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THE ECONOMIC IMPACTS OF THE CRUISE INDUSTRY IN ALASKA, 2003

FINAL REPORT

PREPARED FOR:
NORTH WEST CRUISESHIP ASSOCIATION



Research-Based Consulting

Juneau
Anchorage

SEPTEMBER 2004

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EXECUTIVE SUMMARY

The cruise industry has become a major economic force in Alaska, bringing nearly 780,000 visitors to the state in 2003 alone. To better understand how the cruise ship industry affects the Alaska economy, the North West CruiseShip Association (NWCA) contracted with McDowell Group, an Alaska research and consulting firm, to prepare a study of the impacts of the Alaska cruise industry on the state during 2003.¹ Impacts were also summarized for Southeast, Southcentral and Interior/North regions of Alaska (see map). Cruise industry impacts are expressed in terms of spending, employment and payroll. Key findings are presented below.

Cruise Passenger and Crew Member Spending

- The average out-of-pocket spending per passenger in 2003 was \$511, for total spending of \$393 million. This does not include airfare to and from the state, or any trip components included in the cruise or cruisetour package (such as hotel, rail, and bus components).
- Cruise passengers make the bulk of their out-of-pocket purchases in Southeast Alaska, where they spend the most time. It is also where they have the most opportunity to make independent purchases on tours, retail items, and meals.
- Approximately 20,000 crew members spent an estimated \$13 million in Alaska in 2003, nearly all of it in Southeast Alaska.

Cruise Passenger Spending by Region, 2003

Region	Total Spending	Percent of Total
Southeast	\$334 million	85%
Southcentral	34 million	9
Interior/North	12 million	3
Unattributed*	13 million	3
Total	\$393 million	100%

*Unattributed spending includes spending that cannot be obviously attributed to a region.

Cruise Line Spending on Goods and Services

- Cruise lines and their subsidiaries purchased approximately \$149 million in goods and services from Alaska businesses and organizations during 2003. Included in this figure is spending on operational expenses as well as capital projects. According to cruise line data, approximately \$35 million of the \$149 million is attributable to capital projects. Direct payroll is not included.
- Southcentral captured about half of cruise line spending at \$76 million. Southeast and the Interior/North each captured about a quarter of spending at \$39 million and \$34 million, respectively.
- The high level of spending in Southcentral reflects, in part, cruise line subsidiary operations such as lodges, railcars, and other land tour components, many of which are based and/or supplied by businesses located in that area.

¹ This study considers impacts from NWCA member lines only, which represent 95 percent of the Alaska cruise market.

Cruise Line Direct Purchases of Goods and Services by Region, 2003

Region	Total Spending	Percent of Total
Southcentral	\$76 million	51%
Southeast	39 million	26
Interior/North	34 million	23
Total	\$149 million	100%

Total Direct Cruise Industry Spending

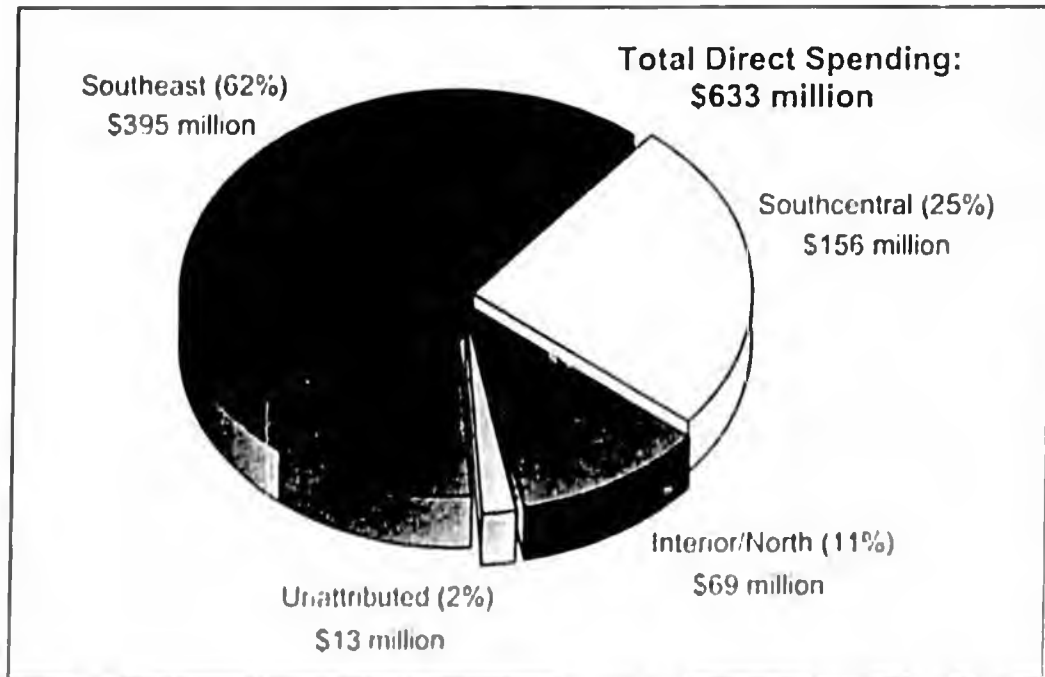
- Cruise lines, crew members, and passengers directly accounted for \$633 million in spending in Alaska in 2003. This figure includes \$393 million in passenger spending, \$149 in cruise line spending on goods and services, \$46 million in cruise line payroll spending, \$32 million in passenger airfare, and \$13 million in crew member spending.

Total Direct Cruise Industry Spending, 2003

Region	Total Spending
Cruise passenger spending	\$393 million
Cruise line spending on goods and services	149 million
Cruise line payroll	46 million
Cruise passenger airfare ²	32 million
Crew member spending	13 million
Total	\$633 million

- The following table shows the direct spending by cruise lines (purchases and payroll), passengers (out-of-pocket spending and airfare), and crew members, by region.

**Total Direct Spending by Cruise Lines, Passengers, and Crew Members
By Region, 2003**



² Cruise passenger airfare refers to the portion of passenger airfare that is estimated to stay in the state of Alaska.

Cruise Industry Employment and Payroll

- In 2003, the cruise industry directly employed an average of 1,630 workers, with peak employment of 3,130. Direct payroll accounted for \$46 million. These figures do not include jobs created by passenger spending or by cruise line spending with Alaska businesses.
- Counting both direct and indirect employment and payroll, the cruise industry generated 12,430 jobs (annual-equivalent) in 2003. Cruise industry-related employment peaked at approximately 21,000 jobs during the summer. The industry accounted for \$384 million in total payroll.
- The cruise industry has the greatest impact in Southeast, where it accounts for 7,300 jobs and \$212 million in payroll. These figures represent 14 percent of all employment and 12 percent of all payroll in Southeast.

Total Statewide Employment and Payroll Impacts of the Cruise Industry, 2003 (Including Direct, Indirect, and Induced Impacts)

	Jobs	Payroll (\$ millions)
Statewide		
Cruise line employment and spending	4,830	\$152.7
Passenger and crew spending	7,600	231.4
Total	12,430	384.1
Southeast		
Cruise line employment and spending	800	\$28.4
Passenger and crew spending	6,500	183.6
Total	7,300	212.0
Southcentral		
Cruise line employment and spending	1,970	\$81.5
Passenger and crew spending	900	37.3
Total	2,870	118.8
Interior/North		
Cruise line employment and spending	1,960	\$42.6
Passenger and crew spending	300	10.6
Total	2,260	53.2

Note: Regional totals may not add up to statewide totals due to rounding.

Cruise Industry Impacts on State and Local Governments

- At the municipal level, it is estimated that local governments earned over \$30 million from the cruise industry in 2003, including \$14 million in sales tax from passenger and crew spending.

Statewide Municipal Revenues from the Cruise Industry, 2003

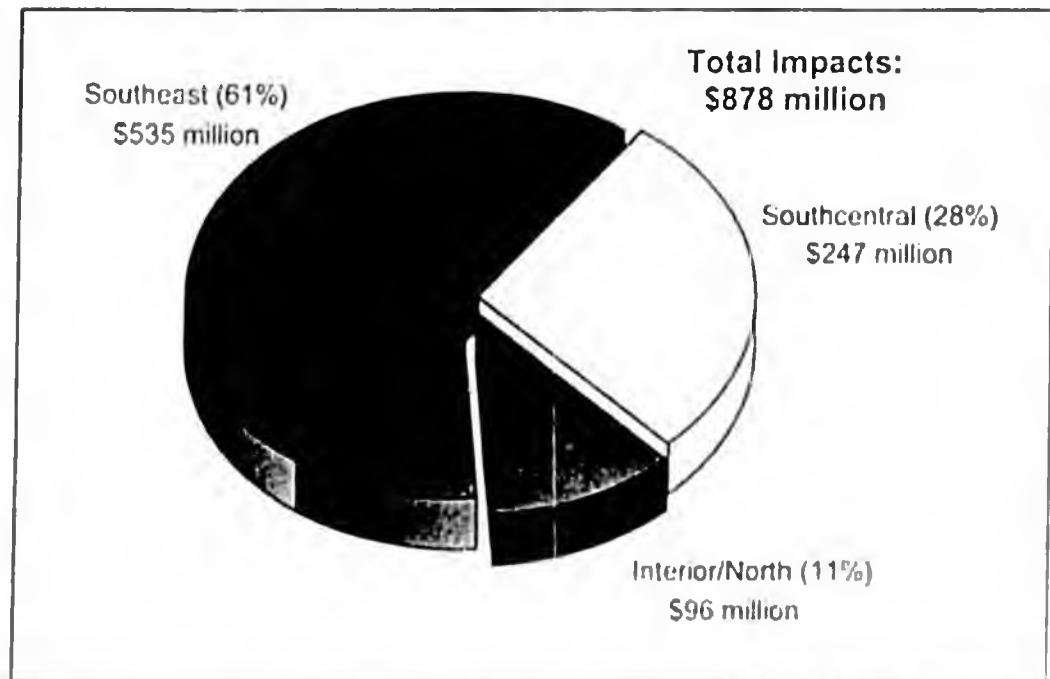
	Total Revenues
Passenger/crew sales tax revenues	\$13,906,000
Cruise line sales tax revenues	1,500,000
Cruise line dockage/moorage fees	7,834,000
Bed tax revenues	4,489,000
Property tax revenues	3,000,000
Total	\$30,729,000

- All available data suggests that the cruise industry provides an overall net benefit to local governments, with cruise-related revenues significantly exceeding cruise-related expenses.
- Though it is not possible to measure all state government costs and revenues associated with the cruise industry, available information suggests that revenues exceed costs.
- Based on interviews with state departments and cruise industry data, it is estimated that in 2003, \$2.1 million was generated by the cruise industry in revenue to the state, with \$775,000 in verified program costs attributed to the cruise industry.

Total Spending Impact

- Statewide, total spending attributable to the cruise industry was approximately \$878 million in 2003. This is a measure of all the direct, indirect, and induced spending in support of the industry, its passengers, and its labor force. Direct cruise line spending, passenger spending, crew member spending, cruise line payroll, and all associated indirect and induced spending and payroll are included in this number. This is a total measure of all dollars moving through the Alaska economy as a result of the cruise industry.
- Below is a chart that shows how total spending activity (including direct, indirect, and induced impacts) is spread out regionally in Alaska.

**Total Spending Impact of the Cruise Industry by Region, 2003
(Including Direct, Indirect, and Induced Impacts)**



Scope of Work

Over the last decade, the cruise ship industry has clearly become a major economic force in the state of Alaska. Like the visitor industry as a whole, it is a difficult sector to analyze. The cruise industry exists within a wide variety of economic sectors: services, amusement/recreation, hotel/lodging, and transportation, among others. To better understand how the industry affects the Alaska economy, the North West CruiseShip Association (NWCA) contracted with McDowell Group, an Alaska research and consulting firm, to prepare a study of the impacts of the Alaska cruise industry on the state during 2003.

The 2003 Alaska large cruise ship market was almost entirely comprised of eight cruise lines, all members of NWCA: Carnival Cruise Lines, Celebrity Cruises, Crystal Cruises, Holland America, Norwegian Cruise Line, Princess Cruises, Royal Caribbean International, and Radisson Seven Seas Cruises.³ Passengers from these lines represented over 98 percent of the 2003 Alaska cruise market. This study examines the impacts of these lines only, not small cruise ship lines, or other non-NWCA member lines.

The study includes:

- Alaska Cruise Industry Profile
- Cruise Industry-Related Spending in Alaska
 - Cruise line spending
 - Cruise passenger spending
 - Cruise industry-related employment and payroll
- Cruise Industry Role in the Alaska and Regional Economies
- Cruise Industry Impacts on State and Local Government Revenues

Methodology

Cruise Line Purchases of Goods and Services

The study team received 2003 purchasing data, by vendor and by location, from seven of the eight NWCA member lines operating in Alaska in 2003. (These seven lines represented 98 percent of all passengers in 2003.) The data included all purchases by cruise lines in support of their operations, as well as subsidiary operations, over the course of the year. Capital expenditures are also included in the data.

For this report, the study team only analyzed expenditure data for purchases made with Alaska businesses. The data was reviewed and categorized into sectors (such as construction, transportation, and government) in order to facilitate the analysis of indirect economic impacts. Purchasing data was also categorized by community and region.

³ Two more cruise lines, Seabourn Cruise Line and World Explorer Cruises, are members of NWCA but did not send any ships to Alaska in 2003.

The purchasing list was further sorted to avoid duplication. Payments to tour operators were eliminated where those expenditures were included in passenger spending data.

The cruise lines also provided information on their charitable donations (both in-kind and cash) and payments made to local membership organizations.

Cruise Passenger and Crew Spending

Cruise passenger spending estimates were derived primarily from McDowell Group's biennial, proprietary visitor research program, the *Alaska Travelers Survey*. In a 2003 exit survey of cruise passengers, respondents were asked to estimate how much their party spent on their entire Alaska trip, not including their cruise or cruisetour package or airfare. Passengers were also asked to estimate their expenditures in several specific communities where the surveys were conducted.

It is important to note that the *Alaska Travelers Survey* expenditure data does not include any trip components paid for in the cruise or cruisetour package - for example, hotel stays, meals, bus transfers, and train transportation. These purchases are accounted for in the spending by cruise lines. The passenger expenditure data *does* include spending on shore excursions, even if the excursions were purchased through the cruise line before the cruise.

For a more detailed explanation of cruise passenger spending estimates, please refer to page 16.

To estimate 2003 crew member spending, the study team drew up on data from a 1995 McDowell Group study estimating crew spending for Juneau and Sitka, McDowell Group's 1999 Southeast cruise industry impacts study, and interviews with local retailers and crew members.

Cruise Industry Employment and Payroll

Detailed employment and payroll data for 2003 was obtained directly from the cruise lines. McDowell Group also received monthly employment data for all cruise industry-owned operations in Alaska (including land tour and hotel operations) from the Alaska Department of Labor and Workforce Development.

The study team used IMPLAN econometric models for Alaska to estimate indirect (and induced) impacts from cruise industry activity at the regional and statewide level. To verify the relevancy of the IMPLAN model, the study team used known direct expenditures provided by the cruise industry to evaluate the relationships between cruise-related activities and other businesses in Alaska. The direct, indirect, and induced impacts on output, employment, and payroll were aggregated to obtain total impact.

Impacts on State and Local Governments

At the state budget level, both revenues and expenses related to the cruise industry were analyzed for the report. The budgets of each individual state department were assessed for links to the cruise industry. Department, division, and section directors were interviewed to determine specific expenses and revenues from cruise passenger activity. This information was supplemented by McDowell Group visitor data - for example, cruise passenger sportfishing participation data was used to determine fishing license revenue, and cruisetour traffic data was used to determine airport usage by cruise passengers. Cruise line vendor data provided further information on revenues to the state budget.

This level of effort was not possible at the local level, considering the large number of communities across the state affected by the cruise industry. However, findings from the McDowell Group's 1997 study *Cruise Industry Impacts on Local Governments in Southeast Alaska* provide valuable insight into how the cruise industry affects municipal budgets in port communities.

Using current data, the study team also estimated 2003 municipal revenues, including sales tax revenues, docking and moorage fees, bed tax revenues, and property tax revenues. The data is presented at the regional level where possible.

Note on Previous Cruise Industry Economic Impact Analysis

The cruise industry impact numbers presented in this study differ from another recent analysis of cruise industry impacts. In *The Contribution of the North American Cruise Industry to the U.S. Economy in 2003*, a report prepared for the International Council of Cruise Lines (ICCL), cruise industry activity in Alaska in 2003 included \$694 million in direct spending and 13,650 in total employment. Methodological differences account for relatively minor variations between numbers presented in the ICCL report and this study.

ALASKA CRUISE INDUSTRY PROFILE

Overview of the Cruise Industry in Alaska

Alaska's Role in the Global Cruise Industry

Alaska captured 6.7 percent of the worldwide cruise market in 2003.⁴ It is the third most popular cruise destination in the world, after the Caribbean/Bahamas at 51.5 percent and the Mediterranean at 15.0 percent. Alaska's share has declined just slightly from 2002 when it captured 7.0 percent of the market, following market shares of 5.5 percent in 2000 and 6.6 percent in 2001.

The worldwide cruise industry has expanded at an average rate of 8 percent for more than two decades, and continued growth is forecasted. According to the Cruise Industry News Annual, "Only 15 percent of the North American population has ever taken a cruise... Moreover, cruising is said to account for only 3 percent of the North American leisure travel market. That leaves a huge potential of cruise passengers among all those who take vacations."⁵

Cruise Lines Operating in Alaska

The 2003 Alaska large cruise ship market was almost entirely comprised of eight cruise lines, all members of the North West CruiseShip Association (NWCA).⁶

- Carnival Cruise Lines
- Celebrity Cruises
- Crystal Cruises
- Holland America
- Norwegian Cruise Line
- Princess Cruises
- Royal Caribbean International
- Radisson Seven Seas Cruises

Together, these eight cruise lines sent a total of 26 ships to Alaska in 2003, on nearly 450 individual trips. Several of these cruise lines are affiliated with one another. Holland America is a subsidiary of Carnival Corporation; Princess was recently acquired by Carnival Corporation; and Royal Caribbean International and Celebrity Cruises are owned by one parent company, Royal Caribbean Cruises Ltd.

Average large ship capacity for the 2003 season was 1,700 passengers, with individual ship capacities ranging from 700 to 2,600. Average ship capacity has grown steadily over the last decade as new, larger ships have been introduced to the market.

⁴ *Cruise Industry News Annual 2003*, published by Cruise Industry News, 2003.

⁵ *Cruise Industry News Annual 2003*.

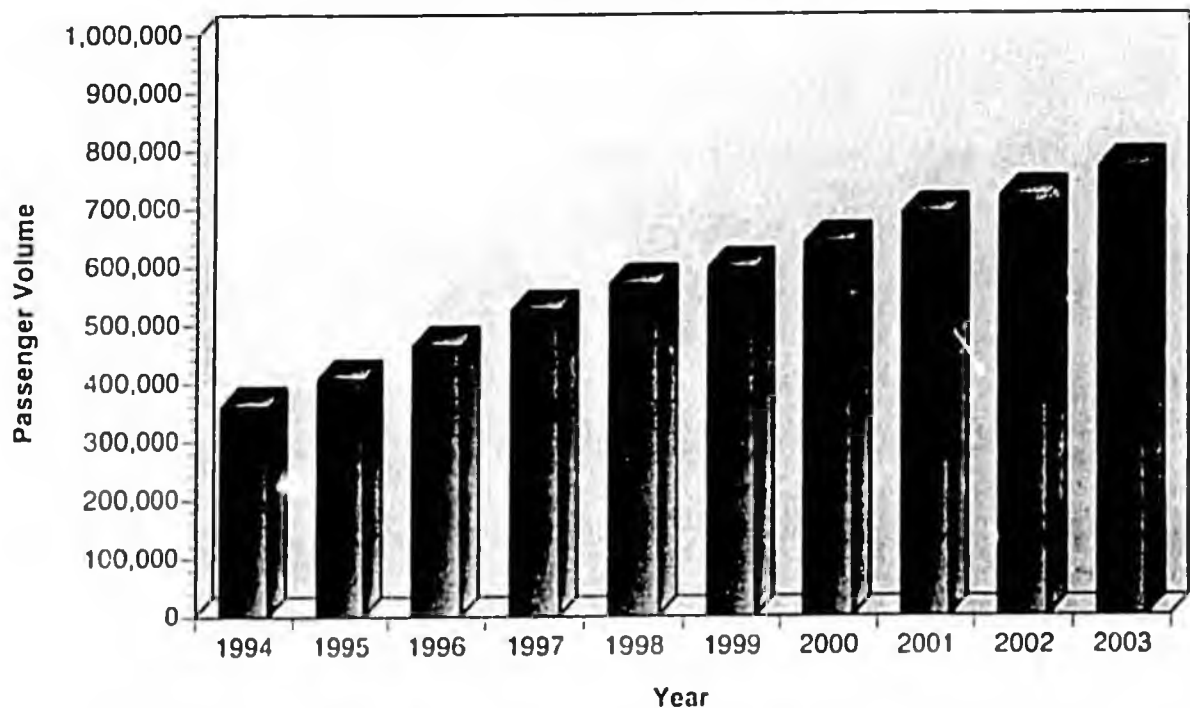
⁶ Two more cruise lines, Seabourn Cruise Line and World Explorer Cruises, are members of NWCA but did not send any ships to Alaska in 2003.

Cruise Passenger Volume

Cruise passenger volume to Alaska has grown dramatically over the last decade, increasing by 120 percent since 1994. In 2003, 780,000 people cruised to and/or from Alaska, an 8 percent increase over the previous year. The vast majority (98 percent) traveled on large cruise ships, which have a capacity of 250 passengers or more.

Industry projections indicate continued growth for the Alaska cruise market. A recent study conducted for the City of Ketchikan predicted that cruise passenger demand would reach 1.3 million passengers by 2015.⁷ This estimate reflects an average annual growth rate of 5 percent.

Chart 1
Alaska Cruise Passenger Volume, 1994-2003



Source: Cruise Line Agencies

Alaska's primary cruise ship ports are Juneau, Ketchikan and Skagway. Over 80 percent of the total market visits these three ports, and their market share changes little from year to year. Other ports experience more fluctuation in traffic and market share, as cruise lines experiment with different itineraries, and as new ports come onto the market (such as Icy Strait Point near Hoonah). Table 1, below, shows the 2003 passenger volume and market share by Alaska port; Table 2 shows the trend in cruise passenger volumes by Alaska ports for the past decade.

⁷ Port and Harbor Facility Development Plan, Phase I Inventory and Needs Assessment Report, KPEF Consulting, City of Ketchikan, 2003

Table 1
Cruise Passenger Volume and Market Share by Port, 2003

Port of Call	Volume (# of passengers)	Market Share of Total Volume (%)
Total Volume	780,000	-
Juneau	777,000	99.5%
Ketchikan	770,700	98.7
Skagway	628,000	80.4
Seward	293,200	37.5
Sitka	256,800	32.9
Wrangell	39,100	5.0
Haines*	28,500	3.6
Valdez	17,000	2.2

Note: These figures include both large and small cruise ship passengers.

* Does not include Skagway passengers who visit Haines on shore excursions

Source: Cruise Line Agencies

Table 2
Cruise Passenger Volume by Alaska Ports, 1994 – 2003

Location	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Juneau	360,000	407,000	464,000	525,000	569,000	596,000	640,000	690,000	740,000	777,000
Ketchikan	379,600	380,000	426,200	480,700	531,100	565,000	572,500	665,200	701,000	770,700
Skagway	202,900	252,800	268,400	435,600	486,600	515,000	563,700	610,100	619,600	628,000
Seward	158,000	137,000	230,000	208,900	280,500	280,200	274,700	337,200	316,600	293,200
Sitka	200,000	221,000	252,300	183,600	163,400	168,000	156,000	206,300	249,500	256,800
Wrangell	n/a	n/a	24,400	8,300	11,200	12,000	6,700	4,800	6,000	39,100
Haines	43,200	64,700	85,200	132,300	104,500	159,700	187,400	40,200	82,000	28,500

Note: These figures include both large and small cruise ship passengers.

Source: Cruise Line Agencies.

Glacier Bay is the most popular geographical point of interest, followed by the Hubbard Glacier, College Fjord, Misty Fjords, and Prince William Sound. Ports not specified in the above table include many communities that are visited only by small ships, such as Elfin Cove, Petersburg, Metlakatla, Dutch Harbor, Homer, and Nome.

Cruise Industry Investments in Alaska

The cruise industry has a substantial amount of investment in property and facilities throughout Alaska. These include hotels/lodges, rail cars, motorcoaches, offices, and maintenance shops. Most assets are owned by the three cruise lines with cruisetour operations: Princess (Princess Tours/Royal Highway Tours), Holland America (Holland America Line Westours/Gray Line), and Royal Caribbean/Celebrity (Royal Celebrity Tours). Cumulatively, these three lines have spent nearly \$560 million in capital projects in Alaska since they began operations.

Hotels represent the cruise industry's most substantial assets in the state. Two cruise lines own and/or operate hotels in Alaska: Princess and Holland America. The following table lists the properties and their capacity, by cruise line.

Some cruise line holdings serve other markets besides cruise passengers, such as the Westmark Anchorage hotel. Others, like Princess' hotels in Denali, serve almost exclusively cruise passengers.

Table 3
Cruise Line-Owned (or Operated) Hotels in Alaska

	Location	Capacity
Princess		
Fairbanks Princess	Fairbanks	325 rooms
Denali Princess	Denali	436 rooms
McKinley Princess	Talkeetna	334 rooms
Kenai Princess	Cooper Landing	86 rooms
Copper River Princess	Copper Center	85 rooms
Holland America		
Westmark Anchorage	Anchorage	198 rooms
Westmark Fairbanks Hotel	Fairbanks	136 rooms (400 as of 5/04)
Westmark Tok	Tok	92 rooms
Westmark Denali Sourdough Cabins	Denali	45 cabins
Westmark Inn Skagway	Skagway	151 rooms
Westmark Baranof Juneau	Juneau	196 rooms

Note: This table does not include properties managed but not owned by cruise line subsidiaries, such as the Westmark Shee Atika Hotel and the Westmark Totem Square Inn, both in Sitka.

Examining the number of hotel rooms by region, of the 2,084 total room capacity available in 2003, 1,119 rooms are located in the Interior/North, 618 rooms in Southcentral, and 347 rooms in Southeast. The map below shows where cruise line-associated hotel properties are located in Alaska.



Alaska Cruise Itineraries and Tour Packages

Cruise routes and itineraries vary among and within cruise lines, although there are general similarities. Cruises tend to supplement port calls with visits to geographical points of interest such as Tracy Arm and Glacier Bay. Round-trip itineraries usually use Vancouver or Seattle as the embarkation/disembarkation port. "Cross-gulf" itineraries use these same ports as a base, but also sail across the Gulf of Alaska, traveling between Vancouver/Seattle and Seward. (In 2004, Whittier will become an additional Southcentral port.) Passengers on cross-gulf itineraries cruise one-way and fly one-way. In 2003, round-trip cruises accounted for approximately 60 percent of all traffic, cross-gulf 40 percent. Alaska cruises generally last seven days, although some variations exist in cruise length.

Passengers on cross-gulf itineraries can choose from an array of land tour itineraries that last anywhere from three to ten days. Cruisetours spread out passengers, who embark and disembark their ships in large volumes, to different properties and locations – airplanes, hotels, buses, and railcars clearly have much lower capacities than cruise ships. As a result, there are many variations in tour length, accommodations, and transportation used to get from place to place.

Land tours usually consist of a rail segment and overnights in Fairbanks, Denali, and Anchorage. Other cruisetour destinations include Girdwood, the Kenai Peninsula, Talkeetna, Glennallen, and the Yukon. Cruise passengers can also choose optional add-on trips to such destinations as Nome, Prudhoe Bay and the Arctic Circle. In 2003, about 15 percent of all cruise passengers participated in a land tour.

Tour participation in Alaska is extremely high compared to other cruise destinations. Between 80 and 90 percent of all passengers purchase at least one tour through their cruise line. Recent years have seen an increase in the demand for more active, adventure-oriented tour options. In response, tour operators have created a wide array of adventure tours, including hiking on a glacier, dog sledding, scuba diving, kayaking, canoeing, river rafting, and driving a Jeep on mountain roads.

The table below shows the percentage of cruise visitors that participated in each type of tour during their Alaska vacation in 2003. The most popular tour in Alaska is the White Pass and Yukon Route train in Skagway. City tours are also very popular, followed by glacier tours, day cruises, and wildlife viewing tours.

(see table next page)

Table 4
Cruise Passenger Tour Participation
Alaska Travelers Survey^c, Cruise Passengers, Summer 2003

	Total
White Pass/Yukon Route train	47%
City tours	39
Glacier tours	29
Day cruises	27
Wildlife viewing tours	25
Native culture tours/activities	16
Museums/historical sites	14
Helicopter flightseeing	10
Tramway/gondola	10
Lumberjack show	10
Gold panning/gold mine tours	10
Small plane flightseeing	9
Salmon bake	9
Hiking/nature walk	8
City walking tours	6
Charter fishing	6
Rafting	4
Dog sledding	3
Kayaking	3
Canoeing	3
Bear viewing	3
Horseback riding	2
Bike tours	2
Other tours/excursions	9

Cruise Passenger Profile

The following section includes data from the McDowell Group's ongoing, proprietary research program: *Alaska Travelers Survey^c*. In addition to 2,000 surveys of independent visitors, over 1,500 cruise visitors were surveyed at cruise ship docks in Ketchikan and Juneau and at the Fairbanks and Anchorage airports in the summer of 2003. The cruise sample included passengers on large cruise ships only.

Demographic Characteristics

Alaska cruise passengers are predominantly from the United States (84 percent). The Western US is the largest market, representing one-third of all passengers, followed by the South, Mid-west, and the East. Canadians represent about one in ten passengers.

Cruise passengers tend to travel in 2-person parties, showing an average party size of 2.6. They report an average age of 56 years old. The average age among cruise passengers continues to trend downward gradually. Over half of cruise passengers have a college degree. Of passengers who reported their household income, 60 percent earned over \$75,000 annually.

Table 5
Demographics
Alaska Travelers Survey^o, Cruise Passengers, Summer 2003

Total	
Average age	55.8 years
Average party size	2.6 people
Household income > \$75,000	60%
Origin	
Western U.S.	34%
Southern U.S.	26
Midwestern U.S.	14
Eastern U.S.	12
Canada	9
Other International	5
Gender	
Male	43%
Female	57%
Educational Attainment	
High school graduate	78%
College graduate	54%

CRUISE INDUSTRY-RELATED SPENDING IN ALASKA

Money spent by cruise lines, its subsidiaries, and passengers affect the Alaska economy both directly and indirectly. Direct impacts include:

- Expenditures for goods and services
- Payroll (shore-side employees only)
- Government revenue
- Cruise passenger spending
- Crew member spending

Indirect and induced spending is sometimes referred to as a "multiplier effect." Cruise industry employees and passengers spend money with Alaska businesses; those businesses employ others and purchase goods and services; this in turn generates additional jobs and expenditures.

Cruise Line Purchases of Goods and Services

Cruise Line Purchases by Sector

Cruise lines and their subsidiaries spent approximately \$149 million on goods and services from Alaska businesses during 2003. This amount includes approximately \$35 million in spending on capital projects; it does not include cruise line payroll. Spending data is derived from purchasing information provided by NWCA member lines. The data was sorted to eliminate spending outside of Alaska, as well as payments to four vendors accounted for under passenger spending.

Total Alaska expenditures are categorized by the industry sector in the table below. The top five sectors affected by cruise line direct purchases of goods and services were: hotels and accommodations (\$42 million); construction (\$29 million); transportation, including air, rail, ground and water (\$24 million); government fees and taxes (\$19 million); and wholesale and retail trade (\$12 million). NWCA member lines purchased goods and services from more than 1,770 Alaska businesses, organizations or government entities in 2003.

Table 6
Cruise Line Direct Purchases of Goods and Services by Sector, 2003

Sector	Total Expenditures (\$ million)	Percent of Total
Accommodations	\$41.9	28.1%
Construction	28.8	19.3
Transportation*	23.9	16.0
Local, state, and federal government	18.5	12.4
Trade (retail and wholesale)	12.3	8.3
Professional and business services	12.0	8.1
All other sectors**	11.7	7.8
Total	\$149.1	100%

* Expenditures with the Alaska Railroad are included under transportation, not state government

**Other sectors include utilities, health services, financial activities and manufacturing

Source: NWCA member lines

Cruise Line Purchases by Region

The \$149 million spent on goods and services by cruise lines almost entirely occurs in three regions: Southcentral, Southeast, and Interior/North (see map below). When categorizing spending by region, just over half (51 percent; \$76 million) occurs in Southcentral Alaska, a quarter (26 percent; \$39 million) in Southeast Alaska, and another quarter (23 percent; \$34 million) in Interior/North Alaska.

These figures reflect, in part, expenditures related to cruise line subsidiary operations such as lodges, railcars, and other land tour components, which are based primarily in Southcentral. In addition, purchasing data reflects the location of the company's headquarters – not necessarily where the service was provided. Of the 1,770 Alaska businesses, organizations or government entities from which purchases were made, 820 were based in Southcentral Alaska, 480 in Interior/North Alaska, and 470 in Southeast Alaska.

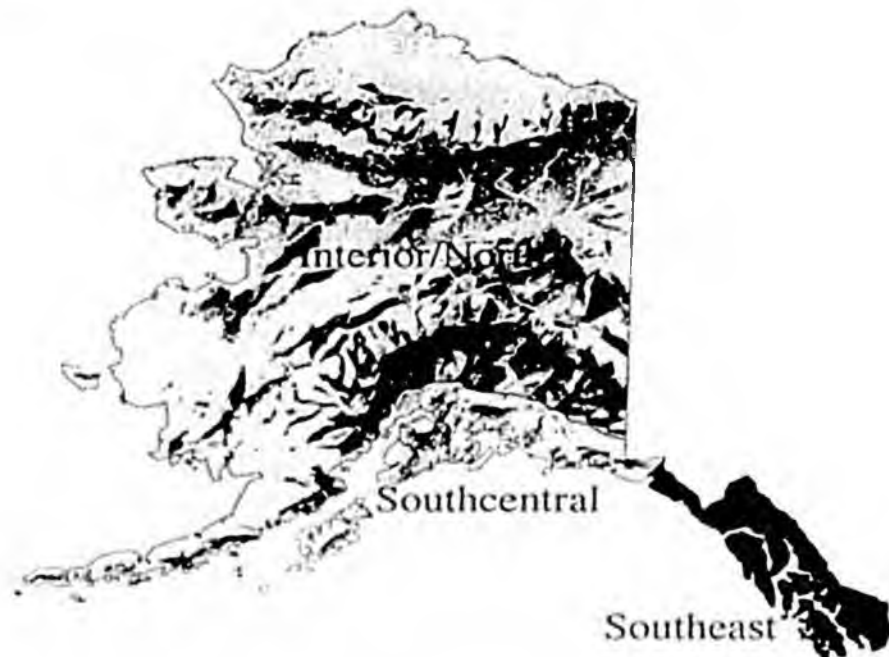


Table 7
Cruise Industry Direct Purchases of Goods and Services by Region, 2003

Region	Total Expenditures (\$ million)	Percent of Total
Southcentral	\$76.0	51%
Southeast	39.3	26
Interior/North	33.8	23
Total	\$149.1	100%

Source: NWCA member lines

Contributions to Non-Profit Organizations

The cruise industry had an additional impact on the Alaska economy in its charitable contributions to non-profit organizations. Based on data provided by NWCA member lines, in 2003, the cruise industry made in-kind and cash contributions to more than 256 non-profit organizations in Alaska, totaling \$522,000.

Table 8
Cruise Industry Contributions to Non-Profit Organizations in Alaska, 2003

Total Contributions	
Cash	\$349,000
In-Kind	\$173,000
Total	\$522,000

Source: NWCA member lines

These non-profit organizations ranged from church groups to social service organizations to scholarship programs. Support for community services and civic organizations (food banks, fire departments, senior centers, etc.) and educational programs (scholarship programs, school districts, etc.) are the two types of organizations that receive the highest support from the cruise industry.

Table 9
Cruise Line Contributions to Non-Profit Organizations in Alaska by Type of Organization, 2003

Type of Organization	Cash	In-Kind	Total
Community and civic	\$122,000	\$86,000	\$208,000
Education	\$90,000	\$26,000	\$116,000
Arts and humanities	\$56,000	\$11,000	\$67,000
Youth activities	\$32,000	\$13,000	\$45,000
Health/social services	\$14,000	\$29,000	\$43,000
Alaska Native	\$18,000	\$6,000	\$24,000
Other	\$17,000	\$2,000	\$19,000
Total	\$349,000	\$173,000	\$522,000

Source: NWCA member lines

Contributions were made throughout the state. Southeast Alaska received the most contributions (\$253,000), followed by Southcentral (\$164,000) and Interior/North (\$105,000).

Cruise Passenger Spending

Cruise or cruisetour packages usually include hotel accommodations, meals, transportation, and some tours in addition to the cruise itself. Cruise passengers also spend money on items not included in their package: shore excursions, meals, gifts, and transportation, for example. Cruise passengers who choose to travel on their own in Alaska before or after their cruise spend additional money on lodging, meals, and tours.

Total Cruise Passenger Spending

The average out-of-pocket spending per passenger in 2003 was \$511, for a total spending figure of \$393 million (NWCA passengers only).

Table 10
Statewide Cruise Passenger Spending, 2003

Average Per Person Out-of-Pocket Spending	Passenger Volume*	Total Spending
\$511	768,500	\$393 million

* NWCA member lines only

This per-passenger spending figure is derived from McDowell Group's biennial, proprietary visitor research program, the *Alaska Travelers Survey*, which includes both cruise and non-cruise visitors in its sample. In the summer of 2003, 1,149 cruise passengers were interviewed before they exited the state at three locations: the docks in Ketchikan, the Anchorage airport, and the Fairbanks airport. Results were weighted according to cruise line and cruise type (round trip, cross-gulf, and cruisetour) to ensure statistical representation of the entire large cruise ship market.

Respondents were asked to estimate how much their party spent on their entire Alaska trip, not including their cruise or cruisetour package or airfare. To arrive at a per person spending figure, the average per party figure (\$1,182) was divided by the average party size. The total expenditure figure (\$393 million) is a result of applying the \$511 average per person figure to the total number of NWCA cruise passengers in 2003 (768,500). The majority of cruise passenger spending is on tours, followed by retail. Cruise passengers traveling independently also spend money on lodging.

It is important to note that the *Alaska Travelers Survey* expenditure data does not include any trip components paid for in the cruise or cruisetour package – for example, hotel stays, meals, bus transfers, and train transportation. These purchases are accounted for in the spending by cruise lines, discussed in the preceding section. The passenger expenditure data *does* include spending on shore excursions, even if the excursions were purchased through the cruise line.

Cruise Passenger Spending by Region

Cruise passengers make nearly all of their out-of-pocket purchases (\$334 million out of \$393 million) in Southeast Alaska, where they spend the most time. Southcentral destinations (including Anchorage, the Mat-Su Valley, the Kenai Peninsula, and Prince William Sound) generate approximately a tenth as much spending. The Interior/North region, where spending is largely concentrated in two locations (Fairbanks and Denali), generated approximately \$12 million in passenger spending in 2003.

Not only do cruise passengers spend the most time in Southeast, it is also where they have the most opportunity to make independent purchases. Passengers on cruisetours to the Interior/North have most of their land tour included in their package, including transportation, day tours, and accommodations.

Table 11
Cruise Passenger Spending by Region, 2003

Region	Total Spending	Percent of Total
Southeast	\$334 million	85%
Southcentral	\$34 million	9
Interior/North	\$12 million	3
Unattributed*	\$13 million	3
Total	\$393 million	100%

* Unattributed spending includes spending that cannot be obviously attributed to a region

Regional spending figures are derived from *Alaska Travelers Survey* data, cruise line data, and past spending data acquired by the McDowell Group. The study team determined an estimated per-passenger spending amount for each port of call as well as each community visited on cruisetours. Communities frequently visited by cruise passengers traveling on their own were also considered.

The 2003 *Alaska Travelers Survey* program included acquiring passenger spending in certain communities. Other communities' spending levels were determined using past McDowell Group spending estimates as well as information provided by cruise lines on tour sales.⁸

Cruise line spending estimates were applied to passenger volume estimates for each community. For port communities, Cruise Line Agency passenger volume data was used.⁹ For other communities, the study team estimated visitation using *Alaska Travelers Survey* data. During the survey, cruise passengers were asked where they had overnighted, and for how long. Applied to the total volume of NWCA cruise passengers, this data provides the volume of passengers for each community, as well as their length of stay. Visitation volume data was verified by checking known volumes of passengers on various cruisetour patterns.

Cruise Passenger Spending on Air Travel

While four out of ten cruise passengers either enter or exit Alaska by air, neither the cruise line purchasing data nor the cruise passenger spending data includes passenger travel to and from Alaska.

Some of this spending on air travel to and from Alaska impacts the state's economy, in the form of landing fees, fuel purchases, airline employee wages, and other purchases in support of airline operations. To estimate this economic impact, one half the cost of an average one-way Seattle-Anchorage ticket was assumed to stay in the state. This methodology is inexact: some passengers fly to and from Fairbanks rather than Anchorage, and many passengers fly to or from points other than Seattle. In the absence of more specific data, this provides a reasonable and conservative estimate of impacts from cruise passenger airfare in and out of the state.

Using arrival and departure data generated by McDowell Group, an estimate of air ticket costs, and the portion of these costs that have an economic impact in Alaska, total 2003 air travel spending by cruise passengers that affects the Alaska economy is estimated at \$32 million.¹⁰ Over 80 percent of this figure is associated with the Anchorage airport (\$27 million) with the remaining \$5 million associated with the Fairbanks airport. Southeast airports receive a nominal amount of traffic associated with large cruise ships. This distribution reflects cruise passenger traffic through Alaska airports.

Crew Member Spending

Approximately 20,000 crew members visited Alaska in 2003 aboard NWCA ships. Their spending in Alaska ports is difficult to quantify, as there has never been a survey of crew members on their spending habits in the state.

⁸ *The Economic Impacts of the Cruise Industry in Southeast Alaska, 1999 (2001)*, *The Economic Impacts of the Cruise Industry in Anchorage, 1999 (2001)*, and *The Economic Impacts of the Cruise Industry in Fairbanks/Denali, 2000 (2001)*

⁹ For the purposes of determining total expenditures, passenger volumes were adjusted from CIA data to reflect the fact that not all passengers disembark in every community.

¹⁰ Approximately 323,000 passengers cruised one-way to or from Alaska in 2003. An average one-way Seattle-Anchorage fare is around \$200. Assuming 50 percent is attributable to Alaska, \$100 per passenger stays in the state, for an overall impact of \$32 million.

In 1995, the McDowell Group estimated Juneau and Sitka crew spending using surveys of local merchants. To estimate 2003 spending, the study team drew upon the 1995 data, the 1999 cruise impacts study, and interviews with local retailers, former crew members, and the owner of a crew service operation. These sources led to a conservative estimate of per crew member, per port estimate of spending for the entire season. Spending ranged significantly from port to port, from \$25 to \$300 per crew member, per season. Per-port spending reflects the number of crew member visits in each port, the level of retail development, and typical length of in-port time.

According to interviews, crew members' largest portside expense is food and beverage. They also spend a large amount of money on communications: phone cards, Internet use, and postage. In addition, crew members are frequent visitors to retail centers such as Fred Meyer's and Costco in Juneau. The table below provides community estimates of crew spending.

Table 12
Crew Member Spending, 2003

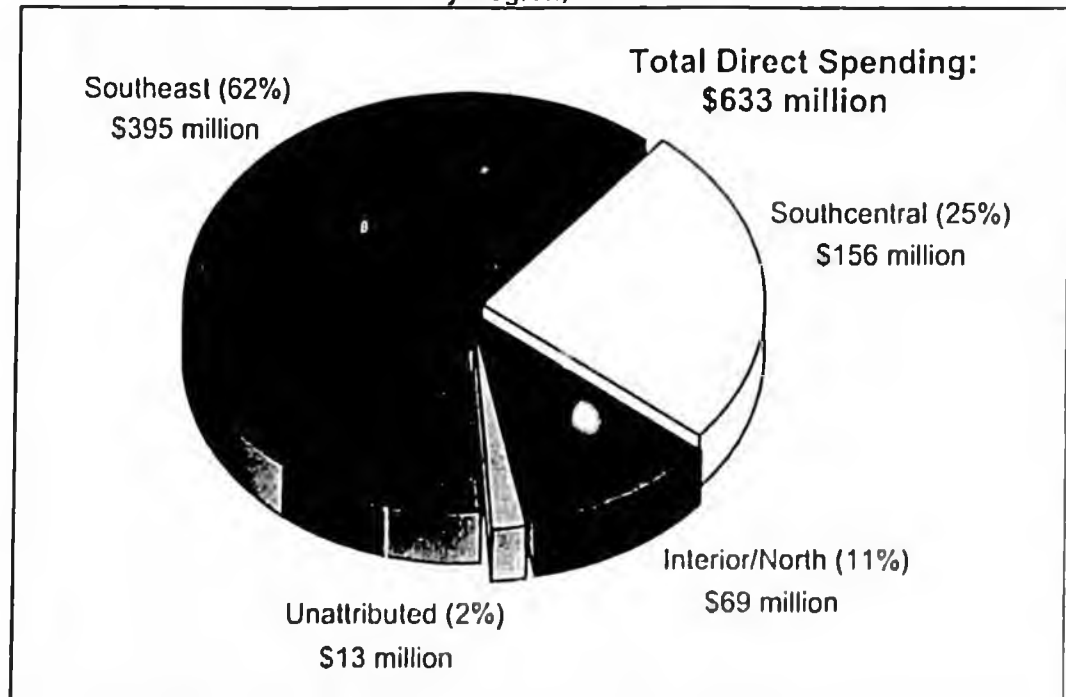
	Total Spending
Juneau	\$5.7 million
Skagway	\$3.5 million
Ketchikan	\$2.9 million
Sitka	\$572,000
Seward	\$236,000
Wrangell	\$54,000
Haines	\$43,000
Total	\$13 million

Economic activity associated with crew members also comes in the form of flying crew members in and out of the state and housing them when necessary. These expenditures are included under cruise line spending on goods and services. According to cruise line estimates, over 3,000 one-way trips were made by crew members in or out of the state in 2003.

Total Direct Spending by Region

The following chart combines cruise line, passenger and crew member spending totals by region. Southeast benefits from over half (62 percent) of all direct spending. Southcentral receives one-quarter of all spending (25 percent), and the Interior receives 11 percent. These distributions change significantly for payroll spending, discussed in the following section.

Chart 2
 Total Direct Spending by Cruise Lines, Passengers, and Crew Members
 By Region, 2003



Cruise Industry-Related Employment and Payroll

Direct Impacts

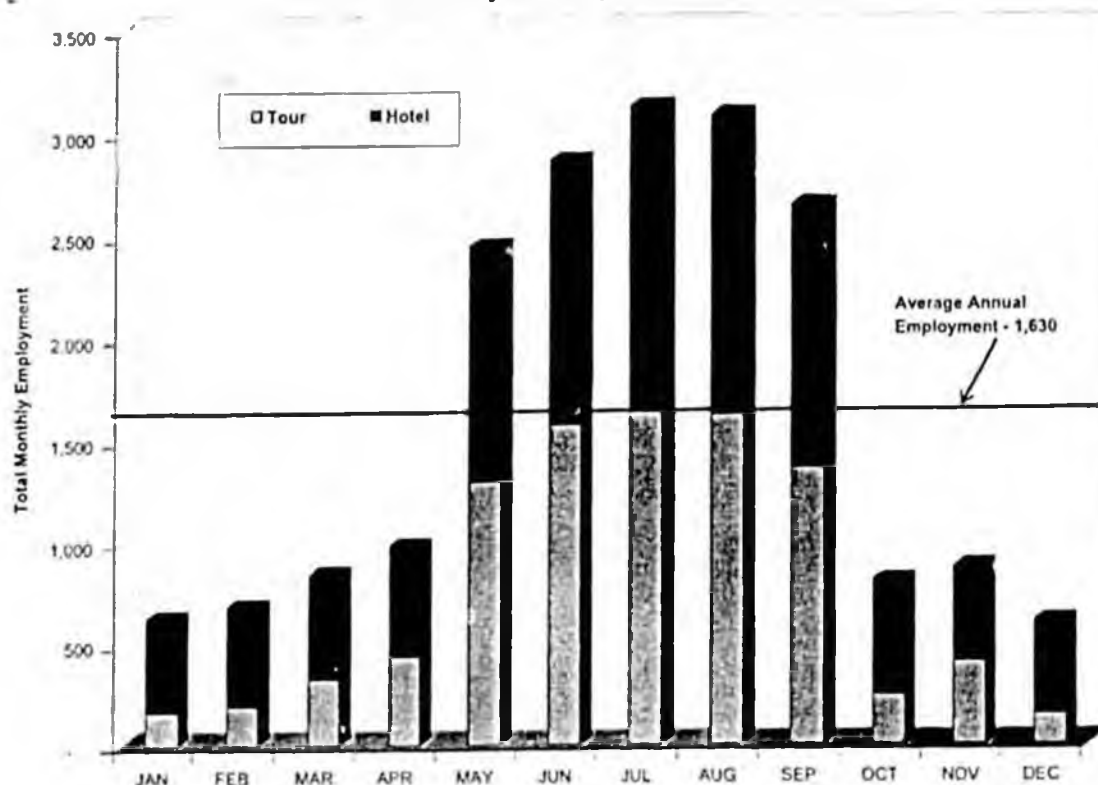
Cruise line employment includes a wide variety of occupations: managers, administration and clerical workers, luggage handlers, drivers, mechanics, restaurant servers, cleaners, and tour guides, among others. Using seasonal and year-round employment estimates from NWC A member lines, approximately 1,630 annual average jobs were created directly by cruise lines in Alaska in 2003.¹¹ These lines reported that they spent \$46 million on Alaska payroll during 2003.

Cruise line direct employment can be divided into hotel employment and tour employment. Tour employment includes all land-based tour employees, such as rail car workers and motorcoach tour guides. Hotel employment refers to employment at hotels owned by cruise lines or their subsidiaries – whether or not the hotel caters to cruise passengers. Of the 1,630 annual average jobs created in 2003, 850 were related to hotel operations, while the remaining 780 jobs were in tour operations.

Employment in the cruise industry is largely seasonal, fluctuating dramatically between summer and winter. During its seasonal summer peak, cruise lines directly employed approximately 3,130 workers (July 2003) in Alaska. This number dropped to a low of 600 workers in December.

¹¹ Labor data provided by the Alaska Department of Labor and Workforce Development.

Chart 3
Cruise Industry Monthly Employment, 2003



Source: Alaska Department of Labor and Workforce Development

The following table shows how the direct employment and payroll impacts of the cruise industry break down by region. Interior/North Alaska accounts for 65 percent of all direct cruise industry employment. About a quarter of direct cruise industry employment is found in Southcentral Alaska (23 percent) and one-eighth in Southeast Alaska (12 percent).

Table 13
Cruise Line Direct Employment¹ in Alaska, By Region, 2003

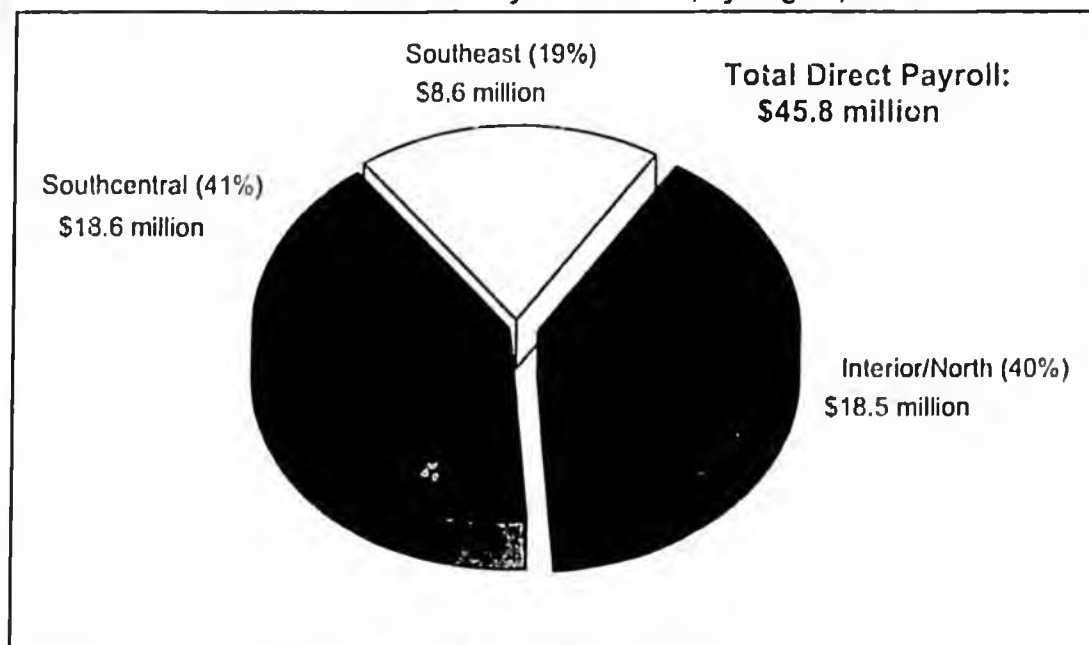
	Tour Employment	Hotel Employment	Total Employment	Percent of Total
Interior/North	68	585	653	40%
Southcentral	436	199	634	39
Southeast	196	147	343	21
Total	700	930	1,630	100%

¹ Annual average employment

Source: Total employment reflects Alaska Department of Labor and Workforce Development annual average figures for 2003. Regional employment is based on NWCA cruise line employment data

Regionally, payroll is distributed evenly between Southcentral Alaska (\$19 million) and Interior/North employees (\$19 million) with the remaining \$9 million paid in Southeast Alaska

Chart 4
Cruise Line Direct Payroll in Alaska, by Region, 2003



Source: NWCA member lines' payroll data

Total Cruise Industry Impacts (Direct, Indirect and Induced)

Cruise line spending on goods, services and payroll, in addition to out-of-pocket expenditures by passengers and crew, create additional jobs and spending that are not considered "direct" impacts, but rather "indirect" and "induced" impacts. For example, a cruise passenger buying a meal creates employment and payroll at the restaurant. These are indirect impacts. In turn, the employees at the restaurant create jobs and spending with their own purchases from other businesses, called induced impacts. The repeated rounds of spending produce a multiplier effect that increases the economic impact by a substantial amount. Commonly, indirect and induced impacts are grouped together under the label of indirect impacts.

To estimate the indirect economic impacts of cruise industry-related activity in Alaska, the study team used IMPLAN, predictive input-output model of local and state economies. IMPLAN is widely used to measure the economic impact of industries and industrial/commercial development.

Not all cruise passenger spending was entered into the IMPLAN model. Most shore excursions that passengers participate in are purchased through their cruise lines, which charge a commission. These commissions do not necessarily enter into the Alaskan economy and were therefore subtracted from passenger spending for the purposes of IMPLAN modeling.

In summary, IMPLAN analysis indicates that employment directly or indirectly related to cruise line spending totaled 4,830 jobs in 2003, accounting for \$153 million in payroll. Passenger and crew spending directly or indirectly created a total of 7,600 jobs and \$231 million in payroll in 2003. In total, the cruise industry accounted for 12,430 jobs throughout Alaska and \$384 million in labor income. Cruise industry-related output (a measure of all direct and indirect spending related to the cruise industry) totaled \$878 million.

Table 14
Total Statewide Economic Impacts of the Cruise Industry
(Including Direct, Indirect, and Induced Impacts)

	Jobs	Payroll (\$ millions)	Total Spending Impact (\$ millions)
Cruise line employment and spending	4,330	\$152.7	\$281.2
Passenger and crew spending	7,600	231.4	596.4
Total	12,430	\$384.1	\$877.6

Total Impacts by Region

The Southeast region experiences the highest degree of economic impact from the cruise industry, with 7,300 jobs and \$212 million in payroll, from \$535 million in economic output. Southcentral receives nearly 3,000 jobs and \$119 million in payroll, while the Interior/North receives 2,260 jobs and \$53 million in payroll.

Table 15
Regional Economic Impacts of the Cruise Industry
(Including Direct, Indirect, and Induced Impacts)

	Jobs	Payroll (\$ millions)	Total Spending Impact (\$ millions)
Southeast			
Cruise line employment and spending	900	\$28.4	\$67.5
Passenger and crew spending	6,400	183.6	467.3
Total	7,300	212.0	534.8
Southcentral			
Cruise line employment and spending	1,970	\$81.5	\$146.4
Passenger and crew spending	900	37.3	100.6
Total	2,870	118.8	247.0
Interior/North			
Cruise line employment and spending	1,960	\$42.6	\$67.3
Passenger and crew spending	300	10.6	28.5
Total	2,260	53.2	95.8

While a detailed assessment of the cruise industry's local-level economic impacts is beyond the scope of this study, some data is available on the larger communities of Anchorage and Fairbanks.

Approximately 292,000 passengers visited Anchorage in the 2003 season. Direct spending in Anchorage by cruise lines totaled \$72 million, not including cruise line-related payroll, which totaled \$17 million. Cruise lines made purchases from 588 Anchorage businesses. Cruise passengers spent an estimated \$19 million in Anchorage in 2003. This is a conservative estimate which includes only out-of-pocket purchases and does not include pre-paid expenditures, such as hotels and some local tours.

Fairbanks was visited by about 134,000 passengers in 2003. Direct cruise line spending in Fairbanks totaled \$15 million. Cruise line-related payroll totaled \$12 million. In total, cruise lines made purchases from 349 Fairbanks businesses in 2003. Cruise passengers spent an estimated \$8 million in Fairbanks. This is also a conservative estimate, and it does not include pre-paid expenditures.

Role of the Cruise Industry in the Statewide and Regional Economies

Having estimated cruise industry spending, employment, and payroll, it is important to look at these figures in the context of the regional and statewide economies. Out of all jobs in the state of Alaska, the cruise industry accounts for approximately 3.0 percent – including direct and indirect employment. The industry accounts for 2.3 percent of all payroll in the state.

The cruise industry plays the greatest role in Southeast Alaska, where it accounts for 14.2 percent of all employment in the region, and 12.0 percent of total wages. In the Interior/North the figures drop to 3.8 percent of all employment and 2.3 percent of all wages. In Southcentral, the cruise industry accounts for 1.2 percent of all employment and 1.1 percent of all wages.

Table 16
Cruise Industry and Regional/Statewide Employment and Payroll Impacts¹
 (Including Direct, Indirect, and Induced Impacts)

	Total for Region	Cruise Industry Total	Cruise Industry as % of Total
Southeast			
Employment	51,535	7,300	14.2%
Payroll	\$1.7 billion	\$212.0 million	12.0%
Southcentral			
Employment	240,805	2,870	1.2%
Payroll	\$10.4 billion	\$118.8 million	1.1%
Interior/North			
Employment	59,420	2,260	3.8%
Payroll	\$2.4 billion	\$53.2 million	2.3%
Statewide			
Employment	413,995	12,430	3.0%
Payroll	\$17.1 billion	\$384 million	2.3%

¹Statewide and regional employment and payroll data presented in this table are total full-time and part-time employment as measured by the US Bureau of Economic Analysis. This data differs from Alaska Department of Labor data in that it includes self-employed workers.

CRUISE INDUSTRY IMPACTS ON STATE AND LOCAL GOVERNMENT

The cruise industry generates significant revenues for state and local governments in Alaska. User fees, sales taxes, property taxes, income taxes and others payments all flow to state and local governments in Alaska directly or indirectly from the cruise industry. At the same time, state and local governments expend resources in support of the cruise industry. This chapter details, to the extent possible, the state and local government expenditures and revenues that can be attributed to the cruise industry.

State Government Revenue and Program Impacts

The study team contacted Alaska's state government departments and agencies to determine the revenue and program impacts that could be attributed to cruise-related activity. Since there is no explicit accounting of most cruise impacts in the state budget, it is not possible to track the full extent of all revenue and program impacts. However, based on interviews and cruise industry data it was estimated that \$2.1 million was generated in revenue to the state, with only \$775,000 in verified program costs attributed to the cruise industry.

Details on how these figures were estimated can be found in the Appendix.

Table 17
Cruise Industry-Related Revenue and Program Impacts
on Alaska's State Government by Department, 2003
(General Fund Impacts Only)

Alaska State Departments	Estimated Revenue	Estimated Costs
Administration	\$102,000	No attributed cost
Education and Early Development	\$121,000	No attributed cost
Environmental Conservation	\$742,000	\$456,000
Fish and Game	\$618,000	No attributed cost
Natural Resources	\$172,000	\$309,000
Health & Social Services	\$0	\$10,000
Additional direct payments to State of Alaska*	\$385,000	No attributed cost
Estimated Total	\$2,140,000	\$775,000

*These revenues were evident in the cruise line expenditure data but could not be attributed to a specific state government department.

The table above addresses only revenues generated in FY 2003. In FY 2003, the legislature "swept" leftover Cruise Ship Program funds from previous years (administered by the Department of Environmental Conservation) into the General Fund. The \$1,099,970 consisted of fees and fines collected since the establishment of the program in 2001 that were not used for program expenses.

It is also important to point out that cruise lines contributed a total of \$1.8 million in 2003 to the Alaska Travel Industry Association, which by government mandate is required to raise funds from the tourism industry.

Impacts on Local Governments

Impacts of the cruise industry on local governments include a broad range of both revenues (sales tax, bed tax, property tax, moorage fees, etc.) and expenses (public parks, police, fire protection, medical, etc.). Studying impacts of the cruise industry at the local level introduces another layer of complexity to an already complex study. Each community has a unique relationship to the industry – Girdwood, for example, may host several thousand passengers on overnight stops, while Juneau hosts nearly 800,000, but for day visits only.

Expenses incurred on behalf of the cruise industry (such as police and fire safety) are particularly difficult to gauge. For the purposes of this study, the McDowell Group compiled current data on municipal revenues: from sales tax, bed tax, property tax, and moorage fees. Individual community data was used wherever possible.

Cruise-related expenses (as well as revenues) are discussed below, in a summary of a McDowell Group study conducted for Southeast Conference in 1999, *Cruise Industry Impacts on Local Governments in Southeast Alaska, 1997*. That study included in-depth analysis at the local level of municipal expenses such as libraries, convention and visitors bureaus, museums, emergency medical services, etc. Although in-depth analysis of cruise-related expenses has not been conducted since 1999, the net effect on municipal budgets is not likely to have changed significantly since that time.

Local Government Revenues

In 2003, Alaskan municipalities received significant amounts of revenue related to the cruise industry in the form of taxes and fees. Following are estimates of revenues to municipalities, statewide, from: sales tax, bed tax, moorage/dockage fees, and property tax.

Sales Tax Revenues

Cruise Passenger and Crew Spending

Sales tax revenues for 2003 were estimated using McDowell Group crew and cruise passenger spending data, local sales tax rates, and data from cruise lines related to taxable spending by cruise passengers. For a complete explanation of how cruise passenger and crew expenditures were determined, please see page 16.

Local sales tax rates cannot be applied to all cruise passenger spending, because not all cruise passenger spending is taxable. For example, flightseeing purchases are non-taxable under federal regulation. (Only the flightseeing portions of tours are non-taxable; other portions of flightseeing tours, such as transfers, trekking, and dog-sledding, remain taxable.) In addition, commissions on tours, travel and lodging are non-taxable, including the commissions earned by cruise lines from on-board sales of tours.

Taxable spending rates were determined for each community with a sales tax that was affected by cruise passenger spending in 2003. Using data from the *Alaska Travelers Survey* as well as tour revenue data provided by cruise lines, the study team estimated:

- how much spending in each community was on tours
- how much spending in each community was on flightseeing
- an average tour commission rate.

These estimates yielded a taxable spending rate for each community with a sales tax. As a point of reference, the total sales tax revenue figure was compared with each community's total tax revenues for the fiscal year 2003. In Juneau, for example,

cruise passenger sales tax revenue accounted for approximately 15 percent of all FY 2003 sales tax revenue for the city.

Because crew members very rarely take tours, all of their spending is assumed to be taxable.

The following table shows sales tax revenues from cruise passenger and crew spending, divided by region. The primary cruise ports (Juneau, Ketchikan, and Skagway) are broken out to show specific data for those communities. The Southcentral region shows lower revenue in part because most passenger spending occurs in areas without a sales tax (including Anchorage). The Interior/North region is not included because virtually all passenger spending occurs in areas without a sales tax.

Table 18
Sales Tax Revenues from Cruise Passenger and Crew Spending,
By Community and Region, 2003

Region/Community	Taxable Passenger Spending	Taxable Crew Spending	Total Taxable Spending	Sales Tax Revenues
Southeast	\$256,004,000	\$12,740,000	\$268,744,000	\$13,339,000
Juneau	\$87,754,000	\$5,715,000	\$93,469,000	\$4,674,000
Ketchikan	\$85,231,000	\$2,858,000	\$88,089,000	\$4,845,000
Skagway	\$58,008,000	\$3,499,000	\$61,507,000	\$2,460,000
Southcentral	\$11,329,000	\$236,000	\$11,565,000	\$567,000
Total	\$267,333,000	\$12,976,000	\$280,309,000	\$13,906,000

Note: The Interior/North region is not included because virtually all passenger spending occurs in areas without a sales tax.

Cruise Line Spending

Sales tax revenues from cruise line spending are difficult to measure, particularly at the local level. Each community has different sales tax rates as well as exemption policies, and each community experiences different types of cruise line spending. For example, Juneau has a sales tax exemption on the portion of transactions over \$7,500. At the same time, they do not charge a sales tax to cruise lines on their per passenger fees – which constitute a major portion of cruise line spending in the community. They also do not charge a sales tax on medical spending.

Examining these complexities in every cruise-affected community is beyond the scope of this study. However, it is possible to estimate statewide cruise line spending sales tax revenues using an overall taxable spending rate, spending per community from cruise line purchasing data, and sales tax rates for each community.

Using this methodology, it is estimated that statewide, communities earn approximately \$1.5 million in sales tax revenues from cruise line spending. Over 95 percent of sales tax revenues occurred in Southeast Alaska, as few communities in Southcentral and Interior/North charge sales tax.

Cruise Line Fees

Most municipal governments in Alaska's cruise port communities earn revenues from cruise lines in the form of moorage and docking fees. Skagway and Seward are two exceptions, as their dock facilities are privately owned. Juneau has both private and public docks, while the remaining ports have only publicly owned docks for large cruise ship use.

Each community has its own system of charging cruise lines for using port facilities. Dock charges are generally assessed on a per foot/per day basis. Additional charges include tonnage fees, passenger fees, lightering fees, and water fees – varying among communities. Juneau has several unique fees: a \$5 per passenger “head tax” and a \$25 per hour “transfer bridge fee.” Sitka has only one fee: a per-day lightering charge, as there is no large cruise ship dock. Haines offers a discount on docking fees for day calls (as opposed to evening calls).

Docking and moorage revenue data were collected from port officials in each community with municipally-owned docks used by large cruise ships. The total revenues for 2003 were \$7.8 million, all of it collected in Southeast. (Seward’s docks are privately owned.) Because of a new passenger fee introduced in Ketchikan for the 2004 season, that figure is expected to increase to \$11 million in 2004.

Not all docking and moorage revenues go towards port operations or municipal general funds. Revenue from Juneau’s \$5 passenger fee is dedicated to visitor industry-related projects. Likewise, Ketchikan charges a \$1.90 per foot/per day “port development” fee that is earmarked for cruise-related development of port facilities.

Bed Tax Revenues

Passengers on cruisetours to the Interior/North and Southcentral regions of Alaska generate a significant amount of bed tax revenue for local municipalities. Bed tax revenues were determined using *Alaska Travelers Survey* data, which identified where passengers spent every night of their trip, and average lodging expenditure data provided by cruise lines. As a point of reference, cruise-related bed tax revenues were compared with total bed tax revenues from fiscal year 2003. It is important to note that not all communities have bed taxes.

Anchorage had the highest amount of bed tax revenue of all Alaska communities in 2003, at \$1.8 million, followed by Fairbanks at approximately \$1.5 million.¹² The Southeast region is not included in this analysis because with very few (large ship) cruise passengers overnighiting in the region their bed tax revenues from this market are negligible.

Table 19
Bed Tax Revenues from Cruise Ship Passengers
By Region, 2003

Region	Lodging Expenditures	Bed Tax Revenues
Southcentral	\$30,531,000	\$2,161,000
Interior/North	\$31,018,000	\$2,328,000
Total	\$61,549,000	\$4,489,000

Note: These revenues are from large cruise ship passengers only. Southeast Alaska receives a nominal amount of overnight visits from large cruise ship passengers.

Property Tax Revenues

The cruise industry also directly and indirectly contributes property tax revenues to local governments in Alaska. Property taxes are paid on cruise-line owned facilities and equipment. Property taxes are also paid by many businesses that are dependent on cruise passenger spending, including gift shops in high cruise passenger traffic areas (especially in Ketchikan, Juneau and Skagway), flightseeing operations (particularly in Juneau), and bus tour operations, among others. Property taxes are also paid by residents dependent on the cruise industry for their livelihood.

¹² Estimated cruise-related bed tax revenues in Anchorage of \$1.8 million represent 16 percent of total Anchorage bed tax revenues for 2003 of \$11 million. Estimated revenues in Fairbanks of \$1.5 million represent 83 percent of total Fairbanks revenues of \$1.8 million.

It is beyond the scope of this study to measure property tax revenues in each Alaska community affected by cruise traffic. The analysis would be very complex; most property tax revenues are indirect, that is, paid by businesses that provide goods and services to cruise ship passengers. Many cruise-affected businesses also provide goods and services to independent visitors and Alaska residents. Therefore, not all of the property taxes paid by these businesses could be attributed to the cruise industry.

Cruise line data shows that NWCA lines made direct payments of nearly \$2 million in property taxes in 2003. To provide some measure of impacts from *cruise-related* businesses, the study team examined the commercial property tax rolls for Juneau. Businesses that are 75 percent or more dependent on the cruise industry account for approximately \$60 million in assessed valuation. At Juneau's 11.64 mill rate, that accounts for \$700,000 in annual property tax revenues. This does not include property taxes paid by businesses less dependent on cruise activity (but still deriving income from cruise passengers) or taxes paid by households of employees of cruise-related businesses.

Based on this data, the study team developed a model that links cruise visitor spending in key communities (which to a degree reflects local investment in facilities and equipment to service visitors) and local property tax rates. The analysis indicates that, statewide, the cruise industry accounts for at least \$3 million in property tax revenues. This is only a partial measure of property tax revenues in that it does not include taxes paid by businesses that are only partially dependent on the cruise industry, or taxes paid by household earnings from the industry.

Summary of Government Revenues from Cruise Industry

This overview of local government revenues from the cruise industry indicates measurable revenues totaled approximately \$30 million. This is an incomplete measure, however, because some indirect and all induced taxes are excluded (induced taxes are those paid by cruise industry employee households).

**Table 20
Statewide Municipal Revenues from the Cruise Industry, 2003**

	Total Revenues
Passenger/crew sales tax revenues	\$13,906,000
Cruise line sales tax revenues	\$1,500,000
Cruise line dockage/moorage fees	\$7,834,000
Bed tax revenues	\$4,489,000
Property tax revenues	\$3,000,000
Total	\$30,729,000

As described previously, this is only a partial measure of cruise industry related revenues to local governments. It does not include, for example, property taxes and sales taxes paid by employees of cruise lines or employees of other businesses providing goods and services to cruise lines, passengers and crew.

The assessment of cruise industry impacts on state government indicated revenues of about \$1.7 million in general fund revenue attributable to the cruise industry. (This does not include corporate income taxes paid by businesses providing goods and services to cruise lines, their crew and their passengers.)

In addition to indirect employment and payroll data, IMPLAN provides an estimate of total state and local government revenues stemming from cruise-related spending in Alaska. IMPLAN indicates the total state and local government revenues from the

industry total approximately \$46 million annually. This is an estimate all direct, indirect and induced revenues. The methodology employed in the IMPLAN model is imprecise in terms of tax revenue analysis, however, the model's data appears reasonable given what is actually measurable.

Summary of 1997 Study: Cruise Industry Impacts on Local Governments in Southeast Alaska

The McDowell Group conducted a study for Southeast Conference in 1997 examining the impacts of the cruise industry on local governments in Southeast Alaska. Municipal entities studied included: City of Ketchikan, Ketchikan Gateway Borough, City of Wrangell, City of Petersburg, City and Borough of Sitka, City and Borough of Juneau, City of Haines, Haines Borough, and City of Skagway. The study focused on local government revenues and expenditures during the 1997 cruise season (which included 525,000 passengers).

Revenues

The study measured municipal revenues in terms of two general categories:

- **Sales tax revenues:** These include the sales taxes generated by local governments as a result of local spending by cruise ship passengers, crew and cruise lines. Sales tax rates were applied only to estimated taxable spending, which excludes tour commissions and flightseeing sales.
- **User fees and other revenues:** These revenues include fees paid by cruise lines and cruise passengers. This includes passenger fees, docking fees, lightering fees, and water service fees.

Cruise industry related revenues not measured in the study include property tax payments made by businesses selling goods and services to cruise visitors or sales taxes paid by business people as they make local purchases in support of their operations. It also did not include any secondary or indirect tax revenues (such as sales and property tax payments made by employees of the cruise industry).

Sales tax revenues to Southeast Alaska municipalities totaled an estimated \$7.0 million in 1997, while port fees totaled \$3.2 million, for a total of \$10.2 million in revenues.

Expenditures

Services provided by local governments that are affected by the cruise industry include police protection, emergency medical services, harbors/docks, libraries, museums, convention and visitors bureaus, public utilities/public works, and occasionally other services, depending on the community. To assess costs to these services, budget information was gathered and interviews were conducted with representatives of each affected municipal department. The study measured cruise-related expenditures in two different ways:

- **Marginal Costs:** These are direct additional or new costs incurred by local government over and above what would be incurred in the absence of the cruise industry. For example, if the police department does not need to hire additional patrol or traffic officers as a result of cruise traffic, there are no marginal costs in that department, even though officers spend some of their time serving cruise visitors.
- **Direct Overhead Costs (Average Cost or Full Allocation):** These are costs allocated according to services rendered rather than dollars spent. Returning to our police department analogy, if a patrol officer is spending 25% of his time dealing with cruise visitors, the approach dictates that 25% of his salary and

overhead should be allocated to the cruise visitor industry. The theory underlying this approach is that while there may be no new cost associated with serving visitors, there is an "opportunity cost" in terms of reduced service for residents.

In addition to operating expenses, the study also considered capital projects that were related to the cruise industry, although these are not included in the following table.

Total marginal costs to municipalities in Southeast were estimated to be \$2.1 million, direct costs were estimated at \$1.2 million, for total costs of \$3.3 million. That compares to total estimated revenues of \$10.1 million.

The 1997 study found that in general, municipalities gained far more from the cruise industry than they lost. This is not surprising, considering how few municipal services cruise passengers really require: they are highly unlikely to commit crimes; they rarely use major municipal facilities like schools and swimming pools; and they only occasionally require emergency medical services. On the other hand, they are highly likely to shop, dine and take tours - and in doing so contribute significantly to local sales tax revenues.

State Government Revenue and Program Impacts

Department of Administration

The only area of the Department of Administration with direct ties to the cruise industry is the Division of Motor Vehicles, which issues licenses to tour bus drivers. Based on cruise industry vendor data, it is estimated that \$102,000 was directly paid to the state for motorcoach licensing. The division is not able to precisely quantify how much of their activity is cruise industry-related. (Each Commercial Drivers License costs \$100.) It is true that the cruise industry represents a very small portion of the division's activities. Further, it is clear that while the DMV serves the cruise industry, it does not incur any costs that it would not incur in the absence of the industry. Any administrative expenses incurred by cruise industry activity are likely covered by the license fees.

Department of Community and Economic Development

Cruise industry vendor data shows direct payments of several million to the Alaska Railroad Corporation. Corporation officials indicated that the fees paid by the cruise industry for pull or haul fees of industry-owned rail cars and cruise passenger fees covered all operational costs this activity incurred. The railroad receives no general fund money from the state.

Marine pilot licensing is also handled under the DCED. The marine pilots pay wholly for the department's administration of their occupational licensing program through their annual licensing fees (a total of \$120,000). While the Southeast marine pilots pilot other large ships, a significant portion of their business is cruise-related. Cruise-related business for Southcentral and Southwest pilots is a less significant portion.

Department of Education and Early Development

One area of the Department of Education and Early Development is directly involved with the cruise industry: State Museums. The Division of Alaska State Museums manages two museums, both visited by cruise passengers: the Alaska State Museum in Juneau, and the Sheldon Jackson Museum in Sitka. In FY 2003, 70,870 people visited the Juneau state museum. Of that number, 23,940 (or 34 percent) were cruise passengers on shore excursions. In FY 2003, 18,710 people visited the Sheldon Jackson Museum, of which 4,590 (25 percent) were cruise passengers on shore excursions.

In FY 2003, the Juneau state museum collected \$102,340 in admissions from shore-based tour companies serving cruise passengers, according to museum staff. The Sheldon Jackson Museum collected \$18,190.

In discussions with the Chief Curator as well as the Acting Director of Libraries, Archives and Museums, it was noted that the vast majority of the division's budget is allocated to expenses that would be incurred whether or not cruise passengers patronized the facilities (such as exhibit research and design). The only difference in expenditures attributable to the cruise industry is additional staff time due to the increased visitation. Both of those interviewed agreed that the fees paid by cruise passengers and shore excursion companies most likely make up for the additional staff time required to accommodate them.

Department of Environmental Conservation

There are two divisions in the Department of Environmental Conservation that have direct ties to the cruise industry: the Division of Spill Prevention and Response, and the Division of Water. The Division of Spill Prevention and Response did not handle any cruise ship spills in 2003. According to a program director in the division, none of the division's expenses can be attributed to the cruise industry. On the rare occasions when cruise ship spills occur, the division does participate in clean-up. However, the responsible cruise line is billed for the entire expense, including administrative time, as well as clean-up.

The Division of Water runs a program called Commercial Passenger Vessel Environmental Compliance Program (otherwise known as the Cruise Ship Program). This program has two main areas of focus: wastewater discharges and opacity (visible emissions). Cruise ships pay a fee to the Division that covers the environmental monitoring. The fee is based upon passenger capacity multiplied by number of voyages they make in Alaska. The program's budget is occasionally augmented when fines are collected from cruise lines.

According to the program's director, in FY 2003, \$742,250 was collected from NWCA member lines and these fees collected from the cruise lines more than cover the cost of the program. It cost \$456,370 to run the program. In FY 2001 and 2002, the excess monies were applied to the program's budget for the following year. In FY 2003, the legislature "swept" the leftover Cruise Ship Program funds into the General Fund. The \$1,099,970 consisted of fees and fines collected since the establishment of the program in 2001 that were not used for program expenses.

Department of Fish and Game

The one area of Fish and Game with ties to the cruise industry is the Division of Sport Fish. According to the McDowell Group's survey of over 1,100 cruise passengers in the summer of 2003, 6 percent of passengers participated in sport fishing on their Alaska trip. Applied to the total volume of cruise passengers, this translates into 46,800 participants. (Of the 292,844 non-resident fishing participants in the state in 2003, 46,800 represents 16 percent.) Each participant is assumed to participate in one day of sport fishing. At \$10 for a one-day license, cruise passengers generated \$468,000 in regular license fees in 2003. Based on interviews, approximately one-third of participants also purchase king salmon stamps, at \$10 each, for \$150,000 in king salmon stamp sales. Total fees generated from cruise passengers are therefore estimated at \$618,000 for 2003. This figure represents 6 percent of total gross sales from non-resident fishing licenses and king salmon stamps.

According to both the Assistant Director and the Southeast Regional Supervisor for the Sport Fish Division of the Department of Fish and Game, no part of the division's expense budget can be attributed to the cruise industry. The division's efforts are focused on research (such as port sampling and creel census), regulation, and management. These activities would occur whether there were cruise passengers fishing or not. While cruise passenger traffic (and related sport fishing activity) has grown dramatically since 1993, the division's program has not changed in response. Division contacts confirmed that if the cruise industry were to disappear, their program expenses would not be affected.

Department of Health and Social Services

The only office in the Department of Health and Social Services with a noticeable amount of cruise industry-related activity is the Section of Epidemiology, in the

Division of Public Health. According to its website, the office of Epidemiology is responsible for "surveillance, investigation and control of acute and chronic diseases and injuries through defining causal factors, identifying and directing control measures and providing a basis for policy development, program planning and evaluation." The office is occasionally affected by the cruise industry when cruise ship passengers bring communicable diseases to Alaska cruise ports. (The federal Center for Disease Control is responsible for ship-board prevention and control.) The Section of Epidemiology has a budget of \$10,947,800, of which \$7,994,800 (or 73 percent) is federally funded.

According to a Medical Epidemiologist in the Division, it would be virtually impossible to determine exactly what percentage of their activities or budget could be attributed to the cruise industry. However, the office did recently compile a list of tourism-related disease control efforts that occurred between 1995 and 2003, along with details of each effort. Three of the operations occurred in fiscal year 2003 and were cruise ship-related: an outbreak of "norovirus" aboard four ships in the summer of 2002, influenza aboard two ships in June of 2003, and a SARS case aboard one ship, also in June of 2003. For each case, the Office of Epidemiology estimated how much staff time and travel was required. These three cases combined resulted in the expenditure of six weeks of Epidemiology staff time, including two weeks of doctor time, two weeks of nurse time and two weeks of support staff time. The cost of this time is estimated at approximately \$10,000. The cruise industry does not pay any fees to make up for these expenses to the state.

Department of Natural Resources

State Parks is the only area of the Department of Natural Resources with clear links to the cruise industry. State parks that are utilized by cruise passengers include Totem Bight State Historical Park in Ketchikan, Baranof Castle State Historical Site in Sitka, Chilkat Bald Eagle Preserve in Haines, Chilkoot Lake State Recreation Site in Haines, and Denali State Park, among others. In some cases, such as Totem Bight, passengers pay a fee (as part of their tour price) to visit the state park; in others there are no fees paid by either cruise or non-cruise visitors.

No data is available to estimate exactly how many visits are made to state parks by cruise visitors. It is also difficult to determine how much the fees paid by cruise passengers cover the cost of their usage of the parks. Cruise visitors account for approximately half of all Alaska visitors. However, they are not as likely as non-cruise visitors to visit the state's widely-distributed parks, as they rarely utilize campgrounds, and their itineraries are shorter and more concentrated. They are also more likely than non-cruise visitors to be part of a commercial tour, and thus subject to fees.

According to State Park estimates, 800,000 out of the total 4.2 million annual state park visits are by non-residents, or 19 percent. An estimate of cruise passenger visitation to state parks of 20 percent of all non-resident visitation would represent 4 percent of all state park visitation, residents included. (The actual percentage is likely even lower.)

The FY 2003 operating budget for Parks and Recreation Management, together with Parks Management, was \$7,722,400. Four percent of that figure is \$309,000. Cruise vendor data shows that the cruise industry payment of \$152,000 directly to State Parks for use of Totem Bight State Park in the 2003 season. An additional \$20,000 was paid directly for park ranger services.

Department of Public Safety

There are two divisions in the Department of Public Safety with links to the cruise industry: the Division of State Troopers (Bureau of Wildlife Enforcement) and the Division of Fire Safety.

The Bureau of Wildlife Enforcement (until recently Fish and Wildlife Protection) is a program administered by the Alaska State Troopers. The Bureau handles the enforcement of wildlife and fisheries-related regulations, including commercial fishing, sport fishing, hunting, guiding, and trapping. The only area affected by cruise passenger activity is sport fishing regulation enforcement. As discussed in the section on Division of Sport Fish, cruise passengers represent 16 percent of non-resident sport fishing participants, and approximately 10 percent of all sport fishing participants. An Assistant Bureau commander estimated that of all the Bureau's activities, less than 1 percent would be related to cruise passenger activity.

One of the programs offered by the Division of Fire Prevention is Fire Service Training, and several cruise lines take advantage of this service. Cruise lines contract with the Division to train crew members and bus drivers in fire safety while in Alaska ports. The Supervisor of Fire Service Training estimates that between 5 and 10 percent of the Division's activity is related to cruise lines. The supervisor also stated that all of the services provided to crew members are billed to the cruise lines, including overhead costs. The cruise lines are "more than compensating" for their costs, he said. Princess, the major cruise line contract of the Division, pays for Division instructors to be trained in England, in order to teach in the way the cruise line prefers. This extra training benefits Division instructors, and in turn the Division's other training recipients. "We are a huge beneficiary of the cruise industry," the contact stated.

Department of Transportation and Public Facilities

The airports are the most obvious link to the cruise industry in the Department of Transportation and Public Facilities (DOT&PF), since many cruise passengers use the Anchorage and Fairbanks airports as part of a one-way cruise or cruise-tour.

Based on discussions with DOT&PF officials, the study team calculated the revenue impacts from cruise passengers using the Fairbanks and Anchorage International Airports at about \$2 million.

There are two major sources of revenue. The first is the passenger facility fee. This is a fee that the airport charges its departing air passengers to pay for capital improvements to the airport. All of the money collected goes into the capital fund.

Table 21
Cruise Passenger Revenue to Anchorage and Fairbanks Airports
From Passenger Fees, 2003

	Anchorage Airport	Fairbanks Airport
Per passenger fee	\$3.00	\$4.50
Number of exiting cruise passengers	130,500	26,500
Revenue	\$391,500	\$119,000
Total revenue to Capital Fund	\$511,000	

The second source is monies collected through landing fees and fuel "flow" fees. DOTPF gave us an average of \$696.36 per the average sized flight used for passenger

travel (largely 737, 757, and 767). They also suggested an average of 150 cruise passengers per flight. All money goes into the operating fund.

Table 22
Cruise Passenger Revenue to Anchorage and Fairbanks Airports
From Landing and Fuel Fees, 2003

Total annual passengers	314,000
Average number of seats per plane	150
Number of annual landings	2,100
Revenue per landing	\$700
Total airport operation revenue	\$1,458,000
Anchorage	\$1,210,000
Fairbanks	\$248,000

Table 23
Cruise Passenger Revenue to Anchorage and Fairbanks Airports, 2003

	Anchorage Airport	Fairbanks Airport	Total
Total passenger revenues	\$392,000	\$119,000	\$511,000
Total landing and fuel revenues	\$1,210,000	\$248,000	\$1,458,000
Total revenues	\$1,601,000	\$367,000	\$1,968,000

It is important to note that the international airports receive no Alaska state general fund money. All airport operations are supported by federal money and revenue. Because there are no general fund impacts, cruise related costs and expenditures are not included in the summary table.

The Division of Measurements and Commercial Vehicle Enforcement (CVE) is another area of DOT&PF affected by the cruise industry, as this division is responsible for doing safety inspections on motorcoaches. According to a representative of the office of Commercial Vehicle Enforcement, out of 8,258 total commercial vehicle inspections, 103 (1.2 percent) were of motorcoaches. The cruise lines do not pay anything to the department for these services, and violation fines are very rare. The total budget for CVE was \$3,542,531 in FY04.

Other State Departments

While the cruise industry may have indirect impacts on other departments within the Alaska state government, no significant or apparent link to the cruise industry could be found in the Departments of Corrections, Labor and Workforce Development, Law, or Military and Veterans Affairs.