

# **ECONOMIC IMPACT OF CRUISE TOURISM ON THE CARIBBEAN ECONOMY**

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



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Prepared for:

The Florida-Caribbean Cruise Association



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- Bahamas
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- Dominica
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- San Juan, Puerto Rico
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## EXECUTIVE SUMMARY

Business Research and Economic Advisors (BREA) was engaged by the Florida-Caribbean Cruise Association (FCCA) and participating cruise destinations and governments to conduct an analysis of cruise-related spending and its impact on the economies of the participating destinations. The participating destinations and their sponsoring agencies are shown in **Table ES-1**.

**Table ES-1 – Participating Destinations and Sponsoring Agencies**

Destinations	Sponsoring Agencies
Antigua & Barbuda	Ministry of Tourism
Aruba	Aruba Ports Authority
The Bahamas	Ministry of Tourism
Barbados	Barbados Tourism Authority
Belize	Belize Tourism Board
Cayman Islands	Ministry of Tourism
Cartagena, CO	Sociedad Portuaria de Cartagena
Curacao	Curacao Tourist Board
Dominica	Ministry of Tourism
Grenada	Granada Board of Tourism
Key West	City of Key West
Martinique	Comite Martiniquais du Tourisme
Mexico: Costa Maya and Cozumel	Puerto de Costa Maya
San Juan, PR	Puerto Rico Tourism Company
St. Kitts and Nevis	St. Kitts Tourism Authority
St. Lucia	St. Lucia Air and Sea Ports Authority
St. Maarten	Port of St. Maarten
U. S. Virgin Islands	Department of Tourism

## Economic Impacts

During the 2005-2006 cruise year<sup>1</sup> cruise tourism generated significant economic benefits to the 19 participating destinations. As shown in **Table ES-2 cruise tourism generated nearly \$1.8 billion in direct expenditures, 41,500 jobs and \$600 million in employee wages** in the 19 destinations. Five destinations had direct cruise tourism expenditures in excess of \$150 million. The U.S. Virgin Islands led all destinations with \$362 million, followed by St. Maarten with \$246 million, Cozumel with \$214 million, the Cayman Islands with \$180 million, and San Juan, PR with \$170 million. Combined, these five destinations accounted for 66 percent of the total cruise tourism expenditures in the 19 destinations.

The remaining fourteen destinations accounted for one-third of the cruise tourism expenditures. This spending averaged just under \$43 million per destination, ranging from \$4.0 million in Martinique to \$144.4 million in The Bahamas.

<sup>1</sup> The economic contribution of cruise tourism to the 19 destinations was estimated for the 12-month period from May, 2005 through April, 2006 which is referred to as the 2005-2006 cruise year throughout this report.

Table ES-2 – Total Economic Contribution of Cruise Tourism by Destination, 2005-2006 Cruise Year

Destinations	Total Cruise Tourism Expenditures (\$US Millions)	Total Employment	Total Employee Wage Income (\$US Millions)
Antigua	\$ 41.0	1,215	\$ 10.4
Aruba	\$ 66.2	1,710	\$ 24.6
Bahamas	\$ 144.4	3,965	\$ 60.9
Barbados	\$ 57.3	1,635	\$ 16.8
Belize	\$ 64.2	1,885	\$ 19.9
Cayman Islands	\$ 179.7	3,705	\$ 66.0
Cartagena	\$ 4.5	140	\$ 0.8
Costa Maya	\$ 60.2	1,770	\$ 11.7
Cozumel	\$ 213.9	5,945	\$ 40.8
Curacao	\$ 18.0	420	\$ 7.5
Dominica	\$ 13.8	390	\$ 3.0
Grenada	\$ 16.3	485	\$ 3.1
Key West	\$ 68.7	1,260	\$ 35.4
Martinique	\$ 4.0	115	\$ 0.8
San Juan	\$ 170.0	3,865	\$ 55.4
St. Kitts	\$ 6.7	205	\$ 1.5
St. Lucia	\$ 34.8	1,035	\$ 6.7
St. Maarten	\$ 246.4	5,590	\$ 99.3
U.S.V.I.	\$ 361.6	6,165	\$ 135.6
<b>All Destinations</b>	<b>\$ 1,771.7</b>	<b>41,500</b>	<b>\$ 600.1</b>

The economic analysis of cruise tourism revealed the following impacts<sup>2</sup> for the top five destinations:

- The U.S. Virgin Islands, with the highest per passenger spending rate, had the highest economic contribution. The \$362 million in cruise tourism expenditures generated an estimated 6,165 jobs paying \$136 million in wage income during the 2005-2006 cruise year.
- The \$246 million in cruise tourism expenditures in St. Maarten generated total employment of 5,590 residents and wage income of \$99.3 million. St. Maarten had the second highest per passenger spending rate and the highest average crew expenditure rate.
- Despite the disruptions caused by Hurricane Wilma which limited passenger and crew visits due to the destruction of the cruise ship piers, Cozumel still led the Caribbean in the number of passenger visits. In Cozumel the \$214 million in total cruise tourism expenditures generated 5,945 jobs and \$40.8 million in wage income during the 2005-2006 cruise year.
- The Cayman Islands, with the second highest number of passenger visits, ranked fourth in direct cruise tourism expenditures. The \$180 million in cruise tourism spending in the Cayman Islands generated 3,705 total jobs and \$66 million in wage income during the 2005-2006 cruise year.

<sup>2</sup> The terms economic contribution, economic impacts and economic benefits are used interchangeably throughout this report.

- San Juan benefited from \$170 million in total cruise tourism expenditures which, in turn, generated 3865 jobs and \$55.4 million in wages during the 2005-2006 cruise year. San Juan was the only destination in this study in which the economic benefits were generated by both homeporting and port-of-call cruise ships.

## Passenger, Crew and Cruise Line Expenditures

The economic benefits of cruise tourism at each destination arise from three principal sources:

- onshore expenditures by passengers which are concentrated in shore excursions and retail purchases of clothing and jewelry;
- onshore spending by crew which are concentrated in purchases of food and beverages, local transportation and retail purchases of clothing and electronics;
- expenditures by the cruise lines for supplies, such as food and beverages, port services, such as navigation and utility services, and port fees and taxes, such as wharfage and dockage fees.

To develop estimates of the typical or average expenditures of cruise passengers and crew during their onshore visit, surveys were conducted by the FCCA member cruise lines.<sup>3</sup> A total of **24,464** passenger surveys and **11,093** crew surveys were completed and returned for tabulation.

The passenger and crew surveys were designed to collect data for onshore spending and visit satisfaction by both passengers and crew. While the crew survey was slightly shorter than the passenger survey, both surveys were designed to collect the following information:

- hours spent ashore;
- expenditures by category, including shore tours, food & beverages, clothing, etc.;
- visit satisfaction, including shore tour, safety, prices, shopping, etc.;
- likelihood of recommending and returning for a land-based vacation; and
- demographic characteristics, including country of residence, age group, income, etc.

The surveys were conducted on board the cruise ships during the months of March, April and May of 2006. The survey schedule was designed so that surveys were conducted by all FCCA member cruise lines that called at each destination. Additionally, the distribution of passenger and crew survey across the cruise lines reflected the distribution of passenger and crew arrivals by cruise line at each destination. On each cruise itinerary, passenger and crew surveys were placed in all passenger cabins and crew quarters following a single destination call. The surveys were completed by the passengers and crew in the privacy of their quarters and returned to a designated office on the cruise ship. Thus, passengers and crew were only surveyed once during a cruise itinerary and for a single destination.

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<sup>3</sup> The FCCA member lines are as follows: Carnival Cruise Lines, Celebrity Cruises, Costa Cruise Lines, Cunard Line, Disney Cruise Line, Holland America Line, MSC Cruises (USA), Inc., Norwegian Cruise Line, Princess Cruises, Regent Seven Seas Cruises, Royal Caribbean International and Windstar Cruises.



## Passenger Visits and Expenditures

As shown in **Table ES-3**, the 13.7 million cruise passengers that visited the 19 participating destinations spent just over \$1.3 billion for shore excursions and other goods and services during the 2005-2006 cruise year. Average per passenger expenditures ranged from a low of \$39.35 in Martinique to a high of \$176.69 in the U.S. Virgin Islands and averaged \$98.01 across the 19 destinations.

**Table ES-3 – Passengers Visits and Expenditures by Destination, 2005-2006 Cruise Year**

Destinations	Passenger Onshore Visits (Thousands)	Average Expenditure per Passenger	Total Passenger Expenditures (\$US Millions)
Antigua	391.4	\$ 84.00	\$ 32.9
Aruba	478.6	\$ 113.26	\$ 54.2
Bahamas*	1,585.5	\$ 60.54	\$ 96.0
Barbados	405.3	\$ 111.82	\$ 45.3
Belize	610.4	\$ 87.77	\$ 53.6
Cayman Islands	1,671.5	\$ 82.73	\$ 138.3
Cartagena	32.4	\$ 114.73	\$ 3.7
Costa Maya	605.9	\$ 76.28	\$ 46.2
Cozumel	1,713.9	\$ 91.64	\$ 157.0
Curacao	253.8	\$ 53.34	\$ 13.5
Dominica	190.0	\$ 51.20	\$ 9.7
Grenada	246.2	\$ 53.82	\$ 13.2
Key West	852.6	\$ 55.21	\$ 47.1
Martinique	77.5	\$ 39.35	\$ 3.0
San Juan**	1,186.6	\$ 96.94	\$ 115.0
St. Kitts	93.8	\$ 57.40	\$ 5.4
St. Lucia	345.7	\$ 82.62	\$ 28.6
St. Maarten	1,304.3	\$ 145.15	\$ 189.3
U.S.V.I.	1,631.5	\$ 176.69	\$ 288.3
<b>All Destinations</b>	<b>13,676.8</b>	<b>\$ 98.01</b>	<b>\$ 1,340.4</b>

\* Only includes passenger visits at Nassau and Freeport.

\*\* Includes passengers aboard both port-of-call and homeporting cruise ships.

The U.S. Virgin Islands with \$288 million in total passenger expenditures led all destinations and accounted for almost 22 percent of all passenger spending among the 19 destinations. Four additional destinations had passenger expenditures in excess of \$100 million. Passengers spent \$189 million in St. Maarten, \$157 million in Cozumel, \$138 million in the Cayman Islands, and \$115 million in San Juan. Combined, these four destinations accounted for 45 percent of the direct expenditures among the 19 destinations.

The remaining fourteen destinations accounted for one-third of total passenger expenditures. This spending averaged just over \$32 million per destination, ranging from \$3.0 million in Martinique to \$96 million in The Bahamas.

## Passenger Expenditures by Category

Passengers were asked to provide their cruise party expenditures for a variety of categories as shown in **Table ES-4**. The per party expenditures in each category were divided by the average size of the expenditure party to arrive at the average spend per passenger. This, in turn, was multiplied by the percentage (share) of all onshore visits to arrive at the weighted average spend per passenger. Total passenger expenditures by category is equal to the weighted spend per passenger multiplied by total passenger visits, 13.7 million passengers.

**Table ES-4 – Average Passenger Expenditures – Average Across All Destinations**

Purchase Categories	Average Spend per Passenger (\$US)	Share of All Onshore Visits	Weighted Average Spend per Passenger	Total Passenger Expenditures (\$US Millions)
Shore Excursions*	\$ 29.72	66.8%	\$ 19.86	\$ 271.7
F&B at Restaurants & Bars	\$ 12.86	55.2%	\$ 7.10	\$ 97.1
Clothing	\$ 21.82	50.8%	\$ 11.08	\$ 151.6
Local Crafts & Souvenirs	\$ 13.32	38.4%	\$ 5.12	\$ 70.0
Taxis/Ground Transportation	\$ 12.18	34.7%	\$ 4.23	\$ 57.8
Other Purchases	\$ 20.59	27.8%	\$ 5.73	\$ 78.3
Watches & Jewelry	\$ 160.45	23.6%	\$ 37.81	\$ 517.1
Retail Purchases of Liquor	\$ 16.64	12.3%	\$ 2.04	\$ 27.9
Entertainment/Night Clubs	\$ 47.73	2.8%	\$ 1.32	\$ 18.0
Telephone & Internet	\$ 5.64	2.2%	\$ 0.12	\$ 1.7
Lodging**	\$ 158.29	1.4%	\$ 2.27	\$ 31.0
Electronics	\$ 126.18	1.0%	\$ 1.32	\$ 18.1
<b>Total</b>			<b>\$ 98.01</b>	<b>\$ 1,340.4</b>

\* The average shore excursion expenditure is a weighted average of direct onshore and Internet purchases by passengers and the net payment of onboard purchases made to local tour operators.

\*\* Lodging expenditures only apply to the passengers who embarked on cruises in San Juan. For purposes of this table the weighted average has been calculated across all passengers.

The analysis of the passenger surveys showed the following major attributes of passenger on-shore spending:

- The typical cruise passenger spent an average of just over \$98 at each destination call during their cruise vacation with total passenger expenditures in the 19 destinations reaching \$1.3 billion during the 2005-2006 cruise year.<sup>4</sup>
- Over 75 percent of passenger expenditures were made in four categories: watches and jewelry, shore excursions, clothing, and food and beverages. Combined, cruise passengers spent an estimated \$1.0 billion in these four categories.
- The most popular expenditure was for shore excursions with two-thirds of all passengers making such a purchase. Local tour operators received an average of \$29.72 per passenger directly from cruise passengers and cruise lines (**see Note**

<sup>4</sup> These estimated expenditures are based upon the passenger and crew surveys conducted during the high season. Lacking any reliable data on low season average expenditure rates no adjustment has been made to the survey estimates for low season passenger and crew visits. However, the FCCA is committed to studying passenger and crew spending patterns in the low season.

**below table).** The weighted average expenditure was \$19.86 per passenger. Total payments to tour operators in the 19 participating destinations were an estimated \$272 million.

- Passengers that purchased watches and jewelry spent an average of \$160.45 on such purchases. Since only 23.6 percent of passengers purchased watches and jewelry the average jewelry expenditure per passenger was \$37.81. Total expenditures on watches and jewelry were an estimated \$517 million.
- Approximately half of the cruise passengers purchased clothing and food and beverages. On average, visiting passengers spent \$7.10 on food and beverages and \$11.08 on clothing at each port call. Combined, passengers spent a total of \$249 million in these two categories.

## Crew Visits and Expenditures

**Table ES-5 Crew Visits and Expenditures by Destination, 2005-2006 Cruise Year**

Destinations	Crew Visits (Thousands)	Average Expenditure per Crew	Total Crew Expenditures (\$US Millions)
Antigua	78.9	\$ 52.47	\$ 4.1
Aruba	89.6	\$ 78.45	\$ 7.0
Bahamas*	279.8	\$ 19.96	\$ 5.6
Barbados	82.8	\$ 76.18	\$ 6.3
Belize	72.1	\$ 18.23	\$ 1.3
Cayman Islands	261.7	\$ 45.92	\$ 12.0
Cartagena	5.2	\$ 43.64	\$ 0.2
Costa Maya	147.5	\$ 50.25	\$ 7.4
Cozumel	356.4	\$ 48.77	\$ 17.4
Curacao	42.1	\$ 39.17	\$ 1.6
Dominica	35.4	\$ 74.80	\$ 2.6
Grenada	50.0	\$ 26.07	\$ 1.3
Key West	147.3	\$ 61.14	\$ 9.0
Martinique	18.8	\$ 28.20	\$ 0.5
San Juan**	203.9	\$ 91.13	\$ 18.6
St. Kitts	19.5	\$ 20.61	\$ 0.4
St. Lucia	76.3	\$ 31.01	\$ 2.4
St. Maarten	289.8	\$ 159.55	\$ 46.2
U.S.V.I.	351.5	\$ 143.83	\$ 50.6
<b>All Destinations</b>	<b>2,608.4</b>	<b>\$ 74.56</b>	<b>\$ 194.5</b>

\* Only includes crew visits at Nassau and Freeport.

\*\* Includes crew aboard both port-of-call and homeporting cruise ships.

As shown in **Table ES-5**, the estimated 2.6 million crew members that visited the 19 participating destinations spent just over \$194 million for goods and services during the 2005-2006 cruise year. Average expenditures per crew ranged from a low of \$18.23 in Belize to a high of \$159.55 in St. Maarten and averaged \$74.56 across all destinations. Unlike passengers, shore excursions are not a focus of crew spending; rather, crew expenditures are more heavily weighted toward food and beverages, local transportation, retail purchases of clothing and telephone and Internet services.

The analysis of the crew surveys showed the following major attributes of crew onshore spending:

- The U.S. Virgin Islands had the second highest number of estimated crew visits, 352,000, and average per crew expenditure of \$144. As a result, the crew visits to the island generated the highest level of crew onshore expenditures of \$50.6 million during the 2005-2006 cruise year.
- With an average expenditure of nearly \$160 per crew member, St. Maarten had the highest average expenditure among the 19 participating destinations. In St. Maarten crew expenditures were concentrated on retail purchases of clothing, jewelry and electronics. The 290,000 crew members that visited St. Maarten spent an estimated \$46.2 million during the 2005-2006 cruise year.
- Cozumel led the 19 destinations with an estimated 356,000 onshore crew visits. Crew spent an average of \$48.77 per visit and generated 17.4 million in total onshore expenditures during the 2005-2006 cruise year.
- Crew in San Juan spent an average of just over \$91. Crew aboard homeporting ships spent slightly more than crew aboard port-of-call ships, \$96.44 and \$87.03, respectively. This is primarily due to the fact that homeporting crew spent about 50% more time on shore than port-of-call crew. Crew spent an estimated \$18.6 million in Puerto Rico during the 2005-2006 cruise year.
- The Cayman Islands had slightly fewer crew visits, 262,300, than St. Maarten but the crew spent significantly less in the Caymans than St. Maarten. As a result, total crew expenditures in the Cayman Islands during the 2005-2006 cruise year generated \$12 million.

## Cruise Line Expenditures

In addition to net payments to local tour operators, cruise lines also provided data for two other categories: 1) payments to ports for taxes and port services and, such as navigation and utility services, and 2) payments to local businesses for supplies and services, such as food and beverages and other stores.<sup>5</sup>

As shown in **Figure ES-1**, total expenditures for port fees and local supplies varied considerably across destinations. This reflects the differences in the structure of port fees, the volume of cruise calls, and the availability of and need for ship supplies in each destination. In total, the cruise lines spent an estimated \$236.8 million in the 19 participating destinations during the 2005-2006 cruise year for port fees and taxes, utilities, navigation services and ship supplies.

The analysis of cruise line expenditures revealed the following impacts for the top five destinations:

- The Bahamas had the highest total expenditures by cruise lines among the 19 participating destinations, \$42.8 million. The expenditures by cruise lines in The Bahamas

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<sup>5</sup> Because of the tremendous volatility in fuel costs, the purchases of bunker fuels have not been included in this analysis.

were concentrated in port fees and services which accounted for over 98 percent of total cruise line expenditures.

- Cozumel and San Juan had similar cruise line expenditures during the 2005-2006 cruise year, \$39.5 million and \$36.4 million, respectively. In Cozumel the bulk of the cruise lines expenditures were for port fees while in San Juan approximately 25 percent of cruise lines expenditures were earmarked for servicing and supplying homeporting cruise ships.
- Cruise lines spent an estimated \$29.4 million in the Cayman Islands primarily on port fees and taxes.
- The U.S. Virgin Islands ranked fifth among the participating destinations with total expenditures by cruise lines of \$22.7 million. About 90 percent of the expenditures were for port fees and taxes and 10 percent for ship supplies.

**Figure ES-1 –Total Expenditures by Cruise Lines by Destination, 2005-2006 Cruise Year**



\* Includes both port-of-call and homeporting cruise ships.

## Passenger Attributes and Satisfaction

A total of 24,294 port-of-call passenger surveys and 170 homeport passenger surveys<sup>6</sup> were completed and returned for tabulation. While the characteristics of passenger visits varied by destination, **Table ES-6** shows the major attributes of port-of-call passenger visits across all destinations as derived from by the passenger surveys.

<sup>6</sup> Homeport surveys were conducted on cruise ships embarking on their cruises from San Juan, PR. The attributes of San Juan homeport passengers are discussed in the San Juan analysis.

**Table ES-6 – Major Attributes of Port-of-Call Passenger Visits – All Destinations**

	Number	Percent
<b>Total Respondents</b>	24,294	
<b>Number Ashore</b>	23,643	
<b>Number Making Onshore Purchases:</b>	17,732	75.0%
<b>Average Size of Expenditure Party (Persons)</b>	2.2	
<b>Purchased a Shore Excursion (Tour)</b>	15,746	66.6%
<b>Purchased Onshore Tour from:</b>		
<b>Cruise Line</b>	10,994	69.8%
<b>Onshore/Internet</b>	4,752	30.2%
<b>Toured On Own/Did not Tour</b>	7,897	

The major attributes of passenger visits are:

- Of the passengers who went ashore, 75% made at least one purchase while ashore.
- Two-thirds of the passengers that went ashore purchased a shore excursion. Seventy (70) percent of passengers who purchased a tour did so through the cruise lines and 30 percent purchased their tour onshore or through the Internet.
- The typical cruise party consisted of 2.2 passengers.

The passenger survey also asked the passengers to rate their satisfaction with their destination visit along a number of parameters, as shown in **Table ES-7**. A 10-point scale was used with 10 being the highest score, i.e., extremely satisfied, and 1 being the lowest score, i.e., not at all satisfied. As indicated in the table, cruise passengers were, in general, very satisfied with their Caribbean cruise vacation with a mean score of 7.2 (Very Satisfied) for "Visit Met Expectations".

**Table ES-7 – Passenger Satisfaction with Destination Visits\* – Average for All Destinations**

Visit Attributes	Mean Score
<b>Initial Shoreside Welcome</b>	7.2
<b>Guided Tour</b>	8.2
<b>Shopping Experience</b>	6.6
<b>Historic Sites/Museums</b>	7.0
<b>Beaches</b>	7.6
<b>Friendliness of Residents</b>	7.7
<b>Courtesy of Employees</b>	8.1
<b>Variety of Shops</b>	6.8
<b>Overall Prices</b>	6.5
<b>Taxis/Local Transportation</b>	7.4
<b>Feeling of Safety Ashore</b>	8.2
<b>Visit Met Expectations</b>	7.2

\* Scale is 1 to 10 with 10 being the highest score. The mean scores can be interpreted as follows:  
 Extremely Satisfied: 10-9; Very Satisfied: 8-7; Somewhat Satisfied: 6-5; Not Too Satisfied: 4-3;  
 Not At All Satisfied: 2-1.

Among other key conclusions concerning visit satisfaction were the following:

- “Guided Tours” (or Shore Excursions) and “Feeling of Safety Ashore” received the highest scores of all visit attributes, each with a mean score of 8.2. Thus, cruise passengers felt very safe in the Caribbean and were very satisfied with their shore excursions.
- Cruise passengers also felt that employees that they interacted with throughout the Caribbean were very courteous (Mean Score: 8.1).
- Categories with slightly lower scores but still above 7.0 (Very Satisfied) were: initial shoreside welcome, historic sites, beaches, friendliness of residents, and local transportation.
- Categories with average scores between 6.0 and 7.0 (Somewhat Satisfied) were given for: the overall shopping experience, including the variety of shops and overall prices.

## INTRODUCTION

This study analyzes the contribution of cruise tourism on the economies of 18 Caribbean and one continental U.S. cruise destinations.<sup>7</sup> The study was funded by the Florida-Caribbean Cruise Association (FCCA) and the 19 participating destinations. Utilizing onshore expenditure data collected from passenger and crew surveys, port service and navigation fees collected from the destinations and FCCA member cruise lines<sup>8</sup>, and expenditures for provisions and other stores in the Caribbean provided by the cruise lines, total cruise tourism expenditures were estimated for each of the participating destinations. The economic contribution of these expenditures for each destination was then estimated for the 12-month period beginning in May, 2005 and ending in April, 2006 utilizing economic data collected from local, regional and international sources.

### The Caribbean Cruise Market

The Caribbean is the most popular cruise destinations in the world. According to capacity data published by Cruise Lines International Association (CLIA), the cruise industry had 31.5 million bed days deployed throughout the Caribbean in 2005, accounting for nearly 41 percent of the industry's global bed day capacity.<sup>9</sup> CLIA also reported that the average cruise length was 6.9 days. Thus, cruise ships operating in the region had sufficient capacity to carry over 4.5 million passengers in 2005.

In a separate report recently published by the Caribbean Tourist Organization (CTO)<sup>10</sup>, the group reported that over 18 million cruise passengers arrived at the 22 Caribbean destinations for which it provides data. Since cruise ships call at multiple destinations on any single itinerary, passenger arrivals are always significantly higher than passenger capacity.

Both, the proximity of the Caribbean to the United States and its temperate climate during the winter months have been important factors in the growth of the cruise industry in the region. However, the region also has a strong appeal to cruisers from around the world. Data obtained from our survey of cruise passengers indicated that 82 percent of the surveyed passengers were residents of the United States, 11 percent were from Canada and 5 percent were citizens of the United Kingdom. The remaining 2 percent of passengers arrived from a broad range of countries, including Germany, Australia, Mexico, the Philippines and South Africa to name a few. Thus, even as a cruise destination, the Caribbean can be considered to have a global reach sourcing cruise passengers from around the globe.

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<sup>7</sup> Participating destinations contributed to the funding of this study and also provided cruise related data, such as passenger arrivals and port fees. The 19 participating destinations are: Antigua and Barbuda; Aruba; The Bahamas; Barbados; Belize; The Cayman Islands; Cartagena, CO; Costa Maya, MX; Cozumel, MX; Curacao; Dominica; Grenada; Martinique; San Juan, PR; St. Kitts and Nevis; St. Lucia; St. Maarten; the U.S. Virgin Islands and one continental U.S. port, Key West, FL.

<sup>8</sup> The FCCA member lines are as follows: Carnival Cruise Lines, Celebrity Cruises, Costa Cruise Lines, Cunard Line, Disney Cruise Line, Holland America Line, MSC Cruises (USA), Inc., Norwegian Cruise Line, Princess Cruises, Regent Seven Seas Cruises, Royal Caribbean International and Windstar Cruises.

<sup>9</sup> CLIA, [The Overview](#), Spring 2005.

<sup>10</sup> CTO, [2005 Tourist Statistics](#), September 12, 2006.



## Passenger and Crew Arrivals at Participating Destinations

While some of the participating destinations are not included in the CTO cruise passenger data, these destinations, with a combined 16 million passenger arrivals<sup>11</sup>, account for a significant proportion of total passenger arrivals throughout the Caribbean (see **Table 1**).<sup>12</sup> Adding the 6.6 million crew arrivals, the cruise industry brought over 22 million passenger and crew arrivals to the 19 destinations during the 2005-2006 cruise year.

**Table 1– Estimated Passenger and Crew Arrivals (Thousands) at the Participating Destinations, 2005-2006 Cruise Year**

Destinations	Passengers	Crew	Total
Antigua	460.4	197.2	657.7
Aruba	563.1	223.9	787.0
Bahamas*	1,981.8	799.4	2,781.2
Barbados	506.6	207.1	713.7
Belize	726.6	288.6	1,015.2
Cayman Islands	1,857.2	747.7	2,604.8
Cartagena	38.1	17.2	55.3
Costa Maya	757.4	295.0	1,052.4
Cozumel	2,142.3	891.0	3,033.3
Curacao	298.5	120.3	418.8
Dominica	223.5	88.5	312.0
Grenada	289.6	125.0	414.7
Key West	907.1	368.1	1,275.2
Martinique	91.1	46.9	138.1
San Juan**	1,296.5	509.6	1,806.1
St. Kitts	117.2	48.8	166.0
St. Lucia	432.2	190.7	622.9
St. Maarten	1,449.2	724.5	2,173.6
St. Thomas	1,812.8	703.0	2,515.9
<b>All Destinations</b>	<b>15,951.4</b>	<b>6,592.4</b>	<b>22,543.9</b>

\* Only includes passenger and crew arrivals at Nassau and Freeport.

\*\* Includes passenger and crew aboard both port-of-call and homeporting cruise ships.

**Source: Port Authorities, Caribbean Tourist Organization and the FCCA**

Six of the participating destinations, The Bahamas, the Cayman Islands, Cozumel, San Juan, St. Maarten and the U.S. Virgin Islands, had passenger arrivals in excess of 1 million passengers. Combined, these six destinations accounted for two-thirds of all passenger and crew arrivals among the 19 destinations.

<sup>11</sup> Throughout this report arrivals are distinguished from visits. Arrivals are the number of passengers (crew) onboard cruise ships that call at each destination. Visits are the number of passengers (crew) that disembark and visit each destination.

<sup>12</sup> The following participating destinations are not included in the CTO data: Cartagena, Costa Maya, Dominica, Key West, and St. Kitts. At the same time, the CTO data includes the following destinations which did not participate in this study: Bermuda, Bonaire, British Virgin Islands, Dominican Republic, Jamaica, Montserrat, St. Vincent and the Grenadines, and Trinidad and Tobago.

## DATA AND METHODS

To achieve the primary objective of this project, to estimate the contribution of cruise tourism to the economies of the participating destinations, the analysis was conducted in two phases. The first phase consisted of collecting data that could be used to estimate the direct spending generated by cruises in each of the destinations. This required that:

- i. surveys be designed and distributed for the purpose of obtaining passenger and crew expenditure data at each of the destinations,
- ii. data on total passenger arrivals and port fees be collected for each of the destinations, and
- iii. data on passenger carryings; purchases from local businesses, including tour operators; and payment of fees and taxes for port and navigation services be obtained from the cruise lines.

The second phase required that economic data, such as national income accounts, employment and income be collected for each destination and that economic impact models be developed that could be used to estimate the direct and indirect employment and income generated by the cruise tourism expenditures estimated in the first phase.

The following sections discuss the data and methods that were employed in both phases of this project.

### Estimates of Total Cruise Tourism Expenditures

The total cruise tourism spending by passengers, crew and cruise lines is the source of the economic contribution of the cruise industry in each destination. Data on spending by each group had to be estimated from survey-based data in the case of passengers and crew expenditures and from data collected from ports and cruise lines in the case of cruise line expenditures.

### Surveys of Passengers and Crew

Passenger and crew surveys were designed to collect data for onshore spending and visit satisfaction by both passengers and crew. (These surveys are contained in the following Appendix.) While the crew survey was slightly shorter than the passenger survey, both surveys were designed to collect the following information:

- hours spent ashore;
- expenditures by category, including shore tours, food & beverages, clothing, etc.;
- visit satisfaction, including shore tour, safety, prices, shopping, etc.;
- likelihood of recommending and returning for a land-based vacation; and
- demographic characteristics, including country of residence, age group, income, etc.

A slightly different survey was given to passengers who were embarking on their cruise from San Juan. In addition to the information collected for port-of-call passengers, embarking pas-

sengers were asked to provide information on their expenditures for lodging and travel to San Juan and the length of stay in Puerto Rico prior to and after the cruise.

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

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

Over 150 survey distributions were conducted. A single survey distribution is counted as a distribution on a given day, on a single ship at a designated destination. Thus, the distribution of surveys on April 15 on the Carnival Liberty in Antigua would be considered a single distribution. Thus, on any given day surveys might have been conducted aboard multiple ships at different destinations.

**Table 2 – Completed Passenger and Crew Surveys by Destination**

Destinations	Passengers	Crew
Antigua	731	**
Aruba	1,514	494
Bahamas	1,372	1,061
Barbados	663	244
Belize	2,195	807
Cayman Islands	2,391	1,057
Cartagena	964	**
Costa Maya	1,425	948
Cozumel	2,282	1,443
Curacao	946	201
Dominica	870	415
Grenada	508	**
Key West	1,024	1,506
Martinique	1,139	**
San Juan*	1,156	681
St. Kitts	357	227
St. Lucia	1,117	168
St. Maarten	1,871	935
U.S. Virgin islands	1,939	841
<b>All Destinations</b>	<b>24,464</b>	<b>11,093</b>

\* Includes both port-of-call and homeporting passengers and crew.

\*\* Fewer than 50 completed crew surveys were returned.

As indicated in **Table 2**, a total of 24,464 completed passenger surveys (port-of-call and home-port passengers) and 11,093 completed crew surveys were collected over the three-month period. Given that the average size of the surveyed cruise parties was 2.2 passengers, the 24,464 completed passenger surveys represented 53,820 passengers. As also shown in the table, there were an insufficient number of crew surveys for a four destinations: Antigua, Cartagena, Grenada and Martinique. As will be discussed in the analysis for each of these destinations, an adjusted average of crew expenditures across all destinations was used in each of these destinations.

## Data Collected from Participating Destinations

Each participating destination was asked to provide the following data:

- passenger and crew arrivals;
- cruise-related port fees, including passenger-based fees, navigation fees and charges for utilities, such as water, power and sanitary services; and
- port employment and wages (total and cruise-related).

The passenger and crew arrivals data were used as the basis for estimating onshore visits of passengers and crew. The cruise-related port fees were included in the estimates of direct cruise-related spending in each destination. And, finally, the port employment and wages were included in the estimation of the direct employment and wage impacts by destination.

## Data Collected from FCCA Member Cruise Lines

Each FCCA member cruise line was asked to provide data on passenger and crew counts and their expenditures for goods and services in each destination for each of the following categories:

- ship stores, including food and beverages and hotel supplies;
- port fees, including piloting and tugboats and utility services and port taxes; and
- the net value of passenger shore tours paid to local tour operators and the number of passengers purchasing such tours.

The FCCA member lines generally accounted for 80 percent or more of all passenger arrivals at each destination. Thus, the responses from the FCCA member lines were used to generate various ratios that could be used in the estimation of total activity at each port. The passenger and crew counts were used to create ratios of passengers to crew so that crew arrivals could be estimated for each destination. Each cruise line and ship has a slightly different ratio and consequently, each destination has a slightly different ratio based upon the mix of ships calling at each destination.

The various port fees and passenger counts were aggregated across cruise lines to create per passenger ratios of total port fees paid at each port. The per passenger ratios were then multiplied by total passenger arrivals to estimate port payments in each destination. Similarly, the expenditures for ship stores were aggregated and the per passenger ratios for these set of expenditures were used to estimate cruise lines' purchases of food and beverages and other supplies in each destination.

Finally, the data on net payments to local tour operators and the number of passengers purchasing tours onboard the cruise ships were aggregated and an average net payment per onboard purchase was calculated for each destination. These ratios were used in the calculation of passenger purchases of shore excursions in each destination.

## Estimates of the Economic Contribution

Given the direct spending estimates developed in Phase I, the economic contribution of these expenditures, as measured by employment and wage income were then estimated for each destination. This process began with the collection of economic data for each destination from a combination of local, regional and international sources. The economic data included the following:

- national income accounts, i.e., GDP by category and industry
- employment and unemployment, aggregate and by industry as available
- wages and personal income, aggregate and by industry as available
- population and other labor force statistics.

Wherever possible, local data sources were used, followed by regional data sources and then international data sources. Among the local data sources were the following:

- Antigua: Ministry of Finance and the Economy
- Aruba: Central Bank of Aruba and Aruba Bureau of Statistics
- Bahamas: Central Bank of The Bahamas and The Bahamas Department of Statistics
- Barbados: Ministry of Labour and Government Information Network
- Cayman Islands: 2003 Annual Report
- Colombia: Department of National Statistics
- Grenada: Ministry of Finance
- Mexico: Institute of National Statistics
- Puerto Rico: Puerto Rico Department of Planning and the U.S. Census Bureau
- St. Maarten: Central Bureau of Statistics
- U.S. Virgin Islands: USVI Department of Labor and the U.S. Census Bureau.

Regional data sources were used to supplement gaps in local data, especially national income data and included the following:

- Caribbean Development Bank
- Eastern Caribbean Central Bank
- Economic Commission for Latin America and the Caribbean (ECLAC).

International data sources were used in most cases to develop consistent measures of GDP, aggregate employment and wage incomes across all destinations and included the following:

- The International Monetary Fund (IMF)
- The World Bank
- The CIA Fact Book.

Utilizing all of these data, a set of economic impact models were developed for each destination. These models included GDP, employment and wage estimates for each destination and were used in the estimation of destination-specific economic multipliers by major industrial sectors, i.e., agriculture, mining, manufacturing. These models were designed to reflect the economic structure of each destination, including the industrial composition of GDP, the wage share of GDP by industry and the average wage by industry, as well as, the relative importance of imports to each economy. As a result, direct and total employment and wage impacts were developed for each destination.

These economic impact models are a statistical representation of each destination's economy and were used to estimate the flow of the total cruise tourism expenditures through each destination's economy. The expenditures of the passengers, crew and cruise lines have a **direct impact** on employment and wages for local residents employed by those businesses that provide goods and services to the cruise sector. These directly impacted businesses, in turn, purchase additional goods and services to support the production and sale of goods and services to the cruise sector, creating additional jobs and income. This **indirect spending** induces further spending by other businesses in the local economy. The economic impact models quantify this flow of direct and indirect impacts for each of the participating destinations.

An important aspect of these models is the role of imports. Imports act as a leakage to the multiplier process. Thus, the greater the relative importance of imports to an economy the smaller are the indirect impacts relative to the direct impacts. The size of the economic impacts relative to the direct impacts is partially determined by the degree of economic development in a particular economy. This occurs because more developed economies import proportionately fewer goods which reduces leakages to other economies. For example, in analyses conducted by BREA of the economic impact of the cruise industry in the United States, the indirect employment impacts were 30 percent higher than the direct impacts, resulting in an implicit employment multiplier of 2.3. In each of the destinations analyzed for this study, the indirect impacts were always smaller than the direct impacts. This is due to the relatively high proportion of imported goods and services in these economies. As a consequence, the implicit employment and wage multipliers for each destination were less than 2.0.

The economic impact model for Key West was different than the models developed for the Caribbean destinations. The Key West model utilized a cruise sector economic impact model for Florida that had been developed as part of BREA's economic impact analysis of the cruise industry for the International Council of Cruise Lines (ICCL). This model utilizes economic data for the State of Florida that was collected from federal government agencies, including the Bureau of Labor Statistics and the Bureau of Economic Analysis. An overview of the state models can be found in BREA's most recent report for the ICCL.<sup>13</sup> Because this is a state model the total economic impacts generated by this model are statewide impacts.

## **Appendix – Passenger and Crew Surveys**

Samples of the passenger (Port-of-Call and Homeport) and crew surveys follow.

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<sup>13</sup> The Contribution of the North American Cruise Industry to the U.S. Economy in 2005, August 2006.

**CONFIDENTIAL CRUISE PASSENGER SURVEY**

The Florida-Caribbean Cruise Association (FCCA) is conducting a survey of cruise passengers who have visited Caribbean destinations. The objective of this survey is to provide information to the FCCA and the Caribbean destinations that will allow them to enhance visitors' experiences and quantify the contribution of cruise passengers to the economies of each destination and the Caribbean as a whole. **The survey should only take a few minutes to complete and your responses will be held in strict confidence.**

**Today's Date:** Month \_\_\_ Day \_\_\_ (Numbers Please)

Q1. How many hours did you spend ashore during your cruise ship call at Barbados today?  0  1  2  3  4  5  6  7  8  9  10+

**(If 0, Go to Q12)**

Q2. On a scale of 1 to 10, how satisfied were you with your initial shoreside welcome and services?  
Extremely satisfied  10  9  8  7  6  5  4  3  2  1 Not at all satisfied  0 Not applicable

Q3. If you took a tour in Barbados, how did you purchase this tour?  
 Through the cruise line  Over the Internet  Through an onshore vendor  Did not purchase a tour/toured on my own

Q4. Did you make any purchases during your onshore visit today?  Yes  No **(If No, Go to Q7)**

Q5. Please record the value of all purchases (in U.S. dollars) that all persons in your cabin made during your **on-shore visit** to Barbados today. \* **Do not include the cost of tours nor goods and services that were purchased onboard the cruise ship. (Enter whole dollars).**

Food and beverages at restaurants and bars:	\$ _____	Tours purchased <b>on shore or the Internet only</b> :	\$ _____
Taxis/Ground Transportation: (Do not include cost of sightseeing tours)	\$ _____	Local Crafts and Souvenirs:	\$ _____
Retail Purchases of Watches & Jewelry:	\$ _____	Retail Purchases of Liquor:	\$ _____
Retail Purchases of Clothing (incl. T-shirts):	\$ _____	Retail Purchases of Electronics:	\$ _____
Entertainment Venues/Nightclubs/Casinos:	\$ _____	Telephone & Internet Communications:	\$ _____
Any Other Purchases:	\$ _____		

Q6. How many persons do the expenditures cover in Question 5? \_\_\_\_\_

Q7. On a scale of 1 to 10 how satisfied were you with each of the following in Barbados?  
Extremely satisfied = 10...Not at all satisfied = 1

Guided Tour:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Shopping Experience:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Historic Sites/Museums:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Beaches:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Friendliness of the residents:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Courtesy of employees:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Variety of Shops:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Overall Prices:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Taxis/Local Transportation:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable

Q8. On a scale of 1 to 10, how safe did you feel as you traveled in Barbados?  
Extremely safe  10  9  8  7  6  5  4  3  2  1 Not at all safe  0 Not applicable

Q9. Overall, and on a scale of 1 to 10, how did your visit to Barbados meet your expectations?  
Greatly Exceeded  10  9  8  7  6  5  4  3  2  1 Fell far short

Q10. Based upon your experience in Barbados today, on a scale of 1 to 10 how likely are you to recommend a land-based or resort vacation in Aruba to a friend?  
Extremely likely  10  9  8  7  6  5  4  3  2  1 Not at all likely



Q11. Based upon your experience in Barbados today, how likely are you to return to Aruba for a land-based or resort vacation within the next three years?  
Extremely likely  10  9  8  7  6  5  4  3  2  1 Not at all likely

**The following are to better understand demographic characteristics of cruise passenger visitors at each destination.**

Q12. What is your gender?  Male  Female

Q13. In which age group do you fall?  Under 20  21 to 30  31 to 50  51 to 65  over 65

Q14. Where is your permanent place of residence?  US  Canada  UK  France  Other (please specify): \_\_\_\_\_

If the US/Canada, which state/province? \_\_\_\_\_ (please use 2 letter abbreviation)

Q15. Approximately, what is your annual gross (pre-tax) household income (in U.S. dollars)?

<input type="checkbox"/> Under \$50,000	<input type="checkbox"/> \$50,000 but less than \$75,000	<input type="checkbox"/> \$75,000 but less than \$100,000
<input type="checkbox"/> \$100,000 but less than \$150,000	<input type="checkbox"/> \$150,000 but less than \$200,000	<input type="checkbox"/> \$200,000 or more

**If you have any comments you would like to make concerning your onshore experience, please write them on the reverse side of this survey.**

**Thank you very much for taking time to assist us and enjoy the remainder of your cruise.**

**CONFIDENTIAL CRUISE PASSENGER SURVEY (Homeport)**

The Florida-Caribbean Cruise Association (FCCA) is conducting a survey of cruise passengers who have visited Puerto Rico. The objective of this survey is to provide information to the FCCA and Puerto Rico that will allow them to enhance visitors' experiences and quantify the contribution of cruise passengers to the economies of Puerto Rico and the Caribbean as a whole. **The survey should only take a few minutes to complete and your responses will be held in strict confidence.**

Today's Date: Month \_\_\_ Day \_\_\_ (Numbers Please)

Q1. Do you reside in Puerto Rico?  Yes (If Yes, go to Q3)  No

Q2. If you do not live in Puerto Rico, how many nights did you spend in Puerto Rico immediately prior to this cruise?

None (0) – We arrived the day of the cruise  One (1)  Two (2)  Three (3)  More Specify \_\_\_\_\_

Q3. If you took a tour in Puerto Rico, how did you purchase this tour?

Through the cruise line  Over the Internet  Through an onshore vendor  Did not purchase a tour/toured on my own

Q4. Please record the value of all purchases (in U.S. dollars) that all persons in your cabin made during your **pre-cruise visit** in Puerto Rico. (Enter whole dollars).

Lodging:	\$ _____	Transportation to Puerto Rico: (do not include the cost of the cruise)	\$ _____
Food and Beverages at bars and restaurants:	\$ _____	Tours purchased <b>on shore or the Internet only</b> :	\$ _____
Taxis/Ground Transportation: (Do not include cost of sightseeing tours)	\$ _____	Local Crafts and Souvenirs:	\$ _____
Retail Purchases of Watches & Jewelry:	\$ _____	Retail Purchases of Liquor:	\$ _____
Retail Purchases of Clothing (incl. T-shirts):	\$ _____	Retail Purchases of Electronics:	\$ _____
Entertainment Venues/Nightclubs/Casinos:	\$ _____	Telephone & Internet Communications:	\$ _____
Any Other Purchases:	\$ _____		

Q5. How many persons do the expenditures cover in Question 4? \_\_\_\_\_

Q6. On a scale of 1 to 10 how satisfied were you with each of the following in Puerto Rico? Extremely satisfied: 10 .. 1: Not at all satisfied

Guided Tour:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Shopping Experience:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Historic Sites/Museums:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Beaches:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Friendliness of the residents:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Courtesy of employees:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Variety of Shops:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Overall Prices:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Taxis/Local Transportation:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable

Q7. On a scale of 1 to 10, how safe did you feel as you traveled in Puerto Rico?

Extremely safe 10 9 8 7 6 5 4 3 2 1 Not at all safe 0 Not applicable

Q8. Overall, and on a scale of 1 to 10, how did your visit to Puerto Rico meet your expectations?

Greatly Exceeded 10 9 8 7 6 5 4 3 2 1 Fell far short

Q9. Based upon your experience in Puerto Rico today, on a scale of 1 to 10 how likely are you to recommend a cruise or resort vacation in Puerto Rico to a friend?

Extremely likely 10 9 8 7 6 5 4 3 2 1 Not at all likely

Q10. Based upon your experience in Puerto Rico today, how likely are **you** to return to Puerto Rico for a land-based or resort vacation within the next three years?

Extremely likely 10  9  8  7  6 5  4 3  2  1 Not at all likely

Q11. When the cruise returns to Puerto Rico, how many nights, if any, are you planning to spend in Puerto Rico?

None (0) – We will depart upon our return  One (1)  Two (2)  Three (3)  More Specify \_\_\_\_\_

**The following are to better understand demographic characteristics of cruise passenger visitors at each Puerto Rico.**

Q12. What is your gender?  Male  Female

Q13. In which age group do you fall?  Under 20  21 to 30  31 to 50  51 to 65  over 65

Q14. Where is your primary place of residence? Country: \_\_\_\_\_ If the U.S./Canada., which state/province? \_\_\_\_\_

Q15. Approximately, what is your annual gross (pre-tax) household income (in U.S. dollars)?

<input type="checkbox"/> Under \$50,000	<input type="checkbox"/> \$50,000 but less than \$75,000	<input type="checkbox"/> \$75,000 but less than \$100,000
<input type="checkbox"/> \$100,000 but less than \$150,000	<input type="checkbox"/> \$150,000 but less than \$200,000	<input type="checkbox"/> \$200,000 or more

**If you have any comments you would like to make concerning your onshore experience, please write them on the reverse side of this survey.**

**Thank you very much for taking time to assist us and enjoy the remainder of your cruise.**

**CONFIDENTIAL CREW SURVEY**

The Florida-Caribbean Cruise Association (FCCA) is conducting a survey of crew who have visited Caribbean destinations. The objective of this survey is to provide information to the FCCA and the Caribbean destinations that will allow them to enhance visitors' experiences and quantify the contribution of cruise passengers and crew to the economies of each destination and the Caribbean as a whole. **The survey should only take a few minutes to complete and your responses will be held in strict confidence.**

**Today's Date: Month**\_\_\_ **Day**\_\_\_ (Numbers Please)

Q1. Did you leave the ship and visit Antigua today?  Yes  No (If No, Go to Q3)

Q2. How many hours did you spend ashore during your visit today? \_\_\_\_\_ hours

Q3. Have you visited Antigua on any previous cruise calls in the past month?  Yes  No (If No, go to Q8)

Q4. Please record the value of all purchases (in U.S. dollars) that you made during your on-shore visit to Antigua today or for the most recent visit if have visited Antigua in the past month. \* **Do not include the cost of tours or goods and services that were purchased onboard the cruise ship. (Enter whole dollars).**

Food and Beverages at bars and restaurants:	\$ _____	Tours purchased <b>on shore or the internet only</b> :	\$ _____
Taxis/Ground Transportation: (Do not include cost of sightseeing tours)	\$ _____	Local Crafts and Souvenirs:	\$ _____
Retail Purchases of Watches & Jewelry:	\$ _____	Retail Purchases of Liquor:	\$ _____
Retail Purchases of Clothing (incl. T-shirts):	\$ _____	Retail Purchases of Electronics:	\$ _____
Entertainment Venues/Nightclubs/Casinos:	\$ _____	Telephone & Internet Communications:	\$ _____
Any Other Purchases:	\$ _____		

Q5. On a scale of 1 to 10 how satisfied were you with each of the following in Antigua? Extremely satisfied: 10 ..... 1: Not at all satisfied

Guided Tour:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Shopping Experience:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Historic Sites/Museums:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Beaches:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Friendliness of the residents:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Courtesy of employees:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Variety of Shops:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Overall Prices:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable
Taxis/Local Transportation:	<input type="checkbox"/> 10	<input type="checkbox"/> 9	<input type="checkbox"/> 8	<input type="checkbox"/> 7	<input type="checkbox"/> 6	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0 Not applicable

Q6. On a scale of 1 to 10, how safe did you feel as you traveled in Antigua?

Extremely safe 10 9 8 7 6 5 4 3 2 1 Not at all safe 0 Not applicable

Q7. Based upon your experience in Antigua, on a scale of 1 to 10 how likely are you to recommend a land-based or resort vacation in Antigua to a friend?

Extremely likely 10 9 8 7 6 5 4 3 2 1 Not at all likely

**The following are to better understand demographic characteristics of crew visitors at each destination.**

Q8. What is your gender?  Male  Female

Q9. In which age group do you fall?  Under 20  21 to 30  31 to 50  51 to 65  over 65

Q10. Where is your permanent place of residence? Country: \_\_\_\_\_

# ECONOMIC CONTRIBUTION ANALYSIS

The economic contribution analysis measures the direct and total employment and wages generated by the cruise tourism expenditures in each destination. The analysis begins with the estimation of direct expenditures by passengers, crew and cruise lines in each destination for the 2005-2006 cruise year. These expenditures are entered as inputs to the destination-specific economic impact models to generate the direct and total employment and wage contributions of cruise tourism. This section provides an overview of the expenditures and economic contribution for each destination while a more comprehensive analysis for each destination is presented in the following section of this report.

## Passenger and Crew Expenditures

The expenditure data collected from the passenger and crew surveys provided several pieces of data that were critical for the economic analysis. First, average per passenger and per crew spending figures for the 12 expenditure categories shown in **Table 3** were derived from the surveys.

**Table 3 –Passenger and Crew Expenditure Categories**

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

\* Only applicable for passengers who embarked on their cruises in San Juan.

It should be noted that the expenditure component of the survey generated the per passenger expenditure of those tours that were purchased onshore and through the Internet. The net payment to local tour operators of tours purchased onboard cruise ships was estimated from data obtained from the cruise lines and then included with the passenger onshore expenditures.

As shown in **Table 4**, the cruise industry generated 16.3 million passenger and crew onshore visits during the 2005-2006 cruise year. It is these onshore visits that generate the local spending that creates employment and income in each destination.

Based upon data collected from the cruise lines, it was estimated that an average of 85 percent of cruise passengers disembarked at port calls across all destinations. This ranged from a low

of about 80 percent for the smaller destinations, such as Antigua, St. Kitts and St. Lucia, to an approximate high of 90 percent for the larger destinations, such as the U.S.V.I. and St. Maarten. As a result, passenger onshore visits, which generate the local spending, are lower than passenger arrivals (passengers onboard cruise ships).

**Table 4 – Estimated Passenger and Crew Onshore Visits (Thousands) at the Participating Destinations, 2005-2006 Cruise Year**

Destinations	Passengers	Crew	Total
Antigua	391.4	78.9	470.3
Aruba	478.6	89.6	568.2
Bahamas*	1,585.5	279.8	1,865.2
Barbados	405.3	82.8	488.1
Belize	610.4	72.1	682.5
Cayman Islands	1,671.5	261.7	1,933.1
Cartagena	32.4	5.2	37.6
Costa Maya	605.9	147.5	753.4
Cozumel	1,713.9	356.4	2,070.2
Curacao	253.8	42.1	295.9
Dominica	190.0	35.4	225.4
Grenada	246.2	50.0	296.2
Key West	852.6	147.3	999.9
Martinique	77.5	18.8	96.2
San Juan**	1,186.6	203.9	1,390.5
St. Kitts	93.8	19.5	113.3
St. Lucia	345.7	76.3	422.0
St. Maarten	1,304.3	289.8	1,594.1
U.S.V.I.	1,631.5	351.5	1,983.1
<b>All Destinations</b>	<b>13,676.8</b>	<b>2,608.4</b>	<b>16,284.2</b>

\* Only includes passenger and crew visits at Nassau and Freeport.

\*\* Includes passengers and crew aboard both port-of-call and homeporting cruise ships.

Data from the surveys were used to estimate the percentage of crew that disembarked on a given port call. For those destinations with insufficient survey data, data from the cruise lines were used to estimate crew visits. These data indicated that a much smaller percentage of crew onboard cruise ships were able to disembark at each port-of-call. The survey data indicated that this figure averaged about 40 percent across all destinations and ranged from a low of 25 percent in Belize to a high of 50 percent in Costa Maya and the U.S. Virgin Islands.

Finally, the passenger survey provided a breakdown on passenger purchases of tours or shore excursions. As indicated in **Table 5**, 20.1 percent of all cruise passengers purchased their shore excursions directly from local tour operators either on shore or through the Internet and 46.5 percent purchased their tour through the cruise lines. The remaining 34.4 percent of passengers did not purchase a tour or toured the destination on their own. The data in the table also shows a significant diversity in the percentage of passengers that purchase a formal tour across destinations and through what channel. For example, 92 percent of Cartagena passengers purchased a formal tour while only 47 percent of passengers in Key West did so. In terms of purchase

channel, 73 percent of passengers in Cartagena purchased their tour through the cruise line while only 30 percent of Key West passengers did so.

**Table 5— Percentage of Passengers Purchasing Shore Excursions by Destination**

Destinations	Purchased a Tour		Did Not Purchase a Tour
	Onshore or Internet	Cruise Line	
Antigua	28.9%	42.9%	28.2%
Aruba	22.1%	48.2%	29.7%
Bahamas	17.8%	36.4%	45.8%
Barbados	24.1%	46.4%	29.5%
Belize	23.1%	60.1%	16.8%
Cayman Islands	21.3%	50.3%	28.4%
Cartagena	19.1%	72.9%	8.0%
Costa Maya	15.8%	46.0%	38.2%
Cozumel	13.2%	41.6%	45.2%
Curacao	22.7%	38.5%	38.8%
Dominica	20.7%	64.8%	14.5%
Grenada	24.5%	50.4%	25.1%
Key West	16.9%	30.3%	52.8%
Martinique	17.1%	35.7%	47.2%
San Juan*	21.8%	39.7%	38.5%
St. Kitts	24.7%	36.4%	38.9%
St. Lucia	25.9%	49.5%	24.6%
St. Maarten	18.2%	41.1%	40.7%
U.S.V.I.	18.9%	44.2%	36.9%
<b>All Destinations</b>	<b>20.1%</b>	<b>46.5%</b>	<b>33.4%</b>

\* Includes passengers aboard both port-of-call and homeporting cruise ships.

These percentages were used in estimating the average expenditure per passenger for onshore excursions. The "Cruise Line" weight was used with the average per passenger payment to local tour operators as derived from the data provided by the cruise lines. The "Onshore or Internet" weight was used with average per passenger expenditures estimated from the passenger survey data.

As shown in **Table 6**, the 13.7 million cruise passengers that visited the 19 participating destinations spent just over \$1.3 billion for goods and services during the 2005-2006 cruise year. Average per passenger expenditures ranged from a low of \$39.35 in Martinique to a high of \$176.69 in the U.S. Virgin Islands and averaged \$98.01 across all destinations.

The U.S. Virgin Islands had the third highest number of passenger visits behind Cozumel and the Cayman Islands and as noted above had the highest average expenditure per passenger. As a result, the U.S. Virgin Islands led all destinations with \$288 million in passenger expenditures during the 2005-2006 cruise year and accounted for 22 percent of the total passenger expenditures among the 19 destinations.

Four more destinations had passenger expenditures in excess of \$100 million. Passengers spent an estimated \$189 million in St. Maarten, \$157 million in Cozumel, \$138 million in the Cayman Islands, and \$115 million in San Juan. Combined, these four destinations accounted for 45 percent of the direct expenditures in the 19 destinations.

**Table 6—Passenger Expenditures by Destination, 2005-2006 Cruise Year**

Destinations	Passenger Onshore Visits (Thousands)	Average Expenditure per Passenger	Total Passenger Expenditures (\$US Millions)
Antigua	391.4	\$ 84.00	\$ 32.9
Aruba	478.6	\$ 113.26	\$ 54.2
Bahamas*	1,585.5	\$ 60.54	\$ 96.0
Barbados	405.3	\$ 111.82	\$ 45.3
Belize	610.4	\$ 87.77	\$ 53.6
Cayman Islands	1,671.5	\$ 82.73	\$ 138.3
Cartagena	32.4	\$ 114.73	\$ 3.7
Costa Maya	605.9	\$ 76.28	\$ 46.2
Cozumel	1,713.9	\$ 91.64	\$ 157.0
Curacao	253.8	\$ 53.34	\$ 13.5
Dominica	190.0	\$ 51.20	\$ 9.7
Grenada	246.2	\$ 53.82	\$ 13.2
Key West	852.6	\$ 55.21	\$ 47.1
Martinique	77.5	\$ 39.35	\$ 3.0
San Juan**	1,186.6	\$ 96.94	\$ 115.0
St. Kitts	93.8	\$ 57.40	\$ 5.4
St. Lucia	345.7	\$ 82.62	\$ 28.6
St. Maarten	1,304.3	\$ 145.15	\$ 189.3
U.S.V.I.	1,631.5	\$ 176.69	\$ 288.3
<b>All Destinations</b>	<b>13,676.8</b>	<b>\$ 98.01</b>	<b>\$ 1,340.4</b>

\* Only includes passenger visits at Nassau and Freeport.

\*\* Includes passengers aboard both port-of-call and homeporting cruise ships.

The remaining fourteen destinations accounted for one-third of passenger expenditures. This spending averaged just over \$32 million per destination, ranging from \$3.0 million in Martinique to \$96 million in The Bahamas.

As shown in **Table 7**, the 2.6 million crew members that visited the 19 participating destinations spent just over \$194 million for goods and services during the 2005-2006 cruise year. Average per crew expenditures ranged from a low of \$18.23 in Belize to a high of \$159.55 in St. Maarten and averaged \$74.56 across all destinations. Unlike passengers, shore excursions are not a focus of crew spending; rather, crew expenditures are more heavily weighted toward food and beverages, local transportation, retail purchases of clothing and telephone and Internet services.

The U.S.V.I. had the second highest number of estimated crew visits, 351,500, and average per crew expenditure of \$144. As a result, the crew visits to the island generated the highest level of crew onshore expenditures of \$50.6 million during the 2005-2006 cruise year.



With an average expenditure of nearly \$160 per crew member, St. Maarten had the highest average expenditure among the 19 participating destinations. In St. Maarten crew expenditures were concentrated on retail purchases of clothing, jewelry and electronics. Crew spent an estimated \$46.2 million in St. Maarten during the 2005-2006 cruise year.

**Table 7—Crew Expenditures by Destination, 2005-2006 Cruise Year**

Destinations	Crew Visits (Thousands)	Average Expenditure per Crew	Total Crew Expenditures (\$US Millions)
Antigua	78.9	\$ 52.47	\$ 4.1
Aruba	89.6	\$ 78.45	\$ 7.0
Bahamas*	279.8	\$ 19.96	\$ 5.6
Barbados	82.8	\$ 76.18	\$ 6.3
Belize	72.1	\$ 18.23	\$ 1.3
Cayman Islands	261.7	\$ 45.92	\$ 12.0
Cartagena	5.2	\$ 43.64	\$ 0.2
Costa Maya	147.5	\$ 50.25	\$ 7.4
Cozumel	356.4	\$ 48.77	\$ 17.4
Curacao	42.1	\$ 39.17	\$ 1.6
Dominica	35.4	\$ 74.80	\$ 2.6
Grenada	50.0	\$ 26.07	\$ 1.3
Key West	147.3	\$ 61.14	\$ 9.0
Martinique	18.8	\$ 28.20	\$ 0.5
San Juan**	203.9	\$ 91.13	\$ 18.6
St. Kitts	19.5	\$ 20.61	\$ 0.4
St. Lucia	76.3	\$ 31.01	\$ 2.4
St. Maarten	289.8	\$ 159.55	\$ 46.2
U.S.V.I.	351.5	\$ 143.83	\$ 50.6
<b>All Destinations</b>	<b>2,608.4</b>	<b>\$ 74.56</b>	<b>\$ 194.5</b>

\* Only includes crew visits at Nassau and Freeport.

\*\* Includes crews aboard both port-of-call and homeporting cruise ships.

Cozumel led the 19 destinations with an estimated 356,400 onshore crew visits. Crew spent an average of \$48.77 per visit and generated 17.4 million in total onshore expenditures during the 2005-2006 cruise year.

Crew in San Juan spent an average of just over \$91. Crew aboard homeporting ships spent slightly more than crew aboard port-of-call ships, \$96.44 and \$87.03, respectively. This is primarily due to the fact that homeporting crew spent about 50% more time on shore than port-of-call crew. Crew spent an estimated \$18.6 million in Puerto Rico during the 2005-2006 cruise year.

The Cayman Islands had slightly fewer crew visits, 261,700, than St. Maarten but the crew spent significantly less in the Cayman Islands than St. Maarten. As a result, total crew expenditures in the Cayman Islands during the 2005-2006 cruise year generated \$12 million.

While spending obviously varies across destinations, we have estimated the average passenger and crew expenditures for a port call by a 2,000 passenger ship with 800 crew (see **Table 8**). During the typical call, such a cruise ship would generate approximately 1,700 passenger visits (85 percent of passenger arrivals) and 320 crew visits (40 percent of crew arrivals). Passengers would generate \$166,617 ( $\$98.01 \times 1,700$ ) in onshore spending while crew would add an additional \$23,859 ( $\$74.56 \times 320$ ) for total onshore spending of \$199,476.

**Table 8— Average Onshore Expenditures (\$US) of a Port Call by a 2,000 Passenger Cruise Ship**

	Arrivals	Onshore Visits	Average Spend	Total
Passengers	2,000	1,700	\$ 98.01	\$ 166,617
Crew	800	320	\$ 74.56	\$ 23,859
<b>Total</b>	<b>2,800</b>	<b>2,020</b>	<b>\$ 94.93</b>	<b>\$ 190,476</b>

## Expenditures by Cruise Lines

As discussed in the **Data and Methods** section of this report, the participating destinations and the FCCA member lines provided data on port fees and taxes paid by the cruise lines. Cruise lines also provided data for two additional categories: 1) net payments to local tour operators for passenger shore excursions purchased onboard cruise ships, and 2) payments to local businesses for supplies and services. Net payments to local tour operators were discussed previously and were included in passenger expenditures for shore excursions. The second category of purchases for supplies from local businesses included:

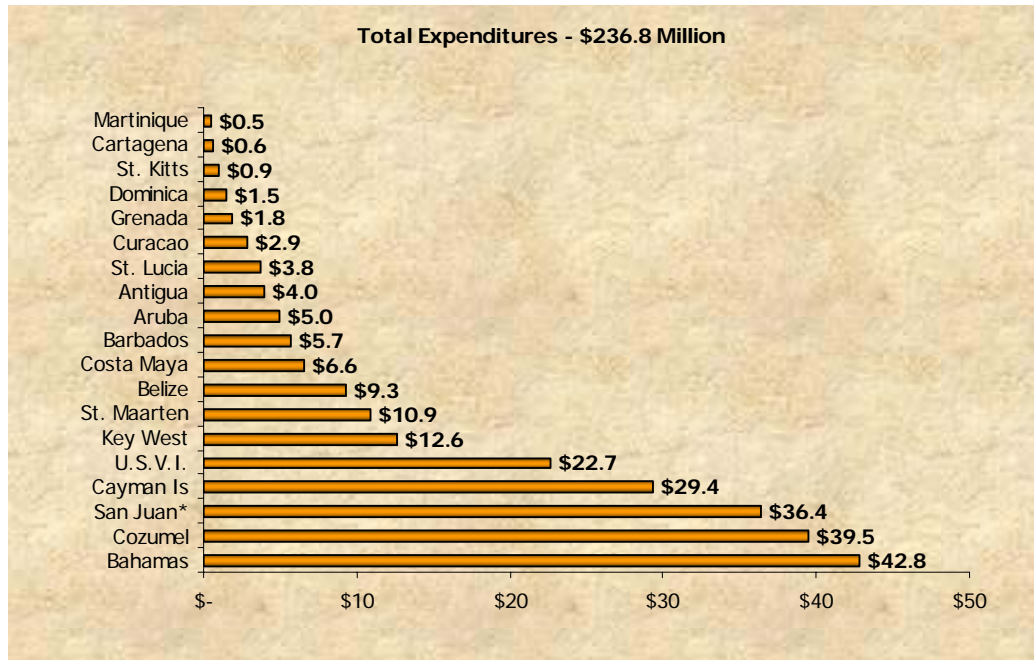
- food and beverages;
- hotel supplies and other stores; and
- other land side purchases of goods and services.

As shown in **Figure 1**, total expenditures for port fees and local supplies varied considerably across destinations. This reflects the differences in the number of cruise calls, the structure of port fees and the availability of and need for ship supplies in each destination. In total, the cruise lines spent an estimated \$236.8 million in the 19 participating destinations during the 2005-2006 cruise year for port fees and taxes, utilities, navigation services, and supplies.

The Bahamas had the highest total expenditures by cruise lines among the 19 participating destinations, \$42.8 million. The expenditures by cruise lines in The Bahamas were concentrated in port fees and services which accounted for nearly all of the total cruise line expenditures.

Cozumel and San Juan had similar cruise line expenditures during the 2005-2006 cruise year, \$39.5 million and \$36.4 million, respectively. In Cozumel the bulk of the cruise lines expenditures were for port fees while in San Juan approximately 25 percent of cruise lines expenditures were earmarked for servicing and supplying homeporting cruise ships.

**Figure 1– Total Expenditures (\$US Millions) by Cruise Lines by Destination  
2005-2006 Cruise Year**



\* Includes both port-of-call and homeporting cruise ships.

Cruise lines spent an estimated \$29.4 million in the Cayman Islands primarily on port fees and taxes.

The U.S. Virgin Islands ranked fifth among the participating destinations with total expenditures by cruise lines of \$22.7 million. About 90 percent of the expenditures were for port fees and taxes and 10 percent for ship supplies.

## Direct Cruise Tourism Expenditures

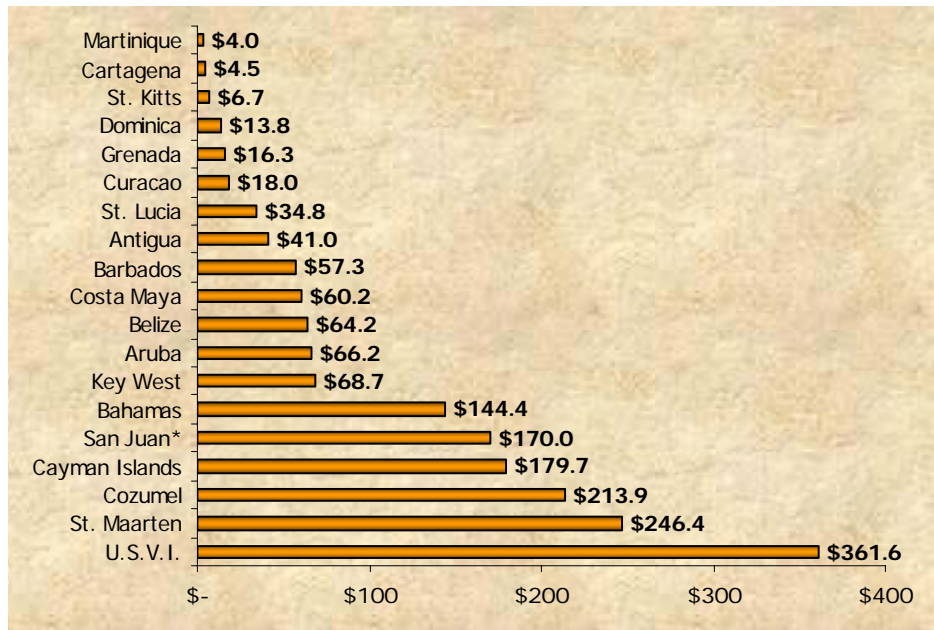
As shown in **Table 9 and Figure 2**, the 16.3 million passenger and crew visits generated an estimated \$1.5 billion in spending for local goods and services in the 19 destinations. The cruise lines added another \$237 million in spending for port services and other local goods and services, bringing total cruise tourism expenditures to just under \$1.8 billion during the 2005-2006 cruise year.

Five destinations had total cruise tourism expenditures in excess of \$150 million. The U.S. Virgin Islands led all destinations with \$362 million, followed by St. Maarten with \$246 million, Cozumel with \$214 million, the Cayman Islands with \$180, and San Juan with \$170 million. Combined, these five destinations accounted for two-thirds of the direct expenditures among the 19 destinations.

**Table 9– Total Cruise Tourism Expenditures (\$US Millions) by Destination, 2005-2006 Cruise Year**

Destinations	Passengers	Crew	Cruise Line	Total
Antigua	\$ 32.9	\$ 4.1	\$ 4.0	\$ 41.0
Aruba	\$ 54.2	\$ 7.0	\$ 5.0	\$ 66.2
Bahamas	\$ 96.0	\$ 5.6	\$ 42.8	\$ 144.4
Barbados	\$ 45.3	\$ 6.3	\$ 5.7	\$ 57.3
Belize	\$ 3.6	\$ 1.3	\$ 9.3	\$ 64.2
Cayman Islands	\$ 138.3	\$ 12.0	\$ 29.4	\$ 179.7
Cartagena	\$ 3.7	\$ 0.2	\$ 0.6	\$ 4.5
Costa Maya	\$ 6.2	\$ 7.4	\$ 6.6	\$ 60.2
Cozumel	\$ 157.0	\$ 17.4	\$ 39.5	\$ 213.9
Curacao	\$ 13.5	\$ 1.6	\$ 2.9	\$ 18.0
Dominica	\$ 9.7	\$ 2.6	\$ 1.5	\$ 13.8
Grenada	\$ 13.2	\$ 1.3	\$ 1.8	\$ 16.3
Key West	\$ 47.1	\$ 9.0	\$ 12.6	\$ 68.7
Martinique	\$ 3.0	\$ 0.5	\$ 0.5	\$ 4.0
San Juan*	\$ 115.0	\$ 18.6	\$ 36.4	\$ 170.0
St. Kitts	\$ 5.4	\$ 0.4	\$ 0.9	\$ 6.7
St. Lucia	\$ 28.6	\$ 2.4	\$ 3.8	\$ 34.8
St. Maarten	\$ 189.3	\$ 46.2	\$ 10.9	\$ 246.4
U.S.V.I.	\$ 288.3	\$ 50.6	\$ 22.7	\$ 361.6
<b>All Destinations</b>	<b>\$ 1,340.4</b>	<b>\$ 194.5</b>	<b>\$ 236.8</b>	<b>\$ 1,771.7</b>

**Figure 2– Total Cruise Tourism Expenditures (\$US Millions) by Destination, 2005-2006 Cruise Year**



\* Includes both port-of-call and homeporting cruise ships.

The remaining fourteen destinations accounted for one-third of total cruise tourism expenditures. This spending averaged just under \$43 million per destination, ranging from \$4.0 million in Martinique to \$144.4 million in The Bahamas.

## Economic Contribution of Cruise Tourism Expenditures

As noted in the **Data and Methods** section, an economic impact model was developed for each participating destination. Data for these models were collected from a broad range of local, regional and international sources. These models included Gross Domestic Product (GDP) and employment and wage data. They were designed to reflect the economic structure of each destination, including the industrial composition of GDP, the wage share of GDP by industry and the average wage by industry, as well as, the relative importance of imports to each economy.

### Direct Economic Contribution of Cruise Tourism Expenditures

The direct economic contribution of cruise tourism in destination ports was derived from a broad range of activities including:

- onshore expenditures by passengers which are concentrated in shore excursions and retail purchases of clothing and jewelry;
- onshore spending by crew which are concentrated in purchases of food and beverages, local transportation and retail purchases of clothing and electronics;
- expenditures by cruise lines in ports for port services, such as dockage fees and linesmen; utilities, such as water and power; and navigation services; and
- purchases of supplies, such as food, hotel supplies and other stores, by the cruise lines from local businesses.

The analysis of cruise tourism's direct expenditures shows that the cruise ship calls the brought 16.3 million passenger and crew visits to the 19 participating destinations during the 2005-2006 cruise year generated \$1.8 billion in direct spending by passengers, crew and cruise lines. As shown in **Table 10** and **Figure 3**, the businesses that supplied the shore excursions and other goods and services employed an estimated 24,540 employees and paid annual wages of \$344 million. While the impacts vary across destinations, nearly every \$72,000 in cruise tourism expenditures generated a direct job in the destinations and that about 19 percent of cruise tourism expenditures ended up as income for the impacted workers.

The U.S. Virgin Islands, with the second highest total of passenger and crew onshore visits and the highest per passenger spending rate, had the highest level of total cruise tourism expenditures. The U.S.V.I. also had the second highest direct employment contribution and the highest direct wage contribution. The \$362 million in direct cruise tourism expenditures generated 3,525 jobs paying \$77.7 million in wage income during the 2005-2006 cruise year. Due to the large volume of high value duty free shopping at this destination, it required over \$102,000 in cruise tourism expenditures to create a direct job. At the same time, the island economy's above average wage structure resulted in 21 percent of the direct expenditures ending up as employee wages.

St. Maarten had the fifth highest level of total passenger and crew visits and the second highest level of cruise tourism expenditures. The \$242 million in direct cruise tourism expenditures gen-

erated 3,210 jobs paying \$57 million in wage income during the 2005-2006 cruise year. One direct job was generated for every \$76,000 in cruise tourism expenditures in this destination. Like the U.S.V.I., St. Maarten has an above average wage structure and, consequently, the wage income of the impacted workers accounted for 23 percent of the direct expenditures.

**Table 10 – Direct Economic Impact of Cruise Tourism by Destination, 2005-2006 Cruise Year**

Destinations	Total Cruise Tourism Expenditures (\$US Millions)	Direct Employment	Direct Employee Wage Income (\$US Millions)
Antigua	\$ 41.0	720	\$ 6.1
Aruba	\$ 66.2	985	\$ 14.1
Bahamas	\$ 144.4	2,235	\$ 34.3
Barbados	\$ 57.3	950	\$ 9.7
Belize	\$ 64.2	1,215	\$ 12.9
Cayman Islands	\$ 179.7	2,090	\$ 37.2
Cartagena	\$ 4.5	95	\$ 0.5
Costa Maya	\$ 60.2	1,115	\$ 7.3
Cozumel	\$ 213.9	3,715	\$ 25.4
Curacao	\$ 18.0	250	\$ 4.4
Dominica	\$ 13.8	255	\$ 1.9
Grenada	\$ 16.3	320	\$ 2.1
Key West	\$ 68.7	755	\$ 17.2
Martinique	\$ 4.0	70	\$ 0.5
San Juan	\$ 170.0	2,225	\$ 30.4
St. Kitts	\$ 6.7	125	\$ 0.9
St. Lucia	\$ 34.8	685	\$ 4.5
St. Maarten	\$ 246.4	3,210	\$ 57.0
U.S.V.I.	\$ 361.6	3,525	\$ 77.7
<b>All Destinations</b>	<b>\$ 1,771.7</b>	<b>24,540</b>	<b>\$ 344.0</b>

\* Only includes passenger and crew arrivals at Nassau and Freeport.

\* \*Includes passengers and crew aboard both port-of-call and homeporting cruise ships.

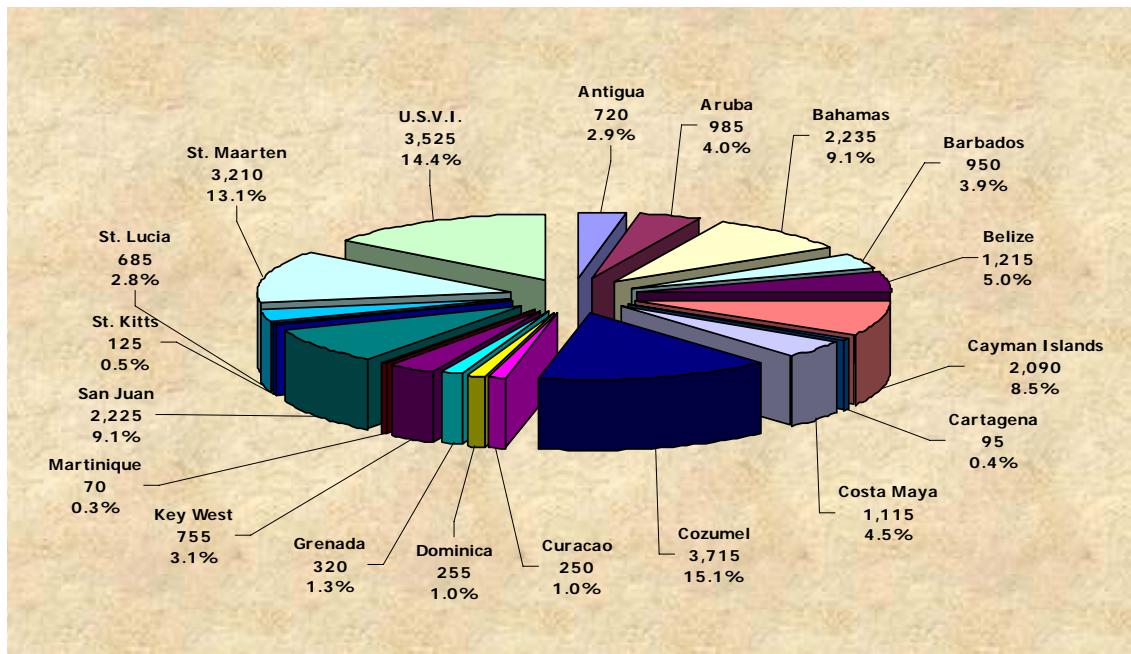
Cozumel, with the highest level of passenger and crew visits but lower per passenger and per crew spending than either St. Maarten or the U.S.V.I., had the third highest level of cruise tourism expenditures. The nearly \$214 million in direct cruise tourism expenditures generated 3,715 jobs paying \$25.4 million in wage income during the 2005-2006 cruise year. The overall cost and wage structure in Cozumel is considerably lower than in either the U.S.V.I or St. Maarten. As a result, one direct job in Cozumel was created for every \$57,500 in direct cruise tourism spending but only about 12 percent of these expenditures remained as wage income for the impacted workers.

The Cayman Islands (\$180 million) and San Juan (\$170 million) had similar total cruise tourism expenditures. The Cayman Islands ranked second in passenger and crew visits while San Juan ranked sixth. However, it required \$86,000 of direct spending in the Cayman Islands to generate one direct job but only \$76,000 in San Juan. As a consequence, more direct jobs were generated in San Juan (2,225) than in the Cayman Islands (2,090). With a higher average wage

structure in the Cayman Islands, direct wages were a higher percentage of direct cruise tourism expenditures in the Cayman Islands relative to San Juan, 21 percent and 18 percent, respectively.

Finally, the \$144 million in cruise tourism spending in The Bahamas generated 2,235 direct jobs paying \$34.3 million in wage income during the 2005-2006 cruise year. One direct job was created for every \$64,600 in direct cruise tourism expenditures and wages accounted for 23 percent of the direct expenditures.

**Figure 3 - Direct Employment Impact of Cruise Tourism by Destination, 2005-2006 Cruise Year**



### Total Economic Contribution of Cruise Tourism Expenditures

The economic contribution of cruise tourism expenditures is the sum of the direct, discussed above, and the indirect contributions. The indirect contribution results from the spending of the local businesses that serve the cruise sector for those goods and services that they require to conduct their business. For example, tour operators must purchase or rent vehicles and equipment to transport passengers; fuel to operate their vehicles; utility services, such as electricity and water, for their offices; and insurance for property and employees.

The estimated indirect economic contribution was developed by destination by utilizing the economic impact models discussed previously. The size of the economic impacts relative to the direct impacts is primarily determined by the degree of economic development in a particular economy. This occurs because more developed economies import proportionately fewer goods and services which reduces leakages to other economies. For example, in analyses conducted by BREA of the economic impact of the cruise industry in the United States, the indirect employ-

ment impacts were 30 percent higher than the direct impacts, resulting in an implicit employment multiplier of 2.3. In each of the destinations analyzed for this study, the indirect impacts were always smaller than the direct impacts. This is due to the relatively high proportion of imported goods and services in these economies. As a consequence, the implicit employment and wage multipliers for each destination were less than 2.0.

As shown in **Table 11 and Figure 4**, the \$1.8 billion in direct cruise tourism generated total employment of 41,500 residents of the 19 destinations and \$600 million in employee wages during the 2005-2006 cruise year.

**Table 11 – Total Economic Impact of Cruise Tourism by Destination, 2005-2006 Cruise Year**

Destinations	Total Cruise Tourism Expenditures (\$US Millions)	Total Employment	Total Employee Wage Income (\$US Millions)
Antigua	\$ 41.0	1,215	\$ 10.4
Aruba	\$ 66.2	1,710	\$ 24.6
Bahamas	\$ 144.4	3,965	\$ 60.9
Barbados	\$ 57.3	1,635	\$ 16.8
Belize	\$ 64.2	1,885	\$ 19.9
Cayman Islands	\$ 179.7	3,705	\$ 66.0
Cartagena	\$ 4.5	140	\$ 0.8
Costa Maya	\$ 60.2	1,770	\$ 11.7
Cozumel	\$ 213.9	5,945	\$ 40.8
Curacao	\$ 18.0	420	\$ 7.5
Dominica	\$ 13.8	390	\$ 3.0
Grenada	\$ 16.3	485	\$ 3.1
Key West	\$ 68.7	1,260	\$ 35.4
Martinique	\$ 4.0	115	\$ 0.8
San Juan	\$ 170.0	3,865	\$ 55.4
St. Kitts	\$ 6.7	205	\$ 1.5
St. Lucia	\$ 34.8	1,035	\$ 6.7
St. Maarten	\$ 246.4	5,590	\$ 99.3
U.S.V.I.	\$ 361.6	6,165	\$ 135.6
<b>All Destinations</b>	<b>\$ 1,771.7</b>	<b>41,500</b>	<b>\$ 600.1</b>

\* Only includes passenger and crew arrivals at Nassau and Freeport.

\*\* Includes passengers and crew aboard both port-of-call and homeporting cruise ships.

The U.S. Virgin Islands, with the highest per passenger spending rate, had the highest economic contribution. The \$362 million in cruise tourism expenditures generated an estimated 6,165 jobs paying \$136 million in wage income during the 2005-2006 cruise year.

Despite the disruptions caused by Hurricane Wilma which limited passenger and crew visits due to the destruction of the cruise ship piers, Cozumel still led the Caribbean in the number of passenger visits. In Cozumel the \$214 million in total cruise tourism expenditures generated 5,945 jobs and \$40.8 million in wage income during the 2005-2006 cruise year.



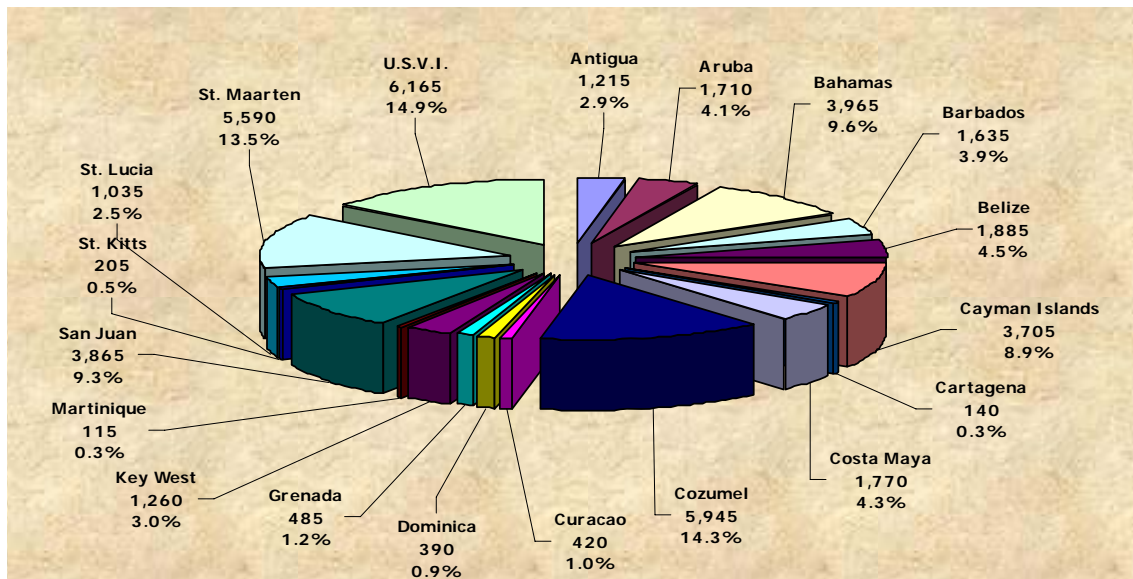
The \$246 million in cruise tourism expenditures in St. Maarten generated total employment of 5,590 residents and wage income of \$99.3 million. The average annual wage per impacted worker in St. Maarten was over \$17,700, one of the highest among the 19 destinations.

The Bahamas had the fourth highest total employment contribution. The \$144 million in cruise tourism spending in the Bahamas generated 3,965 total jobs during the 2005-2006 cruise year. With a relatively low wage structure, just over \$15,000 in average annual wages per impacted worker, the wage impact was \$60.9 million.

The \$180 million in cruise tourism spending in the Cayman Islands generated 3,705 total jobs during the 2005-2006 cruise year. With a relatively high wage structure, just over \$17,800 in average annual wages per impacted worker, the wage impact was \$66 million.

San Juan benefited from \$170 million in total cruise tourism expenditures which, in turn, generated 2,865 jobs and \$42.3 million in wages during the 2005-2006 cruise year. The economic benefits in San Juan were generated by both homeporting and port-of-call cruise ships.

**Figure 4 – Total Employment Impact of Cruise Tourism by Destination, 2005-2006 Cruise Year**



## **SURVEY RESULTS AND ECONOMIC ANALYSIS BY DESTINATION**

This section presents an overview of the passenger and crew survey results and the analysis of the direct passenger, crew and cruise line expenditures for each destination. A more detailed analysis is presented for each destination than in the previous section, however, only a brief discussion of data and methods is provided.

## Antigua

At the core of the analysis of the economic contribution of cruise tourism were a set of passenger and crew surveys conducted by the FCCA member cruise lines.<sup>14</sup> The surveys were conducted onboard the cruise ships during the months of March, April and May of 2006. The survey schedule was designed so that surveys were conducted by all FCCA member cruise lines that called at each destination and that the distribution of passenger and crew surveys would reflect the distribution of passenger and crew arrivals by cruise line at each destination. On any given cruise itinerary, passenger and crew surveys were placed in all passenger cabins and crew quarters following a single destination call. The surveys were completed by the passengers and crew in the privacy of their quarters and returned to a designated office on the cruise ship. Thus, passengers and crew were only surveyed once during a cruise itinerary and for a single destination. On a subsequent itinerary, passengers were surveyed following a call at a different destination.

Passenger and crew surveys were designed to collect data for onshore spending and visit satisfaction by both passengers and crew. While the crew survey was slightly shorter than the passenger survey, both surveys were designed to collect the following information:

- hours spent ashore;
- expenditures by category, including shore tours, food & beverages, clothing, etc.;
- visit satisfaction, including shore tour, safety, prices, shopping, etc.;
- likelihood of recommending and returning for a land-based vacation; and
- demographic characteristics, including country of residence, age group, income, etc.

Combining the expenditure data collected from the passenger and crew surveys with data on expenditures by cruise lines for port fees and services, payments to local tour operators for passenger shore excursions purchased onboard the cruise ships, and other provisions purchased locally by the cruise lines, estimates of total cruise tourism expenditures were developed for each participating destination.

Given the direct spending estimates, the economic contribution of these expenditures, as measured by employment and wage income were then estimated for each destination. This process began with the collection of economic data for each destination from a combination of local, regional and international sources. Utilizing all of these data a set of economic impact models were developed for each destination to estimate the direct and total employment and wage impacts. A more detailed description of these models is provided in the **Data and Methods** section of the full report.

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<sup>14</sup> The FCCA member lines are as follows: Carnival Cruise Lines, Celebrity Cruises, Costa Cruise Lines, Cunard Line, Disney Cruise Line, Holland America Line, MSC Cruises (USA), Inc., Norwegian Cruise Line, Princess Cruises, Regent Seven Seas Cruises, Royal Caribbean International and Windstar Cruises.

## Cruise Tourism Expenditures

Cruise tourism expenditures in destination ports are composed of a broad range of spending including:

- onshore expenditures by passengers which are concentrated in shore excursions and retail purchases of clothing and jewelry and purchases of food and beverages;
- onshore expenditures by crew which are concentrated in purchases of food and beverages in restaurants and retail purchases of jewelry and clothing;
- expenditures by cruise lines for port services, such as dockage fees and linesmen, utilities, such as water and power and navigation services; and
- purchases of supplies, such as food and other supplies, by the cruise lines from local businesses.

According to data provided by the CTO, 460,443 cruise passengers arrived aboard cruise ships during the 2005-2006 cruise year.<sup>15</sup> Of these, an estimated 391,377 passengers (85 percent) disembarked and visited Antigua. Utilizing additional data provided by the visiting cruise lines, we have estimated that 197,226 crew were aboard the cruise ships and that 40 percent, or 78,890 crew, disembarked and visited the island. These passenger and crew visits along with additional expenditures by the cruise lines generated a total of **\$41 million** (\$US) in cruise tourism expenditures in Antigua during the 2005-2006 cruise year. The contribution of expenditures by passengers, crew and cruise lines to this total is discussed below.

**Table 12 – Estimated Passenger Spending (\$US) in Antigua, 2005-2006 Cruise Year<sup>16</sup>**

Purchase Categories	Average Spend per Party	Share of All Onshore Visits	Weighted Average Spend per Party
Shore Excursions	\$ 65.21	72%	\$ 46.82
Clothing	\$ 44.90	45%	\$ 20.16
F&B at Restaurants & Bars	\$ 23.30	41%	\$ 9.56
Local Crafts & Souvenirs	\$ 21.60	38%	\$ 8.28
Other Purchases	\$ 39.60	25%	\$ 9.84
Taxis/Ground Transportation	\$ 31.70	24%	\$ 7.45
Watches & Jewelry	\$ 425.70	14%	\$ 59.88
Retail Purchases of Liquor	\$ 23.10	7%	\$ 1.69
Entertainment/Night Clubs	\$ 156.80	3%	\$ 3.93
Telephone & Internet	\$ 8.60	2%	\$ 0.20
Electronics	\$ 24.80	1%	\$ 0.19
<b>Total Spend per Cruise Party</b>			<b>\$ 168.00</b>
<b>Average Size of a Cruise Party</b>			<b>2.0</b>
<b>Total Spend per Cruise Passenger</b>			<b>\$ 84.00</b>
<b>Cruise Passenger Visits</b>			<b>391,377</b>
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 32,875,578</b>

<sup>15</sup> The 2005-2006 cruise year includes the twelve months beginning in May, 2005 and ending in April, 2006.

<sup>16</sup> The average shore excursion expenditure is a weighted average of the onshore and Internet purchases and the portion of the onboard purchases paid to local tour operators.

Per passenger spending estimates were derived from the 725 surveys completed by passengers that went ashore during the survey period. As shown in **Table 12**, each passenger cruise party spent an average of \$168. The average spend per cruise party is the sum of the weighted spending in each of the eleven categories. For example, 41 percent of the survey respondents reported spending an average of \$23.30 at local restaurants and/or bars. Spread over the 725 cruise parties that visited Antigua, this represents an average of \$9.56 per party. On a per passenger basis, the average total expenditure was \$84. This represents the sum of per party expenditures, \$168, divided by the average size of a cruise party in Antigua, 2.0 passengers.

For the entire 2005-2006 cruise year, the estimated 391,777 cruise passengers who visited Antigua spent a total of **\$32.9 million** (\$US) in Antigua.

Due to an insufficient number of completed crew surveys, per crew spending estimates were estimated from the complete set of crew surveys. The average spend for each category for the more than 11,000 crew surveys was adjusted for this destination. This process involved comparing the per passenger spending estimates for each category for this destination with the per passenger spending estimates of the complete set of passenger surveys. For, example, in the total passenger and crew samples, passengers spent an average of \$6.13 on food and beverages and crew spent an average of \$14.18. In Antigua, passengers spent an average of \$4.78 ( $\$9.56 \div 2$ ), or 78 percent of the Caribbean-wide average for food and beverages. We then multiplied the Caribbean-wide average of crew expenditures for food and beverages, \$14.18, by 78 percent to arrive at an average spend on food and beverages of \$11.05 in Antigua. Similar calculations were made for each purchase category.

As shown in **Table 13**, we estimated that each crew member who went ashore in Antigua spent an average of \$52.96. For the entire 2005-2006 cruise year, the estimated 78,890 crew who visited Antigua spent an estimated total of **\$4.1 million** (\$US).

**Table 13 – Estimated Crew Spending (\$US) in Antigua, 2005-2006 Cruise Year**

Purchase Categories	Average Spend per Crew
F&B at Restaurants & Bars	\$ 11.05
Clothing	\$ 9.31
Watches & Jewelry	\$ 8.37
Entertainment/Night Clubs/Casinos	\$ 7.61
Other Purchases	\$ 6.12
Taxis/Ground Transportation	\$ 3.24
Telephone & Internet	\$ 2.44
Local Crafts & Souvenirs	\$ 1.91
Electronics	\$ 0.98
Retail Purchases of Liquor	\$ 0.93
Onshore Purchase of Tours	\$ 0.52
<b>Total Spend per Crew</b>	<b>\$ 52.47</b>
Cruise Passenger Visits	78,890
<b>Total Cruise Passenger Expenditures</b>	<b>\$ 4,139,495</b>

Cruise lines made payments to local businesses for a variety of goods and services. Net payments to local vendors for shore excursions have been included with passenger expenditures.

However, cruise lines made other local expenditures, including payments for port fees and taxes, navigation services, utilities and other supplies. Based upon data provided by the FCCA member cruise lines, we estimated that all cruise lines spent **\$4 million** (\$US) in Antigua during the 2005-2006 cruise year. Nearly all of these expenditures were payments for port fees and taxes and navigation services.

### Economic Contribution of Cruise Tourism Expenditures

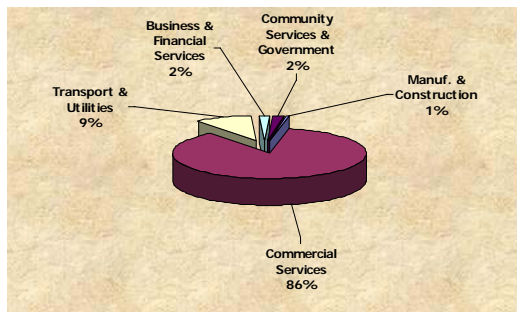
As noted in the **Data and Methods** section of the full report, a set of economic impact models were developed for each destination to produce estimates of the economic contribution of cruise tourism. Data for these models were collected from a broad range of local, regional and international sources. The impact models were designed to reflect the economic structure of each destination, including the industrial composition of Gross Domestic Product (GDP), the wage share of GDP by industry and average employee wages by industry.

**Table 14 – Total Economic Contribution of Cruise Tourism in Antigua, 2005-2006 Cruise Year**

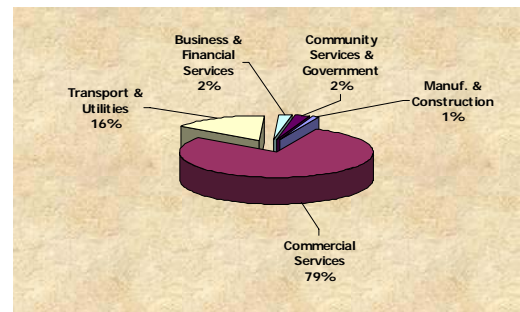
	Employment	Wage Income (\$US Millions)
Direct Economic Contribution	720	\$ 6.1
<b>Total Economic Contribution</b>	<b>1,215</b>	<b>\$ 10.4</b>

As shown in **Table 14**, the \$41 million in total cruise tourism expenditures in Antigua generated direct employment of 720 residents of Antigua paying \$6.1 million in annual wages. Adding the indirect contribution that results from the spending of those local businesses that are the direct recipients of passenger, crew and cruise line expenditures, the direct cruise tourism expenditures generated a total employment contribution of 1,215 jobs and \$10.4 million in wage income in Antigua during the 2005-2006 cruise year.

**Figure 5 – Total Employment Impacts by Sector - Antigua**



**Figure 6 – Total Wage Impacts by Sector Antigua**



As shown in **Figures 5 and 6**, the total employment and wage impacts of cruise tourism are concentrated in the commercial and transport sectors which account for 95 percent of the total impacts. This is not surprising since the direct impacts account for nearly 60 percent of the total employment impacts and that virtually all of the cruise tourism expenditures are made with businesses in these sectors. Because of the relatively higher wages in the transport sector com-

pared to the other sectors of the economy, the transport sector accounts for 16 percent of the wage impacts but only 9 percent of the employment impacts. The remainder of the total employment and wage impacts was generated by the indirect spending in the other sectors of the economy.<sup>17</sup>

## Passenger Surveys

A total of 731 passenger surveys were completed and returned for tabulation. **Table 15** shows the major attributes of passenger visits to Antigua as derived from the passenger surveys.

- Of the 725 passengers who went ashore, 72 percent made at least one purchase while ashore.
- Seventy-two (72) percent of the passengers that went ashore purchased a shore excursion. Sixty (60) percent purchased their tour through the cruise lines and 40 percent purchased their tour onshore or on the Internet.
- The typical cruise party in Antigua consisted of 2.0 passengers.

**Table 15 - Major Attributes of Passenger Surveys - Antigua**

	Number	Percent
<b>Total Respondents</b>	731	
<b>Number Ashore</b>	725	
<b>Respondents Making Onshore Purchases:</b>	519	71.6%
<b>Average Size of Expenditure Party (Persons)</b>	2.0	
<b>Purchased an Onshore Tour</b>	520	71.7%
<b>Purchased Onshore Tour from:</b>		
<b>Cruise Line</b>	311	59.8%
<b>Onshore/Internet</b>	209	40.2%
<b>Toured On Own/Did not Tour</b>	205	

<sup>17</sup> The industry sectors include the following activities:

Manufacturing & Construction: residential and nonresidential construction and all manufacturing  
 Commercial Services: wholesale and retail trade, lodging and eating and drinking establishments  
 Transportation & Utilities: tour operators, port services, telecommunications and water and power utilities  
 Business & Financial Services: banking, insurance, legal, accounting, leasing and other business services  
 Community Services & Government: education, health and social services and government agencies

## Passenger Satisfaction

The passenger survey also asked the passengers to rate their satisfaction with their destination visit along a number of parameters, as shown in **Table 16**. A 10-point scale was used with 10 being the highest score, i.e., extremely satisfied, and 1 being the lowest score, i.e., not at all satisfied. As indicated in the table, cruise passengers were, in general, very satisfied with their cruise call at Antigua with a mean score of 7.2 (Very Satisfied) for "Visit Met Expectations".

Among the key findings were the following:

- Passengers felt very safe in Antigua with the Safety category receiving an average score of 8.1.
- Other categories with the scores above 8.0 (Very Satisfied) were: island beaches and courtesy of local employees.
- Categories with slightly lower scores but still above 7.0 (Very Satisfied) were: guided tours, friendliness of the residents and historic site/museums.
- Categories with average scores between 6.0 and 7.0 (Somewhat Satisfied) were given for: the initial shoreside welcome, the shopping experience, including variety of shops and overall prices.
- Passengers were somewhat likely to recommend a resort vacation in Antigua to family or friends (6.0) but were not too likely to return themselves (4.3).

**Table 16 – Passenger Visit Satisfaction\* - Antigua**

Satisfaction Categories	Mean Score
Initial Shoreside Welcome	6.7
Guided Tour	7.9
Shopping Experience	6.3
Historic Sites/Museums	7.1
Beaches	8.1
Friendliness of Residents	7.7
Courtesy of Employees	8.0
Variety of Shops	6.7
Overall Prices	6.5
Taxis/Local Transportation	7.3
Feeling of Safety Ashore	8.1
Visit Met Expectations	7.2
Likelihood of Recommending Resort Vacation	6.0
Likelihood of Return for Resort Vacation	4.3

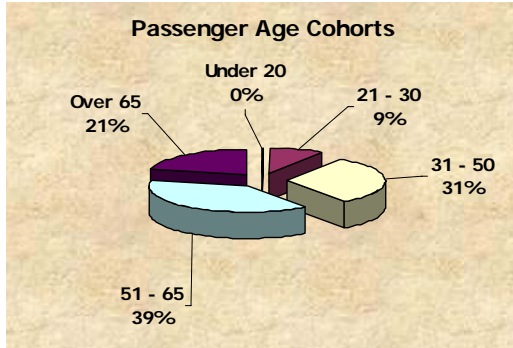
\* Scale is 1 to 10 with 10 being the highest score. The mean scores can be interpreted as follows: Extremely Satisfied/Likely: 10-9; Very Satisfied/Likely: 8-7; Somewhat Satisfied/Likely: 6-5; Not Too Satisfied/Likely: 4-3; Not At All Satisfied/Likely: 2-1.



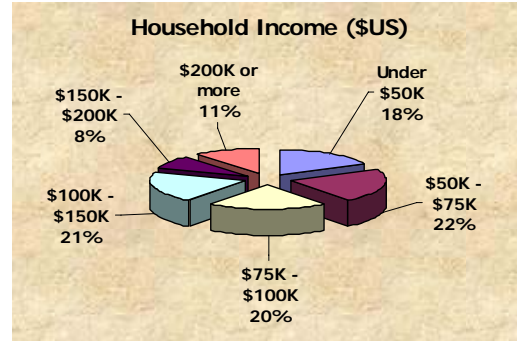
## Passenger Demographics

Residents of the United States and the U.K. accounted for 84 percent of the responding passengers. The average age of the respondents was 51 years with 60 percent of the respondents being over 50 years old. Antigua passengers had an average household income of \$102,800 with 40 percent having over \$100,000 in household income.

**Figure 7 – Passenger Age Antigua**



**Figure 8 – Passenger Household Income Antigua**



## Aruba

At the core of the analysis of the economic contribution of cruise tourism were a set of passenger and crew surveys conducted by the FCCA member cruise lines.<sup>18</sup> The surveys were conducted onboard the cruise ships during the months of March, April and May of 2006. The survey schedule was designed so that surveys were conducted by all FCCA member cruise lines that called at each destination and that the distribution of passenger and crew surveys would reflect the distribution of passenger and crew arrivals by cruise line at each destination. On any given cruise itinerary, passenger and crew surveys were placed in all passenger cabins and crew quarters following a single destination call. The surveys were completed by the passengers and crew in the privacy of their quarters and returned to a designated office on the cruise ship. Thus, passengers and crew were only surveyed once during a cruise itinerary and for a single destination. On a subsequent itinerary, passengers were surveyed following a call at a different destination.

Passenger and crew surveys were designed to collect data for onshore spending and visit satisfaction by both passengers and crew. While the crew survey was slightly shorter than the passenger survey, both surveys were designed to collect the following information:

- hours spent ashore;
- expenditures by category, including shore tours, food & beverages, clothing, etc.;
- visit satisfaction, including shore tour, safety, prices, shopping, etc.;
- likelihood of recommending and returning for a land-based vacation; and
- demographic characteristics, including country of residence, age group, income, etc.

Combining the expenditure data collected from the passenger and crew surveys with data on expenditures by cruise lines for port fees and services, payments to local tour operators for passenger shore excursions purchased onboard the cruise ships, and other provisions purchased locally by the cruise lines, estimates of total cruise tourism expenditures were developed for each participating destination.

Given the direct spending estimates, the economic contribution of these expenditures, as measured by employment and wage income were then estimated for each destination. This process began with the collection of economic data for each destination from a combination of local, regional and international sources. Utilizing all of these data a set of economic impact models were developed for each destination to estimate the direct and total employment and wage impacts. A more detailed description of these models is provided in the **Data and Methods** section of the full report.

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<sup>18</sup> The FCCA member lines are as follows: Carnival Cruise Lines, Celebrity Cruises, Costa Cruise Lines, Cunard Line, Disney Cruise Line, Holland America Line, MSC Cruises (USA), Inc., Norwegian Cruise Line, Princess Cruises, Regent Seven Seas Cruises, Royal Caribbean International and Windstar Cruises.

## Cruise Tourism Expenditures

Cruise tourism expenditures in destination ports are composed of a broad range of spending including:

- onshore expenditures by passengers which tend to be concentrated in shore excursions and retail purchases of clothing, jewelry and local crafts and souvenirs;
- onshore expenditures by crew which are generally concentrated in purchases of food and beverages, local transportation and retail purchases of clothing and electronics;
- expenditures by cruise lines for port services, such as dockage fees and linesmen, utilities, such as water and power and navigation services; and
- purchases of supplies, such as food and other stores, by the cruise lines from local businesses.

According to data provided by the CTO, 563,082 cruise passengers arrived aboard cruise ships during the 2005-2006 cruise year.<sup>19</sup> Of these, an estimated 478,620 passengers (85 percent) disembarked and visited Aruba. Utilizing additional data provided by the visiting cruise lines, we have estimated that 223,904 crew were aboard the cruise ships and that 40 percent, or 89,562 crew, disembarked and visited Aruba. These passenger and crew visits along with additional expenditures by the cruise lines generated a total of **\$66.2 million** (\$US) in cruise tourism expenditures in Aruba during the 2005-2006 cruise year. The contribution of expenditures by passengers, crew and cruise lines to this total is discussed below.

**Table 17 – Estimated Passenger Spending (\$US) in Aruba, 2005-2006 Cruise Year<sup>20</sup>**

Purchase Categories	Average Spend per Party	Share of All Onshore Visits	Weighted Average Spend per Party
Shore Excursions	\$ 69.09	70%	\$ 48.57
Clothing	\$ 54.20	66%	\$ 35.93
F&B at Restaurants & Bars	\$ 26.80	44%	\$ 11.68
Local Crafts & Souvenirs	\$ 31.10	40%	\$ 12.33
Other Purchases	\$ 36.80	26%	\$ 9.60
Watches & Jewelry	\$ 429.20	25%	\$ 107.82
Taxis/Ground Transportation	\$ 30.60	22%	\$ 6.61
Telephone & Internet	\$ 8.20	5%	\$ 0.38
Entertainment/Night Clubs	\$ 54.70	4%	\$ 2.20
Retail Purchases of Liquor	\$ 21.90	4%	\$ 0.77
Electronics	\$ 346.30	1%	\$ 1.95
<b>Total Spend per Cruise Party</b>			<b>\$ 237.82</b>
Average Size of a Cruise Party			2.1
<b>Total Spend per Cruise Passenger</b>			<b>\$ 113.26</b>
Cruise Passenger Visits			478,620
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 54,207,830</b>

<sup>19</sup> The 2005-2006 cruise year includes the twelve months beginning in May, 2005 and ending in April, 2006.

<sup>20</sup> The average shore excursion expenditure is a weighted average of the onshore and Internet purchases and the portion of the onboard purchases paid to local tour operators.

Per passenger spending estimates were derived from the 1,490 surveys completed by passengers that went ashore during the survey period. As shown in **Table 17**, each passenger cruise party spent an average of \$237.82. The average spend per cruise party is the sum of the weighted spending in each of the eleven categories. For example, 44 percent of the survey respondents reported spending an average of \$26.80 at local restaurants and/or bars. Spread over the 1,490 cruise parties that visited Aruba, this represents an average of \$11.68 per party. On a per passenger basis, the average total expenditure was \$113.26. This represents the sum of per party expenditures, \$287.82, divided by the average size of a cruise party in Aruba, 2.1 passengers.

For the entire 2005-2006 cruise year, the estimated 478,620 cruise passengers who visited Aruba spent a total of **\$54.2 million** (\$US).

Per crew spending estimates were derived from the 494 surveys completed by crew members during the survey period. As shown in **Table 18**, each crew member spent an average of \$78.45 in Aruba. The average spend per crew member is the sum of the weighted spending in each of the eleven categories. For example, 53 percent of the survey respondents reported spending an average of \$35.70 for food and beverages. Spread over the 494 crew members that visited Aruba, this represents an average of \$19.01 per crew member.

For the entire 2005-2006 cruise year, the estimated 89,562 crew who visited Aruba spent an estimated total of **\$7.0 million** (\$US).

**Table 18 – Estimated Crew Spending (\$US) in Aruba, 2005-2006 Cruise Year**

Purchase Categories	Average Spend per Crew	Share of All Onshore Visits	Average Spend per Crew
F&B at Restaurants & Bars	\$ 35.70	53%	\$ 19.01
Telephone & Internet	\$ 18.80	29%	\$ 5.40
Clothing	\$ 65.30	20%	\$ 13.09
Taxis/Ground Transportation	\$ 15.00	18%	\$ 2.67
Other Purchases	\$ 54.70	12%	\$ 6.42
Local Crafts & Souvenirs	\$ 26.10	10%	\$ 2.69
Entertainment/Night Clubs	\$ 152.20	6%	\$ 9.24
Watches & Jewelry	\$ 214.70	5%	\$ 11.30
Shore Excursions	\$ 27.00	4%	\$ 1.15
Electronics	\$ 226.10	3%	\$ 6.41
Retail Purchases of Liquor	\$ 58.70	2%	\$ 1.07
<b>Total Spend per Crew</b>			<b>\$ 78.45</b>
<b>Cruise Passenger Visits</b>			89,562
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 7,026,447</b>

Cruise lines made payments to local businesses for a variety of goods and services. Net payments to local vendors for shore excursions have been included with passenger expenditures. However, cruise lines made other local expenditures, including payments for port fees and taxes, navigation services, utilities and other supplies. Based upon data provided by the FCCA member cruise lines, we estimated that all cruise lines spent **\$5.0 million** (\$US) in Aruba during the 2005-2006 cruise year. Approximately 80 percent of these expenditures were payments

for port fees and navigation services while the remaining 20 percent consisted of payments for ship supplies.

### Economic Contribution of Cruise Tourism Expenditures

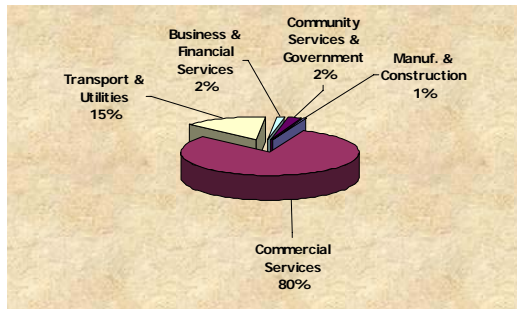
As noted in the **Data and Methods** section of the full report, a set of economic impact models were developed for each destination to produce estimates of the economic contribution of cruise tourism. Data for these models were collected from a broad range of local, regional and international sources. The impact models were designed to reflect the economic structure of each destination, including the industrial composition of Gross Domestic Product (GDP), the wage share of GDP by industry and average employee wages by industry.

**Table 19 – Total Economic Contribution of Cruise Tourism in Aruba, 2005-2006 Cruise Year**

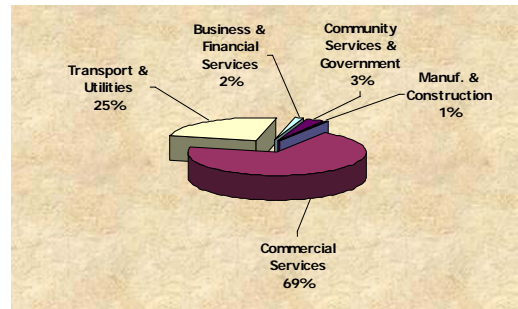
	Employment	Wage Income (\$US Millions)
<b>Direct Economic Contribution</b>	985	\$14.1
<b>Total Economic Contribution</b>	1,710	\$24.6

As shown in **Table 19**, the \$66.2 million in total cruise tourism expenditures generated direct employment of 985 residents of Aruba paying \$14.1 million in annual wages. Adding the indirect contribution that results from the spending of those local businesses that are the direct recipients of passenger, crew and cruise line expenditures, the direct cruise tourism expenditures generated a total employment contribution of 1,710 jobs and \$24.6 million in wage income in Aruba during the 2005-2006 cruise year.

**Figure 9 – Total Employment Impacts by Sector - Aruba**



**Figure 10 – Total Wage Impacts by Sector Aruba**



As shown in **Figures 9 and 10**, the total employment and wage impacts of cruise tourism are concentrated in the commercial and transport sectors which account for about 95 percent of the employment and wage impacts.<sup>21</sup> This is not surprising since the direct impacts account for

<sup>21</sup> The industry sectors include the following activities:  
 Manufacturing & Construction: residential and nonresidential construction and all manufacturing  
 Commercial Services: wholesale and retail trade, lodging and eating and drinking establishments  
 Transportation & Utilities: tour operators, port services, telecommunications and water and power utilities  
 Business & Financial Services: banking, insurance, legal, accounting, leasing and other business services  
 Community Services & Government: education, health and social services and government agencies

nearly 60 percent of the total employment impacts and that virtually all of the cruise tourism expenditures are made with businesses in these sectors. Because of the relatively higher wages in the transport sector compared to the other sectors of the economy, the transport sector accounts for 25 percent of the wage impacts but only 15 percent of the employment impacts. The remainder of the total employment and wage impacts was generated by the indirect spending in the other sectors of the economy.

## Passenger Surveys

A total of 1,514 passenger surveys were completed and returned for tabulation. **Table 20** shows the major attributes of passenger visits in Aruba as derived from the passenger surveys.

- Of the passengers who went ashore, 84 percent made at least one purchase while ashore.
- Seventy (70) percent of the passengers that went ashore purchased a shore excursion. Sixty-nine (69) percent purchased their tour through the cruise lines and 31 percent purchased their tour onshore or on the Internet.
- The typical cruise party in Aruba consisted of 2.1 passengers.

**Table 20 - Major Attributes of Passenger Surveys - Aruba**

	Number	Percent
<b>Total Respondents</b>	1,514	
<b>Number Ashore</b>	1,490	
<b>Respondents Making Onshore Purchases:</b>	1,246	83.6%
<b>Average Size of Expenditure Party (Persons)</b>	2.1	
<b>Purchased an Onshore Tour</b>	1,047	70.3%
<b>Purchased Onshore Tour from:</b>		
<b>Cruise Line</b>	718	68.6%
<b>Onshore/Internet</b>	329	31.4%
<b>Toured On Own/Did not Tour</b>	443	

## Passenger Satisfaction

The passenger survey also asked the passengers to rate their satisfaction with their destination visit along a number of parameters, as shown in **Table 19**. A 10-point scale was used with 10 being the highest score, i.e., extremely satisfied, and 1 being the lowest score, i.e., not at all satisfied. As indicated in the table, cruise passengers were, in general, very satisfied with their cruise call at Aruba with a mean score of 8.4 (Very Satisfied) for "Visit Met Expectations".

Among the key findings are the following:

- Passengers felt extremely safe in Aruba with the Safety category receiving an average score of 9.0.
- Other categories with scores above 8.0 (Very Satisfied) were: initial shoreside welcome, guided tour, island beaches, friendliness of residents, courtesy of local employees, variety of shops, and local transportation.
- Categories with slightly lower scores but still above 7.0 (Very Satisfied) were: the overall shopping experience, overall prices and historic site/museums.
- Passengers were very likely to recommend a resort vacation in Aruba to family or friends (8.0) and were somewhat likely to return themselves (6.3).

**Table 21 – Passenger Visit Satisfaction\* - Aruba**

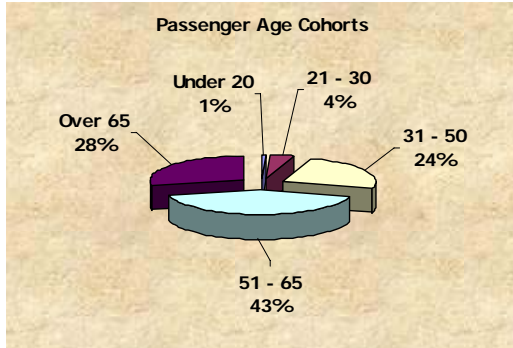
Satisfaction Categories	Mean Score
Initial Shoreside Welcome	8.0
Guided Tour	8.5
Shopping Experience	7.8
Historic Sites/Museums	7.6
Beaches	8.9
Friendliness of Residents	8.5
Courtesy of Employees	8.6
Variety of Shops	8.0
Overall Prices	7.4
Taxis/Local Transportation	8.1
Feeling of Safety Ashore	9.0
Visit Met Expectations	8.4
Likelihood of Recommending Resort Vacation	8.0
Likelihood of Return for Resort Vacation	6.3

\* Scale is 1 to 10 with 10 being the highest score. The mean scores can be interpreted as follows:  
 Extremely Satisfied/Likely: 10-9; Very Satisfied/Likely: 8-7; Somewhat Satisfied/Likely: 6-5;  
 Not Too Satisfied/Likely: 4-3; Not At All Satisfied/Likely: 2-1.

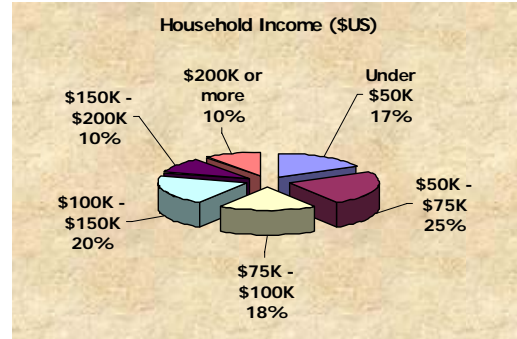
## Passenger Demographics

Residents of the United States and the Canada accounted for 92 percent of the responding passengers. The average age of the respondents was 54 years with 71 percent of the respondents being over 50 years old. Aruba passengers had an average household income of \$103,600 with 40 percent having over \$100,000 in household income.

**Figure 11 – Passenger Age Aruba**



**Figure 12 – Passenger Household Income Aruba**





## The Bahamas

At the core of the analysis of the economic contribution of cruise tourism were a set of passenger and crew surveys conducted by the FCCA member cruise lines.<sup>22</sup> The surveys were conducted onboard the cruise ships during the months of March, April and May of 2006. The survey schedule was designed so that surveys were conducted by all FCCA member cruise lines that called at each destination and that the distribution of passenger and crew surveys would reflect the distribution of passenger and crew arrivals by cruise line at each destination. On any given cruise itinerary, passenger and crew surveys were placed in all passenger cabins and crew quarters following a single destination call. The surveys were completed by the passengers and crew in the privacy of their quarters and returned to a designated office on the cruise ship. Thus, passengers and crew were only surveyed once during a cruise itinerary and for a single destination. On a subsequent itinerary, passengers were surveyed following a call at a different destination.

Passenger and crew surveys were designed to collect data for onshore spending and visit satisfaction by both passengers and crew. While the crew survey was slightly shorter than the passenger survey, both surveys were designed to collect the following information:

- hours spent ashore;
- expenditures by category, including shore tours, food & beverages, clothing, etc.;
- visit satisfaction, including shore tour, safety, prices, shopping, etc.;
- likelihood of recommending and returning for a land-based vacation; and
- demographic characteristics, including country of residence, age group, income, etc.

Combining the expenditure data collected from the passenger and crew surveys with data on expenditures by cruise lines for port fees and services, payments to local tour operators for passenger shore excursions purchased onboard the cruise ships, and other provisions purchased locally by the cruise lines, estimates of total cruise tourism expenditures were developed for each participating destination.

Given the direct spending estimates, the economic contribution of these expenditures, as measured by employment and wage income were then estimated for each destination. This process began with the collection of economic data for each destination from a combination of local, regional and international sources. Utilizing all of these data a set of economic impact models were developed for each destination to estimate the direct and total employment and wage impacts. A more detailed description of these models is provided in the **Data and Methods** section of the full report.

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<sup>22</sup> The FCCA member lines are as follows: Carnival Cruise Lines, Celebrity Cruises, Costa Cruise Lines, Cunard Line, Disney Cruise Line, Holland America Line, MSC Cruises (USA), Inc., Norwegian Cruise Line, Princess Cruises, Regent Seven Seas Cruises, Royal Caribbean International and Windstar Cruises.

## Cruise Tourism Expenditures

Cruise tourism expenditures in destination ports are composed of a broad range of spending including:

- onshore expenditures by passengers which tend to be concentrated in shore excursions and retail purchases of clothing, jewelry and local crafts and souvenirs;
- onshore expenditures by crew which are generally concentrated in purchases of food and beverages, local transportation and retail purchases of clothing and electronics;
- expenditures by cruise lines for port services, such as dockage fees and linesmen, utilities, such as water and power and navigation services; and
- purchases of supplies, such as food and other stores, by the cruise lines from local businesses.

According to data provided by the CTO and the FCCA, nearly 2 million cruise passengers arrived aboard cruise ships at Nassau and Freeport<sup>23</sup> during the 2005-2006 cruise year.<sup>24</sup> Of these, an estimated 1.6 million passengers (80 percent) disembarked and visited The Bahamas. Utilizing additional data provided by the visiting cruise lines, we have estimated that 800,000 crew were aboard the cruise ships and that 35 percent, or 279,784 crew, disembarked and visited the island. These passenger and crew visits along with additional expenditures by the cruise lines generated a total of **\$144.4 million** (\$US) in cruise tourism expenditures in The Bahamas during the 2005-2006 cruise year. The contribution of expenditures by passengers, crew and cruise lines to this total is discussed below.

Per passenger spending estimates were derived from the 1,318 surveys completed by passengers that went ashore during the survey period. As shown in **Table 22**, each passenger cruise party spent an average of \$151.36. The average spend per cruise party is the sum of the weighted spending in each of the eleven categories. For example, 36 percent of the survey respondents reported spending an average of \$28.90 at local restaurants and/or bars. Spread over the 1,318 cruise parties that visited The Bahamas, this represents an average of \$10.47 per party. On a per passenger basis, the average total expenditure was \$60.54. This represents the sum of per party expenditures, \$151.36, divided by the average size of a cruise party in The Bahamas, 2.5 passengers.

For the entire 2005-2006 cruise year, the estimated 1.6 million cruise passengers who visited The Bahamas spent a total of **\$96 million** (\$US).

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<sup>23</sup> Since this analysis is focused on the economic impact of onshore spending by the cruise sector, we have excluded passenger and crew arrivals and visits at the various private cays in The Bahamas. Including these visits, CTO has estimated that there were 3.3 million total passenger arrivals in The Bahamas during the 2005-2006 cruise year.

<sup>24</sup> The 2005-2006 cruise year includes the twelve months beginning in May, 2005 and ending in April, 2006.

**Table 22 – Estimated Passenger Spending (\$US) in The Bahamas, 2005-2006 Cruise Year<sup>25</sup>**

Purchase Categories	Average Spend per Party	Share of All Onshore Visits	Weighted Average Spend per Party
Clothing	\$ 49.00	57%	\$ 27.83
Shore Excursions	\$ 56.60	54%	\$ 30.68
Local Crafts & Souvenirs	\$ 34.60	45%	\$ 15.70
F&B at Restaurants & Bars	\$ 28.90	36%	\$ 10.47
Taxis/Ground Transportation	\$ 30.80	31%	\$ 9.53
Other Purchases	\$ 49.70	25%	\$ 12.33
Watches & Jewelry	\$ 192.50	20%	\$ 38.18
Retail Purchases of Liquor	\$ 27.40	6%	\$ 1.76
Entertainment/Night Clubs	\$ 93.80	5%	\$ 4.58
Telephone & Internet	\$ 12.60	2%	\$ 0.25
Electronics	\$ 39.00	0%	\$ 0.04
<b>Total Spend per Cruise Party</b>			<b>\$ 151.36</b>
Average Size of a Cruise Party			2.5
<b>Total Spend per Cruise Passenger</b>			<b>\$ 60.54</b>
Cruise Passenger Visits			1,585,450
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 95,990,456</b>

Per crew spending estimates were derived from the 619 surveys completed by crew members during the survey period. As shown in **Table 23**, each crew member spent an average of \$19.96 in The Bahamas. The average spend per crew member is the sum of the weighted spending in each of the eleven categories. For example, 16 percent of the survey respondents reported spending an average of \$32.30 for food and beverages. Spread over the 619 crew members that visited The Bahamas, this represents an average of \$5.24 per crew member.

For the entire 2005-2006 cruise year, the estimated 279,784 crew who visited The Bahamas spent an estimated total of **\$5.5 million** (\$US).

**Table 23 – Estimated Crew Spending (\$US) in The Bahamas, 2005-2006 Cruise Year**

Purchase Categories	Average Spend per Crew	Share of All Onshore Visits	Average Spend per Crew
F&B at Restaurants & Bars	\$ 32.30	16%	\$ 5.24
Taxis/Ground Transportation	\$ 12.70	8%	\$ 1.01
Clothing	\$ 64.90	6%	\$ 4.04
Local Crafts & Souvenirs	\$ 25.80	4%	\$ 1.09
Other Purchases	\$ 36.10	3%	\$ 1.22
Telephone & Internet	\$ 17.40	3%	\$ 0.48
Watches & Jewelry	\$ 158.60	2%	\$ 3.74
Entertainment/Night Clubs	\$ 86.60	2%	\$ 1.80
Shore Excursions	\$ 17.40	1%	\$ 0.18
Retail Purchases of Liquor	\$ 45.50	1%	\$ 0.43
Electronics	\$ 110.70	1%	\$ 0.73
<b>Total Spend per Crew</b>			<b>\$ 19.96</b>
Cruise Passenger Visits			279,784
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 5,583,316</b>

<sup>25</sup> The average shore excursion expenditure is a weighted average of the onshore and Internet purchases and the portion of the onboard purchases paid to local tour operators.

Cruise lines made payments to local businesses for a variety of goods and services. Net payments to local vendors for shore excursions have been included with passenger expenditures. However, cruise lines made other local expenditures, including payments for port fees and taxes, navigation services, utilities and other supplies. Based upon data provided by the FCCA member cruise lines, we estimated that all cruise lines spent **\$42.8 million** (\$US) in The Bahamas during the 2005-2006 cruise year. Nearly all of these expenditures were payments for port fees and taxes and navigation services.

### Economic Contribution of Cruise Tourism Expenditures

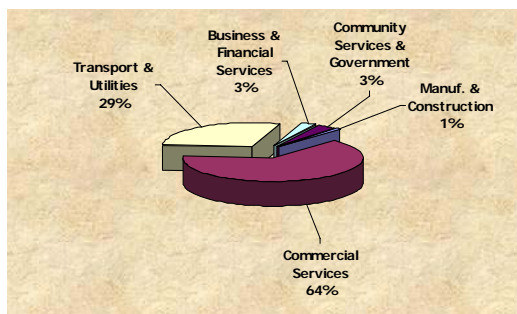
As noted in the **Data and Methods** section of the full report, a set of economic impact models were developed for each destination to produce estimates of the economic contribution of cruise tourism. Data for these models were collected from a broad range of local, regional and international sources. The impact models were designed to reflect the economic structure of each destination, including the industrial composition of Gross Domestic Product (GDP), the wage share of GDP by industry and average employee wages by industry.

**Table 24 – Total Economic Contribution of Cruise Tourism in The Bahamas, 2005-2006 Cruise Year**

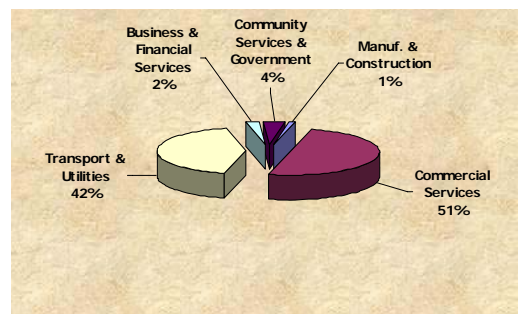
	Employment	Wage Income (\$US Millions)
<b>Direct Economic Contribution</b>	2,235	\$34.3
<b>Total Economic Contribution</b>	3,965	\$60.9

As shown in **Table 24**, the \$144.4 million in total cruise tourism expenditures generated direct employment of 2,235 residents of The Bahamas paying \$34.3 million in annual wages. Adding the indirect contribution that results from the spending of those local businesses that are the direct recipients of passenger, crew and cruise line expenditures, the direct cruise tourism expenditures generated a total employment contribution of 3,965 jobs and \$60.9 million in wage income in The Bahamas during the 2005-2006 cruise year.

**Figure 13 – Total Employment Impacts by Sector - The Bahamas**



**Figure 14 – Total Wage Impacts by Sector The Bahamas**



As shown in **Figures 13 and 14**, the total employment and wage impacts of cruise tourism are concentrated in the commercial and transport sectors which account for about 93 percent of the employment and wage impacts.<sup>26</sup> This is not surprising since the direct impacts account for 55 percent of the total employment impacts and that virtually all of the cruise tourism expenditures are made with businesses in these sectors. Because of the relatively higher wages in the transport sector compared to the other sectors of the economy, the transport sector accounts for 42 percent of the wage impacts but only 29 percent of the employment impacts. The remainder of the total employment and wage impacts was generated by the indirect spending in the other sectors of the economy.

### Passenger Surveys

A total of 1,372 passenger surveys were completed and returned for tabulation. **Table 23** shows the major attributes of passenger visits in The Bahamas as derived from the passenger surveys.

- Of the passengers who went ashore, 73 percent made at least one purchase while ashore.
- Fifty-four (54) percent of the passengers that went ashore purchased a shore excursion. Sixty-seven (67) percent purchased their tour through the cruise lines and 33 percent purchased their tour onshore or on the Internet.
- The typical cruise party in The Bahamas consisted of 2.5 passengers.

**Table 25 - Major Attributes of Passenger Surveys – The Bahamas**

	Number	Percent
<b>Total Respondents</b>	1,372	
<b>Number Ashore</b>	1,318	
<b>Average Hours Ashore</b>	4.1	
<b>Respondents Making Onshore Purchases:</b>	963	73.1%
<b>Average Size of Expenditure Party (Persons)</b>	2.5	
<b>Purchased an Onshore Tour</b>	715	54.2%
<b>Purchased Onshore Tour from:</b>		
<b>Cruise Line</b>	480	67.1%
<b>Onshore/Internet</b>	235	32.9%
<b>Toured On Own/Did not Tour</b>	603	

<sup>26</sup> The industry sectors include the following activities:  
 Manufacturing & Construction: residential and nonresidential construction and all manufacturing  
 Commercial Services: wholesale and retail trade, lodging and eating and drinking establishments  
 Transportation & Utilities: tour operators, port services, telecommunications and water and power utilities  
 Business & Financial Services: banking, insurance, legal, accounting, leasing and other business services  
 Community Services & Government: education, health and social services and government agencies

## Passenger Satisfaction

The passenger survey also asked the passengers to rate their satisfaction with their destination visit along a number of parameters, as shown in **Table 26**. A 10-point scale was used with 10 being the highest score, i.e., extremely satisfied, and 1 being the lowest score, i.e., not at all satisfied. As indicated in the table, cruise passengers were, in general, satisfied with their cruise call in The Bahamas with a mean score of 6.9 (Satisfied) for "Visit Met Expectations".

Among the key findings are the following:

- Passengers felt very safe in The Bahamas with the Safety category receiving an average score of 7.9.
- Other categories with scores above 7.0 (Very Satisfied) were: guided tour, island beaches, friendliness of residents, courtesy of local employees, and local transportation.
- Categories with average scores between 6.0 and 7.0 (Somewhat Satisfied) were given for: the initial shoreside welcome, historic sites, and the overall shopping experience, including the variety of shops and overall prices.
- Passengers were somewhat likely to recommend a resort vacation in The Bahamas to family or friends (6.4) and to return themselves (5.4).

**Table 26 – Passenger Visit Satisfaction\* - The Bahamas**

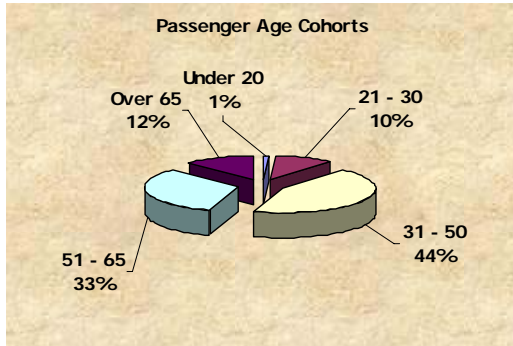
Satisfaction Categories	Mean Score
Initial Shoreside Welcome	6.8
Guided Tour	7.5
Shopping Experience	6.5
Historic Sites/Museums	6.9
Beaches	7.4
Friendliness of Residents	7.4
Courtesy of Employees	7.7
Variety of Shops	6.9
Overall Prices	6.5
Taxis/Local Transportation	7.1
Feeling of Safety Ashore	7.9
Visit Met Expectations	6.9
Likelihood of Recommending Resort Vacation	6.4
Likelihood of Return for Resort Vacation	5.4

\* Scale is 1 to 10 with 10 being the highest score. The mean scores can be interpreted as follows: Extremely Satisfied/Likely: 10-9; Very Satisfied/Likely: 8-7; Somewhat Satisfied/Likely: 6-5; Not Too Satisfied/Likely: 4-3; Not At All Satisfied/Likely: 2-1.

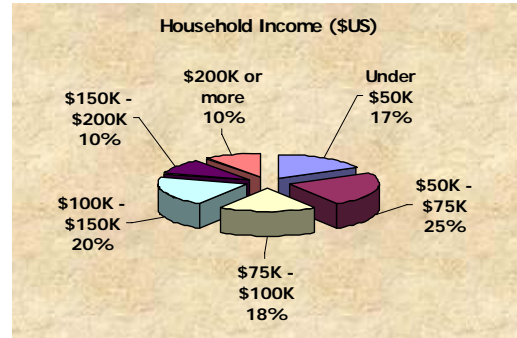
## Passenger Demographics

Residents of the United States and the Canada accounted for 94 percent of the responding passengers. The average age of the respondents was 48 years with 45 percent of the respondents being over 50 years old. The Bahamas passengers had an average household income of \$100,400 with 40 percent having over \$100,000 in household income.

**Figure 15 – Passenger Age  
The Bahamas**



**Figure 16 – Passenger Household Income  
The Bahamas**



## Barbados

At the core of the analysis of the economic contribution of cruise tourism were a set of passenger and crew surveys conducted by the FCCA member cruise lines.<sup>27</sup> The surveys were conducted onboard the cruise ships during the months of March, April and May of 2006. The survey schedule was designed so that surveys were conducted by all FCCA member cruise lines that called at each destination and that the distribution of passenger and crew surveys would reflect the distribution of passenger and crew arrivals by cruise line at each destination. On any given cruise itinerary, passenger and crew surveys were placed in all passenger cabins and crew quarters following a single destination call. The surveys were completed by the passengers and crew in the privacy of their quarters and returned to a designated office on the cruise ship. Thus, passengers and crew were only surveyed once during a cruise itinerary and for a single destination. On a subsequent itinerary, passengers were surveyed following a call at a different destination.

Passenger and crew surveys were designed to collect data for onshore spending and visit satisfaction by both passengers and crew. While the crew survey was slightly shorter than the passenger survey, both surveys were designed to collect the following information:

- hours spent ashore;
- expenditures by category, including shore tours, food & beverages, clothing, etc.;
- visit satisfaction, including shore tour, safety, prices, shopping, etc.;
- likelihood of recommending and returning for a land-based vacation; and
- demographic characteristics, including country of residence, age group, income, etc.

Combining the expenditure data collected from the passenger and crew surveys with data on expenditures by cruise lines for port fees and services, payments to local tour operators for passenger shore excursions purchased onboard the cruise ships, and other provisions purchased locally by the cruise lines, estimates of total cruise tourism expenditures were developed for each participating destination.

Given the direct spending estimates, the economic contribution of these expenditures, as measured by employment and wage income were then estimated for each destination. This process began with the collection of economic data for each destination from a combination of local, regional and international sources. Utilizing all of these data a set of economic impact models were developed for each destination to estimate the direct and total employment and wage impacts. A more detailed description of these models is provided in the **Data and Methods** section of the full report.

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<sup>27</sup> The FCCA member lines are as follows: Carnival Cruise Lines, Celebrity Cruises, Costa Cruise Lines, Cunard Line, Disney Cruise Line, Holland America Line, MSC Cruises (USA), Inc., Norwegian Cruise Line, Princess Cruises, Regent Seven Seas Cruises, Royal Caribbean International and Windstar Cruises.



## Cruise Tourism Expenditures

Cruise tourism expenditures in destination ports are composed of a broad range of spending including:

- onshore expenditures by passengers which tend to be concentrated in shore excursions and retail purchases of clothing, jewelry and local crafts and souvenirs;
- onshore expenditures by crew which are generally concentrated in purchases of food and beverages, local transportation and retail purchases of clothing and electronics;
- expenditures by cruise lines for port services, such as dockage fees and linesmen, utilities, such as water and power and navigation services; and
- purchases of supplies, such as food and other stores, by the cruise lines from local businesses.

According to data provided by the CTO, 506,626 cruise passengers arrived aboard cruise ships during the 2005-2006 cruise year.<sup>28</sup> Of these, an estimated 405,301 passengers (80 percent) disembarked and visited Barbados. Utilizing additional data provided by the visiting cruise lines, we have estimated that 207,072 crew were aboard the cruise ships and that 40 percent, or 82,829 crew, disembarked and visited the island. These passenger and crew visits along with additional expenditures by the cruise lines generated a total of **\$57.3 million** (\$US) in cruise tourism expenditures in Barbados during the 2005-2006 cruise year. The contribution of expenditures by passengers, crew and cruise lines to this total is discussed below.

**Table 27 – Estimated Passenger Spending (\$US) in Barbados, 2005-2006 Cruise Year<sup>29</sup>**

Purchase Categories	Average Spend per Party	Share of All Onshore Visits	Weighted Average Spend per Party
Shore Excursions	\$ 76.71	71%	\$ 54.08
Taxis/Ground Transportation	\$ 21.60	41%	\$ 8.90
Local Crafts & Souvenirs	\$ 27.30	40%	\$ 11.02
F&B at Restaurants & Bars	\$ 17.50	40%	\$ 6.99
Clothing	\$ 77.30	40%	\$ 30.89
Other Purchases	\$ 32.60	36%	\$ 11.61
Retail Purchases of Liquor	\$ 25.60	17%	\$ 4.35
Watches & Jewelry	\$ 524.10	16%	\$ 83.55
Telephone & Internet	\$ 10.90	5%	\$ 0.56
Electronics	\$ 433.00	5%	\$ 21.65
Entertainment/Night Clubs	\$ 85.30	1%	\$ 1.24
<b>Total Spend per Cruise Party</b>			<b>\$ 234.84</b>
Average Size of a Cruise Party			2.1
<b>Total Spend per Cruise Passenger</b>			<b>\$ 111.82</b>
Cruise Passenger Visits			405,301
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 45,319,792</b>

<sup>28</sup> The 2005-2006 cruise year includes the twelve months beginning in May, 2005 and ending in April, 2006.

<sup>29</sup> The average shore excursion expenditure is a weighted average of the onshore and Internet purchases and the portion of the onboard purchases paid to local tour operators.

Per passenger spending estimates were derived from the 656 surveys completed by passengers that went ashore during the survey period. As shown in **Table 27**, each passenger cruise party spent an average of \$234.84 in Barbados. The average spend per cruise party is the sum of the weighted spending in each of the eleven categories. For example, 40 percent of the survey respondents reported spending an average of \$17.50 at local restaurants and/or bars. Spread over the 656 cruise parties that visited Barbados, this represents an average of \$6.99 per party. On a per passenger basis, the average total expenditure was \$111.82. This represents the sum of per party expenditures, \$234.84, divided by the average size of a cruise party in Barbados, 2.1 passengers.

For the entire 2005-2006 cruise year, the estimated 405,301 cruise passengers who visited Barbados spent a total of **\$45.3 million** (\$US) on the island.

Per crew spending estimates were derived from the 244 surveys completed by crew members during the survey period. As shown in **Table 28**, each crew member spent an average of \$76.18 in Barbados. The average spend per crew member is the sum of the weighted spending in each of the eleven categories. For example, 73 percent of the survey respondents reported spending an average of \$32.50 for food and beverages. Spread over the 244 crew members that visited Barbados, this represents an average of \$23.58 per crew member.

For the entire 2005-2006 cruise year, the estimated 82,829 crew who visited Barbados spent an estimated total of **\$6.3 million** (\$US).

**Table 28 – Estimated Crew Spending (\$US) in Barbados, 2005-2006 Cruise Year**

Purchase Categories	Average Spend per Crew	Share of All Onshore Visits	Average Spend per Crew
F&B at Restaurants & Bars	\$ 32.50	73%	\$ 23.58
Taxis/Ground Transportation	\$ 14.10	55%	\$ 7.69
Other Purchases	\$ 62.60	11%	\$ 6.93
Local Crafts & Souvenirs	\$ 26.90	10%	\$ 2.65
Clothing	\$ 68.30	9%	\$ 6.16
Retail Purchases of Liquor	\$ 53.10	7%	\$ 3.92
Watches & Jewelry	\$ 162.30	6%	\$ 9.31
Telephone & Internet	\$ 20.80	5%	\$ 1.11
Shore Excursions	\$ 36.30	5%	\$ 1.79
Entertainment/Night Clubs	\$ 31.30	4%	\$ 1.28
Electronics	\$ 410.00	3%	\$ 11.76
<b>Total Spend per Crew</b>			<b>\$ 76.18</b>
<b>Cruise Passenger Visits</b>			82,829
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 6,309,952</b>

Cruise lines made payments to local businesses for a variety of goods and services. Net payments to local vendors for shore excursions have been included with passenger expenditures. However, cruise lines made other local expenditures, including payments for port fees and taxes, navigation services, utilities and other supplies. Based upon data provided by the FCCA member cruise lines, we estimated that all cruise lines spent **\$5.7 million** (\$US) in Barbados during the 2005-2006 cruise year. Approximately 90 percent of these expenditures were pay-

ments for port fees and navigation services while the remaining 10 percent consisted of payments for ship supplies.

### Economic Contribution of Cruise Tourism Expenditures

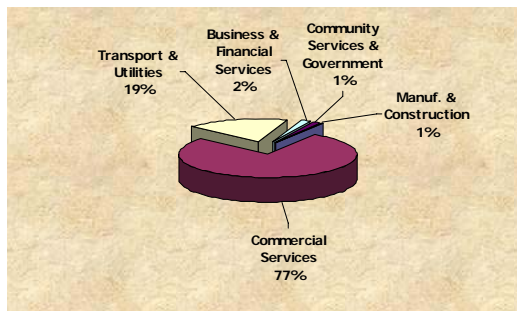
As noted in the **Data and Methods** section of the full report, a set of economic impact models were developed for each destination to produce estimates of the economic contribution of cruise tourism. Data for these models were collected from a broad range of local, regional and international sources. The impact models were designed to reflect the economic structure of each destination, including the industrial composition of Gross Domestic Product (GDP), the wage share of GDP by industry and average employee wages by industry.

**Table 29 – Total Economic Contribution of Cruise Tourism in Barbados, 2005-2006 Cruise Year**

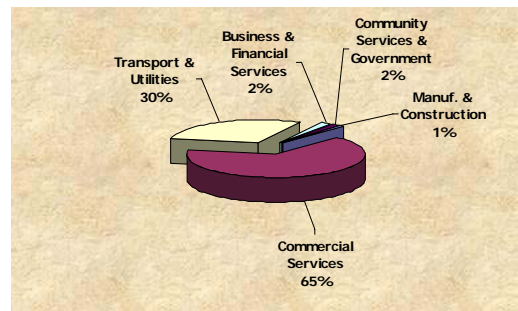
	Employment	Wage Income (\$US Millions)
<b>Direct Economic Contribution</b>	950	\$9.7
<b>Total Economic Contribution</b>	1,635	\$16.8

As shown in **Table 29**, the \$57.3 million in total cruise tourism expenditures generated direct employment of 950 residents of Barbados paying \$9.7 million in annual wages. Adding the indirect contribution that results from the spending of those local businesses that are the direct recipients of passenger, crew and cruise line expenditures, the direct cruise tourism expenditures generated a total employment contribution of 1,635 jobs and \$16.8 million in wage income in Barbados during the 2005-2006 cruise year.

**Figure 17 – Total Employment Impacts by Sector - Barbados**



**Figure 18 – Total Wage Impacts by Sector Barbados**



As shown in **Figures 17 and 18**, the total employment and wage impacts of cruise tourism are concentrated in the commercial and transport sectors which account for about 95 percent of the employment and wage impacts.<sup>30</sup> This is not surprising since the direct impacts account for

<sup>30</sup> The industry sectors include the following activities:  
 Manufacturing & Construction: residential and nonresidential construction and all manufacturing  
 Commercial Services: wholesale and retail trade, lodging and eating and drinking establishments  
 Transportation & Utilities: tour operators, port services, telecommunications and water and power utilities  
 Business & Financial Services: banking, insurance, legal, accounting, leasing and other business services  
 Community Services & Government: education, health and social services and government agencies

nearly 60 percent of the total employment impacts and that virtually all of the cruise tourism expenditures are made with businesses in these sectors. Because of the relatively higher wages in the transport sector compared to the other sectors of the economy, the transport sector accounts for 30 percent of the wage impacts but only 19 percent of the employment impacts. The remainder of the total employment and wage impacts was generated by the indirect spending in the other sectors of the economy.

## Passenger Surveys

A total of 663 passenger surveys were completed and returned for tabulation. **Table 30** shows the major attributes of passenger visits in Barbados as derived from the passenger surveys.

- Of the passengers who went ashore, 74 percent made at least one purchase while ashore.
- Seventy-one (71) percent of the passengers that went ashore purchased a shore excursion. Sixty-six (66) percent purchased their tour through the cruise lines and 34 percent purchased their tour onshore or on the Internet.
- The typical cruise party in Barbados consisted of 2.1 passengers.

**Table 30 - Major Attributes of Passenger Surveys - Barbados**

	Number	Percent
<b>Total Respondents</b>	663	
<b>Number Ashore</b>	656	
<b>Respondents Making Onshore Purchases:</b>	483	73.6%
<b>Average Size of Expenditure Party (Persons)</b>	2.1	
<b>Purchased an Onshore Tour</b>	463	70.6%
<b>Purchased Onshore Tour from:</b>		
<b>Cruise Line</b>	304	65.7%
<b>Onshore/Internet</b>	159	34.3%
<b>Toured On Own/Did not Tour</b>	193	

## Passenger Satisfaction

The passenger survey also asked the passengers to rate their satisfaction with their destination visit along a number of parameters, as shown in **Table 31**. A 10-point scale was used with 10 being the highest score, i.e., extremely satisfied, and 1 being the lowest score, i.e., not at all satisfied. As indicated in the table, cruise passengers were, in general, very satisfied with their cruise call at Barbados with a mean score of 7.3 (Very Satisfied) for "Visit Met Expectations".

Among the key findings are the following:

- Passengers felt very safe in Barbados with the Safety category receiving an average score of 8.2.
- Other categories with scores above 8.0 (Very Satisfied) were: guided tour, island beaches, and courtesy of local employees.
- Categories with slightly lower scores but still above 7.0 (Very Satisfied) were: initial shoreside welcome, historic sites, friendliness of residents, and local transportation.
- Categories with average scores between 6.0 and 7.0 (Somewhat Satisfied) were given for: the overall shopping experience, including the variety of shops and overall prices.
- Passengers were somewhat likely to recommend a resort vacation in Barbados to family or friends (6.5) but not too likely to return themselves (4.7).

**Table 31 – Passenger Visit Satisfaction\* - Barbados**

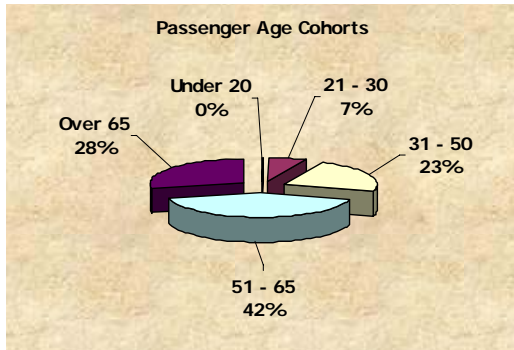
Satisfaction Categories	Mean Score
Initial Shoreside Welcome	7.3
Guided Tour	8.5
Shopping Experience	6.5
Historic Sites/Museums	7.6
Beaches	8.2
Friendliness of Residents	7.9
Courtesy of Employees	8.2
Variety of Shops	6.8
Overall Prices	6.3
Taxis/Local Transportation	7.4
Feeling of Safety Ashore	8.2
Visit Met Expectations	7.3
Likelihood of Recommending Resort Vacation	6.5
Likelihood of Return for Resort Vacation	4.7

\* Scale is 1 to 10 with 10 being the highest score. The mean scores can be interpreted as follows:  
 Extremely Satisfied/Likely: 10-9; Very Satisfied/Likely: 8-7; Somewhat Satisfied/Likely: 6-5;  
 Not Too Satisfied/Likely: 4-3; Not At All Satisfied/Likely: 2-1.

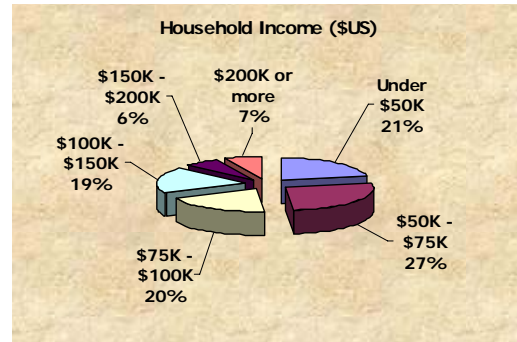
## Passenger Demographics

Residents of the United States and the Canada accounted for 89 percent of the responding passengers. The average age of the respondents was 54 years with 70 percent of the respondents being over 50 years old. Barbados passengers had an average household income of \$93,200 with 32 percent having over \$100,000 in household income.

**Figure 19 – Passenger Age Barbados**



**Figure 20 – Passenger Household Income Barbados**



## Belize

At the core of the analysis of the economic contribution of cruise tourism were a set of passenger and crew surveys conducted by the FCCA member cruise lines.<sup>31</sup> The surveys were conducted onboard the cruise ships during the months of March, April and May of 2006. The survey schedule was designed so that surveys were conducted by all FCCA member cruise lines that called at each destination and that the distribution of passenger and crew surveys would reflect the distribution of passenger and crew arrivals by cruise line at each destination. On any given cruise itinerary, passenger and crew surveys were placed in all passenger cabins and crew quarters following a single destination call. The surveys were completed by the passengers and crew in the privacy of their quarters and returned to a designated office on the cruise ship. Thus, passengers and crew were only surveyed once during a cruise itinerary and for a single destination. On a subsequent itinerary, passengers were surveyed following a call at a different destination.

Passenger and crew surveys were designed to collect data for onshore spending and visit satisfaction by both passengers and crew. While the crew survey was slightly shorter than the passenger survey, both surveys were designed to collect the following information:

- hours spent ashore;
- expenditures by category, including shore tours, food & beverages, clothing, etc.;
- visit satisfaction, including shore tour, safety, prices, shopping, etc.;
- likelihood of recommending and returning for a land-based vacation; and
- demographic characteristics, including country of residence, age group, income, etc.

Combining the expenditure data collected from the passenger and crew surveys with data on expenditures by cruise lines for port fees and services, payments to local tour operators for passenger shore excursions purchased onboard the cruise ships, and other provisions purchased locally by the cruise lines, estimates of total cruise tourism expenditures were developed for each participating destination.

Given the direct spending estimates, the economic contribution of these expenditures, as measured by employment and wage income were then estimated for each destination. This process began with the collection of economic data for each destination from a combination of local, regional and international sources. Utilizing all of these data a set of economic impact models were developed for each destination to estimate the direct and total employment and wage impacts. A more detailed description of these models is provided in the **Data and Methods** section of the full report.

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<sup>31</sup> The FCCA member lines are as follows: Carnival Cruise Lines, Celebrity Cruises, Costa Cruise Lines, Cunard Line, Disney Cruise Line, Holland America Line, MSC Cruises (USA), Inc., Norwegian Cruise Line, Princess Cruises, Regent Seven Seas Cruises, Royal Caribbean International and Windstar Cruises.

## Cruise Tourism Expenditures

Cruise tourism expenditures in destination ports are composed of a broad range of spending including:

- onshore expenditures by passengers which tend to be concentrated in shore excursions and retail purchases of clothing, jewelry and local crafts and souvenirs;
- onshore expenditures by crew which are generally concentrated in purchases of food and beverages, local transportation and retail purchases of clothing and electronics;
- expenditures by cruise lines for port services, such as dockage fees and linesmen, utilities, such as water and power and navigation services; and
- purchases of supplies, such as food and other stores, by the cruise lines from local businesses.

According to data provided by the Belize Tourist Board, 726,621 cruise passengers arrived aboard cruise ships during the 2005-2006 cruise year.<sup>32</sup> Of these, an estimated 610,362 passengers (84 percent) disembarked and visited Belize. Utilizing additional data provided by the visiting cruise lines, we have estimated that 288,574 crew were aboard the cruise ships and that 25 percent, or 72,144 crew, disembarked and visited Belize. These passenger and crew visits along with additional expenditures by the cruise lines generated a total of **\$64.2 million** (\$US) in cruise tourism expenditures in Belize during the 2005-2006 cruise year. The contribution of expenditures by passengers, crew and cruise lines to this total is discussed below.

**Table 32 – Estimated Passenger Spending (\$US) in Belize, 2005-2006 Cruise Year<sup>33</sup>**

Purchase Categories	Average Spend per Party	Share of All Onshore Visits	Weighted Average Spend per Party
Shore Excursions	\$ 89.59	83%	\$ 74.54
Clothing	\$ 34.20	51%	\$ 17.41
F&B at Restaurants & Bars	\$ 18.00	48%	\$ 8.69
Local Crafts & Souvenirs	\$ 29.90	47%	\$ 13.98
Other Purchases	\$ 56.40	23%	\$ 12.94
Watches & Jewelry	\$ 302.30	19%	\$ 56.42
Retail Purchases of Liquor	\$ 39.00	10%	\$ 4.04
Taxis/Ground Transportation	\$ 37.60	5%	\$ 1.84
Telephone & Internet	\$ 17.20	2%	\$ 0.32
Entertainment/Night Clubs	\$ 324.60	1%	\$ 2.82
Electronics	\$ 55.00	0%	\$ 0.07
<b>Total Spend per Cruise Party</b>			<b>\$ 193.08</b>
<b>Average Size of a Cruise Party</b>			<b>2.2</b>
<b>Total Spend per Cruise Passenger</b>			<b>\$ 87.77</b>
<b>Cruise Passenger Visits</b>			<b>610,362</b>
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 53,573,035</b>

<sup>32</sup> The 2005-2006 cruise year includes the twelve months beginning in May, 2005 and ending in April, 2006.

<sup>33</sup> The average shore excursion expenditure is a weighted average of the onshore and Internet purchases and the portion of the onboard purchases paid to local tour operators.



Per passenger spending estimates were derived from the 2,115 surveys completed by passengers that went ashore during the survey period. As shown in **Table 32**, each passenger cruise party spent an average of \$193.08 in Belize. The average spend per cruise party is the sum of the weighted spending in each of the eleven categories. For example, 48 percent of the survey respondents reported spending an average of \$18 at local restaurants and/or bars. Spread over the 2,115 cruise parties that visited Belize, this represents an average of \$8.69 per party. On a per passenger basis, the average total expenditure was \$87.77. This represents the sum of per party expenditures, \$193.08, divided by the average size of a cruise party in Belize, 2.2 passengers.

For the entire 2005-2006 cruise year, the estimated 610,362 cruise passengers who visited Belize spent a total of **\$53.6 million** (\$US).

Per crew spending estimates were derived from the 807 surveys completed by crew members during the survey period. As shown in **Table 33**, each crew member spent an average of \$18.23 in Belize. The average spend per crew member is the sum of the weighted spending in each of the eleven categories. For example, 24 percent of the survey respondents reported spending an average of \$29.60 for food and beverages. Spread over the 807 crew members that visited Belize, this represents an average of \$7.15 per crew member.

For the entire 2005-2006 cruise year, the estimated 72,144 crew who visited Belize spent an estimated total of **\$1.3 million** (\$US).

**Table 33 – Estimated Crew Spending (\$US) in Belize, 2005-2006 Cruise Year**

Purchase Categories	Average Spend per Crew	Share of All Onshore Visits	Average Spend per Crew
F&B at Restaurants & Bars	\$ 29.60	24%	\$ 7.15
Taxis/Ground Transportation	\$ 14.20	8%	\$ 1.13
Local Crafts & Souvenirs	\$ 20.10	7%	\$ 1.37
Clothing	\$ 34.50	5%	\$ 1.71
Other Purchases	\$ 31.00	4%	\$ 1.19
Telephone & Internet	\$ 6.20	3%	\$ 0.16
Entertainment/Night Clubs	\$ 225.30	2%	\$ 4.19
Watches & Jewelry	\$ 55.00	1%	\$ 0.82
Retail Purchases of Liquor	\$ 22.60	1%	\$ 0.25
Shore Excursions	\$ 18.90	1%	\$ 0.19
Electronics	\$ 30.00	0%	\$ 0.07
<b>Total Spend per Crew</b>			<b>\$ 18.23</b>
<b>Cruise Passenger Visits</b>			72,144
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 1,315,175</b>

Cruise lines made payments to local businesses for a variety of goods and services. Net payments to local vendors for shore excursions have been included with passenger expenditures. However, cruise lines made other local expenditures, including payments for port fees and taxes, navigation services, utilities and other supplies. Based upon data provided by the FCCA member cruise lines, we estimated that all cruise lines spent **\$9.3 million** (\$US) in Belize dur-

ing the 2005-2006 cruise year. Essentially all of these expenditures were payments for port fees and taxes and navigation services.

**Economic Contribution of Cruise Tourism Expenditures**

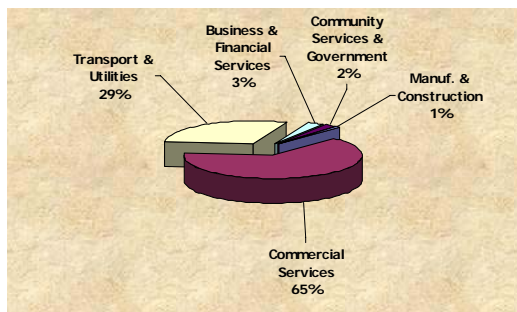
As noted in the **Data and Methods** section of the full report, a set of economic impact models were developed for each destination to produce estimates of the economic contribution of cruise tourism. Data for these models were collected from a broad range of local, regional and international sources. The impact models were designed to reflect the economic structure of each destination, including the industrial composition of Gross Domestic Product (GDP), the wage share of GDP by industry and average employee wages by industry.

**Table 34 – Total Economic Contribution of Cruise Tourism in Belize, 2005-2006 Cruise Year**

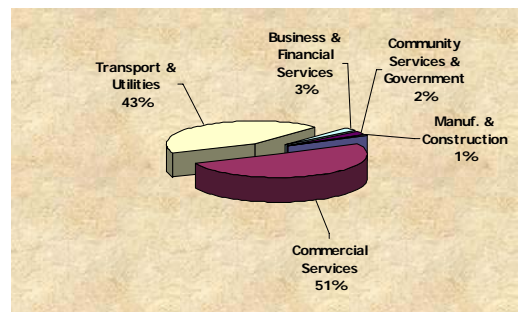
	Employment	Wage Income (\$US Millions)
Direct Economic Contribution	1,215	\$12.9
Total Economic Contribution	1,885	\$19.9

As shown in **Table 34**, the \$64.2 million in total cruise tourism expenditures generated direct employment of 1,215 residents of Belize paying \$12.9 million in annual wages. Adding the indirect contribution that results from the spending of those local businesses that are the direct recipients of passenger, crew and cruise line expenditures, the direct cruise tourism expenditures generated a total employment contribution of 1,885 jobs and \$19.9 million in wage income in Belize during the 2005-2006 cruise year.

**Figure 21 – Total Employment Impacts by Sector - Belize**



**Figure 22 – Total Wage Impacts by Sector Belize**



As shown in **Figures 21 and 22**, the total employment and wage impacts of cruise tourism are concentrated in the commercial and transport sectors which account for about 94 percent of the employment and wage impacts.<sup>34</sup> This is not surprising since the direct impacts account for nearly 65 percent of the total employment impacts and that virtually all of the cruise tourism expenditures are made with businesses in these sectors. Because of the relatively higher wages in the transport sector compared to the other sectors of the economy, the transport sector accounts for 43 percent of the wage impacts but only 29 percent of the employment impacts. The remainder of the total employment and wage impacts was generated by the indirect spending in the other sectors of the economy.

### Passenger Surveys

A total of 2,195 passenger surveys were completed and returned for tabulation. **Table 35** shows the major attributes of passenger visits in Belize as derived from the passenger surveys.

- Of the passengers who went ashore, 71 percent made at least one purchase while ashore.
- Eighty-three (83) percent of the passengers that went ashore purchased a shore excursion. Seventy-two (72) percent purchased their tour through the cruise lines and 28 percent purchased their tour onshore or on the Internet.
- The typical cruise party in Belize consisted of 2.2 passengers.

**Table 35 - Major Attributes of Passenger Surveys - Belize**

	Number	Percent
<b>Total Respondents</b>	2,195	
<b>Number Ashore</b>	2,115	
<b>Respondents Making Onshore Purchases:</b>	1,495	70.7%
<b>Average Size of Expenditure Party (Persons)</b>	2.2	
<b>Purchased an Onshore Tour</b>	1,759	83.2%
<b>Purchased Onshore Tour from:</b>		
<b>Cruise Line</b>	1,271	72.3%
<b>Onshore/Internet</b>	488	27.7%
<b>Toured On Own/Did not Tour</b>	356	

<sup>34</sup> The industry sectors include the following activities:

Manufacturing & Construction: residential and nonresidential construction and all manufacturing  
 Commercial Services: wholesale and retail trade, lodging and eating and drinking establishments  
 Transportation & Utilities: tour operators, port services, telecommunications and water and power utilities  
 Business & Financial Services: banking, insurance, legal, accounting, leasing and other business services  
 Community Services & Government: education, health and social services and government agencies

## Passenger Satisfaction

The passenger survey also asked the passengers to rate their satisfaction with their destination visit along a number of parameters, as shown in **Table 36**. A 10-point scale was used with 10 being the highest score, i.e., extremely satisfied, and 1 being the lowest score, i.e., not at all satisfied. As indicated in the table, cruise passengers were, in general, satisfied with their cruise call at Belize with a mean score of 6.9 (Satisfied) for "Visit Met Expectations".

Among the key findings are the following:

- Passengers felt very safe in Belize with the Safety category receiving an average score of 7.6.
- Other categories with scores above 8.0 (Very Satisfied) were: guided tour and courtesy of local employees.
- Categories with slightly lower scores but still above 7.0 (Very Satisfied) were: initial shoreside welcome, historic sites, friendliness of residents, and local transportation.
- Categories with average scores between 6.0 and 7.0 (Somewhat Satisfied) were given for: island beaches and the overall shopping experience, including the variety of shops and overall prices.
- Passengers were somewhat likely to recommend a resort vacation in Belize to family or friends (5.6) but not too likely to return themselves (4.3).

**Table 36 – Passenger Visit Satisfaction\* - Belize**

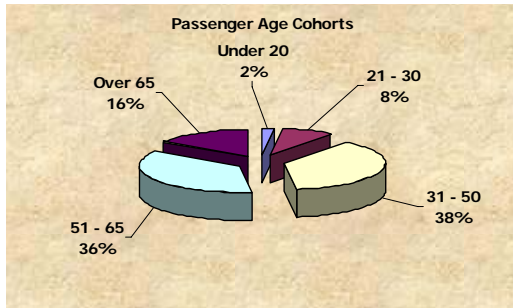
Satisfaction Categories	Mean Score
Initial Shoreside Welcome	7.1
Guided Tour	8.7
Shopping Experience	6.2
Historic Sites/Museums	7.5
Beaches	6.6
Friendliness of Residents	7.8
Courtesy of Employees	8.4
Variety of Shops	6.2
Overall Prices	6.5
Taxis/Local Transportation	7.0
Feeling of Safety Ashore	7.6
Visit Met Expectations	6.9
Likelihood of Recommending Resort Vacation	5.6
Likelihood of Return for Resort Vacation	4.3

\* Scale is 1 to 10 with 10 being the highest score. The mean scores can be interpreted as follows:  
 Extremely Satisfied/Likely: 10-9; Very Satisfied/Likely: 8-7; Somewhat Satisfied/Likely: 6-5;  
 Not Too Satisfied/Likely: 4-3; Not At All Satisfied/Likely: 2-1.

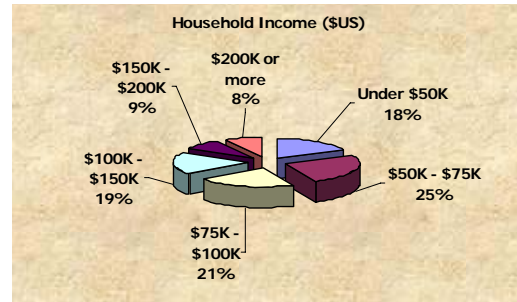
## Passenger Demographics

Residents of the United States and the Canada accounted for 99 percent of the responding passengers. The average age of the respondents was 49 years with 52 percent of the respondents being over 50 years old. Belize passengers had an average household income of \$98,300 with 36 percent having over \$100,000 in household income.

**Figure 23 – Passenger Age Belize**



**Figure 24 – Passenger Household Income Belize**



## The Cayman Islands

At the core of the analysis of the economic contribution of cruise tourism were a set of passenger and crew surveys conducted by the FCCA member cruise lines.<sup>35</sup> The surveys were conducted onboard the cruise ships during the months of March, April and May of 2006. The survey schedule was designed so that surveys were conducted by all FCCA member cruise lines that called at each destination and that the distribution of passenger and crew surveys would reflect the distribution of passenger and crew arrivals by cruise line at each destination. On any given cruise itinerary, passenger and crew surveys were placed in all passenger cabins and crew quarters following a single destination call. The surveys were completed by the passengers and crew in the privacy of their quarters and returned to a designated office on the cruise ship. Thus, passengers and crew were only surveyed once during a cruise itinerary and for a single destination. On a subsequent itinerary, passengers were surveyed following a call at a different destination.

Passenger and crew surveys were designed to collect data for onshore spending and visit satisfaction by both passengers and crew. While the crew survey was slightly shorter than the passenger survey, both surveys were designed to collect the following information:

- hours spent ashore;
- expenditures by category, including shore tours, food & beverages, clothing, etc.;
- visit satisfaction, including shore tour, safety, prices, shopping, etc.;
- likelihood of recommending and returning for a land-based vacation; and
- demographic characteristics, including country of residence, age group, income, etc.

Combining the expenditure data collected from the passenger and crew surveys with data on expenditures by cruise lines for port fees and services, payments to local tour operators for passenger shore excursions purchased onboard the cruise ships, and other provisions purchased locally by the cruise lines, estimates of total cruise tourism expenditures were developed for each participating destination.

Given the direct spending estimates, the economic contribution of these expenditures, as measured by employment and wage income were then estimated for each destination. This process began with the collection of economic data for each destination from a combination of local, regional and international sources. Utilizing all of these data a set of economic impact models were developed for each destination to estimate the direct and total employment and wage impacts. A more detailed description of these models is provided in the **Data and Methods** section of the full report.

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<sup>35</sup> The FCCA member lines are as follows: Carnival Cruise Lines, Celebrity Cruises, Costa Cruise Lines, Cunard Line, Disney Cruise Line, Holland America Line, MSC Cruises (USA), Inc., Norwegian Cruise Line, Princess Cruises, Regent Seven Seas Cruises, Royal Caribbean International and Windstar Cruises.

## Cruise Tourism Expenditures

Cruise tourism expenditures in destination ports are composed of a broad range of spending including:

- onshore expenditures by passengers which tend to be concentrated in shore excursions and retail purchases of clothing, jewelry and local crafts and souvenirs;
- onshore expenditures by crew which are generally concentrated in purchases of food and beverages, local transportation and retail purchases of clothing and electronics;
- expenditures by cruise lines for port services, such as dockage fees and linesmen, utilities, such as water and power and navigation services; and
- purchases of supplies, such as food and other stores, by the cruise lines from local businesses.

According to data provided by the Port Authority of the Cayman Islands, 1.86 million cruise passengers arrived aboard cruise ships during the 2005-2006 cruise year.<sup>36</sup> Of these, an estimated 1.67 million passengers (90 percent) disembarked and visited the Cayman Islands. Utilizing additional data provided by the visiting cruise lines, we have estimated that 747,650 crew were aboard the cruise ships and that 35 percent, or 261,678 crew, disembarked and visited the island. These passenger and crew visits along with additional expenditures by the cruise lines generated a total of **\$179.7 million** (\$US) in cruise tourism expenditures in the Cayman Islands during the 2005-2006 cruise year. The contribution of expenditures by passengers, crew and cruise lines to this total is discussed below.

**Table 37 – Estimated Passenger Spending (\$US) in the Cayman Islands, 2005-2006 Cruise Year<sup>37</sup>**

Purchase Categories	Average Spend per Party	Share of All Onshore Visits	Weighted Average Spend per Party
Shore Excursions	\$ 65.98	72%	\$ 47.24
F&B at Restaurants & Bars	\$ 34.30	52%	\$ 17.99
Clothing	\$ 54.70	48%	\$ 26.26
Local Crafts & Souvenirs	\$ 28.00	38%	\$ 10.74
Taxis/Ground Transportation	\$ 24.90	35%	\$ 8.69
Other Purchases	\$ 44.90	29%	\$ 13.15
Watches & Jewelry	\$ 367.20	18%	\$ 67.21
Retail Purchases of Liquor	\$ 36.50	12%	\$ 4.50
Telephone & Internet	\$ 15.00	1%	\$ 0.22
Entertainment/Night Clubs	\$ 172.80	1%	\$ 2.12
Electronics	\$ 48.70	1%	\$ 0.43
<b>Total Spend per Cruise Party</b>			<b>\$ 198.57</b>
<b>Average Size of a Cruise Party</b>			<b>2.4</b>
<b>Total Spend per Cruise Passenger</b>			<b>\$ 82.73</b>
<b>Cruise Passenger Visits</b>			<b>1,671,463</b>
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 138,274,839</b>

<sup>36</sup> The 2005-2006 cruise year includes the twelve months beginning in May, 2005 and ending in April, 2006.

<sup>37</sup> The average shore excursion expenditure is a weighted average of the onshore and Internet purchases and the portion of the onboard purchases paid to local tour operators.

Per passenger spending estimates were derived from the 2,342 surveys completed by passengers that went ashore during the survey period. As shown in **Table 37**, each passenger cruise party spent an average of \$198.57 in the Cayman Islands. The average spend per cruise party is the sum of the weighted spending in each of the eleven categories. For example, 52 percent of the survey respondents reported spending an average of \$34.30 at local restaurants and/or bars. Spread over the 2,342 cruise parties that visited the Cayman Islands, this represents an average of \$17.99 per party. On a per passenger basis, the average total expenditure was \$82.73. This represents the sum of per party expenditures, \$198.57, divided by the average size of a cruise party in the Cayman Islands, 2.4 passengers.

For the entire 2005-2006 cruise year, the estimated 1.67 million cruise passengers who visited the Cayman Islands spent a total of **\$138.3 million** (\$US) on the island.

Per crew spending estimates were derived from the 1,057 surveys completed by crew members during the survey period. As shown in **Table 38**, each crew member spent an average of \$45.92 in the Cayman Islands. The average spend per crew member is the sum of the weighted spending in each of the eleven categories. For example, 35 percent of the survey respondents reported spending an average of \$32.10 for food and beverages. Spread over the 1,057 crew members that visited the Cayman Islands, this represents an average of \$11.08 per crew member.

For the entire 2005-2006 cruise year, the estimated 261,678 crew who visited the Cayman Islands spent an estimated total of **\$12 million** (\$US).

**Table 38 – Estimated Crew Spending (\$US) in the Cayman Islands, 2005-2006 Cruise Year**

Purchase Categories	Average Spend per Crew	Share of All Onshore Visits	Average Spend per Crew
F&B at Restaurants & Bars	\$ 32.10	35%	\$ 11.08
Taxis/Ground Transportation	\$ 15.80	12%	\$ 1.93
Clothing	\$ 41.00	8%	\$ 3.34
Other Purchases	\$ 59.30	8%	\$ 4.54
Local Crafts & Souvenirs	\$ 30.20	7%	\$ 2.03
Watches & Jewelry	\$ 333.90	5%	\$ 16.43
Telephone & Internet	\$ 22.30	5%	\$ 1.03
Retail Purchases of Liquor	\$ 52.50	3%	\$ 1.39
Shore Excursions	\$ 24.00	1%	\$ 0.30
Electronics	\$ 325.00	1%	\$ 3.07
Entertainment/Night Clubs	\$ 118.00	1%	\$ 0.78
<b>Total Spend per Crew</b>			<b>\$ 45.92</b>
<b>Cruise Passenger Visits</b>			261,678
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 12,017,285</b>

Cruise lines made payments to local businesses for a variety of goods and services. Net payments to local vendors for shore excursions have been included with passenger expenditures. However, cruise lines made other local expenditures, including payments for port fees and taxes, navigation services, utilities and other supplies. Based upon data provided by the FCCA member cruise lines, we estimated that all cruise lines spent **\$29.4 million** (\$US) in the Cay-



man Islands during the 2005-2006 cruise year. Essentially all of these expenditures were payments for port fees and taxes and navigation services.

### Economic Contribution of Cruise Tourism Expenditures

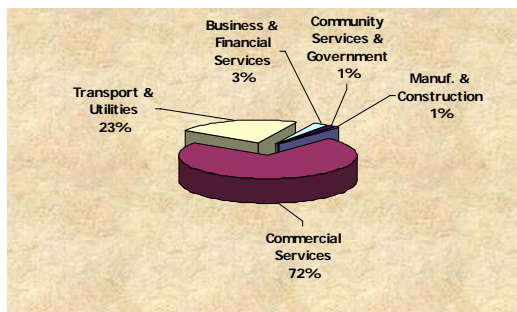
As noted in the **Data and Methods** section of the full report, a set of economic impact models were developed for each destination to produce estimates of the economic contribution of cruise tourism. Data for these models were collected from a broad range of local, regional and international sources. The impact models were designed to reflect the economic structure of each destination, including the industrial composition of Gross Domestic Product (GDP), the wage share of GDP by industry and average employee wages by industry.

**Table 39 – Total Economic Contribution of Cruise Tourism in the Cayman Islands 2005-2006 Cruise Year**

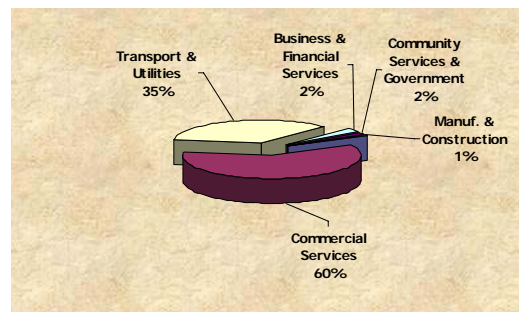
	Employment	Wage Income (\$US Millions)
Direct Economic Contribution	2,090	\$37.2
Total Economic Contribution	3,705	\$66.0

As shown in **Table 39**, the \$179.7 million in total cruise tourism expenditures generated direct employment of 2,090 residents of the Cayman Islands paying \$37.2 million in annual wages. Adding the indirect contribution that results from the spending of those local businesses that are the direct recipients of passenger, crew and cruise line expenditures, the direct cruise tourism expenditures generated a total employment contribution of 3,705 jobs and \$66 million in wage income in the Cayman Islands during the 2005-2006 cruise year.

**Figure 25 – Total Employment Impacts by Sector - The Cayman Islands**



**Figure 26 – Total Wage Impacts by Sector The Cayman Islands**



As shown in **Figures 25 and 26**, the total employment and wage impacts of cruise tourism are concentrated in the commercial and transport sectors which account for about 95 percent of the employment and wage impacts.<sup>38</sup> This is not surprising since the direct impacts account for 55 percent of the total employment impacts and that virtually all of the cruise tourism expenditures are made with businesses in these sectors. Because of the relatively higher wages in the transport sector compared to the other sectors of the economy, the transport sector accounts for 35 percent of the wage impacts but only 23 percent of the employment impacts. The remainder of the total employment and wage impacts was generated by the indirect spending in the other sectors of the economy.

## Passenger Surveys

A total of 2,391 passenger surveys were completed and returned for tabulation. **Table 40** shows the major attributes of passenger visits in the Cayman Islands as derived from the passenger surveys.

- Of the passengers who went ashore, 73 percent made at least one purchase while ashore.
- Seventy-two (72) percent of the passengers that went ashore purchased a shore excursion. Seventy (70) percent purchased their tour through the cruise lines and 30 percent purchased their tour onshore or on the Internet.
- The typical cruise party in the Cayman Islands consisted of 2.2 passengers.

**Table 40 - Major Attributes of Passenger Surveys – The Cayman Islands**

	Number	Percent
<b>Total Respondents</b>	2,391	
<b>Number Ashore</b>	2,342	
<b>Respondents Making Onshore Purchases:</b>	1,710	73.0%
<b>Average Size of Expenditure Party (Persons)</b>	2.4	
<b>Purchased an Onshore Tour</b>	1,677	71.6%
<b>Purchased Onshore Tour from:</b>		
<b>Cruise Line</b>	1,178	70.2%
<b>Onshore/Internet</b>	499	29.8%
<b>Toured On Own/Did not Tour</b>	665	

<sup>38</sup> The industry sectors include the following activities:

Manufacturing & Construction: residential and nonresidential construction and all manufacturing  
 Commercial Services: wholesale and retail trade, lodging and eating and drinking establishments  
 Transportation & Utilities: tour operators, port services, telecommunications and water and power utilities  
 Business & Financial Services: banking, insurance, legal, accounting, leasing and other business services  
 Community Services & Government: education, health and social services and government agencies

## Passenger Satisfaction

The passenger survey also asked the passengers to rate their satisfaction with their destination visit along a number of parameters, as shown in **Table 34**. A 10-point scale was used with 10 being the highest score, i.e., extremely satisfied, and 1 being the lowest score, i.e., not at all satisfied. As indicated in the table, cruise passengers were, in general, very satisfied with their cruise call in the Cayman Islands with a mean score of 7.4 (Very Satisfied) for "Visit Met Expectations".

Among the key findings are the following:

- Passengers felt very safe in the Cayman Islands with the Safety category receiving an average score of 8.8.
- Other categories with scores above 8.0 (Very Satisfied) were: guided tour, island beaches, friendliness of residents, and courtesy of local employees.
- Categories with slightly lower scores but still above 7.0 (Very Satisfied) were: initial shoreside welcome, variety of shops, and local transportation.
- Categories with average scores between 6.0 and 7.0 (Somewhat Satisfied) were given for: the overall shopping experience, historic sites, and overall prices.
- Passengers were somewhat likely to recommend a resort vacation in the Cayman Islands to family or friends (6.8) and to return themselves (5.3).

**Table 41 – Passenger Visit Satisfaction\* - Cayman Islands**

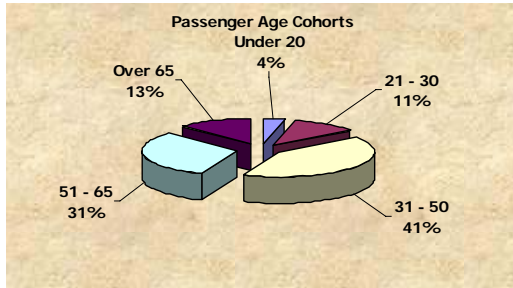
Satisfaction Categories	Mean Score
Initial Shoreside Welcome	7.1
Guided Tour	8.2
Shopping Experience	6.7
Historic Sites/Museums	6.4
Beaches	8.1
Friendliness of Residents	8.0
Courtesy of Employees	8.2
Variety of Shops	7.0
Overall Prices	6.0
Taxis/Local Transportation	7.2
Feeling of Safety Ashore	8.8
Visit Met Expectations	7.4
Likelihood of Recommending Resort Vacation	6.8
Likelihood of Return for Resort Vacation	5.3

\* Scale is 1 to 10 with 10 being the highest score. The mean scores can be interpreted as follows:  
 Extremely Satisfied/Likely: 10-9; Very Satisfied/Likely: 8-7; Somewhat Satisfied/Likely: 6-5;  
 Not Too Satisfied/Likely: 4-3; Not At All Satisfied/Likely: 2-1.

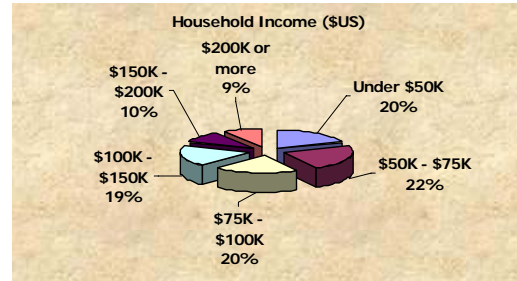
## Passenger Demographics

Residents of the United States and the Canada accounted for 97 percent of the responding passengers. The average age of the respondents was 47 years with 44 percent of the respondents being over 50 years old. The Cayman Islands passengers had an average household income of \$100,700 with 38 percent having over \$100,000 in household income.

**Figure 27 – Passenger Age  
The Cayman Islands**



**Figure 28 – Passenger Household Income  
The Cayman Islands**



## Cartagena

At the core of the analysis of the economic contribution of cruise tourism were a set of passenger and crew surveys conducted by the FCCA member cruise lines.<sup>39</sup> The surveys were conducted onboard the cruise ships during the months of March, April and May of 2006. The survey schedule was designed so that surveys were conducted by all FCCA member cruise lines that called at each destination and that the distribution of passenger and crew surveys would reflect the distribution of passenger and crew arrivals by cruise line at each destination. On any given cruise itinerary, passenger and crew surveys were placed in all passenger cabins and crew quarters following a single destination call. The surveys were completed by the passengers and crew in the privacy of their quarters and returned to a designated office on the cruise ship. Thus, passengers and crew were only surveyed once during a cruise itinerary and for a single destination. On a subsequent itinerary, passengers were surveyed following a call at a different destination.

Passenger and crew surveys were designed to collect data for onshore spending and visit satisfaction by both passengers and crew. While the crew survey was slightly shorter than the passenger survey, both surveys were designed to collect the following information:

- hours spent ashore;
- expenditures by category, including shore tours, food & beverages, clothing, etc.;
- visit satisfaction, including shore tour, safety, prices, shopping, etc.;
- likelihood of recommending and returning for a land-based vacation; and
- demographic characteristics, including country of residence, age group, income, etc.

Combining the expenditure data collected from the passenger and crew surveys with data on expenditures by cruise lines for port fees and services, payments to local tour operators for passenger shore excursions purchased onboard the cruise ships, and other provisions purchased locally by the cruise lines, estimates of total cruise tourism expenditures were developed for each participating destination.

Given the direct spending estimates, the economic contribution of these expenditures, as measured by employment and wage income were then estimated for each destination. This process began with the collection of economic data for each destination from a combination of local, regional and international sources. Utilizing all of these data a set of economic impact models were developed for each destination to estimate the direct and total employment and wage impacts. A more detailed description of these models is provided in the **Data and Methods** section of the full report.

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<sup>39</sup> The FCCA member lines are as follows: Carnival Cruise Lines, Celebrity Cruises, Costa Cruise Lines, Cunard Line, Disney Cruise Line, Holland America Line, MSC Cruises (USA), Inc., Norwegian Cruise Line, Princess Cruises, Regent Seven Seas Cruises, Royal Caribbean International and Windstar Cruises.

## Cruise Tourism Expenditures

Cruise tourism expenditures in destination ports are composed of a broad range of spending including:

- onshore expenditures by passengers which tend to be concentrated in shore excursions and retail purchases of clothing, jewelry and local crafts and souvenirs;
- onshore expenditures by crew which are generally concentrated in purchases of food and beverages, local transportation and retail purchases of clothing and electronics;
- expenditures by cruise lines for port services, such as dockage fees and linesmen, utilities, such as water and power and navigation services; and
- purchases of supplies, such as food and other stores, by the cruise lines from local businesses.

According to data provided by the Sociedad Portuaria de Cartagena, 38,142 cruise passengers arrived aboard cruise ships during the 2005-2006 cruise year.<sup>40</sup> Of these, an estimated 32,421 passengers (85 percent) disembarked and visited Cartagena. Utilizing additional data provided by the visiting cruise lines, we have estimated that 17,179 crew were aboard the cruise ships and that 30 percent, or 5,154 crew, disembarked and visited Cartagena. These passenger and crew visits along with additional expenditures by the cruise lines generated a total of **\$4.5 million** (\$US) in cruise tourism expenditures in Cartagena during the 2005-2006 cruise year. The contribution of expenditures by passengers, crew and cruise lines to this total is discussed below.

**Table 42 – Estimated Passenger Spending (\$US) in Cartagena, 2005-2006 Cruise Year<sup>41</sup>**

Purchase Categories	Average Spend per Party	Share of All Onshore Visits	Weighted Average Spend per Party
Shore Excursions	\$ 54.53	92%	\$ 50.17
Local Crafts & Souvenirs	\$ 24.50	44%	\$ 10.75
Clothing	\$ 26.30	37%	\$ 9.86
Watches & Jewelry	\$ 361.80	34%	\$ 122.83
Other Purchases	\$ 20.40	30%	\$ 6.14
F&B at Restaurants & Bars	\$ 5.20	13%	\$ 0.68
Taxis/Ground Transportation	\$ 36.20	11%	\$ 3.95
Retail Purchases of Liquor	\$ 17.10	2%	\$ 0.32
Telephone & Internet	\$ 24.80	2%	\$ 0.42
Entertainment/Night Clubs	\$ 139.30	1%	\$ 1.40
Electronics	\$ 0.00	0%	\$ 0.00
<b>Total Spend per Cruise Party</b>			<b>\$ 206.52</b>
<b>Average Size of a Cruise Party</b>			<b>1.8</b>
<b>Total Spend per Cruise Passenger</b>			<b>\$ 114.73</b>
<b>Cruise Passenger Visits</b>			<b>32,421</b>
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 3,719,681</b>

<sup>40</sup> The 2005-2006 cruise year includes the twelve months beginning in May, 2005 and ending in April, 2006.

<sup>41</sup> The average shore excursion expenditure is a weighted average of the onshore and Internet purchases and the portion of the onboard purchases paid to local tour operators.

Per passenger spending estimates were derived from the 877 surveys completed by passengers that went ashore during the survey period. As shown in **Table 42**, each passenger cruise party spent an average of \$206.52 in Cartagena. The average spend per cruise party is the sum of the weighted spending in each of the eleven categories. For example, 37 percent of the survey respondents reported spending an average of \$26.30 for clothing. Spread over the 877 cruise parties that visited Cartagena, this represents an average of \$9.86 per party. On a per passenger basis, the average total expenditure was \$114.73. This represents the sum of per party expenditures, \$206.52, divided by the average size of a cruise party in Cartagena, 1.8 passengers.

For the entire 2005-2006 cruise year, the estimated 32,421 cruise passengers who visited Cartagena spent a total of **\$3.7 million** (\$US) in Cartagena.

Due to an insufficient number of completed crew surveys, per crew spending estimates were estimated from the complete set of crew surveys. The average spend for each category for the more than 11,000 crew surveys was adjusted for this destination. This process involved comparing the per passenger spending estimates for each category for this destination with the per passenger spending estimates of the complete set of passenger surveys. For, example, in the total passenger and crew samples, passengers spent an average of \$10.97 for clothing and crew spent an average of \$10.13. In Cartagena, passengers spent an average of \$5.48 ( $\$9.86 \div 1.8$ ), or 50 percent of the Caribbean-wide average for clothing. We then multiplied the Caribbean-wide average of crew expenditures for clothing, \$10.13, by 50 percent to arrive at an average spend on clothing of \$5.06 in Cartagena. Similar calculations were made for each purchase category.

As shown in **Table 43**, we estimated that each crew member who went ashore in Cartagena spent an average of \$43.64. For the entire 2005-2006 cruise year, the estimated 5,154 crew who visited Cartagena spent an estimated total of **\$224,897** (\$US).

**Table 43 – Estimated Crew Spending (\$US) in Cartagena, 2005-2006 Cruise Year**

Purchase Categories	Average Spend per Crew
Watches & Jewelry	\$19.07
Telephone & Internet	\$5.68
Clothing	\$5.06
Other Purchases	\$4.24
Entertainment/Night Clubs	\$3.01
Local Crafts & Souvenirs	\$2.75
Taxis/Ground Transportation	\$1.91
F&B at Restaurants & Bars	\$0.87
Shore Excursions	\$0.84
Retail Purchases of Liquor	\$0.20
Electronics	\$0.00
<b>Total Spend per Crew</b>	<b>\$43.64</b>
Cruise Passenger Visits	5,154
<b>Total Cruise Passenger Expenditures</b>	<b>\$224,897</b>

Cruise lines made payments to local businesses for a variety of goods and services. Net payments to local vendors for shore excursions have been included with passenger expenditures. However, cruise lines made other local expenditures, including payments for port fees and taxes, navigation services, utilities and other supplies. Based upon data provided by the FCCA member cruise lines, we estimated that all cruise lines spent **\$600,000** (\$US) in Cartagena during the 2005-2006 cruise year. Nearly all of these expenditures were payments for port fees and taxes and navigation services.

### Economic Contribution of Cruise Tourism Expenditures

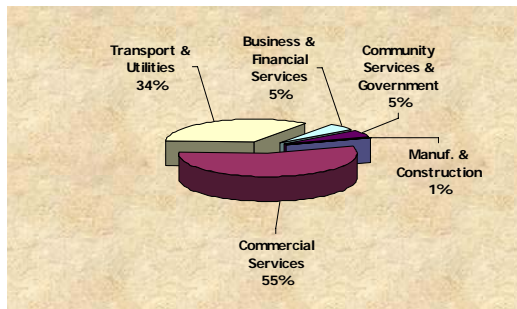
As noted in the **Data and Methods** section of the full report, a set of economic impact models were developed for each destination to produce estimates of the economic contribution of cruise tourism. Data for these models were collected from a broad range of local, regional and international sources. The impact models were designed to reflect the economic structure of each destination, including the industrial composition of Gross Domestic Product (GDP), the wage share of GDP by industry and average employee wages by industry.

**Table 44 – Total Economic Contribution of Cruise Tourism in Cartagena, 2005-2006 Cruise Year**

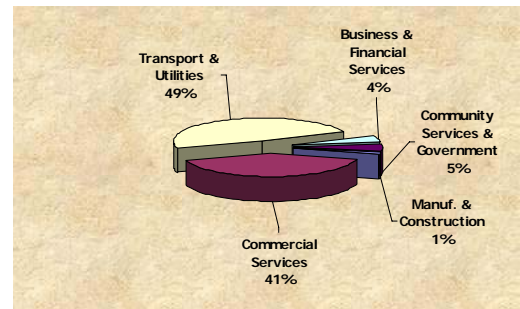
	Employment	Wage Income (\$US Millions)
Direct Economic Contribution	95	\$0.5
Total Economic Contribution	140	\$0.8

As shown in **Table 44**, the \$4.5 million in total cruise tourism expenditures in Cartagena generated direct employment of 95 residents of Cartagena paying \$0.5 million in annual wages. Adding the indirect contribution that results from the spending of those local businesses that are the direct recipients of passenger, crew and cruise line expenditures, the direct cruise tourism expenditures generated a total employment contribution of 140 jobs and \$0.8 million in wage income in Cartagena during the 2005-2006 cruise year.

**Figure 29 – Total Employment Impacts by Sector - Cartagena**



**Figure 30 – Total Wage Impacts by Sector Cartagena**





As shown in **Figures 29 and 30**, the total employment and wage impacts of cruise tourism are concentrated in the commercial and transport sectors which account for about 90 percent of the total impacts. This is not surprising since the direct impacts account for nearly 70 percent of the total employment impacts and that virtually all of the cruise tourism expenditures are made with businesses in these sectors. Because of the relatively higher wages in the transport sector compared to the other sectors of the economy, the transport sector accounts for 49 percent of the wage impacts but only 34 percent of the employment impacts. The remainder of the total employment and wage impacts was generated by the indirect spending in the other sectors of the economy.<sup>42</sup>

## Passenger Surveys

A total of 964 passenger surveys were completed and returned for tabulation. **Table 45** shows the major attributes of passenger visits to Cartagena as derived from the passenger surveys.

- Of the 877 passengers who went ashore, 68 percent made at least one purchase while ashore.
- Ninety-two (92) percent of the passengers that went ashore purchased a shore excursion. Seventy-nine (79) percent purchased their tour through the cruise lines and 21 percent purchased their tour onshore or on the Internet.
- The typical cruise party in Cartagena consisted of 1.8 passengers.

**Table 45 - Major Attributes of Passenger Surveys - Cartagena**

	Number	Percent
<b>Total Respondents</b>	964	
<b>Number Ashore</b>	877	
<b>Respondents Making Onshore Purchases:</b>	595	67.8%
<b>Average Size of Expenditure Party (Persons)</b>	1.8	
<b>Purchased an Onshore Tour</b>	806	91.9%
<b>Purchased Onshore Tour from:</b>		
<b>Cruise Line</b>	639	79.3%
<b>Onshore/Internet</b>	167	20.7%
<b>Toured On Own/Did not Tour</b>	71	

<sup>42</sup> The industry sectors include the following activities:

Manufacturing & Construction: residential and nonresidential construction and all manufacturing  
 Commercial Services: wholesale and retail trade, lodging and eating and drinking establishments  
 Transportation & Utilities: tour operators, port services, telecommunications and water and power utilities  
 Business & Financial Services: banking, insurance, legal, accounting, leasing and other business services  
 Community Services & Government: education, health and social services and government agencies

## Passenger Satisfaction

The passenger survey also asked the passengers to rate their satisfaction with their destination visit along a number of parameters, as shown in **Table 46**. A 10-point scale was used with 10 being the highest score, i.e., extremely satisfied, and 1 being the lowest score, i.e., not at all satisfied. As indicated in the table, cruise passengers were, in general, satisfied with their cruise call at Cartagena with a mean score of 6.5 (Satisfied) for "Visit Met Expectations".

Among the key findings were the following:

- Passengers felt very safe in Cartagena with the Safety category receiving an average score of 7.3.
- The cruise passengers felt that the local employees were very courteous with a mean score of 8.1.
- Categories with slightly lower scores but still above 7.0 (Very Satisfied) were: initial shoreside welcome, guided tours, historic sites/museums, and local transportation.
- The lowest scores (below 7 – Somewhat Satisfied) were given to the overall shopping experience, including variety of shops and overall prices, beaches and friendliness of the residents.
- Passengers were not too likely to recommend a resort vacation in Cartagena to family or friends (4.0) and not at all likely to return themselves (2.3).

**Table 46 – Passenger Visit Satisfaction\* - Cartagena**

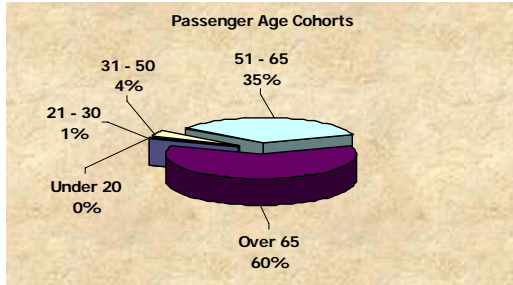
Satisfaction Categories	Mean Score
Initial Shoreside Welcome	7.3
Guided Tour	7.7
Shopping Experience	5.5
Historic Sites/Museums	7.1
Beaches	4.8
Friendliness of Residents	6.5
Courtesy of Employees	8.1
Variety of Shops	5.6
Overall Prices	6.1
Taxis/Local Transportation	7.0
Feeling of Safety Ashore	7.3
Visit Met Expectations	6.5
Likelihood of Recommending Resort Vacation	4.0
Likelihood of Return for Resort Vacation	2.3

\* Scale is 1 to 10 with 10 being the highest score. The mean scores can be interpreted as follows: Extremely Satisfied/Likely: 10-9; Very Satisfied/Likely: 8-7; Somewhat Satisfied/Likely: 6-5; Not Too Satisfied/Likely: 4-3; Not At All Satisfied/Likely: 2-1.

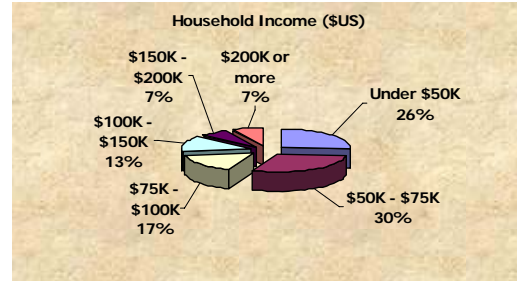
## Passenger Demographics

Residents of the United States and Canada accounted for 98 percent of the responding passengers. The average age of the respondents was 61 years with 95 percent of the respondents being over 50 years old. Cartagena passengers had an average household income of \$89,300 with 27 percent having over \$100,000 in household income.

**Figure 31 – Passenger Age Cartagena**



**Figure 32 – Passenger Household Income Cartagena**



## Costa Maya

At the core of the analysis of the economic contribution of cruise tourism were a set of passenger and crew surveys conducted by the FCCA member cruise lines.<sup>43</sup> The surveys were conducted onboard the cruise ships during the months of March, April and May of 2006. The survey schedule was designed so that surveys were conducted by all FCCA member cruise lines that called at each destination and that the distribution of passenger and crew surveys would reflect the distribution of passenger and crew arrivals by cruise line at each destination. On any given cruise itinerary, passenger and crew surveys were placed in all passenger cabins and crew quarters following a single destination call. The surveys were completed by the passengers and crew in the privacy of their quarters and returned to a designated office on the cruise ship. Thus, passengers and crew were only surveyed once during a cruise itinerary and for a single destination. On a subsequent itinerary, passengers were surveyed following a call at a different destination.

Passenger and crew surveys were designed to collect data for onshore spending and visit satisfaction by both passengers and crew. While the crew survey was slightly shorter than the passenger survey, both surveys were designed to collect the following information:

- hours spent ashore;
- expenditures by category, including shore tours, food & beverages, clothing, etc.;
- visit satisfaction, including shore tour, safety, prices, shopping, etc.;
- likelihood of recommending and returning for a land-based vacation; and
- demographic characteristics, including country of residence, age group, income, etc.

Combining the expenditure data collected from the passenger and crew surveys with data on expenditures by cruise lines for port fees and services, payments to local tour operators for passenger shore excursions purchased onboard the cruise ships, and other provisions purchased locally by the cruise lines, estimates of total cruise tourism expenditures were developed for each participating destination.

Given the direct spending estimates, the economic contribution of these expenditures, as measured by employment and wage income were then estimated for each destination. This process began with the collection of economic data for each destination from a combination of local, regional and international sources. Utilizing all of these data a set of economic impact models were developed for each destination to estimate the direct and total employment and wage impacts. A more detailed description of these models is provided in the **Data and Methods** section of the full report.

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<sup>43</sup> The FCCA member lines are as follows: Carnival Cruise Lines, Celebrity Cruises, Costa Cruise Lines, Cunard Line, Disney Cruise Line, Holland America Line, MSC Cruises (USA), Inc., Norwegian Cruise Line, Princess Cruises, Regent Seven Seas Cruises, Royal Caribbean International and Windstar Cruises.

## Cruise Tourism Expenditures

Cruise tourism expenditures in destination ports are composed of a broad range of spending including:

- onshore expenditures by passengers which tend to be concentrated in shore excursions and retail purchases of clothing, jewelry and local crafts and souvenirs;
- onshore expenditures by crew which are generally concentrated in purchases of food and beverages, local transportation and retail purchases of clothing and electronics;
- expenditures by cruise lines for port services, such as dockage fees and linesmen, utilities, such as water and power and navigation services; and
- purchases of supplies, such as food and other stores, by the cruise lines from local businesses.

According to data provided by the Port of Costa Maya, 757,419 cruise passengers arrived aboard cruise ships during the 2005-2006 cruise year.<sup>44</sup> Of these, an estimated 605,935 passengers (80 percent) disembarked and visited Costa Maya. Utilizing additional data provided by the visiting cruise lines, we have estimated that 294,982 crew were aboard the cruise ships and that 50 percent, or 147,491 crew, disembarked and visited Costa Maya. These passenger and crew visits along with additional expenditures by the cruise lines generated a total of **\$60.2 million** (\$US) in cruise tourism expenditures in Costa Maya during the 2005-2006 cruise year. The contribution of expenditures by passengers, crew and cruise lines to this total is discussed below.

**Table 47 – Estimated Passenger Spending (\$US) in Costa Maya, 2005-2006 Cruise Year<sup>45</sup>**

Purchase Categories	Average Spend per Party	Share of All Onshore Visits	Weighted Average Spend per Party
Shore Excursions	\$ 74.29	62%	\$ 45.91
F&B at Restaurants & Bars	\$ 27.00	60%	\$ 16.25
Local Crafts & Souvenirs	\$ 35.90	51%	\$ 18.14
Clothing	\$ 44.80	45%	\$ 20.30
Watches & Jewelry	\$ 228.80	26%	\$ 60.45
Other Purchases	\$ 35.70	23%	\$ 8.07
Taxis/Ground Transportation	\$ 15.50	19%	\$ 2.95
Retail Purchases of Liquor	\$ 41.00	7%	\$ 2.76
Telephone & Internet	\$ 9.80	2%	\$ 0.17
Entertainment/Night Clubs	\$ 60.00	1%	\$ 0.43
Electronics	\$ 0.00	0%	\$ 0.00
<b>Total Spend per Cruise Party</b>			<b>\$ 175.42</b>
<b>Average Size of a Cruise Party</b>			<b>2.3</b>
<b>Total Spend per Cruise Passenger</b>			<b>\$ 76.28</b>
<b>Cruise Passenger Visits</b>			<b>605,935</b>
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 46,221,349</b>

<sup>44</sup> The 2005-2006 cruise year includes the twelve months beginning in May, 2005 and ending in April, 2006.

<sup>45</sup> The average shore excursion expenditure is a weighted average of the onshore and Internet purchases and the portion of the onboard purchases paid to local tour operators.

Per passenger spending estimates were derived from the 1,403 surveys completed by passengers that went ashore during the survey period. As shown in **Table 47**, each passenger cruise party spent an average of \$175.42 in Costa Maya. The average spend per cruise party is the sum of the weighted spending in each of the eleven categories. For example, 60 percent of the survey respondents reported spending an average of \$27 at local restaurants and/or bars. Spread over the 1,403 cruise parties that visited Costa Maya, this represents an average of \$16.25 per party. On a per passenger basis, the average total expenditure was \$76.28. This represents the sum of per party expenditures, \$175.42, divided by the average size of a cruise party in Costa Maya, 2.3 passengers.

For the entire 2005-2006 cruise year, the estimated 605,935 cruise passengers who visited Costa Maya spent a total of **\$46.2 million** (\$US).

Per crew spending estimates were derived from the 948 surveys completed by crew members during the survey period. As shown in **Table 48**, each crew member spent an average of \$50.25 in Costa Maya. The average spend per crew member is the sum of the weighted spending in each of the eleven categories. For example, 70 percent of the survey respondents reported spending an average of \$32.10 for food and beverages. Spread over the 948 crew members that visited Costa Maya, this represents an average of \$22.45 per crew member.

For the entire 2005-2006 cruise year, the estimated 147,491 crew who visited Costa Maya spent an estimated total of **\$7.4 million** (\$US).

**Table 48 – Estimated Crew Spending (\$US) in Costa Maya, 2005-2006 Cruise Year**

Purchase Categories	Average Spend per Crew	Share of All Onshore Visits	Average Spend per Crew
F&B at Restaurants & Bars	\$ 32.10	70%	\$ 22.45
Taxis/Ground Transportation	\$ 10.00	33%	\$ 3.26
Clothing	\$ 29.50	16%	\$ 4.57
Local Crafts & Souvenirs	\$ 30.50	13%	\$ 4.09
Other Purchases	\$ 41.40	8%	\$ 3.23
Watches & Jewelry	\$ 147.90	6%	\$ 8.74
Telephone & Internet	\$ 11.70	5%	\$ 0.59
Retail Purchases of Liquor	\$ 26.50	4%	\$ 1.01
Shore Excursions	\$ 45.40	3%	\$ 1.29
Entertainment/Night Clubs	\$ 48.50	1%	\$ 0.51
Electronics	\$ 68.70	1%	\$ 0.51
<b>Total Spend per Crew</b>			<b>\$ 50.25</b>
<b>Cruise Passenger Visits</b>			147,491
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 7,411,205</b>

Cruise lines made payments to local businesses for a variety of goods and services. Net payments to local vendors for shore excursions have been included with passenger expenditures. However, cruise lines made other local expenditures, including payments for port fees and taxes, navigation services, utilities and other supplies. Based upon data provided by the FCCA member cruise lines, we estimated that all cruise lines spent **\$6.6 million** (\$US) in Costa Maya during the 2005-2006 cruise year. Essentially all of these expenditures were payments for port fees and taxes and navigation services.

## Economic Contribution of Cruise Tourism Expenditures

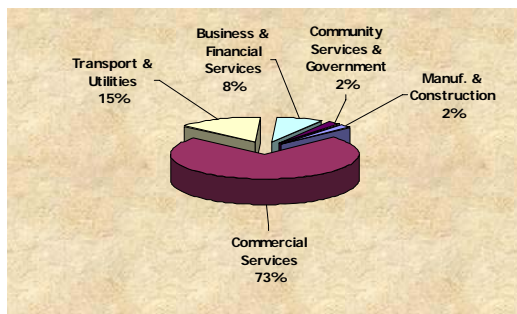
As noted in the **Data and Methods** section of the full report, a set of economic impact models were developed for each destination to produce estimates of the economic contribution of cruise tourism. Data for these models were collected from a broad range of local, regional and international sources. The impact models were designed to reflect the economic structure of each destination, including the industrial composition of Gross Domestic Product (GDP), the wage share of GDP by industry and average employee wages by industry.

**Table 49 – Total Economic Contribution of Cruise Tourism in Costa Maya 2005-2006 Cruise Year**

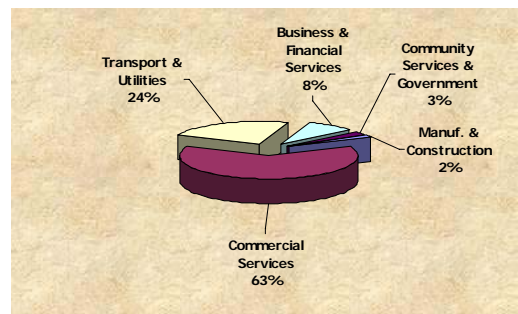
	Employment	Wage Income (\$US Millions)
Direct Economic Contribution	1,115	\$7.3
Total Economic Contribution	1,770	\$11.7

As shown in **Table 49**, the \$60.2 million in total cruise tourism expenditures generated direct employment of 1,115 residents of Costa Maya paying \$7.3 million in annual wages. Adding the indirect contribution that results from the spending of those local businesses that are the direct recipients of passenger, crew and cruise line expenditures, the direct cruise tourism expenditures generated a total employment contribution of 1,770 jobs and \$11.7 million in wage income in Costa Maya during the 2005-2006 cruise year.

**Figure 33 – Total Employment Impacts by Sector - Costa Maya**



**Figure 34 – Total Wage Impacts by Sector Costa Maya**



As shown in **Figures 33 and 34**, the total employment and wage impacts of cruise tourism are concentrated in the commercial and transport sectors which account for about 88 percent of the employment and wage impacts.<sup>46</sup> This is not surprising since the direct impacts account for about 65 percent of the total employment impacts and that virtually all of the cruise tourism expenditures are made with businesses in these sectors. Because of the relatively higher wages in the transport sector compared to the other sectors of the economy, the transport sector accounts for 24 percent of the wage impacts but only 15 percent of the employment impacts. The remainder of the total employment and wage impacts was generated by the indirect spending in the other sectors of the economy.

## Passenger Surveys

A total of 1,425 passenger surveys were completed and returned for tabulation. **Table 50** shows the major attributes of passenger visits in Costa Maya as derived from the passenger surveys.

- Of the passengers who went ashore, 80 percent made at least one purchase while ashore.
- Sixty-two (62) percent of the passengers that went ashore purchased a shore excursion. Seventy-four (74) percent purchased their tour through the cruise lines and 26 percent purchased their tour onshore or on the Internet.
- The typical cruise party in Costa Maya consisted of 2.3 passengers.

**Table 50 - Major Attributes of Passenger Surveys – Costa Maya**

	Number	Percent
<b>Total Respondents</b>	1,425	
<b>Number Ashore</b>	1,403	
<b>Respondents Making Onshore Purchases:</b>	1,128	80.4%
<b>Average Size of Expenditure Party (Persons)</b>	2.3	
<b>Purchased an Onshore Tour</b>	867	61.8%
<b>Purchased Onshore Tour from:</b>		
<b>Cruise Line</b>	645	74.4%
<b>Onshore/Internet</b>	222	25.6%
<b>Toured On Own/Did not Tour</b>	536	

<sup>46</sup> The industry sectors include the following activities:

Manufacturing & Construction: residential and nonresidential construction and all manufacturing  
 Commercial Services: wholesale and retail trade, lodging and eating and drinking establishments  
 Transportation & Utilities: tour operators, port services, telecommunications and water and power utilities  
 Business & Financial Services: banking, insurance, legal, accounting, leasing and other business services  
 Community Services & Government: education, health and social services and government agencies



## Passenger Satisfaction

The passenger survey also asked the passengers to rate their satisfaction with their destination visit along a number of parameters, as shown in **Table 51**. A 10-point scale was used with 10 being the highest score, i.e., extremely satisfied, and 1 being the lowest score, i.e., not at all satisfied. As indicated in the table, cruise passengers were, in general, very satisfied with their cruise call at Costa Maya with a mean score of 7.5 (Very Satisfied) for "Visit Met Expectations".

Among the key findings are the following:

- Passengers felt very safe in Costa Maya with the Safety category receiving an average score of 8.6.
- Other categories with scores above 8.0 (Very Satisfied) were: guided tours and courtesy of local employees.
- Categories with slightly lower scores but still above 7.0 (Very Satisfied) were: initial shoreside welcome, historic sites, beaches, friendliness of residents, and local transportation.
- Categories with average scores between 6.0 and 7.0 (Somewhat Satisfied) were given for: the overall shopping experience, including variety of shops and overall prices.
- Passengers were somewhat likely to recommend a resort vacation in Costa Maya to family or friends (5.7) but not too likely to return themselves (4.2).

**Table 51 – Passenger Visit Satisfaction\* - Costa Maya**

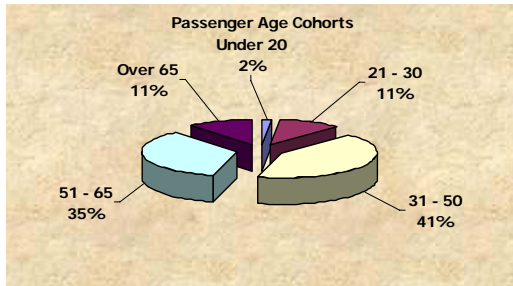
Satisfaction Categories	Mean Score
Initial Shoreside Welcome	7.7
Guided Tour	8.4
Shopping Experience	6.6
Historic Sites/Museums	7.8
Beaches	7.3
Friendliness of Residents	7.9
Courtesy of Employees	8.2
Variety of Shops	6.9
Overall Prices	6.3
Taxis/Local Transportation	7.4
Feeling of Safety Ashore	8.6
Visit Met Expectations	7.5
Likelihood of Recommending Resort Vacation	5.7
Likelihood of Return for Resort Vacation	4.2

\* Scale is 1 to 10 with 10 being the highest score. The mean scores can be interpreted as follows: Extremely Satisfied/Likely: 10-9; Very Satisfied/Likely: 8-7; Somewhat Satisfied/Likely: 6-5; Not Too Satisfied/Likely: 4-3; Not At All Satisfied/Likely: 2-1.

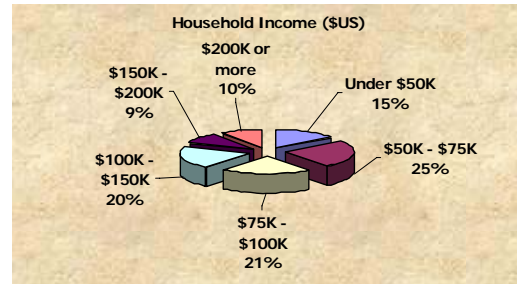
## Passenger Demographics

Residents of the United States and the Canada accounted for 97 percent of the responding passengers. The average age of the respondents was 47 years with 46 percent of the respondents being over 50 years old. Costa Maya passengers had an average household income of \$102,400 with 39 percent having over \$100,000 in household income.

**Figure 35 – Passenger Age  
Costa Maya**



**Figure 36 – Passenger Household Income  
Costa Maya**



## Cozumel

At the core of the analysis of the economic contribution of cruise tourism were a set of passenger and crew surveys conducted by the FCCA member cruise lines.<sup>47</sup> The surveys were conducted onboard the cruise ships during the months of March, April and May of 2006. The survey schedule was designed so that surveys were conducted by all FCCA member cruise lines that called at each destination and that the distribution of passenger and crew surveys would reflect the distribution of passenger and crew arrivals by cruise line at each destination. On any given cruise itinerary, passenger and crew surveys were placed in all passenger cabins and crew quarters following a single destination call. The surveys were completed by the passengers and crew in the privacy of their quarters and returned to a designated office on the cruise ship. Thus, passengers and crew were only surveyed once during a cruise itinerary and for a single destination. On a subsequent itinerary, passengers were surveyed following a call at a different destination.

Passenger and crew surveys were designed to collect data for onshore spending and visit satisfaction by both passengers and crew. While the crew survey was slightly shorter than the passenger survey, both surveys were designed to collect the following information:

- hours spent ashore;
- expenditures by category, including shore tours, food & beverages, clothing, etc.;
- visit satisfaction, including shore tour, safety, prices, shopping, etc.;
- likelihood of recommending and returning for a land-based vacation; and
- demographic characteristics, including country of residence, age group, income, etc.

Combining the expenditure data collected from the passenger and crew surveys with data on expenditures by cruise lines for port fees and services, payments to local tour operators for passenger shore excursions purchased onboard the cruise ships, and other provisions purchased locally by the cruise lines, estimates of total cruise tourism expenditures were developed for each participating destination.

Given the direct spending estimates, the economic contribution of these expenditures, as measured by employment and wage income were then estimated for each destination. This process began with the collection of economic data for each destination from a combination of local, regional and international sources. Utilizing all of these data a set of economic impact models were developed for each destination to estimate the direct and total employment and wage impacts. A more detailed description of these models is provided in the **Data and Methods** section of the full report.

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<sup>47</sup> The FCCA member lines are as follows: Carnival Cruise Lines, Celebrity Cruises, Costa Cruise Lines, Cunard Line, Disney Cruise Line, Holland America Line, MSC Cruises (USA), Inc., Norwegian Cruise Line, Princess Cruises, Regent Seven Seas Cruises, Royal Caribbean International and Windstar Cruises.

## Cruise Tourism Expenditures

Cruise tourism expenditures in destination ports are composed of a broad range of spending including:

- onshore expenditures by passengers which tend to be concentrated in shore excursions and retail purchases of clothing, jewelry and local crafts and souvenirs;
- onshore expenditures by crew which are generally concentrated in purchases of food and beverages, local transportation and retail purchases of clothing and electronics;
- expenditures by cruise lines for port services, such as dockage fees and linesmen, utilities, such as water and power and navigation services; and
- purchases of supplies, such as food and other stores, by the cruise lines from local businesses.

According to data obtained from the CTO and FCCA, 2.1 million cruise passengers arrived aboard cruise ships during the 2005-2006 cruise year.<sup>48</sup> Of these, an estimated 1.7 million passengers (80 percent) disembarked and visited Cozumel. Utilizing additional data provided by the visiting cruise lines, we have estimated that 890,976 crew were aboard the cruise ships and that 40 percent, or 356,390 crew, disembarked and visited Cozumel. These passenger and crew visits along with additional expenditures by the cruise lines generated a total of **\$213.9 million** (\$US) in cruise tourism expenditures in Cozumel during the 2005-2006 cruise year. The contribution of expenditures by passengers, crew and cruise lines to this total is discussed below.

**Table 52 – Estimated Passenger Spending (\$US) in Cozumel, 2005-2006 Cruise Year<sup>49</sup>**

Purchase Categories	Average Spend per Party	Share of All Onshore Visits	Weighted Average Spend per Party
F&B at Restaurants & Bars	\$ 37.10	60%	\$ 22.25
Clothing	\$ 46.90	57%	\$ 26.76
Shore Excursions	\$ 98.91	55%	\$ 54.20
Taxis/Ground Transportation	\$ 27.40	45%	\$ 12.41
Local Crafts & Souvenirs	\$ 35.00	39%	\$ 13.67
Watches & Jewelry	\$ 196.40	38%	\$ 74.40
Other Purchases	\$ 49.60	24%	\$ 11.99
Retail Purchases of Liquor	\$ 24.60	10%	\$ 2.54
Entertainment/Night Clubs	\$ 71.60	2%	\$ 1.54
Telephone & Internet	\$ 6.30	2%	\$ 0.13
Electronics	\$ 24.00	0%	\$ 0.03
<b>Total Spend per Cruise Party</b>			<b>\$ 219.93</b>
Average Size of a Cruise Party			2.4
<b>Total Spend per Cruise Passenger</b>			<b>\$ 91.64</b>
Cruise Passenger Visits			1,713,859
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 157,051,091</b>

<sup>48</sup> The 2005-2006 cruise year includes the twelve months beginning in May, 2005 and ending in April, 2006.

<sup>49</sup> The average shore excursion expenditure is a weighted average of the onshore and Internet purchases and the portion of the onboard purchases paid to local tour operators.

Per passenger spending estimates were derived from the 2,215 surveys completed by passengers that went ashore during the survey period. As shown in **Table 52**, each passenger cruise party spent an average of \$219.93 in Cozumel. The average spend per cruise party is the sum of the weighted spending in each of the eleven categories. For example, 60 percent of the survey respondents reported spending an average of \$37.10 at local restaurants and/or bars. Spread over the 2,215 cruise parties that visited Cozumel, this represents an average of \$22.25 per party. On a per passenger basis, the average total expenditure was \$91.64. This represents the sum of per party expenditures, \$219.93, divided by the average size of a cruise party in Cozumel, 2.4 passengers.

For the entire 2005-2006 cruise year, the estimated 1.7 million cruise passengers who visited Cozumel spent a total of **\$157 million** (\$US).

Per crew spending estimates were derived from the 1,143 surveys completed by crew members during the survey period. As shown in **Table 53**, each crew member spent an average of \$48.77 in Cozumel. The average spend per crew member is the sum of the weighted spending in each of the eleven categories. For example, 47 percent of the survey respondents reported spending an average of \$45 for food and beverages. Spread over the 1,143 crew members that visited Cozumel, this represents an average of \$21.21 per crew member.

For the entire 2005-2006 cruise year, the estimated 356,390 crew who visited Cozumel spent an estimated total of **\$17.4 million** (\$US).

**Table 53 – Estimated Crew Spending (\$US) in Cozumel, 2005-2006 Cruise Year**

Purchase Categories	Average Spend per Crew	Share of All Onshore Visits	Average Spend per Crew
F&B at Restaurants & Bars	\$ 45.00	47%	\$ 21.21
Taxis/Ground Transportation	\$ 15.30	32%	\$ 4.89
Telephone & Internet	\$ 12.20	14%	\$ 1.65
Clothing	\$ 35.30	12%	\$ 4.38
Local Crafts & Souvenirs	\$ 25.40	9%	\$ 2.17
Other Purchases	\$ 64.90	7%	\$ 4.86
Watches & Jewelry	\$ 150.90	4%	\$ 6.69
Shore Excursions	\$ 13.10	4%	\$ 0.53
Retail Purchases of Liquor	\$ 25.40	3%	\$ 0.88
Entertainment/Night Clubs	\$ 40.90	2%	\$ 0.96
Electronics	\$ 72.00	1%	\$ 0.55
<b>Total Spend per Crew</b>			<b>\$ 48.77</b>
<b>Cruise Passenger Visits</b>			356,390
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 17,379,609</b>

Cruise lines made payments to local businesses for a variety of goods and services. Net payments to local vendors for shore excursions have been included with passenger expenditures. However, cruise lines made other local expenditures, including payments for port fees and taxes, navigation services, utilities and other supplies. Based upon data provided by the FCCA member cruise lines, we estimated that all cruise lines spent **\$39.5 million** (\$US) in Cozumel during the 2005-2006 cruise year. Essentially all of these expenditures were payments for port fees and taxes and navigation services.

## Economic Contribution of Cruise Tourism Expenditures

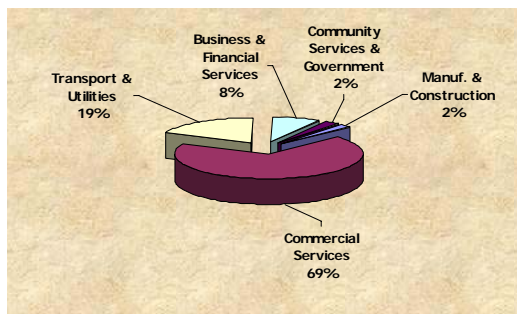
As noted in the **Data and Methods** section of the full report, a set of economic impact models were developed for each destination to produce estimates of the economic contribution of cruise tourism. Data for these models were collected from a broad range of local, regional and international sources. The impact models were designed to reflect the economic structure of each destination, including the industrial composition of Gross Domestic Product (GDP), the wage share of GDP by industry and average employee wages by industry.

**Table 54 – Total Economic Contribution of Cruise Tourism in Cozumel 2005-2006 Cruise Year**

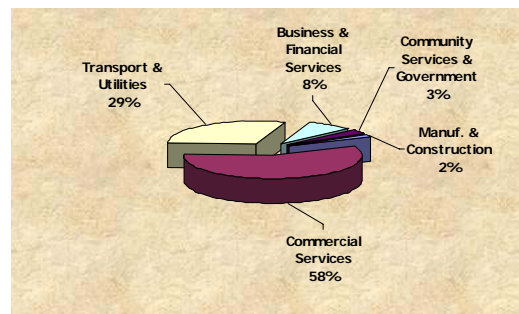
	Employment	Wage Income (\$US Millions)
<b>Direct Economic Contribution</b>	3,715	\$25.4
<b>Total Economic Contribution</b>	5,945	\$40.8

As shown in **Table 54**, the \$213.9 million in total cruise tourism expenditures generated direct employment of 3,715 residents of Cozumel paying \$25.4 million in annual wages. Adding the indirect contribution that results from the spending of those local businesses that are the direct recipients of passenger, crew and cruise line expenditures, the direct cruise tourism expenditures generated a total employment contribution of 5,945 jobs and \$40.8 million in wage income in Cozumel during the 2005-2006 cruise year.

**Figure 37 – Total Employment Impacts by Sector - Cozumel**



**Figure 38 – Total Wage Impacts by Sector Cozumel**



As shown in **Figures 37 and 38**, the total employment and wage impacts of cruise tourism are concentrated in the commercial and transport sectors which account for about 88 percent of the employment and wage impacts.<sup>50</sup> This is not surprising since the direct impacts account for about 65 percent of the total employment impacts and that virtually all of the cruise tourism expenditures are made with businesses in these sectors. Because of the relatively higher wages in the transport sector compared to the other sectors of the economy, the transport sector accounts for 29 percent of the wage impacts but only 19 percent of the employment impacts. The remainder of the total employment and wage impacts was generated by the indirect spending in the other sectors of the economy.

## Passenger Surveys

A total of 2,282 passenger surveys were completed and returned for tabulation. **Table 55** shows the major attributes of passenger visits in Cozumel as derived from the passenger surveys.

- Of the passengers who went ashore, 84 percent made at least one purchase while ashore.
- Fifty-five (55) percent of the passengers that went ashore purchased a shore excursion. Seventy-six (76) percent purchased their tour through the cruise lines and 24 percent purchased their tour onshore or on the Internet.
- The typical cruise party in Cozumel consisted of 2.4 passengers.

**Table 55 - Major Attributes of Passenger Surveys – Cozumel**

	Number	Percent
<b>Total Respondents</b>	2,282	
<b>Number Ashore</b>	2,215	
<b>Respondents Making Onshore Purchases:</b>	1,861	84.0%
<b>Average Size of Expenditure Party (Persons)</b>	2.4	
<b>Purchased an Onshore Tour</b>	1,214	54.8%
<b>Purchased Onshore Tour from:</b>		
<b>Cruise Line</b>	921	75.9%
<b>Onshore/Internet</b>	293	24.1%
<b>Toured On Own/Did not Tour</b>	1,000	

<sup>50</sup> The industry sectors include the following activities:

Manufacturing & Construction: residential and nonresidential construction and all manufacturing  
 Commercial Services: wholesale and retail trade, lodging and eating and drinking establishments  
 Transportation & Utilities: tour operators, port services, telecommunications and water and power utilities  
 Business & Financial Services: banking, insurance, legal, accounting, leasing and other business services  
 Community Services & Government: education, health and social services and government agencies

## Passenger Satisfaction

The passenger survey also asked the passengers to rate their satisfaction with their destination visit along a number of parameters, as shown in **Table 56**. A 10-point scale was used with 10 being the highest score, i.e., extremely satisfied, and 1 being the lowest score, i.e., not at all satisfied. As indicated in the table, cruise passengers were, in general, very satisfied with their cruise call at Cozumel with a mean score of 7.1 (Very Satisfied) for "Visit Met Expectations".

Among the key findings are the following:

- Passengers felt very safe in Cozumel with the Safety category receiving an average score of 8.3.
- Other categories with scores above 8.0 (Very Satisfied) were: guided tours and courtesy of local employees.
- Categories with slightly lower scores but still above 7.0 (Very Satisfied) were: initial shoreside welcome, beaches, friendliness of residents, variety of shops, and local transportation.
- Categories with average scores between 6.0 and 7.0 (Somewhat Satisfied) were given for: historic sites, the overall shopping experience, and overall prices.
- Passengers were somewhat likely to recommend a resort vacation in Cozumel to family or friends (6.0) but not too likely to return themselves (4.8).

**Table 56 – Passenger Visit Satisfaction\* - Cozumel**

Satisfaction Categories	Mean Score
Initial Shoreside Welcome	7.3
Guided Tour	8.5
Shopping Experience	6.6
Historic Sites/Museums	6.9
Beaches	7.3
Friendliness of Residents	7.8
Courtesy of Employees	8.1
Variety of Shops	7.0
Overall Prices	6.7
Taxis/Local Transportation	7.7
Feeling of Safety Ashore	8.3
Visit Met Expectations	7.1
Likelihood of Recommending Resort Vacation	6.0
Likelihood of Return for Resort Vacation	4.8

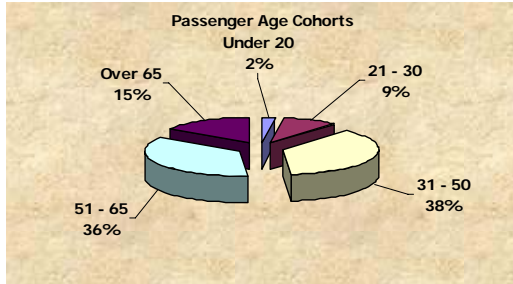
\* Scale is 1 to 10 with 10 being the highest score. The mean scores can be interpreted as follows: Extremely Satisfied/Likely: 10-9; Very Satisfied/Likely: 8-7; Somewhat Satisfied/Likely: 6-5; Not Too Satisfied/Likely: 4-3; Not At All Satisfied/Likely: 2-1.



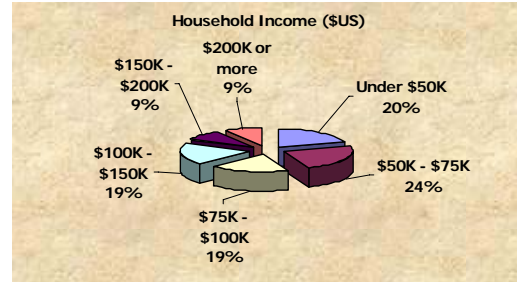
## Passenger Demographics

Residents of the United States and the Canada accounted for 98 percent of the responding passengers. The average age of the respondents was 49 years with 51 percent of the respondents being over 50 years old. Cozumel passengers had an average household income of \$99,000 with 37 percent having over \$100,000 in household income.

**Figure 39 – Passenger Age Cozumel**



**Figure 40 – Passenger Household Income Cozumel**



## Curacao

At the core of the analysis of the economic contribution of cruise tourism were a set of passenger and crew surveys conducted by the FCCA member cruise lines.<sup>51</sup> The surveys were conducted onboard the cruise ships during the months of March, April and May of 2006. The survey schedule was designed so that surveys were conducted by all FCCA member cruise lines that called at each destination and that the distribution of passenger and crew surveys would reflect the distribution of passenger and crew arrivals by cruise line at each destination. On any given cruise itinerary, passenger and crew surveys were placed in all passenger cabins and crew quarters following a single destination call. The surveys were completed by the passengers and crew in the privacy of their quarters and returned to a designated office on the cruise ship. Thus, passengers and crew were only surveyed once during a cruise itinerary and for a single destination. On a subsequent itinerary, passengers were surveyed following a call at a different destination.

Passenger and crew surveys were designed to collect data for onshore spending and visit satisfaction by both passengers and crew. While the crew survey was slightly shorter than the passenger survey, both surveys were designed to collect the following information:

- hours spent ashore;
- expenditures by category, including shore tours, food & beverages, clothing, etc.;
- visit satisfaction, including shore tour, safety, prices, shopping, etc.;
- likelihood of recommending and returning for a land-based vacation; and
- demographic characteristics, including country of residence, age group, income, etc.

Combining the expenditure data collected from the passenger and crew surveys with data on expenditures by cruise lines for port fees and services, payments to local tour operators for passenger shore excursions purchased onboard the cruise ships, and other provisions purchased locally by the cruise lines, estimates of total cruise tourism expenditures were developed for each participating destination.

Given the direct spending estimates, the economic contribution of these expenditures, as measured by employment and wage income were then estimated for each destination. This process began with the collection of economic data for each destination from a combination of local, regional and international sources. Utilizing all of these data a set of economic impact models were developed for each destination to estimate the direct and total employment and wage impacts. A more detailed description of these models is provided in the **Data and Methods** section of the full report.

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<sup>51</sup> The FCCA member lines are as follows: Carnival Cruise Lines, Celebrity Cruises, Costa Cruise Lines, Cunard Line, Disney Cruise Line, Holland America Line, MSC Cruises (USA), Inc., Norwegian Cruise Line, Princess Cruises, Regent Seven Seas Cruises, Royal Caribbean International and Windstar Cruises.

## Cruise Tourism Expenditures

Cruise tourism expenditures in destination ports are composed of a broad range of spending including:

- onshore expenditures by passengers which tend to be concentrated in shore excursions and retail purchases of clothing, jewelry and local crafts and souvenirs;
- onshore expenditures by crew which are generally concentrated in purchases of food and beverages, local transportation and retail purchases of clothing and electronics;
- expenditures by cruise lines for port services, such as dockage fees and linesmen, utilities, such as water and power and navigation services; and
- purchases of supplies, such as food and other stores, by the cruise lines from local businesses.

According to data obtained from the Curacao Tourist Board, 298,545 cruise passengers arrived aboard cruise ships during the 2005-2006 cruise year.<sup>52</sup> Of these, an estimated 253,763 passengers (85 percent) disembarked and visited Curacao. Utilizing additional data provided by the visiting cruise lines, we have estimated that 120,254 crew were aboard the cruise ships and that 35 percent, or 42,089 crew, disembarked and visited Curacao. These passenger and crew visits along with additional expenditures by the cruise lines generated a total of **\$18 million** (\$US) in cruise tourism expenditures in Curacao during the 2005-2006 cruise year. The contribution of expenditures by passengers, crew and cruise lines to this total is discussed below.

**Table 57 – Estimated Passenger Spending (\$US) in Curacao, 2005-2006 Cruise Year<sup>53</sup>**

Purchase Categories	Average Spend per Party	Share of All Onshore Visits	Weighted Average Spend per Party
Shore Excursions	\$ 37.29	61%	\$ 22.82
F&B at Restaurants & Bars	\$ 21.00	48%	\$ 10.01
Clothing	\$ 41.70	45%	\$ 18.91
Local Crafts & Souvenirs	\$ 20.40	34%	\$ 7.03
Other Purchases	\$ 40.80	29%	\$ 11.91
Taxis/Ground Transportation	\$ 22.30	23%	\$ 5.02
Retail Purchases of Liquor	\$ 23.90	16%	\$ 3.82
Watches & Jewelry	\$ 164.50	14%	\$ 22.48
Entertainment/Night Clubs	\$ 40.20	5%	\$ 1.81
Electronics	\$ 422.50	1%	\$ 2.62
Telephone & Internet	\$ 8.60	3%	\$ 0.24
<b>Total Spend per Cruise Party</b>			<b>\$ 106.68</b>
Average Size of a Cruise Party			2.0
<b>Total Spend per Cruise Passenger</b>			<b>\$ 53.34</b>
Cruise Passenger Visits			253,763
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 13,535,536</b>

<sup>52</sup> The 2005-2006 cruise year includes the twelve months beginning in May, 2005 and ending in April, 2006.

<sup>53</sup> The average shore excursion expenditure is a weighted average of the onshore and Internet purchases and the portion of the onboard purchases paid to local tour operators.

Per passenger spending estimates were derived from the 917 surveys completed by passengers that went ashore during the survey period. As shown in **Table 57**, each passenger cruise party spent an average of \$106.68 in Curacao. The average spend per cruise party is the sum of the weighted spending in each of the eleven categories. For example, 48 percent of the survey respondents reported spending an average of \$21 at local restaurants and/or bars. Spread over the 917 cruise parties that visited Curacao, this represents an average of \$10.01 per party. On a per passenger basis, the average total expenditure was \$53.34. This represents the sum of per party expenditures, \$106.68, divided by the average size of a cruise party in Curacao, 2.0 passengers.

For the entire 2005-2006 cruise year, the estimated 253,763 cruise passengers who visited Curacao spent a total of **\$13.5 million** (\$US).

Per crew spending estimates were derived from the 201 surveys completed by crew members during the survey period. As shown in **Table 58**, each crew member spent an average of \$39.18 in Curacao. The average spend per crew member is the sum of the weighted spending in each of the eleven categories. For example, 35 percent of the survey respondents reported spending an average of \$26.23 for food and beverages. Spread over the 201 crew members that visited Curacao, this represents an average of \$9.13 per crew member.

For the entire 2005-2006 cruise year, the estimated 42,089 crew who visited Curacao spent an estimated total of **\$1.6 million** (\$US).

**Table 58 – Estimated Crew Spending (\$US) in Curacao, 2005-2006 Cruise Year**

Purchase Categories	Average Spend per Crew	Share of All Onshore Visits	Average Spend per Crew
F&B at Restaurants & Bars	\$ 26.23	35%	\$ 9.13
Clothing	\$ 56.76	16%	\$ 9.32
Local Crafts & Souvenirs	\$ 17.00	10%	\$ 1.69
Taxis/Ground Transportation	\$ 12.88	8%	\$ 1.09
Other Purchases	\$ 67.13	8%	\$ 5.34
Telephone & Internet	\$ 7.50	7%	\$ 0.52
Entertainment/Night Clubs	\$ 91.92	6%	\$ 5.49
Electronics	\$ 156.40	2%	\$ 3.89
Watches & Jewelry	\$ 108.75	2%	\$ 2.16
Shore Excursions	\$ 18.50	2%	\$ 0.37
Retail Purchases of Liquor	\$ 11.33	1%	\$ 0.17
<b>Total Spend per Crew</b>			<b>\$ 39.17</b>
<b>Cruise Passenger Visits</b>			42,089
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 1,648,637</b>

Cruise lines made payments to local businesses for a variety of goods and services. Net payments to local vendors for shore excursions have been included with passenger expenditures. However, cruise lines made other local expenditures, including payments for port fees and taxes, navigation services, utilities and other supplies. Based upon data provided by the FCCA member cruise lines, we estimated that all cruise lines spent **\$2.9 million** (\$US) in Curacao during the 2005-2006 cruise year. Approximately 90 percent of these expenditures were pay-

ments for port fees and navigation services while the remaining 10 percent consisted of payments for ship supplies.

### Economic Contribution of Cruise Tourism Expenditures

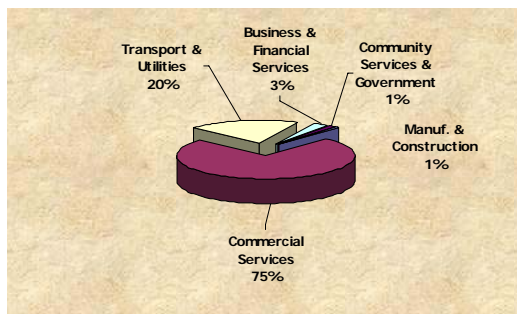
As noted in the **Data and Methods** section of the full report, a set of economic impact models were developed for each destination to produce estimates of the economic contribution of cruise tourism. Data for these models were collected from a broad range of local, regional and international sources. The impact models were designed to reflect the economic structure of each destination, including the industrial composition of Gross Domestic Product (GDP), the wage share of GDP by industry and average employee wages by industry.

**Table 59 – Total Economic Contribution of Cruise Tourism in Curacaoo 2005-2006 Cruise Year**

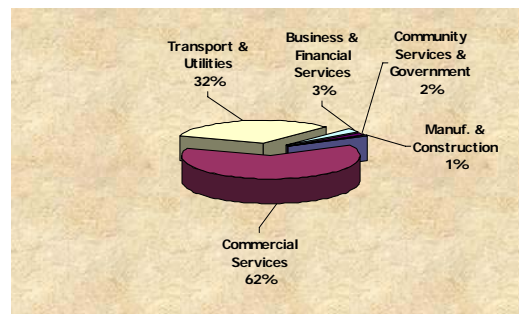
	Employment	Wage Income (\$US Millions)
Direct Economic Contribution	250	\$4.4
Total Economic Contribution	420	\$7.5

As shown in **Table 59**, the \$18 million in total cruise tourism expenditures generated direct employment of 250 residents of Curacao paying \$4.4 million in annual wages. Adding the indirect contribution that results from the spending of those local businesses that are the direct recipients of passenger, crew and cruise line expenditures, the direct cruise tourism expenditures generated a total employment contribution of 420 jobs and \$7.5 million in wage income in Curacao during the 2005-2006 cruise year.

**Figure 41 – Total Employment Impacts by Sector - Curacao**



**Figure 42 – Total Wage Impacts by Sector Curacao**



As shown in **Figures 41 and 42**, the total employment and wage impacts of cruise tourism are concentrated in the commercial and transport sectors which account for about 95 percent of the employment and wage impacts.<sup>54</sup> This is not surprising since the direct impacts account for about 60 percent of the total employment impacts and that virtually all of the cruise tourism expenditures are made with businesses in these sectors. Because of the relatively higher wages in the transport sector compared to the other sectors of the economy, the transport sector accounts for 32 percent of the wage impacts but only 20 percent of the employment impacts. The remainder of the total employment and wage impacts was generated by the indirect spending in the other sectors of the economy.

## Passenger Surveys

A total of 946 passenger surveys were completed and returned for tabulation. **Table 60** shows the major attributes of passenger visits in Curacao as derived from the passenger surveys.

- Of the passengers who went ashore, 70 percent made at least one purchase while ashore.
- Sixty-one (61) percent of the passengers that went ashore purchased a shore excursion. Sixty-three (63) percent purchased their tour through the cruise lines and 37 percent purchased their tour onshore or on the Internet.
- The typical cruise party in Curacao consisted of 2.0 passengers.

**Table 60 - Major Attributes of Passenger Surveys – Curacao**

	Number	Percent
<b>Total Respondents</b>	946	
<b>Number Ashore</b>	917	
<b>Respondents Making Onshore Purchases:</b>	644	70.2%
<b>Average Size of Expenditure Party (Persons)</b>	2.0	
<b>Purchased an Onshore Tour</b>	562	61.3%
<b>Purchased Onshore Tour from:</b>		
<b>Cruise Line</b>	353	62.8%
<b>Onshore/Internet</b>	209	37.2%
<b>Toured On Own/Did not Tour</b>	355	

<sup>54</sup> The industry sectors include the following activities:  
 Manufacturing & Construction: residential and nonresidential construction and all manufacturing  
 Commercial Services: wholesale and retail trade, lodging and eating and drinking establishments  
 Transportation & Utilities: tour operators, port services, telecommunications and water and power utilities  
 Business & Financial Services: banking, insurance, legal, accounting, leasing and other business services  
 Community Services & Government: education, health and social services and government agencies

## Passenger Satisfaction

The passenger survey also asked the passengers to rate their satisfaction with their destination visit along a number of parameters, as shown in **Table 61**. A 10-point scale was used with 10 being the highest score, i.e., extremely satisfied, and 1 being the lowest score, i.e., not at all satisfied. As indicated in the table, cruise passengers were, in general, satisfied with their cruise call at Curacao with a mean score of 6.9 (Satisfied) for "Visit Met Expectations".

Among the key findings are the following:

- Passengers felt very safe in Curacao with the Safety category receiving an average score of 8.3.
- Other categories with scores between 7.0 and 8.0 (Very Satisfied) were: guided tours, beaches, friendliness of residents, courtesy of local employees, and variety of shops.
- Categories with average scores between 6.0 and 7.0 (Somewhat Satisfied) were given for: initial shoreside welcome, historic sites, the overall shopping experience, overall prices, and local transportation.
- Passengers were somewhat likely to recommend a resort vacation in Curacao to family or friends (5.4) but not too likely to return themselves (3.7).

**Table 61 – Passenger Visit Satisfaction\* - Curacao**

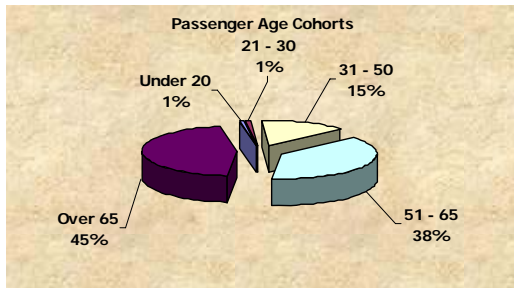
Satisfaction Categories	Mean Score
Initial Shoreside Welcome	6.7
Guided Tour	7.5
Shopping Experience	6.5
Historic Sites/Museums	6.6
Beaches	7.0
Friendliness of Residents	7.5
Courtesy of Employees	7.7
Variety of Shops	7.0
Overall Prices	6.7
Taxis/Local Transportation	6.9
Feeling of Safety Ashore	8.3
Visit Met Expectations	6.9
Likelihood of Recommending Resort Vacation	5.4
Likelihood of Return for Resort Vacation	3.7

\* Scale is 1 to 10 with 10 being the highest score. The mean scores can be interpreted as follows:  
 Extremely Satisfied/Likely: 10-9; Very Satisfied/Likely: 8-7; Somewhat Satisfied/Likely: 6-5;  
 Not Too Satisfied/Likely: 4-3; Not At All Satisfied/Likely: 2-1.

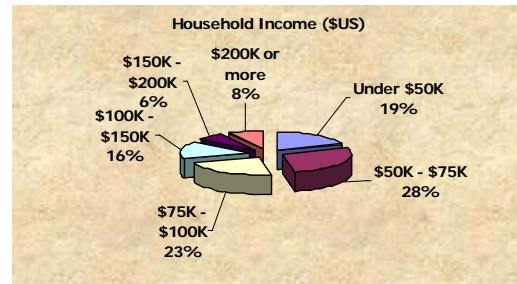
## Passenger Demographics

Residents of the United States and the Canada accounted for 93 percent of the responding passengers. The average age of the respondents was 58 years with 83 percent of the respondents being over 50 years old. Curacao passengers had an average household income of \$94,200 with 30 percent having over \$100,000 in household income.

**Figure 43 – Passenger Age Curacao**



**Figure 44 – Passenger Household Income Curacao**





## Dominica

At the core of the analysis of the economic contribution of cruise tourism were a set of passenger and crew surveys conducted by the FCCA member cruise lines.<sup>55</sup> The surveys were conducted onboard the cruise ships during the months of March, April and May of 2006. The survey schedule was designed so that surveys were conducted by all FCCA member cruise lines that called at each destination and that the distribution of passenger and crew surveys would reflect the distribution of passenger and crew arrivals by cruise line at each destination. On any given cruise itinerary, passenger and crew surveys were placed in all passenger cabins and crew quarters following a single destination call. The surveys were completed by the passengers and crew in the privacy of their quarters and returned to a designated office on the cruise ship. Thus, passengers and crew were only surveyed once during a cruise itinerary and for a single destination. On a subsequent itinerary, passengers were surveyed following a call at a different destination.

Passenger and crew surveys were designed to collect data for onshore spending and visit satisfaction by both passengers and crew. While the crew survey was slightly shorter than the passenger survey, both surveys were designed to collect the following information:

- hours spent ashore;
- expenditures by category, including shore tours, food & beverages, clothing, etc.;
- visit satisfaction, including shore tour, safety, prices, shopping, etc.;
- likelihood of recommending and returning for a land-based vacation; and
- demographic characteristics, including country of residence, age group, income, etc.

Combining the expenditure data collected from the passenger and crew surveys with data on expenditures by cruise lines for port fees and services, payments to local tour operators for passenger shore excursions purchased onboard the cruise ships, and other provisions purchased locally by the cruise lines, estimates of total cruise tourism expenditures were developed for each participating destination.

Given the direct spending estimates, the economic contribution of these expenditures, as measured by employment and wage income were then estimated for each destination. This process began with the collection of economic data for each destination from a combination of local, regional and international sources. Utilizing all of these data a set of economic impact models were developed for each destination to estimate the direct and total employment and wage impacts. A more detailed description of these models is provided in the **Data and Methods** section of the full report.

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<sup>55</sup> The FCCA member lines are as follows: Carnival Cruise Lines, Celebrity Cruises, Costa Cruise Lines, Cunard Line, Disney Cruise Line, Holland America Line, MSC Cruises (USA), Inc., Norwegian Cruise Line, Princess Cruises, Regent Seven Seas Cruises, Royal Caribbean International and Windstar Cruises.

## Cruise Tourism Expenditures

Cruise tourism expenditures in destination ports are composed of a broad range of spending including:

- onshore expenditures by passengers which tend to be concentrated in shore excursions and retail purchases of clothing, jewelry and local crafts and souvenirs;
- onshore expenditures by crew which are generally concentrated in purchases of food and beverages, local transportation and retail purchases of clothing and electronics;
- expenditures by cruise lines for port services, such as dockage fees and linesmen, utilities, such as water and power and navigation services; and
- purchases of supplies, such as food and other stores, by the cruise lines from local businesses.

According to data obtained from the Dominica Ministry of Tourism and the FCCA, 223,500 cruise passengers arrived aboard cruise ships during the 2005-2006 cruise year.<sup>56</sup> Of these, an estimated 189,975 passengers (85 percent) disembarked and visited Dominica. Utilizing additional data provided by the visiting cruise lines, we have estimated that 88,488 crew were aboard the cruise ships and that 40 percent, or 35,395 crew, disembarked and visited Dominica. These passenger and crew visits along with additional expenditures by the cruise lines generated a total of **\$13.8 million** (\$US) in cruise tourism expenditures in Dominica during the 2005-2006 cruise year. The contribution of expenditures by passengers, crew and cruise lines to this total is discussed below.

**Table 62 – Estimated Passenger Spending (\$US) in Dominica, 2005-2006 Cruise Year<sup>57</sup>**

Purchase Categories	Average Spend per Party	Share of All Onshore Visits	Weighted Average Spend per Party
Shore Excursions	\$ 64.13	86%	\$ 54.83
Local Crafts & Souvenirs	\$ 21.20	65%	\$ 13.83
Clothing	\$ 29.90	28%	\$ 8.52
F&B at Restaurants & Bars	\$ 11.40	23%	\$ 2.60
Other Purchases	\$ 24.50	18%	\$ 4.33
Taxis/Ground Transportation	\$ 40.80	12%	\$ 4.73
Watches & Jewelry	\$ 104.20	10%	\$ 10.65
Retail Purchases of Liquor	\$ 24.40	9%	\$ 2.25
Telephone & Internet	\$ 5.90	2%	\$ 0.10
Electronics	\$ 40.20	1%	\$ 0.47
Entertainment/Night Clubs	\$ 22.50	0%	\$ 0.09
<b>Total Spend per Cruise Party</b>			<b>\$ 102.40</b>
<b>Average Size of a Cruise Party</b>			<b>2.0</b>
<b>Total Spend per Cruise Passenger</b>			<b>\$ 51.20</b>
<b>Cruise Passenger Visits</b>			<b>189,975</b>
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 9,727,104</b>

<sup>56</sup> The 2005-2006 cruise year includes the twelve months beginning in May, 2005 and ending in April, 2006.

<sup>57</sup> The average shore excursion expenditure is a weighted average of the onshore and Internet purchases and the portion of the onboard purchases paid to local tour operators.

Per passenger spending estimates were derived from the 853 surveys completed by passengers that went ashore during the survey period. As shown in **Table 62**, each passenger cruise party spent an average of \$102.40 in Dominica. The average spend per cruise party is the sum of the weighted spending in each of the eleven categories. For example, 23 percent of the survey respondents reported spending an average of \$11.40 at local restaurants and/or bars. Spread over the 853 cruise parties that visited Dominica, this represents an average of \$2.60 per party. On a per passenger basis, the average total expenditure was \$51.20. This represents the sum of per party expenditures, \$102.40, divided by the average size of a cruise party in Dominica, 2.0 passengers.

For the entire 2005-2006 cruise year, the estimated 189,975 cruise passengers who visited Dominica spent a total of **\$9.7 million** (\$US).

Per crew spending estimates were derived from the 415 surveys completed by crew members during the survey period. As shown in **Table 63**, each crew member spent an average of \$74.80 in Dominica. The average spend per crew member is the sum of the weighted spending in each of the eleven categories. For example, 45 percent of the survey respondents reported spending an average of \$26.90 for food and beverages. Spread over the 415 crew members that visited Dominica, this represents an average of \$12.06 per crew member.

For the entire 2005-2006 cruise year, the estimated 35,395 crew who visited Dominica spent an estimated total of **\$2.6 million** (\$US).

**Table 63 – Estimated Crew Spending (\$US) in Dominica, 2005-2006 Cruise Year**

Purchase Categories	Average Spend per Crew	Share of All Onshore Visits	Average Spend per Crew
F&B at Restaurants & Bars	\$ 26.90	45%	\$ 12.06
Taxis/Ground Transportation	\$ 21.51	24%	\$ 5.08
Local Crafts & Souvenirs	\$ 24.02	19%	\$ 4.63
Clothing	\$ 62.46	13%	\$ 8.43
Telephone & Internet	\$ 25.55	13%	\$ 3.45
Shore Excursions	\$ 22.27	13%	\$ 2.79
Other Purchases	\$ 197.50	11%	\$ 21.42
Watches & Jewelry	\$ 68.39	7%	\$ 5.11
Retail Purchases of Liquor	\$ 42.48	7%	\$ 2.97
Electronics	\$ 76.80	5%	\$ 3.70
Entertainment/Night Clubs	\$ 125.88	4%	\$ 5.16
<b>Total Spend per Crew</b>			<b>\$ 74.80</b>
<b>Cruise Passenger Visits</b>			35,395
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 2,647,676</b>

Cruise lines made payments to local businesses for a variety of goods and services. Net payments to local vendors for shore excursions have been included with passenger expenditures. However, cruise lines made other local expenditures, including payments for port fees and taxes, navigation services, utilities and other supplies. Based upon data provided by the FCCA member cruise lines, we estimated that all cruise lines spent **\$1.5 million** (\$US) in Dominica during the 2005-2006 cruise year. Essentially all of these expenditures were payments for port fees and taxes and navigation services.

## Economic Contribution of Cruise Tourism Expenditures

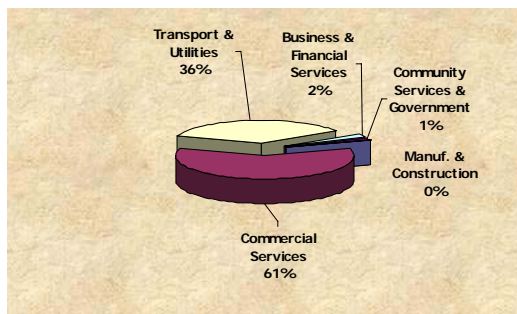
As noted in the **Data and Methods** section of the full report, a set of economic impact models were developed for each destination to produce estimates of the economic contribution of cruise tourism. Data for these models were collected from a broad range of local, regional and international sources. The impact models were designed to reflect the economic structure of each destination, including the industrial composition of Gross Domestic Product (GDP), the wage share of GDP by industry and average employee wages by industry.

**Table 64 – Total Economic Contribution of Cruise Tourism in Dominica 2005-2006 Cruise Year**

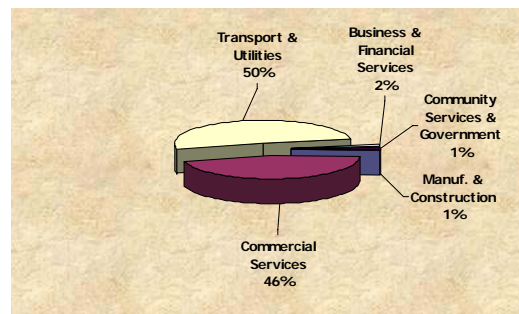
	Employment	Wage Income (\$US Millions)
Direct Economic Contribution	255	\$1.9
Total Economic Contribution	390	\$3.0

As shown in **Table 64**, the \$13.8 million in total cruise tourism expenditures generated direct employment of 255 residents of Dominica paying \$1.9 million in annual wages. Adding the indirect contribution that results from the spending of those local businesses that are the direct recipients of passenger, crew and cruise line expenditures, the direct cruise tourism expenditures generated a total employment contribution of 390 jobs and \$3.0 million in wage income in Dominica during the 2005-2006 cruise year.

**Figure 45 – Total Employment Impacts by Sector - Dominica**



**Figure 46 – Total Wage Impacts by Sector Dominica**



As shown in **Figures 45 and 46**, the total employment and wage impacts of cruise tourism are concentrated in the commercial and transport sectors which account for about 97 percent of the employment and wage impacts.<sup>58</sup> This is not surprising since the direct impacts account for about 65 percent of the total employment impacts and that virtually all of the cruise tourism expenditures are made with businesses in these sectors. Because of the relatively higher wages in the transport sector compared to the other sectors of the economy, the transport sector accounts for 50 percent of the wage impacts but only 36 percent of the employment impacts. The remainder of the total employment and wage impacts was generated by the indirect spending in the other sectors of the economy.

## Passenger Surveys

A total of 870 passenger surveys were completed and returned for tabulation. **Table 65** shows the major attributes of passenger visits in Dominica as derived from the passenger surveys.

- Of the passengers who went ashore, 60 percent made at least one purchase while ashore.
- Eighty-five (85) percent of the passengers that went ashore purchased a shore excursion. Seventy-six (76) percent purchased their tour through the cruise lines and 24 percent purchased their tour onshore or on the Internet.
- The typical cruise party in Dominica consisted of 2.0 passengers.

**Table 65 - Major Attributes of Passenger Surveys – Dominica**

	Number	Percent
<b>Total Respondents</b>	870	
<b>Number Ashore</b>	853	
<b>Respondents Making Onshore Purchases:</b>	509	59.7%
<b>Average Size of Expenditure Party (Persons)</b>	2.0	
<b>Purchased an Onshore Tour</b>	730	85.6%
<b>Purchased Onshore Tour from:</b>		
<b>Cruise Line</b>	553	75.8%
<b>Onshore/Internet</b>	177	24.3%
<b>Toured On Own/Did not Tour</b>	123	

<sup>58</sup> The industry sectors include the following activities:

Manufacturing & Construction: residential and nonresidential construction and all manufacturing  
 Commercial Services: wholesale and retail trade, lodging and eating and drinking establishments  
 Transportation & Utilities: tour operators, port services, telecommunications and water and power utilities  
 Business & Financial Services: banking, insurance, legal, accounting, leasing and other business services  
 Community Services & Government: education, health and social services and government agencies

## Passenger Satisfaction

The passenger survey also asked the passengers to rate their satisfaction with their destination visit along a number of parameters, as shown in **Table 66**. A 10-point scale was used with 10 being the highest score, i.e., extremely satisfied, and 1 being the lowest score, i.e., not at all satisfied. As indicated in the table, cruise passengers were, in general, very satisfied with their cruise call at Dominica with a mean score of 7.4 (Very Satisfied) for "Visit Met Expectations".

Among the key findings are the following:

- Passengers felt very safe in Dominica with the Safety category receiving an average score of 7.9.
- Other categories with scores above 8.0 (Very Satisfied) were: guided tours and courtesy of local employees.
- Categories with slightly lower scores but still above 7.0 (Very Satisfied) were: initial shoreside welcome, friendliness of residents, and local transportation.
- Categories with average scores between 5.0 and 7.0 (Somewhat Satisfied) were given for: historic sites, beaches, and the overall shopping experience, including, variety of shops and overall prices.
- Passengers were somewhat likely to recommend a resort vacation in Dominica to family or friends (5.6) but not too likely to return themselves (3.7).

**Table 66 – Passenger Visit Satisfaction\* - Dominica**

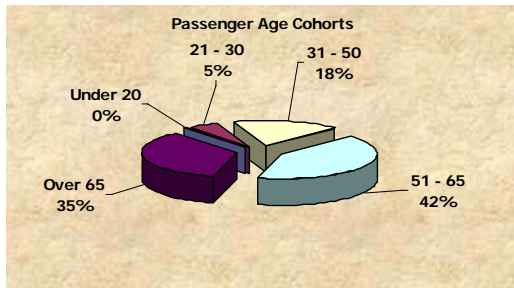
Satisfaction Categories	Mean Score
Initial Shoreside Welcome	7.3
Guided Tour	8.3
Shopping Experience	5.8
Historic Sites/Museums	6.7
Beaches	5.4
Friendliness of Residents	7.8
Courtesy of Employees	8.3
Variety of Shops	5.1
Overall Prices	6.3
Taxis/Local Transportation	7.1
Feeling of Safety Ashore	7.9
Visit Met Expectations	7.4
Likelihood of Recommending Resort Vacation	5.6
Likelihood of Return for Resort Vacation	3.7

\* Scale is 1 to 10 with 10 being the highest score. The mean scores can be interpreted as follows: Extremely Satisfied/Likely: 10-9; Very Satisfied/Likely: 8-7; Somewhat Satisfied/Likely: 6-5; Not Too Satisfied/Likely: 4-3; Not At All Satisfied/Likely: 2-1.

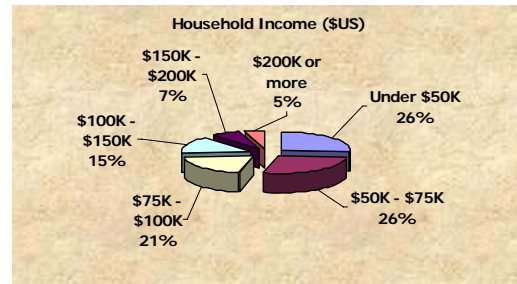
## Passenger Demographics

Residents of the United States and the Canada accounted for 89 percent of the responding passengers. The average age of the respondents was 55 years with 77 percent of the respondents being over 50 years old. Dominica passengers had an average household income of \$87,400 with 27 percent having over \$100,000 in household income.

**Figure 47 – Passenger Age Dominica**



**Figure 48 – Passenger Household Income Dominica**



## Grenada

At the core of the analysis of the economic contribution of cruise tourism were a set of passenger and crew surveys conducted by the FCCA member cruise lines.<sup>59</sup> The surveys were conducted onboard the cruise ships during the months of March, April and May of 2006. The survey schedule was designed so that surveys were conducted by all FCCA member cruise lines that called at each destination and that the distribution of passenger and crew surveys would reflect the distribution of passenger and crew arrivals by cruise line at each destination. On any given cruise itinerary, passenger and crew surveys were placed in all passenger cabins and crew quarters following a single destination call. The surveys were completed by the passengers and crew in the privacy of their quarters and returned to a designated office on the cruise ship. Thus, passengers and crew were only surveyed once during a cruise itinerary and for a single destination. On a subsequent itinerary, passengers were surveyed following a call at a different destination.

Passenger and crew surveys were designed to collect data for onshore spending and visit satisfaction by both passengers and crew. While the crew survey was slightly shorter than the passenger survey, both surveys were designed to collect the following information:

- hours spent ashore;
- expenditures by category, including shore tours, food & beverages, clothing, etc.;
- visit satisfaction, including shore tour, safety, prices, shopping, etc.;
- likelihood of recommending and returning for a land-based vacation; and
- demographic characteristics, including country of residence, age group, income, etc.

Combining the expenditure data collected from the passenger and crew surveys with data on expenditures by cruise lines for port fees and services, payments to local tour operators for passenger shore excursions purchased onboard the cruise ships, and other provisions purchased locally by the cruise lines, estimates of total cruise tourism expenditures were developed for each participating destination.

Given the direct spending estimates, the economic contribution of these expenditures, as measured by employment and wage income were then estimated for each destination. This process began with the collection of economic data for each destination from a combination of local, regional and international sources. Utilizing all of these data a set of economic impact models were developed for each destination to estimate the direct and total employment and wage impacts. A more detailed description of these models is provided in the **Data and Methods** section of the full report.

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<sup>59</sup> The FCCA member lines are as follows: Carnival Cruise Lines, Celebrity Cruises, Costa Cruise Lines, Cunard Line, Disney Cruise Line, Holland America Line, MSC Cruises (USA), Inc., Norwegian Cruise Line, Princess Cruises, Regent Seven Seas Cruises, Royal Caribbean International and Windstar Cruises.



## Cruise Tourism Expenditures

Cruise tourism expenditures in destination ports are composed of a broad range of spending including:

- onshore expenditures by passengers which tend to be concentrated in shore excursions and retail purchases of clothing, jewelry and local crafts and souvenirs;
- onshore expenditures by crew which are generally concentrated in purchases of food and beverages, local transportation and retail purchases of clothing and electronics;
- expenditures by cruise lines for port services, such as dockage fees and linesmen, utilities, such as water and power and navigation services; and
- purchases of supplies, such as food and other stores, by the cruise lines from local businesses.

According to data provided by the CTO, 289,617 cruise passengers arrived aboard cruise ships during the 2005-2006 cruise year.<sup>60</sup> Of these, an estimated 246,174 passengers (85 percent) disembarked and visited Grenada. Utilizing additional data provided by the visiting cruise lines, we have estimated that 125,045 crew were aboard the cruise ships and that 40 percent, or 50,018 crew, disembarked and visited Grenada. These passenger and crew visits along with additional expenditures by the cruise lines generated a total of **\$16.3** million (\$US) in cruise tourism expenditures in Grenada during the 2005-2006 cruise year. The contribution of expenditures by passengers, crew and cruise lines to this total is discussed below.

**Table 67 – Estimated Passenger Spending (\$US) in Grenada, 2005-2006 Cruise Year<sup>61</sup>**

Purchase Categories	Average Spend per Party	Share of All Onshore Visits	Weighted Average Spend per Party
Shore Excursions	\$ 59.43	75%	\$ 44.51
Local Crafts & Souvenirs	\$ 21.10	58%	\$ 12.13
Other Purchases	\$ 24.10	35%	\$ 8.37
Clothing	\$ 33.90	24%	\$ 8.05
F&B at Restaurants & Bars	\$ 18.80	20%	\$ 3.71
Taxis/Ground Transportation	\$ 28.40	16%	\$ 4.47
Retail Purchases of Liquor	\$ 17.80	13%	\$ 2.23
Watches & Jewelry	\$ 290.10	8%	\$ 23.93
Telephone & Internet	\$ 4.70	5%	\$ 0.24
Entertainment/Night Clubs	\$ 0.00	0%	\$ 0.00
Electronics	\$ 0.00	0%	\$ 0.00
<b>Total Spend per Cruise Party</b>			<b>\$ 107.65</b>
<b>Average Size of a Cruise Party</b>			<b>2.0</b>
<b>Total Spend per Cruise Passenger</b>			<b>\$ 53.82</b>
<b>Cruise Passenger Visits</b>			<b>246,174</b>
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 13,250,218</b>

<sup>60</sup> The 2005-2006 cruise year includes the twelve months beginning in May, 2005 and ending in April, 2006.

<sup>61</sup> The average shore excursion expenditure is a weighted average of the onshore and Internet purchases and the portion of the onboard purchases paid to local tour operators.

Per passenger spending estimates were derived from the 497 surveys completed by passengers that went ashore during the survey period. As shown in **Table 67**, each passenger cruise party spent an average of \$107.65 in Grenada. The average spend per cruise party is the sum of the weighted spending in each of the eleven categories. For example, 20 percent of the survey respondents reported spending an average of \$18.80 for food and beverages. Spread over the 497 cruise parties that visited Grenada, this represents an average of \$3.71 per party. On a per passenger basis, the average total expenditure was \$53.82. This represents the sum of per party expenditures, \$107.65, divided by the average size of a cruise party in Grenada, 2.0 passengers.

For the entire 2005-2006 cruise year, the estimated 246,174 cruise passengers who visited Grenada spent a total of **\$13.2 million** (\$US) in Grenada.

Due to an insufficient number of completed crew surveys, per crew spending estimates were estimated from the complete set of crew surveys. The average spend for each category for the more than 11,000 crew surveys was adjusted for this destination. This process involved comparing the per passenger spending estimates for each category for this destination with the per passenger spending estimates of the complete set of passenger surveys. For, example, in the total passenger and crew samples, passengers spent an average of \$10.97 for clothing and crew spent an average of \$10.13. In Grenada, passengers spent an average of \$4.02 ( $\$8.05 \div 2.0$ ), or 37 percent of the Caribbean-wide average for clothing. We then multiplied the Caribbean-wide average of crew expenditures for clothing, \$10.13, by 37 percent to arrive at an average spend on clothing of \$3.72 in Grenada. Similar calculations were made for each purchase category.

As shown in **Table 68**, we estimated that each crew member who went ashore in Grenada spent an average of \$26.07. For the entire 2005-2006 cruise year, the estimated 50,018 crew who visited Grenada spent an estimated total of **\$1.3 million** (\$US) in Grenada.

**Table 68 – Estimated Crew Spending (\$US) in Grenada, 2005-2006 Cruise Year**

Purchase Categories	Average Spend per Crew
Other Purchases	\$5.21
F&B at Restaurants & Bars	\$4.29
Clothing	\$3.72
Watches & Jewelry	\$3.34
Telephone & Internet	\$2.92
Local Crafts & Souvenirs	\$2.79
Taxis/Ground Transportation	\$1.94
Retail Purchases of Liquor	\$1.23
Shore Excursions	\$0.63
Entertainment/Night Clubs	\$0.00
Electronics	\$0.00
<b>Total Spend per Crew</b>	<b>\$26.07</b>
Cruise Passenger Visits	50,018
<b>Total Cruise Passenger Expenditures</b>	<b>\$1,303,988</b>

Cruise lines made payments to local businesses for a variety of goods and services. Net payments to local vendors for shore excursions have been included with passenger expenditures. However, cruise lines made other local expenditures, including payments for port fees and taxes, navigation services, utilities and other supplies. Based upon data provided by the FCCA member cruise lines, we estimated that all cruise lines spent **\$1.8 million** (\$US) in Grenada during the 2005-2006 cruise year. All of these expenditures were payments for port fees and taxes and navigation services.

### Economic Contribution of Cruise Tourism Expenditures

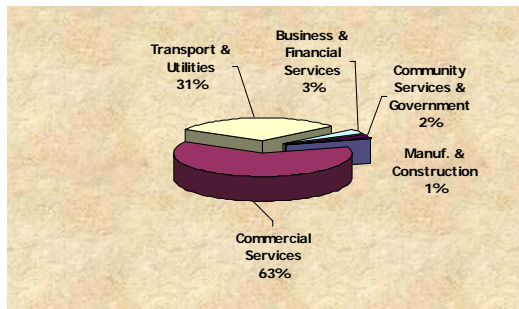
As noted in the **Data and Methods** section of the full report, a set of economic impact models were developed for each destination to produce estimates of the economic contribution of cruise tourism. Data for these models were collected from a broad range of local, regional and international sources. The impact models were designed to reflect the economic structure of each destination, including the industrial composition of Gross Domestic Product (GDP), the wage share of GDP by industry and average employee wages by industry.

**Table 69 – Total Economic Contribution of Cruise Tourism in Grenada, 2005-2006 Cruise Year**

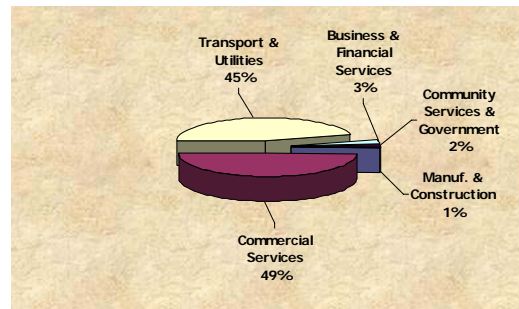
	Employment	Wage Income (\$US Millions)
Direct Economic Contribution	320	\$2.1
Total Economic Contribution	485	\$3.1

As shown in **Table 69**, the \$16.3 million in total cruise tourism expenditures in Grenada generated direct employment of 320 residents of Grenada paying \$2.1 million in annual wages. Adding the indirect contribution that results from the spending of those local businesses that are the direct recipients of passenger, crew and cruise line expenditures, the direct cruise tourism expenditures generated a total employment contribution of 485 jobs and \$3.1 million in wage income in Grenada during the 2005-2006 cruise year.

**Figure 49 – Total Employment Impacts by Sector - Grenada**



**Figure 50 – Total Wage Impacts by Sector Grenada**



As shown in **Figures 49 and 50**, the total employment and wage impacts of cruise tourism are concentrated in the commercial and transport sectors which account for about 94 percent of the total impacts. This is not surprising since the direct impacts account for nearly 65 percent of the total employment impacts and that virtually all of the cruise tourism expenditures are made with businesses in these sectors. Because of the relatively higher wages in the transport sector compared to the other sectors of the economy, the transport sector accounts for 45 percent of the wage impacts but only 31 percent of the employment impacts. The remainder of the total employment and wage impacts was generated by the indirect spending in the other sectors of the economy.<sup>62</sup>

## Passenger Surveys

A total of 508 passenger surveys were completed and returned for tabulation. **Table 70** shows the major attributes of passenger visits to Grenada as derived from the passenger surveys.

- Of the 497 passengers who went ashore, 81 percent made at least one purchase while ashore.
- Seventy-five (75) percent of the passengers that went ashore purchased a shore excursion. Sixty-seven (67) percent purchased their tour through the cruise lines and 33 percent purchased their tour onshore or on the Internet.
- The typical cruise party in Grenada consisted of 2.0 passengers.

**Table 70 - Major Attributes of Passenger Surveys - Grenada**

	Number	Percent
Total Respondents	508	
Number Ashore	497	
Respondents Making Onshore Purchases:	400	80.5%
Average Size of Expenditure Party (Persons)	2.0	
Purchased an Onshore Tour	372	74.8%
Purchased Onshore Tour from:		
Cruise Line	250	67.2%
Onshore/Internet	122	32.8%
Toured On Own/Did not Tour	125	

<sup>62</sup> The industry sectors include the following activities:

Manufacturing & Construction: residential and nonresidential construction and all manufacturing  
 Commercial Services: wholesale and retail trade, lodging and eating and drinking establishments  
 Transportation & Utilities: tour operators, port services, telecommunications and water and power utilities  
 Business & Financial Services: banking, insurance, legal, accounting, leasing and other business services  
 Community Services & Government: education, health and social services and government agencies

## Passenger Satisfaction

The passenger survey also asked the passengers to rate their satisfaction with their destination visit along a number of parameters, as shown in **Table 71**. A 10-point scale was used with 10 being the highest score, i.e., extremely satisfied, and 1 being the lowest score, i.e., not at all satisfied. As indicated in the table, cruise passengers were, in general, very satisfied with their cruise call at Grenada with a mean score of 7.2 (Very Satisfied) for "Visit Met Expectations".

Among the key findings were the following:

- Passengers felt very safe in Grenada with the Safety category receiving an average score of 8.1.
- Other categories with scores above 8.0 (Very Satisfied) were: guided tours, friendliness of residents, and courtesy of local employees.
- Categories with slightly lower scores but still above 7.0 (Very Satisfied) were: initial shoreside welcome, beaches, and local transportation.
- Categories with average scores between 6.0 and 7.0 (Somewhat Satisfied) were given for: historic sites, and the overall shopping experience, including variety of shops and overall prices.
- Passengers were somewhat likely to recommend a resort vacation in Grenada to family or friends (5.2) but not too likely to return themselves (3.2).

**Table 71 – Passenger Visit Satisfaction\* - Grenada**

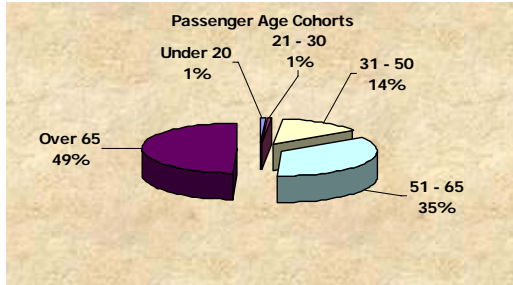
Satisfaction Categories	Mean Score
Initial Shoreside Welcome	7.3
Guided Tour	8.4
Shopping Experience	6.4
Historic Sites/Museums	6.9
Beaches	7.5
Friendliness of Residents	8.0
Courtesy of Employees	8.4
Variety of Shops	6.1
Overall Prices	6.4
Taxis/Local Transportation	7.8
Feeling of Safety Ashore	8.1
Visit Met Expectations	7.2
Likelihood of Recommending Resort Vacation	5.2
Likelihood of Return for Resort Vacation	3.2

\* Scale is 1 to 10 with 10 being the highest score. The mean scores can be interpreted as follows: Extremely Satisfied/Likely: 10-9; Very Satisfied/Likely: 8-7; Somewhat Satisfied/Likely: 6-5; Not Too Satisfied/Likely: 4-3; Not At All Satisfied/Likely: 2-1.

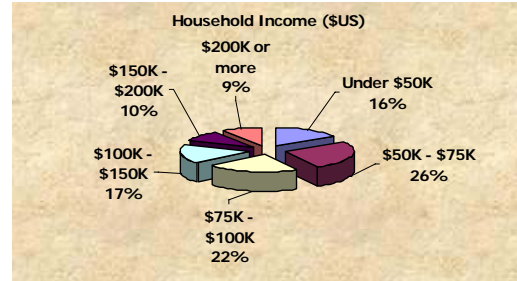
## Passenger Demographics

Residents of the United States and Canada accounted for 93 percent of the responding passengers. The average age of the respondents was 58 years with 84 percent of the respondents being over 50 years old. Grenada passengers had an average household income of \$100,400 with 36 percent having over \$100,000 in household income.

**Figure 51 – Passenger Age Grenada**



**Figure 52 – Passenger Household Income Grenada**



## Key West

At the core of the analysis of the economic contribution of cruise tourism were a set of passenger and crew surveys conducted by the FCCA member cruise lines.<sup>63</sup> The surveys were conducted onboard the cruise ships during the months of March, April and May of 2006. The survey schedule was designed so that surveys were conducted by all FCCA member cruise lines that called at each destination and that the distribution of passenger and crew surveys would reflect the distribution of passenger and crew arrivals by cruise line at each destination. On any given cruise itinerary, passenger and crew surveys were placed in all passenger cabins and crew quarters following a single destination call. The surveys were completed by the passengers and crew in the privacy of their quarters and returned to a designated office on the cruise ship. Thus, passengers and crew were only surveyed once during a cruise itinerary and for a single destination. On a subsequent itinerary, passengers were surveyed following a call at a different destination.

Passenger and crew surveys were designed to collect data for onshore spending and visit satisfaction by both passengers and crew. While the crew survey was slightly shorter than the passenger survey, both surveys were designed to collect the following information:

- hours spent ashore;
- expenditures by category, including shore tours, food & beverages, clothing, etc.;
- visit satisfaction, including shore tour, safety, prices, shopping, etc.;
- likelihood of recommending and returning for a land-based vacation; and
- demographic characteristics, including country of residence, age group, income, etc.

Combining the expenditure data collected from the passenger and crew surveys with data on expenditures by cruise lines for port fees and services, payments to local tour operators for passenger shore excursions purchased onboard the cruise ships, and other provisions purchased locally by the cruise lines, estimates of total cruise tourism expenditures were developed for each participating destination.

Given the direct spending estimates, the economic contribution of these expenditures, as measured by employment and wage income were then estimated for each destination. This process began with the collection of economic data for each destination from a combination of local, regional and international sources. Utilizing all of these data a set of economic impact models were developed for each destination to estimate the direct and total employment and wage impacts. A more detailed description of these models is provided in the **Data and Methods** section of the full report.

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<sup>63</sup> The FCCA member lines are as follows: Carnival Cruise Lines, Celebrity Cruises, Costa Cruise Lines, Cunard Line, Disney Cruise Line, Holland America Line, MSC Cruises (USA), Inc., Norwegian Cruise Line, Princess Cruises, Regent Seven Seas Cruises, Royal Caribbean International and Windstar Cruises.

## Cruise Tourism Expenditures

Cruise tourism expenditures in destination ports are composed of a broad range of spending including:

- onshore expenditures by passengers which tend to be concentrated in shore excursions and retail purchases of clothing, jewelry and local crafts and souvenirs;
- onshore expenditures by crew which are generally concentrated in purchases of food and beverages, local transportation and retail purchases of clothing and electronics;
- expenditures by cruise lines for port services, such as dockage fees and linesmen, utilities, such as water and power and navigation services; and
- purchases of supplies, such as food and other stores, by the cruise lines from local businesses.

According to data obtained from the City of Key West Port Operations, 907,053 cruise passengers arrived aboard cruise ships during the 2005-2006 cruise year.<sup>64</sup> Of these, an estimated 852,630 passengers (94 percent) disembarked and visited Key West. Utilizing additional data provided by the visiting cruise lines, we have estimated that 368,135 crew were aboard the cruise ships and that 40 percent, or 147,254 crew, disembarked and visited Key West. These passenger and crew visits along with additional expenditures by the cruise lines generated a total of **\$68.7 million** (\$US) in cruise tourism expenditures in Key West during the 2005-2006 cruise year. The contribution of expenditures by passengers, crew and cruise lines to this total is discussed below.

**Table 72 – Estimated Passenger Spending (\$US) in Key West, 2005-2006 Cruise Year<sup>65</sup>**

Purchase Categories	Average Spend per Party	Share of All Onshore Visits	Weighted Average Spend per Party
F&B at Restaurants & Bars	\$ 31.90	70%	\$ 22.46
Clothing	\$ 61.00	60%	\$ 36.87
Shore Excursions	\$ 51.20	47%	\$ 24.17
Local Crafts & Souvenirs	\$ 30.70	33%	\$ 10.05
Other Purchases	\$ 55.80	30%	\$ 16.50
Watches & Jewelry	\$ 85.40	16%	\$ 13.83
Taxis/Ground Transportation	\$ 57.70	9%	\$ 5.42
Retail Purchases of Liquor	\$ 47.40	3%	\$ 1.50
Entertainment/Night Clubs	\$ 68.00	2%	\$ 1.60
Electronics	\$ 14.00	0%	\$ 0.07
Telephone & Internet	\$ 4.00	0%	\$ 0.02
<b>Total Spend per Cruise Party</b>			<b>\$ 132.49</b>
<b>Average Size of a Cruise Party</b>			<b>2.4</b>
<b>Total Spend per Cruise Passenger</b>			<b>\$ 55.21</b>
<b>Cruise Passenger Visits</b>			<b>852,630</b>
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 47,069,814</b>

<sup>64</sup> The 2005-2006 cruise year includes the twelve months beginning in May, 2005 and ending in April, 2006.

<sup>65</sup> The average shore excursion expenditure is a weighted average of the onshore and Internet purchases and the portion of the onboard purchases paid to local tour operators.



Per passenger spending estimates were derived from the 1,006 surveys completed by passengers that went ashore during the survey period. As shown in **Table 72**, each passenger cruise party spent an average of \$132.49 in Key West. The average spend per cruise party is the sum of the weighted spending in each of the eleven categories. For example, 70 percent of the survey respondents reported spending an average of \$31.90 at local restaurants and/or bars. Spread over the 1,006 cruise parties that visited Key West, this represents an average of \$22.46 per party. On a per passenger basis, the average total expenditure was \$55.21. This represents the sum of per party expenditures, \$132.49, divided by the average size of a cruise party in Key West, 2.4 passengers.

For the entire 2005-2006 cruise year, the estimated 852,630 cruise passengers who visited Key West spent a total of **\$47.1 million** (\$US).

Per crew spending estimates were derived from the 1,506 surveys completed by crew members during the survey period. As shown in **Table 73**, each crew member spent an average of \$61.14 in Key West. The average spend per crew member is the sum of the weighted spending in each of the eleven categories. For example, 38 percent of the survey respondents reported spending an average of \$30.30 for food and beverages. Spread over the 1,506 crew members that visited Key West, this represents an average of \$11.65 per crew member.

For the entire 2005-2006 cruise year, the estimated 147,254 crew who visited Key West spent an estimated total of **\$9 million** (\$US).

**Table 73 – Estimated Crew Spending (\$US) in Key West, 2005-2006 Cruise Year**

Purchase Categories	Average Spend per Crew	Share of All Onshore Visits	Average Spend per Crew
F&B at Restaurants & Bars	\$ 30.30	38%	\$ 11.65
Telephone & Internet	\$ 22.10	27%	\$ 5.88
Clothing	\$ 77.80	25%	\$ 19.32
Other Purchases	\$ 53.20	17%	\$ 8.83
Taxis/Ground Transportation	\$ 14.80	13%	\$ 1.99
Local Crafts & Souvenirs	\$ 23.80	9%	\$ 2.26
Watches & Jewelry	\$ 127.80	5%	\$ 5.94
Electronics	\$ 121.80	3%	\$ 3.56
Entertainment/Night Clubs	\$ 58.10	2%	\$ 1.00
Shore Excursions	\$ 18.00	2%	\$ 0.29
Retail Purchases of Liquor	\$ 37.50	1%	\$ 0.42
<b>Total Spend per Crew</b>			<b>\$ 61.14</b>
<b>Cruise Passenger Visits</b>			147,254
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 9,003,546</b>

Cruise lines made payments to local businesses for a variety of goods and services. Net payments to local vendors for shore excursions have been included with passenger expenditures. However, cruise lines made other local expenditures, including payments for port fees and taxes, navigation services, utilities and other supplies. Based upon data provided by the FCCA member cruise lines, we estimated that all cruise lines spent **\$12.6 million** (\$US) in Key West during the 2005-2006 cruise year. Essentially all of these expenditures were payments for port fees and taxes and navigation services.

## Economic Contribution of Cruise Tourism Expenditures

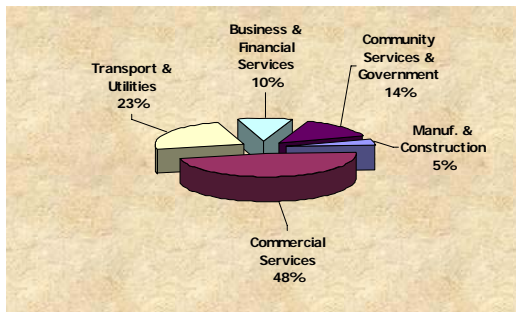
As noted above, a set of economic impact models were developed for each destination to produce estimates of the economic contribution of cruise tourism. The economic impact model for Key West was different than the models developed for the Caribbean destinations. The Key West model utilized a cruise sector economic impact model for Florida that had been developed as part of BREA's economic impact analysis of the cruise industry for the International Council of Cruise Lines (ICCL). This model utilizes economic data for the State of Florida that was collected from federal government agencies, including the Bureau of Labor Statistics and the Bureau of Economic Analysis. An overview of the state models can be found in BREA's most recent report for the ICCL.<sup>66</sup> Because this is a state model the total economic impacts generated by this model are statewide impacts.

**Table 74 – Total Economic Contribution of Cruise Tourism in Key West 2005-2006 Cruise Year**

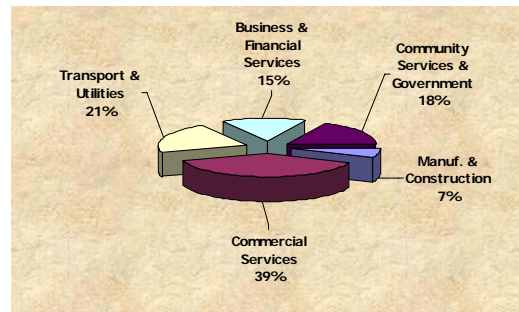
	Employment	Wage Income (\$US Millions)
Direct Economic Contribution	755	\$17.2
Total Economic Contribution	1,260	\$35.4

As shown in **Table 74**, the \$68.7 million in total cruise tourism expenditures generated direct employment of 755 residents of Key West paying \$17.2 million in annual wages. Adding the indirect contribution that results from the spending of those local businesses that are the direct recipients of passenger, crew and cruise line expenditures, the direct cruise tourism expenditures generated a total employment contribution of 1,260 jobs and \$35.4 million in wage income in throughout Florida during the 2005-2006 cruise year.

**Figure 53 – Total Employment Impacts by Sector - Key West**



**Figure 54 – Total Wage Impacts by Sector Key West**



<sup>66</sup> The Contribution of the North American Cruise Industry to the U.S. Economy in 2005, August 2006.

As shown in **Figures 53 and 54**, the total employment and wage impacts of cruise tourism are concentrated in the commercial and transport sectors which account for about 60 percent of the employment and wage impacts.<sup>67</sup> This is not surprising since the direct impacts account for about 60 percent of the total employment impacts and that virtually all of the cruise tourism expenditures are made with businesses in these sectors. Because of the relatively lower wages in the commercial sector relative to the other sectors of the Florida economy, the commercial sector accounts for 48 percent of the employment impacts but only 39 percent of the wage impacts. The remainder of the total employment and wage impacts was generated by the indirect spending in the other sectors of the economy.

### Passenger Surveys

A total of 1,024 passenger surveys were completed and returned for tabulation. **Table 75** shows the major attributes of passenger visits in Key West as derived from the passenger surveys.

- Of the passengers who went ashore, 85 percent made at least one purchase while ashore.
- Forty-seven (47) percent of the passengers that went ashore purchased a shore excursion. Sixty-four (64) percent purchased their tour through the cruise lines and 36 percent purchased their tour onshore or on the Internet.
- The typical cruise party in Key West consisted of 2.4 passengers.

**Table 75 - Major Attributes of Passenger Surveys – Key West**

	Number	Percent
<b>Total Respondents</b>	1,024	
<b>Number Ashore</b>	1,006	
<b>Respondents Making Onshore Purchases:</b>	852	84.7%
<b>Average Size of Expenditure Party (Persons)</b>	2.4	
<b>Purchased an Onshore Tour</b>	475	47.2%
<b>Purchased Onshore Tour from:</b>		
<b>Cruise Line</b>	305	64.2%
<b>Onshore/Internet</b>	170	35.8%
<b>Toured On Own/Did not Tour</b>	531	

<sup>67</sup> The industry sectors include the following activities:  
 Manufacturing & Construction: residential and nonresidential construction and all manufacturing  
 Commercial Services: wholesale and retail trade, lodging and eating and drinking establishments  
 Transportation & Utilities: tour operators, port services, telecommunications and water and power utilities  
 Business & Financial Services: banking, insurance, legal, accounting, leasing and other business services  
 Community Services & Government: education, health and social services and government agencies

## Passenger Satisfaction

The passenger survey also asked the passengers to rate their satisfaction with their destination visit along a number of parameters, as shown in **Table 76**. A 10-point scale was used with 10 being the highest score, i.e., extremely satisfied, and 1 being the lowest score, i.e., not at all satisfied. As indicated in the table, cruise passengers were, in general, very satisfied with their cruise call at Key West with a mean score of 7.7 (Very Satisfied) for “Visit Met Expectations”.

Among the key findings are the following:

- Passengers felt extremely safe in Key West with the Safety category receiving an average score of 8.9.
- Other categories with scores above 8.0 (Very Satisfied) were: guided tours and courtesy of local employees.
- Categories with slightly lower scores but still above 7.0 (Very Satisfied) were: initial shoreside welcome, overall shopping experience, historic sites, friendliness of residents, variety of shops, and local transportation.
- Categories with average scores between 6.0 and 7.0 (Somewhat Satisfied) were given for: beaches and overall prices.
- Passengers were very likely to recommend a resort vacation in Key West to family or friends (7.0) but only somewhat likely to return themselves (5.5).

**Table 76 – Passenger Visit Satisfaction\* - Key West**

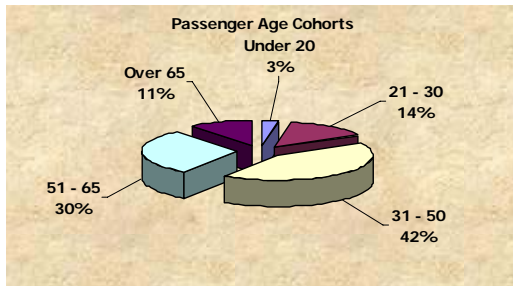
Satisfaction Categories	Mean Score
Initial Shoreside Welcome	7.6
Guided Tour	8.3
Shopping Experience	7.4
Historic Sites/Museums	7.7
Beaches	6.3
Friendliness of Residents	7.7
Courtesy of Employees	8.1
Variety of Shops	7.7
Overall Prices	6.7
Taxis/Local Transportation	7.1
Feeling of Safety Ashore	8.9
Visit Met Expectations	7.7
Likelihood of Recommending Resort Vacation	7.0
Likelihood of Return for Resort Vacation	5.5

\* Scale is 1 to 10 with 10 being the highest score. The mean scores can be interpreted as follows: Extremely Satisfied/Likely: 10-9; Very Satisfied/Likely: 8-7; Somewhat Satisfied/Likely: 6-5; Not Too Satisfied/Likely: 4-3; Not At All Satisfied/Likely: 2-1.

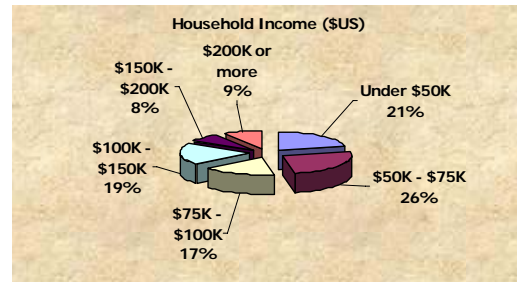
## Passenger Demographics

Residents of the United States and the Canada accounted for 97 percent of the responding passengers. The average age of the respondents was 46 years with 41 percent of the respondents being over 50 years old. Key West passengers had an average household income of \$97,200 with 36 percent having over \$100,000 in household income.

**Figure 55 – Passenger Age Key West**



**Figure 56 – Passenger Household Income Key West**



## Martinique

At the core of the analysis of the economic contribution of cruise tourism were a set of passenger and crew surveys conducted by the FCCA member cruise lines.<sup>68</sup> The surveys were conducted onboard the cruise ships during the months of March, April and May of 2006. The survey schedule was designed so that surveys were conducted by all FCCA member cruise lines that called at each destination and that the distribution of passenger and crew surveys would reflect the distribution of passenger and crew arrivals by cruise line at each destination. On any given cruise itinerary, passenger and crew surveys were placed in all passenger cabins and crew quarters following a single destination call. The surveys were completed by the passengers and crew in the privacy of their quarters and returned to a designated office on the cruise ship. Thus, passengers and crew were only surveyed once during a cruise itinerary and for a single destination. On a subsequent itinerary, passengers were surveyed following a call at a different destination.

Passenger and crew surveys were designed to collect data for onshore spending and visit satisfaction by both passengers and crew. While the crew survey was slightly shorter than the passenger survey, both surveys were designed to collect the following information:

- hours spent ashore;
- expenditures by category, including shore tours, food & beverages, clothing, etc.;
- visit satisfaction, including shore tour, safety, prices, shopping, etc.;
- likelihood of recommending and returning for a land-based vacation; and
- demographic characteristics, including country of residence, age group, income, etc.

Combining the expenditure data collected from the passenger and crew surveys with data on expenditures by cruise lines for port fees and services, payments to local tour operators for passenger shore excursions purchased onboard the cruise ships, and other provisions purchased locally by the cruise lines, estimates of total cruise tourism expenditures were developed for each participating destination.

Given the direct spending estimates, the economic contribution of these expenditures, as measured by employment and wage income were then estimated for each destination. This process began with the collection of economic data for each destination from a combination of local, regional and international sources. Utilizing all of these data a set of economic impact models were developed for each destination to estimate the direct and total employment and wage impacts. A more detailed description of these models is provided in the **Data and Methods** section of the full report.

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<sup>68</sup> The FCCA member lines are as follows: Carnival Cruise Lines, Celebrity Cruises, Costa Cruise Lines, Cunard Line, Disney Cruise Line, Holland America Line, MSC Cruises (USA), Inc., Norwegian Cruise Line, Princess Cruises, Regent Seven Seas Cruises, Royal Caribbean International and Windstar Cruises.

## Cruise Tourism Expenditures

Cruise tourism expenditures in destination ports are composed of a broad range of spending including:

- onshore expenditures by passengers which tend to be concentrated in shore excursions and retail purchases of clothing, jewelry and local crafts and souvenirs;
- onshore expenditures by crew which are generally concentrated in purchases of food and beverages, local transportation and retail purchases of clothing and electronics;
- expenditures by cruise lines for port services, such as dockage fees and linesmen, utilities, such as water and power and navigation services; and
- purchases of supplies, such as food and other stores, by the cruise lines from local businesses.

According to data provided by the Comité Martiniquais du Tourisme, 91,147 cruise passengers arrived aboard cruise ships during the 2005-2006 cruise year.<sup>69</sup> Of these, an estimated 77,475 passengers (85 percent) disembarked and visited Martinique. Utilizing additional data provided by the visiting cruise lines, we have estimated that 46,920 crew were aboard the cruise ships and that 40 percent, or 18,768 crew, disembarked and visited Martinique. These passenger and crew visits along with additional expenditures by the cruise lines generated a total of **\$4 million** (\$US) in cruise tourism expenditures in Martinique during the 2005-2006 cruise year. The contribution of expenditures by passengers, crew and cruise lines to this total is discussed below.

**Table 77 – Estimated Passenger Spending (\$US) in Martinique, 2005-2006 Cruise Year<sup>70</sup>**

Purchase Categories	Average Spend per Party	Share of All Onshore Visits	Weighted Average Spend per Party
Shore Excursions	\$ 61.50	53%	\$ 32.47
Local Crafts & Souvenirs	\$ 21.40	40%	\$ 8.61
F&B at Restaurants & Bars	\$ 19.30	36%	\$ 7.00
Clothing	\$ 31.90	35%	\$ 11.23
Other Purchases	\$ 24.90	27%	\$ 6.66
Taxis/Ground Transportation	\$ 23.80	23%	\$ 5.38
Retail Purchases of Liquor	\$ 26.10	16%	\$ 4.12
Watches & Jewelry	\$ 37.90	7%	\$ 2.52
Telephone & Internet	\$ 7.80	2%	\$ 0.17
Entertainment/Night Clubs	\$ 35.90	1%	\$ 0.45
Electronics	\$ 40.00	0%	\$ 0.07
<b>Total Spend per Cruise Party</b>			<b>\$ 78.68</b>
Average Size of a Cruise Party			2.0
<b>Total Spend per Cruise Passenger</b>			<b>\$ 39.35</b>
Cruise Passenger Visits			77,475
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 3,048,621</b>

<sup>69</sup> The 2005-2006 cruise year includes the twelve months beginning in May, 2005 and ending in April, 2006.

<sup>70</sup> The average shore excursion expenditure is a weighted average of the onshore and Internet purchases and the portion of the onboard purchases paid to local tour operators.

Per passenger spending estimates were derived from the 1,068 surveys completed by passengers that went ashore during the survey period. As shown in **Table 77**, each passenger cruise party spent an average of \$78.68 in Martinique. The average spend per cruise party is the sum of the weighted spending in each of the eleven categories. For example, 36 percent of the survey respondents reported spending an average of \$19.30 for food and beverages. Spread over the 1,068 cruise parties that visited Martinique, this represents an average of \$7.00 per party. On a per passenger basis, the average total expenditure was \$39.35. This represents the sum of per party expenditures, \$78.68, divided by the average size of a cruise party in Martinique, 2.0 passengers.

For the entire 2005-2006 cruise year, the estimated 77,475 cruise passengers who visited Martinique spent a total of **\$3 million** (\$US) in Martinique.

Due to an insufficient number of completed crew surveys, per crew spending estimates were estimated from the complete set of crew surveys. The average spend for each category for the more than 11,000 crew surveys was adjusted for this destination. This process involved comparing the per passenger spending estimates for each category for this destination with the per passenger spending estimates of the complete set of passenger surveys. For, example, in the total passenger and crew samples, passengers spent an average of \$10.97 for clothing and crew spent an average of \$10.13. In Martinique, passengers spent an average of \$5.62 ( $\$11.23 \div 2.0$ ), or 51 percent of the Caribbean-wide average for clothing. We then multiplied the Caribbean-wide average of crew expenditures for clothing, \$10.13, by 51 percent to arrive at an average spend on clothing of \$5.18 in Martinique. Similar calculations were made for each purchase category.

As shown in **Table 78**, we estimated that each crew member who went ashore in Martinique spent an average of \$28.20. For the entire 2005-2006 cruise year, the estimated 18,768 crew who visited Martinique spent an estimated total of **\$529,271** (\$US) in Martinique.

**Table 78 – Estimated Crew Spending (\$US) in Martinique, 2005-2006 Cruise Year**

Purchase Categories	Average Spend per Crew
F&B at Restaurants & Bars	\$8.09
Taxis/Ground Transportation	\$2.34
Watches & Jewelry	\$0.35
Clothing	\$5.18
Entertainment/Night Clubs	\$0.87
Other Purchases	\$4.14
Shore Excursions	\$0.54
Local Crafts & Souvenirs	\$1.98
Retail Purchases of Liquor	\$2.27
Electronics	\$0.36
Telephone & Internet	\$2.07
<b>Total Spend per Crew</b>	<b>\$28.20</b>
Cruise Passenger Visits	18,768
<b>Total Cruise Passenger Expenditures</b>	<b>\$529,271</b>



Cruise lines made payments to local businesses for a variety of goods and services. Net payments to local vendors for shore excursions have been included with passenger expenditures. However, cruise lines made other local expenditures, including payments for port fees and taxes, navigation services, utilities and other supplies. Based upon data provided by the FCCA member cruise lines, we estimated that all cruise lines spent **\$500,000** (\$US) in Martinique during the 2005-2006 cruise year. All of these expenditures were payments for port fees and taxes and navigation services.

### Economic Contribution of Cruise Tourism Expenditures

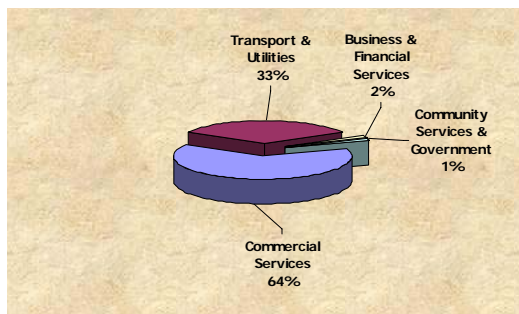
As noted in the **Data and Methods** section of the full report, a set of economic impact models were developed for each destination to produce estimates of the economic contribution of cruise tourism. Data for these models were collected from a broad range of local, regional and international sources. The impact models were designed to reflect the economic structure of each destination, including the industrial composition of Gross Domestic Product (GDP), the wage share of GDP by industry and average employee wages by industry.

**Table 79 – Total Economic Contribution of Cruise Tourism in Martinique, 2005-2006 Cruise Year**

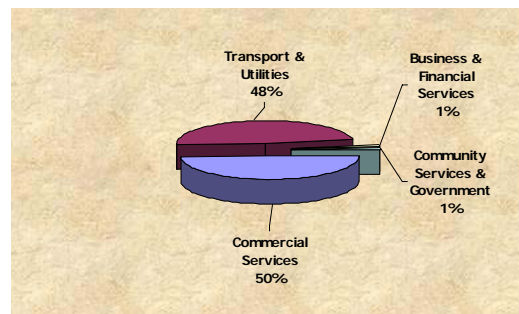
	Employment	Wage Income (\$US Millions)
<b>Direct Economic Contribution</b>	70	\$0.5
<b>Total Economic Contribution</b>	115	\$0.8

As shown in **Table 79**, the \$4 million in total cruise tourism expenditures in Martinique generated direct employment of 70 residents of Martinique paying \$0.5 million in annual wages. Adding the indirect contribution that results from the spending of those local businesses that are the direct recipients of passenger, crew and cruise line expenditures, the direct cruise tourism expenditures generated a total employment contribution of 115 jobs and \$0.8 million in wage income in Martinique during the 2005-2006 cruise year.

**Figure 57 – Total Employment Impacts by Sector - Martinique**



**Figure 58 – Total Wage Impacts by Sector Martinique**



As shown in **Figures 57 and 58**, the total employment and wage impacts of cruise tourism are concentrated in the commercial and transport sectors which account for about 97 percent of the total impacts. This is not surprising since the direct impacts account for nearly 60 percent of the total employment impacts and that virtually all of the cruise tourism expenditures are made with businesses in these sectors. Because of the relatively higher wages in the transport sector compared to the other sectors of the economy, the transport sector accounts for 48 percent of the wage impacts but only 33 percent of the employment impacts. The remainder of the total employment and wage impacts was generated by the indirect spending in the other sectors of the economy.<sup>71</sup>

### Passenger Surveys

A total of 1,139 passenger surveys were completed and returned for tabulation. **Table 80** shows the major attributes of passenger visits to Martinique as derived from the passenger surveys.

- Of the 1,068 passengers who went ashore, 52 percent made at least one purchase while ashore.
- Fifty-three (53) percent of the passengers that went ashore purchased a shore excursion. Sixty-eight (68) percent purchased their tour through the cruise lines and 32 percent purchased their tour onshore or on the Internet.
- The typical cruise party in Martinique consisted of 2.0 passengers.

**Table 80 - Major Attributes of Passenger Surveys - Martinique**

	Number	Percent
<b>Total Respondents</b>	1,139	
<b>Number Ashore</b>	1,068	
<b>Respondents Making Onshore Purchases:</b>	557	52.2%
<b>Average Size of Expenditure Party (Persons)</b>	2.0	
<b>Purchased an Onshore Tour</b>	563	52.7%
<b>Purchased Onshore Tour from:</b>		
<b>Cruise Line</b>	381	67.7%
<b>Onshore/Internet</b>	182	32.3%
<b>Toured On Own/Did not Tour</b>	505	

<sup>71</sup> The industry sectors include the following activities:  
 Manufacturing & Construction: residential and nonresidential construction and all manufacturing  
 Commercial Services: wholesale and retail trade, lodging and eating and drinking establishments  
 Transportation & Utilities: tour operators, port services, telecommunications and water and power utilities  
 Business & Financial Services: banking, insurance, legal, accounting, leasing and other business services  
 Community Services & Government: education, health and social services and government agencies

## Passenger Satisfaction

The passenger survey also asked the passengers to rate their satisfaction with their destination visit along a number of parameters, as shown in **Table 81**. A 10-point scale was used with 10 being the highest score, i.e., extremely satisfied, and 1 being the lowest score, i.e., not at all satisfied. As indicated in the table, cruise passengers were, in general, satisfied with their cruise call at Martinique with a mean score of 4.9 (Somewhat Satisfied) for "Visit Met Expectations".

Among the key findings were the following:

- Passengers felt very safe in Martinique with the Safety category receiving an average score of 7.0.
- Passengers were also very satisfied with their guided tours (or shore excursions which received a mean score of 7.0).
- Categories with average scores between 5.0 and 7.0 (Somewhat Satisfied) were given for: the initial shoreside welcome, historic sites/museums, beaches, friendliness of the residents, courtesy of the local employees, and local transportation.
- Passengers were not too satisfied with the overall shopping experience, including variety of shops, and overall prices.
- Passengers were not too likely to recommend a resort vacation in Martinique to family or friends (3.8) or to return themselves (2.6).

**Table 81 – Passenger Visit Satisfaction\* - Martinique**

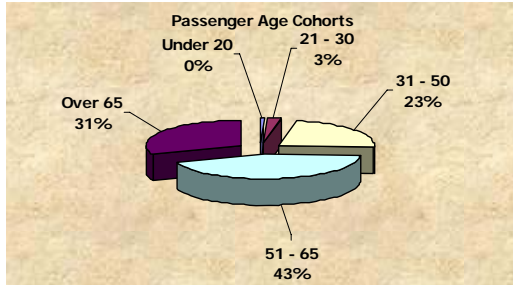
Satisfaction Categories	Mean Score
Initial Shoreside Welcome	5.4
Guided Tour	7.0
Shopping Experience	3.9
Historic Sites/Museums	5.3
Beaches	5.1
Friendliness of Residents	5.4
Courtesy of Employees	6.4
Variety of Shops	4.0
Overall Prices	4.0
Taxis/Local Transportation	5.5
Feeling of Safety Ashore	7.0
Visit Met Expectations	4.9
Likelihood of Recommending Resort Vacation	3.8
Likelihood of Return for Resort Vacation	2.6

\* Scale is 1 to 10 with 10 being the highest score. The mean scores can be interpreted as follows: Extremely Satisfied/Likely: 10-9; Very Satisfied/Likely: 8-7; Somewhat Satisfied/Likely: 6-5; Not Too Satisfied/Likely: 4-3; Not At All Satisfied/Likely: 2-1.

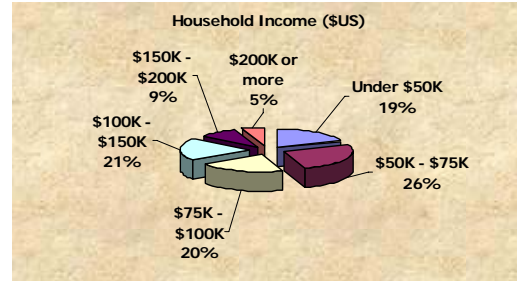
## Passenger Demographics

Residents of the United States and the United Kingdom accounted for 83 percent of the responding passengers. The average age of the respondents was 55 years with 74 percent of the respondents being over 50 years old. Martinique passengers had an average household income of \$95,400 with 35 percent having over \$100,000 in household income.

**Figure 59 – Passenger Age Martinique**



**Figure 60 – Passenger Household Income Martinique**



## San Juan

At the core of the analysis of the economic contribution of cruise tourism were a set of passenger and crew surveys conducted by the FCCA member cruise lines.<sup>72</sup> The surveys were conducted onboard the cruise ships during the months of March, April and May of 2006. The survey schedule was designed so that surveys were conducted by all FCCA member cruise lines that called at each destination and that the distribution of passenger and crew surveys would reflect the distribution of passenger and crew arrivals by cruise line at each destination. On any given cruise itinerary, passenger and crew surveys were placed in all passenger cabins and crew quarters following a single destination call. The surveys were completed by the passengers and crew in the privacy of their quarters and returned to a designated office on the cruise ship. Thus, passengers and crew were only surveyed once during a cruise itinerary and for a single destination. On a subsequent itinerary, passengers were surveyed following a call at a different destination.

Passenger and crew surveys were designed to collect data for onshore spending and visit satisfaction by both passengers and crew. While the crew survey was slightly shorter than the passenger survey, both surveys were designed to collect the following information:

- hours spent ashore;
- expenditures by category, including shore tours, food & beverages, clothing, etc.;
- visit satisfaction, including shore tour, safety, prices, shopping, etc.;
- likelihood of recommending and returning for a land-based vacation; and
- demographic characteristics, including country of residence, age group, income, etc.

Combining the expenditure data collected from the passenger and crew surveys with data on expenditures by cruise lines for port fees and services, payments to local tour operators for passenger shore excursions purchased onboard the cruise ships, and other provisions purchased locally by the cruise lines, estimates of total cruise tourism expenditures were developed for each participating destination.

Given the direct spending estimates, the economic contribution of these expenditures, as measured by employment and wage income were then estimated for each destination. This process began with the collection of economic data for each destination from a combination of local, regional and international sources. Utilizing all of these data a set of economic impact models were developed for each destination to estimate the direct and total employment and wage impacts. A more detailed description of these models is provided in the **Data and Methods** section of the full report.

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<sup>72</sup> The FCCA member lines are as follows: Carnival Cruise Lines, Celebrity Cruises, Costa Cruise Lines, Cunard Line, Disney Cruise Line, Holland America Line, MSC Cruises (USA), Inc., Norwegian Cruise Line, Princess Cruises, Regent Seven Seas Cruises, Royal Caribbean International and Windstar Cruises.

## Cruise Tourism Expenditures

Cruise tourism expenditures in destination ports are composed of a broad range of spending including:

- onshore expenditures by passengers which tend to be concentrated in shore excursions and retail purchases of clothing, jewelry and local crafts and souvenirs;
- onshore expenditures by crew which are generally concentrated in purchases of food and beverages, local transportation and retail purchases of clothing and electronics;
- expenditures by cruise lines for port services, such as dockage fees and linesmen, utilities, such as water and power and navigation services; and
- purchases of supplies, such as food and other stores, by the cruise lines from local businesses.

According to data obtained from the Puerto Rico Tourism Company, 732,214 cruise passengers arrived aboard cruise ships visiting San Juan as a port-of-call during the 2005-2006 cruise year.<sup>73</sup> Another 564,265 passenger embarked on cruises on ships that homeport in San Juan. Combining the two groups of passengers, San Juan had 1.3 million passenger arrivals. Based upon data obtained from the cruise lines, an estimated 85 percent, or 622,382 port-of-call passengers, disembarked and visited San Juan. By definition, the 564,265 embarking passengers made an onshore visit to San Juan. Thus, there were a total of 1.2 million passenger visits to San Juan during the 2005-2006 cruise year.

Data provided by the visiting cruise lines indicated that there was an average of approximately 2.5 passengers for every crew member aboard the ships that visited and homeported in San Juan. As a result, we have estimated that 509,638 crew were aboard these cruise ships. Additional data from the cruise lines showed that 40 percent, or 203,856 crew, disembarked and visited San Juan. These passenger and crew visits along with additional expenditures by the cruise lines generated a total of **\$170 million** (\$US) in cruise tourism expenditures in San Juan during the 2005-2006 cruise year. The contribution of expenditures by passengers, crew and cruise lines to this total is discussed below.

Per passenger spending estimates were derived from the 953 surveys completed by port-of-call passengers that went ashore during the survey period and 170 embarking passengers. As shown in **Table 82**, each passenger cruise party spent an average of \$203.57 in San Juan. The average spend per cruise party is the sum of the weighted spending in each of the eleven categories. For example, 44 percent of the survey respondents reported spending an average of \$83.62 at local restaurants and/or bars. Spread over the 1,123 cruise parties that visited San Juan, this represents an average of \$36.79 per party. On a per passenger basis, the average total expenditure was \$96.94. This represents the sum of per party expenditures, \$203.57, divided by the average size of a cruise party in San Juan, 2.1 passengers.

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<sup>73</sup> The 2005-2006 cruise year includes the twelve months beginning in May, 2005 and ending in April, 2006.

The passenger surveys showed that the length of stay of embarking passengers averaged just under one day either prior to or after their cruise. Their expenditures on a per passenger basis averaged \$135 across all embarking passengers with lodging expenditures averaging \$55 per passenger and food and beverages nearly \$30 per passenger. Port-of-call passengers, on the other hand, spent an average of \$52 per passenger across all port-of-call passengers with shore excursion expenditures averaging \$6.55 per passenger and food and beverages averaging \$7.32 per passenger.

For the entire 2005-2006 cruise year, the estimated 1.2 million cruise passengers who visited San Juan spent a total of **\$115 million** (\$US).

**Table 82 – Estimated Passenger Spending (\$US) in San Juan\*, 2005-2006 Cruise Year<sup>74</sup>**

Purchase Categories	Average Spend per Party	Share of All Onshore Visits	Weighted Average Spend per Party
Shore Excursions	\$ 51.49	60%	\$ 30.89
F&B at Restaurants & Bars	\$ 83.62	44%	\$ 36.79
Clothing	\$ 44.92	36%	\$ 16.17
Other Purchases	\$ 24.68	32%	\$ 7.90
Local Crafts & Souvenirs	\$ 20.93	30%	\$ 6.28
Taxis/Ground Transportation	\$ 44.17	29%	\$ 12.81
Watches & Jewelry	\$ 132.96	16%	\$ 21.27
Lodging**	\$ 379.90	14%	\$ 54.85
Retail Purchases of Liquor	\$ 35.85	14%	\$ 5.02
Entertainment/Night Clubs	\$ 324.10	3%	\$ 9.72
Telephone & Internet	\$ 33.60	3%	\$ 1.01
Electronics	\$ 86.10	1%	\$ 0.86
<b>Total Spend per Cruise Party</b>			<b>\$ 203.57</b>
<b>Average Size of a Cruise Party</b>			<b>2.1</b>
<b>Total Spend per Cruise Passenger</b>			<b>\$ 96.94</b>
<b>Cruise Passenger Visits</b>			<b>1,186,647</b>
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 115,033,550</b>

\* Includes passengers aboard both port-of-call and homeporting cruise ships.

\*\* Lodging expenditures only apply to the passengers who embarked on cruises in San Juan. For purposes of this table the weighted average has been calculated across all San Juan passengers.

Per crew spending estimates were derived from the 681 surveys completed by crew members on port-of-call and homeporting cruise ships during the survey period. As shown in **Table 83**, each crew member spent an average of \$91.13 in San Juan. The average spend per crew member is the sum of the weighted spending in each of the eleven categories. For example, 47 percent of the survey respondents reported spending an average of \$32.47 for food and beverages. Spread over the 681 crew members that visited San Juan, this represents an average of \$15.26 per crew member. Crew aboard port-of-call cruise ships spent an average of just over \$87 while crew aboard homeporting cruise ships spent an average of more than \$96. Crew aboard homeporting cruise ships spent almost 50 percent more time ashore than crew aboard port-of-call cruise ships, accounting for most of their higher average expenditures.

<sup>74</sup> The average shore excursion expenditure is a weighted average of the onshore and Internet purchases and the portion of the onboard purchases paid to local tour operators.

For the entire 2005-2006 cruise year, the estimated 203,856 crew who visited San Juan spent an estimated total of **\$18.6 million** (\$US).

**Table 83 – Estimated Crew Spending (\$US) in San Juan, 2005-2006 Cruise Year**

Purchase Categories	Average Spend per Crew	Share of All Onshore Visits	Average Spend per Crew
F&B at Restaurants & Bars	\$ 32.47	47%	\$ 15.26
Taxis/Ground Transportation	\$ 18.34	29%	\$ 5.32
Clothing	\$ 89.92	26%	\$ 23.38
Telephone & Internet	\$ 19.89	18%	\$ 3.58
Other Purchases	\$ 52.79	14%	\$ 7.39
Local Crafts & Souvenirs	\$ 25.50	10%	\$ 2.55
Retail Purchases of Liquor	\$ 56.50	6%	\$ 3.39
Electronics	\$ 254.17	6%	\$ 15.25
Watches & Jewelry	\$ 221.60	5%	\$ 11.08
Entertainment/Night Clubs	\$ 59.80	5%	\$ 2.99
Shore Excursions	\$ 47.00	2%	\$ 0.94
<b>Total Spend per Crew</b>			<b>\$ 91.13</b>
<b>Cruise Passenger Visits</b>			203,856
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 18,577,361</b>

Cruise lines made payments to local businesses for a variety of goods and services. Net payments to local vendors for shore excursions have been included with passenger expenditures. However, cruise lines made other local expenditures, including payments for port fees and taxes, navigation services, utilities and other supplies. Based upon data provided by the FCCA member cruise lines, we estimated that all cruise lines spent **\$36.4 million** (\$US) in San Juan during the 2005-2006 cruise year. Approximately 80 percent of these expenditures were payments for port fees and navigation services while the remaining 20 percent consisted of payments for ship supplies.

## Economic Contribution of Cruise Tourism Expenditures

As noted in the **Data and Methods** section of the full report, a set of economic impact models were developed for each destination to produce estimates of the economic contribution of cruise tourism. Data for these models were collected from a broad range of local, regional and international sources. The impact models were designed to reflect the economic structure of each destination, including the industrial composition of Gross Domestic Product (GDP), the wage share of GDP by industry and average employee wages by industry.

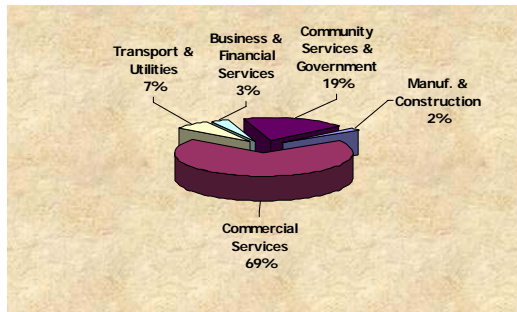
**Table 84 – Total Economic Contribution of Cruise Tourism in San Juan 2005-2006 Cruise Year**

	Employment	Wage Income (\$US Millions)
<b>Direct Economic Contribution</b>	2,225	\$30.4
<b>Total Economic Contribution</b>	3,865	\$55.4

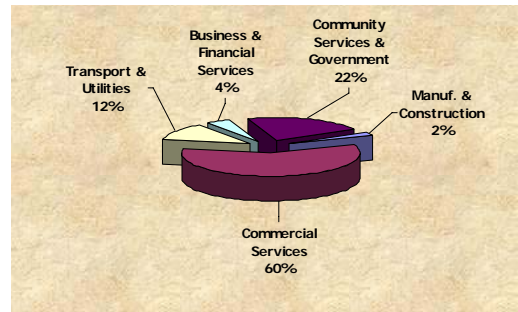


As shown in **Table 84**, the \$170 million in total cruise tourism expenditures generated direct employment of 2,225 residents of San Juan paying \$30.4 million in annual wages. Adding the indirect contribution that results from the spending of those local businesses that are the direct recipients of passenger, crew and cruise line expenditures, the direct cruise tourism expenditures generated a total employment contribution of 3,865 jobs and \$55.4 million in wage income in San Juan during the 2005-2006 cruise year.

**Figure 61 – Total Employment Impacts by Sector - San Juan**



**Figure 62 – Total Wage Impacts by Sector San Juan**



As shown in **Figures 61 and 62**, the total employment and wage impacts of cruise tourism are concentrated in the commercial and transport sectors which account for more than 70 percent of the employment and wage impacts.<sup>75</sup> This is not surprising since the direct impacts account for about 60 percent of the total employment impacts and that virtually all of the cruise tourism expenditures are made with businesses in these sectors. Because of the relatively lower wages in the commercial sector relative to the other sectors of the Puerto Rico economy, the commercial sector accounts for 69 percent of the employment impacts but only 60 percent of the wage impacts. The remainder of the total employment and wage impacts was generated by the indirect spending in the other sectors of the economy.

<sup>75</sup> The industry sectors include the following activities:  
 Manufacturing & Construction: residential and nonresidential construction and all manufacturing  
 Commercial Services: wholesale and retail trade, lodging and eating and drinking establishments  
 Transportation & Utilities: tour operators, port services, telecommunications and water and power utilities  
 Business & Financial Services: banking, insurance, legal, accounting, leasing and other business services  
 Community Services & Government: education, health and social services and government agencies

## Passenger Surveys

A total of 1,156 passenger surveys were completed and returned for tabulation. **Table 85** shows the major attributes of passenger visits in San Juan as derived from the passenger surveys.

- Of the passengers who went ashore, 70 percent made at least one purchase while ashore.
- Fifty-seven (57) percent of the passengers that went ashore purchased a shore excursion. Sixty-four (64) percent purchased their tour through the cruise lines and 36 percent purchased their tour onshore or on the Internet.
  - Sixty-three (63) percent of port-of-call passengers purchased a shore excursion while 29 percent of embarking passengers did so.
- The typical cruise party in San Juan consisted of 2.1 passengers.

**Table 85 - Major Attributes of Passenger Surveys\* – San Juan**

	Number	Percent
<b>Total Respondents</b>	1,156	
<b>Number Ashore</b>	1,123	
<b>Respondents Making Onshore Purchases:</b>	790	70.3%
<b>Average Size of Expenditure Party (Persons)</b>	2.1	
<b>Purchased an Onshore Tour</b>	648	57.7%
<b>Purchased Onshore Tour from:</b>		
<b>Cruise Line</b>	412	63.6%
<b>Onshore/Internet</b>	236	36.4%
<b>Toured On Own/Did not Tour</b>	475	

\* Includes passengers aboard both port-of-call and homeporting cruise ships.

## Passenger Satisfaction

The passenger survey also asked the passengers to rate their satisfaction with their destination visit along a number of parameters, as shown in **Table 66**. A 10-point scale was used with 10 being the highest score, i.e., extremely satisfied, and 1 being the lowest score, i.e., not at all satisfied. As indicated in the table, cruise passengers were, in general, satisfied with their cruise call at San Juan with a mean score of 6.6 (Satisfied) for "Visit Met Expectations".

Among the key findings are the following:

- Passengers felt very safe in San Juan with the Safety category receiving an average score of 7.9.
- Other categories with scores between 7.0 and 8.0 (Very Satisfied) were: initial shore-side welcome, guided tours, historic sites, friendliness of residents, courtesy of local employees, and local transportation.
- Categories with average scores between 6.0 and 7.0 (Somewhat Satisfied) were given for: beaches and the overall shopping experience, including variety of shops and overall prices.
- Passengers were somewhat likely to recommend a resort vacation in San Juan to family or friends (5.0) but not too likely to return themselves (3.2).

**Table 86 – Passenger\* Visit Satisfaction\*\* - San Juan**

Satisfaction Categories	Mean Score
Initial Shoreside Welcome	7.0
Guided Tour	7.8
Shopping Experience	6.1
Historic Sites/Museums	7.8
Beaches	5.9
Friendliness of Residents	7.0
Courtesy of Employees	7.8
Variety of Shops	6.4
Overall Prices	6.5
Taxis/Local Transportation	7.0
Feeling of Safety Ashore	7.9
Visit Met Expectations	6.6
Likelihood of Recommending Resort Vacation	5.0
Likelihood of Return for Resort Vacation	3.2

\* Includes passengers aboard both port-of-call and homeporting cruise ships.

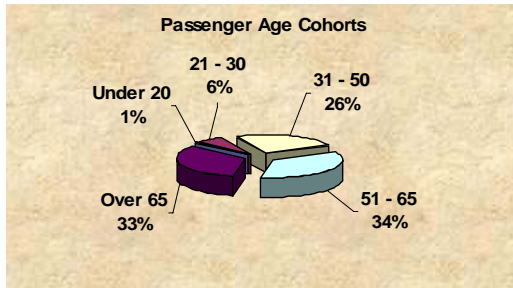
\*\* Scale is 1 to 10 with 10 being the highest score. The mean scores can be interpreted as follows:  
 Extremely Satisfied/Likely: 10-9; Very Satisfied/Likely: 8-7; Somewhat Satisfied/Likely: 6-5;  
 Not Too Satisfied/Likely: 4-3; Not At All Satisfied/Likely: 2-1.

In general, embarkation passengers provided higher scores for all categories than port-of-call passengers. For example, embarkation passengers were very likely to recommend a vacation in San Juan to family and friends (7.1) and were somewhat likely to return themselves (5.7).

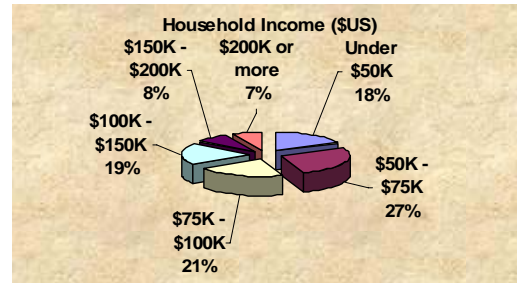
## Passenger Demographics

Residents of the United States and the Canada accounted for 95 percent of the responding passengers. The average age of the respondents was 54 years with 67 percent of the respondents being over 50 years old. San Juan passengers had an average household income of \$96,200 with 34 percent having over \$100,000 in household income.

**Figure 63 – Passenger Age San Juan**



**Figure 64 – Passenger Household Income San Juan**



## St. Kitts and Nevis

At the core of the analysis of the economic contribution of cruise tourism were a set of passenger and crew surveys conducted by the FCCA member cruise lines.<sup>76</sup> The surveys were conducted onboard the cruise ships during the months of March, April and May of 2006. The survey schedule was designed so that surveys were conducted by all FCCA member cruise lines that called at each destination and that the distribution of passenger and crew surveys would reflect the distribution of passenger and crew arrivals by cruise line at each destination. On any given cruise itinerary, passenger and crew surveys were placed in all passenger cabins and crew quarters following a single destination call. The surveys were completed by the passengers and crew in the privacy of their quarters and returned to a designated office on the cruise ship. Thus, passengers and crew were only surveyed once during a cruise itinerary and for a single destination. On a subsequent itinerary, passengers were surveyed following a call at a different destination.

Passenger and crew surveys were designed to collect data for onshore spending and visit satisfaction by both passengers and crew. While the crew survey was slightly shorter than the passenger survey, both surveys were designed to collect the following information:

- hours spent ashore;
- expenditures by category, including shore tours, food & beverages, clothing, etc.;
- visit satisfaction, including shore tour, safety, prices, shopping, etc.;
- likelihood of recommending and returning for a land-based vacation; and
- demographic characteristics, including country of residence, age group, income, etc.

Combining the expenditure data collected from the passenger and crew surveys with data on expenditures by cruise lines for port fees and services, payments to local tour operators for passenger shore excursions purchased onboard the cruise ships, and other provisions purchased locally by the cruise lines, estimates of total cruise tourism expenditures were developed for each participating destination.

Given the direct spending estimates, the economic contribution of these expenditures, as measured by employment and wage income were then estimated for each destination. This process began with the collection of economic data for each destination from a combination of local, regional and international sources. Utilizing all of these data a set of economic impact models were developed for each destination to estimate the direct and total employment and wage impacts. A more detailed description of these models is provided in the **Data and Methods** section of the full report.

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<sup>76</sup> The FCCA member lines are as follows: Carnival Cruise Lines, Celebrity Cruises, Costa Cruise Lines, Cunard Line, Disney Cruise Line, Holland America Line, MSC Cruises (USA), Inc., Norwegian Cruise Line, Princess Cruises, Regent Seven Seas Cruises, Royal Caribbean International and Windstar Cruises.

## Cruise Tourism Expenditures

Cruise tourism expenditures in destination ports are composed of a broad range of spending including:

- onshore expenditures by passengers which tend to be concentrated in shore excursions and retail purchases of clothing, jewelry and local crafts and souvenirs;
- onshore expenditures by crew which are generally concentrated in purchases of food and beverages, local transportation and retail purchases of clothing and electronics;
- expenditures by cruise lines for port services, such as dockage fees and linesmen, utilities, such as water and power and navigation services; and
- purchases of supplies, such as food and other stores, by the cruise lines from local businesses.

According to data obtained from the FCCA, an estimated 117,245 cruise passengers arrived aboard cruise ships during the 2005-2006 cruise year.<sup>77</sup> Of these, an estimated 93,796 passengers (80 percent) disembarked and visited St. Kitts. Utilizing additional data provided by the visiting cruise lines, we have estimated that 48,761 crew were aboard the cruise ships and that 40 percent, or 19,504 crew, disembarked and visited St. Kitts. These passenger and crew visits along with additional expenditures by the cruise lines generated a total of **\$6.7 million** (\$US) in cruise tourism expenditures in St. Kitts during the 2005-2006 cruise year. The contribution of expenditures by passengers, crew and cruise lines to this total is discussed below.

**Table 87 – Estimated Passenger Spending (\$US) in St. Kitts, 2005-2006 Cruise Year<sup>78</sup>**

Purchase Categories	Average Spend per Party	Share of All Onshore Visits	Weighted Average Spend per Party
Shore Excursions	\$ 75.89	61%	\$ 46.37
Local Crafts & Souvenirs	\$ 25.40	48%	\$ 12.22
Clothing	\$ 49.10	45%	\$ 21.98
F&B at Restaurants & Bars	\$ 20.40	38%	\$ 7.67
Taxis/Ground Transportation	\$ 34.50	32%	\$ 11.01
Other Purchases	\$ 21.20	21%	\$ 4.54
Watches & Jewelry	\$ 144.00	17%	\$ 24.00
Retail Purchases of Liquor	\$ 33.70	9%	\$ 2.89
Entertainment/Night Clubs	\$ 63.80	2%	\$ 1.22
Electronics	\$ 8.50	1%	\$ 0.08
Telephone & Internet	\$ 8.00	0%	\$ 0.04
<b>Total Spend per Cruise Party</b>			<b>\$ 132.01</b>
Average Size of a Cruise Party			2.3
<b>Total Spend per Cruise Passenger</b>			<b>\$ 57.40</b>
Cruise Passenger Visits			93,796
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 5,383,467</b>

<sup>77</sup> The 2005-2006 cruise year includes the twelve months beginning in May, 2005 and ending in April, 2006.

<sup>78</sup> The average shore excursion expenditure is a weighted average of the onshore and Internet purchases and the portion of the onboard purchases paid to local tour operators.

Per passenger spending estimates were derived from the 350 surveys completed by passengers that went ashore during the survey period. As shown in **Table 87**, each passenger cruise party spent an average of \$132.01 in St. Kitts. The average spend per cruise party is the sum of the weighted spending in each of the eleven categories. For example, 38 percent of the survey respondents reported spending an average of \$20.40 at local restaurants and/or bars. Spread over the 350 cruise parties that visited St. Kitts, this represents an average of \$7.67 per party. On a per passenger basis, the average total expenditure was \$57.40. This represents the sum of per party expenditures, \$132.01, divided by the average size of a cruise party in St. Kitts, 2.3 passengers.

For the entire 2005-2006 cruise year, the estimated 93,796 cruise passengers who visited St. Kitts spent a total of **\$5.4 million** (\$US).

Per crew spending estimates were derived from the 227 surveys completed by crew members during the survey period. As shown in **Table 88**, each crew member spent an average of \$20.61 in St. Kitts. The average spend per crew member is the sum of the weighted spending in each of the eleven categories. For example, 34 percent of the survey respondents reported spending an average of \$23.20 for food and beverages. Spread over the 227 crew members that visited St. Kitts, this represents an average of \$7.97 per crew member. For the entire 2005-2006 cruise year, the estimated 19,504 crew who visited St. Kitts spent an estimated total of **\$402,037** (\$US).

**Table 88 – Estimated Crew Spending (\$US) in St. Kitts, 2005-2006 Cruise Year**

Purchase Categories	Average Spend per Crew	Share of All Onshore Visits	Average Spend per Crew
F&B at Restaurants & Bars	\$ 23.20	34%	\$ 7.97
Taxis/Ground Transportation	\$ 12.80	21%	\$ 2.71
Other Purchases	\$ 16.70	10%	\$ 1.69
Telephone & Internet	\$ 21.90	9%	\$ 2.03
Clothing	\$ 46.30	5%	\$ 2.45
Local Crafts & Souvenirs	\$ 16.50	4%	\$ 0.58
Shore Excursions	\$ 21.80	3%	\$ 0.58
Entertainment/Night Clubs	\$ 63.80	2%	\$ 1.12
Retail Purchases of Liquor	\$ 33.80	2%	\$ 0.60
Watches & Jewelry	\$ 75.00	1%	\$ 0.66
Electronics	\$ 50.00	0%	\$ 0.22
<b>Total Spend per Crew</b>			<b>\$ 20.61</b>
<b>Cruise Passenger Visits</b>			19,504
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 402,037</b>

Cruise lines made payments to local businesses for a variety of goods and services. Net payments to local vendors for shore excursions have been included with passenger expenditures. However, cruise lines made other local expenditures, including payments for port fees and taxes, navigation services, utilities and other supplies. Based upon data provided by the FCCA member cruise lines, we estimated that all cruise lines spent **\$900,000** (\$US) in St. Kitts during the 2005-2006 cruise year. Essentially all of these expenditures were payments for port fees and taxes and navigation services.

## Economic Contribution of Cruise Tourism Expenditures

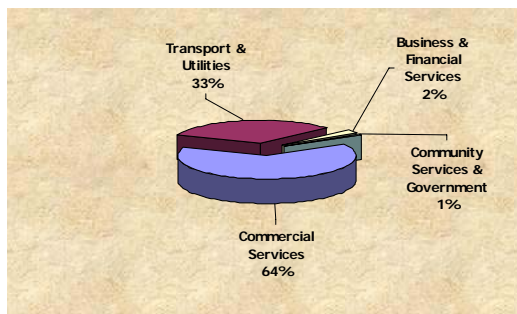
As noted in the **Data and Methods** section of the full report, a set of economic impact models were developed for each destination to produce estimates of the economic contribution of cruise tourism. Data for these models were collected from a broad range of local, regional and international sources. The impact models were designed to reflect the economic structure of each destination, including the industrial composition of Gross Domestic Product (GDP), the wage share of GDP by industry and average employee wages by industry.

**Table 89 – Total Economic Contribution of Cruise Tourism in St. Kitts 2005-2006 Cruise Year**

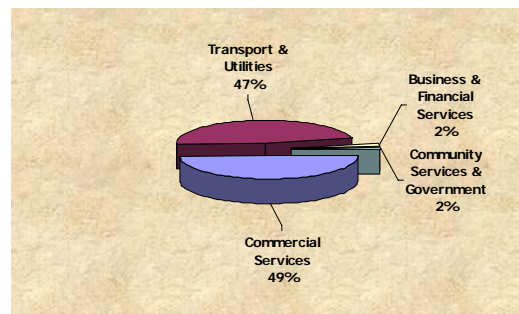
	Employment	Wage Income (\$US Millions)
Direct Economic Contribution	125	\$0.9
<b>Total Economic Contribution</b>	<b>205</b>	<b>\$1.5</b>

As shown in **Table 89**, the \$6.7 million in total cruise tourism expenditures generated direct employment of 125 residents of St. Kitts paying \$0.9 million in annual wages. Adding the indirect contribution that results from the spending of those local businesses that are the direct recipients of passenger, crew and cruise line expenditures, the direct cruise tourism expenditures generated a total employment contribution of 205 jobs and \$1.5 million in wage income in St. Kitts during the 2005-2006 cruise year.

**Figure 65 – Total Employment Impacts by Sector - St. Kitts**



**Figure 66 – Total Wage Impacts by Sector St. Kitts**





As shown in **Figures 65 and 66**, the total employment and wage impacts of cruise tourism are concentrated in the commercial and transport sectors which account for about 96 percent of the employment and wage impacts.<sup>79</sup> This is not surprising since the direct impacts account for about 60 percent of the total employment impacts and that virtually all of the cruise tourism expenditures are made with businesses in these sectors. Because of the relatively higher wages in the transport sector compared to the other sectors of the economy, the transport sector accounts for 47 percent of the wage impacts but only 33 percent of the employment impacts. The remainder of the total employment and wage impacts was generated by the indirect spending in the other sectors of the economy.

## Passenger Surveys

A total of 357 passenger surveys were completed and returned for tabulation. **Table 90** shows the major attributes of passenger visits in St. Kitts as derived from the passenger surveys.

- Of the passengers who went ashore, 60 percent made at least one purchase while ashore.
- Sixty-one (61) percent of the passengers that went ashore purchased a shore excursion. Sixty (60) percent purchased their tour through the cruise lines and 40 percent purchased their tour onshore or on the Internet.
- The typical cruise party in St. Kitts consisted of 2.3 passengers.

**Table 90 - Major Attributes of Passenger Surveys – St. Kitts**

	Number	Percent
<b>Total Respondents</b>	357	
<b>Number Ashore</b>	350	
<b>Respondents Making Onshore Purchases:</b>	210	60.0%
<b>Average Size of Expenditure Party (Persons)</b>	2.3	
<b>Purchased an Onshore Tour</b>	213	60.9%
<b>Purchased Onshore Tour from:</b>		
<b>Cruise Line</b>	127	59.6%
<b>Onshore/Internet</b>	86	40.4%
<b>Toured On Own/Did not Tour</b>	137	

<sup>79</sup> The industry sectors include the following activities:

Manufacturing & Construction: residential and nonresidential construction and all manufacturing  
 Commercial Services: wholesale and retail trade, lodging and eating and drinking establishments  
 Transportation & Utilities: tour operators, port services, telecommunications and water and power utilities  
 Business & Financial Services: banking, insurance, legal, accounting, leasing and other business services  
 Community Services & Government: education, health and social services and government agencies

## Passenger Satisfaction

The passenger survey also asked the passengers to rate their satisfaction with their destination visit along a number of parameters, as shown in **Table 91**. A 10-point scale was used with 10 being the highest score, i.e., extremely satisfied, and 1 being the lowest score, i.e., not at all satisfied. As indicated in the table, cruise passengers were, in general, very satisfied with their cruise call at St. Kitts with a mean score of 7.0 (Very Satisfied) for “Visit Met Expectations”.

Among the key findings are the following:

- Passengers felt very safe in St. Kitts with the Safety category receiving an average score of 8.2.
- Passengers were also very satisfied with their guided tours (8.4).
- Categories with slightly lower scores but still above 7.0 (Very Satisfied) were: initial shoreside welcome, beaches, friendliness of residents, courtesy of the local employees and local transportation.
- Categories with average scores between 5.0 and 7.0 (Somewhat Satisfied) were given for: historic sites, and the overall shopping experience, including, variety of shops and overall prices.
- Passengers were somewhat likely to recommend a resort vacation in St. Kitts to family or friends (5.8) but not too likely to return themselves (4.5).

**Table 91 – Passenger Visit Satisfaction\* - St. Kitts**

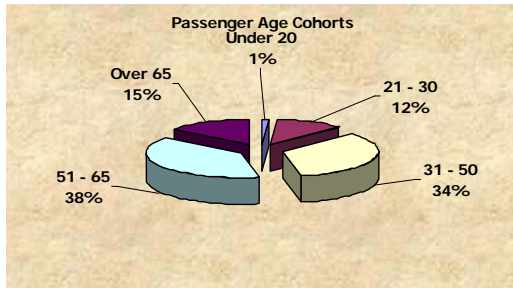
Satisfaction Categories	Mean Score
Initial Shoreside Welcome	7.0
Guided Tour	8.4
Shopping Experience	5.9
Historic Sites/Museums	6.9
Beaches	7.3
Friendliness of Residents	7.7
Courtesy of Employees	7.9
Variety of Shops	5.6
Overall Prices	6.1
Taxis/Local Transportation	7.8
Feeling of Safety Ashore	8.2
Visit Met Expectations	7.0
Likelihood of Recommending Resort Vacation	5.8
Likelihood of Return for Resort Vacation	4.5

\* Scale is 1 to 10 with 10 being the highest score. The mean scores can be interpreted as follows:  
 Extremely Satisfied/Likely: 10-9; Very Satisfied/Likely: 8-7; Somewhat Satisfied/Likely: 6-5;  
 Not Too Satisfied/Likely: 4-3; Not At All Satisfied/Likely: 2-1.

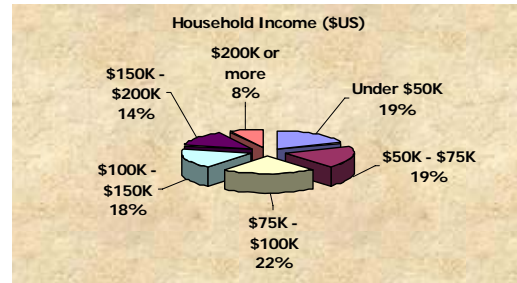
## Passenger Demographics

Residents of the United States and the Canada accounted for 96 percent of the responding passengers. The average age of the respondents was 49 years with 72 percent of the respondents being over 50 years old. St. Kitts passengers had an average household income of \$103,500 with 40 percent having over \$100,000 in household income.

**Figure 67 – Passenger Age St. Kitts**



**Figure 68 – Passenger Household Income St. Kitts**



## St. Lucia

At the core of the analysis of the economic contribution of cruise tourism were a set of passenger and crew surveys conducted by the FCCA member cruise lines.<sup>80</sup> The surveys were conducted onboard the cruise ships during the months of March, April and May of 2006. The survey schedule was designed so that surveys were conducted by all FCCA member cruise lines that called at each destination and that the distribution of passenger and crew surveys would reflect the distribution of passenger and crew arrivals by cruise line at each destination. On any given cruise itinerary, passenger and crew surveys were placed in all passenger cabins and crew quarters following a single destination call. The surveys were completed by the passengers and crew in the privacy of their quarters and returned to a designated office on the cruise ship. Thus, passengers and crew were only surveyed once during a cruise itinerary and for a single destination. On a subsequent itinerary, passengers were surveyed following a call at a different destination.

Passenger and crew surveys were designed to collect data for onshore spending and visit satisfaction by both passengers and crew. While the crew survey was slightly shorter than the passenger survey, both surveys were designed to collect the following information:

- hours spent ashore;
- expenditures by category, including shore tours, food & beverages, clothing, etc.;
- visit satisfaction, including shore tour, safety, prices, shopping, etc.;
- likelihood of recommending and returning for a land-based vacation; and
- demographic characteristics, including country of residence, age group, income, etc.

Combining the expenditure data collected from the passenger and crew surveys with data on expenditures by cruise lines for port fees and services, payments to local tour operators for passenger shore excursions purchased onboard the cruise ships, and other provisions purchased locally by the cruise lines, estimates of total cruise tourism expenditures were developed for each participating destination.

Given the direct spending estimates, the economic contribution of these expenditures, as measured by employment and wage income were then estimated for each destination. This process began with the collection of economic data for each destination from a combination of local, regional and international sources. Utilizing all of these data a set of economic impact models were developed for each destination to estimate the direct and total employment and wage impacts. A more detailed description of these models is provided in the **Data and Methods** section of the full report.

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<sup>80</sup> The FCCA member lines are as follows: Carnival Cruise Lines, Celebrity Cruises, Costa Cruise Lines, Cunard Line, Disney Cruise Line, Holland America Line, MSC Cruises (USA), Inc., Norwegian Cruise Line, Princess Cruises, Regent Seven Seas Cruises, Royal Caribbean International and Windstar Cruises.

## Cruise Tourism Expenditures

Cruise tourism expenditures in destination ports are composed of a broad range of spending including:

- onshore expenditures by passengers which tend to be concentrated in shore excursions and retail purchases of clothing, jewelry and local crafts and souvenirs;
- onshore expenditures by crew which are generally concentrated in purchases of food and beverages, local transportation and retail purchases of clothing and electronics;
- expenditures by cruise lines for port services, such as dockage fees and linesmen, utilities, such as water and power and navigation services; and
- purchases of supplies, such as food and other stores, by the cruise lines from local businesses.

According to data obtained from the St. Lucia Air and Sea Ports Authority, an estimated 432,181 cruise passengers arrived aboard cruise ships during the 2005-2006 cruise year.<sup>81</sup> Of these, an estimated 345,745 passengers (80 percent) disembarked and visited St. Lucia. Utilizing additional data provided by the visiting cruise lines, we have estimated that 190,703 crew were aboard the cruise ships and that 40 percent, or 76,281 crew, disembarked and visited St. Lucia. These passenger and crew visits along with additional expenditures by the cruise lines generated a total of **\$34.8 million** (\$US) in cruise tourism expenditures in St. Lucia during the 2005-2006 cruise year. The contribution of expenditures by passengers, crew and cruise lines to this total is discussed below.

**Table 92 – Estimated Passenger Spending (\$US) in St. Lucia, 2005-2006 Cruise Year<sup>82</sup>**

Purchase Categories	Average Spend per Party	Share of All Onshore Visits	Weighted Average Spend per Party
Shore Excursions	\$ 90.33	75%	\$ 68.11
Local Crafts & Souvenirs	\$ 21.90	47%	\$ 10.35
Clothing	\$ 48.60	46%	\$ 22.54
F&B at Restaurants & Bars	\$ 16.70	33%	\$ 5.50
Taxis/Ground Transportation	\$ 24.30	29%	\$ 7.08
Other Purchases	\$ 28.80	25%	\$ 7.26
Watches & Jewelry	\$ 294.20	14%	\$ 41.02
Retail Purchases of Liquor	\$ 22.10	9%	\$ 1.99
Telephone & Internet	\$ 10.40	2%	\$ 0.18
Electronics	\$ 150.20	1%	\$ 1.14
Entertainment/Night Clubs	\$ 32.00	0%	\$ 0.08
<b>Total Spend per Cruise Party</b>			<b>\$ 165.27</b>
<b>Average Size of a Cruise Party</b>			<b>2.0</b>
<b>Total Spend per Cruise Passenger</b>			<b>\$ 82.62</b>
<b>Cruise Passenger Visits</b>			<b>345,745</b>
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 28,566,812</b>

<sup>81</sup> The 2005-2006 cruise year includes the twelve months beginning in May, 2005 and ending in April, 2006.

<sup>82</sup> The average shore excursion expenditure is a weighted average of the onshore and Internet purchases and the portion of the onboard purchases paid to local tour operators.

Per passenger spending estimates were derived from the 1,103 surveys completed by passengers that went ashore during the survey period. As shown in **Table 92**, each passenger cruise party spent an average of \$165.27 in St. Lucia. The average spend per cruise party is the sum of the weighted spending in each of the eleven categories. For example, 33 percent of the survey respondents reported spending an average of \$16.70 at local restaurants and/or bars. Spread over the 1,103 cruise parties that visited St. Lucia, this represents an average of \$5.50 per party. On a per passenger basis, the average total expenditure was \$82.62. This represents the sum of per party expenditures, \$165.27, divided by the average size of a cruise party in St. Lucia, 2.0 passengers.

For the entire 2005-2006 cruise year, the estimated 345,745 cruise passengers who visited St. Lucia spent a total of **\$28.6 million** (\$US).

Per crew spending estimates were derived from the 168 surveys completed by crew members during the survey period. As shown in **Table 93**, each crew member spent an average of \$31.01 in St. Lucia. The average spend per crew member is the sum of the weighted spending in each of the eleven categories. For example, 48 percent of the survey respondents reported spending an average of \$26.60 for food and beverages. Spread over the 168 crew members that visited St. Lucia, this represents an average of \$12.83 per crew member.

For the entire 2005-2006 cruise year, the estimated 76,281 crew who visited St. Lucia spent an estimated total of **\$2.4 million** (\$US).

**Table 93 – Estimated Crew Spending (\$US) in St. Lucia, 2005-2006 Cruise Year**

Purchase Categories	Average Spend per Crew	Share of All Onshore Visits	Average Spend per Crew
F&B at Restaurants & Bars	\$ 26.60	48%	\$ 12.83
Taxis/Ground Transportation	\$ 13.10	21%	\$ 2.81
Clothing	\$ 35.10	9%	\$ 3.13
Local Crafts & Souvenirs	\$ 69.70	9%	\$ 6.22
Other Purchases	\$ 19.80	8%	\$ 1.53
Telephone & Internet	\$ 14.60	7%	\$ 1.04
Watches & Jewelry	\$ 69.70	4%	\$ 2.49
Shore Excursions	\$ 26.70	2%	\$ 0.48
Electronics	\$ 12.00	1%	\$ 0.14
Entertainment/Night Clubs	\$ 39.00	1%	\$ 0.23
Retail Purchases of Liquor	\$ 18.00	1%	\$ 0.11
<b>Total Spend per Crew</b>			<b>\$ 31.01</b>
<b>Cruise Passenger Visits</b>			76,281
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 2,365,671</b>

Cruise lines made payments to local businesses for a variety of goods and services. Net payments to local vendors for shore excursions have been included with passenger expenditures. However, cruise lines made other local expenditures, including payments for port fees and taxes, navigation services, utilities and other supplies. Based upon data provided by the FCCA member cruise lines, we estimated that all cruise lines spent **\$3.8 million** (\$US) in St. Lucia during the 2005-2006 cruise year. Essentially all of these expenditures were payments for port fees and taxes and navigation services.

## Economic Contribution of Cruise Tourism Expenditures

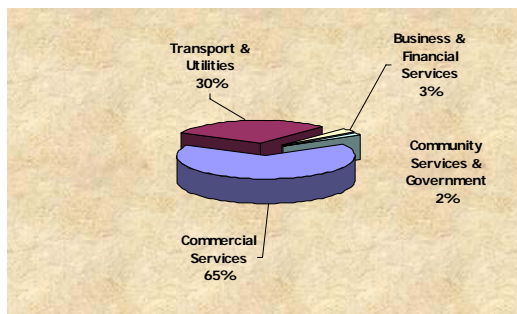
As noted in the **Data and Methods** section of the full report, a set of economic impact models were developed for each destination to produce estimates of the economic contribution of cruise tourism. Data for these models were collected from a broad range of local, regional and international sources. The impact models were designed to reflect the economic structure of each destination, including the industrial composition of Gross Domestic Product (GDP), the wage share of GDP by industry and average employee wages by industry.

**Table 94 – Total Economic Contribution of Cruise Tourism in St. Lucia 2005-2006 Cruise Year**

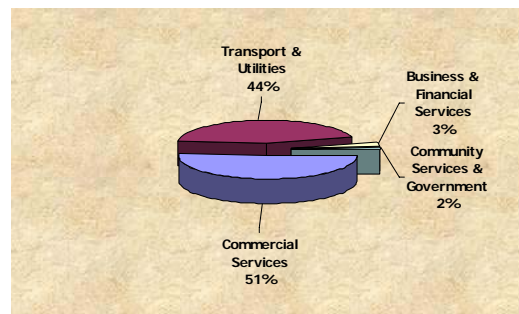
	Employment	Wage Income (\$US Millions)
Direct Economic Contribution	685	\$4.5
Total Economic Contribution	1,035	\$6.7

As shown in **Table 94**, the \$34.8 million in total cruise tourism expenditures generated direct employment of 685 residents of St. Lucia paying \$4.5 million in annual wages. Adding the indirect contribution that results from the spending of those local businesses that are the direct recipients of passenger, crew and cruise line expenditures, the direct cruise tourism expenditures generated a total employment contribution of 1,035 jobs and \$6.7 million in wage income in St. Lucia during the 2005-2006 cruise year.

**Figure 69 – Total Employment Impacts by Sector - St. Lucia**



**Figure 70 – Total Wage Impacts by Sector St. Lucia**



As shown in **Figures 69 and 70**, the total employment and wage impacts of cruise tourism are concentrated in the commercial and transport sectors which account for about 95 percent of the employment and wage impacts.<sup>83</sup> This is not surprising since the direct impacts account for about 65 percent of the total employment impacts and that virtually all of the cruise tourism expenditures are made with businesses in these sectors. Because of the relatively higher wages in the transport sector compared to the other sectors of the economy, the transport sector accounts for 44 percent of the wage impacts but only 30 percent of the employment impacts. The remainder of the total employment and wage impacts was generated by the indirect spending in the other sectors of the economy.

## Passenger Surveys

A total of 1,117 passenger surveys were completed and returned for tabulation. **Table 95** shows the major attributes of passenger visits in St. Lucia as derived from the passenger surveys.

- Of the passengers who went ashore, 72 percent made at least one purchase while ashore.
- Seventy-five (75) percent of the passengers that went ashore purchased a shore excursion. Sixty-six (66) percent purchased their tour through the cruise lines and 34 percent purchased their tour onshore or on the Internet.
- The typical cruise party in St. Lucia consisted of 2.0 passengers.

**Table 95 - Major Attributes of Passenger Surveys – St. Lucia**

	Number	Percent
<b>Total Respondents</b>	1,117	
<b>Number Ashore</b>	1,103	
<b>Respondents Making Onshore Purchases:</b>	789	71.5%
<b>Average Size of Expenditure Party (Persons)</b>	2.0	
<b>Purchased an Onshore Tour</b>	831	75.3%
<b>Purchased Onshore Tour from:</b>		
<b>Cruise Line</b>	546	65.7%
<b>Onshore/Internet</b>	285	34.3%
<b>Toured On Own/Did not Tour</b>	272	

<sup>83</sup> The industry sectors include the following activities:

Manufacturing & Construction: residential and nonresidential construction and all manufacturing  
 Commercial Services: wholesale and retail trade, lodging and eating and drinking establishments  
 Transportation & Utilities: tour operators, port services, telecommunications and water and power utilities  
 Business & Financial Services: banking, insurance, legal, accounting, leasing and other business services  
 Community Services & Government: education, health and social services and government agencies



## Passenger Satisfaction

The passenger survey also asked the passengers to rate their satisfaction with their destination visit along a number of parameters, as shown in **Table 96**. A 10-point scale was used with 10 being the highest score, i.e., extremely satisfied, and 1 being the lowest score, i.e., not at all satisfied. As indicated in the table, cruise passengers were, in general, very satisfied with their cruise call at St. Lucia with a mean score of 7.3 (Very Satisfied) for "Visit Met Expectations".

Among the key findings are the following:

- Passengers felt very safe in St. Lucia with the Safety category receiving an average score of 8.0.
- Other categories with scores above 8.0 (Very Satisfied) were: guided tours and courtesy of local employees.
- Categories with slightly lower scores but still above 7.0 (Very Satisfied) were: initial shoreside welcome, historic sites, beaches, friendliness of residents, and local transportation.
- Categories with average scores between 6.0 and 7.0 (Somewhat Satisfied) were given for: and the overall shopping experience, including, variety of shops and overall prices.
- Passengers were somewhat likely to recommend a resort vacation in St. Lucia to family or friends (6.2) but not too likely to return themselves (4.2).

**Table 96 – Passenger Visit Satisfaction\* - St. Lucia**

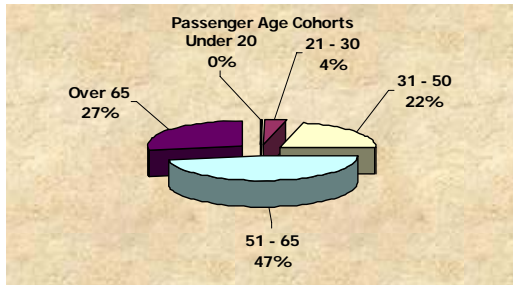
Satisfaction Categories	Mean Score
Initial Shoreside Welcome	7.3
Guided Tour	8.2
Shopping Experience	6.4
Historic Sites/Museums	7.2
Beaches	7.8
Friendliness of Residents	7.8
Courtesy of Employees	8.2
Variety of Shops	6.5
Overall Prices	6.5
Taxis/Local Transportation	7.2
Feeling of Safety Ashore	8.0
Visit Met Expectations	7.3
Likelihood of Recommending Resort Vacation	6.2
Likelihood of Return for Resort Vacation	4.2

\* Scale is 1 to 10 with 10 being the highest score. The mean scores can be interpreted as follows:  
 Extremely Satisfied/Likely: 10-9; Very Satisfied/Likely: 8-7; Somewhat Satisfied/Likely: 6-5;  
 Not Too Satisfied/Likely: 4-3; Not At All Satisfied/Likely: 2-1.

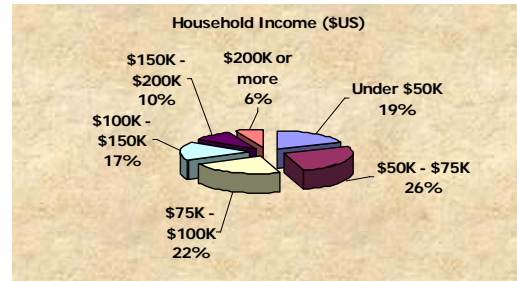
## Passenger Demographics

Residents of the United States and the United Kingdom accounted for 82 percent of the responding passengers. The average age of the respondents was 55 years with 74 percent of the respondents being over 50 years old. St. Lucia passengers had an average household income of \$95,400 with 33 percent having over \$100,000 in household income.

**Figure 71 – Passenger Age St. Lucia**



**Figure 72 – Passenger Household Income St. Lucia**



## St. Maarten

At the core of the analysis of the economic contribution of cruise tourism were a set of passenger and crew surveys conducted by the FCCA member cruise lines.<sup>84</sup> The surveys were conducted onboard the cruise ships during the months of March, April and May of 2006. The survey schedule was designed so that surveys were conducted by all FCCA member cruise lines that called at each destination and that the distribution of passenger and crew surveys would reflect the distribution of passenger and crew arrivals by cruise line at each destination. On any given cruise itinerary, passenger and crew surveys were placed in all passenger cabins and crew quarters following a single destination call. The surveys were completed by the passengers and crew in the privacy of their quarters and returned to a designated office on the cruise ship. Thus, passengers and crew were only surveyed once during a cruise itinerary and for a single destination. On a subsequent itinerary, passengers were surveyed following a call at a different destination.

Passenger and crew surveys were designed to collect data for onshore spending and visit satisfaction by both passengers and crew. While the crew survey was slightly shorter than the passenger survey, both surveys were designed to collect the following information:

- hours spent ashore;
- expenditures by category, including shore tours, food & beverages, clothing, etc.;
- visit satisfaction, including shore tour, safety, prices, shopping, etc.;
- likelihood of recommending and returning for a land-based vacation; and
- demographic characteristics, including country of residence, age group, income, etc.

Combining the expenditure data collected from the passenger and crew surveys with data on expenditures by cruise lines for port fees and services, payments to local tour operators for passenger shore excursions purchased onboard the cruise ships, and other provisions purchased locally by the cruise lines, estimates of total cruise tourism expenditures were developed for each participating destination.

Given the direct spending estimates, the economic contribution of these expenditures, as measured by employment and wage income were then estimated for each destination. This process began with the collection of economic data for each destination from a combination of local, regional and international sources. Utilizing all of these data a set of economic impact models were developed for each destination to estimate the direct and total employment and wage impacts. A more detailed description of these models is provided in the **Data and Methods** section of the full report.

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<sup>84</sup> The FCCA member lines are as follows: Carnival Cruise Lines, Celebrity Cruises, Costa Cruise Lines, Cunard Line, Disney Cruise Line, Holland America Line, MSC Cruises (USA), Inc., Norwegian Cruise Line, Princess Cruises, Regent Seven Seas Cruises, Royal Caribbean International and Windstar Cruises.

## Cruise Tourism Expenditures

Cruise tourism expenditures in destination ports are composed of a broad range of spending including:

- onshore expenditures by passengers which tend to be concentrated in shore excursions and retail purchases of clothing, jewelry and local crafts and souvenirs;
- onshore expenditures by crew which are generally concentrated in purchases of food and beverages, local transportation and retail purchases of clothing and electronics;
- expenditures by cruise lines for port services, such as dockage fees and linesmen, utilities, such as water and power and navigation services; and
- purchases of supplies, such as food and other stores, by the cruise lines from local businesses.

According to data obtained from the St. Maarten Ports Authority, an estimated 1.45 million cruise passengers arrived aboard cruise ships during the 2005-2006 cruise year.<sup>85</sup> Of these, an estimated 1.3 million passengers (90 percent) disembarked and visited St. Maarten. Utilizing additional data provided by the visiting cruise lines, we have estimated that 724,450 crew were aboard the cruise ships and that 40 percent, or 289,780 crew, disembarked and visited St. Maarten. These passenger and crew visits along with additional expenditures by the cruise lines generated a total of **\$246.4 million** (\$US) in cruise tourism expenditures in St. Maarten during the 2005-2006 cruise year. The contribution of expenditures by passengers, crew and cruise lines to this total is discussed below.

**Table 97 – Estimated Passenger Spending (\$US) in St. Maarten, 2005-2006 Cruise Year<sup>86</sup>**

Purchase Categories	Average Spend per Party	Share of All Onshore Visits	Weighted Average Spend per Party
F&B at Restaurants & Bars	\$ 26.20	61%	\$ 16.08
Clothing	\$ 49.50	61%	\$ 30.05
Shore Excursions	\$ 89.79	59%	\$ 53.24
Taxis/Ground Transportation	\$ 22.90	56%	\$ 12.77
Local Crafts & Souvenirs	\$ 33.10	37%	\$ 12.10
Watches & Jewelry	\$ 576.20	33%	\$ 187.63
Other Purchases	\$ 56.50	26%	\$ 14.42
Retail Purchases of Liquor	\$ 40.60	20%	\$ 8.08
Entertainment/Night Clubs	\$ 123.30	4%	\$ 5.31
Electronics	\$ 292.60	3%	\$ 8.40
Telephone & Internet	\$ 15.30	2%	\$ 0.29
<b>Total Spend per Cruise Party</b>			<b>\$ 348.36</b>
<b>Average Size of a Cruise Party</b>			<b>2.4</b>
<b>Total Spend per Cruise Passenger</b>			<b>\$ 145.15</b>
<b>Cruise Passenger Visits</b>			<b>1,304,275</b>
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 189,316,680</b>

<sup>85</sup> The 2005-2006 cruise year includes the twelve months beginning in May, 2005 and ending in April, 2006.

<sup>86</sup> The average shore excursion expenditure is a weighted average of the onshore and Internet purchases and the portion of the onboard purchases paid to local tour operators.

Per passenger spending estimates were derived from the 1,843 surveys completed by passengers that went ashore during the survey period. As shown in **Table 97**, each passenger cruise party spent an average of \$348.36 in St. Maarten. The average spend per cruise party is the sum of the weighted spending in each of the eleven categories. For example, 61 percent of the survey respondents reported spending an average of \$26.20 at local restaurants and/or bars. Spread over the 1,843 cruise parties that visited St. Maarten, this represents an average of \$16.08 per party. On a per passenger basis, the average total expenditure was \$145.15. This represents the sum of per party expenditures, \$348.36, divided by the average size of a cruise party in St. Maarten, 2.4 passengers.

For the entire 2005-2006 cruise year, the estimated 1.3 million cruise passengers who visited St. Maarten spent a total of **\$189.3 million** (\$US).

Per crew spending estimates were derived from the 935 surveys completed by crew members during the survey period. As shown in **Table 98**, each crew member spent an average of \$159.55 in St. Maarten. The average spend per crew member is the sum of the weighted spending in each of the eleven categories. For example, 53 percent of the survey respondents reported spending an average of \$29.80 for food and beverages. Spread over the 935 crew members that visited St. Maarten, this represents an average of \$15.94 per crew member.

For the entire 2005-2006 cruise year, the estimated 289,780 crew who visited St. Maarten spent an estimated total of **\$46.2 million** (\$US).

**Table 98 – Estimated Crew Spending (\$US) in St. Maarten, 2005-2006 Cruise Year**

Purchase Categories	Average Spend per Crew	Share of All Onshore Visits	Average Spend per Crew
F&B at Restaurants & Bars	\$ 29.80	53%	\$ 15.94
Taxis/Ground Transportation	\$ 10.00	47%	\$ 4.65
Clothing	\$ 73.20	21%	\$ 15.34
Electronics	\$ 359.20	18%	\$ 66.08
Other Purchases	\$ 92.30	13%	\$ 12.44
Retail Purchases of Liquor	\$ 51.60	13%	\$ 6.68
Watches & Jewelry	\$ 246.40	10%	\$ 24.24
Entertainment/Night Clubs	\$ 137.50	6%	\$ 7.94
Local Crafts & Souvenirs	\$ 33.90	6%	\$ 1.89
Telephone & Internet	\$ 93.40	4%	\$ 3.90
Shore Excursions	\$ 23.40	2%	\$ 0.45
<b>Total Spend per Crew</b>			<b>\$ 159.55</b>
<b>Cruise Passenger Visits</b>			289,780
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 46,235,484</b>

Cruise lines made payments to local businesses for a variety of goods and services. Net payments to local vendors for shore excursions have been included with passenger expenditures. However, cruise lines made other local expenditures, including payments for port fees and taxes, navigation services, utilities and other supplies. Based upon data provided by the FCCA member cruise lines, we estimated that all cruise lines spent **\$10.9 million** (\$US) in St. Maarten during the 2005-2006 cruise year. Essentially all of these expenditures were payments for port fees and taxes and navigation services.

## Economic Contribution of Cruise Tourism Expenditures

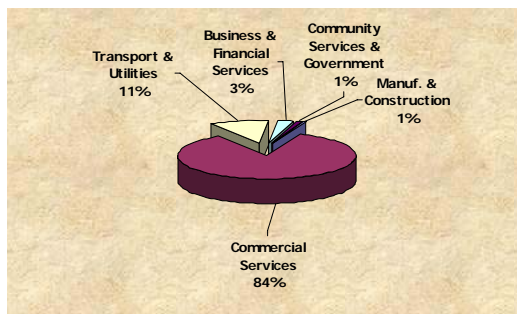
As noted in the **Data and Methods** section of the full report, a set of economic impact models were developed for each destination to produce estimates of the economic contribution of cruise tourism. Data for these models were collected from a broad range of local, regional and international sources. The impact models were designed to reflect the economic structure of each destination, including the industrial composition of Gross Domestic Product (GDP), the wage share of GDP by industry and average employee wages by industry.

**Table 99 – Total Economic Contribution of Cruise Tourism in St. Maarten 2005-2006 Cruise Year**

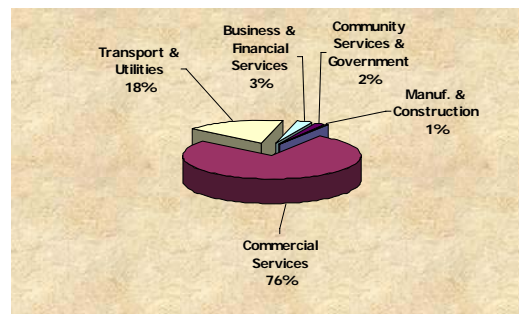
	Employment	Wage Income (\$US Millions)
Direct Economic Contribution	3,210	\$57.0
Total Economic Contribution	5,590	\$99.3

As shown in **Table 99**, the \$246.4 million in total cruise tourism expenditures generated direct employment of 3,210 residents of St. Maarten paying \$57 million in annual wages. Adding the indirect contribution that results from the spending of those local businesses that are the direct recipients of passenger, crew and cruise line expenditures, the direct cruise tourism expenditures generated a total employment contribution of 5,590 jobs and \$99.3 million in wage income in St. Maarten during the 2005-2006 cruise year.

**Figure 73 – Total Employment Impacts by Sector - St. Maarten**



**Figure 74 – Total Wage Impacts by Sector St. Maarten**



As shown in **Figures 73 and 74**, the total employment and wage impacts of cruise tourism are concentrated in the commercial and transport sectors which account for about 95 percent of the employment and wage impacts.<sup>87</sup> This is not surprising since the direct impacts account for about 60 percent of the total employment impacts and that virtually all of the cruise tourism expenditures are made with businesses in these sectors. Because of the relatively lower wages in the commercial sector relative to the other sectors of the St. Maarten economy, the commercial sector accounts for 84 percent of the employment impacts but only 76 percent of the wage impacts. The remainder of the total employment and wage impacts was generated by the indirect spending in the other sectors of the economy.

## Passenger Surveys

A total of 1,871 passenger surveys were completed and returned for tabulation. **Table 100** shows the major attributes of passenger visits in St. Maarten as derived from the passenger surveys.

- Of the passengers who went ashore, 87 percent made at least one purchase while ashore.
- Fifty-nine (59) percent of the passengers that went ashore purchased a shore excursion. Sixty-nine (69) percent purchased their tour through the cruise lines and 31 percent purchased their tour onshore or on the Internet.
- The typical cruise party in St. Maarten consisted of 2.4 passengers.

**Table 100 - Major Attributes of Passenger Surveys – St. Maarten**

	Number	Percent
<b>Total Respondents</b>	1,871	
<b>Number Ashore</b>	1,843	
<b>Respondents Making Onshore Purchases:</b>	1,603	87.0%
<b>Average Size of Expenditure Party (Persons)</b>	2.4	
<b>Purchased an Onshore Tour</b>	1,093	59.3%
<b>Purchased Onshore Tour from:</b>		
<b>Cruise Line</b>	757	69.3%
<b>Onshore/Internet</b>	336	30.7%
<b>Toured On Own/Did not Tour</b>	750	

<sup>87</sup> The industry sectors include the following activities:

Manufacturing & Construction: residential and nonresidential construction and all manufacturing  
 Commercial Services: wholesale and retail trade, lodging and eating and drinking establishments  
 Transportation & Utilities: tour operators, port services, telecommunications and water and power utilities  
 Business & Financial Services: banking, insurance, legal, accounting, leasing and other business services  
 Community Services & Government: education, health and social services and government agencies

## Passenger Satisfaction

The passenger survey also asked the passengers to rate their satisfaction with their destination visit along a number of parameters, as shown in **Table 101**. A 10-point scale was used with 10 being the highest score, i.e., extremely satisfied, and 1 being the lowest score, i.e., not at all satisfied. As indicated in the table, cruise passengers were, in general, very satisfied with their cruise call at St. Maarten with a mean score of 7.8 (Very Satisfied) for "Visit Met Expectations".

Among the key findings are the following:

- Passengers felt very safe in St. Maarten with the Safety category receiving an average score of 8.4.
- Other categories with scores above 8.0 (Very Satisfied) were: guided tours, beaches, courtesy of local employees, and local transportation.
- Categories with slightly lower scores but still above 7.0 (Very Satisfied) were: initial shoreside welcome, the overall shopping experience, including, variety of shops and overall prices, and friendliness of residents.
- Categories with average scores between 6.0 and 7.0 (Somewhat Satisfied) were given for: historic sites.
- Passengers were likely to recommend a resort vacation in St. Maarten to family or friends (6.9) and somewhat likely to return themselves (5.4).

**Table 101 – Passenger Visit Satisfaction\* - St. Maarten**

Satisfaction Categories	Mean Score
Initial Shoreside Welcome	7.7
Guided Tour	8.2
Shopping Experience	7.4
Historic Sites/Museums	6.6
Beaches	8.4
Friendliness of Residents	7.8
Courtesy of Employees	8.2
Variety of Shops	7.3
Overall Prices	7.3
Taxis/Local Transportation	8.0
Feeling of Safety Ashore	8.4
Visit Met Expectations	7.8
Likelihood of Recommending Resort Vacation	6.9
Likelihood of Return for Resort Vacation	5.4

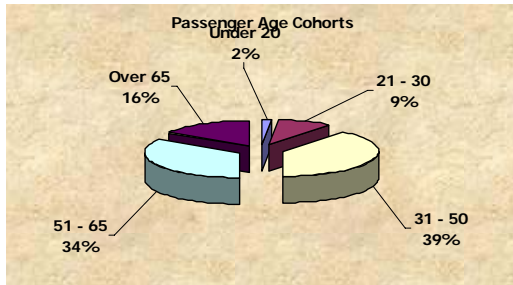
\* Scale is 1 to 10 with 10 being the highest score. The mean scores can be interpreted as follows: Extremely Satisfied/Likely: 10-9; Very Satisfied/Likely: 8-7; Somewhat Satisfied/Likely: 6-5; Not Too Satisfied/Likely: 4-3; Not At All Satisfied/Likely: 2-1.



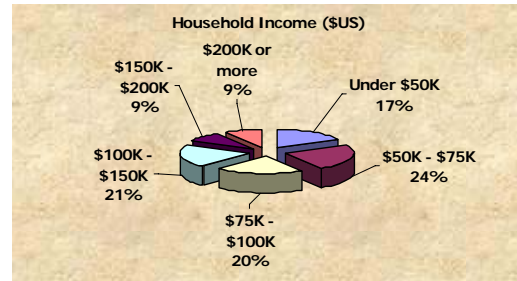
## Passenger Demographics

Residents of the United States and Canada accounted for 96 percent of the responding passengers. The average age of the respondents was 49 years with 50 percent of the respondents being over 50 years old. St. Maarten passengers had an average household income of \$100,400 with 39 percent having over \$100,000 in household income.

**Figure 75 – Passenger Age St. Maarten**



**Figure 76 – Passenger Household Income St. Maarten**



## U.S. Virgin Islands

At the core of the analysis of the economic contribution of cruise tourism were a set of passenger and crew surveys conducted by the FCCA member cruise lines.<sup>88</sup> The surveys were conducted onboard the cruise ships during the months of March, April and May of 2006. The survey schedule was designed so that surveys were conducted by all FCCA member cruise lines that called at each destination and that the distribution of passenger and crew surveys would reflect the distribution of passenger and crew arrivals by cruise line at each destination. On any given cruise itinerary, passenger and crew surveys were placed in all passenger cabins and crew quarters following a single destination call. The surveys were completed by the passengers and crew in the privacy of their quarters and returned to a designated office on the cruise ship. Thus, passengers and crew were only surveyed once during a cruise itinerary and for a single destination. On a subsequent itinerary, passengers were surveyed following a call at a different destination.

Passenger and crew surveys were designed to collect data for onshore spending and visit satisfaction by both passengers and crew. While the crew survey was slightly shorter than the passenger survey, both surveys were designed to collect the following information:

- hours spent ashore;
- expenditures by category, including shore tours, food & beverages, clothing, etc.;
- visit satisfaction, including shore tour, safety, prices, shopping, etc.;
- likelihood of recommending and returning for a land-based vacation; and
- demographic characteristics, including country of residence, age group, income, etc.

Combining the expenditure data collected from the passenger and crew surveys with data on expenditures by cruise lines for port fees and services, payments to local tour operators for passenger shore excursions purchased onboard the cruise ships, and other provisions purchased locally by the cruise lines, estimates of total cruise tourism expenditures were developed for each participating destination.

Given the direct spending estimates, the economic contribution of these expenditures, as measured by employment and wage income were then estimated for each destination. This process began with the collection of economic data for each destination from a combination of local, regional and international sources. Utilizing all of these data a set of economic impact models were developed for each destination to estimate the direct and total employment and wage impacts. A more detailed description of these models is provided in the **Data and Methods** section of the full report.

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<sup>88</sup> The FCCA member lines are as follows: Carnival Cruise Lines, Celebrity Cruises, Costa Cruise Lines, Cunard Line, Disney Cruise Line, Holland America Line, MSC Cruises (USA), Inc., Norwegian Cruise Line, Princess Cruises, Regent Seven Seas Cruises, Royal Caribbean International and Windstar Cruises.

## Cruise Tourism Expenditures

Cruise tourism expenditures in destination ports are composed of a broad range of spending including:

- onshore expenditures by passengers which tend to be concentrated in shore excursions and retail purchases of clothing, jewelry and local crafts and souvenirs;
- onshore expenditures by crew which are generally concentrated in purchases of food and beverages, local transportation and retail purchases of clothing and electronics;
- expenditures by cruise lines for port services, such as dockage fees and linesmen, utilities, such as water and power and navigation services; and
- purchases of supplies, such as food and other stores, by the cruise lines from local businesses.

According to data obtained from the CTO, an estimated 1.8 million cruise passengers arrived aboard cruise ships during the 2005-2006 cruise year.<sup>89</sup> Of these, an estimated 1.63 million passengers (90 percent) disembarked and visited U.S. Virgin Islands. Utilizing additional data provided by the visiting cruise lines, we have estimated that 703,043 crew were aboard the cruise ships and that 50 percent, or 351,522 crew, disembarked and visited the U.S. Virgin Islands. These passenger and crew visits along with additional expenditures by the cruise lines generated a total of **\$361.6 million** (\$US) in cruise tourism expenditures in the U.S. Virgin Islands during the 2005-2006 cruise year. The contribution of expenditures by passengers, crew and cruise lines to this total is discussed below.

**Table 102 – Estimated Passenger Spending (\$US) in the U.S. Virgin Islands, 2005-2006 Cruise Year<sup>90</sup>**

Purchase Categories	Average Spend per Party	Share of All Onshore Visits	Weighted Average Spend per Party
Shore Excursions	\$ 66.83	63%	\$ 42.17
Taxis/Ground Transportation	\$ 24.90	58%	\$ 14.44
Clothing	\$ 50.10	52%	\$ 25.88
F&B at Restaurants & Bars	\$ 24.40	45%	\$ 10.91
Watches & Jewelry	\$ 591.70	38%	\$ 222.51
Other Purchases	\$ 71.10	32%	\$ 22.92
Local Crafts & Souvenirs	\$ 33.90	28%	\$ 9.50
Retail Purchases of Liquor	\$ 60.70	20%	\$ 11.94
Electronics	\$ 295.30	3%	\$ 9.56
Telephone & Internet	\$ 7.60	1%	\$ 0.11
Entertainment/Night Clubs	\$ 85.80	1%	\$ 1.11
<b>Total Spend per Cruise Party</b>			<b>\$ 371.05</b>
<b>Average Size of a Cruise Party</b>			<b>2.1</b>
<b>Total Spend per Cruise Passenger</b>			<b>\$ 176.69</b>
<b>Cruise Passenger Visits</b>			<b>1,631,548</b>
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 288,278,008</b>

<sup>89</sup> The 2005-2006 cruise year includes the twelve months beginning in May, 2005 and ending in April, 2006.

<sup>90</sup> The average shore excursion expenditure is a weighted average of the onshore and Internet purchases and the portion of the onboard purchases paid to local tour operators.

Per passenger spending estimates were derived from the 1,912 surveys completed by passengers that went ashore during the survey period. As shown in **Table 102**, each passenger cruise party spent an average of \$371.05 in the Virgin Islands. The average spend per cruise party is the sum of the weighted spending in each of the eleven categories. For example, 45 percent of the survey respondents reported spending an average of \$24.40 at local restaurants and/or bars. Spread over the 1,912 cruise parties that visited the U.S. Virgin Islands, this represents an average of \$10.91 per party. On a per passenger basis, the average total expenditure was \$176.69. This represents the sum of per party expenditures, \$371.05, divided by the average size of a cruise party in the U.S. Virgin Islands, 2.1 passengers.

For the entire 2005-2006 cruise year, the estimated 1.63 million cruise passengers who visited the U.S. Virgin Islands spent a total of **\$288.3 million** (\$US).

Per crew spending estimates were derived from the 841 surveys completed by crew members during the survey period. As shown in **Table 103**, each crew member spent an average of \$143.83 in the Virgin Islands. The average spend per crew member is the sum of the weighted spending in each of the eleven categories. For example, 56 percent of the survey respondents reported spending an average of \$29.80 for food and beverages. Spread over the 841 crew members that visited the U.S. Virgin Islands, this represents an average of \$16.83 per crew member.

For the entire 2005-2006 cruise year, the estimated 351,522 crew who visited the U.S. Virgin Islands spent an estimated total of **\$50.6 million** (\$US).

**Table 103 – Estimated Crew Spending (\$US) in the U.S. Virgin Islands, 2005-2006 Cruise Year**

Purchase Categories	Average Spend per Crew	Share of All Onshore Visits	Average Spend per Crew
F&B at Restaurants & Bars	\$ 29.80	56%	\$ 16.83
Telephone & Internet	\$ 21.30	47%	\$ 10.00
Taxis/Ground Transportation	\$ 13.60	28%	\$ 3.86
Clothing	\$ 71.90	28%	\$ 19.83
Other Purchases	\$ 70.20	24%	\$ 16.78
Electronics	\$ 230.40	18%	\$ 40.82
Local Crafts & Souvenirs	\$ 32.90	13%	\$ 4.34
Watches & Jewelry	\$ 189.80	11%	\$ 20.99
Retail Purchases of Liquor	\$ 51.10	11%	\$ 5.47
Shore Excursions	\$ 31.50	5%	\$ 1.69
Entertainment/Night Clubs	\$ 128.90	2%	\$ 3.22
<b>Total Spend per Crew</b>			<b>\$ 143.83</b>
<b>Cruise Passenger Visits</b>			351,522
<b>Total Cruise Passenger Expenditures</b>			<b>\$ 50,557,983</b>

Cruise lines made payments to local businesses for a variety of goods and services. Net payments to local vendors for shore excursions have been included with passenger expenditures. However, cruise lines made other local expenditures, including payments for port fees and taxes, navigation services, utilities and other supplies. Based upon data provided by the FCCA member cruise lines, we estimated that all cruise lines spent **\$22.7 million** (\$US) in the Virgin

Islands during the 2005-2006 cruise year. Essentially all of these expenditures were payments for port fees and taxes and navigation services.

### Economic Contribution of Cruise Tourism Expenditures

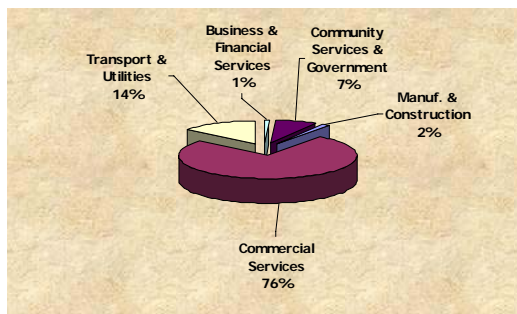
As noted in the **Data and Methods** section of the full report, a set of economic impact models were developed for each destination to produce estimates of the economic contribution of cruise tourism. Data for these models were collected from a broad range of local, regional and international sources. The impact models were designed to reflect the economic structure of each destination, including the industrial composition of Gross Domestic Product (GDP), the wage share of GDP by industry and average employee wages by industry.

**Table 104 – Total Economic Contribution of Cruise Tourism in the U.S. Virgin Islands 2005-2006 Cruise Year**

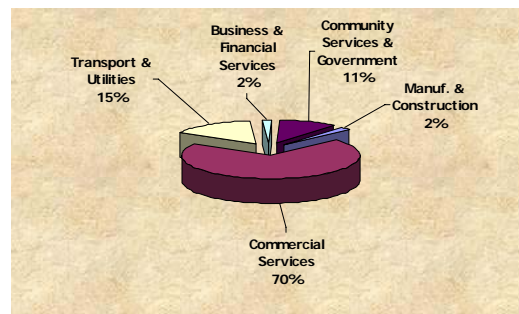
	Employment	Wage Income (\$US Millions)
Direct Economic Contribution	3,525	\$77.7
Total Economic Contribution	6,165	\$135.6

As shown in **Table 104**, the \$361.6 million in total cruise tourism expenditures generated direct employment of 3,525 residents of the U.S. Virgin Islands paying \$77.7 million in annual wages. Adding the indirect contribution that results from the spending of those local businesses that are the direct recipients of passenger, crew and cruise line expenditures, the direct cruise tourism expenditures generated a total employment contribution of 6,165 jobs and \$135.6 million in wage income in the U.S. Virgin Islands during the 2005-2006 cruise year.

**Figure 77 – Total Employment Impacts by Sector - U.S. Virgin Islands**



**Figure 78 – Total Wage Impacts by Sector U.S. Virgin Islands**



As shown in **Figures 77 and 78**, the total employment and wage impacts of cruise tourism are concentrated in the commercial and transport sectors which account for about 85 percent of the employment and wage impacts.<sup>91</sup> This is not surprising since the direct impacts account for about 60 percent of the total employment impacts and that virtually all of the cruise tourism expenditures are made with businesses in these sectors. Because of the relatively lower wages in the commercial sector relative to the other sectors of the U.S. Virgin Islands economy, the commercial sector accounts for 76 percent of the employment impacts but only 70 percent of the wage impacts. The remainder of the total employment and wage impacts was generated by the indirect spending in the other sectors of the economy.

## Passenger Surveys

A total of 1,939 passenger surveys were completed and returned for tabulation. **Table 100** shows the major attributes of passenger visits in the U.S. Virgin Islands as derived from the passenger surveys.

- Of the passengers who went ashore, 81 percent made at least one purchase while ashore.
- Sixty-three (63) percent of the passengers that went ashore purchased a shore excursion. Seventy (70) percent purchased their tour through the cruise lines and 30 percent purchased their tour onshore or on the Internet.
- The typical cruise party in the U.S. Virgin Islands consisted of 2.1 passengers.

**Table 105 - Major Attributes of Passenger Surveys – U.S. Virgin Islands**

	Number	Percent
<b>Total Respondents</b>	1,939	
<b>Number Ashore</b>	1,912	
<b>Respondents Making Onshore Purchases:</b>	1,545	80.8%
<b>Average Size of Expenditure Party (Persons)</b>	2.1	
<b>Purchased an Onshore Tour</b>	1,206	63.1%
<b>Purchased Onshore Tour from:</b>		
<b>Cruise Line</b>	845	70.1%
<b>Onshore/Internet</b>	361	29.9%
<b>Toured On Own/Did not Tour</b>	706	

<sup>91</sup> The industry sectors include the following activities:

Manufacturing & Construction: residential and nonresidential construction and all manufacturing  
 Commercial Services: wholesale and retail trade, lodging and eating and drinking establishments  
 Transportation & Utilities: tour operators, port services, telecommunications and water and power utilities  
 Business & Financial Services: banking, insurance, legal, accounting, leasing and other business services  
 Community Services & Government: education, health and social services and government agencies

## Passenger Satisfaction

The passenger survey also asked the passengers to rate their satisfaction with their destination visit along a number of parameters, as shown in **Table 101**. A 10-point scale was used with 10 being the highest score, i.e., extremely satisfied, and 1 being the lowest score, i.e., not at all satisfied. As indicated in the table, cruise passengers were, in general, very satisfied with their cruise call in the U.S. Virgin Islands with a mean score of 7.4 (Very Satisfied) for “Visit Met Expectations”.

Among the key findings are the following:

- Passengers felt very safe in the U.S. Virgin Islands with the Safety category receiving an average score of 8.4.
- Other categories with scores above 8.0 (Very Satisfied) were: beaches and courtesy of local employees.
- Categories with slightly lower scores but still above 7.0 (Very Satisfied) were: initial shoreside welcome, guided tours, the overall shopping experience, including, variety of shops and overall prices, friendliness of residents, and local transportation.
- Categories with average scores between 6.0 and 7.0 (Somewhat Satisfied) were given for: historic sites.
- Passengers were somewhat likely to recommend a resort vacation in the U.S. Virgin Islands to family or friends (6.5) and to return themselves (4.8).

**Table 106 – Passenger Visit Satisfaction\* - U.S. Virgin Islands**

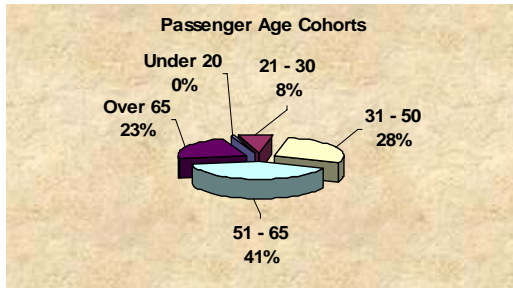
Satisfaction Categories	Mean Score
Initial Shoreside Welcome	7.3
Guided Tour	7.8
Shopping Experience	7.0
Historic Sites/Museums	6.7
Beaches	8.0
Friendliness of Residents	7.8
Courtesy of Employees	8.2
Variety of Shops	7.1
Overall Prices	6.9
Taxis/Local Transportation	7.4
Feeling of Safety Ashore	8.4
Visit Met Expectations	7.4
Likelihood of Recommending Resort Vacation	6.5
Likelihood of Return for Resort Vacation	4.8

\* Scale is 1 to 10 with 10 being the highest score. The mean scores can be interpreted as follows:  
 Extremely Satisfied/Likely: 10-9; Very Satisfied/Likely: 8-7; Somewhat Satisfied/Likely: 6-5;  
 Not Too Satisfied/Likely: 4-3; Not At All Satisfied/Likely: 2-1.

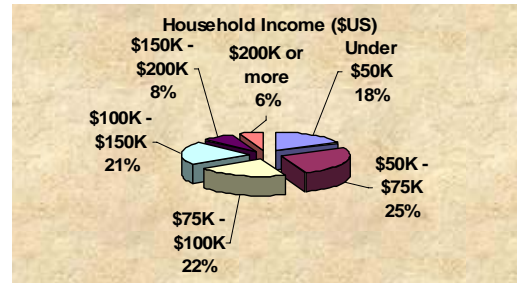
## Passenger Demographics

Residents of the United States and Canada accounted for 96 percent of the responding passengers. The average age of the respondents was 52 years with 64 percent of the respondents being over 50 years old. U.S. Virgin Islands passengers had an average household income of \$95,000 with 35 percent having over \$100,000 in household income.

**Figure 79 – Passenger Age U.S. Virgin Islands**



**Figure 80 – Passenger Household Income U.S. Virgin Islands**







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

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

BREA has provided specialized consulting support, including market research, economic impact studies and demand analyses, to the cruise lines, port service providers and industry associations. Among BREA's recent clients are: Port of Philadelphia and Camden, Tampa Port Authority, Port of San Diego, Royal Caribbean Cruises Ltd., Carnival Corp., P&O Ports of North America, and the International Council of Cruise Lines. Since studies are designed to meet the specific needs of each client, they can incorporate many dimensions of the market and include a variety of ancillary services.

BREA provides the following services:

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

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

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

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