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### ECONOMIC IMPACT OF CRUISE SHIP PASSENGERS IN BAR HARBOR, MAINE

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#### **Executive Summary**

This report examines the economic impact of cruise ship passengers in Bar Harbor, Maine. In 2002, 64 cruise ships docked in Bar Harbor carrying about 120,000 passengers and crewmembers. The analysis presented in the report is based on 1,080 passenger surveys conducted between August and October of 2002. Economic impact figures are based on a total of 97,190 passengers, which is the capacity of the 64 cruise ships that were scheduled to visit Bar Harbor in 2002. Some of the key findings are:

- ⇒ The average respondent has an annual household income of roughly \$75,000, which is slightly higher than the typical Maine tourist.
- ⇒ Bar Harbor's cruise ship industry expands the market for tourism in Maine.

  About 20 percent of the survey respondents are from the west coast, while only 3 percent are from a New England state.
- ⇒ Over one-half of the respondents took a cruise-line sponsored tour while in port, and 78 percent of these tour-goers visited Acadia National Park.
- ⇒ The average respondent spent a total of \$85.26 in Bar Harbor, and average expenditures approached an estimated \$105.82 per person with the inclusion of cruise-line sponsored tours.
- ⇒ Cruise ship passengers were responsible for an estimated 10 percent of the revenue earned by Bar Harbor's restaurants, bars and retail stores during 2002.Passengers accounted for an estimated 64 percent of retail sales and 26 percent of restaurant and bar sales in October of 2002.
- ⇒ Passengers had a \$12.1 million impact on sales revenue, including multiplier effects, and supported 275 full and part-time jobs in Bar Harbor in 2002.

#### 1. Introduction

Cruise ship passengers provide a large economic impact to many coastal areas in the United States. According to the International Council of Cruise Lines, cruise ships and their passengers had an \$11 billion direct impact on the United States economy during 2001. Further, the cruise industry supported 267,000 U.S. jobs in 2001, which provided \$9.7 billion in wages and salaries (Business Research and Economic Advisors, 2002).

Tourism and water-based transportation are sizable economic sectors in many areas across Maine. In 2001, out-of-state U.S. tourists in Maine generated \$344 million in tax revenue and supported 115,000 jobs, which paid \$2.5 billion in wages and salaries (Longwoods International, 2002). While overnight tourism declined by 2 percent nationally in 2001, overnight trips in Maine increased by 2 percent in that year. Within tourism and water-based transporation, the cruise and shipping sectors are important to towns and cities such as Bar Harbor, Eastport, Portland and Rockland.

The cruise industry is a key source of economic activity in Bar Harbor. Bar Harbor has emerged as a popular port-of-call on New England summer and autumn cruises given its rural charm and close proximity to Acadia National Park. In 2002, 64 cruise ships - carrying about 120,000 passengers and crewmembers - docked in Bar Harbor during the summer and autumn months. Fifty-six cruise ships docked in Bar Harbor in 2001 and, as of May 2002, 60 ships had scheduled a visit for 2003 (Chapman, 2002).

To put these cruise ship passenger figures into perspective, about 3.3 million overnight tourists visited the Bar Harbor and Acadia region in 2001. According to a Maine tourism study conducted by Longwoods International, an estimated 4.3 million "overnight marketable trips" were made to Maine in 2001. Of these trips, 989,000 were made to the Bar Harbor and Acadia region, with each overnight trip in Maine containing an average of 3.3 people (Longwoods International, 2002). A comparison of the number of cruise ship passengers in 2002 to the estimated number of Bar Harbor overnight visitors in 2001 suggests that the cruise industry is directly responsible for about 3 percent of the annual tourists to Bar Harbor.

This report examines the economic impact of cruise ship passengers in Bar Harbor, Maine. The analysis is based on 1,080 passenger surveys conducted between August and October of 2002. The surveys asked the amount of money passengers spent in Bar Harbor, the activities they pursued while in port, the areas of town passengers explored, time constraints they may have faced, plans for return travel to Bar Harbor, and several personal characteristics. This report is the first part of a larger project on cruise ship passengers in Bar Harbor. Subsequent research will focus on the factors that affect a visitor's likelihood of returning to Bar Harbor, and investigate the parts of town that were most frequently explored by cruise ship passengers.

The economic impact analysis presented in this report focuses primarily on the expenditures that cruise ship passengers made while in port. Although crew members may make significant local purchases and cruise lines pay anchorage fees to the city of

Bar Harbor, theses expenditures are beyond the scope of this study. Further, it should be noted upfront that the economic impact figures are based on a total of 97,190 passengers, which is the capacity of the 64 cruise ships that were scheduled to visit Bar Harbor in 2002. Since some of the ships may have come to Bar Harbor at less than full capacity, the impact figures presented in the report can be interpreted as an upper-bound estimate of the passenger impact. Spending by ship personnel, however, may offset the diminished realized impact caused by ship vacancies and/or passengers that chose not to disembark in Bar Harbor.

When interpreting the study findings, it is also important to note that there are costs and benefits associated with Bar Harbor's cruise ship industry unrelated to its economic impact as presented in this report. Beyond the industry's impact on sales revenue, income and employment, cruise ships may have additional costs and benefits related to town and harbor congestion, environmental effects and other potential impacts. Thus, findings presented in this report should be interpreted as a part, but not the whole, of the evidence in evaluating the effects of Bar Harbor's cruise ship industry.

#### 2. Data Collection

Over seven days between August and October of 2002, surveys were distributed to 2,332 passengers as they returned to the ship after spending the day in Bar Harbor. Passengers were surveyed from the Norwegian Sea and Norwegian Dream, which are a part of the Norwegian Cruise Lines fleet, the Princess Cruise Lines' Golden Princess and Royal Princess, and the Rotterdam, which is operated by Holland America Cruise Line. We

received 1,080 returned surveys, which translates into an overall response rate of 46 percent. Table 1 shows the number of surveys distributed and return rates from each day of surveying.

Table 2 outlines the cruise season in Bar Harbor, which begins in May and continues until the end of October. While only two ships, carrying a total of 4,396 passengers and crew, docked in Bar Harbor in May, visitor numbers steadily increased through October, when over 50,000 passengers and crew came to town on 20 vessels. The ships that were included in this study carried, on average, a larger number of passengers (close to 2,000 passengers) than the average cruise ship that docked in Bar Harbor during 2002 (about 1,500 passengers). The observed differences in passenger demographics and expenditures across the ships included in the study suggest that differences may also exist between the survey respondents and passengers on ships that were not included in the study. Thus, the information from survey respondents may not be representative of all cruise ship passengers who visited Bar Harbor in 2002.

# 3. Economic and Demographic Profile of Survey Respondents

Table 3 presents information on the annual household income of the survey respondents. The average respondent has an annual income of roughly \$75,000. About 25 percent of the respondents have an annual household income of between \$50,000 and \$75,000. Close to 37 percent of the passengers surveyed have an annual household income of over \$100,000, while only about 25 percent have an annual household income of less than \$50,000. On average, cruise ship passengers appear to have slightly higher household

incomes than the typical Maine tourist. According to the Longwoods study on tourism in Maine, 40 percent of the visitors on "overnight marketable trips" to Maine have an annual household income of \$75,000 or higher, while 36 percent have an income of less than \$50,000 (Longwoods International, 2002).

As shown in table 4, the average respondent is about 60 years of age, with the youngest being 20 years old and the oldest reporting an age of 90 years. A large majority of respondents, slightly less than 69 percent, are female. Table 5 provides a demographic profile of the survey respondents. Slightly less than one-third of the respondents are between the ages of 60 and 69, and almost 25 percent are 70 years and older. Only 5 percent of the respondents are less than 40 years old. Cruise ship passengers are considerably older, and more likely to be female, than the typical Maine tourist. According to the Longwoods study, the average Maine tourist is close to 48 years old, and about 54 percent of Maine visitors are male (Longwoods International, 2002).

Table 6 shows information on the survey respondents' region-of-residence. Approximately 27 percent of the cruise ship respondents are from the Mid-Atlantic Region of New York, New Jersey and Pennsylvania. The Pacific West Region - which includes Oregon, Washington, California, Hawaii and Alaska - accounted for close to 20 percent of the survey respondents. Only 3 percent of the survey respondents are from a New England state, and less than 4 percent of respondents are from outside the United States.

Bar Harbor's cruise ship industry appears to expand the market for tourism in Maine. The Longwoods tourism study suggests that roughly 79 percent of the overnight trips to Maine had origins within a regional market of the New England states, New York, New Jersey, Pennsylvania, Maryland, Delaware and Washington D.C. (Longwoods International, 2002). Comparatively, less than 35 percent of cruise ship respondents are from the same regional market. Likewise, as indicated above, a sizable portion of the survey respondents are from the west coast, which is well beyond Maine's "normal" tourism market.

#### 4. Time in Port and Tour Information

As shown in table 7, the cruise ships included in the study arrived in Bar Harbor between 7am and noon, and left port between 3pm and 7pm. The eight ships spent an average of just under nine hours in port, with the Golden Princess spending twelve hours in Bar Harbor on September 18 and the ships of the Norwegian Cruise Line spending as few as seven hours in port.

The average respondent spent 5 hours and 20 minutes in Bar Harbor and about 2 hours of this time was spent on a cruise-line sponsored tour. Respondents occupied the rest of their time in port - about three-and-a-half hours - eating, shopping and exploring the downtown. As shown in table 8, the survey respondents generally de-boarded the ship between 9:30am and 12:00pm and re-boarded the ship between 2:30pm and 4:30pm.

Slightly over one-half of the survey respondents indicated that they needed additional time to see all they wanted in Bar Harbor. The only cruise in which 40 percent or more of the passengers did not need more time was a Rotterdam cruise that docked in Bar Harbor on October 19. Although any number of factors could explain the relatively small percentage of these Rotterdam passengers that needed more time in Bar Harbor, it is noteworthy that October 19 had the worst weather (e.g., cold, overcast and rain) of any of the days that surveys were conducted.

About 56 percent of the respondents took a tour sponsored by the cruise line while in port. Table 9 shows that 78 percent of those that took a cruise-line sponsored tour visited Acadia National Park, which was – by far – the most popular tour destination. Much smaller percentages of tour-goers explored downtown Bar Harbor (16 percent), visited St. Saviour's Episcopal Church (12 percent), and went on a whale-watching cruise (6 percent). Other sites and attractions seen on cruise-line sponsored tours include a bed and breakfast, a lobstering demonstration, the ocean trail walk, historical homes and cottages in Bar Harbor, and the Reinhart Pavilion.

A respondents' likelihood of visiting Acadia National Park on a cruise-line sponsored tour appears to be highly dependent upon the number of past visits to Bar Harbor. As shown in table 10, the day spent in port was the first visit to Bar Harbor for about three-fourths of the survey respondents. Of these first-time visitors, 69 percent saw Acadia on a cruise-line sponsored tour. Respondents who had been to Bar Harbor one or more times previously were highly likely to have already visited Acadia National Park.

Substantially lower percentages of these return visitors took a tour of Acadia while in port. For instance, only one-third of the respondents who had been to Bar Harbor four or more times previously took a cruise-line sponsored tour of Acadia.

#### 5. Passenger Expenditure Profile

The survey asked passengers about their expenditures in nine categories: food and beverages, drug and beauty items, apparel items, household goods, fine art and jewelry, transportation, tours (not sponsored by the cruise line), rental equipment, and other expenditures. Tables 11 and 12 present expenditure information based on all survey respondents, including individuals (referred to below as "non-spenders") that did not spend any money in one or more of the categories. The average respondent spent a total of \$85.26 while in port, with a large amount of this money spent on food and beverages (\$20.51) and apparel items (\$22.96). On the other hand, the average respondent spent very little on transportation (\$1.61), drug and beauty items (\$1.39) and rental equipment (\$0.35).

#### Spenders Compared to Non-Spenders

It is informative to differentiate between respondents who are "spenders" and "non-spenders." Spenders reported positive amounts in the given expenditure categories, whereas non-spenders were respondents that had zero expenditures in one or more categories. Table 13 shows the average expenditures made by spenders, which – at \$90.44 – is about five dollars higher than the total expenditures made by the average respondent. The information on average expenditures shown in tables 11 and 12 includes

non-spenders, which pulls down the average expenditures of the spenders. It is interesting to note that, for respondents that bought fine art and jewelry, expenditures were close to \$97.00 per spender. On the other hand, the average respondent spent just under \$17.00 on fine art and jewelry.

A comparison of spenders (table 13) versus all respondents (tables 11 and 12) indicates that, while some passengers are non-spenders, those who are spenders have fairly high expenditures. The spender information, however, should be interpreted with some caution. For example, since over 99 percent of all respondents reported zero expenditures on rental equipment, the average expenditure made by spenders is based on a very small number of respondents. Further, over 80 percent of the respondents reported zero expenditures on drug and beauty items, household items, fine art and jewelry, transportation and tours.

### Adjusting the Expenditure Figures to Include Cruise-line Sponsored Tours

As indicated above, over half of the survey respondents took a cruise-line sponsored tour in Bar Harbor. Since the survey focused on expenditures made directly by passengers while in port, we did not collect information on the amounts paid to cruise lines for their tours. However, these tours provide revenue to some local businesses and attractions. In order to include the cruise-line sponsored tours in the overall passenger impact, we assumed that these tours cost \$39.69, which is the average amount a "spender" paid for a tour that was not sponsored by the cruise line. After making this adjustment, we found

that the average respondent spent a total of \$105.82 in Bar Harbor, including \$25.62 on tours.

On the basis of the expenditures made by the survey respondents, it appears that cruise ship passengers spend substantially more per day than the typical Maine tourist. Cruise passengers spent over \$100 per day in Bar Harbor, including cruise-line sponsored tours, while the average Maine tourist spent less than \$40.00 per day (Longwoods International, 2002). According to the Longwoods tourism study, 43 million tourist trips to Maine resulted in \$5.6 billion in direct expenditures in 2001. The retail sector accounted for 34 percent of tourism spending (\$1.9 billion) and food expenditures totaled 30 percent of the spending by Maine tourists (\$1.7 billion). With each trip made up of 3.4 people, the average tourist in Maine spent approximately \$38.30 per day, including \$13.00 on retail goods and \$11.50 on food (Longwoods International, 2002).

## **6.** Economic Impact of Cruise Ship Passengers

Cruise ship passengers impact the Bar Harbor economy both through their direct expenditures made while in port and the "multiplier effects" that this spending has on local businesses and workers. Estimates for the total amount of money spent directly by cruise ship passengers are based on the average expenditures made by the survey respondents and the number of passengers that visited Bar Harbor. As discussed in the introduction, the analysis uses a passenger total of 97,190 people, which is the full capacity of the 64 cruise ships that were scheduled to visit Bar Harbor in 2002

The associated multiplier effects are estimated using an input-output model for the Bar Harbor economy. The Bar Harbor IMPLAN (input-output) model traces the circular flows of expenditures and income through the economy with a complex system of accounts that are uniquely tailored to the area. Underlying these accounts is detailed information regarding transactions occurring between businesses located in the town, the purchasing patterns of local households, and transactions occurring between Bar Harbor and the rest of the world. Some of the data sources used to build the Bar Harbor IMPLAN model are County Business Patterns from the US Census Bureau, Regional Economic Information System (REIS) data and input-output accounts from the US Bureau of Economic Analysis, and ES202 statistics from the US Bureau of Labor Statistics.

Table 14 shows the estimated expenditures made by cruise ship passengers in Bar Harbor during the 2002 season. Cruise ship passengers spent an estimated \$10.3 million in Bar Harbor, including \$2.0 million in restaurants and bars, and \$4.7 million in retail stores. Over \$4.2 million of the total estimated expenditures were made in October, when 20 ships and close to 40,000 passengers were scheduled to visit Bar Harbor. To put these figures into perspective, Bar Harbor's restaurants, bars and retail stores had a combined \$66.7 million in taxable sales during 2002 (Maine Revenue Services, 2003).

A comparison of the expenditures made by cruise ship passengers in 2002 to the total taxable sales in 2002 suggests that cruise ship passengers were responsible for about 10 percent of the revenue earned by Bar Harbor's restaurants, bars and retail stores. It

appears that the cruise ship industry was especially important to Bar Harbor's retail economy during September and October of 2002. As shown in table 15, cruise ship passengers made 9 percent of the purchases in restaurants and bars in September, and passengers accounted for close to 26 percent of restaurant and bar sales in October. Likewise, cruise ship passengers provided an estimated 29 percent of the sales revenue to retail stores in September, and almost 64 percent of retail sales in October.

Table 16 summarizes the economic impact, including multiplier effects, of cruise ship passengers in Bar Harbor. The direct impact of passenger spending is \$10.3 million in sales output, of which an estimated \$2.9 million is paid in wages and salaries to support 244 full and part-time jobs. The total impact of passenger spending is \$12.1 million in output, \$3.6 million in wages and salaries, and 275 full and part-time jobs.

#### 7. Conclusions

The results and analysis presented in this report suggest that cruise ship passengers have a sizable impact on the Bar Harbor economy. Although the number of passengers is fairly low compared to all overnight tourists in Bar Harbor, cruise ship visitors provided about 5 percent of the total revenue earned by restaurants and bars, and 16 percent of total retail sales in 2002. The cruise industry is an especially important source of retail activity in October, when passengers accounted for about 26 percent of sales in restaurants and bars, and 64 percent of sales in retail stores. In total, cruise ship passengers have an estimated \$12.1 million impact on sales output in the Bar Harbor economy. As stated in the

introduction, these impact figures are based on 97,190 passengers, which is the full capacity of the 64 ships that were scheduled to visit Bar Harbor in 2002

Although passengers made substantial purchases while in Bar Harbor, some survey respondents mentioned goods or services they would have liked to purchase in Bar Harbor but were unable to find. Thirty-two respondents indicated that they were looking for items by local artisans, such as wooden products, jewelry and pottery. Thirty-six respondents would have liked to find a larger selection of clothing, including "higher quality" apparel such as sweaters, ties, and clothing without a Bar Harbor logo. Finally, eight respondents believed that the town could use a taxicab or car rental service close to the pier.

Along with the expenditures made by cruise ship passengers while they are in port, Bar Harbor's cruise industry provides a less tangible benefit of showcasing the town and state to thousands of potential repeat visitors. As indicated above, the day spent in port was the first trip to Bar Harbor for about three-fourths of the survey respondents. About 33 percent of the total respondents indicated that they were planning to return to Bar Harbor, and 31 percent plan to travel elsewhere in Maine during the next two years. Although these figures are well below the 51 percent of the respondents that felt they needed additional time in port, it is important to keep in mind that a large percentage of cruise passengers are from regions quite distant from Bar Harbor. Long distances between a respondents' place-of-residence and Bar Harbor may explain why the percentage of

respondents who plan to return to Bar Harbor is smaller than the percentage who felt they needed more time in town.

### 8. References and Data Sources

Business Research and Economic Advisors. 2002. "The Contribution of the North American Cruise Industry to the U.S. Economy in 2001." Report prepared for the International Council of Cruise Lines.

Chapman, Liz. 2002. "Bar Harbor to welcome record number of cruise ships." *Bangor Daily News*. May 20, 2002.

Longwoods International. 2002. "Travel and Tourism in Maine: 2001 Visitor Study."

Report prepared for the Maine Office of Tourism.

Maine Revenue Services. 2003. "Taxable Retail Sales Report."

Table 1 Survey Distribution and Return Rates

| Ship Name       | Survey<br>Date | Ship Capacity (Passengers) | Surveys<br>Distributed | Surveys<br>Returned | Response<br>Rate |
|-----------------|----------------|----------------------------|------------------------|---------------------|------------------|
|                 |                |                            |                        |                     |                  |
| Norwegian Sea   | 8/28/2002      | 1,800                      | 320                    | 124                 | 38.75%           |
| Golden Princess | 9/18/2002      | 2,600                      | 400                    | 151                 | 37.75%           |
| Rotterdam       | 9/29/2002      | 1,600                      | 294                    | 141                 | 47.96%           |
| Norwegian Dream | 10/4/2002      | 2,100                      | NA *                   | 136                 | NA               |
| Royal Princess  | 10/4/2002      | 1,200                      | NA                     | 105                 | NA               |
| ,               |                | subtotal:                  | 528                    | 241                 | 45.64%           |
| Rotterdam       | 10/19/2002     | 1,600                      | 210                    | 108                 | 51.43%           |
| Golden Princess | 10/22/2002     | 2,600                      | 370                    | 159                 | 42.97%           |
| Norwegian Sea   | 10/25/2002     | 1,800                      | 210                    | 120                 | 57.14%           |
| Total           |                |                            | 2,332                  | 1,080               | 46.31%           |

<sup>\*</sup> Surveys were distributed to passengers from two ships that were using the same docking facility on October 4. Information on the number of surveys distributed and response rate for each individual ship is not available.

Table 2 Cruise Ships Visiting Bar Harbor in 2002 \*

| Month     | Number of Ships | Passengers Crew ** |        | Total Passengers and Crew |  |  |
|-----------|-----------------|--------------------|--------|---------------------------|--|--|
| May       | 0               | 2.406              | 000    | 4 206                     |  |  |
| May       | 2               | 3,496              | 900    | 4,396                     |  |  |
| June      | /               | 10,102             | 1,264  | 11,366                    |  |  |
| July      | 9               | 11,984             | 1,885  | 13,869                    |  |  |
| August    | 10              | 8,173              | 2,623  | 10,796                    |  |  |
| September | 16              | 23,742             | 6,495  | 30,237                    |  |  |
| October   | 20              | 39,693             | 10,953 | 50,646                    |  |  |
| Total     | 64              | 97,190             | 24,120 | 121,310                   |  |  |

<sup>\*</sup> Passenger and crew figures are from the Bar Harbor Chamber of Commerce Website. \*\* Information on the number of crew is not available for all ships.

Table 3 Income Profile of Survey Respondents

# Percentage of respondents within annual household income category

| Ship Name and Date    | Under \$25,000 | \$25,000-\$49,999 | \$50,000-\$74,999 | \$75,000-\$99,999 | \$100,000-\$149,999 | Over \$150,000 |
|-----------------------|----------------|-------------------|-------------------|-------------------|---------------------|----------------|
|                       |                |                   |                   |                   |                     |                |
| Norwegian Sea 8/28    | 5.56%          | 25.00%            | 21.30%            | 15.74%            | 25.00%              | 7.41%          |
| Golden Princess 9/18  | 2.26%          | 23.31%            | 21.80%            | 10.53%            | 25.56%              | 16.54%         |
| Rotterdam 9/29        | 3.36%          | 15.97%            | 18.49%            | 15.97%            | 15.13%              | 31.09%         |
| Norwegian Dream 10/4  | 8.55%          | 25.64%            | 25.64%            | 15.38%            | 14.53%              | 10.26%         |
| Royal Princess 10/4   | 3.45%          | 13.79%            | 24.14%            | 22.99%            | 14.94%              | 20.69%         |
| Rotterdam 10/19       | 1.09%          | 20.65%            | 27.17%            | 9.78%             | 20.65%              | 20.65%         |
| Golden Princess 10/22 | 3.97%          | 15.89%            | 21.19%            | 16.56%            | 23.18%              | 19.21%         |
| Norwegian Sea 10/25   | 6.86%          | 23.53%            | 33.33%            | 13.73%            | 17.65%              | 4.90%          |
| All Ships             | 4.25%          | 20.30%            | 24.12%            | 14.77%            | 19.98%              | 16.58%         |

Table 4 Age and Gender of Survey Respondents

| Ship Name and Date    | Average<br>Age | Minimum<br>Age | Maximum<br>Age | Percentage<br>Male | Percentage<br>Female |
|-----------------------|----------------|----------------|----------------|--------------------|----------------------|
|                       |                |                |                |                    | _                    |
| Norwegian Sea 8/28    | 56.06          | 25             | 87             | 29.06%             | 70.94%               |
| Golden Princess 9/18  | 56.64          | 20             | 85             | 32.65%             | 67.35%               |
| Rotterdam 9/29        | 62.85          | 30             | 90             | 27.54%             | 72.46%               |
| Norwegian Dream 10/4  | 65.78          | 35             | 85             | 31.62%             | 68.38%               |
| Royal Princess 10/4   | 60.39          | 27             | 81             | 29.81%             | 70.19%               |
| Rotterdam 10/19       | 63.81          | 31             | 81             | 34.58%             | 65.42%               |
| Golden Princess 10/22 | 53.64          | 22             | 75             | 27.04%             | 72.96%               |
| Norwegian Sea 10/25   | 65.59          | 21             | 83             | 32.20%             | 67.80%               |
| All Ships             | 60.41          | 20             | 90             | 31.23%             | 68.77%               |

Table 5
Demographic Profile of Survey Respondents

| Age Range      | Percentage of<br>Respondents | Percentage<br>Male | Percentage<br>Female |
|----------------|------------------------------|--------------------|----------------------|
|                |                              |                    |                      |
| Less than 30   | 1.48%                        | 18.75%             | 81.25%               |
| 30-39          | 3.80%                        | 21.95%             | 78.05%               |
| 40-49          | 10.93%                       | 22.88%             | 77.12%               |
| 50-59          | 25.37%                       | 28.83%             | 71.17%               |
| 60-69          | 32.13%                       | 30.84%             | 69.16%               |
| 70-79          | 20.46%                       | 41.63%             | 58.37%               |
| 80 and over    | 3.24%                        | 40.00%             | 60.00%               |
| All Passengers |                              | 31.23%             | 68.77%               |

Table 6
Respondents by Region of Residence \*

| Ship Name and Date    | NE     | MA     | SA     | ESC   | WSC    | ENC    | WNC    | MW     | PW     | CAN   | Other | DNR   |
|-----------------------|--------|--------|--------|-------|--------|--------|--------|--------|--------|-------|-------|-------|
|                       |        |        |        |       |        |        |        |        |        |       |       |       |
| Norwegian Sea 8/28    | 1.61%  | 64.52% | 14.52% | 0.81% | 4.84%  | 4.03%  | 1.61%  | 0      | 3.23%  | 0     | 0     | 4.84% |
| Golden Princess 9/18  | 0.66%  | 45.70% | 17.88% | 3.97% | 4.64%  | 6.62%  | 1.99%  | 1.99%  | 9.27%  | 0     | 3.31% | 3.97% |
| Rotterdam 9/29        | 0.71%  | 7.80%  | 12.77% | 2.13% | 10.64% | 10.64% | 7.09%  | 12.06% | 26.24% | 2.84% | 1.42% | 5.67% |
| Norwegian Dream 10/4  | 19.85% | 12.50% | 12.50% | 2.94% | 5.15%  | 10.29% | 9.56%  | 7.35%  | 12.50% | 2.21% | 1.47% | 3.68% |
| Royal Princess 10/4   | 1.90%  | 6.67%  | 4.76%  | 3.81% | 9.52%  | 7.62%  | 16.19% | 9.52%  | 35.24% | 0.95% | 1.90% | 1.90% |
| Rotterdam 10/19       | 0      | 11.11% | 12.04% | 4.63% | 10.19% | 9.26%  | 2.78%  | 5.56%  | 34.26% | 4.63% | 2.78% | 2.78% |
| Golden Princess 10/22 | 1.26%  | 48.43% | 10.69% | 0.63% | 10.06% | 10.06% | 3.77%  | 5.03%  | 4.40%  | 0     | 3.14% | 2.52% |
| Norwegian Sea 10/25   | 0      | 4.17%  | 22.50% | 0     | 6.67%  | 5.83%  | 5.00%  | 4.17%  | 42.50% | 5.83% | 0.83% | 2.50% |
| All Ships             | 3.24%  | 26.57% | 13.89% | 2.22% | 7.78%  | 7.96%  | 5.65%  | 5.65%  | 19.81% | 1.85% | 1.85% | 3.52% |

<sup>\*</sup> NE- New England-Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island

MA- Middle Atlantic- New York, New Jersey, Pennsylvania

SA- South Atlantic- Maryland, Delaware, West Virginia, Virginia, North Carolina, South Carolina, Georgia, Florida

ESC- East South Central- Kentucky, Tennessee, Mississippi, Alabama

WSC- West South Central- Oklahoma, Arkansas, Louisiana, Texas

ENC- East North Central- Ohio, Michigan, Indiana, Illinois, Wisconsin

WNC- West North Central- North Dakota, South Dakota, Minnesota, Iowa, Nebraska, Missouri, Kansas

MW- Mountain West- Montana, Wyoming, Idaho, Nevada, Utah, Colorado, New Mexico, Arizona

PW- Pacific West- Washington, Oregon, California, Alaska, Hawaii

CAN- Canada

Other- Locations outside of the US and Canada

DNR- Did not respond

Table 7 Ship Time in Port \*

| Ship Name and Date    | Scheduled<br>Arrival Time | Scheduled<br>Departure Time | Total Time in Port |
|-----------------------|---------------------------|-----------------------------|--------------------|
|                       |                           |                             |                    |
| Norwegian Sea 8/28    | 12:00pm                   | 7:00pm                      | 7 hours            |
| Golden Princess 9/18  | 7:00am                    | 7:00pm                      | 12 hours           |
| Rotterdam 9/29        | 8:00am                    | 6:00pm                      | 10 hours           |
| Norwegian Dream 10/4  | 12:00pm                   | 7:00pm                      | 7 hours            |
| Royal Princess 10/4   | 8:00am                    | 6:00pm                      | 10 hours           |
| Rotterdam 10/19       | 8:00am                    | 6:00pm                      | 10 hours           |
| Golden Princess 10/22 | 7:00am                    | 3:00pm                      | 8 hours            |
| Norwegian Sea 10/25   | 12:00pm                   | 7:00pm                      | 7 hours            |
| All Ships             | 9:25am                    | 6:12pm                      | 8 hours 47 minutes |

<sup>\*</sup> Arrival and departure times from the Bar Harbor Chamber of Commerce Website.

Table 8
Amount of Time Spent in Bar Harbor

| Ship Name and Date    | Average<br>De-Boarding Time | Average<br>Re-Boarding Time | Average Time<br>Spent in Port | Average Time<br>Spent in Port (not on tour) | Percentage of Respondents that<br>Needed Additional Time |
|-----------------------|-----------------------------|-----------------------------|-------------------------------|---|--|
|                       |                             |                             |                               |   |  |
| Norwegian Sea 8/28    | 11:26                       | 16:30                       | 5h 33min                      | 2h 51min                                    | 50.81%   |
| Golden Princess 9/18  | 10:10                       | 16:47                       | 6h 30min                      | 2h 45min                                    | 53.33%   |
| Rotterdam 9/29        | 10:13                       | 15:30                       | 5h 15min                      | 3h 29min                                    | 42.34%   |
| Norwegian Dream 10/4  | 12:07                       | 16:10                       | 4h 12min                      | 3h 23min                                    | 54.89%   |
| Royal Princess 10/4   | 10:23                       | 16:07                       | 6h 25min                      | 3h 55min                                    | 44.23%   |
| Rotterdam 10/19       | 9:57                        | 16:18                       | 5h 12min                      | 3h 27min                                    | 32.69%   |
| Golden Princess 10/22 | 9:39                        | 14:31                       | 4h 56min                      | 2h 56min                                    | 69.81%   |
| Norwegian Sea 10/25   | 11:57                       | 16:45                       | 4h 55min                      | 3h 34min                                    | 48.74%   |
| All Ships             | 10:33                       | 16:04                       | 5h 20min                      | 3h 31min                                    | 50.80%   |

Table 9
Sites Visited on Cruise-Line Sponsored Tours

| Ship Name and Date    | Acadia<br>National<br>Park | Downtown<br>Bar<br>Harbor | St. Saviour's<br>Church | Whale-<br>Watching<br>Cruise | Reinhart<br>Pavilion | Historical<br>Homes | Bed and<br>Breakfast | Ocean Trail<br>Walk | Lobstering<br>Demonstration | Other  |
|-----------------------|----------------------------|---------------------------|-------------------------|------------------------------|----------------------|---------------------|----------------------|---------------------|-----------------------------|--------|
| Norwegian Sea 8/28    | 73.85%                     | 15.38%                    | 0                       | 7.69%                        | 0                    | 0                   | 0                    | 0                   | 0                           | 13.85% |
| Golden Princess 9/18  | 73.15%                     | 15.74%                    | 12.04%                  | 26.85%                       | 2.78%                | 0.93%               | 0.93%                | 3.70%               | 0                           | 4.63%  |
| Rotterdam 9/29        | 80.49%                     | 15.85%                    | 35.37%                  | 0                            | 0                    | 13.41%              | 10.98%               | 0                   | 6.10%                       | 6.10%  |
| Norwegian Dream 10/4  | 73.81%                     | 19.05%                    | 2.38%                   | 2.38%                        | 7.14%                | 2.38%               | 0                    | 2.38%               | 0                           | 7.14%  |
| Royal Princess 10/4   | 86.96%                     | 21.74%                    | 8.70%                   | 0                            | 8.70%                | 2.90%               | 0                    | 1.45%               | 0                           | 4.35%  |
| Rotterdam 10/19       | 84.48%                     | 15.52%                    | 25.86%                  | 0                            | 3.45%                | 3.45%               | 20.69%               | 1.72%               | 12.07%                      | 5.17%  |
| Golden Princess 10/22 | 78.79%                     | 14.14%                    | 4.04%                   | 1.01%                        | 6.06%                | 2.02%               | 0                    | 6.06%               | 0                           | 6.06%  |
| Norwegian Sea 10/25   | 84.31%                     | 13.73%                    | 0                       | 0                            | 15.69%               | 7.84%               | 0                    | 3.92%               | 1.96%                       | 5.88%  |
| All Ships             | 78.06%                     | 15.75%                    | 11.56%                  | 6.03%                        | 4.52%                | 4.02%               | 3.85%                | 2.51%               | 2.18%                       | 6.20%  |

Table 10
Past Visits to Bar Harbor and Acadia National Park

| Number of Times in Bar Harbor * | Percentage of Respondents | Visited Acadia Previously Visited Acadia While i |        |  |  |  |
|---------------------------------|---------------------------|--|--------|--|--|--|
| 1                               | 74.63%                    | 0  | 69.05% |  |  |  |
| 2                               | 17.38%                    | 75.40%   | 55.08% |  |  |  |
| 3                               | 4.55%                     | 89.80%   | 48.98% |  |  |  |
| 4                               | 1.21%                     | 92.31%   | 23.08% |  |  |  |
| More than 4                     | 2.23%                     | 95.83%   | 33.33% |  |  |  |

<sup>\*</sup> Including date of ship visit

Table 11
Average Expenditures of Survey Respondents, including "Spenders" and "Non-Spenders"

|                       | Food and  | Drug and |         | Household | Fine Art and |                |        | Rental    |         |          |
|-----------------------|-----------|----------|---------|-----------|--------------|----------------|--------|-----------|---------|----------|
| Ship Name and Date    | Beverages | Beauty   | Apparel | Items     | Jewelry      | Transportation | Tours  | Equipment | Other   | Total    |
|                       |           |          |         |           |              |                |        |           |         |          |
| Norwegian Sea 8/28    | \$25.91   | \$0.96   | \$24.10 | \$9.38    | \$9.31       | \$1.96         | \$4.06 | \$0.65    | \$7.36  | \$83.65  |
| Golden Princess 9/18  | \$22.63   | \$2.34   | \$21.58 | \$5.79    | \$20.80      | \$2.11         | \$5.50 | \$0.71    | \$10.75 | \$92.47  |
| Rotterdam 9/29        | \$20.62   | \$1.06   | \$23.66 | \$16.00   | \$31.74      | \$2.25         | \$7.79 | \$0.74    | \$9.73  | \$113.58 |
| Norwegian Dream 10/4  | \$20.23   | \$0.78   | \$19.53 | \$8.80    | \$15.39      | \$0.23         | \$1.57 | 0         | \$9.74  | \$76.78  |
| Royal Princess 10/4   | \$21.77   | \$1.17   | \$22.71 | \$7.30    | \$8.75       | \$2.34         | \$5.13 | 0         | \$9.09  | \$83.96  |
| Rotterdam 10/19       | \$19.66   | \$0.99   | \$24.57 | \$6.28    | \$21.78      | \$2.30         | \$6.54 | 0         | \$7.22  | \$89.27  |
| Golden Princess 10/22 | \$16.15   | \$1.96   | \$24.53 | \$4.50    | \$13.44      | \$0.71         | \$3.72 | \$0.19    | \$10.04 | \$74.96  |
| Norwegian Sea 10/25   | \$17.34   | \$1.35   | \$24.42 | \$1.52    | \$11.81      | \$0.38         | \$5.50 | \$0.16    | \$13.32 | \$76.04  |
| All Ships             | \$20.51   | \$1.39   | \$22.96 | \$7.43    | \$16.47      | \$1.61         | \$5.06 | \$0.35    | \$9.48  | \$85.26  |

Table 12 Expenditure Profile of Survey Respondents

|                    | Food and  | Drug and |          | Household | Fine Art and |                |          | Rental    |          |
|--------------------|-----------|----------|----------|-----------|--------------|----------------|----------|-----------|----------|
| Expenditure Amount | Beverages | Beauty   | Apparel  | Items     | Jewelry      | Transportation | Tours    | Equipment | Other    |
| \$0.00             | 27.42%    | 85.33%   | 49.57%   | 81.59%    | 83.03%       | 96.16%         | 87.15%   | 99.04%    | 68.43%   |
| \$.01 - \$9.99     | 12.56%    | 10.35%   | 2.21%    | 3.93%     | 1.15%        | 0.38%          | 0.19%    | 0.10%     | 8.64%    |
| \$10 - \$19.99     | 14.09%    | 3.16%    | 8.53%    | 4.12%     | 2.30%        | 0.29%          | 1.05%    | 0.19%     | 7.29%    |
| \$20 - \$29.99     | 15.05%    | 0.38%    | 10.83%   | 4.70%     | 3.45%        | 0.48%          | 1.92%    | 0.19%     | 5.47%    |
| \$30 - \$39.99     | 10.35%    | 0.19%    | 7.00%    | 1.53%     | 1.73%        | 0.48%          | 1.82%    | 0         | 3.26%    |
| \$40 - \$49.99     | 7.38%     | 0.38%    | 3.84%    | 0.58%     | 0.96%        | 0.77%          | 5.94%    | 0.29%     | 1.25%    |
| \$50 - \$59.99     | 6.52%     | 0        | 5.37%    | 0.77%     | 1.63%        | 0.67%          | 0.58%    | 0         | 2.50%    |
| \$60 and over      | 6.62%     | 0.19%    | 12.66%   | 2.78%     | 5.75%        | 0.77%          | 1.34%    | 0.19%     | 3.26%    |
| <br>Mean           | \$20.51   | \$1.39   | \$22.96  | \$7.43    | \$16.47      | \$1.61         | \$5.06   | \$0.35    | \$9.48   |
| Min                | 0         | 0        | 0        | 0         | 0            | 0              | 0        | 0         | 0        |
| Max                | \$200.00  | \$200.00 | \$300.00 | \$600.00  | \$2,350.00   | \$118.00       | \$275.00 | \$100.00  | \$575.00 |

Table 13
Average Expenditures of "Spenders"

|                       | Food and       | Drug and |               | Household | Fine Art and   |                |                    | Rental             |                |                    |
|-----------------------|----------------|----------|---------------|-----------|----------------|----------------|--------------------|--------------------|----------------|--------------------|
| Ship Name and Date    | Beverages      | Beauty   | Apparel       | Items     | Jewelry        | Transportation | Tours              | Equipment          | Other          | Total              |
| N                     | <b>#</b> 00.00 | Φ7.00    | <b>#40.05</b> | ΦΕΟ ΟΟ    | <b>#</b> 00 04 | Φ00.00         | Φ44 <del>7</del> 0 | Φ0 <del>7</del> 00 | <b>#07.0</b> F | Φ0 <del>7</del> 40 |
| Norwegian Sea 8/28    | \$29.83        | \$7.82   | \$49.05       | \$56.26   | \$66.34        | \$32.00        | \$41.73            | \$37.00            | \$27.95        | \$87.48            |
| Golden Princess 9/18  | \$28.19        | \$12.30  | \$45.32       | \$27.46   | \$117.58       | \$31.00        | \$36.77            | \$35.00            | \$36.74        | \$99.67            |
| Rotterdam 9/29        | \$28.41        | \$7.93   | \$49.14       | \$77.13   | \$158.70       | \$43.43        | \$50.05            | \$100.00           | \$28.55        | \$117.95           |
| Norwegian Dream 10/4  | \$27.55        | \$8.34   | \$44.20       | \$35.48   | \$76.35        | \$30.00        | \$25.38            | NA *               | \$30.64        | \$79.63            |
| Royal Princess 10/4   | \$27.62        | \$6.75   | \$42.18       | \$54.21   | \$56.88        | \$40.50        | \$38.14            | NA                 | \$23.64        | \$81.39            |
| Rotterdam 10/19       | \$30.77        | \$8.19   | \$48.25       | \$32.31   | \$138.35       | \$82.67        | \$35.30            | NA                 | \$19.81        | \$95.45            |
| Golden Princess 10/22 | \$25.98        | \$16.94  | \$51.03       | \$20.66   | \$74.86        | \$36.67        | \$41.43            | \$15.00            | \$31.34        | \$82.66            |
| Norwegian Sea 10/25   | \$27.35        | \$6.27   | \$38.80       | \$17.66   | \$72.08        | \$44.00        | \$35.44            | \$18.00            | \$44.15        | \$79.56            |
| All Ships             | \$28.36        | \$9.46   | \$45.53       | \$40.37   | \$96.59        | \$41.93        | \$39.69            | \$36.70            | \$29.93        | \$90.44            |

<sup>\*</sup> All respondents from October 4 and 19 reported zero expenditures on rental equipment.

Table 14
Estimated Direct Expenditures Made by Cruise Ship Passengers, 2002

| Month     | Restaurants and Bars | Retail Stores | Other Businesses | Total        |
|-----------|----------------------|---------------|------------------|--------------|
|           |                      |               |                  |              |
| May       | \$71,703             | \$168,682     | \$129,562        | \$369,947    |
| June      | \$207,192            | \$487,422     | \$374,380        | \$1,068,994  |
| July      | \$245,792            | \$578,228     | \$444,127        | \$1,268,147  |
| August    | \$167,628            | \$394,347     | \$302,891        | \$864,867    |
| September | \$486,948            | \$1,145,552   | \$879,879        | \$2,512,378  |
| October   | \$814,103            | \$1,915,187   | \$1,471,023      | \$4,200,313  |
| Total     | \$1,993,367          | \$4,689,418   | \$3,601,861      | \$10,284,646 |

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Table 15
Estimated Bar Harbor Taxable Retail Sales, 2002 \*

|           | Taxable Sales, | Percentage of Sales | Taxable Sales,       | Percentage of Sales<br>Made to Passengers |  |
|-----------|----------------|---------------------|----------------------|---|--|
| Month     | Retail Stores  | Made to Passengers  | Restaurants and Bars |   |  |
| January   | \$437,809      | 0                   | \$705,858            | 0   |  |
| February  | \$318,787      | 0                   | \$457,319            | 0   |  |
| March     | \$384,004      | 0                   | \$743,123            | 0   |  |
| April     | \$656,349      | 0                   | \$835,086            | 0   |  |
| May       | \$1,604,473    | 10.51%              | \$2,096,914          | 3.42%                                     |  |
| June      | \$3,750,278    | 13.00%              | \$5,419,700          | 3.82%                                     |  |
| July      | \$6,061,358    | 9.54%               | \$8,768,419          | 2.80%                                     |  |
| August    | \$6,334,890    | 6.23%               | \$8,853,715          | 1.89%                                     |  |
| September | \$3,982,252    | 28.77%              | \$5,337,766          | 9.12%                                     |  |
| October   | \$2,996,962    | 63.90%              | \$3,163,489          | 25.73%                                    |  |
| November  | \$1,187,339    | 0                   | \$419,225            | 0   |  |
| December  | \$1,623,399    | 0                   | \$602,186            | 0   |  |
| Total     | \$29,337,900   |                     | \$37,402,800         |   |  |

<sup>\*</sup> Monthly sales figures are not available for Bar Harbor. Monthly figures for Mount Desert Island were used to convert quarterly Bar Harbor sales figures into monthly figures. Taxable sales figures are from Maine Revenue Services.

Table 16 Economic Impact of Cruise Ship Passengers in Bar Harbor, 2002

|                   | Sales Output | Full and Part-time Jobs | Income      |
|-------------------|--------------|-------------------------|-------------|
| Direct Impact     | \$10,284,646 | 244                     | \$2,904,294 |
| Multiplier Effect | \$1,841,723  | 31                      | \$686,408   |
| Tatal Image at    | ¢10,100,000  | 075                     | ΦΩ FΩΩ 7ΩΩ  |
| Total Impact      | \$12,126,369 | 275                     | \$3,590,702 |

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