County Profile
Cape Cod & the Islands Sub-region

5.4. Cape Cod & the Islands Sub-region 5.4.1. Barnstable County

Background

"Barnstable County consists of the 15 coastal towns located on the peninsula known as Cape Cod. Bordered on the north by Cape Cod Bay, to the east by the Atlantic Ocean and to the south by Nantucket Sound, it is the easternmost point of land in the Commonwealth of Massachusetts. With over 550 miles of shoreline and more than 360 lakes and ponds, the maritime heritage of the region is deeply rooted. Approximately 396 square miles of land are home to over 205,000 year round residents, swelling to more than three times that number during the peak summer months.

The County seat is located in Barnstable Village on Historic Route 6A, the Old King's Highway, in the Town of Barnstable. County offices are located in the Superior Court House, the First District Court House and the Registry of Deeds and Probate Building.

Established as a County in the year 1685, the current boundary lines were drawn in 1707 and have not changed since that date. Although initially the counties of the Commonwealth were mainly judicial in nature, over time additional responsibilities were assigned by the state legislature. Subsequently, many counties served as subdivisions of the state government, serving as an administrative arm of the Commonwealth on a regional basis, but without legislative authority. This changed in Barnstable County with the passage of the Barnstable County Home Rule Charter, signed into legislation in July of 1988, which guaranteed certain rights of home rule for the county and established a legislative body with the power to enact ordinances. This increased Barnstable County's accountability to the residents of Cape Cod and provided for increased citizen participation and input in the function of County Government.

Barnstable County government has long been recognized as a model for successful regionalization of services, ranging from public safety to fiscal, health, human service, economic development, planning and land use functions."

The Cape Cod Commission

In the wake of an unprecedented growth boom in the 1980s, the Cape Cod Commission Act found that the region known as Cape Cod (Barnstable County) possesses unique natural, coastal, historical, cultural and other values which are threatened by uncoordinated or inappropriate uses of the region's land and other resources. Thus, the Cape Cod Commission was created in 1990 by an Act of the Massachusetts General Court and confirmed by a majority of Barnstable County voters.

The Commission was established as a regional planning and regulatory agency to prepare and implement a regional land use policy plan for all of Cape Cod, to review and regulate Developments of Regional Impact, and to recommend designation of certain areas as Districts of Critical Planning Concern.

The Commission is a department of Barnstable County and is funded by the Cape Cod Environmental Protection Fund.

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¹ http://www.barnstablecounty.org/

COMMISSION MAKEUP

The Commission is made up of 19 members representing each of Barnstable County's 15 towns as well as the County Commissioners, minorities, Native Americans, and a governor's appointee. They are citizen volunteers who guide a professional staff to plan for Cape Cod's future growth, provide technical assistance to towns, review and vote on major developments and act as the Commission's liaison to their communities.

Commission planners and technical staff have expertise in a wide variety of areas including: landscape architecture, land use planning, economic development, affordable housing, historic preservation, wetland and wildlife resources, water resources, coastal resources, waste management, transportation planning, communications and computer mapping. Staff is available to discuss specific issues or projects with local officials, project proponents, and the public.

One example of a county-level service that has practical implications for the fishing industry of Cape Cod is their dredging service. "The Barnstable County Dredge *Codfish* provides dredging service to towns at approximately 70% below the market rate. The dredged material has been used to successfully renourish many of the Cape's beaches, while at the same time allowing ease of navigation in several harbors and riverways."

Fisheries Dependency

The Cape and Islands is third, following Downeast Maine (1) and Upper Mid-coast Maine (2), on the dependency index that is based on the employment indices used in this project. The fishing infrastructure scale looks at individual ports, but several of the Cape Cod & Islands ports are listed among the top ports. For example, Chatham has a ranking of four, Vineyard Haven is ranked as nine, Sandwich is 14 out of the 36 ranked. Despite gentrification, these ports are actively engaged in the fishing industry.

Provincetown-Chatham are lumped together by *Fisheries of the United States, 1999.* In comparison to other major U.S. ports 1998-99, Provincetown-Chatham numbered among the top 50 ports with landings of 17.8 million pounds in 1998 and 20 million pounds in 1999. The value of these landings was \$10.2 million in 1998 and \$12.9 million in 1999. While the price per pound was approximately the same as found in Pt. Judith, a port to which Chatham is often compared, the quantities landed were much smaller.

The profiles provide a more in-depth look at the social and cultural capital devoted to the industry.

Governance

Barnstable County has two branches of government: the executive branch, the County Commissioners and the legislative branch, the Assembly of Delegates.

Demography³

Population

The 1990 Census found 186,605 residents of Barnstable County. Of these 88,161 were male, 98,444 were female.

Age Structure

According to the 1990 Census, there were 44,733 children (under 20), 100,550 were adults (21 to 64), and 41,322 were 65 or over.

² Fisheries of the United States, 1999. U.S. Dept of Commerce, NOAA, NMFS. Prepared by Fisheries Statistics Division. Available at http://www.st.nmfs.gov/st1/fus/fus99/index.html

³ http://venus.census.gov/cdrom/lookup/

Education

Of persons 25 years and over, 15,588 had no high school diploma, 41,186 had graduated from high school, 39,590 had some college, and 37,587 had a Bachelor's or higher degree.

Housing

There were 135,192 housing units, 77,586 occupied and 57,606 vacant. Of the occupied housing, 56,136 were owner occupied, 21,450 were rented. Median value of the owner-occupied housing was \$162,500 and the median year the structures were built was 1971.

Racial and Ethnic Composition

Barnstable County was predominantly white (179,518 individuals) with Irish, English, and/or German ancestry frequently cited. There were also 2863 Blacks, 1158 American Indians/Eskimo, and 931 Asians.

Economic Context

Income

The median household income in 1989 was \$31,766; per capita income was \$16,402.

Employment

For persons 16 and over, 2,655 selected "agriculture, forestry, and fisheries as their "industry" and 2,271 selected "farming, forestry, and fishing occupations" as their "occupation." Retail trade was the largest category for "industry" with 18,846, followed by construction (8191), health services (7314) and other professional services (7004).

Community Profiles
Barnstable County, Massachusetts
Cape Cod & the Islands Sub-region

5.4.1.1. Sandwich

Background

"Incorporated in 1639, Sandwich is the oldest town on Cape Cod. It is located on both sides of the Cape Cod Canal with the majority of its population and landmass on the southerly side of the canal. Sandwich is a mostly residential community with a winter population considerably smaller than the population during the warm summer. Residents feel that its charm and uniqueness combined with its ideal location make Sandwich a very attractive place both to live and visit."

"Sandwich's beaches along Cape Cod Bay stretch for miles and provide a wonderful view on a clear day of the many vessels that pass through on their way to or from the Boston area. Commercial fishermen and lobstermen can be seen daily from the docks at the Sandwich Marina, the only harbor along the canal. Not too far from the marina is historic Sandwich Village which is a world-renowned tourist destination, providing a glimpse into New England's rich colonial history. Heritage Plantation, Sandwich Glass Museum, the Thornton Burgess Museum, Hoxie House (the oldest house on Cape Cod), Daniel Webster Inn, Dexter Grist Mill and various art galleries, rare book and antique stores are some examples of the attractions which bring visitors to Sandwich from all across New England and the world."

A small fleet of commercial fishermen follows a long tradition of small-scale pursuit of lobster, shellfish and finfish. Sandwich, described by locals as a "fishing enclave," lies at the intersection of the lower mid-coast of Massachusetts with the inner and outer Cape and Islands.

Sandwich has a long history of fishing, including a now defunct herring fishery (local inhabitants used to catch herring in inshore waters which they pickled and sold by the barrels). Local fishermen also beach seined and did hook and line fishing. The proximity of the Cape Cod Canal now allows boats to bring in cod and other fish caught off the Cape to be processed then shipped out to New Bedford, or sold locally in nearby fish markets.

Many historic buildings, elegant bed and breakfast locations, museums and shops make the central district of Sandwich an attractive weekend tourist destination. However, the fishing and marina operations are located northwest of this central tourist corridor. Despite the well-developed tourist sector in the central town, there is little sign of gentrification or expansion that would threaten existing commercial fishing operations. Thus, like Plymouth, with its stabilized meld of gentrified tourism and well-maintained commercial fishing space, the cultural and economic capital of fishing has not been usurped by development.

Governance

Five-member, part-time, Board of Selectmen, Town Administrator and Town Meeting.

Demography

Population⁶

The population of the Town of Sandwich, per the 1990 US Census, was 15,489 persons (349 people per square mile of Town area). Of that total, 7,539 were males and 7,950 were female. The Sandwich population as of January 1, 1997 was 19,521.

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⁴ http://www.state.ma.us/dhcd/iprofile/261.htm

⁵ http://www.state.ma.us/dhcd/iprofile/261.htm#NARRATIVE

⁶ http://www.state.ma.us/dhcd/iprofile/

Age Structure

According to the 1990 Census, there were 4664 children (under 21 years), 8641 adults (21-64) and 2184 seniors.

Education

Of persons over 25, 810 had not graduated from high school, 2659 had a high school diploma, 3310 had some college, and 3430 had a Bachelor's or higher degree.

Housing

There were 7,236 housing units, of which 5,557 were occupied and 1679 were vacant. Of those occupied, 4653 were owner-occupied and 904 were rented. The median year the structures were built was 1978 and the median value of owner-occupied housing was \$159,700.

Racial and Ethnic Composition

The majority of the population was white (15,146) with 97 Blacks, 35 American Indians, 123 Asians and 88 "other." Irish, English, Italian and German were the most common ancestries cited.

Economic Context

Income

The median household income is \$43,500, rating 17.7% above the Massachusetts State average. Per capita income is \$17,412. Average household size is 2.74 persons per household. Four point eight percent of households are below the poverty line.

Employment

INDUSTRY

Universe: Employed persons 16 years and over	
Agriculture, forestry, and fisheries (000-039)	247
Mining (040-059)	7
Construction (060-099)	664
Manufacturing, nondurable goods (100-229)	226
Manufacturing, durable goods (230-399)	369
Transportation (400-439)	306
Communications and other public utilities (440-499)	301
Wholesale trade (500-579)	262
Retail trade (580-699)	1528
Finance, insurance, and real estate (700-720)	618
Business and repair services (721-760)	317
Personal services (761-799)	294
Entertainment and recreation services (800-811)	91
Professional and related services (812-899):	
Health services (812-840)	719
Educational services (842-860)	505
Other professional and related services (841, 861-899)	521
Public administration (900-939)	357
OCCUPATION	
OCCUPATION	
Universe: Employed person's 16 years and over	
Managerial and professional specialty occupations (000-202):	4000
Executive, administrative, and managerial occupations (000-042)	1080
Professional specialty occupations (043-202)	1212
Technical, sales, and administrative support occupations (203-402):	226
Technicians and related support occupations (203-242)	226 1393
Sales occupations (243-302)	
Administrative support occupations, including clerical (303-402)	951

Service occupations (403-472):	
Private household occupations (403-412)	10
Protective service occupations (413-432)	96
Service occupations, except protective and household (433-472)	754
Farming, forestry, and fishing occupations (473-502)	198
Precision production, craft, and repair occupations (503-702)	896
Operators, fabricators, and laborers (703-902):	
Machine operators, assemblers, and inspectors (703-802)	140
Transportation and material moving occupations (803-863)	216
Handlers, equipment cleaners, helpers, and laborers (864-902)	160
CLASS OF WORKER	
Universe: Employed persons 16 years and over	
Private for profit wage and salary workers	4905
Private not-for-profit wage and salary workers	477
Local government workers	635
State government workers	169
Federal government workers	229
Self-employed workers	887
Unpaid family workers	30

Transportation and Access

Sandwich is situated on Cape Cod, a 65-mile long sandy peninsula comprising Barnstable County. The Cape has excellent highway, rail, bus and air connections to other parts of New England. Air, bus, and passenger rail service expand during the summer months to accommodate the large numbers of tourists.

Major Highways

Principal highways are the Mid-Cape Highway (U.S Route 6), and State Routes 6A and 130. The portion of State Route 6A through Sandwich is a national historic district.

Rail

The Bay Colony Railroad provides freight rail service to Sandwich. The Cape Cod Scenic Railroad operates a seasonal excursion train between Hyannis and the Cape Cod Canal.

Bus

Sandwich is a member of the Cape Cod Regional Transit Authority (CCRTA), which operates a bbus demand response service. The Plymouth and Brockton Street Railway Company provides bus service from the Sagamore Circle commuter lot to two locations in Boston.

Other

Barnstable Municipal Airport, a Primary Commercial Service (PR) facility, has two asphalt runways 5,249' and 5,430' long. Instrument approaches are available. Marstons Mills Airport, a privately owned public use facility, has 2 turf runways.

Hospitals, schools, libraries, museums

Hospitals

Cape Cod Hospital (Hyannis)

Falmouth Hospital (Falmouth)

Jordan Hospital (Plymouth)

Tobey Hospital (Wareham)

Rehabilitation Hospital of the Cape & Islands (RHCI) (Sandwich)

Schools

Henry T. Wing School (K-8) 983 Students Oak Ridge School (K-8) 1,038 Students Forestdale School (K-8) 1,016) Students High School (9-12) 982 Students

Upper Cape Cod Vocational Technical School (Bourne) 90 Sandwich Students as of 10-1-99

Library

Sandwich Public Library, founded 1891.

Churches

St. John's Episcopal, Corpus Christi (Catholic), Forestdale Baptist, Covenant Baptist, Sandwich Community Church of the Assemblies of God, First Church of Christ, Sandwich Meeting of Friends (Quaker)

Museums

Heritage Plantation of Sandwich The Old Hoxie House Sandwich Glass Museum Thornton W. Burgess Museum Yesteryears Doll & Toy Museum

Fisheries Profile

Community

Because the commercial fishing infrastructure (fishing basin) is separate from the tourist attractions, there are no dockside restaurants, hotels/inns, bars, or clubs. The enclave nature of this small-scale site is indicated by the absence of infrastructure components such as boat builders, boat yards, boat dealers, a fish auction, seafood brokers, fishing monuments, maritime museums, or marine railways. Although fishing represents an historical activity, it has always been part of a mixed economy including tourism, agriculture, and transport.

Although the fishing infrastructure *per se* is not seen as threatened, the transformation of surrounding areas by road development, increasing numbers of homes and hotels, and an influx of what local fishermen regard as outsiders (i.e., Boston-type suburbanites), has increased the price of real estate, a potential concern in the long-term.

Commercial fishing and fisheries-related employment

Harvesting structure

A small fleet of six stern draggers pursues the multispecies groundfish fishery. This activity has been hampered by Days At Sea restrictions, and groundfishermen pursue shoreside activities, lobster fishing, or shellfishing when they are unable to earn enough trawl fishing. There are no purse seiners, urchin dive boats, or eastern rig trawlers, although there are several local divers who will occasionally fish for urchins. In addition, five scallop boats fish nearby. Until recently when regulations forbade targeting dogfish, gillnetters counted on catching them in the winter. Tuna are caught with rod and reel or harpoon.

The largest contingent of fishermen is lobstermen who set their traps in the inner Cape waters. However, there has been a noted decline in the lobster fishery, with fewer lobsters caught, some problems with shell rot disease, and a reduction in the size of lobsters.

Processing structure

The major fish processing company in Sandwich is Canal Marine Fisheries. This business has six regular employees, including clerical staff, one manager and four laborer/truck drivers. They pick up six other workers as temporary employees, most of whom are from Mexico and Guatemala.

This fish processor/shipper/wholesaler has been in operation since 1938, and has links to businesses all throughout New England, as evidenced by the entourage of trucks from Massachusetts, Maine, Rhode Island, and even Fulton's in New York parked outside in the dock lot. However, their primary market remains a local one in seafood restaurants and local hotels (e.g., in Hyannis). The specialties of this processor include lobster, tuna dressed and shipped, and bait (herring, mackerel, and skate). Other species from the area sold and shipped include cod, fluke, dabs, summer flounder, yellowtail, haddock, and gray sole. Other less significant species caught or processed include crab, striped bass, dogfish, skate, monkfish, bluefish, scallops, and menhaden (pogies—also used for bait, and shipped in from New Jersey).

This firm is another example of the regional connections linked by total capital flows. The company regularly buys from at least 20 purse seiners from Portland to New Jersey and 10 midwater trawlers. They send out their trucks (of which they have two) to pick up fish or product is trucked in to this site from all across the region. Each day begins with a ritual of regional phone calls that goes on from the very early morning throughout the day. Connections are not just dockside but directly with vessels at sea that call in using cell phones to check market demand and price.⁷

Additional workers are usually Hispanic immigrants who are brought in as a group and paid minimum wage. These workers are identified by brokers who generally use vans to get groups of workers from their homes in such immigration centers as New Bedford, Chelsea, Lowell, to their job sites. The use of immigrant workers associated with brokers is also common in the seafood-processing sector of Gloucester, Boston, Point Judith and New Bedford.

Support Services

Contemporary fishery infrastructure is adequate to maintain the existing activities. The infrastructure includes a fish retailer, air fill station for urchin divers, dockside diesel fuel, a dock with seasonal and year round transit slips, a fish processor, ice house, harbor master, one fish and tackle dealer, fish and seafood wholesaler, fish retailer, dockside welding service, cold storage warehouse, and four local seafood restaurants.

A small local grocer supplies food to the commercial sector, and operations are overseen by a harbormaster. The lack of fishing capital in boat building, net making, and roadside fish vending distinguishes Sandwich from some of the northern ports of the same size in Downeast Maine, for example.

Sandwich Marina, open year-round, has 180 commercial and recreational slips, water, electricity, showers, parking, a playground area, boat amp, winter storage, and can accommodate boats up to 70 ft.

The East Boat Basin located on the south side of the Canal in Sandwich has slips for recreational and commercial vessels. The area is leased from the Corps of Engineers to the Town of Sandwich for operation year round. On a fee basis, boaters may utilize the marina's slips or boat ramp.

⁷ One of the biggest knowledge deficits in the functioning of the Natural Resource Region and its sub-regions of New England is the regional flow of total capital represented in the marketing, shipment and consumption of fishery produce, and should be a topic of special consideration for research by the Department of Commerce.

On the west end of the Canal, the Buttermilk Bay channel provides boaters access to the Taylor Point Marina, which is owned and operated by the town of Bourne.

Employment (year-around and seasonal)

According to key respondents, the mix of commercial boats support approximately 70 commercial fishers, most of whom are engaged in lobster fishing.

According to key respondents, there are an estimated 200 households directly dependent on commercial fishing, and an additional 70 households that are indirectly dependent on the fishing industry.

Marketing

The parking lot of the Sandwich Fish Basin is filled with a sundry assortment of refrigerated small to mid-sized trucks, which vary with the season and availability of fish. There are two delivery trucks that purchase mackerel, and two trucks from Long Island that will pick up product and deliver herring from Maine for lobster bait. Seafood is brought into local markets through lobstering, tuna fishing, and gillnetting.

Species, Seasonality

Spring and fall are the peak fishing/ marketing seasons for lobster and winter for gillnetting. In the off season, some fishermen are involved in carpentry, while others may fish with rod and reel for striped bass, fluke, mackerel, and bluefish.

Until the recent rise of quotas for dogfish, fishermen would switch over to gillnetting, or long lining for dogfish and cod when dragging, lobstering, or shell fishing was poor.

Recreational fishing and employment

There are approximately ten recreational fishing vessels, which steam out of the protected basin marina via the canal to fish tuna, bluefish, striped bass, and other species. In addition, 4 charter boats are available for tuna fishing using rod and reel.

Fishing-related programs and services

An indication of the logistic importance of Sandwich is the presence of a Coast Guard facility, and a National Marine Fisheries Service extension office.

Perceptions of the Fishing Community⁸

Boundaries

Of the 70 commercial fishermen who work out of Sandwich, only half live in the immediate area. The others come from Bourne and Plymouth because there are no slips presently available in their hometowns. Many of the commercial fishermen are on waiting lists for slips in these locations, but given the value of coastal property and the significance of tourism to the area, commercial fishing slip space will probably remain scarce.

Community contacts are linked to the patterns of fishing, and to the closed nature of the fishing enclaves that make up the coast. Plymouth was noted as the community that people had the most contact with. It is interesting that Hyannis has "bigger buyers" in the fishery, and is where most fish from Sandwich is sold. Hyannis is also highly gentrified with numerous seafood restaurants, hotels, and tourist industry infrastructure. Other community contacts were as follows:

Sell Fish	Hyannis
Offload Fish	Chatham

⁸ Based on key informant interviews

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Buy Fishing Gear	New Bedford
Buy Ice	Sandwich
Buy Fuel/ Oil	Sandwich
Haul out Boat Repairs	Sandwich
Book Keeping	Sandwich
Banking	Sandwich
Shopping	Sandwich or Hyannis
Go to Church	Sandwich
Got to School	Plymouth
Go for Health Care	Hyannis
Go for Childcare	Plymouth
Visit Relatives	Sandwich to Plymouth
Visit Friends	Sandwich to Plymouth
Go for Vacation	Florida
Go for Recreation	Plymouth, deep sea fishing
Socialize	Hyannis

Communication Issues

Despite regulatory limitations, communication with management is overall a success. Communication with local fishery managers was rated as "good," with state managers as "good," and with regional federal managers as "good." The overall mood is one of optimism that the fishery will sustain itself, and that management has done a good job in allowing the fishery of this region to continue to thrive.

Assessments

There is clearly disagreement about the assessment of stock conditions between fishermen and scientists. Key respondents indicate that the groups "strongly disagree" on the conditions of stocks, and that fishermen see the ecosystem and supported fisheries in good shape, while the scientist are thought to be too rigid in interpreting conditions as in a state of collapse through over-fishing.

Local management practices

Unlike Chatham, with its folk-managed shellfishing regime, there are no homegrown techniques for increasing stocks in this part of the Cape.

Economic Change

As with small enclaves in Maine, the population of fishermen is stable, and the perception of several key respondents is that the fisheries here have been and will continue to be successful.

The perceived economic condition of the fishery over time has been good, with recent declines attributed to an increase in numbers of fishermen, particularly in the lobster-fishing sector. Ten years ago the fishery was "excellent," and five years ago "good," but today is rated as "average," with a mark of "fair" anticipated for the fishery five years from now due to the perceived trend of an increasing number of fishermen and traps.

The one counterbalance to perceived declines from increased competition is an increase in the price of product, particularly for finfish. High quality finfish attracts high prices at the fish auctions in New Bedford and Gloucester. The demand fueling high prices is partially from the large urban marketing sector of Boston, which serves local restaurants as well as elite hotels and international customers in Japan, Canada, and western Europe.

Today, increased prices for quality fishery products has improved the standard of living of those in the local fishery, though a countervailing force is the increased cost of real estate stemming from an influx of "outsiders."

Effects of recent management

Regulations that are having the most impact for the Sandwich fishing enclave are trap limits for lobster, Days At Sea limits for draggers, and tuna quotas for the charter boat and commercial tuna fishing sector.

Fishing families

Spouses of fishermen are working more outside the home today than five years ago, and this is significantly different from conditions five years ago.

Community Profiles
Barnstable County
Cape Cod & the Islands

5.4.1.2. Hyannis

Background

The town of Barnstable includes seven villages within its boundaries. Each village has unique and significant cultural and historical qualities. Centerville, located on the south side, is primarily residential, includes the Christian Camp Meeting Association and has a beautiful beach. Osterville is located on the south side, is primarily residential and includes inlets and harbors for fishing and boating. Hyannis is the town's central business/commercial district, which includes town offices and several shopping malls. Hyannis is also a fishing village and its harbor provides steamship access to Martha's Vineyard and Nantucket Islands. Marstons Mills is primarily residential and is located on Route 28. Cotuit is a village located on a peninsula on the south side, is primarily residential and has several small beaches. West Barnstable is primarily residential and sparsely populated. Barnstable is located on the north side that houses the County Complex and has a working harbor and several small beaches.

Hyannis is one of the most gentrified of the Cape Cod ports, with a long history of catering to the upper class of New England Society. The port of Hyannis is replete with marinas, dockside seafood restaurants, hotels, seaside condominiums, and sports a festive elitist demeanor of wealth and leisure. Dozens of recreational craft jam the dock space, and slips are the most expensive in New England, costing one dollar a foot/day. The dockside space of marinas and recreational vessels are intermixed with curio shops, ice cream stands, parks, and back from the waterfront numerous hotels, antique shops, boutiques, and other tourist shops of all sorts.

Hyannis acts as a biophysical capital sink because of the high demand for seafood products, as evidenced by the numerous seafood restaurants that draw in much of the seafood catch from the region. A total of fifteen restaurants were counted dockside or just across the street from the docks, and numerous others up side streets and in the central part of town away from the docks. For example, the restaurant trade in Hyannis absorbs most of the seafood product processed in nearby Sandwich. Fish is brought in to be sold both retail and wholesale. In addition, there is a fish broker (North Atlantic Seafood, Boston) that buys directly from the docks in Hyannis. Hyannis is also the closest dock to areas having significant seasonal runs of valuable fish such as scup and fluke. This makes it attractive for vessels to offload fish here, but not to actually tie-up for any length of time.

In line with the tourist orientation of the port are whale watching tour operations, and pleasure ferry boats to take clients around the harbor and return them to enjoy numerous restaurants, bars and dockside clubs.

Governance¹⁰
Mayor - Council

Demography¹¹

Population

The 1990 Census found 40,958 residents of the town of Barnstable, while the village of Hyannis was 14,120. In the town as a whole there are 19,552 males, 21,406 females, while Hyannis itself was 6,591 male and 7,529 female.

⁹ http://www.state.ma.us/dhcd/iprofile/020.HTM

¹⁰ This is for the Town of Barnstable

¹¹ http://venus.census.gov/cdrom/lookup/

Age Structure

According to the 1990 Census, in the town of Barnstable, 10,028 were children under 21 years and 22,562 were adults (21 to 64), 8358 were 65 or over. In the village of Hyannis, there were 3,333 children (20 and under), 7885 adults (21 through 64) and 2902 seniors (65 and older).

Education

Of persons 25 years and over in the town of Barnstable, 3,265 had no high school diploma, 8787 had graduated from high school, 8716 had some college, and 8197 had a Bachelor's or higher degree. In Hyannis, 1786 had no high school diploma, 3444 were high school graduates, 2,795 had some college and 1751 had a Bachelor's or higher degree.

Housing

In Barnstable, there were 23,377 housing units, 16,607 occupied and 6770 vacant. Of the occupied housing, 11,772 were owner occupied, 4,835 rented. Median value of the owner-occupied housing was \$159,400 and the median year the structures were built was 1973.

In Hyannis, there were 8340 housing units, 6022 occupied and 2318 vacant. Of those occupied, 3037 were owner-occupied and 2985 were rented. The median value of owner-occupied housing units was \$127,800 and the median year housing units were built was 1969.

Racial and Ethnic Composition

Almost 93 percent of the population of Barnstable was white in 1989 (38,565 individuals) with 2.85 percent Black (1169 individuals), 345 American Indian/Eskimo, and 248 Asian. Like the rest of the town, the village of Hyannis had a white majority at the time of the 1990 Census (12,638 individuals), with 791 Blacks, 176 American Indian/Eskimo, and 100 Asian.

Economic Context

Income

The median household income in the town of Barnstable in 1989 was \$33,411; per capita income was \$17,376. The median household income in Hyannis at the same time was lower at \$25,492 and the per capita income was \$14,053.

Employment

In the town of Barnstable for persons 16 and over, 500 selected "agriculture, forestry, and fisheries as their "industry" and 406 selected "farming, forestry, and fishing occupations" as their "occupation." Retail trade was the largest category for "industry" with 4,272, followed by construction (1763), health services (1714) and finance, insurance and real estate (1448).

In Hyannis, though considered the fishing village of Barnstable, the numbers indicated by the Census shows that the individuals involved in the fishing industry actually live all over the town, though their vessels and jobs might be based in Hyannis.

INDUSTRY (for Hyannis)

Universe: Employed persons 16 years and over

Agriculture, forestry, and fisheries (000-039).	108
Mining (040-059)	0
Construction (060-099)	609
Manufacturing, nondurable goods (100-229)	333
Manufacturing, durable goods (230-399)	326
Transportation (400-439)	283
Communications and other public utilities (440-499)	187
Wholesale trade (500-579)	115

Retail trade (580-699) Finance, insurance, and real estate (700-720) Business and repair services (721-760) Personal services (761-799) Entertainment and recreation services (800-811) Professional and related services (812-899): Health services (812-840) Educational services (842-860) Other professional and related services (841, 861-899) Public administration (900-939)	1880 384 239 436 70 680 341 467 221
OCCUPATION (for Hyannis) Universe: Employed persons 16 years and over Managerial and professional specialty occupations (000-202):	
Executive, administrative, and managerial occupations (000-042)	735
Professional specialty occupations (043-202)	822
Technical, sales, and administrative support occupations (203-402):	
Technicians and related support occupations (203-242)	134
Sales occupations (243-302)	873
Administrative support occupations, including clerical (303-402)	999
Service occupations (403-472):	
Private household occupations (403-412)	32
Protective service occupations (413-432)	43
Service occupations, except protective and household (433-472)	1266
Farming, forestry, and fishing occupations (473-502)	97
Precision production, craft, and repair occupations (503-702)	877
Operators, fabricators, and laborers (703-902):	
Machine operators, assemblers, and inspectors (703-802)	255
Transportation and material moving occupations (803-863)	306
Handlers, equipment cleaners, helpers, and laborers (864-902)	240
OLAGO OF WORKER	
CLASS OF WORKER	
Universe: Employed persons 16 years and over	1000
Private for profit wage and salary workers	4832
Private not-for-profit wage and salary workers	628
Local government workers	415
State government workers	166
Federal government workers	119
Self-employed workers	503
Unpaid family workers	16

Transportation and Access

Barnstable is located on the "biceps" of the Cape Cod arm. Bordered by Cape Cod Bay on the north, Nantucket Sound on the south, Sandwich and Mashpee on the west and Yarmouth on the east. Barnstable is 53 miles east of Fall River, 69 miles southeast of Boston, and 250 miles from New York City.

Fisheries Profile

Commercial fishing and fisheries-related employment

Harvesting structure

There are only eight commercial vessels in the port of Hyannis, including two eastern rigs, two lobster boats, two stern trawlers, and two scallop vessels. Two of the boats also fish for sea urchins.

Key respondents estimate that fishing directly supports twenty-five (25) households. This is based on a calculation that there are three to four individuals (captain and crew) per vessel. The eastern-rigged vessels and stern draggers are large (56-60 feet in length) and are able to compensate for their expensive dockside costs through the excellent prices they receive for their fresh fish and shellfish.

Support Services

Slips are the most expensive in New England, costing one dollar a foot/day. Thus, a commercial dragger of 65 feet must pay \$65 dollars a day to hold a dockside space. Most commercial fishing vessels cannot support such prices.

There are no air fill stations, bait houses, boat yards, boat dealers, fish auctions, fishermen's associations, fish processors, ice houses, net makers, niche fisheries, or marine railways. An absence of significant fishing infrastructure echoes sites such as Newport, Rhode Island, which has been shaped by a long history of coastal tourism.

Nevertheless, because of the well-developed recreational fishery, there are some infrastructure components that allow the fishing industry to keep a foothold in the community. These include a harbor masters office, marinas, fish retailers, a fishermen's supply store, fish and tackle dealers, wholesale fish and seafood dealers, marine insurance companies, dockside welding services, and a dockside diesel fuel facility.

Employment (year-around and seasonal)

A key respondent estimated that besides 25 households directly dependent on fishing, there are at least another 300 households in the area that are indirectly dependent, ranging from owners of retail businesses and seafood restaurants to those who buy seafood for the dinner table.

Marketing

While the summer is a boon time for seafood, a large resident population, including a large number of retired persons who live in the town of Barnstable, maintain the demand throughout the year.

Truck brokers come from Boston to take advantage of local runs of valuable fish, and park their trucks adjacent to a small dockside area where boats come in, unload their catch, and then spin out and leave, making way for the next boat in line. This "unloading derby" spectacle is one of the regional adaptations commercial fishermen have developed in response to declining fishing infrastructure along the coast and specifically to combat expensive docking fees. Thus, boats from Sandwich, Plymouth, Scituate, and elsewhere may fish off Hyannis and unload their catch to be transported quickly to market in a refrigerated truck. By unloading locally, they maintain a high quality of catch, and thus optimize their price on the market.

Species, Seasonality

The local catch of fish and shellfish species is quite diverse, and includes cod, fluke, winter flounder, yellowtail, haddock, pollock, squid, lobster, swordfish, tuna, scup, monkfish, scallop, sea clams, and conch.

There are no alternative or niche fisheries that people are switching over to.

Perceptions of the Fishing Community¹²

Importance of fishing to the community

Like Kennebunkport, Maine, which is also highly gentrified, key respondents in the fisheries of Hyannis perceive fishing as being "very important".

Boundaries

Capital contacts can be divided up into those encompassing social capital (e.g., visit friends, go for recreation, go for vacation, visit relatives, socialize, go to church); economic (e.g., sell fish, offload fish, buy fishing gear, haul out for boat repairs, go to the bank, go shopping), and human (e.g., go to school, go for childcare, go for health care, go for retraining).

People in the fishing community are said to have the most contact with New Bedford, while others are mostly linked to off Cape areas such as Boston. Other community contacts were as follows:

Sell Fish	Hyannis, Chatham, Boston
Offload Fish	Hyannis, Chatham, Boston
Buy Fishing Gear	New Bedford
Buy Ice	New Bedford
Buy Fuel/ Oil	Hyannis
Haul out Boat Repairs	Provincetown, New Bedford
Book Keeping	Hyannis
Banking	Hyannis
Shopping	Hyannis
Go to Church	Hyannis
Got to School	Hyannis
Go for Health Care	Hyannis
Go for Childcare	Hyannis
Visit Relatives	Hyannis, out-of-state, everywhere
Visit Friends	Hyannis
Go for Vacation	Florida, White Mountains
Go for Recreation	Bars
Socialize	Hyannis

Communication Issues

There is optimism that groundfish catches and local stocks are on the rebound, and communication with management is considered overall a success. Specifically, communication with local fishery managers was rated as "good," with state managers as "excellent," and with regional federal managers as "very good."

Assessments

Fishermen "strongly disagree" with the assessment of stocks, and are particularly concerned about having to throw back fish when quotas are exceeded, which is a thought to happen frequently.

-

¹² Based on key informant interviews

Economic Change

Fishing conditions and the standard of living were regarded as "stable." The perceived economic condition of the fishery is that it has declined somewhat, but is rebounding now from the virtual collapse of groundfish stocks. Ten years the fishery was noted as "good" and five years ago as "good," but today is rated as "average," with a rating of "very good" expected for the fishery five years from now. Today increased prices for quality fishery products have generated more income and thus have compensated for the increasingly complex and constantly shifting regulatory climate

Effects of recent management

Although the population of fishermen is threatened by the lack of overt local community support, there are no specific regulations that key respondent alluded to as having had a significant impact on recent fishing conditions.

The overall mood is one of optimism. Key respondents believe that if they can maintain some dockspace, the high local demand and presence of trucking fish brokers will allow them to continue their lifestyle. Overall, they feel that management has done a good job in allowing the fishery of this region to continue to thrive.

Characteristics of local fishermen

Job satisfaction

Even though they have a tenuous hold on dock space, fishermen are perceived by key respondents to be "very satisfied with their work." Unfortunately, the position of the commercial fleet is precarious because of the extremely limited dock space, and the town council is perceived as being "uncaring" when it comes to the commercial fishing industry.

There are occasional workers who come to try their hand on the few boats here, but leave after a short time. These "shackers" as they are called, come and go with the seasons but are most abundant in summer when tourism creates a high demand for seafood in local restaurants.

Fishing families

Although spouses of fishermen are working outside the home today, this is not significantly different from conditions five years ago.

Community Profiles
Barnstable County
Cape Cod and the Islands Sub-region

Author: Renee Gagne¹³

5.4.1.3. Chatham

Background

Chatham, Massachusetts is a small (population 6,600 in 1989) coastal town within Barnstable County, better known as Cape Cod. Cape Cod is a sandy peninsula extending off the southeastern coast of Massachusetts, 65 miles east into the Atlantic. The peninsula then turns to the north and curves back toward the northwest, giving the whole landmass an appearance of a flexed arm. Chatham is located at the elbow of this arm. Covering approximately 17 square miles, it borders the waters of the Atlantic to the east and Nantucket Sound to the south. This geographical location has spawned the diverse fisheries found in Chatham today. A few miles to the east are fertile groundfish grounds, once teaming with cod, haddock, flounder and pollock. To the south, the warmer waters of Nantucket Sound support coastal fisheries such as scup, mackerel, black bass and squid. The convergence of cold Atlantic waters and warmer coastal waters also promote conditions for successful shellfisheries.

A location close to a fertile fishing ground is not necessarily sufficient for successful fisheries. More importantly, Chatham has natural access to both the eastern and southern fishing grounds. The Chatham Fish Pier is located at Aunt Lydia's Cove along the east facing shore. A barrier beach protects Aunt Lydia's Cove from a direct assault of the Atlantic. This barrier beach also provides access to the Atlantic through an ever-changing inlet. Through a process of erosion and disposition, the beach breaches and repairs itself, creating often-dangerous shoal conditions for fishermen entering and exiting the cove.

The Town Pier includes unloading facilities for two private fish companies, as well as berthing areas to the north and south of the facilities for the loading and unloading of fish and fishing gear. The facilities are maintained by the Town and are dedicated solely to commercial fishing endeavors, though the town maintains a floating dock seasonally for public access. The fleet primarily targets Georges Bank stock groundfish and dogfish.

Along the south facing shores, Stage Harbor, also a port of Safe Refuge maintained by the Army Corps of Engineers, houses a smaller groundfish fleet as well as a number of diverse seasonal fisheries such as weir and tuna fisheries. The town provides an area for both residential and commercial use and maintains a boat ramp. Increased usage of these facilities has prompted recent regulations for limiting usage to residents only. Stage Harbor also has a number of private docks dedicated to commercial fishing enterprises.

Chatham also encompasses lesser bays, coves, salt-water ponds and Monomoy Island, all ideal habitats for a variety of shellfish. These areas support an extensive shellfish industry. The dominate shellfisheries are quahogs and soft-shell clams, but many other shellfisheries, such as mussels, sea clams and bay scallops, are seasonally significant.

Chatham was first settled in 1656 and was incorporated in 1712, making it one of the Cape's earliest townships. ¹⁴ Names of the original Yankee settlers are still prominent in the town and include names such as Nickerson, Eldredge and Ryder. As with the majority of the Cape, long before the colonists arrived, Native Americans utilized the benefits of both the land and shore for farming and marine harvesting. Archaeological sites have indicated a number of seasonal

¹³ This profile reflects the detail that is possible when a skilled and local participant-observer is able and willing to collaborate on a research project.

¹⁴ http://www.state.ma.us/dhcd/iprofile/055.htm#NARRATIVE

settlements along the east facing shores of Cape Cod. Settlers of Chatham first established the town as a farming community and old pictures indicate a treeless landscape well into the early 1900s. But founding families soon found the surrounding waters more profitable than the thin-soiled land for their survival. To this day, fishing, shellfishing and their shore-side support industries are a major source of employment and income for the town of Chatham.

Fishing Dependency

As noted in the introduction to this sub-region, Chatham is ranked fourth on the scale of infrastructure differentiation, after New Bedford, Portland and Gloucester. Though small, Chatham has a devoted fleet and a thriving shellfish industry and a complex of support services. As part of the Cape Cod and Islands sub-region, Chatham ranks third for dependency after Downeast and Upper Mid-coast Maine based on employment indices for the sub-region. As an individual community, Chatham is 14th on the gentrification scale.

Governance

The Town of Chatham adopted a new Town Charter in 1995. The Town employs a Town Manager who is appointed by a five-person Board of Selectmen. The Town Manager administers the day to day affairs of the town as well as staffs and oversees all Town departments, except the regulatory boards. The part-time Board of Selectmen is the policy making body of the town. The Board meets weekly in a public forum, to discuss and finalize policy. Although comments from the public are encouraged, decisions from the Board are final (unless challenged in a court of law). The Board also signs-off on and presents the yearly budget at an annual open Town Meeting. The open town meeting forum of government is a process dating back to colonial times that allows the voting residents to approve or revise the Town's operating budget. Residents also vote on a variety of articles dealing with any appropriations over and above the operating budget.

With the adoption of the new Town Charter, many aspects of the Town's government were reorganized. All departments concerning Chatham waterways and shore-side issues were consolidated under the Coastal Resource Department (CRD) including the Harbormaster, Shellfish and Permit Offices. The Director of the Coastal Resource Department oversees the various harbor management plans throughout the Town and participates on coastal and water-related committees. The Director also participates in the planning and implementation of coastal-related capital projects such as dredging and reconstruction of municipal shore-side facilities.

Demography

Population

Chatham's year-round population according to the 1990 US Census information is 6,579. Simple observation indicates a significant increase in population numbers over the last ten years. Service industries such as small shops and restaurants, once closed during the winter months, now remain open year-round. New and large chain stores are on the increase (over the border in East Harwich) and resemble the larger urban areas of Hyannis and Falmouth. Traffic, though it subsides greatly from the summer months, has increased yearly during the off-seasons. All these indicate a population supporting these enterprises. Also important is the swell of Chatham's population in the summer months. Though there is no official count of Chatham's summer population, the Chatham Police Department estimates this to be between 25,000-30.000. 15

It is interesting to note that Chatham was one of the communities chosen by the Federal Government to apply a door to door census taking along with the long form for the 2000 US

¹⁵ Friends of Chatham Waterways, <u>An Economic Study of the Town Chatham, Massachusetts</u>, (December 1996), 12.

Census. Federal Census takers asserted that this method was applied to towns estimated to have had major changes in their population.

Age Structure

Census information indicates the largest portion of Chatham's senior population was between the ages of 70 and 74 numbering 587, the second largest group was between the ages of 65 and 69 numbering 564, and the third largest was between the ages of 75 to 79 numbering 473 (for a total of 1624 seniors). According to a study conducted in 1996, the distribution of Chatham's over 65 population was then one-third of the total population and was more than twice the state's average as well as Barnstable County's. 16 Hence, Chatham's demographic profile supports the view that it is, in some respects, a "retirement town." Total persons between the ages of 19 and 64 totaled 3,293, while those persons under the age of 18 totaled 1,045.

Education

There are two schools in Chatham, an elementary school spanning grades K through six and a high school spanning grades seven through twelve. The 1990 data indicates 538 students attended Chatham's public schools while 31 students attended private institutions. Massachusetts Department of Education statistics shows an increase in enrollment in 1998 with 685 students. Enrollment increased again in 1999, according to the 1999 Annual Reports of the Town Officers, ¹⁷ with 707 students. The increase in enrollment may be due to the School Choice Program instituted in recent years allowing Barnstable County residents to choose which school a student attends. Ninety of the total student population in 1999 came from other Cape towns.

The school ethnic make-up reflects the overall Town make-up. According to Massachusetts Department of Education statistics for 1998-1999, 96.8% of the public school student population was white, a 19.7% difference from the overall State statistic of 77.1% white student population.

The amount of monies spent per student also differed from the State average. In the 1997-1998 school year, Chatham spent \$7,743 per child while the State average was \$5,221. Chatham also surpassed the State in special education spending per child by \$7,625, although Chatham did not dedicate any funds to bilingual or vocational education programs.

Chatham students may also opt to enroll in other Cape towns' schools, although the numbers who do so is unknown. The primary alternative choice is the Cape Cod Technical High School located in the bordering town of Harwich. Thirteen Chatham students attend Cape Cod Tech. The Tech school provides vocational and technical education and also offers adult education and training programs.

Housing

Since the mid-1800's Chatham has attracted a summer resident population. Wealthy families from New York and Connecticut built large summer retreats along the picturesque shoreline. With the advent of the automobile, those of lesser means built smaller summer cottages and camps. Today, many homes are simply summer or part-time residences. According to the 1990 U.S Census, close to half of the town's 6,301 total housing units were vacant. Also 2,333 housing units were owner occupied, while 690 were renter occupied.

These statistics are bound to change greatly with the 2000 US census. According to the Cape Cod Commission, as of January 1997, housing units increased by 337. 18 Between the beginning of 1997 and 1999, housing units further increased by 200, for a total of 6.838. 19 From January through March 2000, a total of 38 permits for new single family dwellings have been issued

¹⁷ Town of Chatham, Annual Reports of the Town Officers of the Town of Chatham 1999

¹⁸ Cape Cod Commission, <u>CapeTrends</u>, Barnstable County-Cape Cod, 4th edition, 1997. 47.

¹⁹ Tim Woods, "Moratorium Talk Prompts Spike in New House Permits", The Cape Cod Chronicle, 27 April 2000

almost half of the total issued for all of 1998 with 78 permits. 20 Taxing of resources such as ground water and nitrogen loading of coastal waters by septic systems has prompted discussion on a building permit moratorium. A recent study by the Friends of Chatham Waterways showed approximately 750 buildable lots remain, with a few more "substandard" lots that could potentially be deemed as buildable dependent on zoning criteria.²

Sales of single family home sales have also jumped, from 55 in 1998 to 256 in 1999, a 365% increase, 22 the highest of any Cape town. Values of single family homes have also increased in value. In 1994, the median price for a residential sale was \$172,000²³ while current median residential sales is \$237,000.2

The increased value of single family dwellings has all but eliminated affordable housing for Chatham residents earning low to moderate incomes. These residents are often in service or labor fields of employment including fishing and shellfishing. Concern has prompted town officials to examine the issue of affordable housing. Only 3% of Chatham's housing stock can be classified as "affordable" while the State recommends a 10% housing stock designated as "affordable." The Town Manager recently proposed creation of an Affordable Housing Committee to first assess the Towns housing needs and second to propose a housing plan.

Rental units are also of concern. The 1990 census shows 690 units as rentals and no new estimates are available. Yet competition for existing rentals is evident. A recent article in The Cape Cod Chronicle indicated 75 calls within the first few hours of a room for rent listed in the classifieds. With the increased value of homes, owners are opting to sell or seasonally rent single family homes instead of renting them year-round. According to three shellfishermen who lost a year-round rental recently, the three were forced to rent a summer rental at \$1200 each a month²⁶. The Chatham Housing Authority, organized by State mandates,²⁷subsidized eight families with rental vouchers in 1999.

The number of households indicated in the 1990 US Census was 3,023. The majority of those households were married couples at 1,649 although 1,107 were listed as non-family households.

Racial and Ethnic Composition

Chatham is above the U.S. average for "white" persons at 6,485 in 1990 or 98.6% of the total population. The total US percentage of "white" was 83.0% in 1990. Those of Hispanic origin rated as the second highest population at 37 persons followed by blacks at 29 persons.

Those families with the longest traditions in Chatham are culturally from "Old Yankee" stock. They are perceived by many to be non-demonstrative, conservative, and frugal people who seem to innately know the Town's family tree. All other residents, even those with a generation of residency, are considered "wash-a-shores."

²³ Friends of Chatham Waterways, An Economic Study of the Town Chatham, Massachusetts,

²⁰ Town of Chatham, Annual Reports of the Town Officers of the Town of Chatham 1999, 165.

²¹ Michael J. Pessolano, Consultant, "Draft: Vacant Substandard Lot Study." Friends of Chatham Waterways, February 12, 2000. ²² Ibid.

²⁴ Cape Cod Chronicle, 27 April 2000.
²⁵ Tim Wood, "Town Manager to Recommend affordable Housing Committee" Cape Cod Chronicle,

In order to shellfish in Chatham, one must be a full-time resident of the town for at least one year beginning May 1st of a given year.

²⁷ Massachusetts General Laws, Chapter 121B, Section3.

Economic Context

Income

The median household income for Chatham ranked eight out of the 15 towns within Barnstable County with \$31,315 in 1989 (1990 US Census). However, Chatham ranked 2nd behind its neighbor Orleans with a per capita income of \$18,471 in 1989 (1990 US Census). The median household income fell below that of the State, while the per capita income was slightly higher than the State. The higher per capita income may be due to high retirement income.

The majority of income was derived by wage and salary sources with 1,637 households earning an average income of \$33,440 in 1989. The second highest source of household income was derived from the non-farm self-employment sector, which included fishermen, shellfishermen, land-based support industries and construction work.

Employment

At a glance, Chatham is the quintessential summer community, with the majority of visible labor sectors dedicated to summer residents and tourists. Federal and State figures concur with those visible industries. According to the 1990 US Census, 2,583 residents were employed while 129 persons were unemployed. Further census data shows the service industries as employing the majority of residents with 887 individuals. The second largest industry employer group was the wholesale and retail trade numbering 541 followed by construction at 261 individuals.

The State of Massachusetts' Division of Employment and Training figures for 1995 show an increase in employed residents totaling 3,231 persons.²⁸ A breakdown into labor sectors shows the following:

EMPLOYMENT TRENDS BY INDUSTRY 1995²⁹

Industry Sector	Employment	
Agriculture, Forestry & Fishing	78	
Construction	110	
Transportation & Public Utilities	40	
Wholesale & Retail Trade	1,011	
Finance, Insurance & Real Estate	87	
Services	1,593	
Manufacturing	26	
Government	286	
Total Employed	3,231	

Unfortunately, Federal and even State data sources do not present an accurate picture of Chatham's total employment history. While the Federal figures are out-dated, State figures of employment exclude the self-employed and requires employers of "Agriculture, Forestry and Fishing" labor to report only if employing 10 or more employees. A report by Friends of Chatham Waterways utilized Chatham's Town Census to more fully understand the employment structure of the town. The following shows a breakdown of employment utilizing categories that conform to the federal Standard Industrial Classification in the 1996 Town Census:

²⁸ Figures show average annual employment

²⁹ Cape Trends, Barnstable County-Cape Cod, 4th Edition 1997 & Massachusetts Division of Employment and Training

³⁰ Friends of Chatham Waterways, 22.

CHATHAM EMPLOYMENT BY MAJOR ECONOMIC SECTORS³¹ 1996 CHATHAM TOWN CENSUS

ECONOMIC SECTORS	PERCENTAGE OF
	EMPLOYMENT
Fishing	12
Building Trades	11
Finances, Real Estate	10
Retail Trade	10
Professional Business Services	8
Health Services	8
Misc. Business Services	8*
Education Services	7
Hotels, Restaurants	7*
Landscaping	4
Family services	3
Government	3*
Boatyards, Transportation	3*
Other	7

^{*}Approximate percentage of total

State figures for 1995 put the percentage of those in agriculture and fishing occupations at 2% of total employment. A Friends of Chatham Waterways report found employment in agriculture and fishing occupations to be 16% of total employment, ³² far different from the State's 2%. Fishing itself is the greatest employer in Chatham at 12% when the service sectors of employment are further broken down as in the above table. This more realistic view of Chatham's labor force is the first indication of the importance of the fishing industry to Chatham.

Another important aspect to consider when examining Chatham's true employment picture is its annual rate of unemployment. The majority of the service industries cater to seasonal visitors and tourists. The following depicts the fluctuation of unemployment throughout the year.

³¹ Friends of Chatham Waterways

³² Friends of Chatham Waterways, 25.

LABOR FORCE AND UNEMPLOYMENT IN CHATHAM³³ 1996

MONTH	LABOR	UNEMPLOYMENT
	FORCE	RATE
JANUARY	2,575	10.3
FEBRUARY	2,606	11.1
MARCH	2,632	10.1
APRIL	2,676	7.2
MAY	2,787	3.9
JUNE	3,043	2.7
JULY	3,223	1.8
AUGUST	3,238	1.7
SEPTEMBER	2,927	2.6
OCTOBER	2,806	2.8
NOVEMBER	2,702	4.5
DECEMBER	2,645	4.8

The above table depicts a very different story than the Federal unemployment rates for 1990 of 4.4%. Even the State's average annual rate of 5.1 percent for 1996 overlooks the great fluctuation between 11.10% in February and 1.70% in August.

Transportation and Access

Chatham has no form of public transportation. A private bus company does make a route stop in Chatham before proceeding to Orleans and then back to Hyannis where connections to New York and Boston can be made.

The Cape's main highway is Route 6 and provides access to Chatham via exit 11. A lesser road, Route 28, also bypasses most Cape towns including Chatham. Since Route 28 is also many towns' Main Street, the drive is a slow method of accessing other towns.

Hospitals, schools, libraries

There are no hospitals in Chatham. The closest facility, Cape Cod Hospital, is located in Hyannis, an approximate 20-minute car drive. Chatham does have emergency medical technicians.

Chatham has two libraries. The main library, Eldredge Public Library, is located across the street from Town Hall in the center of Chatham's downtown. The brick and ivy structure stands out amongst the traditional white clad storefronts. The library was recently renovated and is now "linked" via the Internet. Another smaller library is located on Route 28 in South Chatham. The South Chatham Library is only open two days a week, but remains open year-round.

Fisheries Profile

Community

Chatham is primarily known as a tourist destination. People from all over the globe flock to Chatham from summer to early fall to admire its scenic beauty, walk through the quaint downtown shops, and to visit its active commercial fish pier. Since the early 1980's, visitors have been able to view fishermen unloading their catch from an observation deck directly above the commercial

³³ CapeTrends, Cape Cod Commission & Massachusetts Division of Employment and Training

fishermen. At most Town Landings, tourist watch and ask questions of the fishermen and shellfishermen unloading their daily catch. But beyond the very visible signs of an active commercial harvesting industries lies more extensive support industries. Fish buyers and cutters, gear workers and shellfish shuckers are just a few of the many active and healthy industries nestled in and around Chatham. These industries are, in turn, supported by an extensive work force, individuals who, for the most part, live in Chatham as part of the vibrant year-round community.

Commercial fishing and fisheries-related employment

Fishermen were asked to estimate the number of fishermen living within a defined area. The boundary of the "area" was also asked. The numbers of fishermen estimated by respondents were quite close. While one respondent indicated the "area" as including Chatham, Orleans and Harwich, he could only estimate the number of fishermen in Chatham to be 500. Two respondents estimated the number to be between 800 and 1000 with one indicating the "area" as Chatham and Harwich. Another defined "area" as a 15-mile radius, which would include parts of Orleans and Harwich, estimated the number of fishermen to be 1,000.

Households Dependent on Fisheries

Estimates of the number of households directly dependent of commercial fishing varied greatly. One fisherman stated 200 families were directly dependent while another stated between 500 and 1,000 families were dependent on fisheries. One respondent stated,

"...30 to 40 percent of the working population. I would think 30% of the households in town."

Respondents were less sure of how many other households were dependent on some aspect of the fishing industries. Answer ranged from "I don't know" to 500 to:

There's a lot, whether it's part-time or full-time. You have gillnet hangers, long-line baiters, shucking sea or bay scallops, it depends on what the population of [those] fishing is. For every boat that goes cod fishing, there's two people who bait. So if you have 30 boats that go cod fishing, you have 60 that are baiting.

Harvesting structure

Currently, there are 64 vessels with docking permits for the Town Pier. From this total, 22 vessels solely use gillnets, 17 use longlines, 5 others use a combination of both gillnets and longlines, 8 are lobster boats, 3 are handline boats and 4 are party/charter boats. There are also two draggers, one Scottish seiner and one strictly tuna boat. The majority of fish targeted and landed at the Town Pier are codfish, dogfish, monkfish, haddock, bluefin tuna and lobster. A number of these vessels also utilize the private facilities offered at Stage Harbor depending on the season and the weather. Stage Harbor offers greater protection and safer access to the fishing grounds, though the steam time to the grounds is longer.

Approximately fifteen vessels without docking permits utilize Stage Harbor full-time. Although the Town maintains a floating dock and boat ramp at Stage Harbor, most of the commercial finfish activity takes place on the two private docks adjacent to the Town's facilities. The docks are owned by commercial fishermen who also own weir trap companies. Weir traps are an ancient method of harvesting fish that travel in schools along the coastline. In Chatham, trap fishing takes place in the spring and summer and targets a number of species including scup, squid, mackerel, butterfish, Spanish mackerel, and bonito. Other fishermen utilize the docks to unload codfish, dogfish and tuna. Fish are boxed and iced on the docks and a forklift is used to carry the loads onto awaiting trucks. One of the private docks utilizes a specific fish company whose main office is located in Boston. The other private dock utilizes a local fish company who ships fish directly to larger markets as well as processes some of the catch in its local plant to supply local markets.

It should be noted that another harbor located in Harwich services a fleet considered to be part of the Chatham fleet. Approximately 40 commercial fishing vessels utilize the Town facilities at Wychmer Town Pier. A number of those vessel owners live in Chatham, but more importantly, the fleet fishes along side that of Chatham. The majority of these vessels use longline gear and target cod and dogfish, though there are a few gillnetters and lobster boats. Again, these vessels opt for the longer, but safer ride to offshore fishing grounds.

Number of Vessels by Type

Fishermen were asked to identify the number of vessels in Chatham by the type of vessel, its length and its age. The number of wood vessels estimated by interviewees ranged between three to 20-plus and ranged in length from 19 to 40 feet. All estimated their ages as over 20 years. No cement or PVC vessels were noted while the number of steel boats ranged from zero to six with lengths of those vessels to be between 30 to 42 feet. The greatest numbers of vessels noted were fiberglass and were estimated to be between 100 and 300 in number with lengths ranging between 12 to 49 feet. The lower end length estimates suggest some interviewees included commercial skiffs as well. All describe fiberglass vessels as being new to over 25 years of age. When asked about specific "types" of vessels, all participants added to the given list as follows:

TYPE	OPERATING	DRY DOCK
Urchin dive boat	0	0
Eastern Rig	0	0
Lobster/conch	15-30	In winter only
Stern dragger	2-4	0-1
Purse seine	0	0
Longline/hook	30-100	0
Gillnet	20-50	0
Scottish seiner	1	0
Sea clam	0-1	0

According to Chatham Harbormaster documents, the total number of commercially registered vessel in Chatham are 279³⁴ and they range from 10 feet to 57 feet. About two-thirds of these are commercial skiffs used primarily for shellfishing. Offshore fishing vessels holding docking permits at the Chatham Fish Pier are 63 vessels and can be categorized as follows

Longline	15
Gillnet	20
Lobster	7
Gillnet/Longline	4
Longline/jig	6
Dragger	2
Scottish seiner	1
Party	4

^{*}Four vessels are undetermined

Another 16 (not including skiffs) commercial vessels are located at Stage Harbor.

³⁴ This number only includes commercially registered vessels at the Chatham Fish Pier and Stage Harbor mooring areas. Other lesser mooring areas are not included but most certainly contain a number of commercially registered skiffs.

Shellfish

Chatham has an extensive shellfish industry due to its expansive coastal area conducive to the propagation of a variety of shellfish species. In 1999, 548 commercial permits were issued. Throughout the year, approximately 50 to 75 work the shores year-round. The numbers swell in the summer months into the hundreds including college students and part-time shellfishermen. Shellfishing has also been an "insurance policy" for finfish fishermen during times of low catches and more recently during fish closures. Retired fishermen are often seen quahogging along the shores to supplement their income. The predominant species are soft-shell clams (or steamers) and quahogs. Through the years, sets of other shellfish species, such as mussels and sea clams, have surfaced to create periodic booms for the Town. Landings of shellfish are self-reported making the estimated wholesale value of shellfish over three million dollars in 1999.

Infrastructure

The most visible fishing industries are those that take place from the Chatham Municipal Town Pier. The Town Pier is home to the majority of Chatham's commercial groundfish fleet. Boats target fish in waters east and south east of Chatham. ³⁵ The Town Pier includes two buildings and an upper and lower parking lot. The upper parking lot is maintained for crews (or deckhands) and the many visitors hoping to view fishing boats unloading their daily catch. The lower parking lot is reserved for captains and/or owners of those vessels holding docking permits for the pier. The lower lot abuts the cove allowing for easy access to vessels for repairs and the loading and unloading of gear and fish. Located on the upper level building is the Warfinger/Assistant Harbormaster's Offices as well as public bathrooms. Beneath the office is a large garage-type space used by fishermen to work on gear or bait longline gear. There are also two freezer/coolers rented out by the Town to store bait for lobstermen or longliners.

A Fishermen's Monument commissioned in 1992 to honor fishermen and their families, stands along the hill between the upper and lower parking lots. The monument depicts a hand reaching skyward holding a net filled with a variety of fish and shellfish with a plague reading; "The Chatham Fishing Industry, Ever Changing to Remain the Same." The dedication hoped to capture Chatham's diverse maritime industries. The statue is a symbol of the cultural capital invested in the industry. The main building is located along the water and includes space and facilities for two fish companies to off-load incoming boats. These companies "rent" the space from the Town. Rent is derived from the actual amount of fish off-loaded from the fishing vessels. Currently, each company must give 25 cent for every "box" of fish unloaded. 36 The fish companies that occupy the pier have had the privilege for many years without a contract with the Town. According to the Chatham Harbormaster, occupancy of these spaces will soon go up for bid to any interested fish company. Rents will thereafter be based on a monthly fee. A Request for Proposals has already been published. Fishermen also have the option of unloading their own fish at a separate bulkhead in order to sell those fish to a company of their choice. A fuel service also rents space and is located between the fish companies on the front side of the dock. There is also an observation deck for visitors to view fishermen unloading their catch.

The majority of vessels utilize the facilities at one of the two companies along the pier. Each company employs a number of people who help the fishermen load fish into a bucket that is lowered onto the vessel. When full, the bucket is lifted above the dock and dumped into a shoot where other employees separate and weigh the catch by species and size. The fish are then iced and placed into separate boxes before being loaded onto 18-wheeler trucks backed up to the parking lot side of the building. The fish companies transport most of the fish directly to the larger markets of New York and Boston, while some fish are trucked to the individual fish companies' main facilities. These facilities are still located within Chatham. Fish are processed at the plant and filets are sold to local fish stores and restaurants. One of the fish companies also has its own retail fish store.

³⁵ The fish the Chatham fleet targets are considered part of the George's Bank stock.

³⁶ A box of fish weighs between 100 and 125 pounds whatever the species be.

This fall a new type of marketing venture opened its doors for the sale of live fish. A holding facility was constructed through a grant from the US Department of Agriculture. The hope is to develop specialty markets for live or whole fresh fish to increase the value of the catch. The cooperative venture, Cape Live Seafood, includes a holding facility with tanks capable of holding 5000 pounds of live fish. The venture will begin with codfish, but hopes to expand to other species. Currently, ten hook fishermen (handline and longline) are participating. Boats are outfitted with small holding tanks containing titanium chillers in order to bring in live product year-round. The cooperative aspect will allow fishermen greater returns as well as generate funding to outfit other vessels and increase fishermen participation. The project is supported by a number of retailers including Stop and Shop and Legal Seafoods as well as conservation groups such as Conservation Law Foundation.

Support Services

Other industries extend beyond the fish piers and are essential to those working on the water. For gillnetters, gillnets must be "hung" by sewing the top and bottom of a net to corresponding lines. For the top, floats are sewn in periodically to ensure the net floats approximately five feet above the ocean floor. The bottom line is filled with lead to ensure the net sits on top of the ocean floor. Net hanging is usually completed with two people, one sewing the net to the float line and the other sewing the net to the lead line, though, some hangers hang alone. Once these nets are in use, they often rip during the hauling process or the picking (of fish) process. These nets are then "stripped" from the float and lead line in order to reuse the lines with new nets. Each gillnet vessels employs both net strippers and hangers.

Another substantial industry emanating from fishing is longline baiting. Over the last 20 years changes in how longliners fish has created this niche industry. Previously, most longliners fished three handed, the captain and two crew. One crew gut and cleaned fish while the other stood by the hauling machine and "coiled" the longline as it was hauled onto the boat. The groundline used was of thinner, more rugged material then is used today and could be looped by the coiler. The hook would be hooked atop the coil and laid flat, one coil on top the other. This method made for easy rebaiting. The rebaiting took place on the trip home or soon thereafter by the crew. As the stocks near shore declined, vessels steamed further away from shore and were forced to set more and more gear to catch the same quantities of fish. Since the process of coiling was time consuming and hauling can only take place during certain periods of the tide. new gear was developed (first used in Alaska) which allowed the longlines to fall directly into fish totes so gear could be hauled at a faster pace. The coil man was eliminated from the crew. Without the convenience of "coiled" gear, baiting time increased and thus began the need for "baiters" onshore. Now, each longline vessel employs baiters to rebait their gear onshore. The task is time-consuming and tedious. It consists of placing small pieces of bait, usually sea clams or squid, on every hook and placing it just so within a fish tote so that the gear does not tangle while being set offshore. Most fishermen use 300 hook "bundles" and set between 14 and 20 of these bundles per trip. Baiters are paid per hook, but must also repair the gear and reset bent hooks. Each bundle of gear takes a baiter, depending on experience, between 45 minutes and two hours. Most vessels employ two baiters, if not more. Other than the few boats that utilize the town facilities at the Fish Pier, most baiting takes place away from shore. Some fishermen have shanties with coolers and freezers at their home, but most own or rent facilities in the number of industrial parks around Chatham.

Employment (year-around and seasonal)

All the respondents worked as harvesters though they targeted differing species. A weir fisherman described his year as beginning in March. He begins by preparing the gear used for the traps. It is a labor-intensive industry. For most trap fishermen, actual fishing lasts for only two months, May and June. Some will continue to fish through September, but with only one other deck hand. Through the fall, traps are packed up and put away. This individual works on other boats in the winter but has also worked in construction during bad fishing winters.

Two other fishermen respondents simply change fisheries throughout the year. Cod, dogfish, and blue fin tuna are their primary target species though both subsidize their income with shellfishing. One helps his brother lobstering when fishing is slow. Neither fisherman relies on land-based jobs. One of the fishermen changes gear throughout the year. During the winter months of December through March, he longlines for cod. During the spring and summer, he targets cod and dogfish with gillnets and changes over to tuna fishing in the fall.

The full-time shellfisherman also changes his target species depending on the seasons. For instance, many areas closed during the summer and fall open for shellfishing December 1, so he long rakes for quahogs during the winter months. By April, he is back digging steamers and getting back in shape for the long days of June, July and August where, as the respondent described,

You can do double tides where you wake up at 3 am and get done around 10 am, take a nap, go back out at 1 p.m. and work until dark.

By October he is back quahogging. This shellfisherman estimates fishing days to between 220 and 250 days a year. Days he takes off usually have to do with taking care of his three children.

When asked what other jobs were available in the area, most respondents listed a number of fishing support industries such as baiting and net hanging. Also mentioned were fishing supply industries such as gear, fuel and electronics. Service industries such as engine and electronic repair, out-board mechanics were also listed. Outside of the fishing industry, respondents listed other labor-intense occupations such as construction, landscaping, and plumbing. One fisherman mentioned service industries such as restaurants and banks. Most of the respondents looked down at other occupations, as one fishermen stated "...I don't know, everything else is a demotion from fishing." While another stated "You can either work in the shops as a salesperson, or manage a shop, or go fishing."

Sales/revenue

When asked to determine the percentage of the respondents annual income from fishing, two of the households interviewed depended on fishing for 100% of their annual income. One stated that recent winter work in construction has changed their annual income from 100% fishery dependent to about 80% currently. Another fishermen has a wife that works outside the home in a non-fishing related occupation making their annual income 60-80% dependent on fishing.

Species, Seasonality

The number of species fished for is vast.

Groundfish: cod, flounders (fluke, dabs, winter flounder, and yellowtail) haddock, pollock hake (red or silver) halibut, and gray sole.

Small mesh: whiting, squid, and shrimp are caught.

Pelagics: Both herring and mackerel are caught; though one fisherman stated herring were not harvested for economic reasons, but used for bait.

Crustaceans: lobsters

Highly migratory species: tuna

Other species listed included: Striped bass, dogfish, skate, monkfish, bluefish, conch, scallops, sea bass, scup (porgies), soft shell clams, quahogs, mussels, slime eels, menhaden (pogies). One fisherman included sturgeon but did not include scallops or slime eels. Another fisherman did not include menhaden.

Niche Fisheries

Weir (or trap) fishing was mentioned as well as a variety of shellfishing including conch and mussels. A number of methods for harvesting were mentioned, such as long raking for quahogs, hand digging for steamers and hook and line fisheries. One fisherman described Chatham fisheries as "diverse and archaic."

Most respondents mentioned dogfish and monkfish when asked what alternatives fishermen were switching to. They clarified their answers by stating monk fishing was restricted and not many went into it. Dog fishing, on the other hand, was being taken away. Other alternatives mentioned were quahogs and steamers. As one fisherman stated:

Clams, steamers...the whole population is digging steamers. When the groundfish people aren't fishing, they're digging steamers, the people who don't really want to work dig when they need money, some dig all the time.

Form of ownership (e.g., owner/operator; corporation)

The majority of vessels in Chatham are owner/operator. A very small number have other captains run their vessels either because they are retired, or the individual owns two boats, runs one and has the other captained. Some fishermen may be incorporated for tax purposes, but there are no large corporate interests in the Chatham fleet.

Recreational fishing and employment

Chatham is an increasingly popular destination for numerous recreational fishing enterprises. Striped bass is the favorite target species, followed by bluefish, scup and cod. The number of small day excursion boats have increased over the last five years and services offered range from dropping customers off along the pristine shore of South Beach and Monomoy Island for fly fishing, to all day, off-shore excursions. With increasing recreational fishing activity, conflicts concerning access have erupted. Boat ramps and parking lots at Town landings have become over saturated with both commercial and recreational fishing efforts, as well as other water based activities such as boaters, kayackers, windsurfers and sailors. A number of seal-watching tours have also added to the congestion. Efforts to control traffic have also created angst between commercial and recreational endeavors. Recent regulations have limited the usage of the Town's primary boat ramp and subsequent parking area to residents only. Those enterprises carrying recreational fishermen for fees must now be bonded for insurance purposes in order to utilize Town facilities.

All respondents affirmed the existence of recreational fisheries in Chatham. Two noted the increase in the last five years. Most mentioned the striped bass and blue fish fishery. One fisherman acknowledge the claim that Chatham is one of the premiere destination for flyfishermen on the East Coast, while another stated,

..it's an industry and many people are involved in it.

Cultural role of fishing

Respondents were asked if most fishermen came from Chatham. All responded to the contrary, though where fishermen came from could not be specified. One fisherman stated,

Yes, I'm a native. There's really not a whole lot of us left. Most are wash-a-shores.

History and museums

Chatham is one of the Cape's earliest townships and the harvesting of surrounding resources began over 250 years ago. The size of the fleet has changed over the years, but Chatham has always been a small day-boat port. Prior to the late 1970's, Chatham had also always been a hook-boat port. Old timers still recount long trips to Georges Bank to hand-haul longline gear targeting halibut. But for the most part, fishing took place close to shore with many inshore spots in sight of land. Weir fishing has also had a long history in Chatham.

Cultural events

A number of cultural events are held and celebrated throughout the year, with the largest event being Chatham's Fourth of July Parade. Chatham's parade attracts an increasing number of

visitors every year, but is still attended by the majority of its residents. Many floats display a nautical theme.

Seafest is an event held in October and specifically celebrates Chatham's diverse natural bounties and shoreside industries. A number of demonstrations are held throughout the Town showing techniques in clamming, quahogging, baiting and how to eat a lobster. There are also discussions held on current events affecting the fisheries. The primary goal of the event is to attract visitors to Chatham during the off season and teach both visitors and residents about maritime industries.

Years ago, Chatham held the Miss Eelgrass Contest as a fundraiser for local children's programs. Local merchants would sponsor an individual who would vie to become Captain Eelgrass's mate. Women would dress in outrageous outfits, donning large, real cod heads, or mermaids garb made from actual seaweed. Each candidate would demonstrate a plea or talent to be chosen as Miss Eelgrass. A number of donated prizes were also raffled off. The event was held at the Veteran of Foreign Wars field and most locals attended. The theme song for the event was, "Jelly, Jelly, Cuz Jam Don't Shake Like That". The winner joined Captain Eelgrass on the Fourth of July float. Unfortunately, as older organizers retired from the event, new organizers reinvented the event to "The Arts of Charity". The new event still raises money for local children's organizations but in a more upscale forum that lacks any local color. The new event takes place in Chase Park in Downtown Chatham and presents a live auction for all sorts of artwork. The Arts of Charity is still a well-attended and fun event, but the crowd and antics have most definitely changed.

Ethnicity in the fisheries

The great majority of Chatham citizens are white. Chatham's local population is derived from old Yankee stock. There are no outward celebrations of ethnicity other than the Fourth of July Parade.

Kinship & family

Although the majority of fishermen are not of local stock, those that are have been involved for generations. A number of those currently fishing or shellfishing are third generation. Unfortunately, most fishermen do not want their children to enter fishing, though some expressed this with reservation. "If its prolific and a stable environment," hedged one fishermen. Another offered:

No...well I won't say I don't want to see them in the industry, don't think I want to see them fishing.I don't see them taking over the traps...I don't see them [the traps] being in existence after I'm through unless something dramatically changes.

Two fishermen had wives or significant others who worked outside the house and outside the fishing industry. The other fishermen felt wives were vital to their enterprises. One fisherman described his wife as his co-worker stated,

She does a little bit of everything. When I gillnet, she hangs nets, when I longline she baits the gear, She's also the bookkeeper. Elbows me in the ribs to get me out of bed,

When asked, "What makes a good fisherman?" one fisherman answered, "My wife!"

Where fishermen go for coffee

Chatham supports a number of breakfast restaurants, but the majority of fishermen, active and retired, patronize Larry's PX. Most fishermen, whether working or not, are accustomed to early hours and Larry's opens at 4 a.m. The two gas stations that sell coffee are also a gathering spot for fishermen and shellfishermen.

Where fishermen go for beer

After hour gatherings for fishermen have changed over the years. Even ten years ago, fishermen mostly congregated at the Chatham Squire, located in downtown Chatham. On non-fishing days, fishermen would begin gathering at lunchtime. A number of factors have led to the demise of this kind of socializing. For one, the Squire's clientele has shifted to the tourist. It is also difficult to maneuver large trucks through downtown during the summer months, never mind finding a parking space. Also, the drunken driving laws and enforcement have simply changed how everyone socializes. Since there are few drinking establishments, local law enforcement keep watches over the few there are and take note on who is where and for how long. Still, small pockets of fishermen congregate during the early hours of the evening at a number of places throughout Chatham and Harwich. The younger crowd tends to gather at the Sou' Wester, while an older crowd gathers at Campari's in North Chatham and Castaways in Harwich.

Fishing related organizations and their roles in the community and fishery

Chatham Fisherman's Association: Not active

Chatham Fisherman's Wives Association: Not active, though there have been recent attempts at revitalizing the organization

Cape Cod groups include:

Cape Cod Commercial Hook Fisherman's Association: An ever expanding and important group supporting and advocating for small boat fishing. Activity includes lobbying on the federal level, assisting in grant writing and procurement of grants for projects such as Cape Live Seafood as well as sponsoring educational forums for fishermen and their families such as how to access fishing information online.

- Cape Cod Gillnetters Association
- Outer Cape Lobstermen's Association
- The Nereids: A recently form group of Cape women dedicated to supporting maritime communities by developing links between residents, visitors and maritime-related interests.

And regional groups:

- Northwest Atlantic Marine Alliance (NAMA)
- General Category Tuna

Fishing-related programs and services

Other NGOs/Training institutes

Approximately five years ago the Fishing Family Assistance Program had an office in Chatham. J-Tech, located in Hyannis, still helps fishermen and their families in funding retraining in fields outside the fishing industry.

Coast Guard

Despite cutbacks, Chatham still maintains a Coast Guard station. The Coast Guard offers a few navigational courses every year to interested residents.

Perceptions of the Fishing Community³⁷

Importance of fishing to the community

Based on a scale of one to five, with one being not important and five being very important, two fishermen believe fishing to be very important (5) to the community, while another believed it to be important (4). One fisherman stated,

More important than people in this community know. How about

³⁷ Based on key informant interviews

a 4 and a half? (between important and very important)

Boundaries

Two of the respondents named Harwich as the community Chatham folks have contact with the most. The other community is Orleans. Both towns are directly adjacent to Chatham. It is Harwich, though, that contains part of the "Chatham" fleet. East Harwich also offers ever-increasing retail services. Directly over the border between Chatham and East Harwich is the 24 hour Stop and Shop, a new CVS and a number of clothing stores with more scheduled for construction.

The following shows where the respondents conduct specific activities:

Sell fish	Chatham
	(Shellfish=Hyannis, Falmouth ³⁸)
Offload fish	Chatham/Harwich
Buy fishing gear	Chatham/Harwich/New
	Bedford/Sandwich
Buy ice	Chatham
Buy boat fuel and oil	Chatham
Haul out for boat repairs	Chatham
Go for bookkeeping	Chatham/Yarmouth/Off-cape
Go to bank	Chatham
To shopping	Chatham, Harwich
Go to church	Chatham
Go to school	Chatham
Go for health care	Chatham/Hyannis/Orleans
Go for childcare	Chatham/Orleans
Visit relatives	Chatham/Eastham/Wakefield/Florida
Visit friends	Chatham/ Maine
Go for vacation	Maine/Western MA/South
Go for recreation	Chatham/Maine/Western MA
Go to socialize	Chatham

The only respondent who answered yes to whether any of these contacts had changed in the last five years explained that his social life had changed since no one came over to their home anymore due to their three small children!

Communication Issues

Communication with local fisheries managers and representatives was rated as "poor" by two respondents and "fair" by two. Communication with state managers and representatives was rated as "excellent" by one, "very good" by another and "poor" by two. Communication with Federal managers and representatives was thought to be "fair" by one, "poor" by two, "no comment" by one.

Assessments

When asked how well scientists and fishermen agreed on the assessment of fish stocks, all four respondents believe fishermen and scientists disagree (number 2) on the assessment of stock conditions.

³⁸ The respondent added that those companies from Hyannis and Falmouth bring trucks to Chatham to buy shellfish.

Local management practices

Fishermen were asked if there were any local management practices that the local people themselves devised. One respondent had no idea, while two mentioned proposals hook fishermen had submitted to the New England Fisheries Management Council. The fourth gave an example of local management practices.

Yes, the shellfishing. The Town, shellfishermen and the shellfish advisory board that we have set the amount of shellfish that can be taken, some are limited to the times of year we can harvest.....There is a size limit [boat size] at the fish pier,

The shellfishermen in Town also agreed to raise their own permit fees in the early 1980's in order to create a fund for the propagation of shellfish. With the revenues, the Shellfish Department constructed an upwelling system for a variety of shellfish species, though the primary focus is quahogs. Seed shellfish are grown out then planted in outdoors grow-out areas under protected mesh. Shellfishermen volunteer their time and along with Shellfish deputies, helping plant mature quahogs from the grow-out areas. Shellfishermen also agreed not to allow private aquaculture ventures to take place within Chatham since the Town "public" aquaculture venture benefited everyone.

Economic Change

Ten years ago, the economic condition of the fishing industry was rated as "excellent" by one and "good" by three. All the respondents attributed the good to excellent economic conditions ten years ago to the abundance of fish. One fisherman also added that prices for fish were high as well as,

...we were able to go where we wanted, as we please. It was a reasonably productive industry.

Five years ago, three rated the economic condition as "good" and one as "average." Fishermen still attributed the fairly good economic conditions to the quantity of fish as well as the fish price. One fisherman noted that with the ability to diversify into dog fishing, they were able to sustain themselves. Another fisherman noted the boom in shellfishing as the reason.

Actually, I would give it a very good if I could and I'm basing that not just about ground fishing but mostly about shellfishing. I think because of the shellfishing. There were 200 to 300 people out there. Kids are putting themselves through college by shellfishing in the summer. It was a boom and it still is although its probably not a as good as it was five years ago, but its still doing well. The groundfishing may have gone down, but the shellfishing equalized it.

Today, the economics were rated as "good" by one, "average" by two and "fair" by one. Two fishermen noted the decline of fish as well as the impacts from the fishing regulations for the lowering of economic conditions. One fisherman actually found the situation to be quite good and added:

So far this year, it's been good to excellent. There was a lot of fish caught and the prices were good most of the winter.

At the same time one fisherman commented:

The fish have diminished. We're regulated to not be able to go and you just can't catch anything.

The differing comments may simply reflect the individual variability of the industry.

Predicting the future, three anticipated that the economic condition would be "good" in five years. Most respondents were optimistic that the regulations would work to rebuild stocks. One fisherman believed the economic conditions would get worse before they became better, but still believed in a better future. Another fisherman, optimistic that regulations would help fish stocks, added his concern about the managers,

I'm sure the regulations will work, but that's if they let us fish. Now that the government's involved, it will never be the same.

One respondent could not make a prediction for the future, but his response to why expresses his doubtful concerns over the unpredictability of the industry,

I have no idea. We are on the brink of being shut down. If what happened in Cape Cod Bay happens here, we're finished. They put trip limits on it and finally ended the whole industry. ...we are on the brink of that here. Especially if we're inundated by another fleet. If the boats from the North come down here, it will put undo pressure on our limited resources. ...they are out of luck up there...they're all done.

Personal economic change

Next, fishermen were asked if their standard of living had changed for the better in the last five years. Three of the respondents felt there had been no change in their own standard of living, though one did believe his total income had decreased. Another fisherman believed the standard of living was worse.

When asked in what ways life was worse than five years ago, responses ranged from the increased costs in housing and the inability of a working family to survive in Chatham, to the increase in tourists during the summer months and finally,

Lets put it this way, five years ago I was 50 and now I'm 55 and I'm working harder. Any reasonable person would not think that so good.

Two respondents believed their standard of living had decreased due to a decrease in their annual income over the last five years. Both mentioned the decline in income from fishing. One fisherman believed his standard of living had risen, though his annual income had remained pretty much the same in the last five years.

All four respondents had health insurance. Two of the fishermen were not part of any group plan. One fisherman was a part of the Fisherman's Partnership health plan, and another was covered under his wife's plan from work.

Changes in fishing effort

All respondents believed there had been a change in effort over the past 10 years. One fisherman stated a reduction in fishing effort was due to management, while another believed effort had increase because of the fear of being shut down. Another fisherman stated his effort had decreased by the reduction in traps he set out.

Other than shellfish, which has remained stable over the years, all fishermen noticed a change in the mix of fish stock. Both cod fishermen noted the role of dogfish. One believed the "balance" between cod and dogfish were off because of the increase in dogfish populations. The other cod fisherman confirmed his switch from cod to dogs was due to the decline in cod,

Targeting the traditional species, cod, has changed because of regulations, quantity, availability of other resources and necessity.

The weir fisherman noted that mackerel has always been the predominate species, around 50 percent of the catch, followed by 25 percent squid and 25 percent scup. But, in recent years, that composition has changed to 75 percent mackerel, 24.5 percent squid and .5 percent scup. One fisherman also noted the increase in the striped bass population.

Significant changes in the fishing industry

- First, access to permits...you just can't get permits...And that's a big point, I can't diversify. Next is Amendment 5 and 7. The more people are regulated in the groundfish fishery, [they] come inshore and that puts more pressure on the inshore fisheries like the shellfish industry.
- Better, more reliable equipment. The boats are fiberglass now, they're safer and there are less repairs. Next is there's less camaraderie amongst fishermen now and I'm not sure why. Myself, I see a lot of people getting into this industry maybe 15 years ago because it was a quick way to make money and it was the only way they looked at it. I don't think it was like that before. I think that fishing has become more competitive because of the lack of fish. It creates dissention when you have that much competition. People just don't seem to be as friendly. Its harder to be friends and go steal a fish from under him the next day.
- Regulations and the failure of the cod fish. And the failure of the codfish is due to overfishing.
- The loran and gillnets in Chatham. Gillnets came in to Chatham in 1977-78. That changed Chatham. Also, increase in the horsepower in the draggers.

Effects of recent management

When asked which recent regulations would have the greatest impacts on them, all respondents mentioned some aspect of Amendment 7 and subsequent additional measures such as, Days at Sea, trip limits, the closed areas and blocks. But most comments focused on those regulations that are currently being promulgated. The uncertainties of new regulations seem to be a pervasive concern. One commented on the yet unknown dogfish regulations.

The dog fish regulations will be a huge shock to the Town....A lot Of boats diversified away from groundfish into dogfish.

Another stated

They're working on new ones now so who knows.

While still another added:

We know its going to be closed for 30 days, but then they're going to have a whole new set of rules...they're talking trip limits and closures. It's going to affect us and put a lot of us on the clam-flats and affect the clams so it's going to affect everyone. [Cape Fishermen's Supply] hasn't ordered much gear because he doesn't know what's going on. He's scaled back on what he orders.

When asked what alternatives fishermen are switching to, most mentioned clams. Again, the uncertainty of new dogfish regulations surfaced,

...dog fish, but that's being taken away...so I don't know what they're going to switch to.

Characteristics of local fishermen

Asked what makes a good fisherman, the fishermen replied:

- Tenacity
- My wife! Paying attention to everything that happens. They're so many things that can make a good fisherman.
- Perseverance, drive and luck...also being at the right place at the right time.
- Today, someone who is conscientious of the environment and fishes for tomorrow. Meaning, the old school way of fishing where small fish didn't matter. You took whatever you could get in the boat. Didn't matter if you killed a bazillion fish to get them. I think today's way of thinking is different, it needs to be different. We need to think about tomorrow, to have fish for tomorrow.

Safety

When asked if fishing was more dangerous, or safer than it was in the past, all but one answered that fishing was safer. All three attributed the increase in safety to stricter regulations, but mostly emphasizing that boats were better today,

...the boats are safer. I don't want to admit that the regulations have made it safer. People are making more money, so they have more money to put into their boats. Its not like years ago when you made do with what you had because you couldn't afford any better. Coast Guard regulations have helped, but mostly the boats are better and safer.

One fisherman believed the fishing was more dangerous since many captains were forced to work alone without any crew. Fishermen also have to fish further away to catch fewer fish. Therefore, fishermen, especially those fishing alone, are take greater chances.

Job satisfaction

Respondents were asked if most fishermen in the area were satisfied with their jobs. Three directly answered yes, while another said he did not know, but he was satisfied. When asked to explain why they felt fishermen were satisfied with their work, two mentioned the freedom they derived from it,

We choose this profession because we like the lifestyle. We're basically our own boss. We have time off and are not dictated by a 9 to 5 work schedule. It would be a real drastic change to get out of the fishing industry and think you have to go work with structured hours and days...I know a lot o guys who are not going to do it...I'm not going to do it.

Fishing families

Asked whether spouses of harvesters worked outside the home, respondents commented that most spouses worked outside the home and that this was not different from five years ago. One added that it might be different then 10 years ago, while another believed it was different 15 years ago. When asked specifically whether the respondents spouses or partners worked, all answered affirmatively. Two of the fishermen's wives were in integral part of their spouses fishing business, while two of the other spouse/partner worked outside the fishing industry.

Community Profiles
Barnstable County
Cape Cod and the Islands Sub-region

5.4.1.4. Provincetown

Background

Provincetown is at the very tip of Cape Cod, a commercial fishing center and, in the summer, a tourist center and art colony. It's a picture perfect fishing village made up of narrow streets, clapboard and shingled cottages with Cape roses and old-fashioned gardens.

The Town of Provincetown was incorporated in 1727, but its history begins much earlier since its deep, well-protected harbor offered excellent protection from storms. The European explorer Gosnold recorded a stop in Provincetown as early as 1602 then the Pilgrims dropped anchor here in 1620. Before moving on to Plymouth where fresh water was more plentiful, they drew up the New World's first document of self-governance, The Mayflower Compact, sowing the seeds of self-determination and radical thought that still characterizes the people of Provincetown. 40

As far as is known the Native Americans, the Wampanoag, did not establish permanent settlements here, but set up seasonal camps for fishing and hunting. This pattern of a transient population that swells in the summer months continued with the Europeans. The rich fishing grounds of Grand, Stellwagen and Georges Banks led to seasonal leasing of fisheries with licenses granted for bass, mackerel and cod fishing but the first permanent settlement didn't take place until 1700.

Provincetown grew very slowly during the 18th century and its population fluctuated with the price of fish. Farming was of secondary importance and aside from the fishing industry, there were only some salt works and one mill. After the Revolution, the town boomed and its population rose 276.6% between 1790 and 1830. Despite its relative lack of good farmland, by the middle of the 19th century, Provincetown had developed as the prime maritime, fishing and commercial center of the Cape. The beach itself was the main thoroughfare for horse-drawn carts loaded with fish and salt and the tools of the fisherman's trade. Most of the houses faced the bay. Side streets ran inland. Travel to the mainland was accomplished by stagecoaches that plied The Old King's Highway, portions of which still run through Truro and Wellfleet. 42

As whaling came of age in New England, Provincetown's transition from a quiet fishing village to a bustling seaport was sudden. By the mid 1800s Provincetown, with the largest and safest natural harbor on the New England coast, had become one of the greatest and busiest seaports in the country.

Boasting a fishing fleet of more than 700 vessels, Provincetown had become wealthy and crowded, with more than 5,000 residents by mid-century. Fifty-six wharves jutted out into the bay. There were buildings for smoking and canning herring, and fish-flaking racks for curing codfish. Salt was supplied by 70 local salt works -windmills along the waterfront that pumped seawater into vats to be evaporated by the sun.

The Civil War, which destroyed so much New England business, only provided more markets for Provincetown's fish. Portuguese sailors, picked up by American ships in the Azores and Cape Verde Islands to fill out their crews, came to Provincetown to live and additional Portuguese

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³⁹ http://www.state.ma.us/cc/provincetown.html

http://www.provincetown.com/about/history/

⁴¹ http://www.provincetown.com/about/history/

http://www.provincetown.com/about/history/

immigrants had moved to town by the 19th century to work on the whaling boats and coastal fishing vessels. In 1875, there were 25 coastwise and 36 ocean vessels operating in town, more than any community in the state including Boston.

Provincetown was a bustling place with all of the ancillary maritime businesses operating, such as ship chandlers, shipwrights, sail makers, caulkers, riggers and blacksmiths. But whaling declined after the turn of the century and a storm known in local legends as The Portland Gale destroyed most of the town's packing wharves, windmills and salt works. The era of Provincetown's fame as a seaport had ended but by then Provincetown had become known to many of the wealthier residents of Boston and New York. The railroad now brought an entirely new type of visitor to Provincetown—the upper class tourist, eager to escape the heat and grime of the industrial cities.

In the late 1800s Romanticism and Impressionism, with their fascinations with light and landscape, dominated the international art scene. American Impressionists, like Charles Hawthorne, were captivated by the ever-changing interplay of light and water that they found here at the narrow tip of Cape Cod. They quickly embraced Provincetown and its splendid environs as their own.

Hawthorne established The Cape Cod School of Art in 1899. A 'plein air' (open air or outdoor) school of painting, Hawthorne led his students out to the high hills, the low tidal flats and the dunes, stalking the essence of Provincetown's incomparable light in all its changing moods. Artists, out in every sort of weather and season, easels and paints in tow, have been a familiar sight in Provincetown ever since.

In 1914, Hawthorne and others founded The Provincetown Art Association and Museum, whose first exhibition, featuring works by 44 artists, was held in the Town Hall. By 1915, the Art Association had grown to 147 members.

Poets, novelists, journalists, socialists, radicals, entrepreneurs and dilettantes flocked to Provincetown. Abandoned wharves, barns, sail lofts and fish sheds were quickly converted to studios, galleries and little shops. Many especially hardy (and solitude-loving) artists built tiny shacks on the unclaimed land of the high ocean dunes in Provincetown and North Truro (some are still standing).

The Provincetown Players, a mixed group of writers, playwrights, actors and artists, and the first truly American theatre company, converted an abandoned fish house into The Wharf Theatre in 1915. In 1916 The Players opened with Eugene O'Neill's 'Bound East for Cardiff' and the *Boston Globe* ran a front page article proclaiming Provincetown the 'Biggest Art Colony in the World...' By 1917, the Art Association had grown to over 300 members. Throughout the next several decades, Provincetown moved into prominence as one of the primary cultural centers of the country.

Provincetown's creative spirit and stylistic aplomb endures. The Provincetown Art Association, Hawthorne's Cape Cod School of Art and the Fine Arts Work Center continue to be well-respected and vital organizations in the social and cultural context of the town.

The hippies of the 60s discovered Provincetown and instantly embraced the open-mindedness and non-judgmental ways of this already diverse Cape tip community. In the mid-70s, responding to the town's long tradition of tolerant open mindedness as much as to its delightful environs and exciting summer scene, the gay community also adopted Provincetown.

As a backdrop to this melange of fascinating people, the ocean beaches and the high dunes, incorporated into the Cape Cod National Seashore in 1961, remain preserved in their natural state, little altered since the Pilgrims first landing over 300 years ago. Cape Cod National Seashore comprises 43,604 acres of shoreline and upland landscape features, including a forty-mile long stretch of pristine sandy beach, dozens of clear, deep, freshwater kettle ponds, and

upland scenes that depict evidence of how people have used the land.⁴³ A variety of historic structures are within the boundary of the Seashore, including lighthouses, a lifesaving station, and numerous Cape Cod style houses. The Seashore offers six swimming beaches, eleven self-guiding nature trails, and a variety of picnic areas and scenic overlooks.

Provincetown is unique in that so many diverse social elements - the Portuguese fishermen, the artists and writers, the hippies and the gays have together built a cohesive community that really supports all its members in a manner that is not only tolerant, but completely respectful of 'lifestyle preferences.'

The changing fishing community

The Portuguese community and influence is still very strong. The fishing fleet, although reduced in numbers, still hauls out to sea. Every summer the Bishop blesses the fleet and the Portuguese Festival enlivens the town.

However, about 15 years ago, local respondents report that the industry began to experience a downturn as nearby fish stocks were depleted and area closures such as Stellwagen Bank limited the opportunities to fish near shore. What was once a proud fleet of day boats including easternigged draggers, scallopers and lobster boats is now a derelict collection of aging vessels in poor repair and with little operating capital to keep the fishery viable. The Provincetown harvesting sector has also suffered from a lack of diversity in their industry's development. P-Town has concentrated its efforts on dragging for groundfish or whiting, and has not significantly diversified into other fisheries or gear.

Unlike ports such as Plymouth or Vineyard Haven that have, with active community support, successfully maintained their fishing industry while developing a tourist industry, Provincetown's fishing industry is failing. Despite the positive spin on the state of the fishing industry reported by web site pages, key respondents indicate there is little local support for the cultural capital of fishing in Provincetown. When fishing was an important element in the community there were fish processing plants, a NMFS marine extension office, a fisherman's memorial, marine and fishing supplies, an icehouse, net maker, and a fish auction. Now these items of economic and cultural capital have given way to additional seafood restaurants, tourist shops, art galleries, businesses, and hotels geared to outsiders:

"It used to be real wild around here. Fishermen had bars to celebrate in and small grocery stores where you could buy supplies on credit. That is all gone now. Now it is all regulated and full of tourists. Fishermen don't matter that much anymore."

Another disadvantage of P-Town is its geographic location. Although it has the second deepest natural harbor in the world, its location at the northernmost tip of Cape Cod has made it distant from major fish markets and thus less competitive with ports having better access to ground transportation such as New Bedford and Gloucester. In the summer time, the one road going into an out of Cape Cod is regularly clogged with tourist vehicles on their way to visiting the beaches or traveling to the art and tourists shops that have come to dominant the area's economic landscape. In the wintertime, bad storms can close down the one road making regular access difficult.

The Portuguese and Portuguese-American fishing fleet was primarily composed of day-boats and they tended to work in extended family groupings. At one time they commonly had 6 and 7 person crews, then by the 1970's were usually working with crews of 4 or 5 men. Most of the fleet retained their traditional pattern of groundfish trawling, supplemented with whiting and

⁴³ http://www.nps.gov/caco/

⁴⁴ http://www.provincetown.com/about/history/

lobstering. Late in the 1970's when bluefin tuna began to attract Japanese buyers, some of the vessels would try for a big one with hook and line. In general, though, the Provincetown fleet did not significantly diversify their economic activities and thus remained somewhat culturally and linguistically isolated.

Migration between P-Town and Portugal was common. Many of the more successful fishermen left Provincetown over the last 25 years to join the fleet in New Bedford. Newer immigrants who would take over aging vessels and "have a go at it" replaced them. However, others stayed and fished out of P-Town for up to 40 years. Because of the outmigration of highliners and the ethnic insularity of the fleet, there was neither the impetus nor the necessary capital to diversify fishing strategies. Those coming into the fishery took up what was available, and had little encouragement or incentive to change.

Governance

Board of Selectmen, Town Manager and Open Town Meeting

Demography

Population

According to the 1990 Census there was a population of 3,374 in Provincetown CDP, with 1644 males and 1730 females.

Age Structure

There were 465 children (under 21 years), 2275 adults (21 to 64 years) and 635 seniors in 1989.

Education

Of adults over 25, 501 had no high school diploma, 815 had graduated from high school, 715 had some college and 788 had a Bachelor's or higher degree in 1989.

Housing

There were 3660 housing units, 1868 of which were occupied and 1792 were vacant. Of those occupied, 891 were owner-occupied and 977 were rented. The median year housing units were built was 1939 and the median value of owner-occupied housing was \$167,600 in 1989.

Racial and Ethnic Composition

The vast majority of the population was white (3309) with 52 Blacks, 6 American Indians and 7 Asians. The first ancestry reported by 1175 individuals was Portuguese. Four hundred-one persons claimed English ancestry and over 200 each claimed Irish and Italian ancestry.

Economic Context

Income

The median household income in 1989 was \$19,935 and the per capita income was \$15,235.

Employment⁴⁶

Whale watching has replaced whale hunting as an important source of revenue and fame for Provincetown.

INDUSTRY

Universe: Employed persons 16 years and over

46 http://venus.census.gov/cdrom/lookup

⁴⁵ Key respondent interview.

Agriculture, forestry, and fisheries (000-039) Mining (040-059) Construction (060-099) Manufacturing, nondurable goods (100-229) Manufacturing, durable goods (230-399) Transportation (400-439) Communications and other public utilities (440-499) Wholesale trade (500-579) Retail trade (580-699) Finance, insurance, and real estate (700-720) Business and repair services (721-760) Personal services (761-799) Entertainment and recreation services (800-811) Professional and related services (812-899): Health services (812-840) Educational services (842-860) Other professional and related services (841, 861-899) Public administration (900-939)	67 0 136 55 36 48 33 14 512 93 40 133 15 78 129 60 66
OCCUPATION Universe: Employed persons 16 years and over Managerial and professional specialty occupations (000-202): Executive, administrative, and managerial occupations (000-042) Professional specialty occupations (043-202) Technical, sales, and administrative support occupations (203-402): Technicians and related support occupations (203-242) Sales occupations (243-302) Administrative support occupations, including clerical (303-402) Service occupations (403-472): Private household occupations (403-412) Protective service occupations (413-432) Service occupations, except protective and household (433-472) Farming, forestry, and fishing occupations (473-502) Precision production, craft, and repair occupations (503-702) Operators, fabricators, and laborers (703-902): Machine operators, assemblers, and inspectors (703-802) Transportation and material moving occupations (803-863) Handlers, equipment cleaners, helpers, and laborers (864-902)	204 264 39 180 141 0 0 400 85 142 42 20 98
CLASS OF WORKER Universe: Employed persons 16 years and over Private for profit wage and salary workers Private not-for-profit wage and salary workers Local government workers State government workers Federal government workers Self-employed workers Unpaid family workers	1002 65 195 33 23 297 0

Transportation and Access⁴⁷

Provincetown is situated on Cape Cod, a 65-mile long sandy peninsula comprising Barnstable County. The Cape has excellent highway, rail, bus and air connections to other parts of New

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⁴⁷ http://www.state.ma.us/cc/provincetown.html

England. Air, bus, and passenger rail service expand during the summer months to accommodate the large numbers of tourists.

Major Highways

Principal highways are U.S. Route 6, the Mid Cape Highway, and State Route 6A.

Rail

There is no freight rail service, but the network of intermodal facilities serving Eastern Massachusetts and Rhode Island is accessible.

Bus

Provincetown is a member of the Cape Cod Regional Transit Authority (CCRTA), which operates a b-bus demand response service. The Plymouth and Brockton Street Railway Company provides two trips daily between Provincetown and Boston.

Other

The Provincetown Municipal Airport, a Commercial Service (CM) facility located 2 mi. NW of town, has a 3,498'x 100' asphalt runway. Precision and non-precision Instrument approaches are available. The Plymouth and Brockton Street Railway Company provides two bus trips daily between Provincetown and Logan Airport.

Ferries (people and bikes, no cars) from Plymouth and from Boston make daily trips in season to Provincetown.

Hospitals, schools, libraries, museums⁴⁸

There is no hospital in Provincetown.

Provincetown Public Library

Pilgrim Monument and Provincetown Museum, Cape Cod Pilgrim Memorial Association Provincetown Art Association and Museum

Provincetown Heritage Museum

American Lighthouse Foundation restored the keeper's house and outbuildings at Race Point Light.

Fisheries Profile

Community

The Portuguese community and influence is still very strong. The fishing fleet, although reduced in numbers, still hauls out to sea. Every summer the Bishop blesses the fleet and the Portuguese Festival enlivens the town.⁴⁹

Commercial fishing and fisheries-related employment

Harvesting structure

The majority of the fleet are eastern-rigged otter trawlers, complemented by a small fleet of inshore angling vessels. A total of 18 vessels were counted at the docks, with their numbers equally divided between steel and wooden hull vessels.

⁴⁸ http://www.state.ma.us/cc/provincetown.html

⁴⁹ http://www.provincetown.com/about/history/

The nearest fishing ground is Stellwagen Bank, though "fished out" when the groundfish stocks fell to low levels, now shows signs of a recovering biomass of groundfish and other species. However, the Provincetown fleet must compete for Stellwagen fish with the North shore fleets of Boston and Gloucester. This competition forced P-town vessels further and further off shore, but because of the declining condition of their vessels, they can no longer risk going far, especially in marginal weather.

In 1996 there were 28 large vessels and 19 small jig boats.⁵⁰ Of these, 15 were longliners, two gillnetters, and two lobster fishing boats. Only 17 of the 28 vessels were in working condition. In 2001, there are only eight of the 28 large vessels operating, plus 12 small longlining/jigging/lobstering boats. The smaller boats are in better financial shape, since they are less costly and are expected to provide direct support for only 1 or 2 fishermen and their families.

Nevertheless, all vessels and fishing families are marginalized in a fishing community that is experiencing the worst possible combination of marketing, fish stock, and production capital losses. The total estimated participation in fishing is approximately 25 in groundfishing, 20 lobstering and another 10 in diverse small-scale fisheries. The estimate is a total of 55 fishermen, with 26 households directly dependent on fishing, and the remainder indirectly (doing other jobs such as trucking and carpentry).

Support Services

Local political leaders have not taken any action to support and integrate fishing into the changing economy. A significant decline in fishing infrastructure has occurred over the last two decades. Infrastructure which did exist but is now absent includes an icehouse, bait house, fish auction, boat builders, and NMFS extension office. Surviving facilities include two marine railways, two diesel fuel stations, three fish retail markets, a harbormaster, the Coast Guard, and a fishing/sailing monument in the town proper.

The marine railways target the recreational fishing sector, and the diesel facilities are also used by recreational vehicles, while the fish retail markets also rely on outside product, particularly during the summer tourist season. The town pier has two large docks that extend for approximately 300 yards. The construction is wood and cement and is sturdy enough for 18-wheeler truck traffic. At the end of the pier are two fish buyers: Oceanic Seafood and Whaling City Seafoods. The docks are in good condition, and the Chamber of Commerce has been actively promoting the quality of the harbor for berthing of large offshore (foreign) vessels, while providing little support to maintain the commercial fishing sector. Restaurants and local shops dominate the end of the pier, but there is little evidence of businesses dependent on the fishing industry.

Marketing

Most fish is sold locally, or taken by truck to the fish auctions or other markets. As with other ports, the imprecise knowledge on the marketing of fish products indicates a need for a region-wide study on marketing flows (human, biophysical, economic capital flows).

Species, Seasonality

While the summer is a boon time for fish produce, fishermen work through the year to make ends meet. However, the dilapidated condition of the fleet and limited DAS forces some boats to be tied up six months out of the year. January through March is the period for scallop fishing, draggers fish April to June, and scalloping resumes from July through September.

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⁵⁰ Dyer and Griffith 1996.

The local catch of fish and shellfish species is quite diverse and includes cod, fluke, winter flounder, whiting, red hake, herring (for bait), yellowtail, haddock, pollock, squid, lobster, swordfish, tuna, scup, monkfish, scallop, sea clams, and conch.

Form of ownership (e.g., owner/operator; corporation) Vessels are usually owner-operated.

Recreational fishing and employment

Whale watching and fishing charters are available. Some of the companies include: Bay Lady II Excursion Cape Cod Whale Watch Dolphin Fleet Whale Watch Flyer's Boat Shop Inc—Charter & Rental Hindu Schooner—Charter & Rental Off The Coast Kayak

Portuguese Princess Whale Watch

Shady Lady Co—Fishing Charters

Cultural role of fishing

Cultural events

The Portuguese fleet and the recreational fleet join together to celebrate the Portuguese Festival and parade for the Blessing of the Fleet in June.

Ethnicity in the fisheries

The dragger fleet is predominantly Portuguese and Portuguese-American.

Religion

Roman Catholicism predominates in the dragger fleet.

Kinship & family

For many years there were strong family ties among the fishermen. It was a way of life that young men longed to join. In the late 1970's many of the skippers had dropped out of school at 15 years of age to go fishing with their fathers, uncles, and/or brothers.

Fishing-related programs and services

Other NGOs

The Center for Coastal Studies, an independent, non-profit institution dedicated to research, conservation, and public education was founded in 1976. The Center has become internationally known for its progressive and innovative programs and scientific research. As part of the Entanglement Network, the Center and fishermen cooperate to protect and rescue marine mammals when they have become entangled in fishing gear.

Perceptions of the Fishing Community⁵¹

Importance of fishing to the community

Provincetown epitomizes what can go wrong in a port highly reliant on one fishery albeit a multispecies fishery. There has been a steady decline and no diversification in the local commercial fishery since the 1996 groundfish study, and the lost human capital is not being replaced as fishermen retrain out of the industry or move to different ports such as New Bedford,

⁵¹ Based on key informant interviews

Gloucester and Chatham. Overall importance of the fishery to the community today is noted as "slightly important." Nevertheless, there are innovative individuals who remain strongly committed to the industry and who seek ways to make their efforts profitable and sustainable.

Boundaries

Community contacts are tied to the local town linkages, such as Chatham and Truro. People have the most contact with Truro, while others are linked to off Cape areas such as Boston and New Bedford. Specific community contacts were as follows:

Sell Fish	Provincetown
Offload Fish	Provincetown
Buy Fishing Gear	New Bedford/Chatham
Buy Ice	Cape Cod Ice (Yarmouth, Hyannis, Sandwich)
Buy Fuel/ Oil	Provincetown
Haul out Boat Repairs	Provincetown/New Bedford
Bookkeeping	Provincetown
Banking	Provincetown
Shopping	Provincetown
Go to Church	Provincetown
Got to School	Provincetown
Go for Health Care	Hyannis-Outer Cape Health/
	Medical Center
Go for Childcare	Provincetown
Visit Relatives	Provincetown/out of state
Visit Friends	Provincetown
Go for Vacation	Florida, White Mountains, anywhere
Go for Recreation	Bars
Socialize	Provincetown, bars, dockside, home

Communication Issues

Communication with local fishery managers was rated as "poor," with state managers as "good," and with regional federal managers as "poor."

"Managers just don't listen to us. We can go to meetings and write letters, and we never get back a response."

Assessments

Key respondents "strongly disagree" with the assessment of stocks, and are particularly concerned over having to throw back fish when quotas are exceeded.

Economic Change

The local fishery is certainly in decline, maybe an irreversible decline for the present, made worse by a lack of overt local community support and no apparent infusion of outside economic capital into fishing. Ten years ago, the economic condition of the fishery was rated as "good." However, even five years ago it was noted to be "poor" due to lost DAS and the increase in mesh size to 6 inches. Today, with DAS down to 88 and stiff quotas on catch, the fishery also receives a ranking of "poor." Today, life is in no way "better" than it was five years ago, and is made "worse" by higher operating expenses, fewer fish, and more regulations. One advantage is that quality fish will receive a better price than five years ago, in part because of the influence of fish auctions in New Bedford, Gloucester and Portland.

The situation is not seen to be improving, and five year from now, key respondents still predict a condition of "poor" for the local fishery.

Effects of recent management

The most onerous local regulations are the closures in nearby water, including Stellwagen, and the limited DAS.

Other concerns

Another issue which fishermen are concerned may impede the viability of fishing is a sewage outfall pipe from Boston's new sewage treatment plant. The outfall pipe carries fresh water and dumps it onto Stellwagen Bank. One fisherman of 40 years experience who was very encouraged by the recent comeback of scallops on the Bank, as well as the recuperation of the local lobster population which serves as a secondary catch on draggers said, "It will be the end of us."

An environmental engineer who worked on aspects of the outfall pipe remarked, "the ecosystem will certainly be changed since they will be dumping millions of gallons of freshwater onto the Stellwagen Bank." It is too early to tell what impact the outfall will have on the fishing industry, and this situation should be closely monitored by the responsible agencies.

Characteristics of local fishermen

For this population, there is still a sense of optimism, with key respondents indicating that most fishermen are "satisfied with their work. However, by some the future looks bleak:

"A lot of the guys fishing here now are dying to get out (of fishing) because there are too many laws, the price is poor, there are too few fish, and there are better places to work."

Community Profiles
Dukes County
Cape Cod & the Islands Sub-region

5.4.2. Duke's County (Martha's Vineyard)

Background⁵²

"Martha's Vineyard, the largest island in New England, was formed by glacial action 10,000 years ago and lies 7 miles off the coast of Cape Cod. The Island is roughly shaped like a triangle with its base the straight south shore. It is 9 miles wide and 23 miles long at its furthest points and has a total land area of about 100 square miles. The Vineyard has 124.6 miles of tidal shoreline." ⁵³

"The first humans probably came here before the Vineyard was an island. It is thought that they arrived after the ice was gone, but before the melting glaciers in the north raised the sea level enough to separate Martha's Vineyard and Nantucket from the mainland. Indian camps that carbon date to about 2270 BC have been uncovered on the Island.

Legend surrounds the much later arrival of the first white men. Some believe Norsemen were here about 1000 AD. In 1524 Verrazzano sailed past and named the Island Louisa. The Indians called it Noepe which means 'island in the streams." Other explorers gave different names, but Bartholomew Gosnold, who named it for the wild grapes and for one of his little daughters, gave the one that stuck in 1602.

Within 40 years of Gosnold's visit, all of New England was being claimed and divided up by Europeans. Thomas Mayhew, a Bay Colony businessman, bought Martha's Vineyard, Nantucket, and the Elizabeth Islands for forty pounds. He made his only son and namesake copatentee. In 1642 the first white settlement on the Vineyard was established at Great Harbour, now Edgartown, under the leadership of Thomas Mayhew, Jr.

The ordained pastor of his flock, this young man by example and precept instituted a policy of respect and fair dealing with the natives that was unequaled anywhere. One of the first Mayhew rulings was that no land be taken from the native Island people, the Wampanoag Indians, without consent and fair payment. From this time on the colonial settlers and the Indians lived without the terror and bloodshed that has marked American history elsewhere. Within a few years a congregation of "Praying Indians" was established at what is still known as Christiantown.

This colonial period was marked by plenty as well as peace. The sea provided fish for both export and Island use, and the Indians taught the settlers to capture whales and tow them ashore to boil out the oil. Farms were productive as well; in 1720 butter and cheese were being exported by the shipload." ⁵⁴

"One of the earliest mentions of African home ownership on-Island was in the 1763 will of a Wampanoag man named Elisha Amos. The will, 1/272 Dukes County Probate, provides that his "beloved wife Rebecca" receive livestock and his house for as long as she lived. Rebecca Amos was an enslaved woman originally from Guinea, West Africa." ⁵⁵

"The American Revolution, however, brought hardships to the Vineyard. Despite the Island's vulnerable position, the people rallied to the Patriot cause and formed companies to defend their homeland. With their long heritage of following the sea, Vineyarders served effectively in various

⁵² http://www.mvy.com/mvhistory.html

http://www.mvy.com/minute_guide.html

http://www.mvy.com/mvhistory.html

⁵⁵ http://www.mvy.com/diaspora.html

maritime operations. In fact, it is probable that the first naval engagement of the war occurred in April, 1775, when Nathan Smith of Tisbury mounted three small cannons on a whaleboat and sailed with a small crew across Vineyard Sound, attacking and capturing the armed British schooner *Volante*.

Vineyarders, of course, knew that they could do little to resist a British invasion of the Island, and their worst fears were confirmed on September 10, 1778, when a British fleet of 40 ships sailed into Vineyard Haven harbor. Within a few days the British raiders had burned many Island vessels and had removed more than 10,000 sheep and 300 head of cattle from the Vineyard. The raid was an economic blow that affected Island life for more than a generation.

Before the Revolution, Vineyarders had been building large vessels and were sailing the North Atlantic from the Grand Banks to the Western Islands in search of whales and the valuable oil they yielded. After the start of the war, all this came to a stop, and the whaling industry did not make a real recovery until the early 1820s, when many of the mariners built their beautiful homes in Edgartown."⁵⁶

"During the 1800s seafaring was one of the few ways for African American men to eke out a living during a socially and politically inhospitable era. Entry into most other industries was severely restricted. Due to the political powerlessness experienced in the oppressive political and social climate of the early 1800s, James Williamson, "a Negro man" who owned seventeen acres of "upland" in Martha's Vineyard's Christiantown, shipped aboard a whaler in 1828, as a means to raise much-needed cash.

The first whaling captain of African descent on Martha's Vineyard was born in Edgartown in July 1830. Captain William A. Martin was a highly regarded and respected Edgartown whaler. He mastered many successful whaling voyages and his career spanned in excess of forty years, with journeys on all of the earth's oceans."⁵⁷

"The Civil War brought the end to the Golden Age of Whaling. The Confederate navy captured ships on the high seas. Others were bottled up in the harbors. Either way, it meant financial ruin for the ship owners and the Island.

A new industry was 'God sent' in a very literal way. In 1835 the Edgartown Methodists had held a camp meeting in an oak grove high on the bluffs at the northern end of the town. This was just one of the hundreds of revivals that were being held in outdoor settings at the time. The worshippers and their preachers lived in nine improvised tents and the speakers' platform was made of driftwood. The camp meeting became a yearly affair and one of rapidly growing popularity.

Wesleyan Grove, as the Oak Bluffs Camp Ground was called, rode the crest of the religious and cultural uplift movement. By the mid-1850s the Sabbath meetings here were drawing congregations of 12,000 people. They came for the sunshine and sermonizing in hundreds of individual church groups. Each group had its own communal tent where the contingent was bedded down in straw purchased from local farmers. Services were held in a large central tent.

The communal tents gave way to "family tents," which reluctant church authorities granted only to "suitable" families. But the vacationers urge could not be checked. Family tents turned into wooden cottages designed to look like tents. And the cottages multiplied, trying to out-do each other in brightly painted fantasies of gingerbread. A new all-steel Tabernacle structure replaced the big central tent in 1879. It stands today as a fine memento of the age of ironwork architecture.

⁵⁶ http://www.mvy.com/mvhistory.html

http://www.mvy.com/diaspora.html

Within 40 years of the first camp meeting here, there were crowds of 30,000 attending Illumination Night, which marked the end of the summer season with stunning displays of Japanese lanterns and fireworks.

Wesleyan Grove struggled to hold its own against such secular attractions as ocean bathing, berry picking, walking in the woods, fishing, and croquet playing. There were efforts to ban peddlers, especially book peddlers. A high picket fence was built around the Camp Ground proper. By the 1870s, Wesleyan Grove had expanded into "Cottage City" and Cottage City had become the town of Oak Bluffs, with 1,000 cottages plus boarding houses, stores, a lumberyard, and a bakery.

Steam vessels from New York, Providence, Boston, and Portland continued to bring more enthusiastic devotees of the Oak Bluffs way of life. Horse cars had to be employed to take vacationers from the dock to the Tabernacle. The horse cars were later replaced by a steam railroad that ran all the way to Katama. Among the first passengers on the railroad were President Grant, accompanied by Vice President Wilson, Secretary of State Robeson, Postmaster General Jewel, and Governor Talbot of Massachusetts.

The railroad gave way to an electric trolley line (from Vineyard Haven to the Oak Bluffs wharves), and the trolley gave way to the automobile. The steamers and their throngs of eager rusticators grew fewer. Oak Bluffs retains a charm today that serenely reminds us of earlier times."58

There are six towns on Martha's Vineyard; three up-Island towns: Aquinnah, Chilmark and West Tisbury and three down-Island towns: Vineyard Haven, Oak Bluffs and Edgartown (which includes Chappaquiddick). The terms up-Island and down-Island are nautical references to degrees of longitude designated on maps and charts.

Edgartown was the Island's first colonial settlement and has been the county seat since 1642. The town is renowned for its stately, white Greek Revival and Federal houses built by whaling captains. The distinctive, museum-piece architecture preserves the ambience of the 19th century seaport to the present day.

The town of Tisbury, also known as Vineyard Haven, was one of New England's busiest ports in the 1800s. At that time, the area around the harbor was known as Holmes Hole and was a convenient anchorage for ships traveling between the East Coast of the United States and Europe. In those days, most of the coastwise shipping traveled through Vineyard Sound. In 1845 13,814 vessels were counted.

Oak Bluffs, formerly known as Cottage City from the many gingerbread cottages which are still found there, is also home to the Flying Horses Carousel, the oldest operating merry-go-round in the United States. The horses were hand-carved in New York City in 1876. This historic landmark is maintained by the Martha's Vineyard Preservation Trust that manages this and several other historic sites on the Island.

West Tisbury, incorporated in 1892, was the 'industrial' heart of the Island, as it was home to the Island's grist mill, a clay works, a salt works, extensive trap fishing operations and a manufacturing center for satinet, a heavy, Island-made, woolen fabric used to make whalemen's jackets.

Aquinnah (formerly known as Gay Head) is home to the Wampanoag Tribe, the only federally recognized Native American tribe in Massachusetts. This recognition has resulted in a government-to-government relationship between the United States and the Wampanoag Tribal

⁵⁸ http://www.mvy.com/obinfo.html

Council. On May 14, 1997 voters in the town of Gay Head decided to change the name of the town to Aguinnah. This change was signed into law on May 7, 1998.

Chilmark is known for its rolling hills and unmatched coastline. Before the days when the Coastguard looked out for shipwrecked vessels, Vineyarders took it upon themselves to form volunteer groups that provided assistance to sailors in times of need. The open dories, one of which was provided by the Massachusetts Humane Society, were launched into stormy seas from Squibnocket Landing, the only beach on the south shore shallow enough for boats to be landed or launched in heavy weather.

Chilmark was also noteworthy for its population of deaf. "For almost three centuries, due to an inbred recessive gene, the population of Martha's Vineyard had an unusual proportion of profoundly deaf people. Modern mobility and population diversity have virtually erased the Vineyard's deaf community, but in 1854, when the incidence of deafness on the island peaked, the national average was one deaf person in 5,728; on the Vineyard, it was one in 155. In Chilmark it was one in 25, and in Squibnocket, a section of Chilmark, one in four babies born in the mid-19th-century was deaf.

Families in Chilmark and West Tisbury earned their living farming or fishing or both, often supplemented with another trade such as wood-cutting or trapping. Families stayed in the same village, often even the same house, for two or even three centuries. Sons followed fathers into their fields and fishing boats.

Yet the isolation was also a blessing. For 250 years these rural Vineyarders never heard the mainland idea that an inability to hear or speak could be a handicap. "Practical in all things," a reporter in 1895 went on, "they began to build on a signing system their ancestors had used in England. In the stores, on the farms, and up the creek, Martha's Vineyard sign language was the only language that everybody knew."

Children learned to sign "from the crib," at the same time they learned to speak. At town meetings, hearing signers would stand in front and translate the goings-on for the deaf. The same thing went on in church. If a deaf person . . . had something to say to the congregation, he or she would stand up and sign; if someone didn't know sign fluently, chances were that the person next to him did and could translate."⁵⁹

Martha's Vineyard is part of the Dukes County, which also includes the Elizabeth Islands and Noman's Land. There are seven towns in Dukes County, the six Vineyard towns and the town of Gosnold on Cuttyhunk Island, the most southerly of the Elizabeth Islands. The population of Martha's Vineyard is approximately 14,248 year round and 105,625 during the summer."

⁵⁹ http://www.mvy.com/spokehand.html

⁶⁰ http://www.mvy.com/minute_guide.html

Community Profiles
Dukes County
Cape Cod & the Islands Sub-region

5.4.2.1. Vineyard Haven (Tisbury)

Background

"When ships were powered by wind and canvas, Vineyard Haven was one of New England's busiest ports. Most of the coastwise shipping traveled through Vineyard Sound (13,814 vessels were counted in 1845). Holmes Hole, as this harbor community was called, provided a convenient anchorage. Here a ship and its crew could lay over comfortably to wait out bad weather, pick up provisions, or take on a pilot who could negotiate the rips and shoals that were the special perils of this sea route."

Today, Vineyard Haven is home to a vibrant local fishery that thrives on an influx of summer tourists. As the primary port of Martha's Vineyard, Vineyard Haven is reached by ferry from Woods Hole, and contains many of the elements of gentrification typical of the most famous tourist sites in New England. Six dockside hotels and inns, interspersed with numerous trendy retail shops, restaurants and marinas, are complemented by historic homes on an island dotted with fishing coves and shellfish flats with a small but sustained commercial fishing presence.

Unlike other gentrified sites, such as Newport, the fishing infrastructure here is not antithetical to gentrification but blended with it. Fishermen are viewed as welcome contributors to the local cultural capital. Importantly, fishermen provide desired seafood products year-round to the four seafood restaurants and two seafood processors/retailers in town. In general, residents of Martha's Vineyard tend to be tolerant, accepting fellow inhabitants and their occupations as part of the island community:

"Folks here are all pretty much respectful of each other – there are a lot of rich folks that have money and of course the summer tourist crowd, but people support each other here and help out when necessary- we're all part of one community..."

Despite the description of the fishing industry as "very important" to Vineyard Haven and Martha's Vineyard, it is notable that only 2 percent of the dock space is utilized by the small commercial fleet. When demand for finfish is down in the fall/winter season, some fishermen compensate by clamming, or working in carpentry and house maintenance for the many homes that are summer "cottages." There is little new development on the Island, what occurs more frequently is renovation of already existing houses rather than new construction.

Governance

Town meeting and Board of Selectmen

Demography

Population

The population according to the 1990 Census was 1778, 795 male and 983 female.

Age Structure

In 1989 there were 464 children (under 21), 917 adults (21 to 64 years) and 397 seniors (65 and older).

Education

Of persons 25 or older, 171 had no high school diploma, 357 had graduated from high school, 399 had some college and 315 had a Bachelor's or higher degree.

⁶¹ http://www.mvy.com/vhinfo.html

Housing

There were 1338 housing units, 850 of which were occupied and 488 were vacant. Of the occupied units, 542 were owner-occupied and 308 were rented. The median year housing structures were built was 1943. The median value of owner-occupied housing units was \$167,500.

Racial and Ethnic Composition

Eighty-eight percent of the population was white (1574 individuals) with 63 Blacks, 51 American Indian/Eskimo/Aleut, and 38 Asian. English, Irish and Portuguese ancestries were the most frequently cited.

Economic Context

Income

Median household income in 1989 was \$25,965; per capita income was \$16,679.

Employment INDUSTRY

INDUSTRY	
Universe: Employed persons 16 years and over	
Agriculture, forestry, and fisheries (000-039)	36
Mining (040-059)	0
Construction (060-099)	100
Manufacturing, nondurable goods (100-229)	16
Manufacturing, durable goods (230-399)	28
Transportation (400-439)	52
Communications and other public utilities (440-499)	16
Wholesale trade (500-579)	20
Retail trade (580-699)	230
Finance, insurance, and real estate (700-720)	42
Business and repair services (721-760)	24
Personal services (761-799)	59
Entertainment and recreation services (800-811)	7
Professional and related services (812-899):	
Health services (812-840)	106
Educational services (842-860)	17
Other professional and related services (841, 861-899)	89
Public administration (900-939)	35
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OCCUPATION	
Universe: Employed person's 16 years and over	
Managerial and professional specialty occupations (000-202):	
Executive, administrative, and managerial occupations (000-042)	80
Professional specialty occupations (043-202)	98
Technical, sales, and administrative support occupations (203-402):	
Technicians and related support occupations (203-242)	11
Sales occupations (243-302)	95
Administrative support occupations, including clerical (303-402)	132
Service occupations (403-472):	
Private household occupations (403-412)	5
Protective service occupations (413-432)	7
Service occupations, except protective and household (433-472)	156
Farming, forestry, and fishing occupations (473-502)	43
Precision production, craft, and repair occupations (503-702)	151
Operators, fabricators, and laborers (703-902):	

Machine operators, assemblers, and inspectors (703-802)	25
Transportation and material moving occupations (803-863)	44
Handlers, equipment cleaners, helpers, and laborers (864-902)	30
CLASS OF WORKER	
Universe: Employed persons 16 years and over	
Private for profit wage and salary workers	520
Private not-for-profit wage and salary workers	81
Local government workers	24
State government workers	21
Federal government workers	13
Self-employed workers	218
Unpaid family workers	0

Transportation and Access

Ferries to the Island sail from Woods Hole, Falmouth, Hyannis, New Bedford, New London, Montauk (Long Island) and Nantucket. The ferries from Woods Hole carry both passenger and cars, and sail every day, year-round. Reservations for cars are recommended. The ferries from Falmouth, Hyannis, and New Bedford carry passengers only, and operate during the spring, summer, and fall. Passenger ferries from Nantucket run during the summer and the ferry from Montauk runs on selected weekends in July.

There is year-round scheduled airplane service to the Martha's Vineyard Airport from Boston, Hyannis, Nantucket, New Bedford, and Providence. Charter services also are available, and the airport has facilities for private planes. A grass field (general aviation) airport is also located at Katama.

Bus service to Woods Hole is provided from Boston and from New York (stopping in Providence) daily, year-round, by Bonanza Bus Line.

Marina and mooring services are available in the harbors at Edgartown, Menemsha, Oak Bluffs, and Vineyard Haven.

Hospitals, schools, libraries

Vineyard Haven Public Library

Fisheries Profile

Commercial fishing and fisheries-related employment

Harvesting structure

Approximately five trawlers/scallopers and six lobster boats fish out of Vineyard Haven, with about the same number fishing out of Edgartown on the other side of the island. Locals also fish seasonally for clams and other shellfish in inshore shoals and may also go after lobster ('ten potters'). This local harvest follows seasonal pulses, and can also involve some small-scale finfishing with gill nets and other gear by locals to either provide for friends and family, or take advantage of good prices available in local fish markets.

Processing structure

Two processors process and fillet fish for local sale. The prices charged for the fillets are usually several dollars higher than elsewhere. For example, codfish at \$2.10 a pound in a mainland wholesale market/fish auction could be sold here for \$3 to \$4/pound. Price is clearly related to the forces of supply and demand. Because residents are a boat ride way from other sources of seafood products, they rely on the local fish markets to provide them with fresh produce.

Moreover, the economic capital available to many of the wealthier residents makes quality more important than price.

Support Services

Despite the high degree of gentrification and upper-class residents associated with the community, there is an adequate supporting infrastructure to support the local fishing activity. In addition to the fish processors, there is a marine railway, ice house, and marine supply house. The two docking facilities are shared with recreational fishermen, but local commercial fishermen are part of the "island color" and key respondents indicated there was no competition for space for most of the year. This is partly because the number of residents drops by several thousand as fall approaches and mooring sites and summer homes are deserted by the more affluent community members.

Fishermen's supplies are available, but usually at a premium, since they are primarily geared to recreational fishing and because they must be imported via the ferry. Marine supplies are more affordable in New Bedford and Chatham.

There are two sources of dockside diesel fuel, and three trucking operations, and a bait house and one national/ international seafood broker, but no air fill stations, boat yards, boat dealers, fish auctions, NMFS extension office, or fishing monuments. The bait house also provides significant seasonal support to the fishing excursion boats, of which there are six in town. The fishermen's association, or Seaman's Bethel, also has a social service as well as fishery function.

Because of the well-developed recreational fishery, there is a boat insurance agency, a marine haul out facility that services local boats of small to moderate size, and two boat welders in town. There are also three recreational boat dealers to go along with two marinas. In line with the tourist character of the port, there are boat tour operations.

Employment (year-around and seasonal)

A key respondent estimated that besides 30 households island-wide directly dependent on fishing, there are at least another 50 households in the area that are indirectly dependent, ranging from owners of retail businesses and seafood restaurants to those who buy seafood for the dinner table. The actual number of those indirectly dependent through the restaurant trade goes up in the summer to an estimated 200, most of these holding jobs in the restaurant and recreational fishing sectors.

Species, Seasonality

The local catch of fish and shellfish species is quite diverse, and includes cod, fluke, scup, winter flounder, yellowtail, haddock, pollock, squid, lobster, swordfish, tuna, monkfish, scallop, and sea clams. If a particular fish is not available (e.g. monkfish), but there is a demand for it from a high paying customer, calls may be made to a boat at sea or fish may be brought in by truck on the ferry.

While the summer is a boon time for fish produce, a resident population that includes many retired persons maintains the demand throughout the year. Fish produce is brought in from local catches and from boats from New Bedford, Edgartown, and Chatham.

There are no alternative fisheries that people are switching over to, but fishermen may alternately pursue lobstering, finfishing and shellfishing depending upon the season and demand.

Recreational fishing and employment

Fishing Charters & Parties

ABC - Atta Boy Charters (Oak Bluffs), Banjo Charters (Oak Bluffs), Big Eye Charters (Edgartown), Book-a-Boat (Menemsha), Capt. Porky's Bait & Tackle (Edgartown),

Conomo Charters (Aquinnah), Coop's Bait & Tackle (Edgartown), Great Harbour Sport Fishing Charters (Edgartown), Island Fly Fishing Guides (West Tisbury), The Island Lure Charter Fishing (Chilmark), Larry's Tackle Shop, (Edgartown Machaca Charters (Edgartown), Osprey Custom Rods & Tackle (West Tisbury), Party Boat "Skipper" (Oak Bluffs), Sharks Landing Bait, Tackle & Charter Co. (Oak Bluffs), Sortie Charters (Menemsha, Chilmark)

Cultural role of fishing

History and museums

Vineyard Seaman's Society / Martha's Vineyard Seafaring Center, The Bethel Collection (Old Schoolhouse Building, owned by the Martha's Vineyard Preservation Trust). For over 100 years, the Bethel served seafarers who visit the Island as well as those who live here. Many of those seamen and their family members gave the Bethel gifts in appreciation of its work and the services provided. These gifts have been preserved and today constitute the core of The Bethel Maritime Collection. It includes: models of schooners in bottles, whale tooth and walrus tusk carvings, early photographs and drawings of Vineyard Haven, shells from Island beaches, a lifebelt from the Titanic, a beautiful quilt, paintings, plus a wide variety of other "sailor souvenirs." It is operated in cooperation with the Vineyard Maritime Co. which offers Coast Guard licensed training.

Perceptions of the Fishing Community⁶²

Importance of fishing to the community

Key respondents indicated that local fisheries are "very important," a sustainable and important "island tradition." Seafood is important on restaurant menus but is also an important part of the diet of year round locals, many of whom now are retired.

Boundaries

The community with which the people of Martha's Vineyard have the most contact is Woods Hole. Although with the summer influx, people from all over New England arrive by plane, car or ferry. One quality of life issue that arises in the summer is the impact of cars. Restrictions on the numbers of cars that would be allowed on the Island were being contemplated.

Capital contacts can be divided up into those encompassing social capital (e.g., visit friends, go for recreation, go for vacation, visit relatives, socialize, go to church); economic (e.g., sell fish, offload fish, buy fishing gear, haul out for boat repairs, go to the bank, go shopping), and human (e.g., go to school, go for childcare, go for health care, go for retraining).

Sell Fish	Martha's Vineyard, New Bedford, Chatham
Offload Fish	Martha's Vineyard
Buy Fishing Gear	New Bedford
Buy Ice	Martha's Vineyard
Buy Fuel/ Oil	Martha's Vineyard
Haul out Boat Repairs	Martha's Vineyard, New Bedford
Book Keeping	Martha's Vineyard
Banking	Martha's Vineyard
Shopping	Martha's Vineyard, Woods Hole
Go to Church	Martha's Vineyard
Got to School	Martha's Vineyard

⁶² Based on key informant interviews

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Go for Health Care	Woods Hole
Go for Childcare	Martha's Vineyard
Visit Relatives	Martha's Vineyard, out of state,
	elsewhere
Visit Friends	Martha's Vineyard
Go for Vacation	Florida, White Mountains
Go for Recreation	Martha's Vineyard- party boats,
	restaurants, shops
Socialize	Martha's Vineyard-restaurants, home,
	dockside

Communication Issues

Concern was voiced over the declining local lobster harvest, especially since occasional animals were showing up with shell rot disease. Nevertheless, there was also optimism that groundfish catches and local stocks are on the rebound, and that communication with management is overall a success.

On a one to five scale, communication with local fishery managers was rated as "very good," with state managers as "excellent," and with regional federal managers as "very good."

Assessments

Fishermen "strongly disagree" with the assessment of stocks, but the 88 days at sea quota, given the high prices that a good quality catch brings, are still adequate for the local fleet to survive. In general, key respondents believe that nearby fish stocks are better off than management indicates. They maintain that if catch and DAS restrictions were lifted there would be no significant harm to the local resource and fishermen would benefit.

Economic Change

Ten years ago the fishery was noted as being "very good," five years ago as "good," and today is rated as "good," with a mark of "very good" anticipated five years from now. Today, increased prices for quality fishery products, and a price structure that exceeds mainland prices, has meant more money coming in, compensating for the increasingly complex and constantly shifting regulatory climate. Because of the high local demand for seafood, and the limited local competition among fishermen, the present small fleet will probably remain stable far into the future.

Effects of recent management

No specific regulations were noted as having had a significant impact on recent fishing conditions.

Characteristics of local fishermen

Job satisfaction

Even though they have a tenuous hold on dock space, fishermen are perceived by key respondents to be "very satisfied with their work." Good prices and little competition allow the small fleet of vessels to make ends meet.