

**Florida's Recreational Marine Industry –
Relative Growth and Economic Impact
2005 - 2008**

Performed by

Thomas J. Murray & Associates, Inc.

for

MARINE INDUSTRIES ASSOCIATION OF FLORIDA, INC.

October 2008



Table of Contents

EXECUTIVE SUMMARY II

INTRODUCTION 1

FLORIDA RECREATIONAL MARINE INDUSTRY OVERVIEW – RELATIVE GROWTH
2005-2008 2

 Table 1 - Gross Sales and Florida Statewide Recreational Boats (FY 2005&2008)..... 3

 Table 2 – Numbers of Watercraft Registered in Florida’s Leading Marine Industry Counties 2005-2008
 4

 Table 3 — Recent Trends In Boat Related Sales (\$) For Top Ten Counties Fiscal Years -2005-2008.5

ECONOMIC IMPACT ANALYSIS 5

ECONOMIC IMPACT ANALYSIS 6

 The Standard Input-Output Model..... 6

ECONOMIC IMPACT ESTIMATION-2008 9

 Table 4: Summary of Estimated Economic Impact of Florida's Marine Industry in Direct, Indirect and
 Total Output (\$1,000's) – 2008 10

EMPLOYMENT IMPACT ESTIMATES 10

 Economic Activity Associated with Florida’s Primary Marine Industry Regions 11

 Marine Industry “Location Quotients” for Marine Industry Regions..... 11

 Economic Impact Estimates by County and Region 2005..... 13

 Table 5: Trends in Economic Activity and Watercraft Registrations for Florida Counties and Primary
 Marine Industry Regions. FY 2005-2008 13

GLOSSARY OF TERMS: 17

 Industry Classifications:..... 17

 Economic Impact Definitions: 17

LITERATURE CITED AND OTHER LITERATURE REVIEWED 19

**Florida's Recreational Marine Industry –
Relative Growth and Economic Impact
2005 - 2008**

Performed by

Thomas J. Murray & Associates, Inc.

for

Marine Industries Association of Florida, Inc.

October 2008

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.

The recreational boating industry declined between 2005 and 2008. Manufacturing, retailing, and service sectors comprising the industry declined for the first time in many years after steady growth for decades. For the Fiscal Year 2008, gross retail sales of boat and motor products in Florida declined, decreasing by 9% from \$5.9 billion at the time of the last economic impact assessment to 5.4 billion.

- During Fiscal Year 2008, Florida lead in registered recreational watercraft among boating states nationwide with 921,834 recreational boats registered. This compared to 920,768 during 2005.

- In Fiscal Year 2008, the marine industry generated approximately \$9.5 billion in direct output resulting in an estimated total economic impact in Florida of \$ 16.8 billion in output, and over 202,000 related jobs compared to \$18.4 billion and 220,000 jobs in 2005.

Introduction

The purpose of this study, performed on behalf of the Marine Industries Association of Florida, Inc. ("MIAF")¹ 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 1997² and updated in 2000 and 2005. Additional information has been obtained from government entities, academic institutions and the boating-related industries. The report is limited in this sense. The published and unpublished data for the study were obtained from Federal, State and private sources and is considered by the authors 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. However it is not as meaningful as would be possible with data collected with more appropriate industry definition. 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

¹ MIAF, 7800 Red Road, Suite 302, Miami, Florida 33143
< www.boatflorida.org >

² "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.

dilemma and the sporadic collection of primary data chronicled herein, reliance upon the use of “indicators” of industry activity and trends in growth is necessitated.

Florida Recreational Marine Industry Overview – Relative Growth 2005-2008

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; and, the corresponding level of retail sales associated with boats and related products³ and the average gross expenditure per watercraft.

Florida’s Marine Industries combined for retail sales of \$5.457 billion in fiscal year 2008; a decrease of \$.539 billion (9%) from the 2005 level. During 2008, 921,834 recreational boats were registered in Florida. Florida continued its top ranking among states in terms of registered recreational watercraft. ⁴

The first attempt to measure the economic impact of the recreational marine industry in Florida viewed the sector as it appeared in 1980. As discussed below the overall estimate of economic impact of the industry in that year was \$1.5 billion. Since that time the level of retail sales, one measure of activity, has grown by \$4.0 billion.

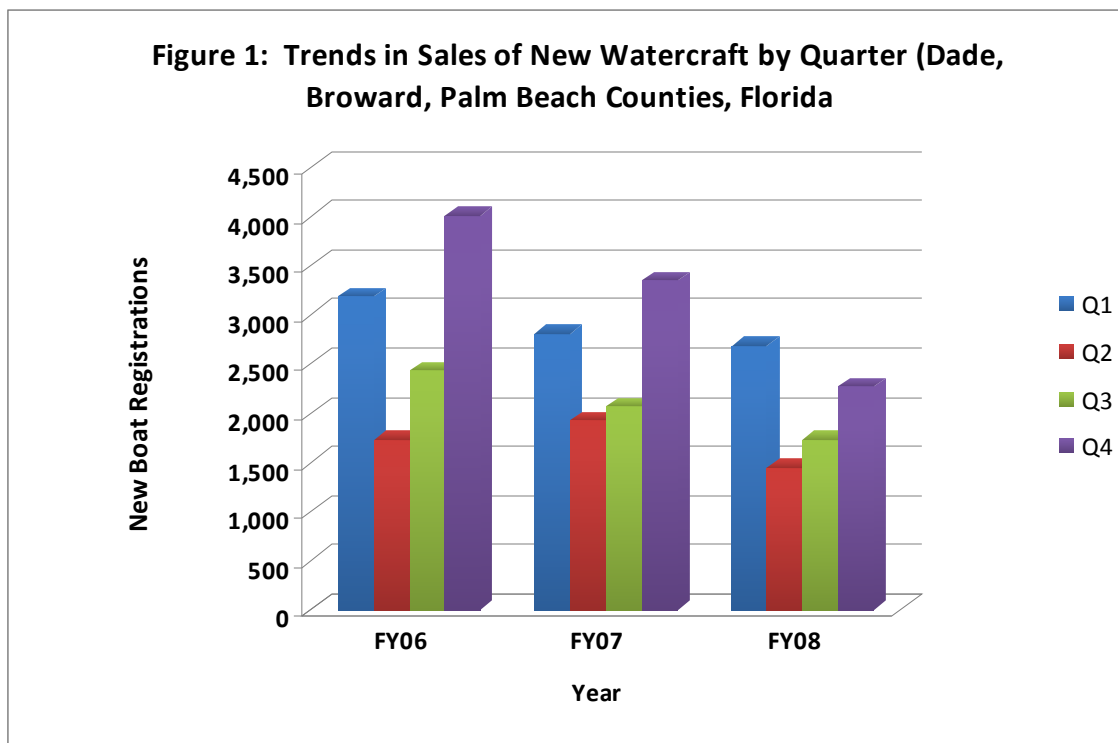
³ Florida Bureau of Titles and Registrations.

⁴ 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.

| Fiscal Year | Number of Pleasure Boats | Gross Boat-Related Sales (\$ 000's) | Spending Per Boat |
|--------------------|---------------------------------|--------------------------------------------|--------------------------|
| FY 2005 | 920,768 | \$5,996,265 | \$6,512 |
| FY 2008 | 921,834 | \$5,457,069, | \$5,912 |

Source: Kind Code 28 "Motorboat and Yacht Dealer" Gross Sales. FDOR 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 2008 includes the period July1, 2007 through June 30, 2008.

As is depicted in Figure 1 the declining trend in the overall marine industry business activity continued and actually accelerated during the last quarters of fiscal year 2008. ⁵



⁵ Data provided by Info-Link Technologies, Inc. based upon new watercraft registrations in the Tri-County area of Florida. October 2008.

Table 2 reflects the overall level of boat registrations in leading Florida counties. While the overall number of watercraft generally has grown the economic activity arising from their sale and use declined between 2005 and 2008. Table 4 demonstrates the overall level of boat related spending by county. It should be noted that the declines in economic activity statewide have been somewhat forestalled in counties such as Dade, Broward and Palm Beach that are centers of the large vessel and mega-yacht related trade, as reflected In Figure 2.

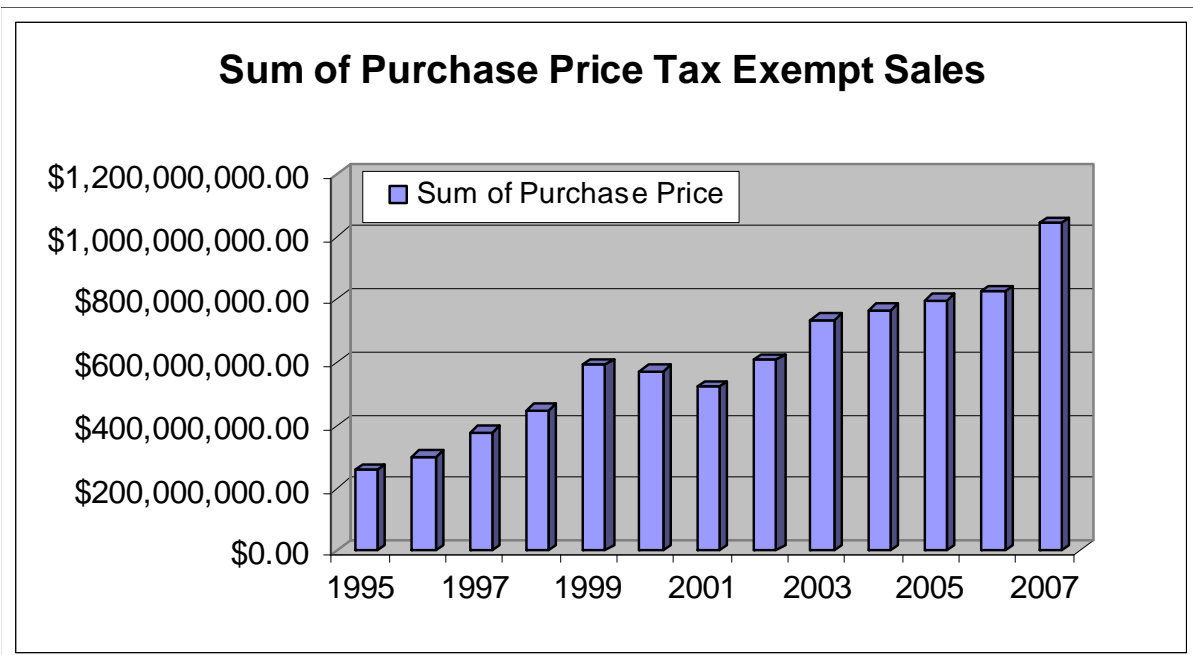
| Table 2 - Numbers of Watercraft Registered in Florida's Leading Marine Industry Counties 2005-2008 | | | |
|-----------------------------------------------------------------------------------------------------------|----------------|----------------|---------------------------|
| County | FY 2008 | FY 2005 | % Change 2005-2008 |
| Dade | 57,254 | 48,566 | 17.8% |
| Pinellas | 49,181 | 47,446 | 3.6 |
| Lee | 45,206 | 44,138 | 2.4 |
| Broward | 44,292 | 43,168 | 2.6 |
| Hillsborough | 44,088 | 40,638 | 8.4 |
| Palm Beach | 40,051 | 37,579 | 6.5 |
| Brevard | 36,379 | 34,234 | 6.2 |
| Duval | 30,573 | 29,297 | 4.3 |
| Monroe | 22,946 | 23,820 | -.04 |
| Collier | 22,206 | 20,637 | 7.6 |
| Manatee | 17,968 | 17,437 | 3.0 |
| Martin | 14,770 | 14,669 | .006 |
| All Other Counties | 496,920 | 519,139 | -.04 |
| Florida Total | 921,834 | 920,768 | 0.1% |

Table 3 – Recent Trends In Boat Related Sales (\$) For Top Ten Counties

| County | 2008 | 2005 | % Change FY 2005 – |
|------------------|-----------------|-----------------|--------------------|
| Broward | \$1,713,351,197 | \$1,724,955,430 | -.01% |
| Pinellas | 375,743,688 | 477,785,167 | -.22 |
| Dade | 458,067,016 | 436,961,747 | .04 |
| Palm Beach | 646,006,740 | 574,401,432 | .12 |
| Manatee | 224,382,317 | 231,071,580 | -.03 |
| Lee | 203,819,003 | 266,666,149 | -.24 |
| Martin | 325,811,776 | 299,395,934 | 8.8 |
| Hillsborough | 160,599,288 | 243,619,036 | -.34 |
| Monroe | 150,572,307 | 163,351,044 | -.08 |
| Collier | 154,099,027 | 173,699,462 | -.12 |
| Top Ten Counties | \$4,412,452,359 | 4,591,906,981 | -.04 |
| Florida Total | \$5,457,069,119 | \$5,996,265,209 | -.27% |

Source: Kind code 28 "Motorboat and Yacht Dealer" Gross Sales. Fla. Dept. of Revenue Tax. Florida Fiscal year runs from July 1 through June 30th. For example Fiscal year 2005 includes the period July1, 2004 through June 30, 2005.

Figure 2.



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.

$$\text{Type I Multipliers} = \text{Direct} + \text{Indirect}/\text{Direct}$$

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.

$$\text{Type II Multipliers} = \text{Direct} + \text{Indirect} + \text{Induced}/\text{Direct}$$

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.⁶

⁶ 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 provides 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 above 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 studies in terms of the approach of viewing the "Marine industries" as comprised of five major sectors, as depicted in Table 5 below. Additionally other sector studies completed over the years add additional chronological quantifications to the acknowledged continual growth in Florida's marine recreational economy.

Economic Impact Estimation-2008

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 is \$16.8 billion during 2008 down from \$18.4 billion in 2005. Table 4 summarizes the 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) – 2008 | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|----------------------------|
| Sector | Direct Output | Indirect Output \$ | Total Output \$ |
| Manufacturing | \$1,616,566,472.35 | \$1,077,913,138.83 | \$2,694,479,611.17 |
| Wholesale Trade | \$1,688,605,722.39 | \$1,173,699,892.83 | \$2,862,305,615.22 |
| Retail trade | \$3,303,221,974.04 | \$2,929,956,867.78 | \$6,233,178,841.83 |
| Dockage | \$1,192,488,604.70 | \$828,779,580.39 | \$2,021,268,184.17 |
| Marine Services | \$1,788,816,147.39 | \$1,243,230,017.22 | \$3,032,046,164.61 |
| Total | \$9,589,698,919.96 | \$7,253,579,497.04 | \$16,843,278,417.00 |

Employment Impact Estimates

Given the method of projected estimated industry output from a historical base, employment associated or 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 arrived at by dividing the 2005 total output estimates for the State (adjusted for inflation using the U.S. Bureau of Labor Statistics Producers Price Index PPI) by the 1985 output per employee ratio from the average of the two 1985 studies: University of Florida Sea Grant (\$54,477) (2) and Laventhol and Horwath (\$82,916) (4); and Ernst Young (\$32,741) (5) by the PPI adjustment from the 1997 base (July 1997). The three direct employment estimates were then averaged to provide the estimation herein. One need only review the 1985 studies to understand the variability in such estimations without duplicate data collection bases. The averaging is done because of the significant differences concluded by the

three studies. Using the 1985 estimates further assumes no change in labor productivity between 1985 and 2008.

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 must suffice.

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 problem with further allocating the economic impact of the marine industry in Florida is determining, for example, how much of the marine industry output in, for example, Monroe County is for export (bringing in "new dollars"); and, how much is for local ("residential") 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).

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. Because Florida Department of Labor and Employment Security’s employment data (ES202 data) is not currently available for each county at the 4-digit SIC level, in order to specify employment by boating-related trade sectors, Florida Department of Revenue Kind code 28 data (on boat related retail sales) will be 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 (\$5,996,265,000), minus Broward and Palm Beach County Kind code 28 Sales.⁷ The LQ will provide a broad guide for dividing the statewide marine industry impacts into the relative share of the MIAF defined region.

⁷ Broward County’s economic impact estimates are based upon a recently completed 2005 update of a 1994 study (5) 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 recent study completed in 2005 which included primary surveys and data collection in addition to trends analysis. (GEC 20)

Economic Impact Estimates by County and Region 2005

The marine industry regions are defined below:

| 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. W. 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 |

The following (Table 5) summarizes the relative contribution of individual counties toward the overall economic impact in each region 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.

| Region 1 | \$ 2007- 2008 | \$ 2004-2005 | # Boats 2005 | # Boats 2008 |
|-------------------------|---------------|--------------|--------------|--------------|
| Manatee | 175,613,960 | 231,071,000 | 17,437 | 17,968 |
| Sarasota | 89,162,180 | 117,318,658 | 21,649 | 22,645 |
| Region Total | 264,776,140 | 348,389,658 | 39,086 | 40,613 |
| Total Output | 405,107,495 | 533,036,177 | N/A | |
| Total Employment | 5,381 | 7,080 | N/A | |

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.

| Table 5 cont. | | | | |
|-------------------------|---------------------|---------------------|---------------------|---------------------|
| Region 2 | \$ 2007-2008 | \$ 2004-2005 | # Boats 2005 | # Boats 2008 |
| Collier | 132,011,591 | 173,699,462 | 20,637 | 22,206 |
| Region Total | 0 | | N/A | 22,206 |
| Total Output | 201,977,735 | 265,760,177 | NA | |
| Total Employment | 2,683 | 3,530 | NA | |
| Region 3 | \$ 2007-2008 | \$ 2004-2005 | # Boats 2005 | # Boats 2008 |
| Citrus | 15,092,010 | 19,857,908 | 14,749 | 16,577 |
| Hernando | 2,544,158 | 3,347,576 | 8,276 | 9,399 |
| Hillsborough | 185,150,467 | 243,619,036 | 40,638 | 44,088 |
| Pasco | 31,615,475 | 41,599,309 | 22,071 | 24,303 |
| Pinellas | 363,116,727 | 477,785,167 | 47,446 | 49,181 |
| Region Total | 597,518,837 | 786,208,996 | 133,180 | 143,548 |
| Total Output | 914,203,821 | 1,202,899,764 | NA | |
| Total Employment | 12,144 | 15,979 | NA | |
| Region 4 | \$ 2007-2008 | \$ 2004-2005 | # Boats 2005 | # Boats 2008 |
| Bay | 73,875,801 | 97,205,001 | 16,993 | 18,336 |
| Escambia | 35,957,030 | 47,311,882 | 15,135 | 16,437 |
| Okaloosa | 123,172,904 | 162,069,610 | 16,989 | 17,416 |
| Santa Rosa | 9,942,333 | 13,082,017 | 11,939 | 13,887 |
| Walton | 1,692,379 | 2,226,815 | 4,439 | 5,366 |
| Region Total | 244,640,447 | 321,895,325 | 65,495 | 71,442 |
| Total Output | 374,299,884 | 492,499,848 | NA | |
| Total Employment | 4,971 | 6,541 | NA | |
| Region 5 | \$ 2007-2008 | \$ 2004-2005 | # Boats 2005 | # Boats 2008 |
| Dixie | #VALUE! | N/A | 2,163 | 2,423 |
| Franklin | 792,117 | 1,042,259 | 2,207 | 2,408 |
| Gulf | #VALUE! | N/A | 2,547 | 2,731 |
| Jefferson | #VALUE! | N/A | 1,034 | 1318 |
| Levy | #VALUE! | N/A | 3,339 | 4,050 |
| Taylor | 1,614,964 | 2,124,952 | 3,297 | 3,484 |
| Wakulla | 8,672,906 | 11,411,718 | 3,754 | 4,406 |
| Region Total | 11,079,986 | 14,578,929 | 18,341 | 20,820 |
| Total Output | 16,952,378 | 22,305,761 | NA | |
| Total Employment | 225 | 296 | NA | |
| Region 6 | \$ 2007-2008 | \$ 2004-2005 | # Boats 2005 | # Boats 2008 |
| Clay | 30,322,795 | 39,898,415 | 11,193 | 12,425 |
| Duval | 106,018,532 | 139,498,069 | 29,297 | 30,573 |
| Flagler | 666,951 | 877,567 | 4,178 | 5,102 |
| Nassau | 3,891,645 | 5,120,585 | 4,931 | 5,893 |
| St. Johns | 25,665,582 | 33,770,502 | 10,602 | 12,647 |
| Region Total | 166,565,505 | 219,165,138 | 60,201 | 66,640 |
| Total Output | 254,845,222 | 335,322,661 | NA | |
| Total Employment | 3,386 | 4,455 | NA | |

| Table 5 cont. | | | | |
|-------------------------|-------------------------|-----------------------|---------------------|---------------------|
| Region 7 | \$ 2007-2008 | \$ 2004-2005 | # Boats 2005 | # Boats 2008 |
| Brevard | 108,749,689 | 143,091,696 | 34,234 | 36,379 |
| Volusia | 41,901,332 | 55,133,332 | 25,837 | 29,111 |
| Region Total | 150,651,021 | 198,225,028 | 60,071 | 65,490 |
| Total Output | 230,496,063 | 303,284,293 | NA | |
| Total Employment | 3,061 | 4,028 | NA | |
| Region 8 | \$ 2007-2008 | \$ 2004-2005 | # Boats 2005 | # Boats 2008 |
| Indian river | 12,187,090 | 16,035,645 | 9,449 | 10,542 |
| Martin | 227,540,910 | 299,395,934 | 14,669 | 14,770 |
| St. Lucie | 47,383,073 | 62,346,149 | 11,592 | 12,644 |
| Region Total | 287,111,073 | 377,777,728 | 35,710 | 37,956 |
| Total Output | 439,279,942 | 577,999,924 | NA | |
| Total Employment | 5,835 | 7,678 | NA | |
| Region 9 | \$ 2007-2008 | \$ 2004-2005 | # Boats 2005 | # Boats 2008 |
| Orange | 67,218,367 | 88,445,220 | 29,807 | 31,763 |
| Seminole | 18,501,615 | 24,344,230 | 17,080 | 18,258 |
| Lake | 22,606,856 | 29,745,863 | 19,570 | 21,756 |
| Polk | 17,180,843 | 22,606,372 | 27,701 | 31,161 |
| Osceola | 723,294 | 951,703 | 7,977 | 8,862 |
| Region Total | 126,230,975 | 166,093,388 | 102,135 | 111,800 |
| Total Output | 250,402,988 | 329,477,616 | NA | |
| Total Employment | 2,566 | 3,376 | NA | |
| Region 10 | \$ 2007-2008 | \$ 2004-2005 | # Boats 2005 | # Boats 2008 |
| Palm Beach | 436,545,088 | 574,401,432 | 37,579 | 40,051 |
| Region Total | 436,545,088 | 574,401,432 | N/A | 40,051 |
| Total Output | 1,436,992,348 | 1,890,970,000 | NA | |
| Total Employment | 13,853 | 18,228 | NA | |
| Region 11 | \$ 2007-2008 | \$ 2004-2005 | # Boats 2005 | # Boats 2008 |
| Broward | 1,713,351,197 | 1,724,955,430 | 43,168 | 44,392 |
| Region Total | 1,713,351,197 | 1,724,955,430 | N/A | |
| Total Output | 10,682,348,8217, | 10,750,945,340 | NA | |
| Total Employment | 133,285 | 134,141 | NA | 44,392 |
| Region 12 | \$ 2007-2008 | \$ 2004-2005 | # Boats 2005 | # Boats 2008 |
| Dade | 458,067,016 | 436,961,747 | 48,556 | 57,254 |
| Region Total | 458,067,016 | 436,961,747 | N/A | 57,254 |
| Total Output | 979,791,823 | 932,727,587 | NA | |
| Total Employment | 7,176 | 9,442 | NA | |
| Region 13 | \$ 2007-2008 | \$ 2004-2005 | # Boats 2005 | # Boats 2008 |
| Monroe | 124,146,793 | \$163,351,044 | 23,820 | 22,946 |
| Region Total | 124,146,793 | \$163,351,044 | N/A | 22,946 |
| Total Output | 189,944,594 | \$249,927,097 | NA | |
| Total Employment | 2,522 | 3,319 | NA | |

| <i>Table 5 cont.</i> | | | | |
|-------------------------|-------------------------|-------------------------|---------------------|---------------------|
| Region 14 | \$ 2007-2008 | \$ 2004-2005 | # Boats 2005 | # Boats 2008 |
| Charlotte | 75,624,828 | \$99,506,352 | 18,756 | 20,988 |
| Lee | 202,666,273 | \$266,666,149 | 44,138 | 45,206 |
| Region Total | 278,291,101 | \$366,172,501 | 62,894 | 66,194 |
| Total Output | 425,785,384 | \$560,243,926 | NA | |
| Total Employment | 5,655 | 7,441 | NA | |
| | | | | |
| Florida Satewide | \$ 2007-2008 | \$ 2004-2005 | # Boats 2005 | # Boats 2008 |
| Total Output | \$16,802,428,498 | \$18,447,400,171 | NA | NA |
| Total Employment | 202,743 | 225,534 | NA | NA |

Glossary of Terms:

Industry Classifications:

Dockage – including services of boatyards, yacht clubs, 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.

Literature Cited and Other Literature Reviewed

1. "Florida's Recreational Marine Industry-Economic Impact and Growth 1980-2005" Thomas J. Murray & Associates, Inc.
2. "Economic Impact of Marine Recreational Boating on the Florida Economy 1980." J. Walter Milon and David Mulkey. Florida Sea Grant SGR-54. March, 1983.
3. "The Economic Impact of Florida's Recreational Boating Industry in 1985." J. Walter Milon and Chuck Adams. Florida Sea Grant Technical Paper 50. April, 1987.
4. "Financial Structure and Performance of Florida's Recreational Marinas and Boatyards." J. Walter Milon, et. al. Florida Sea Grant SGR-53. March, 1983.
5. "Economic Impact of the Recreational Marine Industry in Florida." Laventhol & Horwath, Certified Public Accountants, Coral Gables, Florida. March, 1987
6. "Economic Impact of the Recreational Marine Industry: Broward County, Florida June 1995." Ernst & Young LLP. Broward Economic Development Council, Inc. June, 1995.
7. "Economic Impact of the Recreational Marine Industry Broward, Dade and Palm Beach Counties, Florida-2005" Thomas J. Murray & Associates, Inc. 2005.
8. "Vessels Registered In Florida." Annual Summaries. 1987-1999. Bureau of Vessel Titles and Registrations. Florida Department of Highway Safety and Motor Vehicles, Division of Motor Vehicles. Tallahassee, Florida.
9. "Florida Sales Tax Return Data" Validated Tax Receipts Data for Fiscal Years 1987-2005 For Kind code 28, Motorboat and Yacht Dealers. Florida Department of Revenue. Tallahassee, Florida.
10. "Annual Summary ES 202 Reports." Florida Department of Labor and Employment Security, Division of Employment Security, Bureau of Research and Analysis. 1980-1995.

11. "2004 Recreational Boating Statistical Abstract" National Marine Manufacturers Association. Chicago, Illinois .
12. "Economic Impacts Of Marine Industries in Palm Beach County". Gulf Engineers & Consultants. Baton Rouge, Louisiana. 2005.