

THE LOCAL AND REGIONAL ECONOMIC IMPACTS OF CRUISE SERVICE AT JAXPORT



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ECONOMIC IMPACTS OF CRUISE SERVICE AT JAXPORT

In 2019, 76 cruise vessel calls were recorded at JAXPORT, carrying nearly 390,000 passengers. It is important to note that these cruise vessel calls are by the homeported vessel – Carnival Ecstasy – as compared to in-transit calls. The key difference between an in-transit call and a homeport call is the fact that a vessel homeporting will take on passengers and supplies at JAXPORT, while a vessel making an intermediate in-transit call typically does not take on or discharge new passengers and neither does the vessel take on supplies from local chandlers and caterers, as well as use local services such as advertising, maintenance and repair, linen services, etc. Hence, a call by a homeported vessel will generate a greater economic impact than an in-transit call.

To measure the economic impact of the cruise service, Martin Associates developed a cruise impact model for JAXPORT. The model can be used to test the sensitivity of the impacts to changes in the percent of passengers flying into the Jacksonville airport versus the percent of passengers driving to the Port, the share of passengers staying in hotels prior to and after the cruise, the local expenditures by passengers while in hotels either before or after the cruise, and the local purchases by the cruise lines for food, liquor, and other supplies and services. The impact of changes in the mix of the size of vessels and the number of cruises by size of vessel and itinerary can also be evaluated using the model, if needed.

1. ECONOMIC IMPACT STRUCTURE

Cruise service related to the home porting of a vessel contributes to the local and regional economies by providing employment and income to individuals, tax revenues to local and state governments, and revenue to businesses engaged in providing operational services and supplies to the vessels and passengers. The flow of cruise industry-generated economic impacts throughout an economy creates four separate and non-additive types of impacts. These four types of impacts are:

- ***Employment Impact*** – represents the number of full-time equivalent jobs generated by cruise activity at JAXPORT. This consists of jobs directly generated by the homeporting of cruise vessels as well as induced jobs, or jobs created in the Jacksonville area due to the purchase of goods and services by those individuals directly dependent upon cruise activity.
- ***Income Impact*** - the level of earnings associated with the jobs created by cruise activity, and adjusted to reflect re-spending throughout the economy.
- ***Revenue Impact*** - the sales generated by firms engaged in supplying services and materials to the vessels while in port, as well as firms in the Jacksonville area visitor industry that supply services to cruise passengers staying in hotels before and after the cruise. The value of the cruise ticket is not included as a revenue impact.

- ***Tax Impacts*** – includes the state and local tax revenues generated by cruise activity. These are taxes paid by individuals directly dependent upon the cruise activity.

The methodology used to estimate these impacts is described in the following section.

2. ECONOMIC IMPACT OF HOMEPORT CALLS

Homeport activity at JAXPORT affects two sectors of the local and regional economy:

- Maritime Service Sector; and
- Visitor Industry Sector.

Separate impacts are estimated for each of the various economic categories supplying goods and services to the cruise ships and passengers. A discussion of each of the impact categories is provided below.

The typical expenditure profile of a cruise line while in port provides an understanding of the types of firms involved in providing goods and services to the vessel and its passengers. These expenditure categories are:

- **Food and Beverage** - This category includes wholesale food and liquor distributors. It is to be emphasized that in some cases the non-perishable food brought on board at the beginning of a cruise is not necessarily purchased locally, but based on contractual relationships and is trucked in from out of the area. Similarly, in some cases, liquor is purchased from in-bond warehouses, and not from local distributors. Interviews with the cruise operators identified the amount spent locally.
- **Logo Items** - These items are typically purchased under contract and are trucked into the port of embarkation. Therefore, no local impact is estimated.
- **Flowers** - Local wholesale flower distributors supply flowers for each cruise.
- **Public Relations and Advertising** - Contracts are usually developed with local advertising firms to promote the cruise. This is especially the case for the local cruises providing daily cruise services.
- **Parking** – The Port parking management companies provide parking services for the cruise passengers.

- Taxis/buses/rideshare - Local taxis and buses provide transportation between the airport and the ship or between the hotel and the ship for air/sea passengers.
- Security - Security services are hired while the ship is in port.
- Linen services - Contracts are developed with local laundries for linen and laundry services.
- Pilots – State licensed and locally based operators guide the cruise ships into the terminal.
- Tugs - Tug services are required for certain cruise ships to assist in docking and undocking. However, most cruise vessels require minimal, if any, tug assists.
- Stevedoring - Required in loading and unloading baggage and ship stores.
- Linehandling – Securing and unsecuring the vessel to the dock.
- Local and Regional Travel Agencies - Local travel agencies will receive a commission from ticket sales to area residents.
- Waste Disposal - Solid waste and other refuse that cannot be discharged at sea will be disposed by local refuse collectors.
- Bunkers - Fuel will be purchased from local bunkering companies.
- Water - Some potable water purchased locally prior to departure.
- Visitor Industry - In addition to the impacts generated by direct vessel purchases, 30% of cruise passengers stay in hotels either before or after the cruise. These individuals will typically purchase incidental retail items before or after the cruise and eat in local hotel restaurants while in the Jacksonville area. Also, these air/sea passengers will take cabs/buses from the airport to the hotel or ship, as well as taxis/ride-share vehicles between the hotel and the ship and throughout the city. In addition to passengers impacting the local visitor industry, the ship's crew will also impact the local industry. For example, the crew will likely purchase personal incidentals while in port. Also, a portion of the crew could be rotated on each sailing. The new crew may stay in a local hotel upon arrival, while the departing crew may also stay in a hotel prior to leaving the area.

In addition, the passengers arriving via the Jacksonville International Airport also generate impacts on site at the airport, including jobs with airlines (ticket agents, baggage, concessions, taxis, security, etc.). To estimate the impact on the Airport, Martin Associates used average impact ratios

developed from our numerous airport impact studies conducted for such airports as Miami International Airport, Atlanta Hartsfield International Airport, Washington Dulles and Reagan National Airports, Baltimore-Washington International Airport, San Francisco International Airport, and Seattle-Tacoma International Airport.

The economic impact analysis of cruise service at JAXPORT is based on a survey of cruise lines currently serving the Port. Data was also collected from JAXPORT as well as Martin Associates' in-house data bases developed from previous JAXPORT impact analyses.

The interviews of cruise lines focused on typical expenditure profiles of a vessel while in port as well as the percent of crew that are rotated on/off during each sailing. Incidental expenses by crew while in port were also estimated from the interviews as well as in-house data.

Passenger characteristics such as the percent of passengers that are air/sea versus drive-in, the percent of visitor versus local passengers, and the share of passengers spending a pre/post night in Jacksonville and key landside expenses (e.g. hotel, food and retail) were developed from a passenger survey conducted by Tennessee Connections and managed by Martin Associates which entailed a survey of 900 JAXPORT passengers and approximately 200 crew conducted in October and November, 2019.

The induced impacts are based on the expenditure profile of residents in the Jacksonville area, as estimated by the U.S. Bureau of Labor Statistics, "Consumer Expenditure Survey". This survey indicates the distribution of consumer expenditures over key consumption categories for Jacksonville area residents. The consumption categories are:

- Housing;
- Food at Restaurants;
- Food at Home;
- Entertainment;
- Health Care;
- Home Furnishings; and
- Transportation Equipment and Services.

The estimated consumption expenditure generated as a result of the re-spending impact is distributed across these consumption categories. Associated with each consumption category is the relevant retail and wholesale industry. Jobs to sales ratios in each industry are then computed for the Jacksonville area, and induced jobs are estimated for the relevant consumption categories. It is to be emphasized that induced jobs are only estimated at the retail and wholesale level, since these jobs are most likely generated in the Jacksonville area. Further levels of induced jobs are not estimated since it is not possible to defensibly identify geographically where the subsequent rounds of purchasing occur.

The “Consumer Expenditure Survey” does not include information to estimate the job impact with supporting business services, legal, social services, state and local governments, and educational services. To estimate this induced impact, a ratio of state of Florida employment in these key service industries to total state of Florida employment is developed. This ratio is then used with the direct and induced consumption jobs to estimate induced jobs with business/financial services, legal, educational, governmental and other social services.

The indirect impacts are estimated based on the local purchases by the directly dependent firms, combined with indirect job, income and revenue coefficients for the supplying industries in the state of Florida as developed for Martin Associates by the U.S. Bureau of Economic Analysis, Regional Input/Output Modeling System.

The cruise service impact model provides a tool by which the Port can evaluate changes in the types of cruises being offered, the size of vessels deployed, the number of passengers per cruise, and the share of passengers staying overnight in Jacksonville area hotels prior to or after the cruise. The cruise model can also be used to quantify the potential impact of new services, by size of vessel and type of cruise. Finally, the cruise impact model, along with the maritime cargo model, can be used to evaluate the economic impact of a seaport terminal for use as a cruise terminal versus a cargo terminal.

3. CRUISE SERVICE IMPACT MODEL

In order to assess the economic impacts of potential cruise business at JAXPORT, Martin Associates developed a spreadsheet framework, which can be used to assess the impacts of changes in such factors as:

- Number of cruise vessel calls;
- Number of passengers;
- Passenger characteristics:
 - Local expenditures;
 - Local residents versus tourists;
 - Length of pre/post night stay in Jacksonville area;
- Size of crew; and
- Size of vessel.

This model will estimate the impacts of current cruise operations at JAXPORT.

4. JAXPORT CRUISE OPERATIONS 2019

During the 2019 cruise season, 76 cruises called the Port carrying nearly 390,000 total embarking and debarking passengers, or about 194,655 actual individual embarking passengers (not including

transit passengers). The cruise operations at JAXPORT are typically conventional multi-day cruises on the Carnival Ecstasy.

The passenger survey indicated that 75% of the cruise passengers at JAXPORT are visitors to the Jacksonville area, residing more than 150 miles outside of Duval County. From our sample of passengers in October and November, the cruise passengers arrived in Jacksonville from their residences that spanned 40 states, the District of Columbia and 4 international countries. Cruise passengers from Florida and Georgia represented about 42% of the cruise passengers surveyed, with 26% from Florida and 16% from Georgia, followed by the states of North Carolina, South Carolina, Alabama and Tennessee.

5. ECONOMIC IMPACTS OF CRUISE SERVICE AT JAXPORT

The economic impact of the 76 cruise vessel calls in 2019 at JAXPORT is presented in Exhibit 1 and described in the subsequent sections.

Exhibit 1: 2019 Economic Impact of Cruise Operations at JAXPORT

IMPACT CATEGORY	CRUISE	AIRPORT	TOTAL
JOBS			
Direct	352	38	391
Induced	153	15	168
Indirect	<u>175</u>	<u>66</u>	<u>240</u>
TOTAL JOBS	680	119	799
PERSONAL INCOME (\$ Millions)			
Direct	\$10.5	\$0.9	\$11.5
Induced	\$13.4	\$0.9	\$14.3
Indirect	<u>\$5.8</u>	<u>\$2.5</u>	<u>\$8.3</u>
TOTAL PERSONAL INCOME	\$29.7	\$4.4	\$34.0
BUSINESS REVENUE (\$ Millions)	\$80.1	\$54.6	\$134.7
LOCAL PURCHASES (\$ Millions)	\$8.3	\$6.9	\$15.2
STATE & LOCAL TAXES (\$ Millions)	\$2.7	\$0.4	\$3.1

Totals may not add due to rounding

6. JOB IMPACTS

The cruise activity at JAXPORT created 799 total jobs for Jacksonville area residents in 2019. Of these 799 jobs, 391 were direct jobs, 168 induced jobs were supported in the Jacksonville area as the result of the purchases of the 391 direct job holders, while another 240 indirect jobs were supported in local industries that supply services and goods to the tourism industry catering to the cruise passengers as well as to the chandlers and other firms supplying services and goods to the vessels while in Port.

7. PERSONAL INCOME IMPACT

The 391 direct job holders received \$11.5 million of direct wages and salaries, for an annual salary of cruise-related port dependent job of \$29,411. As the result of the purchases made locally with this income, (which supported the 168 induced jobs in the Jacksonville area) an additional \$14.3 million of local income and consumption expenditures were created in the Jacksonville area. The 240 indirectly employed workers were paid \$8.3 million, for a total wage and salary income impact of \$34.0 million, including the consumption impact.

8. BUSINESS REVENUE

Local businesses supplying food, beverages and services to the cruise lines and the services supplied at the Jacksonville International Airport received \$134.7 million of business revenue. In addition, in order to support the services and goods supplied to the cruise lines by these firms, another \$15.2 million of local purchases in the Jacksonville area were made by those firms providing direct services to the cruise lines. These local purchases supported the 240 indirect jobs in the local economy.

9. TAX REVENUE

Finally, as the result of cruise activity at JAXPORT during the 2019 cruise season, \$3.1 million of state and local tax revenue was collected. Exhibit 2 presents the breakdown of taxes by the share of state versus local tax revenues.

Exhibit 2: 2019 Distribution of State and Local Tax Revenue

TAXES (\$ Millions)	
State	\$1.6
Local	\$1.5
Total	\$3.1

Totals may not add due to rounding

10. COMPARISON OF IMPACTS

Martin Associates conducted a similar cruise impact study for JAXPORT in 2009, reflecting the cruise activity in FY2008. In FY2008, 50 vessel calls were recorded at JAXPORT carrying about 74,474 embarking passengers. These cruise activities created 460 direct, induced and indirect jobs, \$23.7 million of personal income impact, \$67.4 million of local business revenue and \$1.8 million of state and local tax revenue was collected.

During the 2019 cruise season, JAXPORT handled 76 vessel calls that carried 194,655 embarking passengers. That is an increase of 155% over the 10 year period in passengers and a 52% increase in sailings. As previously shown, these cruise activities in 2019 created 799 direct, induced and indirect jobs, \$34.0 million of personal income impact, \$134.7 million of local business revenue and \$3.1 million of state and local tax revenue was collected.

This growth in sailings, cruise passengers and economic impacts over the past 10 years shows the type of growth that can occur in the cruise activity at JAXPORT with continued progress and interest in the cruise business.