THE ECONOMIC IMPACT OF BOATING IN CALIFORNIA

by Edgar Rust and Michael Potepan

prepared for the California Department of Boating and Waterways
C. F. Raysbrook, Director

by the Public Research Institute, San Francisco State University
and Planning and Applied Economics, Berkeley, California

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Chapter 1. The Bottom Line

This study measures the overall impact of boating on output, jobs and tax revenues in California. The study findings are summarized in Table 1.1.

Table 1.1. Economic Impact of Boating in California, 1995

	Gross State Product	(1)	Jobs	(1)	Government Revenues: State	(2)	Government Revenues: Local	(2)
Boating Impact	$ 11,007,271,265		183,444		$ 344,116,370		$ 244,601,135	
State Total	$ 913,700,000,000	(3)	14,206,000	(4)	$ 54,696,674,000	(5)	$ 109,850,369,000	(5)
Boating Impact as %	1.2%		1.3%		0.6%		0.2%	

(1) Source: Table 1.2 (2) Source: Table 7.1
(3) Source: California State Product 1995 (Current Dollars), UCLA Business Forecasting Project
(4) Source: Civilian Employment - California 1995, Statistical Abstract of the US 1996
(5) FY 1994-5 total revenues, California Statistical Almanac, 1996

Boating contributed $11 billion to the gross state product (GSP) in 1995, which represented about 1.2% of the state economy. The contribution of boating to GSP was $6.7 billion in 1987 (Dornbusch, 1988), which was 1.1% of GSP at that time. These figures show that despite a slump in the sales of large boats since the 1992 recession, the boating industry has increased its relative importance in the state economy. It stimulated demand for 183,000 jobs — 65,000 more than in 1987 — and generated $568 million in state and local tax revenues.

The major components of boating's economic impact on output and employment are broken out inTable 1.2. (A much more detailed industry-by-industry breakdown with all data sources is given in Chapters 2-6.)

Table 1.2. Components of the Economic Impact of Boating in California, 1995

	Gross State Product		Jobs	
Boating Industry				
Direct	$ 3,239,482,617	(1)	78,770	(3)
Indirect & Induced	$ 3,555,244,818	(1)	37,950	(4)
subtotal	$ 6,794,727,435		116,719	
Other Boater Spending				
Direct	$ 1,687,802,344	(2)	16,405	(5)
Indirect & Induced	$ 2,524,741,486	(2)	50,320	(6)
	$ 4,212,543,831		66,724	
Boating Impact				
Direct	$ 4,927,284,961		95,174	
Indirect & Induced	$ 6,079,986,304		88,269	
	$ 11,007,271,265		183,444	

(1) See Table 5.1 (4) See Tables 6.1, 6.3
(2) See Table 5.2 (5) See Table 6.4
(3) See Table 6.3 (6) See Tables 6.2, 6.4

The boating industry itself, the group of businesses that specialize in boating, is a large part of the picture. It contributes $6.8 billion and 117,000 jobs to the state economy. Boater spending for other goods and sevices (such as food, lodging and fuel) while boating contributed another $4.2 billion and 67,000 jobs.

About half the impact of boating is direct output that supplies consumers with the goods and services they use in boating activity, while the other half is the output from the rest of the state economy, called indirect and induced output, that is stimulated by the direct output to boating consumers. The indirect output includes the manufacturing, wholesaling, transportation, utilities and services that go

into a product before it is consumed. The induced output is the extra personal consumption by workers in all those industries made possible by income earned because of boating activity in the state.

The body of this report contains a detailed presentation of the data and methods that support these findings. Its main elements are the following.

Chapter 2: an inventory of the California businesses, organizations and agencies that belong to the boating industry (as defined below), and to classify them by sector at the at the four-digit SIC level or better.

Chapter 3: estimates of output from each sector of the California boating industry.

Chapter 4: measures boater spending on other California industries (such as lodging, groceries, etc.) in conjunction with boating activities.

Chapter 5: projections of the multiplier effects of boating businesses and boater spending on California's gross state product.

Chapter 6: projections of the multiplier effects of boating businesses and boater spending on employment in California

Chapter 7: projections of the contribution of boating to state and local tax revenues in California.

Chapter 2. Inventory of the Boating Industry

The California boating industry is defined as all businesses, organizations and agencies in the state engaged directly in boat operation or providing boating-related goods or services in economically significant quantities. "Boating" includes for this study all recreational uses of small craft, and commercial uses of small craft such as commercial fishing. It excludes passenger ferry, supply vessel, fireboat, crew boat, tug and barge operators that primarily operate heavy, deep-draft vessels or support the ocean shipping industry.

The study team prepared a comprehensive inventory of the California boating industry by searching the sources listed below, merging the lists and carefully removing duplications. Each record in the inventory identifies a home or branch outlet of a boating industry member with its name, address, telephone, its four-digit Standard Industrial Classification, its three-digit classification in the scheme used by the 1987 Dornbusch study, the specific class of boating-related goods or services it provides, and contact information. Marina records also include number of berths.

Table 2.1 summarizes the number of records by industrial classification for 1987 and for 1996. A complete listing of all records has been submitted to DBAW in computer data base form. The 1996 inventory, in order to maintain comparability with the 1987 one, contains a separate record for each outlet location. Since some firms have branches in several locations, a count of separate business names in the inventory is given in the last column. The unduplicated numbers of separate businesses is significantly larger than the numbers of establishments given for some corresponding industries in the 1992 U.S. Census of Businesses, which only counts establishments with payrolls. We found 656 Boat Dealers, SIC #5551, for example, whereas the Census Bureau found only 333 as of 1992. Having made extensive follow-up calls to verify the inventory, we are confident the numbers given represent real boating businesses, but significant numbers of them may be businesses without payrolls.

Table 2.1 Boating Industry Inventory, 1987 and

SIC	Industry or Portion	Number of Records 1987	Number of Records 1996	% Change 1996-7	Unduplicated Names 1996
912-919	Commercial fishing		5		5
1629	Boat dock & marina construction		84		84
1711 & 1731	Boatbuilding trades		38		38
2091	Canned and cured seafoods		28		28
2092	Fresh or frozen seafoods		27		27
2394	Canvas & related products	212	572	170%	572
2399	Fishing nets		1		1
2721	Boating publications	42	11	-74%	11
2842, 2891	Boating adhesive, cleaning prod. mfg.		2		2
3069	Marine rubber prod.		7		7
3089	Misc. Plastics Products		7		7
3429	Hardware, nec.	141	2		2
3519	Int. Combus. Engines, nec		2		2
3561	Pumps & Pumping Equipment		3		3
3589	Marine water makers		7		7
3663	Radio & Television Equip & Supplies (VHF Radios)		1		1
3699	Electric Equipment, nec		1		1
3732	Boat building and repairing	669	957	43%	957
3799	Boat trailers	5	2		2
3812	Navigation, nautical equip mfg.		3		3
3949	Sporting goods mfg.		1		1
4213	Boat trucking	40	27		27
4492	Dry storage		348		348
4493	Marinas (wet storage)	593	489	-18%	489
4499	Boat cleaning, management	185	261	41%	261
5012-5033	Boating wholesale		23		21
5146	Fresh fish-wholesale	42	445		445
5162	Plastics Materials		1		1
5211	Building Materials Dealers		1		1
5531	Marine battery dealers		14		14
5541	Marine service stations	32	16		16
5551	Boat dealers	834	782	-6%	656
5571	Personal watercraft dealers		103		103
5713	Boat floor covering		2		2
5941	Boating & fishing equip. dealers	1,296	1,153	-11%	948
6141	Boat financing inst.		7		7
6331	Boat insurance companies		1		1
6411	Boat insurance brokers		34		34
7221	Boat photography		1		1
7389	Yacht brokers		110		110
7699	Repair shops nec		21		21
7997	Boating, yacht clubs	219	263		263
7997a	Boating Class Associations		65		65
7999	Boat rental, sportfishing	530	422	-20%	332
8611	Boating industry trade associations		2		2
8711	Designing boats and yachts	148	18		18
	unclassified	47			0
	Total	5,035	6,370	27%	5,947

Inventory Results

There are 6368 boating business outlets in the state. The most numerous boating businesses are boating and fishing equipment dealers, with about 18% of the total. Boatbuilding and repair firms are 15% of

boating businesses. Boat and personal watercraft dealers constitute 14% of boating businesses. Wet and dry storage marinas are 13%.

A little background will help understand the changes observed in the boating industry since 1987. During the period 1987-1996, the California boating industry was experiencing little demand for new boats except in the very small size classes. There was consolidation of business ownership as a few strong firms bought up smaller businesses weakened by the 1990-93 recession. These conditions supported used-boat maintenance, remodelling and brokerage more than new-boat manufacturing and retailing. Inland lake and river boat ownership grew strongly, while coastal area boat ownership was nearly stable. Further information on these trends will be found in PRI's *Boating Facilities Inventory and Demand Study* (California Department of Boating and Waterways, 1995).

The number of California boating business outlets increased 27% from the 1987 inventory. Growth definitely occurred in the numbers of boat repair and service businesses, dry storage facilities and personal watercraft dealers, as well as in a number of maintenance-related sectors like boat cushions and covers, boat cleaning and management. The numbers of yacht brokers and construction and commercial fishing-related businesses had probably been undercounted in 1987, so their growth may only be apparent. The number of businesses in many significant sectors, however, actually declined. The number of boating and fishing equipment outlets experienced 11% attrition, and the number of sportfishing businesses fell by 20%. These trends reflect a growing concentration of business ownership in the U.S. and the world.

Data Sources

The Boating Yellow Pages, Northern California Edition, 1996
The Boating Yellow Pages, Southern California Edition, 1996
BigBook On-line Directory, World-Wide Web, 1996
The American Business Disc (CD-ROM), 1995 Edition
American Manufacturers Directory (CD-ROM), 1995 Edition
PRI, California Boating Facilities Inventory, 1996
Northern California Yachting Association 1996 Yearbook
Southern California Yachting Association 1996 Yearbook
Dornbusch & Co., 1987 Boating Industry Inventory (unpublished data base)
U.S. Office of Management and Budget, Standard Industrial Classification Manual, 1987
1996 Northern California Boat Show catalog and exhibitor flyers
Current issues of most boating magazines

Chapter 3. Output of the California Boating Industry

California boating businesses sold $6.8 billion worth of goods and services in 1995. Final output to consumers from the industry was worth $3.6 billion (the other $3 billion was output to other businesses, as when a boat is resold from builder to wholesaler to retailer). The 1995 output of each sector of the California boating industry is given in Table 3.1. Several different methods of measurement were used in order to capitalize on the best available information for each sector, as follows:

- Commercial fishing output is based State Department of Fish and Game data for the ex-vessel value of fish landed during 1995. Details are given in Table 3.2.
- Retail trade output by sector, including retail sales at marinas, is measured by the taxable value of retail sales as reported to the State Board of Equalization for boating industries, divided by the percent of sales subject to tax for that sector. Sales data were obtained for a stratified random sample of firms taken from the boating industry inventory, and expanded by statistical methods to estimate total sales for each sector. Output was estimated from sales. Details are given in Table 3.3.
- Boater spending on boat maintenance, insurance, marina rents, dry storage, equipment and supplies were calculated from the 1995 PRI Boater Spending Survey. Details are given in Table 3.4.
- Output per firm in most of the remaining sectors was estimated from the U.S. Census of Businesses, projecting forward from 1987 and 1992 data. Supporting calculations are given in Table 3.5.
- Output per firm for one sector was estimated by a telephone survey of a sample drawn randomly from that sector of the inventory. The estimates per firm were then multiplied by the number of firms in the inventory of that sector. Supporting calculations are given in Table 3.6.

Table 3.1. 1995 Output of the California Boating Industry

SIC	Industry or Portion	Gross Receipts	Output to Consumers	Source
912-919	Commercial fishing	$ 159,503,472	$ -	Table 3.2
1629	Boat dock & marina construction	$ 12,379,946	$ 1,555,305	Table 3.5
1711 & 1731	Boatbuilding trades	$ 12,379,946	$ 1,237,995	Table 3.5
2091	Canned and cured seafoods	$ 164,326,071	$ 16,432,607	Table 3.5
2092	Fresh or frozen seafoods	$ 205,408,636	$ 32,659,973	Table 3.5
2394	Canvas & related products	$ 406,737,129	$ 141,544,521	Table 3.5
2399	Fishing nets	$ 1,835,345	$ 622,182	Table 3.5
2721	Boating publications	$ 36,228,359	$ 13,150,894	Table 3.5
2842, 2891	Boating adhesive, cleaning prod. mfg.	$ 38,835,470	$ 2,019,444	Table 3.5
3069	Marine rubber prod.	$ 29,499,237	$ 2,536,934	Table 3.5
3089-3561	Boats parts mfg, nonrigid: plastics	$ 94,660,543	$ 4,229,676	Table 3.5
3589	Marine water makers	$ 12,672,056	$ 532,226	Table 3.5
3663, 3699	Marine electric part mfg.	$ 22,283,119	$ 832,421	Table 3.5
3732	Boat building and repairing	$ 395,416,964	$ 327,800,663	Table 3.4
3799	Boat trailers	$ 3,938,708	$ 1,331,283	Table 3.5
3812	Navigation, nautical equip mfg.	$ 155,719,141	$ 6,540,204	Table 3.5
3949	Sporting goods mfg.	$ 1,796,453	$ 1,489,260	Table 3.5
4213	Boat trucking	$ 46,784,707	$ 8,234,108	Table 3.5
4492	Dry storage	$ 28,526,980	$ 28,526,980	Table 3.4
4493	Marinas (wet storage)	$ 177,964,573	$ 177,964,573	Table 3.4
4499	Boat cleaning, management	$ 354,588,833	$ 61,343,868	Table 3.5
4499A	Launching Fees	$ 123,125,927	$ 123,125,927	Table 4.2
4499B	Crew wages	$ 14,032,278	$ 14,032,278	Table 4.2
5012-5131	Boating wholesale	$ 91,199,245	$ 23,803,003	Table 3.5
5146	Fresh fish-wholesale	$ 2,188,903,021	$ 571,303,689	Table 3.5
5162	Plastics Materials	$ 4,853,576	$ 1,266,783	Table 3.5
5211	Building Materials Dealers	$ 3,775,457	$ 1,819,770	Table 3.5
5531	Marine battery dealers	$ 3,706,358	$ 3,206,000	Table 3.3
5541	Marine service stations	$ 10,827,302	$ 9,993,600	Table 3.3
5551	Boat dealers	$ 1,107,377,212	$ 1,043,149,333	Table 3.3
5571	Personal watercraft dealers	$ 78,592,327	$ 71,361,833	Table 3.3
5713	Boat floor covering	$ 1,358,082	$ 1,159,802	Table 3.5
5941	Boating & fishing equip. dealers	$ 563,992,025	$ 537,484,400	Table 3.3
6141	Boat financing inst.	$ 19,909,338	$ 5,494,977	Table 3.5
6331, 6411	Boat insurance companies and brokers	$ 215,940,669	$ 172,752,535	Table 3.4
7221	Boat photography	$ 305,746	$ 302,077	Table 3.5
7389	Yacht brokers	$ 83,223,639	$ 2,996,051	Table 3.5
7699	Repair shops nec	$ 12,816,229	$ 1,307,255	Table 3.5
7997	Boating, yacht clubs	$ 15,809,825	$ 15,809,825	Table 3.3
7997a	Boat class associations	$ 71,205	$ 71,205	Table 3.6
7999	Boat rental, sportfishing	$ 18,498,857	$ 18,369,365	Table 3.3
8611	Boating industry trade associations	$ 1,437,734	$ 307,675	Table 3.5
8711	Designing boats and yachts	$ 31,994,099	$ 7,998,525	Table 3.5
	Total	$ 6,953,235,840	$ 3,457,701,026	

The commercial fishing industry is a major sector of boating activity, employing over 1,300 people directly and landing approximately $160 million worth of fish a year. The value of commercially caught fish landed at California ports is estimated by the Department of Fish and Game from reported weight and estimated ex-vessel prices by species. Most commercially caught fish is sold through wholesalers or processors, but indirect estimates suggest that approximately 1% is probably sold by commercial fishermen directly to consumers. The number of commercial fishing licenses may somewhat overstate the total employment in the industry because of the prevalence of part-time and seasonal work, but still constitute the best available data. (Other sources are based on payroll tax records and

grossly understate total employment because many fishermen take on crew as partners rather than wage workers.) Commercial fishing statistics are summarized in Table 3.2.

3.2 Commercial Fishing Data for California,1995

SIC	Industry or Portion	Value of Fish Landed
912-919	Commercial fishing	$159,503,472

	Number of Licensed Commercial Fishermen		
	Operators	Crew	Total
Resident	4,874	5,316	10,190
Nonresident			945
Total			11,135

Source
California Department of Fish and Game

The best estimates of retail sales can often be made from state sales tax records of the Board of Equalization. A stratified random sample of 349 retail businesses was drawn from eight SIC groups in the boating business inventory. The BOE provided a special tabulation of taxable sales for those eight groups, from which estimates of total sales are given in Table 3.3. Marina retail sales were excluded from the table to avoid double-counting with boater purchases reported in Table 3.4.

Table 3.3 1995 Output Estimates Based on Sales Tax Sample

SIC	Boating Industry Portion	Number of Firms Sample	Number of Firms Universe	Expansion Factor
5531	Marine Battery Dealers	10	14	1.4
5541	Marine Service Stations	5	16	3.2
5551	Boat Dealers (adj)	30	656	21.9
5571	Personal Watercraft	30	103	3.4
5941	Fishing Equip. Dealers (adj)	30	948	31.6
7997	Boating, Yacht Clubs	97	263	2.7
7999	Boat rental, sportfishing (adj)	85	332	3.9
		287		

SIC	Boating Industry Portion	1995 Taxable Sales (1) Sample	1995 Taxable Sales (1) Universe	Percent Taxable	Total Sales
5531	Marine Battery Dealers	$ 2,290,000	$ 3,206,000	86.5%	$ 3,706,358
5541	Marine Service Stations	$ 3,123,000	$ 9,993,600	92.3%	$ 10,827,302
5551	Boat Dealers (adj)	$ 47,705,000	$ 1,043,149,333	94.2%	$ 1,107,377,212
5571	Personal Watercraft	$ 20,785,000	$ 71,361,833	90.8%	$ 78,592,327
5941	Fishing Equip. Dealers (adj)	$ 17,009,000	$ 537,484,400	95.3%	$ 563,992,025
7997	Boating, Yacht Clubs	$ 5,831,000	$ 15,809,825	100.0%	$ 15,809,825
7999	Boat rental, sportfishing (adj)	$ 4,703,000	$ 18,369,365	99.3%	$ 18,498,857
			$ 1,731,356,534		$ 1,831,011,537

(1) Source: California State Board of Equalization, special tabulation, 1996

PRI surveyed over 2,000 California boat owners in August, 1995 to determine how much they spend on boats and boating. The findings of that survey together with DMV and US Coast Guard statistics for total boat registrations provide the basis for Tables 3.4 (boat purchase and upkeep expenditures) and 4.2 (boating trip expenditures). The questionnaire applied to 1994 spending. Estimates of 1995 spending were made by substituting the appropriate numbers of boats for each category. There was slight inflation for overall consumer prices in that period, but in the boating industry price levels appeared generally stable, so no inflation factor was included in the 1994-1995 projection.

Table 3.4 - Annual Boater Spending (Boating Industries) and Cost of Boat

SIC	Question	Under 16', jet propelled	Under 16', sail or hand propelled	Under 16', all other (1)	16-25', any propulsion	25' +, any propulsion	Total
		Expenditures per Boat					
	sample size	*427*	*372*	*462*	*432*	*400*	*2093*
3732 (2)	Repair & maint.	$ 357.05	$ 50.10	$ 219.71	$ 332.02	$ 1,517.76	
6411	Insurance, fees & taxes	$ 143.40	$ 34.87	$ 70.37	$ 209.83	$ 879.08	
4493	Slip rental	$ 10.31	$ 18.04	$ 18.87	$ 139.58	$ 1,873.81	
4492	Dry Storage	$ 25.71	$ 16.45	$ 13.99	$ 40.70	$ 88.91	
5941	Equip/supplies	$ 86.76	$ 34.80	$ 119.02	$ 56.24	$ 131.31	
	Annual upkeep	$ 623	$ 154	$ 442	$ 778	$ 4,491	
	Boat purchase cost	$ 3,577	$ 1,011	$ 1,535	$ 6,516	$ 36,250	
		Number of Boats, 1995					Total
	registered (3)	128,934	39,148	275,174	370,165	44,056	857,477
	documented					19,488	19,488
	total	128,934	39,148	275,174	370,165	63,544	876,965

SIC	Question	Under 16', jet propelled	Under 16', sail or hand propelled	Under 16', all other*	16-25', any propulsion	25' +, any propulsion	Total
		Total Expenditures					
3732 (2)	Build/repair	$ 46,035,477	$ 1,961,399	$ 60,458,468	$ 122,900,778	$ 96,444,541	$ 327,800,663
6411 (4)	Insurance, fees & taxes	$ 18,489,498	$ 1,364,918	$ 19,365,221	$ 77,672,956	$ 55,859,942	$ 172,752,535
4493	Marinas	$ 1,328,896	$ 706,137	$ 5,193,165	$ 51,667,151	$ 119,069,224	$ 177,964,573
4492	Dry Storage	$ 3,315,446	$ 643,943	$ 3,850,649	$ 15,067,086	$ 5,649,856	$ 28,526,980
5941	Equip/supplies	$ 11,186,459	$ 1,362,287	$ 32,751,067	$ 20,817,497	$ 8,343,804	$ 74,461,113
	Annual upkeep	$ 80,355,775	$ 6,038,684	$ 121,618,569	$ 288,125,468	$ 285,367,367	$ 781,505,864
	Boat purchase cost	$ 461,209,298	$ 39,579,154	$ 422,471,902	$ 2,411,854,614	$ 2,303,470,000	$ 5,638,584,969

SIC		Expenditures	% to Consumers	Estimated Gross
3732 (2)	Build/repair	$ 327,800,663	82.9%	$ 395,416,964
6411 (4)	Insurance, fees & taxes	$ 172,752,535	80.0%	$ 215,940,669
4493	Marinas	$ 177,964,573	100.0%	$ 177,964,573
4492	Dry Storage	$ 28,526,980	100.0%	$ 28,526,980

(1) includes: aux. & sail, inboard, outboard, in/outboard, other
(2) includes equipment repair such as trailer, sails, pumps
(3) DMV December 1995 Registrations
(4) Insurance estimated at $ 109,397,101 net of
$6,969,584 from licenses and fees due to harbor and watercraft fund 7/95-6/96 (DMV)
$56,385,850 from taxes (1% of boat cost)
(5) Build/repair from BEA Input-Output Table: Use Table for Commodities, 1987; others, PRI

Source: Public Research Institute, Boater Spending Survey (Questions 8 and 11), 1995

The 1987 and 1992 US Censuses of Construction, Manufactures, Utilities, Wholesale Trade, Retail Trade, Finance-Insurance-Real Estate and Services are collectively referred to as the Economic Censuses. Most industries that were not covered in Tables 3.2-3.4 were covered by those surveys, although as noted earlier the number of establishments reported is based on the filing of Federal payroll tax records and may undercount parts of the boating industry where there are large numbers of businesses without a payroll. Gross receipts (by various measures) per establishment for 1995 were estimated from the 1987-1992 straight-line trend, or by applying the 1992-1995 increase in consumer

prices to the 1992 values. Output to consumers, which eliminates double-counting, was estimated from the input-output coefficients for each industry as published by the US Bureau of Economic Analysis. The resulting estimates are given in Table 3.5. (SIC 6331 and 6411 are combined in this table.)

Table 3.5 - Economic Census Output Estimates

SIC	Industry. (Portion)	1987	1992	1995	Projection method
1629	Boat dock & marina construction	$ 1,952,682	$ 1,889,477	$ 1,851,554	t (1)
1711, 1731	Boatbuilding trades	$ 395,600	$ 351,968	$ 325,788	t (1)
2091	Canned and cured seafoods	NA	$ 14,882,353	$ 5,868,788	k (2)
2092	Fresh or frozen seafoods	$ 9,720,455	$ 8,400,000	$ 7,607,727	t (2)
2394	Canvas & related products	$ 618,543	$ 676,378	$ 711,079	t (2)
2399	Fishing nets	$ 1,509,589	$ 1,713,187	$ 1,835,345	t (2)
2721	Boating Publications	$ 2,445,633	$ 2,975,542	$ 3,293,487	t (2)
2891	Adhesives & Sealants	NA	$ 18,353,247	$ 19,417,735	k (2)
3069	Marine rubber prod.	$ 2,773,387	$ 3,673,881	$ 4,214,177	t (2)
3089	Misc. Plastics Products	$ 3,150,853	$ 3,976,182	$ 4,471,380	t (2)
3429	Hardware, nec.	$ 4,254,146	$ 4,534,343	$ 4,702,462	t (2)
3519	Int. Combus. Engines, nec	NA	$ 8,635,484	$ 9,136,342	k (2)
3561	Pumps & Pumping Equipment	$ 8,363,934	$ 10,570,492	$ 11,894,426	t (2)
3589	Marine water makers	NA	$ 3,041,053	$ 1,810,294	k (2)
3663	Radio & Television Equip & Supplies (VHF Radios)	NA	$ 12,861,864	$ 13,607,853	k (2)
3699	Electric Equipment, nec	$ 3,525,086	$ 6,743,949	$ 8,675,267	t (2)
3799	Boat trailers	$ 1,047,087	$ 1,623,504	$ 1,969,354	t (10)
3812	Navigation, nautical equip mfg.	$ 60,187,117	$ 55,011,656	$ 51,906,380	t (2)
3949	Sporting goods mfg.	NA	$ 3,186,667	$ 1,796,453	k (2)
4213	Trucking, ex. local	$ 1,011,029	$ 1,462,115	$ 1,732,767	t (3)
4499	Water Trans. services, nec.	$ 493,286	$ 1,034,093	$ 1,358,578	t (3)
5063	Electrical Apparatus & Equipment	$ 3,947,385	$ 4,066,257	$ 4,137,581	t (4)
5072	Hardware	$ 2,799,798	$ 3,726,723	$ 4,282,878	t (4)
5074	Plumbing & Heating Equip. & Supplies	$ 3,305,701	$ 3,568,629	$ 3,726,386	t (4)
5084	Industrial Machinery & Equip., nec.	$ 2,508,592	$ 2,888,078	$ 3,115,770	t (4)
5088	Trans Equip/supplies ex. motor vehicle	$ 4,452,100	$ 4,502,492	$ 4,532,728	t (4)
5091	Sporting/rec. goods/supplies	$ 2,984,202	$ 4,060,608	$ 4,706,452	t (4)
5131	Piece Goods, Notions, Other Dry Goods	$ 3,668,665	$ 4,970,721	$ 5,751,955	t (4)
5146	Fresh fish-wholesale	$ 4,343,049	$ 4,702,945	$ 4,918,883	t (4)
5162	Plastics Materials	$ 6,946,324	$ 5,638,356	$ 4,853,576	t (4)
5211	Building Materials Dealers	$ 2,640,584	$ 3,349,880	$ 3,775,457	t (5)
5713	Boat floor covering	$ 817,040	$ 730,791	$ 679,041	t (5)
6141	Personal Credit Institutions	NA	$ 2,688,271	$ 2,844,191	k (6)
6331	Fire/Marine Casualty Insurance	NA	$ 14,845,087	$ 15,706,102	k (6)
6411	Boat insurance brokers				
7221	Boat Photography	$ 229,742	$ 277,244	$ 305,746	t (7)
7389	Business Services, nec (Yacht brokers)	$ 450,094	$ 641,647	$ 756,579	t (7)
7699	Repair Shops and related, nec	$ 385,716	$ 526,079	$ 610,297	t (7)
8611	Boating industry trade associations	$ 429,014	$ 610,172	$ 718,867	t (8)
8711	Designing boats and yachts	$ 1,210,203	$ 1,564,732	$ 1,777,450	t (7)

k -1995 output estimates equal 1992 actual output plus cpi inflation @ 5.8%
t - 1995 output estimated from 1987 to 1992 trend

continued on next page

Table 3.5, continued

SIC	Industry, (Portion)	Unduplicated Names 1996	GROSS RECEIPTS	% to consumers (9)	OUTPUT TO CONSUMERS
1629	Boat dock & marina construction	84	$ 155,530,500	1.0%	$ 1,555,305
1711, 1731	Boatbuilding trades	38	$ 12,379,946	10.0%	$ 1,237,995
2091	Canned and cured seafoods	28	$ 164,326,071	10.0%	$ 16,432,607
2092	Fresh or frozen seafoods	27	$ 205,408,636	15.9%	$ 32,659,973
2394	Canvas & related products	572	$ 406,737,129	34.8%	$ 141,544,521
2399	Fishing nets	1	$ 1,835,345	33.9%	$ 622,182
2721	Boating Publications	11	$ 36,228,359	36.3%	$ 13,150,894
2891	Adhesives & Sealants	2	$ 38,835,470	5.2%	$ 2,019,444
3069	Marine rubber prod.	7	$ 29,499,237	8.6%	$ 2,536,934
3089	Misc. Plastics Products	7	$ 31,299,657	4.2%	$ 1,314,586
3429	Hardware, nec.	2	$ 9,404,923	6.9%	$ 648,940
3519	Int. Combus. Engines, nec	2	$ 18,272,684	4.2%	$ 767,453
3561	Pumps & Pumping Equipment	3	$ 35,683,279	4.2%	$ 1,498,698
3589	Marine water makers	7	$ 12,672,056	4.2%	$ 532,226
3663	Radio & Television Equip & Supplies (VHF Radios)	1	$ 13,607,853	0.8%	$ 103,698
3699	Electric Equipment, nec	1	$ 8,675,267	8.4%	$ 728,722
3799	Boat trailers	2	$ 3,938,708	33.8%	$ 1,331,283
3812	Navigation, nautical equip mfg.	3	$ 155,719,141	4.2%	$ 6,540,204
3949	Sporting goods mfg.	1	$ 1,796,453	82.9%	$ 1,489,260
4213	Trucking, ex. local	27	$ 46,784,707	17.6%	$ 8,234,108
4499	Water Trans. services, nec.	261	$ 354,588,833	17.3%	$ 61,343,868
5063	Electrical Apparatus & Equipment	2	$ 8,275,161	26.1%	$ 2,159,817
5072	Hardware	3	$ 12,848,633	26.1%	$ 3,353,493
5074	Plumbing & Heating Equip. & Supplies	1	$ 3,726,386	26.1%	$ 972,587
5084	Industrial Machinery & Equip., nec.	3	$ 9,347,309	26.1%	$ 2,439,648
5088	Trans Equip/supplies ex. motor vehicle	3	$ 13,598,183	26.1%	$ 3,549,126
5091	Sporting/rec. goods/supplies	8	$ 37,651,617	26.1%	$ 9,827,072
5131	Piece Goods, Notions, Other Dry Goods	1	$ 5,751,955	26.1%	$ 1,501,260
5146	Fresh fish-wholesale	445	$ 2,188,903,021	26.1%	$ 571,303,689
5162	Plastics Materials	1	$ 4,853,576	26.1%	$ 1,266,783
5211	Building Materials Dealers	1	$ 3,775,457	48.2%	$ 1,819,770
5713	Boat floor covering	2	$ 1,358,082	85.4%	$ 1,159,802
6141	Personal Credit Institutions	7	$ 19,909,338	27.6%	$ 5,494,977
6331	Fire/Marine Casualty Insurance	1	$ 15,706,102	65.5%	$ 10,287,497
6411	Boat insurance brokers	34	$ -		
7221	Boat Photography	1	$ 305,746	98.8%	$ 302,077
7389	Business Services, nec (Yacht brokers)	110	$ 83,223,639	3.6%	$ 2,996,051
7699	Repair Shops and related, nec	21	$ 12,816,229	10.2%	$ 1,307,255
8611	Boating industry trade associations	2	$ 1,437,734	21.4%	$ 307,675
8711	Designing boats and yachts	18	$ 31,994,099	25.0%	$ 7,998,525
		1,751	$ 4,198,706,522		$ 924,340,006

(1) Dollar Value of Business Done, U.S. Census of Construction - Geographic Area Series- California; 1987, 1992
(2) Value of Shipments, U.S. Census of Manufactures - Geographic Area Series- California; 1987, 1992
(3) Revenue, U.S. Economic Census Utilities - Geographic Area Series- California; 1987, 1992
(4) U.S. Economic Census Wholesale Trade - Geographic Area Series- California; 1987, 1992
(5) Sales, U.S. Economic Census Retail Trade - Geographic Area Series- California; 1987, 1992
(6) Revenue, U.S. Census FIRE Industries - Geographic Area Series- California; 1992
(7) Receipts, U.S. Census Service Industries - Geographic Area Series- California; 1987, 1992
(8) Expenses (firms not subject to income tax), U.S. Census Service Industries - California; 1987, 1992
(9) % of personal consumption expenditures of total output per SIC - Benchmark Input-Output Accounts of the United States, 1987, Table 2A - The Use Table for Commodities
Exceptions: SIC 2721 % of subscriptions, 1992 Census of Manufactures; SICs 1629 and 8711, telephone survey
(10) Value Added by Manufacture, 1992 Census of Manufactures, US Summary

Table 3.6 - Other Output Estimates

SIC	Industry, (Portion)	Output per Establishment	Establish-ments	TOTAL OUTPUT	% to consumers	OUTPUT TO CONSUMERS
7997a	Boat class associations	$ 1,095 (1)	65	$ 71,205	100%	$ 71,205

(1) Source: Estimate based on Sailing Class Association budgets (sample)

Chapter 4. Impacts of Boater Spending on Other Industries

An important part of the economic impact of boating in California is the impact of boaters' spending on other industries such as groceries, restaurants, gas stations and drug stores in connection with their boating activities, which totalled over $1.3 billion, as shown in Table 4.1.

Table 4.1. 1995 Boating Expenditures in Non-Boating Industries

SIC	Industry or Portion		Expenditures	Source
5411	Grocery and convenience stores	$	519,177,525	Table 4.2
5812	Restaurants	$	201,890,768	Table 4.2
7011	Hotels and motels	$	174,212,002	Table 4.2
5541	Gasoline stations (boat fuel)	$	327,681,922	Table 4.2 (1)
591pt.	Drug Stores (Incidentals)	$	103,069,575	Table 4.2
		Total	1,326,031,792	

(1) Total boat fuel expenditures (table 4.2) minus purchases at marine fuel outlets (table 3.3)

The 1995 PRI Boater Spending Survey of over 2,000 boat owners statewide provided the necessary data, as shown in Table 4.2. Adjustments to estimate 1995 calendar year spending were made by the same methods as in Table 3.4. Additional spending items shown in this table are included for general information on overall boater spending but are not included in the Table 4.1 totals to avoid double-counting since they are part of boating industries covered in earlier tables.

Table 4.2 - Annual Boating Expenditures of California Boat Owners

Expenditures per Boat (1)

	Under 16', jet propelled	Under 16', sail or hand propelled	Under 16', all other	16-25', any propulsion	25' +, any propulsion	Total
sample size	*379*	*218*	*287*	*344*	*354*	*1,582*
food	$ 1,165	$ 133	$ 323	$ 533	$ 1,222	
restaurants	$ 401	$ 64	$ 82	$ 235	$ 597	
fishing equip	$ 101	$ 31	$ 208	$ 272	$ 143	
equip rental	$ 12	$ 19	$ 11	$ 123	$ 0	
lodging	$ 448	$ 120	$ 138	$ 185	$ 82	
boat fuel	$ 536	$ 19	$ 193	$ 460	$ 700	
boat launching	$ 125	$ 22	$ 164	$ 158	$ 42	
wages	$ -	$ 3	$ 48	$ 1	$ 3	
incidentals	$ 377	$ 38	$ 39	$ 89	$ 144	
total, boat upkeep (2)	$ 623	$ 154	$ 442	$ 778	$ 4,491	
	$ 3,165	$ 449	$ 1,207	$ 2,056	$ 2,933	

Number of Boats, 1995						Total
registered	128,934	39,148	275,174	370,165	44,056	857,477
documented (3)					19,488	19,488
total	128,934	39,148	275,174	370,165	63,544	876,965

Total Expenditures

	Under 16', jet propelled	Under 16', sail or hand propelled	Under 16', all other*	16-25', any propulsion	25' +, any propulsion	Total
food	$ 150,193,036	$ 5,188,235	$ 88,943,295	$ 197,194,720	$ 77,658,240	519,177,525
restaurants	$ 51,727,599	$ 2,518,996	$ 22,695,233	$ 86,981,845	$ 37,967,095	201,890,768
fishing equip (2)	$ 13,033,641	$ 1,207,140	$ 57,236,730	$ 100,589,610	$ 9,065,855	181,132,977
equip rental (2)	$ 1,561,496	$ 754,228	$ 3,069,280	$ 45,571,185	$ 8,616	50,964,805
lodging	$ 57,811,444	$ 4,714,734	$ 38,091,830	$ 68,354,190	$ 5,239,803	174,212,002
boat fuel	$ 69,123,329	$ 742,824	$ 52,972,008	$ 170,379,894	$ 44,457,467	337,675,522
boat launching	$ 16,102,207	$ 851,499	$ 45,049,631	$ 58,449,106	$ 2,673,485	123,125,927
wages	$ -	$ 107,747	$ 13,332,554	$ 430,424	$ 161,553	14,032,278
incidentals	$ 48,583,583	$ 1,493,790	$ 10,822,094	$ 33,005,482	$ 9,164,626	103,069,575
total, boat upkeep (2)	$ 80,355,775	$ 6,038,684	$ 121,618,569	$ 288,125,468	$ 285,367,367	$ 781,505,864
	$ 488,492,112	$ 23,617,876	$ 453,831,223	$ 1,049,081,925	$ 471,764,107	$ 2,486,787,243

(1) PRI 1995 Boater Spending Survey, Question 7
(2) from table 3.4
(3) Commercial and recreational vessels of 5 tons or more documented to California residents, US Coast Guard, October 1995

Chapter 5. Impact of Boating on the Gross State Product

The consumption of goods and services in connection with boating stimulates demand for material inputs to the industries supplying them, and generates wages and profits that stimulate additional demand for personal consumption. One way of estimating the magnitude of this effect is called a multiplier analysis. The multipliers in this case are derived from the 1993 IMPLAN multi-regional input-output model of the US economy prepared by the Minnesota Impact Group. They are Type III multipliers for California gross state product, which include the direct, indirect and induced effects of consumer expenditures for each of 528 industries or industry groups.

The impact of boating on gross state product for 1995 calculated by this method was $11 billion, as shown in Tables 5.1 (boating industry portion) and 5.2 (other industries).

Table 5.1 Impact of Boating Industry Output on Gross StateProduct

SIC	Industry or Portion	Output to Consumers (1)	GSP Multiplier (2)	GSP Impact
912-919	Commercial fishing	$ 17,545,382	3.4764	$ 60,994,766
1629	Boat dock & marina construction	$ 1,555,305	1.5	$ 2,332,958
1711 & 1731	Boatbuilding trades	$ 1,237,995	1.8143	$ 2,246,094
2091	Canned and cured seafoods	$ 16,432,607	1.7355	$ 28,518,790
2092	Fresh or frozen seafoods	$ 32,659,973	1.8466	$ 60,309,906
2394	Canvas & related products	$ 141,544,521	2.0582	$ 291,326,933
2399	Fishing nets	$ 622,182	1.7196	$ 1,069,904
2721	Boating publications	$ 13,150,894	1.8068	$ 23,761,036
2842, 2891	Boating adhesive, cleaning prod. mfg.	$ 2,019,444	1.7317	$ 3,497,072
3069	Marine rubber prod.	$ 2,536,934	1.8939	$ 4,804,700
3089-3561	Boats parts manuf., nonrigid: plastics	$ 4,229,676	1.8939	$ 8,010,583
3589	Marine water makers	$ 532,226	1.8215	$ 969,450
3663, 3669	Marine electric part mfg.	$ 832,421	1.8215	$ 1,516,254
3732	Boat building and repairing	$ 298,222,556	1.8143	$ 541,065,184
3799	Boat trailers	$ 1,331,283	1.7464	$ 2,324,953
3812	Navigation, nautical equip mfg.	$ 6,540,204	1.8215	$ 11,912,981
3949	Sporting goods mfg.	$ 1,489,260	1.984	$ 2,954,691
4213	Boat trucking	$ 8,234,108	2.228	$ 18,345,594
4492	Dry storage	$ 26,794,253	1.8652	$ 49,976,641
4493	Marinas (wet storage)	$ 177,964,573	1.8652	$ 331,939,521
4499	Boat cleaning, management	$ 61,343,868	1.8652	$ 114,418,583
5012-5033	Boating wholesale	$ 23,803,003	1.8227	$ 43,385,733
5146	Fresh fish-wholesale	$ 571,303,689	1.8227	$ 1,041,315,233
5162	Plastics Materials	$ 1,266,783	1.8227	$ 2,308,966
5211	Building Materials Dealers	$ 1,819,770	2.5654	$ 4,668,439
5531	Marine battery dealers	$ 3,206,000	2.5654	$ 8,224,672
5541	Marine service stations	$ 9,993,600	2.5654	$ 25,637,581
5551	Boat dealers	$ 1,043,149,333	2.0296	$ 2,117,175,887
5571	Personal watercraft dealers	$ 71,361,833	2.5654	$ 183,071,647
5713	Boat floor covering	$ 1,159,802	2.5654	$ 2,975,356
5941	Fishing equip. dealers	$ 537,484,400	2.7402	$ 1,472,814,753
6141	Boat financing inst.	$ 5,494,977	2.7554	$ 15,140,860
6411	Boat insurance companies & brokers	$ 105,528,988	1.9295	$ 203,618,182
7221	Boat photography	$ 302,077	2.2973	$ 693,961
7389	Yacht brokers	$ 2,996,051	2.1768	$ 6,521,804
7699	Repair shops nec	$ 1,307,255	1.945	$ 2,542,612
7997	Boating, yacht clubs	$ 15,809,825	2.4474	$ 38,692,965
7999	Boat rental, sportfishing	$ 18,369,365	2.4253	$ 44,551,220
8611	Boating industry trade associations	$ 307,675	2.2984	$ 707,160
8711	Designing boats and yachts	$ 7,998,525	2.2984	$ 18,383,810
	Total	$ 3,239,482,617		$ 6,794,727,435

(1) Output estimates from Table 3.1
(2) Multipliers from IMPLAN multiregional input-output model, 1993

Table 5.2 GSP Impact of Boater Spending in Other Industries

SIC	Industry or Portion	Output to Consumers (1)	GSP Multiplier (2)	GSP Impact
4499A	Boat Launching	$ 123,125,927	1.8652	$ 229,654,480
4499B	Wages	$ 14,032,278	1.8652	$ 26,173,004
5411	Grocery and convenience stores	$ 519,177,525	2.5654	$ 1,331,898,023
5541	Gasoline stations	$ 327,681,922	2.5654	$ 840,635,203
5812	Restaurants	$ 201,890,768	2.5654	$ 517,930,576
5911pt.	Drug Stores, etc. (Incidentals)	$ 327,681,922	2.5654	$ 840,635,203
7011	Hotels and motels	$ 174,212,002	2.4431	$ 425,617,343
		$ 1,687,802,344		$ 4,212,543,831

(1) Output estimates from Table 3.1, Table 4.1
(2) Multipliers from IMPLAN multiregional input-output model, 1993

Chapter 6. Impacts of Boating on Employment

The impact of boating on total employment in California is a consequence of its direct, indirect and induced contributions to total output (gross state product), as documented above. The most consistent way to estimate the corresponding employment impact is to apply IMPLAN Type III employment multipliers to consumer output of each boating-affected industry in a manner similar to the method used above to estimate the gross state product impact. This calculation, shown in Tables 6.1 and 6.2, shows 183,000 California boating industry jobs attributable to the impact of boating.

Table 6.1 Boating Impact on Employment, Boating Industry,1995

SIC	Industry or Portion	Output to Consumers		Employment Multiplier (3)	Employment Impact
912-919	Commercial fishing	$ 159,503,472	(1)	81.6986	13,031
1629	Boat dock & marina construction	$ 1,555,305	(4)	21.2482	33
1711 & 1731	Boatbuilding trades	$ 1,237,995	(4)	21.2482	26
2091	Canned and cured seafoods	$ 16,432,607	(4)	17.3197	285
2092	Fresh or frozen seafoods	$ 32,659,973	(1)	16.8817	551
2394	Canvas & related products	$ 141,544,521	(1)	29.9782	4,243
2399	Fishing nets	$ 622,182	(1)	17.9018	11
2721	Boating publications	$ 13,150,894	(1)	20.5608	270
2842, 2891	Boating adhesive, cleaning prod. mfg.	$ 2,019,444	(1)	11.8906	24
3069	Marine rubber prod.	$ 2,536,934	(1)	18.3493	47
3089-3561	Boats parts manuf., nonrigid: plastics	$ 4,229,676	(1)	18.3493	78
3589	Marine water makers	$ 532,226	(4)	23.9603	13
3663, 3669	Marine electric part mfg.	$ 832,421	(1)	15.9485	13
3732	Boat building and repairing	$ 298,222,556	(1)	18.4859	5,513
3799	Boat trailers	$ 1,331,283	(1)	14.7651	20
3812	Navigation, nautical equip mfg.	$ 6,540,204	(4)	15.9485	104
3949	Sporting goods mfg.	$ 1,489,260	(1)	23.9603	36
4213	Boat trucking	$ 8,234,108	(1)	30.5684	252
4492	Dry storage	$ 26,794,253	(1)	15.2888	410
4493	Marinas (wet storage)	$ 177,964,573	(1)	15.2888	2,721
4499	Boat cleaning, management	$ 61,343,868	(1)	15.2888	938
5012-5131	Boating wholesale	$ 23,803,003	(1)	27.2044	648
5146	Fresh fish-wholesale	$ 571,303,689	(1)	27.2044	15,542
5162	Plastics Materials	$ 1,266,783	(1)	27.2044	34
5211	Building Materials Dealers	$ 1,819,770	(1)	48.618	88
5531	Marine battery dealers	$ 3,206,000	(1)	48.618	156
5541	Marine service stations	$ 9,993,600	(1)	48.618	486
5551	Boat dealers	$ 1,043,149,333	(1)	32.304	33,698
5571	Personal watercraft dealers	$ 71,361,833	(1)	48.618	3,469
5713	Boat floor covering	$ 1,159,802	(1)	48.618	56
5941	Boating & fishing equip. dealers	$ 537,484,400	(1)	51.1622	27,499
6141	Boat financing inst.	$ 5,494,977	(1)	50.4328	277
6411	Boat insurance companies and brokers	$ 172,752,535	(1)	24.4137	4,218
7221	Boat photography	$ 302,077	(1)	39.4928	12
7389	Yacht brokers	$ 2,996,051	(1)	35.728	107
7699	Repair shops nec	$ 1,307,255	(1)	26.4133	35
7997	Boating, yacht clubs	$ 15,809,825	(1)	47.4911	751
7999	Boat rental, sportfishing	$ 18,369,365	(1)	40.0298	735
8611	Boating industry trade associations	$ 307,675	(1)	34.9198	11
8711	Designing boats and yachts	$ 7,998,525	(4)	34.9198	279
	Total	$ 3,448,664,254			116,719

(1) Source: Table 3.2
(2) Source: Table 6.4
(3) Multipliers from IMPLAN Multi-regional Input-Output Model,1993

Table 6.2 Boating Impact on Employment, Non-Boating Industries, 1995

SIC	Industry or Portion	Output to Consumers		Employment Multiplier (3)	Employment Impact
4499A	Boat Launching	$ 123,125,927	(1)	15.2888	1,882
4499B	Wages	$ 14,032,278	(2)	15.2888	215
5411	Grocery and convenience stores	$ 519,177,525	(1)	48.618	25,241
5541	Gasoline Stations	$ 337,675,522	(1)	48.618	16,417
5812	Restaurants	$ 201,890,768	(1)	48.618	9,816
591pt.	Drug Stores (Incidentals)	$ 103,069,575	(1)	48.618	5,011
7011	Hotels and motels	$ 174,212,002	(1)	46.7377	8,142
		$ 1,473,183,597			66,724

(1) Source: Table 4.2
(2) Source: Table 4.2
(3) Multipliers from IMPLAN Multi-regional Input-Output Model,1993

Direct employment in the boating industry was 95,000 persons, estimated from the economic censuses and other sources as documented in Tables 6.3 and 6.4. Supporting calculations of employment per firm are provided. These estimates are not as reliable as the ones given in Tables 6.1 and 6.2 for total impact because of their heavy reliance on the economic censuses, which omit businesses not filing payrolls.

Table 6.3 Direct Employment, Boating Industries, 1995

SIC	Industry or Portion	Firms (1)	per Firm	Source	Employment
912-919	Commercial fishing	-	-	A	11,135
1629	Boat dock & marina construction	84	12.5	B	1,047
1711 & 1731	Boatbuilding trades	38	2.7	B	104
2091	Canned and cured seafoods	28	72.5	B	2,030
2092	Fresh or frozen seafoods	27	50.0	B	1,351
2392	Boat cushions & covers	337	36.7	B	12,382
2394	Sailmaking	235	8.4	B	1,965
2399	Fishing nets	1	18.2	B	18
2721	Boating publications	11	17.9	B	197
2842, 2891	Boating adhesive, cleaning prod.	2	25.4	B	51
3069	Marine rubber prod.	7	44.6	B	312
3089-3561	Boats parts manuf., nonrigid: pla	14	44.2 **	B	619
3589	Marine water makers	7	28.9 **	B	202
3663, 3669	Marine electric part mfg.	2	70.5 **	C	141
3732	Boat building and repairing	957	14.1 **	B	13,458
3799	Boat trailers	2	11.5	B	23
3812	Navigation, nautical equip mfg.	3	391.4	B	1,174
3949	Sporting goods mfg.	1	33.6 **	B	34
4213	Boat trucking	27	14.4	B	388
4493	Marinas & Dry Storage	489	6.0	B	2,956
4499	Boat cleaning, management	261	14.7	B	3,849
5012-5033	Boating wholesale	21	10.7	B	224
5146	Fresh fish-wholesale	445	10.7	B	4,781
5162	Plastics Materials	1	9.0	B	9
5211	Building Materials Dealers	1	18.9	B	19
5531	Marine battery dealers	14	7.3	B	102
5541A	Marine service stations	16	6.9	B	110
5551	Boat dealers	656	5.3	B	3,475
5571	Personal watercraft dealers	103	6.3	B	645
5713	Boat floor covering	2	5.4	B	11
5941	Fishing equip. dealers	948	6.5	B	6,158
6141	Boat financing inst.	7	7.0	C	49
6331	Boat insurance companies	1	32.0	C	32
6411	Boat insurance brokers	34	5.0	C	170
7221	Boat photography	1	6.5	B	7
7389	Yacht brokers	110	9.4	B	1,034
7699	Repair shops nec	21	6.8	B	142
7997	Boating, yacht clubs	263 *	28.8	B	7,575
7999	Boat rental, sportfishing	332	1.6	D	515
8611	associations	2	5.9	B	12
8711	Designing boats and yachts	18	14.6	B	264
	Total				78,770

(1) Number of firms from Table 2.1
(A) Source: California Department of Fish & Game
(B) trend- 1995 output estimates equal 1987/1992 actual output linear trend; 1992 US Economic Census
(C) constant-1995 employment estimates equal1992 actual employment; 1992 US Economic Census
(D) Taxable sales (BOE)/1992 payroll per employee (Economic Census)
(*) excludes class associations
(**) conservative estimate

Table 6.4. 1995 Direct Employment Due to Boater Spending in Non-Boating Industries

SIC	Industry or Portion	Employees/Million $ of Industry Sales- 1995 Estimate		1995 Boater Spending		Jobs
5411	Grocery & convenience stores	5.8	(1)	$ 519,177,525	(2)	2,986
5812	Restaurants	31.1	(1)	$ 201,890,768	(2)	6,269
7011	Hotels and motels	22.0	(1)	$ 174,212,002	(2)	3,828
5541	Gasoline stations	4.0	(1)	$ 327,681,922	(2)	1,311
4499	Launching Fees	10.7	(1)	$ 123,125,927	(2)	1,318
591pt.	Incidentals (drug stores, etc.)	6.7	(1)	$ 103,069,575	(2)	692
	Total			$ 1,449,157,720		16,405

(1) 1992 Economic Census
(2) Table 4.2

Chapter 7. Impacts of Boating on State and Local Government Revenues

Taxes on boating and the income it generated in 1995 contributed $589 million to California state and local government revenues. This estimate includes personal and corporate income taxes, gas station sales of boat fuel (but not fuel dock sales), boat registration fees, property taxes on boats, marinas and boating businesses, sales taxes and business license taxes. It does not include public marina rents and launching fees, which are usually offset by costs and often segregated in enterprise funds. It also does not include gasoline tax on automobile fuel used in boating trips, which is dedicated to highway construction and maintenance.

Table 7.1 - Government Revenue Impacts of Boating in California, 1995

State Taxes		Tax base		Rate*	Tax Impact
Personal income	$	3,521,549,355	(1)	6.0%	$ 211,292,961
Corporate income	$	861,621,134	(2)	9.3%	$ 80,130,765
Gasoline	$	327,681,922	(3)	14.0%	$ 45,723,059
Boat licences and fees (4)					$ 6,969,584
					$ 344,116,370
Local property taxes					
Boats	$	5,638,584,969	(5)	1.061%	$ 59,825,387
Marinas	$	1,855,800,000	(6)	1.061%	$ 19,690,038
Other boating businesses	$	3,184,684,312	(7)	1.061%	$ 33,789,501
					$ 113,304,925
Other Local Revenues					
Sales tax	$	1,731,356,534	(8)	7.25%	$ 125,523,349
Business licenses	$	861,621,134	(2)	0.67%	$ 5,772,862
					$ 131,296,210
Total					$ 588,717,505

* estimated average tax rate for affected businesses
(1) California 1995 avg. payroll/worker $20,000; employment from Table 6.1
(2) Expanded from sample of 209 boating business corporate tax returns, Franchise Tax Board, 1996
(3) Boat fuel sales (Table 4.2) minus marine service station sales (Table 3.3)
(4) DMV, 7/95-6/96
(5) Table 3.3
(6) 61,860 berths (PRI Boating Facilities Inventory, 12/94) @ $30000
(7) Estimate of value of buildings, equipment at 43.7% and land at 10.9% of gross output based on average values for boating businesses, U.S. Census of Businesses, 1992; Table 3.1
(8) Table 3.4