Economic Activity Associated With the 56th Annual Fort Lauderdale International Boat Show

November 5-9, 2015

Prepared by
Thomas J. Murray & Associates, Inc.

In conjunction with

University of Florida

March 2016

For

Marine Industries Association of South Florida, Inc.
&
Show Management, Inc.

TABLE OF CONTENTS

Economic Activity Associated With

The 56th Annual

Fort Lauderdale International Boat Show

Prepared by
Thomas J. Murray & Associates, Inc.

In conjunction with
University of Florida

March 2016

For
Marine Industries Association of South Florida, Inc.
&
Show Management, Inc.

EXECUTIVE SUMMARY

The Fort Lauderdale International Boat Show enhances Fort Lauderdale and the State in many ways:

It is perhaps most difficult to quantify the positive amenity values or externalities which arise by the continuing success of The Fort Lauderdale International Boat Show ("The Show"). In bringing the world's boat-related industry to Fort Lauderdale, the community both enhances and reinforces its historic identity as the boating capital of the world. Clearly the Show also serves to introduce the region's diverse attractions to the world.

The show is the largest in the world in terms of gross exhibitor space, and in the number of mega yachts gathered for any event. With 56 years of continued success, the Show has earned the reputation as the preferred annual gathering place for industry leaders, media, dealer meetings, product introductions, etc.

The overall good will and economic impact generated for the local community and the State of Florida is well recognized in the boating industry. Together the Show's public and private partnership can work as one to insure the Show's preeminence in the future.

Although the economic impacts outlined herein are clearly significant, they should be considered "short run" impacts only. Given the region's leadership position in virtually all boat-related sectors, the initial Show sales will continue to generate future, "long run" activity.

Major Findings:

Sales of boats and other marine products at the 56th Annual Fort Lauderdale International Boat Show "the Show" brought the World's most serious buyers together with suppliers to generate final sales.

- The Show generated $857.3 million in economic output throughout the state of Florida as a result of the infusion of purchases and expenditures at the Show.
- Over 6,000 full-time Florida jobs are associated with the economic output generated by the 2015 Show.
- Total estimated sales by Florida companies during the Show reached $380.8 million. Tri-County companies completed and estimated $240.7million in sales as a result of the Show including Broward County companies which contributed $131.5 million in estimated sales of marine products.
- Total sales for all Show participants are estimated to be $508.3 million.
- Total excise and sales taxes generated within Florida as a result of the Show was $51.2 million; of this total $16.9 million occurred in Broward County.
- Statewide personal income impacts of $ 304.3 million were associated with the economic activity stemming from the 2015 Show; $105.6 million of that accrued to Broward County.
- Total value-added of $485.9 million was contributed throughout Florida as a result of the Show, including $163.9 million in Broward County.

Boat show visitors bring in new dollars to the region and the State.

- Nearly 100,000 tickets were sold for the 2015 Show.
- 58% of Show visitors were from outside the Tri-county region, 54 % of the visitors were from outside Florida including 10% foreign visitors.
- The average expenditure by out-of-town visitors (hotels, restaurants, retail spending, local transportation, etc.) at the Show was $208 per day.
- Visiting attendees and exhibitors were responsible of over 69,000 local "hotel room nights".
- Non-local visitor expenditures at the Show totaled an estimated $29.6 million.

Boat Show exhibitors spend to promote and show their company or products in 2015.

- 42 % of exhibitors were Tri-county companies.
- The exhibitors supported the activities of thousands of staff throughout the Show, including boat crews, owners, associated workers, and sales personnel.

- On average, individual exhibitor personnel stayed in the area for five days.
- Exhibitors from outside the region expended $12.9 million on exhibit space, local goods and services, such as hotels, restaurants, retail and local transportation. Such expenditures were the beginning of economic impacts throughout Broward and the Tri- County, the State of Florida.

TOTAL ECONOMIC IMPACTS OF THE 2015 FORT LAUDERDALE BOAT SHOW (BY REGION / $ MILLIONS)			
Impact Type	***Broward County***	***Tri-County***	***Florida***
Output	$282.8	$531.5	$857.3
Employment (FTES)	2,280	3,859	6,254
Labor Income	$105.6	$195.5	$304.3
Total Value-Added	$163.9	$305.3	$485.9
Indirect Business Taxes	$16.9	$30.4	$51.2

INTRODUCTION

The Fort Lauderdale International Boat Show ("the Show") has been held annually for 56 years. The Show is held at the Bahia Mar Resort and Yachting Center in Fort Lauderdale and is owned by the Marine Industries Association of South Florida, Inc. (MIASF). It is produced and managed by Show Management— both are located in Fort Lauderdale.[1]

This study has been completed on behalf of the MIASF and Show Management, Inc. to evaluate the economic activity and impacts arising from the show at three levels:

- Broward County;
- The "Tri-County" (Broward, Dade, & Palm Beach) region;
- The State of Florida

Based upon the information gathered from Show Management, the author's knowledge of the regions marine industry, and implementation of conventional input-output modeling techniques, we have analyzed the economic impacts of the Show. The unique capabilities for input-output modeling at the University of Florida were utilized to calibrate the input data for analysis and complete the model's impact analysis.

The Show

The Show has grown significantly over the past 30 years from approximately 700 exhibitors in 1988 to over 1,000 at the 2015 event. The 56th Annual Show displayed in excess of 1,300 boats compared to 1,150 at the 1988 Show. The types and values of vessels have also greatly increased over the decade. Also, the visitation to the Show has nearly doubled over the period. A 1989 study reported 64,528 tickets sold to the Show in 1988. (1) The comparable number for 2015's Show was 95,306 according to Show Management statistics.

The intent of this study is to prepare current estimates of the economic impacts of the Fort Lauderdale Boat Show which include the following sources:

- Expenditures by both visitors and exhibitors in the Show
- Sales of boats and other marine products as a result of the Show

The 56th year of the Fort Lauderdale International Boats Show was reported to be a success. The overall level and scope of business generated at the Show are better understood by assessing the large number and types of boating-related businesses which invested in exhibiting at the Show.

[1] The current address for the MIASF and "Show Management Inc." are respectively: MIASF 2312 South Andrews Avenue, Fort Lauderdale, Florida, 33316; and, Show Management, Inc. 1115 Northeast 9th Avenue, Fort Lauderdale, Florida 33304.

The show centered around seven principal venues:

Bahia Mar Yachting Center included several accessory tents, accommodating diverse exhibitors including marine electronics, manufacturers of engines, generators, air conditioners, super-yacht builders and designers, inflatables, jet skis and trailer able boats.

Las Olas Municipal Marina in-water location displayed power and sail brokerage yachts and mega yachts .

Convention Centers three levels displayed fishing boats, boat trailers, inflatables, center-console boats, family cruisers, runabouts, flat boats, jet skis fishing equipment, etc.

Pier 66 Marina provided a special showcase of catamaran sailboats berthed and displayed brokerage motor yachts and sailboats up to 141'.

Hall of Fame Marina extending from the end of "F-Dock" at Bahia Mar served as a principal showcase for brokerage yachts and "mega yachts" in excess of 80'.

Fort Lauderdale Hilton Marina larger yacht berthing.

The Sails Marina offered berthing to the Show's largest mega yachts.

Economic Impact Analysis

Economic 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).[2]

In the standard input-output model, measures of aggregate economic activity are used as a basis for estimating the total economic impact of the subject 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 this report estimates of the primary sales by category were obtained and used as the base measure of the "direct impact" of the industry.

Given this measure of the direct purchases of the boat-related industry, an estimate is made of the indirect impacts using information on the interactions between these industry sectors and other economic sectors, which are to varying extent, dependent upon such boat-related industry.

For example, suppliers of materials into the boat-related products manufacturing, transportation, storage, marketing and distribution are also dependent upon the sales of boat-related goods and

[2] A Glossary of economic impact definitions is contained in Appendix II.

services. These added sales or impacts are referred to as the "indirect impacts." Such "indirectly" dependent sectors include hundreds of other types of manufacturing, trade, for which industrial classifications range from "Boat Building and Repairing" to "Veneer and Plywood."

Ultimately, the direct sales activity, and the resulting indirect activity, generates some increases in the general level of employment and income in the study area. The extra income generated in this way leads to a third "wave" of economic impact through greater household expenditures on goods and services. Much of this additional re-spending will also occur within the study area, further expanding economic activity. These effects are referred to as the "induced impacts" of the industry.

ECONOMIC INPUT-OUTPUT MODEL APPLICATION

Most regional input-output studies attempt to characterize either, the economic impacts of specified changes in final demand for a given set of products, services, and industries, or, the economic significance of specific industries in a regional and national economy. The research described herein accomplishes the latter task. It assesses the economic significance of the Show upon boat-related industries located in Broward County, the Tri County area, and the State of Florida.

Because of the interrelationships among the many sectors of an economy, any new basic economic activity (such as sales induced by the Show) will generate additional waves of economic impact. By stimulating the expenditures by out-of-region visitors and the export sale of marine products, the Show initiates such rounds of economic impact.

For example, the marketing of boat-related goods and services from these regions calls forth additional activity among the suppliers of necessary inputs as well as among distributors of boat-related products, warehouses, and retailers. The impact of the sale of a dollar of boat-related goods and services, generates activity not only for the retail sector, but also indirectly generates economic activity for suppliers, accountants and programmers whose employment supports the operation of the retail enterprise. In an analogous way, the activities of boat-related marketers and consumers will generate multiple rounds of economic activity.

As mentioned above, economic impact analysis is an attempt to provide an estimate of the total impact of any economic activity in any region, including, not only the primary economic impact, but also secondary and tertiary impacts.

The Implan Model

Many economic impact studies use information from the Regional Inter-industry Impact Model – (IMPLAN). This model was developed using a combination of direct survey data obtained through national surveys of inter-industry interaction, and then, “shares down” the inter-industry relationships to the local or regional level, based upon the structure or employment structure of industries in the state or region. The IMPLAN model used herein includes industry linkages specific to Broward, Dade and Palm Beach Counties as well as the state of Florida.

From these government derived regional inter-industry relationships, output, income and employment multipliers are estimated.

Thus, in terms of simple analysis of the aggregate impacts of activity on the regional economy, published government estimates of the multiplier are used. The use of the “IMPLAN” multipliers for the present analysis is considered reasonable.

To perform the impact analysis, initial information on the level of primary or "basic" economic activity for the industry studied is needed. As mentioned above, measuring the total economic impact of any product, good, or service such as the Boat Show, first requires an estimate of the volume of the goods sold by virtue of the Show.

Direct Impacts

Direct impacts, represent the revenues, value-added, income, or jobs that result directly from an economic activity within the study area or a regional economy.

The direct economic impact begins with the infusion of "outside" dollars into the region. Again, for the sake of this study there are three economic regions modeled: Broward County, Broward Dade and Palm Beach Counties as a region and, the state of Florida. As outlined above, these dollars come from two sources:

- Purchases of marine products from companies within these regions, and
- Expenditures of non-local visitors and exhibitors associated with the Show.

Marine Product Sales

The total value of marine product sales at the Show in 2015 was estimated to be $508.3 million for all exhibitors. Much of these sales were made by exhibitors located in the study region. 42 percent of exhibitors are south Florida companies. Total sales by Florida companies during the Show were estimated at $380.8 million; of this Broward County companies contributed an estimated $131.5 million and Tri-county firms sold an estimated $240.7 in sales of marine products.[3]

It is important to understand that not all of these sales generate economic impact in the study region. In view of the fact that 34% of the exhibitors were from outside of Florida, sales by those firms do not have the same impact as sales by similar types of firms within the study regions. For example the sale of a new vessel by a boat manufacturer from North Carolina does not stimulate Florida's economy as an equal dollar sale by a Florida boat manufacturer.

The information on the origin of Show sales was utilized to adjust the gross Show sales information for economic impact assessment. Such a "sharing" of sales to within and outside the study areas is required for realistic estimates of net impacts on local areas, such as the three regions used herein.

[3] Web based and in-person surveys administered by MIASF and Show Management Inc. personnel were conducted following the Show. The survey on Show-generated marine product sales had a response rate of approximately 15% of the total "in-water" and "out-of-water" exhibitors at the 2015 Show. The results noted here is an expansion of that survey information which reported $250.3 million in Show sales. The estimate confidence intervals are plus or minus 10%, at the 95% confidence level considered normal for these types of analysis.

Similarly, the fact that the sale of a fabricated good is made by a firm within the study area does not mean that all of the impacts of the sale accrue to that region. The IMPLAN model assesses the industry sector and computes from the gross output, or sales amount, how much of the necessary expenditures to produce the good are locally acquired for the sake of multiplier analysis. The purchases of inputs from outside the study area, in a sense, are "leakages" from the local economy.

The sales of such goods (for example an engine manufactured in Illinois) while sold in the study area does not entirely impact the study region.

TABLE 1. SALES ATTRIBUTED TO THE SHOW BY REGION AND GENERAL PRODUCT TYPE – ($ MILLIONS)

Sector	*Total*	*Broward County*	*Tri-County*	*Florida*	*Out-of-State*
Boats & Equipment	$365.40	$94.40	$154.80	$245.70	*$119.70*
Used Boats	$142.9	$37.1	$85.9	$135.1	*$7.8*
Total	*$508.30*	*$131.50*	*$240.70*	*$380.80*	*$127.50*

Expenditures by Non-local Visitors and Exhibitors

Additionally, total expenditures by non-local show visitors and exhibitors were estimated to be $42.5 million.

Exhibitors from outside the region expended $12.9 million on travel-related goods and services such as hotel rooms, meals, local transportation, etc. Adding to this direct expenditure impact was another $29.6 million in similar expenditures by non-local visitors attending the Show. Together, these sources of "new dollars" were estimated to generate $36.7 million in direct output in Broward County Florida.[4]

[4] For allocation of the marine product sales by region the location of the exhibitors and relative sales were obtained from the survey responses and estimated from the Show's "Official Marine Products Source Guide & Show Directory." For estimation of the economic impact of the Show only in-state sales are used.

TABLE 2. EXPENDITURES[5] BY NON-LOCAL VISITORS AND EXHIBITORS, BY BUSINESS TYPE				
Type	***%***	***Total***	***Non-Local Visitors***	***Non-Local Exhibitors***
Hotel lodging	25.0%	$10,645,333	$7,406,610	$3,238,723
Hotel restaurants	11.0%	$4,683,947	$3,258,909	$1,425,038
Other restaurants	18.0%	$7,664,640	$5,332,760	$2,331,880
Hospitality suites	5.2%	$2,214,229	$1,540,575	$673,654
Entertainment	10.0%	$4,258,133	$2,962,644	$1,295,489
Retail purchases	20%	$8,516,267	$5,925,288	$2,590,978
Local transportation	6.9%	$2,938,112	$2,044,224	$893,888
Other	3.9%	$1,660,672	$1,155,431	$505,241
Total	100.0%	$42,581,334	$29,626,442	$12,954,892

Direct Economic Impacts of the Boat Show

The direct economic impacts of the Show on output manifest themselves in other economic growth measures as well. Total direct employment (full time equivalent jobs) associated with the output was 1,033 in Broward County, 1,380 for the Tri-County region and 1,943 for the state.

Similarly the direct impacts include increases in personal incomes earned throughout the region. For the same regions the labor income associated with the Show sales activity was $47.0 million in Broward County, $69.1 million in the Tri-County area, and $97.6 million statewide.

By virtue of the fact that businesses receive increased sales, and households receive increased incomes, more taxes are paid. The overall measure of "Indirect Business Taxes" includes items such as sales taxes and reflects the business generated by the Show. These taxes initially amounted to $9.2 million in Broward County, $14.6 million in the Tri-County region, and $22.8 million for the State as a whole.

Table 3 summarizes the measures of direct economic impacts of the Show, and further distributes, as a hierarchy, the impacts to each the three study regions using six traditional economic base indicators. For all measures the direct impacts of the smaller region are "nested" in the larger region. For example, the Florida measured impacts include the Tri-County region impacts.

[5] The allocation breakdown on visitor expenditures was provided by the Greater Fort Lauderdale Convention & Visitors Bureau and Smith Travel.

TABLE 3. DIRECT ECONOMIC IMPACTS OF THE 2015 FORT LAUDERDALE BOAT SHOW (BY REGION / $ MILLIONS)			
Impact Type	***Broward County***	***Tri-County***	***Florida***
Output	$122.4	$186.0	$271.4
Employment (FTES)	1033	1380	1943
Labor Income	$47.0	$69.1	$97.6
Total Value-Added	$66.0	$98.7	$141.8
Indirect Business Taxes	$9.2	$14.6	$22.8

Indirect Economic Impacts of the Boat Show

Having calculated the first ("direct") effects of the Show on various measures noted above, the further "ripple" or indirect effects of the initial change can be quantified using the input-output model. Indirect impacts occur when businesses use revenues originating from outside the region, or study area, to purchase inputs (goods and services) from local suppliers. This secondary, or indirect business, generates additional revenues, income, jobs and taxes for the area economy.

Based upon information on the interrelationships among the sectors of the regional economy, the values of the inter-industry "multipliers" are generated by the IMPLAN. That is, quantifying from which industries the subject sector buys its production inputs, and to which sectors its final products are sold, enables estimates of the multiplier effects to be made. Understanding both the purchases of inputs and sale of goods and services by the marine sectors allows the "forward" hand "backward" linking of the sector's economic activity. This permits tracing of expenditures as they "multiply" throughout directly and indirectly impacted sectors depicted in Table 4.

TABLE 4. INDIRECT ECONOMIC IMPACTS OF THE 2015 FORT LAUDERDALE BOAT SHOW (BY REGION / $ MILLIONS)			
Impact Type	***Broward County***	***Tri-County***	***Florida***
Output	$31.3	$63.6	$97.8
Employment (FTES)	217	397	627
Labor Income	$10.9	$22.6	$32.7
Total Value-Added	$18.4	$36.9	$54.2
Indirect Business Taxes	$1.6	$3.2	$5.3

As reflected in *Appendix 1*, the "indirect" impacts are realized across many economic sectors. Businesses such as clerical "Other Business Services," "Wholesale Trade," "Search & Navigation Equipment," etc. all are impacted by the direct activity in the boat-related sectors.

To summarize, in addition to direct impacts, two other types of impacts are estimated:

- indirect impacts which measure the change in output production in backward linked industries caused by the changing input needs of directly affected industries;
- induced impacts which measure the change in regional household expenditure patterns caused by changes in household income.

Induced Economic Impacts of the Boat Show

As a result of the added employees' compensation and personal income directly generated from Show sales, and similar growth in indirect (supply) industries, overall income levels rise further initiating expenditure and economic activity. Induced effects or impacts occur when new dollars, originating from outside the study area, are introduced into the local economy. Induced economic impacts occur as the households of business owners and employees spend their earnings from these enterprises to purchase consumer goods and services from other businesses within the region. This induced effect \generates additional revenues, income, jobs and taxes for the area economy. These induced, or "household" impacts are summarized in Table 5.

TABLE 5. INDUCED ECONOMIC IMPACTS OF THE 2015 FORT LAUDERDALE BOAT SHOW (BY REGION / $ MILLIONS)

Impact Type	*Broward County*	*Tri-County*	*Florida*
Output	$129.1	$281.8	$487.9
Employment (FTES)	1030	2082	3684
Labor Income	$47.6	$103.7	$173.9
Total Value-Added	$79.4	$169.5	$289.7
Indirect Business Taxes	$6.1	$12.5	$23.1

For example, as shown in *Appendix 1*, the increases in household incomes bring about economic activity in non-boating sectors such as "owner-occupied dwellings," Eating & Drinking establishments, Banking, Hospitals, Real Estate, etc.

TOTAL ECONOMIC IMPACT OF THE 56TH ANNUAL FORT LAUDERDALE INTERNATIONAL BOAT SHOW

In reality, most of the regions industries are either directly, indirectly or through induced expenditures, impacted by the boat industry related business resulting at the Show.

To sum the direct, indirect and induced impacts, an estimate for the total economic impact of the Show in 2015 is illustrated in Table 6.

TABLE 6. TOTAL ECONOMIC IMPACTS OF THE 2015 FORT LAUDERDALE BOAT SHOW (BY REGION / $ MILLIONS)

Impact Type	***Broward County***	***Tri-County***	***Florida***
Output	$282.8	$531.5	$857.3
Employment (FTES)	2280	3859	6254
Labor Income	$105.6	$195.5	$304.3
Total Value-Added	$163.9	$305.3	$485.9
Indirect Business Taxes	$16.9	$30.4	$51.2

Qualifications

Any estimate of economic impacts is only as good as the basic information entered into the input-output model. In performing the research, the best information available was used to attempt to fully characterize the level and mix of spending generated by the Show. To maintain the integrity of this study, the authors have been careful to impart a downward bias to our estimated Show impacts.

While attempting to account for all potential spending generated by the Show, caution was exercised in order not to artificially bias the estimated economic activity upward with unrealistic assumptions and unfounded assumptions.

Several examples of the caution we have taken in generating our estimates of the economic impact are given here:

Assignment of the net direct economic impact estimates which involved “margin” sectors such as sales by brokers, were closely scrutinized. Boat Show surveys reported sales of “used boats” by this sector of $142.8 million. Direct impacts of this activity were margined to 10% of total sales.

The reduction in direct impact estimates for the “used-boat” (brokered) sales resulting from the Show, also exclude the often significant post-show expenditures such vessel sales generate in vessel repair, refurbishing, maintenance, dockage, accessories, services, etc.

Perhaps one of the major problems with utilizing “off-the-shelf” models such as IMPLAN and others is the lack of specificity to account for sectors such Florida’s vessel brokerages. Used boat sales were margined to sector for lack of a more specific brokerage sector.

The expenditure estimates for Show visitors may be underestimated. The use of monthly average hotel rates as a basis for estimate is a significant understatement from the prevailing hotel room rates which prevail during the Show. Closer analysis of the Show’s impact on the hotel sector is difficult because the Show spans two months; existing occupancy reports and rate estimates are averaged monthly by the local tourist development organizations which collect such data.

The survey on Show-generated marine product sales had a response rate of approximately 15% of the total “in-water” and “out-of-water” exhibitors at the 2015 Show. The results noted here is an expansion of that survey information which reported $250.3 million in Show sales. The estimate confidence intervals are plus or minus 10% at the 95% confidence level considered normal for these types of analysis.

Conclusion

It is perhaps most difficult to quantify the positive amenity values or externalities which arise by the continuing success of the Show. In bringing the world’s boat-related industry to Fort Lauderdale, the community both enhances and reinforces its historic identity as the boating capital of the world. Clearly the Show also serves to introduce the region’s diverse attractions to the world.

The Show is the largest single gathering place of mega yachts at one time, and is the largest in the world in terms of gross exhibitor space. Over the years the Show has grown to represent a gathering place for industry entrepreneurs, media, dealer meetings, product introductions and the like.

Finally, although the economic impacts outlined above are clearly significant, they should be considered to be “short run” impacts only. Given the region’s leadership position in virtually all boat-related sectors, the initial Show sales will continue to generate future, “long run” activity. The products sold as a result of the Show in a sense will continue to impact the area as they are, maintained, repaired, refitted, and utilized for years to come.

World leadership will continue to be based upon the industry support for the Show and the critical support of local and state government. The overall good will and economic impact generated for the local community and the State of Florida is well recognized in the boating industry. As a result other world boating centers such as Genoa, Italy and Monaco are stepping forward to expand and enhance in-water boating facilities to build competitive world boat shows.

APPENDIX I.

Region	Industry Group (NAICS)	Employment (Fulltime, Part-time Jobs)	Labor Income (Million $)	Value Added (Million $)	Industry Output (Million $)	Business Taxes (Million $)
Broward County, FL	11 Agriculture, Forestry, Fishing & Hunting	0	$0.0	$0.0	$0.0	$0.0
	21 Mining	1	$0.0	$0.0	$0.1	$0.0
	22 Utilities	1	$0.1	$0.7	$1.5	$0.2
	23 Construction	71	$3.6	$5.7	$13.2	$0.1
	31-33 Manufacturing	180	$11.3	$13.2	$49.9	$0.7
	42 Wholesale Trade	38	$3.2	$6.2	$9.4	$1.3
	44-45 Retail trade	522	$28.7	$44.5	$57.2	$7.8
	48-49 Transportation & Warehousing	74	$2.7	$3.7	$7.6	$0.2
	51 Information	21	$1.9	$4.3	$9.7	$0.4
	52 Finance & insurance	68	$3.9	$5.4	$12.4	$0.3
	53 Real estate & rental	91	$1.7	$18.7	$28.6	$2.3
	54 Professional, scientific & technical services	98	$6.5	$8.4	$13.8	$0.4
	55 Management of companies	9	$1.1	$1.4	$2.2	$0.0
	56 Administrative & waste services	102	$3.7	$4.7	$6.9	$0.0
	61 Educational services	26	$1.1	$1.2	$1.9	$0.0
	62 Health & social services	149	$7.3	$8.2	$13.4	$0.1

	71 Arts- entertainment & recreation	92	$2.3	$3.3	$6.2	$0.2
	72 Accommodation & food services	497	$14.3	$19.9	$32.6	$2.9
	81 Other services	90	$3.0	$4.2	$6.1	$0.4
	92 Government & non NAICs	151	$11.3	$13.3	$15.5	($0.2)
	Total	2,280	$107.7	$167.1	$288.3	$17.3
Miami-Ft. Lauderdale-West Palm Beach, FL Metro Area 3 counties)	11 Agriculture, Forestry, Fishing & Hunting	5	$0.2	$0.4	$0.5	$0.0
	21 Mining	3	$0.1	$0.2	$0.6	$0.0
	22 Utilities	5	$0.8	$3.4	$6.9	$1.0
	23 Construction	125	$6.0	$9.4	$22.9	$0.2
	31-33 Manufacturing	330	$18.0	$22.0	$90.8	$1.4
	42 Wholesale Trade	80	$7.3	$13.8	$20.4	$2.6
	44-45 Retail trade	899	$50.4	$79.0	$101.5	$14.2
	48-49 Transportation & Warehousing	125	$4.9	$7.0	$15.0	$0.4
	51 Information	54	$5.2	$10.9	$25.9	$0.9
	52 Finance & insurance	173	$11.8	$15.4	$32.9	$0.8
	53 Real estate & rental	166	$3.6	$34.7	$52.6	$4.1
	54 Professional, scientific & technical services	198	$13.8	$17.6	$28.8	$0.8
	55 Management of companies	32	$4.3	$5.4	$8.4	$0.1
	56 Administrative & waste services	197	$6.5	$8.0	$12.1	$0.1
	61 Educational services	51	$2.3	$2.6	$4.0	$0.1

	62 Health & social services	307	$16.6	$18.9	$30.9	$0.3
	71 Arts- entertainment & recreation	112	$3.7	$5.6	$9.3	$0.4
	72 Accommodation & food services	561	$17.0	$23.6	$38.2	$3.2
	81 Other services	167	$5.4	$7.9	$11.4	$0.8
	92 Government & non NAICs	270	$21.2	$25.3	$28.6	($0.3)
	Total	3,859	$199.3	$311.2	$541.7	$31.1
State of Florida	11 Agriculture, Forestry, Fishing & Hunting	19	$0.7	$1.5	$1.9	$0.0
	21 Mining	7	$0.1	$0.2	$1.6	$0.0
	22 Utilities	11	$1.3	$6.4	$13.9	$2.3
	23 Construction	206	$8.9	$14.5	$36.2	$0.3
	31-33 Manufacturing	527	$32.6	$39.9	$152.0	$2.3
	42 Wholesale Trade	139	$11.4	$22.3	$33.8	$4.6
	44-45 Retail trade	1,494	$75.3	$121.6	$159.7	$24.1
	48-49 Transportation & Warehousing	185	$7.6	$10.8	$23.5	$0.6
	51 Information	83	$7.1	$15.1	$37.4	$1.4
	52 Finance & insurance	289	$17.5	$24.1	$53.5	$1.4
	53 Real estate & rental	294	$5.6	$57.9	$89.1	$7.1
	54 Professional, scientific & technical services	339	$22.4	$28.1	$46.9	$1.3
	55 Management of companies	58	$6.1	$7.6	$13.1	$0.2
	56 Administrative & waste services	325	$10.8	$13.4	$20.3	$0.1

61 Educational services	78	$3.1	$3.4	$5.5	$0.1
62 Health & social services	515	$28.6	$32.4	$53.3	$0.5
71 Arts- entertainment & recreation	166	$4.9	$7.5	$13.2	$0.7
72 Accommodation & food services	737	$19.5	$28.1	$47.4	$4.1
81 Other services	273	$9.2	$13.1	$18.7	$1.3
92 Government & non NAICs	509	$37.6	$47.3	$52.4	($0.4)
Total	6,254	$310.2	$495.2	$873.6	$52.2

APPENDIX II.

Glossary of Input-Output Terms

Direct effects/impacts: Direct impacts represent the revenues, value-added, income, or jobs that result directly from an economic activity within the study area or a regional economy.

Employment or Jobs: Represents the total numbers of wage and salaried employees as well as self-employed jobs. This includes full-time, part-time and seasonal workers measured in annual average jobs.

Indirect Business Taxes: Include sales, excise, and property taxes as well as fees and licenses paid by businesses during normal operations. It does not include taxes on profits or income.

Indirect effects/impacts: Indirect effects occur when businesses use revenues originating from outside the region, or study area, to purchase inputs (goods and services) from local suppliers. This secondary, or indirect business, generates additional revenues, income, jobs and taxes for the area economy.

Induced effects/impacts: Induced effects or impacts occur when new dollars, originating from outside the study area, are introduced into the local economy. Induced economic impacts occur as the households of business owners and employees spend their earnings from these enterprises to purchase consumer goods and services from other businesses within the region. This induced effect generates additional revenues, income, jobs and taxes for the area economy.

Input-Output Analysis: The use of input-output models to estimate how revenues or employment for one or more particular industries, businesses or activities in a regional economy impact other businesses and institutions in that region, and the regional as a whole.

Input-Output Models: A mathematical representation of economic activity within a defined region using inter-industry transaction tables or matrices where the outputs of various industries are used as inputs by those same industries and other industries as well.

Labor Income: All forms of employment compensation, including employee wages and salaries, and proprietor income or profits.

Local revenues/expenditures: Local revenues or spending represent simple transfers between individuals or businesses within a regional economy. These transactions do not generate economic spin-off or multiplier (indirect and induced) effects.

Margins: Represent the differences between retail, wholesale, distributor and producers prices.

Non-local revenues/expenditures: When outside or new revenues flow into a local economy either from the sale of locally produced goods and services to points outside the study area, or from expenditures by non-local visitors to the study area, additional economic repercussions occur through indirect and induced (multiplier) effects.

Other Property Type Income: Income in the form of rents, royalties, interest, dividends, and corporate profits.

Output: Revenues or sales associated with an industry or economic activity.

Total Impacts: The sum of direct, indirect and induced effects or economic impacts.

Value-added: Includes wages and salaries, interest, rent, profits, and indirect taxes paid by businesses. In the IMPLAN results tables, Value-added equals the sum of Labor Income, Other Property Type Income, and Indirect Business Taxes.

LITERATURE CITED

1. Kenneth Leventhal & Company. "Ft. Lauderdale International Boat Show-Economic Impact Analysis" July 1989. Coral Gables, Florida.

2. *Implan Group, LLC. Implan social accounting and economic impact analysis software, version 3, and 2014 state/county data for Florida*. Huntersville, NC, Nov. 2014. www.Implan.com.