

**2013**

# City of Annapolis Demand and Supply of Recreation Boating



**MARKET-ECONOMICS**

Market Economics - Annapolis, MD

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## EXECUTIVE SUMMARY

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### SUMMARY

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The demand and supply of recreational boating in the City of Annapolis stems outside of its immediate residents, but from the tri-state area of Virginia, Pennsylvania, and Delaware. The City of Annapolis is a major market center for the supply of recreational boats on the East Coast. Within the City, production of recreational boats is sizably smaller than the early 1990's. Opportunity remains for final assembly of manufactured boats built elsewhere or in custom production.

Demand for recreational boating in the City of Annapolis remains as a major maritime location for one stop repair and marina docking.



# INTRODUCTION

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## U. S. RECREATIONAL BOATING MARKET

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### RECREATIONAL BOATING

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U.S. Recreational Boating emerged in the post-World War II era as an opportunity to be on the water. Initially, it comprised two elements: families that could afford locally made runabouts equipped with low horsepower outboard motors and those that could afford custom produced boats. The advent of mass production of recreational boats by manufacturers such as Chris Craft, Owens, and Trojan brought affordable runabouts propelled by outboard and inboard engines. For those households that could afford more, cabin cruisers that could accommodate families on weekends on the water were being introduced. During this era, Chris Craft offered kits with which hobbyists and weekend carpenters could assemble their own boats for as little as \$266 for 16-foot runabout. Luger, Westsail, Sailcrafters, and Sunfish offered sailboat kits as well. The advent of fiberglass reinforced plastic (FRP) construction by late 1950, ushered in a way to mass produce a given design boat using assembly line production methods borrowed from the car industry.

### DEMAND AND SUPPLY OF RECREATIONAL BOATING

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Key to understanding the demand and supply of recreational boating is recognizing their key components. Demand for recreational boating is influenced by demographics, economics, and geographic access. Supply is influenced by the production of new recreational boats and the availability of existing boats. Boat storage and access availability reflects demand. If there are insufficient marinas to store boats or limited access to the water to launch and retrieve boats, or both, they will impinge on the supply of recreational boats in the area.

## SUPPLY OF RECREATIONAL BOATING

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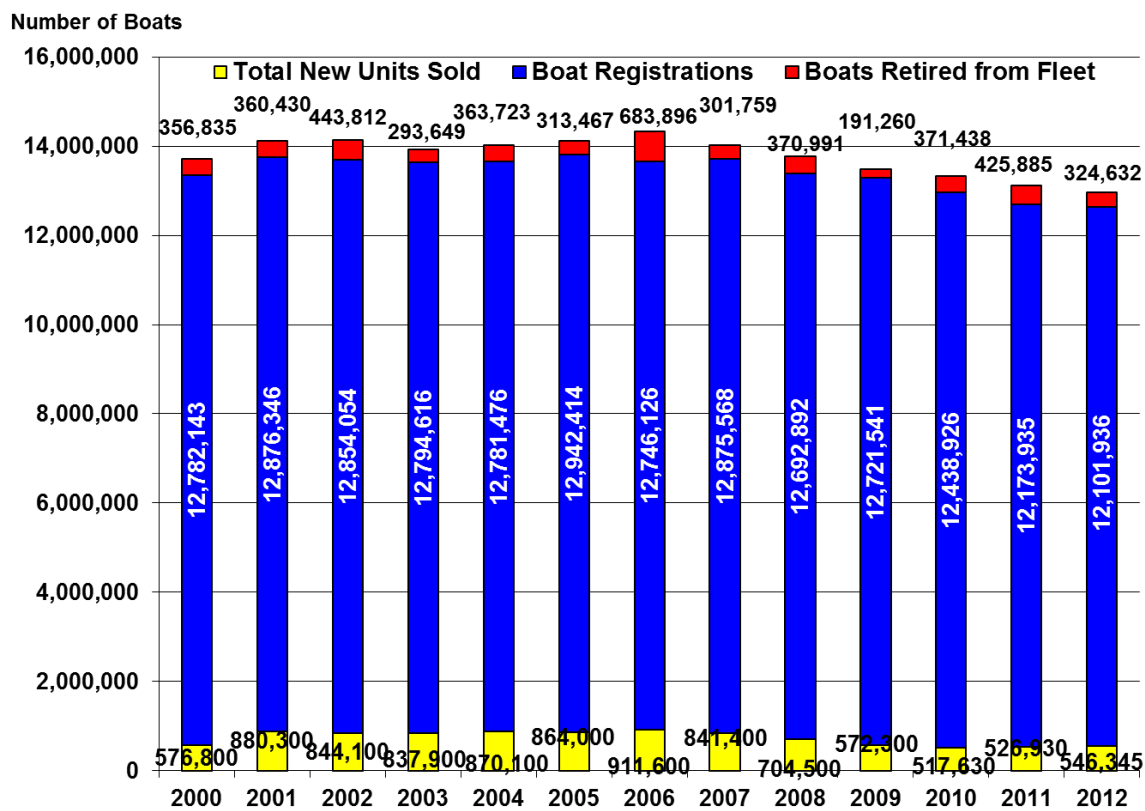
The supply of recreational boats can be seen as the number of new boats sold per year. Manufacturers have also moved away from building boats on speculation to building boats only when customer orders have been received. During the “Great Recession” of 2007–2009, recreational boat production declined by 32 percent, with a drop of 269,300 new boats. The economic downturn prompted a significant amount of industry consolidation, plant closings, and adjustments in manufacturing capacity as demand dropped off. Boat builders were forced to reduce operating costs, postpone capital expenditures, and adjust staffing levels. This reduction in capacity has affected the number of units produced, as well as limited the development of new

products. The number of boat dealers has also shrunk, reducing the amount of inventory and showroom space available. Industry experts estimate that as many as 1,500 dealers have failed since 2008, representing a 20 percent reduction.

Boat production did not rebound until 2011, when it rose by 1.8 percent. In 2012, new boat sales rose by 3.7 percent, 546,395 boats. These new boats added to inventory of registered boats or existing boats in the market place, reaching 12,101,936 (see Figure 1).<sup>1</sup>

FIGURE 1

## Recreational Boating Inventory 2000—2012



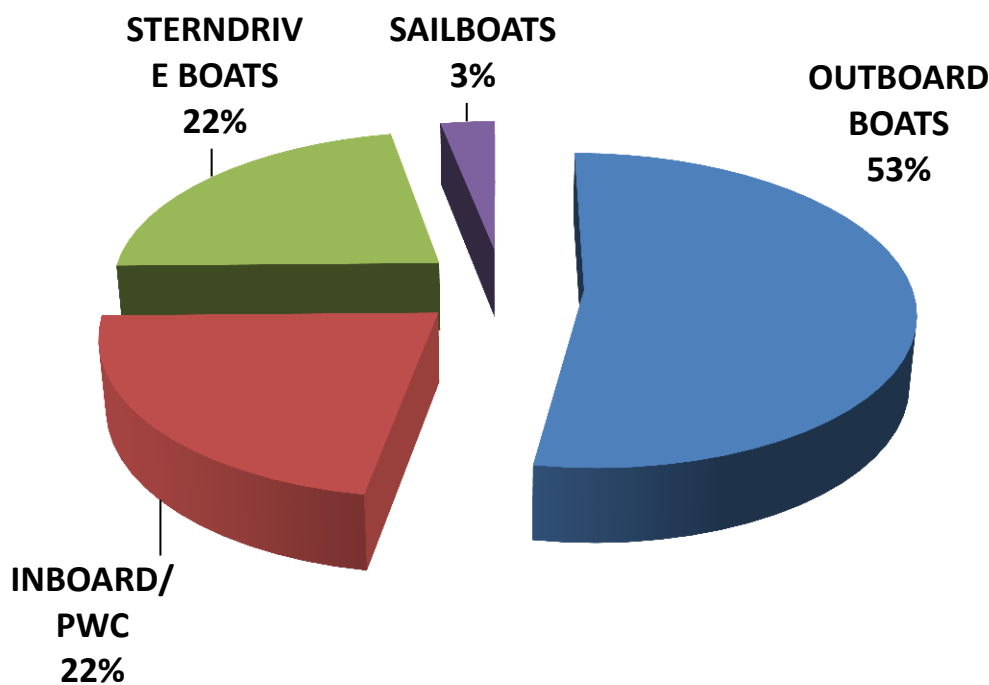
Source: 2012 Recreational Boating Statistical Abstract, National Marine Manufacturers Association, 2013

In 2012, an estimated 324,632 boats were removed from the inventory, down from the peak in 2006 of 683,896. A higher than average number of recreational boats removed from inventory reflected natural disasters in the previous year. It takes about a year for all claims to be accounted and boats to be disposed. For example, the high number of removals in 2006 reflected impact of Hurricane Katrina in August 2005. Similarly, 2013 statistics will reflect a large number of boats removed from inventory as result of Hurricane Sandy.

In 2012, fifty-three percent of the recreational boats that were removed from inventory were outboard boats, while only 3 percent were sailboats. Sailboats have a longer duration remaining in use for longer periods; their average age is 25 years, outboard 21 years, inboard 20 years, and sterndrive 18 years.

FIGURE 2

## Type of Boat Removed from Inventory 2013



Source: 2012 Recreational Boating Statistical Abstract, National Marine Manufacturers Association, 2013

The economic downturn prompted a significant amount of the industry to consolidate, to close plants and to make adjustments in manufacturing capacity as demand dropped off. Boat builders were forced to reduce operating costs, postpone capital expenditures, and adjust staffing levels. This reduction in capacity has affected the number of units that can be produced, as well as

limited the development of new products. The number of boat dealers has also shrunk, reducing the amount of inventory and showroom space available. Industry experts estimate that as many as 1,500 dealers have failed since 2008, representing a 20 percent reduction. Manufacturers have also moved away from building boats on speculation to building boats only when customer orders have been received.

Industry leader, Brunswick offers 24 separate boat brands, 17 of which it has acquired since 2000. In 2010, it had a supply of 15,000 boats in the pipeline, the lowest in history. Tracker Marine, owned by Bass Pro Shops produces several brands of fishing and sport outboard runabouts over a pre-ordered retail outlet. Godfrey Marine, the leader in aluminum pontoon boats, began production in 1958. Like Brunswick, Yamaha cuts across recreational boating production with personal watercraft (PWC) and marine engines.

## PRODUCTION BOAT BUILDERS

TABLE 1

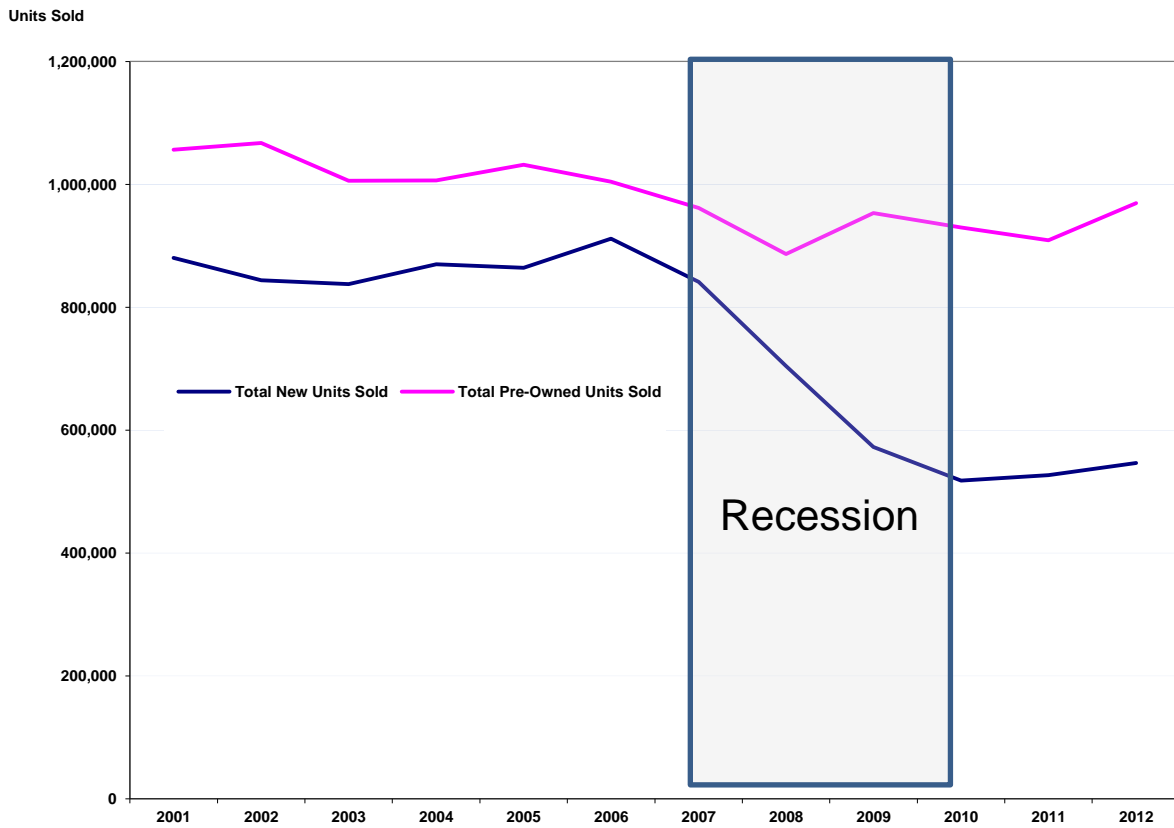
Rank by Volume of Sales	Production Boat Builder
1.	Brunswick
2.	Tracker Marine
3.	Godfrey Marine
4.	Yamaha
5.	Alumacraft
6.	Smoker Craft
7.	XPress Boats
8.	Carolina Skiff
9.	Marine Products
10.	Triton
11.	Leisure Life
12.	Bombardier
13.	Bennington
14.	Crown Line
15.	Starcraft
16.	American Marine
17.	Malibu
19.	Weeres
20.	Sea Fox
21.	MasterCraft

During the recession, new boat sales declined by an average of 14.2 percent from the peak in 2006 (see Figure 4). The rebound in new boat sales began only in 2011, up from the previous year by 1.8 percent. New production, or new boat sales, represents about 42.1 percent of boats sold between 2000 and 2012. During the recession of 2007–2009, the number of new boats sold declined to a low of 35.7 percent of total sales as all sales declined (see Figure 3). The

recovery has shown some improvement, with new boat sales averaging 36.5 percent in 2011 and 2012, but nowhere near the 2006 peak of 47.6 percent. The availability of pre-owned boat sales reflects the quality and age of the available boats for sale. Pre-owned high quality and newer boats bring higher prices. Some estimates of boat depreciation are on order of 9 percent a year until it reaches a plateau at 20 years.

FIGURE 3

## New and Pre-Owned Boat Sales 2000-2012

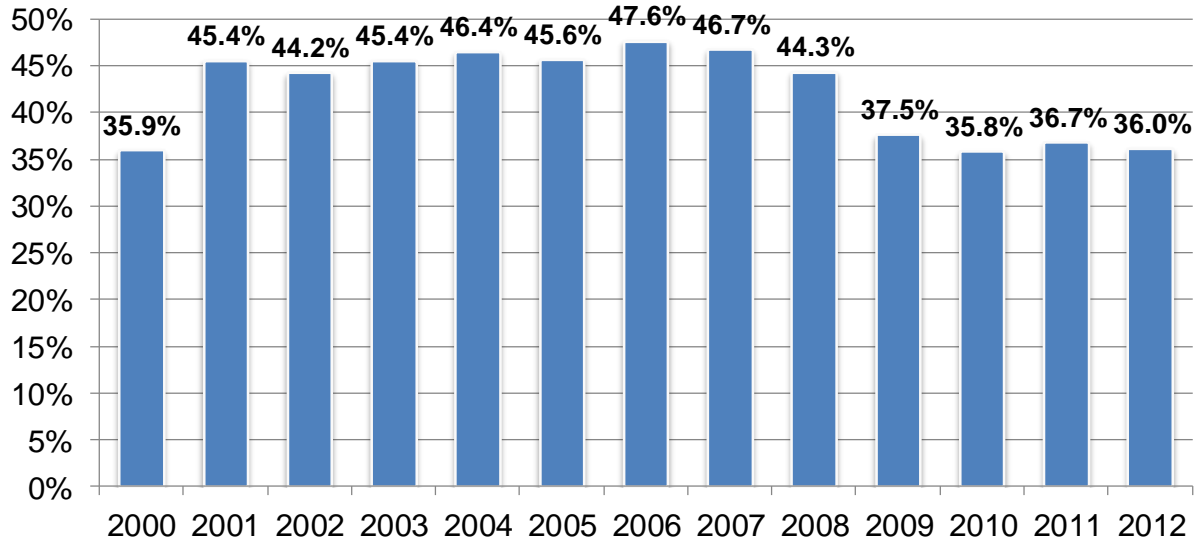


Source: National Marine Manufacturers Association, 2013



FIGURE 4

## Share of New Boat Sales 2000-2012



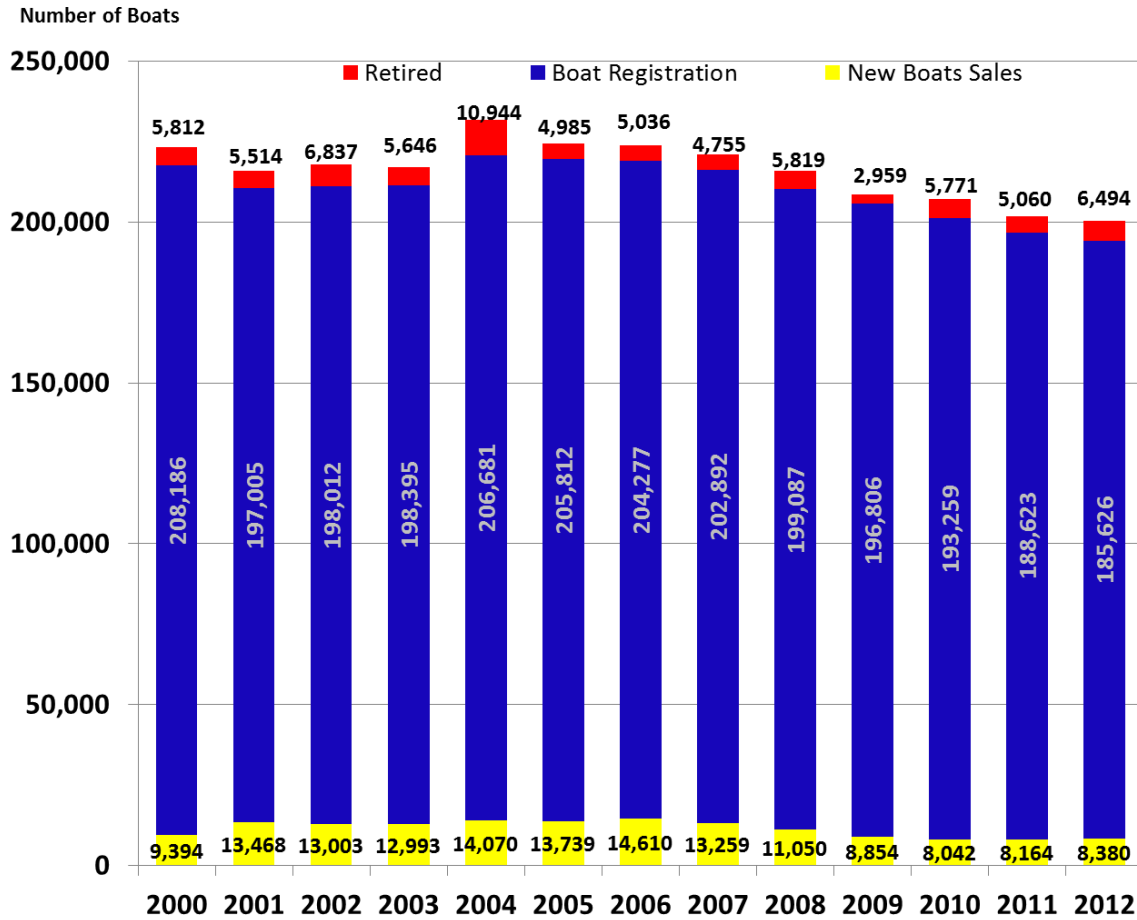
Source: National Marine Manufacturers Association, 2013

### MARYLAND SUPPLY FOR RECREATIONAL BOATING

In Maryland, the inventory of new boats follows national trends; new boat sales peaked in 2006. Over the recession period of 2007-2009, new boat sales declined by 33.2 percent nearly in line with national rates. Maryland boat manufacturers held their ground while reducing production and staff. Production of new boats rebounded in 2011, up by an estimated 122 boats from 2010.

FIGURE 4

## Maryland Recreational Boating Inventory 2000—2012



Estimates by Market Economics, 2013, using Maryland Department of Natural Resources Boat Registrations and National Marine Manufacturers Association, 2013

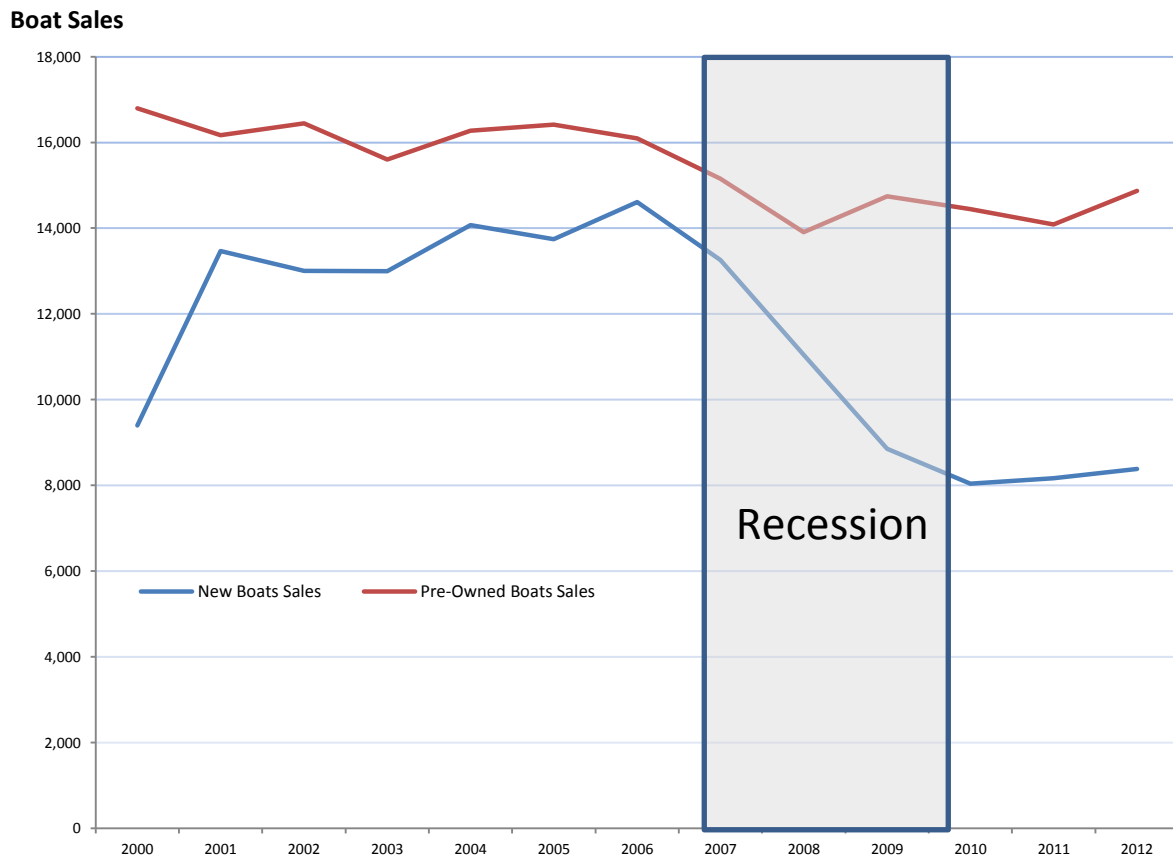
In 2012, an estimated 8,380 Maryland boats were removed from the inventory. This was down from the peak in 2004 of 10,944. A higher than average number of recreational boats removed from inventory reflected natural disasters in the previous year. It takes about a year for all claims to be accounted and boats to be disposed. For example, the high number of removals in 2004 reflected impact of Hurricane Isabel in September 2003. In 2011, Hurricane Irene had a smaller number of boats removed from inventory in 2012. Similarly, 2013 statistics will reflect a large number of boats removed from inventory in 2013 as a result of Hurricane Sandy.

During the recession, Maryland estimated new boat sales declined by an average of -15.3 percent from the peak in 2006 to the bottom in 2009 (see Figure 5). The rebound in new boat sales began only in 2011, up from the previous year by 1.5 percent. New production or new boat sales

represents about 42.1 percent of all Maryland estimated boats sold between 2000 and 2012. During the recession of 2007–2009, the number of new boats sold declined to a low of 35.7 percent of total sales as all sales declined (see Figure 3).

FIGURE 5

## New and Pre-Owned Maryland Boat Sales 2000–2012\*



\*Estimates by Market Economics, 2013, using Maryland Department of Natural Resources Boat Registrations National Marine Manufacturers Association, 2013

A number of Maryland boat builders have gone through a major transformation with a cluster in the communities of Denton and Crisfield borrowing from the traditional power boats built for watermen. Production of custom built boats from Mast & Mallet, Cutts & Case, Belkov Yachts, and Swain Boat Builders remain. Chesapeake Light Craft leads in the production of small boat kits.



## MARYLAND PRODUCTION BOAT BUILDERS

TABLE 2

Production Boat Builder
Judge Yachts
Mathew Brothers
Evans Boats
Composite Yacht
Eastport Yacht
Mast & Mallet
Cutts & Case
Swain Boat Builders
Belkov Yachts
Chesapeake Light Craft
Bandy Boats

Source: Market Economics, 2013

In Maryland, the average length of boat owned is closer to 22 feet, where 81.3 percent are less than 26 feet, the most common configuration is an outboard boat stored on a trailer either at or near the owner's home.

The economic downturn prompted a significant amount of industry consolidation, plant closings and adjustments in manufacturing capacity as demand dropped off. Boat builders were forced to reduce operating costs, postpone capital expenditures, and adjust staffing levels. This reduction in capacity has



affected the number of units that can be produced, as well as limited the development of new products. The number of boat dealers has also shrunk, reducing the amount of inventory and showroom space available. Industry experts estimate that as many as 1,500 dealers have failed since 2008, representing a 20 percent reduction. Manufacturers have also moved away from building boats on speculation to building boats only when customer orders have been received.

## ANNAPOLIS SUPPLY FOR RECREATIONAL BOATING

The City of Annapolis Demand and Supply portion of the report was developed based on responses via in-person interviews, surveys, windshield surveys and ongoing discussions with marina operators.

Estimation is made of new and pre-owned boats apply the national rate ratio to number of registered boats. The City of Annapolis boat registrations is a special tabulation by Maryland Department of Natural Resources of boats registered and stored in waters of the City of Annapolis. For the City of Annapolis, it is estimated that new boat sales declined by an average of 16.9 percent from the peak in 2006 to the bottom in 2009. This parallels the decline in the state over the same period (see Figure 6). The rebound in new boat sales in Annapolis began only in 2011, up from the previous year by less than 1 percent. New production, or new boat sales, represents about 42.4 percent of all Maryland estimated boats sold between 2002 and 2012. During the recession of 2007–2009, the number of new boats sold declined to a low of 42.8 percent of total sales as all sales declined (see Figure 6).



Belkov Yachts



Eastport Yacht Company



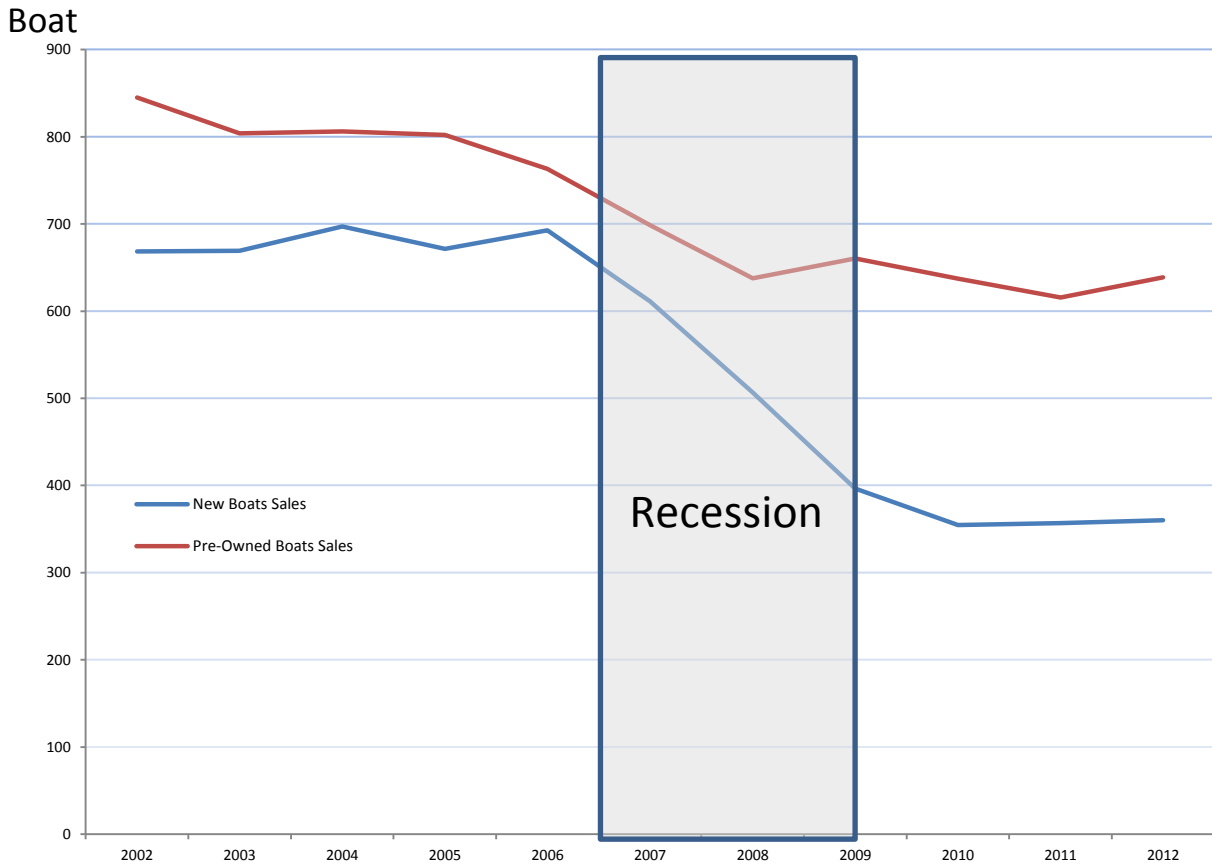
Chesapeake Light Craft



Bandy Boats

FIGURE 6

## New and Pre-Owned Annapolis Boat Sales 2000–2012\*



Source: Maryland Department of Natural Resources and Market-Economics estimate, 2013

### ANNAPOLIS PRODUCTION BOAT BUILDERS

TABLE 3

#### Production Boat Builders

Belkov Yachts

Chesapeake Light Craft

Eastport Yacht

Bandy Boats

Source: Market Economics, 2013

## DEMAND OF RECREATIONAL BOATING

There are 16.7 million boat owners in the United States.<sup>ii</sup> Boat ownership is not geographically uniform across states. States with miles of navigable waterways are highly influenced boat ownership, while states without large number of waterways tend to have fewer boat owners. The Midwest has the largest number of boat owners followed by the South and the West. Florida, California, Minnesota, Michigan, and Wisconsin are the five states with the largest number of registered boats; Maryland ranks 24th (see Table 4). When ownership per adult population is calculated, Minnesota, Wisconsin, South Carolina, Michigan and Maine are the top five states and Maryland ranks 33rd (see Table 5). Nationally, the average length of boat owned is less than 26 feet and the most frequently owned boat is an outboard, which offers flexibility and segmentation of the power plant for transport and repair. The outboard recreational boat is most frequently stored on a trailer at or near the owner's home and is taken to local bodies of water. Boats over 26 feet in length are docked at marinas.

The recession in the United States encouraged more consumers to look for affordable ways to engage in their boating activities. For many, acquiring a used boat became a more compelling option. Thus, much of the distressed product was cleaned out of the marketplace. In addition, many used boat owners cannot afford to sell or trade in their boats at a loss, as the market for used boats continues to yield good deals. Further, credit has tightened on new boats, and people are holding onto their used boats for longer periods.

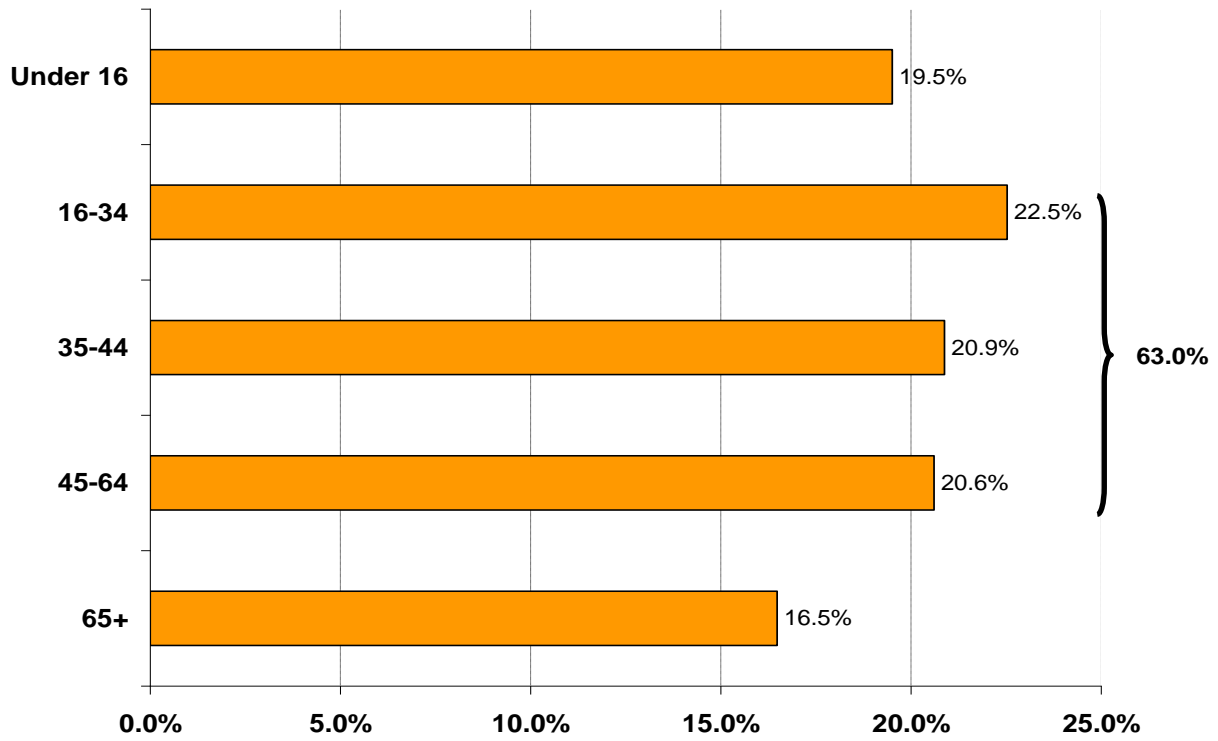
The demand for recreational boats is influenced by access to navigable waters and moderate weather. The per capita demand for boats is illustrated in Table 5 of the per capita of adults 25 years of age and older of reported registered boats by state.

Nearly 68 percent of boat owners are married, they are of a median age of 47 of years and a median household income of \$50,000 to \$75,000(See Figure 6).<sup>iii</sup> Seventy-three percent of boat owners have annual household income of less than \$100,000. The average age of a new sailboat buyer is 56.1 years old, outboard buyers are 53 years old, inboard and sterndrive buyers are 50.1 years old, and PWC and jet-drive buyers are 47 and 45.9 years old, respectively (see Figure 7).<sup>iv</sup> For existing boat owners, the average age is somewhat younger; of 40–45 years. The first-time boat owner tends to be of a median age of 45 years, have a household income of \$50,000, and reside in a town or rural area. Quickly emerging segments of the PWC market are kayaks and paddleboards.



FIGURE 8

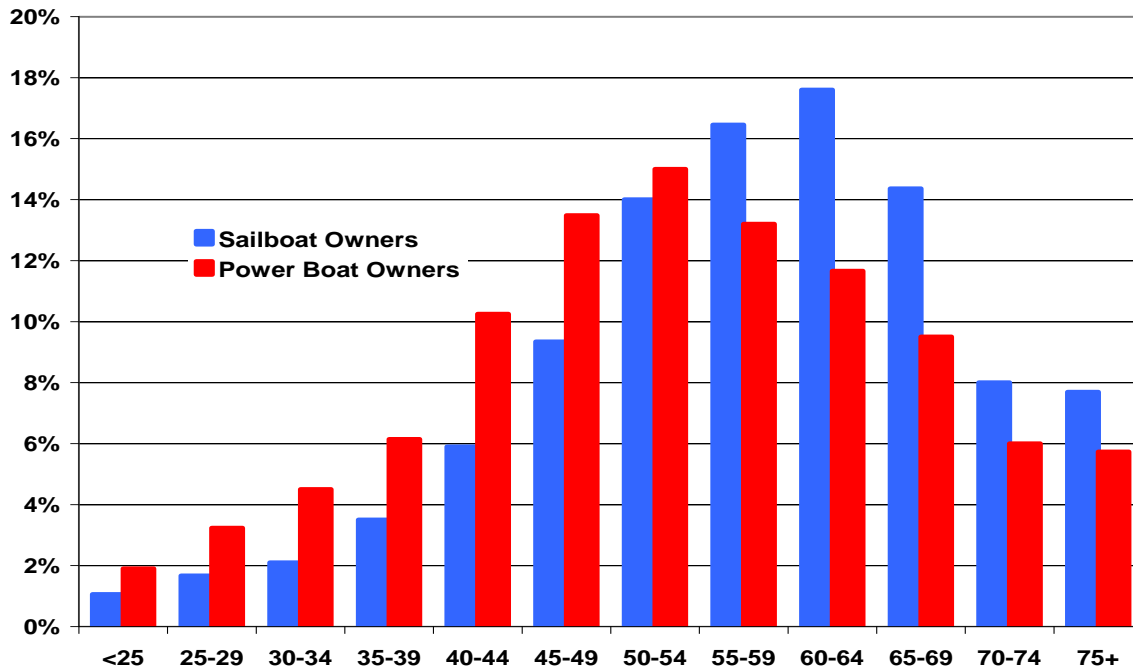
## Distribution of Boat Ownership by Age



Source: National Marine Manufacturers Association, 2013

FIGURE 9

## Distribution of Boat Ownership by Age



Source: National Marine Manufacturers Association, 2013

The outlook for growth is in the 55–64 age bracket that will also support demand, since boat purchases become more likely just before to retirement and consumers in that age group have the disposable income to purchase larger, more expensive vessels. In addition, the industry's effort to sell the "boating lifestyle" to women and minorities should expand the market. Boating products are luxury items, often purchased on credit or by borrowing against the value of a home, and therefore the recreational boating market was decimated by the economic downturn that began in 2007. As housing values have improved, prices have returned.

Locational variation in the demand for recreational boats varies by the availability of navigable waterways and the overall climate for recreation. Of the five states with the highest per capita were in the Midwest: Minnesota, Wisconsin, North Dakota, and Michigan (see Table 5). South Carolina is only state in the top five ranked states per capita that is in the South. Boating registrations per capita is the highest in the Midwest, followed by the South, Northeast, and West.

BOAT REGISTRATIONS PER CAPITA 2012

TABLE 5

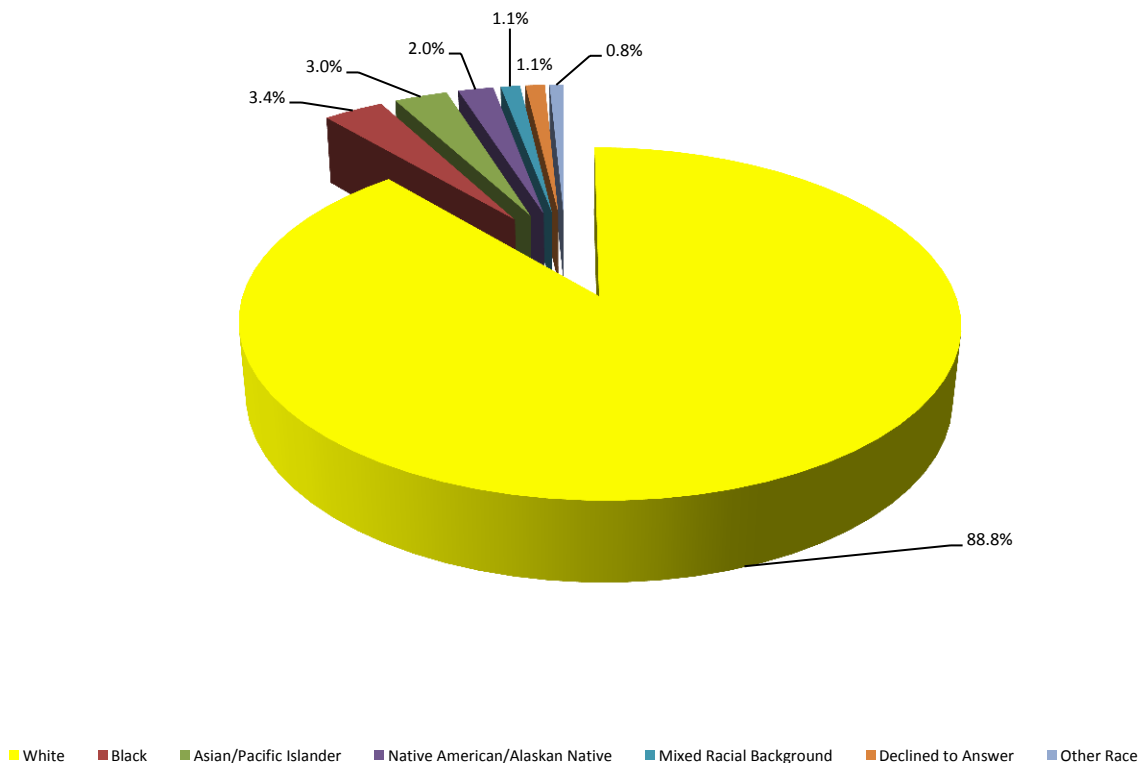
<i>Rank</i>		<i>Boat Registrations 2012</i>	<i>Population 25+ Years of Age 2012</i>	<i>Ratio of Boats per Adult 25+ Per Capita</i>
1	Minnesota	817,996	3,565,596	22.94%
2	Wisconsin	622,563	3,830,479	16.25%
3	South Carolina	460,564	3,115,306	14.78%
4	North Dakota	62,799	450,176	13.95%
5	Michigan	804,088	6,599,357	12.18%
6	Iowa	235,095	2,033,745	11.56%
7	Maine	108,502	943,192	11.50%
8	Alaska	50,142	457,012	10.97%
9	South Dakota	58,449	537,503	10.87%
10	Arkansas	199,546	1,935,366	10.31%
11	New Hampshire	92,976	911,052	10.21%
12	Louisiana	305,081	2,991,131	10.20%
13	Delaware	58,541	608,595	9.62%
14	Idaho	85,749	999,139	8.58%
15	Alabama	268,374	3,184,713	8.43%
16	Oklahoma	201,069	2,464,785	8.16%
17	Montana	54,642	678,539	8.05%
18	Wyoming	28,620	377,499	7.58%
19	Missouri	300,714	4,014,029	7.49%
20	Nebraska	86,248	1,195,770	7.21%
21	Mississippi	133,556	1,917,303	6.97%
22	Vermont	28,987	433,937	6.68%
23	Florida	870,031	13,300,105	6.54%
24	Oregon	169,188	2,642,252	6.40%
25	North Carolina	391,711	6,400,654	6.12%
26	Tennessee	259,632	4,290,841	6.05%
27	Kentucky	175,286	2,928,665	5.99%
28	Rhode Island	40,451	709,584	5.70%
29	Ohio	441,732	7,755,670	5.70%
30	Georgia	323,116	6,331,143	5.10%
31	Washington	230,684	4,577,094	5.04%
32	Indiana	214,487	4,260,493	5.03%
33	<b>Maryland</b>	<b>185,626</b>	<b>3,928,555</b>	<b>4.73%</b>
34	Kansas	85,840	1,855,124	4.63%
35	West Virginia	57,085	1,296,488	4.40%
36	Utah	70,144	1,612,943	4.35%
37	Illinois	368,224	8,512,320	4.33%
38	Virginia	230,684	5,422,325	4.25%
39	Connecticut	103,992	2,444,671	4.25%
40	Pennsylvania	332,431	8,701,143	3.82%
41	Texas	580,064	16,079,133	3.61%
42	New York	463,539	13,194,983	3.51%
43	California	776,584	24,420,908	3.18%
44	Massachusetts	139,123	4,518,140	3.08%
45	Arizona	129,221	4,210,133	3.07%
46	Nevada	50,499	1,813,835	2.78%
47	New Mexico	36,846	1,351,688	2.73%
48	New Jersey	160,345	5,998,455	2.67%
49	Colorado	87,225	3,387,754	2.57%
50	Hawaii	14,098	939,959	1.50%
51	District of Columbia	2,118	428,194	0.49%
	<b>Total of States</b>	<b>12,086,645</b>	<b>206,557,476</b>	<b>5.85%</b>

The number of foreign imports by U.S. consumers is directly impacted by the buying power of the U.S. dollar. For the past decade, the United States' largest trading partner for boat imports was Canada. As the strength of the U.S. dollar weakens against foreign currencies, imports become more expensive. High taxation imposed on the importation of boats into the United States also affects the number of units that are purchased abroad.

Boat owner demographics by ethnicity continue to show a high concentration among Whites (See Figure 10). National demographic trends show a growing Hispanic population and substantial numbers of Asian/Pacific Islander and African American households with higher incomes.

FIGURE 10

## Power Boat Ownership by Ethnicity 2010



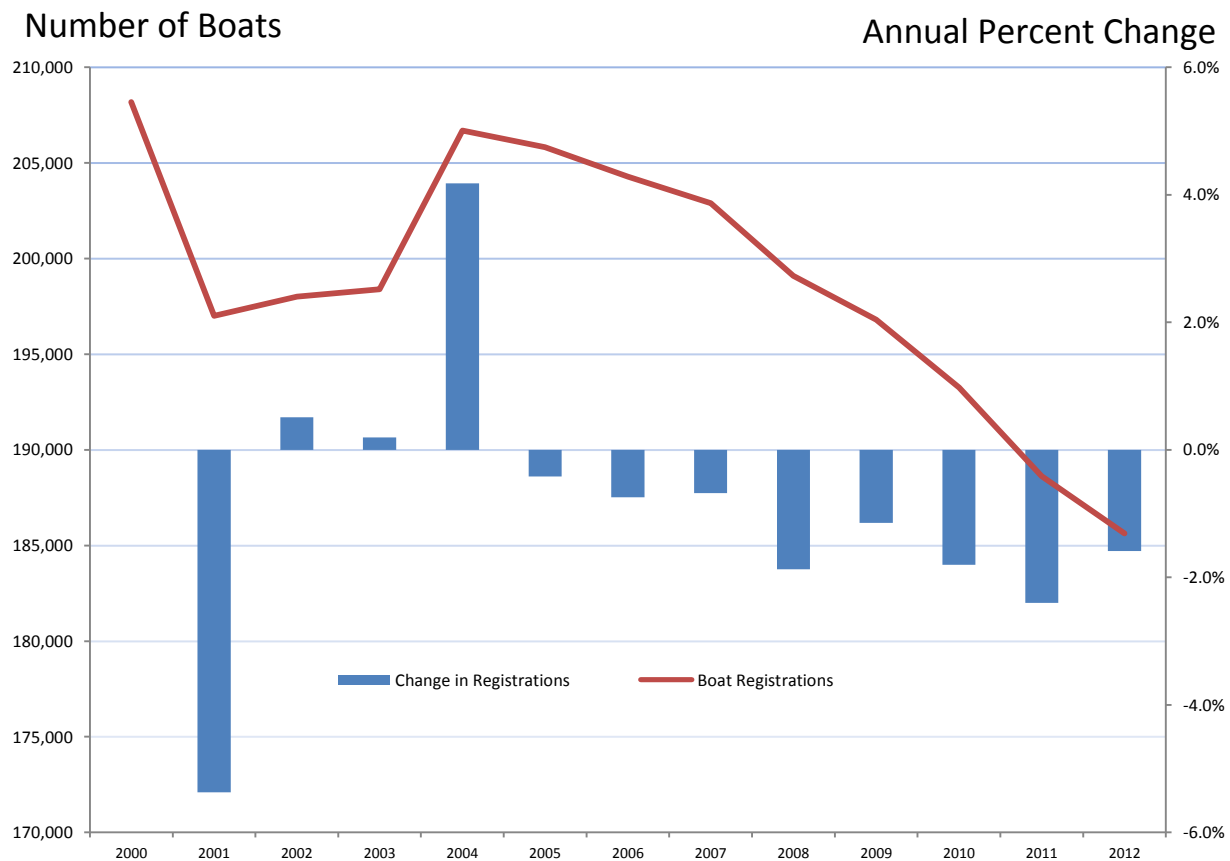
Source: National Marine Manufacturers Association, 2013

## MARYLAND DEMAND FOR RECREATIONAL BOATING

The demand factors for recreational boating in Maryland reflect national trends. Demand can be interpreted by the trends in boat registrations. Maryland boat registrations reflect both new and existing boats. The overall trend shows a decline from 2004 to 2012. In 2001, boat registrations declined by 5.4 percent to rebound in 2002 followed by a moderate increase in 2003, up by 0.2 percent. A sharp rise in 2004 of 4.2 percent was followed by downward trend through 2012.

FIGURE 11

### Maryland Boat Registrations 2000–2012\*

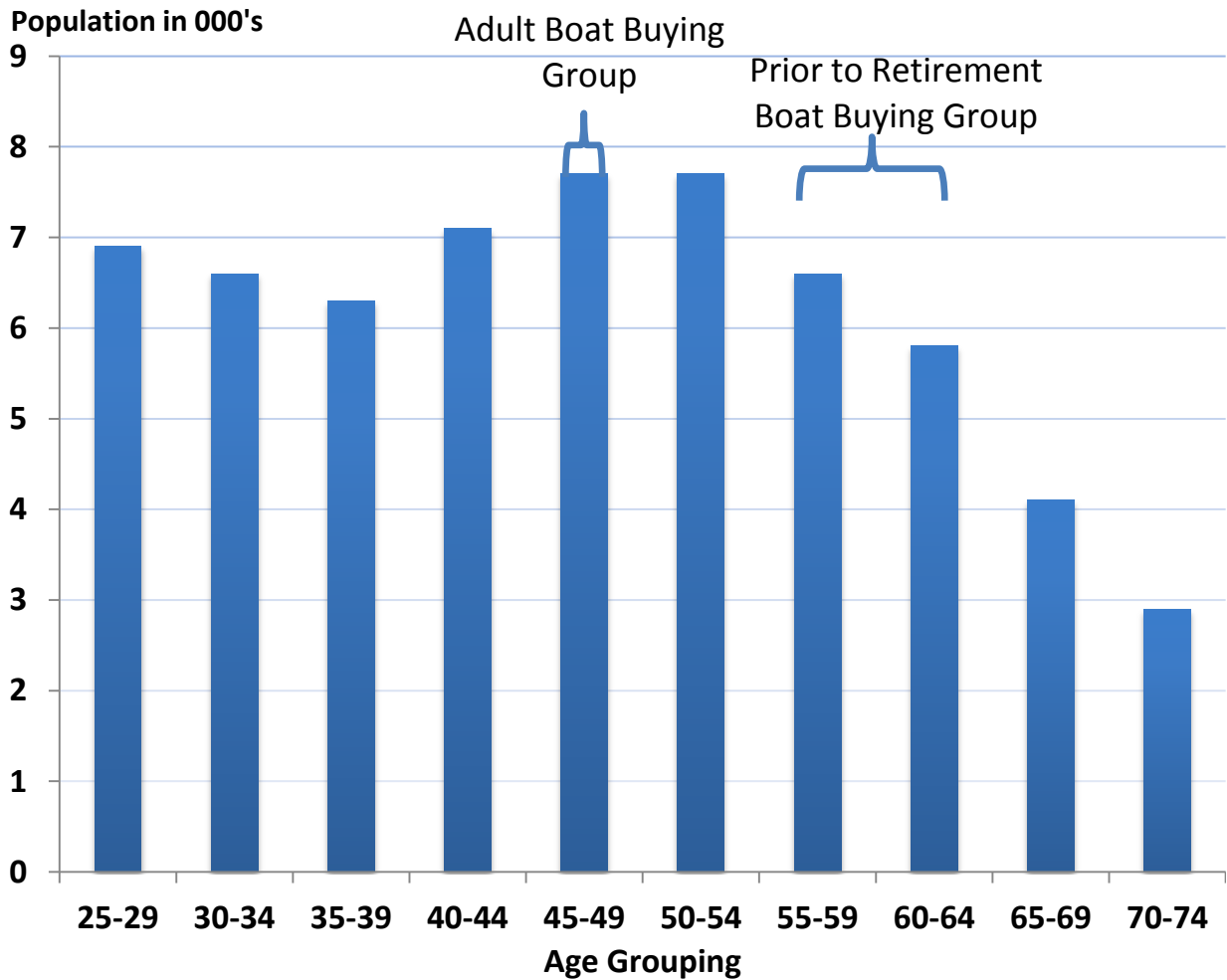


Source: Maryland Department of Natural Resources, 2013

Lacking sufficient demographic information specifically on Maryland recreational boating, inference is being made from national level demographics to imply those at the state level. The U.S. Census 2012 estimate of Maryland adult population distribution by age group 2010 finds the age groups in 40–49 years of age group. This represents the typical age buying group for recreational boating.

FIGURE 12

## Maryland Adult Population Group by Age 2012

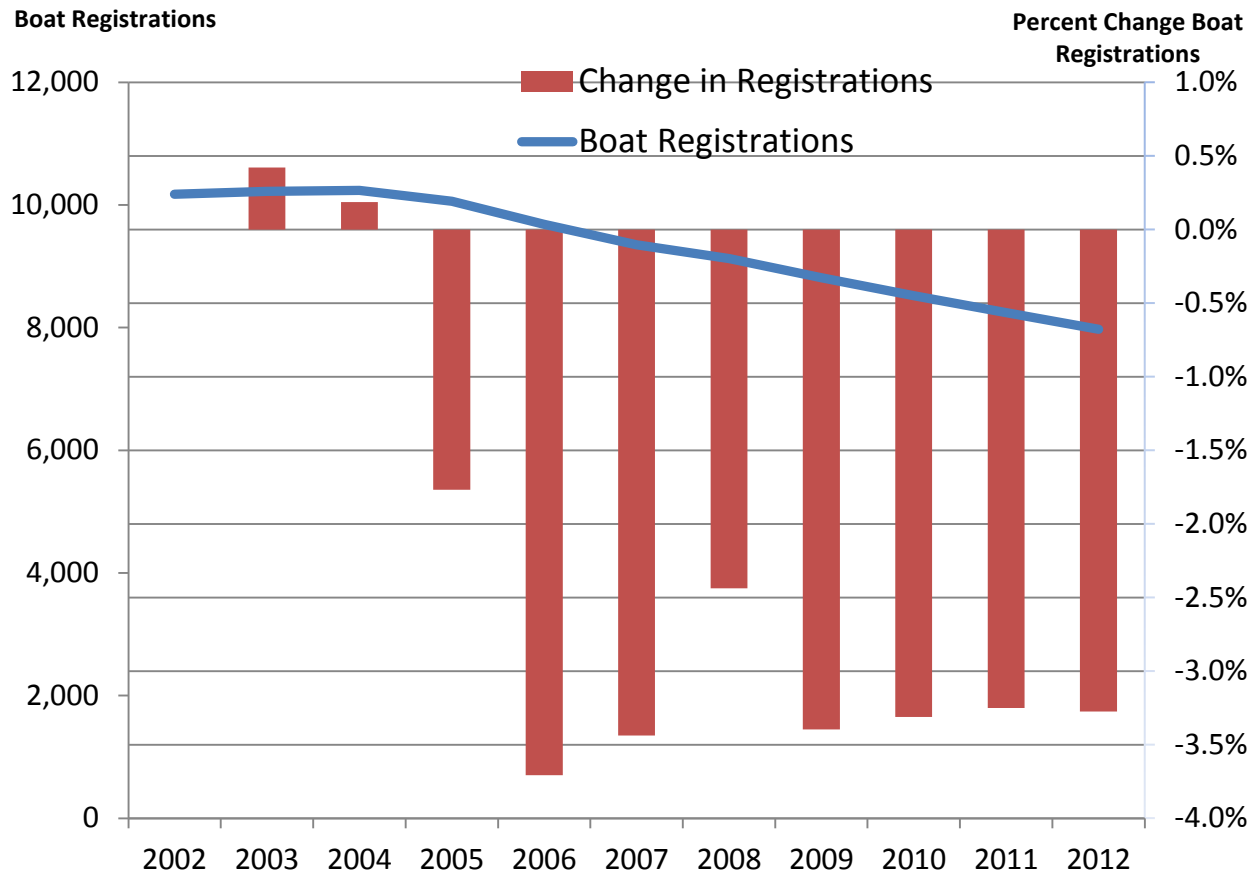


Source: U.S. Census, National Marine Manufacturers Association, and Market Economics, 2013

Annapolis demand for recreational boats can be interpreted from boat registrations.

FIGURE 13

## Annapolis Boat Registrations 2002-2012

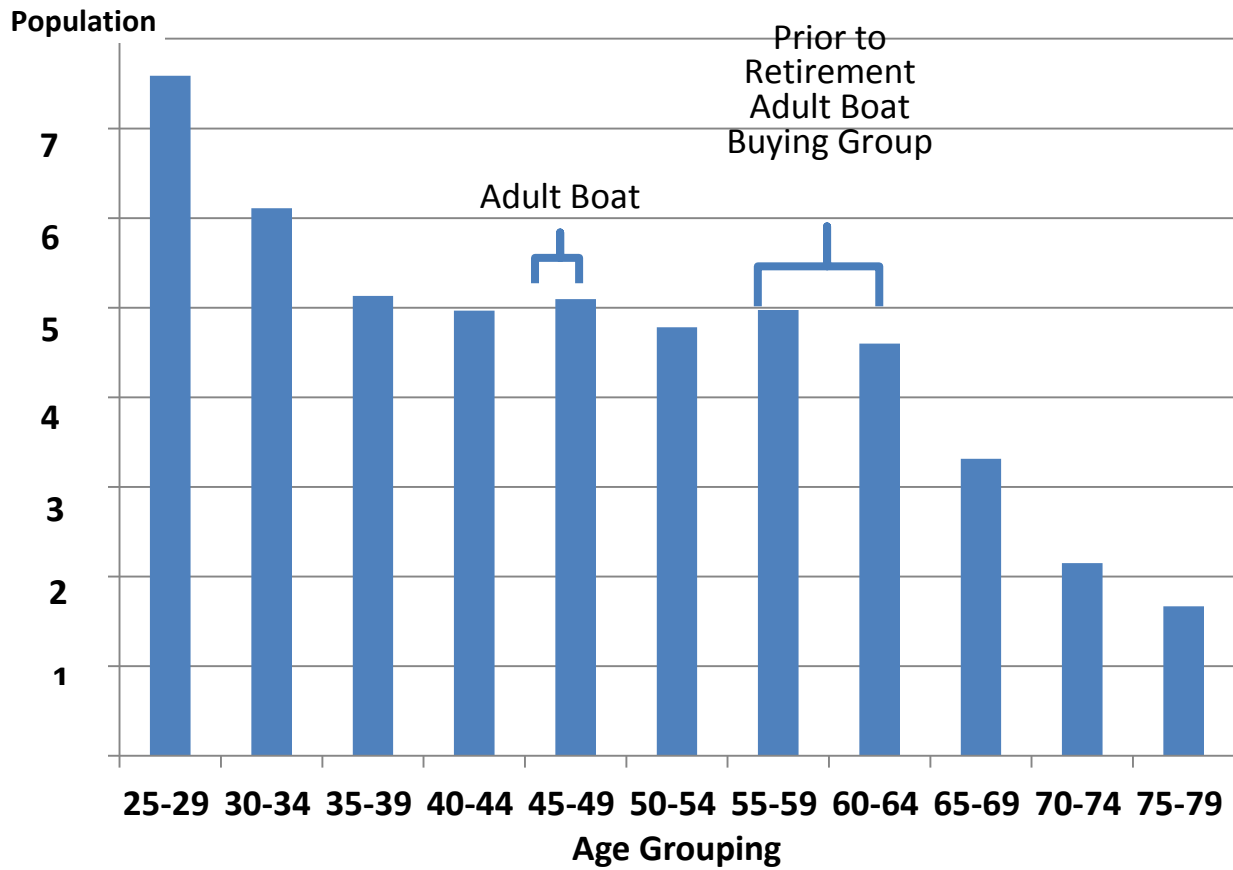


Source: Market Economics, 2013

In 2003, Annapolis boat registrations rose by 0.4 percent, a year earlier than the state increase of 4.2 percent in 2004. Following 2003, Annapolis boat registrations rose by 0.2 percent from the previous year. Since 2004, boat registrations showed a sharp decline. This decline reflected a drop in the number of powerboat registrations and particularly outboard powered boats under 26 feet in length.

FIGURE 14

## Annapolis Adult Population Group by Age 2012



Source: U.S. Census and Market Economics, 2013



## CONCLUSION

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Nation-wide boat registrations have declined since 2000. The decline in boat registrations is evident in Maryland and in the City of Annapolis. Despite the decline in the number of boats registered to Annapolis resident, marinas within the City of Annapolis are 90–95 percent occupied, as reported by marina officers during one-on-one interviews.. This suggests that an increasing percentage of boats owners renting slips in the City of Annapolis live outside of the City. Some live within the state, but many more live in the surrounding tri-state area of Virginia, Pennsylvania, and Delaware. This reinforces a high demand for recreational boating for the City of Annapolis. The demand is external to the City and attracts boat owners who spend recreational boating dollars.

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<sup>i</sup> U.S. Coast Guard Survey, 2012 Recreational Boating Statistics

<sup>ii</sup> U.S. Coast Guard Survey

<sup>iii</sup> National MARINE Manufacturers Association

<sup>iv</sup> Michael Sciulla, Boating Growth Requires Multi-Generational Effort, Soundings Trade Only, April 29 2013.