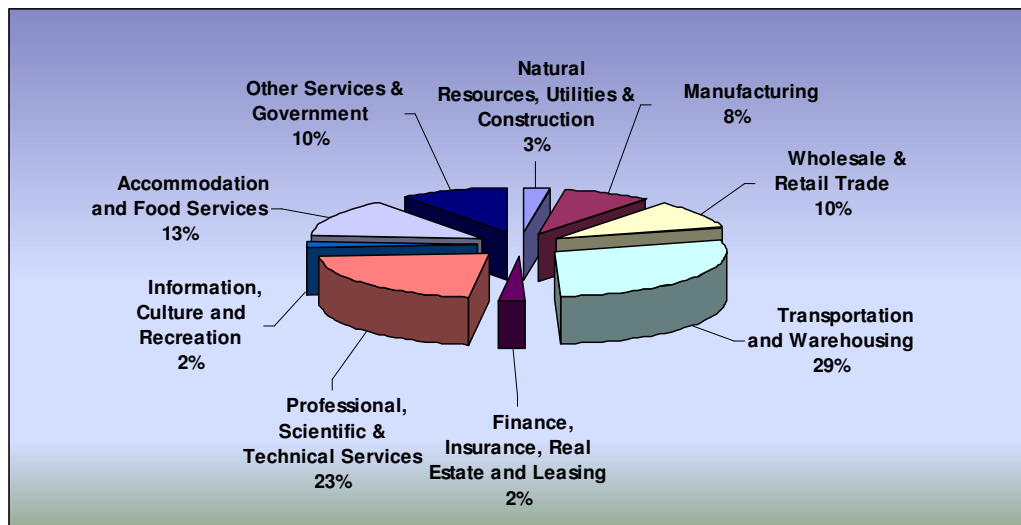
³⁶ This is equivalent to 872 jobs on a full-time equivalent basis.

Table 37 – Total Cruise Industry Economic Impacts in Quebec, 2003
Millions of Dollars

Sectors	Output	Jobs	Income
Goods Producing Sector	\$ 32.9	127	\$ 5.3
Natural Resources, Utilities & Construction	\$ 6.7	30	\$ 1.5
Manufacturing	\$ 26.2	97	\$ 3.8
Durable Goods	\$ 8.7	48	\$ 1.7
Nondurable Goods	\$ 17.5	49	\$ 2.1
Service Producing Sector	\$ 101.3	1,051	\$ 35.0
Wholesale & Retail Trade	\$ 5.9	122	\$ 4.1
Transportation and Warehousing	\$ 33.1	333	\$ 12.1
Finance, Insurance, Real Estate and Leasing	\$ 6.5	29	\$ 1.1
Professional, Scientific & Technical Services	\$ 25.9	261	\$ 11.1
Information, Culture and Recreation	\$ 10.6	26	\$ 1.1
Accommodation and Food Services	\$ 8.9	158	\$ 2.3
Other Services & Government	\$ 10.4	122	\$ 3.2
Total Impacts	\$ 134.2	1,178	\$ 40.3
Indirect Business Taxes	\$ 7.6		
Income Taxes			\$ 6.9

The Goods Producing sector accounted for one-fourth of the total output impacts but due to the relatively high productivity of this sector only 11% of the total jobs and 13% of the income impacts. The total economic impacts are more evenly distributed throughout the Goods Producing sector than the direct impacts as the indirect impacts spread throughout the economy, especially among the natural resource and construction industries.

Figure 13 – Distribution of Total Employment Impact in Quebec, 2003



Within the Services Producing sector, the Transportation and Warehousing industry remains the dominant industry, accounting for approximately one-third 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.

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

In summary, the more than 170 cruise ship calls at the two Quebec ports during 2003 generated over 111,000 passenger and crew onshore arrivals (see **Table 38**). In addition, almost 54,000 Quebec residents purchased cruises from both Canada and elsewhere. Passengers, crew and the cruise lines directly spent \$71 million in the province during the year generating 667 full- and part-time jobs paying \$22 million in wage income. The direct spending also generated an estimated \$7 million in indirect business and income taxes.

Table 38 – Summary of Cruise Industry Economic Impacts in Quebec, 2003

Canadian and Foreign Passenger and Crew Onshore Arrivals (Millions)	111,773
Direct Economic Impacts	
Cruise Industry Direct Spending (\$ Millions)	\$ 71.3
Employment	667
Wage Income (\$ Millions)	\$ 22.1
Indirect Business and Income Taxes (\$ Millions)	\$ 7.0
Total Economic Impacts	
Total Output (\$ Millions)	\$ 134.2
Employment	1,178
Wage Income (\$ Millions)	\$ 40.3
Indirect Business and Income Taxes (\$ Millions)	\$ 14.5

As a result of the subsequent indirect spending by businesses and their employees, the cruise industry was responsible for the generation of an estimated \$134 million in total output, 1,178 jobs and \$40.3 million in wage income throughout Canada during 2003. Total indirect business and income taxes were an estimated \$14.5 million.

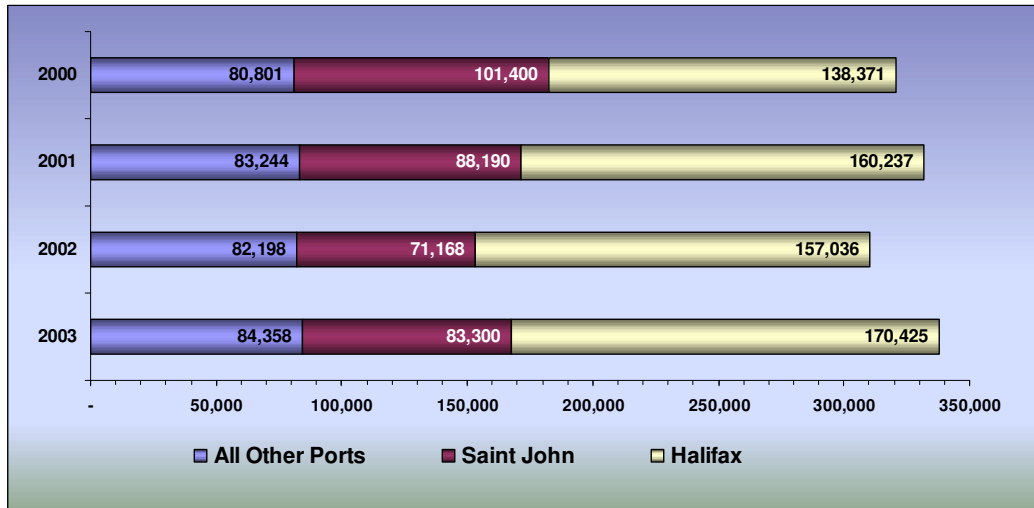
Overall, the economic impacts of the cruise industry in Quebec accounted for about 7% of the industry's impact throughout Canada. Relative to the national impacts, the economic impacts in Quebec were more highly concentrated in the Transportation and Warehousing industry. This reflects the high share of port-of-call passenger and crew visits. On the contrary, there was a proportionately smaller impact within the Manufacturing sector 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.

IV.C Atlantic Canada

IV.C.1 Background

During 2003 approximately 290 cruise ship calls were made at the ports of Atlantic Canada.³⁷ As shown in **Figure 14**, the Atlantic Canada ports handled just under 340,000 passengers during the cruise season, accounting for 22% of the Canadian cruise passenger traffic. All of these ports are ports-of-call for Canada/New England cruises which originate in the northeastern United States.³⁸

Figure 14 – Passenger Arrivals at the Ports of Atlantic Canada, 2000 - 2003



Source: Ports of Halifax and Saint John and the Atlantic Canada Cruise Association

Halifax is the largest of the Atlantic Canada ports having processed more than half of the passengers at the region’s ports. Since 2000, the ports of Atlantic Canada have processed over 300,000 passengers on an annual basis. The total fell slightly in 2002, but it rebounded by almost 9% in 2003.

In addition to cruise passenger arrivals, the CLIA reported that just over 9,000 residents of Atlantic Canada purchased cruises during 2003. This represented 2.3% of all Canadian residents who purchased cruises during the year.

³⁷ For the purposes of this study, the provinces of Atlantic Canada are: Nova Scotia, New Brunswick, Newfoundland and Labrador and Prince Edward Island.

³⁸ St. John’s, NF did process a few hundred embarkations and debarkations during 2003.

IV.C.2 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 in support of 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 will purchase a similar set of goods and services with a heavier concentration on retail goods.

During 2003, cruise-related spending totaled \$67.5 million in the provinces of Atlantic Canada, or 7% of cruise-related spending throughout Canada. As indicated in **Table 39**, expenditures by the cruise lines accounted for 47% of the total, passengers 44% and crew the remaining 9%. The industry impacts, which are discussed in the following sections, vary significantly across the three sources.

Table 39 – Direct Cruise-Related Expenditures in Atlantic Canada, 2003
Millions of Dollars

Sources	Spending	Share
Cruise Lines	\$ 31.5	47%
Passengers	\$ 29.9	44%
Crew	\$ 6.1	9%
Total	\$ 67.5	

IV.C.2.a Expenditures by Cruise Lines

Expense data collected through a survey of NWCA member lines showed that the cruise lines spent over \$31 million with businesses in Atlantic Canada during 2003. As shown in **Table 40**, the cruise lines spent an estimated \$2.8 million in administrative and professional expenses with businesses in the provinces of Atlantic Canada. This represented 9% of total cruise line expenditures in the provinces and primarily included expenditures for advertising and promotion and other professional consulting services.

Table 40 – Cruise Lines' Expenditures in Atlantic Canada by Category, 2003
Millions of Dollars

Category	Spending	Share
Administrative & Professional Expenses	\$ 2.8	9%
Operational Expenses	\$ 27.7	91%
Food and Beverages	\$ 10.9	35%
Rubber & Plastic Products	\$ 2.6	8%
Travel Agent Commissions	\$ 1.1	3%
Other Operating Expenses	\$ 14.1	45%
Total	\$ 31.5	

In addition, the cruise lines spent \$27.7 million on operational expenses with businesses in Atlantic Canada. Cruise lines spent almost \$11 million with Atlantic Canada businesses for food products. The cruise industry also spent \$2.6 with businesses in the region's rubber and plastics industry, primarily for personal and fire safety equipment. Another \$1.1 million was paid as commissions to travel agents in the provinces. Other operating expenses, totaling \$16.3 million, included expenditures for port charges and fees, port agents and other products for other onboard hotel operations.

IV.C.2.b Expenditures by Passengers

As shown in **Table 41**, cruise passengers spent almost \$30 million on goods and services throughout Atlantic Canada in 2003 for an average expenditure of almost \$92 per passenger. The Port of Halifax reported the highest per passenger expenditure figure of \$109.

Table 41 – Passenger Expenditures in Atlantic Canada by Category, 2003
Millions of Dollars

	Halifax	Saint John	Other Ports	Total
Passenger Onshore Visits	161,904	79,135	80,378	321,417
Lodging	\$ 0.0	\$ 0.0	*	\$ 0.0
Tours and Transportation	\$ 5.2	\$ 2.0	\$ 2.1	\$ 9.3
Food and Beverages	\$ 2.3	\$ 0.6	\$ 0.4	\$ 3.3
Other Retail	\$ 10.2	\$ 4.1	\$ 2.7	\$ 17.0
Total Spending	\$ 17.7	\$ 6.7	\$ 5.2	\$ 29.6
Average per Passenger	\$ 109.00	\$ 85.02	\$ 64.42	\$ 91.95

* Less than \$10,000

Retail goods, such as clothing and souvenirs, accounted for more than half (57%) of passenger expenditures. Expenditures for tours and food accounted for 31% and 11% of passenger expenditures, respectively. With only a relatively few embarkations generating limited lodging and dining expenditures in Atlantic Canada, the tour and retail components of passenger spending in Atlantic Canada each accounted for a larger share of passenger spending than at other Canadian ports.

IV.C.2.c Expenditures by Crew

As shown in **Table 42**, an estimated 98,315 crew arrived onshore at the ports of Atlantic Canada and spent \$6.1 million in 2003. The major difference between crew and passenger spending is that the average crew member with less time ashore spent about one-third less per visit. In addition, tours only accounted for 16% of crew expenditures while tours absorbed 31% of passenger expenditures.

Table 42 – Crew Expenditures in Atlantic Canada by Category, 2003
Millions of Dollars

	Halifax	Saint John	Other Ports	Total
Crew Onshore Arrivals	48,000	24,000	26,315	98,315
Tours and Transportation	\$ 0.5	\$ 0.2	\$ 0.3	\$ 1.0
Food and Beverages	\$ 0.7	\$ 0.3	\$ 0.3	\$ 1.3
Other Retail	\$ 1.9	\$ 1.0	\$ 0.9	\$ 3.8
Total Spending	\$ 3.1	\$ 1.5	\$ 1.5	\$ 6.1
Average per Crew Member	\$ 64.26	\$ 64.26	\$ 56.71	\$ 62.24

IV.C.2.d Other Passenger Expenditures

Other passenger expenditures consist of the airfare and travel insurance costs of cruise passengers that impact on Canadian economic activity. Only a limited number of passengers travel to and from the Atlantic provinces to embark on and/or debark from their cruises. We have estimated that this air travel related to cruises about \$100,000 in air travel expenditures that impacted the Atlantic Canada economy (see **Table 43**). In addition, the residents of Atlantic Canada purchased an estimated \$100,000 in travel insurance for their cruise.

Table 43 – Other Direct Passenger Expenditures in Atlantic Canada, 2003
Dollars

Category	Expenditures
Airfares Impacting the Quebec Economy	\$100,000
Cruise-Related Travel Insurance in Quebec	\$100,000
Total	\$200,000

IV.C.2.e Total Direct Expenditures by Industry

For purposes of the economic impact analysis, the \$67.5 million in direct cruise industry expenditures in Atlantic Canada were allocated to the appropriate industries. For example, 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 and Food Services industry. These are shown in **Table 44**.

As indicated in the table, the Transportation & Warehousing industry accounts for 30% of the cruise industry's direct expenditures in the region. This industry includes expenditures for cruise lines' purchases of port services, such as stevedoring, piloting and port agents, as well as trucking and warehousing. It also includes passenger and crew expenditures for air transportation, tours and other ground transportation.

Table 44 – Direct Cruise Industry Expenditures in Atlantic Canada, 2003
Millions of Dollars

Sectors	Expenditures	Share
Goods Producing Sector	\$ 25.2	37%
Agriculture, Utilities & Construction	\$ 3.3	5%
Manufacturing	\$ 21.9	32%
Service Producing Sector	\$ 37.3	56%
Wholesale & Retail Trade	\$ 6.3	9%
Transportation and Warehousing	\$ 19.9	30%
Professional, Scientific & Technical Services	\$ 2.8	4%
Accommodation and Food Services	\$ 5.8	9%
Other Services & Government	\$ 2.5	4%
Spending by Sector	\$ 62.5	93%
Indirect Business Taxes	\$ 5.0	7%
Total Direct Spending	\$ 67.5	

Businesses in the manufacturing sector received \$21.9 million in cruise industry expenditures, 32% of total direct expenditures. These expenditures consist 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 and rubber and plastic products which combined totaled more than \$16 million. The cruise lines also purchased additional supplies for their cruise operations, including fuel and other manufactured products.

The Professional & Technical Services industry received \$2.8 million in cruise industry expenditures in 2003. 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 allocated to three industries, Transportation & Warehousing, which we have already discussed, Wholesale & Retail Trade and Accommodation and Food Services. These later two sectors accounted for 18% of total direct expenditures and totaled \$12 million combined.

IV.C.3 Direct Employment, Wage and Tax Impacts

As shown in **Table 45**, the \$67.5 million in direct cruise industry expenditures generated direct employment of 530 full- and part-time employees³⁹ paying \$16.1 million in wage income. Combining indirect business and income taxes, the direct cruise-related spending in the province generated \$7.7 million in governmental tax payments.

The Goods Producing sector accounted for 37% of total direct expenditures, 23% of the total direct jobs and 27% of the wage income. With 70% of the direct expenditures

³⁹ These are equivalent to 335 full-time equivalent employees.

within the manufacturing sector, the food and beverage industry accounted for most of the manufacturing impacts.

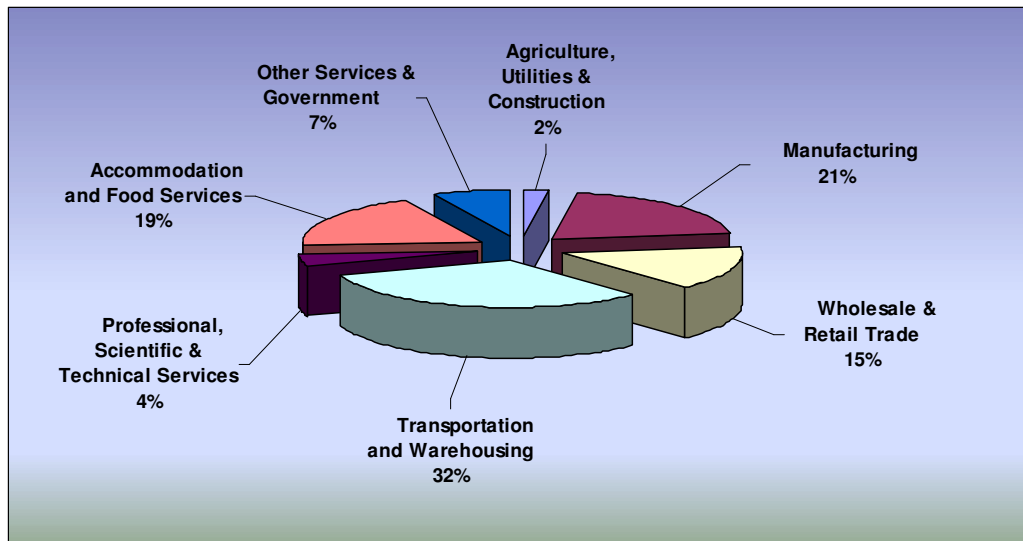
Table 45 – Direct Cruise Industry Economic Impacts in Atlantic Canada, 2003
Millions of Dollars

Sectors	Direct Spend	Jobs	Income
Goods Producing Sector	\$ 25.2	121	\$4.4
Agriculture, Utilities & Construction	\$ 3.3	12	\$0.6
Manufacturing	\$ 21.9	109	\$3.8
Service Producing Sector	\$ 37.3	409	\$11.7
Wholesale & Retail Trade	\$ 6.3	81	\$2.1
Transportation and Warehousing	\$ 19.9	169	\$6.3
Professional, Scientific & Technical Services	\$ 2.8	21	\$0.9
Accommodation and Food Services	\$ 5.8	101	\$1.4
Other Services & Government	\$ 2.5	37	\$1.0
Spending by Sector	\$ 62.5		
Indirect Business Taxes	\$ 5.0		
Total Direct Impacts	\$ 67.5	530	\$ 16.1
Income Taxes			\$2.7

With passenger and crew spending accounting for 53% of total direct spending and spending for transportation services accounting for 30% of the direct expenditures, the Service Producing sector accounted for 55% of the direct spending, 77% of the direct jobs and 73% of the wage income. The Transportation & Warehousing industry accounted for almost 50 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.

The direct impacts in the Professional, Scientific and Technical Services industry accounted for 8% of the direct spending and 5% of the employment impacts, but due to the relatively high wages in this sector, it accounted for 8% 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 and Food Services industries, the cruise industry generated \$12.1 million in direct spending, 182 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 within the Retail Trade and Accommodation and Food Services industries, these two industries accounted for 30% of the direct income in the Service Producing sector, but 45% of the direct jobs and 32% of the direct spending.

Figure 15 – Distribution of Direct Employment Impact in Atlantic Canada, 2003

IV.C.4 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 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 aggregate input/output table for Atlantic Canada was used to estimate the indirect impacts.⁴⁰ The input-output table reflects the inter-industry links among industries in the Atlantic Canada 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 Atlantic Canada economy. As discussed in the Methodology section, the direct expenditures were adjusted for transportation and trade margins as well as indirect business taxes prior to estimating the indirect impacts.

As shown in **Table 46**, the input-output analysis indicated that the \$67.5 million in direct cruise industry expenditures generated \$130 million in total (direct plus indirect) output, just over 1,000 full- and part-time jobs⁴¹ and \$32.5 million in income. In addition, the industry generated an estimated \$7.9 million in indirect business taxes and \$5.5 million in income taxes.

⁴⁰ Statistics Canada, *The Input-Output Structure of the Canadian Economy, 1999-2000*. The tables for Nova Scotia and New Brunswick were aggregated for this analysis. Combined, these two provinces accounted for approximately 80% of the cruise-related direct expenditures in the region.

⁴¹ The passenger spending figures for Atlantic Canada used in this analysis were provided by the Ports of Halifax, Saint John and St. John's. Passenger expenditure data for the remaining Atlantic Canada ports were obtained from the previously referenced Atlantic Canada Cruise Association report.

The Goods Producing sector accounted for 46% of the total output impacts but due to the relatively high productivity of this sector only 24% of the total jobs and 30% of the income impacts. The total economic impacts are more evenly distributed throughout the Goods Producing sector than the direct impacts as the indirect impacts spread throughout the economy, especially among the natural resource and construction industries.

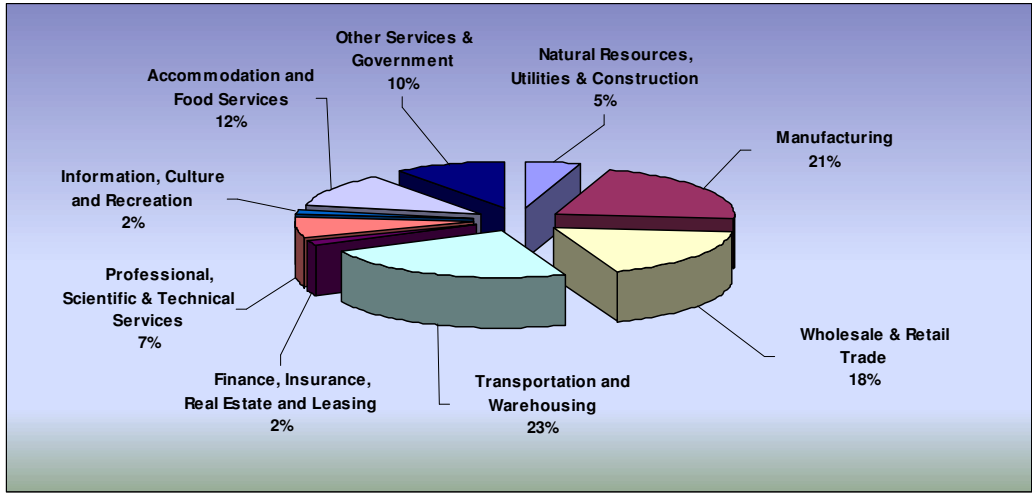
Table 46 – Total Cruise Industry Economic Impacts in Atlantic Canada, 2003
Millions of Dollars

Sectors	Output	Jobs	Income
Goods Producing Sector	\$ 60.1	266	\$ 9.9
Natural Resources, Utilities & Construction	\$ 13.1	51	\$ 2.1
Manufacturing	\$ 47.0	215	\$ 7.8
Durable Goods	\$ 7.3	44	\$ 1.8
Nondurable Goods	\$ 39.7	171	\$ 6.0
Service Producing Sector	\$ 70.1	738	\$ 22.6
Wholesale & Retail Trade	\$ 10.3	177	\$ 5.5
Transportation and Warehousing	\$ 26.3	237	\$ 8.8
Finance, Insurance, Real Estate and Leasing	\$ 5.5	19	\$ 0.8
Professional, Scientific & Technical Services	\$ 8.1	71	\$ 2.9
Information, Culture and Recreation	\$ 4.4	16	\$ 0.6
Accommodation and Food Services	\$ 6.7	117	\$ 1.6
Other Services & Government	\$ 8.8	101	\$ 2.4
Total	\$ 130.2	1,004	\$ 32.5
Indirect Business Taxes	\$ 7.9		
Income Taxes			\$ 5.5

Within the Services Producing sector, the Transportation and Warehousing industry remains the dominant industry, accounting for more than one-third of the total economic impact 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 and Food Services industries is significantly less than their share of the direct impacts. This is due to the fact that the indirect impacts are more concentrated on business-to-business activity than travel and tourism related activity.

Figure 16 – Distribution of Total Employment Impact in Atlantic Canada, 2003



In summary, the 290 cruise ship calls at the Atlantic Canada ports during 2003 generated just under 420,000 passenger and crew onshore arrivals (see **Table 47**). In addition, over 9,000 Atlantic Canada residents purchased cruises from both Canada and elsewhere. Passengers, crew and the cruise lines directly spent \$67.5 million in the region during the year generating 530 full- and part-time jobs paying \$16.1 million in wage income. The direct spending also generated an estimated \$7.7 million in indirect business and income taxes.

As a result of the subsequent indirect spending by businesses and their employees, the cruise industry was responsible for the generation of an estimated \$130 million in total output, just over 1,000 jobs and \$32.6 million in wage income throughout Canada during 2003. Total indirect business and income taxes were an estimated \$13.4 million.

Table 47 – Summary of Cruise Industry Economic Impacts in Atlantic Canada, 2003

Canadian and Foreign Passenger and Crew Onshore Arrivals (Millions)	419,732
Direct Economic Impacts	
Cruise Industry Direct Spending (\$ Millions)	\$ 67.5
Employment	530
Wage Income (\$ Millions)	\$ 16.1
Indirect Business and Income Taxes (\$ Millions)	\$ 7.7
Total Economic Impacts	
Total Output (\$ Millions)	\$ 130.2
Employment	1,004
Wage Income (\$ Millions)	\$ 32.6
Indirect Business and Income Taxes (\$ Millions)	\$ 13.4

Overall, the economic impacts of the cruise industry in Atlantic Canada accounted for about 7% of the industry's impact throughout Canada. Relative to the national impacts, the economic impacts in Atlantic Canada were more highly concentrated in the Trade and Manufacturing industries. This reflects the high share of port-of-call passenger and crew visits and the large volume of food purchases by the cruise lines. 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.



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.