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BOAT SHOWS IN ANNAPOLIS

Gauging the Economic Impacts

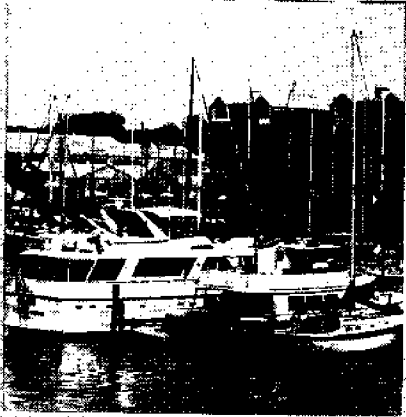
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Over the last 10 years, boating participation throughout the country has increased significantly: one estimate has put national growth at 7 to 10 percent annually (Rounds 1985), with a jump of as much as 64 percent between 1983 and 1985 (Moyatt 1987). In 1985, the 153,818 vessels in Maryland accounted for ten percent of all vessels documented in the United States and two percent of all registered boats (Crandel 1986). While the state ranks 24th nationally in boating registration, 1986 estimates by the National Marine Manufacturers Association ranked Maryland 8th in purchases of boats, trailers and accessories, with almost \$264 million in expenditures. Added to this value are yearly fixed costs and trip expenditures which, in 1983, were reported to be \$400 million for Maryland boaters (Graefe 1985).

Among economic impacts of boating not accounted for by Graefe are the dollar value to businesses and the impact on local and state economies of specialized boating events—in particular, two annual shows held in Annapolis each fall, the U.S. Sailboat Show and the U.S. Powerboat Show. In recent years, citizens of Annapolis and local government officials have questioned whether the economic value of these shows are worth the cost of severe congestion and traffic disruptions. As a result of these and other concerns, the Marine Trades Association of Maryland requested assistance from the Maryland Sea Grant Extension Program to estimate the impact of both shows. In this way, citizens and officials could better evaluate the trade-offs between economic benefits and social costs.

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OBJECTIVES

The three major objectives of this study were to:

1. Characterize patrons attending the boat shows in terms of their residence, income, education, length of stay and travel group composition.
2. Identify spending patterns of show patrons and exhibitors while at the show, within the local community and state.
3. Calculate total direct expenditures made by show patrons, exhibitors and sponsors during the course of the two boat shows.

METHODS

We conducted two major surveys: first, on-site surveys of patrons (marine trade representatives and the general public) to obtain socio-economic profiles, boating participation and expenditure information; second, a survey questionnaire to all exhibitors and sponsors to obtain expenditure information.

Survey of Patrons

For each show, we stationed interviewers at locations throughout the grounds. Of the 532 patrons asked to answer the questionnaire, 95 percent complied and took 8 to 10 minutes to complete it. Because many people traveled in groups, we asked that individuals from each group answer the socio-economic and boating participation questions for themselves but list expenditures for the entire group.

The questionnaire consisted of three categories: boat show attendance and general boating participation; socio-economic characteristics, e.g., age, gender, income and education; and a list of trip expenditures—lodging, restaurants, parking, gasoline and automobile, show purchases (i.e., sails, halyards, engines, but not including

boats), shopping, entertainment, miscellaneous—and where those expenditures occurred, in Annapolis, within Maryland or outside Maryland.

Survey of Exhibitors and Sponsors

Of 499 exhibitors who participated in the shows, 232 responded (46 percent) to the single mailing survey. Only a single one-time mailing survey was conducted, largely because in order to protect the confidentiality of financial information provided by exhibitors, questionnaires were not numbered or otherwise identifiable. The survey consisted of a list of expenditure categories commonly associated with boating events. Boat show-related literature (e.g., Gartner and Holocek 1982) and discussions with show sponsors and exhibitors were the basis for category selection.

Exhibitors were notified by show sponsors through pre-show newsletters that the patron survey would be con-

TABLE 1

Personal Family Income of Boat Show Patrons

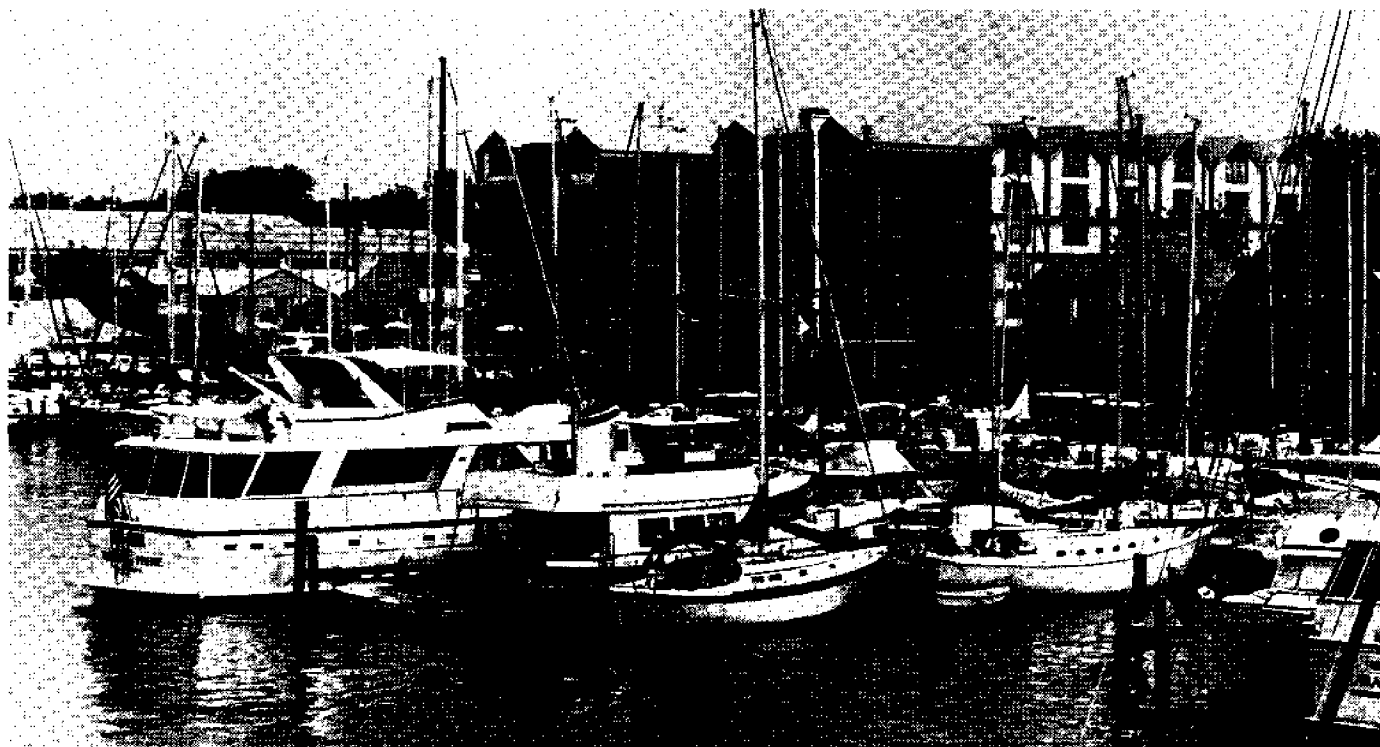
Income Category	Percent
Less than \$10,000	1%
\$10,000 to \$19,999	4%
\$20,000 to \$29,999	10%
\$30,000 to \$39,999	13%
\$40,000 to \$49,999	17%
\$50,000 to \$74,999	29%
\$75,000 to \$99,999	11%
Greater than \$100,000	16%
	100%

TABLE 2

Education Levels of Boat Show Patrons

Education Level	Sail Boat Show Percent	Power Boat Show Percent
Some High School	1%	1%
Graduated High School	4%	16%
Graduated Technical or Vocational School	3%	7%
Some College	19%	26%
Associate Degree	7%	5%
Bachelors Degree	32%	22%
Graduate School	34%	23%
	100%	100%

Chi-square = 38.59, df(7), p = .001



ducted during the show and that exhibitors would be contacted afterwards and asked to provide expenditure-related data.

Boat show sponsors also provided the same information on show-related expenditures as did exhibitors. Because this information is proprietary, sponsor totals were added to exhibitor expense totals to ensure confidentiality.

FINDINGS

Patron Characteristics

Nearly two-thirds of the patrons attending the 1985 boat shows had previously attended one or the other of the shows, usually of the same boat type (sail or power): 83 percent of those at the sailboat show had never attended the powerboat show, while 81 percent of those at the powerboat show had never attended the sailboat show. Of the former, 73 percent owned at least one sailboat, compared with 77 percent ownership of powerboats by the powerboat show patrons.

The average age at both shows was 41, with 55 percent reporting annual household incomes greater than \$50,000 (Table 1). While patrons were predominantly well-educated, there were differences in education between attendees at both shows: 66 percent of those at the sailboat show had college and graduate degrees compared with 45 percent at the powerboat show (Table 2).

Though the majority of patrons were from the neighboring states of Virginia and Pennsylvania, Maryland visitors ac-



counted for 30 percent of sailboat patrons and 40 percent of powerboat patrons (Table 3). Maryland patrons were largely from Anne Arundel county, though three counties taken together, Montgomery, Baltimore and Prince Georges, accounted for 29 percent of sailboat patrons and 39 percent of powerboat patrons (Table 4). Only 2 percent were from outside the U.S.

The majority attended the shows only one day, though 15 percent spent two days and 10 percent spent three days (Table 5). Nearly half the groups consisted of two people (Table 6).



TABLE 3

State of Residence of Boat Show Patrons

State of Residence	Sail Boat Show Percent	Power Boat Show Percent
Maryland	30%	40%
Virginia	17%	18%
Pennsylvania	14%	13%
New Jersey	6%	10%
New York	5%	2%
North Carolina	5%	2%
Ohio	3%	1%
Delaware	2%	5%
Other (<2% each)	18%	9%
	100%	100%

Chi-square = 38.59, df(7), p = .001



TABLE 4

County of Residence of Maryland Boat Show Patrons

County of Residence	Sail Boat Show Percent	Power Boat Show Percent
Anne Arundel	46%	33%
Montgomery	14%	16%
Baltimore	11%	13%
Prince Georges	4%	10%
Harford	4%	5%
Other	21%	23%
	100%	100%

Chi-square = 32.58, df(5), p = .05

TABLE 6

Number of People Per Group Attending the Boat Shows

Number of People	Percent of Sample
Alone	14%
Two People	47%
Three People	17%
Four People	10%
Five People	12%

Group size range = 1-9.

TABLE 5

Number of Days Spent in the Annapolis Area by Boat Show Patrons

Days	Percent of Sample
One Day	69%
2 Days	15%
3 Days	10%
4 Days	3%
5 or More Days	3%

TABLE 7

Percentage of Boat Show Patrons Incurring Various Expenses

Expenditure Items	Percent
Lodging	24.3%
Restaurant	80.7%
Parking	56.5%
Gas and Auto	56.3%
Show Purchases	42.8%
Shopping	37.8%
Entertainment	16.7%
Miscellaneous	21.8%



TABLE 8

Total Patron Expenses by Location of Expenditure

Expenditure Items	Annapolis		Other Maryland		Out-of-State		Total Expenditures
	Amount	Percent	Amount	Percent	Amount	Percent	
Lodging	1,515,551	74%	415,388	20%	125,439	6%	2,056,378
Restaurants	2,748,048	88%	326,625	10%	65,953	2%	3,140,626
Parking	177,768	95%	9,159	5%	0	0%	186,927
Gas & Auto	290,909	34%	360,379	42%	217,096	25%	868,384
Purchases	3,559,670	100%	0	0%	0	0%	3,559,670
Shopping	1,788,978	95%	31,879	2%	54,382	3%	1,875,239
Entertainment	721,489	91%	60,190	8%	10,296	1%	791,975
Miscellaneous	652,897	94%	27,059	4%	13,877	2%	693,833
TOTAL	11,455,309		1,230,681		487,042		13,173,032

Patron Expenditure Patterns

The questionnaire listed eight major expenditure categories—lodging, restaurants, parking, gasoline and automobile, show purchases, shopping, entertainment, miscellaneous—and asked patrons to indicate whether their expenditures were in Annapolis, outside Annapolis but within the state, or outside the state. The study calculated expenditures for each of these locations and then extrapolated to the total number of patrons at both shows.

Table 7 summarizes the percentage of patrons who incurred expenses in each category. Almost 81 percent listed restaurant expenses, while 56 percent listed costs for parking and gasoline; 42 percent of all visitors made purchases at the show, while only 17 percent spent money for entertainment. Nearly 25 percent listed lodging expenses.

Table 8 summarizes extrapolated dollar values of expenditures in each category according to location: in Annapolis, within the state, out-of-state. Annapolis accounted for 93.5 percent of the \$13.2 million of patron expenditures for a total of \$11.5 million. Spending in the state accounted for 4.6 percent of the total and out-of-state for 1.9 percent. (Out-of-state expenditures would have been higher transportation expenses other than automobiles, for example, airplanes and buses, been accounted for.)

Purchases at the boat shows themselves (these do not include boat purchases but equipment and other items, from sails and halyards to diesel engines) accounted for the largest proportion of expenditures, some 27 percent of the total. Lodging accounted for \$1.5 million, or 11.5 percent

of the total; restaurants for \$2.8 million or nearly 20 percent of the total; and shopping for \$1.8 million or 13.5 percent.

Exhibitor Expenditure Patterns

Of the 499 exhibitors at both shows, 86 percent of the businesses were from Annapolis and 14 percent from elsewhere in Maryland. Many of the products sold at the show were produced in other states or abroad, and companies sent technical and marketing representatives, resulting in such in-state and out-of-state expenditures as lodging, travel and freight. We asked Maryland exhibitors and U.S. Boat Shows, Inc. to list their expenditures among eighteen categories (Table 9).

Product and display transportation accounted for one-fourth of all expenditures, though a number of categories accounted for 7 to 10 percent, among them, commissions, wages, advertising, freight, set-up and rental. Because of the large number of local exhibitors, nearly 75 percent of the expenditures were, as is to be expected, in Annapolis.

Total Show Expenditures

Total expenditures from both shows—extrapolated values for patrons and expenses by exhibitors/promoters—amounted to \$16.6 million for two weeks (Table 10). Nearly 85 percent of these expenditures were in Maryland.

While these totals indicate significant economic impact on the city and state, there are a number of additional economic impact considerations that also need discussion.



As already noted, some show patrons flew into Maryland from out-of-state. Many rented cars and reported expenses in the gas and auto category. The state of Maryland does not benefit directly from out-of-state airfare expenditures and thus those were expenditures not included in the data gathered. However, from a national perspective these expenses are significant and would need to be included if impacts outside Maryland were an important consideration.

Second, patron admission expenses were not included to protect the confidentiality of boat show promotor revenue and attendance data. This, too, is a significant amount of money spent in Annapolis, which is not reflected in the total economic impact of the show.

Third, boat purchases by patrons and dealers, perhaps the largest expenditure category, could not be counted nor easily estimated. It is the most difficult expenditure to estimate since many show patrons and dealers were unsure whether they would purchase boats at the show or later in the year, or some time in the future. Nevertheless, we tried to account for boat buying intentions. When we asked patrons and dealers if they planned to buy a boat at the show, 67 percent indicated they would not, 6 percent that they would; the remaining 27 percent replied they would probably buy one within the year. As reported earlier, some two-thirds of the patrons and dealers were from outside

Maryland and thus there is a good chance that a large percentage of boats purchased later in the year would be bought out-of-state. This is a significant expenditure (e.g., purchase of 2,000 boats could easily exceed \$20 million) and should be examined more fully in future research.

Another factor unaccounted for in our estimates of patron expenditures is impulse buying; since patron interviews were conducted during the show rather than at its conclusion, we were unable to take such expenditures into account. This type of buying could be significant, though we have no measure.

Finally, exhibitors and U.S. Boat Show personnel may have had non-reimbursable expenditures, for example, personal expenditures for shopping, entertainment and travel, that were not accounted for. We have no measure on these expenditures.

SUMMARY

The U.S. Sailboat and Powerboat shows held annually in Annapolis add up to a small component of boating industry activities in Maryland. Nevertheless, it is clear that both shows contribute substantially to the local and state economies. Money spent at the shows by patrons was for the most part new money entering the local area and state since the

TABLE 9
Total Expenditures by Boat Show Exhibitors by Location of Expenditure

	Annapolis		Other Maryland		Out-of-State		Total Amount
	Amount	Percent	Amount	Percent	Amount	Percent	
Wages	326,124	95%	12,345	4%	4,458	1%	342,937
Commissions	297,450	80%	57,416	16%	15,558	4%	370,423
Personal Travel	136,541	100%	0	0%	0	0%	136,541
Lodging	100,139	100%	0	0%	0	100%	100,139
Entertainment	182,993	100%	0	0%	0	0%	182,993
Advertising	201,477	75%	44,266	17%	22,535	8%	268,278
Transportation	490,035	61%	208,974	26%	110,967	14%	809,975
Freight	68,271	27%	69,794	28%	115,731	46%	253,797
Rental	202,091	91%	18,514	8%	2,454	1%	223,059
Set-up	251,577	100%	0	0%	0	0%	251,577
Telephone	33,428	100%	0	0%	0	0%	33,428
Insurance	30,559	21%	63,185	43%	53,885	37%	147,629
Repairs	33,459	93%	2,674	7%	0	0%	36,133
Bank Charges	6,477	43%	5,945	39%	2,783	18%	15,205
Postage	36,323	57%	24,516	39%	2,929	5%	63,677
Supplies	33,442	55%	23,826	39%	3,981	7%	61,249
Laundry	11,257	100%	0	0%	0	0%	11,257
Other	103,110	95%	3,470	3%	1,843	2%	108,423
TOTALS	2,544,663		534,924		337,123		3,416,710



TABLE 10

**Summary of Patron and Exhibitor/Promoter Expenditures
by Location of Expenditure**

	Annapolis		Other Maryland		Out-of-State		Total Expenditure
	Amount	Percent	Amount	Percent	Amount	Percent	
Patrons	11,455,309	87%	1,230,681	9%	487,042	4%	13,173,032
Exhibitor/ Promoters	2,544,663	75%	534,924	16%	337,123	10%	3,416,710
TOTALS	13,999,972		1,765,605		824,165		16,586,742

majority of those attending the shows reside in states other than Maryland.

Merchants in the Annapolis area were the direct beneficiaries of the boat shows. Over 83 percent of all patrons' expenditures were made in Annapolis. Less than 5 percent of patron expenditures were made outside the state.

It is important to note that the \$13 million in direct expenditures by show patrons, exhibitors and show sponsors is a very conservative estimate of total spending. As reported earlier, boat sales, personal expenditures by exhibitors and impulse buying occurring after the survey was administered all were sources of undocumented expenditures. Identification and documentation of these and other expenditures is needed in future studies. Expanded methodologies and innovative measurement procedures need to be examined and tested to document more accurately all expenditures associated with boat shows and other boating-related events to reach the goal of adequately valuing Maryland's recreational boating industry.

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