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Assessment of the Economic Impacts of Recreational Boating in the City of Hampton

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Assessment of the Economic Impacts of Recreational Boating in the City of Hampton



Performed by
Virginia Institute of Marine Science
College of William & Mary

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In conjunction with Economic Impact Analysis Program at the University of Florida

> On behalf of the City of Hampton Contract Number 08-0007630-001 (3/12/08) REQ. #310708

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Cover Photo: Boats at Bluewater Yacht Sales in Hampton. © Erin Seiling/VASG

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ASSESSMENT OF THE ECONOMIC IMPACTS OF RECREATIONAL BOATING IN THE CITY OF HAMPTON

Performed by

Virginia Institute of Marine Science, College of William and Mary

January 2009

Executive Summary

The survey research completed and described in this report produces in-depth information regarding the economic activity and fiscal impacts of recreational boating to the City of Hampton, Virginia. Surveys of Hampton resident boat owners and non-resident boat owners were completed during 2008. The surveys provided details on the amount and types of spending associated with watercraft use in Hampton. Additionally the surveys provided information on the factors that make Hampton a desirable home port and boating center.

Major Findings:

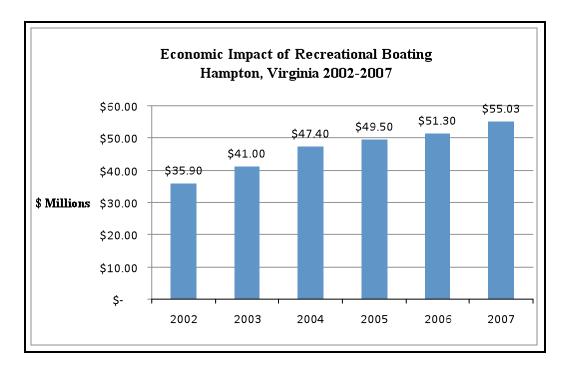
Boat Related Spending in Hampton:

- ◆ Hampton resident boat owners spent over \$25 million on boating in Hampton during 2007.
- ◆ Residents owning boats 21 to 33 feet in length accounted for over \$15 million of the total spending.
- ◆ Fuel accounted for the largest "trip related" expenditure at almost \$3.5 million. Spending on fishing supplies, restaurant meals, and groceries *each* exceeded \$1 million.
- ◆ The largest expenditures over \$4.5 million were for annual storage and maintenance of watercraft.
- ◆ The survey of 260 non-resident boat owners indicated that as a group they spent over \$26 million in Hampton during 2007.
- For non-resident "trip-related" expenses, lodging represented the largest expenditure; an estimated \$4.1 million.
- ◆ Fuel accounted for the second largest amount of non-resident spending at almost \$3.9 million. Spending on restaurant meals while in Hampton was a close third place at an estimated \$3.1 million during 2007.

Economic Impact of Boating in Hampton

- Expenditures by out-of-region boating-visitors represent an inflow of "new" capital into the community. This spending initiates multiple rounds of economic impact among Hampton's businesses and households.
- ◆ The total economic impact of non-resident boaters on Hampton was \$37.1 million in 2007.
- Non-resident boaters were responsible for generating 475 full time jobs in Hampton.
- ♦ By virtue of the fact that expenditures and multiplier impacts create additional sales and value added to Hampton, the City also gained \$2.2 million in additional tax revenue from the non-resident boater activities.
- ◆ The overall tax impact on the Commonwealth was \$3.4 million.
- ◆ Taken together, resident and non-resident boaters were responsible for \$55.0 million in economic impact to Hampton. This impact represents \$32.5 million in new value added, \$22.2 million in incomes and 698 jobs.

The economic impact has continued to expand with increasing numbers of non-resident and resident watercraft making Hampton their homeport. The figure below illustrates this growth in terms of 2007 dollar values.



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Background

The City of Hampton is located in southeastern Virginia on the Lower Peninsula and is a part of what is known as the "Tidewater area." The city is bounded to the East by the Chesapeake Bay, to the South by the Hampton Roads Harbor, to the West by the City of Newport News, and to the North by the Back River, the City of Poquoson and York County. Hampton is comprised of 72 square miles including 55 square miles of land and 17 square miles of water. The City has a population of approximately 145,860, distributed in densities from suburban to very urban. There are 49,806 parcels, most of which are taxable with a small percentage of non-taxable parcels.

Home to more than 4,000 recreational boats, the City of Hampton Virginia is a gateway to marine recreation in the Chesapeake Bay. Hampton's importance to boating access carries with it an expanding economy related to boating and boating related industries.

In addition to the large group of boater-citizens who reside in the City of Hampton, local marine businesses such as marinas also provide access and berthing to many non-local watercrafts. While watercraft registrations provide a partial and useful estimate of the stock of boats in a region, the true economic impact arising from recreational boating primarily depends upon the type of boats as well as the frequency and nature of use.

I. Objectives

The survey research completed and reported on in this report is in fulfillment to the City of Hampton's ("Hampton") request to produce in-depth information regarding:

1. The estimated 2002-2007 total expenditures of recreational boaters in Hampton.

2. The respective annual total economic impacts of boater spending on Hampton economy in terms of income, employment, total output and related economic impact measures.

In addition to the primary objectives, the City also requested that the survey include questions requesting views about the watercraft personal property tax.

II. Work Completed

Objective 1. Evaluation of Economic Activity

Registered Boater Expenditure Estimates - Data Collection

Resident Boater Survey

The Virginia Department of Game and Inland Fisheries (VDGIF) boater registration database served as the sampling frame for the Hampton *resident* boat owner mail survey to determine boater expenditures.

A stratification scheme for the sample was used to determine the number of surveys to be mailed. Table 1 shows the stratification scheme used based upon registered boat lengths for Hampton. This resulted in unique categories for which required minimum sample sizes of completed surveys were determined for each category in order to make an expenditure estimate for that category. It was originally estimated that there needed to be approximately 100 returned surveys. Assuming a response rate of 20 percent, this would require a mailing of approximately 500 surveys. Actually 360 complete resident boater survey returns were returned. The response is considered to be normal based upon prior research by the authors and sufficient for projecting economic impacts. City of Hampton staff compared an original boat license population of 3,003 records contained in the Virginia Department of Game & Inland Fisheries (VDGIF) report with Hampton addresses against the current 2008 VDGIF report to eliminate mailing surveys to citizens in the City's system who were no longer active on the Hampton VDGIF report. Additionally, a comparison of names on the 4 boat length category listings was made to remove duplicate names to prevent mailing duplicate surveys to residents. As a result of these refinements, the original population of 3,003 records was reduced to a stratified sample population from which the random survey sample was drawn. The survey stratification by boat size class is depicted in Table 1.

Table 1. Resident Boater Survey	Sample Stratification by Boat Size
Length in Feet	Number of Boats
<=14	574
15-20	724
21-33	407
>33	10
Total	1,715

The survey instrument was conducted as a mail survey and consisted of four pages (Appendix 1). The survey consisted of a cover letter from the Commissioner of Revenue's Office providing the rationale for the survey and other background information intended to encourage the boat owner to complete the survey. The first page of questions (page 2) collected information about the type of boat, location of use and storage, number of boater trips during the sample period, and spending per year in Hampton on trip related expenses. Page 3 collected information on the annual expenditures in Hampton as required by the economic impact model in Objective 2. Pages 4 and 5 of the survey investigated issues related to the underlying decision-making to keep watercraft in Hampton including the ranking of taxes and fees with other potential locational factors.

In addition to trip-related expenditures, annual expenditures independent of boating trips taken such as slip fees, repairs, insurance, and loan expenses were collected and averaged for the different boater types. Examples of these annual expenses are given in Table 2.

Respondents were given the option of completing the survey and returning via a postage-paid envelope or going to a web address and completing the survey over the web (http://www.vims.edu/adv/Hamptonboater.html) or faxing the completed survey to Virginia Institute of Marine Science (VIMS).

The resident boater survey mailing was completed by the City of Hampton Commissioner of Revenue's office in close coordination with the Virginia Sea Grant Program at VIMS.

Non-Resident Boater Survey

During 2007, Hampton's 12 commercial marinas represented an estimated 1,400 in-water boat slips and 620 dry stack storage spaces. Many of these slips were utilized seasonally and year around by boats and vessels not registered to Hampton residents.

In addition to the registered resident Hampton boaters, detailed surveys were completed with Hampton marinas to gather expenditure information for watercraft (boats and vessels) that likely were not reflected within the Virginia registered boat data base (Appendix 2). These boats and vessels were those registered in Virginia from outside Hampton, out of state boats utilizing Hampton as a home port and Coast Guard documented vessels (over 5 net tons displacement) that may not be accounted for in other ways. ¹

Those boat owners were contacted using lists provided by local marinas and provided a separate survey tailored to assessing their expenditures. Based upon the list provided 1,293 non-resident boats (72%) and 503 resident boats (28%) were located at marinas in 2007. The entire population of non-resident boat owners was sent surveys. As with the resident surveys, respondents were given the option of completing the survey and returning via a postage-paid envelope or going to a web address and completing the survey over the web (http://www.vims.edu/adv/marina.html) or faxing the completed survey to VIMS.

Results and Discussion

Expenditures of Resident Boaters in Hampton, Virginia

As shown in *Table 2*, a survey of 310 Hampton resident boat owners indicated that their spending on total boating related activities exceeded \$25 million during 2007. The average boat registered in Hampton is 19 feet in length and has a value of \$20,238. Fuel accounted for the largest amount of "trip related" spending at almost \$3.5 million. Spending on fishing supplies, restaurant meals, and groceries *each* exceeded \$1 million. The largest expenditures; however, were for storage and maintenance of watercraft. Marina fees were almost \$2.4 million, engine repair and replacement \$4.5 million, and insurance costs were more than \$1.5 million.

.

¹ Boats of 5 net tons or greater in displacement are documented via the U.S. Coast Guard Documentation System. Over 8,000 documented recreational vessels are reported as having Virginia home ports. This listing provides a supplementary data base for conducting research such as this. The database from the Coast Guard Office of Information Services was obtained and evaluated in conjunction with the marina surveys.

Residents owning boats 21 to 33 feet in length accounted for over \$15 million in expenditures annually. Though most boats in Hampton are smaller than 21 feet, this group took the largest average number of trips and exhibited the highest level of total spending. These residents spent over \$2 million on fuel and over \$900,000 on fishing supplies. They also spent the most on storage and maintenance – with marina fees of almost \$1.7 million, engine repairs of nearly \$1.4 million, and engine replacements totaling almost \$1.8 million.

Residents with 15 to 20 foot boats also expended significant amounts with an estimated \$5.8 million in expenditures during the year. Fuel and fishing supplies were two of the largest categories, at about \$760,000 and \$650,000 respectively. Engine repair accounted for over half a \$500,000, and marina fees were about \$460,000.

Though there are over 1,000 boats less than 14 feet, and fewer than 100 boats over 33 feet, owners of the over 33 foot boats spent almost twice as much in total boating related activity: \$2.7 million versus \$1.4 million. Owners of small boats spend less in almost every category, except fishing supplies, trailers, winterizing, and taxes and registration fees.

Expenditures of Non-Resident Boaters in Hampton, Virginia

The survey of 260 non-resident boat owners indicated that their spending on boating related activities exceeded \$26 million during 2007.² The average non-resident boat at a marina in Hampton is 39 feet long and has an estimated value of \$102,000. Owners took an average of 43 trips to Hampton for boating excursions staying on average 2 days per trip. Over three-quarters (77%) of the non-resident boats were power and just under one quarter (23%) were sail.

For "trip-related" expenses, lodging represented the largest expenditure; an estimated \$4.1 million. Fuel accounted for the second largest amount of spending at almost \$3.9 million. Spending on restaurant meals while in Hampton was a close third place at \$3.1 million. Spending on other boat supplies totaled over \$1.5 million. The largest expenditures; however, were for storage and maintenance of watercraft. Marina fees are almost \$6.8 million, engine repair and maintenance \$5.8 million.

² The total expenditures reported by boat owners who kept their boats at marinas were \$36.2 million. The estimated amount of that spending actually contributed by Hampton residents was \$10.1 million. The total expenditure used for impact assessment (\$26.1 million) was net of the resident expenditures to avoid double counting with the resident survey expenditure results.

Expense Item	Residents	Non-Residents	Total
Trip Expenses Total	10,921,043	13,676,037	24,597,080
Lodging (hotel, camping fees, etc.)	401,894³	4,150,915	4,552,809
Restaurant meals	1,070,212	3,103,488	4,173,700
Groceries and misc. purchases	1,366,063	969,840	2,335,903
Fishing supplies (bait, tackle, etc.)	1,725,272		1,725,272
Boat launch fees	339,137		339,137
Equipment rental	52,915		52,915
Other boat supplies	1,877,816	1,572,434	3,450,250
Boat fuel costs	3,496,000	3,879,360	7,375,360
Other	591,734		591,734
Non-Trip Expenses Total	14,794,844	12,567,833	27,362,678
Marina/slip/yacht club fees and dues	2,393,207	6,788,880	9,182,087
Storage fees not included above	238,290		238,290
Bottom paint/haul out	1,191,715		1,191,715
Engine repair & maintenance	2,212,043	5,778,953	7,990,996
New/used replacement engine	2,299,218		2,299,218
Electronics/electric repair	428,225		428,225
New/used electronics	840,044		840,044
Sails/rigging repair & maintenance	156,779		156,779
Sails/rigging replacement	160,116		160,116
Other boating equipment & supplies	760,815		760,815
Misc. boatyard services	370,050		370,050
Trailer maintenance & repair	288,112		288,112
Trailer replacement	346,500		346,500
Insurance (boat, towing, etc.)	1,533,931		1,533,931
Boat club, association dues	412,133		412,133
Taxes and registration fees	434,330		434,330
Winterizing Boat	353,398		353,398
Boating magazines and publications	98,258		98,258
Other	277,681		277,681
Total Expenses—Trip and Annual Expenditures	\$25,715,887	\$26,243,870	\$51,959,758

²

³ Certain residents included marina and launch fees in this category on the survey; in some of these cases the dollar amount was also entered under non-trip expenses for marina/slip fees. Where both were entered the initial entry was retained and the non-trip value removed.

Objective 2. Economic Impact Modeling

Economic Impact Analysis

Economic impact analysis begins with introducing a change in the output of goods and services using the multiplier model to analyze the effects on a region's economic base. 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 recreational boating activity on the economy of Hampton, Virginia.

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).⁴

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

⁴ A Glossary of economic impact definitions is contained in Attachment 1.

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 respending will also occur within the study area, further expanding economic activity. These effects are referred to as the "induced impacts" of the industry.

To summarize, because of the interrelationships among the many sectors of Hampton's economy, new sales of goods and services to non-resident boaters generates additional waves of economic impact. Expenditures by out-of-region boating-visitors are in fact "exports" from Hampton's economic base and these transactions initiate multiple rounds of economic impact among Hampton's businesses and households.

Economic Input-Output Model Application — IMPLAN

Many economic impact studies use information from a regional inter-industry impact (input-output) model such as *Impact Planning for Analysis* (IMPLAN). IMPLAN is a nationally recognized economic model used for community/regional economic impact analysis across the country. The model uses input-output analysis in tandem with regional social accounting matrices and multipliers. IMPLAN divides the total national economy into 440 sectors corresponding to North American Industry Classification System (NAICS) codes related to agriculture, extraction, manufacturing, transportation, wholesale trade, retail trade, services and government. Data on these 440 industry sectors is based on national input/output or industry transaction tables (Minnesota IMPLAN Group, 2007). The IMPLAN model used herein was regionalized for this study to reflect the City of Hampton. In addition to the modeling software, individual state data must be purchased from IMPLAN to use in the model. Running the basic IMPLAN model with Hampton data yields the necessary employment, income and output multipliers to apply to the expenditure data.

In order to estimate economic activity, each category of expenditure by the recreational boater was first matched to one or more of the IMPLAN sectors. In most instances, this matching is straightforward. For example, boater expenditures for lodging expenses can be matched to the IMPLAN Hotel and Lodging sector and boat repair and maintenance expenditures accrue to the Boat Building and Repair sector.

The allocation of the boater respective types of boating related expenditures to appropriate industrial sectors for the purpose of estimating the economic impacts is summarized in Table 3.

Boater retail expenditures must be allocated by the proportion of the expenditure attributed to the value added by the retail, wholesale, transportation and producing sectors before applying the IMPLAN multipliers. Each of those sectors will have their own set of impacts on the Hampton economy. Allocation of the expenses is done through national averages of the margins for these expenditure categories as supplied in the IMPLAN data. If the expenditures are for services such as at a marina, it is not necessary to calculate margins, as the full expenditure is applied to the service sector and matched to an IMPLAN multiplier.

After expenditures are broken down using margins into the various IMPLAN sectors, they are then multiplied by a regional purchase coefficient (RPC) before applying the economic activity multipliers. A regional purchase coefficient indicates the extent to which the demand for a good or service can be met by a Hampton-based industry. RPC's, expressed as percentages, are provided by IMPLAN for all sectors in Hampton, Virginia.

The final components of the economic impact analysis are the economic activity multipliers. The multipliers estimate the amount of employment, income or output that a given level of expenditure generates, after it has been adjusted by the RPC. Employment multipliers provide impacts in terms of jobs (full-time, part-time and seasonal). IMPLAN includes several income multipliers. For this project, two types of income impacts were calculated: personal income and total income. Personal income includes employee compensation (wages and salaries), while total income includes personal income plus proprietor (self-employment) income and other property income (e.g., rent). For output impacts, IMPLAN utilizes a Type I and modified Type III multiplier. The Type I output multiplier provides the relationship between the Hampton State expenditures and the direct output or sales in the state. The Type III multiplier includes the additional indirect and induced effects created by the initial expenditure amount.

An ongoing issue in the professional literature on economic impact and input-output analysis is the true value of the costly "survey approach." It is reasonable to assume that without major structural shifts and technological change within the overall economy, multipliers do not change greatly from year to year. Thus, in terms of simple analysis of the aggregate impacts of activity

⁵ In an update of an earlier recreational boating economic impact study (Milon and Adams, 1987), the authors conclude, "These results suggest that repeating 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 (italics added)."(5)

on the regional economy, for the purpose of this study it is appropriate that estimates of the multiplier are used. Further, if spending by industry sector does not change greatly from year to year, then it is sufficient to update these expenditures on an annual basis – specific in this study, based on the change in the number and types of boats.

Thus, utilizing the survey and available data, prior years and updated annual estimates of boater expenditures and economic impacts are based on a 2007 expenditure survey for a 5 year period.⁶ (Figure 4) By using a composite index which reflects the number of registered boats (3) and documented vessels (4) located in Hampton in prior years – relative to the 2007 base year overall boat activity – spending and economic impact is estimated for each year based upon the 2007 baseline. The Bureau of Labor Statistics Consumer Price Index for All Urban Consumers (CPI-U) is used to translate the individual annual estimates for 2002-2006 into 2007 dollars. (2)

⁻

⁶ For this purpose the economic impact estimated for 2007 is adjusted to make estimates for prior years. By using a composite index which reflects the number of registered boats (3) and documented vessels (4) located in Hampton in prior years relative to the 2007 base year overall boat activity, spending and economic impact is estimated for each year based upon the 2007 baseline. The Bureau of Labor Statistics Consumer Price Index for All Urban Consumers (CPI-U) is used to translate the individual annual estimates for 2002-2006 into 2007 dollars. (2)

Table	Table 3. Hampton	Virginia Boa	ting Expendi	tures (2007)	Virginia Boating Expenditures (2007) Model Calibration
Expense Item	Residents	Non- Residents	Total	IMPLAN Sector#	IMPLAN Sector Name
Trip Expenses Total	10,921,043	13,676,037	24,597,080		
Lodging (hotel, camping fees, etc.)	401,894	4,150,915	4,552,809	411	Hotels and motels, including casino hotels
Restaurant meals	1,070,212	3,103,488	4,173,700	413	Food services and drinking places
Groceries and misc. purchases	1,366,063	969,840	2,335,903	329	Retail Stores - General merchandise
Fishing supplies (bait, tackle, etc.)	1,725,272		1,725,272	328	Retail Stores - Sporting goods, hobby, book and music
Boat launch fees	339,137		339,137	410	Other amusement and recreation industries
Equipment rental	52,915		52,915	363	General and consumer goods rental except video tapes and discs
Other boat supplies	1,877,816	1,572,434	3,450,250	320	Retail Stores - Motor vehicle and parts
Boat fuel costs	3,496,000	3,879,360	7,375,360	326	Retail Stores - Gasoline stations
Other	591,734		591,734	330	Retail Stores - Miscellaneous
Non-trip Expenses Total	14,794,844	12,567,833	27,362,678		
Marina/slip/yacht club fees and dues	2,393,207	6,788,880	9,182,087	410	Other amusement and recreation industries
Storage fees not included above	238,290		238,290	340	Warehousing and storage
Bottom paint/haul out	1,191,715		1,191,715	291	Boat building and repairing
Engine repair & maintenance	2,212,043	5,778,953	966'066'2	414	Automotive repair and maintenance, except car washes
New/used replacement engine	2,299,218		2,299,218	225	Other engine equipment manufacturing

Table	Table 3. Hampton	Virginia Boat	ting Expendit	tures (2007)	Virginia Boating Expenditures (2007) Model Calibration
Expense Item	Residents	Non- Residents	Total	IMPLAN Sector #	IMPLAN Sector Name
Electronics/electric repair	428,225		428,225	416	Electronic and precision equipment repair and maintenance
New/used electronics	840,044		840,044	249	Search, detection, and navigation instruments manufacturing
Sails/rigging repair & maintenance	156,779		156,779	291	Boat building and repairing
Sails/rigging replacement	160,116		160,116	84	Textile bag and canvas mills
Other boating equipment & supplies	760,815		760,815	320	Retail Stores - Motor vehicle and parts
Misc. boatyard services	370,050		370,050	291	Boat building and repairing
Trailer maintenance & repair	288,112		288,112	414	Automotive repair and maintenance, except car washes
Trailer replacement	346,500		346,500	320	Retail Stores - Motor vehicle and parts
Insurance (boat, towing, etc.)	1,533,931		1,533,931	357	Insurance carriers
Boat club, association dues	412,133		412,133	410	Other amusement and recreation industries
Taxes and registration fees	434,330		434,330	432	Other state and local government enterprises
Winterizing Boat	353,398		353,398	414	Automotive repair and maintenance, except car washes
Boating magazines and publications	98,258		98,258	342	Periodical publishers
Other	277,681		277,681	330	Retail Stores - Miscellaneous

Table 4.	Table 4. Summary: Economic Impacts from Hampton Boating Activities, 2007	omic Impact	s from Hamp	ton Boating	Activities, 200	70	
Impact	Expenditure Type	Non- Resident Direct	Non- Resident Indirect	Non- Resident Induced	Total Non- Resident	Resident Direct	Total Resident & Non- Resident
Output Impact (Mn\$)	Total	21,023,552	4,141,500	12,013,693	37,178,746	17,857,909	55,036,655
	Trip	8,455,719	1,629,214	4,752,017	14,836,950	4,114,938	18,951,888
	Non-trip	12,567,833	2,512,286	7,261,676	22,341,796	13,742,971	36,084,767
Total Value Added Impact (Mn\$)	Total	12,010,225	2,290,942	8,779,800	23,080,968	9,477,875	32,558,843
	Trip	4,679,030	937,540	3,489,813	9,106,384	2,531,117	11,637,501
	Non-trip	7,331,195	1,353,402	5,289,987	13,974,584	6,946,758	20,921,342
Labor Income Impact (MnS)	Total	8,257,683	1,328,700	6,016,036	15,602,419	6,660,055	22,262,474
	Trip	2,892,723	545,227	2,406,952	5,844,902	1,678,317	7,523,219
	Non-trip	5,364,960	783,473	3,609,084	9,757,517	4,981,738	14,739,255
Other Property Income Impact (Mn\$)	Total	2,150,689	746,251	2,318,918	5,215,858	1,636,925	6,852,783
	Trip	1,099,656	308,780	911,951	2,320,387	412,776	2,733,163
	Non-trip	1,051,033	437,471	1,406,967	2,895,471	1,224,149	4,119,620
Indirect Business Taxes Impact (Mn\$)	Total	1,601,854	215,991	444,846	2,262,692	1,180,895	3,443,587
	Trip	686,652	83,533	170,910	941,095	440,024	1,381,119
	Non-trip	915,202	132,458	273,936	1,321,597	740,871	2,062,468
Employment Impact (jobs)	Total	326	34	114	475	224	869
	Trip	139	14	45	198	84	282
	Non-trip	187	20	69	277	140	416

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of the sales tax collected as a result of the direct, indirect, and induced economic impacts detailed above accrue to the City of The model's estimate of indirect business taxes includes some taxes that do not accrue to local government. Most notably only 50% Hampton.'

Table 5 below summarizes the net taxes generated to the City by boating activity.

	Table 5. Tax	Table 5. Tax Impact to City of Hampton – Indirect Business Taxes	Iampton – Indirec	t Business Taxes	
	Resident Trip	Resident Non-Trip	Non-Resident Trip	Non-Trip	Total
Motor Vehicle License	\$4,570.00	\$9,043.00	\$7,555.00	\$10,609.00	\$31,777.00
Other Taxes	\$53,039.00	\$104,953.00	\$87,681.00	\$123,132.00	\$368,805.00
Property Taxes	\$230,765.00	\$456,635.00	\$381,488.00	\$535,731.00	\$1,604,619.00
S/L Non Taxes	\$19,851.00	\$39,281.00	\$32,817.00	\$46,085.00	\$138,034.00
Sales Tax (50% returned)	899,401.50	\$196,694.50	\$164,325.00	\$230,765.00	\$691,186.00
Severance	\$47.00	\$93.00		\$109.00	\$249.00
Total to the City of Hampton	\$330,166.50	\$653,329.50 \$545,813.00	\$545,813.00	\$766,496.00	\$2,295,805.00

⁷ Personal communication with Commissioner of Revenue's Office. See appendix 3 for detailed IMPLAN tax impact reports. Other taxes likely include revenues accruing to Hampton but are not identifiable from the IMPLAN Social Accounts Tax Estimates.

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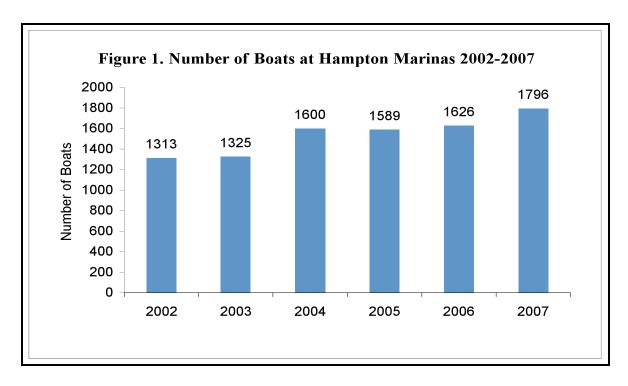
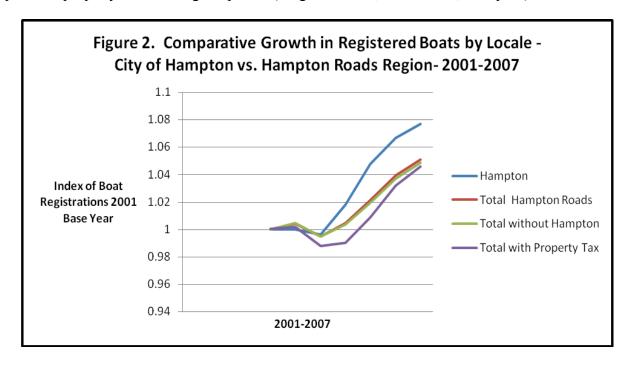
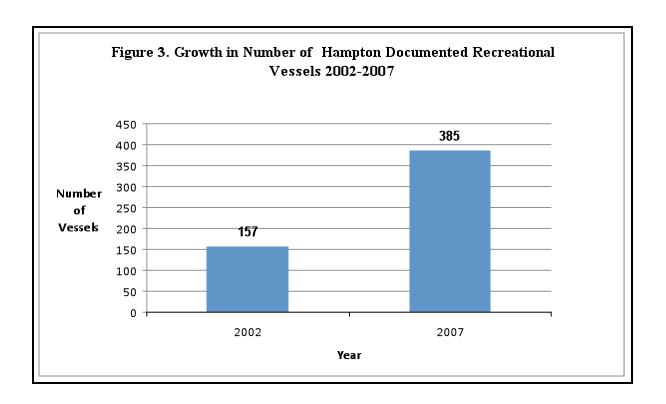
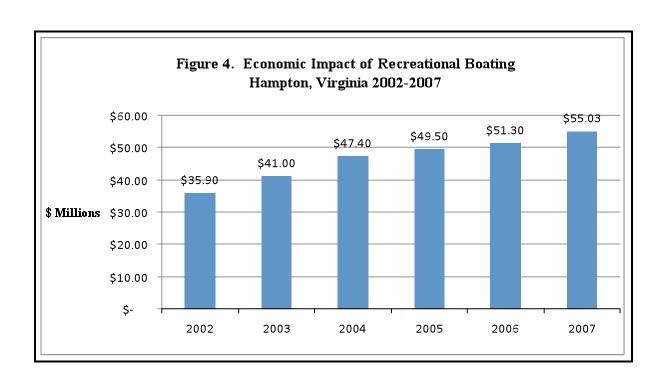


Figure 2 reflects the change in numbers of registered recrational watercraft in Hampton and surrounding areas over a five year period. The series entitled "no property tax areas" shows the total for Hampton Roads minus locales that removed or effectively eliminated watercraft personal property taxes during the period (Virginia Beach, Portsmouth, Hampton).







Influence of Watercraft Personal Property Taxes

In addition to the primary objectives of the economic impact assessment looking at the boating expenditures and associated economic impacts, the City of Hampton requested that the survey also include questions requesting views of the watercraft personal property tax.

A series of questions was asked both residents and non-residents regarding the likely response to the re-imposition of the property tax. The responses were quite varied however they may provide an indicator the incremental changes in boating activity and therefore economic activity which would be associated with a tax. Non-residents overall conducted on average 43 boating trips during 2007. Respondents suggested that they would decrease their boating activity by 24 boating trips (56%) if a tax was re-imposed. Based upon the total estimate of trip expenditures of \$13.6 million non-resident spending would be reduced by \$7.5 million not including any change in the non-trip expenditures.

The same series of questions for residents indicated some decrease in boating activity but not at the same level as the non-residents. On average residents conducted 37 boating excursions during 2007. They estimate that the imposition of the tax would cause them to reduce the amount of boating activity by 8 trips (22%).

Table 6. Boat Owners Response to Question: "If the personal property tax on watercraft
goes back on would you move your boat?"

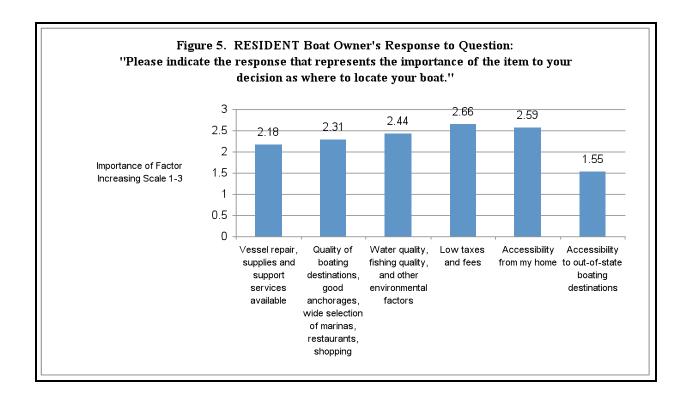
Answer Options	Resident Owner Response %	Non-Resident Owner Response %
Yes	57.7%	83.2%
No	42.3%	16.8%

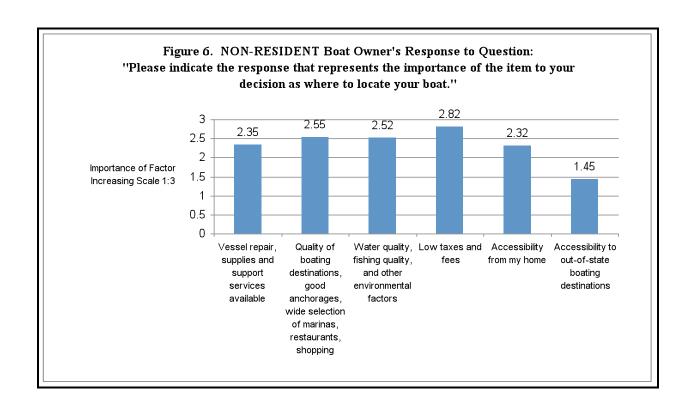
Table 7. Boat Owners Response to Question: "If the personal property tax on watercraft goes back on would you reduce the number of boating trips taken in Hampton?"

Answer Options	Resident Owner Response #	Non-Resident Owner Response #
Number of trips taken 2007	37	43
Reduction of trips with tax	8	24

Further, respondents volunteered additional comments. In the resident boater survey, 124 boaters (over 40% of respondents) volunteered additional comments. Over 60% commented on the possibility of a tax; most other responses were general comments or clarifications of their survey responses. Over 80% of boaters offering opinions on the boat tax adamantly opposed it. A few boaters supported the tax, but usually with conditions: either that the money is used for projects that benefit boaters (such as dredging) or that the tax is capped. Over 10% of those commenting were concerned about the economic effects of a tax on Hampton, predicting the tax would drive boaters and business away from the area. Another 10% stated that a tax would cause them to either sell their boats or seriously consider relocating them.

In the non-resident boater survey, 134 non-resident boaters (over 50% of respondents) volunteered additional comments. Over 70% commented on the possibility of a tax; most other responses were general comments or clarifications of their survey responses. Over 90% of boaters offering opinions on the boat tax adamantly opposed it. A few boaters supported a potential tax, but usually with conditions: either that the money is used for projects that benefit boaters (such as dredging) or that the tax is capped. Over 10% of those commenting were concerned about the economic effects of a tax on Hampton, predicting the tax would drive boaters and business away from the area.





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Attachment 1. 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/ Resident 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-resident /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.

APPENDIX I

HAMPTON REGISTERED BOATER SURVEY



May 14, 2008

Dear Hampton Boater:

We are conducting a survey of recreational boaters in Hampton to learn more about the economic importance of boating to the local economy. You were chosen to participate in the enclosed survey because you have at least one boat registered in Hampton, Virginia. Information from this study will help estimate the total economic impact of boating to your community. This study is funded by the City of Hampton through a contract with the Virginia Sea Grant College Program at the Virginia Institute of Marine Science.

Your completed survey is the only source of information for documenting issues of importance to boaters as well as the economic importance of this part of Virginia's marine industry. **All responses will be kept confidential**. Once information has been compiled, **your survey form will be destroyed**, and there will be no way to identify you. It is vital that we receive as much input as possible to increase the validity of the survey.

Please return the survey in the enclosed envelope, or you may fax it to Thomas Murray at (804) 684-7161. If you prefer, you may complete the survey on line at: http://www.vims.edu/adv/Hamptonboater.html. Should you have any questions or comments, please contact Thomas Murray at (804) 684-7190.

Thank you for taking the time to complete the survey.

Sincerely,

Ross A. Mugler Commissioner of the Revenue

Enclosures

Hampton Local Boater Survey	
About Your Boat	
Model Year Z. Year purchased	
3. Length (ft) 4. Propulsion type	
jn Power	jn Sail
5. My declared state of principal use is: State or Foreign 6. Approximate current value of vessel is ((\$):
7. How long has your boat been in Hampto 8. Where did you keep your boat previousl	
9. How many boating trips do you estimate	e you took last year from Hampton?
Boat Related Expenses in Hampton	
10. Spending Per Year on Trip-Related Exp Lodging (hotel, camping fees, etc.) Restaurant meals Groceries and misc. purchases Fishing supplies (bait, tackle, etc.) Boat launch fees Equipment rental Other boat supplies Boat fuel costs Other	enses (\$)

Hampton Local Boater Survey

Annual Boat Related Expenses in Hampton

11. Annual Boat Related Fixed Expense	es (\$)
Marina/slip/yacht club fees and dues	
Storage fees not included above	
Bottom paint/haul out	
Engine repair & maintenance	
New/used replacement engine	
Electronics/electric repair	
New/used electronics	
Sails/rigging repair & maintenance	
Sails/rigging replacement	
Other boating equipment & supplies	
Misc. boatyard services	
Trailer maintenance & repair	
Trailer replacement	
Insurance (boat, towing, etc.)	
Boat club, association dues	
Taxes and registration fees	
Winterizing Boat	
Boating magazines and publications	
Other	

Hampton Local Boater Survey

Watercraft Personal Property Tax

12. On a scale of 1-3 (with 1 being not at all familiar and 3 being completely familiar), how familiar are you with the personal property tax on boats in Virginia?

	1	2	3
	(Not Familiar)	(Somewhat Familiar)	(Very Familiar)
Familiarity with Virginia personal property tax	jm	j α	j m
on boats?			

13. If there was a personal property tax on boats in Hampton, would you change the number of boat trips or time you spend here on future boating excursions? If no change, enter a zero.

I would INCREASE the number of trips by (number)

I would DECREASE the number of trips by (number)

I would INCREASE the length of typical trip by (days)

I would DECREASE the length of typical trip by (days)

14. If the personal property tax on watercraft goes back on would you move your boat?

jn Yes

in No

15. If you moved your boat where would you move it?

Where You Locate Your Boat

16. Please complete the following table by checking the response that represents the importance of the item to your decision as to where to locate your boat.

	1 (Not Important)	(Moderately Important)	3 (Very Important)
Vessel repair, supplies and support services available	j ta	jm	j το
Quality of boating destinations, good anchorages, wide selection of marinas, restaurants, shopping	j n	j m	j n
Water quality, fishing quality, and other environmental factors	j m	jα	j'n
Low taxes and fees	j m	Jm	j m
Accessibility from my home	j m	jm	j α
Accessibility to out-of-state boating destinations	j ∕∩	j m	j n

Hampton Local Boater Survey

Other Locations

17. Please complete the table below for one other location where you considered keeping your boat and how you rank it to Hampton by checking the response that best compares that location with Hampton. Please enter the name of the location in the box below. If no other location was considered, enter "None" in the box.

	1 (Not As Good)	2 (Almost As Good)	3 (Better Than Hampton)
Vessel repair, supplies and support services available	j'n	j n	j n
Quality of boating destinations, good anchorages, wide selection of marinas, restaurants, shopping	j n	j'n	j m
Water quality, fishing quality, and other environmental	j to	j m	ja
factors			
Low taxes and fees	jn	j n	j n
Accessibility from my home	ja	j a	j ta
Accessibility to out-of-state boating destinations	j m	jn	j m
Location Name			

About You

18. Please indicate the range of your Annual Household Income:

to Less than \$50,000

j∵∩ \$250,000 - \$500,000

jn \$50,000-\$100,000

j∩ \$500,000 - \$750,000

jn \$100,000-\$250,000

More than \$750,000

Thank You

19. Thank your for taking the time to complete this survey. If you would like to add comments to this survey please do so below.



APPENDIX II

HAMPTON NON-RESIDENT BOATER SURVEY



BOATING IN HAMPTON THE ECONOMIC IMPACT OF NON- RESIDENT BOATER SPENDING

Background

We are asking for your participation in this survey, which addresses the activity and economic impact of boaters visiting Hampton and also attempts to more thoroughly understand important factors that attract boaters to come to Hampton. This survey is being conducted among marinas that provide in-water slips for boats. It is intended to lay the groundwork for estimates of the total economic contribution of Virginia's recreational boaters and those that visit Hampton during the year; what factors influence a boater's decision to spend time in Hampton and what could be done to increase their length of stay. The study is funded by the City of Hampton through a contract with the Virginia Sea Grant College Program at the Virginia Institute of Marine Science.

Your completed survey is the only source of information for documenting issues of importance to boaters as well as the economic importance of this part of Virginia's marine industry. All responses will be kept confidential. Once information has been compiled, your survey form will be destroyed, and there will be no way to identify you. It is vital that we receive as much input as possible to increase the validity of the survey. Please return the survey in the attached envelope to Tom Murray, Virginia Institute of Marine Science, P.O. Box 1346, Gloucester Point, VA 23062. If you prefer, you may fax the survey form to Tom Murray at (804) 684-7161. If you have any questions or comments, please contact Tom Murray at (804) 684-7190. Thank you for taking the time to complete the survey.

If you would prefer, you may complete this questionnaire on line at: http://www.vims.edu/adv/marina.html

Hampton Non-Resider	nt Boater Survey	
Homeport		
 Please indicate your city of What is the one-way travel the place where your vessel is Distance from home to Hampton How often during 2007 did y Trips to Hampton in 2007 	distance from your home (or s moored in Hampton? (miles)	r other typical point of embarkation) to
About Your Boat		
4. Model Year 5. Year purchased 6. Length (ft) 7. Propulsion type jn Power 8. My declared state of princip State or Foreign 9. Approximate current value		
Hampton Trips & Expenses		
10. How many separate trips of the separate	gth of stay in Hampton on a jn 5-6 months jn 7-8 months	st year? typical visit to the area (select one)? jn 9-10 months jn 11-12 months

Hampton Non-Resident Boater	Survey		
Hampton Trips & Expenses			
12. While in Hampton waters, what was you Fuel Mooring/slip fees Food and entertainment Lodging Other 13. How much in total did you spend last ye			for (\$):
Maintenance and repair		. (4)	
Boat supplies			
Watercraft Personal Property Tax			
14. On a scale of 1-3 (with 1 being not at all you with the personal property tax on boats			
	1 (Not Familiar)	2 (Somewhat Familiar)	3 (Very Familiar)
Familiarity with Virginia personal property tax on boats?	ja	ja	jn
15. If there was a personal property tax on boat trips or time you spend here on future I would INCREASE the number of trips by (number would DECREASE the number of trips by (number would INCREASE the length of typical trip by I would DECREASE the length of typical trip by	boat trips? If no per) ber) (days)	_	number of
16. If Hampton's personal property tax on v	watercraft goes b	oack on would you move	your boat?
jn Yes			
j _∩ No			
17. If you moved your boat from Hampton v	where would you	move it?	

Hampton Non-Resident Boater Survey

Where You Locate Your Boat

18. Please complete the following table by checking the response that represents the importance of the item to your decision as to where to locate your boat.

	1 (Not Important)	2 (Moderately Important)	3 (Very Important)
Vessel repair, supplies and support services available	j to	jα	j ta
Quality of boating destinations, good anchorages, wide selection of marinas, restaurants, shopping	j'n	j Ω	j n
Water quality, fishing quality, and other environmental factors	jα	ja	j α
Low taxes and fees	j n	j n	j n
Accessibility from my home	j ta	ja	j ta
Accessibility to out-of-state boating destinations	j n	j n	j m

Other Locations

19. Please complete the table below for one other location where you considered keeping your boat. Please rank that location compared to Hampton by checking the response that best compares that location with Hampton for each factor. Please enter the name of the location in the box below. If no other location was considered, enter "None" in the box.

	1 (Not As Good)	2 (Almost As Good)	3 (Better Than Hampton)
Vessel repair, supplies and support services available	j'n	j ra	ja
Quality of boating destinations, good anchorages, wide selection of marinas, restaurants, shopping	j n	j'n	j n
Water quality, fishing quality, and other environmental factors	j α	j o	j m
Low taxes and fees	j m	j m	j m
Accessibility from my home	j ta	j m	ja
Accessibility to out-of-state boating destinations	j m	j m	j m
Location Name			

About You

20. Please indicate the range of your Annual Household Income:

j∩ Less than \$50,000	jn \$250,000 - \$500,000
j _∩ \$50,000-\$100,000	jn \$500,000 - \$750,000
j∩ \$100,000-\$250,000	j₁ More than \$750,000

Ha	ampton Non-Resident Boater Survey	
Th	nank You	
	21. Thank your for taking the time to complete this survey. If you would like to add comments to survey please do so below.	this
		<u>A</u>
		V