Report III

Tabular Report

RFR #: ENV 06 CZM 09

Massachusetts Office of Coastal Zone Management

(CZM)



Presented by

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TABULAR REPORT

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OVERVIEW OF TABLES IN THIS REPORT

The tables in this report are the final tables used for economic impact analysis and sector discussions presented in *Report I An Assessment of the Coastal and Marine Economies in Massachusetts; RFR #: ENV 06 CZM 09.*



ORIGINAL ES-202 DATA

The tables in this section contain the final set of ES-202 data used in the analysis. These numbers were adjusted for the model using allocation formulas as described in Appendix 2 Methodology: Industry Code Conversion and Allocation Formulas.

Marine Industry, Massachusetts, 2004 – before allocation

| NAICS Code | NAICS Title | Firms | Estab- lishments | Employ- ment | Wage |
|---------------|---|-------|---------------------|-----------------|-----------------|
| 11251 | Animal Aquaculture | 10 | 10 | 52 | \$2,586,559 |
| 114111 | Finfish Fishing | 208 | 248 | 897 | \$41,381,249 |
| 114112 | Shellfish Fishing | 147 | 170 | 803 | \$64,212,641 |
| 114119 | Other Marine Fishing | 3 | 3 | 0 | \$22,000 |
| 237990 | Other Heavy Construction | 104 | 143 | 919 | \$49,636,280 |
| 311711 | Seafood Canning | 6 | 7 | 118 | \$4,376,717 |
| 311712 | Fresh and Frozen Seafood Processing | 47 | 51 | 2,311 | \$91,240,549 |
| 325510 | Paint and Coating Manufacturing | 25 | 25 | 692 | \$39,606,107 |
| 326199 | All Other Plastics Product Manufacturing | 174 | 191 | 8,333 | \$357,268,940 |
| 333120 | Construction Machinery Manufacturing | 7 | 7 | 127 | \$4,809,189 |
| 33361 | Engine, Power, and Turbine Manufacturing | 25 | 29 | 1,339 | \$68,075,807 |
| 334511 | Search, Detection & Navigation Instrument | 33 | 36 | 4,974 | \$440,123,892 |
| 334519 | Other Measuring and Controlling Devices | 59 | 62 | 2,395 | \$161,547,191 |
| 336399 | All Other Motor Vehicle Parts Mfg | 9 | 9 | 94 | \$3,669,419 |
| 336611 | Ship Building and Repairing | 8 | 13 | 195 | \$8,155,194 |
| 336612 | Boat Building | 31 | 38 | 250 | \$8,788,168 |
| 423860 | Transportation Equipment Supplies (except motor vehicle) merchant wholesalers | 31 | 34 | 303 | \$22,766,075 |
| 424460 | Fish and Seafood Merchant Wholesalers | 159 | 179 | 2,100 | \$100,204,635 |
| 441222 | Boat Dealers | 104 | 122 | 1,128 | \$43,373,713 |
| 445220 | Fish and Seafood Markets | 127 | 154 | 916 | \$24,141,879 |
| 454390 | Other Direct Selling Establishments | 61 | 72 | 580 | \$21,067,920 |
| 48311 | Deep Sea, Coastal, and Water Lakes Transportation | 28 | 28 | 870 | \$55,398,557 |
| 483211 | Inland Water Freight Transportation | 7 | 8 | 18 | \$504,717 |
| 483212 | Inland Water Passenger Transportation | 6 | 7 | 13 | \$255,836 |
| 487110 | Scenic/Sightseeing Transportation, Land | 21 | 33 | 704 | \$20,689,866 |
| 487210 | Scenic/Sightseeing Transportation, Water | 48 | 60 | 736 | \$14,383,648 |
| 4883 | Support Activities for Water Transport | 44 | 54 | 411 | \$16,708,053 |
| 531210 | Offices of Real Estate Agents & Brokers | 1,895 | 2,419 | 10,161 | \$658,385,436 |
| 531311 | Residential Property Managers | 559 | 880 | 6,557 | \$269,763,396 |
| 531312 | Nonresidential Property Managers | 322 | 420 | 3,715 | \$259,540,882 |
| 531320 | Offices of Real Estate Appraisers | 202 | 220 | 687 | \$38,516,529 |
| 531390 | Other Activities Related to Real Estate | 124 | 150 | 303 | \$26,702,111 |
| 532292 | Recreational Goods Rental | 30 | 45 | 165 | \$3,352,584 |
| 532411 | Transportation Equipment Rental/Leasing | 14 | 18 | 67 | \$7,347,938 |
| 541330 | Engineering Services | 1,364 | 1,662 | 22,252 | \$1,747,872,179 |
| 541370 | Other Surveying and Mapping Services | 198 | 224 | 1,379 | \$65,037,469 |
| 541710 | Physical/Engineering/Biological | 847 | 1,057 | 36,284 | \$3,292,036,302 |

| | Research | | | | |
|--------|--|--------|--------|---------|----------------------|
| 561599 | All Other Travel Arrangement Services | 62 | 110 | 1,837 | \$71,644,499 |
| 611620 | Sports and Recreation Instruction | 266 | 314 | 1,754 | \$31,379,295 |
| 611699 | Miscellaneous Schools and Instruction | 131 | 173 | 1,181 | \$41,294,693 |
| 711110 | Theater Companies and Dinner Theaters | 91 | 116 | 1,832 | \$49,283,057 |
| 711190 | Other Performing Arts Companies | 16 | 20 | 50 | \$1,523,508 |
| 71121 | Spectator Sports | 70 | 88 | 2,366 | \$429,896,133 |
| 711320 | Promoters without Facilities | 58 | 83 | 316 | \$15,954,421 |
| 713920 | Skiing Facilities | 14 | 16 | 1,110 | \$17,077,236 |
| 713930 | Marinas | 145 | 168 | 1,561 | \$56,212,235 |
| 713940 | Fitness and Recreational Sports Centers | 882 | 1,061 | 16,238 | \$249,535,594 |
| 713990 | All Other Amusement and Recreation Industries | 473 | 564 | 7,184 | \$143,741,556 |
| 7211 | Traveler Accommodation | 840 | 1,035 | 31,506 | \$858,756,472 |
| 721211 | RV Parks and Campgrounds | 52 | 65 | 456 | \$8,423,383 |
| 721214 | Recreational and Vacation Camps | 48 | 76 | 580 | \$14,563,781 |
| 721310 | Rooming and Boarding Houses | 60 | 73 | 612 | \$12,230,360 |
| 722110 | Full-Service Restaurants | 4,483 | 5,446 | 106,862 | \$1,770,584,501 |
| 722211 | Limited-Service Restaurants | 3,158 | 4,588 | 48,500 | \$660,722,451 |
| 722212 | Cafeterias | 43 | 64 | 1,268 | \$25,768,090 |
| 722213 | Snack and Nonalcoholic Beverage Bars | 1,223 | 1,762 | 26,390 | \$376,123,427 |
| 722310 | Food Service Contractors | 105 | 714 | 14,405 | \$290,331,314 |
| 722320 | Caterers | 277 | 512 | 5,576 | \$104,006,135 |
| 722410 | Drinking Places (Alcoholic Beverages) | 960 | 1,080 | 8,683 | \$116,510,453 |
| 812220 | Cemeteries and Crematories | 103 | 110 | 782 | \$27,168,699 |
| 813990 | Other Similar Organizations | 193 | 241 | 784 | \$22,070,351 |
| 924110 | Air, Water and Waste Program Admin | 19 | 28 | 3,268 | \$213,541,624 |
| | OTHER CATEGORY TOTAL | 29 | 46 | 1,482 | \$32,639,252 |
| | | 20,888 | 27,441 | 399,431 | \$13,674,532,14 7 |

OTHER CATEGORY INCLUDES:

| 712190 | Nature Parks & Other Similar Institution |
|--------|---|
| 713110 | Amusement and Theme Parks |
| 7132 | Gambling Industries |
| 487990 | Scenic/Sightseeing Transportation, Other |

| NAICS Code | NAICS Title | Firms | Establish- ments | Employment | Wage |
|---------------|---|-------|---------------------|------------|-------------|
| 11251 | Animal Aquaculture | 9 | 9 | 47 | 2,390,192 |
| 114111 | Finfish Fishing | 204 | 242 | 886 | 40,983,122 |
| 114112 | Shellfish Fishing | 142 | 163 | 787 | 63,245,865 |
| 237990 | Other Heavy Construction | 41 | 59 | 404 | 23,955,620 |
| 311712 | Fresh and Frozen Seafood Processing | 44 | 46 | 2,259 | 88,196,573 |
| 325510 | Paint and Coating Manufacturing | 8 | 8 | 181 | 9,781,704 |
| 326199 | All Other Plastics Product Manufacturing | 26 | 31 | 1,340 | 53,201,045 |
| 334511 | Search, Detection & Navigation Instruments | 10 | 11 | 542 | 37,535,944 |
| 334519 | Other Measuring and Controlling Devices | 12 | 12 | 164 | 11,616,688 |
| 336399 | All Other Motor Vehicle Parts Mfg | 4 | 4 | 75 | 2,757,199 |
| 336612 | Boat Building | 27 | 33 | 194 | 7,208,858 |
| 424460 | Fish and Seafood Merchant Wholesalers | 129 | 145 | 1,754 | 83,124,396 |
| 441222 | Boat Dealers | 82 | 87 | 772 | 31,042,232 |
| 445220 | Fish and Seafood Markets | 89 | 109 | 586 | 16,641,229 |
| 454390 | Other Direct Selling Establishments | 21 | 17 | 129 | 2,493,784 |
| 483211 | Inland Water Freight Transportation | 5 | 6 | 13 | 309,824 |
| 483212 | Inland Water Passenger Transportation | 6 | 7 | 14 | 255,836 |
| 487110 | Scenic/Sightseeing Transportation, Land | 18 | 23 | 472 | 13,786,626 |
| 487210 | Scenic/Sightseeing Transportation, Water | 47 | 58 | 723 | 13,968,529 |
| 4883 | Support Activities for Water Transport | 41 | 49 | 400 | 16,353,497 |
| 531210 | Offices of Real Estate Agents & Brokers | 800 | 985 | 5,025 | 400,384,476 |
| 531311 | Residential Property Managers | 277 | 371 | 3,578 | 151,562,415 |
| 531312 | Nonresidential Property Managers | 140 | 161 | 1,517 | 122,809,332 |
| 531320 | Offices of Real Estate Appraisers | 74 | 79 | 236 | 15,425,300 |
| 531390 | Other Activities Related to Real Estate | 47 | 60 | 142 | 15,286,369 |
| 532292 | Recreational Goods Rental | 21 | 35 | 87 | 2,059,431 |
| 532411 | Transportation Equipment Rental/Leasing | 7 | 10 | 58 | 6,771,009 |
| 541330 | Engineering Services | 375 | 436 | 5,333 | 389,268,453 |
| 541370 | Other Surveying and Mapping Services | | | | |

Marine Industry, Massachusetts Coastal Zone, 2004 – before allocation

| | | 74 | 81 | 628 | 31,587,845 |
|--------|---|-------|--------|---------|---------------|
| 541710 | Physical/Engineering/Biological Research | 173 | 216 | 8,027 | 495,334,704 |
| 561599 | All Other Travel Arrangement Services | 38 | 45 | 710 | 26,063,628 |
| 611620 | Sports and Recreation Instruction | 72 | 86 | 491 | 8,659,321 |
| 611699 | Miscellaneous Schools and Instruction | 44 | 53 | 527 | 20,634,907 |
| 711110 | Theater Companies and Dinner Theaters | 43 | 52 | 1,242 | 36,049,829 |
| 711190 | Other Performing Arts Companies | 4 | 7 | 11 | 270,022 |
| 711320 | Promoters without Facilities | | | | |
| 713930 | Marinas | 22 | 29 | 212 | 12,429,491 |
| 713940 | Fitness and Recreational Sports Centers | 135 | 154 | 1,514 | 55,097,974 |
| | | 312 | 363 | 6,045 | 99,075,908 |
| 713990 | All Other Amusement and Recreation | 158 | 198 | 2,724 | 57,635,621 |
| 721110 | Hotels (except Casino Hotels) and Motels | 373 | 435 | 16,030 | 476,169,093 |
| 721211 | RV Parks and Campgrounds | 24 | 29 | 188 | 4,461,234 |
| 721214 | Recreational and Vacation Camps | 17 | 30 | 241 | 5,517,002 |
| 721310 | Rooming and Boarding Houses | 34 | 43 | 232 | 4,820,131 |
| 722110 | Full-Service Restaurants | 2,097 | 2,359 | 46,240 | 832,422,368 |
| 722211 | Limited-Service Restaurants | | | | |
| 722212 | Cafeterias | 1,435 | 1,814 | 18,242 | 259,547,588 |
| 722213 | Snack and Nonalcoholic Beverage Bars | 24 | 24 | 414 | 6,695,904 |
| | | 549 | 769 | 10,240 | 152,609,739 |
| 722310 | Food Service Contractors | 104 | 232 | 5,738 | 120,686,377 |
| 722320 | Caterers | 138 | 177 | 2,072 | 38,357,842 |
| 722410 | Drinking Places (Alcoholic Beverages) | 389 | 444 | 4,553 | 65,904,290 |
| 812220 | Cemeteries and Crematories | 35 | 39 | 310 | 12,276,997 |
| 813990 | Other Similar Organizations | 81 | 105 | 373 | 9,709,379 |
| 423860 | Other Transport Goods Merchant Whsle | | | | |
| 48311 | Sea, Coastal & Great Lakes Transport | 12 | 13 | 187 | 11,072,879 |
| | other total | 20 | 20 | 851 | 54,268,763 |
| | | 49 | 63 | 3,396 | 200,833,993 |
| | | 9,153 | 11,127 | 159,109 | 4,718,218,185 |

OTHER COASTAL DATA INCLUDES:

| 487990 | Scenic/Sightseeing Transportation, Other |
|--------|---|
| 712190 | Nature Parks & Other Similar Institution |
| 713110 | Amusement and Theme Parks |
| 7132 | Gambling Industries |
| 713920 | Skiing Facilities |

| 924110 | Air, Water and Waste Program Admin |
|--------|--------------------------------------|
| 114119 | Other Marine Fishing |
| 333120 | Construction Machinery Manufacturing |
| 336611 | Ship Building and Repairing |
| 311711 | Seafood Canning |
| 711219 | Other Spectator Sports |



ADJUSTED DATA TABLES USED IN ANALYSIS

Marine Industry, Massachusetts and Coastal Zone

| State, MA, 2004, Marine Industry | | | | | | | |
|--|----------------|------------|-----------------|-----------------------|--|--|--|
| 2002 NAICS | Establishments | Employment | Wages | Wages per Employee | | | |
| Commercial Seafood Industries: | 1,110 | 11,270 | \$509,727,058 | \$45,227 | | | |
| Commercial Seafood Industries (ES-202 2004) | 1,110 | 7,661 | \$338,330,058 | \$44,160 | | | |
| Commercial Seafood Industries (Nonemployer 2003) | n/a | 3,609 | \$171,397,000 | \$47,492 | | | |
| Marine Transportation | 171 | 2,099 | \$92,835,244 | \$44,230 | | | |
| Coastal Tourism and Recreation | 7,640 | 119,420 | \$2,338,200,556 | \$19,580 | | | |
| Marine Science and Technology | 184 | 5,055 | \$418,699,680 | \$82,821 | | | |
| Marine-Related Infrastructure | 1,851 | 14,596 | \$948,937,697 | \$65,013 | | | |
| Total Marine Industry | 10,955 | 152,441 | \$4,308,400,235 | \$28,263 | | | |

Source: Mass. Division of Unemployment Assistance (Mass. DUA), ES-202, 2004; Mass. Division of Fisheries, Shellfish Sanitation Management Project

| Coast, MA | , 2004, Marine Indus | stry | | |
|--|----------------------|------------|-----------------|-----------------------|
| 2002 NAICS | Establishments | Employment | Wages | Wages per Employee |
| Commercial Seafood Industries | 979 | 6,594 | \$296,954,695 | \$45,031 |
| Commercial Seafood Industries (ES-202 2004 and MA DMF) | 979 | 6,594 | \$296,954,695 | \$45,031 |
| Commercial Seafood Industries (Nonemployer 2003) Numbers are for the state, not for the Coast. Hence they are not included in totals | n/a | 3,609 | \$171,397,000 | \$47,492 |
| Marine Transportation | 148 | 2,045 | \$90,302,416 | \$44,156 |
| Coastal Tourism and Recreation | 7,640 | 119,420 | \$2,338,200,556 | \$19,580 |
| Marine Science, Technology and Education | 66 | 1,120 | \$65,062,330 | \$58,067 |
| Marine-Related Infrastructure | 1,809 | 11,246 | \$731,287,167 | \$65,029 |
| Total Marine Industry, Coast | 10,642 | 140,426 | 3,521,807,164 | \$25,080 |
| Other* Coast: | 63 | 3,396 | \$200,833,993 | \$59,138.40 |
| Source: Mass DIA ES 202 2004 | | | | |

Source: Mass. DUA, ES-202, 2004 * See Appendix-Industry Code Conversion and Allocation Formulas



Marine Industry by Major Sector, Massachusetts

| 2002 NAICS | Description | Establ | Empl | Wages |
|--|--|--|---|--|
| | Total Marine in Massachusetts | 10,955 | 152,441 | \$4,308,400,235 |
| Commercia | al Seafood Industries | 1,110 | 11,270 | \$509,727,058 |
| Sub-sector 1 | - Fishing Supplies and Services | 267 | 267 | \$3,691,183 |
| 11251 | Animal Aquaculture (MA Division of Fisheries) | 267 | 267 | \$3,691,183 |
| Sub-sector 2 | - Commercial Fishing | 421 | 5,286 | \$276,336,890 |
| 1141 | Commercial Fishing (Nonemployer 2003) | n/a | 3,586 | \$170,721,000 |
| 114111 | Finfish Fishing | 248 | 897 | \$41,381,249 |
| 114112 | Shellfish Fishing | 170 | 803 | \$64,212,641 |
| | Other Marine Fishing | 3 | n/a | \$22,000 |
| Sub-sector 3 | - Seafood Processing and Wholesaling (3117) | 237 | 4,552 | \$196,497,901 |
| 3117 | Seafood Processing and Wholesaling (Nonemployer 2003) | n/a | 23 | \$676,000 |
| | Seafood Canning | 7 | 118 | \$4,376,717 |
| 311712 | Fresh and Frozen Seafood Processing | 51 | 2,311 | \$91,240,549 |
| 424460 | Fish and Seafood Merchant Wholesalers | 179 | 2,100 | \$100,204,635 |
| Sub-sector 4 | - Retail and Food Service Seafood Sales | 185 | 1,165 | \$33,201,085 |
| 445220 | Fish and Seafood Markets | 154 | 916 | \$24,141,879 |
| 454390 | Other Direct Selling Establishments (part) | 31 | 249 | \$9,059,206 |
| | | | | |
| Marine Tra | nsportation | 171 | 2,099 | \$92,835,244 |
| | Deep Sea, Coastal, and Water Lakes Transportion | 28 | 870 | \$55,398,557 |
| 483211 | Inland Water Freight Transportation | 8 | 18 | \$504,717 |
| 483212 | Inland Water Passenger Transportation | 7 | 13 | \$255,836 |
| 487210 | Scenic and Sightseeing Transportation, Water | 60 | 736 | \$14,383,648 |
| | Support Activities for Water Transportation | 54 | 411 | \$16,708,053 |
| | Commercial Air, Rail, and Water Transportation Equipment | 14 | 51 | \$5,584,433 |
| | Rental and Leasing | | | |
| | | | | |
| Coastal To | urism and Recreation | 7,640 | 119,420 | \$2,338,200,556 |
| | | 1,064 | 40.005 | \$322,954,736 |
| | - Entertainment and Recreation | 1,004 | 13,625 | 4JZZ,3J4,7JU |
| Sub-sector 1 | - Entertainment and Recreation Marinas | | 13,625 1,514 | |
| Sub-sector 1 713930 | Marinas | 154 | 1,514 | \$55,097,974 |
| Sub-sector 1 713930 713940 | Marinas Fitness and Recreational Sports Centers (part) | | 1,514 6,045 | \$55,097,974 \$99,075,908 |
| Sub-sector 1 713930 713940 713990 | Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) | 154 363 198 | 1,514 6,045 2,724 | \$55,097,974 \$99,075,908 \$57,635,621 |
| Sub-sector 1 713930 713940 713990 711110 | Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) | 154 363 | 1,514 6,045 | \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 |
| Sub-sector 1 713930 713940 713990 711110 711190 | Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) | 154 363 198 52 | 1,514 6,045 2,724 1,242 | \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 |
| Sub-sector 1 713930 713940 713990 711110 711190 | Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) | 154 363 198 52 7 | 1,514 6,045 2,724 1,242 11 | \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 |
| Sub-sector 1 713930 713940 713990 711110 711190 711320 | Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events | 154 363 198 52 7 | 1,514 6,045 2,724 1,242 11 | \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 |
| Sub-sector 1 713930 713940 713990 711110 711190 711320 532292 | Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) | 154 363 198 52 7 29 | 1,514 6,045 2,724 1,242 11 212 | \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 |
| Sub-sector 1 713930 713940 713990 711110 711190 711320 532292 611620 | Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction | 154 363 198 52 7 29 35 86 | 1,514 6,045 2,724 1,242 11 212 87 491 | \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$8,659,321 |
| Sub-sector 1 713930 713940 713990 711110 711190 711320 532292 611620 611699 | Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental | 154 363 198 52 7 29 35 | 1,514 6,045 2,724 1,242 11 212 87 | \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$8,659,321 \$20,634,907 |
| Sub-sector 1 713930 713940 713990 711110 711190 711320 532292 611620 611699 | Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction All Other Miscellaneous Schools and Instruction (part) Boat Dealers | 154 363 198 52 7 7 29 35 35 86 53 | 1,514 6,045 2,724 1,242 11 212 87 491 527 772 | \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$8,659,321 \$20,634,907 \$31,042,232 |
| Sub-sector 1 713930 713940 713990 711110 711190 711320 532292 611620 611699 441222 Sub-Sector 2 | Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction All Other Miscellaneous Schools and Instruction (part) Boat Dealers - Food | 154 363 198 52 7 7 29 35 86 53 87 5,819 | 1,514 6,045 2,724 1,242 11 212 87 491 527 | \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$8,659,321 \$20,634,907 \$31,042,232 \$1,476,224,108 |
| Sub-sector 1 713930 713940 713990 711110 711190 711320 532292 611620 611699 441222 Sub-Sector 2 722110 | Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction All Other Miscellaneous Schools and Instruction (part) Boat Dealers - Food Full-Service Restaurants | 154 363 198 52 7 7 29 35 35 86 53 87 | 1,514 6,045 2,724 1,242 11 212 87 491 527 772 87,499 | \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$8,659,321 \$20,634,907 \$31,042,232 \$1,476,224,108 \$832,422,368 |
| Sub-sector 1 713930 713940 713990 711110 711190 711320 532292 611620 611699 441222 Sub-Sector 2 722110 722211 | Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction All Other Miscellaneous Schools and Instruction (part) Boat Dealers - Food | 154 363 198 52 7 7 29 35 35 86 53 87 5,819 2,359 | 1,514 6,045 2,724 1,242 11 212 87 491 527 772 87,499 46,240 | \$55,097,974 \$99,075,908 \$57,635,62 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$8,659,321 \$20,634,907 \$31,042,232 \$1,476,224,108 \$832,422,368 \$259,547,588 |
| Sub-sector 1 713930 713940 713990 711110 711190 711320 532292 611620 611699 441222 Sub-Sector 2 722110 722211 | Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction All Other Miscellaneous Schools and Instruction (part) Boat Dealers - Food Full-Service Restaurants Limited-Service Restaurants Cafeterias | 154 363 198 52 7 7 29 35 86 53 87 5,819 2,359 1,814 | 1,514 6,045 2,724 1,242 11 212 87 491 527 772 87,499 46,240 18,242 | \$55,097,974 \$99,075,906 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$8,659,321 \$20,634,907 \$31,042,232 \$1,476,224,108 \$832,422,368 \$259,547,588 \$6,695,904 |
| Sub-sector 1 713930 713940 713990 711110 711190 711320 532292 611620 611699 441222 Sub-Sector 2 722110 722211 722212 722213 | Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction All Other Miscellaneous Schools and Instruction (part) Boat Dealers - Food Full-Service Restaurants Limited-Service Restaurants | 154 363 198 52 7 7 29 35 86 53 87 5,819 2,359 1,814 24 | 1,514 6,045 2,724 1,242 11 212 87 491 527 772 87,499 46,240 18,242 414 | \$55,097,974 \$99,075,906 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$8,659,321 \$20,634,907 \$31,042,232 \$1,476,224,108 \$832,422,368 \$259,547,588 \$6,695,904 \$152,609,738 |
| Sub-sector 1 713930 713940 713990 711110 711120 711320 532292 611620 611629 441222 Sub-Sector 2 722110 722211 722212 722213 722310 | Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction All Other Miscellaneous Schools and Instruction (part) Boat Dealers - Food Full-Service Restaurants Limited-Service Restaurants Cafeterias Snack and Nonalcoholic Beverage Bars (part) | 154 363 198 52 7 7 29 35 86 53 87 5,819 2,359 1,814 2,359 1,814 24 769 | 1,514 6,045 2,724 1,242 11 212 87 491 527 772 87,499 46,240 18,242 414 10,240 | \$55,097,974 \$99,075,906 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$8,659,321 \$20,634,907 \$31,042,232 \$1,476,224,108 \$832,422,368 \$259,547,588 \$6,695,904 \$152,609,739 \$120,686,377 |

Massachusetts Marine Industry by NAICS, 2004



| | - Accommodations | 757 | 18,296 | |
|--|--|------------------|-----------------------|--|
| 7211 | Traveler Accommodation | 587 | 16,453 | \$484,373,091 |
| 721310 | Rooming and Boarding Houses (part) | 43 | 232 | \$4,820,131 |
| 721214 | Recreational and Vacation Camps (except Campgrounds) | 30 | 241 | \$5,517,002 |
| | RV (Recreational Vehicle) Parks and Campgrounds | 29 | 188 | \$4,461,234 |
| 487110 | Scenic and Sightseeing Transportation, Land (part) | 23 | 472 | \$13,786,626 |
| 561599 | All Other Travel Arrangement and Reservation Services (part) | 45 | 710 | \$26,063,628 |
| | | | | |
| larine Scie | ence and Technology | 184 | 5,055 | \$418,699,680 |
| ub-sector 1 | - Instrumentation and Equipment | 11 | 1,441 | \$126,465,634 |
| 334511 | Search, Detection, Navigation, Guidance, Aeronautical, and | 10 | 1,393 | \$123,234,690 |
| | Nautical System and Instrument Manufacturing | | | |
| 334519 | Other Measuring and Controlling Device Manufacturing (part) | 1 | 48 | \$3,230,944 |
| ub-sector 2 | l - Marine Services | 107 | 2,985 | \$265,399,985 |
| 541330 | Engineering Services (part) | 33 | 445 | \$34,957,444 |
| | Research and Development in the Physical, Engineering, | 74 | 2,540 | \$230,442,541 |
| | and Life Sciences | | | |
| ub-sector 3 | - Marine Materials and Supplies | 10 | 140 | \$6,596,269 |
| | Paint and Coating Manufacturing (part) | 2 | 62 | \$3,564,550 |
| | All Other Motor Vehicle Parts Manufacturing (part) | 7 | 75 | \$2,935,535 |
| | Construction Machinery Manufacturing (part) | 0 | 3 | \$96,184 |
| | - Ship and Boat Building and Repair | 56 | 490 | \$20,237,793 |
| | All Other Plastics Product Manufacturing (part) | 0 | 2 | \$107,181 |
| | Ship Building and Repairing | 13 | 195 | \$8,155,194 |
| | Boat Building | 38 | 250 | \$8,788,168 |
| | Transportation Equipment and Supplies (except Motor | 5 | 42 | \$3,187,251 |
| | Vehicle) Merchant Wholesalers | | | |
| | | | | |
| | ated Infrastructure | 1,851 | 14,596 | \$948,937,697 |
| | All Other Heavy Construction | 23 | 147 | \$7,941,805 |
| 924110 | Administration of Air and Water Resource and Solid Waste | 28 | 3,268 | \$213,541,624 |
| | Management Programs | | | |
| | Estate Development | 1,800 | 11,181 | \$727,454,268 |
| | Offices of Real Estate Agents and Brokers | 985 | 5,025 | \$400,384,476 |
| 531210 | Offices of Real Estate Agents and Blokers | 000 | | |
| | Residential Property Managers | 371 | 3,578 | |
| 531311 | | | | \$151,562,415 |
| 531311 531312 | Residential Property Managers | 371 | 3,578 | \$151,562,415 \$122,809,332 |
| 531311 531312 531320 | Residential Property Managers Nonresidential Property Managers | 371 161 | 3,578 1,517 | \$151,562,415 \$122,809,332 \$15,425,300 |
| 531311 531312 531320 531320 531390 | Residential Property Managers Nonresidential Property Managers Offices of Real Estate Appraisers | 371 161 79 | 3,578 1,517 236 | \$151,562,415 \$122,809,332 \$15,425,300 \$15,286,369 \$12,276,997 |

NOTE - In rows marked "part" allocation formulas have been used to adjust original data. See Appendix 2 for details. Source: Mass. DUA, ES-202, 2004; Nonemployer Series, 2003; Mass. Division of Marine Fisheries; author's allocation formulas in rows marked "part"

2 Digit NAICS Codes, Massachusetts Coastal Zone

| NAICS | Description | Establishments | Employment | Wage |
|-------|--------------------------|----------------|------------|-------------------------|
| 10 | Total, All Industries | 71,160 | 1,161,274 | \$ 60,198,792,586.00 |
| | Agriculture, Forestry, | | | |
| 11 | Fishing & Hunting | 556 | 2,632 | \$ 131,279,270.00 |
| 21 | Mining | 25 | 612 | \$ 28,557,346.00 |
| 22 | Utilities | 110 | 6,094 | \$ 493,715,624.00 |
| 23 | Construction | 6,821 | 48,048 | \$ 2,612,083,519.00 |
| 31-33 | Manufacturing | 2,512 | 71,371 | \$ 3,784,431,323.00 |
| 42 | Wholesale Trade | 3,417 | 32,539 | \$ 1,950,949,042.00 |
| 44-45 | Retail Trade | 9,683 | 127,918 | \$ 3,340,989,133.00 |
| | Transportation and | | | |
| 48-49 | Warehousing | 1,699 | 43,465 | \$ 2,082,300,965.00 |
| 51 | Information | 1,352 | 28,248 | \$ 1,775,050,746.00 |
| 52 | Finance and Insurance | 3,784 | 100,209 | \$ 12,888,639,620.00 |
| | Real Estate and Rental | | | |
| 53 | and Leasing | 2,746 | 20,741 | \$ 1,124,220,020.00 |
| | Professional and | | | |
| 54 | Technical Services | 8,732 | 78,361 | \$ 6,138,474,530.00 |
| | Management of | | | |
| | Companies and | | | |
| 55 | Enterprises | 342 | 17,873 | \$ 1,322,075,305.00 |
| | Administrative and Waste | | | |
| 56 | Services | 3,859 | 62,497 | \$ 2,160,852,469.00 |
| 61 | Educational Services | 929 | 89,864 | \$ 4,171,774,542.00 |
| | Health Care and Social | | | |
| 62 | Assistance | 5,570 | 198,153 | \$ 8,967,958,115.00 |
| | Arts, Entertainment, and | | | |
| 71 | Recreation | 1,257 | 21,476 | \$ 729,715,609.00 |
| | Accommodation and | | | |
| 72 | Food Services | 6,518 | 104,622 | \$ 1,975,661,345.00 |
| | Other Services, Ex. | | | |
| 81 | Public Admin | 10,196 | 45,221 | \$ 1,202,209,766.00 |
| 92 | Public Administration | 1,052 | 61,382 | \$ 3,317,854,314.00 |

Coastal Zone Economy, 2-Digit NAICS Codes

2 Digit NAICS Codes, Massachusetts Coastal Regions

| | | Boston Harbor | | | | |
|-------|--|----------------|------------|----------------|--|--|
| NAICS | Description | Establishments | Employment | Wage | | |
| 10 | Total, All Industries | 28,383 | 659,611 | 41,722,286,361 | | |
| 11 | Agriculture, Forestry, Fishing & Hunting | 13 | 67 | 3,046,690 | | |
| 21 | Mining | 5 | 52 | 2,614,774 | | |
| 22 | Utilities | 27 | 2,969 | 238,384,917 | | |
| 23 | Construction | 1,749 | 19,717 | 1,317,517,320 | | |
| 31-33 | Manufacturing | 718 | 18,936 | 1,134,114,971 | | |
| 42 | Wholesale Trade | 1,274 | 14,536 | 1,034,420,385 | | |
| 44-45 | Retail Trade | 3,196 | 44,663 | 1,263,148,225 | | |
| 48-49 | Transportation and Warehousing | 718 | 32,522 | 1,661,894,804 | | |
| 51 | Information | 678 | 19,109 | 1,331,685,738 | | |
| 52 | Finance and Insurance | 2,074 | 84,882 | 12,009,846,127 | | |
| 53 | Real Estate and Rental and Leasing | 1,319 | 13,952 | 888,662,621 | | |
| 54 | Professional and Technical Services | 4,621 | 58,985 | 5,080,824,071 | | |
| 55 | Management of Companies and Enterprises | 186 | 10,761 | 896,067,538 | | |
| 56 | Administrative and Waste Services | 1,480 | 43,171 | 1,544,971,701 | | |
| 61 | Educational Services | 447 | 49,670 | 2,537,950,971 | | |
| 62 | Health Care and Social Assistance | 2,192 | 121,191 | 6,129,152,205 | | |
| 71 | Arts, Entertainment, and Recreation | 335 | 9,203 | 452,805,169 | | |
| 72 | Accommodation and Food Services | 2,603 | 49,831 | 1,086,058,104 | | |
| 81 | Other Services, Ex. Public Admin | 4,353 | 24,329 | 738,473,733 | | |
| 92 | Public Administration | 395 | 41,071 | 2,370,646,299 | | |
| | s DIIA ES-202 2004 | 1 | , | ,,,, | | |

Coast Economy by Region--Boston Harbor--2004, All Ownerships



| | | Cape & Islands | | | | |
|-------|--|----------------|------------|---------------|--|--|
| NAICS | Description | Establishments | Employment | Wage | | |
| 10 | Total, All Industries | 11,441 | 106,770 | 3,730,218,817 | | |
| 11 | Agriculture, Forestry, Fishing & Hunting | 95 | 295 | 8,321,777 | | |
| 21 | Mining | 6 | 98 | 5,185,882 | | |
| 22 | Utilities | 20 | 512 | 38,226,695 | | |
| 23 | Construction | 1,542 | 7,541 | 337,197,521 | | |
| 31-33 | Manufacturing | 266 | 2,445 | 104,341,082 | | |
| 42 | Wholesale Trade | 350 | 1,588 | 75,477,288 | | |
| 44-45 | Retail Trade | 2,009 | 19,669 | 529,058,339 | | |
| 48-49 | Transportation and Warehousing | 260 | 2,908 | 103,980,544 | | |
| 51 | Information | 206 | 2,362 | 109,096,417 | | |
| 52 | Finance and Insurance | 380 | 2,936 | 171,539,406 | | |
| 53 | Real Estate and Rental and Leasing | 485 | 2,184 | 66,631,265 | | |
| 54 | Professional and Technical Services | 955 | 4,916 | 259,861,016 | | |
| 55 | Management of Companies and Enterprises | 30 | 1,060 | 49,764,641 | | |
| 56 | Administrative and Waste Services | 767 | 4,242 | 146,133,044 | | |
| 61 | Educational Services | 114 | 7,785 | 307,910,229 | | |
| 62 | Health Care and Social Assistance | 795 | 15,132 | 586,635,932 | | |
| 71 | Arts, Entertainment, and Recreation | 309 | 3,499 | 94,316,495 | | |
| 72 | Accommodation and Food Services | 1,437 | 17,174 | 337,820,321 | | |
| 81 | Other Services, Ex. Public Admin | 1,222 | 4,380 | 114,500,672 | | |
| 92 | Public Administration | 193 | 6,055 | 284,220,253 | | |

Coast Economy by Region--Cape & Islands--2004, All Ownerships

Source: Mass. DUA, ES-202, 2004

Coast Economy by Region--North Shore--2004, All Ownerships

| | | North Shore | | | | |
|-------|--|----------------|------------|---------------|--|--|
| NAICS | Description | Establishments | Employment | Wage | | |
| 10 | Total, All Industries | 13,877 | 181,068 | 7,249,900,683 | | |
| 11 | Agriculture, Forestry, Fishing & Hunting | 148 | 489 | 16,910,096 | | |
| 21 | Mining | 7 | 111 | 5,602,306 | | |
| 22 | Utilities | 23 | 820 | 57,583,809 | | |
| 23 | Construction | 1,398 | 8,067 | 393,437,968 | | |
| 31-33 | Manufacturing | 742 | 24,050 | 1,489,478,929 | | |
| 42 | Wholesale Trade | 810 | 6,826 | 403,567,256 | | |
| 44-45 | Retail Trade | 1,973 | 29,781 | 740,803,106 | | |
| 48-49 | Transportation and Warehousing | 330 | 3,738 | 151,301,865 | | |
| 51 | Information | 260 | 3,483 | 188,736,474 | | |
| 52 | Finance and Insurance | 580 | 5,872 | 350,574,736 | | |
| 53 | Real Estate and Rental and Leasing | 432 | 2,428 | 95,634,458 | | |
| 54 | Professional and Technical Services | 1,547 | 7,689 | 446,130,861 | | |
| 55 | Management of Companies and Enterprises | 46 | 2,018 | 154,327,829 | | |
| 56 | Administrative and Waste Services | 742 | 6,793 | 246,298,379 | | |
| 61 | Educational Services | 181 | 14,587 | 582,566,652 | | |
| 62 | Health Care and Social Assistance | 1,197 | 29,162 | 1,096,010,044 | | |
| 71 | Arts, Entertainment, and Recreation | 287 | 4,027 | 86,524,401 | | |
| 72 | Accommodation and Food Services | 1,196 | 17,510 | 282,036,897 | | |
| 81 | Other Services, Ex. Public Admin | 1,804 | 7,648 | 165,014,569 | | |
| 92 | Public Administration | 174 | 5,984 | 297,360,051 | | |

| NAICS | Description | Establishments | South Coast | Waga |
|-------|--|----------------|-------------|---------------|
| | Description | | Employment | Wage |
| 10 | Total, All Industries | 10,723 | 139,617 | 4,641,570,648 |
| 11 | Agriculture, Forestry, Fishing & Hunting | 267 | 1,683 | 100,674,959 |
| 21 | Mining | 5 | 29 | 1,014,051 |
| 22 | Utilities | 23 | 920 | 66,393,070 |
| 23 | Construction | 1,262 | 7,320 | 281,797,933 |
| 31-33 | Manufacturing | 565 | 22,146 | 881,781,846 |
| 42 | Wholesale Trade | 472 | 6,178 | 232,970,627 |
| 44-45 | Retail Trade | 1,566 | 20,305 | 472,311,775 |
| 48-49 | Transportation and Warehousing | 262 | 3,009 | 111,337,269 |
| 51 | Information | 90 | 2,134 | 82,009,580 |
| 52 | Finance and Insurance | 392 | 3,532 | 175,105,981 |
| 53 | Real Estate and Rental and Leasing | 312 | 1,323 | 41,976,783 |
| 54 | Professional and Technical Services | 729 | 2,942 | 124,919,294 |
| 55 | Management of Companies and Enterprises | 52 | 1,866 | 82,223,316 |
| 56 | Administrative and Waste Services | 481 | 5,051 | 125,720,791 |
| 61 | Educational Services | 108 | 11,551 | 486,708,592 |
| 62 | Health Care and Social Assistance | 913 | 23,877 | 835,606,196 |
| 71 | Arts, Entertainment, and Recreation | 171 | 1,950 | 37,929,755 |
| 72 | Accommodation and Food Services | 820 | 12,474 | 157,411,277 |
| 81 | Other Services, Ex. Public Admin | 2,050 | 5,981 | 113,626,441 |
| 92 | Public Administration | 183 | 5,352 | 230,051,115 |

Coast Economy by Region--South Coast--2004, All Ownerships

Source: Mass. DUA, ES-202, 2004

Coast Economy by Region--South Shore--2004, All Ownerships

| | | South Shore | | | | |
|---------|--|----------------|------------|---------------|--|--|
| NAICS | Description | Establishments | Employment | Wage | | |
| 10 | Total, All Industries | 6,736 | 74,208 | 2,854,816,077 | | |
| 11 & 21 | Agriculture, Forestry, Fishing & Hunting & | 35 | 420 | 16,466,081 | | |
| | Mining | | | | | |
| 22 | Utilities | 17 | 873 | 93,127,133 | | |
| 23 | Construction | 870 | 5,403 | 282,132,777 | | |
| 31-33 | Manufacturing | 221 | 3,794 | 174,714,495 | | |
| 42 | Wholesale Trade | 511 | 3,411 | 204,513,486 | | |
| 44-45 | Retail Trade | 939 | 13,500 | 335,667,688 | | |
| 48-49 | Transportation and Warehousing | 129 | 1,288 | 53,786,483 | | |
| 51 | Information | 118 | 1,160 | 63,522,537 | | |
| 52 | Finance and Insurance | 358 | 2,987 | 181,573,370 | | |
| 53 | Real Estate and Rental and Leasing | 198 | 854 | 31,314,893 | | |
| 54 | Professional and Technical Services | 880 | 3,829 | 226,739,288 | | |
| 55 | Management of Companies and Enterprises | 28 | 2,168 | 139,691,981 | | |
| 56 | Administrative and Waste Services | 389 | 3,240 | 97,728,554 | | |
| 61 | Educational Services | 79 | 6,271 | 256,638,098 | | |
| 62 | Health Care and Social Assistance | 473 | 8,791 | 320,553,738 | | |
| 71 | Arts, Entertainment, and Recreation | 155 | 2,797 | 58,139,789 | | |
| 72 | Accommodation and Food Services | 462 | 7,633 | 112,334,746 | | |
| 81 | Other Services, Ex. Public Admin | 767 | 2,883 | 70,594,351 | | |
| 92 | Public Administration | 107 | 2,920 | 135,576,596 | | |

2 Digit NAICS Codes, Massachusetts

| NAICS | Description | Establishments | Employment | Wage | Wag | ge per Person |
|-------|--|----------------|------------|-----------------------|-----|---------------|
| 10 | Total, All Industries | 212,746 | 3,139,629 | \$ 153,635,357,894 | \$ | 48,934.24 |
| | Agriculture, Forestry, Fishing & | | | | | |
| 11 | Hunting | 993 | 6,860 | \$ 267,504,837 | \$ | 38,994.87 |
| 21 | Mining | 121 | 1,829 | \$ 91,007,303 | \$ | 49,757.96 |
| 22 | Utilities | 376 | 13,741 | \$ 1,030,846,798 | \$ | 75,019.78 |
| 23 | Construction | 21,684 | 150,159 | \$ 7,730,463,577 | \$ | 51,481.85 |
| 31-33 | Manufacturing | 8,897 | 313,291 | \$ 19,071,748,094 | \$ | 60,875.51 |
| 42 | Wholesale Trade | 15,834 | 135,265 | \$ 9,060,091,684 | \$ | 66,980.31 |
| 44-45 | Retail Trade | 25,225 | 356,206 | \$ 9,623,659,637 | \$ | 27,017.12 |
| 48-49 | Transportation and Warehousing | 4,578 | 102,221 | \$ 4,419,654,418 | \$ | 43,236.27 |
| 51 | Information | 4,569 | 92,623 | \$ 6,459,720,126 | \$ | 69,742.07 |
| 52 | Finance and Insurance | 9,950 | 172,877 | \$ 17,776,694,383 | \$ | 102,828.57 |
| 53 | Real Estate and Rental and Leasing | 7,116 | 44,809 | \$ 2,150,390,157 | \$ | 47,990.14 |
| 54 | Professional and Technical Services | 28,234 | 227,554 | \$ 18,159,675,738 | \$ | 79,803.81 |
| 55 | Management of Companies and Enterprises | 1,058 | 64,681 | \$ 4,842,216,615 | \$ | 74,863.05 |
| 56 | Administrative and Waste Services | 11,741 | 162,818 | \$ 5,372,084,206 | \$ | 32,994.41 |
| 61 | Educational Services | 3,192 | 299,340 | \$ 13,365,316,485 | \$ | 44,649.28 |
| 62 | Health Care and Social Assistance | 16,353 | 451,464 | \$ 18,797,835,691 | \$ | 41,637.51 |
| 71 | Arts, Entertainment, and Recreation | 3,324 | 51,261 | \$ 1,496,710,296 | \$ | 29,197.84 |
| 72 | Accommodation and Food Services | 15,438 | 244,935 | \$ 4,239,079,315 | \$ | 17,306.96 |
| 81 | Other Services, Ex. Public Admin | 31,033 | 117,856 | \$ 3,059,500,218 | \$ | 25,959.65 |
| 92 | Public Administration | 3,030 | 129,840 | \$ 6,621,158,316 | \$ | 50,994.75 |

Massachusetts Total Economy, 2004, All ownerships



Marine Industry by Major Sector, Massachusetts Coastal Zone

| 2002 NAICS | Description | Establishments | Employment | Wages |
|---|--|---|--|---|
| 2002 10 000 | Total Marine in Massachusetts | 10,642 | 140,426 | 3,521,807,164 |
| Commerc | ial Seafood Industries | 979 | 6,594 | 296,954,695 |
| | 1 - Fishing Supplies and Services | 267 | 267 | 3691182.5 |
| | Animal Aquaculture | 267 | 267 | 3691182.5 |
| | 2 - Commercial Fishing (1141) | 405 | 1,673 | \$104,228,987 |
| 1141 | | n/a | 3,586 | \$170,721,000 |
| | for the state, not for the Coast. Hence they are not | | -, | , , , |
| | included in totals | | | |
| 114111 | Finfish Fishing | 242 | 886 | \$40,983,122 |
| 114112 | Shellfish Fishing | 163 | 787 | \$63,245,865 |
| Sub-sector | 3 - Seafood Processing and Wholesaling | 191 | 4,013 | \$171,320,969 |
| 3117 | Seafood Processing and Wholesaling (Nonemployer | n/a | 23 | \$676,000 |
| | 2003) Numbers are for the state, not for the Coast. Hence | | | |
| | they are not included in totals | | | |
| | Fresh and Frozen Seafood Processing | 46 | 2,259 | \$88,196,573 |
| | Fish and Seafood Merchant Wholesalers | 145 | 1,754 | \$83,124,396 |
| | 4 - Retail and Food Service Seafood Sales | 116 | 641 | \$17,713,556 |
| | Fish and Seafood Markets | 109 | 586 | \$16,641,229 |
| 454390 | Other Direct Selling Establishments (part) | 7 | 55 | \$1,072,327 |
| Morino Tr | anonartation | 148 | 2,045 | 00 202 446 |
| | ansportation Sea, Coastal & Great Lakes Transport | 20 | 2,045 851 | 90,302,416 \$54,268,763 |
| | Inland Water Freight Transportation | 6 | 13 | \$309,824 |
| | Inland Water Passenger Transportation | 7 | 13 | \$255,836 |
| | Scenic and Sightseeing Transportation, Water | 58 | 723 | \$13,968,529 |
| | Support Activities for Water Transportation | 49 | 400 | \$16,353,497 |
| | Commercial Air, Rail, and Water Transportation Equipment | .0 | 44 | \$5,145,967 |
| | Rental and Leasing | - | | <i>•••</i> ,•••,••• |
| | | | | |
| | | | | |
| | ourism and Recreation | 7,640 | 119,420 | 2,338,200,556 |
| Sub-sector | 1 - Entertainment and Recreation | 7,640 1,064 | 13,625 | \$322,954,736 |
| Sub-sector 7 713930 | 1 - Entertainment and Recreation Marinas | 1,064 154 | | \$322,954,736 \$55,097,974 |
| Sub-sector 7 713930 713940 | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) | 1,064 154 363 | 13,625 1,514 6,045 | \$322,954,736 \$55,097,974 \$99,075,908 |
| Sub-sector 7 713930 713940 713990 | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) | 1,064 154 363 198 | 13,625 1,514 6,045 2,724 | \$322,954,736 \$55,097,974 \$99,075,908 \$57,635,621 |
| Sub-sector 713930 713940 713990 711110 | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) | 1,064 154 363 198 52 | 13,625 1,514 6,045 2,724 1,242 | \$322,954,736 \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 |
| Sub-sector 713930 713940 713990 71110 71110 | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) | 1,064 154 363 198 52 7 | 13,625 1,514 6,045 2,724 1,242 11 | \$322,954,736 \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 |
| Sub-sector 713930 713940 713990 71110 71110 | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events | 1,064 154 363 198 52 | 13,625 1,514 6,045 2,724 1,242 | \$322,954,736 \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 |
| Sub-sector 713930 713940 713990 711110 711190 711320 | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) | 1,064 154 363 198 52 7 29 | 13,625 1,514 6,045 2,724 1,242 11 212 | \$322,954,736 \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 |
| Sub-sector 713930 713940 713990 711110 711190 711320 532292 | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental | 1,064 154 363 198 52 7 7 29 35 | 13,625 1,514 6,045 2,724 1,242 11 212 87 | \$322,954,736 \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 |
| Sub-sector 713930 713940 713990 711110 711190 711320 532292 611620 | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction | 1,064 154 363 198 52 7 7 29 35 86 | 13,625 1,514 6,045 2,724 1,242 11 212 87 491 | \$322,954,736 \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$8,659,321 |
| Sub-sector 713930 713940 713990 711110 711190 711320 532292 611620 611699 | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction All Other Miscellaneous Schools and Instruction (part) | 1,064 154 363 198 52 7 7 29 35 35 86 53 | 13,625 1,514 6,045 2,724 1,242 11 212 87 491 527 | \$322,954,736 \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$8,659,321 \$20,634,907 |
| Sub-sector 713930 713940 713990 711110 711190 711320 532292 611620 611699 441222 | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction All Other Miscellaneous Schools and Instruction (part) Boat Dealers | 1,064 154 363 198 52 7 7 29 29 35 86 86 53 87 | 13,625 1,514 6,045 2,724 1,242 11 212 87 491 527 772 | \$322,954,736 \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$8,659,321 \$20,634,907 \$31,042,232 |
| Sub-sector 713930 713940 713990 711110 711190 711320 532292 611620 611629 441222 Sub-Sector | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction All Other Miscellaneous Schools and Instruction (part) Boat Dealers 2 - Food | 1,064 154 363 198 52 7 7 29 29 35 35 86 53 87 87 5,819 | 13,625 1,514 6,045 2,724 1,242 11 212 87 491 527 772 87,499 | \$322,954,736 \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$20,634,907 \$31,042,232 \$1,476,224,108 |
| Sub-sector 713930 713940 713990 711110 711190 711320 532292 611620 611629 441222 Sub-Sector 722110 | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction All Other Miscellaneous Schools and Instruction (part) Boat Dealers 2 - Food Full-Service Restaurants | 1,064 154 363 198 52 7 7 29 35 35 35 86 53 87 87 5,819 2,359 | 13,625 1,514 6,045 2,724 1,242 11 212 87 491 527 772 87,499 46,240 | \$322,954,736 \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$8,659,321 \$20,634,907 \$31,042,232 \$1,476,224,108 \$832,422,368 |
| Sub-sector 713930 713940 713990 711110 711190 711320 532292 611620 611629 441222 Sub-Sector 722110 722211 | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction All Other Miscellaneous Schools and Instruction (part) Boat Dealers 2 - Food Full-Service Restaurants Limited-Service Restaurants | 1,064 154 363 198 52 7 7 29 35 35 35 86 53 87 5,819 2,359 1,814 | 13,625 1,514 6,045 2,724 1,242 11 212 87 491 527 772 87,499 46,240 18,242 | \$322,954,736 \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$2,059,431 \$20,634,907 \$31,042,232 \$1,476,224,108 \$832,422,368 \$259,547,588 |
| Sub-sector 713930 713940 713990 711110 711190 711320 532292 611620 611629 441222 Sub-Sector 722110 722211 | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction All Other Miscellaneous Schools and Instruction (part) Boat Dealers 2 - Food Full-Service Restaurants Limited-Service Restaurants | 1,064 154 363 198 52 7 29 35 35 86 53 87 5,819 2,359 1,814 24 | 13,625 1,514 6,045 2,724 1,242 11 212 87 491 527 772 87,499 46,240 18,242 414 | \$322,954,736 \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$2,059,431 \$20,634,907 \$31,042,232 \$1,476,224,108 \$832,422,368 \$259,547,588 \$6,695,904 |
| Sub-sector 713930 713940 713990 711110 711190 711320 532292 611620 611629 441222 Sub-Sector 722110 722211 722212 722213 | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction All Other Miscellaneous Schools and Instruction (part) Boat Dealers 2 - Food Full-Service Restaurants Limited-Service Restaurants Snack and Nonalcoholic Beverage Bars (part) | 1,064 154 363 198 52 7 29 35 86 53 87 5,819 2,359 1,814 24 769 | 13,625 1,514 6,045 2,724 1,242 11 212 87 491 5272 87,499 46,240 18,242 414 10,240 | \$322,954,736 \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$20,634,907 \$31,042,232 \$1,476,224,108 \$832,422,368 \$259,547,588 \$6,695,904 \$152,609,739 |
| Sub-sector 713930 713940 713990 711110 711190 711320 532292 611620 611629 441222 Sub-Sector 722110 722211 722212 722213 722310 | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction All Other Miscellaneous Schools and Instruction (part) Boat Dealers 2 - Food Full-Service Restaurants Limited-Service Restaurants | 1,064 154 363 198 52 7 29 35 35 86 53 87 5,819 2,359 1,814 24 | 13,625 1,514 6,045 2,724 1,242 11 212 87 491 527 772 87,499 46,240 18,242 414 | \$322,954,736 \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$8,659,321 \$20,634,907 \$31,042,232 \$1,476,224,108 \$832,422,368 \$259,547,588 \$6,695,904 \$152,609,739 \$120,686,377 |
| Sub-sector 713930 713940 713990 711110 711190 711320 532292 611620 611699 441222 Sub-Sector 722110 722211 722212 722213 722310 722310 | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction All Other Miscellaneous Schools and Instruction (part) Boat Dealers 2 - Food Full-Service Restaurants Limited-Service Restaurants Cafeterias Snack and Nonalcoholic Beverage Bars (part) | 1,064 154 363 198 52 7 29 35 86 53 86 53 87 5,819 2,359 1,814 24 769 232 | 13,625 1,514 6,045 2,724 1,242 11 212 87 491 527 772 87,499 46,240 18,242 414 10,240 5,738 | \$322,954,736 \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$20,634,907 \$31,042,232 \$1,476,224,108 \$832,422,368 \$259,547,588 \$6,695,904 \$152,609,739 |
| Sub-sector 713930 713940 713990 711110 711190 711320 532292 611620 611699 441222 Sub-Sector 722110 722211 722212 722213 722310 722310 722320 722410 | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction All Other Miscellaneous Schools and Instruction (part) Boat Dealers 2 - Food Full-Service Restaurants Limited-Service Restaurants Sonack and Nonalcoholic Beverage Bars (part) Food Service Contractors | 1,064 154 363 198 52 7 29 35 86 53 86 53 87 5,819 2,359 1,814 24 769 232 177 | 13,625 1,514 6,045 2,724 1,242 11 212 87 491 527 772 87,499 46,240 18,242 414 10,240 5,738 2,072 | \$322,954,736 \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$8,659,321 \$20,634,907 \$31,042,232 \$1,476,224,108 \$832,422,368 \$259,547,588 \$6,695,904 \$152,609,739 \$120,686,377 \$38,357,842 |
| Sub-sector 713930 713940 713990 71110 71110 71110 711320 532292 611620 611699 441222 Sub-Sector 722110 722212 722213 722310 722320 722410 Sub-Sector | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction All Other Miscellaneous Schools and Instruction (part) Boat Dealers 2 - Food Full-Service Restaurants Limited-Service Restaurants Cafeterias Snack and Nonalcoholic Beverage Bars (part) Food Service Contractors Caterers Drinking Places (Alcoholic Beverages) | 1,064 154 363 198 52 7 29 35 86 53 86 53 87 5,819 2,359 1,814 24 769 232 177 444 | 13,625 1,514 6,045 2,724 1,242 11 212 87 491 527 772 87,499 46,240 18,242 414 10,240 5,738 2,072 4,553 | \$322,954,736 \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$8,659,321 \$20,634,907 \$31,042,232 \$1,476,224,108 \$832,422,368 \$259,547,588 \$6,695,904 \$152,609,739 \$120,686,377 \$38,357,842 \$65,904,290 |
| Sub-sector 713930 713940 713940 713990 711110 711120 711320 532292 611620 611629 441222 Sub-Sector 722110 722213 722210 722210 722310 722410 Sub-Sector 722410 722320 722410 | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction All Other Miscellaneous Schools and Instruction (part) Boat Dealers 2 - Food Full-Service Restaurants Limited-Service Restaurants Cafeterias Snack and Nonalcoholic Beverage Bars (part) Food Service Contractors Caterers Drinking Places (Alcoholic Beverages) 3 - Accommodations | 1,064 154 363 198 52 7 29 35 86 53 86 53 87 5,819 2,359 1,814 24 769 232 177 444 757 | 13,625 1,514 6,045 2,724 1,242 11 212 87 491 527 772 87,499 46,240 18,242 414 10,240 5,738 2,072 4,553 18,296 | \$322,954,736 \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$8,659,321 \$20,634,907 \$31,042,232 \$1,476,224,108 \$832,422,368 \$259,547,588 \$6,695,904 \$152,609,739 \$120,686,377 \$38,357,842 \$65,904,290 539,021,712 |
| Sub-sector 713930 713940 713940 713990 711110 711120 711320 532292 611620 611699 441222 Sub-Sector 722110 722213 722210 722310 722310 722410 Sub-Sector 7211 7211 | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction All Other Miscellaneous Schools and Instruction (part) Boat Dealers 2 - Food Full-Service Restaurants Limited-Service Restaurants Cafeterias Snack and Nonalcoholic Beverage Bars (part) Food Service Contractors Caterers Drinking Places (Alcoholic Beverages) 3 - Accommodations | 1,064 154 363 198 52 7 29 35 86 53 87 5,819 2,359 1,814 24 769 232 1,814 24 769 232 1,814 769 232 1,77 444 765 87 587 30 30 | 13,625 1,514 6,045 2,724 1,242 11 212 87 491 527 772 87,499 46,240 18,242 414 10,240 5,738 2,072 4,553 18,296 16,453 | \$322,954,736 \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$8,659,321 \$20,634,907 \$31,042,232 \$1,476,224,108 \$832,422,368 \$259,547,588 \$6,695,904 \$152,609,739 \$120,686,377 \$38,357,842 \$65,904,290 539,021,712 \$484,373,091 |
| Sub-sector 713930 713940 713990 711110 711190 711320 532292 611620 611629 441222 Sub-Sector 722110 722212 722213 722310 722310 722310 722310 722310 722310 722111 | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction All Other Miscellaneous Schools and Instruction (part) Boat Dealers 2 - Food Full-Service Restaurants Limited-Service Restaurants Cafeterias Snack and Nonalcoholic Beverage Bars (part) Food Service Contractors Caterers Drinking Places (Alcoholic Beverages) 3 - Accommodations Traveler Accommodation | 1,064 154 363 198 52 7 29 35 86 53 87 5,819 2,359 1,814 24 769 232 1,814 24 769 232 1,814 769 232 1,77 4444 757 587 43 30 | 13,625 1,514 6,045 2,724 1,242 11 212 87 491 527 772 87,499 46,240 18,242 414 10,240 5,738 2,072 4,553 18,296 16,453 232 | \$322,954,736 \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$8,659,321 \$20,634,907 \$31,042,232 \$1,476,224,108 \$832,422,368 \$259,547,588 \$6,695,904 \$152,609,739 \$120,686,377 \$38,357,842 \$65,904,290 539,021,712 \$484,373,091 \$4,820,131 |
| Sub-sector 713930 713940 713990 711110 711190 711320 532292 611620 611699 441222 Sub-Sector 722110 722212 722212 722213 722310 722310 722320 722310 722310 722310 722310 722310 722111 72111 721214 | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction All Other Miscellaneous Schools and Instruction (part) Boat Dealers 2 - Food Full-Service Restaurants Limited-Service Restaurants Cafeterias Snack and Nonalcoholic Beverage Bars (part) Food Service Contractors Caterers Drinking Places (Alcoholic Beverages) 3 - Accommodation Rooming and Boarding Houses (part) Recreational and Vacation Camps (except Campgrounds) RV (Recreational Vehicle) Parks and Campgrounds | 1,064 154 363 198 52 7 29 35 86 53 87 5,819 2,359 1,814 24 769 232 1,814 24 769 232 1,87 5,819 2,359 1,814 24 769 232 177 4444 757 587 43 30 29 | 13,625 1,514 6,045 2,724 1,242 11 212 87 491 527 772 87,499 46,240 18,242 414 10,240 5,738 2,072 4,553 18,296 16,453 232 241 | \$322,954,736 \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$8,659,321 \$20,634,907 \$31,042,232 \$1,476,224,108 \$832,422,368 \$259,547,588 \$6,695,904 \$152,609,739 \$120,686,377 \$38,357,842 \$65,904,290 539,021,712 \$484,373,091 \$4,820,131 \$5,517,002 \$4,461,234 \$13,786,626 |
| Sub-sector 713930 713940 713990 711110 711190 711320 532292 611620 611699 441222 Sub-Sector 722110 722212 722212 722213 722310 722310 722320 722310 722310 722310 722310 722310 722111 72111 721214 | 1 - Entertainment and Recreation Marinas Fitness and Recreational Sports Centers (part) All Other Amusement and Recreation Industries (part) Theater Companies and Dinner Theaters (part) Other Performing Arts Companies (part) Promoters of Performing Arts, Sports, and Similar Events without Facilities (part) Recreational Goods Rental Sports and Recreation Instruction All Other Miscellaneous Schools and Instruction (part) Boat Dealers 2 - Food Full-Service Restaurants Limited-Service Restaurants Cafeterias Snack and Nonalcoholic Beverage Bars (part) Food Service Contractors Caterers Drinking Places (Alcoholic Beverages) 3 - Accommodations Traveler Accommodation Rooming and Boarding Houses (part) Recreational and Vacation Camps (except Campgrounds) RV (Recreational Vehicle) Parks and Campgrounds | 1,064 154 363 198 52 7 29 35 86 53 87 5,819 2,359 1,814 24 769 232 1,814 24 769 232 1,814 769 232 1,77 4444 757 587 43 30 | 13,625 1,514 6,045 2,724 1,242 11 212 87 491 527 772 87,499 46,240 18,242 414 10,240 5,738 2,072 4,553 18,296 16,453 232 241 188 | \$322,954,736 \$55,097,974 \$99,075,908 \$57,635,621 \$36,049,829 \$270,022 \$12,429,491 \$2,059,431 \$8,659,321 \$20,634,907 \$31,042,232 \$1,476,224,108 \$832,422,368 \$259,547,588 \$6,695,904 \$152,609,739 \$120,686,377 \$38,357,842 \$65,904,290 539,021,712 \$484,373,091 \$4,820,131 \$5,517,002 \$4,461,234 |

Coastal Marine Industry by NAICS, 2004



| Marine Science and Technology | 66 | 1,120 | \$65,062,330 |
|---|-------|--------|---------------|
| Sub-sector 1 - Instrumentation and Equipment | 3 | 155 | \$10,742,398 |
| 334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing | 3 | 152 | \$10,510,064 |
| 334519 Other Measuring and Controlling Device Manufacturing | 0 | 3 | \$232,334 |
| Sub-sector 2 - Marine Services | 24 | 669 | \$42,458,798 |
| 541330 Engineering Services (part) | 9 | 107 | \$7,785,369 |
| 541710 Research and Development in the Physical, Engineering, and Life Sciences | 15 | 562 | \$34,673,429 |
| Sub-sector 3 - Marine Materials and Supplies | 4 | 76 | \$3,086,113 |
| 325510 Paint and Coating Manufacturing (part) | 1 | 16 | \$880,353 |
| 336399 All Other Motor Vehicle Parts Manufacturing (part) | 3 | 60 | \$2,205,759 |
| Sub-sector 4 - Ship and Boat Building and Repair | 35 | 221 | \$8,775,021 |
| 326199 All Other Plastics Product Manufacturing | 0 | 0 | \$15,960 |
| 336612 Boat Building | 33 | 194 | \$7,208,858 |
| 423860 Transportation Equipment and Supplies (except Motor Vehicle) Merchant Wholesalers (part) | 2 | 26 | \$1,550,203 |
| Marine-Related Infrastructure | 1,809 | 11,246 | \$731,287,167 |
| 234990 All Other Heavy Construction | 9 | 65 | \$3,832,899 |
| Coastal Real Estate Development | 1,800 | 11,181 | \$727,454,268 |
| 531210 Offices of Real Estate Agents and Brokers | 985 | 5,025 | \$400,384,476 |
| 531311 Residential Property Managers | 371 | 3,578 | \$151,562,415 |
| 531312 Nonresidential Property Managers | 161 | 1,517 | \$122,809,332 |
| 531320 Offices of Real Estate Appraisers | 79 | 236 | \$15,425,300 |
| 531390 Other Activities Related to Real Estate | 60 | 142 | \$15,286,369 |
| 812220 Cemeteries and Crematories (part) | 39 | 310 | \$12,276,997 |
| 813990 Other Similar Organizations (except Business, Professional, Labor, and Political Organizations) (part) | 105 | 373 | \$9,709,379 |

NOTE - This table represents marine industry located in **coastal zone communities** - for entire MA marine industry totals see Marine Industry by NAICS, MA

NOTE 2 - In rows marked "part" allocation formulas have been used to adjust original data. See Appendix 2 for details. Source: Mass. DUA, ES-202, 2004; author's allocation formulas in rows marked "part"

INPUT-OUTPUT TABLES

Massachusetts Coastal Zone Economy Impacts, Summary Tables

Summary Table: Economic Impact of Coastal Economy Employment and Disposable Income, 2004

| | | Modeled Employment | | | | | |
|------------|-------------------|--------------------|---------------|---------------|----------------|------------|--|
| Impact | Actual Employment | Direct* | Indirect* | Induced* | Total* | Multiplier | |
| Employment | 1,161,274 | 253,280 | 57,453 | 89,501 | 400,234 | 1.58 | |
| Output | | 27,039,477,561 | 7,864,416,054 | 9,846,824,963 | 44,750,718,976 | 1.66 | |

Source: Mass. DUA, ES-202, 2004; MA Division of Fisheries, Shellfish Sanitation Management Project

Summary of Inputs: Economic Impacts of the Coastal Economy

| | | Input |
|--|------------------------------------|--------------------|
| | Coast Wages | Disposable Income |
| Coast Economy | 60,198,792,586 | 38,527,227,255 |
| Source: Mass. DUA, ES-202, 2004; MA Division | of Fisheries, Shellfish Sanitation | Management Project |

Summary Table: Employment and Output Impact of Coastal Economy Employment and Disposable Income, 2004

| Direct* | Indirect* | Induced* | Total* | Multiplier |
|----------------|---------------|--|-------------------------------|--|
| 1,161,274 | 57,453.10 | 89,501.20 | 1,308,228.30 | 1.13 |
| 27,039,477,561 | 7,864,416,054 | 9,846,824,963 | 44,750,718,976 | 1.66 |
| | 1,161,274 | Direct* Indirect* 1,161,274 57,453.10 | 1,161,274 57,453.10 89,501.20 | Direct* Indirect* Induced* Total* 1,161,274 57,453.10 89,501.20 1,308,228.30 |

Source: Mass. DUA, ES-202, 2004; MA Division of Fisheries, Shellfish Sanitation Management Project

| * Employment Impact: <u>Direct</u> measures employment in the Coastal Zone. Indirect | * Output Impact: Direct measures the economic | Output Impact represents dollar amount of the value |
|---|--|---|
| measures the amount of additional employment generated thanks to this | effects of the disposable income of employment in the | |
| employment in the region. Induced measures the employment created in related Massachusetts industries due to the multiplier | Coastal Zone. Indirect measures the economic effects of additional activity | were derived from a number of sources including Bureau of |
| effect. | generated in the region. Induced measures the | Census economic censuses, BEA output |
| | economic effects on related Massachusetts industries due to the multiplier effect. | estimates, and the BLS employment projections. |



Massachusetts Marine Economy Impacts, Summary Tables

Massachusetts Marine Economy, Employment Impacts

Summary Tables: Employment Impact of Marine Industry, Massachusetts, 2004

| Sectors | Direct* | Indirect* | Induced* | Total* | Multiplier |
|-------------------------------|---------|-----------|----------|---------|------------|
| Commercial Fishing | 11,270 | 5,025 | 6,159 | 22,454 | 1.99 |
| Marine Transportation | 2,099 | 2,125 | 1,708 | 5,932 | 2.83 |
| Marine Tourism | 119,420 | 15,536 | 22,475 | 157,431 | 1.32 |
| Marine Science and Technology | 5,055 | 2,348 | 4,078 | 11,481 | 2.27 |
| Marine-related Infrastructure | 14,596 | 5,038 | 6,903 | 26,537 | 1.82 |
| Marine Total | 152,441 | 30,072 | 41,324 | 223,836 | 1.47 |

marine industry in Massachusetts. Indirect measures the amount of additional employment generated thanks to existing marine industry employment in the region. Induced measures the employment created in Massachusetts industries due to additional employees indirectly generated in the state by marine workforce.

Source: Mass. DUA, ES-202, 2004; MA Division of Fisheries, Shellfish Sanitation Management Project

Summary Tables: Output Impact of Marine Industry, Massachusetts, 2004

| Sectors | Direct* | Indirect* | Induced* | Total* | Multiplier |
|-------------------------------|---------------|---------------|---------------|----------------|------------|
| Commercial Fishing | 916,823,281 | 329,842,336 | 307,891,314 | 1,554,556,901 | 1.70 |
| Marine Transportation | 289,755,957 | 134,830,261 | 104,036,340 | 528,622,555 | 1.82 |
| Marine Tourism | 5,069,549,937 | 1,705,687,021 | 1,943,492,974 | 8,718,730,008 | 1.72 |
| Marine Science and Technology | 589,664,057 | 257,942,625 | 309,937,261 | 1,157,543,944 | 1.96 |
| Marine-related Infrastructure | 1,823,174,648 | 457,212,492 | 563,115,087 | 2,843,502,266 | 1.56 |
| Marine Total | 8,688,967,880 | 2,885,514,735 | 3,228,472,976 | 14,802,955,674 | 1.70 |

* Direct measures the economic effects of Output Impact the employment of marine industry in represents dollar Massachusetts. Indirect measures the amount of the value of economic effects of additional employment Marine industry's total generated thanks to existing marine production. The data industry employment in the region. Induced measures the economic effects number of sources on Massachusetts industries that are supported by the indirectly created employees.

were derived from a including Bureau of Census economic censuses, BEA output estimates, and the **BLS** employment projections.

Source: Mass. DUA, ES-202, 2004; MA Division of Fisheries, Shellfish Sanitation Management Project

Massachusetts Marine Economy, Inputs and Output Impacts

| | Input* | | C | Output** | | |
|--------------------------------|------------|---------|----------|----------|---------|------------|
| Employment Impact | Employment | Direct | Indirect | Induced | Total | Multiplier |
| Commercial Seafood Industries | 11,270 | 11,270 | 5,025 | 6,159 | 22,454 | 1.99 |
| Marine Transportation | 2,099 | 2,099 | 2,125 | 1,708 | 5,932 | 2.83 |
| Coastal Tourism and Recreation | 119,420 | 119,420 | 15,536 | 22,475 | 157,431 | 1.32 |
| Marine Science and Technology | 5,055 | 5,055 | 2,348 | 4,078 | 11,481 | 2.27 |
| Marine-Related Infrastructure | 14,596 | 14,596 | 5,038 | 6,903 | 26,537 | 1.82 |
| Total Marine Industry | 152,441 | 152,441 | 30,072 | 41,324 | 223,836 | 1.47 |

Massachusetts Marine Industry Input and Output Impacts, 2004

* Input. See Methodology

** <u>Direct</u> measures employment in the marine industry in Massachusetts. <u>Indirect</u> measures the amount of additional employment generated by existing marine industry employment in the region. <u>Induced</u> measures employment created in Massachusetts industries due to additional employees indirectly generated in the state by the marine workforce.

Source: Mass. DUA, ES-202, 2004; MA Division of Fisheries, Shellfish Sanitation Management Project

Massachusetts Marine Industry Input and Output Impacts, 2004

| Output Impact | Input* | Output** | | | | |
|--------------------------------|------------|---------------|---------------|---------------|----------------|------------|
| | Employment | Direct | Indirect | Induced | Total | Multiplier |
| Commercial Seafood Industries | 11,270 | 916,823,281 | 329,842,336 | 307,891,314 | 1,554,556,931 | 1.70 |
| Marine Transportation | 2,099 | 289,755,957 | 134,830,261 | 104,036,340 | 528,622,558 | 1.82 |
| Coastal Tourism and Recreation | 119,420 | 5,069,549,937 | 1,705,687,021 | 1,943,492,974 | 8,718,729,932 | 1.72 |
| Marine Science and Technology | 5,055 | 589,664,057 | 257,942,625 | 309,937,261 | 1,157,543,943 | 1.96 |
| Marine-Related Infrastructure | 14,596 | 1,823,174,648 | 457,212,492 | 563,115,087 | 2,843,502,227 | 1.56 |
| Total Marine Industry | 152,441 | 8,688,967,880 | 2,885,514,735 | 3,228,472,976 | 14,802,955,591 | 1.70 |

* Input. See Methodolgy

| ** <u>Direct</u> measures the economic effect of the marine industry in Massachusetts. <u>Indirect</u> measures the economic effect of related industries due to spending in the marine industry in Massachusetts. <u>Induced</u> measures the economic effect on the rest of the economy in Massachusetts. | from a number of sources including Bureau of Census economic censuses, BEA output estimates, and the BLS |
|---|---|
| | and the BLS employment projections. |
| | |

Source: Mass. DUA, ES-202, 2004; MA Division of Fisheries, Shellfish Sanitation Management Project



NAICS DEFINITION OF THE MARINE ECONOMY

Massachusetts Marine Industry - NAICS Code Defintion

| 2002 NAICE Code | Description | | | | | |
|---|---|--|--|--|--|--|
| 2002 NAICS Code | Description | | | | | |
| Commercial Seafo | od Industries | | | | | |
| ub-sector 1 - Fishing Supplies and Services | | | | | | |
| | Animal Aquaculture | | | | | |
| | | | | | | |
| Sub-sector 2 - Comme | | | | | | |
| | Commercial Fishing | | | | | |
| | Finfish Fishing | | | | | |
| | Shellfish Fishing | | | | | |
| | Other Marine Fishing | | | | | |
| Sub-sector 3 - Seatood | Processing and Wholesaling (3117) | | | | | |
| | Seafood Processing and Wholesaling | | | | | |
| | Seafood Canning | | | | | |
| | Fresh and Frozen Seafood Processing | | | | | |
| | Fish and Seafood Merchant Wholesalers | | | | | |
| | nd Food Service Seafood Sales | | | | | |
| | Fish and Seafood Markets | | | | | |
| 454390 | Other Direct Selling Establishments (part) | | | | | |
| | | | | | | |
| Marine Transportat | tion | | | | | |
| 48311 | Deep Sea, Coastal, and Water Lakes Transportion | | | | | |
| 483211 | Inland Water Freight Transportation | | | | | |
| 483212 | Inland Water Passenger Transportation | | | | | |
| 487210 | Scenic and Sightseeing Transportation, Water | | | | | |
| | Support Activities for Water Transportation | | | | | |
| 532411 | Commercial Air, Rail, and Water Transportation Equipment Rental and Leasing | | | | | |
| | | | | | | |
| Coastal Tourism a | nd Recreation (codes measured within coastal zone geography) | | | | | |
| Sub-sector 1 - Entertai | nment and Recreation | | | | | |
| 713930 | Marinas | | | | | |
| 713940 | Fitness and Recreational Sports Centers | | | | | |
| 713990 | All Other Amusement and Recreation Industries | | | | | |
| 711110 | Theater Companies and Dinner Theaters | | | | | |
| | Other Performing Arts Companies | | | | | |
| 711320 | Promoters of Performing Arts, Sports, and Similar Events without Facilities | | | | | |
| | Recreational Goods Rental | | | | | |
| 611620 | Sports and Recreation Instruction | | | | | |
| | All Other Miscellaneous Schools and Instruction | | | | | |
| 441222 | Boat Dealers | | | | | |
| Sub-Sector 2 - Food | | | | | | |
| 722110 | Full-Service Restaurants | | | | | |
| 722211 | Limited-Service Restaurants | | | | | |
| 722212 | Cafeterias | | | | | |
| 722213 | Snack and Nonalcoholic Beverage Bars | | | | | |
| | Food Service Contractors | | | | | |
| | Caterers | | | | | |
| | Drinking Places (Alcoholic Beverages) | | | | | |

| Sub-Sector 3 - Accomm | nodations |
|-------------------------|---|
| | Traveler Accommodation |
| | Rooming and Boarding Houses |
| | Recreational and Vacation Camps (except Campgrounds) |
| | RV (Recreational Vehicle) Parks and Campgrounds |
| | Scenic and Sightseeing Transportation, Land |
| | All Other Travel Arrangement and Reservation Services |
| 501599 | |
| Marine Science and | d Technology |
| | entation and Equipment |
| 334511 | Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and |
| | Instrument Manufacturing (part) |
| | Other Measuring and Controlling Device Manufacturing (part) |
| Sub-sector 2 - Marine S | |
| 541330 | Engineering Services (part) |
| 541710 | Research and Development in the Physical, Engineering, and Life Sciences (part) |
| Sub-sector 3 - Marine | Materials and Supplies |
| 325510 | Paint and Coating Manufacturing (part) |
| 336399 | All Other Motor Vehicle Parts Manufacturing (part) |
| 333120 | Construction Machinery Manufacturing (part) |
| Sub-sector 4 - Ship and | d Boat Building and Repair |
| 326199 | All Other Plastics Product Manufacturing (part) |
| 336611 | Ship Building and Repairing |
| 336612 | Boat Building |
| 423860 | Transportation Equipment and Supplies (except Motor Vehicle) Merchant Wholesalers |
| | (part) |
| | |
| Marine-Related Infi | |
| 237990 | All Other Heavy Construction (part) |
| | Administration of Air and Water Resource and Solid Waste Management Programs (part) |
| Coastal Real Estate De | evelopment (codes measured within coastal zone geography) |
| 531210 | Offices of Real Estate Agents and Brokers |
| 531311 | Residential Property Managers |
| | Nonresidential Property Managers |
| 531320 | Offices of Real Estate Appraisers |
| | Other Activities Related to Real Estate |
| 812220 | Cemeteries and Crematories (part) |
| 813990 | Other Similar Organizations (except Business, Professional, Labor, and Political |
| | Organizations) (part) |

* Note: NAICS codes marked *part* are measured using an allocation formula (See Appendix 3. Methodology: Industry Code Conversion)

COASTAL TOURISM

Coastal Tourism_Supplemental Spending Analysis Tables

Beach Visitor Day Trips

| Direct Spending by Category Per Person Trip: | | |
|---|---|--------------|
| Gas and au | ito | \$3.42 |
| Parking and entrance Fe | es | \$0.98 |
| Food and Drink from stor | es | \$4.66 |
| Restaurar | nts | \$4.89 |
| Equipment ren | tal | \$0.78 |
| Beach sporting goo | ds | \$0.73 |
| Incidenta | als | \$1.54 |
| TOTAL per T | rip | \$17.00 |
| Person Trips | Number of Trips | 1,324,899 |
| Total All Categories | Total x Trips | \$22,523,283 |
| - | Total Amount Spent in Region (Massachusetts) | \$18,470,757 |
| | Total Amount Spent outside of Massachusetts | \$4,052,526 |
| Direct Employment | Total | 325 |
| Direct Payroll | Total Payroll | \$7,176,893 |
| | Average Annual Payroll per Employee | \$22,090 |
| Employment Generated (Indirect and Induced) | Total | 110 |
| Annual Payroll Generated (Indirect and Induced) | Total | \$4,253,885 |
| | Average Annual Payroll per New Employee | \$38,813 |
| Overall Impact (Total Output) | Employment (Direct, Indirect, and Induced) | 435 |
| | Total (Direct, Indirect, and Induced) | \$31,483,881 |
| Multiplier Effects | In-State Spending Muliplier | 1.70 |
| | All Spending Multiplier (in and out of state) | 1.40 |

Summary of Economic Impacts MA Tourism Activity Spending: Beach Visitors Day Trips

Source: Authors', calculations based on data from Massachusetts Office of Travel and Tourism, and expenditure estimates from *The Fiscal Impact of Beaches in California*, by Philip King, Ph.D, September 1999.

For methodological details see Appendix-Supplemental Spending Analysis

Beach Visitor Overnight Trips

Summary of Economic Impacts MA Tourism Activity Spending: Beach Visitors Overnight Trips

| Dise at Oscardina ha Ostanana Dan Danara Trina | | |
|---|--|---------------|
| Direct Spending by Category Per Person Trip: | | |
| Gas and auto | | \$10.08 |
| Beach related lodging | | \$25.84 |
| Parking and entrance Fees | | \$1.32 |
| Food and Drink from stores | | \$11.27 |
| Restaurants | | \$15.25 |
| Equipment rental | | \$2.60 |
| Beach sporting goods | | \$0.67 |
| Incidentals | | \$3.17 |
| Total per trip | | \$70.20 |
| Person Trips | Number of Trips | 2,702,151 |
| Total All Categories | Total x Trips | \$189,691,000 |
| | Total Amount Spent in Region (Massachusetts) | \$130,985,551 |
| | Total Amount Spent out of Massachusetts | \$58,705,449 |
| Direct Employment | Total | 2,108 |
| Direct Payroll | Total Payroll | \$49,871,002 |
| | Average Annual Payroll per Employee | \$23,661 |
| Employment Generated (Indirect and Induced) | Total | 768 |
| Annual Payroll Generated (Indirect and Induced) | Total | \$29,807,577 |
| | Average Annual Payroll per New Employee | \$38,822 |
| Overall Impact (Total Output) | Employment (Direct, Indirect, and Induced) | 2,876 |
| | Total (Direct, Indirect, and Induced) | \$222,231,373 |
| Multiplier Effects | In-State Spending Muliplier | 1.70 |
| | All Spending Multiplier | 1.17 |

Source: Authors' calculations based on data from Massachusetts Office of Travel and Tourism, and expenditure

estimates from The Fiscal Impact of Beaches in California, by Philip King, Ph.D, September 1999.

For methodological details see Appendix 4. Methodology: Supplemental Spending Analysis

Recreational Boating

| Mean annual trip-related expenditures per boa | at: | |
|---|--|---------------|
| Marine and yatch clubs | | \$359.00 |
| Gas stations | | \$214.00 |
| Restaurants and bars | | \$184.00 |
| Grocery and convenience type stores | | \$148.00 |
| Bait and tackle shops | | \$62.00 |
| Boat launching and mooring fees | | \$58.00 |
| Lodging | | \$58.00 |
| Entertainment and other expenses | | \$56.00 |
| All other retail purchases | | \$55.00 |
| Tournament fees | | \$12.00 |
| Total | | \$1,206.00 |
| Registered Boats | Number of Boats | 150,683 |
| Total All Categories | Total x Number of Boats | \$181,723,698 |
| | Total Amount Spent in Region (Massachusetts) | \$140,377,869 |
| | Total Amount Spent Outside of Massachusetts | \$41,345,829 |
| Direct Employment | Total | 2,283 |
| Direct Payroll | Total Payroll | \$50,325,390 |
| | Average Annual Payroll per Employee | \$22,047 |
| Employment Generated (Indirect and Induced) | Total | 851 |
| Annual Payroll Generated (Indirect and Induced) | Total | \$33,002,105 |
| | Average Annual Payroll per New Employee | \$38,767 |
| Overall Impact (Total Output) | Employment (Direct, Indirect, and Induced) | 3,134 |
| | Total (Direct, Indirect, and Induced) | \$241,177,491 |
| Multiplier Effects | In-State Spending Muliplier | 1.72 |
| | All Spending Multiplier | 1.33 |

Summary of Economic Impacts MA Tourism Activity Spending: Recreational Boat Ownership

Source: Authors' calculations based on data from U.S. Coast Guard and expenditure estimates in *Recreational Boating Expenditures in 2003 in New York State and Their Economic Impacts* by Nancy A. Connelly, Tommy L. Brown, David L. Kay, September 2004. For methodological details see *Appendix-Supplemental Spending Analysis*

Saltwater Angling

Summary of Economic Impacts

MA Tourism Activity Spending: Saltwater Angling Trips

| Direct Spending by Category Per Person Trip: | | |
|---|--|---------------|
| Food and lodging | | \$8.90 |
| Transportation | | \$4.13 |
| Fees | | \$6.22 |
| Boating costs | | \$16.95 |
| Bait | | \$3.37 |
| Ice | | \$0.77 |
| Equipment | | \$10.61 |
| Total per trip | | \$50.95 |
| Person Trips | Number of Trips | 4,244,280 |
| Total All Categories | Total x Trips | \$216,246,066 |
| | Total Amount Spent in Region (Massachusetts) | \$155,730,212 |
| | Total Amount Spent Outside of Massachusetts | \$60,515,854 |
| Direct Employment | Total | 2,819 |
| Direct Payroll | Total Payroll | \$62,502,818 |
| | Average Annual Payroll per Employee | \$22,175 |
| Employment Generated (Indirect and Induced) | Total | 941 |
| Annual Payroll Generated (Indirect and Induced) | Total | \$35,806,551 |
| | Average Annual Payroll per New Employee | \$38,068 |
| Overall Impact (Total Output) | Employment (Direct, Indirect, and Induced) | 3,759 |
| | Total (Direct, Indirect, and Induced) | \$262,666,800 |
| Multiplier Effects | In-State Spending Muliplier | 1.69 |
| | All Spending Multiplier | 1.21 |

Source: Authors' calculations based on data from National Marine Fisheries Service, U.S. Department of the Interior, and U.S. Department of Commerce. For methodological details see Appendix-Supplemental Spending Analysis

Wildlife Watching

Summary of Economic Impacts MA Tourism Activity Spending: Oceanside Wildlife Watching Trips

| Direct Spending by Category Per Person Trip: | | |
|---|--|------------------|
| Food | | \$8.37 |
| Lodging | | \$4.16 |
| Transportation | | \$8.10 |
| Other trip costs | | \$7.81 |
| Total per trip | | \$28.44 |
| Person Trips | Number of Trips | 6,091,200 |
| Total All Categories | total * trips | \$173,233,728.00 |
| | Total Amount Spent in Region (Massachusetts) | \$139,879,671.00 |
| | Total Amount Spent Outside of Massachusetts | \$33,354,057.00 |
| Direct Employment | Total | 2,550 |
| Direct Payroll | Total Payroll | \$55,342,971 |
| | Average Annual Payroll per Employee | \$21,703 |
| Employment Generated (Indirect and Induced) | Total | 857 |
| Annual Payroll Generated (Indirect and Induced) | Total | \$33,652,264 |
| | Average Annual Payroll per New Employee | \$39,277 |
| Overall Impact (Total Output) | Employment (Direct, Indirect, and Induced) | 3,407 |
| | Total (Direct, Indirect, and Induced) | \$240,582,691 |
| Multiplier Effects | In-State Spending Muliplier | 1.72 |
| | All Spending Multiplier | 1.39 |

Source: Authors' calculations based on data from U.S. Department of the Interior, and U.S. Department of Commerce. For methodological details see *Appendix-Supplemental Spending Analysis*

COMMERCIAL SEAFOOD

Commercial Seafood_DMF Aquaculture Permits

| TOWN | LICENSE HOLDERS | LICENSES | ACRES | % OF TOTAL ACRES * | \$ TOTAL |
|--------------|-----------------|----------|-------|--------------------|----------------|
| AQUINNAH | 3 | 4 | 11 | 1.12% | \$64,345.00 |
| BARNSTABLE | 50 | 66 | 174 | 17.74% | \$814,877.50 |
| BREWSTER | 6 | 6 | 7 | 0.71% | \$18,875.00 |
| CHATHAM | 1 | 1 | 4 | 0.41% | \$82,396.00 |
| CHILMARK | 2 | 2 | 0.5 | 0.05% | \$7,000.00 |
| DENNIS | 27 | 27 | 29 | 2.96% | \$14,500.00 |
| DUXBURY | 23 | 32 | 52 | 5.30% | \$388,250.00 |
| EASTHAM | 22 | 24 | 18 | 1.83% | \$62,161.25 |
| EDGARTOWN | 5 | 10 | 55 | 5.61% | \$52,000.00 |
| ESSEX | 1 | 1 | 1 | 0.10% | \$0.00 |
| FAIRHAVEN | 1 | 1 | 35 | 3.57% | \$161,600.00 |
| FALMOUTH | 1 | 2 | 22 | 2.24% | \$0.00 |
| GOSNOLD | 1 | 2 | 28 | 2.85% | \$50,000.00 |
| IPSWICH | 2 | 1 | 1 | 0.102% | \$675.00 |
| MARION | 1 | 1 | 0.5 | 0.051% | \$0.00 |
| MASHPEE | 6 | 8 | 26 | 2.65% | \$2,500.00 |
| MATTAPOISETT | 2 | 2 | 104 | 10.60% | \$323,552.00 |
| NANTUCKET | 4 | 4 | 17 | 1.73% | \$0.00 |
| OAK BLUFFS | 1 | 1 | 2 | 0.20% | \$0.00 |
| ORLEANS | 18 | 19 | 25 | 2.55% | \$97,280.00 |
| PROVINCETOWN | 5 | 5 | 8 | 0.82% | \$1,350.00 |
| WAREHAM | 6 | 15 | 97 | 9.89% | \$140,718.00 |
| WELLFLEET | 74 | 106 | 229 | 23.34% | \$1,390,039.25 |
| WESTPORT | 1 | 1 | 8 | 0.82% | \$0.00 |
| YARMOUTH | 4 | 5 | 27 | 2.75% | \$19,063.50 |
| TOTALS | 267 | 346 | 981.0 | 100.00% | \$3,691,182.50 |

2005 AQUACULTURE FIGURES

* this is a percentage of the total aquaculture area for the State of Massachusetts.

Source: MA Division of Fisheries, Shellfish Sanitation and Management Program

Commercial Seafood_DMF Aquaculture Values by Town

| Town Aquaculture Values for Years 2000 to 2004 | | | | | |
|--|----------------------|----------------|----------------|----------------|-----------------------|
| TOWN | \$ 2000 TOTAL | \$ 2001 TOTAL | \$ 2002 TOTAL | \$ 2003 TOTAL | \$ 2004 TOTAL |
| CAPE | \$3,599,950.10 | \$2,851,514.00 | \$2,754,471.00 | \$3,105,669.70 | \$2,503,042.50 |
| ISLANDS | \$40,415.00 | \$51,500.00 | \$349,680.00 | \$310,181.00 | \$123,345.00 |
| BUZZARDS BAY | \$164,587.50 | \$627,104.00 | \$159,887.00 | \$574,712.00 | \$675 , 870.00 |
| N/S SHORE | \$90 , 786.00 | \$73,021.50 | \$321,600.00 | \$283,635.00 | \$388,925.00 |
| | | | | | \$3,691,182.50 |

Source: MA Division of Fisheries, Shellfish Sanitation and Management Program





Commercial Seafood_DMF Commercial Permit and Dealer Data 2004 MA COMMERCIAL PERMIT HOLDERS

Count

| Dout Tour | Count | State |
|------------------------|-----------|-------------|
| Port Town AMESBURY | 13 | AL |
| BARNSTABLE | 102 | CA |
| BEVERLY | 78 | CO |
| BOSTON | 190 | СТ |
| BOURNE | 12 | FL |
| CAMBRIDGE | 3 | MA |
| CHATHAM | 346 | MD |
| CHELSEA | 2 | ME |
| CHILMARK | 53 | MI |
| COHASSET | 56 | NC |
| DANVERS | 32 | NE |
| DARTMOUTH | 74 | NH |
| DENNIS | 81 | NJ |
| DUXBURY | 41 | NY |
| EASTHAM EDGARTOWN | 36 74 | OH |
| ESSEX | 47 | PA RI |
| FAIRHAVEN | 155 | SD |
| FALL RIVER | 31 | TN |
| FALMOUTH | 109 | TX |
| GLOUCESTER | 525 | VA |
| GOSNOLD | 16 | VT |
| HARWICH | 42 | WA |
| HAVERHILL | 2 | Grand Total |
| HINGHAM | 39 | |
| HULL | 39 | |
| IPSWICH | 56 | |
| KINGSTON | 6 | |
| LYNN | 47 | |
| MANCHESTER | 49 | |
| MARBLEHEAD | 79 | |
| MARION | 20 | |
| MARSHFIELD | 139 | |
| MATTAPOISETT | 32 | |
| NAHANT | 36 | |
| NANTUCKET | 125 | |
| NEW BEDFORD | 368 | |
| NEWBURY NEWBURYPORT | 15 142 | |
| OAK BLUFFS | 29 | |
| OAK BLUFFS | 29 57 | |
| OUT OF STATE | 473 | |
| PLYMOUTH | 188 | |
| PROVINCETOWN | 143 | |
| QUINCY | 46 | |
| ROCKPORT | 111 | |
| ROWLEY | 7 | |
| SALEM | 45 | |
| SALISBURY | 50 | |
| SANDWICH | 115 | |
| SAUGUS | 50 | |
| SCITUATE | 121 | |
| SWAMPSCOTT | 36 | |
| SWANSEA | 7 | |
| TISBURY | 48 | |
| TRURO | 25 | |
| UNKNOWN | 1222 | |
| WAREHAM WELLELEET | 87 72 | |
| WELLFLEET WESTPORT | 72 149 | |
| WEYMOUTH | 22 | |
| WINTHROP | 38 | |
| YARMOUTH | 38 9 | |
| (blank) | 2227 | |
| Grand Total | 8689 | |
| | | |

| Permit Type | Count |
|---------------------|-------|
| BOAT 0 FT-59 FT | 2830 |
| BOAT 60 FT-99 FT | 146 |
| BOAT 99 FT+ | 43 |
| COASTAL LOBSTER | 1464 |
| INDIVIDUAL | 581 |
| OFFSHORE LOBSTER | 346 |
| OFFSHORE LOBSTER-N | 202 |
| ROD & REEL | 1529 |
| SEASONAL LOBSTER | 100 |
| SHELLFISH & ROD & R | 590 |
| SHELLFISH & SEAWOR | 858 |
| Grand Total | 8689 |

Source: Massachusetts Division of Marine Fisharies



2004 MA DEALERS WHO WERE PRIMARY BUYERS

Dealer Permit Information for 2004 (Number of MA dealer permits issued by permit type): note: This data sets includes primary buyers PERMIT_TYPE COUNT(*)

| PERMIT_TYPE | COUN |
|------------------|-------|
| BAIT DEALER | 137 |
| RETAIL BOAT | 64 |
| RETAIL STORE | 728 |
| RETAIL TRUCK | 30 |
| WHOLESALE BROKER | 21 |
| WHOLESALE DEALER | 402 |
| WHOLESALE TRUCK | 165 |
| TOTAL | 1,547 |
| | |

Source: Massachusetts Division of Marine Fisheries For a description of the different permit types, visit the following link: <u>http://www.mass.gov/dfwele/dmf/dealers/dealerapp.pdf</u>



2005 MA COMMERCIAL PERMIT HOLDERS

| Port_Town | Count | State |
|----------------------|------------------|-------------|
| MESBURY | 10 | CA |
| ARNSTABLE | 97 | СО |
| EVERLY | 74 | CT |
| BOSTON | 181 | FL |
| BOURNE | 11 | MA |
| CAMBRIDGE | 3 | MD |
| CHATHAM | 336 | ME |
| CHELSEA | 1 | MI |
| CHILMARK | 50 | NC |
| COHASSET | 54 | NE |
| DANVERS | 25 | NH |
| DARTMOUTH | 74 | NJ |
| DENNIS | 82 | NY |
| DUXBURY | 41 | OH |
| EASTHAM | 36 | PA |
| EDGARTOWN | 66 | RI |
| ESSEX | 39 | SD |
| FAIRHAVEN | 142 | TN |
| FALL RIVER | 38 | TX |
| FALMOUTH | 113 | VA |
| GLOUCESTER | 504 | VT |
| GOSNOLD | 16 | WA |
| IARWICH | 37 | Grand Total |
| IAVERHILL | 2 | |
| HINGHAM | 35 | |
| HULL | 39 | |
| PSWICH | 55 | |
| KINGSTON | 6 | |
| .YNN | 41 | |
| MANCHESTER | 48 | |
| MARBLEHEAD | 70 | |
| MARION | 19 | |
| MARSHFIELD | 134 | |
| MATTAPOISETT | 32 | |
| NAHANT | 35 | |
| NANTUCKET | 116 | |
| NEW BEDFORD | 358 | |
| NEWBURY | 10 | |
| NEWBURYPORT | 150 | |
| OAK BLUFFS | 28 | |
| ORLEANS | 58 | |
| OUT OF STATE | 507 | |
| PLYMOUTH | 183 | |
| PROVINCETOWN | 141 | |
| QUINCY | 49 | |
| ROCKPORT | 108 | |
| ROWLEY | 5 | |
| SALEM | 48 | |
| SALISBURY | 44 | |
| SANDWICH | 107 | |
| SAUGUS | 42 | |
| SCITUATE | 119 | |
| SWAMPSCOTT | 37 | |
| SWANSEA | 6 | |
| TISBURY | 45 | |
| TRURO | 24 | |
| JNKNOWN | 1134 | |
| WAREHAM | 81 | |
| WELLFLEET | 73 | |
| WESTPORT | 138 | |
| | 20 | |
| | 20 | |
| WEYMOUTH WINTHROP | 20 | |
| WINTHROP | 38 10 | |
| | 38 10 2157 | |

| PERMIT TYPE | Count |
|-------------------------|-------|
| BOAT 0 FT-59 FT | 2713 |
| BOAT 60 FT-99 FT | 212 |
| BOAT 99 FT+ | 42 |
| COASTAL LOBSTER | 1429 |
| INDIVIDUAL | 541 |
| OFFSHORE LOBSTER | 315 |
| OFFSHORE LOBSTER-NON TR | 227 |
| ROD & REEL | 1373 |
| SEASONAL LOBSTER | 93 |
| SHELLFISH & ROD & REEL | 585 |
| SHELLFISH & SEAWORMS | 852 |
| Grand Total | 8382 |

Description of the permits:

Coastal Lobster Permit allows the taking, landing and sale

Offshore Lobster Permit allows the landing and sale of

Seasonal Lobster Permit is issued to full-time students

Boat Permits allows the taking, landing and sale of fish (to

Individual Permit allows the holder only to take, land and

Shellfish Permit allows an individual to take, land and sell

Rod & Reel Permit allows the holder only, to catch and sell

Source:

Massachusetts Division of Marine Fisharies http://mass.gov/dfwele/dmf/commercialfishing/permit_index.htm



Commercial Seafood_DMF Memo: Lobster and Shellfish Permits

Memo by Thomas Hoopes: 2004 Employment Figures for Select Massachusetts Fisheries Derived from Two Annual Catch Report Surveys, Massachusetts Division of Marine Fisheries. April 3, 2006:

Background

The Massachusetts Division of Marine Fisheries (DMF) collects information from fishermen permitted in select fisheries which are conducted primarily (but not exclusively) within the territorial waters of the Commonwealth. This information is collected on annual catch report forms which are completed by the permit holder at the end of the year as part of the permit renewal process for the following year. Some of the forms ask for more detailed information than others. For example, permit holders who harvest and land lobster or shellfish are asked for information about their vessel (its value and the amount of fuel used), the amount and value of gear used, and the total number of individuals employed at any one time during the year. For a blank copy of these forms, as well as all other catch report forms used, see the Division's website at: http://www.mass.gov/dfwele/dmf/commercialfishing/catch_reports.htm#catch

Methods

Blank catch report forms are mailed with permit renewal applications in late November. Permit holders must complete the catch report forms and submit in order to renew their permits for the following year. Catch data from the forms are entered into an Oracle database linked to the permitting information.

Results

The following table shows the number of permits issued by type in 2004 and reporting information with respect to employment. For a description of permit types, see the Division's website at:

http://www.mass.gov/dfwele/dmf/commercialfishing/permit index.htm

| Permit Type | Number Issued | Number Reporting | Number Reporting Fished | Number Reporting Employment Information | Total Employees Reported @ | Average Employment per Permit |
|--------------------------|------------------|---------------------|-------------------------------|--|-------------------------------------|-------------------------------------|
| Coastal | | | | | | |
| Lobster | 1,464 | 1,437 | 987 | 927 | 1,542 | 1.66 |
| Offshore Lobster Trap | 346 | 321 | 205 | 156 | 566 | 3.63 |
| Offshore Lobster Non- | | | | | | |
| Trap | 202 | 183 | 130 | 96 | 426 | 4.44 |
| Seasonal | | | | | | |
| Lobster | 100 | 67 | 52 | 46 | 61 | 1.33 |
| Shellfish * | 2,611 | 2,190 | 1,232 | 743 | 785 | 1.06 |

(a) Includes the permit holder.

* To be able to harvest shellfish commercially, the permit holder must obtain one of several commercial permit types, and then applies a shellfish endorsement to it. The figures in the table for shellfish include all commercial permits except for the four lobster permits listed earlier in the table (e.g. there is no overlap between any of the permit holders in the table).

MARINE-RELATED CONSTRUCTION

Marine Construction_Port Capital Development Data

United States Port Authorities for 2004 – 2008 By Total Projected Capital Expenditures

In millions of dollars

| Port | Total Projected Capital |
|---------------------------------------|-------------------------|
| Port of Long Beach | \$1,832 |
| Port of Los Angeles | \$1,287 |
| Port Authority of New York/New Jersey | \$960 |
| Port of Houston Authority | \$841 |
| Port Everglades | \$507 |
| Virginia Port Authority | \$451 |
| Jacksonville Port Authority | \$417 |
| Maryland Port Administration | \$406 |
| Port of Oakland | \$396 |
| Port of Seattle | \$361 |
| Port of Massachusetts* | \$42 |

*MA capital expenditures are for FY2005-2009

Sources: Massport "2005 Bonds, Series A, B and C -- Official Statement" <u>http://www.massport.com/about/pdf/c_2005os.pdf</u> "US Port Development Expenditures Report, November 2005" <u>http://www.marad.dot.gov/publications/ports.htm</u>



In millions of dollars

| Project | Estimated Expenditure |
|---|-----------------------|
| Airport Roadway Acquisition from CA/T Project | \$100 |
| Central Parking Garage Repairs and Expansion | \$183 |
| International Gateway (Logan Modernization) | \$117 |
| Runway 14/32 and Associated Taxiways | \$98 |
| Other major airfield improvements associated with Runway 14/32 | \$23 |
| Terminal B Parking Garage Structural Repairs and Lighting | \$27 |
| Roadway System Improvements (Logan Modernization) | \$21 |
| Terminal A Replacement Development (Authority commitment) | \$26 |
| Terminal A Redevelopment (Delta) | \$239 |
| Enhanced Logan Airport Security Program | \$73 |
| Residential Sound Insulation Program | \$50 |
| Additional capital improvements for Logan airfield and other Airport projects | \$208 |
| Capital improvements for Maritime, Hanscom Field and the Tobin Bridge | \$42 |
| Major maintenance (all facilities) | \$207 |
| Core Block Development in South Boston (third party ventures) | \$550 |
| Additional third party development ventures | \$67 |
| Logan Expeditures | \$1,165 |
| Maritime Expenditures | \$42 |
| South Boston and Third Party Ventures | \$207 |
| Maintenenance (all facilities) | \$617 |
| Total Capital Program Expenditures | \$2,031 |

Sources: Massport "2005 Bonds, Series A, B and C -- Official Statement" <u>http://www.massport.com/about/pdf/c 2005os.pdf</u>



Port of Massachusetts Capital Project Funding Sources FY 2005-2009

In millions of dollars

| Maintenance Reserve Fund | \$162 |
|---------------------------------------|---------|
| Improvement and Extension Fund | \$306 |
| PFCs pay-as-you-go | \$101 |
| Additional PFC Bonds | \$47 |
| FAA Entitlement Grants | \$26 |
| FAA Discretionary Grants | \$43 |
| FAA Logan Soundproofing Grants | \$40 |
| TSA Discretionary Grants | \$29 |
| Commercial Paper | \$100 |
| 2003 Bond proceeds | \$58 |
| 2005 Bond proceeds | \$200 |
| Additional Bonds | \$62 |
| Third party or non-recourse financing | \$856 |
| Total Funding Sources | \$2,031 |

Source: Massport "2005 Bonds, Series A, B and C -- Official Statement" <u>http://www.massport.com/about/pdf/c_2005os.pdf</u>



MARINE SCIENCE AND TECHNOLOGY

Marine Science and Technology_Marine Research Awards and Employment

| W | lassachusetts Mar | ine Science Resea | arch Awards 20 | 04-2005 by Ins | titution |
|--|--------------------------------------|--------------------------------------|--|--|---|
| Organization | Sponsored research awards 2004 | Sponsored research awards 2005 | # of Employees Current Full- Time | # of Employees Current Part- Time | Definition of Funding |
| Massachusetts Institute of Technology | \$32,593,624 | \$15,538,433 | 34 | 0 | Total grant amount for awards in 2004 and 2005 |
| Woods Hole Oceanographic Institute | \$108,600,000 | \$104,500,000 | 677 | 80 | Sponsored research |
| Northeastern University | \$54,759 | \$274,889 | 23 | | Total grant amount for awards in 2004 and 2005 |
| University of Massachusetts, Lowell | \$96,000 | \$0 | * | * | Total grant amount for awards in 2004 and 2005 |
| University of Massachusetts, Dartmouth; School for Marine Science and Technology (SMAST) | \$4,000,000 | \$4,000,000 | * | * | UMD - Bill Brah says \$4+ million "last fiscal year research expenditures" (see worksheet for notes) |
| University of Massachusetts, Boston | \$1,750,000 | \$1,750,000 | * | * | UMB - Bill Brah says \$1.75 million "last fiscal year researc expenditures " (see worksheet for notes) |
| University of Massachusetts, Amherst | \$0 | \$0 | * | * | N/A |
| New England Aquarium | \$2,240,617 | \$2,116,052 | 196 | 66 | "Grant and Contract Research Dollars" |
| Harvard University | \$447,553 | \$724,628 | 9 | 0 | "National Science Foundation Grant Awards" |
| Boston University | \$1,926,304 | \$694,391 | 13 | 43 | "Total Grant awards for Marine Science Research" |
| Southeastern Massachusetts Aquaculture Center | \$17,500 | \$35,000 | 4 | 0 | "Research and Monitoring" |
| Northeastern Massachusetts Aquaculture Center | N/A | N/A | 4 | 0 | |
| University of Massachusetts Intercampus Graduate School of Marine Science and | | | | | |
| Technology | N/A | N/A | 91 | 0 | |
| Marine Biological Labs ** | \$18,650,555 | \$18,650,555 | 261 | 29 | "Total Grant awards for Marine Science Research" |
| TOTAL | \$170,376,912 | \$148,283,948 | 1,312 | 218 | |

Source: Original Research by the Donahue Institute February/March 2006; Technical Notes - Employment numbers are from contacts in the department, or from departmental information published on the Internet; Revenue numbers are from contacts in the department, funding information published on the Internet, or previously published studies.

* All faculty in marine science at the four campuses of the University of Massachusetts are counted under the inter-campus Marine Science program

** The funding amount for Marine Biological Laboratories - \$37,301,110 - represents two years of funding. Separate data for 2004 and 2005 was unavailable. The amount reported is the average for each year.



Marine Science and Technology_Massachusetts NSF Awards

National Science Foundation Awards to Massachusetts Marine Programs 9/01/2000 to 01/01/2005

| Organization | Number of Awards | Total Value |
|---------------------------------------|------------------|---------------|
| Woods Hole Oceanographic Institution | 113 | \$124,716,175 |
| UMass, Lowell | 1 | \$317,883 |
| UMass, Dartmouth | 5 | \$1,012,202 |
| UMass, Boston | 2 | \$711,796 |
| UMass, Amherst | 1 | \$797,825 |
| Smith College | 1 | \$230,060 |
| Northeastern University | 2 | \$901,257 |
| New England Aquarium Corporation | 1 | \$1,961,253 |
| Massachusetts Institute of Technology | 10 | \$5,464,801 |
| Harvard University | 3 | \$1,017,073 |
| Boston University | 5 | \$1,081,111 |
| State Total | 144 | \$138,211,436 |

Source: National Science Foundation website http://www.nsf.gov/awardsearch/.

Note on Source : Data current as of 02/15/06. NSF awards include oceanographic science as well as marine life and biology. Awardee abstracts are updated as awards are given.



Marine Science and Technology_Supplemental Spending Analysis

Summary of Economic Impacts

MA Marine Science and Technology Research Spending

| Direct Spending | All Spending | \$170,376,912 |
|---|---|---------------|
| | Total Amount Spent in Region (Massachusetts) | \$133,598,886 |
| | Total Amount Spent outside of Masschusetts | \$36,778,026 |
| Direct Employment | Total | 1,348 |
| Direct Payroll | Total Payroll Average Annual Payroll per | \$72,409,642 |
| | Employee | \$53,708.38 |
| Employment Generated (Indirect and Induced) | Total | 1,013 |
| Annual Payroll Generated (Indirect and Induced) | Total Average Annual Payroll per New | \$37,860,321 |
| | Employee | \$37,371 |
| Overall Impact (Total Output) | Employment (Direct, Indirect, and Induced) | 2,361 |
| | Total (Direct, Indirect, and Induced) | \$249,507,137 |
| Multiplier Effects | In-State Spending Muliplier | 1.87 |
| | All Spending Multiplier | 1.46 |

Source: UMass Donahue Institute.

For methodological details see Appendix-Supplemental Spending Analysis



MARINE TRANSPORTATION

Marine Transportation U.S. Waterborne Foreign Trade

U.S. Waterborne Foreign Trade by U.S. Customs Port Percent Change from 1997 to 2004

| Trade, Thousands Me | etric Tons | | | | |
|-----------------------|------------|---------------|------|---------------|-----|
| Total | | Exports | | Imports | |
| Massachusetts | 48% | Massachusetts | 78% | Massachusetts | 47% |
| Maine | -2% | Maine | 68% | Maine | -6% |
| United States | 26% | United States | -4% | United States | 42% |
| Trade, Millions of Do | llars | | | | |
| Total | | Exports | | Imports | |
| Massachusetts | 38% | Massachusetts | 35% | Massachusetts | 38% |
| Maine | 77% | Maine | 159% | Maine | 62% |
| United States | 52% | United States | 4% | United States | 79% |

U.S. Waterborne Foreign Container Trade by U.S. Custom Ports Percent Change from 1997 to 2005

| Twenty-foot Equivalent Un | its (TEUs | s) | | | |
|----------------------------|---------------|----------------|------|---------------|---------|
| Total | | Export TEUs | | Import TEUs | |
| Massachusetts | 109% | Massachusetts | 292% | Massachusetts | 54% |
| United States | 74% | United States | 21% | United States | 122% |
| Thousands of Metric Tons (| (Mtons) | Free and Mdana | | I and M.t.m. | |
| Total | o - 0/ | Export Mtons | 2220 | Import Mtons | 2 () (|
| Massachusetts | 97% | Massachusetts | 322% | Massachusetts | 36% |
| United States | 62% | United States | 21% | United States | 106% |

U.S. Port Calls by Port and Vessel Type, 2002-2004 Percent Change from 2002 to 2004

| Capacity, All Types | |
|---------------------|------|
| Massachusetts | -48% |
| Maine | 4% |
| United States | 9% |
| Calls, All Types | |
| Massachusetts | -54% |
| Maine | -10% |
| United States | 6% |

Original data notes and sources can be found at the bottom of each worksheet

Please Note: In all tables, changes by percent are estimates. In the "Calls by Port and Vessel Type" table, fewer Maine ports were listed in the original data for 2004 than for 2002. For purposes of comparison in each port, the additional 2002 ports were excluded in the percent change numbers. Additionally, the 2002 data for Gloucester, MA was not included in percent change estimates because that is the only year that port is listed.