

# Cruise Industry's Economic Impact on the Caribbean

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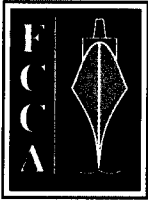
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BREA

Business Research &  
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Dear Partners in Tourism:

The Florida-Caribbean Cruise Association is pleased to present the attached economic impact studies conducted by Business Research & Economic Advisors (BREA) and PricewaterhouseCoopers (PwC). These studies analyze the economic impact of the FCCA Member Lines throughout the Caribbean and are organized into the following major areas:

- Cruise passenger and crew arrivals;
- Cruise passenger and crew spending;
- Economic impact of passenger and crew spending.

Furthermore, these studies attempt to analyze other areas such as:

- Cruise passenger destination satisfaction;
- Economic contribution of the FCCA Member Lines;
- Total Caribbean employment generated by cruise-related expenditures.

The Member Lines of the FCCA believe that economic impact studies are one of the most valuable tools we have in evaluating our progress as an industry, as members of the public and private sectors.

The economic impact of the FCCA Member Lines on the Caribbean included in this report is the culmination of a considerable amount of effort by a large number of people. The findings in this report are more than just numbers and statistics, they are indicators; guides to how well we are doing and where we are falling short.

Highlights of these studies for the 1999/2000 cruise year include:

- FCCA Member Lines' passengers and crew accounted for approximately *\$1.4 billion in direct spending* and *\$1.2 billion in indirect spending*; for a ***total annual economic impact of \$2.6 billion*** throughout the Caribbean from the cruise industry.
- Cruise-related expenditures generated ***60,136 jobs*** throughout the Caribbean. These cruise-generated jobs paid *\$285 million in wage income* to Caribbean residents.
- Average cruise ***passenger spending per port of call was \$103.83*** and average spending per port of call by *crew members was \$72.06*.
- Caribbean cruise ***passenger capacity grew by 21.8%*** in the year 2000.
- The *Caribbean's market share* of the North American cruise capacity was ***45.6%*** in the year 2000.
- Almost ***80%*** of cruise passengers reported a *high degree of satisfaction* with the destinations they visited.
- Many cruise passengers (***51.6%***) expressed an *interest in returning to the ports of call* on a land-based vacation because of their cruise visit.
- The typical cruise ship carrying 2,000 passengers and 900 crew members generates almost ***\$259,000 in passenger and crew expenditures during a port of call visit***.

It is clear that the cruise industry's economic impact on the Caribbean region is significant and continues to grow. The Member Lines of the FCCA urge you to carefully read and analyze this report and see for yourself how the cruise industry is positively impacting the economy of your country.

The Member Lines of the FCCA

## FCCA Member Lines

*Carnival Cruise Lines • Celebrity Cruises • Costa Cruise Lines • Cunard Line Ltd.  
Disney Cruise Line • Holland America Line • Norwegian Cruise Line • Princess Cruises • Regal Cruises  
Royal Caribbean International • Seabourn Cruise Line • Sun Cruises • Topaz International Cruises*

BREA

The Economic Impact of the  
Passenger Cruise Industry  
on the Caribbean

May 2001

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## Introduction

Business Research and Economic Advisors (BREA) was engaged by the Florida-Caribbean Cruise Association (FCCA) to develop a full-year (twelve months) estimate of spending and its economic impact generated by the cruise passengers and cruise ship crew throughout the Caribbean. To accomplish this FCCA provided BREA with a report prepared by PricewaterhouseCoopers (PwC).<sup>1</sup> The PwC report provided passenger and crew spending for each of ten Caribbean destinations<sup>2</sup> during the three-month period of January through March of 2000.<sup>3</sup> PwC also presented estimates of the economic impact, as measured by employment and wage income, for each destination during the three-month period.

Following discussions with FCCA it was agreed that BREA would utilize the PwC three-month passenger and crew spending rates for both high and low season passenger and crew arrivals in the ten destinations.<sup>4</sup> The ten destinations analyzed by PwC account for about 75 percent of all cruise passenger and crew arrivals in the Caribbean. Spending for the remaining Caribbean passenger and crew arrivals was estimated from the average per passenger and per crew spending estimates for the ten destinations (combined) analyzed by PwC.

## Cruise Passenger Arrivals

Cruise ships are deployed in the Caribbean throughout the year. Over the 12-month period between July 1999 and June 2000 more than 13.1 million cruise passengers visited destinations throughout the Caribbean.<sup>5</sup> In addition to passenger visits, crewmembers of the cruise ships will also disembark at Caribbean destinations and purchase goods and services. Crew arrivals were estimated to total 3.3 million visits throughout the Caribbean during the 1999/2000 cruise year.<sup>6</sup>

Tourism throughout the Caribbean is highly, but not uniformly, seasonal. This reflects the attractiveness of the region to European and North American tourists during the coldest months on those continents. **Figure 1** clearly shows that the period from November through April is the preferred period for cruising to the Caribbean.

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<sup>1</sup> *Economic Contribution of the FCCA Member Cruise Lines to the Caribbean and Florida*, PricewaterhouseCoopers, 2001.

<sup>2</sup> These destinations were Antigua, Aruba, Bahamas, Barbados, Cayman Islands, Cozumel, Jamaica, Puerto Rico, St. Kitts and Nevis and the U.S. Virgin Islands.

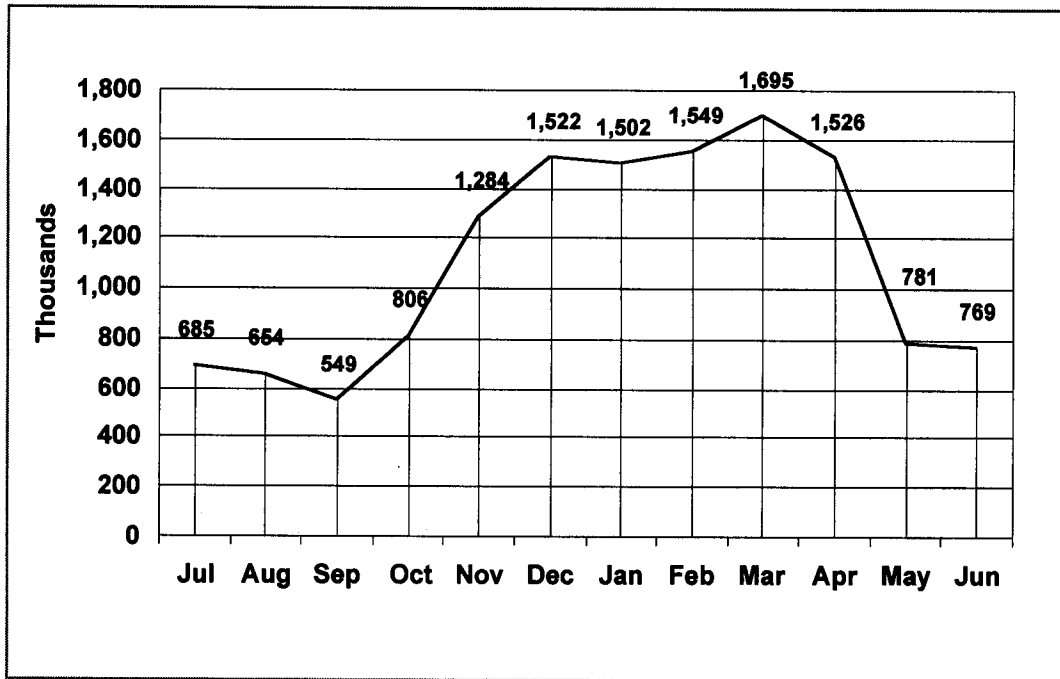
<sup>3</sup> It should also be noted that the PwC spending estimates were limited to passengers on FCCA member cruise ships. Caribbean cruise ship capacity estimates suggest that FCCA Member Lines account for about 90 percent of the cruise passenger capacity in the Caribbean. BREA assumed that spending by passengers on non-FCCA cruise ships mirrored the passenger spending reported by PwC.

<sup>4</sup> BREA attempted to collect Caribbean cruise passenger spending for both the high and low season. Such data for cruise passengers was only found for the U.S. Virgin Islands. High and low season spending was available for hotel tourists for three destinations, Aruba, Jamaica and St. Kitts. Due to the lack of reliable high and low season spending data for cruise passengers and the numerous assumptions that would be required to use the limited data that were available, it was decided that using the PwC data was the most straightforward and reasonable approach to follow.

<sup>5</sup> Based on monthly data published by the Caribbean Tourism Organization (CTO). For the purposes of this report the Caribbean includes the following island nations: Antigua, Aruba, Barbados, Bahamas, Belize, Bonaire, British Virgin Islands, Cayman Islands, Cozumel, Curacao, Dominica, Grenada, Guadeloupe, Haiti, Jamaica, Martinique, Montserrat, Puerto Rico, St. Kitts, St. Lucia, St. Maarten, St. Vincent & Grenadines, Trinidad and the U.S. Virgin Islands.

<sup>6</sup> As defined for this report the 1999/2000 cruise year includes the 12-month period from July 1999 through June 2000

**Figure 1 - Caribbean Cruise Arrivals by Month – July 1999 through June 2000**



Source: Caribbean Tourist Organization and Local Tourist Boards and Port Authorities

The FCCA Member Lines are the major source of the Caribbean passenger capacity, accounting for 90 percent of the Caribbean passenger capacity. As shown in **Table 1**, the cruise ships of the FCCA Member Lines deployed in the Caribbean during 2000 had a combined passenger capacity of 4.4 million. Not only do these cruise lines carry the vast majority of the cruise passengers that visit the Caribbean, they are expanding their capacity as well. Combined, Royal Caribbean and Celebrity Cruise Lines increased their Caribbean capacity by more than 285,000 passengers in 2000 while Carnival Cruise Lines increased its passenger capacity by more than 185,000. In percentage terms, Holland America had the highest growth rate of 55.9 percent in 2000. Combined, the FCCA Member Lines increased their Caribbean passenger capacity by 25 percent in 2000 while non-FCCA lines cut their capacity by 1 percent.

**Table 1 – Caribbean Passenger Capacity**

	Passenger Capacity		Percent Change
	1999	2000	
Carnival Cruise Line	1,293,000	1,480,246	14.5%
Royal Caribbean/Celebrity Cruise Lines	971,000	1,257,630	29.5%
Holland America	134,000	208,904	55.9%
Princess	214,000	259,370	21.2%
Norwegian	279,000	365,856	31.1%
Disney	249,000	332,500	33.5%
Other - FCCA	390,000	503,750	29.2%
Non-FCCA	481,000	476,095	-1.0%
<b>Total</b>	<b>4,011,000</b>	<b>4,884,351</b>	<b>21.8%</b>

Source: Cruise Industry News Annual 2000 and PricewaterhouseCoopers

## Passenger and Crew Spending

During the 1999/2000 cruise year, cruise-related expenditures in the Caribbean totaled \$2.6 billion (see Table 2).<sup>7</sup> These expenditures include the direct spending by passengers and cruise line employees as well as expenditures by the chain of suppliers to this direct spending. Cruise-related expenditures during the 1999/2000 cruise year were 13.3 percent higher than similar expenditures reported for 1995 and 41.2 percent higher than 1992 expenditures

**Table 2 – Direct and Indirect Expenditures Associated with the Passenger Cruise Industry in the Caribbean - 1992, 1995 and 2000 – Millions of US\$**

	2000	1995	1992	Percent Change	
				2000 - 1995	2000 - 1992
Total Caribbean	\$ 2,617	\$ 2,310	\$ 1,854	13.3%	41.2%
Passengers	\$ 2,241	\$ 2,059	\$ 1,681	8.8%	33.3%
Crew	\$ 376	\$ 251	\$ 173	49.9%	117.5%

Source: Business Research & Economic Advisors and Pricewaterhouse LLP

Direct passenger and crew spending throughout the Caribbean was estimated from the PwC report as discussed above. This direct passenger and crew spending total \$1.4 billion during the 1999/2000 cruise year. Passengers purchased a variety of goods and services at businesses located at and near each port-of-call. Passenger and crew purchases included the following goods and services:

<sup>7</sup> The data for 1995 and 1992 were obtained from *The Economic Impact of the Passenger Cruise Industry on the Caribbean, 1995*, prepared by Pricewaterhouse LLP, 1996.

- locally produced gifts and craft goods;
- food and beverages;
- entertainment, including casino gambling;
- sightseeing and excursions;
- taxis and other local transit; and
- a variety of duty-free goods.

Indirect spending totaled \$1.2 billion during the 1999/2000 cruise year. Indirect spending includes the spending by Caribbean-based businesses required to bring the goods purchased by the cruise passengers and crew to market. It also includes the spending by their employees on consumer goods and services produced in the Caribbean. These include expenditures for transportation and warehousing, utilities and communications, other business expenses and a variety of consumer goods. Indirect spending in the Caribbean was also estimated from the analysis presented by PwC.

## ***Economic Impact of Passenger and Crew Spending***

The purchases made by passengers and crew while visiting the Caribbean island destinations directly create employment and compensation for local (Caribbean) residents at the businesses producing and selling the goods and services. This local employment and associated compensation represent the **direct economic impact** of the passenger and crew spending. Subsequently, these local businesses and their employees spend a portion of their respective revenues and wages on goods and services from other sectors of the economy, generating additional employment and income. This indirect spending then induces further spending by the suppliers to the facilities and their employees. The resulting local employment and compensation represent the **indirect economic impact** of the passenger and crew spending.

Input-output models quantify this continual process and form the basis for input-output analysis, a form of economic impact analysis that is widely used to measure the economic impact of specific projects and industries such as tourism. The economic impacts presented in this summary are based upon the implicit multipliers embedded in the Caribbean analysis prepared by PricewaterhouseCoopers for the FCCA.<sup>8</sup> The input-output models that form the basis of the multipliers reflect the types and proportions of inputs that must be purchased by each sector in the economy to produce one unit of output. Thus an increase in final demand for one sector's output will cause the demand for other sectors' output to increase. Meanwhile this increased economic activity will generate additional income for households and induce additional demand for final output.

As shown in **Table 3**, the \$2.6 billion in cruise-related expenditures generated 60,136 jobs throughout the Caribbean during the 1999/2000 cruise year. The 60,136 Caribbean jobs generated by cruise-related expenditures is a 25 percent increase over the number of jobs created in 1995 and a 69 percent increase over the 1992 jobs. Approximately 56 percent of the Caribbean jobs were generated as a result of the \$1.4 billion in direct purchases of goods and services throughout the Caribbean by cruise passengers and passenger ship crewmembers.

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<sup>8</sup> *Economic Contribution of the FCCA Member Cruise Lines to the Caribbean and Florida*, PricewaterhouseCoopers, 2001.

To bring these goods to the market 26,169 indirect jobs were also generated. These jobs included employment in manufacturing, warehousing, transportation, construction and other industries throughout the Caribbean.

In aggregate, the 60,136 cruise-generated jobs paid \$285 million in wage income for Caribbean residents during the 1999/2000 cruise year. Again, these figures include both direct and indirect impacts.

**Table 3– Total Caribbean Employment Generated by Cruise-related Expenditures**

	<u>2000</u>	<u>1995</u>	<u>1992</u>	Percent Change	
				<u>2000 - 1995</u>	<u>2000 - 1992</u>
Total Caribbean	60,136	48,099	35,582	25.0%	69.0%
Direct	33,967	26,389	21,167	28.7%	60.5%
Indirect	26,169	21,710	17,415	20.5%	50.3%

*Source: Business Research & Economic Advisors and Pricewaterhouse LLP*

Thus, the cruise industry was a major source of employment and income growth throughout the Caribbean during the 1999/2000 cruise year. Given the industry's plan to add new ships and itineraries throughout the Caribbean, the economic impact of the cruise industry is sure to increase as well.



