Exhibit A

Prepared Direct Testimony of Stephen Shafer on Behalf of San Diego Unified Port District

Exhibit 1

Exhibit 1

APPENDIX B:

Economic Impact Analysis of the San Diego Cruise Sector 2015

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ECONOMIC IMPACT ANALYSIS OF THE SAN DIEGO CRUISE SECTOR 2015



Prepared for

San Diego Unified Port District

June 2016

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EXECUTIVE SUMMARY

Business Research and Economic Advisors (BREA) was engaged by the San Diego Unified Port District (the Port) to conduct an analysis of cruise-related spending and its subsequent impact on the economy of the San Diego metropolitan area.¹ These economic benefits arise from three principal sources:

- > onshore spending by cruise passengers and crew for goods and services associated with their cruise, including local transportation and tours and the and pre- and post-cruise vacation spending;
- > expenditures by the cruise lines for goods and services necessary for cruise operations, both local and global, including food and beverages, hotel supplies, and equipment; and
- > spending by the cruise lines for port services at the Port of San Diego.

To achieve the project objectives, the Port provided data collected by the San Diego Tourism Authority and CIC Research, Inc. through surveys of San Diego visitors, including cruise passengers during 2013.² These included data on cruise passenger spending³, demographics and other attributes of cruise passenger visits. In addition, BREA utilized data on cruise-related expenditures specific to San Diego that are collected annually from the cruise lines.

This summary highlights the important findings for three principal areas of research:

- Economic Impacts,
- > Passenger, Crew and Cruise Line Expenditures, and
- Cruise Passenger Demographic Characteristics.

Economic Impacts

During calendar year 2015, the 77 cruise ship calls at the Port of San Diego generated significant employment, income, and other economic benefits throughout the San Diego metropolitan area. As shown in **Ta-ble ES-1**, the major economic impacts of the San Diego cruise sector during 2015 were as follows.

- ➤ Including the indirect economic impacts, the spending of the cruise lines and their passengers and crew was responsible for the generation of \$82.07 million in final sales or output among San Diego businesses. This, in turn, generated 652 full-time equivalent (FTE) jobs in the San Diego MSA paying a total of \$35.93 million in employee earnings⁴.
- > The San Diego cruises generated \$46.83 million in direct spending by the cruise sector. These expenditures, in turn, generated 333 direct jobs paying \$20.44 million in employee compensation.

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¹ This includes all of San Diego county and the official title of the area is the San Diego-Carlsbad, CA Metropolitan Statistical Area (MSA).

² <u>Visitors to San Diego – 2013: Profile of Cruise Passengers & Port Tidelands Hotel Guests</u>, San Diego Tourism Authority and CIC Research, Inc., August 19, 2014.

³ The passenger expenditure data for 2013 were adjusted for inflation from 2013 through 2015. Inflation rates specific to the San Diego-Carlsbad, CA MSA and category were utilized.

⁴ Earnings include wages and salaries and benefits. The terms earnings, compensation and employee income are used interchangeably in this report.

- > Cruise passengers and crew directly spent \$26.4 million in expenditures creating more than 150 FTE in the trade, entertainment, lodging and food service sectors. These jobs generated just under \$9 million in earnings.
- > Cruise lines directly spent \$20.47 million for goods and services in the San Diego metropolitan area in support of cruises originating at the Port. This spending created over 175 FTE jobs and generated about \$11.5 million in employee income.
- ➤ On s per call basis, the 77 cruise ship calls at San Diego in 2015 generated \$1.06 million in total output throughout San Diego county. This output, in turn, generated 8.5 annualized FTE jobs paying \$466,623 annualized earnings.

Table ES-1 - Summary of Cruise Industry Economic Impacts in San Diego, 2015

	Final Sales (\$ Millions)	Earnings (\$ Millions)	Employment
Direct Economic Impacts	\$46.83	\$ 13.63	333
Direct Economic Impacts per Call	\$608,168	\$177,013	4.3
Manufacturing	\$ 3.04	\$ 0.64	11
Wholesale & Retail Trade	\$ 17.02	\$ 4.34	75
Transportation & Warehousing	\$ 6.61	\$ 2.16	82
Financial & Business Services	\$ 7.07	\$ 1.79	30
Lodging	\$ 3.27	\$ 1.05	45
Food & Beverage Services	\$ 4.29	\$ 1.18	37
Other Services & Government	\$ 5.54	\$ 2.47	53
Total Economic Impacts	\$ 82.07	\$ 35.93	652
Total Economic Impacts per Call	\$1,065,844	\$466,623	8.5
Natural Resources & Construction	\$ 1.49	\$ 0.50	5
Manufacturing	\$ 3.52	\$ 1.11	13
Wholesale & Retail Trade	\$ 11.30	\$ 4.78	49
Transportation & Warehousing	\$ 12.08	\$ 5.93	150
Financial Services	\$ 6.10	\$ 2.13	22
Business & Professional Services	\$ 26.60	\$ 9.90	132
Lodging	\$ 6.03	\$ 2.91	83
Food & Beverage Services	\$ 3.71	\$ 1.53	32
Other Services & Government	\$ 11.24	\$ 7.15	166
Indirect Economic Impacts	\$ 35.24	\$ 22.30	319
Indirect Economic Impacts per Call	\$457,676	\$289,610	4.2

Passenger, Crew and Cruise Line Expenditures

As shown in **Table ES-2**, during 2015 cruise ships made 77 calls at the Port of San Diego. These ships generated a throughput of nearly 215,000 passengers and over 163,000 passenger and crew onshore visits⁵ throughout the San Diego area. The major characteristics of passenger and crew visits and expenditures were as follows.

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⁵ An onshore visit represents a daytime or overnight visit by a cruise passenger or crew to a San Diego area attraction, restaurant, hotel or other venue. Onshore visit and cruise visitor are used interchangeably in this report.

- > Passengers accounted for 84% of the onshore visits generated by the cruise sector. There were 139,138 passenger visits (embarkations + intransit) and an estimated 26,536 crew visits.
- Twenty percent (20%) of all embarking cruise passengers had a pre- or post-cruise overnight stay at an area hotel. These passengers who stayed overnight in San Diego, either prior to or following their cruise, spent an average of 2.1 nights generating an estimated 15,700 room nights (double occupancy) at San Diego area hotels.
- > During their visits to the San Diego area cruise passengers and crew spent \$26.36 million with area businesses. Expenditures for lodging, dining and entertainment (\$8.1 million) accounted for 31% of the total while general retail expenditures at \$9.55 million accounted for 36% of the total.
- ➤ The average cruise call in San Diego generated just over \$342,000 in passenger and crew onshore expenditures in the metropolitan area.

Table ES-2 - Passenger and Crew Visits and Spending in San Diego, 2015

Passenger & Crew Spending			
Cruise Characteristics			
Cruise Ship Calls	77		
Passenger and Crew Visits	165,664		
Passengers	139,128		
Crew	26,536		
Passenger & Crew Expenditures (\$ Millions)	\$ 26.36		
Lodging	\$ 2.97		
Food & Entertainment	\$ 5.13		
General Retail (Clothing, Jewelry, Souvenirs, etc.)	\$ 9.55		
Other Purchases (Parking, Museums, Local Transit)	\$ 8.70		
Average Expenditure per Cruise	\$342,303		

As shown in **Table ES-3**, the 77 cruises calling at the Port of San Diego also generated significant expenditures by the cruise lines in support of these cruises. These included expenditures for food and beverages consumed on the ships by passengers and crew, supplies for hotel operations and equipment utilized on the ships. In addition, San Diego businesses also supported cruises on a national and global basis, such as travel agents, legal firms and entertainment companies. The major characteristics of the expenditures by the cruise lines were as follows.

- Cruise lines spent another \$20.47 million with the Port of San Diego and area businesses in support of their cruises. Fifty-one percent (51%) of the expenditures, \$10.37 million, consisted of expenses for equipment and supplies for hotel, restaurant and bar operations, such as food and beverages, linens, cabin consumables and galley and laundry equipment.
- Cruise lines paid \$5.71 million for port fees, local transportation of passengers and crew and navigation services.
- > The use of legal and other professional services, largely in support of national and global cruise operations, resulted in \$3.16 million in cruise line expenditures.
- Combined, passengers, crew and cruise lines spent \$46.83 million with San Diego area businesses, or just over \$608,000 per cruise.

Table ES-3 - Direct Cruise Sector Expenditures in San Diego, 2015

Cruise Sector Spending	
Category	(\$ Millions)
Equipment and Supplies	\$ 3.04
Food & Beverages	\$ 7.33
Transportation (Port Fees, Port Agents, Transit, etc.)	\$ 5.71
Professional Services (Legal, Architectural, etc.)	\$ 3.16
Other Services	\$ 1.24
Total Cruise Line Spending	\$ 20.47
Passenger & Crew Expenditures (\$ Millions)	\$ 26.36
Total Cruise Sector Expenditures	\$ 46.83
Average Expenditure per Cruise	\$608,168

Cruise Passenger Attributes

Passengers on cruise ships calling at the Port of San Diego came from around the globe and all income groups. The primary demographic characteristics of San Diego cruise passengers surveyed in 2013 are shown in **Table ES-4** and were as follows.

- ➤ Just over half (53.5%) of San Diego cruise passengers were residents of California: Southern California (30.8%) and Northern California (12.7%).
- International passengers (or foreign residents) accounted for 13.2% of San Diego cruise passengers. Of these, 70% were from Canada and 19% were from Mexico.
- As a group, cruise passengers tend to have above average incomes. In the case of San Diego, the median household income of cruise passengers was \$98,700. In fact, nearly 17% of passengers had annual household incomes in excess of \$150,000.
- The median age of San Diego cruise passengers in 2013 was 53. Twenty-four percent (24%) were 65 years of age or older. Only 3.5% were under the age of 25.
- > The average size of a San Diego cruise party was 2.2 passengers which is about average for most cruise ports.
- > Twenty percent (20%) of the surveyed San Diego cruise passengers reported spending one or more nights in San Diego prior to and/or following their cruise. The average length of their stay was 2.1 nights.
- > Only 2.4% of cruise passengers reported traveling with children.
- > Including the cruise and overnight stays, San Diego cruise passengers reported that they spent an average of just over 11 days away from home during their cruise vacation.
- > Twenty-one percent (21%) said that they were first time visitors to San Diego.

Table ES-4 - Major Demographic Characteristics of San Diego Cruise Passengers, 2013

San Diego Cruise Visitors	
Place of Residence	
Southern California	30.8%
Northern California	12.7%
Other Pacific States	7.3%
Mountain States	19.8%
Midwestern States	11.1%
Eastern States	5.1%
Foreign	13.2%
Median Household Income	\$98,700
Less than \$60,000	15.8%
Between \$60,000 and \$100,000	35.3%
Between \$100,000 and \$150,000	32.3%
More than \$150,000	16.6%
Median Age	53
Percent Under 25	3.5%
Percent Between 25 and 44	26.9%
Percent Between 45 and 64	45.4%
Percent 65 and Older	24.2%
Average Size of a Cruise Party	2.2 Passengers
Percent of Cruise Visitors with Overnight Stay	20.4%
Average Length of Overnight Stay	2.1 Nights
Percent Traveling with Children	2.4%
Average Days Away from Home	11.3 Days
First Time Visitors	21.1%

Source: <u>Visitors to San Diego – 2013: Profile of Cruise Passengers & Port Tidelands Hotel Guests</u>, San Diego Tourism Authority and CIC Research, Inc., August 19, 2014.

INTRODUCTION

Cruise calls in San Diego usually fall into one of three categories: 1) roundtrip, 2) one-way, and intransit calls. Roundtrip cruises begin and terminate in San Diego. Thus, passengers embark on their cruise in San Diego and return to San Diego at the conclusion of the cruise. These cruises primarily make calls along the Pacific coast of Mexico. On one-way cruises passengers will begin their cruise in one port and terminate at another port. In the case of San Diego, these cruises usually sail between San Diego and Fort Lauderdale and transit the Panama Canal. These cruises make calls in Mexico, Central America and the Caribbean. So one group of passengers will embark on their cruise in San Diego and disembark in Fort Lauderdale and another group will embark in Fort Lauderdale and disembark in San Diego upon the ship's return. Intransit calls are cruise calls that are made by ships during the course of their itinerary. In the case of San Diego, these cruise calls are usually re-positioning cruises between the Caribbean and Alaska markets or Pacific coastal cruises.

Table 1 - San Diego Cruise Statistics, 2000 -2015

Year	Cruise Calls	Embarks	Disembarks	Intransit	Total Passenger Throughput
2000	101	47,149	47,816	91,487	186,452
2001	108	66,643	59,864	93,515	220,022
2002	119	137,965	137,393	32,201	307,559
2003	110	92,466	85,542	96,561	274,569
2004	187	190,100	171,534	158,101	519,735
2005	220	218,092	217,589	175,343	611,024
2006	182	176,445	173,924	176,517	526,886
2007	238	331,260	337,567	141,568	810,395
2008	255	396,808	408,035	116,517	921,360
2009	223	400,604	405,219	36,530	842,353
2010	150	242,742	246,160	16,525	505,427
2011	104	144,327	147,371	23,367	315,065
2012	87	105,187	101,419	62,552	269,158
2013	77	75,056	75,123	53,865	204,044
2014	68	49,381	51,114	69,413	169,908
2015	77	74,729	75,543	64,399	214,671

Source: San Diego Unified Port District

CRUISE ACTIVITY FROM 2000 THROUGH 2015

As shown in **Table 1 and Figure 1**, since 2000 the San Diego cruise sector has experienced periods of rapid expansion and contraction. In fact, the past 15 years can be broken into four distinct periods: i) 2000 - 2003, ii) 2004 - 2006, iii) 2007 - 2009, iv) 2010 - 2014 and v) 2015. From

2000 through 2003, cruise calls were fairly stable averaging about 110 cruise ship calls and a throughput⁶ of 247,150 passengers per year. During this period cruise activity peaked in 2002 driven primarily by the expansion of homeport activity as Royal Caribbean added larger ships and Celebrity began cruising from San Diego for the first time. As shown in Table 1, passenger visits generated by intransit calls accounted for a higher share, about 35%, of passenger throughput than in the other period.

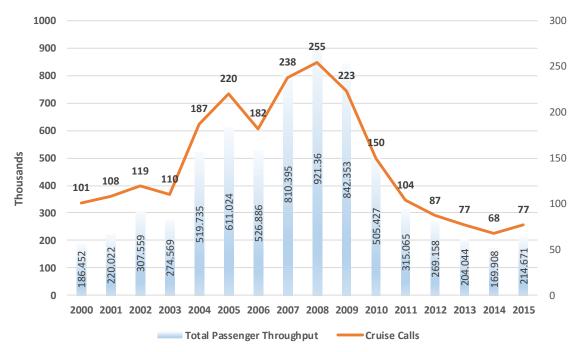


Figure 1 - San Diego Cruise Calls and Passenger Throughput, 2000 - 2011

Source: San Diego Unified Port District

Beginning in 2004, cruise activity increased significantly with cruise calls averaging 215 calls per year during the 2004 - 2006 period. Average annual passenger throughput more than doubled to just over 552,000 passengers. This expansion was driven primarily by the expansion of homeport cruises to Mexico. During this period, the bed day capacity deployed in the Mexico West market increased from 3.4 million bed days in 2003 to 5.7 million in 2005. This increase occurred as the *Carnival Spirit* began sailing from San Diego and Princess Cruises introduced two ships for winter cruising to Mexico in 2005 and 2006. As a result of the increase in homeport activity, the share of intransit passenger visits fell to 30% over the three-year period.

Another spurt of growth occurred in 2007 as once again the industry increased the capacity in the Mexico West market. By 2008, the capacity in this market reached 6.5 million bed days with much of that capacity homeporting in San Diego. During the 2007 - 2009 period, cruise calls av-

⁶ Passenger throughput is the sum of passenger embarkations, passenger debarkations and intransit passengers. Because one way cruises, usually through the Panama Canal, originate and terminate in San Diego, embarks and debarks are not equal to one another.

eraged nearly 240 per year and average annual passenger throughput increased to nearly 860,000. During this period, Carnival introduced a second ship, the *Carnival Elation*, and along with Royal Caribbean's *Monarch of the Sea*⁷s began sailing year-round from San Diego. As indicated in Table 1 and Figure 1, cruise activity peaked in San Diego in 2008 with 255 cruise calls and a throughput of 921,360 passengers. In 2009, embarkations and disembarkations each accounted for about 48% of total passenger throughput, while the share for intransit passengers had fallen to 4%.

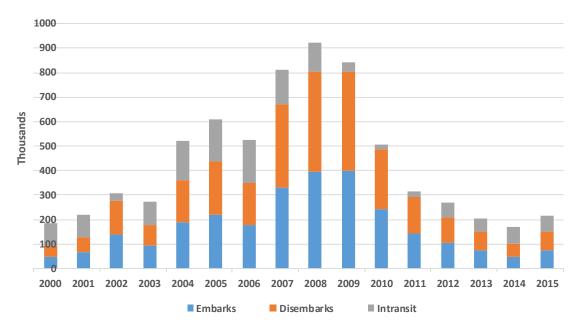


Figure 2 - San Diego Throughput by Type, 2000 - 2015

Source: San Diego Unified Port District

From 2000 through 2009, the port of San Diego experienced a 150% increase in cruise calls and a nearly a 400% increase in passenger throughput. While we have focused on the increase in calls as a driving force for the growth in passenger throughput, it is clearly not the only factor. With passenger throughput increasing at more than twice the rate as calls, the average size of the ships calling at the port must also have increased. In 2000, the average size of a cruise ship calling at San Diego was approximately 1,400 passengers. By 2009, the average ship size in San Diego had increased to 2,000 passengers, an increase of more than 40%. San Diego was not alone in experiencing this type of growth; the entire industry was growing with ports throughout the U.S., Europe and the Caribbean seeing similar rates of growth.

In 2009, San Diego experienced a decline in cruise calls to 223 from 255 in the prior year. Passenger throughput experienced a corresponding decline of 8.6%. This decline accelerated in

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 $^{^{7}}$ It should be noted that at least one Royal Caribbean was sailing from San Diego on a year-round basis throughout the 2000 - 2008 period. In 2009 Royal Caribbean redeployed the *Monarch of the Seas*.

2010 as a result of recessionary impacts and as the cruise industry reduced its deployment in the Mexico West market. As a result, cruise calls in San Diego continued to fall to 68 in 2014, about one-fourth of the 2008 peak. Passenger throughput also fell to 118,794 passengers, 18% of the 2008 peak of 921,360 passengers. Finally, in 2015, San Diego experienced its first increase in cruise calls and passenger throughput since 2008 with cruise calls increasing to 77 and passenger throughput increasing by 26% to 214,671 passengers.

Of the 77 cruise ship calls in San Diego during 2015, approximately 40% were intransit calls. As shown in Table 1, the number of passengers arriving at the port or embarking on cruises totaled 74,729 while the number of passengers that ended their cruise or disembarked was 75,543. There were 64,399 passengers that arrived in San Diego as intransit passengers. These passengers arrived in San Diego and departed on the same day as their cruise continued. Thus, the port processed a total of 214,671 passengers throughout 2015.

The principal cruise lines operating at the port are: Holland America Cruise Line, Princess Cruises and Disney Cruise Line. Combined these three cruise lines accounted for 75% of the cruise calls and 79% of the total passenger throughput at the port. Holland America accounted for the most cruise calls, 29, and the highest volume of passenger throughput, 67,357 passengers. The majority of these cruises were Panama Canal cruises between San Diego and Fort Lauderdale. On these cruises a group of passengers embarked in Fort Lauderdale and then disembarked in San Diego. Then a new group of passengers embarked in San Diego and disembarked in Fort Lauderdale. A few passengers remained on the ship and returned to Fort Lauderdale and are considered intransit passengers.

Table 2 - Cruise Passenger Embarkations at the Port of San Diego

Cruise Line	Cruise Calls	Passenger Throughput	Embarks	Debarks	Intransit
Holland America Cruise Line	29	67,357	31,717	30,287	5,353
Princess Cruises	18	51,087	28	61	50,998
Disney Cruise Line	11	50,816	25,044	25,158	614
All Other Cruise Lines	19	45,411	17,940	20,037	7,434
	77	214,671	74,729	75,543	64,399

Princess Cruises produced the second highest level of cruise activity. During 2015 Princess cruise ships made 18 calls and generated a throughput of 51,087. As the data in Table 1 indicate, the calls made by the Princess ships were intransit calls. Most of these calls are part of southern Pacific coastal cruises that originate and terminate at other California ports. These itineraries generally include calls at Ensenada and ports on the Baja Peninsula.

Disney Cruise line generated 11 cruise calls and a throughput of 50,816 passengers at the port during 2015. As indicated in the table most of these calls were turnaround cruise calls. Prior to and following the Disney Wonder's deployment in the Alaska market, the Disney Wonder offered a number of 2,3, and 5-day cruises to the Baja Peninsula from San Diego.

All other cruise lines, including Royal Caribbean, Celebrity, Regent Seven Seas, Silversea and Crystal among others, made 19 cruise calls at San Diego during 2015 and generated a passenger throughput of 45,411 passengers, most, of which, were generated by turnaround cruises.

PASSENGER DEMOGRAPHICS AND CRUISE ATTRIBUTES

The demographic and spending characteristics of cruise passengers in San Diego were derived from a report prepared for the San Diego Tourism Authority by CIC Research. At the time of this analysis the most recent report was based upon surveys of passengers in 2013. This report indicates that passengers on cruise ships calling at the Port of San Diego came from around the globe and all income groups. The primary demographic characteristics of San Diego cruise passengers surveyed in 2013 are shown in **Table 2** and were as follows.

Table 3 - Major Demographic Characteristics of San Diego Cruise Passengers, 2013

San Diego Cruise Visitors	
Place of Residence	
Southern California	30.8%
Northern California	12.7%
Other Pacific States	7.3%
Mountain States	19.8%
Midwestern States	11.1%
Eastern States	5.1%
Foreign	13.2%
Median Household Income	\$98,700
Less than \$60,000	15.8%
Between \$60,000 and \$100,000	35.3%
Between \$100,000 and \$150,000	32.3%
More than \$150,000	16.6%
Median Age	53
Percent Under 25	3.5%
Percent Between 25 and 44	26.9%
Percent Between 45 and 64	45.4%
Percent 65 and Older	24.2%
Average Size of a Cruise Party	2.2 Passengers
Percent of Cruise Visitors with Overnight Stay	20.4%
Average Length of Overnight Stay	2.1 Nights
Percent Traveling with Children	2.4%
Average Days Away from Home	11.3 Days
First Time Visitors	21.1%

Source: <u>Visitors to San Diego – 2013</u>: <u>Profile of Cruise Passengers & Port Tidelands Hotel Guests</u>, San Diego Tourism Authority and CIC Research, Inc., August 19, 2014.

As shown in **Figure 3**, the report indicated that the majority of the cruise passenger visitors to San Diego⁹ were US residents (87%). The 13% of passengers who were residents of foreign countries were primarily residents of Canada (70%) and Mexico (19%).

⁸ <u>Visitors to San Diego – 2013: Profile of Cruise Passengers & Port Tidelands Hotel Guests</u>, San Diego Tourism Authority and CIC Research, Inc., August 19, 2014.

⁹ A San Diego visitor is not a resident of S.D. County and is not here for daily employment.

In total, surveyed passengers came from 35 states. The majority of US-resident cruise passengers came from California, 44% of all passenger visitors and 51% of US-resident passenger visitors. Of these visitors from California, 70% resided in Southern California and 30% resided in Northern California. Residents of the other western and mountain states accounted for 27% of all cruise passenger visitors and 31% of US-resident visitors.

Other U.S.
16%

Other Western
& Mountain
27%

International
Californian
Californian
13%

Figure 3 - Place of Residence of San Diego Cruise Passengers, 2013

Source: <u>Visitors to San Diego – 2013: Profile of Cruise Passengers & Port Tidelands Hotel Guests</u>, San Diego Tourism Authority and CIC Research, Inc., August 19, 2014.

The median household income of cruise passengers visiting San Diego was \$98,700. As shown in **Figure 4**, nearly half (48.9%) of the interviewed cruise passengers reported having household incomes in excess of \$100,000 while 4.4% reported an income above \$200,000. Only 4.8% reported a household income under \$40,000.



Figure 4 - Household Income of San Diego Cruise Passengers by Income Class, 2013

Source: <u>Visitors to San Diego – 2013: Profile of Cruise Passengers & Port Tidelands Hotel Guests</u>, San Diego Tourism Authority and CIC Research, Inc., August 19, 2014.

The survey respondents reported that the median age of a San Diego cruise passenger in 2013 was 51 years of age. As shown in **Figure 5**, nearly one-fourth (24.2%) of the passengers were 65 years of age or older. Almost half (45.6%) were between the ages of 45 and 64 while only 3.5% were under the age of 25.

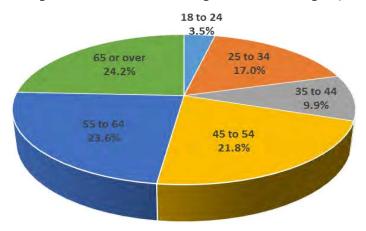


Figure 5 - Age Distribution of San Diego Cruise Passengers, 2013

Source: <u>Visitors to San Diego – 2013: Profile of Cruise Passengers & Port Tidelands Hotel Guests</u>, San Diego Tourism Authority and CIC Research, Inc., August 19, 2014.

The average San Diego cruise party was similar to what you find at most ports. The average size of a San Diego cruise party was 2.2 passengers with the most common size of a cruise party being two passengers (62.5%). Just over eight percent (8.3%) of the San Diego cruise parties consisted of four or more cruise passengers (see **Figure 6**).

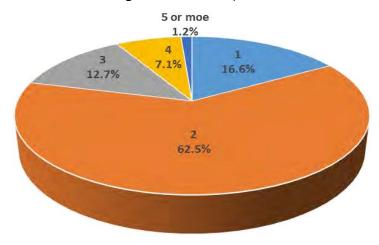


Figure 6 - Size of San Diego Cruise Parties, 2013

Source: <u>Visitors to San Diego – 2013: Profile of Cruise Passengers & Port Tidelands Hotel Guests</u>, San Diego Tourism Authority and CIC Research, Inc., August 19, 2014.

As shown in **Figure 7**, 20.4% of San Diego cruise passengers stated that they stayed overnight in San Diego county prior to their cruise or were planning an overnight stay following their cruise. The average length of stay of the cruise passengers was 2.1 nights. Of those passengers with an overnight stay, 40% spent one night in the county, 33% spent two nights and 27% spent three or more nights.

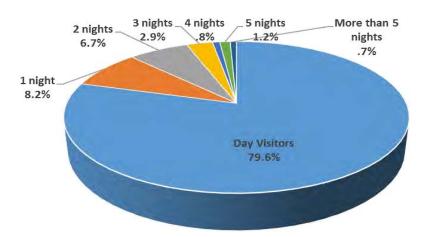


Figure 7 - Cruise Overnight Visits to San Diego, 2013

Source: <u>Visitors to San Diego – 2013</u>: <u>Profile of Cruise Passengers & Port Tidelands Hotel Guests</u>, San Diego Tourism Authority and CIC Research, Inc., August 19, 2014.

San Diego cruise passengers stated that they spent an average of 11.3 days away from home while on their cruise vacation. As shown in **Figure** 8, just over eleven percent (11.3%) spent between 4 and 6 days away from home. Another 28.8% spent 7 nights away from home while 25.3% spent between 8 and 10 nights away from home. Finally, 34.6% of San Diego cruise passengers spent 11 or more nights away from home while on their cruise vacation during 2013.

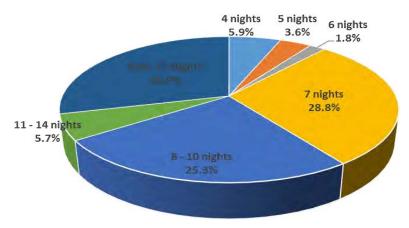


Figure 8 - Total Nights Away from Home by San Diego Cruise Passengers, 2013

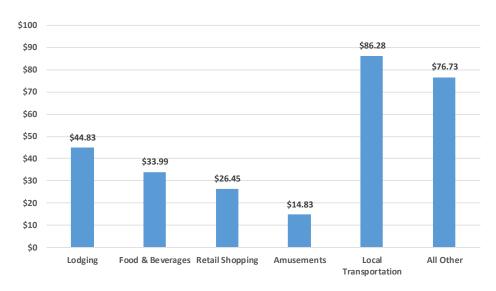
Source: <u>Visitors to San Diego – 2013</u>: <u>Profile of Cruise Passengers & Port Tidelands Hotel Guests</u>, San Diego Tourism Authority and CIC Research, Inc., August 19, 2014.

AVERAGE SPENDING BY CRUISE PASSENGERS AND CREW IN SAN DIEGO

The survey sponsored by the San Diego Tourism Authority discussed in the previous section also collected data on cruise passenger spending in San Diego. The report presented average spending by both embarking and intransit passengers for ten categories during 2013. BREA updated these average expenditure rates utilizing Consumer Price Indices (CPI) for the San Diego-Carlsbad MSA published by the Bureau of Economic Analysis (BEA). Inflation rates for the 2013-2015 period for each category were calculated from these data. The 2013 survey estimates were then adjusted to reflect these inflations rates. The result was that the average total spend of \$279.34 by embarking passengers in 2013 was increased to \$283.11 for 2015, an increase of 1.3%. Similarly, the average spend of intransit passengers was increased from \$71.93 in 2013 to an estimated \$74.38 for 2015, an increase of 3.4%.

As noted above and shown in **Figure 9**, turnaround cruise passengers in San Diego spent an average of \$283.11 during their visit in 2015.¹⁰ These passengers spent an average of \$44.83 for lodging per visit. Another \$33.99 and \$26.45 was spent on average for food and beverages and retail shopping, respectively. Passengers also spent an average of \$14.83 for amusements and recreation, including tours. Turnaround passengers also spent \$86.28, 30% of total expenditures on local transportation, including car rental and parking. Finally, another \$76.73 was spent on other purchases, including, groceries and airport generated expenditures.

Figure 9 – Average per Passenger Spending San Diego by Turnaround Passengers, 2015
Average per Passenger Expenditures = \$283.11



As shown in **Figure 9**, intransit cruise passengers in San Diego spent an average of \$74.38 during their visit. On average these passengers spent an average of \$17.68 and \$22.08 was spent on average for food and beverages and retail shopping, respectively. Passengers also spent an

10

average of \$26.42, 36% of total expenditures, for amusements and recreation, including tours. Intransit passengers also spent an average of \$5.64, on local transportation. Finally, another \$2.55 was spent on other purchases.

Figure 10 – Average per Passenger Spending San Diego by Intransit Passengers, 2015 Average per Passenger Expenditures = \$74.38

Since no surveys of crew were conducted during the 2013 survey period, BREA utilized data on average crew spending at U.S. ports. As shown in **Figure 11**, it was estimated that crew who visited San Diego spent an average of \$122.85 during their onshore visit. Most of the expenditures were for retail goods (\$48.78 per crew member or 40% of the total). Crew also spent an average of \$35.83 for food and beverages, \$35.20 for amusements, including tours and local transportation and \$3.05 for other goods and services.



Figure 11 – Average per Crew Spending San Diego, 2015 Average per Crew Expenditures = \$122.85

ECONOMIC IMPACT OF THE SAN DIEGO CRUISE SECTOR

The objective of the economic impact analysis was to quantify the final sales or output, employment and employee earnings generated by the San Diego cruise sector. The direct and indirect economic impacts of the cruise sector were estimated with the following data:

- actual passenger boardings and visits and cruise ship calls in San Diego during 2015;
- results from the CIC Research 2013 San Diego cruise passenger surveys;
- estimates of direct cruise line spending among businesses in the San Diego-Carlsbad
 MSA collected by BREA from the cruise lines that visited the Port of San Diego;
- publicly available data on employment and wages by industry in San Diego; and
- input/output multipliers specific to the San Diego-Carlsbad MSA.¹¹

The economic impacts of the cruise sector, which includes the cruise lines, their passengers, crew and suppliers arise from two principal sources:

- 1. spending by cruise passengers and crew that visit San Diego as a result of cruises that originate and/or terminate in San Diego; and
- 2. purchases by the cruise lines for goods and services from businesses in the San Diego MSA in support of their San Diego and global cruises.

As shown in **Table 4**, the 77 cruise ship calls at the Port of San Diego generated a throughput of 214,671 passengers. Holland America Cruise Line accounted for 31% of the total. Princess Cruises and Disney Cruise Line each accounted for another 23% of the passenger throughput. In addition to the three major cruise lines that sail to and from San Diego, additional calls were made by cruise lines with fewer calls that carried just over 45,000 passengers, or 21% of the total passenger throughput.

Table 4 - Cruise Passenger Embarkations at the Port of San Diego

Cruise Line	Cruise Calls	Passenger Throughput	Share
Holland America Cruise Line	29	67,357	31.4%
Princess Cruises	18	51,087	23.8%
Disney Cruise Line	11	50,816	23.7%
All Other Cruise Lines	19	45,411	21.1%
	77	214,671	

¹¹ The San Diego - Carlsbad MSA consists solely of San Diego county.

Cruise Passenger and Crew Visits and Spending

Cruise passengers and crew impact the San Diego economy through their expenditures for transportation, lodging, sightseeing, food and beverages and other retail items. This section provides the major impacts of passenger and crew visits and spending as derived from the 2013 survey of San Diego cruise passengers and updated to account for inflation from 2013 through 2015.

Passengers

The CIC Research cruise passenger analysis indicated that 13.5% of San Diego cruise passengers were residents of San Diego. Thus, 86.5% of passenger embarking on cruises from San Diego are defined as San Diego visitors. As a result, we have estimated that there were 64,641 cruise passenger visits (or $.865 \times 74,729$ passenger embarkations).

As shown in previously in Figure 9, San Diego roundtrip cruise passenger visitors spent an average of \$283.11 with San Diego businesses during 2015. In aggregate, all turnaround passengers spent a total \$18.3 million (see **Figure 12**). Cruise visitors spent \$5.1 million (28% of total expenditures) on lodging and food beverages. Retailers of clothing, jewelry and souvenirs benefitted from \$1.71 million in spending by cruise visitors (9% of total expenditures). Expenditures for local transportation, including car rental and parking, totaled \$5.58 million, or 30% of total expenditures of turnaround passengers. The remaining \$5.92 million was spent on a variety of services, including entertainment, amusements and airport generated expenditures.

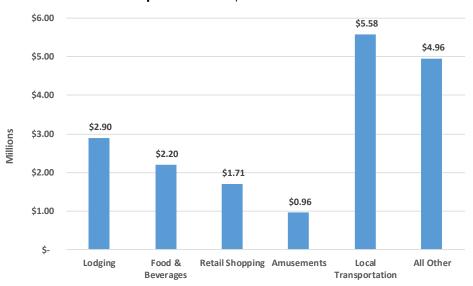


Figure 12 – Total Expenditures in San Diego by Turnaround Cruise Passengers, 2015
Total Expenditures = \$18.31 Million

As shown in previously in Figure 10, San Diego intransit cruise passenger visitors spent an average of \$74.38 with San Diego businesses during 2015. Based upon the average expenditure per intransit cruise passenger we have estimated that the nearly 64,400 intransit cruise passengers that

visited San Diego during 2015 spent a total of \$4.79 million with San Diego businesses. (see **Figure 13**) Cruise visitors spent \$1.14 million (24% of total expenditures) on food beverages. Retailers of clothing, jewelry and souvenirs benefitted from \$1.42 million in spending by cruise visitors (30% of total expenditures). Expenditures for amusements, including tours, totaled \$1.70 million, or 35% of total expenditures of intransit passengers. The remaining \$0.52 million was spent on a variety of services, including local transit and entertainment.

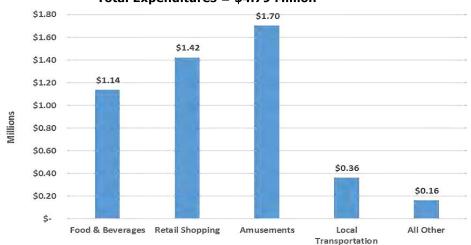


Figure 13 – Total Expenditures in San Diego by Intransit Cruise Passengers, 2015

Total Expenditures = \$4.79 Million

Crew

The 77 cruise ship calls to the Port of San Diego carried an estimated 66,341 crew. Of these, an estimated 40%, or 26,536 crew, visited the San Diego area during 2015. As shown previously in Figure 11, the average member of the crew spent \$122.85 during his or her visit to San Diego. Based upon the average expenditure per crew member, we have estimated that the 26,536 crew visits generated \$3.26 million in spending with San Diego area businesses during 2015 (see **Figure 14**). Crew spent \$0.95 million (29% of total expenditures) on food beverages during their onshore visit. Retailers of clothing, jewelry and souvenirs benefitted from \$1.30 million in spending by cruise visitors (40% of total expenditures). Expenditures for amusements, including tours, totaled \$0.93 million, or 29% of total expenditures of turnaround passengers. The remaining \$0.08 million was spent on a variety of services, including local transit and entertainment.

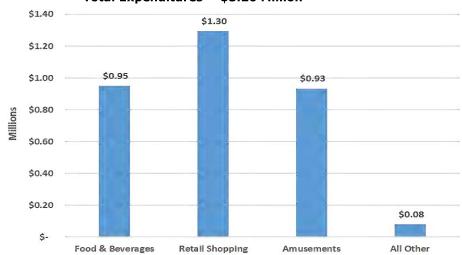


Figure 14 -Expenditures in San Diego by Crew, 2015 Total Expenditures = \$3.26 Million

Cruise Line Spending

BREA maintains an extensive data base on cruise line spending for more than 70 operating and administrative categories by cruise line, state and metropolitan area. BREA's analysis of cruise line expenditures by vendor showed that the cruise lines with ships sailing from San Diego spent an estimated \$20.47 million with businesses in San Diego in direct support of those and global cruises. As shown in **Table 5**, cruise ships visiting the Port of San Diego generated \$16.28 million in "local" expenditures by the cruise lines. Cruise lines spent an additional \$4.19 million in "global" expenditures in support of administrative and global cruise operations with businesses located in San Diego.

As indicated in Table 5, \$8.04 million, 39% of these cruise line expenditures, was paid to businesses in the San Diego MSA for goods and equipment in support of hotel operations, including restaurant and bar operations onboard the cruise ships. These included expenses for food and beverages, linens and bedding supplies, in-cabin personal consumables, cleaning supplies and other housekeeping supplies and equipment. Another \$2.03 million, 10% of the total was spent on supplies and equipment for onboard entertainment and general maintenance equipment. Expenditures for port and navigation fees, passenger transportation and security totaled \$6.23 million, 30% of total cruise line expenditures. Finally, and as noted previously, cruise lines spent \$4.19 million on goods and services that supported general administrative operations and global cruise operations. Of these, legal and professional services (\$1.28 million) and onboard entertainment (\$1.88 million), such as set design, AV equipment and entertainers, accounted for 75% of these national expenditures.

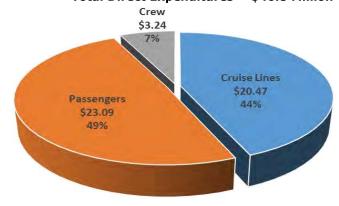
Table 5 - Direct Cruise Sector Expenditures in San Diego, 2015

Cruise Sector Spending	
Category	(\$ Millions)
Hotel Operations & Equipment	\$ 0.71
Restaurant & Bar Operations (incl. F&B)	\$ 7.33
Entertainment Equipment	\$ 0.45
Onboard Maintenance & Equipment	\$ 1.58
Transportation (Port Fees, Passenger Transit, etc.)	\$ 5.71
Security & Inspections	\$ 0.52
Total Cruise Line Spending for Local Calls	\$16.28
Onboard Equipment	\$ 0.73
Legal & Professional Services	\$ 1.28
Travel Agents	\$ 0.30
Onboard Entertainment	\$ 1.88
Total Cruise Line Spending for Global Operations	\$ 4.19
Aggregate Cruise Line Spending	\$20.47

Total Cruise Sector Spending in San Diego

Combining the spending by the cruise lines, passengers and crew, the cruise sector spent \$46.8 million in the San Diego area during 2015 (see **Figure 22**). The cruise lines direct expenditures accounted for 51% of all spending and totaled \$366.5 million for the year. Expenditures in San Diego by embarking passengers accounted for 39% of the total and reached \$284.6 million. Finally, crew spent just over \$73 million, 10% of the total, with San Diego area businesses. Thus, the 721 cruises that called at the Port of San Diego generated an average of just over \$1 million per call in spending with San Diego businesses.

Figure 15 –Total Cruise Sector Expenditures in San Diego, 2015
Total Direct Expenditures = \$46.8 Million



Direct Economic Impact of Cruise Sector Spending

To begin the economic impact analysis, the \$46.8 million in direct expenditures of the cruise sector in San Diego were organized by industry as shown in **Table 6**.¹² As indicated in the table the most heavily impacted sector of the San Diego economy was the wholesale & retail trade sector, accounting for 36% of the direct spending impacts. Wholesalers primarily provided food and beverage products to cruise ships while retailers benefited from the retail spending by passengers and crew for clothing, jewelry and other souvenirs.

Table 6 – Total Cruise Sector Direct Expenditures in San Diego by Industry, 2015

Total Direct Expenditures = \$46.8 Million

Direct Cruise Sector Expenditures				
Sector	(\$ Millions)	Share		
Manufacturing	\$ 3.04	6.5%		
Wholesale & Retail Trade	\$17.02	36.3%		
Transportation & Warehousing	\$ 6.61	14.1%		
Financial & Business Services	\$ 7.06	15.1%		
Lodging	\$ 3.27	7.0%		
Restaurants & Bars	\$ 4.29	9.2%		
Amusements & Recreation	\$ 5.48	11.7%		
Other Services & Government	\$ 0.06	0.1%		
Total Direct Expenditures	\$46.83			

Combined, the lodging and restaurant and bar sectors with \$16.2 million in direct expenditures accounted for 35% of total local spending. These expenditures were primarily generated by passengers with overnight stays in San Diego. The financial and business services sector benefited from \$7.06 million in direct expenditures, 15% of the total. The expenditures were generated by the global expenditures for legal and professional services and local expenditures for auto rentals by cruise passengers. The transportation and warehousing industry accounted for another 14% of local expenditures and totaled \$6.61 million during 2015. This spending included expenditures for port fees, navigation services and passenger and crew ground transportation. The amusement and recreation primarily benefited from passenger and crew spending for shore excursions and other amusement expenditures. This spending totaled \$5.48 million and accounted for nearly 12% of total direct expenditures. Finally, spending with manufacturers for equipment and other services totaled \$4.1 million, nearly 7% of total direct expenditures.

¹² BREA maintains an economic impact model of the cruise industry. This model has been developed over many years by BREA as a result of its research for cruise lines and ports. This model allocates all cruise line, passenger and crew expenditures to specific industries and then develops employment and wage estimates based upon industry-specific productivity, employment and wage data. These data are collected from federal, state and local government agencies. The model was modified for this study to include economic data specific to the San Diego MSA. Industry-specific RIMS II multipliers for the San Diego-Carlsbad MSA, produced by the Bureau of Economic Analysis, were used to estimate the indirect economic impacts by industry for the San Diego area.

As shown in **Table 7**, the \$46.8 million in direct expenditures by the cruise lines and their passengers and crew supported 333 annualized FTE jobs in San Diego paying \$13.6 million in employee earnings during 2015. Spending by cruise lines for onboard supplies was primarily responsible for the 11 FTE jobs and \$0.6 million in income in the Manufacturing sector. Passenger and crew expenditures at area hotels and restaurants were responsible for the 82 FTE jobs and \$2.2 million in compensation in the Lodging and Food & Beverage Services industries. The cruise lines' expenditures for port services and other transportation services generated 82 FTE jobs also paying \$2.2 million in employee earnings in the Transportation & Warehousing sector. Passenger and crew spending for retail goods, as well as, the wholesale distribution of products purchased by the cruise lines supported the 75 Wholesale & Retail Trade FTE jobs and their \$4.3 million in earnings. Finally, the cruise industry expenditures of \$12.6 million for Other Services, including Financial and Business Services, and Government generated 83 FTE jobs and \$4.2 million in employee income.

Table 7 - Direct Economic Impact of the San Diego Cruise Sector - 2015

Sector	Direct Spending (\$ Millions)	Earnings (\$ Millions)	Direct Employment
Manufacturing	\$ 3.04	\$ 0.64	11
Wholesale & Retail Trade	\$17.02	\$ 4.34	75
Transportation & Warehousing	\$ 6.61	\$ 2.16	82
Financial & Business Services	\$ 7.06	\$ 1.79	30
Lodging	\$ 3.27	\$ 1.05	45
Food & Beverage Services	\$ 4.29	\$ 1.18	37
Other Services & Government	\$ 5.54	\$ 2.47	53
Total	\$46.83	\$13.63	333

Total Economic Impact of Cruise Sector Spending

The total economic impact of the San Diego cruise sector is the sum of the direct and indirect impacts. The indirect economic benefits derived from the cruise sector are, in part, the result of the additional spending by the suppliers to the cruise industry. For example, food processors must purchase raw foodstuffs for processing; utility services, such as, electricity and water, to run equipment and process raw materials; transportation services to deliver finished products to the cruise lines or wholesalers; insurance for property and employees and so forth. To estimate the indirect impacts economic multipliers specific to industries in the San Diego MSA were used. These multipliers reflect the industry mix within the three-county metropolitan area and account for the fact that a certain percentage of goods and services purchased by San Diego industries must be imported from outside the area and therefore do not generate economic activity within the metropolitan area. Using food processing as an example again, food processors in San Diego might purchase raw beef from meat packers in the Midwest. In this case the value of the beef is an import and does not generate economic benefits in San Diego.

In addition to the indirect impacts generated by the purchase of business goods and services by cruise industry suppliers, the employees of the suppliers generate indirect economic benefits through their purchases of consumer goods and services, including such goods as autos, food, clothing, furniture, health care and so forth.

The economic impact analysis showed that the San Diego cruise sector generated a total of 652 annualized FTE jobs in the San Diego MSA through the direct and indirect spending by businesses and their employees during 2015. As shown in **Table 8**, these workers produced an estimated \$82.1 million in total final sales or industry output. In addition, the impacted workers received earnings totaling \$35.9 million during the year.

Table 8 - Indirect and Total Economic Impact of the San Diego Cruise Sector - 2015

	Indirect Impacts			Total Impacts		
Sector	Total Final Sales (\$ Mil)	Earnings (\$ Mil)	Total FTE Jobs	Total Final Sales (\$ Millions)	Earnings (\$ Mil)	Total FTE Jobs
Natural Resources & Construction	\$1.49	\$0.50	5	\$1.49	\$0.50	5
Manufacturing	\$0.48	\$0.47	2	\$3.52	\$1.11	13
Wholesale & Retail Trade	\$2.29	\$0.73	14	\$19.31	\$5.07	89
Transportation & Warehousing	\$5.47	\$3.77	68	\$12.08	\$5.93	150
Financial Services	\$6.10	\$2.13	22	\$6.10	\$2.13	22
Business & Professional Services	\$11.52	\$7.81	62	\$18.58	\$9.60	92
Lodging	\$1.76	\$1.56	30	\$5.03	\$2.61	75
Food & Beverage Services	\$0.42	\$0.65	3	\$4.71	\$1.83	40
Other Services & Government	\$5.70	\$4.68	113	\$11.24	\$7.15	166
Total	\$35.24	\$22.30	319	\$82.07	\$35.93	652

The Wholesale & Retail Trade sector within the San Diego MSA benefitted from 13 annualized FTE jobs paying \$1.1 million in employee earnings. Approximately 85% of these impacts are the direct impacts that resulted from purchases of the cruise lines and reflect the exclusion of imported manufactured goods among the indirect impacts.

The Transportation & Warehousing sector added 150 annualized FTE jobs and \$5.9 million in employee income to the total economic impact of the San Diego cruise sector. Approximately half of these impacts are direct. This reflects the importance of the cruise sector's direct impact at the port and the other direct purchases of transportation services for passengers and cruise ship supplies.

The Wholesale & Retail sector benefited from the demand for consumer goods created by the spending of workers in the cruise industry and its suppliers. This sector added 89 annualized FTE jobs paying \$5.1 million in income to the total economic impacts as a result of these consumer expenditures. Approximately 85% of the total impacts are direct impacts reflecting the importance of the direct spending by visiting passengers and crew, especially passengers embarking on cruises from san Diego.

The Business & Professional Services sector contributed 92 annualized FTE jobs and \$9.6 million in earnings to the San Diego economy as a result of the cruise sector's total economic impacts. Nearly two-thirds of these impacts were indirect and resulted from indirect business expenditures for variety of services including consulting services, especially computer consulting, equipment leasing, manpower services, and security and building maintenance services.

The Financial Services sector benefitted from 22 annualized FTE jobs and \$2.1 million in employee compensation as a result of the total economic impacts of the San Diego cruise sector. Virtually all of these impacts were indirect and resulted from business and consumer demand for banking, investment, insurance and housing services, to name a few.

Combined the lodging and food services sectors benefitted from 115 annualized FTE jobs and \$4.4 million in income as a result of the total economic impacts of the San Diego cruise sector. About 75% of these impacts were direct impacts generated by passenger and crew spending.

In conclusion, the 77 cruise ships that called at the Port of San Diego during the 2015 generated an estimated 652 annualized FTE jobs and \$35.9 million in employee earnings in the San Diego MSA. These economic impacts affected many businesses throughout the region. These included transportation companies, hotels, restaurants, retail establishments, food processors and security agencies to name a few.

APPENDIX: IMPACT OF SINGLE SHIP CALLS

The following analysis provides estimates of the direct expenditures and their subsequent aggregate economic impacts of single cruise calls at San Diego. Separate estimates are provided for intransit and turnaround calls. The direct expenditures are based upon the expenditures by cruise lines and their passengers and crew discussed in the body of this report. These aggregate annual expenditures are allocated to a single cruise ship call based upon the nature of the call and the average size of the ship as defined by passenger and crew capacity. The "global" cruise line expenditures of \$4.19 million are excluded from this analysis since they are not directly related to cruise calls in san Diego.

Intransit Call

Based upon data provided by the port on ship calls in San Diego during 2015, BREA has estimated that average intransit call is made by a cruise ship with 2,500 passengers and a crew of 1,078 members. Passenger and crew expenditures are made by those passengers and crew that disembark and visit San Diego. These visitation rates, based upon data maintained by BREA for U.S. port calls, are: 95% for passengers and 40% for crew. As a consequence, the following passenger and crew onshore expenditures in San Diego are based upon 2,375 passenger visits and 431 crew visits.

As shown in **Table A-1**, the 2,806 passenger and crew visits generated by the average intransit cruise ship engenders \$241,240 in onshore expenditures. Amusements & Tours account for one-third of these expenditures with an estimated \$81,447. Retail spending generates a very similar level of passenger and crew expenditures with \$78,248. Spending for food and beverages generates \$60,757 per call while other purchases generates another \$20,788.

Table A-1 - Passenger and Crew Expenditures Generated by an Intransit Call

Passenger & Crew Spending				
Cruise Characteristics - Intransit Cruise Ship				
Cruise Ship Calls	1			
Passenger and Crew Visits	2,806			
Passengers	2,375			
Crew	431			
Passenger & Crew Expenditures (\$ Millions)	\$241,240			
Amusements & Tours	\$81,447			
Food & Entertainment	\$60,757			
General Retail (Clothing, Jewelry, Souvenirs, etc.)	\$78,248			
Other Purchases (Parking, Museums, Local Transit)	\$20,788			

As shown in **Table A-2**, cruise line expenditures generated by an intransit call totals \$83,789. These expenditures are concentrated by spending for port services, including port agents, port fees, security, stevedores among others. They account for 88% of total cruise line expenditures and total \$74,081. The remaining 12% of expenditures are for a variety of other services and supplies, including maintenance and limited hotel supplies.

Combining the passenger, crew and cruise line spending. Total direct expenditures generated by an intransit call total \$325,029. Passenger and crew expenditures account for about 75% of the total with cruise lines accounting for the remaining 25%.

Table A-2 - Total Direct Expenditures Generated by an Intransit Call

Cruise Sector Spending				
Category				
Transportation (Port Fees, Port Agents, Transit, etc.)	\$74,081			
Other Services & Supplies	\$9,708			
Total Cruise Line Spending	\$83,789			
Passenger & Crew Expenditures (\$ Millions)	\$241,240			
Total Cruise Sector Expenditures	\$325,029			

As shown in **Table A-3**, the \$325,029 in direct expenditures generated by an intransit call generates an estimated \$567,030 in total final sales throughout San Diego county. This output is produced by 5.21 annualized FTE employees who are paid \$163,030 in earnings. The Financial and Business Services sector accounts for the highest level of the total output with \$232,340 in final sales. The Other Services and Government sector accounts for the most jobs and earnings with 1.88 annualized FTE jobs paying \$55,620 in earnings.

Table A-3 - Total Economic Impacts Generated by an Intransit Call

Sector	Direct Spending	Total Final Sales	Earnings	Total FTE Employment
Transportation & Warehousing	\$84,480	\$96,050	\$31,890	1.13
Financial & Business Services	\$10,390	\$232,340	\$52,030	1.01
Accommodation & Food Services	\$60,760	\$87,450	\$23,490	1.19
Other Services & Government	\$169,399	\$151,190	\$55,620	1.88
Total	\$325,029	\$567,030	\$163,030	5.21

Turnaround Call

Based upon data provided by the port on ship calls in San Diego during 2015, BREA has estimated that average turnaround call is made by a cruise ship with 1,400 passengers and a crew of 725 members. Passenger and crew expenditures are made by those passengers and crew that disembark and visit San Diego. These visitation rates, based upon data maintained by BREA for U.S. port calls, are: 100% for turnaround passengers and 40% for crew. As a consequence, the following passenger and crew onshore expenditures in San Diego are based upon 1,400 passenger visits and 290 crew visits.

As shown in **Table A-4**, the 1,690 passenger and crew visits generated by the average turnaround cruise ship engenders \$431,977 in onshore expenditures. Accommodations and Food & Entertainment account for 28% of these expenditures with an estimated \$120,739. Retail spending generates a \$51.171 in passenger and crew expenditures. Spending for Other Pur-

chases, primarily auto rental, parking and local transit, generates \$260,067 per call, 60% of the total.

Table A-4 – Passenger and Crew Expenditures Generated by a Turnaround Call

Passenger & Crew Spending				
Cruise Characteristics - Turnaround Cruise Ship				
Cruise Ship Calls	1			
Passenger and Crew Visits	1,690			
Passengers	1,400			
Crew	290			
Passenger & Crew Expenditures (\$ Millions)	\$431,977			
Lodging	\$62,756			
Food & Entertainment	\$57,982			
General Retail (Clothing, Jewelry, Souvenirs, etc.)	\$51,171			
Other Purchases (Parking, Museums, Local Transit)	\$260,067			

As shown in **Table A-5**, cruise line expenditures generated by a turnaround call totals \$1.11 million. These expenditures are concentrated by spending for port services, including port agents, port fees, security, stevedores among others. They account for 76% of total cruise line expenditures and total \$844,201. The purchase of food beverages and equipment & supplies, primarily for hotel operations, totals \$209,601, 29% of the total. The remaining 5% of expenditures are for a variety of other services and supplies, primarily sanitation services.

Combining the passenger, crew and cruise line spending. Total direct expenditures generated by a turnaround call total \$1.54 million. Passenger and crew expenditures account for about 28% of the total with cruise lines accounting for the remaining 72%. Thus, the proportional split between passenger & crew expenditures and cruise line expenditures are reversed relative to an intransit call.

Table A-5 - Total Direct Expenditures Generated by a Turnaround Call

Cruise Sector Spending				
Category				
Equipment and Supplies	\$56,900			
Food & Beverages	\$152,701			
Transportation (Port Fees, Port Agents, Transit, etc.)	\$844,201			
Other Services	\$52,451			
Total Cruise Line Spending	\$1,106,253			
	-			
Passenger & Crew Expenditures (\$ Millions)	\$431,977			
Total Cruise Sector Expenditures	\$1,538,230			

As shown in **Table A-6**, the \$1.54 million in direct expenditures generated by a turnaround call generates an estimated \$1.93 million in total final sales throughout San Diego county. This output is produced by 12.6 annualized FTE employees who are paid \$525,850 in earnings. The Transportation & Warehousing and Financial and Business Services sectors account for the highest level of the total output with \$1.1 million in final sales each. These two sectors also accounted for the highest level of

employee earnings with more than \$250,000. The Other Services and Government sector accounts for the most jobs with 5.06 annualized FTE jobs paying \$163,260 in earnings.

Table A-6 – Total Economic Impacts Generated by a Turnaround Call

Sector	Direct Spending	Total Final Sales	Earnings	Total FTE Employment
Wholesale & Retail Trade	\$213,610	\$248,420	\$70,190	1.08
Transportation & Warehousing	\$987,191	\$1,102,851	\$271,633	2.44
Financial & Business Services	\$74,300	\$1,079,440	\$252,190	4.84
Accommodation & Food Services	\$120,740	\$146,380	\$40,210	1.64
Other Services & Government	\$1,129,580	\$455,750	\$163,260	5.06
Total	\$1,538,230	\$1,929,990	\$525,850	12.62



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.).