Florida's Recreational Marine Industry — Relative Growth and Economic Impact 2008 - 2015

Performed by

Thomas J. Murray & Associates, Inc.

for

MARINE INDUSTRIES ASSOCIATION OF FLORIDA, INC.

February 2016

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Executive Summary

This study is an update of earlier efforts to quantify the economic significance of the recreational marine and boating industry in Florida. The report describes the trends in ownership and operation of recreational boats in Florida counties; and estimates retail sales, employment, and industry output associated with the retail sale of new and used motorboats, supplies, and outboard motors by Florida's diverse marine industry.

After steady growth for decades, the recreational boating industry declined between 2006 and 2008. Subsequently however, it has demonstrated a continual rebound, although still significantly behind the peak years.

- Most recently for the fiscal year 2015, gross retail sales of boat and motor products in Florida were $4.9 billion compared to $5.4 billion in 2008.
- During fiscal year 2014, while Florida lead in registered recreational watercraft among boating states nationwide--with 867,463 recreational boats registered, this represented a 5.89 % decline compared to 2008 annual registrations of 921,834.

- In fiscal year 2015, the marine industry generated approximately $8.7 billion in direct output resulting in an estimated total economic impact in Florida of $15.3 billion in output, and over 183,820 related jobs compared to $16.8 billion and 202,000 jobs in 2008.

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Introduction

The purpose of this study, performed on behalf of the Marine Industries Association of Florida, Inc. ("MIAF")[2] is to update previous assessments and estimate the current economic activity associated with Florida's recreational marine boating industry.

The analysis was undertaken utilizing secondary information obtained from previous economic studies relevant to Florida's recreational boating industry. The current estimates are based upon the same data and estimators, detailed in the comprehensive study by McHugh and Murray in 1997[3] -- subsequently updated in 2000, 2005 and 2008. Additional information has been obtained from government entities, academic institutions and the boating-related industries. The published and unpublished data for the study were obtained from Federal, State and private sources and is considered by the author to be the best available information.

Based upon the overall estimates of economic activity statewide, a general apportioning of the statewide impacts is provided to demonstrate recent trends, and the relative marine industry business activity in specified counties and multi-county regions of Florida.

It should be emphasized that to describe the recreational boating related industry comprehensively, it is necessary to reconfigure government-associated data and report primary data for industry sectors, where it exists or has been published in the past. The impact analysis is based upon the best available information. As has been demonstrated here and elsewhere, while the boating sector is generally defined around "consumer" activity (boating), economic information gathered is classified by "accounts" or larger categories of economic activity. Given this dilemma and the sporadic collection of primary survey data chronicled herein, reliance upon the use of "indicators" of industry activity and trends in growth is necessitated.

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[2] MIAF, 6526 S. Kenner Highway, #338, Stuart, FL 34997
< www.boatflorida.org>

[3] "Florida's Recreational Marine Industry - Economic Impact and Growth 1980-1997" Dr. Richard J. McHugh in conjunction with Thomas J. Murray & Associates. October 1997. Tampa, Florida. Thomas J. Murray & Assoc., Inc., P.O. Box 1083, Gloucester Point, Virginia 23062
E-mail: tjm@vims.edu.

Florida Recreational Marine Industry Overview – Relative Growth 2008-2015

Table 1 below depicts the most recent change in the marine recreation industry in three ways: the numbers of recreational motorboats registered in Florida by year, the corresponding level of retail sales associated with boats and related products[4], and the average gross expenditure per watercraft.

Florida's Marine Industries combined for retail sales of $4.949 billion in fiscal year (FY) 2015; a decrease of $.507 billion (9%) from the 2008 level. During FY 2014[5], 867,463 recreational boats were registered in Florida, compared to 921,834 in 2008--a decrease of over 50,000 pleasure boats. Florida however, continued its top ranking among states in terms of registered recreational watercraft. [6]

The first measure of the economic impact of the recreational marine industry in Florida viewed the sector as it appeared in 1980. The overall estimate of economic impact of the industry in that year was $1.5 billion. Since that time, the level of boating related retail sales, one measure of activity, has grown by $13.8 billion to $15.3 billion in FY 2015.

Table 1 - Gross Boat-Related Sales and Number of Florida Statewide Recreational Boats (FY 2014/FY2015 vs. 2008)

Fiscal Year	Number of Pleasure Boats FY 2014	Gross Boat-Related Sales ($ 000's) FY 2015	Spending Per Boat
FY 2014 & FY 2015	867,463	$4,949,703	$5,705
FY 2008	921,834	$5,457,069	$5,912

Source: Kind Code 28 "Motorboat and Yacht Dealer" Gross Sales. Fla. Dept. of Revenue Tax Research. Watercraft numbers, Florida Bureau of Titles and Registration and Florida Department of Highway and Motor Vehicle Safety.

Florida Fiscal year runs from July 1 through June 30th. For example Fiscal year 2015 includes the period July 1, 2014 through June 30, 2015.

[4] Florida Bureau of Titles and Registrations.

[5] FY 2014 is the most recent year for which boat registration numbers are available.

[6] Chapter 123 of Title 46, United States Code requires each undocumented vessel equipped with propulsion machinery to be numbered in the State in which it is principally operated. The law allows the States and other jurisdictions to create their own numbering systems as long as they meet or exceed Federal requirements. In accordance with CFR 174.123, prior to March 1 of each year, each State must prepare and submit Coast Guard Form CGHQ-3923, Report of Certificates of Number Issued to Boats, to the Coast Guard. State figures are derived from reports of the actual counts of valid boat numbers issued by States and other jurisdictions (Territories and D.C.) Their accuracy is affected primarily by the compliance of the boat owners with numbering and registration laws. Numbering estimates are derived from previous year figures for those few jurisdictions who are unable to provide the numbering data required in form CGHQ-3923.

As is depicted in Figure 1, the declining trend in the overall marine industry business activity identified in the 2008 report continued, but began to recover and accelerate in recent years although still significantly behind the peak years.

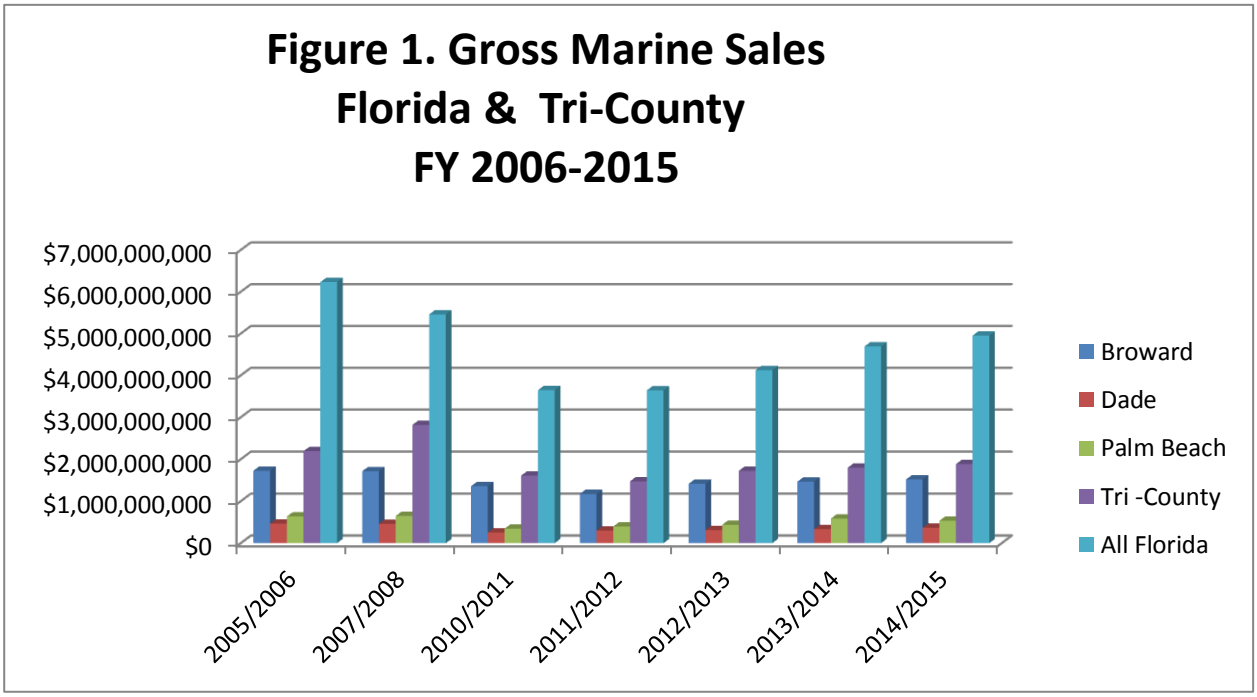

Table 2 reflects a comparison of the level of boat registrations in leading Florida counties for FY 2014 vs. FY 2008. The overall number of watercraft declined by 54,371 pleasure boats (-5.89%) between 2008 and 2014.

Table 3 reflects a comparison of the overall level of boat-related spending by county FY 2015 vs. FY 2008, and shows a positive increase over 2008 for both Manatee and Monroe Counties.

It should be noted that the declines in economic activity statewide over the period 2005-2008 were somewhat forestalled in counties such as Dade, Broward and Palm Beach that are centers of the large vessel and mega-yacht related trade. It is important to recognize in these comparisons, Tables 2 & 3, that although the numbers overall remain behind those of 2008, the fact remains that the trend since 2008 has been upward and positive to date FY 2015.

Table 2 – Numbers of Watercraft Registered in Florida's Leading Marine Industry Counties FY 2014 vs. FY 2008

County	FY 2014	FY 2008	% Change 2014 vs. 2008
Dade	60,713	57,254	6.04%
Pinellas	45,631	49,181	-7.22%
Lee	43,505	45,206	-3.76%
Broward	40,618	44,292	-8.29%
Hillsborough	39,662	44,088	-10.04%
Palm Beach	36,530	40,051	-8.79%
Brevard	31,995	36,379	-12.05%
Duval	26,445	30,573	-13.50%
Monroe	24,695	22,946	-7.62%
Collier	20,936	22,206	-5.72%
Manatee	16,728	17,968	-6.90%
Martin	15,294	14,770	3.55%
All Other Counties	489,406	496,920	-1.51%
Florida Total	867,463	921,834	-5.89%

Table 3 — Recent Trends In Boat-Related Sales ($) For Top Ten Counties FY 2015 vs. FY 2008

County	2015 ($)	2008 ($)	% Change 2015 vs. 2008
Broward	$1,516,358,220	$1,713,351,197	-11%%
Pinellas	$308,153,166	375,743,688	-18%%
Dade	$365,612,686	458,067,016	-20%
Palm Beach	$530,893,143	646,006,740	-18%
Manatee	$265,403,349	224,382,317	18%
Lee	$190,471,455	203,819,003	-7%
Martin	$253,804,213	325,811,776	-22%
Hillsborough	$48,158,982	160,599,288	-70%
Monroe	$167,230,653	150,572,307	11%
Collier	$148,418,391	154,099,027	-4%
Top Ten Counties	$3,646,085,867	$4,412,452,359	-17%
Florida Total	$4,949,703,773	$5,457,069,119	-9%

Source: Kind code 28 "Motorboat and Yacht Dealer" Gross Sales. Fla. Dept. of Revenue Tax Research. Florida Fiscal year runs from July 1 through June 30th. For example Fiscal year 2015 includes the period July1, 2014 through June 30, 2015.

Economic Impact Analysis

Because of the interrelationships among the many sectors of an economy, any new or induced basic economic activity will generate additional waves of economic impact. For example, the manufacturing of any product will generate additional activity among the suppliers of inputs as well as among the shippers of these goods, the warehouses and the retailers. The impact of the rental of a room at a hotel will generate activity not only for the hotel, but also indirectly generate economic activity for cleaners, suppliers, accountants and programmers whose activity supports the operation of the hotel. In an analogous way, the activities of recreational boaters will generate multiple rounds of economic activity.

Economic impact analysis is an attempt to provide an estimate of the total impact of any economy activity in any region, including the primary economic impact but also these secondary and tertiary impacts.

To perform the impact analysis, one initially needs information on the level of primary, or "basic" economic activity from which an attempt is made to estimate the total impact. For example, measuring the total impact of manufacturing requires an estimate of the volume of the production of new manufactured goods.

Secondly, information is needed on the interrelationships among the sectors of the regional economy in order to estimate the value of the inter-industry "multipliers." These multipliers can be obtained using a standard input-output model described below, of which there are a number available. These models show the impact across the spectrum of industries of some change or basic activity and it allows one to sum the impacts across industries to arrive at an aggregate impact.

The Standard Input-Output Model

Impact analysis begins with introducing a change in the output of goods and using the multiplier model to analyze the effects on a region's economic base. The standard input-output model estimates the direct, indirect, and induced economic implications of some basic economic activity. The secondary effects (the indirect and induced impacts), along

with the basic economic activity estimates, provide an estimate of the "multiplier" effects from the basic activity (direct impact).

In the standard input-output model, measures of aggregate economic activity are used as a basis for estimating the total economic impact of the activity. For example, measures of direct employment or total sales in an industry are obtained, and these are then used as a basis for evaluating the total impact. In the case of Marine Industry studies to-date, typically estimates of the retail sales by "motorboat and yacht" category (Revenue Kind code 28) were obtained and used as the base measure of the "direct impact" of the industry

Given this partial measure of the direct contribution of the industry, an estimate is made of the indirect impacts using information on the interactions between this industry and other sectors which are dependent upon the boat related industry. For example, suppliers of materials into the boat manufacturing process are also dependent upon the sale of boats in the specific revenue sector. These impacts are referred to as the "indirect impacts."

Finally, the activity and its indirect impacts will generate some increases in the general level of employment and income in the study area. The extra income generated in this way will lead to a tertiary level of economic impact through the higher level of household expenditures on goods and services, much of which, again, will be spent within the study area. These effects are referred to as the "induced impacts" of the industry.

First, some studies of these impacts use information from the Department of Commerce's RIMS-II inter-industry impacts models (Regional Inter-industry Model - Version II). This model uses a combination of direct survey data obtained through national surveys of inter-industry interaction and then, employing a number of reasonable assumptions (based upon the structure or employment structure of industries in the state or region), "shares down" these inter-industry relationships to the local or regional level.

From these hypothetical regional inter-industry relationships, output, income and employment multipliers are estimated. An alternative approach to estimating these multipliers is to perform detailed surveys of individual firms in each region to directly assess the extent of the inter-region, inter-industry interaction in estimating the appropriate multipliers. This approach was used in the analysis of the impact of recreational boating in Florida in "Economic Impact of the Marine Recreational Boating on the Florida Economy" (Milon. ET. Al, 1983) (1). This approach can be time-consuming and costly.

To summarize, in addition to direct final demand impacts, two other types of impacts are estimated: (1) indirect impacts, which measure the change in output production in supporting supply industries caused by the changing input needs of directly affected industries, and (2) induced impacts, which measure the change in regional household expenditure patterns caused by changes in household income. These impacts are really what introduce the concept of multipliers that are in turn subdivided into two types: Type I and Type II multipliers. Type I multipliers measure the direct and indirect effects per dollar of direct effects, i.e.

Type I Multipliers = Direct + Indirect/Direct

Type I multipliers sum the results of several rounds of expenditures until through "leaks" in the economy, no further expenditures occur. Type II multipliers on the other hand, measure the overall effects including the induced impacts per dollar of direct effects, i.e.

Type II Multipliers = Direct + Indirect + Induced/Direct

Type I and Type II multipliers can be expressed in terms of an array of economic indicators such as gross sales, gross industrial output, income, value-added, and employment.[7]

[7] The difference between gross output and gross sales is that output refers to producer's prices of goods and services, while gross sales refer to consumer prices. Gross output prevents the double counting of products and services by using margins for trade, transportation and insurance and thus yields the actual level of economic production in the region. Gross sales in some instances provide a good indicator of the volume of activity.

An ongoing issue in the professional literature on economic impact and input-output analysis is the true value of the costly "survey approach" estimates relative to the "non-survey" approach. In an update of that study (Milon and Adams, 1987), the authors conclude, "these results suggest that detailed survey methods such as those employed in the original Milon ET. al. (1983) study of the Florida recreational boating industry adds limited additional information in relation to the extra time and cost required." Thus, in terms of simple analysis of the aggregate impacts of activity on the regional economy, "off-the-shelf" estimates of the multiplier can suffice.

To summarize, while the previous studies outlined are the most significant in terms of the evaluation of the recreational boating industry statewide, other publications have investigated portions of the overall marine industry and provide glimpses and benchmarks of marine industry activity.

While there were inconsistencies among the various economic assessments in terms of estimation techniques, similarities do exist between these major Florida statewide studies (1,2,3,4,6) in terms of the approach of viewing the "Marine industries" as comprised of five major sectors, as depicted in Table 4 below. Additionally, other sector studies (7,8) completed over the years add additional chronological quantifications to the acknowledged continual growth in Florida's marine recreational economy.

Economic Impact – Fiscal Year 2015

When integrating the multiplier approaches developed over the years with the trend in economic activity in Florida detailed above, the estimate of overall economic activity as measured by total direct and indirect industry output was $15.3 billion during FY 2015, down from $16.8 billion in FY 2008. Table 4 summarizes this economic activity by marine industry sector.

Table 4: Summary of Estimated Economic Impact of Florida's Marine Industry in Direct, Indirect and Total Output ($1,000's) FY 2015

Sector	Direct Output	Indirect Output $	Total Output $
Manufacturing	$1,471,075,489	$980,900,956	$2,451,976,446
Wholesale Trade	$1,536,631,207	$1,068,066,902	$2,604,698,109
Retail trade	$3,005,931,996	$2,666,260,749	$5,672,192,746
Dockage	$1,085,164,630	$754,189,418	$1,839,354,047
Marine Services	$1,627,822,694	$1,131,339,315	$2,759,162,009
Total	$8,726,626,017	$6,600,757,342	$15,327,383,359

Employment Impact Estimates

Given the method of projecting estimated industry output from a historical base, associated employment necessary to produce the total output is somewhat more uncertain. For example, the employment estimates associated with an impact study in Broward County, may not be completely analogous to the employment impacts arising from marine industry in other less concentrated industry regions.

The total employment estimates summarized in Table 5 were calculated by dividing 2015 total output estimates for the State (adjusted for inflation using the U.S. Bureau of Labor Statistics Producers Price Index PPI) by the 2008 output-per-employee ratio from the average of the three 1985 studies: University of Florida Sea Grant ($54,477) (3) and Laventhol and Horwath ($82,916) (6); and Ernst Young ($32,741) (7) by the PPI adjustment from the 1997 base (July 1997). The three direct employment estimates were then averaged to provide the estimation herein. The averaging is done because of the significant differences concluded by the three studies. Using the earlier estimates further assumes no change in labor productivity between 2008 and 2015.

Economic Activity Associated with Florida's Primary Marine Industry Regions

At the request of the MIAF, the overall impact estimates developed above are divided in the following analysis based upon individual counties--or regions of counties, as identified by the MIAF as logical marine industry regions for analysis. The attempt to partition the overall State estimates is completed solely for the purposes of demonstration of the more local marine industry trends.

As has been noted elsewhere, primary data collection is necessary to properly characterize any economic sub-region for use in impact analysis. Since such data collection is well beyond the scope of this report, general estimates of regional shares of the State's marine industry economic impact are utilized.

MIAF PRIMARY MARINE INDUSTRY REGIONS BY COUNTIES	
Marine Industry Region [8]	**Counties**
1. Suncoast	Manatee & Sarasota
2. Collier	Collier
3. Tampa Bay	Pasco, Pinellas, Hillsborough, Hernando, Citrus
4. N.W. Florida	Escambia, Santa Rosa, Okaloosa, Walton, Bay
5. Big Bend	Gulf, Franklin, Wakulla, Jefferson, Taylor, Dixie, Levy
6. N.E. Fla.	Nassau, Duval, St. Johns, Flagler, Clay
7. Central Atlantic	Volusia, Brevard
8. Treasure Coast	Indian River, St. Lucie, Martin
9. Central Florida	Orange, Seminole, Lake, Polk, Osceola
10. Palm Beach	Palm Beach
11. Broward	Broward
12. Dade	Dade
13. Monroe	Monroe
14. S.W. Fla.	Charlotte, Lee

Marine Industry "Location Quotients" for Marine Industry Regions

The discussion above outlined some of the basic tenets of economic base theory. Working with the theory in a practical application necessitates that the industries of a given region (Florida) be divided between those producing for a market outside the region (exports) and those producing for local markets. The challenge with further allocating the economic impact of the marine industry in Florida is determining, for example, how much of the marine industry output in a *specific* county is for export (bringing in "new dollars"), and how much is for local ("residentiary") spending. Any method used to do this without primary data collection will involve a degree of arbitrariness. One method has been developed in regional economic impact analysis to permit some inference into "export base" activity and it involves the development of "location quotients" (LQ).

[8] Not all counties are included in the marine industry regional breakdown but they include both additional boat registration and boat-related economic activity. They have not been included because the attempt herein is solely to characterize the major marine industry regions. In counties where fewer than 3 firms reported sales to FDOR disclosure requirements require those sales to be added into the "other" category, which is included in the state-wide sales tax data.

The LQ compares the concentration of particular industries in a study region, (for example Monroe County) relative to some other region, in this case Florida. Hence, Florida is the "benchmark economy."

Traditionally, to derive the LQ for a given industry the investigator must have data on employment in that industry and in the total area economy, for both the benchmark and the studied economy. The LQ is obtained by dividing the percentage of total subject economy employment (in this case marine industry) accounted for by the given industry, into the percentage of total employment that industry accounts for in the "benchmark." The LQs basically tell you what relative differences exist between industry specialization in the studied region and the benchmark economy. Florida Department of Labor and Employment Security's employment data (ES202 data) is not currently available for each county at the 4-digit NAICS level. In order to specify employment by boating-related trade sectors, Florida Department of Revenue Kind code 28 data (on boat related retail sales) is used as a general proxy to estimate the marine industry LQ.

For the purpose herein, an LQ will be defined as the percentage of marine-related retail sales (Kind code 28 Sales) in an industry region, relative to the total marine-related retail sales statewide, minus Broward and Palm Beach County Kind code 28 Sales.[9] The LQ will provide a broad guide for dividing the statewide marine industry impacts into the relative share of the MIAF defined region.

[9] Broward County's economic impact estimates are based upon FY 2015 data in conjunction with a 2005 study (8), which involved extensive primary surveys of the marine industry in that county. As such, it is considered to be the best available estimate of the economic impact of the industry in the single county region. Similarly, Palm Beach County's estimates are also based upon a study also completed in 2005, which included primary surveys and data collection in addition to trends analysis. (13)

Economic Impact Estimates by County and Region FY 2008 & FY 2015

The following Table 5 summarizes the relative contribution of individual counties toward the overall economic impact in each of the Marine Industry Regions as defined by MIAF, and the State. The economic impact estimates are derived from the level of retail sales reported in each county and expanded using output multipliers developed in the previous studies discussed above.

It should be noted that certain county level data are not disclosed by the FDOR if the county has fewer than three firms in the industry kind code, in this case boating related businesses. However, those sales are contained in the overall state figure.

Table 5: Trends in Economic Activity and Watercraft Registrations for Florida Counties and Primary Marine Industry Regions. FY 2008 - FY 2015

Region	Boat-Related Sales		# Boats	
	FY 2015	FY 2008	FY 2014[10]	FY 2008
Region 1				
Manatee	$265,403,350	$175,613,960	16,728	17,968
Sarasota	$129,873,924	$89,162,180	20,912	22,645
Region Total	$395,277,274	$264,776,140	37,640	40,613
Total Output	$604,774,229	$405,107,495		
Total Employment	8,033	5,381		
Region 2				
Collier	$148,418,391	$132,011,591	20,936	22,206
Region Total	$148,418,391	$132,011,591	20,936	22,206
Total Output	$227,080,139	$ 201,977,735		
Total Employment	3,016	2,683		
Region 3				
Citrus	$23,033,301	$15,092,010	14,962	16,577
Hernando	$3,072,393	$2,544,158	8,687	9,399
Hillsborough	$48,158,983	$185,150,467	39,662	44,088
Pasco	$19,625,533	$31,615,475	22,896	24,303
Pinellas	$308,153,167	$363,116,727	45,631	49,181
Region Total	$402,043,377	$597,518,837	131,838	143,548
Total Output	$615,126,367	$914,203,821		
Total Employment	8,171	12,144		

[10] Boating registrations for FY 2015 were not available at the time of this report.

Table 5 cont.				
Region	**Boat-Related Sales**		**# Boats**	
	FY 2015	**FY 2008**	**FY 2014**	**FY 2008**
Region 4				
Bay	$18,289,627	$73,875,801	17,182	18,336
Escambia	$27,155,311	$35,957,030	15,061	16,437
Okaloosa	$59,416,664	$123,172,904	17,405	17,416
Santa Rosa	$14,645,923	$9,942,333	13,685	13,887
Walton	$2,547,356	$1,692,379	5,298	5,366
Region Total	$222,054,882	$244,640,447	68,631	71,442
Total Output	$339,743,970	$374,299,884		
Total Employment	4,512	4,971		
Region 5				
Dixie	N/A	N/A	2,158	2,423
Franklin	N/A	$792,117	2,267	2,408
Gulf	N/A	N/A	2,597	2,731
Jefferson	N/A	N/A	1,248	1318
Levy	N/A	N/A	3,782	4,050
Taylor	$7,705,774	$1,614,964	3,538	3,484
Wakulla	$12,262,440	$8,672,906	4,611	4,406
Region Total	$19,968,214	$11,079,986	20,201	20,820
Total Output	$30,551,367	$16,952,378		
Total Employment	405	225		
Region 6				
Clay	$29,861,028	$30,322,795	11,614	12,425
Duval	$70,911,251	$106,018,532	26,445	30,573
Flagler	N/A	$666,951	5,033	5,102
Nassau	$4,231,112	$3,891,645	5,838	5,893
St. Johns	$9,263,573	$25,665,582	13,135	12,647
Region Total	$114,266,963	$166,565,505	62,065	66,640
Total Output	$174,828,454	$254,845,222		
Total Employment	1,594	2,323		
Region 7				
Brevard	$117,638,932	$108,749,689	31,995	36,379
Volusia	$44,405,499	$41,901,332	25,684	29,111
Region Total	$162,044,431	$150,651,021	57,679	65,490
Total Output	$247,927,979	$230,496,063		
Total Employment	3,293	3,061		

Table 5 cont.				
Region	**Boat-Related Sales**		**# Boats**	
	FY 2015	**FY 2008**	**FY 2014**	**FY 2008**
Region 8				
Indian River	$9,398,892	$12,187,090	10,018	10,542
Martin	$253,804,214	$227,540,910	15,294	14,770
St. Lucie	$97,387,024	$47,383,073	12,117	12,644
Region Total	$360,590,129	$287,111,073	37,429	37,956
Total Output	$551,702,898	$439,279,942		
Total Employment	7,329	5,835		
Region 9				
Orange	$47,046,201	$67,218,367	26,151	31,763
Seminole	$21,893,523	$18,501,615	17,109	18,258
Lake	$15,391,481	$22,606,856	19,833	21,756
Polk	$6,018,438	$17,180,843	26,992	31,161
Osceola	$512,299	$723,294	7,994	8,862
Region Total	$90,861,941	$126,230,975	98,079	111,800
Total Output	$180,241,828	$250,402,988		
Total Employment	1,847	2,566		
Region 10				
Palm Beach	$530,893,144	$436,545,088	36,530	40,051
Region Total	$530,893,144	$436,545,088	36,350	40,051
Total Output	$1,747,561,490	$1,436,992,348		
Total Employment	16,847	13,853		
Region 11				
Broward	$1,516,358,221	$1,310,966,127	40,618	44,392
Region Total	$1,516,358,221	$1,310,966,127	40,618	44,392
Total Output	$9,450,843,808	$8,170,718,458		
Total Employment	117,919	101,947		
Region 12				
Dade	$365,612,686	$332,090,928	60,713	57,254
Region Total	$365,612,686	$332,090,928	60,713	57,254
Total Output	$780,427,671	$708,872,966		
Total Employment	7,900	7,176		

Table 5 cont.				
Region	**Boat-Related Sales**		**# Boats**	
	FY 2015	**FY 2008**	**FY 2014**	**FY 2008**
Region 13				
Monroe	$167,230,653	$124,146,793	24,695	22,946
Region Total	$167,230,653	$124,146,793	24,695	22,946
Total Output	$255,862,899	$189,944,594		
Total Employment	3,398	2,522		
Region 14				
Charlotte	$55,583,387	$75,624,828	20,342	20,988
Lee	$190,471,456	$202,666,273	43,505	45,206
Region Total	$246, 054,842	$278,291,101	63,847	66,194
Total Output	$376,463,908	$425,785,384		
Total Employment	5,000	5,655		
Florida Statewide	**FY 2015**	**FY 2008**	**FY 2014**	**FY 2008**
Total Output	$16,732,272,257	$18,447,400,171	N/A	N/A
Total Employment	183,820	202,743	N/A	N/A

Glossary of Terms:

Industry Classifications:

Dockage — including services of boatyards, yacht clubs, and marinas.

Manufacturing — firms engaged in the production of boats including boats, marine supplies, yachts, sails, other marine-related products.

Wholesale — distribution firms selling boats, marine supplies and other related products at the wholesale level.

Retail — includes sales by firms selling boats, boat parts, fuel/oil suppliers, engines, boat rentals, construction materials, marine electronics, supplies and accessories, ship liquidators, inflatables, etc.

Services — comprised of businesses including such services as boat repair, hauling, delivery, signage, towing, naval architects, yacht brokerage, yacht maintenance, yacht management, marine interior design, marine surveyors, crew placement, etc.

Economic Impact Definitions:

Impact multiplier: a measure of the direct and indirect impacts resulting from purchases of raw materials and labor due to changes in final demand for a sector's products. In general the greater a sector's dependence upon other state industries for raw materials and services, the larger the impact multiplier.

Indirect impacts are created through the sale of materials and services to the industry by other state industries.

Induced impacts arise from the spending by employees in a primary (direct) or support (indirect) industry. The employee spending takes place throughout the state economy through retail purchases, financing, and sales of added goods and services.

Total economic activity for a sector is the sum of total output and the output generated in other sectors of the state economy due to the indirect and induced impacts explained above.

Total employment is the sum of direct, indirect and induced employment. It is expressed in "full-time employment'" (FTE). An FTE could be made up of, for example, 12 people working one month each.

Total income is the sum of direct income earned by employees in each sector and the income generated in other sectors due to indirect and induced effects.

Total output for a sector is the sum of in-state sales and exports. This is measured in terms of dollar value of each sector's sales to final demand.

Value added provides a measure of the wages, interest, rent, and profit earned by employees and owners of firms within each sector.

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