APPENDIX A

Sovereign Vessels

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Sovereign Vessels

Sovereign vessels, which are owned and operated by the US Federal government, include, but are not limited to, Navy, United States Coast Guard (USCG), and United States Army Corps of Engineers (USACE) vessels. These vessels would be exempt from the measures contained in the Strategy due to operational necessity and the respective agencies' ongoing efforts to reduce ship strikes. Any Federal agency or service that operates vessels 65 feet (ft) (19.8 m) and greater within right whale habitat (and is exempt from the Strategy) would be expected to consult under Section 7 of the Endangered Species Act. As Section 7 consultations are not an operational measure of the Strategy, they are not included in the main text of the draft environmental impact statement (DEIS). However, this appendix gives a brief summary of current mitigation measures and previous Section 7 consultations for the exempted entities. This appendix does not go into detail on the current and future impacts of sovereign vessels on right whales, nor any current or future Section 7 consultation details as this measure is not an operational measure within of the scope of the DEIS.

U.S. Navy Mitigation Measures

The Navy completed Section 7 consultations with the National Marine Fisheries Service (NMFS) in 1997 for vessel operations in the southeastern US. NMFS issued a biological opinion (BO) following this consultation and the Navy has since implemented recommended measures from this BO along the entire US East Coast. These measures include the following:

- Annual message prior to calving season (December 1–March 30).
- Limit east-west transiting through right whale critical habitat and areas of concern where practical.
- Vessel speed limitations within critical habitat and areas of concern. (Captains are advised to "use extreme caution and use slow safe speed," that is the slowest speed consistent with essential mission, training, and operations.
- Operations in critical habitat and areas of concern are limited to daylight and periods of good visibility, to the extent practicable and consistent with mission, training, and operation.
- Posting two lookouts (one trained in marine mammal identification) while operating in critical habitat and other areas of concern.

In addition to the mitigation measures from the Section 7 consultations, the Navy implemented the following regional protective measures:

Northeast (Fleet message in June 2002)

- Ships transiting Great South Channel and Cape Cod Bay critical habitats check into the mandatory ship reporting system (MSRS) for latest sighting data.
- Ships approaching these areas of high concentration "shall use extreme caution and operate at a safe speed."

- Additional speed restrictions are required when a whale is sighted within 5 nm of a reported location, if the sighting is less than one week old.
- The same lookout requirements as the Southeast.

Mid-Atlantic (Fleet message in December 2004)

- Utilizes the mid-Atlantic ports and dates proposed by the National Oceanic and Atmospheric Administration (NOAA) as seasonal management areas (SMAs).
  - South and east of Block Island (Sept–Oct/Mar–Apr)
  - New York/New Jersey (Sept–Oct/Feb–Apr)
  - Delaware Bay (Oct–Dec/Feb–Mar)
  - Chesapeake Bay [Hampton Roads] (Nov–Dec/Feb–Apr)
  - North Carolina (Dec–Apr)
  - South Carolina (Oct–Apr)
- Ships operating within 20 nautical miles (nm) arcs of these ports "shall use extreme caution and operate at a slow safe speed that is consistent with mission and safety."
- Increased vigilance with regard to avoiding vessel/whale interactions along mid-Atlantic coast including ports not specified.
- The same lookout requirements as the Southeast.

The Navy is also involved with the Early Warning System (EWS) and contributes funding to the EWS survey flights. The Navy's communication and reporting network is coordinated through the Fleet Area Control and Surveillance Facility (FACSFAC). They distribute right whale sighting information to the Department of Defense (DoD) and the civilian shipping industry.

Naval Vessels

The major Navy homeports on the US East Coast include, but are not limited to, Charlestown, Massachusetts, with 1 vessel; Portsmouth, New Hampshire, with 2 vessels; a submarine base in Groton, Connecticut, homeport to 15 vessels; Little Creek amphibious base in Virginia, with 15 vessels; Norfolk, Virginia, with 59 vessels; Kings Bay, Georgia, with 8 vessels; and Mayport, Florida, with 19 vessels.[1] In addition, the US Military Sealift Command operates 28 vessels in the Atlantic (Russell, 2001).

Navy Vessel Traffic

Navy vessels account for about 3.0 percent of vessel traffic out to 200 nm (Filadelfo, 2001). A study was conducted from February 2000 to January 2001 comparing levels of Navy and commercial ship traffic. Commercial shipping data was obtained from the Historical Temporal Shipping (HITS) Database and Navy ship traffic on the East Coast was obtained from the CINCLANTFLT operations center through reviewing daily snapshots of the locations of all LANTFLEET ships. Both fleets were sampled every five

[1] 'List of Homeports' (As of August 19, 2005)
http://www.chinfo.navy.mil/navpalib/ships/lists/homeport.html

days. Commercial traffic density along the East Coast averaged about 202 ships within 50 nm of the coast, and the average steadily increased to 266 within 100 nm, and 358 within 200 nm. The total number of Navy ships on the east coast within 200 nm was 12 at any given time (Filadelfo, 2001).

In terms of spatial distribution, commercial ship traffic is relatively uniform along the coast, with certain concentrations around major port areas. Navy ships however have very non-uniform distribution, depending on exercises (Filadelfo, 2001).

Noise

Quieter Navy warships radiate significantly less noise than fishing vessels (~160 dB), and the loudest Navy ships are close to the range for supertankers (~173 dB) (Filadelfo, 2001).[2] Using the results from the Navy traffic density analysis, the 12 ships present on average from Maine to Florida out to 200 nm, would radiate approximately 1–2 watts of acoustic power to the ocean.[3] In contrast, the estimated 358 commercial ships present in the same area would, on average, radiate about 40 times that of the Navy ships. Therefore, the Navy contributes a small percentage of noise to the ocean at around 2.5 percent. While large concentrations of Navy ships may occasionally increase traffic density and radiate higher levels of acoustic energy during large-scale fleet exercises, in general, the Navy is not a major contributor to traffic or noise (Filadelfo, 2001).

U.S. Coast Guard Mitigation Measures

These mitigation measures are contained in the BOs from the Section 7 consultation process with NMFS (see Section 1.8.3 for an overview of the three BOs). Mitigation measures contained in the 1995 BO include the following:

- Establishing a marine mammal and endangered species program in the First District (Maine to Tom's River, New Jersey), Fifth District (Tom's River through North Carolina), and Seventh District (South Carolina through Florida).
- Developing a Memorandum of Agreement and Memorandum of Understanding with NMFS.
- Developing and providing protected species training for USCG personnel.
- Continuing notices/broadcasts to mariners in right whale critical habitat areas.
- Supporting NMFS emergency efforts in responding to strandings.
- Implementing the protocol/guidelines recommended by the Right Whale Recovery Plan Implementation Teams.
- Participating in the Right Whale EWS; current guidelines in the protocol for the EWS are as follows:

[2] These noise estimates exclude submarines and any noise from sonar.
[3] These comparisons refer only to broadband noise in the 500 Hz center frequency.

1. In Florida and Georgia, a designated lookout must be posted on USCG vessels at all time between December 1 and March 31 when these vessels are operating in the vicinity of channels, near shore areas where humpback and right whales occur, and in other areas of the southeastern US that have been designated as critical habitat for right whales. USCG vessel operators must take the following precautions to avoid whales: All USCG vessels within a 15 nm or greater radius of a right whale sighting must operate at the slowest safe speed possible (except when the nature of the mission, such as emergency response, precludes slow speeds), exercise caution, and keep watch for right and humpback whales. During evening/nighttime hours or when there is limited visibility due to fog or sea states of greater than Beaufort 3, vessels must operate at the slowest safe speed possible (except as previously noted) when transiting between areas that whales have been spotted within 15 nm within the previous 24 hours.

2. Between March 1 and May 30, when right whales are concentrated in the vicinity of right whale critical habitat in the Great South Channel and Cape Cod Bay, a dedicated lookout must be posted on USCG vessels to watch for whales during all vessel operations. This includes reducing the speed of all vessels transiting these areas during this period in response to all non-emergency operations.

Additional conservation recommendations requested by NMFS are included in this BO. These recommendations and the USCG's implementation status are detailed in the following section.

USCG implementation of Conservation Recommendations identified in the 1996 BO includes the following:

1. Between January 1 and March 31, all USCG vessels operating in waters between Cape Henry and Cape Hatteras (Fifth District) have lookouts posted that are tasked with watching for whales at all times and use notice to mariners, broadcasts, and NAVTEX as appropriate. This tasking is specified in the Marine Mammal and Endangered Species Program which was provided in the original BO and is implemented in the Fifth District.

2. In addition to posting dedicated observers on vessels in the southeastern critical habitat area over the calving season, NMFS recommended that dedicated observers also be posted on all USCG vessels operating in the general area between Savannah, Georgia, and Palm Beach, Florida, to watch for whales during critical months. This recommendation was fully implemented by the Seventh District.

3. The terms "maximum safe speed" for emergency operations and "proportional to the mission" for standard operations currently convey that the mission goals supersede the safety of protected species. NMFS recommended that the USCG's standard operating procedures should be revised to incorporate protection for endangered and threatened species where they occur in conjunction with USCG

operations. The current guidance contained in the standard operating procedures for all three Districts did provide specific information regarding speed in critical habitat areas. The guidance document in the First District was revised in April 1996 and will be followed by the Fifth and Seventh Districts. The USCG standard operating procedures now implement the measures in Conservation Recommendation three by placing the safety of protected species on par with mission requirements during emergency operations and make the safety of protected species a primary factor during non-emergency operations.

4. NMFS recommended that the USCG should ensure that its lookouts are trained in techniques required to spot marine mammals and sea turtles. The First District has formally developed a course curriculum on marine mammal protection that is used at the Northeast Regional Fisheries Training Center. The Fifth district units invited NMFS personnel and local stranding network organizations to participate in local training sessions.

5. NMFS recommended that the USCG transmit broadcasts reporting right whale sightings by the EWS as quickly as possible over NAVTEX or other means in Georgia and Florida from mid-December through March. The message should advise mariners within 15 nm of the sighting to operate at the slowest safe speed, exercise caution, and keep watch for right whales. In response, the Fifth District began aerial surveys over critical habitats in Cape Cod Bay and the Great South Channel in 1996 and includes a notification to mariners. The Seventh District conducted surveys and broadcasts during the calving season in the Southeast during 1996.

6. NMFS recommended that the USCG should develop training for personnel that emphasizes not only stranding and enforcement issues, but information on the distribution and behavior of these species that will help the USCG to anticipate where and when conflicts may occur. This recommendation was incorporated into the implementation of Conservation Recommendation four.

7. NMFS recommended that when and where possible, routine transits should avoid those high-use and high-density whale habitat areas during the seasons when whales are concentrated in those areas. All USCG units are instructed to avoid high-use and high-density areas “whenever practical.”

8. Per NMFS recommendation, the First and Seventh District are fully participating in the Recovery Plan Implementation Teams. However, the teams are not currently involved in issues directed at the mid-Atlantic area, and the Fifth District has not participated in the other implementation team activities.

9. NMFS recommended the USCG continue fulfilling its mission, with modifications as previously discussed, which fully support recovery efforts of protected species. The USCG addressed this recommendation under the specific numbers previously listed and will continue to support recovery through additional means.

10. NMFS recommended that during standard operations, and following a whale sighting, USCG vessels should maintain a minimum distance from the whale (minimum of 100 yards). This recommendation was implemented through the updated guidance document in all three districts and specifies “100 yards if practical.”

The remaining conservation measures, 11 through 14 had not been fully implemented at the time of the BO as they addressed activities that affected endangered species and areas other than the right whale and its habitat, which was a priority.

The Reasonable and Prudent Alternative issued in this BO expand on current Conservation Recommendations and add several new measures. A summary of the alternatives includes:

1. Implement all conservation measures that concern endangered whales from the September 1995 BO.
2. Post dedicated lookouts during all transits within 20 nm of shore that are in areas with high whale concentrations.
3. All dedicated lookouts must successfully complete a marine mammal lookout training program.
4. All three of the East Coast Districts must continue current activities in conjunction with the respective Recovery Plan Implementation Teams to provide support for aerial surveys.
5. Issue speed guidance for vessels to clearly require use of the “slow safe speed” standard.
6. Participate in investigating, testing, and implementing technological solutions to prevent ship strikes.
7. Adopt a vessel approach guideline of 500 yards for right whales and 100 yards for all other whales.
8. Provide information on whales to commercial and recreational vessel operators that is geared towards avoiding collisions with endangered whales.
9. Provide timely information on current whale locations to commercial vessels coming into major ports within the critical habitat in the Northeast and Southeast US.
10. Complete Section 7 consultation on USCG permitting before the final rule is issued.
11. Coordinate with NMFS and other agencies on a proposal to the International Maritime Organization (IMO) that requests two MSR systems along the East Coast of the US.

The 1998 BO includes the following conservation recommendations:

1. Initiate Gulf of Mexico and marine event consultations within six months of receiving this BO.
2. USCG will assist in identification of floating whale carcasses and assistance in both marking and retrieving of that carcass if it is a right whale.
3. USCG should periodically review compliance with the speed guidance it has issued.
4. A "Job Aid" has been prepared to provide USCG stations with information that will assist personnel in getting the best information for efforts required under the Law Enforcement Guidance that implement the Atlantic Protected Living Marine Resources Initiative.
5. Evaluate USCG authorities to identify more aggressive opportunities to reduce the threat of ship strikes of endangered large whales, both by USCG and commercial ship traffic.
6. If approved by the IMO, USCG would support the implementation of the MSR systems.
7. USCG should work with NMFS and other agencies to develop information on critical habitat, marine sanctuaries, and endangered species migration routes, feeding and breeding areas for use by mariners and boaters.
8. USCG should assess mission requirement like full power trials so they can be scheduled during times of year and in areas where and when they present the least hazard to endangered and threatened species.
9. USCG First District should continue to support the EWS and other sighting programs.
10. USCG should continually update and revise its training courses for USCG lookouts.

USCG Vessels

The USCG Atlantic fleet patrols waters along the East Coast in response to marine pollution events, port safety and security issues, law enforcement efforts, search and rescue missions, vessel traffic control, and maintenance of aids to navigation. Most of these operations occur in waters less than 20 miles from the shore.

U.S. Army Corps of Engineers–Mitigation Measures

Biological Opinions

The USACE has engaged in a number of ESA Section 7 consultations on local actions involving harbor dredging and related activities in the Southeast US. The consultations did not find that these actions are likely to adversely affect right whales, although mitigation measures were included in the BOs to lessen the likelihood of an interaction

between right whales and vessels. The USACE began consulting with NMFS on the effects of hopper dredging in the Canaveral Ship Channel in Florida in 1978. Consultations for dredging in the southeastern US were reinitiated in 1980, 1986, 1991, 1995, and most recently in 1997. While these BOs focus on threatened and endangered sea turtles, they also address potential impacts on whales; and right whale mitigation measures were developed from the reasonable and prudent measures listed in these BOs.

The 1991 BO was the first cumulative area consultation between NMFS and the USACE regarding hopper dredging in channels along the southeastern Atlantic seaboard from North Carolina through Canaveral, Florida. These activities have the potential to result in interactions between hopper dredges and right whales; therefore, several reasonable and prudent measures were developed in this BO to reduce the impacts on whales:

1. Endangered species observers (with at sea large whale identification experience) are required on dredges from December 1 to March 31st in Georgia and northern Florida to maintain surveys for the occurrence of right whales during transit between channels and disposal areas. Whale sightings must be documented in an annual report to NMFS.

2. Aerial surveys that initiated in Kings Bay, Georgia, are required to continue in accordance with the Right Whale EWS surveys, which are funded in part by the USACE. Dredging within right whale critical habitat from December to March must follow the protocol established within the EWS.

3. Whales that are observed by aerial and shipboard surveys are individually identified and counted, along with cow/calf pairs, and the movements and distribution of the whales is noted.

4. During evening hours or when there is limited visibility due to fog or sea states of greater than Beaufort 3, the dredge must slow down to 5 knots or less when transiting between areas if whales have been spotted within 15 nm of the vessel's path within the previous 24 hours. During daylight hours, the dredge operator must take necessary precautions to avoid whales.

USACE operators and contractors operating in the area from North Carolina to Pawleys Island, South Carolina; Pawleys Island to Tybee Island, Georgia; and Tybee Island to Titusville, Florida, are required to adhere to these measures. There are additional measures for reducing sea turtle takes, although these are outside the scope of the EIS.

There have also been several Section 7 consultations with the USACE in the Northeast. In 2000, NMFS consulted with USACE Baltimore office on the Assateague State Park Nourishment Project. NMFS completed a BO in 2002 on dredging in the Thimble Shoal Federal Navigation Channel and Atlantic Ocean Channel for the USACE Norfolk office. In 2003, a consultation reinitiated on maintenance dredging in the Cape Henry Channel, York Split Channel, York River Entrance Channel, and Rappahoannock Shoal Channel, Virginia. In general, the resulting opinions from these consultations have concluded that the potential for a whale-vessel interaction is unlikely to occur either due to the project location or the slow speed at which dredges operate. Nevertheless, these consultations included similar conservation measures to those described above for the dredging

activities in the Southeast. The conservation measure is as follows: “When whales are present in the action area, vessels transiting the area should post a bridge watch, avoid intentional approaches closer than 100 yards (or 500 yards in the case of right whales) when in transit, and reduce speeds to below 4 knots.”

Cape Cod Canal

The USACE Marine Traffic Controllers have partnered with NOAA in support of the Northeast Region Right Whales Sighting Advisory System. These duties include communicating known whale locations of right whales to vessel masters transiting the Cape Cod Canal, and protecting whales from vessel traffic when they occasionally are found in the canal.

A memorandum of understanding (MOU) was signed by the USACE in March 2004 to formalize ongoing efforts between NMFS and the Cape Cod Canal Office. These efforts include:

1. Alerting ships’ masters of right whale locations as provided by NMFS when right whales are spotted in areas where Canal traffic may transit. Such alerts to include right whale sightings in Cape Cod Bay and the SBNMS should be given to all eastbound canal traffic. Such alerts to include right whale sightings in Rhode Island and Block Island Sounds and off Long Island should be given to westbound canal traffic. Westbound traffic reporting to the Traffic Controllers at the east approach channel (CCB Buoy) should also be given alerts for right whale sightings in the southwest quadrant of Cape Cod Bay.
2. Alerts shall be given to all vessels 65 feet and greater.
3. Providing reasonable protection and separation of vessel traffic from right whales within the canal and within the east or west approach channels.
4. Contributing to mariner’s awareness of the potential for collisions with whale by including information about right whales and guidance on actions to protect right whales in a separate page of the Cape Cod Canal Tide Tables.

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APPENDIX B

Notice of Intent (NOI) to prepare an EIS and Written Scoping Comments

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Dated: June 16, 2005.

P. Michael Payne,

Acting Deputy Director, Office of Protected Resources, National Marine Fisheries Service.

[FR Doc. 05–12342 Filed 6–21–05; 8:45 am]

BILLING CODE 3510–22–S

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[I.D. 060804F]

Endangered Fish and Wildlife; National Environmental Policy Act; Right Whale Ship Strike Reduction Strategy Notice of Intent to Prepare an Environmental Impact Statement and Conduct Public Scoping

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of intent; request for written comments.

SUMMARY: NMFS intends to prepare an Environmental Impact Statement (EIS) to analyze the potential impacts of implementing the operational measures in NOAA's Right Whale Ship Strike Reduction Strategy (Strategy). This notice describes the proposed action and possible alternatives intended to reduce the likelihood and threat of right whale deaths as a result of collisions with vessels.

DATES: Written or electronic comments must be received no later than 5 p.m., eastern standard time, on July 22, 2005. At this time there are no scheduled scoping meetings.

ADDRESSES: Written comments, or requests to be added to the mailing list for this project, should be submitted to: P. Michael Payne, Chief, Marine Mammal and Sea Turtle Conservation Division, Attn: Right Whale Ship Strike EIS, Office of Protected Resources, NMFS, 1315 East-West Highway, Silver Spring, MD 20910. Comments may also be submitted via fax to (301) 427–2522, Attn: Right Whale Ship Strike EIS, or by e-mail to: *Shipstrike.comments@noaa.gov*. Include in the subject line the following identifier: I.D. 060804F.

Additional information including the Environmental Assessment (EA) and the economic analysis report used in the preparation of the EA are available on the NMFS website at *http://www.nmfs.noaa.gov/pr/shipstrike/*.

FOR FURTHER INFORMATION CONTACT: Greg Silber, Office of Protected Resources, NMFS, 1315 East-West Highway, Silver Spring, MD 20910; telephone (301) 713–2322, e-mail *greg.silber@noaa.gov*; or Barb Zoodsma, Southeast Regional Office, NMFS, 263 13th Avenue South, St. Petersburg, FL 33701; telephone (904) 321–2806, e-mail *barb.zoodsma@noaa.gov*.

SUPPLEMENTARY INFORMATION:

Background

The abundance of North Atlantic right whales is believed to be fewer than 300 individuals despite protection for half a century. The North Atlantic right whale is also considered one of the most endangered large whale populations in the world. Recent modeling exercises suggest that the loss of even an individual animal has measurable effects that may contribute to the extinction of the species (Caswell et al., 1999). The models also suggests that preventing the mortality of one adult female a year significantly alters the projected outcome.

The two most significant human-caused threats and sources of mortality to right whales are entanglements in fishing gear and collisions with ships (Knowlton and Kraus, 2001; Jensen and Silber, 2003). Collisions with ships (referred to as ship strikes) account for more confirmed right whale mortalities than any other human-related activity. Ship strikes are responsible for over 50 percent of known human-related right whale mortalities and are considered one of the principal causes for the lack of recovery in this population. Right whales are located in, or adjacent to, several major shipping corridors on the eastern U.S. and southeastern Canadian coasts.

NMFS has implemented conservation measures to reduce the likelihood of mortalities as a result of ship strikes. These activities include the use of aerial surveys to notify mariners of right whale sighting locations, interagency collaboration with the U.S. Coast Guard (USCG) which issues periodic notices to mariners regarding ship strikes, joint operation with the USCG of Mandatory Ship Reporting (MSR) systems to provide information to mariners entering right whale habitat, support of regional Right Whale Recovery Plan Implementation Teams, support of shipping industry liaisons, and consultations with other Federal agencies regarding the effects of their activities on right whales (under section 7 of the Endangered Species Act). However, right whales continue to sustain mortalities as a result of collisions with vessels despite the efforts of these programs.

NMFS recognizes that this complex problem requires the implementation of additional proactive measures to reduce or eliminate the threat of ship strikes to right whales. The goal of the Strategy is to reduce, to the extent practicable, the distributional overlap between ships and right whales. The Strategy allows for regional implementation and accommodates differences in oceanography, commercial ship traffic patterns, navigational concerns, and right whale use. Implementation of the Strategy will require proposed and final rulemaking to be taken.

Purpose of this Action

NEPA requires Federal agencies to conduct an environmental analysis of their proposed actions to determine if the actions may significantly affect the human environment. NMFS is considering a variety of measures, including regulatory and non-regulatory initiatives. NMFS may implement the operational measures of the Strategy through its rulemaking authority pursuant to the Marine Mammal Protection Act (MMPA). Under MMPA section 112(a) (16 U.S.C. 1382(a)), NMFS has authority, in consultation with other Federal agencies to the extent other agencies may be affected, to ''prescribe such regulations as are necessary and appropriate to carry out the purposes of [the MMPA].'' In addition, NMFS has authority under the Endangered Species Act to promote conservation, implement recovery measures, and enhance enforcement to protect right whales. NMFS is seeking public input on the scope of the required National Environmental Policy Act (NEPA) analysis, including the range of reasonable alternatives, associated impacts of any alternatives, and suitable mitigation measures.

On June 1, 2004, NMFS published an Advanced Notice of Proposed Rulemaking (ANPR) (69 FR 30857) and announced its intent to prepare a draft EA to address the potential impacts of implementing the Strategy. The EA considered the context and intensity of the factors identified in NOAA's NEPA guidelines and regulations, along with short- and long-term, and cumulative effects of a No Action Alternative and the proposed action (see **ADDRESSES**). The analysis concluded that the effects of the proposed action on the human environment are likely to be highly controversial. This finding was based on the controversial nature of the Strategy on the human environment and the possible cumulative effects of the proposed action on certain sectors within the maritime industry. The major controversy concerns the potential

economic impacts on the commercial shipping industry. Further, the EA concluded that individual impacts of the proposed action may be insignificant but the cumulative impacts on the shipping industry may be significant. As a result, the cumulative effects on the environment as a result of implementing this action, including the alternatives proposed by this action, are considered significant. Therefore, an EIS is the appropriate level of environmental analysis for the proposed action under NEPA, not an EA. This is consistent with NEPA regulations at section 1501.4(c). This notice announces NMFS's intent to prepare an EIS expanded from the EA to analyze the potential impacts of implementing the operational measures in NOAA's Right Whale Ship Strike Reduction Strategy. This notice describes the proposed action and several possible alternatives intended to reduce the likelihood and threat of mortalities caused by ship strikes.

Scope of the Action

The Draft EIS is expected to identify and evaluate all relevant impacts and issues associated with implementing the Strategy, in accordance with Council on Environmental Quality's Regulations at 40 CFR parts 1500, 1508, and NOAA's procedures for implementing NEPA found in NOAA Administrative Order (NAO) 216–6, Environmental Policy Act, dated May 20, 1999.

NMFS is proposing to implement the operational measures in the Strategy within each of three broad regions: (a) the southeastern Atlantic coast of the U.S., (b) the Mid-Atlantic coastal region, and (c) the northeastern Atlantic coast of the U.S.

The implementation of operational measures, and the specific times and areas (with boundaries) in which the measures would be in effect, are expected to vary within and between each region. However, each region would contain specific elements to reduce the threat of ship strikes to right whales. The operational measures proposed in the alternatives apply to non-sovereign vessels 65 ft (19.8 m) and greater in length. The operational measures do not apply to vessels operated by Federal agencies or the military. Any potential effects of Federal vessel activities, and mitigation, will be evaluated through the Endangered Species Act section 7 consultation process for all alternatives. A more detailed description of the operational measures proposed for each region are in the ANPR (June 1, 2004; 69 FR 30857).

That notice describes the proposed action and possible alternatives intended to reduce the likelihood and threat of mortalities caused by ship strikes pursuant to requirements under NEPA. In particular, the Draft EIS is intended to identify potential impacts to human activities that occur as a result of the proposed action and its alternatives.

The areas of interest for evaluation of environmental and socioeconomic effects will include the territorial sea and the Exclusive Economic Zone off the east coast of the U.S. and international waters in the North Atlantic Ocean.

Public Involvement and the Scoping Process

Public participation in the Strategy has been encouraged through several methods including soliciting public comments on the ANPR and holding public meetings, industry stakeholder meetings, and other focus group meetings. NMFS has been working with state and other Federal agencies, concerned citizens and citizens groups, environmental organizations, and the shipping industry to address the ongoing threat of ship strikes to right whales. NMFS' intent is to encourage the public and interest groups to participate in the NEPA process, including interested citizens and environmental organizations, affected low-income or minority populations or affected local, state and Federal agencies, and any other agencies with jurisdiction or special expertise.

NMFS published the ANPR for Right Whale Ship Strike Reduction in the **Federal Register** on June 1, 2004 (69 FR 30857) and provided a comment period to determine the issues of concern with respect to the practical considerations involved in implementing the Strategy and to determine whether NMFS was considering the appropriate range of alternatives. Comments were received from over 5,250 governmental entities, individuals, and organizations, and can be accessed at the NMFS website (see **ADDRESSES**). These comments were in the form of e-mail, letters, website submissions, correspondence from action campaigns (e-mail and U.S. postal mail), faxes, and a phone call.

NMFS extended the comment period to November 15, 2004 (September 13, 2004; 69 FR 55135) to provide for an extended series of public meetings on the ANPR and this topic in general. Five public meetings on the ANPR were held in the following locations: Boston, MA, at the Tip O'Neill Federal Building (July 20, 2004); New York/New Jersey at the Newport Courtyard Marriot (July 21, 2004); Wilmington, NC, at the Hilton Riverside Wilmington (July 26, 2004); Jacksonville, FL, at the Radisson Riverwalk Hotel (July 27, 2004); and Silver Spring, MD, at NOAA Headquarters Science Center (August 3, 2004). Public comments were requested at these meetings and transcribed for the public record. Also, nine industry stakeholder meetings were held to explain the ANPR at the following locations: Boston, MA (September 30, 2004); Portland, ME (October 1, 2004); Norfolk, VA (October 4, 2004); Morehead City, NC (October 6, 2004); Jacksonville, FL (October 13, 2004); Savannah, GA (October 14, 2004); New London, CT (October 20, 2004); Newark, NJ (October 25, 2004); and Baltimore, MD/Washington, DC (October 27, 2004). A summary report of these meetings and a list of the attendees are posted on the internet at *http://www.nero.noaa.gov/shipstrike*.

NMFS also held two focus group discussion meetings with participants from non-governmental organizations, academia, and Federal and state government agencies. The first meeting was held in Silver Spring, MD on September 26, 2004, and the second meeting was in New Bedford, MA on November 5, 2004.

The comments on the ANPR focused primarily on several broad topics including: speed restrictions, vessel size and operations, speed and routing issues specific to regions, routing restrictions (Port Access Routes Study [PARS] and Areas To Be Avoided [ATBA]), safety of navigation, suggestions for alternative or expanded dates for operational measures, military and sovereign vessel exemptions, enforcement, and compliance.

Alternatives

NMFS will evaluate a range of alternatives in the Draft EIS for developing a final Strategy to reduce mortality to right whales due to ship strikes based on a suite of possible mitigative measures contained in each of the elements of the overall Strategy. The following alternatives are being considered based on comments received on the ANPR and during the public meetings: Alternative 1, a no-action alternative; Alternative 2, Use of Dynamic Management Areas (DMAs); Alternative 3, Speed Restrictions in Designated Areas; Alternative 4, Use of Designated or Mandatory Routes; Alternative 5, Combination of Alternatives 1, 2, 3 and 4; and Alternative 6, NOAA Ship Strike Strategy.

For all speed restrictions being considered under an alternative, NMFS

expects to consider 10, 12, and 14 knots in the analyses. Other variations or additional alternatives may be developed based on significant issues raised during this public scoping period. The probable environmental, biological, cultural, social and economic consequences of the alternatives and those activities that may cumulatively impact the environment are expected to be considered in the Draft EIS.

Alternative 1 - No Action (Status Quo): Under this alternative NMFS would continue to implement existing measures and programs, largely non-regulatory, to reduce the likelihood of mortality from ship strikes. Research would continue and existing technologies would be used to determine whale locations and pass this information on to mariners. Ongoing activities under this alternative would include the use of aerial surveys to notify mariners of right whale sighting locations; the operation of Mandatory Ship Reporting Systems; support of Recovery Plan Implementation Teams; education and outreach programs for mariners; and ongoing research on technological solutions. The development, enhancement, and implementation of the draft Education and Outreach Strategy would continue in coordination with the Recovery Plan Implementation Teams. The alternative would also rely on Endangered Species Act section 7 consultations to address, and mitigate the potential effects of, the activities of vessels operated by government agencies. Additionally, efforts will continue to identify technologies that will mitigate or prevent ship strikes to right whales but that would impose minimal or no environmental impacts.

Alternative 2 - Use of DMAs: A second alternative under consideration would incorporate the elements of Alternative 1 with additional measures to implement DMAs. The DMA component of this alternative would be implemented ONLY when right whale sightings occur.

Under this alternative there would need to be a commitment to continuing aircraft surveillance coverage. If confirmed right whale sightings occur, a DMA would be specified and mariners would have the option of either routing around the DMA or to proceed within the DMA at restricted speeds. NMFS is considering various models for whale density required to trigger a DMA action; the current default is the same criteria used for the Atlantic Large Whale Take Reduction Plan (ALWTRP) Dynamic Area Management fishing restrictions. Consecutive DMAs would be imposed if trigger thresholds persist. If subsequent flights confirm the whales are no longer aggregated in this location, the DMA would be lifted.

Alternative 3 - Speed Restrictions in Designated Areas: This alternative includes all elements of Alternative 1 and implements large-scale speed restrictions throughout the range of northern right whales. Restrictions would apply as follows:

1. Speed restrictions year round off the northeast U.S. coast. This area would include either (1) all waters bounded on the east by the U.S. coastline, the west by 68° W longitude, the north by the U.S./Canadian border and the south by 41°30′ N latitude, or (2) all waters in the area used by Seasonal Area Management (SAM) zones as designated in the ALWTRP;

2. Speed restrictions from October 1 through April 30 off the U.S. mid-Atlantic coast. This area would include all waters extended from U.S. coastline out 25 nm from Providence/New London (Block Island Sound) south to Savannah, Georgia.

3. Speed restrictions from December 1 through March 31 off the Southeast U.S. This area would include all waters within the MSR WHALESSOUTH reporting area and the presently designated right whale critical habitat.

Alternative 4 - Use of Designated or Mandatory Routes: This alternative includes all the elements of Alternative 1 and relies on altering current vessel patterns to move vessels away from areas where whales are known to aggregate in order to reduce the likelihood of a mortality due to a ship strike.

This alternative also creates an ATBA in the Great South Channel as described in NOAA's ANPR, and considers recommendations of a PARS by the USCG. At present the PARS analysis is assessing possible lane changes in Cape Cod Bay and waters off the Southeast U.S. The alternative also will analyze the possibility of moving the Traffic Separation Scheme into/out of Boston to avoid high density aggregations of whales at the northern end of Cape Cod Bay and Stellwagen Bank.

Alternative 5 - Combination of Alternatives: This alternative includes all elements of Alternatives 1 - 4. The cumulative effects of Alternative 5 would be the additive effects of each of the previous alternatives.

Alternative 6 - NOAA Ship Strike Strategy: This alternative includes all the operational measures identified in the NOAA Ship Strike Strategy. The principal difference between Alternative 5 and 6 is that Alternative 6 does not include large-scale speed restrictions (as identified in Alternative 3) but instead relies on speed restrictions in much smaller Seasonally Managed Areas as identified in the NOAA Ship Strike Strategy.

Comments Requested

NMFS provides this notice to: advise the public and other agencies of the NOAA's intentions, and obtain suggestions and information on the scope of issues to include in the EIS. Comments and suggestions are invited from all interested parties to ensure that the full range of issues related to this proposed action and all significant issues are identified. NMFS requests that comments be as specific as possible. In particular, the agency requests information regarding: the potential direct, indirect, and cumulative impacts resulting from the proposed action on the human environment. The human environment could include air quality, water quality, underwater noise levels, socioeconomic resources, and environmental justice.

Comments concerning this environmental review process should be directed to NMFS (see **ADDRESSES**). See **FOR FURTHER INFORMATION CONTACT** for questions. All comments and material received, including names and addresses, will become part of the administrative record and may be released to the public.

Authority

The environmental review of the Ship Strike Strategy will be conducted under the authority and in accordance with the requirements of the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 *et seq.*), National Environmental Policy Act Regulations (40 CFR 1500–1508), other appropriate Federal laws and regulations, and policies and procedures of the Services for compliance with those regulations.

Literature Cited

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Knowlton, A.R., and S.D. Kraus. 2001. Mortality and serious injury of northern right whales (*Eubalaena glacialis*) in the western North Atlantic Ocean. Jour. Cetacean Res. and Manag. (Special Issue) 2:193 208. Russell, B.A. 2001.

Dated: June 16, 2005.

P. Michael Payne

Chief, Marine Mammal and Sea Turtle Conservation Division, Office of Protected Resources, National Marine Fisheries Service.

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[I.D. 061405C]

Atlantic Coastal Fisheries Cooperative Management Act Provisions; Application for Exempted Fishing Permit Related to Horseshoe Crabs

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice; request for comments.

SUMMARY: NMFS announces that the Director, Office of Sustainable Fisheries, is considering issuing an Exempted Fishing Permit to Limuli Laboratories of Cape May Court House, NJ, to conduct the fifth year of an exempted fishing operation otherwise restricted by regulations prohibiting the harvest of horseshoe crabs in the Carl N. Schuster Jr. Horseshoe Crab Reserve (Reserve) located 3 nautical miles (nm) seaward from the mouth of the Delaware Bay. If granted, the EFP would allow the harvest of 10,000 horseshoe crabs for biomedical purposes and require, as a condition of the EFP, the collection of data related to the status of horseshoe crabs within the Reserve. This notice also invites comments on the issuance of the EFP to Limuli Laboratories.

DATES: Written comments on this action must be received on or before July 7, 2005.

ADDRESSES: Written comments should be sent to John H. Dunnigan, Director, Office of Sustainable Fisheries, NMFS, 1315 East-West Highway, Room 13362, Silver Spring, MD 20910. Mark the outside of the envelope ''Comments on Horseshoe Crab EFP Proposal.'' Comments may also be sent via fax to (301) 713–0596. Comments on this notice may also be submitted by e-mail to: *Horseshoe-Crab.EFP@noaa.gov*. Include in the subject line of the e-mail comment the following document identifier: Horseshoe Crab EFP Proposal.

FOR FURTHER INFORMATION CONTACT: Tom Meyer, Fishery Management Biologist, (301) 713–2334.

SUPPLEMENTARY INFORMATION:

Background

The regulations that govern exempted fishing, at 50 CFR 600.745(b) and 697.22, allow a Regional Administrator or the Director of the Office of Sustainable Fisheries to authorize for limited testing, public display, data collection, exploration, health and safety, environmental clean-up and/or hazardous removal purposes, the targeting or incidental harvest of managed species that would otherwise be prohibited. Accordingly, an EFP to authorize such activity may be issued, provided: there is adequate opportunity for the public to comment on the EFP application, the conservation goals and objectives of the fishery management plan are not compromised, and issuance of the EFP is beneficial to the management of the species.

The Reserve was established on March 7, 2001 to protect the Atlantic coast stock of horseshoe crabs and to support the effectiveness of the Atlantic States Marine Fisheries Commission's (Commission) Interstate Fishery Management Plan (ISFMP) for horseshoe crabs. The final rule (February 5, 2001; 66 FR 8906) prohibited fishing for and possession of horseshoe crabs in the Reserve on a vessel with a trawl or dredge gear aboard while in the Reserve. While the rule did not allow for any biomedical harvest or the collection of fishery dependent data, NMFS stated in the comments and responses section that it would consider issuing EFPs for the biomedical harvest of horseshoe crabs in the Reserve.

The biomedical industry collects horseshoe crabs, removes approximately 30 percent of their blood, and returns them alive to the water. Approximately 10 percent do not survive the bleeding process. The blood contains a reagent called *Limulus* Amebocyte Lysate (LAL) that is used to test injectable drugs and medical devices for bacteria and bacterial by-products. Presently, there is no alternative to the LAL derived from horseshoe crabs.

NMFS manages horseshoe crabs in the exclusive economic zone in close cooperation with the Commission and the U.S. Fish and Wildlife Service. The Commission's Horseshoe Crab Management Board met on April 21, 2000, and again on December 16, 2003, and recommended to NMFS that biomedical companies with a history of collecting horseshoe crabs in the Reserve are given an exemption to continue their historic levels of collection not to exceed a combined harvest total of 10,000 crabs annually. In 2000, the Commission's Horseshoe Crab Plan Review Team reported that biomedical harvest of up to 10,000 horseshoe crabs should be allowed to continue in the Reserve given that the resulting mortality should be only about 1,000 horseshoe crabs (10 percent mortality during bleeding process). Also in 2000, the Commission's Horseshoe Crab Stock Assessment Committee Chairman recommended that, in order to protect the Delaware Bay horseshoe crab population from over-harvest or excessive collection mortality, no more than a maximum of 20,000 horseshoe crabs should be collected for biomedical purposes from the Reserve. In addition to the direct mortality of horseshoe crabs that are bled, it can be expected that more than 20,000 horseshoe crabs will be trawled up and examined for LAL processing. This is because horseshoe crab trawl catches usually include varied sizes and sexes of horseshoe crabs and large female horseshoe crabs are the ones usually selected for LAL processing. The remaining horseshoe crabs are released at sea with some unknown amount of mortality. Although unknown, this mortality is expected to be negligible.

Collection of horseshoe crabs for biomedical purposes from the Reserve is necessary because of the low numbers of horseshoe crabs found in other areas along the New Jersey Coast from July through early November and because of the critical role horseshoe crab blood plays in health care. In conjunction with the biomedical harvest, NMFS is considering requiring that scientific data be collected from the horseshoe crabs taken in the Reserve as a condition of receiving an EFP. Since the Reserve was first established, the only fishery data from the Reserve were under EFPs issued to Limuli Laboratories for the past four years, and under Scientific Research Activity Letter of Acknowledgment issued Virginia Polytechnic Institute and State University's Department of Fisheries and Wildlife Science on September 4, 2001 (for collections from September 1–October 31, 200l), on September 24, 2002 (for collections from September 24–November 15, 2002), on August 14, 2003 (for collections from September 1–October 31, 2003), and on September 15, 2004 (for collections from September 15–October 31, 2004). Further data are needed to improve the understanding of the horseshoe crab population in the Delaware Bay area and to better manage the horseshoe crab resource under the cooperative state/Federal management program. The data collected through the EFP will be provided to NMFS, the

Written Comments from Right Whale Ship Strike NOI (June 22, 2005)		
Comment Number	**Specific Comment**	**Response**
1	Supports Alternative 6 as the minimum threshold for protection.	Acknowledged[1]
2	NOAA/NMFS should return to interagency process to resolve policy issues identified in a joint USCG/Dept. of State letter dated November 10, 2004.	Outside the scope of DEIS[2]; NOAA has resumed the interagency process since the publication of the NOI and continues to consult with other agencies.
	Alternatives should be consistent with domestic and international policy concern and proposed alternatives in the NOI could affect interrelated issues such as: Effects on freedom of navigation, application to foreign flag vessels in innocent passage, and gaining international awareness and acceptance; and Means of enforcing speed restrictions and routing measures on the open seas and, correspondingly, determining whether and ensuring the measures being considered are effective.	These issues are being discussed through the interagency process.
	Interagency discussions should be part of the scoping process to ensure that all reasonable alternatives are analyzed in the EIS and that the EIS adequately presents justification for each alternative's viability.	Acknowledged
3	The USCG passenger vessel data is incomplete and only captures a fraction of actual arrivals; this may be due to differing definitions of "passenger vessel" and "small passenger vessel" in the United States Code, or that most US-flagged passenger vessels have tonnage below 100 gross tons, which were below the USCG threshold.	The USCG database does not capture vessels less than 150 gross tons.
	Consider using the National Ferry Database (US DOT) as an additional source of passenger vessel arrivals	This database was utilized in the economic analysis for the DEIS
	Draft EA's treatment of the whale watching industry contains no statistics regarding the number of operators, number of vessels, or economic value of this industry. The EIS should include information on the number of affected whale watching vessels and the economic impacts on the industry.	The DEIS includes a complete analysis of the number of affected whale watching vessels and the economic impact.
	Conduct interviews with ferry operators to discuss the possible impacts of the proposed operational measures and analyze the potential for large impacts on particular ferry companies or routes.	Stakeholder interviews were conducted as a part of the economic impact assessment. (Also see Section 4.4.5.2)
	EIS should analyze the impacts on smaller (200 passengers or below) overnight cruise vessels that are in coastwise service along the east coast.	If these vessels are captured in the USCG vessel arrival database, then they will be analyzed in the DEIS under passenger vessels.
4	Supports Alternative 6 as a minimum for the protection and survival of right whales.	Acknowledged
5	Supports Alternative 6 as the most appropriate alternative to affect the most significant range of vessel activities likely to impact right whales	Acknowledged

[1] Acknowledged indicates that NMFS considered the comment, but did not believe a response was warranted.
[2] If a response is outside the scope of the DEIS, it is generally specific to the language/measures in the proposed rule, and not the DEIS, which only analyzes these measures.

Written Comments from Right Whale Ship Strike NOI (June 22, 2005)		
Comment Number	**Specific Comment**	**Response**
6	Reinitiate the interagency ship strike reduction dialogue to facilitate productive discussion on the overall Strategy with the involved federal agencies.	Outside scope of DEIS; NOAA has resumed the interagency dialogue with the involved Federal agencies.
	Substitute the following language [in clarifying sovereign vessels]: Operational measures do not apply to public vessels. Public vessel means a vessel that is owned or operated by the United States, or a foreign government, when the vessel is used on government non-commercial service. Public vessels include warships, naval auxiliaries, USNS vessels, afloat prepositioned force ships, pre-commissioned vessels, and other vessels owned or operated by the United States when engaged in non-commercial service.	NMFS provides language to clarify sovereign (or Federal) vessels in the proposed rule.
	Consider addition of a new alternative that expands the use of existing conservation measures to the Mid-Atlantic region with no adoption of regulatory measures.	This alternative was considered but rejected as it would not provide sufficient protection to migrating right whales.
	Clarify the effects analysis in the No Action Alternative.	Analyzed in Ch.4
	The scope of the EIS should be clarified such that the "Scope of Action" mirrors the draft EA/OEA and the summary description provided in the Federal Register.	Acknowledged
	EIS should delete any evaluation of section 7 consultation by other agencies from the scope of the defined alternatives.	The DEIS does not evaluate Section 7 consultation as the process is outside the scope of the DEIS, although previous consultations are described in Appendix A.
	The EIS must fully describe the very limited nature of the data from which the proposed 12-knot speed restriction is derived, and ensure that the effectiveness of this measure in reducing right whale collisions is clearly assessed using best available science.	Additional data has become available since the EA was posted, and these data have been incorporated into the DEIS, along with a description of existing data.
	There is no discussion in the EA allowing for the discretion on the part of the master if safety is an issue.	NMFS is aware of navigational safety as it pertains to the measures being proposed. Public health and safety and vessel maneuverability are also mentioned in the DEIS.
	There is no description of how this speed is to be defined; engine order telegraph, vessel's speed along its track, or speed through the water?	Speed restrictions will be a function of "ground speed".
	There was little explanation indicating how 12 knots was decided upon.	The DEIS will analyze 10, 12, and 14 knots, and the proposed and final rules will identify and provide justification for the maximum speed.
	Given the sparse nature of data concerning ship speed and right whale collisions, and the lack of reaction generally displayed when approached by a ship the assumption that 12 knots will be protective and reduce hydrodynamic forces that draw the whale into the ship or propeller does not seem warranted.	Policies regarding speed restrictions are based on the best available data. The DEIS and proposed rule reflect this.

Written Comments from Right Whale Ship Strike NOI (June 22, 2005)		
Comment Number	**Specific Comment**	**Response**
6 (Continued)	The assumptions that right whales might not hear ships because high frequency propeller noise is outside their best hearing range and that machinery noise would not be projected forward of the ship are problematic. Although some high frequency tonals may not be perceived, the lower frequency components of the broadband radiated noise are within the estimated best frequency of right whales.	Most ship noise is probably well within the hearing range of right whales. The factors that contribute to right whale vulnerability to ship strikes are not well known, but hearing range is probably not one of them. Refer to the sections on right whale hearing and ocean noise in Chapter 3.
	Provide the synopsis presented in the NEIT/SEIT meetings that gives a more comprehensive description of the Navy's protective measures. Also note the percentage of coastal traffic the Navy comprises, to provide perspective.	The DEIS provides a comprehensive description of current Navy mitigation measures using information from these meetings. The percentage of Navy vessel traffic was also added; see Appendix A.
7	The comprehensive measures included in Alternatives 5 and 6 have the best chance of meeting this criteria and complying with the ESA and MMPA.	Acknowledged
	NMFS should examine carefully in the DEIS the impact on right whales of delaying implementation of protective measures.	Outside the scope of the DEIS.
	Agrees that NMFS has both the authority and the obligation to take immediate measures to protect this imperiled marine mammal.	Acknowledged
	The objections raised by affected economic sectors through the ANPR and public outreach processes, while not trivial, do not present sufficient justification for NMFS to limit right whale protections.	Acknowledged
	Commenter urges NMFS to carefully consider the scope of its regulations in the DEIS and clearly identify effective measures for recreational vessels throughout all three regions.	Acknowledged
	The purpose and need of the proposed action must be defined to encompass the requirements of the MMPA and ESA, and the consideration of alternatives should be structured accordingly.	Acknowledged
	Commenter supports the use of Dynamic Management Areas to overlay additional protections where more consistent management, either seasonal or year round, is insufficient or impractical; they are insufficient by themselves. (Applicability and enforcement of these measures should be made explicit in any proposed regulations involving dynamic management.)	Acknowledged
	The commenter strongly endorses the immediate creation of a speed limit of 10 knots in the areas and during the times NMFS has identified in the NOI. They also endorse year-round restrictions in the broader geographic scope detailed in Alternative 3, although Alternative 3 alone does not present a comprehensive approach necessary to ensure right whale protection.	The DEIS analyzes 10, 12 and 14 –knot speed restrictions for all alternatives.
	Mandatory shipping routes are insufficient by themselves and must be included as part of a comprehensive strategy to protect right whales.	Routing measures are analyzed in alternatives 4, 5, and 6. Alternatives 5 and 6 combine routing measures with additional measures.

Written Comments from Right Whale Ship Strike NOI (June 22, 2005)		
Comment Number	**Specific Comment**	**Response**
7 (Continued)	The ship strike strategy (Alternative 6) may need to be modified or supplemented to provide sufficient protections for right whales.	Alternative 6 has been modified from the original version published in the NOI.
	Enforcement for routing, speed restrictions, dynamic management areas as well as the MSR system, should be thoroughly explored by the agency, explained in detail, and presented for public comment in any proposed rule.	Enforcement is outside the scope of the DEIS; any comments on enforcement will be addressed in the final rule.
	It is essential that NMFS undertake and update ESA Section 7 consultations for large sovereign vessels not covered by the Strategy in order to ensure compliance with the ESA for those other agencies.	Section 7 consultations commence at the action agency's discretion and are outside the scope of the DEIS.
8	The ESA is clear that cost is not a threshold consideration when weighing measures to protect endangered species, and the act remains relatively blind to cost when the survival of a species is at stake. Therefore, NMFS must provide meaningful protection measures for the species regardless of the resulting economic costs.	The proposed operational measures would be promulgated pursuant to NMFS' authorities under ESA section 11(f) and MMPA section 112(a). Under these provisions, NMFS has discretion in how it fashions protective measures for right whales, including taking into account ways to minimize economic and other impacts.
	There is also an economic incentive to preserving the species. The multi-million dollar whale watching industry in the US and Canada could be adversely affected by the continual decline in right whales. The aesthetic and spiritual value of preserving a healthy right whale population should also be evaluated in the EIS.	Acknowledged
	Commenter believes that [Alternative 2] dynamic management is an important component of an overarching risk-reduction program; in and of itself, it is not sufficient to reduce risk. They are also concerned with the timeliness of DMA implementation and stated that the EIS should evaluate whether or how this can be done on a more timely bases for reducing risk from ship collisions.	Acknowledged; analyzed in Alternative 2, 5 & 6.
	Speed restrictions [Alternative 3] are an important component of risk reduction as they allow more time for both the whale and the mariner to avoid collision and can reduce the force of impact in the event of a collision, but the commenter does not believe that they are sufficient in and of themselves as a means reducing risk.	Acknowledged; analyzed in Alternatives 3, 5 & 6.
	Routing [Alternative 4], like dynamic management and speed restrictions, needs to be part of a larger program of risk reduction that incorporates a number of strategies to reduce risk.	Acknowledged; analyzed in Alternatives 4, 5 & 6.
	Commenter generally supports Alternative 5 provided these measures encompass all of the additional measures outlined in the NOAA ship strike strategy and include expanded protection measures.	Acknowledged.
	A speed limit of 10 knots appears to be the most protective.	Acknowledged

Written Comments from Right Whale Ship Strike NOI (June 22, 2005)		
Comment Number	**Specific Comment**	**Response**
8 (Continued)	Commenter is concerned that sovereign vessels are exempt; therefore the EIS should evaluate the impact of exempting these vessels.	Sovereign vessels are exempt from the operational measures, therefore it is outside the scope of the EIS to evaluate the impact of their exemption.
9	NMFS must make every effort to implement these regulations as soon as possible.	Acknowledged
	NMFS must also address the steps needed to ensure the effective enforcement of these regulations, including making sufficient resources available and developing and implementing new technologies.	See response to comment 7.
	Commenter recommends that the Coast Guard join as a co-author in this rulemaking process, so that these regulations are specifically incorporated into its enforcement regime. If the USCG does not join as a co-author of these regulations, then NMFS should enter into a Memorandum of Agreement with the USCG detailing each entity's enforcement authority and the division of the administrative burden.	The USCG has been an active partner in reducing the threat of ship strikes, as participants in recovery plan implementation teams, and an interagency working group. The USCG has prepared a Port Access Routes Study to assess a number of proposed ship strike reduction measures. However, the proposed regulations will be promulgated under NMFS' ESA/MMPA authorities.
	While issues of economic impact of these regulations must be addressed through the NEPA process, these, and other similar considerations, must give way so that the right whale may receive the required level of protection. See TVA v. Hill, 437 US 153, 174 (1978) (concluding that is it "beyond doubt that Congress intended endangered species to be afforded the highest of priorities.")	NMFS is seeking to obtain the greatest protection for right whales while at the same time minimizing economic impacts. Also see response to comment 8.
	Arguments that the regulatory measures will lead to shipping delays and economic losses…are directly at odds with the underlying intent of the ESA, which was enacted to reverse the trend of species being driven to extinction as "the consequence of economic growth and development untempered by adequate concern and conservation." 16 USC. § 1531	NMFS is attempting to promote recovery of right whales by reducing the threat of ship strikes. At the same NMFS is seeking to minimize economic impacts.
	Commenter recommends regulations cover all vessels under the jurisdiction of the US measuring 65 ft and greater. However, an exemption could be created for those sovereign vessels operation pursuant to parameters established in a Biological Opinion issued by NMFS.	The operational measures apply to all vessels under the jurisdiction of the US, except vessels owned or operated by, or under contract to, the Federal government. A number of Federal agencies are already operating under mitigation measures from a Biological Opinion (see Appendix A).
	Commenter believes that while a DMA system should be implemented as a management tool, given the systems obvious limitations it should not be relied upon in lieu of uniform seasonal management measures, but rather, should augment them.	Acknowledged; analyzed in Alternatives 5 & 6.

Written Comments from Right Whale Ship Strike NOI (June 22, 2005)		
Comment Number	**Specific Comment**	**Response**
9 (Continued)	When developing a system to prevent ship strikes, NMFS cannot base the trigger criteria on one particular type of whale behavior, but rather, must establish a system that will identify whales at a high risk of being involved in whale-vessel interaction.	Additional DMA triggers were developed for the alternatives to account for whales at a high risk of being struck by a vessel.
	Alternative 3 does not go far enough to protect the species; while the temporal and geographic scope of the speed restrictions are substantial, they would not protect whales that are found outside of management areas at other times of the year	Acknowledged; analyzed in proposed alternatives.
	Noting the shortcomings addressed in comments submitted on the ANPR, the commenter considers the regulatory measures outlined in Alternative 6 to be the bare minimum necessary to protect the right whale. They recommend that NMFS make the necessary changes and additions to the regulatory framework proposed in the ANPR before the EIS is commenced.	Alternative 6 has been modified since the ANPR and NOI.
10	The liner shipping industry operates 'strings' of vessels, mostly containerships, on regular day-of-the-week schedules to a fixed range of ports in the US and abroad. A delay to one vessel can impact not only that vessel's schedule, but also the schedules of other vessels in the string.	Impacts on multi-port vessel strings are analyzed in Sections 4.4.2.
	Vessel operating costs are considerably higher in 2005 than the 2002 estimates.	The most current data available (2004 and 2005) is used in the DEIS to make these assessments.
	Cost estimates in the EA for speed reduction measures are based on time/distance/speed conversions in the restricted zones and do not take into account additional costs such as extra fuel burned at sea to maintain schedules.	All direct and indirect impacts are assessed in the DEIS. Fuel is incorporated into the operating costs, described in Section 3.4.1.4.
	Costs associated with bypassing scheduled ports to maintain schedules are considerable and need to be examined in the EIS.	These impacts are analyzed in the Indirect Impacts, Section 4.4.3.
	Commenter does not believe the data support a reduction in ship strikes at a 12 knot speed restriction, and strongly supports hydrodynamic studies.	Several research papers provide supporting evidence for speed restrictions (e.g. Laist et al., 2001; Jensen and Silber, 2003; Pace and Silber, 2005; Vanderlaan and Taggart, in review) and are discussed in the DEIS. NOAA is also considering hydrodynamic studies.
	The EIS should contain a full review of the role of Naval and Coast Guard vessels in efforts to reduce right whale ship strikes.	Current Navy and USCG protection measures are described in the DEIS, Appendix A.
	Commenter supports Alternatives 2 and 4	Acknowledged
11	The EIS should very clearly articulate the proposed management measures that would apply to each port/region in order to allow a complete understanding of the restrictions being considered. Of particular concern is the incomplete description of Dynamic Management Areas. The EIS should summarize the details associated with DMA implementation and information on restrictions that would have resulted using sighting data over the most recent 5 years.	The DEIS (e.g. Ch.2 – Alternatives) describes the measures proposed in each alternative by region. The details of DMA implementation are summarized in Alternative 2 and the proposed rule.

Written Comments from Right Whale Ship Strike NOI (June 22, 2005)		
Comment Number	**Specific Comment**	**Response**
11 (Continued)	A full economic impact assessment should be conducted on each port affected by the regulations and included in the EIS. It should consider direct costs incurred by the shipping lines as a result of the delays, the indirect costs the industry and the regional economy, and the economic implications and job losses associated with temporary and permanent vessel diversions that will likely result.	Ch.4 provides an analysis of the impacts on each port, the direct costs to the shipping lines, collectively, and the economic implications that may result will be analyzed in the socioeconomic section.
	If the proposed regulations cause ships to temporarily or permanently divert from one port to another, it will result in a shift of cargo movement along the eastern seaboard from vessels to trucks. This will result in air quality and traffic impacts along an already highly congested corridor, much of which is already in non-compliance for various air contaminants. These and other secondary environmental impacts should be fully evaluated and quantified for each region in the EIS.	Foreseeable indirect environmental impacts are analyzed in Section 4.4.3 of the DEIS.
	Commenter strongly opposes mandating a specific speed limit without any scientific bases that it will be effective, particularly with the knowledge that speed restrictions will cause economic impacts and that a 10 to 13 knot limit may not allow for the safest operation of a vessel. Prior to proceeding with the EIS, the necessary studies must be conducted.	Data indicate that ship speeds of 12 knots or less would reduce the risk of whale death and serious injury resulting from collisions with ships. The USCG has implemented speed restrictions of 10 knots or less; these speeds apparently do not affect maneuverability in most circumstances.
	NMFS should work with the maritime industry and initiate whatever studies are necessary to fully explore technological solutions (GPS, AIS) to providing mariners with real time locations for right whales.	NMFS has and will continue to work with the maritime industry. Technological solutions are being researched through NOAA grants, although technological solutions are not included in the operational measures.
	Commenter urges NMFS to dedicate significant resources toward research and development of the potential technological solutions such as acoustic/sonar detection systems.	Outside the scope of the DEIS.
	The EIS should fully evaluate all potential alternatives to speed and route restrictions and compare them with the proposed regulatory measures.	Analyzed in the Chapter 2: Alternatives.
12	Commenter supports the EIS process and encourages NMFS to evaluate the economic impact that the strategy would have not only on vessel operators, but also on marine terminal operators, maritime labor organizations, local pilots, shippers and other potentially affected entities.	Foreseeable effects on local economies, including port-related jobs, are analyzed in Section 4.4.3. However, as delays from speed restrictions in SMAs will be known months in advance, there should be minimal, if any, landside impacts.
13	The evaluation should include an economic analysis of the impacts to ship call schedules, cargo handling and distribution operation, pilot and tug operations, and other maritime transportation related activities. In addition, the impact of the proposed alternatives on the regional economies served by the affected ports should be addressed.	See response to comment 12.

Written Comments from Right Whale Ship Strike NOI (June 22, 2005)		
Comment Number	**Specific Comment**	**Response**
14	The economic and public safety consequences of the proposed restrictions could be substantial for [Suez liquefied natural gas North America (SLNGNA)], [Distrigas of Massachusetts (Distrigas)] and the customers it serves.	The economic impacts of the proposed restrictions on LNG vessels is analyzed in the cumulative impacts section 4.7.3.1. NMFS is not aware of any public safety issues posed by the proposed regulations.
	For vessel port calls into Boston, MA, the proposed restrictions could also delay the deployment of resource-constrained public safety, immigration and customs officials, severely hindering SLNGNA's ability to meet very strict tide limitations for transits into Boston, bridge closure restrictions in Chelsea, and nighttime transit restrictions in Boston Harbor. If vessels are delayed in arriving at Boston, SLNGNA will be subject to substantial market risk due to day-to-day market fluctuations.	Impacts on the shipping industry in the port of Boston are included in Section 4.4 and other effects, including tide limitations are addressed in the cumulative effects analysis (Section 4.7.3).
	Vessels inbound to Cove Point, MD face nighttime transit restrictions, as well as eight-hour transit, thus making the discharge window extremely tight. Vessels are required to arrive at the Cape Henry Pilot Station at least eight hours prior to dusk or must wait until the following day to transit. Delays occasioned by the proposed regulations, [in addition to the abovementioned restrictions] especially if DMAs are employed, could cause SLNGNA to miss scheduled load dates as well as subsequent discharge dates.	Restrictions will be known ahead of time, allowing captains time to plan accordingly. Transits may be increased but mariners will have sufficient information for most spatial restrictions prior to planning their routes and can compensate accordingly. (Sections 4.4 and 4.7.3)
	As a further consequence of the proposed restrictions, the number of cargoes shipped by SLNGNA annually could potentially be reduced. Therefore it is critical that the cumulative impacts of the proposed operational measures, including the significant impacts to the natural gas supply for New England, be critically evaluated during the scoping and EIS processes.	See previous response to comment 14. However, impacts on the natural gas supply for New England is outside the scope of the DEIS.
15	The scope of the EIS should include the potential impact of the proposed measures on marine terminal operating costs and total logistical costs, in addition to the costs to vessel operators. This would ensure that an appropriate assessment of the socioeconomic impacts on port communities was undertaken.	See response to comment 12.
16	The EIS process should not interfere with immediately taking the necessary steps to protect right whales as required by the ESA and MMPA. Courts have been quite clear on this (See Appendix A, comment 16 for case citations). Pac. Legal Found. v. Andrus, held that NEPA compliance should not interfere with agency's compliance with ESA. US v. South Florida Water Mgmt. Dist., noted that NEPA should not be used to frustrate actions to benefit the environment and that and EIS could proceed concurrent with action. Sierra Club v. Marsh, found that "[i]t would be inconsistent with NEPA's purposes" to allow a party to "obstruct implementation" of a government action "which will protect endangered species."	The situation of the North Atlantic right whale is serious, and ship strikes are the principal threat. NMFS determined that the petition for emergency rulemaking was not warranted because promulgating a speed limit at that time would curtail full public notice, comment and environmental analysis, duplicate agency efforts and reduce agency resources for a more comprehensive strategy, as well as risk delaying implementation of the draft Strategy.

Written Comments from Right Whale Ship Strike NOI (June 22, 2005)		
Comment Number	**Specific Comment**	**Response**
16 (Continued)	The NOI cites solely the potential economic impacts of implementing the Strategy as the reason for conducting the EIS. As NMFS must surely be aware, economic impacts alone are not sufficient grounds for conducting an EIS. E.g., County of Seneca v. Cheney, and Knowles v. United States Coast Guard.	Under the "Purpose of this Action", the NOI also cites NEPA requirements to conduct environmental analysis.
17	The commenter does not agree that speed restrictions should be mandated for vessels transiting ports on the US East Coast without having substantially more scientific data on which to base this decision.	See response to comments 10 and 11.
	The EIS final rulemaking should state that the safety and steerage of the vessel has been considered as a primary concern.	Both the DEIS and the proposed rule addresses ships' maneuverability.
	The economic study included in the draft EA should be updated and should include long-term projections of impacts based on the future fleet anticipated to call on the US East Coast. The proposed restrictions will result in delays, diversions and bypasses that will directly affect the economic strength of individual ports and port communities, as well as the shipping industry.	The economic study has been updated and expanded in the DEIS. However, the DEIS does not include quantitative long-term future projections, NEPA analysis is based on the most recent available data.
	Savannah has additional restrictions imposed by the USCG on transits associated with LNG vessels.	Analyzed in Chapter 4.7.3, Cumulative Impacts.
	The commenter believes that current measures such as the Early Warning System, aerial surveys and outreach and educational efforts by NMFS are working, and until there is proof that the proposed strategy will result in better protection or that reduced speeds can be proved to reduce collisions with ships, the commenter does not support the strategy.	See Section 1.3 in reference to the effectiveness of current measures. With respect to speed restrictions, see responses to comments 10 and 11.
18	The proposed action identified in the NOI to prepare an EIS will, if ever actually implemented, be inadequate to protect the critically endangered right whale from ship strikes. Drafting and circulation of a DEIS, taking public comments, responding to such comments, preparing the FEIS, issuing proposed and final rules, and finally, implementing the requirements of any final rule will take, at a minimum several months or several years to accomplish.	NMFS believes the proposed action will reduce the threat of ship strikes to North Atlantic right whales, and is adhering to review and comment processes required by law.
	The commenter urges NMFS to take immediate actions and issued an emergency regulation consistent with Marine Mammal Commission recommendations to protect right whales from ship strikes pending the completion of the EIS and notice and comment rulemaking.	This petition for emergency rulemaking was denied in the Federal Register (70 FR 56884, September 29, 2005).
	Commenter does not understand why NMFS is not even considering as an alternative applying the rulemaking to federally owned or operated vessels. NMFS should initially apply their general rulemaking to all vessels; following specific agency consultations, agencies could then perhaps seek modification of such rules to better match their specific operational requirements.	See response to comment 8.
	With regard to the NMFS preferred alternative, the commenter does not understand why NMFS is declining to apply "large-scale speed restrictions" in favor of seasonal restrictions in "Seasonally Managed Areas". NMFS should instead impose year-round speed restrictions covering all areas in which right whales might be found throughout the year, and seasonal speed restrictions only in those areas in which right whales are only found for portions of the year.	Proposed operational measures will apply at times and locations in which co-occurrence of whale and ship densities are highest. The SMAs are based on right whale sighting data that indicate the time of the year the whales are present.
19	Application of plan to recreational vessels over 65 feet is unsupported and unreasonable. The	NMFS considered and rejected exempting

Written Comments from Right Whale Ship Strike NOI (June 22, 2005)		
Comment Number	**Specific Comment**	**Response**
	commenter does not understand and opposes NMFS rationale for applying any new management measures to recreational boats that are 65 feet or more, and recommends that NMFS not apply its management measures to recreational vessels of any length.	recreational vessels. There have been several reported instances (1-southeastern US, 1-South Africa) where recreational vessels over 65 feet have struck and injured whales. In March 2005, a recreational vessel struck a right whale, and resulted in severely lacerated tail flukes.
	NMFS must consider the impacts of its proposals to the boaters and the businesses, such as marinas, boat dealers and repair shops, restaurants, etc., that support them.	Acknowledged
	Any new management measures must be designed and implemented with the full involvement and approval of the USCG. NMFS should begin interagency consultations with the USCG before going further on any proposed measures.	See response to comment 9.
	The commenter supports the No Action Alternative, unless and until recreational boats are excluded from these new management measures and until NMFS works with the Coast Guard to develop proposals that adequately take into account the potential impacts on vessel safety and homeland security.	See response to comment 19 with respect to application of the proposed rule to recreational vessels. NMFS works regularly with the USCG on proposed actions, including its preparation of a Port Access Route Study to assess navigational safety. Federal agency vessels, including those of the US armed forces engaged in national defense of homeland security activities are exempt from the measures.
20	Prior assessments have addressed economic impacts to vessel operators calling at East Coast ports but the impacts to port operators and other members of the maritime community operating in these ports have not been thoroughly evaluated. The evaluation should include an economic analysis of the impacts to ship call schedules, cargo handling and distribution operations, pilot and tug operations, and other maritime transportation related activities.	See response to comment 12.
	The impact of the proposed alternatives on the regional economies served by the affected ports should be addressed.	Socioeconomic impacts will be addressed in Section 4.4.
21	NMFS must provide meaningful protections for the species regardless of the resulting economic costs. Specifically, the ESA is designed to "halt and reverse the trend toward species extinction, whatever the cost." (T.V.A. v. Hill, 1978)	See response to comment 8.
	The EIS should consider the ethical values that some people hold in relation to whales and the marine environment. There are equally important "value-based" reasons as to why society would chose to protect whales; reasons for which there are no economic metrics to define.	Quantitative estimates of the economic benefits to protecting right whales are currently unavailable; however, Section 5.3.1 of the EIS qualitatively discusses these benefits.
	Regulations are necessary for recreational and commercial whale watch vessels, based on the proven inadequacy of the 1999 voluntary Whale Watch Guidelines.	Acknowledged

Written Comments from Right Whale Ship Strike NOI (June 22, 2005)		
Comment Number	**Specific Comment**	**Response**
21 (Continued)	The commenter believes that all sovereign vessels should be included in the ship strikes management regime, regardless of the federal agencies' individual efforts to address ship strikes, and the requirements under Section 7 of the ESA.	See response to comment 8.
	NMFS should work closely with DoD in light of P.L. 108-136, and at a minimum obtain a memorandum of understanding that outlines protective measures that DoD will take to adhere to ship strike management measures to protect NARWs.	See response to comment 8.
	Alternative 6 is the minimum level of protection necessary to protect right whales from vessel collisions. However, alternative 6 excludes large-scale speed restrictions, and for this reason, NMFS should combine alternatives 5 and 6 to include broader-scale speed restrictions…Ships should be required to adhere to speed restrictions not to exceed 13 knots, and preferably a restriction of < 13 knots...	Acknowledged; analysis is provided in the DEIS.
	As a part of a suite of management measures (speed restrictions; ATBA; re-routing; mandatory shipping lanes), the commenter supports the use of DMAs year round for the entire eastern seaboard to address the occurrence of right whales outside of established management areas and/or time periods.	Acknowledged; analyzed in alternatives 2, 5 & 6.
	Individual sightings in the mid-Atlantic should be considered as triggers for dynamic measures.	Additional triggers for a DMA are analyzed in alternatives 2, 5 & 6.
	Commenter suggests that NMFS apply speed restrictions and other management measures during the entire period when right whales are present each year in the Southeast region: November 15- April 15.	These dates (Nov.15-Apr.15) have been adopted in Alternative 6 for the SEUS region.
	The TSS and the area extending westward from the GSC management area to Nantucket and Cape Cod, and northward to the southern boundary of the Off Race Point area, should be subject to management measures for the ships 65' or greater on an annual bases from March 15th through July 31st, including speed restrictions.	Acknowledged; analyzed in alternatives 3, 4, 5 & 6.
	In addition to designating the GSC proposed mgmt. area, and the suggested area to the west as an ATBA for all ships greater than 65'or 300 gross tons, NMFS should impose a uniform speed restriction of 10-13 knots applicable to these vessels during the designated time period.	Speed restrictions in the GSC seasonal management area are proposed and analyzed in alternatives 3, 5 & 6.
	Management measures standing alone would be insufficient in protecting right whales from ship strikes. The commenter supports the designation of mandatory routes as part of a comprehensive ship strike management regime.	Analyzed in alternatives 4, 5 & 6.
	The commenter believes that mandatory shipping lanes with speed restrictions should be designated in the western portion of CCB for approaches to Boston, Portland, and Canada from the Cape Cod Canal and vice versa.	Recommended shipping routes from the Cape Cod Canal are analyzed in the Port Access Route Study and alternatives 4, 5 & 6.
	There is a rectangular area east of the Off Race Point proposed management area and west of the GSC management area that should be included in the scheme. The commenter recommends that NMFS strongly consider the area delineated by the eastern boundary 42°30' N. 69° 54' W. and western boundary 42° 30' N. 69° 00'W, and the northern boundary coordinates even with the northern boundaries of the Off Race Point and GSC management areas, as an ATBA from March 15- July 31st .	Relative to the ANPR and the NOI, the Off Race Point and GSC management areas expanded; and these revisions will be reflected in the DEIS. See Chapter 2, Alternative 6.

Written Comments from Right Whale Ship Strike NOI (June 22, 2005)		
Comment Number	**Specific Comment**	**Response**
22	It is important to consider the role of right whales in the ecosystem, the economic benefit of the survival of right whales, as well as the negative economic impacts that may result from their extinction.	Monetary estimates of the benefits to protecting right whales and the negative economic impacts that may result from extinction are currently unavailable; however, Section 5.3.1 of the EIS qualitatively discusses the benefits.
	If DMAs were to be successful as a sole ship strike reduction measure, dedicated surveys of the entire east coast would need to be conducted year round. While DMAs are an important management tool, they cannot be relied upon as the sole measure to reduce ship strikes.	Acknowledged
	The plan does not account for any vessels under 20 m. Any vessel is capable of striking a whale fatally since the force of the strike is equivalent to the product of vessel mass and acceleration.	The strategy accounts for the vessel size classes that pose the highest risk to right whales.
	Commenter is concerned that NMFS will exempt sovereign vessels.	See response to comment 8.
	Commenter is deeply concerned that the rationale for the use of seasonal measures appears to be solely based on limited survey effort. Opportunistic sightings indicate that whales are active in these areas throughout the year.	See response to comment 18.
	Alternative 4, in and of itself, is an insufficient risk reduction measure. Additionally, since DMAs are not included in Alternative 4, there are no means to require action is taken when whales are found in areas not previously considered in this alternative.	Acknowledged
	Commenter believes alternative 5 is the most conservative proposed by NMFS and alternative 6 is the minimum threshold of protection in order to ensure the survival of the critically endangered North Atlantic right whale population.	Acknowledged
23	Commenter favors alternative 6, given several considerations outlined in the comment (Appendix A).	Acknowledged
	Daylight transits only in “small specific areas”. Alternatively night time transit in a controlled traffic scheme as per alternative 6.	Comment is not specific enough for a response.
	Only supports speed reduction of 12 knots or greater.	Acknowledged
	A competent agency should instate a “Traffic Scheme” designed to take in consideration whales’ habitat and behavior. Access to traffic scheme should be coordinated by shore “Traffic Control Stations”.	Recommended shipping routes are considered in alternatives 4, 5 & 6, and in the USCG’s Port Access Route Study.
	The number of vessels transiting at the same time in the traffic scheme should be coordinated and limited. Vessels in the traffic scheme should run at the same speed and properly spaced.	International regulations exist that set the rules for transiting in traffic separation schemes. And, due to navigational safety concerns and commercial timetables, there may be limits on how much ships can be coordinated.
	Check in points to “Traffic Control” to verify that position, course and speed of vessels in the traffic scheme are consistent.	Comment is not specific enough for a response.

Written Comments from Right Whale Ship Strike NOI (June 22, 2005)		
Comment Number	**Specific Comment**	**Response**
23 (Continued)	Consider tagging whales with solar powered radar detectors	Alternative considered but rejected. See Section 2.3.3.
	Consider sounds and/or other technology to keep whales away from traffic scheme/lanes.	Alternative considered but rejected. See Section 2.3.4, right whale hearing.
	Fishing boats and leisure boats should be prohibited activities, other than transit, in the traffic scheme.	International regulations exist that set the rules for transiting in traffic schemes.
	Create awareness programs through education and controlled tours.	Outreach and education programs are included in the strategy, although are not operational measures considered in the DEIS.
24	The proposed LNG terminal near Eastport, Maine in Passamaquoddy Bay will mean that tankers arriving will cross the right whale breeding ground concentrations when they turn to come into the bay.	Acknowledged; see Sections 4.7.2.7 and 4.7.3.1.
25	Ships that strike whales should be fined.	The MMPA prohibits the taking of whales. Enforcement actions may include penalties, and even imprisonment; however, at this time, fines for ships that comply with regulations are not being considered.
	Implement emergency regulations now.	See response to comment 18
	Year-round speed restrictions should be in place now. Ships should only go in certain routes not all over the ocean.	Year round speed restrictions are unwarranted in certain areas as whale protection measures, but year-round speed restrictions are proposed in the NEUS under Alternative 3. Certain shipping routes are being considered under Alternatives 4, 5, and 6.
26	The success of this effort will depend largely on a continuing effort to report sightings by as many pilots and ships' crew members as possible. Recreational boaters should be encouraged to report sightings over marine channel 16 or over toll-free phone numbers.	Sighting reports by untrained observers often need to be verified, because erroneous sightings may put undue burden on the shipping industry.
	Penalties should be strongly considered for ships' owners whose pilots have been adequately forewarned and yet strike whales due to failure to comply with required speed limits.	See response to comment 25.
27	Commenter supports the continued non-regulatory measures as defined in Alternative 1 and if speed restrictions become part of the management strategy, then seasonally managed speed restricted areas versus coast-wide speed restrictions are encouraged.	Acknowledged; analyzed in alternatives 1 & 6.
	Commenter suggests that all potentially impacted port facilities have a PARS that would allow a captain's speed year-round within the access route.	PARS are for routing measures. Routes are being considered only for certain locations.
28	East and west coast submarine travel and the use of active sonar are potentially detrimental to marine life.	Acknowledged

Written Comments from Right Whale Ship Strike NOI (June 22, 2005)		
Comment Number	**Specific Comment**	**Response**
29	Commenter commends the agency for drafting [these regulations], although states that the government has moved to slowly. Asks agency to remember there are citizens who do not belong to "special interest" groups to whom you should listen.	NMFS recognizes the urgency of the problem and is working to move the process forward within the constraints of legal mandates.
30	Commenter believes Alternative 1 is the most logical of the 6 options. More substantial-definitive data is required to support consideration of additional measures.	Acknowledged
31	Are there technical alternatives to control commercial shipping?	NMFS has considered certain technical alternatives, but rejected these alternatives from further analysis (see Section 2.3).
	Is the NOAA "65 ft and above" criteria supported by any scientific facts?	Yes; see Section 1.4.
	Are there better criteria than arbitrary calendar requirements to determine when the restrictions should apply? Current surveillance methods and warnings are effective.	The dates for management measures are based on years of right whale sighting data.
	Are there better approaches than arbitrary coast-wide restrictions that could reduce the overall dollar cost of the regulations	Alternative 6 analyzes restrictions in specific areas and alternative 5 analyzes coast-wide restrictions. Right whale range includes all waters off the US and Canadian east coast.
	If imposed, how will the restrictions be evaluated for effectiveness? Is there a plan for continuing improvement of the approved actions?	NMFS will develop plans for monitoring effectiveness and improving the program if the threat of ship strikes continues at an unacceptable rate.
	NOAA should prepare an EIS that compares alternatives in dollar costs and presents the dollar value of return on investment for the Strategy.	This DEIS includes a cost analysis of the alternatives, however the value of the return on the investment is not available at this time.
32, 33	Supportive of Alternative 6 as the minimum threshold for protection; although additional protections may be needed for areas and times beyond those outlined in the Strategy.	Acknowledged
34	Supportive of Alternative 6	Acknowledged
35, 36	Encourages going forward with implementing the Strategy as written.	Acknowledged
37	Supports guidelines to help protect and minimize damage to right whales.	Acknowledged
38	Supports Alternative 6 although does not believe that any of the alternatives go far enough to do what is necessary to protect this magnificent animal from extinction.	Acknowledged
	The whale is a natural resource; it belongs to all of us. It makes no sense that a special interest group be allowed to control the future of the resource. It is not theirs to control. It is ours to protect.	Acknowledged
39	It is imperative that the draft proposal by NMFS to slow ships and modify shipping routes away from critical habitat is given a time line for putting these modifications into effect immediately.	Acknowledged

Written Comments from Right Whale Ship Strike NOI (June 22, 2005)		
Comment Number	**Specific Comment**	**Response**
40	The proposed regulations have no meaningful science to support their imposition on the maritime industry.	See response to comment 6.
	Speed restrictions impacting vessels on their approach and departure from Boston Harbor could have a major impact on how freight travels into the entire New England regions. If ports are bypassed, taking containers off ships and putting them on trucks will significantly increase truck traffic on the I95 corridor either south from Halifax or north from New York.	These issues are addressed in the indirect and cumulative impacts sections.
	Boston is a small port that provides a waterborne method of transporting goods and people to a large geographic sector of our country. Loss of a major steamship line could have significant and long range negative consequences to this region.	Impacts on port operations are mentioned in Section 4.4.
	Technology must be given the opportunity to participate in providing a workable strategy. AIS and forward looking sonar are available now.	See response to comment 31.
41	Supports Alternative 6	Acknowledged
42	A whale bumper fit over the bow and welded in place with the space in the new concavity on either side filled in to prevent parasitic drag is in order.	Insufficient information in the comment to provide a response.
43	Please rush into effect the draft proposal to slow ships down.	Acknowledged; see response to comments 16 and 29.

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APPENDIX C

COLREGS Demarcation Lines

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COLREGS Demarcation Lines

1. **South and east of Block Island Sound.**

   §80.150 Block Island, R.I.
   The 72 COLREGS shall apply on the harbors of Block Island. (Chart 13205)

   §80.155 Watch Hill, R.I. to Montauk Point, N.Y.
   (a) A line drawn from Watch Hill Light to East Point on Fishers Island.
   (b) A line drawn from Race Point to Race Rock Light; thence to Little Gull Island Light thence to East Point on Plum Island.
   (c) A line drawn from Plum Island Harbor East Dolphin Light to Plum Island Harbor West Dolphin Light.
   (d) A line drawn from Plum Island Light to Orient Point Light; thence to Orient Point.
   (e) A line drawn from the lighthouse ruins at the southwestern end of Long Brach Point to Cornelius Point.
   (f) A line drawn from Coecles Harbor Entrance Light to Sungic Point.
   (g) A line drawn from Nichols Point to Cedar Island Light.
   (h) A line drawn from Threemile Harbor West Breakwater Light to Threemile Harbor East Breakwater Light. (Charts 13215 & 13209)

2. **Ports of New York and New Jersey (Montauk Point to western end of Martha's Vineyard).**

   New York Harbor: A line drawn from East Rockaway Inlet Breakwater Light to Sandy Hook Light (33 CFR 80.165). (Chart 12326)

3. **Delaware Bay (Ports of Philadelphia and Baltimore).**

   Delaware Bay: A line drawn from Cape May Light to Refuge Light; thence to the northernmost extremity of Cape Henlopen (33 CFR 80.503). (Chart 12304)

4. **Entrance to Chesapeake Bay (Ports of Hampton Roads and Baltimore).**
   Chesapeake Bay Entrance, VA: A line drawn from Cape Charles Light to Cape Henry Light (33 CFR 80.510). (Chart 12221)

5. **Ports of Morehead City and Beaufort, NC.**

   Cape Lookout, NC to Cape Fear, NC:

   (a) A line drawn from Cape Lookout Light to seaward tangent of the southeastern end of Shackleford Banks.

   (b) A line drawn from Morehead City Channel Range Front Light to the seaward extremity of the Beaufort Inlet west jetty.

(c) A line drawn from the southernmost extremity of Bogue Banks at 34° 38.7’ N, 76° 06.0’W across Bogue inlet to the northernmost extremity of Bear Beach at 34° 38.5’N, 77° 07.1’W.

(d) A line drawn from the southeastern most extremity on the southwest side of New River inlet at 34° 31.5’N, 77° 20.6’W, to the seaward tangent of the shoreline on the northeast side of New River Inlet (33 CFR 80.525). (Coast Chart 11543 or Harbor Chart 11545)

6. **Wilmington, NC.**

Cape Lookout, NC to Cape Fear, NC:

(a) A line drawn from the seaward extremity of the jetty on the northeast side of Masonboro Inlet to the seaward extremity of the jetty on the southeast side of the inlet.

(b) Except as provided elsewhere in this section from Cape Lookout to Cape Fear, lines drawn parallel with the general trend of the highwater shoreline across the entrance of small bay and inlets (33 CFR 80.525).

Cape Fear, NC to Little River Inlet, NC.

(a) A line drawn from the abandoned lighthouse charted in approximate position 33° 52.4’ N, 78° 00.1’ W across the Cape Fear River Entrance to Oak Island Light (33 CFR 80.530). (Harbor Chart 11537, Coast Charts 11536 and 11539).

7. **Georgetown, SC.**

Little River Inlet, SC to Cape Romain, SC:

(a) A line drawn from the charted position of Winyah Bay North Jetty End buoy 2N south to the Winyah Bay South Jetty (33 CFR 80.703). (Harbor Chart 11531)

8. **Charleston, SC.**

Charleston Harbor, SC:

(a) A line formed by the submerged north jetty from the shore to the west end of the north jetty.

(b) A line drawn from across the seaward extremity of the Charleston Harbor Jetties.

(c) A line drawn from the west end of the South Jetty across the South Entrance to Charleston Harbor to shore on a line formed by the submerged south jetty (33 CFR 80.710). (Coast Chart 11521)

9. **Savannah, GA.**

Savannah River: A line drawn from the southernmost tank on Hilton Head Island charted in approximate position 32° 06.7’N, 80° 49.3’ W to Bloody

Point Range Rear Light; thence to Tybee (Range Rear) Light (33 CFR 80.715). (Coast Chart 11513)

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APPENDIX D

Port Area Socioeconomic Profiles

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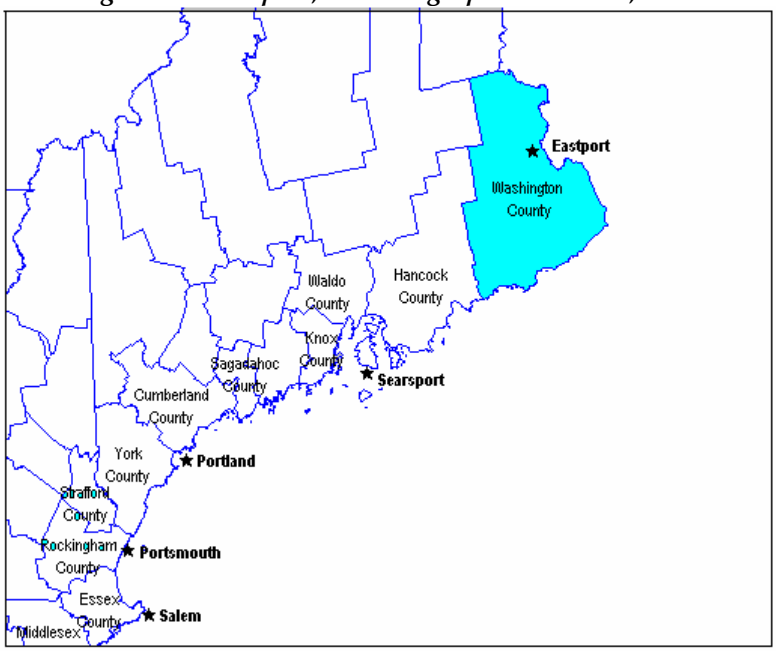
1. Eastport, ME

Location and Background Information

The Port of Eastport is located in Washington County, Maine. It is the easternmost port in the United States and is nestled in a safe harbor behind Canada's Campobello Island. The waters of Passamaquoddy Bay and Cobscook Bay converge in Eastport generating some of the highest tidal ranges in the United States. This massive flow keeps the local waters clean and productive as Eastport is home to one of the largest salmon aquaculture operations in the US. Eastport is also centrally located to many of the State's forest products industries.[1]

Figure 1-1. Eastport, ME: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

Washington County, Maine has a total population of 33,941 according to the 2000 US Census. Of the total population, 17,365 are females; representing 51.2 percent of the total population and 16,576 are males, representing 48.8 percent of the total population. The median age for the population is 40.5 years: 39.7 for males and 41.2 for females. The majority of the population is located between the 40 – 49 age range bracket, both for males and females (Figure 1-2).

The majority of the population of this county is white (93.4 percent), followed by 'others' (include American Indians and Alaska Natives, Native Hawaiian and Pacific Islanders, other races and a combination of two or more races), which represent 5.8 percent of the total population. The Asian

[1] Maine Port Authority website. URL http://www.maineports.com/water_eastport.html

population represents 0.5 percent of the total population, closely followed by the Black or African American population (0.3 percent). (Figure 1-3). In terms of ethnic structure and makeup, only 0.9 percent of the total population is of Hispanic or Latino origin.[2]

Figure 1-2. Eastport, ME: Structure of the Population by Age Group, 2000

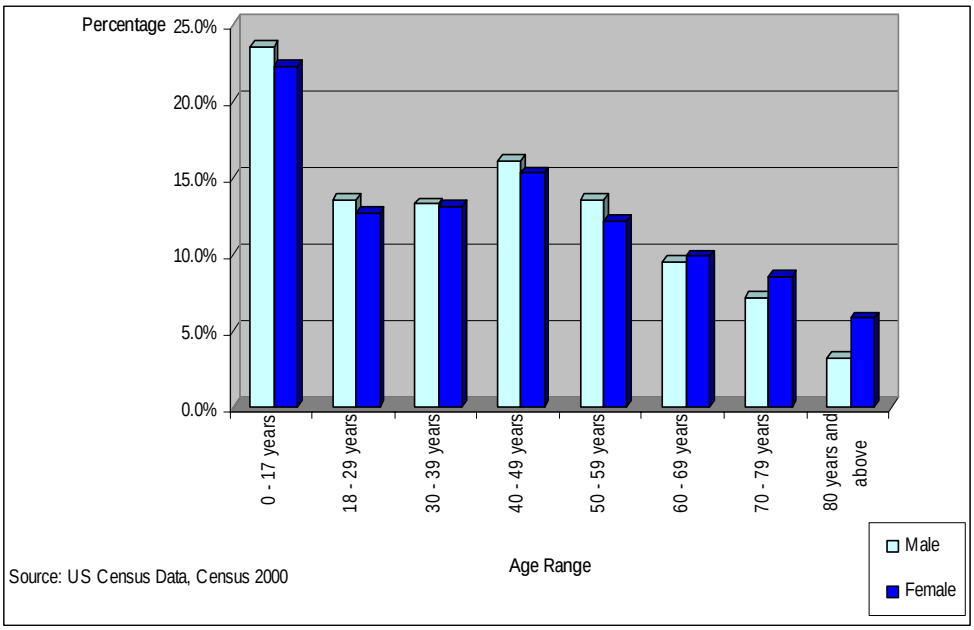
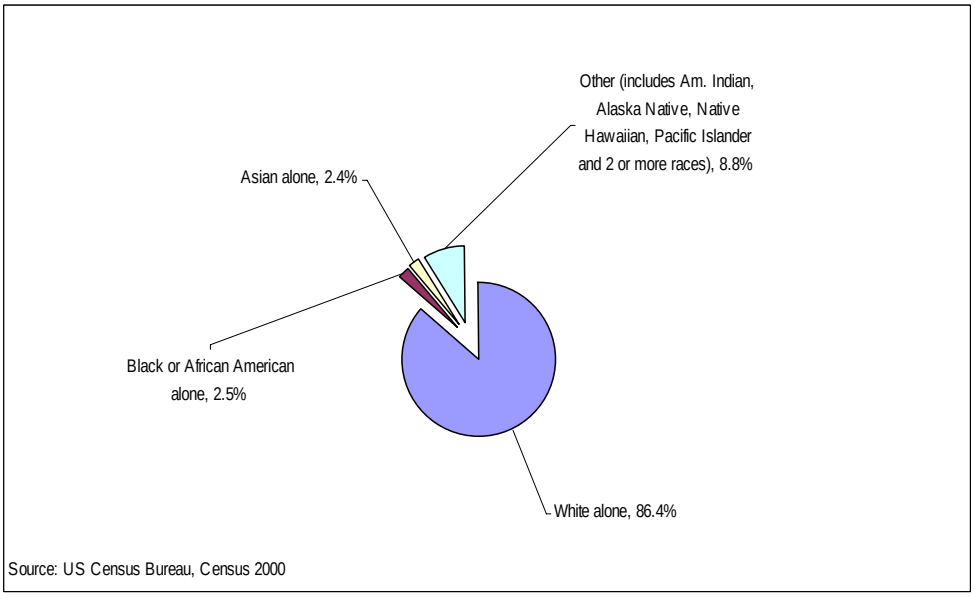


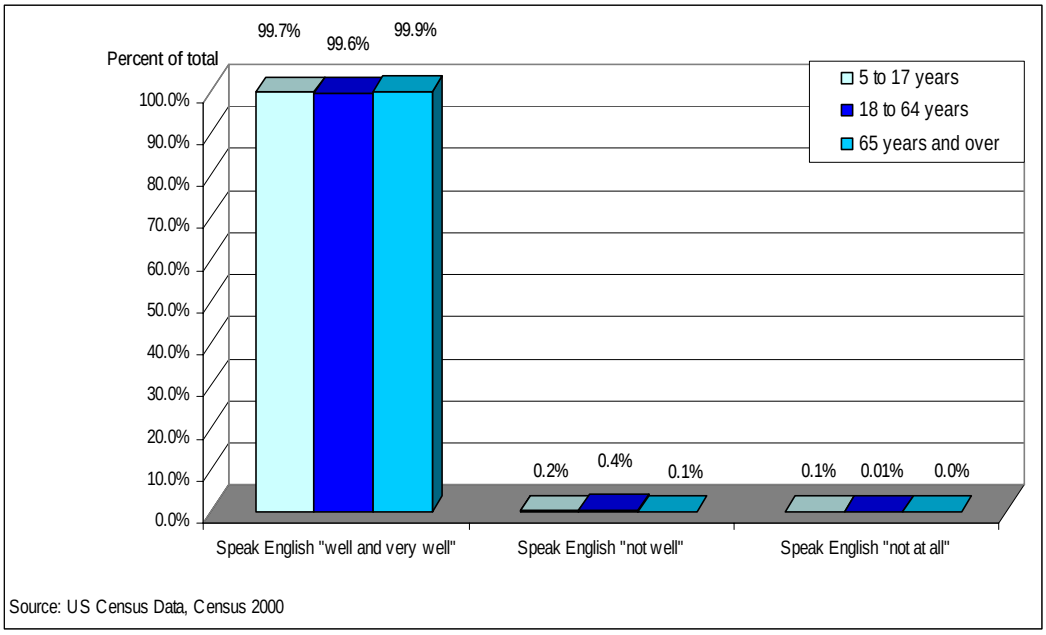
Figure 1-3. Eastport, ME: Population by Race, 2000



[2] US Census Data, Census 2000

It is evident from the data specified in Figure 1-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'.

Figure 1-4. Eastport, ME: Ability to Speak English by Age Group, 2000

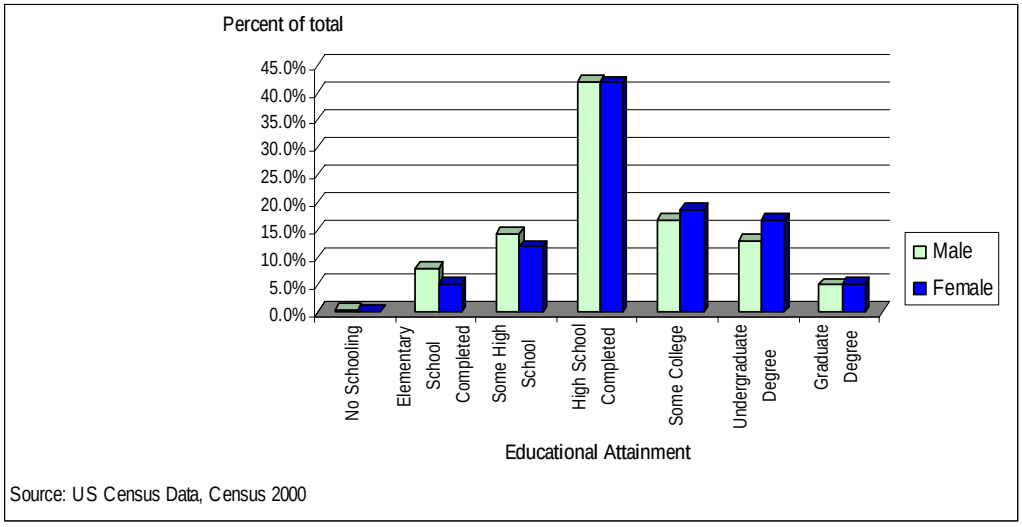


EDUCATION

Almost half of the population of Washington County, ME has completed High School and 13.1 percent of males and 16.9 percent of females have obtained an undergraduate degree. It is interesting to observe that females' educational attainment is higher than male's post high school. (Figure 1-5).

There are only two 4-year colleges in the county of Washington in Maine: Washington County Community College and the University of Maine - Machias.

Figure 1-5. Eastport, ME: Educational Attainment of Population by Sex Ages 25 and Over, 2000



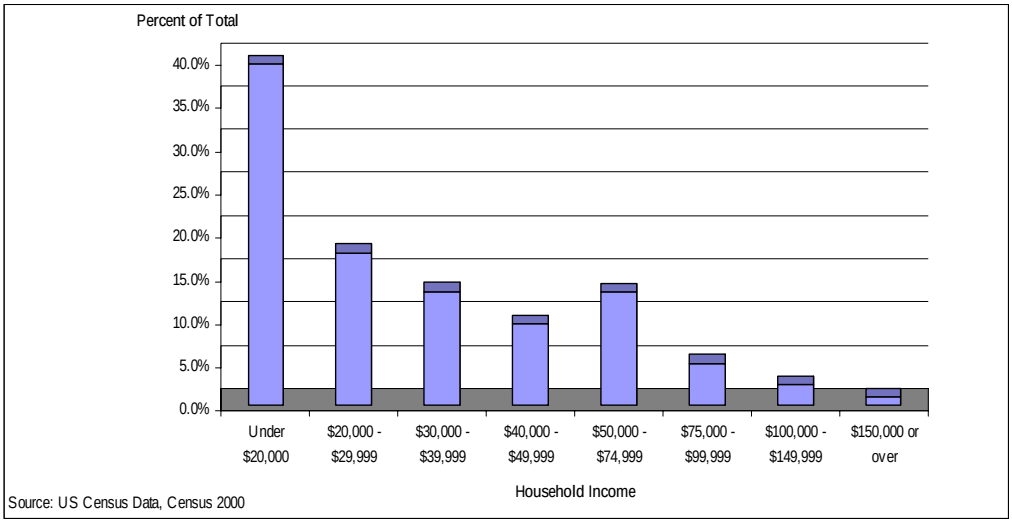
Socio-Economic Characteristics

INCOME

Over 40 percent of households in Washington County, ME have an income level under $20,000. About 17.5 percent of households fall under the income bracket of $20,000 - $29,999. Nearly 15 percent of all households have incomes between $30,000 and $39,999 and an equal percentage have an income between $50,000 and $74,999. (Figure 1-6).

Household median income in this county as of 1999, according to the 2000 US Census, was $25,869.00. The per capita income for 1999, according to the 2000 US Census, was $14,119.00. The percentage of people under the poverty line in the region was 19 in the year 2000. Average household size in Washington County is 2.34.[3]

Figure 1-6. Eastport, ME: Distribution of Households by Household Income Level, 1999



EMPLOYMENT

As is evident from Figure 1-7, most females in Washington County, Maine are employed in the education, health and social services industry (42.5 percent), followed their employment in 'other' industries, which include the arts, entertainment, recreation, food services, public administration and information (20.4 percent). For males, the distribution of employment among industries fluctuates less. The highest participation is distributed amongst three industry categories: agriculture, forestry, fishing, hunting and mining (19 percent); manufacturing (18 percent); and 'other' (16 percent).

An estimated 9.3 percent of males and 7.5 percent of females are unemployed in Washington County, Maine. [4]

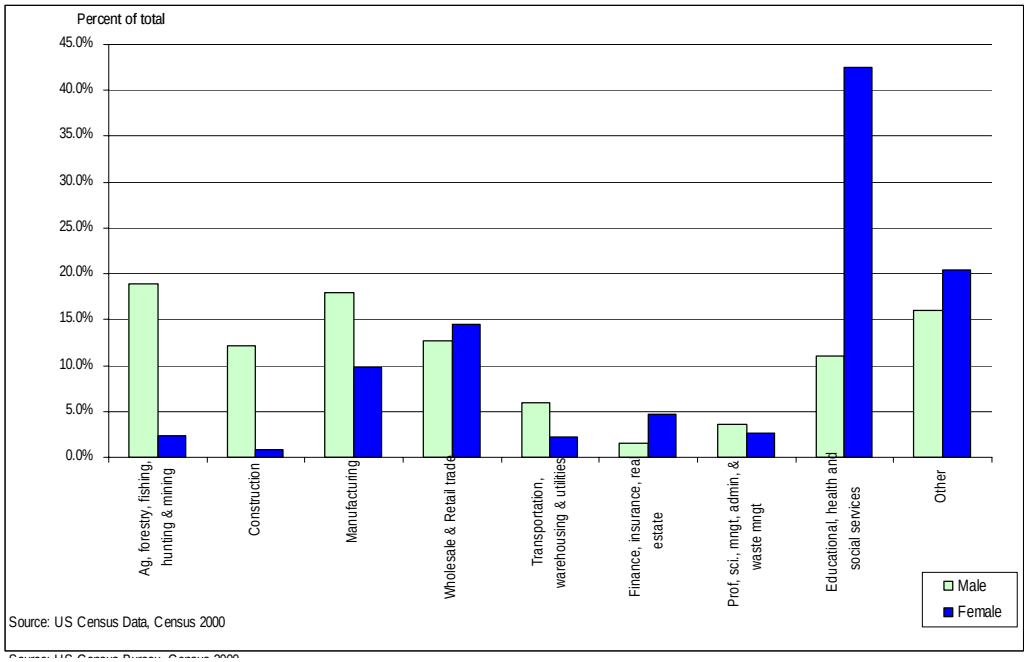
As can be observed in Figure 1-7, an estimated 14.9 percent of males and 0.1 percent of females are employed in farming, fishing and forestry occupations. About 24 percent of males and 9.9 percent of females are employed in production, transportation and material moving occupations. The

[3] US Census Data, Census 2000

[4] US Census Data, Census 2000

aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.8 percent of men's occupations and 0.3 percent of female's occupations.

Figure 1-7. Eastport, ME: Employed Civilian Population by Sex and Industry 16 Years and Over, 2000



MARITIME INFORMATION

The Eastport Breakwater Terminal has berthing for a vessel of up to 700 ft. An equipment maintenance shop, the Eastport Port Authority office, US Customs, and Coast Station Eastport are located just off the pier. The downtown Fish Pier berths the Port's two tugboats, Ahoskie and Pleon, on the North side, and has slips for transient boats on the South side. Approach depths to the Breakwater are over 100 feet and the mean low water depth is 42 feet. The Breakwater is also used by the aquaculture industry, commercial fishermen, and recreational boaters and fishermen.

Located at the downtown area of Eastport, the Breakwater offers cruise ships a direct docking within close proximity to all of Eastport's offerings. Estes Head Cargo Terminal can accommodate a ship of 900 feet in Berth A and one up to 550 feet in Berth B. Berth B is also an excellent berth for barges. EHCT's 43 acre site has several open storage areas, three 20,000 square foot, drive-thru warehouses, and one 43,000 square foot warehouse. The operations are easily supervised from the Federal Marine Terminals' office located just above the Estes Head pier. Approach depths to this pier are also well in excess of 100 feet and the mean low water depth is 64 feet. [5]

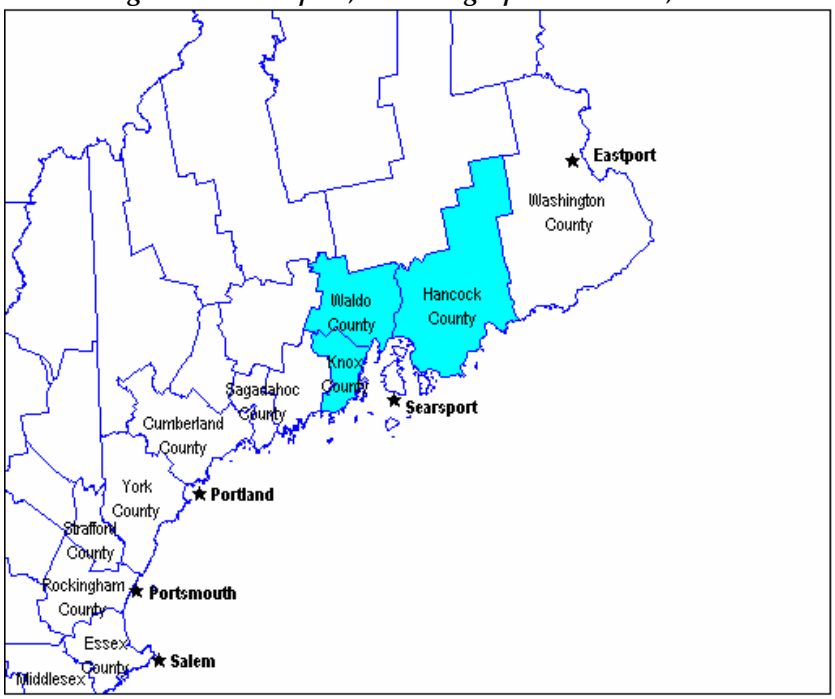
[5] http://www.portofeastport.org/facilities.html

2. Searsport, ME

Location and Background Information

Searsport is part of Knox County, Hancock County and Waldo County, Maine. The Port of Searsport is located at the heart of Penobscot Bay. The port has recently undergone a major reconstruction effort to effectively serve the needs of shippers moving product both into and out of Maine, and through the onsite rail yard of the Montreal, Maine & Atlantic Railway, to provide service to the heartlands of both the US and Canada.[1]

Figure 2-1. Searsport, ME: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

The total population of Knox, Hancock and Waldo counties, Maine is 127,689, according to the 2000 US Census. Of the total population, 17,825 are males (49.1 percent) and 18,455 are females (50.9 percent). The median age for the population is 39.3 years: 38.5 for males and 39.3 for females. It is evident from Figure 2-2 that over 15 percent of the population in this port area falls within the 40 – 49 years age bracket and about 25 percent of males and nearly the same percent of females are between the ages of 0 and 17 years.

[1] Maine Port Authority: http://www.maineports.com/water_searsport.html

As can be observed in Figure 2-3, the majority of the population in the region is white (97.8 percent), followed by 'others' (include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone), which represent 1.7 percent of the total population. The Asian population represents 0.3 percent of the total population, closely followed by the Black or African American population (0.2 percent). Moreover, in terms of ethnic structure, only 0.6 percent of the total population is considered to be of Hispanic or Latino origin.[2]

Figure 2-2. Searsport, ME: Structure of the Population by Age Group, 2000

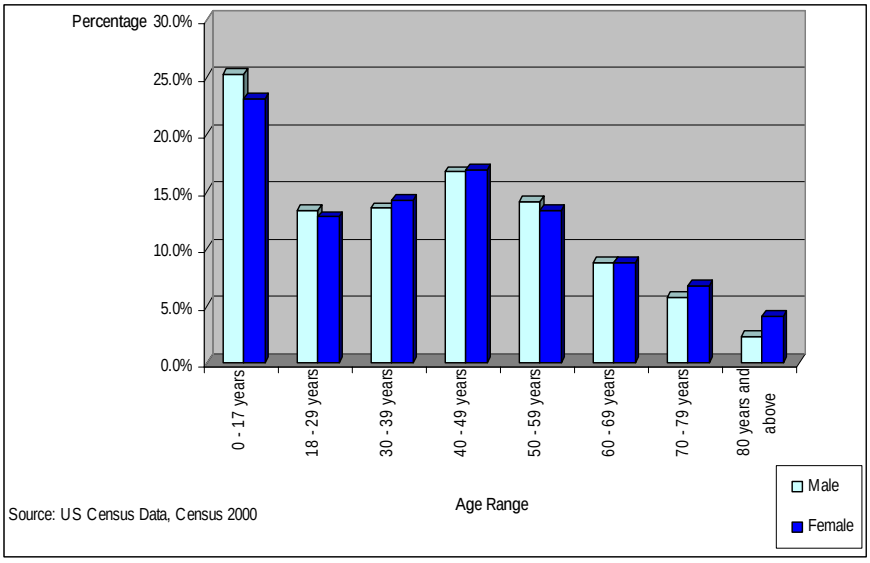
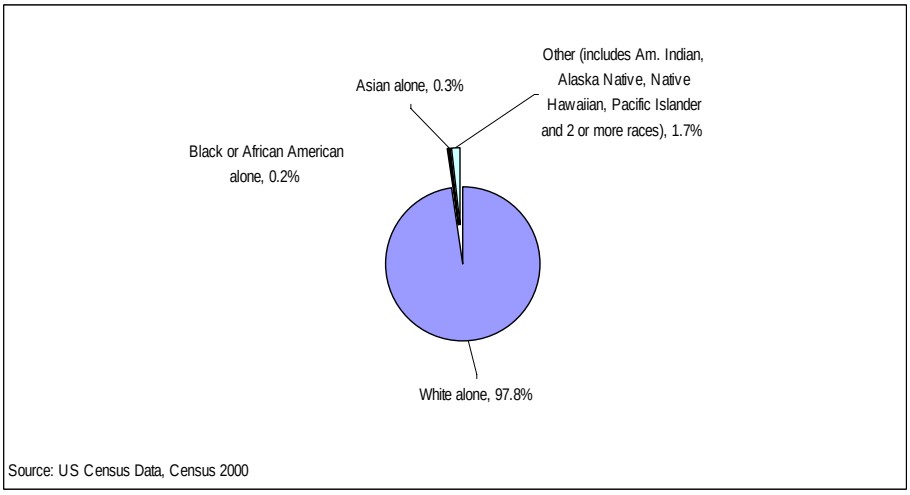


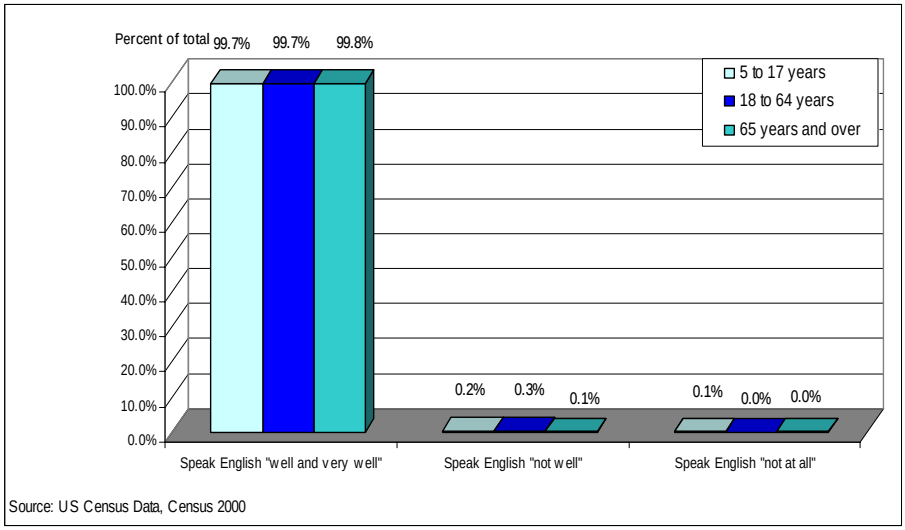
Figure 2-3. Searsport, ME: Population by Race, 2000



[2] US Census Data, Census 2000

It is evident from the data specified in Figure 2-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'.

Figure 2-4. Searsport, ME: Ability to Speak English by Age Group, 2000

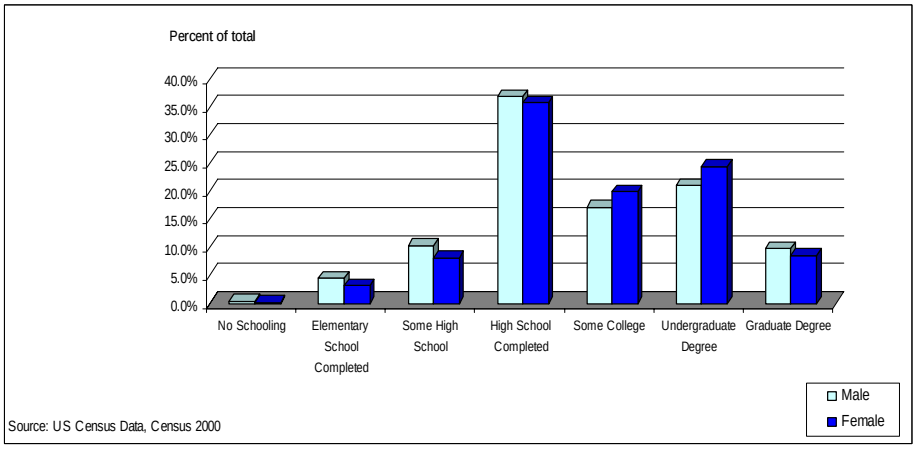


EDUCATION

About 35 percent of males and females, ages 25 and over, have completed high school. Around 20 percent of males and 24 percent of females have obtained an undergraduate degree (Figure 2-5).

The three main colleges in the area are: College of the Atlantic, Maine Maritime Academy in Hancock County and Unity College in Waldo County. [3]

Figure 2-5. Searsport, ME: Educational Attainment of Population by Sex Ages 25 and Over, 2000



[3] Searsport Community Profile: http://www.epodunk.com/

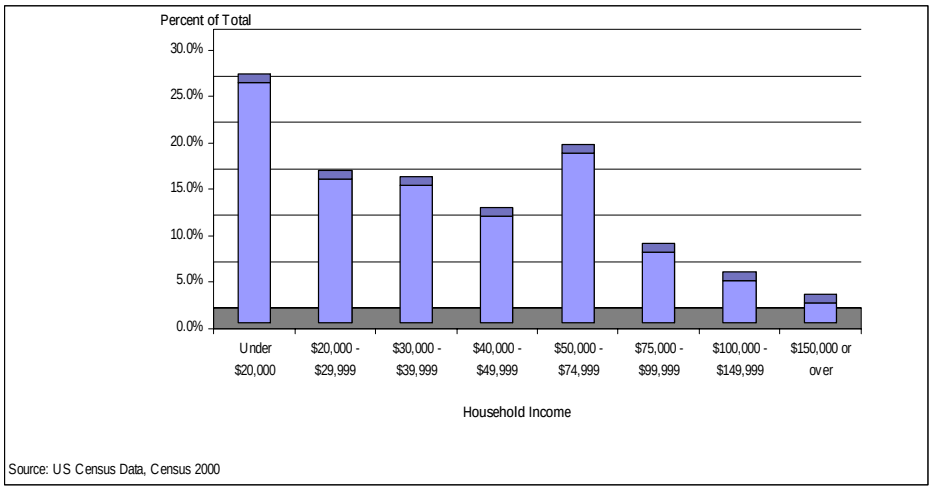
Socio-Economic Characteristics

INCOME

Household median income in the region in 1999 was $35,606.50 and per capita income was $19,188.70. The percentage of people under the poverty line in the region was 11.3 in the year 2000. The average household size in the area in 2000 was 2.43.[4]

About 27 percent of households in the region in 1999 had incomes of under $20,000 and approximately 20 percent of households had incomes between $50,000 and $74,999 (Figure 2-6).

Figure 2-6. Searsport, ME: Distribution of Households by Household Income Level, 1999



EMPLOYMENT

As is portrayed by Figure 2-7, around 34 percent of working females are employed in the education, health and social services industry, followed by their employment in 'other industries', such as arts, entertainment, recreation, food services, public administration and information (about 23 percent). Most males are employed in 'other industries' (19 percent), followed by construction (about 16 percent) and wholesale and retail trade (16 percent).

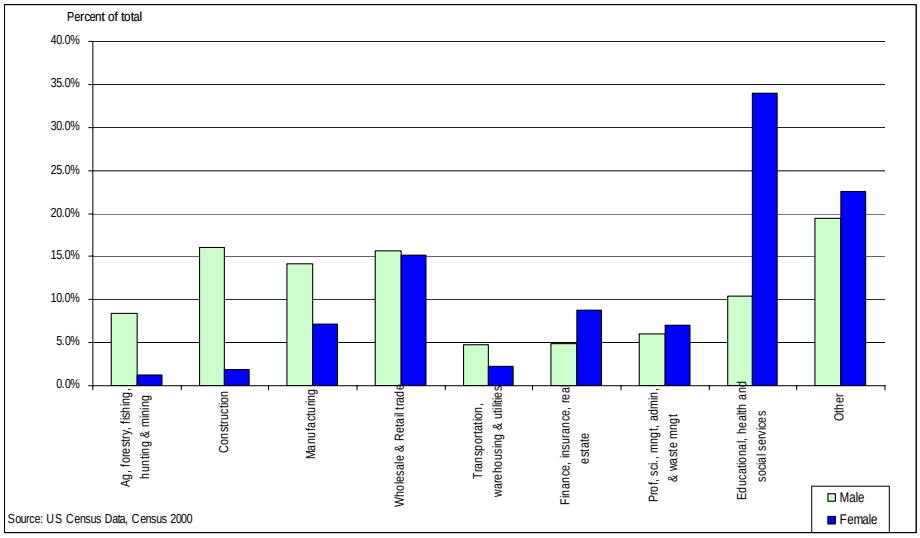
An estimated 4.5 percent of males and 5.1 percent of females were unemployed in the area in the year 2000.[5]

According to the 2000 US Census, an estimated 6.7 percent of males and 0.8 percent of females are employed in farming, fishing and forestry occupations. About 18.9 percent of males and 7.8 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.9 percent of male's occupations and 0.1 percent of female's occupations.

[4] US Census Data, Census 2000.

[5] US Census Data, Census 2000.

Figure 2-7. Searsport, ME: Employed Civilian population by Sex and Industry 16 Years and Over, 2000



MARITIME INFORMATION

The Port of Searsport consists of the Sprague Energy Terminal on Mack Point. The facility is being redeveloped in partnership with the MDOT over the next 2 years. In the mid-1800s in Searsport, there were eight shipbuilding yards which built wooden vessels of exceptional quality. While residents built the ships, they sailed them as well. Searsport was home to one-tenth of the deep water captains in the American Merchant Marine, and produced more shipmasters per square mile than any town of its size in the world. Searsport's presence as a major seaport has been long and successful. The Sprague Energy Terminal at Mack Point in Searsport had a solid year in 2000 handling bulk and liquid cargoes. The cargo handled included items such as coal, road salt, gypsum, and coke. In 1999, the Port of Searsport also handled over 3 million barrels of liquid petroleum products.

The dry cargo pier has a working surface of 100′ x 560′ and a deck load capacity of 1,000 psf. It has two berths, both are 800 feet long. The liquid cargo pier has a multi purpose hose platform, with 2 berths, one that is 700 feet long and the other is 500 feet long. The port has 1.6 million barrel active tank capacity and truck and rail loading racks. It has truck and rail access and a 90,000 sq. ft. warehouse. Intermodal Truck to Rail Facility. It has over 6,500 feet of on-site rail siding interconnected with the Canadian Pacific for double stack service to the US Midwest, central Canada, and Vancouver. [6]

[6] Maine Department of Transportation website: http://www.state.me.us/mdot/freight/searsport.php

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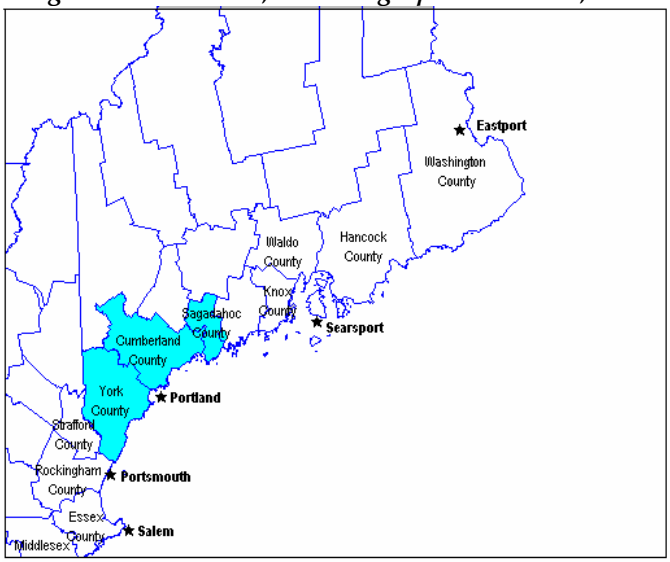
3. Portland, ME

Location and Background Information

The port of Portland is located in the Portland-South Portland-Biddeford, Maine Metropolitan Statistical Area (MSA). Portland Harbor, at the western end of Casco Bay, is the most important port on the coast of Maine. The ice-free harbor offers secure anchorage to deep draft vessels in all weather. There is considerable domestic and foreign commerce in petroleum products, paper, wood pulp, scrap metal, coal, salt and containerized goods. It is also the Atlantic terminus pipeline for shipments of crude oil to Montreal and Ontario. In 1998, Portland became the largest port in the Northeast based on throughput tonnages. A rail system connects the Port to a national network that also reaches into Canada, one of the reasons shippers bypass the crowded and more costly port cities of southern New England and the Mid-Atlantic.[1]

Figure 3-1. Portland, ME: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

The total population of the Metropolitan Statistical area is 487,568 according to the 2000 US Census. Of the total population 236,585 are males or 48.5 percent of the population and 250,983 are females or 51.5 percent of the population. The median age for the population of the area is 38.0 years: 36.9 for males and 39.0 for females. Over 15 percent of the population is located between the 40 – 49 years age range brackets, in this case of both males and females and about 25 percent of males and about 23 percent of females are between the ages of 0 to 17 years (Figure 3-2).

[1] http://www.portofportlandmaine.org/navigation.html

As is evident from Figure 3-3, the majority of the population in the area is white (96.6 percent), followed by 'others' (which include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone), representing 1.7 percent of the total population. The Asian population represents 0.9 percent of the total population, closely followed by the Black and African American population (0.7 percent). Moreover, in terms of ethnic makeup, 0.9 percent of the total population is of Hispanic or Latino origin.[2]

Figure 3-2. Portland, ME: Structure of the Population by Age Group, 2000

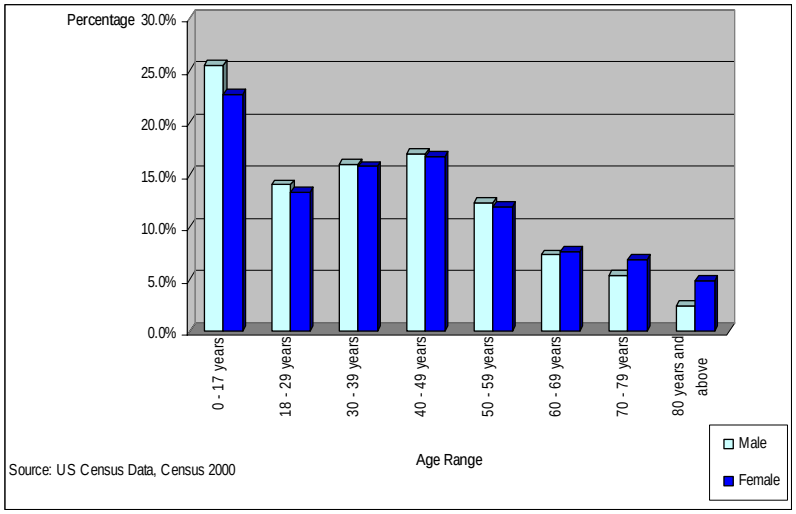
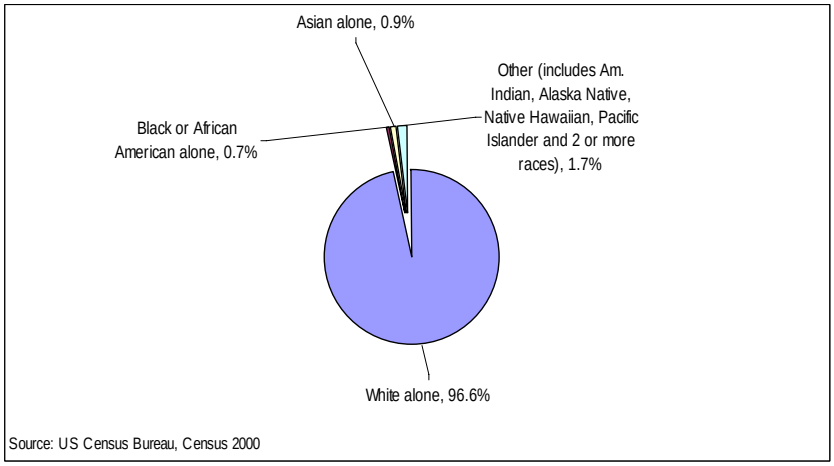


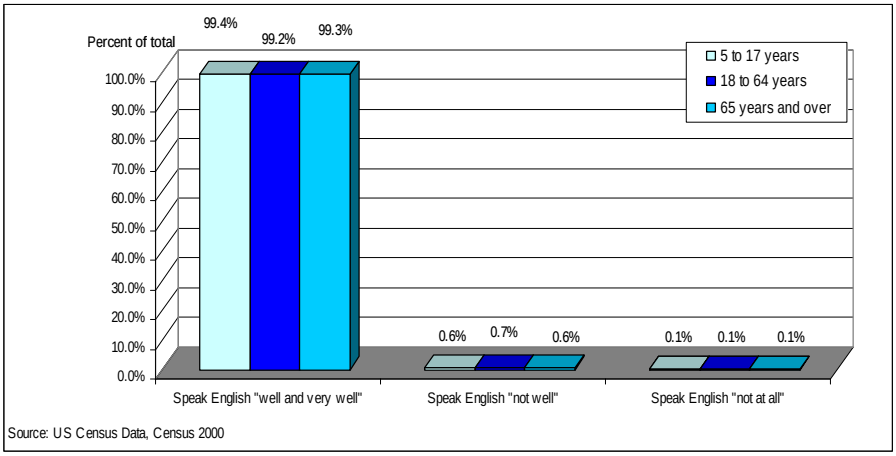
Figure 3-3. Portland, ME: Population by Race, 2000



[2] Source: US Census Data, Census 2000.

It is evident from the data specified in Figure 3-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'.

Figure 3-4. Portland, ME: Ability to Speak English by Age Group, 2000

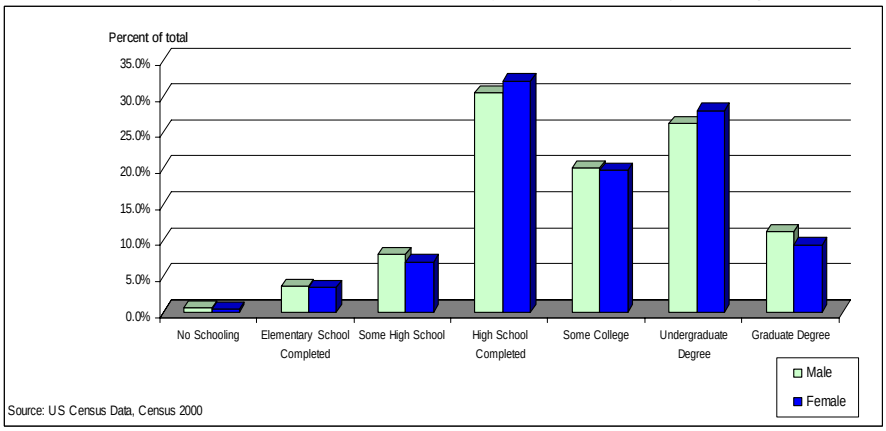


EDUCATION

As portrayed by Figure 3-5, around 30 percent of males and females in this region have completed high school and approximately 25 percent of males and females have obtained an undergraduate degree. This percentage is followed by those who have only completed some college (about 18 – 19 percent).

Some of the colleges and universities in the area are: Bowdoin College, Maine College of Art, Saint Joseph's College and the University of Southern Maine in Cumberland County; and the University of New England and York County Community College in York County, Maine.[3]

Figure 3-5. Portland, ME: Educational Attainment of Population by Sex Ages 25 and Over, 2000



[3] Portland Community Profile: http://www.epodunk.com/cgi-bin/gayInfo.php?locIndex=2303

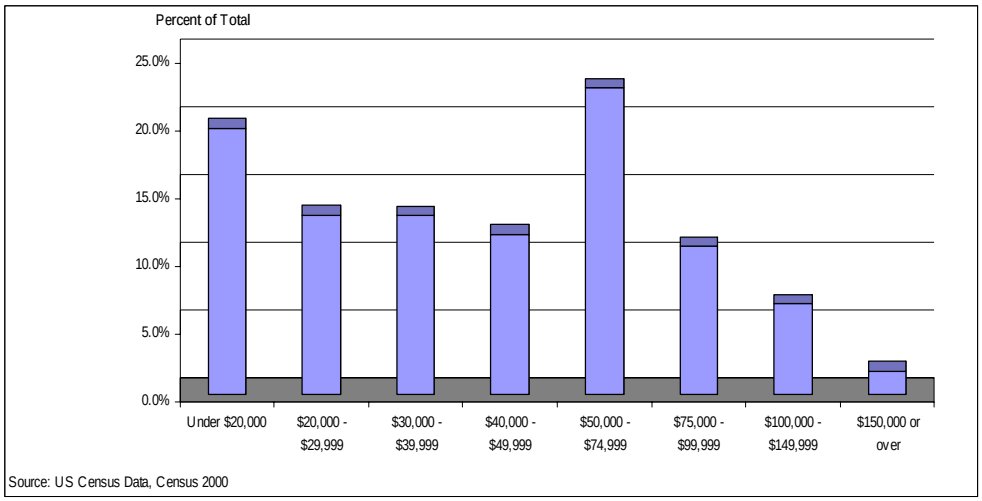
Socio-Economic Characteristics

INCOME

About 23 percent of households in this MSA have incomes within the $50,000 - $74,999 income bracket. This is followed by a rate of 20 percent of households that have incomes of under $20,000 (Figure 3-6).

Household median income in the region in 1999 was $43,735.62 and per capita income was $22,647.78. The percentage of people under the poverty line in the region was 8.0 in the year 2000. Average household size in the year 2000 was 2.42.[4]

Figure 3-6. Portland, ME: Distribution of Households by Household Income Level, 1999



EMPLOYMENT

Around 35 percent of working females are employed in educational, health and social services occupations; followed by 20 percent of females, who are employed within the 'other' category. This category includes arts, recreation, entertainment, food services, public opinion and information occupations. Males' occupations are a bit more evenly distributed among industries, yet the majority of males are employed in manufacturing and wholesale and retail trade (around 19 percent), followed by 'other' which represents about 18 percent (Figure 3-7).

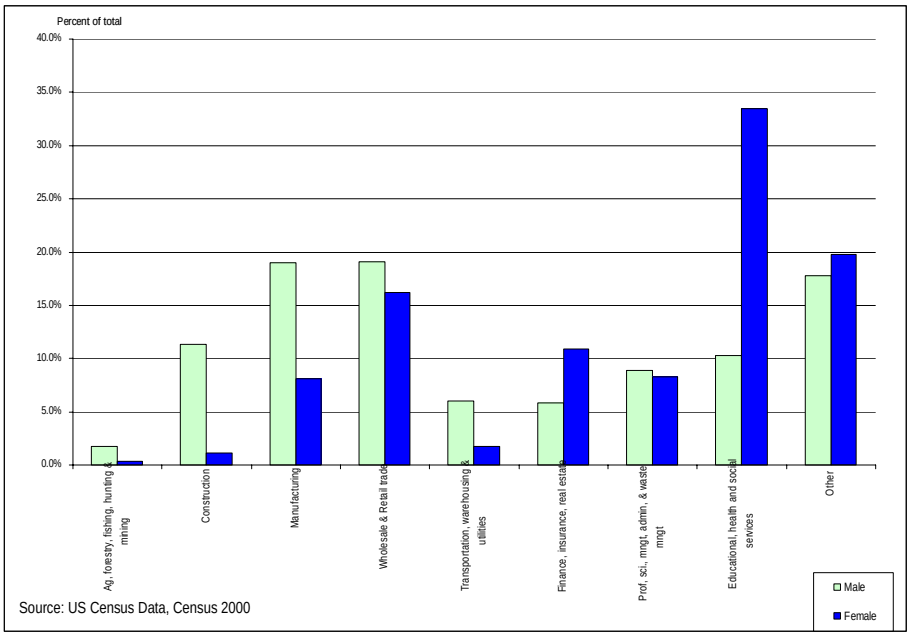
An estimated 3.6 percent of males and 3.5 percent of females were unemployed in 2000.[5]

According to the 2000 US Census, an estimated 1.2 percent of males and 0.1 percent of females are employed in farming, fishing and forestry occupations. About 19.7 percent of males and 6.7 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.7 percent of male's occupations and 0.1 percent of female's occupations.

[4] US Census Data, Census 2000.

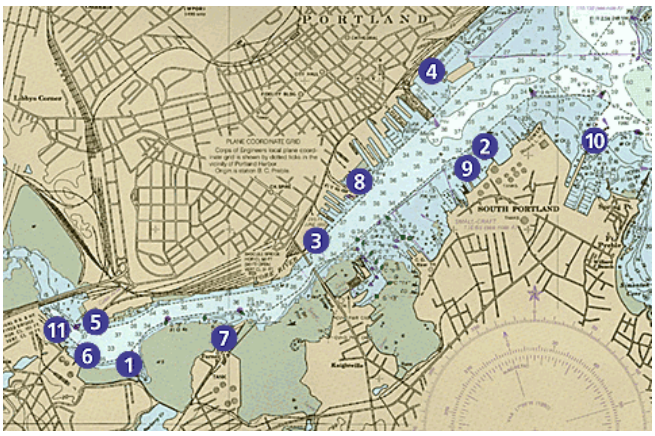
[5] US Census Data, Census 2000.

Figure 3-7. Portland, ME: Employed Civilian Population by Sex and Industry 16 Years and Over, 2000



MARITIME INFORMATION

Terminal information at the Port of Portland:



1. Cargill Petroleum
2. Gulf Oil Terminal
3. International Marine Terminal
4 Maine State Pier (Portland Ocean Terminal, Casco Bay Lines)
5. Merrill Marine Terminal
6. Mobil Oil Terminal
7. Motiva Terminal
8. Portland Fish Pier
9 & 10. Portland Pipe Line Pier One (9) and Pier Two (10)
11. Sprague Energy Terminal

PORTLAND FISH EXCHANGE

The Portland Fish Exchange is an all-display fresh fish and seafood auction operated in Portland, Maine. The Exchange offers a fair and open marketplace, bringing together Commercial Fishing Vessels (Sellers) with Wholesalers and Processors (Buyers). Fresh fish and seafood products are unloaded from fishing vessels daily and displayed for Buyers to make purchasing decisions. A daily auction is conducted at midday. Products purchased are destined for restaurants, markets, and processing plants within hours of vessel landings.

The Portland Fish Exchange is recognized throughout the Fish and Seafood Industry as a leader in innovation, quality, and integrity. Located on the waterfront in Portland, the Exchange offers ample pier and berthing space for boats. The 22,000-square-foot facility also offers numerous shipping bays for convenient loading and transport of products. Fish and Seafood can be landed at ports other than Portland and shipped via motor vehicle and/or aircraft to the auction facility for display and sale.

PILOTAGE

Pilots board 1.0 nautical mile north of the ELN Racon "PAPA" buoy at position 43-31.6 North and 70-05.5 West. Portland Pilots monitor VHF 16 and 11. Pilotage is compulsory for all foreign vessels and US vessels under register in the foreign trade drawing over nine feet. Pilotage is optional for coastwise or fishing vessels under enrollment or license that have onboard a pilot licensed by the Federal Government. The Pilot boats are black-hulled with a white superstructure with the word PILOT on both sides. One is 48 feet LOA and the other is 65 feet LOA. Vessels are requested to provide 48 and 24 hours notice of ETA and to update any appreciable changes. The pilots do not maintain the boat on station. Distance from the pilot station to the inner harbor is approximately 10 miles. [6]

[6] Source: http://www.portofportlandmaine.org/commercial_idx.html

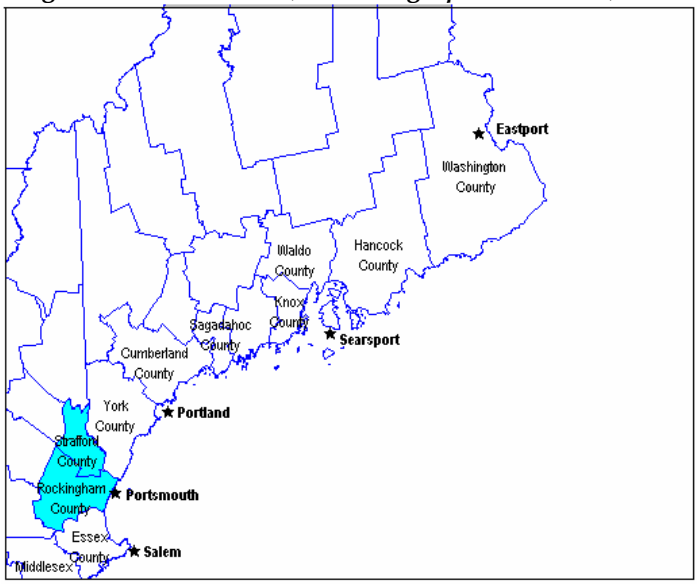
4. Portsmouth, NH

Location and Background Information

The Port of Portsmouth, New Hampshire is part of the Rockingham County-Strafford County, New Hampshire Metropolitan Division of the Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area (MSA). This Metropolitan division is comprised by Rockingham County, NH and Strafford County, NH.

With a deep natural harbor and river, Portsmouth is one of the oldest working ports in the United States. The Piscataqua River Basin's recorded seafaring history began with a visit in 1603 by English explorer Martin Pring and it has witnessed increasing maritime activity ever since. In 1957 the New Hampshire State Legislature created the New Hampshire State Port Authority as an autonomous state agency overseen by a board of directors appointed by the Governor and Executive Council. Today, activity at the Port includes pleasure boating and sport and commercial fishing in addition to bulk and general cargo transport to and from points worldwide. [1]

Figure 4-1. Portsmouth, NH: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

The total population of this Metropolitan Division is 389,592, according to the 2000 US Census. Of this total, 191,592 or 49.1 percent are males and 198,246 or 50.9 percent are females. The median age in the area is 36.4 years; 35.9 for males and 36.9 for females. As Figure 4-2 portrays, over 15 percent of males and females are between the ages of 30 and 39, and about 17 percent are between 40 and 49 years of age. Over 25 percent of males and nearly that percentage of females are between 0 and 17 years old.

[1] Port of Portsmouth profile: http://www.seacoastnh.com/business/port.html

As shown in Figure 4-3, 96.7 percent of the population in this Metropolitan Division is white, followed by 'others' (which include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone), representing 1.6 percent of the population. The Asian population represents 1.1 percent of the total population, closely followed by the Black or African American population (0.6 percent). In terms of ethnic makeup, 1.2 percent of the total population is considered to be of Hispanic or Latino origin.[2]

Figure 4- 2. Portsmouth, NH: Structure of the Population by Age Group, 2000

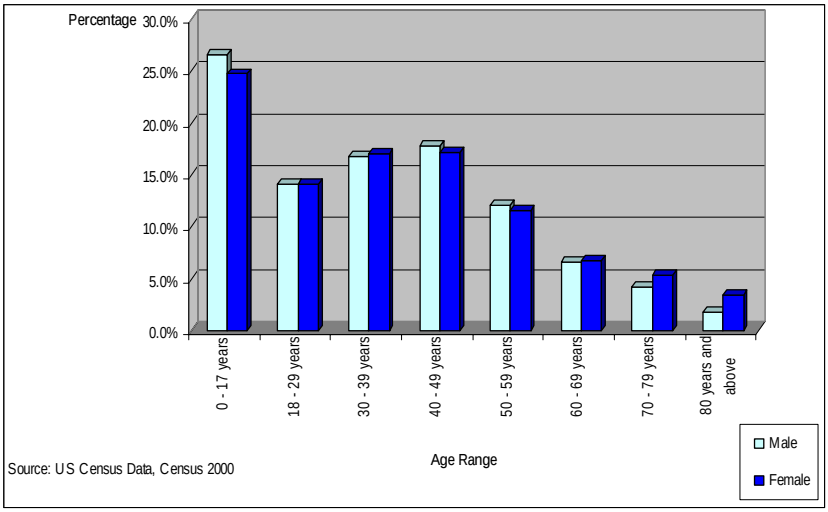
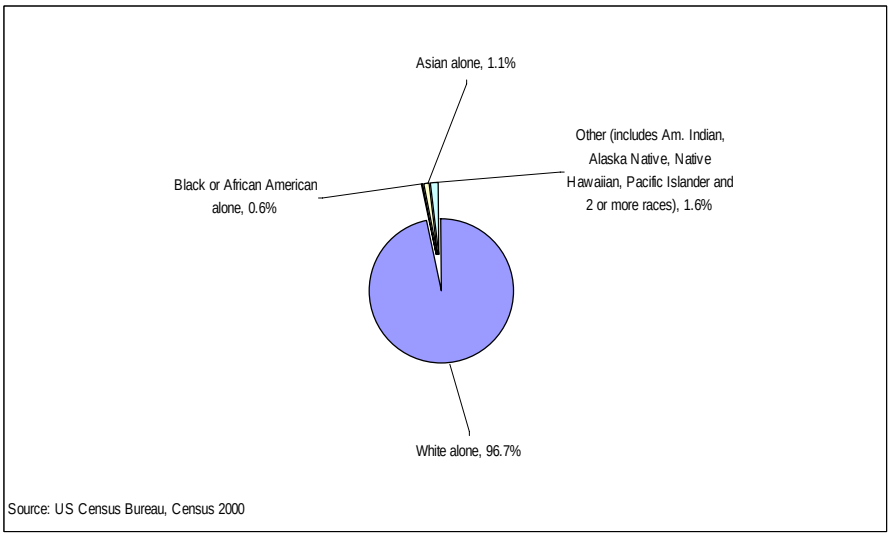


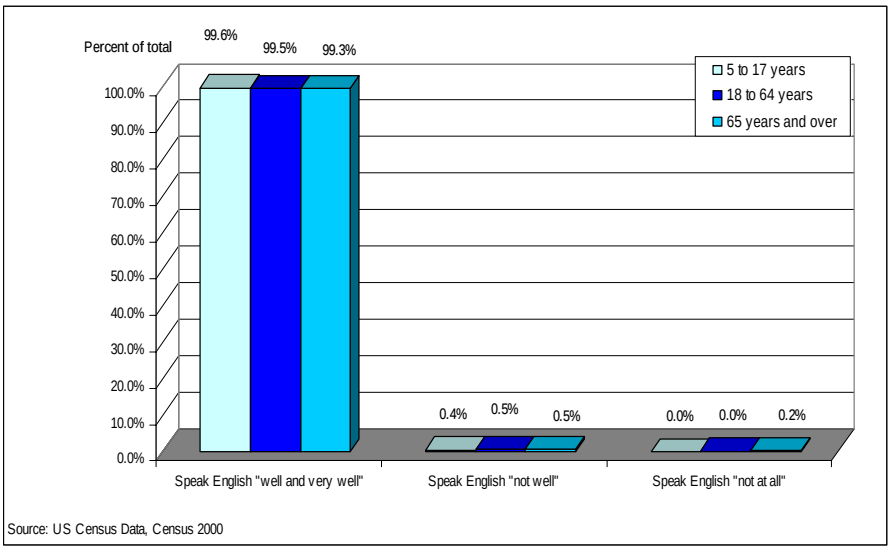
Figure 4-3. Portsmouth, NH: Population by Race, 2000



[2] US Census Data, Census 2000.

It is evident from the data specified in Figure 4-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'.

Figure 4-4. Portsmouth, NH: Ability to Speak English by Age Group, 2000

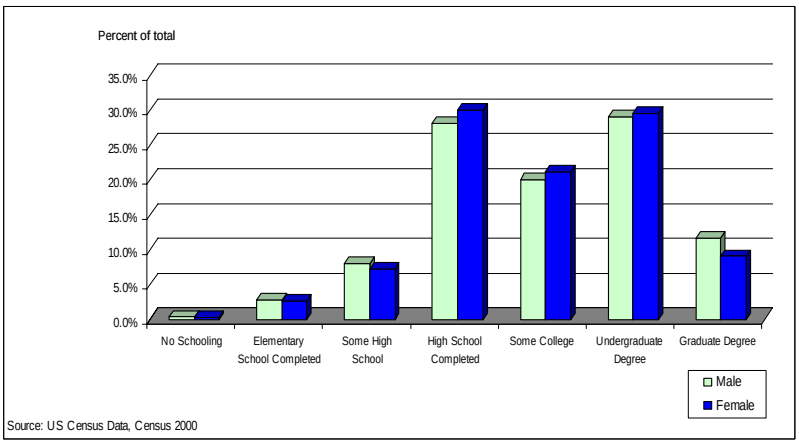


EDUCATION

As evidenced by Figure 4-5, most of the population in this Metropolitan Division has completed high school and has obtained an undergraduate degree (about 30 percent of males and females for each category).

Some of the colleges in the area are: Chester College of New England in Rockingham County and the University of New Hampshire in Strafford County.[3]

Figure 4-5. Portsmouth, NH: Educational Attainment of Population by Sex Ages 25 and Over, 2000



[3] Portsmouth, NH Community Profile: http://www.epodunk.com/

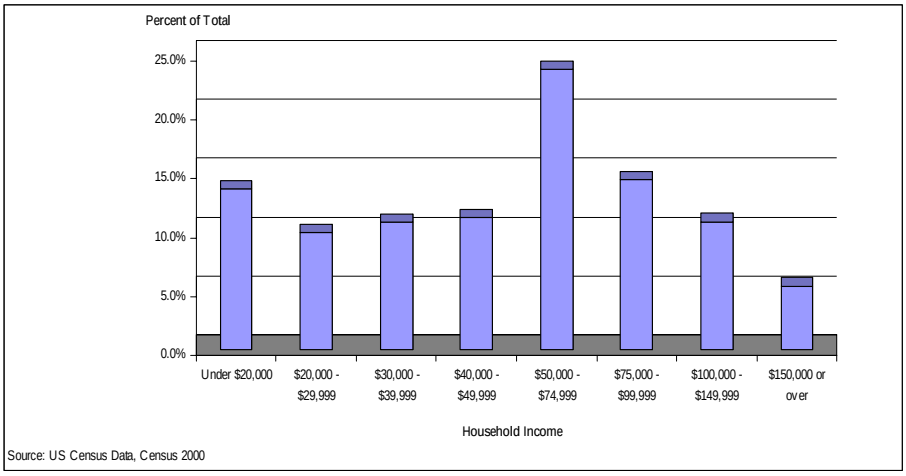
Socio-Economic Characteristics

INCOME

The majority of households in this region have incomes that between $50,000 and $74,999 (about 23 percent). Around 15 percent of households in the region have incomes in the $75,000 - $99,999 income bracket. The rest of households' incomes are more evenly distributed (Figure 4-6).

Household median income for 1999, according to the 2000 US Census, was $54,291.43 and per capita income was $24,876.54. The percentage of people under the poverty line in the region was 5.8 in the year 2000.The average household size in this Metropolitan Division in 2000 was 2.59.[4]

Figure 4-6. Portsmouth, NH: Distribution of Households by Household Income Level, 1999



EMPLOYMENT

About 30 percent of females in this Metropolitan Division are employed in the education, health and social services industry. This is followed by 19 percent employment of females in 'other' industries, which include the arts, entertainment, recreation, public administration, food services and information. About 24 percent of males are employed in manufacturing and approximately 19 percent of males are employed in the wholesale and retail trade industry (Figure 4-7).

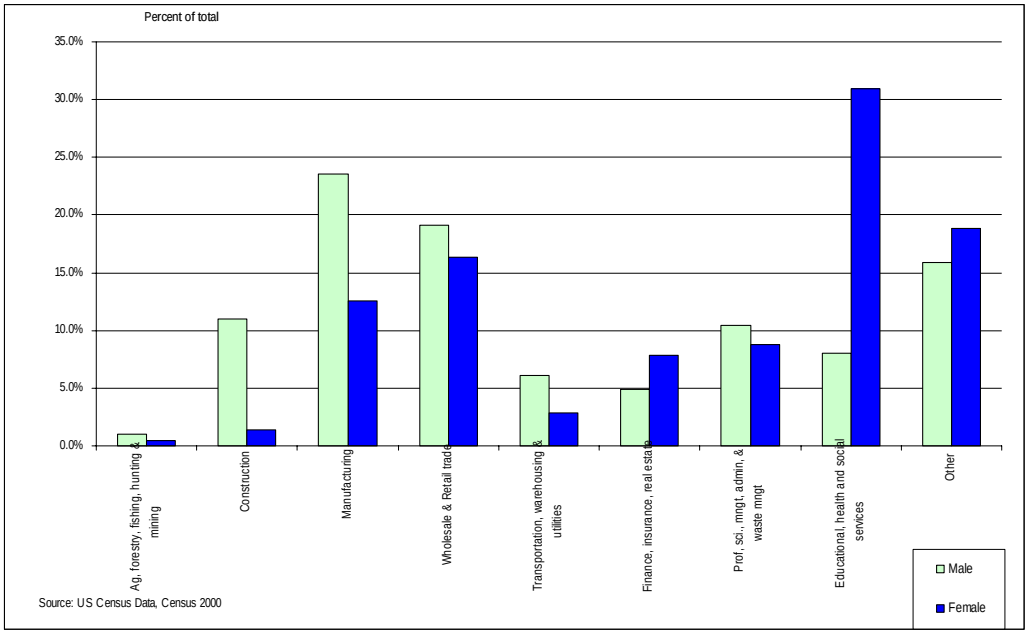
An estimated of 3.1 percent males and 3.1 percent of females were unemployed in this region in the year 2000.[5]

According to the 2000 US Census, an estimated 0.5 percent of males and 0.3 percent of females are employed in farming, fishing and forestry occupations. About 18.7 percent of males and 8.5 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.5 percent of male's occupations and 0.1 percent of female's occupations.

[4] US Census Data, Census 2000.

[5] US Census Data, Census 2000.

Figure 4-7. Portsmouth, NH: Employed Civilian Population by Sex and Industry 16 Years and Over, 2000



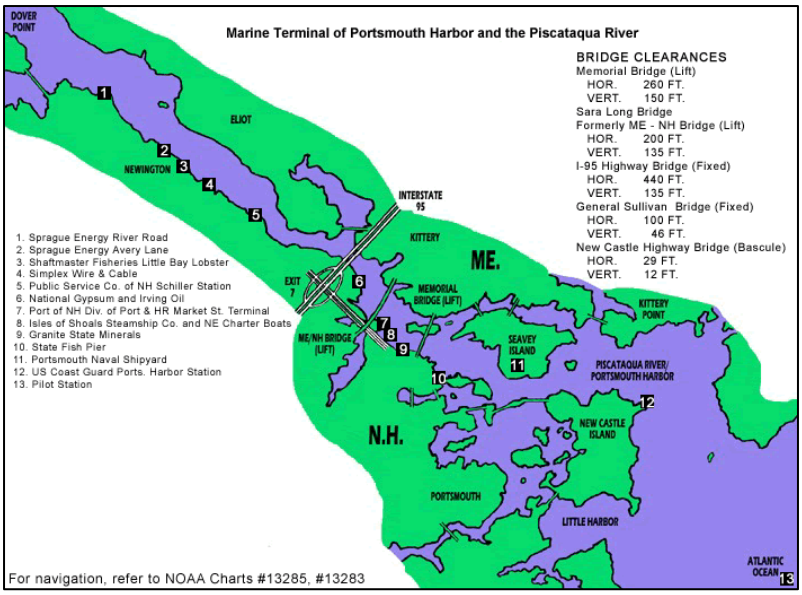
MARITIME INFORMATION

The Port's strategic location makes it ideal for import/export with European trading partners as well as businesses in the Middle East, Africa and the Pacific Rim. The Port, ice-free year round, is the closest such port to Europe, with the transit from sea buoy 2KR only three miles. Rail service is available to the Port Authority and many other private facilities, while access to Interstate Highway 95 is only a half mile away. Pease International Tradeport is two miles away in Newington. The port channel is maintained at 35 feet and has bridge clearances between 135 and 150 feet. In total, about five million tons of cargo enter or exit Portsmouth Harbor each year. Vessels of all types visit the Port Authority, including general purpose liners, bulk carriers, passenger ships, container carriers, feeder vessels and barges. Fresh water, stores, bunkers, telephones and a heliport site are available.[6]

Terminal Information

The DPH Market Street Marine Terminal, located on the Piscataqua River, is the only public access, general cargo terminal on the River. The Piscataqua is a year-round, ice-free, deep draft river. The Market Street Terminal offers 8 acres of paved outside lay down area, 50,000 sq. ft. of covered warehouse, onsite rail access, 600 ft berth, 35 ft/MLW, 312 ft berth, 22 ft/MLW. It has cargo handling capabilities for bulk cargo (scrap, salt, wood chips); break bulk (industrial and machinery parts, construction materials); project cargo (power plant components, vacuum tanks) and container cargo.

[6] Port of Portsmouth profile: http://www.seacoastnh.com/business/port.html



Charter boats operate from 3 of the Division's facilities: Hampton Harbor Marina, Hampton, NH; Rye Harbor Marina, Rye, NH; Market Street Marine Terminal-Burge Wharf, Portsmouth, NH. The vessels range from the 6 passenger (6 pack) boats to 45 passenger vessels. The boats are chartered for fishing for stripers, bluefish, cod or blue fin tuna; scuba diving excursions to the Isles of Shoals or the scallop beds; cocktail or lobster bakes; lobster trap-hauling demonstrations.

There are several party fishing boats, half-day and full-day, that operate from the Hampton and Rye Harbor Marinas. These vessels range in size up to 75 feet in length and carry up to 150 passengers. Some companies are: Atlantic Fishing Fleet, Sushi Hunter Charters, Northeast charter Boat Company, Northwind and Seafari.

Some passenger vessels offer whale watching trips that operate from the Hampton and Rye Harbor Marinas. The Isles of Shoals Steamship Company provides ferry service to Star Island at the Isles of Shoals from the Market Street Marine Terminal-Barker Wharf. The Isles of Shoals is a group of islands located approximately 7 miles off the coast of New Hampshire. The majority of activity on the islands is at the hotel/conference center on Star Island. The DPH is responsible for more than 1,500 moorings in 29 mooring fields.

Commercial Fishing

Pursuant to State Statute RSA 12-G:43(b), the Division of Ports and Harbors (DPH) shall, "aid in the development of salt water fisheries and associated industries." The DPH has responsibility for and jurisdiction over the state-owned commercial fishing piers and facilities at Portsmouth, New Hampshire; Rye Harbor, New Hampshire; and Hampton Harbor, New Hampshire. Berths and slips are only available at Portsmouth. Due to physical limitations at Rye and Hampton, no long-term or overnight berthing is available. Commercial fishermen wishing to use the facilities must be issued a "Pier Use" permit. Bulk fuel is available through permitted vendors; contact the DPH for a list of these vendors. Ice and chandlery is available at Portsmouth. The DPH is the Grantee of Foreign-Trade Zone #81, which includes 5 sites and 1 subzone (Westinghouse Electric): The Market Street Terminal is 11 acres; Portsmouth Industrial Park is 75 acres; Dover Industrial Park, is 50 acres; Manchester Airport is 1400 acres and Pease International Tradeport, 1900 acres. [7]

[7] Port of New Hampshire website: http://www.portofnh.org/who.html

5. Boston, MA

Location and Background Information

The Port of Boston is located in the Boston-Cambridge-Quincy, Massachusetts-New Hampshire Metropolitan Statistical Area (MSA). Boston is the oldest continually active major port in the Western Hemisphere. Though it did not become an international cargo port until 1630, for at least four thousand years previously, it had served as a settlement and trading area for Native American tribes. After the Massachusetts Bay Colony was formed, the port became a very busy place.

Concerned about their utter dependence on British trading ships, they sought greater independence by starting a vigorous shipbuilding industry of their own, and began to establish independent trading links with other colonies and countries to the north and south. For most of the century, Boston was America's largest and busiest port, serving the rapidly expanding colonies with imports of English finished goods in exchange for exports of lumber, fully constructed vessels, rum and salted fish.

Since 1980, container traffic has tripled and Boston has become one of the most modern and efficient container ports in the U.S. General cargo tonnage growth has averaged 3.6% growth each year. The passenger ship industry is also expanding in the Port of Boston. Numerous four and five star cruise lines such as Cunard, Norwegian Majesty, Hapag-Lloyd and Silversea regularly call the port. With more than 62 ship calls last year alone, the port is now considered one of the fastest-growing high-end cruise markets in the country.

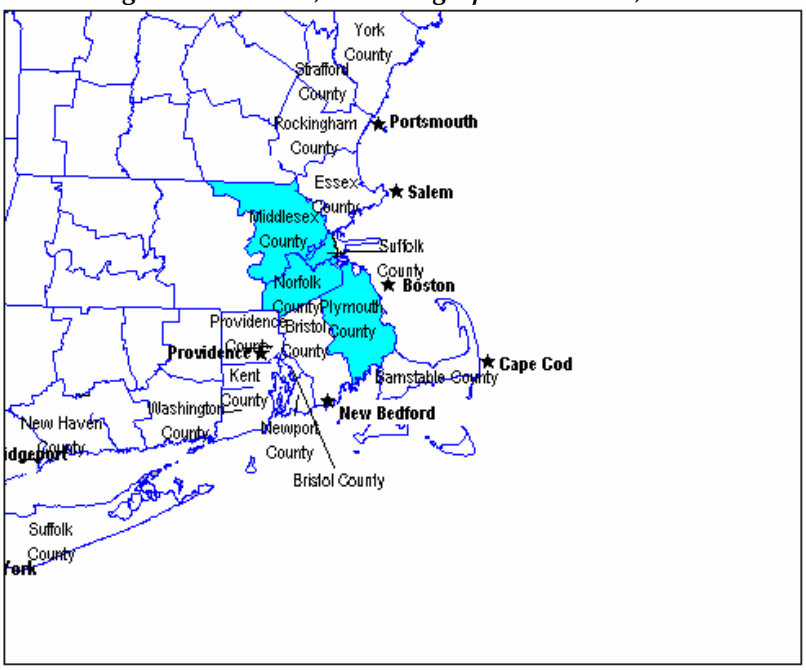
Boston also hosts an enormous complex of privately owned petroleum and liquefied natural gas terminals, which supply more than 90% of Massachusetts' petroleum consumption needs. The port is home to two shipyards, numerous public and private ferry operations, world-renowned marine research institutions, marinas, a major Coast Guard facility and is one of America's highest-value fishing ports.

Boston is one of the most modern and efficient container ports in the U.S. Conley Terminal for containerized cargo shipments and Moran Terminal, currently leased to Boston Autoport for the import and distribution of automobiles handle more than 1.3 million tons of general cargo, 1.5 million tons of non-fuels bulk cargo and 12.8 million tons of bulk fuel cargos yearly.

With 101 passenger ships scheduled to call in the 2005 season, Cruiseport Boston is now considered one of the fastest growing high-end cruise markets in the country. The Black Falcon Cruise Terminal, located in the Boston Marine Industrial Park will serve over 210,000 cruise passengers this year. Another full cruise season is planned for 2006 between the months of April and October.[1]

[1] Massachusetts Port Authority website: http://www.massport.com/ports/about.html

Figure 5-1. Boston, MA: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

The total population of the Boston-Cambridge-Quincy, Massachusetts-New Hampshire Metropolitan Statistical Area is of 3,278,333, according to the 2000 US Census. Of this total, 1,582,659 or 48.3 percent are males and 1,695,674 or 51.7 percent are females. The median age in this region is 35.8 years; 34.7 for males and 36.9 for females. The majority of the population in this area falls within two age brackets, 18 – 29 years and 30 – 39 years; accounting for approximately 34 percent of males and 32 percent of females (Figure 5-2).

The majority of the population in this area is white (81 percent), followed by the Black or African American population, which represents 7.3 percent of the total population. The 'other' category (which includes American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) represents 6.2 percent of the total population, followed by the Asian population, which represents 5.5 percent of the total population (Figure 5-2). In terms of ethnic makeup, 6.0 percent of the total population is considered to be of Hispanic or Latino origin.[2]

[2] US Census Data, Census 2000.

Figure 5-2. Boston, MA: Structure of the Population by Age Group, 2000

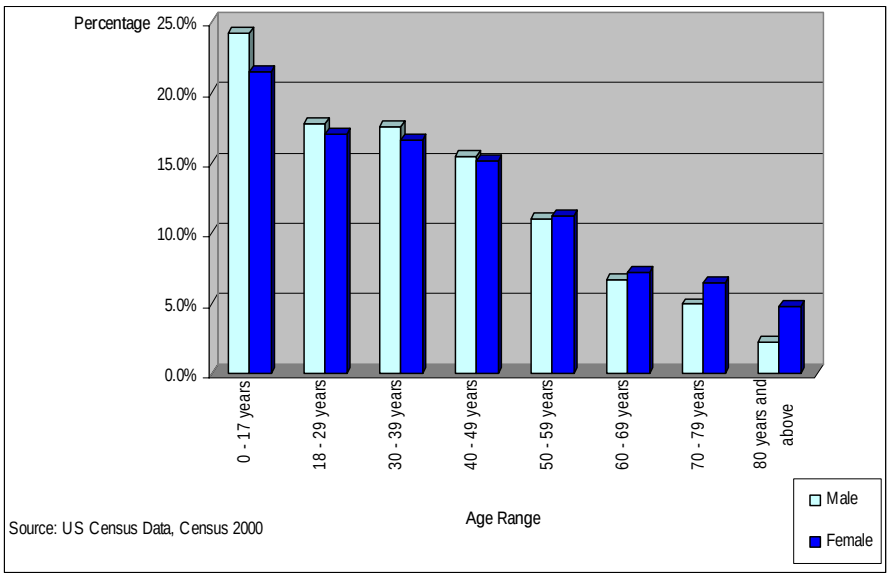
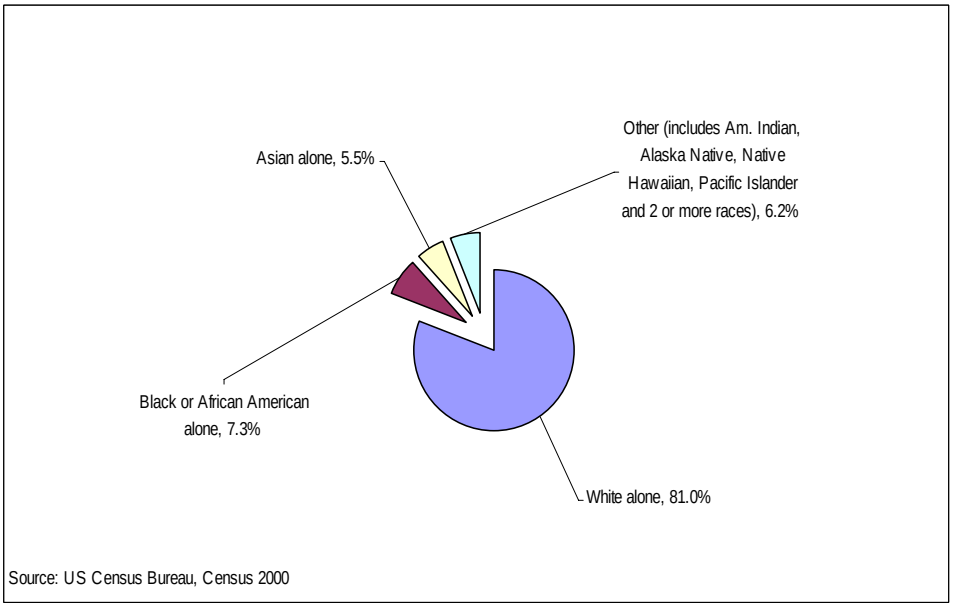
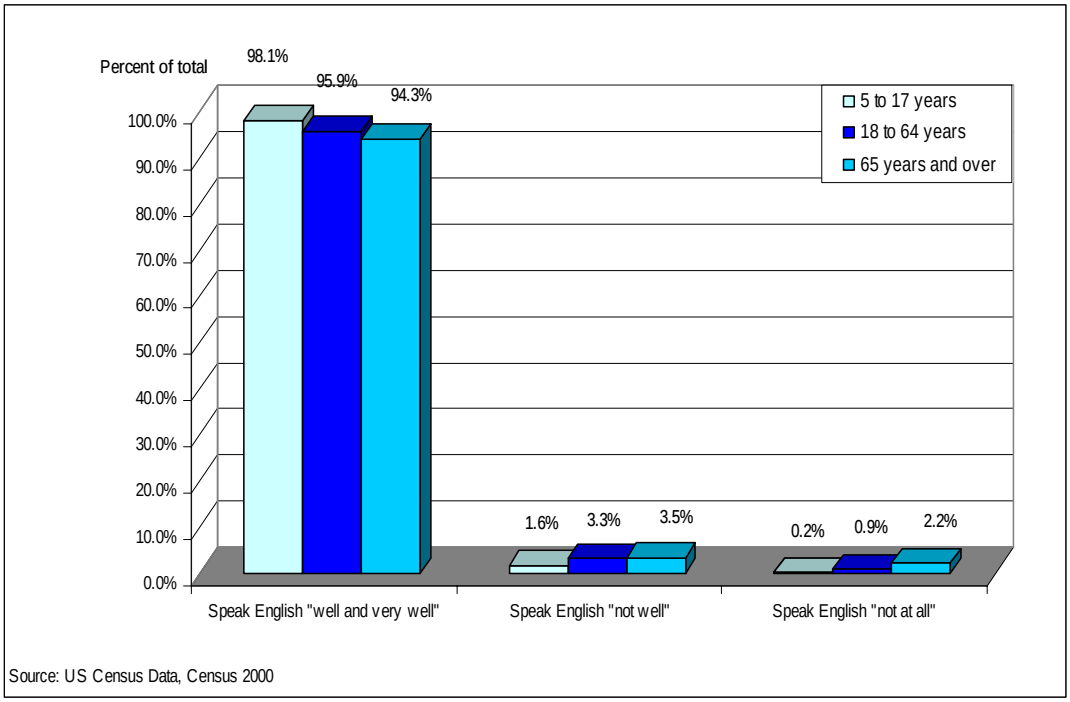


Figure 5-3. Boston, MA: Population by Race, 2000



It is evident from the data specified in Figure 5-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'. The older population groups dominate the language less fluently, about 5.7 percent of the population that is 65 years and over and about 4.2 percent of the population in the 18 – 64 years age bracket don't speak English well or do not speak English at all.

Figure 5-4. Boston, MA: Ability to Speak English by Age Group, 2000

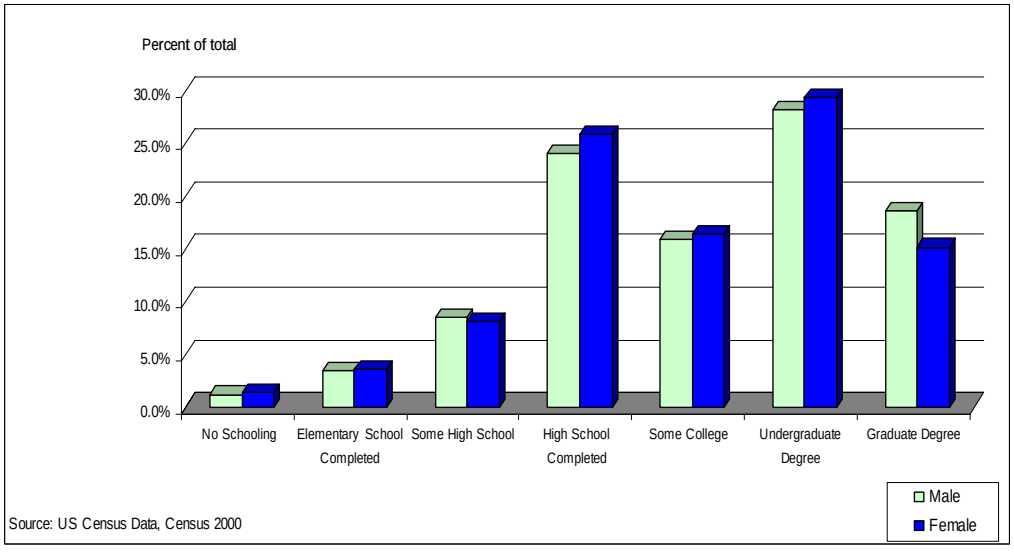


EDUCATION

It is evident from Figure 5-5 that the majority of the population in this area has completed high school (between 24 – 25 percent) and has obtained an undergraduate degree (27 – 29 percent). Around 14 – 18 percent of the population has obtained a graduate degree.

The city of Boston is known for having one of the highest concentrations of colleges and universities in the nation. Some of the finest educational institutions in the country are located in this region, among them Harvard University and MIT. Other well-known colleges in the area are: Boston University, Tufts University, University of Massachusetts Boston, Northeastern University, Emerson College, Boston College and Wellesley College.

Figure 5-5. Boston, MA: Educational Attainment of Population by Sex Ages 25 and Over, 2000



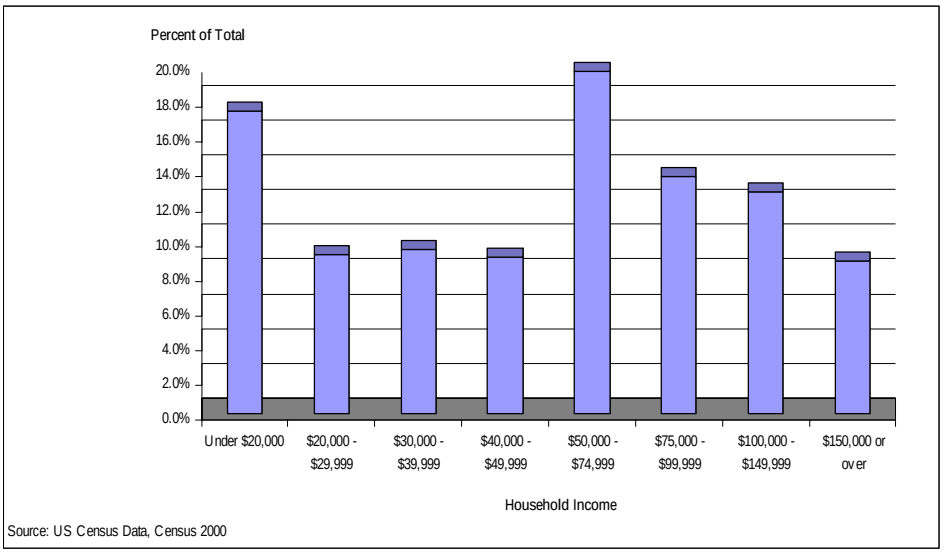
Socio-Economic Characteristics

INCOME

As is apparent from Figure 5-6, most households in the area fall within the income bracket of $60,000 - $74,999 (about 20 percent), followed by 18 percent of households that have incomes under $20,000.

Household median income for the area for the year of 1999, according to the 2000 US Census, was $55,882.15 and per capita income was $28,754.99. The percentage of people under the poverty line in the region was 8.8 in the year 2000. The average household size in this area in 2000 was 2.52.[3]

Figure 5-6. Boston, MA: Distribution of Households by Household Income Level, 1999



EMPLOYMENT

It is evident from Figure 5-7 that about 35 percent of females are employed in the education, health and social industry; whereas males are mostly concentrated in 'other' industries such as the arts, entertainment, recreation, food services, public administration and information (20 percent). Women also have a high representation in the previous category (approximately 19 percent). Slightly over 15 percent of males are employed in professional, science management, administration and waste management services industries.

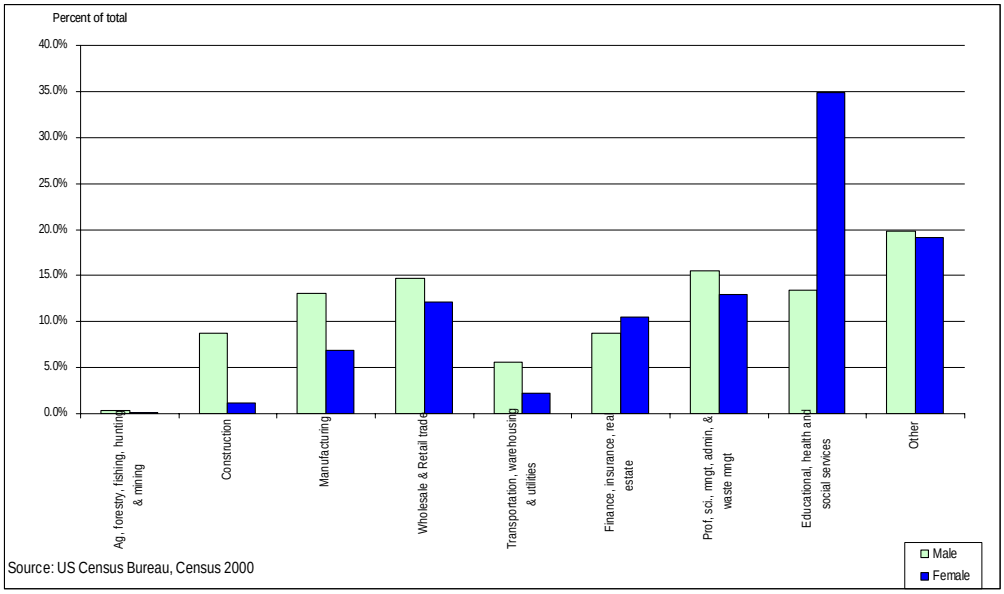
An estimated 4.3 percent of males and 4.1 percent of females were unemployed in this metropolitan statistical area in the year 2000.[4]

According to the 2000 US Census, an estimated 0.2 percent of males and 0.1 percent of females are employed in farming, fishing and forestry occupations. About 12.5 percent of males and 4.7 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.5 percent of male's occupations and 0.04 percent of female's occupations.

[3] US Census Data, Census 2000.

[4] US Census Data, Census 2000.

Figure 5-7. Boston, MA: Employed Civilian Population by Sex and Industry 16 Years and Over, 2000



MARITIME INFORMATION

The Boston Harbor Navigation Improvement Project (BHNIP), already underway, will deepen key portions of Boston's Inner Harbor, its tributary channels, and berth areas to allow the significantly larger "post-Panamax" class of vessels to call in the Port. A total of approximately 2.3 million cubic yards of material will be dredged from key portions of the channels and berths. The completion of this project, coupled with the harbor's nine foot tide swing, will allow even the largest vessels to enter the harbor safely. Boston's channels will be deeper than those of many of the east coast ports, greatly enhancing the Port of Boston's competitive position and providing a significant economic benefit to the New England region.

Dredging of Boston's Inner Harbor began in August 1998 by Great Lakes Dredge & Dock Company. Dredging is proceeding rapidly with most of the silt material already removed from the Reserved Channel and the Mystic River. Three disposal cells have been constructed, filled, and capped in the Mystic River, and three other cells are currently open and being used for disposal in the Mystic and Chelsea Rivers. Several of the berths adjoining the project have been dredged and project benefits are already beginning to be realized.

Massport, in cooperation with The Massachusetts Highway Department and the City of Boston, has developed a permitted overweight container route between Conley Terminal, near-dock sites in Boston, and the CSX rail transfer facility four miles to the west. Companies that pay the federal Harbor Maintenance Tax for goods moving through Massachusetts ports, are eligible for a dollar-for-dollar Massachusetts tax credit. This credit applies to containerized cargo, break bulk, and road vehicles.

Multiple off-dock transloading facilities including warehouse space and cooler facilities for perishables, and several trucking operations are available close to Massport maritime facilities. The Massachusetts Seaport Bond Bill provides partial funding for Double stack rail clearances in the state, and Massport is working with the Executive Office of Transportation and Construction to expedite signing of the Master Agreement between the railroads. Furthermore, Massport works closely with the U.S. Department of Agriculture and private companies to provide fumigation services as needed for cargo in the port.[5]

[5] Massachusetts Port Authority website: http://www.massport.com/ports/about_value.html

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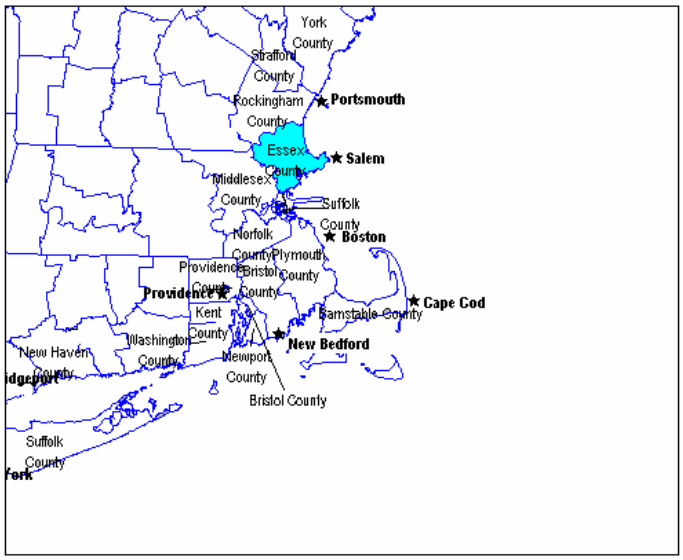
6. Salem, MA

Location and Background Information

The Port of Salem is located in the Essex County, MA Metropolitan Division, which is part of the Boston-Cambridge-Quincy, Massachusetts – New Hampshire Metropolitan Statistical Area (MSA). Founded in 1626, Salem became one of the first and most significant commercial seaports in colonial America. Located along the northeastern coast of Massachusetts, Salem is the second largest and deepest natural harbor of the commonwealth. [1]

Figure 6-1. Salem, MA: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

The total population of Essex County, MA is 723,419, according to the 2000 US Census. Of this total, 346,421 or 47.9 percent are males and 376,998 or 52.1 percent are females. The median age in the county is 37.5 years; 36.2 for males and 38.6 for females. The majority of the population is concentrated in two age brackets: 30 – 39 years and 40 – 49 years; approximately 32 percent of males and 30 percent of females (Figure 6-2).

As evidenced by Figure 6-3, the majority of the population in the county is white (86.4 percent), followed by 8.8 percent of 'others' (which include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone). The Black or African American population represents 2.5 percent of the total population, closely followed by the Asian population (2.4 percent). In terms of ethnic structure, 11.0 percent of the total population is considered to be of Hispanic or Latino origin.[2]

[1] Seaport Advisory Council webpage: http://www.mass.gov/seaports/salem.htm

[2] Source: US Census Data, Census 2000.

Figure 6-2. Salem, MA: Structure of the Population by Age Group, 2000

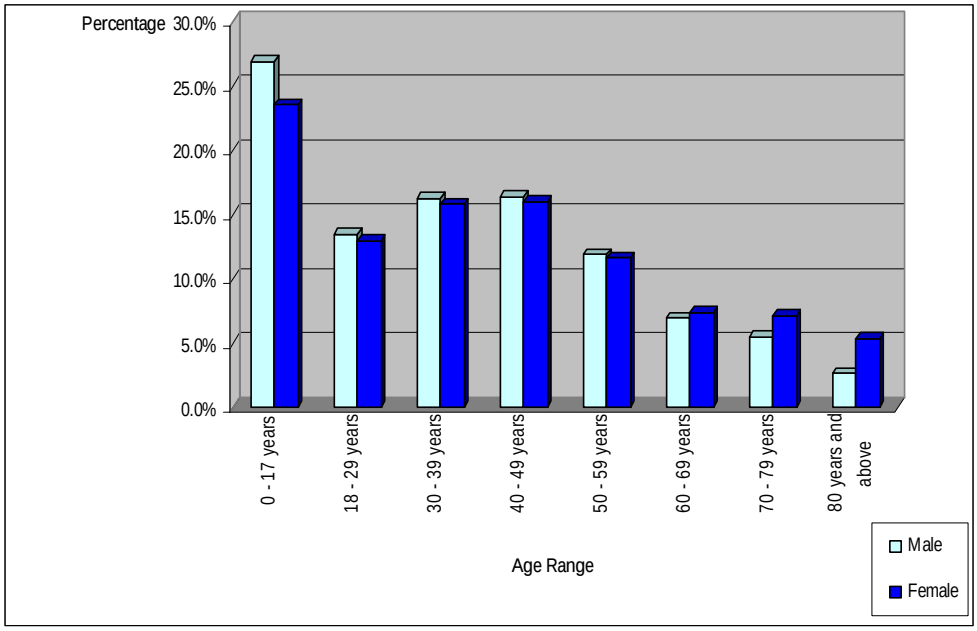
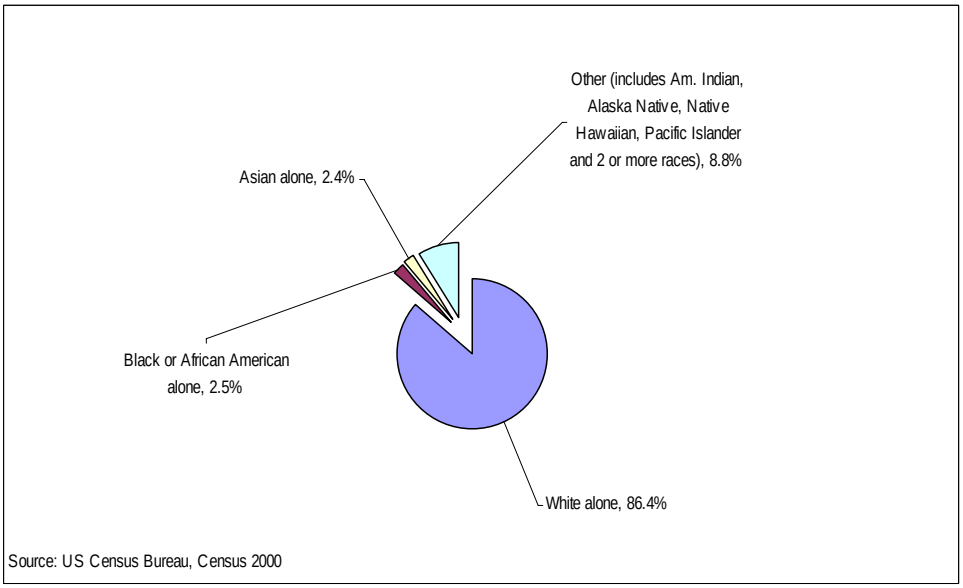
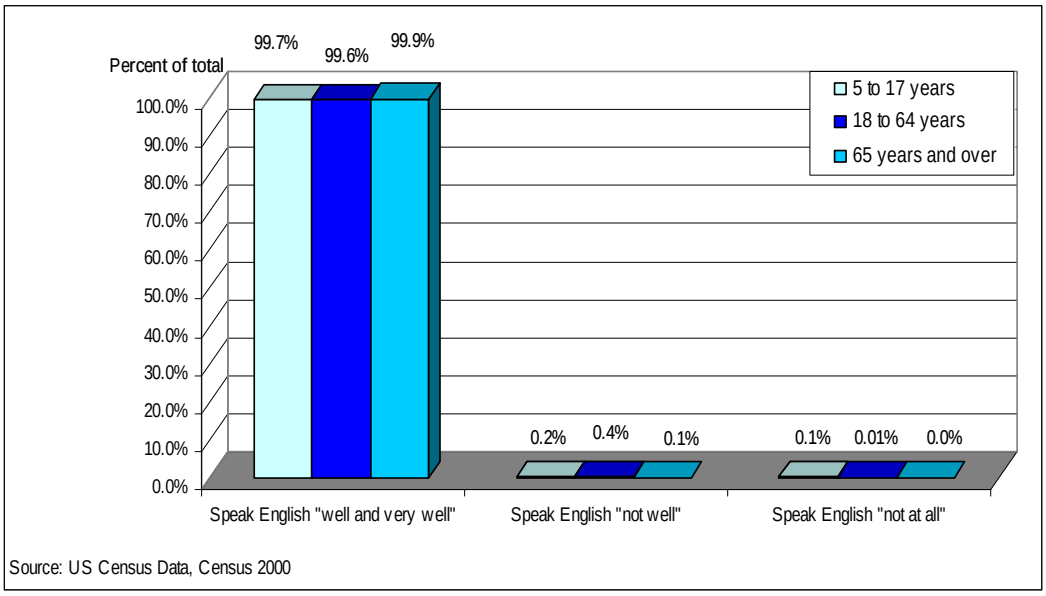


Figure 6-3. Salem, MA: Population by Race, 2000



It is evident from the data specified in Figure 6-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'.

Figure 6-4. Salem, MA: Ability to Speak English by Age Group, 2000

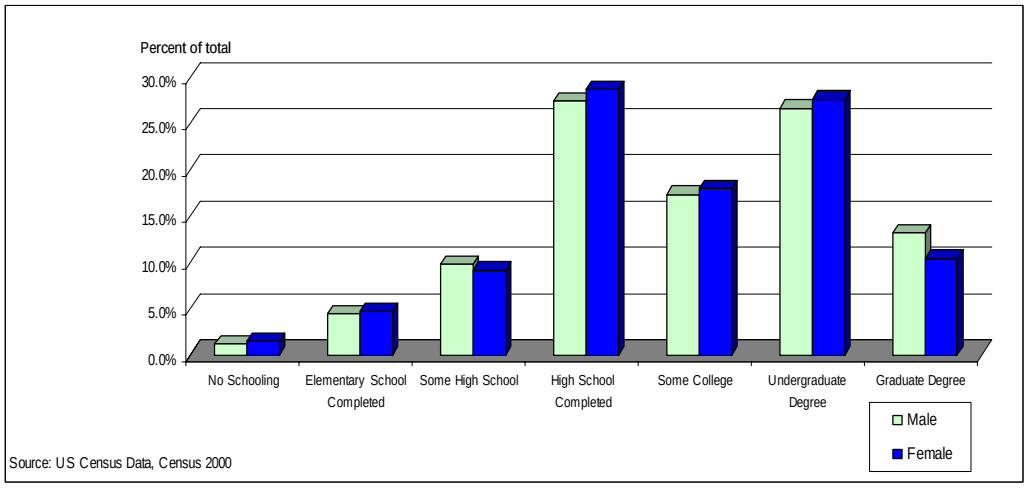


EDUCATION

About 26 percent of males and 27 percent of females have completed high school in the area, and about 25 – 26 percent of males and females have obtained an undergraduate degree (Figure 6-5).

Salem is home to Salem State College and Marian Court College.[3]

Figure 6-5. Salem, MA: Educational Attainment of Population by Sex Ages 25 and Over, 2000



[3] Salem Community Profile: http://www.epodunk.com/

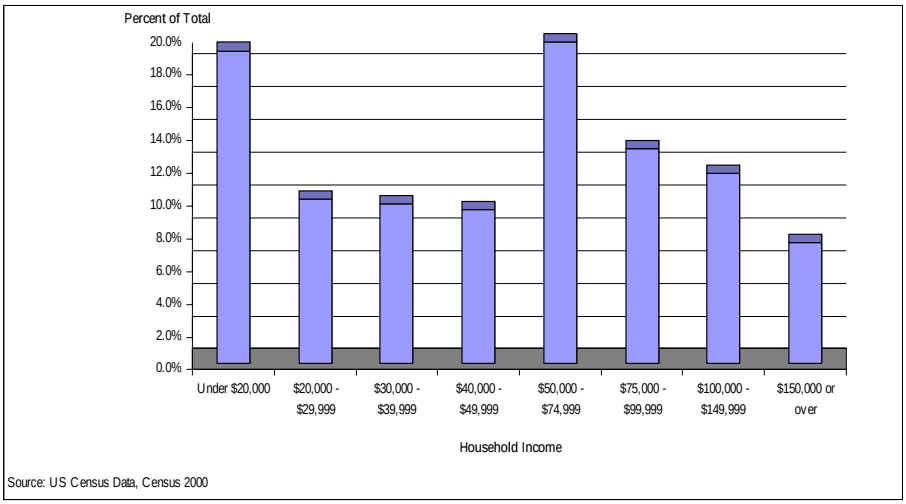
Socio-Economic Characteristics

INCOME

As is portrayed by Figure 6-6, most households in Essex County, MA have an income of under $20,000 or in the bracket of $50,000 - $74,999 (20 percent in each category).

Household median income in 1999, according to the 2000 US Census, was $51,576 and per capita income was $26,358. The percentage of people under the poverty line in the region was 8.9 in the year 2000. The average household size in 2000 was 2.57.[4]

Figure 6-6. Salem, MA: Distribution of Households by Household Income Level, 1999



EMPLOYMENT

Around 34 percent of working females in this region are employed in educational, health and social services industries and around 19 percent of them are employed in 'other' industries, including occupations in the arts, entertainment, recreation, food services, public administration and information. Approximately 21 percent of males are employed in the manufacturing sector, and 18 percent of them are employed in 'other' industries (Figure 6-7).

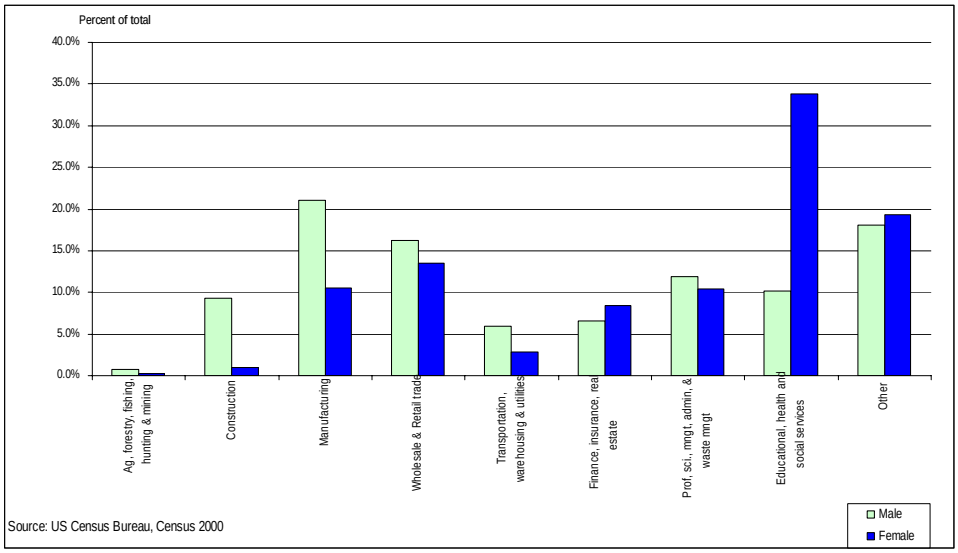
An estimated 4.5 percent of males and 4.7 percent of females were unemployed in 2000.[5]

According to the 2000 US Census, an estimated 0.5 percent of males and 0.1 percent of females are employed in farming, fishing and forestry occupations. About 17.0 percent of males and 7.4 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.5 percent of male's occupations and 0.043 percent of female's occupations.

[4] US Census Data, Census 2000.

[5] US Census Data, Census 2000.

Figure 6-7. Salem, MA: Employed Civilian Population by Sex and Industry 16 Years and Over, 2000



MARITIME INFORMATION

The Port of Salem won early fame as the center of an active shipping trade to the ports of Asia. Salem's vessels and sea captains established lucrative trading routes to China, Japan, Polynesia and throughout the Pacific Basin. Between 1750 and 1810, thousands of sailing voyages began and ended in the Port of Salem. Shipping activity diminished after the War of 1812, and Salem lost its prominence to emerging ports with facilities for new, larger clipper ships. Commercial shipping returned to Salem Harbor in 1940 with the construction by New England Power Company of an electric generating plant. A new deep-water channel was dredged to allow for fuel delivery, and these facilities are the base for all bulk cargo shipments today. Salem's port facilities receive more than one million tons of coal and three million barrels of petroleum products each year. These products arrive in vessels as large as 800 feet in length and 34 feet of draft. A major port expansion project, now underway, will enlarge port capacity, increase allowed draft and produce a new ship berth facility designed to serve cruise vessels and coastal ferry operations. This $18-million infrastructure improvement will reestablish the regional prominence of this historic seaport.

Attractions such as the Peabody-Essex Museum, House of Seven Gables, Salem Witch Museum and the National Maritime Historic Site of the National Park Service are among the key attractions in Salem.[6] The Port of Salem is located on the Northeastern coast of Massachusetts, 12 miles north of Boston. It has one 800-foot berth and is operated by the New England Power Company. Salem has a cargo of more than one million tons of coal and three million barrels of oil annually. Its main trade is with South America and other states in the United States.

The Port has storage capacity for 100,000 tons of bulk and one million barrels of oil and it offers fuel, water and stores services. The Port is one mile away from an existing rail and is three miles away from Route 128/I-95. Future plans include the expansion of the existing ship basin and the construction of a second 600-foot pier and cruise terminal.[7]

[6] Seaport Advisory Council website: http://www.mass.gov/seaports/salem.htm

[7] Port Advisory Council website: http://www.mass.gov/seaports/salem.htm

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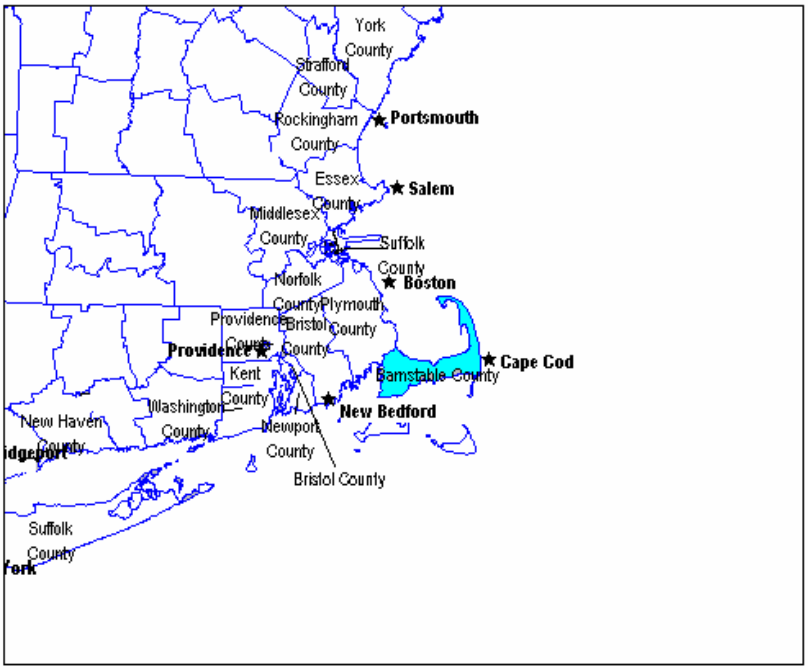
7. Cape Cod Bay, MA

Location and Background Information

The Port of Cape Cod is located in the Barnstable Town, Massachusetts Metropolitan Statistical Area (MSA). This MSA is comprised by Barnstable County, MA.

Figure 7-1. Cape Cod Bay, MA: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

Total population of the Barnstable Town, MA MSA is 222,230; according to the 2000 US Census. Of this total, 105,199 or 47.3 percent are males and 117,031 or 52.7 percent are females. The median age for the region is 44.6; 42.9 for males and 46.1 for females.

As Figure 7-2 shows, the majority of the population in this county is white (94.3 percent), followed by 'others' (include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone), which represent 3.5 percent of the total population. The Black or African American population represents 1.5 percent of the total population, closely followed by Asian population (0.6 percent). In terms of ethnic makeup, 1.3 percent of the total population is considered to be of Hispanic or Latino origin.[1]

[1] US Census Data, Census 2000

Figure 7-2. Cape Cod Bay: Structure of the Population by Age Group, 2000

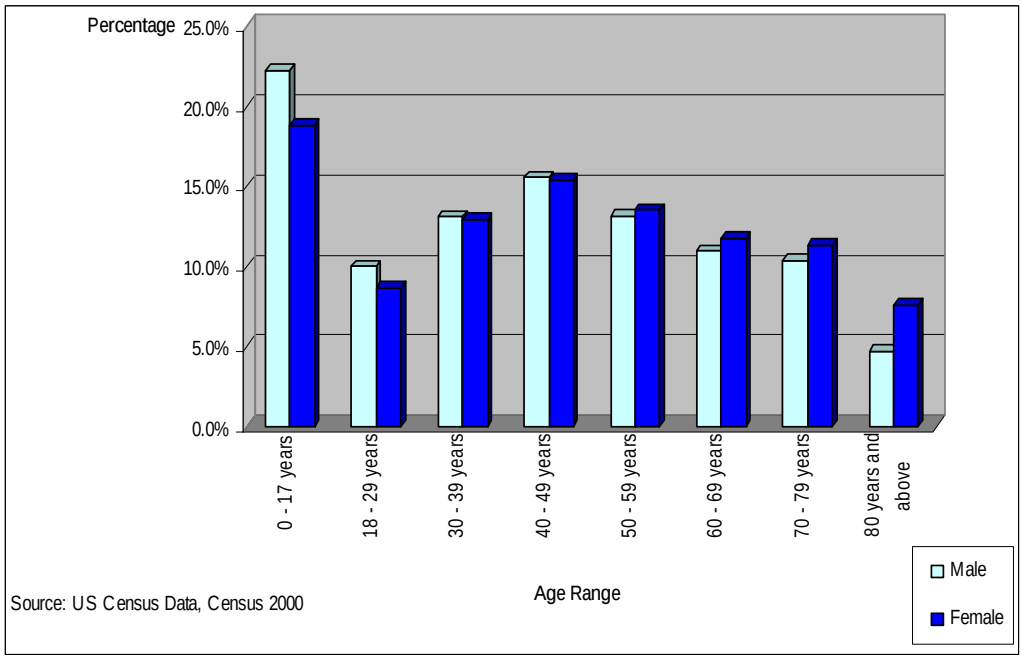
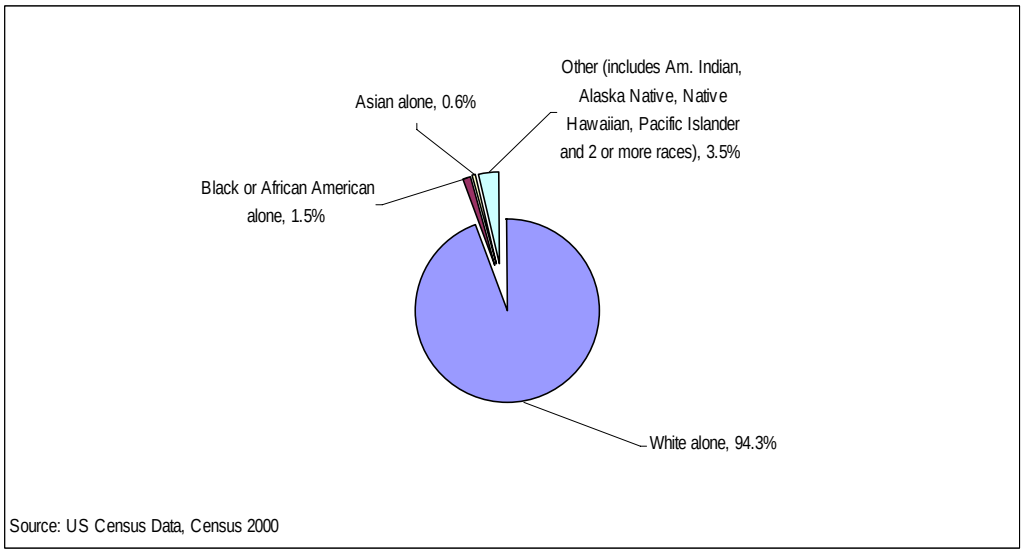
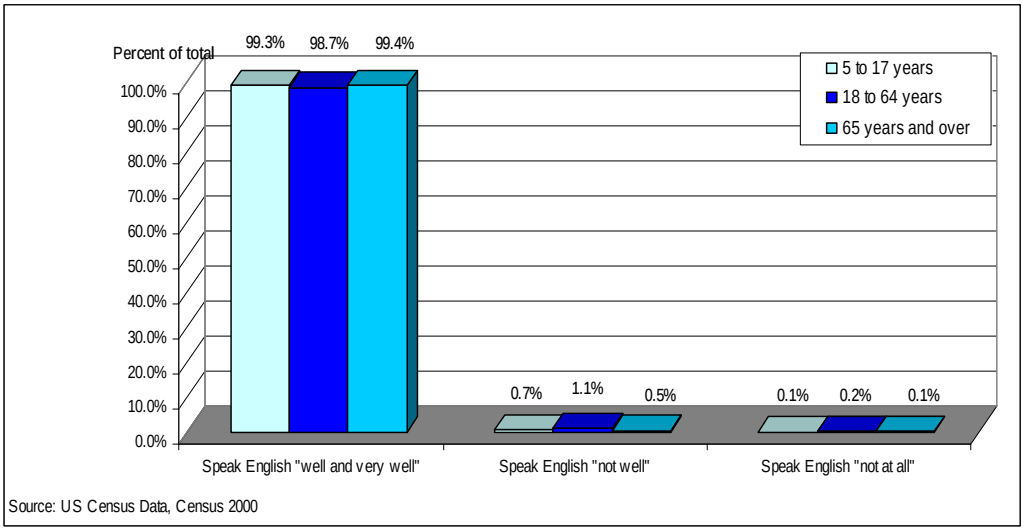


Figure 7-3. Cape Cod Bay: Population by Race, 2000



It is evident from the data specified in Figure 7-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'.

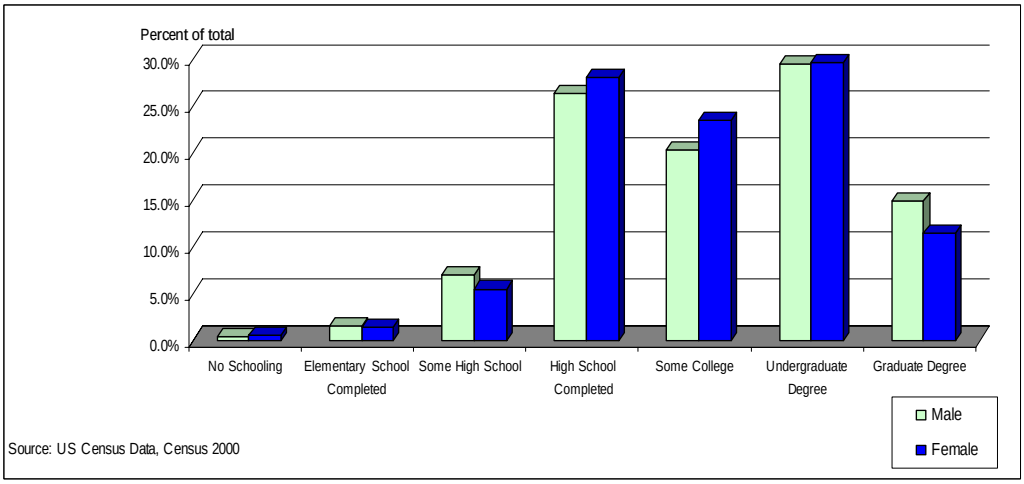
Figure 7-4. Cape Cod Bay: Ability to Speak English by Age Group, 2000



EDUCATION

Most of the population in the region has obtained an undergraduate degree and has completed college. In lesser numbers, some people have finished some college or obtained a graduate degree (Figure 7-5).

Figure 7-5. Cape Cod Bay: Educational Attainment of Population by Sex Ages 25 and over, 2000



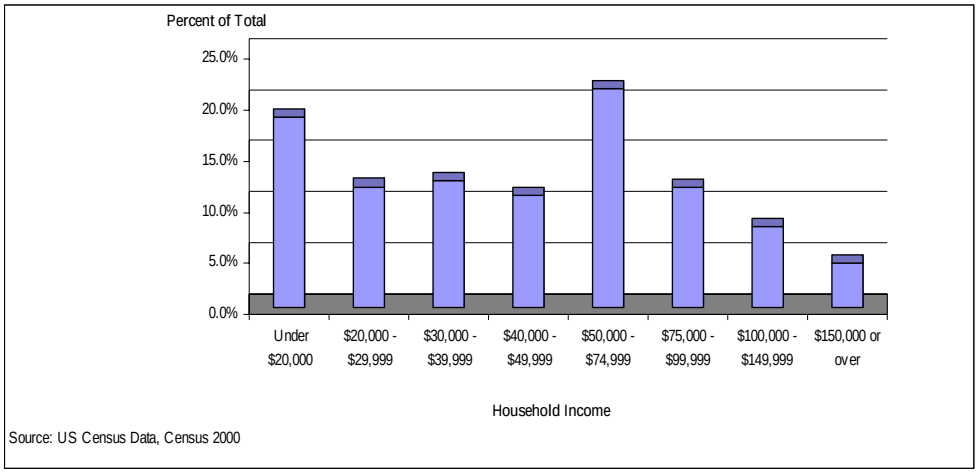
Socio-Economic Characteristics

INCOME

About 22 percent of households in the region have incomes that fall within the $60,000 - $74,999 income bracket. Twenty percent of households have incomes under $20,000.

Household median income in the Cape Cod Bay area in 1999, according to the 2000 US Census, was $45,933.00. The per capita income for 1999, according to the 2000 US Census, was $25,318. The percentage of people under the poverty line in the region was 6.9 in the year 2000. The average household size is 2.28.

Figure 7-6. Cape Cod Bay: Distribution of Households by Household Income Level, 1999



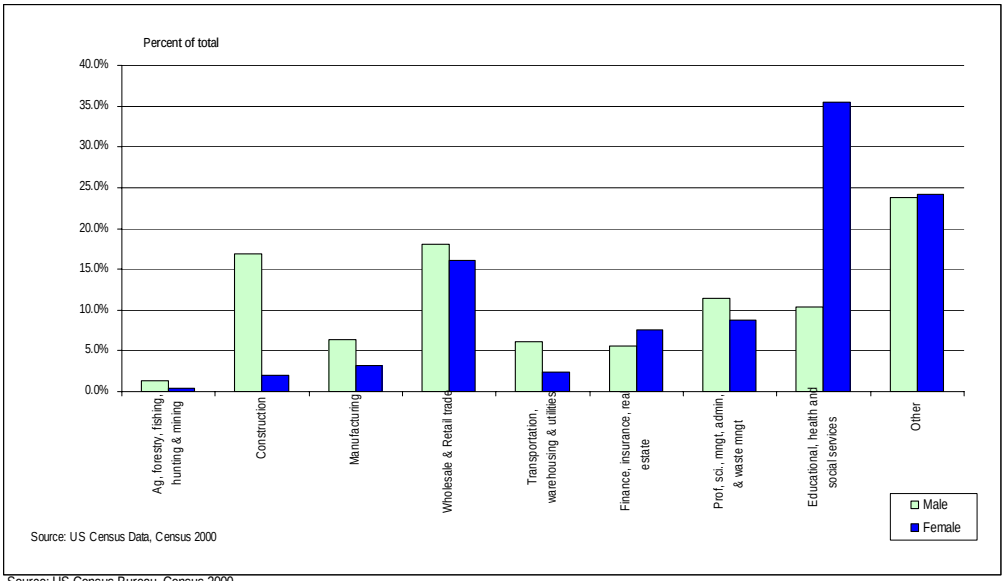
EMPLOYMENT

Around 35 percent of working females in this region are employed in educational, health and social services sectors and around 24 percent of them are employed in 'other' industries, including occupations in the arts, entertainment, recreation, food services, public administration and information. Approximately 23 percent of males are employed in 'other' industries and 18 percent of them are employed in the wholesale and retail sector (Figure 6-7).

An estimated 5.6 percent of males and 4.6 percent of females are unemployed.

According to the 2000 US Census, an estimated 1.2 percent of males and 0.1 percent of females are employed in farming, fishing and forestry occupations. About 11.2 percent of males and 3.5 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.9 percent of male's occupations and 0.1 percent of female's occupations.

Figure 7-7. Cape Cod Bay: Employed Civilian population by Sex and Industry 16 years and over, 2000



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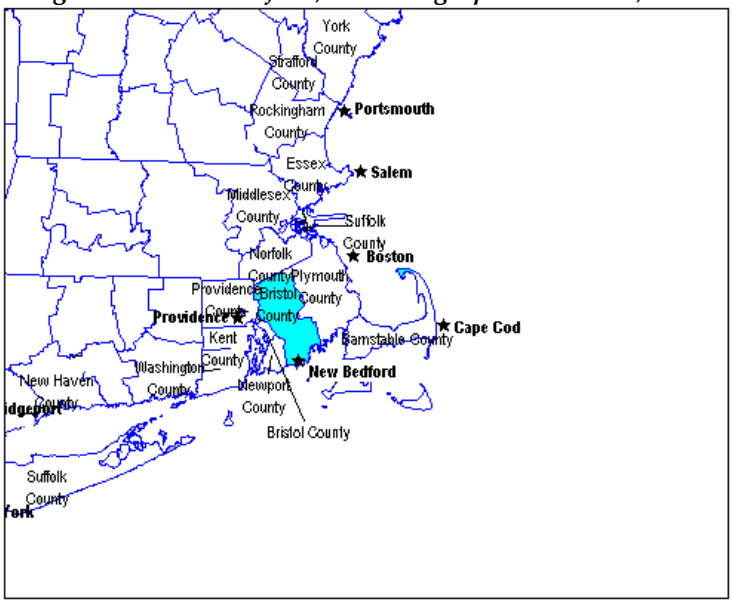
8. New Bedford, MA

Location and Background Information

The Port of New Bedford is part of the Providence-New Bedford-Fall River, Rhode Island – Massachusetts Metropolitan Statistical Area (MSA). New Bedford is located in Bristol County, MA. New Bedford is centrally located on the southeastern coast of Massachusetts. It provides easy access to New England and Canadian markets and has established itself as one of the busiest ports in Massachusetts. Since the early 1960s, the Port of New Bedford has been one of the area's largest handlers of perishable goods, servicing vessels from around the world. Shipments include fruit, vegetables, and bulk commodities of frozen fish and meat products. Currently, New Bedford has various vessel berths and is able to accommodate the largest refrigerated vessels afloat. [1]

Figure 8-1. New Bedford, MA: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

The total population of Bristol County, MA is of 534,678, according to the 2000 US Census. Of this total, 256,747 or 48 percent are males and 277,931 or 52 percent are females. The median age of the population is 36.7 years; 35.4 for males and 38 for females. As evidenced by Figure 8 – 2, about 30 percent of males and females fall within the 30 – 39 and 40 – 49 years age bracket.

The majority of the population in the county is white (91 percent), followed by 'others' (which include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone), which represent 5.6 percent of the total population. The African American or Black population

[1] Seaport Advisory Council: http://www.mass.gov/seaports/newbed.htm

represents 2 percent of the total population; closely followed by the Asian population, which represents only 1.4 percent (Figure 8-3). Moreover, in terms of ethnic structure, 3.6 percent of the total population is considered to be of Hispanic or Latino origin.[2]

Figure 8- 2. New Bedford, MA: Structure of the Population by Age Group, 2000

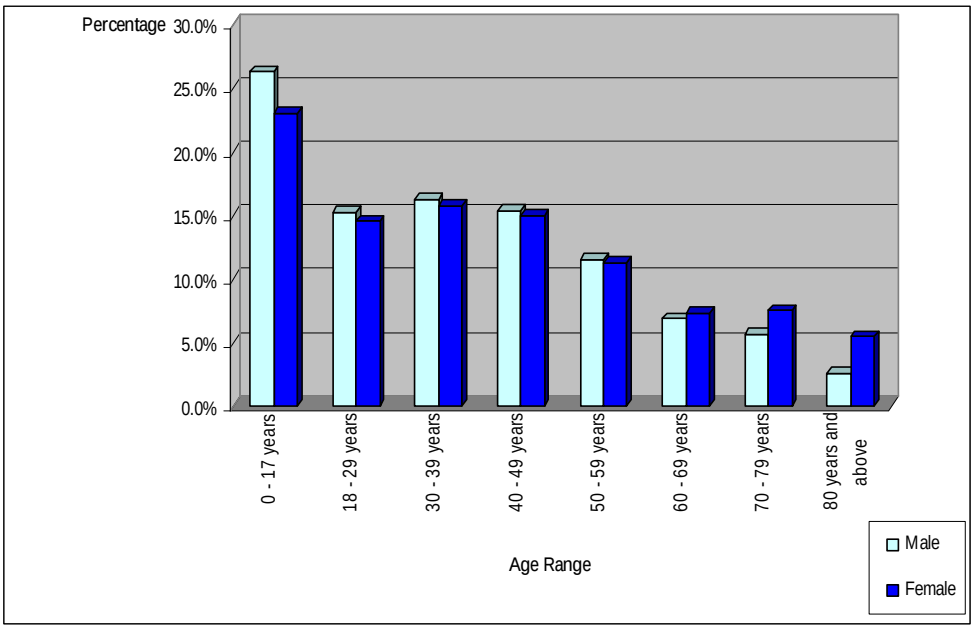
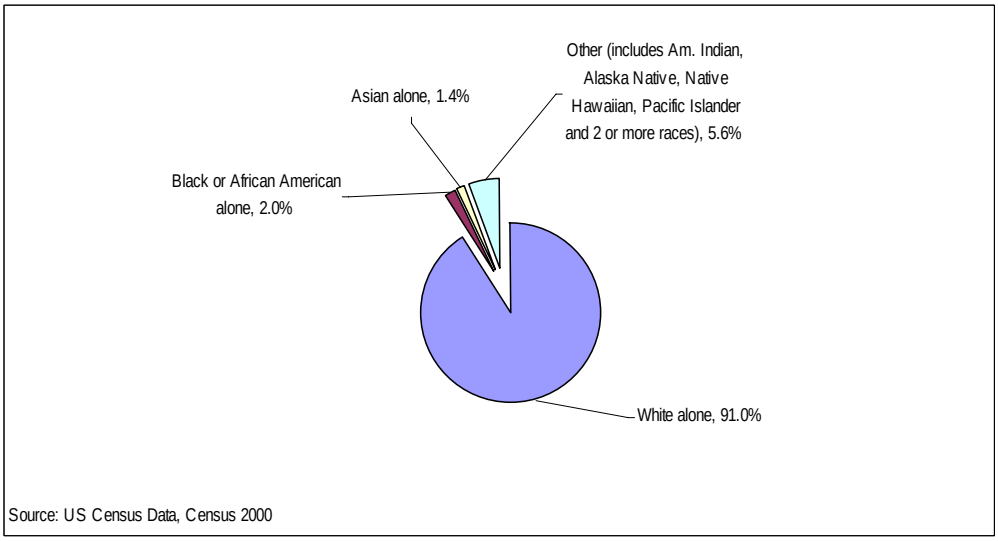


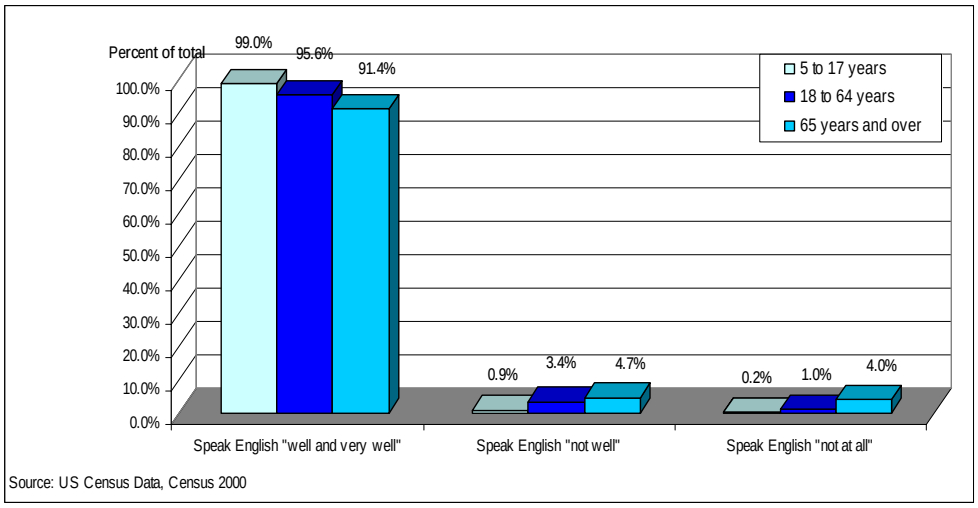
Figure 8-3. New Bedford, MA: Population by Race, 2000



[2] US Census Data, Census 2000

It is evident from the data specified in Figure 8-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'. However, an estimated 8.7 percent of the population in the age range of 65 years and over, do not dominate the English language completely.

Figure 8-4. New Bedford, MA: Ability to Speak English by Age Group, 2000

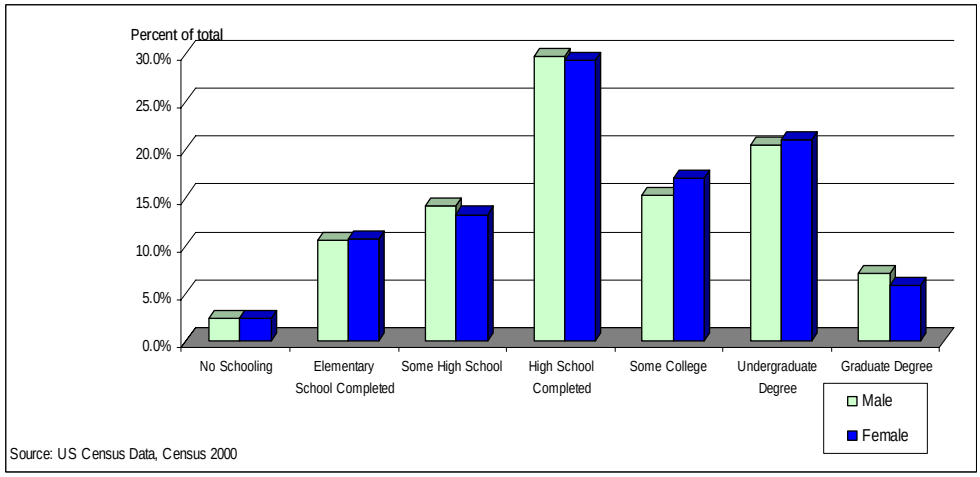


EDUCATION

As is evident from Figure 8-5, almost 30 percent of females and males, ages 25 or over, have completed high school. About 20 percent of both sexes have an undergraduate degree and around 15 percent of both sexes have completed some college.

There are several colleges and universities in Bristol County, MA, among them: Southern New England School of Law, Stonehill College, University of Massachusetts - Dartmouth, Wheaton College and Bristol Community College.

Figure 8-5. New Bedford, MA: Educational Attainment of Population by Sex Ages 25 and Over, 2000



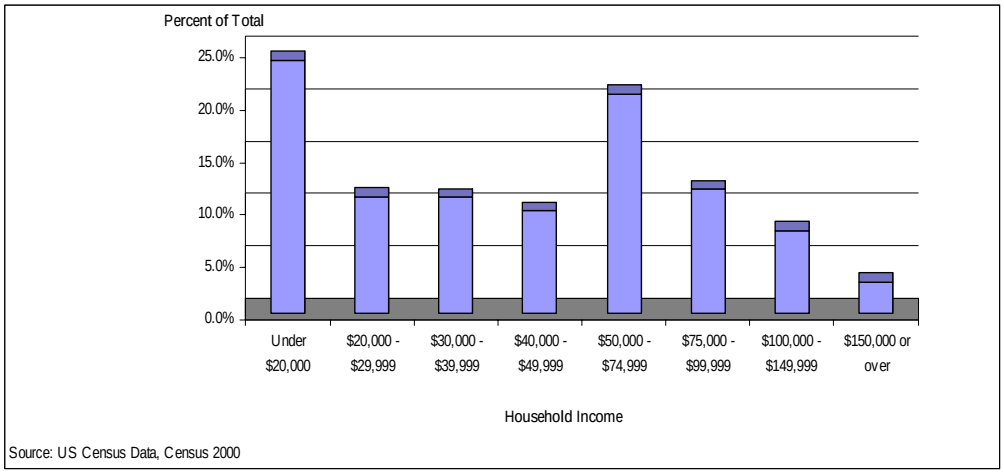
Socio-Economic Characteristics

INCOME

Figure 8-6 clearly portrays that about 25 percent of households in Bristol County, MA have an income of under $20,000. This percentage is closely followed by households in the $50,000 - $74,999 income bracket, which represent about 20 percent of all households. Less than 5 percent of households in the region have incomes of $150,000 or over.

Household median income in 1999 in the area, according to the 2000 US Census, was $43,496 and per capita income was $20,978. The percentage of people under the poverty line in the region was 10 in the year 2000. The average household size in 2000 was 2.54.[3]

Figure 8-6. New Bedford, MA: Distribution of Households by Household Income Level, 1999



EMPLOYMENT

Around 35 percent of females of the employed civilian population in the region ages 16 or over are employed within the educational, health and social services industry; about 17 percent are employed in 'other' industries, such as the arts, entertainment, recreation, food services, public administration and information. About 22 percent of working males are employed in the manufacturing industry, approximately 18 percent are employed in the wholesale and retail trade industry and nearly 17 percent are employed in 'other' industries.

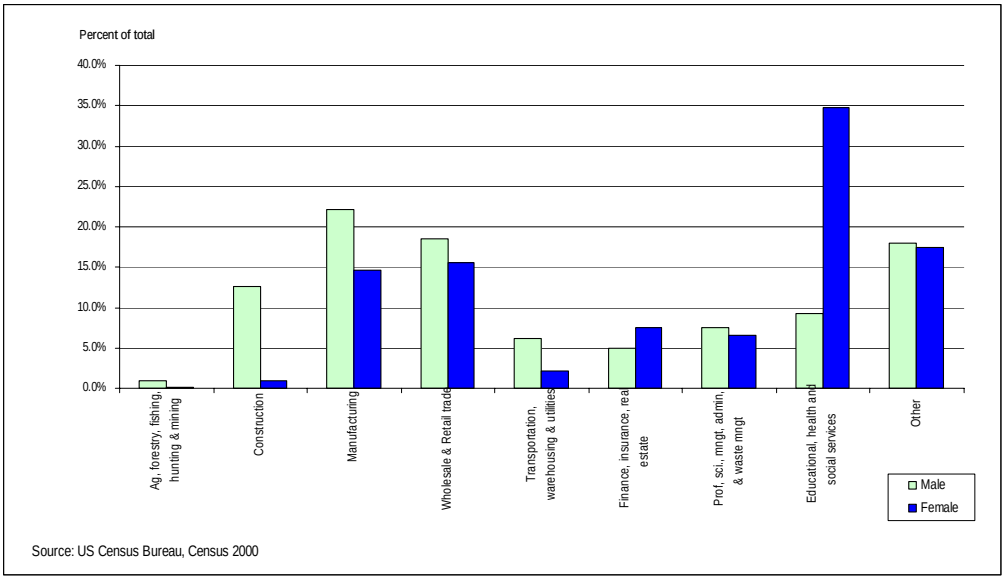
An estimated 6.3 percent of males and 5.2 percent of females were unemployed in Bristol County, MA in the year 2000.[4]

According to the 2000 US Census, an estimated 0.6 percent of males and 0.1 percent of females are employed in farming, fishing and forestry occupations. About 23.3 percent of males and 11.9 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.6 percent of male's occupations and 0.05 percent of female's occupations.

[3] US Census Data, Census 2000.

[4] US Census Data, Census 2000.

Figure 8-7. New Bedford, MA: Employed Civilian Population by Sex and Industry 16 Years and Over, 2000



MARITIME INFORMATION

New Bedford Harbor is at the mouth of the Acushnet River, which flows south into Buzzards Bay and the Atlantic Ocean. The entrance to the harbor is only nine nautical miles from the beginning of the Cape Cod Canal shipping channel. The Port of New Bedford is a deep-water port with depths of 30 feet. The harbor features a hurricane barrier that stretches across the water from the south end of New Bedford to the Town of Fairhaven. The barrier's 150-foot opening is closed during hurricane conditions and coastal storms. As a result, the harbor is one of the safest havens on the eastern seaboard.

The port has a history of seafaring traditions that continue today with an active fishing fleet, ferry services, and cruise ship docking. The port is supported by the city's outstanding, multi-ethnic work force and international distribution services, which include an adjacent airport as well as rail and interstate highway connections. With over 950 recreational boat slips, New Bedford Harbor also is an important center for recreational boating.

New Bedford Harbor is one of the nation's major fishing ports. The port has ranked first in the U.S. for the last three years, based on value of product landed (source: National Marine Fisheries Service). The fishing fleet includes more than 250 vessels operating out of the port. These vessels consist mainly of steel hull construction and are rigged for ground fish and scallops, providing the highest quality seafood products worldwide. The harbor's seafood processing industry has grown in recent years to become a nationally and internationally recognized industry center.

Across the harbor, shipyards line the Fairhaven waterfront. Marine service and vessel repair industries in Fairhaven have established reputations along the East Coast. Two major shipyards, D.N. Kelley & Son and Fairhaven Shipyard, are known internationally for quality repair on all types of boats.

Support industries include vessel maintenance and repair conducted at dockside or at repair facilities along the New Bedford Waterfront. Equipment and provisions to support the fishing fleet and other commercial and recreational vessels, such as food, ice, fuel, oils, electronics, and other products, also are available at the port.

The Port of New Bedford is the largest breakbulk handler of perishable items in Massachusetts and adjacent states. Commodities brought by refrigerated vessels from around the world primarily include fresh fruit and fish, as well as substantial volumes of frozen fish. The Port has direct Atlantic service from Norway calling at Maritime International Terminal every two weeks to satisfy the needs of Massachusetts fish processors and distributors. With its waterfront warehouse capacity, Maritime International has one of the largest U.S. Department of Agriculture-approved cold treatment centers on the East Coast for the use of restricted imported fruit. The terminal receives approximately 25 vessels a year. Each vessel carries about 1,000 tons of fish or, if carrying fruit, about 2,000 to 3,000 tons of fruit. Port calls vary between one and two days per discharge.

Ferry services are available in the port, including passenger and cargo service to Cuttyhunk Island and passenger service to Martha's Vineyard. Launch, water taxi, and charter boat services also operate in the port.

Like many modern working ports, New Bedford/Fairhaven Harbor balances maritime interests and local economic needs with environmental concerns. Several economic and environmental designations, such as the Foreign Trade Zone and No Discharge Area, currently apply to the port. Long-term projects, such as the Superfund cleanup and restoration of federal navigation channels, are taking place in the port. These projects and designations will improve the harbor's environmental health and enhance its economic growth.

Designated Port Area (DPA)
The Massachusetts Office of Coastal Zone Management has classified portions of the waterfront in New Bedford and Fairhaven as a Designated Port Area (DPA) under a program to preserve and promote maritime industry. The DPA classification encourages the creation or expansion of water-dependent industrial facilities, such as fish processing plants, in developed harbor areas. DPAs are subject to specific provisions, including land use restrictions, under Massachusetts General Law Chapter 91, which is administered by the state's Department of Environmental Protection. DPAs also are officially identified as priority areas for federal and state funding, including funds available under the Seaport Bond. (Original source: MA Coastal Zone Management Web site: www.mass.gov/czm)

New Bedford Foreign Trade Zone
The Port of New Bedford, New Bedford Regional Airport, and adjacent areas form the New Bedford Foreign Trade Zone (FTZ), which provides duty-free manufacturing opportunities for importers and exporters. The City of New Bedford is grantee or holder of Foreign Trade Zone (FTZ) number 28. An FTZ is a designated area that, for Customs purposes, is considered outside the U.S. Nearly any imported merchandise can be brought into the FTZ for almost any kind of manipulation duty-free, unless it enters the U.S. market. Goods in the FTZ can be assembled, manufactured or processed and final products re-exported without paying Customs duties. If the final products enter the U.S., the duty rate may be lower than the duty applicable to the product itself or its parts.

New Bedford offers international distribution services that support the FTZ. The city is accessible by sea, air, and rail services, as well as interstate highway systems. The port has shipping agencies, freight forwarding and stevedore services, and warehouse and truck-brokering facilities. The New Bedford Regional Airport is located within the FTZ. New Bedford is serviced by the CSX interstate railway. The city is adjacent to the interstate highway system and is within overnight truck delivery distance of most major cities in the Northeast industrial corridor. Long-haul trucking service to Canada and U.S. inland states also is available.

New Bedford Foreign Trade Zone number 28 is a direct port of entry to European and Latin American markets. FTZ number 28 is able to sponsor expanded general purpose sites within a 60-mile radius of the city. In addition, the FTZ has the potential to sponsor qualified subzones anywhere in Massachusetts. The FTZ Corporation recently created a subzone near the port's South Terminal area outside the Hurricane Barrier.

No Discharge Area
The U.S. Environmental Protection Agency (EPA) has designated Buzzards Bay, including New Bedford Harbor, as a No Discharge Area (NDA). In NDAs, the discharge of all boat sewage, even if it is treated, is prohibited. The Coast Guard enforces restrictions in NDAs. To help boaters comply with federal law, pumpout facilities have been established throughout the area. Pumpouts are wet vacuums that draw sewage out of boat holding tanks for proper disposal. Many of these facilities have been funded by federal grants and are available at little or no cost to boaters. (Original source: MA Coastal Zone Management Web site: www.mass.gov/czm)

New Bedford Federal Navigation Project
The restoration of federally authorized channel depths in New Bedford/Fairhaven Harbor is one of the federal navigation - or dredging - projects maintained by the U.S. Army Corps of Engineers/New England District. The main deep-draft channel to New Bedford has an authorized depth of 30 feet, while shallow draft channels for the fishing fleet at Fairhaven have depths of 15 and 10 feet. The shallower channels on the Fairhaven side of the harbor require maintenance dredging of about 70,000 cubic yards of shoal material. The deeper channels serving the New Bedford waterfront would require dredging of about 1.3 million cubic yards to restore the authorized project dimensions.

The Army Corps assisted the Massachusetts Office of Coastal Zone Management (CZM) in preparation of a Dredged Material Management Plan to identify a disposal site for maintenance dredging of navigation channels in New Bedford and Fairhaven. The state study examined the dredging needs of the federal navigation project for New Bedford and numerous state, municipal, and private facility dredging needs for a 20-year period. Environmental permitting on the project has been completed. The New Bedford Harbor Development Commission is working with the Army Corps and Environmental Protection Agency to coordinate implementation of the 20-year maintenance dredging and the Superfund cleanup. (Original source: Army Corps Web site: www.nae.usace.army.mil)

New Bedford Superfund Site Cleanup
The 18,000-acre New Bedford Harbor Superfund site extends from the northern reaches of the Acushnet River estuary south through the commercial harbor of New Bedford and into Buzzards Bay. The site contains sediments that are contaminated with polychlorinated biphenyls (PCBs) and heavy metals. The city's main working port, which houses the fishing fleet and cruise ship terminal, is not affected by the cleanup that is taking place primarily in the far north region of the harbor.

EPA issued a Record of Decision for the upper and lower harbor in 1998. The cleanup includes dredging approximately 450,000 cubic yards of PCB-contaminated sediment from the harbor. The dredged sediment will be contained in shoreline confined disposal facilities (CDFs) or transported offsite to a licensed landfill. Seawater will be removed from the sediments, treated, and discharged back into the harbor. Once completed, the CDFs will be available for reuse as shoreline open space and parks.

Steps taken to date, including posting warning signs, fencing contaminated shoreline areas and dredging the most highly contaminated hot spot sediments, have reduced threats posed by the site. Progress towards the remaining cleanup continues. EPA and the City of New Bedford have agreed on an innovative approach to increase the environmental benefit of the remedy in the north terminal section of the harbor. Once the cleanup is complete, the City will be able to reuse EPA's six-acre shoreline sediment processing facility as part of its working waterfront and intermodal, multi-user

transportation facility. Construction and minor dredging to support the main cleanup began in 2002. (Original source: EPA Web site: www.epa.gov).[5]

New Bedford offers international distribution services, including an adjacent airport. The port has its own ship agency, freight forwarding, stevedoring services, blast freezing, warehouse and truck brokering facilities all in one location, providing customers with "one-stop shopping." Deepwater berths and U.S. Customs-bonded refrigerated warehouses enable the port to maintain a "cold chain" for perishable products from ship to refrigerated storage. New Bedford's cold treatment facility is, in fact, the largest of its kind in North America.

The port and adjacent areas form the New Bedford Free Trade Port, which provides manufacturing opportunities for various importers and exporters. Future plans include expansion of the seaport through harbor dredging and construction of additional cold storage facilities. Marketed as a "Real Port" offering full turnkey services, New Bedford will take advantage of these improvements to promote further its capabilities for handling perishable goods.[6]

[5] Port of New Bedford website: http://www.ci.new-bedford.ma.us/ECONOMIC/HDC/wtrgeneral.htm

[6] Seaport Advisory Council website: http://www.mass.gov/seaports/newbed.htm

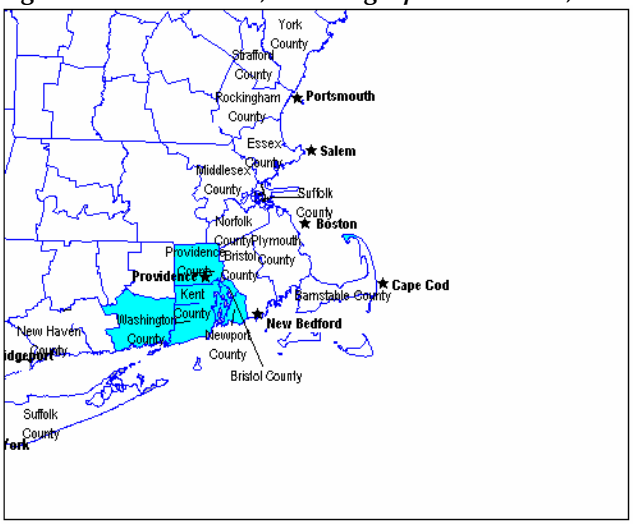
9. Providence, RI

Location and Background Information

The Port of Providence is located in the Providence – New Bedford – Fall River, Rhode Island – Massachusetts Metropolitan Statistical Area (MSA). International commerce started in this port in the 1700's when the Port of Providence first established trade with China. Less than a century later, Providence is New England's third largest city and the Northeast's premiere deep water multimodal facility for international and domestic trade.

The Port of Portland, or ProvPort, was officially founded in 1994 as a fully licensed, bonded Deep Water Port specializing in Bulk and Break Bulk commodities. While China continues to be one of its main trading partners, the port has expanded its partnerships and trading status with Central and South America, Europe, the Far East, Russia, Africa, Australia and New Zealand.[1]

Figure 9-1. Providence, RI: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

The total population of this region is 1,048,319 according to the 2000 US Census. Of this total, 503,635 or 48 percent are males and 544,684 or 52 percent are females. The median age in the region is 36.7 years; 35.3 for males and 37.9 for females.[2] As is shown in Figure 9-2, about 25 percent of males and 22 percent of females are between the ages of 0 and 17 years. Nearly 45 percent of the population (15 percent approximately per age group) is between 18 and 49 years old.

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[1] Providence Port Authority website: http://www.provport.com

[2] US Census Data, Census 2000.

The majority of the population in this MSA is white (85 percent), followed by 'others' (which include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone), which represent 8.4 percent of the total population. The Black or African American population represents 4.3 percent, followed by the Asian population, which represents only 2.3 percent of the total population (Figure 9-3). Moreover, in terms of ethnic makeup, 8.6 percent of the total population is considered to be of Hispanic or Latino origin.[3]

Figure 9-2. Providence, RI: Structure of the Population by Age Group, 2000

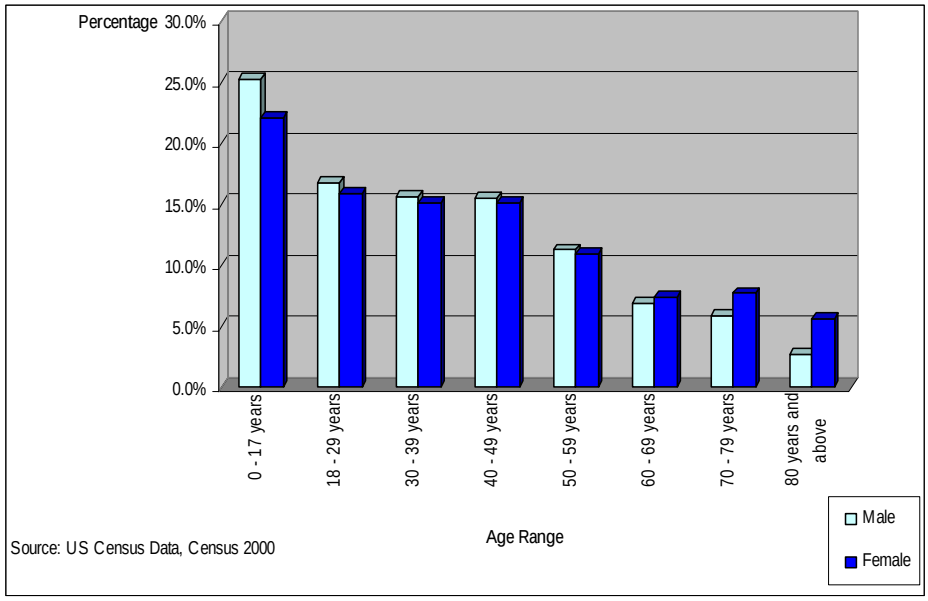
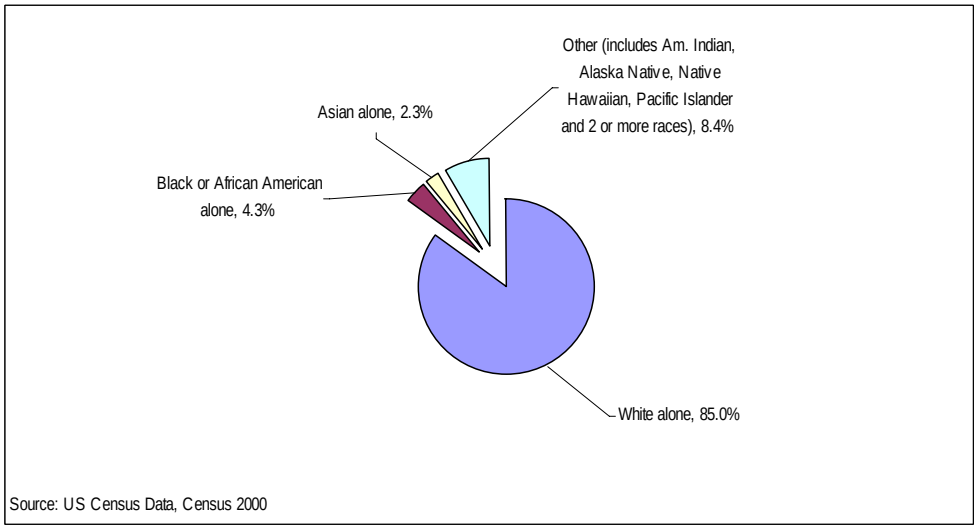


Figure 9-3. Providence, RI: Population by Race, 2000

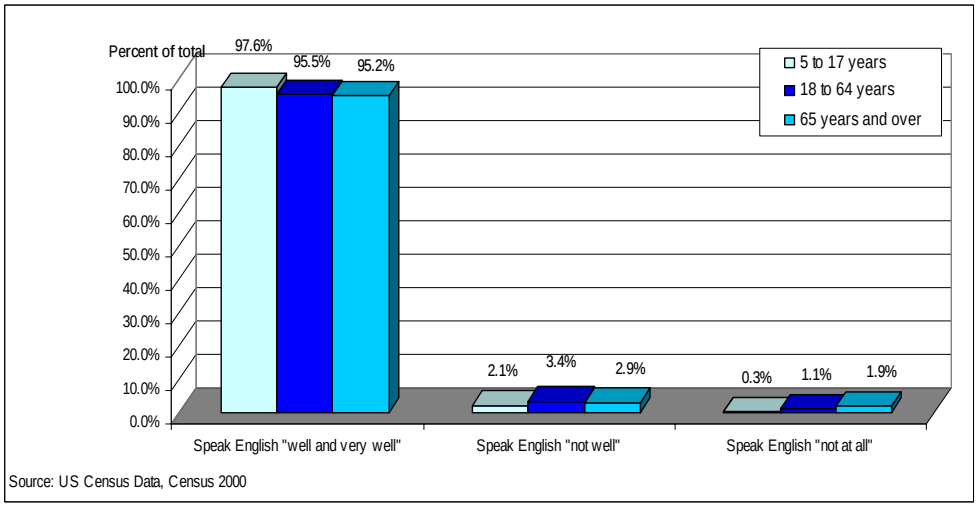


It is evident from the data specified in Figure 9-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'. Approximately 2.3 percent of the

[3] US Census Data, Census 2000

population ages 5 – 17, 4.5 percent of the population ages 18 – 64 years and 4.8 percent of the population ages 65 years or older do not speak English well or do not speak English at all.

Figure 9-4. Providence, RI: Ability to Speak English by Age Group, 2000

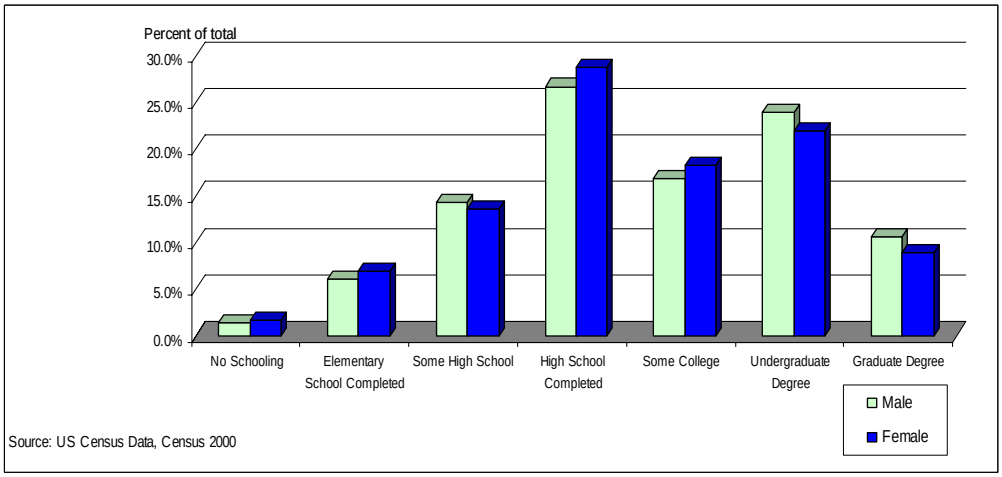


EDUCATION

Around 25 percent of males and 27 percent of females in the region, ages 25 and over, have completed high school. Approximately 23 percent of males and 21 percent of females have obtained an undergraduate degree in this region and less than 10 percent of the population has obtained a graduate degree (Figure 9-5).

There are a number of four year colleges and universities in the region. Some of these institutions include: Brown University, Rhode Island School of Design, Johnson & Wales University, Bryant College, Providence College, New England Institute of Technology and the Rhode Island Hospital Schools of Medical Technology, Nuclear Medicine, Radiologic Technology and Ultra Sonography. [4]

Figure 9-5. Providence, RI: Educational Attainment of Population by Sex Ages 25 and over, 2000



[4] Providence Community Profile: http://www.epodunk.com

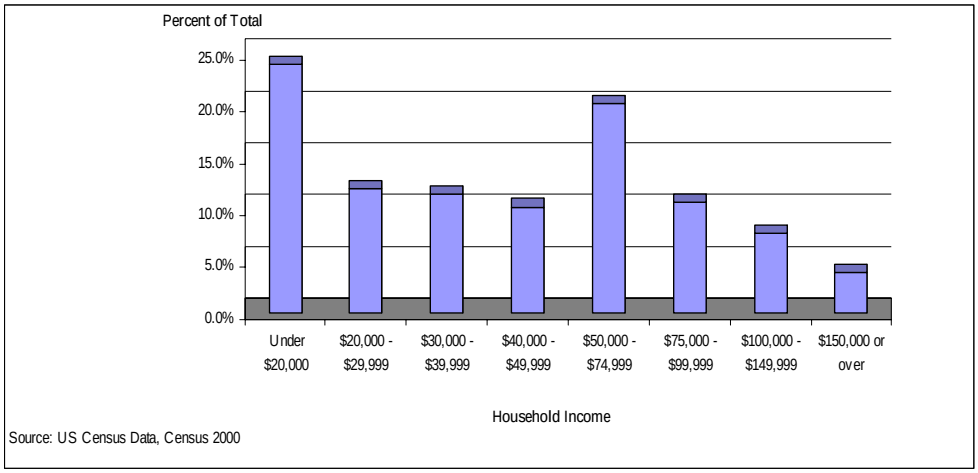
Socio-Economic Characteristics

INCOME

Nearly 25 percent of households in the region had incomes of under $20,000 in 1999; and around 21 percent of households fell within the $50,000 - $74,999 income bracket. About 5 percent of households in the region had incomes of $150,000 or over (Figure 9-6).

Household median income in this MSA in 1999, according to the 2000 US Census, was $42,369.92 and per capita income was $21,687.55. The percentage of people under the poverty line in the region was 11.9 in the year 2000. The average household size in 2000 was 2.47.[5]

Figure 9-6. Providence, RI: Distribution of Households by Household Income Level, 1999



EMPLOYMENT

About 35 percent of females in this region (of the employed civilian population 16 years and over) are employed in educational, health and social services industries and around 20 percent are employed in 'other' industries. These industries include the arts, entertainment, recreation, food services, public administration and information. Males' employment is more evenly distributed among industries, with manufacturing, and 'other' industries as the most dominant ones, representing 20 percent of male's participation; followed by 16 percent participation in wholesale and retail trade (Figure 9-7).

An estimated 5.6 percent of males and females were unemployed in the region in the year 2000.[6]

According to the 2000 US Census, an estimated 0.6 percent of males and 0.1 percent of females are employed in farming, fishing and forestry occupations. About 20.7 percent of males and 9.4 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.5 percent of male's occupations and 0.05 percent of female's occupations.

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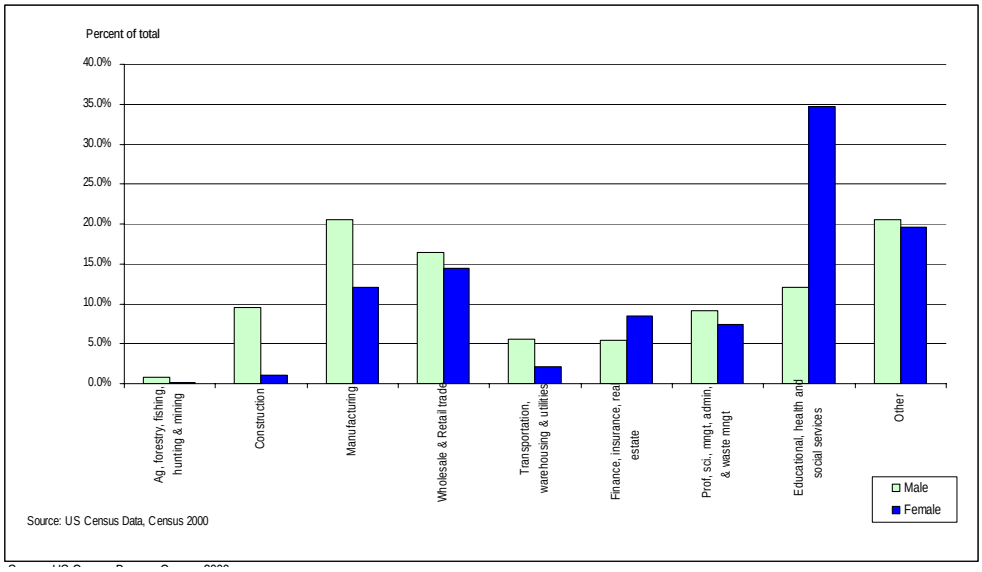
[5] US Census Data, Census 2000.

[6] US Census Data, Census 2000.

Figure 9-7. Providence, RI: Employed Civilian Population by Sex and Industry 16 Years and Over, 2000



MARITIME INFORMATION

ProvPort (the Port of Portland) is centrally located on the Atlantic East Coast shoreline just 150 miles from New York, 50 miles from Boston and 200 miles within major city and ports of Eastern Canada. Located just 1 mile from New England's primary Interstate I-95, ProvPort offers overnight access to all of the Northeast states and Eastern Canada.

ProvPort specializes in the handling of both Dry and Liquid Bulk and Break Bulk commodities for both imports and exports. Over 15 tons of cargo has moved across the facility since its establishment in 1994. ProvPort handles commodities such as cement, chemicals, coal, cobblestone, heavy machinery, liquid petroleum products, lumber, pearlite, salt, scrap, metal and steel products.

ProvPort's premises are 105 acres and include 6 deep water berths totaling 3500 linear feet combined, 3 warehouses totaling 300,000 square feet with 10 loading bay doors, over 20 acres of paved open storage area and on-dock rail access with 3 rail spurs.

Berths
ProvPort completed in January of 2004 its dredging project to deepen its 6 berths to a maximum depth of 40' @ MLW. The project, in conjunction with the U.S. Army Corps of Engineers New England district also involved dredging more than 6 million CY of material in Providence River to return a 7 mile stretch of the authorized Federal navigation project to full authorized dimensions of 40' deep and 600 feet wide. ProvPort offers a total of 3500 L.F. usable dockage space spread over 6 deep water berths as follows:

Petroleum Tank Farm
ProvPort is the owner of its own Petroleum Tank Farm totaling 335,000 barrels / 12 million gallons with storage capacity in 13 above ground storage tanks. In addition, a fuel depot station consisting of

an eight bay loading rack system is available along with a 40 meter operating scale and a secured scale house and operation center.

Cement Storage
With two separate on-dock cement storage facilities, Glens Falls Lehigh Cement has storage capacity of over 55,000 tons of cement. Its most recent investment of $15 million dollars enabled GFLC to create and establish the New England Distribution Center at ProvPort capable of loading and transporting it product by truck or rail to their customer base around the clock.

Warehousing
ProvPort offers 3 separate on dock covered warehouses totaling over 300,000 square feet used for both short and long term storage as well as viable distribution centers for the Northeast corridor. Ranging from 64,000 square feet to 130,000 square feet, ProvPort also has available 10,000 square feet of office space if required, truck bays and rail access for dock side loading/unloading.

The Marine Terminal Building is 116,000 square feet, has 10,000 square feet of office space and 10 truck bays; it is adjacent to berths 1, 2 & 3. The Ace Warehouse is 131,000 square feet, it has dock side loading, and is adjacent to berths 4 & 5. The Terminal Building is 64,000 square feet, it has dock side loading and is adjacent to berths C & 1. [7]

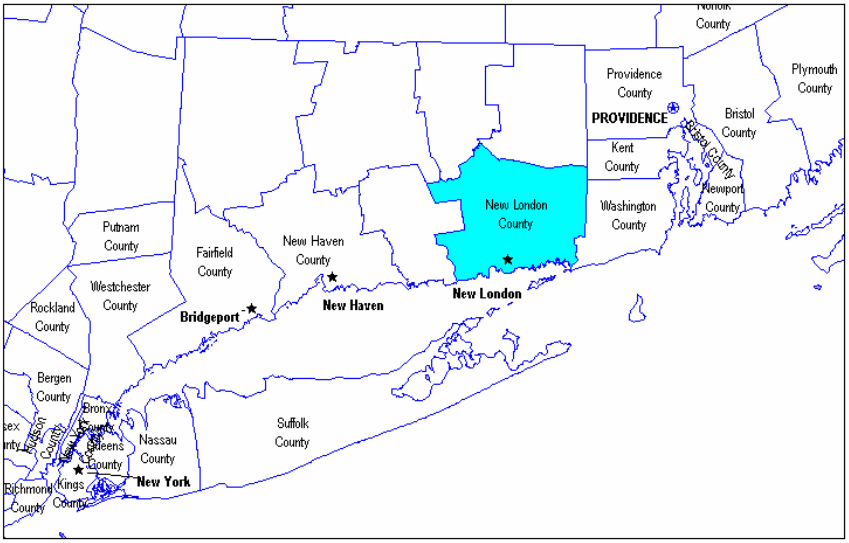
[7] Providence Port Authority website: http://www.provport.com/index.html

10. New London, CT

Location and Background Information

The Port of New London is located in the Norwich – New London, Connecticut Metropolitan Statistical Area (MSA). This MSA is comprised of New London County, CT.

Figure 10-1. New London, CT: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

New London County has a total population of 259,088, according to the 2000 US Census. Of this total, 128,172 or 49.5 percent are males and 130,916 or 50.5 percent are females. The median age in the region is 37 years; 35.9 for males and 38 for females. About 45 percent of males fall within the age brackets of 18 – 29, 30 – 39 and in the 40 – 49 years age range (15 percent approximately in each age group). About 15 percent of females fall within the 30 – 39 and the same percentage in the 40 – 49 years age bracket (Figure 10-2).

The majority of the population in New London county is white (86.9 percent); followed by 'others' (which include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone), representing 6.2 percent of the total population. The Black or African American population represents 5.1 percent of the total population, whereas the Asian population represents roughly 1.9 percent of the total population (Figure 10-3). Moreover, in terms of ethnic makeup, 5.2 percent of the total population is considered to be of Hispanic or Latino origin.[1]

[1] US Census Data, Census 2000.

Figure 10-2. New London, CT: Structure of the Population by Age Group, 2000

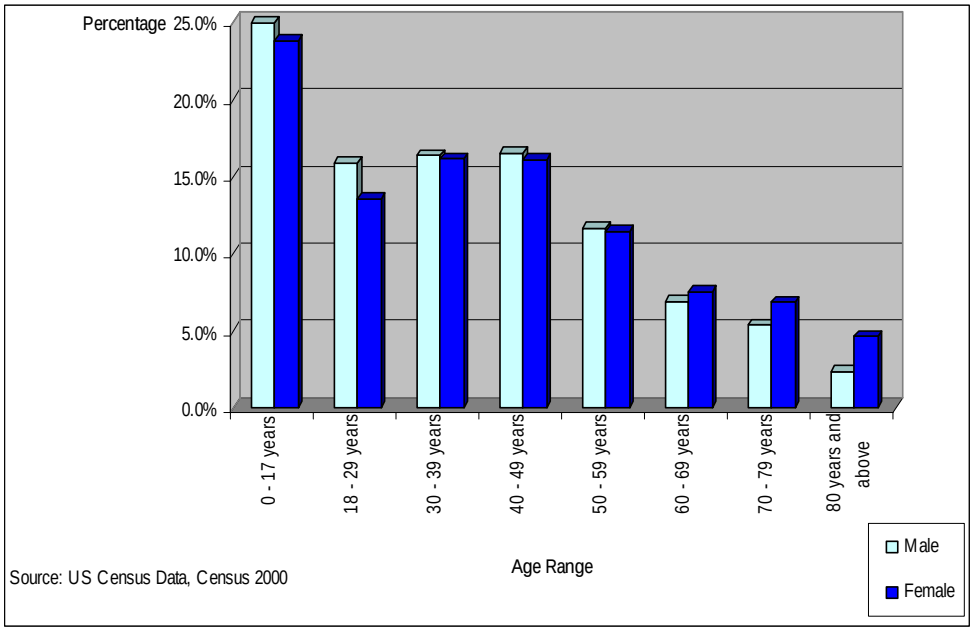
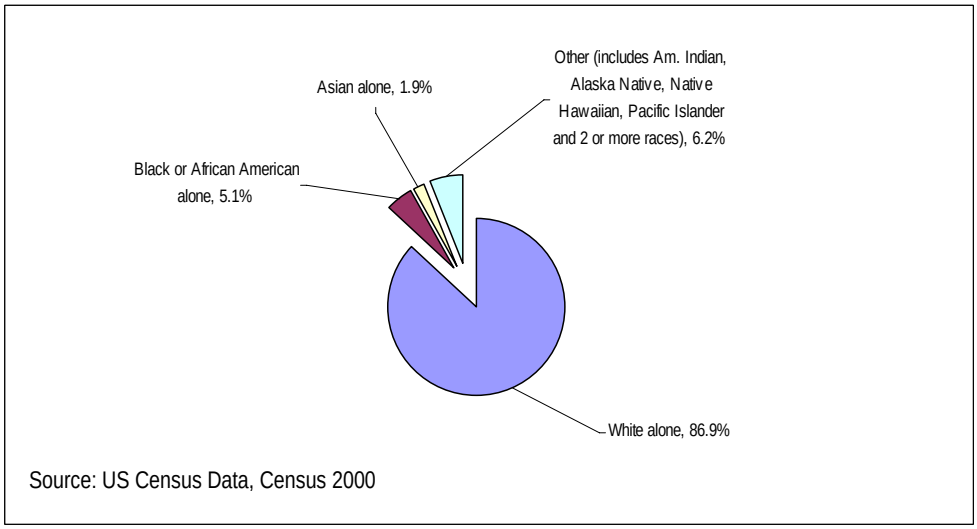
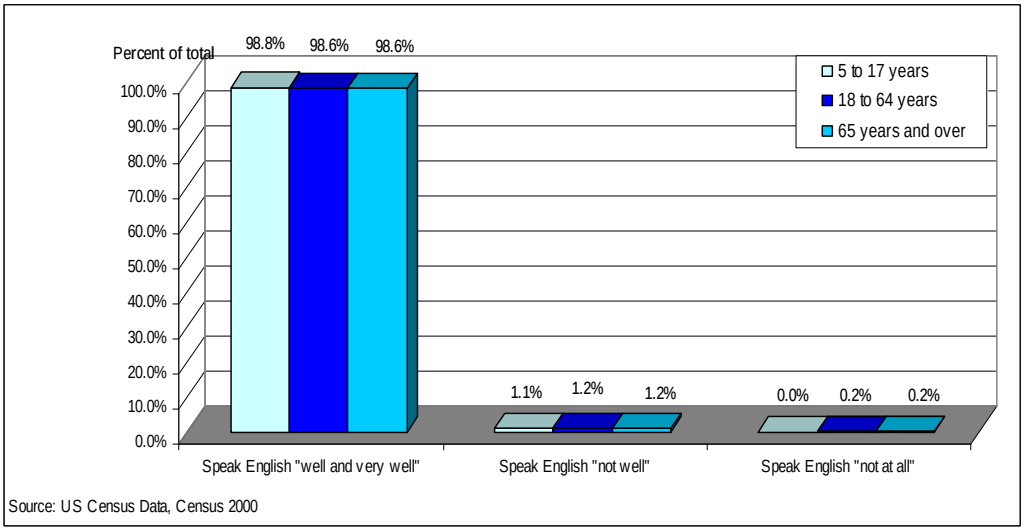


Figure 10-3. New London, CT: Population by Race, 2000



It is evident from the data specified in Figure 10-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'.

Figure 10-4. New London, CT: Ability to Speak English by Age Group, 2000

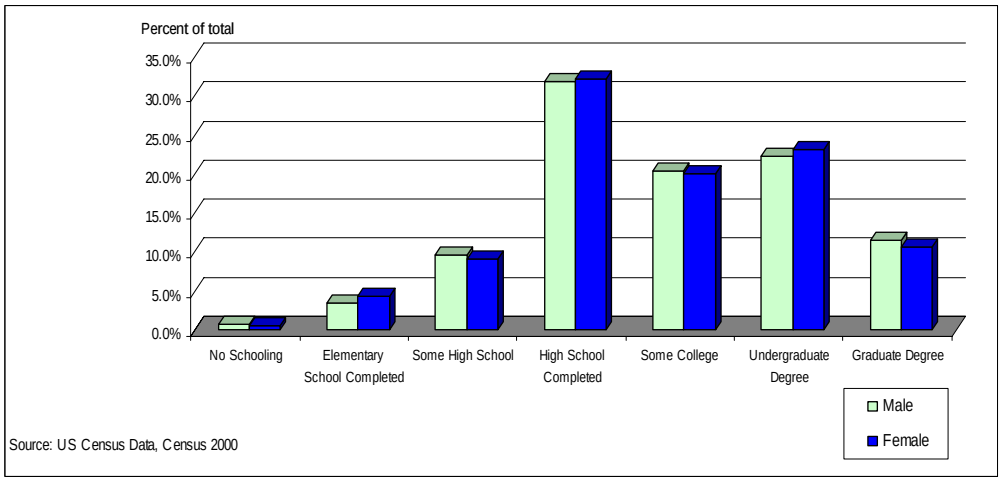


EDUCATION

Of the population in New London County, ages 25 and over, about 30 percent of males and females have completed high school. Nearly 26 percent of males and females have obtained undergraduate degrees. This percentage is very closely followed by the rate of males and females that have finished only some college. About 10 percent of males and females have obtained graduate degrees in the region (Figure 10-5).

There are only three colleges in New London County: Connecticut College, Mitchell College and the U.S. Coast Guard Academy.

Figure 10-5. New London, CT: Educational Attainment of Population by Sex Ages 25 and Over, 2000



Socio-Economic Characteristics

INCOME

As portrayed in Figure 10-6, nearly 25 percent of households in New London County in 1999 had incomes between $50,000 and $74,999. About 15.8 percent of households had incomes under $20,000 and 13 percent fell within the $75,000 - $99,999 income bracket. About 5 percent of households in the region had incomes of $150,000 or over (Figure10-6).

Household median income in this county in 1999 was $50,646 and per capita income was $24,678. The percentage of people under the poverty line in the region was 6.4 in the year 2000. Average household size in 2000 was 2.4. [2]

Figure 10-6. New London, CT: Distribution of Households by Household Income Level, 1999

EMPLOYMENT

As the data in Figure 10-7 shows, of the employed civilian population in the region, ages 16 or over, nearly 35 percent of working females are employed in the educational, health and social services industries and about 29 percent of them are employed in 'other' industries which include the arts, entertainment, recreation, food services, public administration and information. Males are employed in 'other' industries (25 percent); followed in a smaller proportion by occupations in the manufacturing industry (20 percent) and the wholesale and retail trade industry (15 percent).

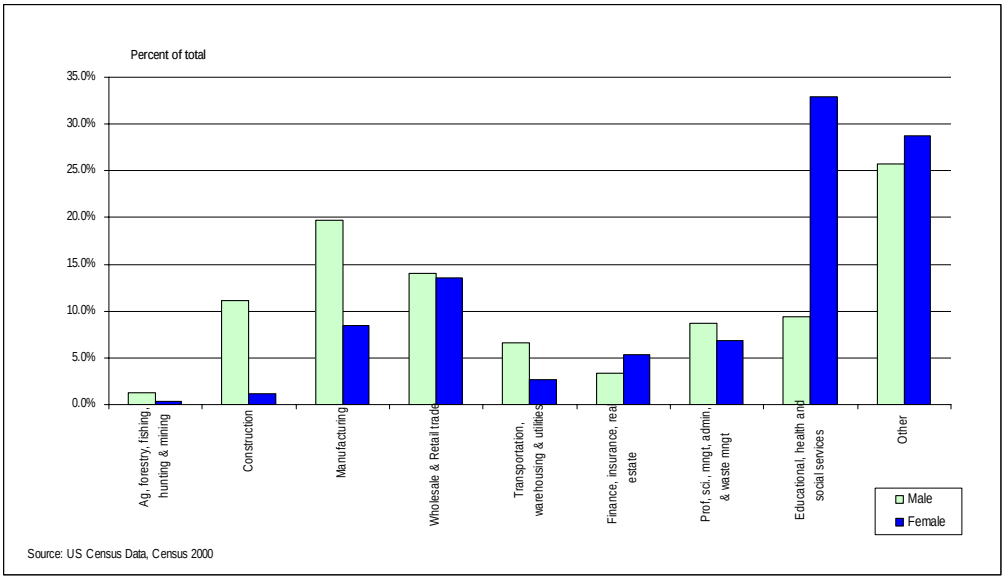
An estimated 4.0 percent of males and 3.8 percent of females were unemployed in the area in 2000.[3]

According to the 2000 US Census, an estimated 0.6 percent of males and 0.3 percent of females are employed in farming, fishing and forestry occupations. About 16.1 percent of males and 5.1 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.7 percent of male's occupations and 0.1 percent of female's occupations.

[2] US Census Data, Census 2000.

[3] US Census Data, Census 2000.

Figure10-7. New London, CT: Employed Civilian Population by Sex and Industry 16 Years and Over, 2000



MARITIME INFORMATION

Picture Source: Connecticut Department of Transportation.[4]

The Port of New London is serviced by the Port of Hartford.[5]

There is a Naval Submarine Base in New London, CT.

[4] Connecticut Department of Transportation website: http://www.ct.gov/dot/cwp/view.asp?a=1380&Q=259734&dot PNavCtr=|40046|#40049

[5] US Customs and Border Protection website: http://www.customs.gov/xp/cgov/toolbox/ contacts/ports/ct/0413.xml

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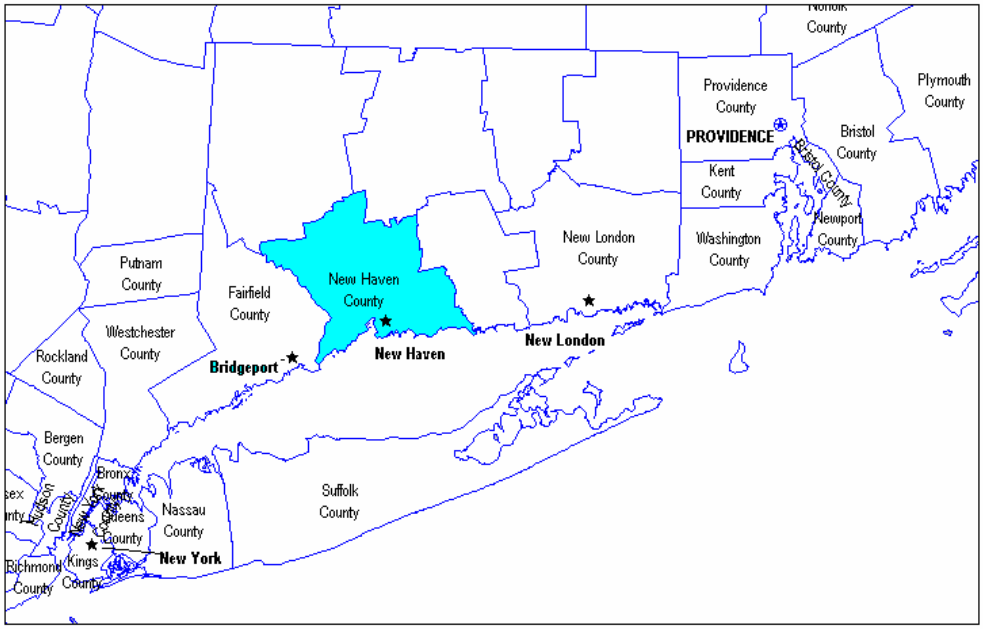
11. New Haven, CT

Location and Background Information

The Port of New Haven, Connecticut is located in the New Haven – Milford, Connecticut Metropolitan Statistical Area (MSA). This MSA is comprised of New Haven County, CT.

Figure 11- 1. New Haven, CT: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

The population of New Haven County in 2000 was 824,008, according to the 2000 US Census. Of this total, 395,931 or 48.0 percent are males and 428,077 or 52.0 percent are females. The median age for the population in 2000 was 37 years; 35.6 for males and 38.3 for females. As shown in Figure 11-2, about 45 percent of the population is between 18 and 49 years of age (15 percent approximately per age group).

The majority of the population in New Haven County is white (79.3 percent), followed by the Black or African American population, which represents 11.2 percent of the total population. This population is followed by 'others' (which include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone), who represent 7.1 percent of the population. The Asian population represents 2.4 percent of the total population (Figure 11-3). Moreover, 5 percent of the total population is considered to be of Hispanic or Latino origin.[1]

[1] US Census Data, Census 2000.

Figure 11-2. New Haven, CT: Structure of the Population by Age Group, 2000

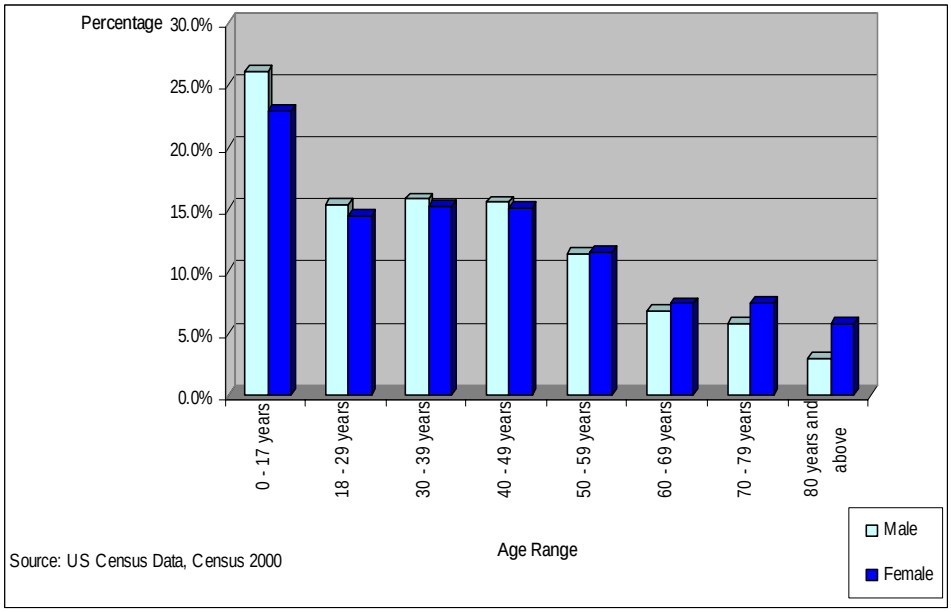
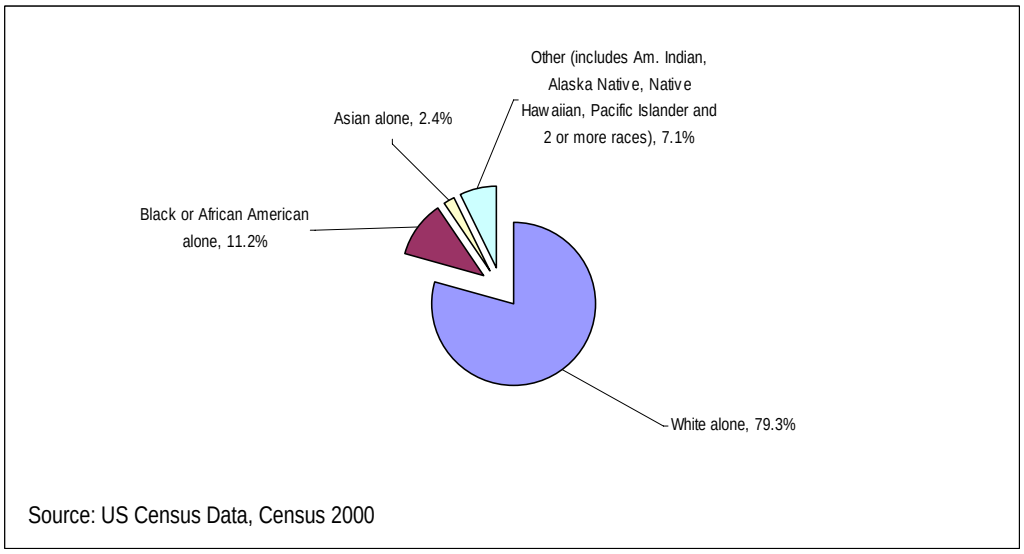
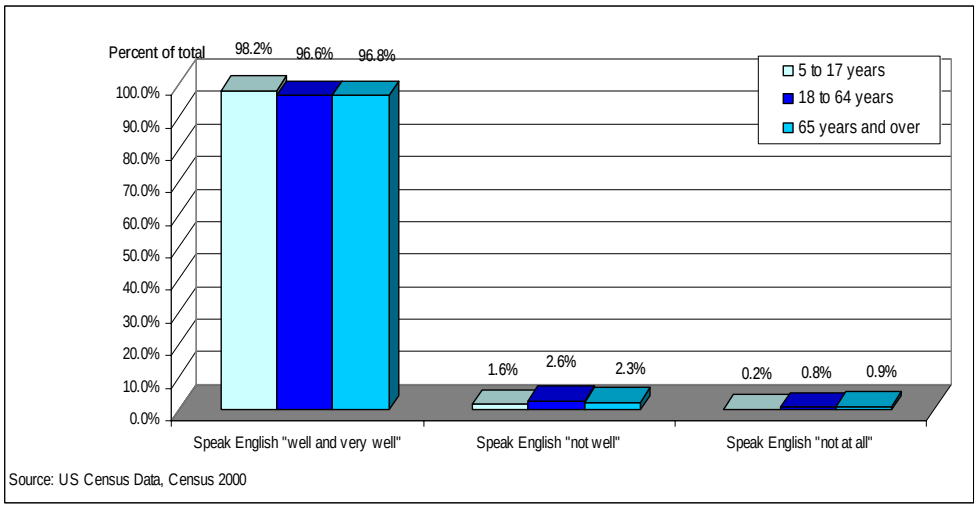


Figure 11-3. New Haven, CT: Population by Race, 2000



It is evident from the data specified in Figure 11- 4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'. Around 3 percent of the population in the 18 – 64 age bracket and the 65 years and over age bracket do not speak English well or don't speak English at all.

Figure 11- 4. New Haven, CT: Ability to Speak English by Age Group, 2000

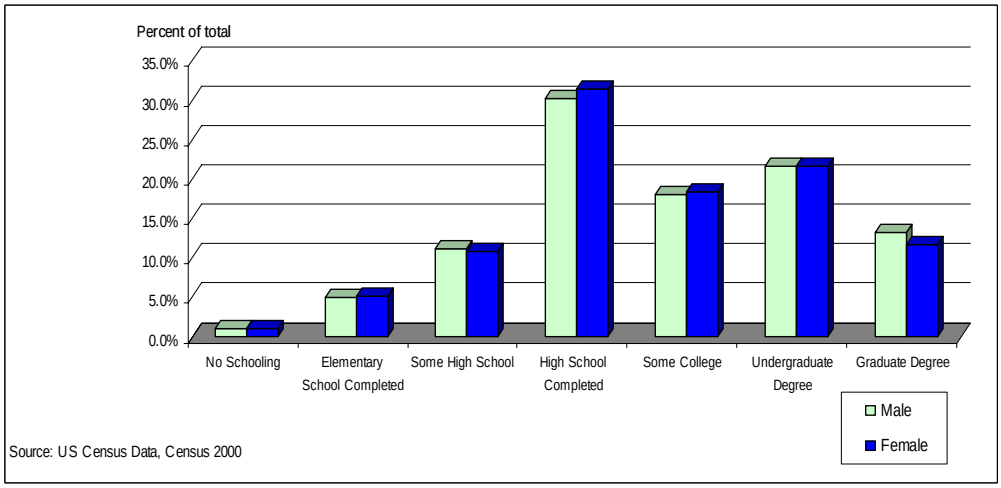


EDUCATION

Of the population in the region, ages 25 and over, nearly 30 percent of males and females have completed high school, and 20 percent have obtained undergraduate degrees. Over 15 percent of the population has completed some college and a little over 10 percent has obtained a graduate degree (Figure 11-5).

There are several universities in New Haven County, among them: Yale University, Southern Connecticut State University, Albertus Magnus College, Gateway Community-Technical College, Quinnipac University and University of New Haven.

Figure 11- 5. New Haven, CT: Educational Attainment of Population by Sex Ages 25 and Over, 2000



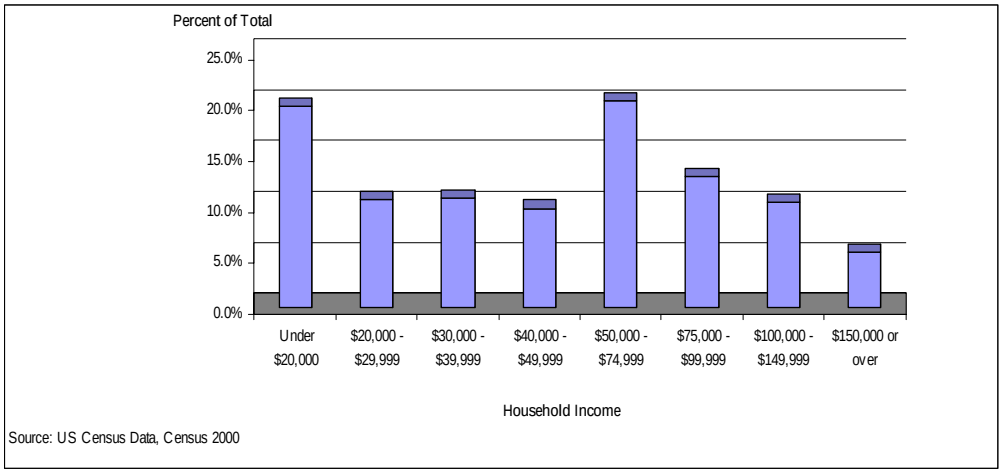
Socio-Economic Characteristics

INCOME

As portrayed in Figure 11- 6, about 20 percent of the households in this area in 1999 had incomes of under $20,000. About 20 percent of households' incomes fell in the $50,000 - $74,999 income bracket. Less than 7 percent of households in the region had incomes of $150,000 or over.

Household median income in New Haven, CT in 1999 was $48,834 and per capita income in the same year was $24,439. The percentage of people under the poverty line in the region was 9.5 in the year 2000. Average household size in 2000 was 2.5.[2]

Figure 11- 6. New Haven, CT: Distribution of Households by Household Income Level, 1999



EMPLOYMENT

Of the employed civilian population in the region, ages 16 or over, nearly 40 percent of females are employed in the educational, health and social services industry, and over 15 percent are employed in 'other' industries, including the arts, recreation, entertainment, food services, public administration and information. Over 20 percent of males are employed in manufacturing and over 17 percent are employed in 'other' industries (Figure 11-7).

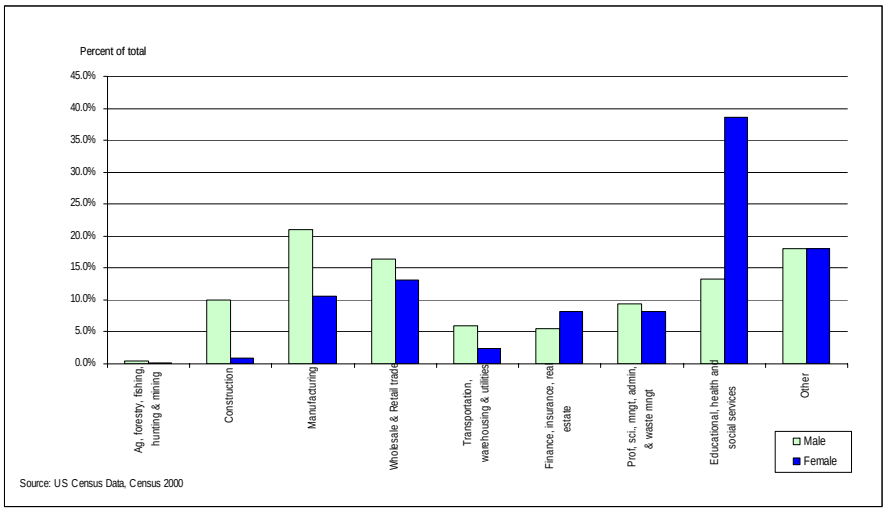
An estimated 6.2 percent of males and 5.6 percent of females were unemployed in the county in 2000.[3]

According to the 2000 US Census, an estimated 0.2 percent of males and 0.1 percent of females are employed in farming, fishing and forestry occupations. About 19.1 percent of males and 7.8 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.4 percent of male's occupations and 0.1 percent of female's occupations.

[2] US Census Data, Census 2000.

[3] US Census Data, Census 2000.

Figure 11- 7. New Haven, CT: Employed Civilian Population by Sex and Industry 16 Years and Over, 2000



MARITIME INFORMATION

The port of New Haven is located on the New Haven Harbor, less than 500 yards from Exit 49 off I-95; with immediate access to I-91 and Route 1. The ports serve vessels, barge, truck and rails. It has three berths, 2 @ 36'. MLW 1 @ 39' MLW

The Port also has capability for loading up to 200 trucks per day from the ground or via loading docks. New Haven port is serviced by the Providence and Worcester railroad, connecting with CONRAIL, New England railroad CN and CP. There is private siding for loading and unloading of box cars, gondolas, flat cars, etc.

There are approximately 400,000 square feet of inside storage and approximately 50 acres of outside storage space, as well as bonded storage available. There is LME approved warehousing available for Zinc, Aluminum, Lead, Tin and Nickel. The port possesses 5 shore cranes up to 250 ton capacity; with 61 forklifts up to 26 tons capacity. The facility currently handles Steel, Copper, Zinc, Aluminum, Tin, Containers, Paper, Woodpulp, Lumber, Heavy lifts, Crane parts and Automobiles; yet facilities are capable of handling any type of Break-Bulk cargo.[4]

[4] Source: Connecticut Department of Transportation http://www.ct.gov/dot/cwp/view.asp?a= 1380&Q= 259730&dotPNavCtr= | 40046 | #40048

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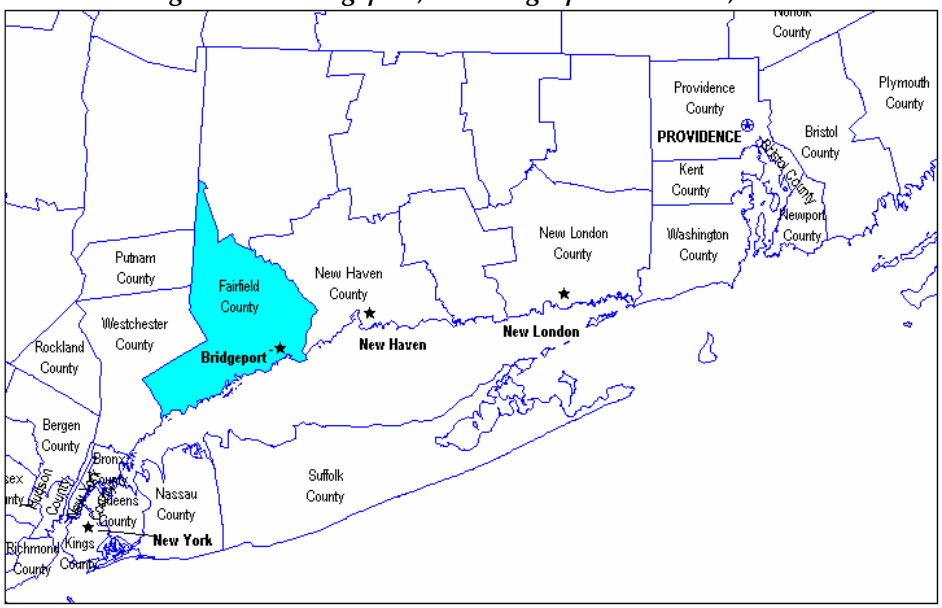
12. Bridgeport, CT

Location and Background Information

The Port of Bridgeport is located in the Bridgeport-Stamford-Norwalk, Connecticut Metropolitan Statistical Area (MSA); comprised of Fairfield County, CT. The port is located in Bridgeport Harbor, 1/4 of a mile South of I-95 at Exit 29.

Figure 12-1. Bridgeport, CT: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

The total population of the MSA in 2000 was 882,567, according to the 2000 US Census. Of this total, 426,127 or 48.3 percent are males and 456,440 or 51.7 percent are females. The average age in the region in 2000 was 37.3 years; 36.1 for males and 38.4 for females. As shown in Figure 12-2, about 30 percent of males and females are between the ages of 18 and 39 years (15 percent approximately per age group).

The majority of the population in the region is white (79.2 percent), followed by the Black or African American population, which represents 10 percent of the total population. 'Others' (which include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) represent 7.6 percent of the population, whereas only 3.2 percent of the population is Asian (Figure 12-3). Moreover, in terms of ethnic makeup, 11.8 percent of the total population is of Hispanic or Latino origin. [1]

[1] US Census Data, Census 2000.

Figure 12-2. Bridgeport, CT: Structure of the Population by Age Group, 2000

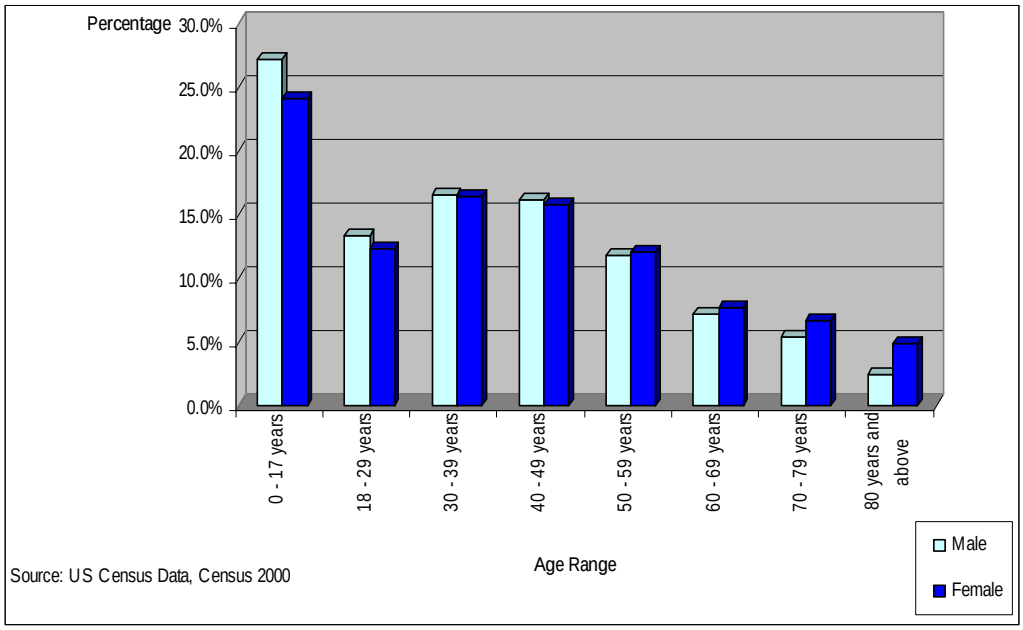
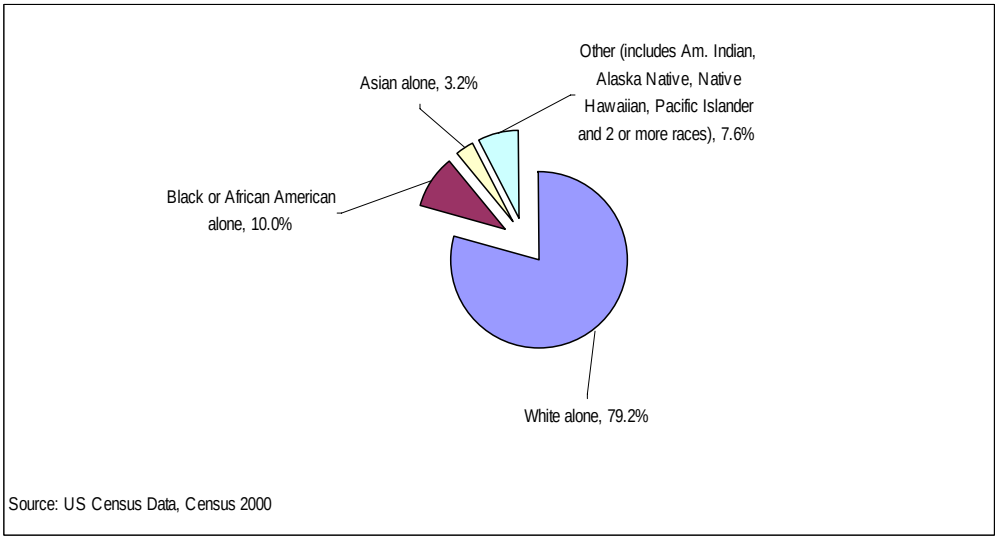
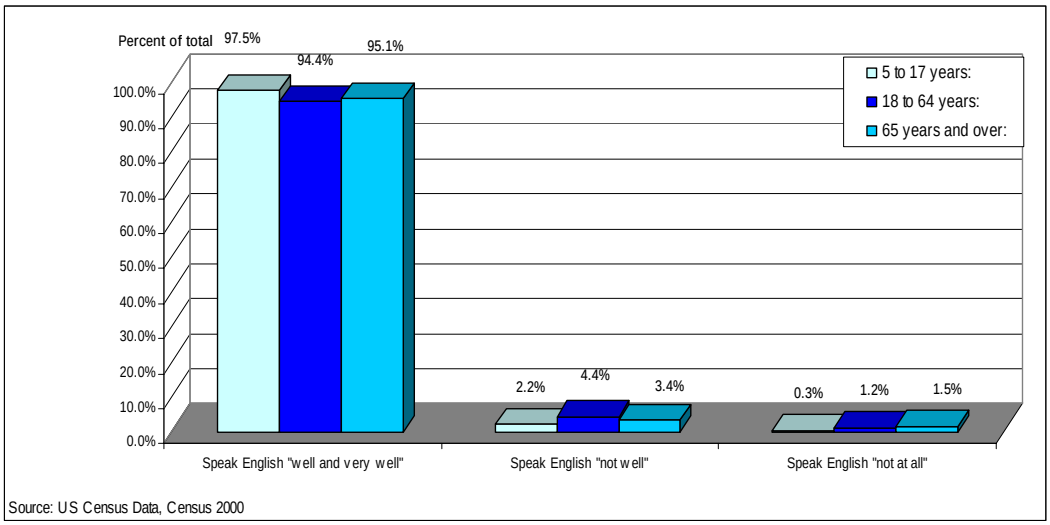


Figure 12-3. Bridgeport, CT: Population by Race, 2000



It is evident from the data specified in Figure 12-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'. About 5.6 percent of the population in the 18 – 64 years age bracket does not speak English well and approximately 5 percent of the population 65 years and over cannot speak English at all.

Figure 12-4. Bridgeport, CT: Ability to Speak English by Age Group, 2000

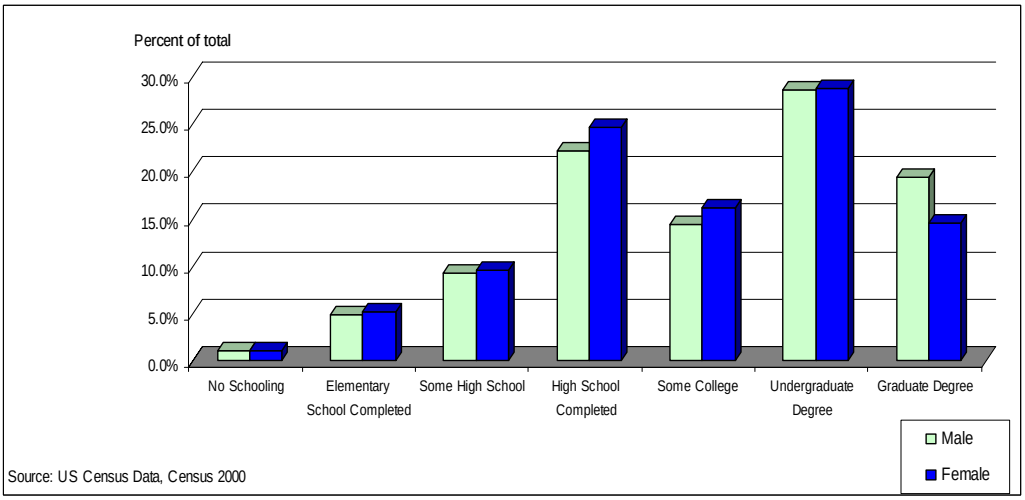


EDUCATION

Nearly 30 percent of males and females, ages 25 or over in Fairfield County, have obtained an undergraduate degree. About 20 percent of males and 25 percent of females have finished high school. Approximately 18 percent of females and 14 percent of males have obtained graduate degrees (Figure 12-5).

There are several universities in Fairfield County; among them: University of Bridgeport, Butler Business School, Fairfield University, Sacred Heart University, Saint Vincent's College and Western Connecticut State University.[2]

Figure 12-5. Bridgeport, CT: Educational Attainment of Population by Sex Ages 25 and Over, 2000



[2] Bridgeport Community Profile: http://www.epodunk.com/

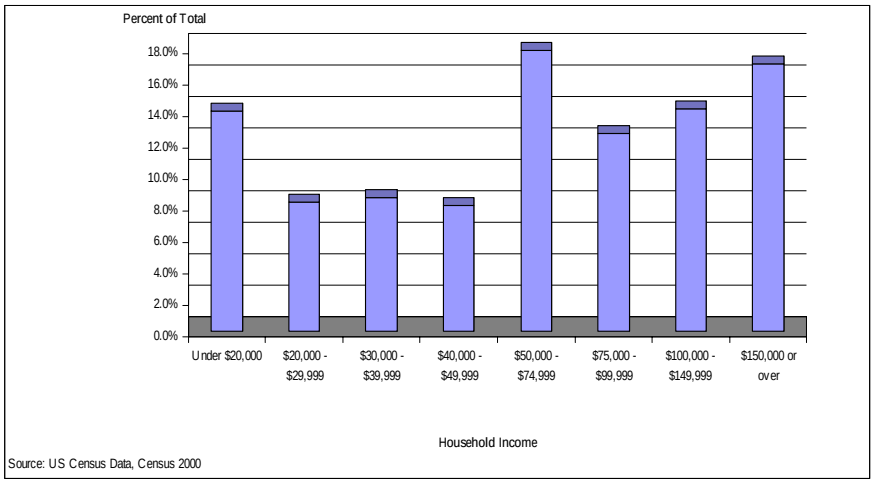
Socio-Economic Characteristics

INCOME

As portrayed in Figure 12-6, about 18 percent of the households in this area in 1999 had incomes in the $50,000 – $74,999 income bracket and 17 percent of households had incomes of $150,000 or over. Around 14 percent of households had incomes under $20,000.

Household median income in the county in 1999 was $65,249 and per capita income in the same year was $38,350. The percentage of people under the poverty line in the region was 6.9 in the year 2000. Average household size in 2000 was 2.67.[3]

Figure 12-6. Bridgeport, CT: Distribution of Households by Household Income Level, 1999



EMPLOYMENT

Of the employed civilian population in the region ages 16 or over, nearly 30 percent of females are employed in the educational, health and social services industry, and almost 20 percent are employed in 'other' industries, including the arts, recreation, entertainment, food services, public administration and information. About 18 percent of males are employed in 'other' industries and nearly 15 percent are employed in the wholesale and retail trade industry. Less than 0.2 percent of the population is employed in forestry, agriculture, mining, fishing or hunting industries (Figure 12-7).

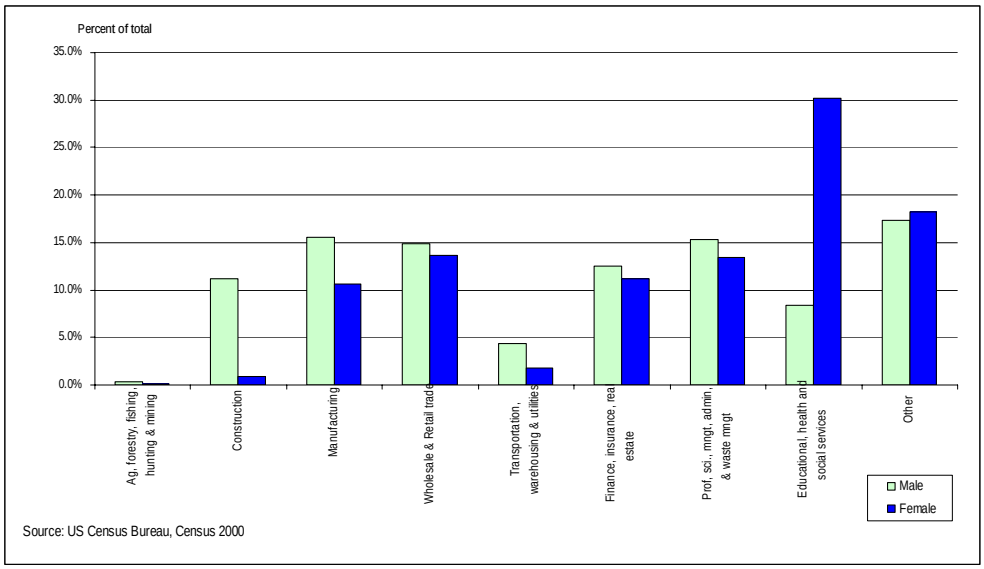
An estimated 4.8 percent of males and 4.7 percent of females were unemployed in the region in the year 2000.[4]

According to the 2000 US Census, an estimated 0.1 percent of males and 0.1 percent of females are employed in farming, fishing and forestry occupations. About 12.3 percent of males and 5.7 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.2 percent of male's occupations and 0.03 percent of female's occupations.

[3] US Census Data, Census 2000.

[4] US Census Data, Census 2000.

Figure 12-7. Bridgeport, CT: Employed Civilian Population by Sex and Industry 16 Years and Over, 2000



MARITIME INFORMATION

The port of Bridgeport is located in Bridgeport Harbor, 1/4 of a mile South of I-95 at Exit 29. The port serves vessels, barge, and trucks. It has 2 Berths @ 33 draft MLW and over 40 pieces of Electric Forklift equipment for handling cargo in refrigerated warehouses/ships. The port has 20 additional pieces of forklift equipment for up to 20 ton capacity. There are approximately 20 acres outside for storage/staging area; 130,000 square feet dry storage space inside; 85,000 square feet of refrigerated warehouse space with temperature capability to 32° F and there is bonded storage available (certified by USDA for Cold Treatment). Bananas, Plantains, Apples, Pears, Citrus, Melons, Forest Products, Miscellaneous General Cargo, Cars/Trucks and Containers are the type of cargo handled. [5]

The Bridgeport Port Authority was created in 1993. The city of Bridgeport transferred ownership of the Water Street Dock and the transfer triggered Connecticut state law forming a Port Authority. The purpose of the transfer was to reconstruct the Water Street Dock and build a ferry terminal on the site. The primary tenant in the port is Bridgeport-Port Jefferson Steamboat Company ("Ferry Co."). It is a year round passenger and vehicular service provided between Bridgeport and the Village of Port Jefferson, Long Island, NY. The train and bus terminals are located within minutes from Bridgeport Harbor (by foot). Bridgeport Harbor is located within 60 miles of New York, and 150 miles of Boston.

[5] Connecticut Department of Transportation website: http://www.ct.gov/dot/cwp/view.asp ?a=1380&Q=259718&dotPNavCtr=|40046|#40047

Bridgeport-Port Jefferson Steamboat Company has been providing ferry services from Bridgeport Harbor to Long Island since 1883.

The Ferry Terminal cost a total of $4.2 million. For the Water Street Dock; the initial repairs and reconfiguration in 2000 – 2001 was $2,092 million. A new access road for boarding vehicles was completed in 1997 – 1998 at cost of 1.535 million. A total of $7,827,000 has been invested in the Water Street Dock facility to date, with additional $6.45 million planned.

Overall crossing traffic has increased 51 percent from 1997 to 2004; passenger only traffic increased 48.36 percent (passengers in 2004 exceeded 900,000); and all vehicle traffic increased 56.43 percent (passenger vehicle traffic in 2004 exceeded 450,000 vehicles). Truck traffic in 2004 exceeded 10,000 (truck traffic increased 19 percent from 2003; since 1997 truck traffic increased over 179 percent).

Ferry services like the Bridgeport-Port Jefferson Ferry provide a local transportation alternative. Passengers typically include business commuters, travelers and those who simply want to enjoy a relaxing ride on the water. Highest passenger only traffic remains from May through September. The typical summer traveler goes to Bridgeport for a ballgame, concert and restaurants and to Port Jefferson for boutique shops and restaurants. In 2004, the ridership was 1.39 million passengers and vehicles. In 1999 a new investment of $14 million was made; for the addition of a vessel; this increased the total fleet number to 3 vessels providing daily route service. In 2003; an aging vessel was replaced (about $15 million); yet 14-16 round trips are made daily (6am-9pm), offering year-round service.

Bridgeport Harbor is underutilized but is growing. Channel depth is 15 feet. New business for the harbor includes Derecktor Shipyards, construction of new vessels, repair and services of all types of vessels. Shipyards include 600 metric ton travel lift. The future for Bridgeport Harbor will include barge feeder service and will operate between Bridgeport and the ports of New York and New Jersey. There is an RFP process underway. There is also a proposal for a High Speed Ferry Service that is planned to operate between Bridgeport, Stamford and New York. [6]

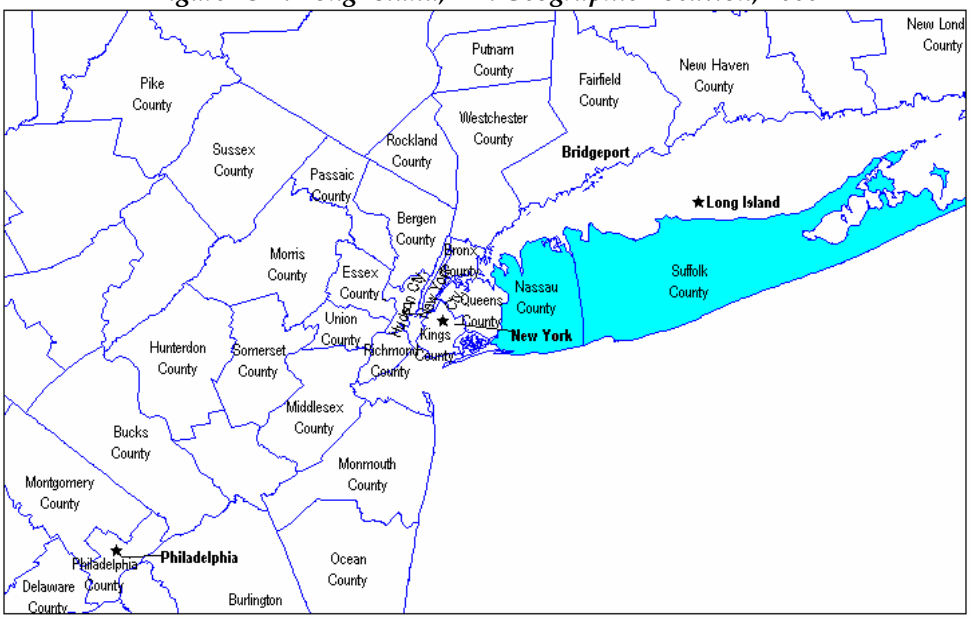
[6] Presentation made by Bridgeport Port Authority Executive Director, Joseph A. Riccio Jr. on February 16, 2005. From American Association of Port Authorities Cruise Workshops: "Niche Markets". URL: http://www.aapa-ports.org/programs/seminar_presentations/05_Cruise/Riccio_Joe.pdf

13. Long Island, NY

Location and Background Information

The Port of Long Island is part of the Nassau-Suffolk, NY Metropolitan Division (comprised by Nassau and Suffolk Counties). This Metropolitan Division is part of the New York - Northern New Jersey - Long Island, New York- New Jersey - Pennsylvania Metropolitan Statistical Area (MSA).

Figure 13-1. Long Island, NY: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

The total population of Nassau and Suffolk counties in 2000 was 2,753,913 according to the 2000 US Census. Of this total, 1,337,327 or 48.6 percent were males and 1,416,586 or 51.4 percent were females. The median age for the region in the same year was 37.5 years; 36.3 for males and 38.8 for females. It is evident by Figure 13-2 that 30 percent of the population is located in the 30–39 and 40–49 years age brackets (15 percent approximately in each age group).

As portrayed by Figure 13-3, 82 percent of the population in these counties is white, 8.4 percent is Black or African American. 'Others' constitute 6.1 percent of the total population (include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) and the Asian population represents roughly 3.5 percent of the total. Moreover in terms of ethnic makeup, 10.3 percent of the total population is considered to be of Hispanic or Latino origin.[1]

[1] US Census Data, Census 2000.

Figure 13-2. Long Island, NY: Structure of the Population by Age Group, 2000

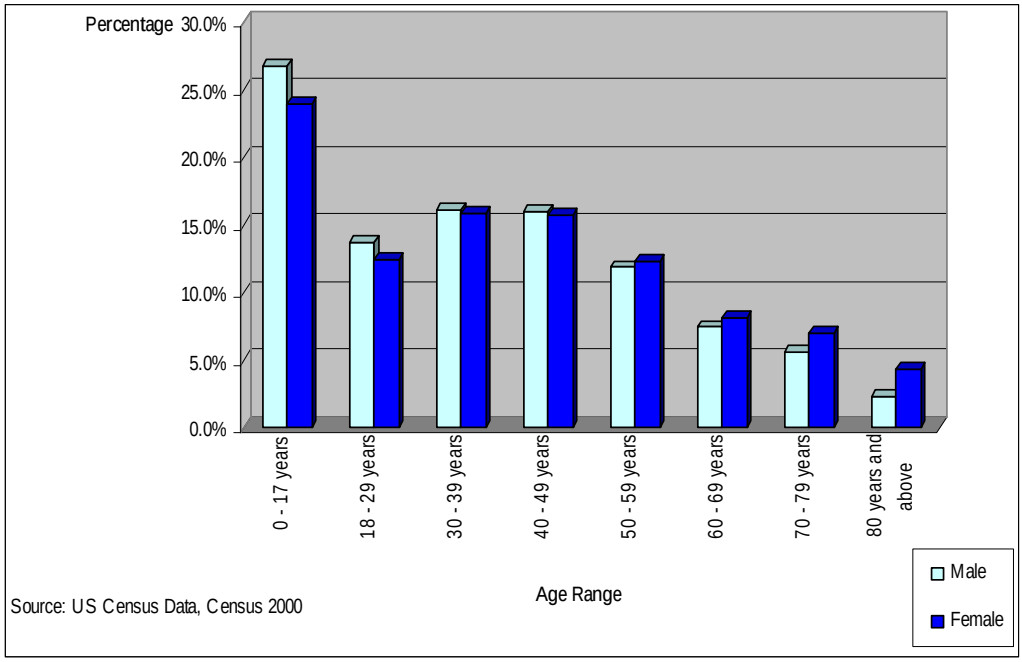
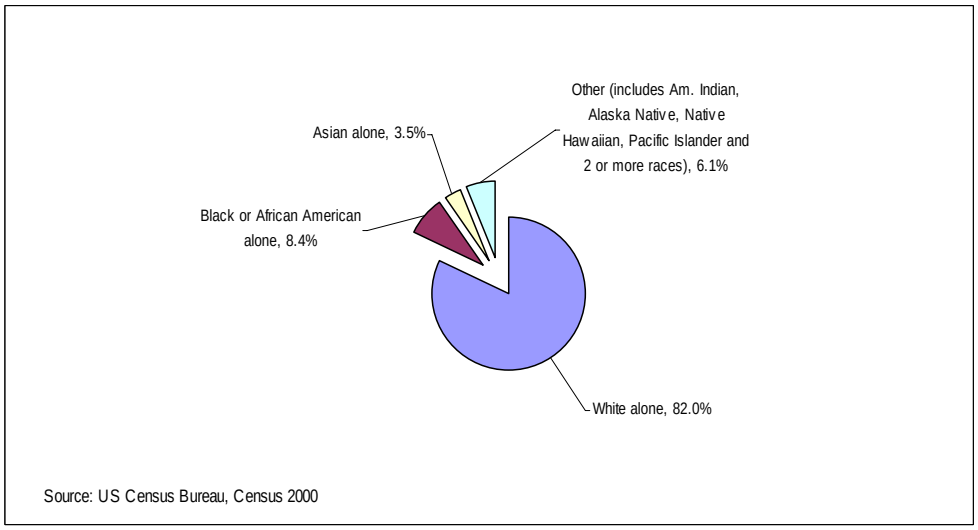
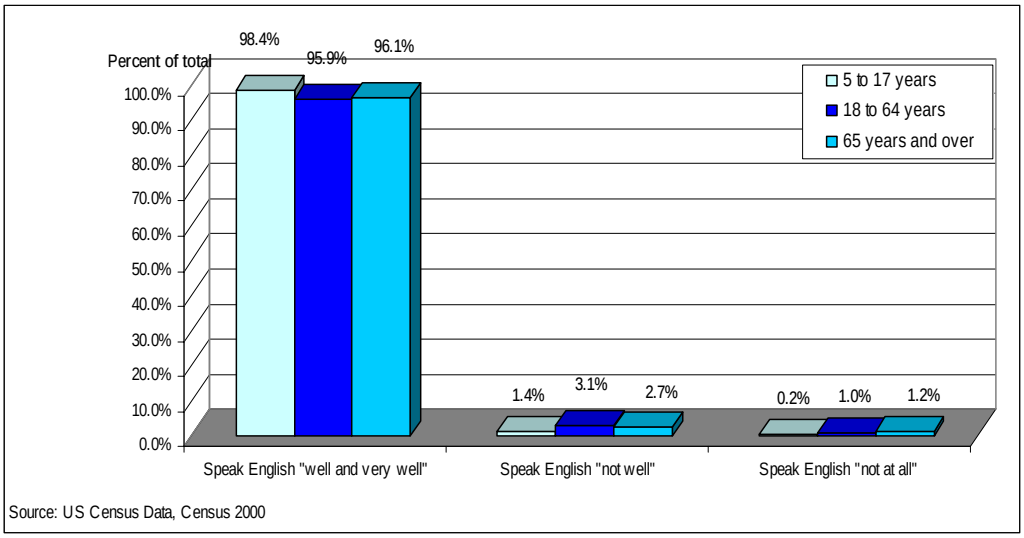


Figure 13-3. Long Island, NY: Population by Race, 2000



It is evident from the data specified in Figure 13-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'. About 5.8 percent of the population aged 18 and over does not speak English well and about 2 percent of this population does not speak English at all.

Figure 13-4. Long Island, NY: Ability to Speak English by Age Group, 2000

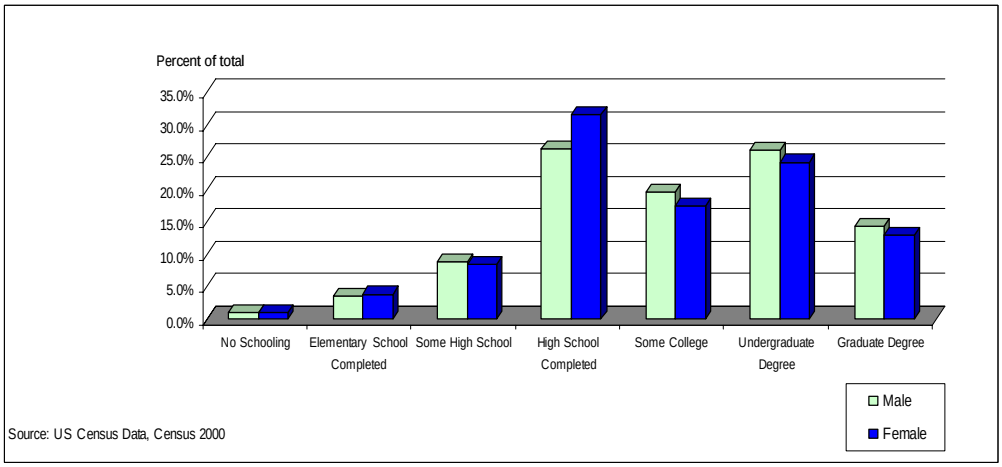


EDUCATION

As shown in Figure 13-5, of the population in Nassau and Suffolk counties, ages 25 and over, about 25 percent of males and 30 percent of females have completed high school and around 25 percent of males and 23 percent of females have obtained an undergraduate degree. Nearly 15 percent of males and females have obtained graduate degrees.

Some of the colleges around the area are: Adelphi University, Molloy College, Nassau Community College, New York College of Health Professions, New York Institute of Technology - New York, United States Merchant Marine Academy, Dowling College, Long Island University and SUNY Stony Brook. [2]

Figure 13-5. Long Island, NY: Educational Attainment of Population by Sex Ages 25 and Over, 2000



[2] Nassau and Suffolk Counties community profiles: http://www.epodunk.com/

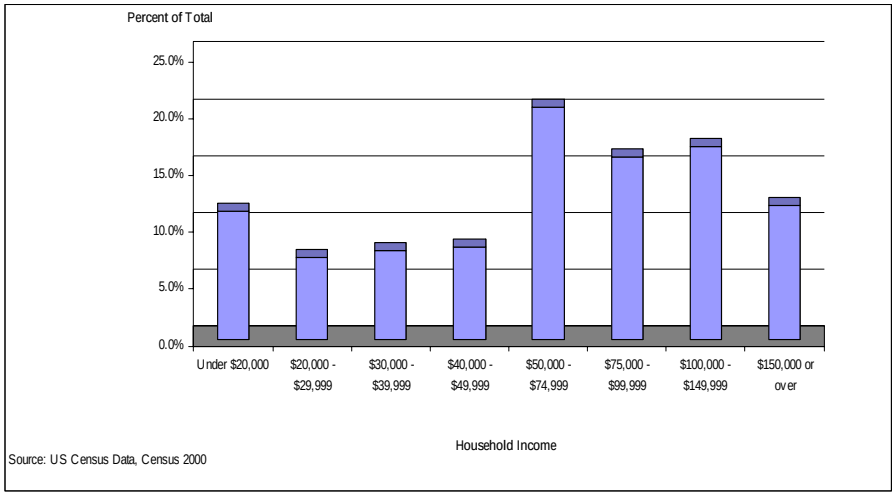
Socio-Economic Characteristics

INCOME

About 20 percent of households in this Metropolitan Division had incomes between $50,000 and $74,000 in 1999. About 17 percent of households had incomes between $75,000 and $99,999 and over 17 percent had incomes between $100,000 and $149,999. More than 10 percent of households in this area had incomes of $150,000 or above (Figure 13-6).

Household median income in Long Island in 1999 was $68,579.14 and per capita income for the same year was $29,278.16. The percentage of people under the poverty line in the region was 5.6 in the year 2000. The average household size in 2000 was 2.95.[3]

Figure 13-6. Long Island, NY: Distribution of Households by Household Income Level, 1999



EMPLOYMENT

Of the employed civilian population in Long Island, 16 years or over, more than 35 percent of females are employed in the educational, health and social services industry, and about 17 percent are employed in 'other' industries, such as the arts, recreation, entertainment, food services, public administration and information. Over 20 percent of males are employed in 'other' industries and over 15 percent are employed in the wholesale and retail trade industry (Figure 13-7).

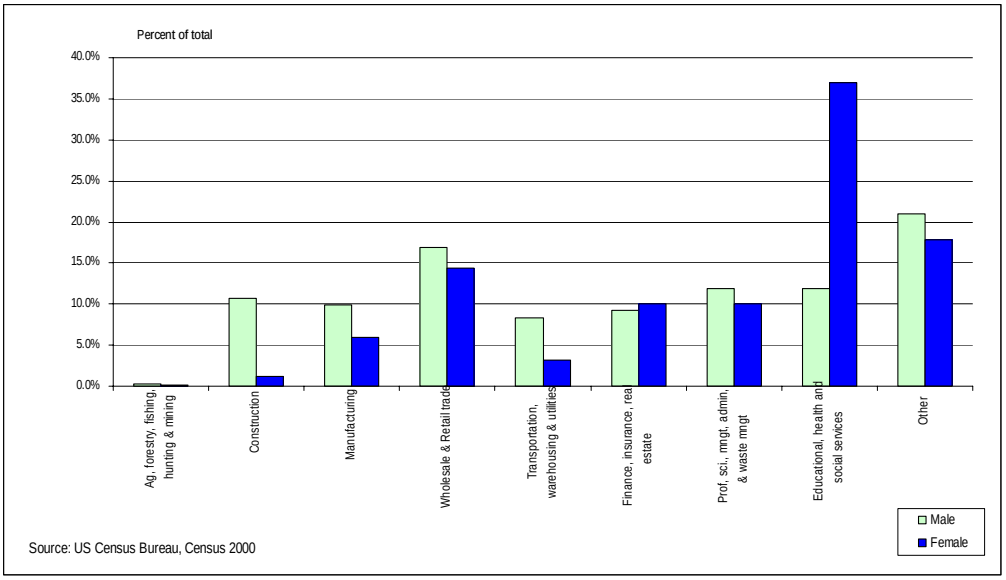
An estimated 3.7 percent of males and 3.9 percent of females were unemployed in this Metropolitan Division in 2000.[4]

According to the 2000 US Census, an estimated 0.2 percent of males and 0.1 percent of females are employed in farming, fishing and forestry occupations. About 13.3 percent of males and 4.7 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.6 percent of male's occupations and 0.1 percent of female's occupations.

[3] US Census Data, Census 2000.

[4] US Census Data, Census 2000.

Figure 13-7. Long Island, NY: Employed Civilian Population by Sex and Industry 16 Years and Over, 2000



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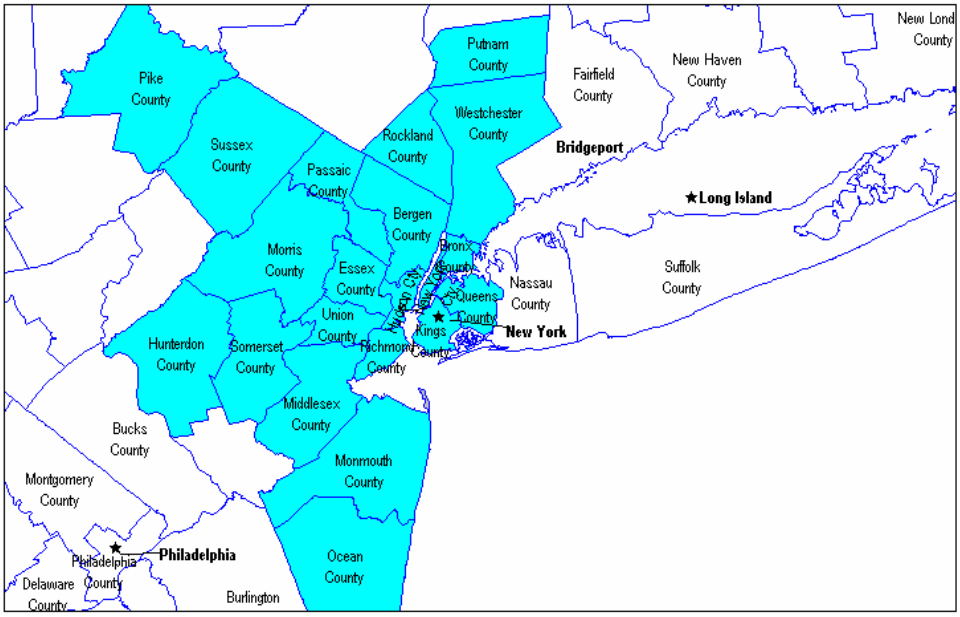
14. Ports of New York – New Jersey

Location and Background Information

The Ports of New York and New Jersey are located within the New York – Northern New Jersey – Long Island, NY-NJ-PA Metropolitan Statistical Area (MSA).

Figure 14-1. New York-New Jersey: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

The combined total population for this MSA in 2000 was 15,569,089, according to the 2000 US Census. Of this total, 7,453,615 or 47.9 percent are males and 8,115,474 or 52.1 percent are females. The median age for the region in the year 2000 was 35.5 years; 34 for males and 36.8 for females. As is evident through Figure 14-2, about 15 percent of the population is between 18 – 29 years and around 15 percent of the population is between the ages of 30 and 39. Less than 5 percent of the population is 80 or above.

The majority of the population is white in the region (58 percent), followed by the Black or African American population, which represents 19.7 percent of the total population. 'Others' (which include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) represent around 14.2 percent of the population. The Asian population represents only 8.1 percent of the total population (Figure 14-3). Moreover, in terms of ethnic makeup, 21.1 percent of the total population is considered to be of Hispanic or Latino origin. [1]

[1] US Census Data, Census 2000.

Figure 14-2. New York-New Jersey: Structure of the Population by Age Group, 2000

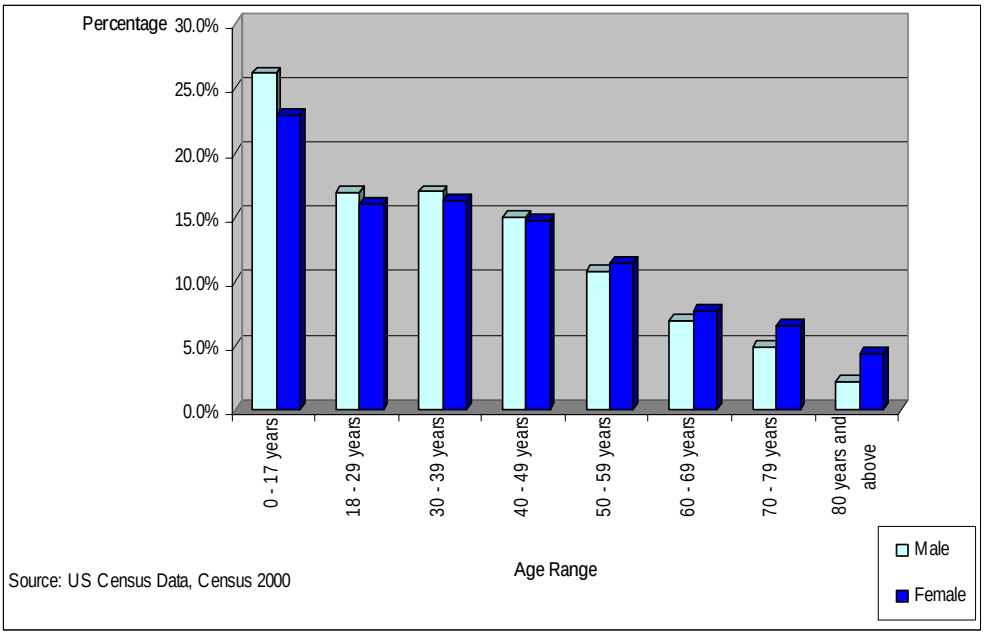
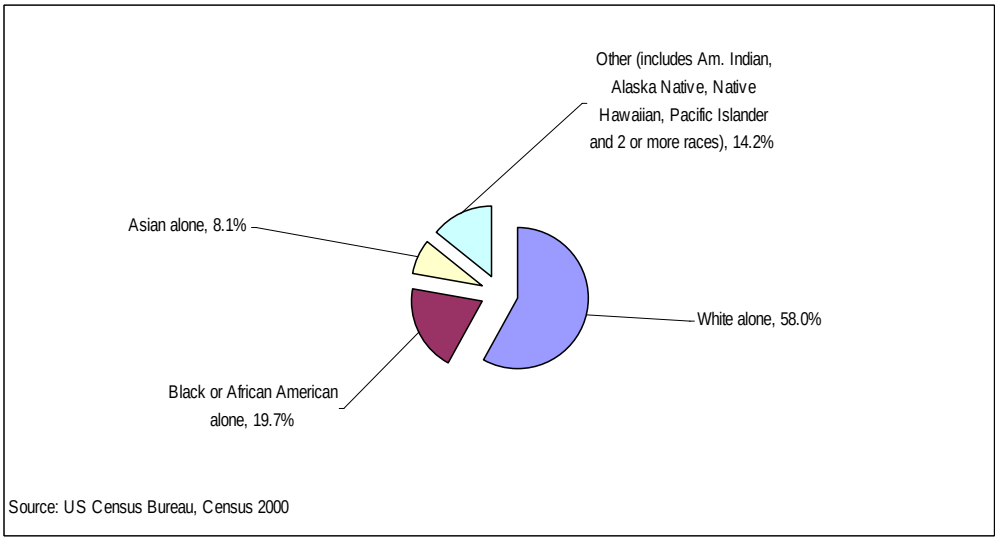
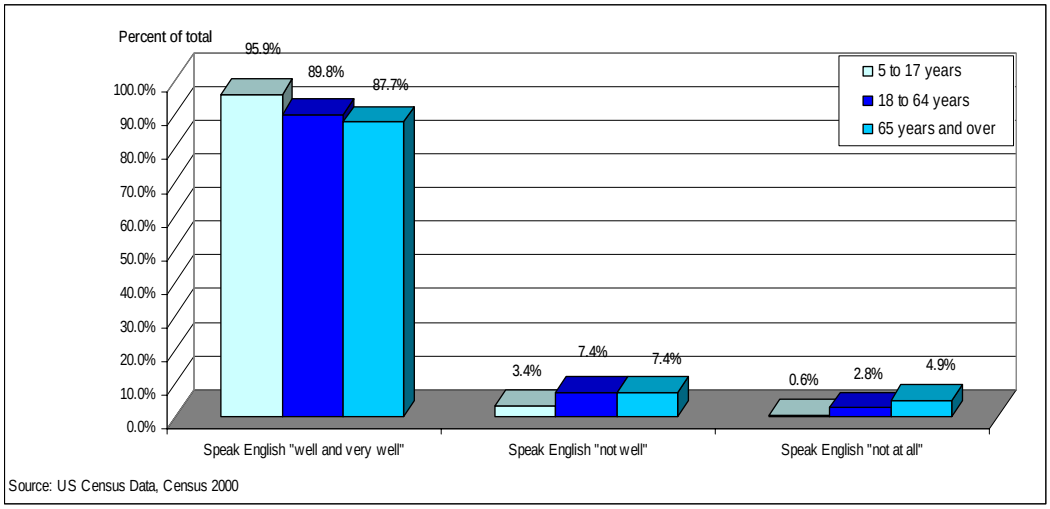


Figure 14-3. New York - New Jersey: Population by Race, 2000



It is evident from the data specified in Figure 14-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'. It is important to note that almost 10 percent of the population in the 18 – 64 years age bracket and 12.3 percent of the population that is 65 years and over do not speak English, or don't speak it well.

Figure 14-4. New York-New Jersey: Ability to Speak English by Age Group, 2000

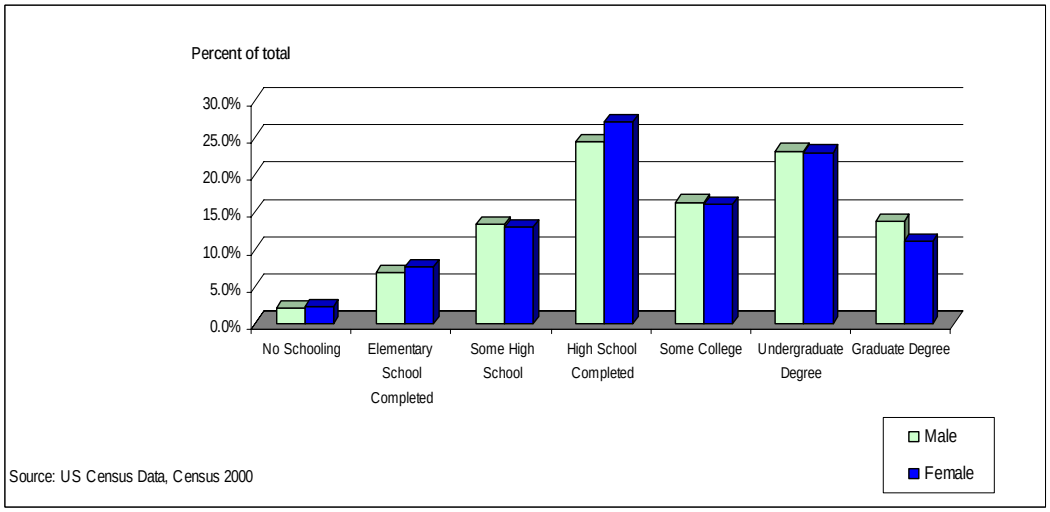


EDUCATION

Of the population in this region, ages 25 and over, about 25 percent of males and females have completed high school, and over 20 percent have obtained an undergraduate degree. About 15 percent of the population has finished only some college. Over 10 percent of the population has obtained a graduate degree (Figure 14-5).

Just New York County has 38 four-year colleges; among them New York University, CUNY, Fashion Institute of Technology, Julliard, Barnard College and Columbia University.

Figure 14-5. New York-New Jersey: Educational Attainment of Population by Sex Ages 25 and Over, 2000



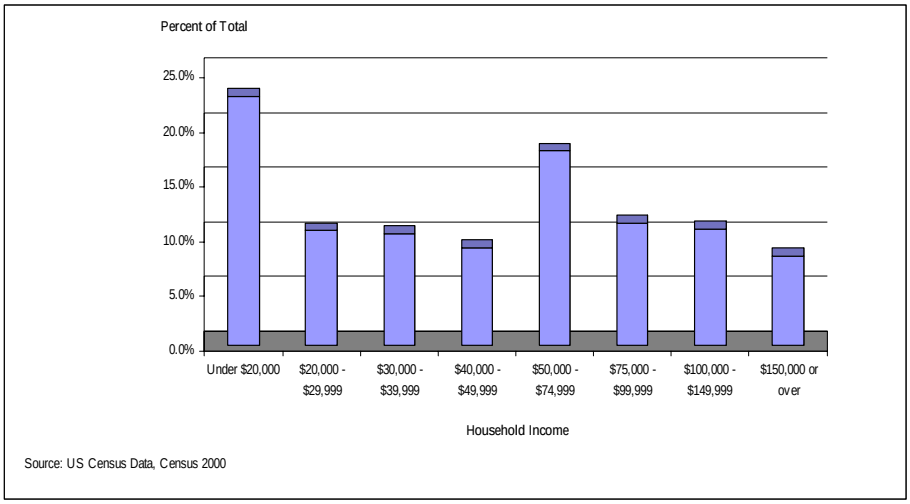
Socio-Economic Characteristics

INCOME

As portrayed in Figure 14-6, about 23 percent of the households in this area in 1999 had incomes of under $20,000. About 17 percent of households' incomes fell in the $50,000 - $74,999 income bracket and almost 10 percent of households in the region had incomes of $150,000 or over.

Household median income in this MSA in 1999 was $48,417.19 and per capita income in the same year was $25,693.16. The percentage of people under the poverty line in the region was 15.1 in the year 2000. Average household size in 2000 was 2.67.[2]

Figure 14-6. New York-New Jersey: Distribution of Households by Household Income Level, 1999



EMPLOYMENT

Of the employed civilian population in the region, ages 16 or over, nearly 35 percent of females were employed in the educational, health and social services industry, and about 20 percent were employed in 'other' industries, including the arts, recreation, entertainment, food services, public administration and information. Over 20 percent of males were employed in 'other' industries and 15 percent were employed in the wholesale and retail trade industry (Figure 14-7).

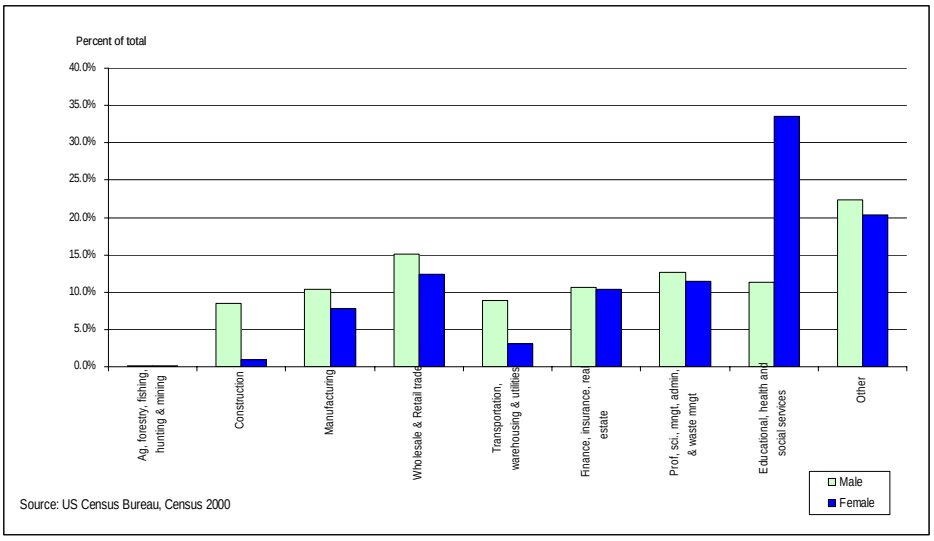
An estimated 7.1 percent of males 7.8 percent of females were unemployed in the region in the year 2000.[3]

According to the 2000 US Census, an estimated 0.1 percent of males and 0.04 percent of females are employed in farming, fishing and forestry occupations. About 15.4 percent of males and 6.0 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.6 percent of male's occupations and 0.1 percent of female's occupations. Less than 0.2 percent of the population is employed in agriculture, forestry, fishing, farming or mining industries.

[2] US Census Data, Census 2000.

[3] US Census Data, Census 2000.

Figure 14-7. New York-New Jersey: Employed Civilian Population by Sex and Industry 16 Years and Over, 2000



MARITIME INFORMATION

The Port of New York and New Jersey is the gateway to the most concentrated and affluent consumer market in the world. Each year, more than 25 million tons of oceanborne general cargo moves through the port, including 4.5 million TEUs (twenty-foot equivalent units) of containerized cargo. The Port Newark/Elizabeth-Port Authority Marine Terminal complex (NJ), the PA Auto Marine Terminal (NJ), Brooklyn Piers and Red Hook Container Terminal (NY) and Howland Hook Marine Terminal (NY) handle most of the cargo and these facilities are managed by the Port Authority of New York and New Jersey. In addition, there are private operators such as Global Marine Terminal and a number of marine terminals operated by private bulk cargo operators. The Passenger Ship Terminal known as New York Cruise Terminal for passenger ship service is operated by P&O Ports North America for the City of New York.

Port Newark/ Elizabeth

Port Newark and the Elizabeth-Port Authority Marine Terminal operate as one fully integrated marine terminal, forming the largest and most comprehensive collection of maritime cargo handling facilities on the East Coast of North America. The entire complex is part of Foreign-Trade Zone No. 49, operated by the Port Authority of New York and New Jersey.

Auto Marine Terminal

The Port Authority's Auto Marine Terminal covers 130 acres along the Jersey City/Bayonne waterfront on the Port Jersey and Greenville peninsulas in New Jersey. It is dedicated exclusively to the movement of vehicle imports and exports. The terminal includes two ship berths totaling 1,800 linear feet open vehicle storage areas, offices and processing buildings for the facility two tenants,

BMW of America's Port Jersey Vehicle Preparation Center, and Northeast Auto Marine Terminal (NEAT). CSX and Norfolk Southern offer direct service to the facility through its adjacent automobile rail terminal. It is also included in Foreign-Trade Zone No. 49, which is operated by the Port Authority.

PA Auto Marine Terminal:
The PA terminal area covers 130 acres/53 hectares and includes two ship berths; totaling 1,800 feet or 549 meters. The berth space is intermodal, with 32 feet or 10 meters MLW depth at dock.

Brooklyn Piers
The Brooklyn Piers are leased for stevedoring and warehousing primarily breakbulk cargo. Right now, the Port Authority and the New York City Economic Development Corporation are reviewing parts of the property in order to make recommendations for future use. The entrance gates for the piers are at the foot of Atlantic Avenue. The primary cargo types in the piers are bulk and neo-bulk. The terminal area covers 40 acres or 16.2 hectares and the length of the ship berth is 5,000 feet or 1,524 meters; the depth at dock in Piers 6-8 are 32-34 feet MLW (9-10 meters MLW) and in pier 12 is 30-40 feet MLW(9-12 meters MLW).

Red Hook Container Terminal
Red Hook Container Terminal features some of the port's most up-to-date facilities for containerized and non-containerized cargoes. With natural 40-foot depths, Red Hook ideally accommodates fully loaded ships with deep drafts. And, on-dock fumigation facilities make Red Hook the natural entry port for specialized commodities such as coffee and cocoa from Central and South America. Red Hook Terminal is operated by American Stevedoring Inc. The entrance gates to the terminal are at the foot of Hamilton Avenue and the primary types of cargo are containers/ Ro-ro and breakbulk. The terminal area covers 80 acres or 32 hectares. The length of ship berth is 2,080 feet or 634 meters for containers and 3,410 feet or 1039meters for breakbulk. The depth at dock is 42 feet MLW or 12.8 meters MLW. Stuffing and stripping facilities in the terminal are 345,000 square feet and there is a near-dock connection with NY Cross Harbor Railroad and a cross Harbor Container Barge to/from Port Newark. The terminal has 72 reefer plug slots for maintenance and repair and has equipment such as toploaders-45-tons, 3 forklifts-26-ton, 22 Paper clamps-54", and 30 Yard Hustlers-100-ton.

Howland Hook Marine Terminal
Howland Hook Marine Terminal is a key terminal as well as a growing container facility in the Port of New York and New Jersey. Strategically located in the northwest corner of the Borough of Staten Island in New York City, the terminal was developed by the City of New York. Its entrance gate is on North Washington Avenue and Western Avenue. It was leased by the Port Authority of New York and New Jersey in 1985. In 2001, The Port Authority purchased an additional 124 acres, a former Proctor & Gamble property known as Port Ivory for future development.

New York Container Terminal Inc. operates a container terminal on the original 187-acre site. The Port Authority is constructing a 39-acre intermodal rail terminal on a section of the Port Ivory tract, and is currently leasing some of the Port Ivory property for warehousing and distribution uses. The primary cargo types handled in the terminal are containers, general cargo and breakbulk. The length of ship berth is 3,000 feet or 914 meters and the depth at dock is 42 feet MLW or 12.8 meters for 2,300 feet of berth and 37 feet or 10.7 meters for 700 feet of berth. The container cranes are 412,000 square feet and include deep-freeze, refrigeration and have undergone U.S. Customs inspection. The terminal has 47 acres of open container storage and one 64,000 -square foot temperature-controlled storage building.

Global Marine Terminal
The only privately owned and operated container terminal at the Port of New York and New Jersey, the Global Marine Terminal spans 100 acres that includes 1,800 feet of berth space with six container cranes, including four Post-Panamax cranes. Global Marine Terminal is located in Jersey City, NJ,

adjacent to the Port Authority's Auto Marine Terminal and its entrance gate is on Port Jersey Boulevard.

The primary cargo types handled in the terminal are containers-ro-ro and heavy lift. The depth at dock is 40 feet MLW. The terminal has 10 rubber-tired gantry cranes (RTGs equipped with GPS), 8 toploaders-30 ton, 4 sideloadres-8 ton, 52 yard tractors and 24 forklifts-30 ton, 26-ton and 15-ton. The terminal is intermodal, due to its proximity to North Jersey rail yards.

New York Cruise Terminal
The New York City Passenger Ship Terminal, owned by the City of New York and operated by P&O Ports North America, provides five 1,000-foot-long berths suitable for servicing the world's largest cruise vessels at a convenient location on the Hudson River only a few blocks west of Times Square in the heart of Manhattan. The terminal occupies the West Side of 12th Avenue between 46th and 54th streets. P&O Ports North America customers include Carnival, Celebrity, Costa, Crystal Cruises, Cunard, Holland America, Norwegian, P&O Cruises, Princess, Radisson Seven Seas, Royal Caribbean, Seabourn and Silversea. The terminal is also home to an array of trade shows and special events managed by P&O Ports North America.

Other Terminals
In addition to terminals owned and operated by the Port Authority of New York and New Jersey, the Port of New York and New Jersey depends on the stewardship of private operators to help manage the port terminal network. Private operators such as Global Marine Terminal, the City of New York's South Brooklyn Terminal, and a number of marine terminals operated by private oil companies along the southern New Jersey coastline, handle loads such as imported liquid bulk crude oil. The NYC Passenger Ship Terminal is operated by P&O Ports North America for the City of New York. Private operators like Global Marine Terminal help augment the facilities developed and managed by the Port Authority.

Port and Waterways Development
To meet the demands of growing industry, a $1 billion investment is already underway to reconfigure existing terminals, deepen the harbor's channels and berths, and improve inland access by rail and barge — all to create the most efficient and cost-effective port possible. The improved port will feature new high-capacity, environmentally friendly cranes that can load and unload containers more quickly, and an improved transportation infrastructure that will alleviate traffic and port congestion. At the same time, deepened channels and berths will allow for the more cost-efficient and environmentally friendly transport of cargo.

Dredging
Right now, the largest dredging fleet since World War II is at work in the New York/New Jersey Harbor. The Port Authority of New York and New Jersey, working together with the US Army Corps of Engineers, the States of New York and New Jersey, and the City of New York, has developed the dredging initiative as a long-term solution to address the navigational needs of the new deep-draft containerships. At the same time, this initiative is stimulating economic growth and investment in maritime uses throughout the port region. By consolidating resources, the deepening project will be completed with less environmental impact, and businesses will benefit from 45 to 50-foot channels in the more nearer future.[4]

[4] New York and New Jersey Port Authority webpage: http://www.panynj.gov/

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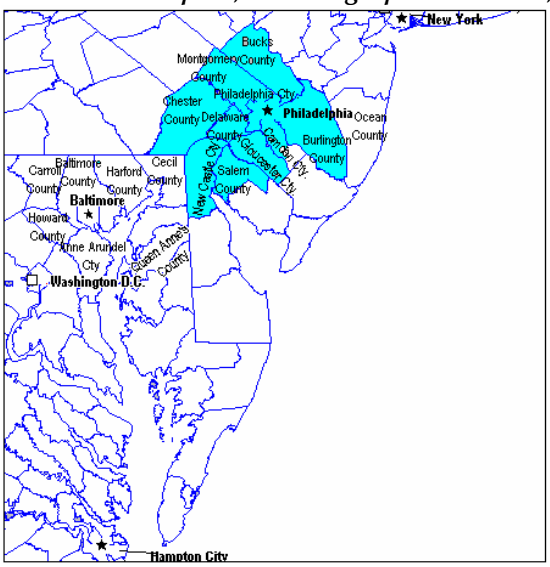
15. Philadelphia, PA

Location and Background Information

The Port of Philadelphia is located in Delaware Bay and is part of the Philadelphia-Camden-Wilmington, Pennsylvania- New Jersey- Delaware- Maryland Metropolitan Statistical Area (MSA). For more than 300 years Philadelphia has been an important port city and a major center for international commerce. Only a few short years after William Penn's vessel "The Welcome" landed on the shores of the Delaware River, heralding the establishment of Penn's "City of Neighborhoods", Philadelphia became the New World's leading center for trade and commerce, a title it held for more than a hundred years. Even today, with major port complexes serving major metropolitan centers throughout the country, Philadelphia and its international seaport maintain a preeminent position in several areas of trade, such as the importing of perishable cargoes from South America and high-quality paper products from Scandinavia.[1]

Figure 15-1. Philadelphia, PA: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

Total population of this MSA in 2000 was 5,687,147 according to the 2000 US Census. Of this total, 2,731,176 or 48 percent were males and 2,955,971 or 52 percent were females. The median age in the region in 2000 was 36.2 years; 34.8 for males and 37.5 for females. As shown in Figure 15-2, about 45 percent of the population is evenly distributed among the 18 – 29, 30 – 39 and 40 – 49 age brackets (around 15 percent per category).

The majority of the population in the region is white (72.6 percent), followed by the Black or African American population, which represents 19.7 percent of the total population. 'Others' (include

[1] Philadelphia Regional Port Authority: http://www.philaport.com/history.htm

American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) constitute 4.5 percent of the population. The Asian population represents only 3.3 percent of the total population (Figure 15-3). Moreover, in terms of ethnic makeup, 5.0 percent of the total population is considered to be of Hispanic or Latino origin.[2]

Figure 15-2. Philadelphia, PA: Structure of the Population by Age Group, 2000

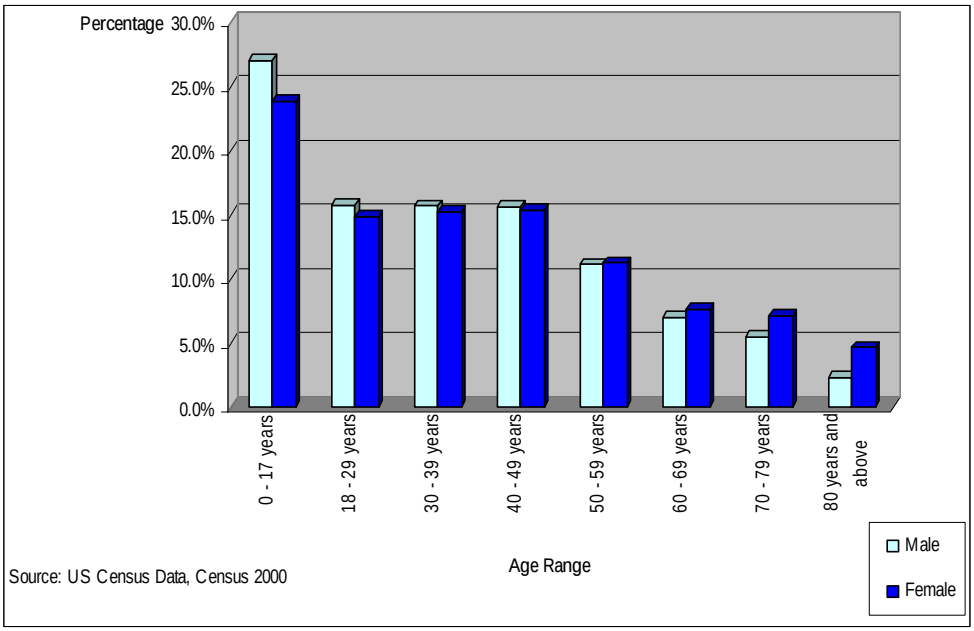
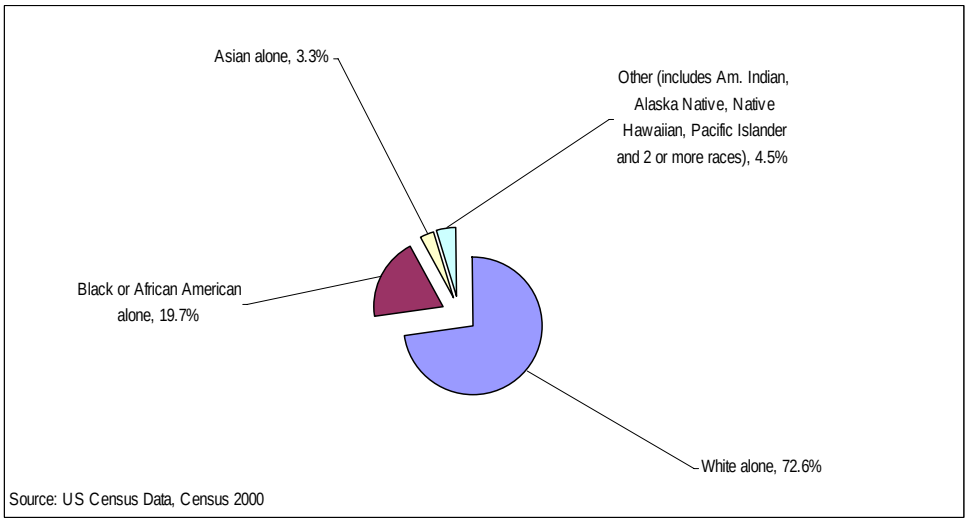


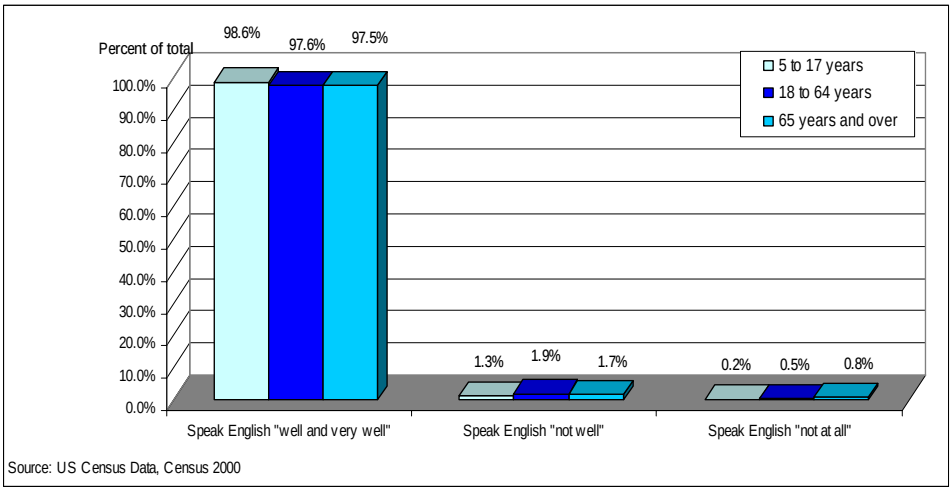
Figure 15-3. Philadelphia, PA: Population by Race, 2000



[2] Source: US Census Data, Census 2000.

It is evident from the data specified in Figure 15-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'.

Figure 15-4. Philadelphia, PA: Ability to Speak English by Age Group, 2000

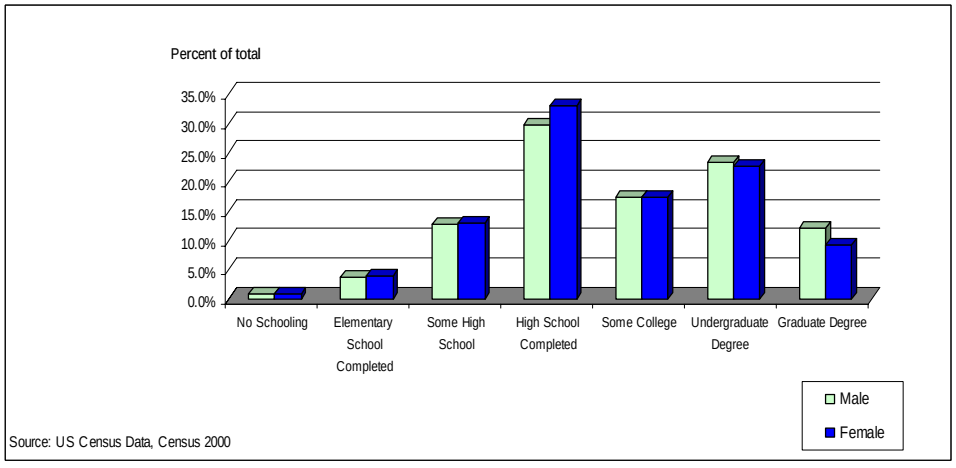


EDUCATION

As shown in Figure 15-5, of the population ages 25 or over, about 30 percent of males and females have completed high school and around 20 percent have obtained an undergraduate degree. Only 10 percent of males and around 8 percent of females have obtained graduate degrees.

There are several colleges and universities in this MSA, the following are some of these institutions: University of Pennsylvania, Temple University, Philadelphia University, Bryn Mawr College, Manor College, Penn State, Swarthmore College and Villanova University.

Figure 15-5. Philadelphia, PA: Educational Attainment of Population by Sex Ages 25 and Over, 2000



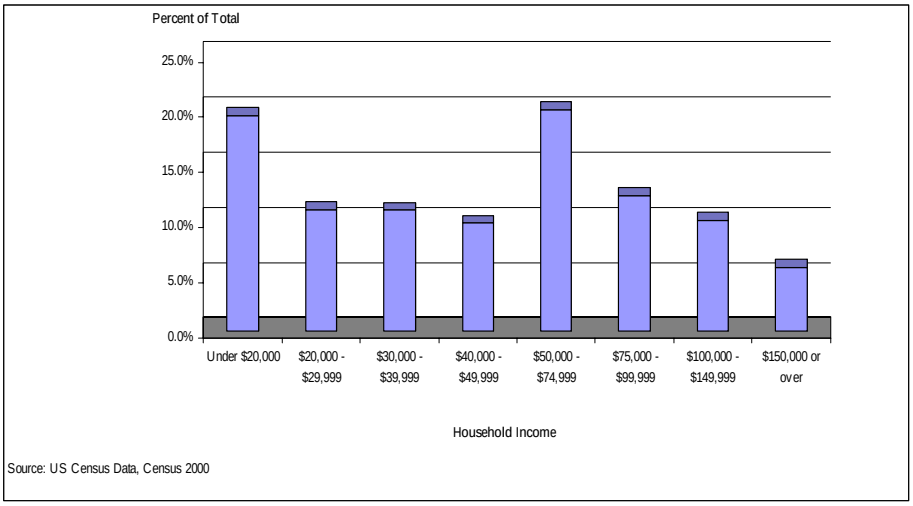
Socio-Economic Characteristics

INCOME

Nearly 20 percent of households in the area in 1999 had incomes between $50,000 and $74,999 and about 20 percent had incomes under $20,000. Almost 10 percent of households in the area had incomes of $150,000 or over (Figure 15-6).

Household median income in 1999 in the MSA was $49,076.83 and per capita income was $23,971.86. The percentage of people under the poverty line in the region was 10.8 in the year 2000. The average household size in 2000 was 2.59.[3]

Figure 15-6. Philadelphia, PA: Distribution of Households by Household Income, 1999



EMPLOYMENT

Of the employed civilian population in the region, ages 16 or over, nearly 35 percent of females are employed in the educational, health and social services industry and nearly 20 percent are employed in other industries. These industries include the arts, entertainment, recreation, food services, public administration and information. Nearly 20 percent of males are employed in 'other' industries, about 15 percent are employed in the manufacturing industry and around 17 percent are employed in the wholesale and retail trade industries (Figure 15-7).

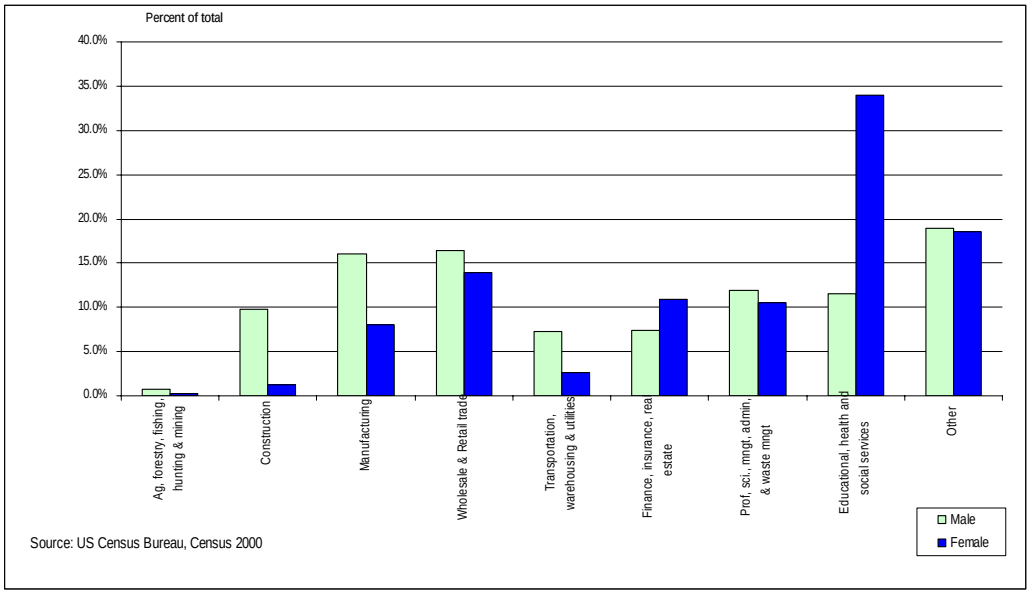
An estimated 6.1 percent of males and 6 percent of females were unemployed in the region in the year 2000.[4]

According to the 2000 US Census, an estimated 0.3 percent of males and 0.1 percent of females are employed in farming, fishing and forestry occupations. About 17.0 percent of males and 5.5 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.5 percent of male's occupations and 0.049 percent of female's occupations.

[3] US Census Data, Census 2000.

[4] US Census Data, Census 2000.

Figure 15-7. Philadelphia, PA: Employed Civilian population by Sex and Industry 16 years and over, 2000



MARITIME INFORMATION

For most of its early history, the Port of Philadelphia thrived and expanded without major guidance from a central governing authority or organization. Rather, disparate private concerns built and maintained piers and waterfront warehouses, moving a wide variety of imported and exported goods through those facilities. It was during these initial years that all manner of breakbulk cargoes moved over the city's docks, establishing early on Philadelphia's reputation for the fast, expert handling of any cargo imaginable. Ultimately, city government took a more active hand in the organization of the city's waterfront, and municipally-owned piers and warehouses sprang up amidst the privately-owned facilities.

For most of the early years of the 20th century, the Philadelphia waterfront was overseen and managed by the Department of Wharves, Docks, and Ferries, a division of the City of Philadelphia's Department of Commerce. The Department of Wharves, Docks, and Ferries oversaw the construction and maintenance of municipally-owned piers and port facilities, and had some regulatory power for the overall Philadelphia waterfront.

In 1965, the non-profit, quasi-public Philadelphia Port Corporation was established. The corporation had the power to issue municipal bonds to raise funds for port improvements. Revenue to pay the bonds' debt service was realized primarily through leasing the agency's port facilities to private operating companies. These private companies operated their respective port facilities on a day-to-day basis, with marketing assistance from the Philadelphia Port Corporation. Major port improvements were made in the 1960s and 70s under the auspices of the Philadelphia Port Corporation. These included the construction of the 106-acre Packer Avenue Marine Terminal (still the Port of Philadelphia's largest facility) and the Tioga Marine Terminal in the 1970s.

Like many ports throughout the United States (and especially competing ports along the East Coast) the capital-intensive requirements to maintain and improve the Port of Philadelphia eventually outgrew the funding capabilities of the City of Philadelphia and its port agency. The Commonwealth of Pennsylvania recognized the vital importance of its seaport asset and it agreed to assist in the maintenance, expansion, and promotion of its international seaport in Philadelphia. The first step was the creation of the Philadelphia Regional Port Authority (PRPA), an independent state agency, in 1990. It immediately replaced the Philadelphia Port Corporation.

Along with creating PRPA, the state purchased all publicly-owned port facilities from the City of Philadelphia, charging PRPA with the mission of managing and maintaining them. A major state capital budget was also established, which allowed PRPA to make an initial round of needed capital improvements during the early 1990s, such as the addition of on-dock warehouse space at Tioga Marine Terminal and new warehouse space and refrigeration at Pier 82.

Since its inception more than ten years ago, PRPA has overseen other major improvements to the Port, as well as aggressively assisting its terminal operators in marketing the Port around the world. PRPA also works with other port agencies and port-related concerns along the Delaware River on issues of mutual concern, such as maintaining sufficient channel depth and monitoring regulatory issues.

PRPA and its 11-member Board of regional business leaders have recently overseen a variety of notable developments at the Port of Philadelphia. In October of 2002, PRPA was named the nation's 14th Strategic Military Port by the U.S. Defense Department, making it one of only 14 U.S. ports permitted to handle our nation's military cargoes destined for different points around the globe. Shortly after that, in January 2003, PRPA was selected as a homeport for two U.S. Navy Large, Medium Speed Roll On/Roll Off (LMSR) ships. These Naval supply vessels, docked at PRPA's Tioga Marine Terminal, are often utilized to deliver the military cargoes now handled by PRPA as a result of its Strategic Military Port designation.

On the commercial front, 2002 and 2003 also saw the advent of dramatic new cargo services at the Port. With the establishment of P&O Nedlloyd's "Around the World" service at the Packer Avenue Marine Terminal, PRPA now offers regular service to North Europe and Mediterranean ports for the first time in more than a decade, as well as significantly enhanced service with longtime trading partners Australia and New Zealand. With new carrier Bertling Line now calling the Tioga Marine Terminal, that facility's already excellent South American services have been enhanced by regular calls by this major carrier of finished wood cargoes and other breakbulk products.

With many challenges on the horizon, 2004 and beyond will be a challenging time for the Philadelphia Regional Port Authority. A current major initiative is to finally bring the Delaware River Channeling Deepening Project to fruition, so our main artery of commerce can finally be deepened from 40 to 45 feet. PRPA's Southport Development Project, which aims to be the first major expansion of the Port of Philadelphia in more than a generation, is also a priority. And, of course, there are the usual ongoing concerns of securing new customers and keeping PRPA's facilities efficient and modern. The Philadelphia Regional Port Authority (PRPA) is the grantee of Free Trade Zone number 35 which covers Southeastern Pennsylvania

FACILITIES:

Packer Avenue Marine Terminal

Located in South Philadelphia, Pennsylvania; this terminal handles containers, steel, meat, fruit, heavy lift/project. The terminal area is 106 acres and has 6 berths with a length of 3,800 linear ft.; 1 RO/RO, 40 foot depth; dry, heated and reefer warehouses; container cranes, heavy lift cranes, rail services. The terminal has 4 storage warehouses: 1 dry/heated - 100,000 sq. ft., 1 dry - 90,000 sq. ft., 1 dry - 100,000 sq. ft. and 1 refrigerated - 2,200,000 cu. ft.

Pier 96 & Pier 98 Annex
The piers are located in South Philadelphia and have a combined area of 56 acres. Pier 96 has an area of 9.7 acres and Pier 98 Annex has an area of 45.2 acres. It has 2 berths with a length of 1,320 linear ft. (402.3 m.) each and 32 foot depth. The piers specialize in cargo such as automobiles, project, trucks and heavy equipment. The piers have two sheds: an auto-washing shed - 15,000 sq. ft. and a service building - 80,000 sq. ft. The accessory shop accommodates 125 vehicles and the auto-washing system handles 125 vehicles per hour (a computer tracking system follows the entire process). They are also designated as a Foreign-Trade Zone.

Pier 82
The pier is a fruit-handling facility and it is located in South Philadelphia; handles fruits and vegetables, other breakbulk, project. It has an area of 18.4 acres, and has 2 berths of 1,139 linear ft. and 855 linear ft. and that are 32 foot in depth. The pier has 1 warehouse that is heated/chilled and has an area of 130,000 sq. ft. with a humidification system. The pier has 12 loading docks (6 canopied), 24 reefers and loading platforms for 17 trucks.

Pier 84
The pier is located in South Philadelphia and handles cocoa beans and cocoa products. It has an area of 23 acres and has 1 berth of 855 linear ft. in length and 32 feet in depth. The pier has two storage warehouses for dry & heated storage: a dry storage facility that is 500,000 sq. ft. and a dry storage facility that is 40,000 sq. ft. It also has canopied loading platforms for over 40 trucks. Value added services offered at the pier include de-bagging, super sacking, weighing and testing.

Piers 78 & 80
Located in South Philadelphia, these piers are a forest products distribution center. They handle newsprint, coated paper, wood pulp, lumber and other forest products. The terminal area is 39.8 acres and has 6 berths. Pier 78 has 2: 1 that is 900 linear ft., the other is 854 linear ft. Pier 80 has 4 berths, 2 berths with RO/RO ramps; one that is 994 linear ft. in length, and another one that is 1,144 linear ft. in length. All berths are 35 ft in depth. The piers have direct to storage/truck/rail and RO/RO capabilities. It has over 100 customized lift trucks with advanced pressure-controlled paper handling capabilities; 5 fifth wheels; 40 tractors; 35 flatbeds and 30 vans. It has 40 truck bays and accommodations for 50 rail cars. The piers are a designated Foreign-Trade Zone.

Piers 38 & 40
The piers are part of the Forest Products Distribution Center and are located in Philadelphia's central waterfront district. They handle newsprint, coated, wood pulp and other forest products. The terminal has an area of 12 acres and has 3 berths that are 550 linear ft, 551 linear ft. and 620 linear ft in length and are 35 foot deep. The terminal has 2 dry warehouses, each 180,000 sq. ft. The terminal also has 16 truck bays and accommodations for 10 rail cars. It has 25 forklifts equipped with paper roll and/or pulp clamps; 30 tractors; 35 flatbeds and 20 vans.

Tioga Marine Terminal
The terminal is located in Northeast Philadelphia and handles containers, refrigerated fresh fruit, paper, plywood, cocoa beans, autos, palletized, project, breakbulk, steel and automobiles. The terminal has an area of 96.5 acres and has 6 berths that are 3,822 linear ft in length and 36 feet deep and 1 RO/RO. The terminal has 4 sheds: 1 compartmented 300,000 sq. ft. warehouse: 150,000 sq. ft. refrigerated, 150,000 sq. ft. heated; 1 cold storage - 90,000 sq. ft. with racked storage for 6,000 pallets; 1 heated storage - 97,500 sq. ft. and 1 dry - 40,000 sq. ft. The terminal has 180 reefer outlets, and 2 kocks container gantry cranes: each 45 short tons (40.9 metric tons); with hydraulic and mechanical mobile cranes available container cranes. It also has canopied loading platforms for 100 trucks and 8 T.I.R. lanes for truck gates; 3 with scales. The terminal has fumigation capabilities for 800,000 fruit boxes a day; trailer offices for customers and 2,000 ft. of rail siding for intermodal COFC transfer.[5]

[5] Philadelphia Regional Port Authority: http://www.philaport.com/history.htm

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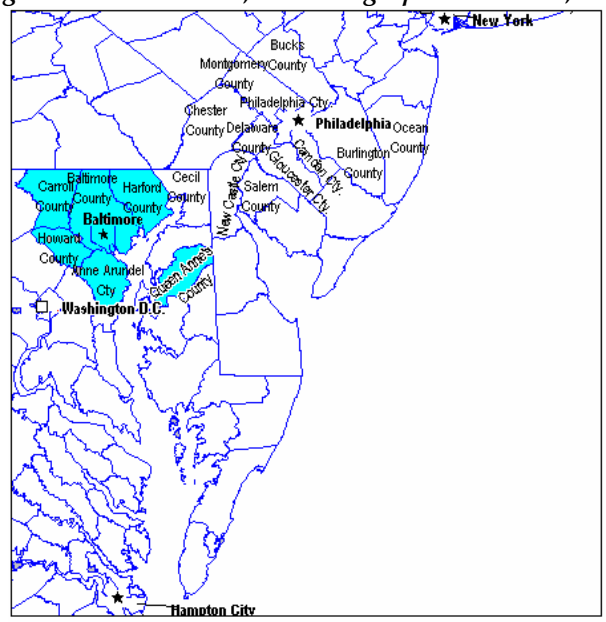
16. Baltimore, MD

Location and Background Information

The Port of Baltimore is located in the Baltimore-Towson, Maryland Metropolitan Statistical Area (MSA). Strategically located in the Mid-Atlantic region of the U.S. east coast, Baltimore sits in the center of the enormous Washington/Baltimore Common Market. This inland location makes it the closest Atlantic port to major Midwestern population and manufacturing centers and a day's reach to 1/3 of U.S. households. The port provides immediate access to the 6.8 million people in the Washington/Baltimore region, the nation's fourth-largest and one of the wealthiest consumer markets in the U.S. [1]

Figure 16-1. Baltimore, MD: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

The total population of the Baltimore-Towson, MD Metropolitan Statistical area is 2,552,994 according to the 2000 US Census. Of the total population, 1,228,231 or 48.1 percent are males and 1,324,763 or 51.9 percent are females. The median age for the population is 36.3 years; 35.1 for males and 37.4 for females. The majority of the population is located between the 30 – 39 and 40 – 43 age range brackets; this in the case of males and females (Figure 16 -2).

The majority of the population in this area is white (67.4 percent), followed by the Black or African American population, which represents 27.2 percent of the total population. The Asian population represents 2.7 percent of the total population, and 'others' (which include American Indians, Alaska

[1] Source: Maryland Department of Transportation. URL: http://www.mdot.state.md.us

natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) constitute 2.7 percent of the population as well (Figure 16-3). In terms of ethnic makeup, only 2.0 percent of the population of this MSA is of Hispanic or Latino origin.[2]

Figure 16-2. Baltimore, MD: Structure of the Population by Age Group, 2000

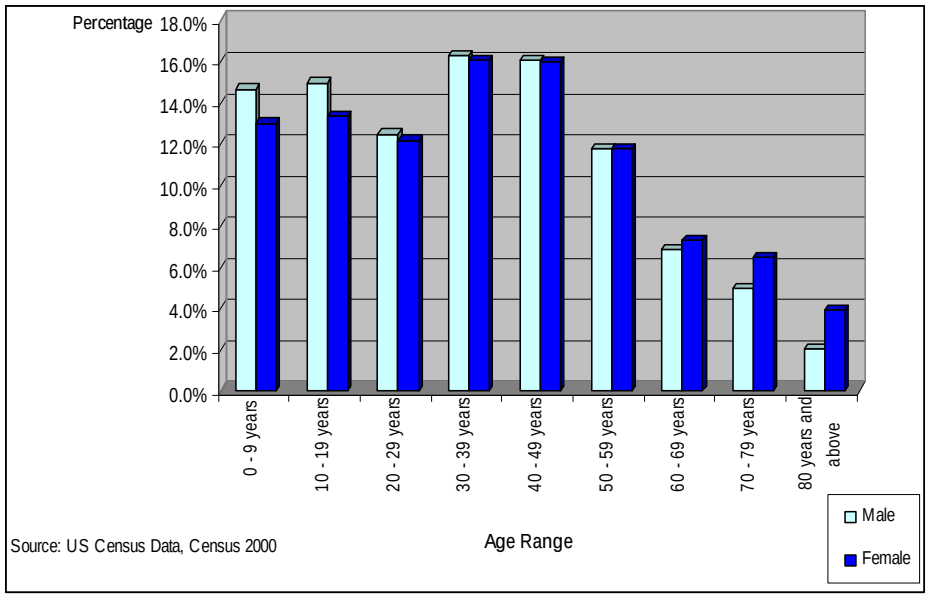
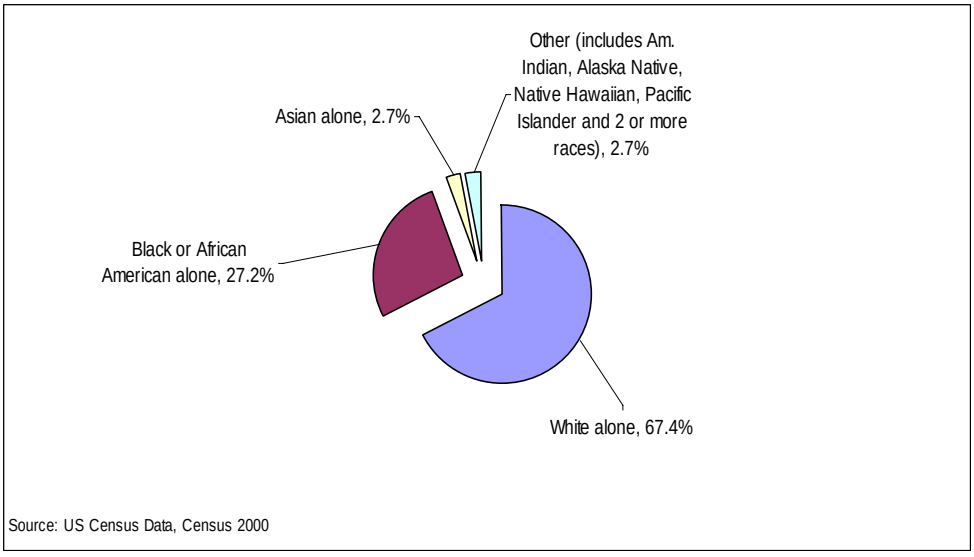


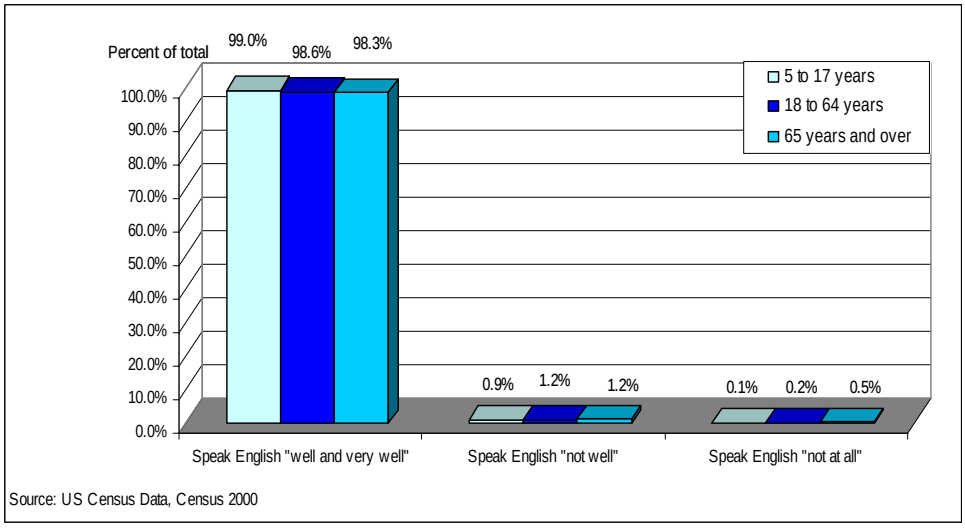
Figure 16-3. Baltimore, MD: Population by Race, 2000



[2] Source: US Census Data, US Census 2000

It is evident from the data specified in Figure 16-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'.

Figure 16-4. Baltimore, MD: Ability to Speak English by Age Group, 2000

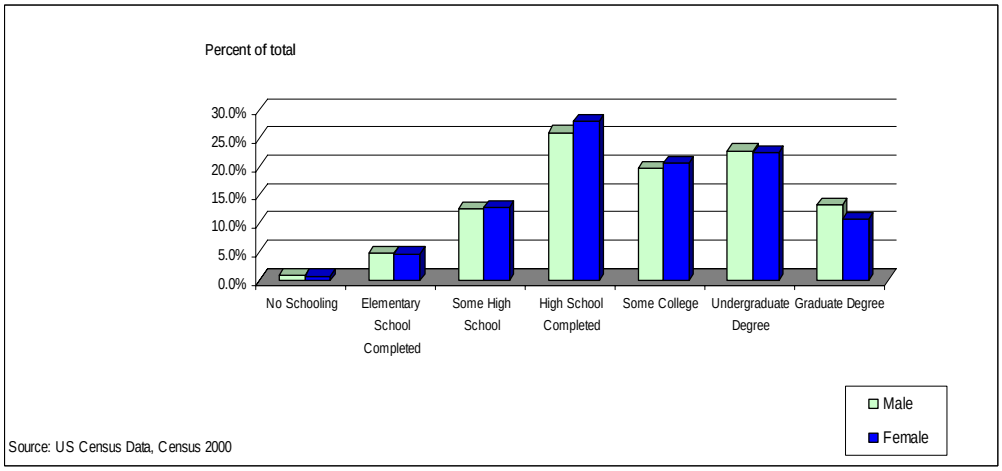


EDUCATION

Of the population in the region, ages 25 and over, about 25 - 27 percent of the population has completed high school and a high percentage has also either completed some college or obtained an undergraduate degree. Approximately 10 – 15 percent of the population has obtained a graduate degree; males more so than females, but only by a small percentage (Figure 16-5).

Maryland has 24 four-year colleges and universities, 4 two-year colleges and 120 private career schools approved by the Maryland Higher Education Commission.[3] About half of the four-year colleges are located within the Baltimore-Towson, MD MSA. One of the best known universities in the area is Johns Hopkins University, especially known for its excellent medical school.

Figure 16-5. Baltimore, MD: Educational Attainment of Population by Sex Ages 25 and Over, 2000



[3] Source: Maryland State Archives. URL: http://www.mdarchives.state.md.us

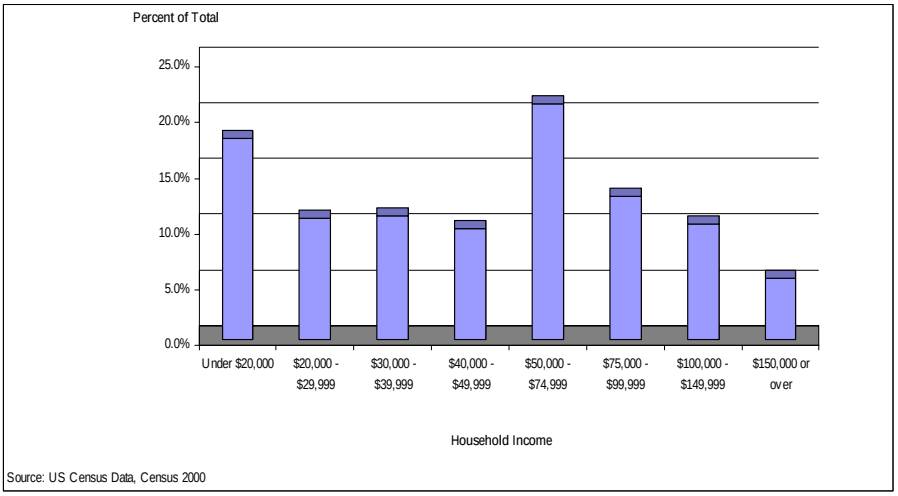
Socio-Economic Characteristics

INCOME

As portrayed in Figure 16-5, about 22 percent of the households in this area in 1999 had incomes between $50,000 and $74,999. Nearly 20 percent of households had incomes under $20,000. Less than 7 percent of households in the region had incomes of $150,000 or over (Figure 16-6).

Household median income in Baltimore, MD in 1999 was $50,572.21 and per capita income in the same year was $24,398.48. The region is considered to be among the country's wealthiest. Maryland has the second highest household income in the nation.[4] The percentage of people under the poverty line in the region was 9.8 in the year 2000. Average household size in 2000 was 2.6.[5]

Figure 16-6. Baltimore, MD: Distribution of Households by Household Income Level, 1999



EMPLOYMENT

Of the employed civilian population in the Baltimore-Towson, MD MSA, ages 16 or over, nearly 35 percent of females were employed in the educational, health and social services industry and almost 25 percent were employed in 'other' industries, including the arts, recreation, entertainment, food services, public administration and information. Nearly 25 percent of males are employed in 'other' industries and 15 percent are employed in the wholesale and retail trade industry (Figure 16-7).

An estimated 4.8 percent of males and 5.1 percent of females were unemployed in the region in 2000.[6]

According to the 2000 US Census, an estimated 0.2 percent of males and 0.1 percent of females are employed in farming, fishing and forestry occupations. About 15.6 percent of males and 4.5 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.5 percent of male's occupations and 0.1 percent of female's occupations.

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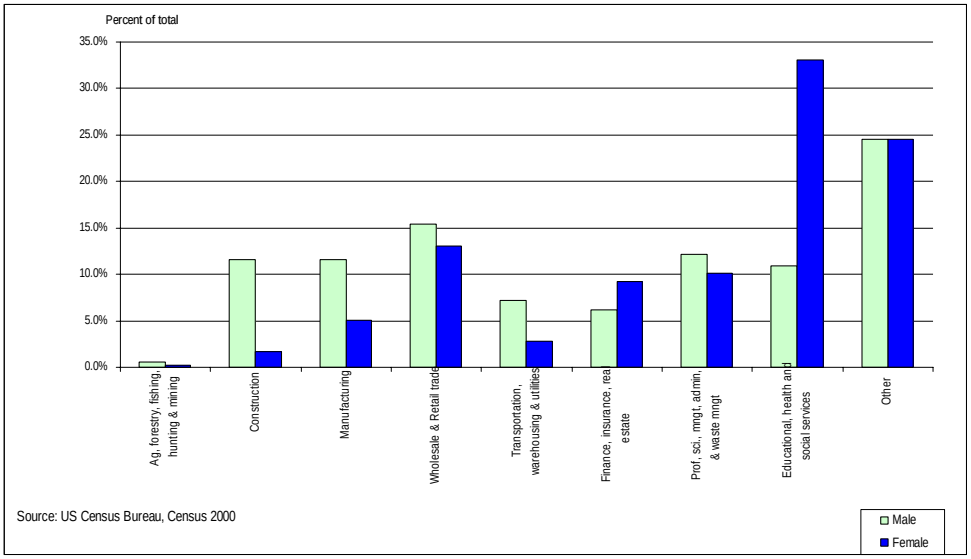
[4] Source: Maryland Department of Transportation. URL: http://www.mdot.state.md.us

[5] Source: US Census Data, Census 2000

[6] US Census Data, Census 2000

Figure 16-7. Baltimore, MD: Employed Civilian Population by Sex and Industry 16 Years and Over, 2000



MARITIME INFORMATION

The Port of Baltimore is regarded as one of America's top container terminals, providing technological advances that have transformed port operations from clipboard to keyboard. The port boasts computerized gate complexes, hand held computers and scanners and the use of Electronic Data Interchange (EDI)- all which greatly increase the port's efficiency and cost-effectiveness.

The Port of Baltimore is a significant economic engine for the entire region, generating $1.5 billion in revenue annually and employing 16,100 Marylanders in direct jobs, and another 17,600 in Induced and Indirect jobs. Port-related jobs are diverse and include everything from truck drivers, longshoremen, tugboat operators, and rail yard workers, to employees of the Maryland Port Administration (MPA). The MPA is charged with stimulating the flow of waterborne cargo through the entire port community, maintaining the terminals, and marketing the Port of Baltimore worldwide.

Other governmental agencies, such as U.S. Customs and the Army Corps of Engineers, along with the private sector with its variety of businesses, play a vital role in making the Port of Baltimore successful. From freight forwarders to bay pilots to warehouse operators- all contribute to making the Port of Baltimore efficient, cost effective and easy to use.

The port of Baltimore has six public terminals and seven private terminals. The public terminals are the following:

Seagirt Marine Terminal
The Seagirt Marine Terminal stands as a working monument to the Port of Baltimore's innovative and progressive spirit. Opened in 1990, Seagirt features the latest in cargo-handling equipment and systems. The design behind this high-tech facility system stems from one simple principle: keep the cargo moving. The computerized gate complex serves as the nerve center for the 275-acre container terminal. Seagirt's automated system consolidates the steps necessary to generate the Trailer

Interchange Report (TIR). When trucks enter Seagirt, an electronic sign-bridge over 13 of the 14 inbound lanes directs the drivers to the appropriate lane, where a remote intercom system allows them to quickly exchange information with clerks in the gate house.

Seagirt's hours and 14 portals make ingress for trucks quick and easy. The newly-enhanced NAVIS system allows truckers, forwarders, and brokers to access the exact status of their container and will even send an email notifying them when it is ready for pick-up. The Seagirt computer system's electronic data interface capabilities automatically receive and send information to the terminal's steamship line customers. With just a few keystrokes, the carriers receive instantaneous information on the cargo and equipment, helping them generate timely reports that can boost their efficiency.

The $220-million terminal's seven 20-story high-speed computerized cranes dominate the port's skyline. In the hands of the port's skilled International Longshoremen's Association (ILA) operators, these 100-foot gauge, post- Panamax cranes are among the most productive in the industry, averaging 33 to 35 containers an hour.

Three of the cranes feature the latest dual-hoist systems, which lift two containers simultaneously to expedite the loading and discharge of the vessel. Capable of handling 150,000 containers a year, Seagirt's practical yard layout places the storage area directly behind the berths, further increasing the productivity of the vessel loading and discharge operations.

Further enhancing Seagirt's efficiency is the adjacent Intermodal Container Transfer Facility, which brings the railhead to within 1,000 feet of the bulkhead and makes the Seagirt complex the port's intermodal hub. The port's progressive labor-management approach complements Seagirt's advanced equipment, technology and systems to further its reputation as one of the nation's most productive terminals.

Dundalk Marine Terminal
With 13 berths, 9 container and two gantry cranes and direct rail access, the 570-acre terminal remains the Port of Baltimore's largest and most versatile general cargo facility. Dundalk handles cargo equipment such as containers, automobiles, farm, construction, wood pulp, steel, breakbulk, project cargo and other Roll On/Roll Off (RO/RO) equipment.

APM Terminals, Inc. operates a private terminal within Dundalk, further enhancing the port's efficiency. Opened in 1993, this private terminal features many of the same automated efficiencies first introduced to the port in 1990 at the Seagirt Marine Terminal, which is generally regarded as the finest container terminal in the country. Maryland International Terminals (M.I.T.) also operates a private container terminal within Dundalk.

Approximately 135 acres, these “terminals within a terminal” (APM and MIT) includes computerized gate complexes that consolidate and improve the Trailer Interchange Report (TIR) process. Using remote intercom systems, truck drivers can communicate directly with clerks in the gatehouse, who instantaneously type the necessary information into a computer. The enhanced NAVIS system also enables truckers, forwarders, and brokers to access the status of specific containers, for up-to-the-minute information.

Over the past several years, Baltimore ranked as one of the nation's top three automobile handling ports. Several auto processors maintain operations at Dundalk, which offers 152.2 acres of storage. Dundalk's direct rail access also allows unit trains to routinely deliver dozens of units of farm and/or construction equipment to the terminal at once. Combined with rail access provided by Norfolk Southern and CSXT, Dundalk's size makes it ideal for handling large breakbulk and project cargo. The terminal's expansive covered storage space can easily house weather-sensitive cargoes such as high-quality steel coils, raw rubber, and wood pulp, one of the fastest-growing cargoes at the port.

The Port of Baltimore recently invested $21 million on crane upgrades at Dundalk. A container crane with a top capacity of 40 containers per hour. Improvements to the speed and capacity of existing cranes. Outreach was increased to 126 feet, so the outermost container row on a Panamax ship can now be reached at full trolley speed. A new heavy lift crane. The truck-mounted Manitowoc M-250T boasts a maximum capacity of 300 long tons, and its mobility makes it available at any of the Port of Baltimore's terminals on an as-needed basis.

N. Locust Point

Over the past century, North Locust Point has adapted and changed to meet the varied needs of the port. It has welcomed immigrants, served as a cargo pier for the Baltimore & Ohio Railroad, and handled many different types of breakbulk and liquid and drybulk cargoes. Today, the 90-acre terminal has been redeveloped to enhance the port's forest products capabilities. The addition of a 45 long ton (45.7 M.T.) container crane, coupled with on-dock rail access, allows for the smooth loading and discharge of steel directly between vessel and rail car. The addition of the container crane boosts the efficiency of the terminal's container operations, while two 75-ton (68 M.T.) gantry cranes provide the heavy-lift capability needed for large breakbulk and project shipments.

North Locust Point provides water access for one of the port's grain elevators, and is home to several latex importers. The terminal has ample storage capacity. With 19 acres (7.9 ha) of outside space and two sheds with a combined 365,206 square feet (33,275 square meters), North Locust Point can easily accommodate the storage of steel, breakbulk and project cargoes. While North Locust Point has changed many times in its proud history, one constant remains: its ability to meet the varied needs of the port's customers.

S. Locust Point

While all of the port's general cargo terminals enjoy excellent highway access, South Locust Point has Interstate 95 -- the "Main Street" of the East Coast -- literally running past its front door. From South Locust Point, trucks can travel almost anywhere in the country without hitting a single traffic signal. The Maryland Port Administration (MPA) opened South Locust Point in 1979 to meet the growing needs of the port's customers. South Locust Point can handle any type of general cargo.

The MPA completed a major expansion of South Locust Point in 1988, doubling the size of the terminal to almost 80 acres and creating four general cargo berths. The multi-million-dollar project increased the terminal's productivity and efficiency by developing another container berth and adding a third container crane. South Locust Point features three 40-long ton (40.6 M.T.) container cranes, as well as a 100-short ton (90.7 M.T.) revolving gantry crane for handling heavy breakbulk and project cargoes. The facility's size and versatility make it ideally suited to handle the needs of medium-sized steamship lines, multi-purpose vessels and any cargo that needs to hit the road in a hurry.

Fairfield Auto Terminals

Together with automobiles and light trucks, tractors, agricultural vehicles, trucks, wheeled cranes, and the like make Baltimore the number one port in the United States for handling “Ro/Ro.” The “Fairfield” area of the port includes four specialized terminals for handling and processing autos, light trucks and similar ro-ro cargo.

Currently, an MPA facility exists, 44.1 acres in size with 50,000 square ft. of modern building space, for processing autos and light trucks. Typically, this includes accessorizing, minor repair operations and final dealership preparation. The terminal is adjacent to a public berth, also owned by MPA. A vessel discharging new vehicles can berth within a few hundred feet of the facility. A second facility, owned by MPA and leased to ATC Logistics of Maryland, is Masonville Marine Terminal. This state-of-the-art facility consists of nearly 50 acres, with a 94,000 sq. ft. building, also designed for processing automobiles. Access is a mere half mile from the vessel. Plans are underway to add an additional berth to the site.

Amports owns and operates two other terminals in this area. These are the Atlantic Terminal, 55 acres with its own pier facility, and Chesapeake Terminal, 70 acres with an additional 26 planned for development. The Port's famous QCHAT Program, Quality Cargo Handling Action Team, is based at the Atlantic facility.

Intermodal Container Transfer Facility
The Port of Baltimore's Intermodal Container Transfer Facility (ICTF) moves cargo between bulkhead and railhead in record time. Adjacent to Baltimore's modern Seagirt Marine Terminal, the 70-acre ICTF allows cargo to catch a train to almost anywhere. CSX Intermodal (CSXI) operates the port's on-dock railyard, which has steadily increased its volume since opening in 1988. Baltimore's ICTF has quickly emerged as an integral link in CSXI's impressive nationwide intermodal system.

With six trains daily, CSXI offers direct service to the Southeast and Midwest, and connections to the rest of the continental United States and Canada. CSXI also operates a service between the ICTF to Montreal and Toronto. The Seagirt ICTF offers double-stack capability, as well as providing shippers and steamship lines with reverse landbridge opportunities to the rest of the country.

The dedicated truck entrance of the automated pre-check system speeds the pick-up and delivery process for cargo. The facility features a separate gate for domestic shipments. The Seagirt ICTF uses the latest in intermodal equipment and a skilled labor force to keep the ICTF running efficiently. Two transtainers -- rubber-tired gantry cranes which straddle the rail tracks -- facilitate the rapid loading and discharge of two trains simultaneously. Toploaders are used to mount and dismount containers to and from chassis.

With its location adjacent to the Seagirt Marine Terminal, cargo flows effortlessly between the two facilities, while the intra-terminal Colgate Creek Bridge connects the Seagirt, the port's largest general cargo facility. In 1992, the International Longshoremen's Association, whose members supply the facility's labor force, and the Steamship Trade Association of Baltimore agreed to an unprecedented five-year agreement contract that adds a third shift, allowing the ICTF to operate 24 hours a day, seven days a week.

Private Terminals:
The Rukert Marine Terminal specializes in metals, ores, fertilizers, alloys; the Sparrows Point Terminal is a bulk and breakbulk loading & unloading facility; the Baltimore Metal & Commodities Terminal specializes in metals, soft commodities & project cargo; Highland Marine Terminal; the CNX Marine Terminals, Inc. specialize in bulk, breakbulk, project and general cargo, stevedoring and lay berthing; the Terminal Corporation has more than a century of experience handling unitized, break bulk and project cargoes and the Westway Terminal Company, Inc. specializes in the handling of agricultural products, molasses products, and chemicals.

The City of Baltimore Foreign-Trade Zone (FTZ) number 74 was established in 1982. Since its establishment, the growth of the FTZ in Baltimore has caused both expansion and modification due to a number of requests and in response to the tremendous benefits to certain industries. This growth, in turn, has created job, additional cargo tonnage for the port and increased the tax base of the community. Zone space was originally 60,000 sq. ft. in 1982 and presently contains over 1,400 acres at 11 sites in the city of Baltimore. As documented in the 2000 Annual Report, the General Purpose Zone and Sub-Zone of FTZ #74 provided over 970 jobs and served 92 users during fiscal year 2000; handling 37 different commodities from 45 countries of origin with a value in excess of $15 million. [7]

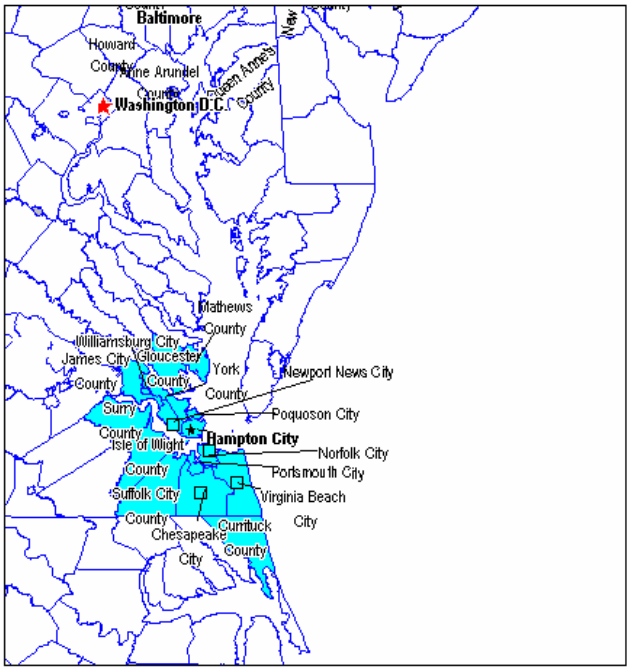
[7] Source: Maryland Department of Transportation website: http://www.marylandports.com/

17. Hampton Roads, VA

Location and Background Information

The Port of Hampton Roads is located in the Virginia Beach-Norfolk-Newport News, Virginia- North Carolina Metropolitan Statistical Area (MSA).

Figure 17-1. Hampton Roads, VA: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

The total population of this MSA in the year 2000 was 1,576,370, according to the 2000 US Census. Of this total, 776,342 or 49.2 percent were males and 800,028 or 50.8 percent were females. The median age for the population in the same year was 33.5 years; 32.1 for males and 35 for females. As shown in Figure 17-2, almost 20 percent of males and over 15 percent of females are between the ages of 18 and 29. Around 15 percent of males and females are between the ages of 30 and 39.

About 62.4 percent of the population in the region is white, 30.9 percent is Black or African American, 4.0 percent are considered 'others' (include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone), and 2.7 of the population is Asian (Figure 17- 3). In terms of ethnic makeup, 3.1 percent of the total population is considered to be of Hispanic or Latino origin.[1]

[1] US Census Data, Census 2000.

Figure 17- 2. Hampton Roads, VA: Structure of the Population by Age Group, 2000

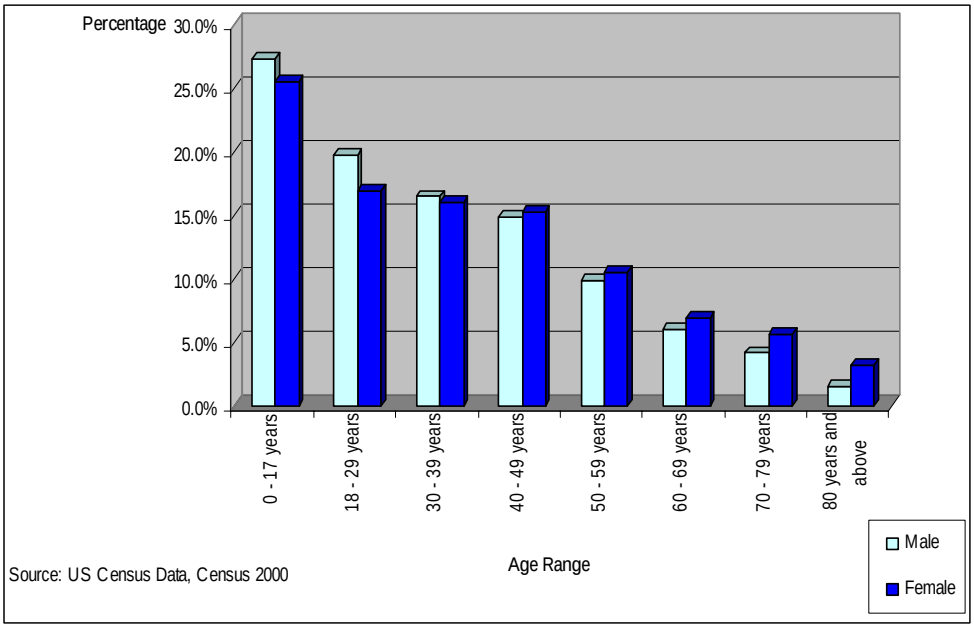
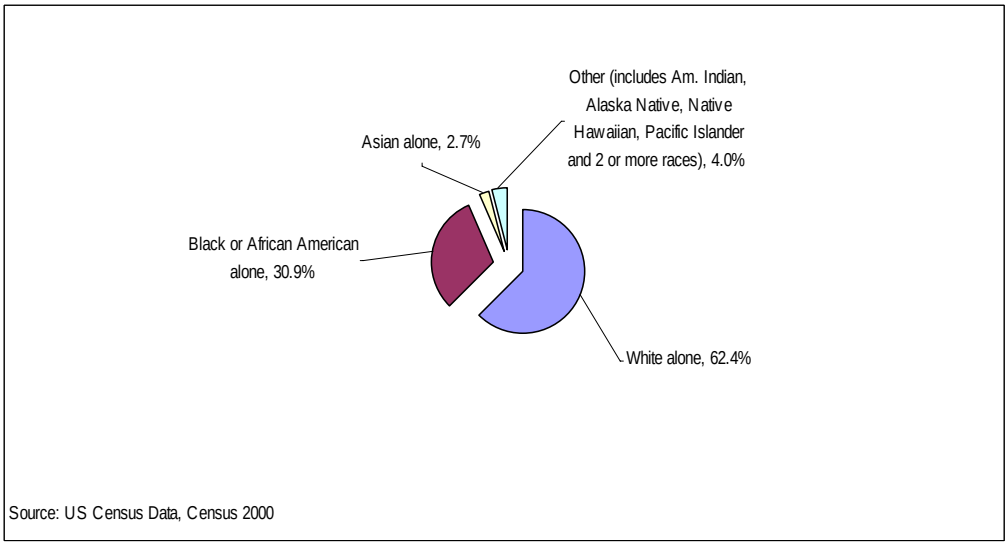
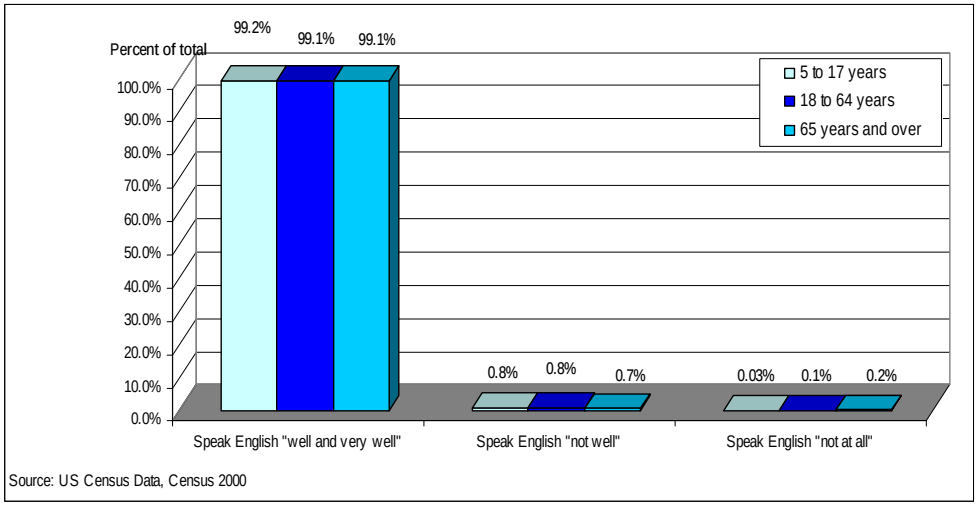


Figure 17- 3. Hampton Roads, VA: Population by Race, 2000



It is evident from the data specified in Figure 17- 4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'.

Figure 17- 4. Hampton Roads, VA: Ability to Speak English by Age Group, 2000

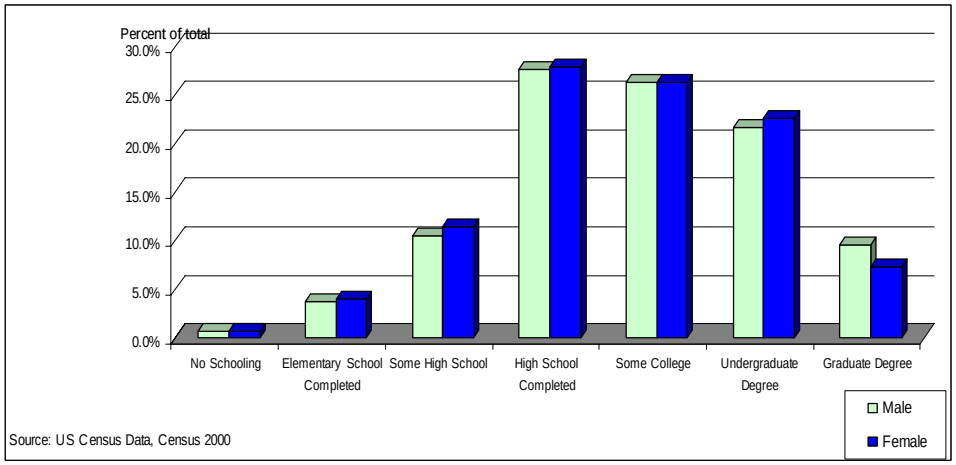


EDUCATION

Of the population in the region, ages 25 and over, over 25 percent of males and females have completed high school, and about 25 percent have completed some college. Around 20 percent of males and females have obtained an undergraduate degree. Less than 10 percent of the population has obtained a graduate degree (Figure 17-5).

Some of the colleges and universities around the area are: Atlantic University, College of William and Mary, Eastern Virginia Medical School, Hampton University, Johnson & Wales University, Norfolk State University, Regent University and Virginia Wesleyan College. There are four military bases in the area: Fort Monroe, Fort Eustis, Langley AFB, Naval Station Norfolk. [2]

Figure 17- 5. Hampton Roads, VA: Educational Attainment of Population by Sex Ages 25 and Over, 2000



[2] Hampton Roads, VA Community Profile: http://www.epodunk.com

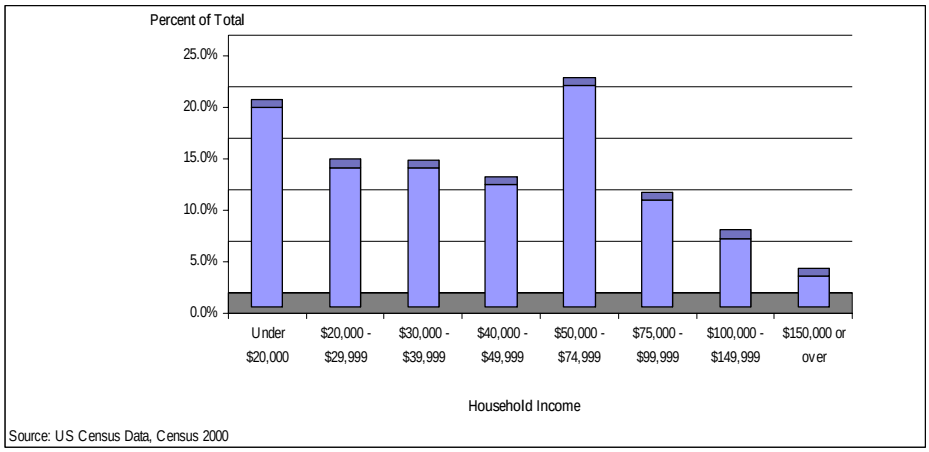
Socio-Economic Characteristics

INCOME

As portrayed in Figure 17-6, about 23 percent of the households' incomes in this area in 1999 fell in the $50,000 - $74,999 income bracket. Around 20 percent of households had incomes of under $20,000. Less than 5 percent of households in the region had incomes of $150,000 or over.

Household median income in Hampton Roads in 1999 was $43,085.86 and per capita income in the same year was $20,312.54. The percentage of people under the poverty line in the region was 10.6 in the year 2000. Average household size in 2000 was 2.61.[3]

Figure 17- 6. Hampton Roads, VA: Distribution of Households by Household Income Level, 1999



EMPLOYMENT

Of the employed civilian population in the region, ages 16 or over, over 35 percent of females are employed in the educational, health and social services industry, and nearly 20 percent are employed in 'other' industries, including the arts, recreation, entertainment, food services, public administration and information. Twenty-five percent of males are employed in 'other' industries, 15 percent are employed in the manufacturing industry and 15 percent are employed in the wholesale and retail trade industry (Figure 17-7).

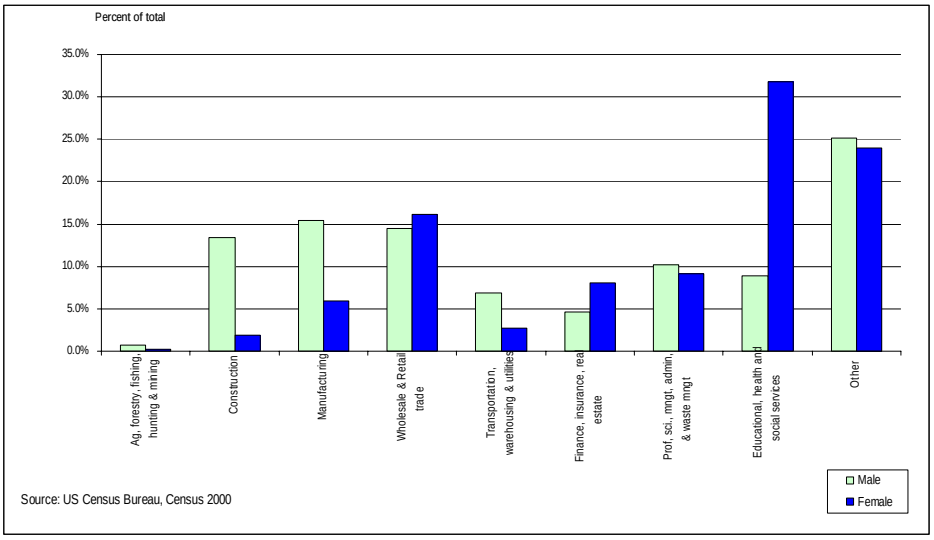
An estimated 4.4 percent of males and 5.8 percent of females were unemployed in the region in 2000.[4]

According to the 2000 US Census, an estimated 0.4 percent of males and 0.2 percent of females are employed in farming, fishing and forestry occupations. About 17.5 percent of males and 6.4 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.9 percent of male's occupations and 0.1 percent of female's occupations.

[3] US Census Data, Census 2000.

[4] US Census Data, Census 2000.

Figure 17-7. Hampton Roads, VA: Employed Civilian Population by Sex and Industry 16 Years and Over, 2000



MARITIME INFORMATION

The Virginia Port Authority is an agency of the Commonwealth of Virginia, reporting to the Secretary of Transportation. It is the state's leading agency for international transportation and maritime commerce, charged with operating and marketing the marine terminal facilities through which the shipping trade takes place. The agency owns four general cargo terminals: Norfolk International Terminals, Portsmouth Marine Terminal, Newport News Marine Terminal, and the Virginia Inland Port in Front Royal; which are operated by its affiliate, Virginia International Terminals, Inc.

Hampton Roads is served by the Port and its three Marine Terminals located in Norfolk, Newport News and Portsmouth. More than 95 percent of the world's shipping lines call on the Port of Hampton Roads, linking Virginia to more than 250 ports in over 100 world-wide locations. It is the second busiest general cargo port on the East Coast, handling over 39 million tons of cargo annually 50 feet of deep ice-free harbor. The Port purchased 8 of the world's largest and fastest cranes, each capable of moving up to 40 fifty-ton containers per hour. During the past 12 years, general cargo handled by the port increased by more than 30 percent, and it is forecasted to further increase 300 percent by 2010.[5]

Virginia's strategic mid-Atlantic location and unparalleled transportation infrastructure offer steamship lines and shippers unbeatable access to two-thirds of the U.S. population with more than 75 international shipping lines and one of the most frequent direct sailing schedules of any port. Virginia has the best natural deepwater harbor on the U.S. East Coast. Fifty-foot-deep, unobstructed channels provide easy access and maneuvering room for the largest of today's container ships. Virginia ports are located just 18 miles from the open sea on a year-round, ice-free harbor and have long maintained a reputation for efficient and uncongested intermodal service. As the largest intermodal facility on the U.S. East Coast, Virginia offers six direct-service trains to 28 major cities each day. More than 50

[5] http://www.hreda.com/research/Port032005.pdf

motor-carrier companies offer full freight-handling and load-consolidation services. A modern network of interstate and local highways permits fast, direct inland motor-freight transportation to any point in the United States.

The Port of Virginia has been a boon to Virginia and the world for nearly four centuries. From the early founding as "America's First Port" at Jamestown in 1607 through the era of the great clipper ships to the present day sophistication of computerized intermodal technology, Virginia has been at the forefront of every major change in the shipping industry.

In addition to the advantages offered by easy access to the open sea, the Port of Virginia is served by one of the nation's more efficient inland transportation networks. Cargo is transported with speed and efficiency by 30 miles of on-dock rail. Over 130 trucking companies and two of the nation's largest railroads, CSX and Norfolk Southern, enable the Port of Virginia to serve two-thirds of the U.S. population within 24 hours.

The Port of Virginia consistently ranks as one of the leading ports in the United States in terms of total foreign waterborne commerce. In terms of general cargo (containerized and break bulk cargo), our port is the second largest port on the U.S. East Coast, just behind New York/New Jersey. Between 1982 and 2001, general cargo tonnage at Virginia's state-owned ports increased from 2.5 million tons in 1982 to 11.5 million tons in 2001, an unmatched growth record among U.S. ports. In terms of total cargo (which includes container, break bulk and bulk cargo), the Port handled over 37 million short tons.

Many factors have contributed to the Port's phenomenal growth, but none is as important as unification of the ports in the Hampton Roads harbor. In 1981, the Virginia General Assembly passed landmark legislation designed to unify the ports under a single agency, the Virginia Port Authority, with a new single operating company, Virginia International Terminals, Inc. In the years preceding unification, ports in the Hampton Roads harbor were privately operated by competing companies, which caused sporadic, sustained growth and splintered marketing efforts. Unification has made the Port of Virginia the fastest growing port complex in the United States.[6]

Newport News Marine Terminal

Newport News Marine Terminal (NNMT) has gained a reputation as the premier steel and project cargo handling port on the U.S. East Coast. NNMT boasts various heavy-lift crane capabilities, warehouse space, and container cranes. And NNMT now offers the advantages of a fully dedicated, on-terminal paper distribution facility, the Lydall Paper Distribution Center. The facility is operated by Lydall Distribution Services, Inc., a company with an outstanding reputation for its expertise in understanding the special nature and requirements of paper cargoes. The 100,000 square foot distribution warehouse will offer the transportation advantages of The Port of Virginia's on-dock rail and its competitive transportation infrastructure.

The terminal has an area of 140.64 acres with direct rail access and has on-pier trackage for direct cargo loading on and off ships to and from rail. The main Channel Depth is 45 feet. Pier B on the North side is 990 feet long and includes 170-foot mooring dolphins/catwalk. The south side is 620 feet long and 550 feet wide. It has three berths handling RO/RO cargo and breakbulk cargo and 34-foot aprons. The water depth on the north side is 32 feet; on the south side is 32 feet and offshore is 33 feet. The pier deck elevation (MLW) is 15.0 feet. Pier C on the North side is 935 feet long and 540 feet wide with 184-foot aprons for handling breakbulk cargo, serviced by two PACECO cranes; the water depth is 40 feet. The south side is 935 feet long, 540 feet wide, with 184-foot aprons for handling RO/RO and container cargo, serviced by one PACECO portainer crane and one CMI crane capable of a 182-LT heavy lift. The water depth is 36 feet and the pier deck elevation (MLW) is 14.5 feet. The terminal has covered Pier Storage: Pier B with 270,000 square feet and Pier C with 124,000 square feet; it has256,000 square feet for dry storage. Its container storage has stacked capacity for 790 containers (two high) and

[6] Hampton Roads Maritime Association webpage: http://www.portofhamptonroads.com

chassis capacity for 1,210 containers. The terminal has 43 acres for open yard storage. The terminal's roadway access is via Interstates 64 and 664 and U.S. Route 17; rail service provided by CSX

Norfolk International Terminals
Norfolk International Terminals (NIT) is the largest terminal. NIT is home to the world's largest container cranes. These Suez-class container cranes, each measuring 219 feet are the largest in the world. They can work ships with containers stacked 22 across, moving as many as forty 50-ton containers in an hour. Recently completed, NIT North has effectively doubled the cargo handling capacity of the terminal.

Portsmouth Marine Terminal
Portsmouth Marine Terminal (PMT) is the second largest terminal with respect to containership berth space. Among PMT's many cranes is the fourth Kone supercrane with lift capacity of 40 LT. PMT's versatility makes it excellent for handling containers, RO/RO and breakbulk cargo. Features of this terminal include refrigerator hook-ups, specialized warehouse space, fumigation facilities and straddle-carrier container stacking.

Virginia Inland Port
Operated as an intermodal container transfer facility, the Virginia Inland Port (VIP) provides an interface between truck and rail for the transport of ocean-going containers to and from The Port of Virginia. Containers are transported by truck to the VIP for immediate loading upon a rail car or for short-term storage prior to loading. Containers arriving from Hampton Roads terminals are unloaded from the train and dispatched by truck to inland destinations. Land is available to steamship lines for container storage and ancillary service companies.

The Port of Virginia is Foreign Trade Zone number 20. [7]

[7] Virginia Port Authority webpage: http://www.vaports.com

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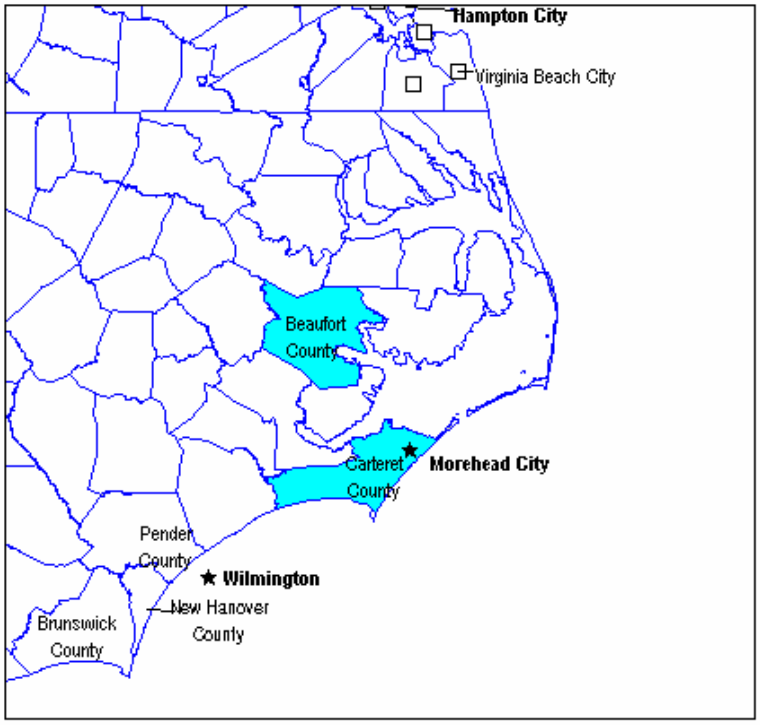
18. Morehead City and Beaufort, NC

Location and Background Information

The Port of Morehead City and Beaufort, is part of the Morehead City, North Carolina and the Washington, North Carolina Micropolitan Statistical Areas.

Figure 18-1. Morehead City and Beaufort, NC: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

The total population of both Micropolitan Statistical Areas combined is of 104,341, according to the 2000 US Census. Of this total 50, 595 or 48.5 percent are males and 53,746 or 51.5 percent are females. The median age for the region is 41.4 years; 39.9 for males and 42.7 for females. A little over 15 percent of the population falls within the 40-49 years age bracket, and about 14 percent falls within the 50 – 59 age bracket (Figure 18-2).

As portrayed by Figure 18-3, the majority of the population in the region is white (80.7 percent), followed by the Black or African American population (16.7 percent). 'Others' (include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) represent 2.3 percent of the population. The Asian population represents only 0.4 percent of the total population. Moreover, in terms of ethnic makeup, 2.1 percent of the total population is considered to be of Hispanic or Latino origin.[1]

[1] US Census Data: Census 2000.

Figure 18-2. Morehead City and Beaufort, NC: Population by Race, 2000

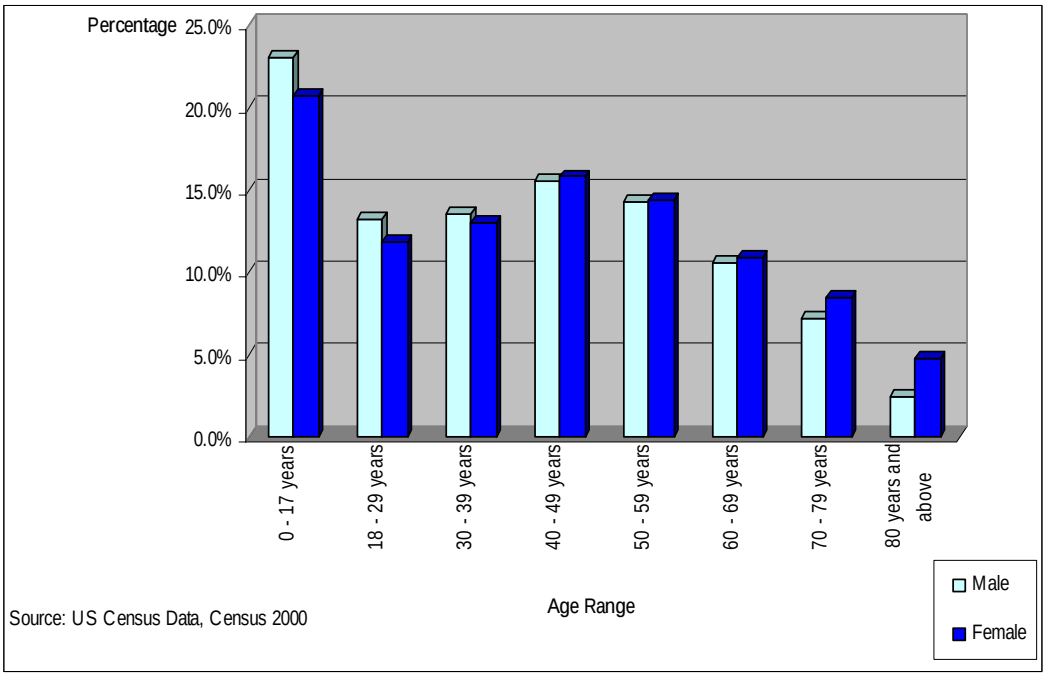
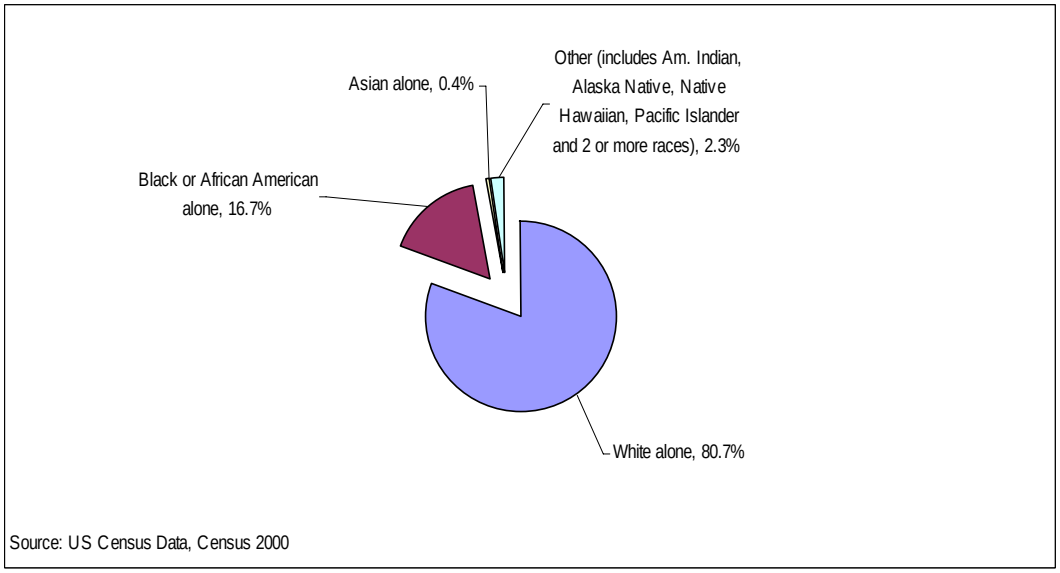
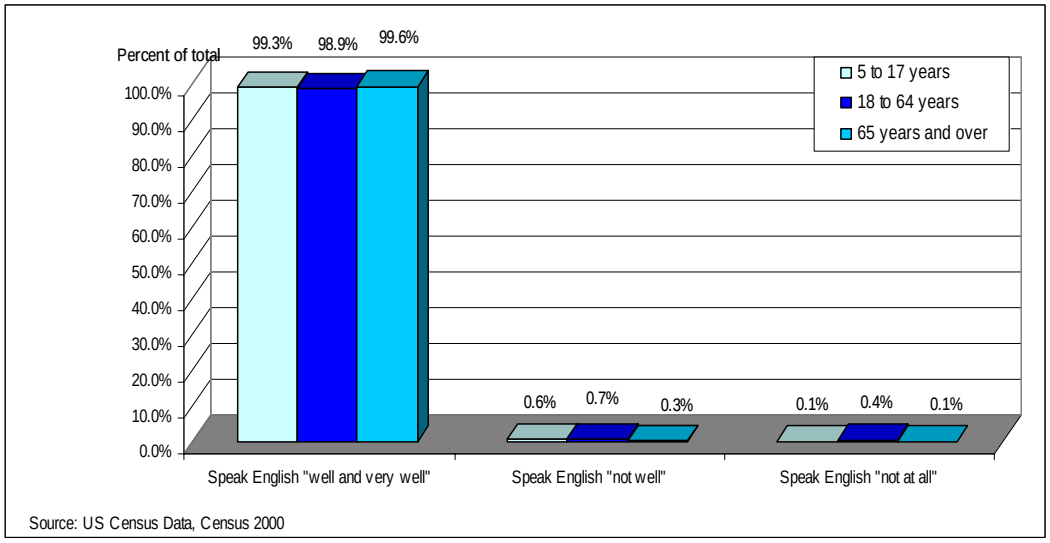


Figure 18-3. Morehead City and Beaufort, NC: Population by Race, 2000



It is evident from the data specified in Figure 18-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'.

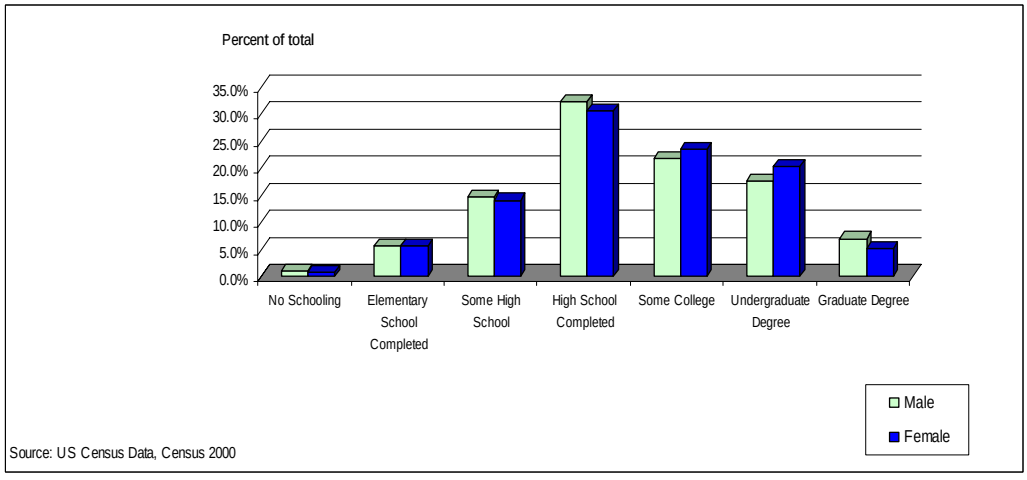
Figure 18-4. Morehead City and Beaufort, NC: Ability to Speak English by Age Group, 2000



EDUCATION

It is evident by Figure 18-5, that of the population ages 25 and over, 35 percent of males and nearly the same percentage of females have completed high school. Around 25 percent of males and a bit over that percentage of females have finished some college and approximately 21 percent of males and 24 percent of females have obtained an undergraduate degree in the region. The only college in the area is Carteret Community College.

Figure 18-5. Morehead City and Beaufort, NC: Educational Attainment of Population by Sex Ages 25 and Over, 2000



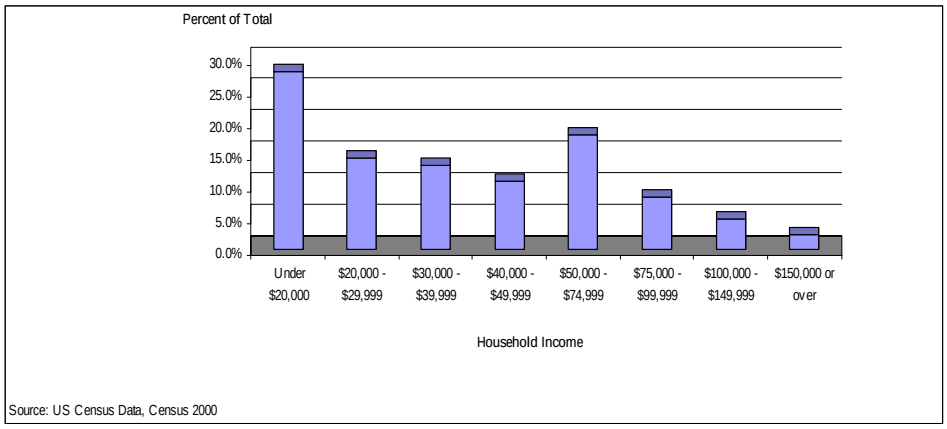
Socio-Economic Characteristics

INCOME

As revealed by Figure 18-6, 30 percent of households in these Micropolitan statistical areas have incomes of under $20, 000 and nearly 20 percent of households have incomes in the $50,000 - $74,999 income bracket. Less than 5 percent of households had incomes of $150,000 or over.

Household median income in the region in 1999 was $35,284.46 and per capita income for the same year was $19,304.69. The percentage of people under the poverty line in the region was 14.5 in the year 2000. The average household size in 2000 was 2.36.[2]

Figure 18-6. Morehead City and Beaufort, NC: Distribution of Households by Household Income Level, 1999



EMPLOYMENT

Of the employed civilian population aged 16 years or over in the region, 35 percent of working females are employed in the educational, health and social services industry. Nearly 24 percent of females are employed in other industries; these include the arts, entertainment, recreation, food services, public administration and information. The same percentage of males are employed in other industries as well. About 17 percent of males are employed in the construction industry, followed by males' participation in the manufacturing and wholesale and retail trade industries, which represent 15 percent each (Figure 18-7).

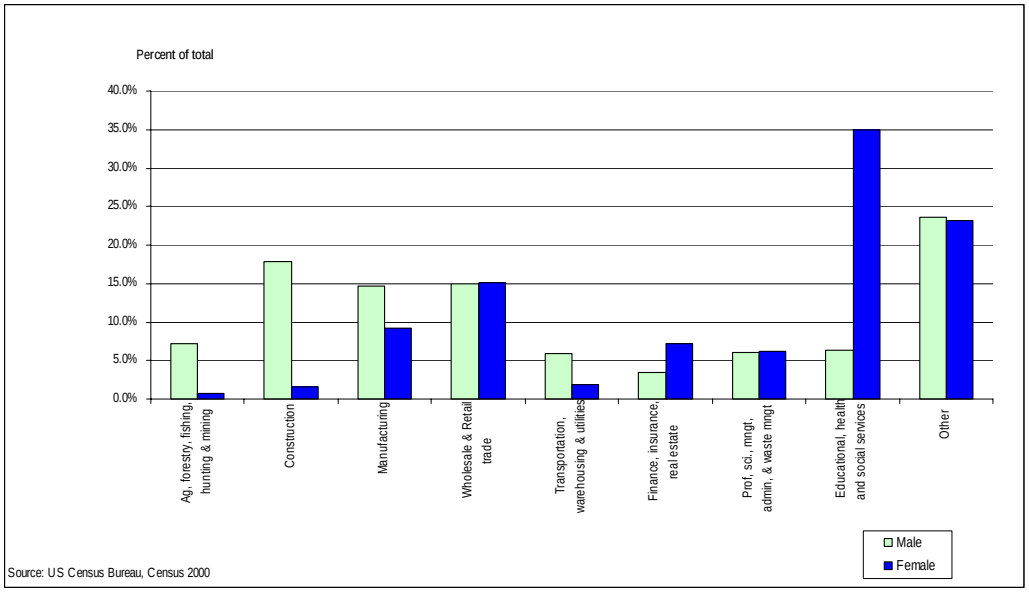
An estimated 4.9 percent of males and 6.1 percent of females were unemployed in the region in the year 2000.[3]

According to the 2000 US Census, an estimated 4.3 percent of males and 0.3 percent of females are employed in farming, fishing and forestry occupations. About 19.6 percent of males and 9.1 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 1.8 percent of male's occupations and 0.1 percent of female's occupations.

[2] US Census Data, Census 2000.

[3] US Census Data, Census 2000.

Figure 18-7.Morehead City and Beaufort, NC: Employed Civilian Population by Sex and Industry 16 Years and Over, 2000



MARITIME INFORMATION

The 45-foot channel at the Port of Morehead City makes it one of the deepest ports on the U.S. East Coast. Only 4 miles from the ocean, the port handles breakbulk and bulk cargo with access to Interstates 95 and 40 via U.S. Highways 70 and 17 and daily train service from Norfolk Southern. Across the Newport River from the port is Radio Island, a prime site for development. The Ports Authority is offering approximately 150 acres - suitable for port industrial development, complete with municipal water and sewer and an NC-approved Environmental Impact Statement for marine terminal development.

With the volume of international trade expected to double by 2020, forward-looking businesses and industries can get ahead of the curve by taking advantage of the services offered by the North Carolina State Ports Authority. North Carolina's Ports of Wilmington and Morehead City, plus inland terminals in Charlotte and in the Piedmont Triad at Greensboro, are "ready, willing and able" to serve as competitive alternatives to ports in neighboring states for competitive access to the global markets. Owned and operated by the Ports Authority, North Carolina's port system combines modern facilities and abundant capacity with the commitment to excel in service to customers.

The Ports' central Eastern seaboard location is closest to the center of the southeast US market -- the fastest growing region in the country. The Ports Authority, along with the North Carolina Department of Commerce, is actively recruiting retail distribution centers to the state. Excellent sites are available for distribution center placement, as well as a labor pool well suited to fill materials handling positions. The North Carolina community college system has developed a course of study specifically

for retail distribution center training. Current and planned improvements in the regional transportation network provide a new platform for distribution when combined with upgraded capabilities at the Port of Wilmington to handle large quantities of imported goods. A unique NC Ports tax credit is also available to port users.

The seaport town of Morehead City is located on Bogue Sound on the coast of North Carolina and has become a popular fishing resort as well as the state's only deepwater port north of Wilmington. Across the Atlantic Intracoastal Waterway is the colonial fishing town of Beaufort and Atlantic Beach, Fort Macon, and Theodore Roosevelt Natural Area State parks are on Bogue Banks offshore. Inland you can explore the Croatan National Forest.

Morehead City was founded in 1853 by John Morehead, governor of North Carolina to be the projected terminus of the Atlantic and North Carolina Railroad, which duly arrived in 1858. It was captured by Union troops in 1862. The colonial seaport town of Beaufort, the third-oldest town in North Carolina, lies on Port Royal Island in the Barrier Islands on North Carolina's Outer Banks, just west of Cape Hatteras National Seashore. This picturesque seaside city, founded in 1715 on the site of an Indian village, was named after the 2nd Duke of Beaufort. Apart from its beautiful gardens, sights of interest include more than 100 colonial houses in the 21 block historic district, the town's Old Burying Ground and the Mariner's Museum which emphasizes the natural history of this coastal region. Spanish explorers first noted the harbour in 1520. In 1562, Jean Ribaut and his band of French Huguenots settled here and established the first Protestant colony in America. Like other settlements along the southeast coast, Beaufort was laid claim to by the Spanish, English, Scots, and Native Americans at one time or another. Beaufort Harbor was also the base of the pirate Edward Teach (Blackbeard) and his ship Queen Anne's Revenge.[4]

Facilities

The port is four miles from the open sea and is situated along the Newport River and Bogue Sound. It has 5,500 feet of continuous wharf and has two berths served by modern ship-loader and maximum loadout rate of 3,000 tons per hour of bulk cargo. It has a dry-bulk facility (used mainly for phosphate) with 225,000-ton capacity warehouse, conveyor system and shiploader and an open storage dry-bulk facility which can outload 1,000 tons per hour with a 2 million-ton annual capacity. The terminal has a concrete capped sheet pile bulkhead, solid fill with 1,000 psf concrete deck with rubber and/or timber fender system. The deck height averages 10 ft. above mean low water and apron widths from unrestricted to 45 ft. opposite transit sheds. It has Roll-on/Roll-off ramp and a well-lit terminal and 24-hour security provided by North Carolina State Certified Port Police, as well as a Barge Fleeting Area and 150 acres available for port industrial development on Radio Island.

There are two sites in the port approved as Foreign Trade Zone 67. Site One is 190,374 square feet of warehouse space within main terminal and Site Two is a 40-acre tract of undeveloped land, four miles west of the port. It [provides for storage, manipulation, exhibition and limited manufacturing operations and can lower, defer or avoid import duties; and can accommodate special purpose subzones.

The port has 457,564 sq.ft. of covered, sprinklered warehouse storage and 353,765 sq.ft. of transit shed storage; as well as rail access to warehouses and transit sheds and 14 acres of paved, open storage. There is a switching railroad operated by Carolina Rail Services and Norfolk Southern access. The berths are served by two surface tracks, two platform level tracks, and two depressed tracks at the rear of the transit sheds and covered railcar loading. There is additional railhead and railcar storage on Radio Island and west of Morehead City

Morehead City's first major port development came during the 1850's with a pier, warehouse and rail facility known as Pier No.1. Following the North Carolina tradition, it handled mostly naval stores and

[4] URL: htp://www.choosingcruising.co.uk/cruiseweb/Cruises_Calling.asp?nCall=Morehead+City&nCat=P)

salt. Takeover by Federal troops during the Civil War and a damaging storm in 1876 further hampered the development of the Morehead City port for many years.

The argument for state-owned ports began in the 1920's, when North Carolina's economic development was handicapped because of higher freight rates than those charged by Virginia competitors - a situation partly due to the state's notable lack of adequate ports and water transportation. A referendum on spending $8.5 million to improve the situation was defeated in 1924, with most of the Piedmont counties voting against it.

The value of deepwater ports was recognized by the state legislature in 1945 with the creation of the NC State Ports Authority. Its job: to create two competitive ports through the sale of revenue bonds. Its ultimate mission: to create a better atmosphere for the development of North Carolina industry.

The General Assembly in 1949 approved the issue of $7.5 million in bonds for construction and improvement of seaports to promote trade throughout the state. Terminals equipped to handle oceangoing vessels were completed at Wilmington and Morehead City in 1952.

Their positions nearly midway between major competing ports in Virginia and South Carolina have made them more accessible to North Carolina traders. In fact, it was the Wilmington harbor's location near some of the state's earliest businesses - pine tar, rice and tobacco - that helped make the city the largest in the state until the early 1900's.

With ships came rail, and up until the 1960's, Wilmington was the headquarters of the Atlantic Coast Line Railroad - now part of CSX. During World War II, Wilmington was the site of major shipbuilding efforts - including an operation that built vessels out of concrete.

Now, times have changed, and so have the methods of shipping. And that has meant some major changes to keep the ports competitive. In the mid 1970's the Ports Authority bought two container cranes, eventually locating both at Wilmington. This multi-million dollar purchase of cranes the size of skyscrapers was deemed necessary because more and more cargo was being shipped in "boxes" - containers the size and shape of small mobile homes.

Morehead City has become a major port for phosphate products. And it can handle containers using its larger cranes in tandem. Wilmington, meanwhile, has acquired a total of five container cranes even as it ships wood products and other bulk and breakbulk commodities. To facilitate the growth in container traffic, two inland terminals were opened in the mid 1980's in Greensboro and Charlotte. The Ports Authority continues to remain competitive, with major projects planned at both facilities. At Morehead City, planning continues for expansion onto Ports Authority property on Radio Island. The Wilmington Harbor Deepening Project brought 42-foot deep water the entire length of the Cape Fear River navigational channel, from the ocean near Southport to the Port - readying the port for the larger ships of the future.[5]

[5] North Carolina Ports website: http://www.ncports.com

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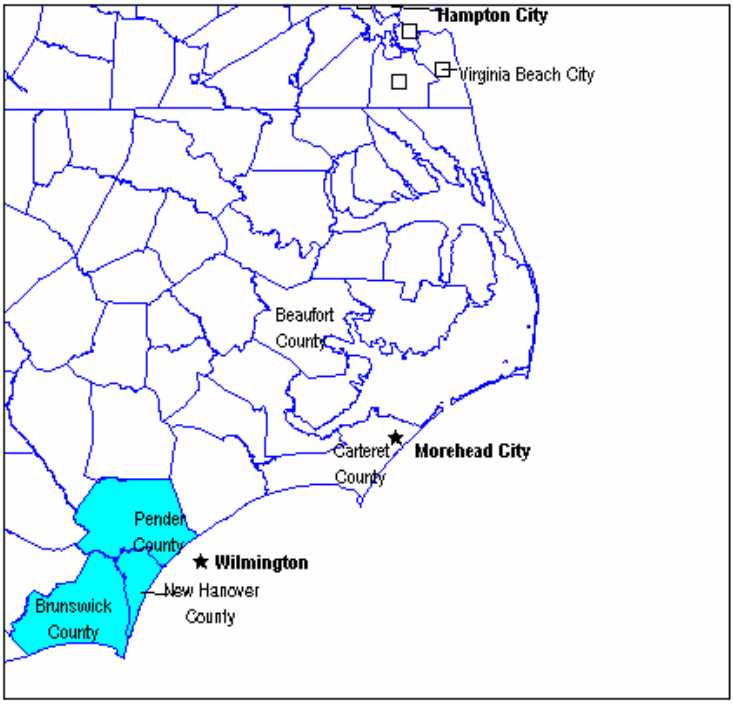
19. Wilmington, NC

Location and Background Information

The Port of Wilmington is part of the Wilmington, North Carolina Metropolitan Statistical Area (MSA).

Figure 19-1. Wilmington, NC: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

The total population of this MSA is 274,532, according to the 2000 US Census. Of this total, 133,999 or 48.8 percent are males and 140,533 or 51.2 percent are females. The median age in the region is 38.2 years; 37.0 for males and 39.5 for females. As portrayed in Figure 19-2, over 15 percent of males and females are between 18 to 29 years old and nearly 15 percent fall in the 40 – 49 years age range.

The majority of the population is white (79.5 percent); followed by the Black or African American population, which represents 17 percent of the total population. 'Others' (which include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) represent 2.8 percent of the total population. The Asian population represents only 0.6 percent of the total population (Figure 19-3). Moreover, in terms of ethnic makeup, 2.5 percent of the total population is considered to be of Hispanic or Latino origin.[1]

[1] US Census Data, Census 2000.

Figure 19-2. Wilmington, NC: Structure of the Population by Age, 2000

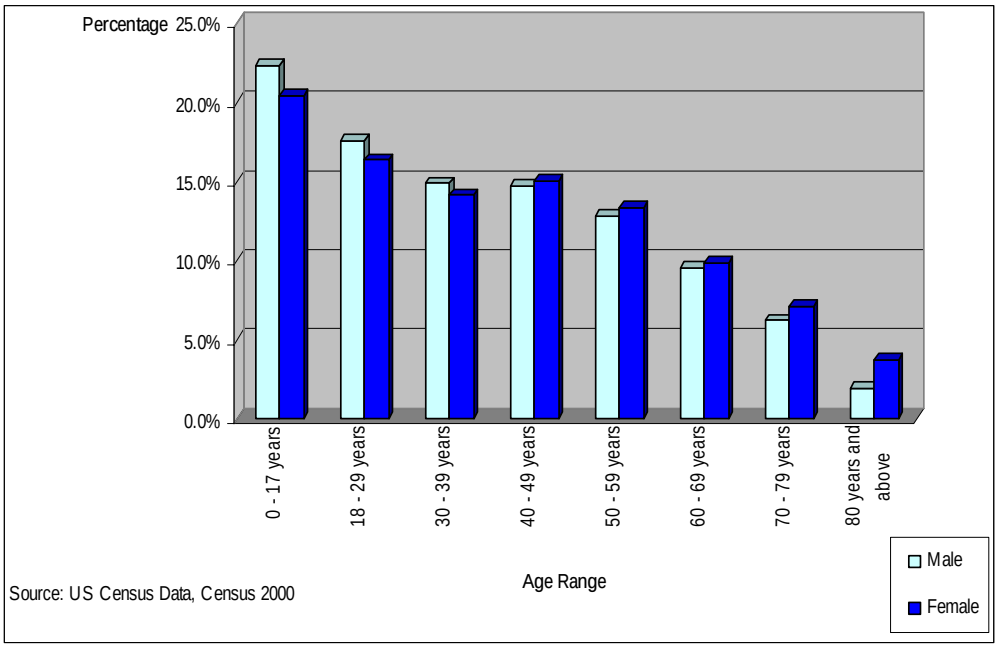
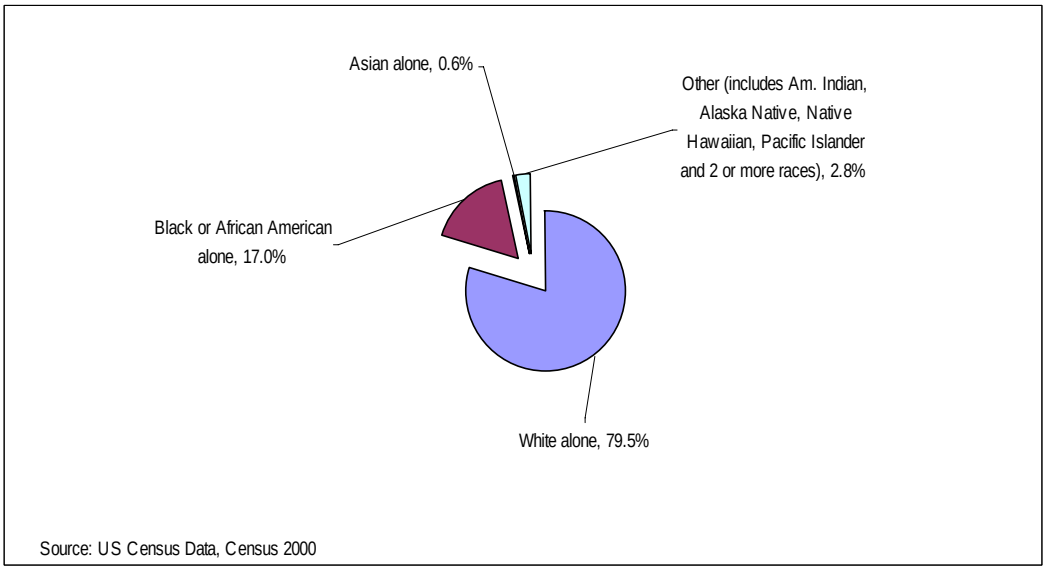
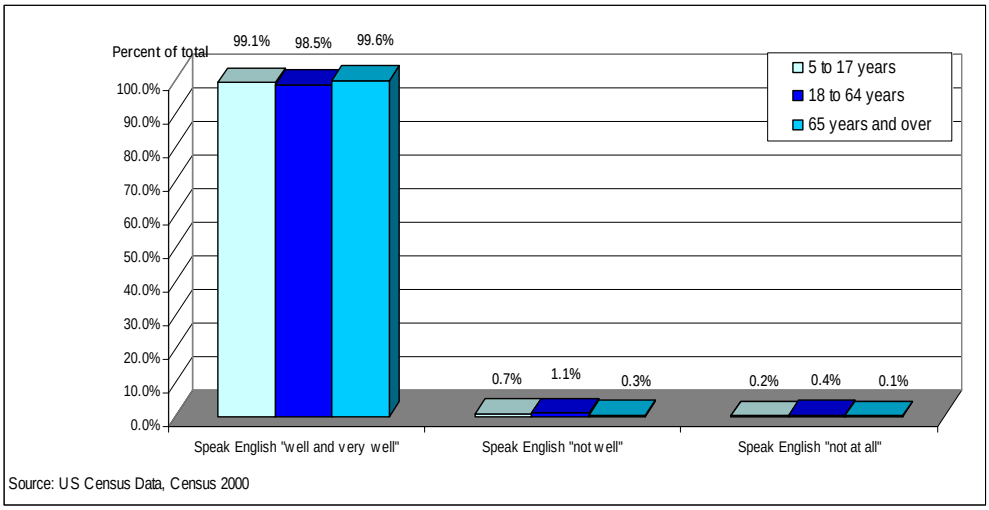


Figure 19-3. Wilmington, NC: Population by Race, 2000



It is evident from the data specified in Figure 19-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'.

Figure 19-4. Wilmington, NC: Ability to Speak English by Age Group, 2000

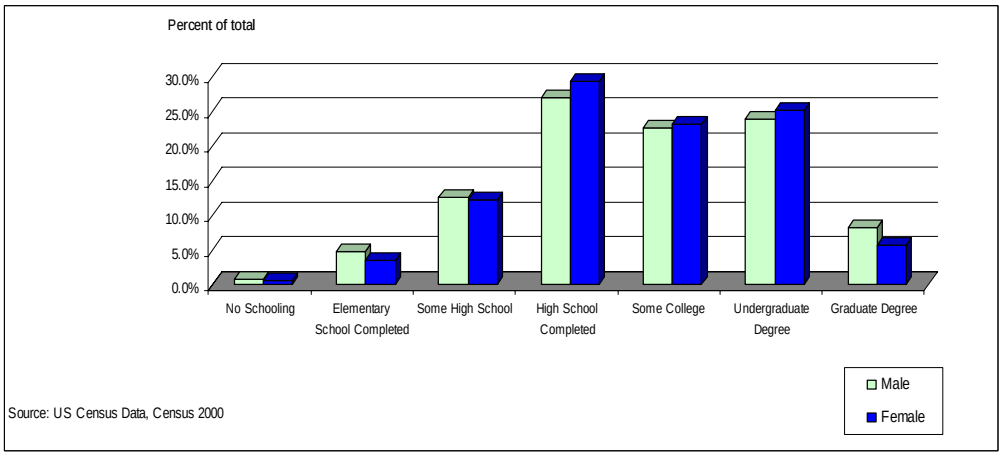


EDUCATION

It is evident from Figure 19-5, that 25 percent of males and around 28 percent of females, ages 25 or over, have completed high school. About 22 percent of males and 24 percent of females have obtained an undergraduate degree, and about 21 – 22 percent of males and females have at least completed some college.

Some of the colleges and universities around the area are: University of North Carolina, Cape Fear Community College, Miller-Motte Business College and Mount Olive College-Wilmington.

Figure 19-5. Wilmington, NC: Educational Attainment of Population by Sex Ages 25 and Over, 2000



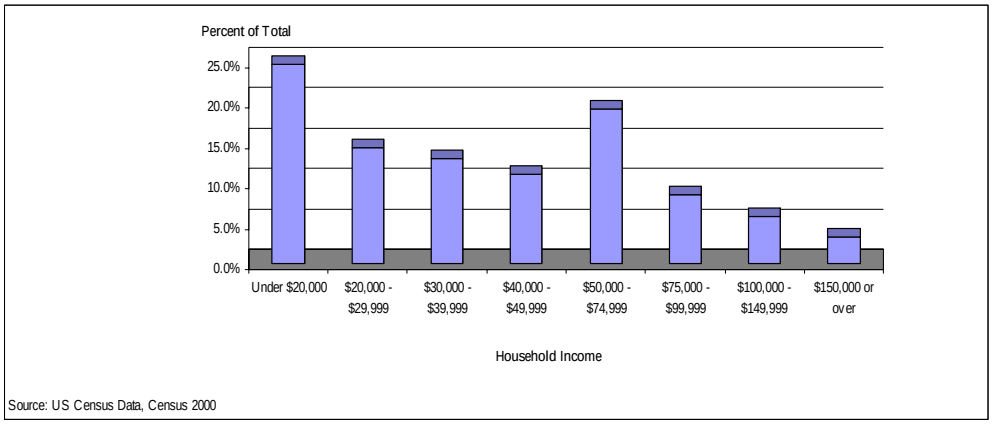
Socio-Economic Characteristics

INCOME

Around 25 percent of households in the Wilmington, NC MSA had incomes of $20,000 or under in 1999. About 20 percent of households in the region had incomes between $50,000 and $74,999. Less than 5 percent of households had incomes of $150,000 or over (Figure 19-6).

Household median income in the region in 1999 was $38,437.56 and per capita income for the same year was $21,468.56. The percentage of people under the poverty line in the region was 13 in the year 2000. The average household size in 2000 was 2.34.[2]

Figure 19-6. Wilmington, NC: Distribution of Households by Household Income Level, 1999



EMPLOYMENT

As shown in Figure 19-7, of the employed civilian population aged 16 years or over, nearly 31 percent of females are employed in the educational, health and social services industry. About 23 percent of females are employed in 'other industries', which include the arts, entertainment, recreation, food services, public administration and information. Over 20 percent of males are employed in 'other' industries, followed by the construction (nearly 20 percent) and wholesale and retail trade (about 16 percent).

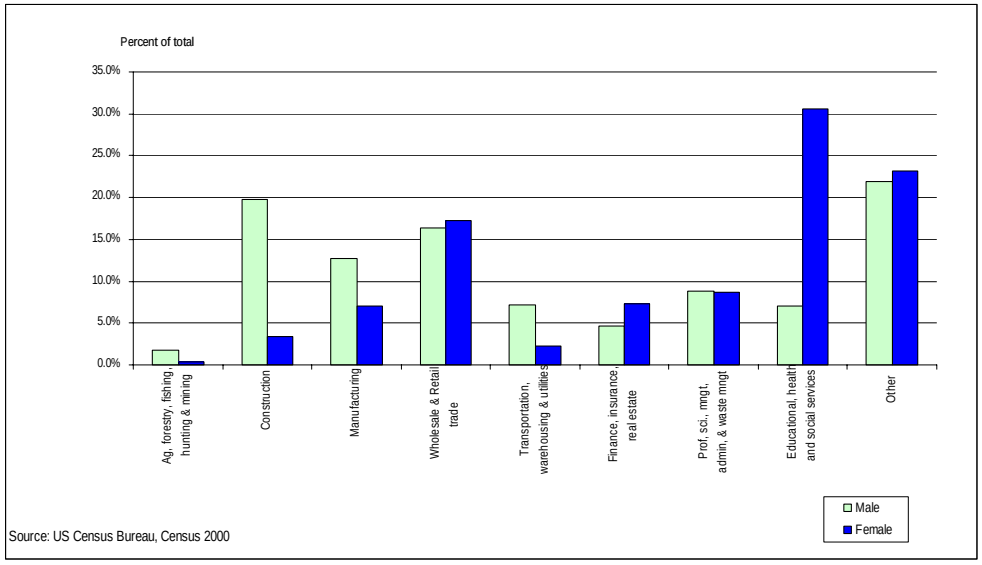
An estimated 5.2 percent of males and 5.7 percent of females were unemployed in the region in the year 2000.[3]

According to the 2000 US Census, an estimated 1.0 percent of males and 0.2 percent of females are employed in farming, fishing and forestry occupations. About 17.7 percent of males and 6.9 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.6 percent of male's occupations and 0.2 percent of female's occupations.

[2] US Census Data, Census 2000.

[3] US Census Data, Census 2000.

Figure 19-7. Wilmington, NC: Employed Civilian population by Sex and Industry 16 Years and Over, 2000



MARITIME INFORMATION

Located on the east bank of the Cape Fear River, the Port of Wilmington offers facilities to handle containerized, bulk and breakbulk cargoes. The Port's new 42-foot channel allows current container vessel customers an additional 15% vessel capacity. The port has direct interstate access to Interstates 95 and 40 and daily train service from CSX Railways. Wilmington is one of the few South Atlantic ports with readily available berths and container storage areas and equipment.

With the volume of international trade expected to double by 2020, forward-looking businesses and industries can get ahead of the curve by taking advantage of the services offered by the North Carolina State Ports Authority. North Carolina's Ports of Wilmington and Morehead City, plus inland terminals in Charlotte and in the Piedmont Triad at Greensboro, are "ready, willing and able" to serve as competitive alternatives to ports in neighboring states for competitive access to the global markets. Owned and operated by the Ports Authority, North Carolina's port system combines modern facilities and abundant capacity with the commitment to excel in service to our customers.

The Ports' central Eastern seaboard location is closest to the center of the southeast US market -- the fastest growing region in the country. The Ports Authority, along with the N.C. Department of Commerce, is actively recruiting retail distribution centers to the state. Excellent sites are available for distribution center placement, as well as a labor pool well suited to fill materials handling positions. The North Carolina community college system has developed a course of study specifically for retail distribution center training. Current and planned improvements in the regional transportation network provide a new platform for distribution when combined with upgraded capabilities at the Port of Wilmington to handle large quantities of imported goods. A unique NC Ports tax credit is also available to port users.

The Port of Wilmington is located on the east bank of Cape Fear River and it is 26 miles from open sea. Its channel is 42 ft., mean low water and its wharf frontage is 6,768 ft. long, divided between container and general cargo operations. It has a concrete pile wharf construction with solid or concrete deck fronted with rubber fender system and a deck height that averages 12 ft. above mean low water. The Port has an open storage dry bulk facility which can outload over 800 tons per hour with a 70,000 ton storage capacity and a covered dry bulk facility with 2.5-million-cubic-foot storage capacity and import conveyor system for grain and fertilizers which can handle 1,000 tons per hour. The facility has nearly 100 acres available for development north of the present terminal, other berths with contiguous open apron areas of up to 300 ft. wide and a well-lit terminal and 24-hour security provided by North Carolina State Certified Port Police officers.

The entire Wilmington Terminal was designated Foreign Trade Zone 66 and it provides for storage, manipulation, exhibition and limited manufacturing operations. It can lower, defer or avoid import duties and can accommodate special purpose subzones.

Wilmington Port has over 1 million square feet of covered, sprinklered storage and has both road and rail access to all storage buildings. The terminal has about 100 acres of paved, open area and nearly 25 acres semi-improved open storage area. Furthermore, it has 31,200 square feet dedicated steel coils warehouse with a 30-ton remote control bridge crane and nearly one-half million square feet warehouse space dedicated to forest products, including a new 108,000 square feet forest products center. The terminal has two chambers providing vacuum methyl bromide and detia and a special covered, in-container fumigation area.

The terminal has CSX rail service twice daily and easy vehicular access with US Highways 17, 74, 76 and 421 and Interstates 95 and 40; inland service by CSX Intermodal and Norfolk Southern and connecting rail line, owned and operated by Wilmington Terminal Railroad, with interchanging cars between port and CSX system. It furthermore has equipment for handling all rail traffic, including double-stack trains, has roll-on/roll-off capacity at ramps and has transit sheds and warehouses with depressed tracks.

North Carolina Ports History

Since Europeans first viewed the area, the river known ominously as the Cape Fear has been vital to the fortunes of both buccaneers and businessmen. History shows it was the pirate Stede Bonnet - by most accounts a poor sailor who already had been convicted as a pirate and pardoned - who may have realized the river's name. After returning to piracy, he tried to escape capture in the early 1700's by hiding up the Cape Fear. But he forgot the first rule of pirates - always have more than one escape route. Bonnet was caught as soon as the British reached the mouth of the river.

Union vessels didn't have as much luck with the blockade runners of the Confederacy, who continued to escape capture and bring needed supplies back to the port at Wilmington during the Civil War. In fact, Wilmington was the last port open to blockade runners. When it finally fell in early 1865, it signaled the end of Confederate hopes. Since then, though, most seagoing traffic hasn't needed an escape route - merely a North Carolina berth. That meant the Cape Fear River and Wilmington, and the deepwater harbor at Morehead City.

Morehead City's first major port development came during the 1850's with a pier, warehouse and rail facility known as Pier No.1. Following the North Carolina tradition, it handled mostly naval stores and salt. Takeover by Federal troops during the Civil War and a damaging storm in 1876 further hampered the development of the Morehead City port for many years.

The argument for state-owned ports began in the 1920's, when North Carolina's economic development was handicapped because of higher freight rates than those charged by Virginia competitors - a situation partly due to the state's notable lack of adequate ports and water

transportation. A referendum on spending $8.5 million to improve the situation was defeated in 1924, with most of the Piedmont counties voting against it.

The value of deepwater ports was recognized by the state legislature in 1945 with the creation of the NC State Ports Authority. Its job: to create two competitive ports through the sale of revenue bonds. Its ultimate mission: to create a better atmosphere for the development of North Carolina industry.

The General Assembly in 1949 approved the issue of $7.5 million in bonds for construction and improvement of seaports to promote trade throughout the state. Terminals equipped to handle oceangoing vessels were completed at Wilmington and Morehead City in 1952.

Their positions nearly midway between major competing ports in Virginia and South Carolina have made them more accessible to North Carolina traders. In fact, it was the Wilmington harbor's location near some of the state's earliest businesses - pine tar, rice and tobacco - that helped make the city the largest in the state until the early 1900's.

With ships came rail, and up until the 1960's, Wilmington was the headquarters of the Atlantic Coast Line Railroad - now part of CSX. During World War II, Wilmington was the site of major shipbuilding efforts - including an operation that built vessels out of concrete.

Now, times have changed, and so have the methods of shipping. And that has meant some major changes to keep the ports competitive. In the mid 1970's the Ports Authority bought two container cranes, eventually locating both at Wilmington. This multi-million dollar purchase of cranes the size of skyscrapers was deemed necessary because more and more cargo was being shipped in "boxes" - containers the size and shape of small mobile homes.

Morehead City has become a major port for phosphate products. And it can handle containers using its larger cranes in tandem. Wilmington, meanwhile, has acquired a total of five container cranes even as it ships wood products and other bulk and breakbulk commodities. To facilitate the growth in container traffic, two inland terminals were opened in the mid 1980's in Greensboro and Charlotte. The Ports Authority continues to remain competitive, with major projects planned at both facilities. At Morehead City, planning continues for expansion onto Ports Authority property on Radio Island. The Wilmington Harbor Deepening Project brought 42-foot deep water the entire length of the Cape Fear River navigational channel, from the ocean near Southport to the Port - readying the port for the larger ships of the future.[4]

[4] North Carolina Ports website: http://www.ncports.com

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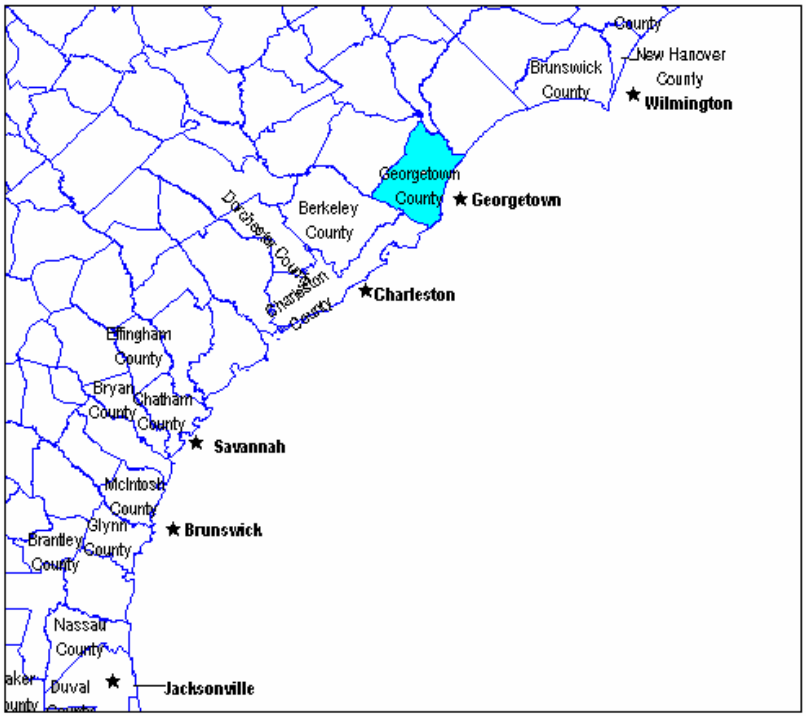
20. Georgetown, SC

Location and Background Information

The Port of Georgetown is located within the Georgetown, South Carolina Micropolitan Statistical Area.

Figure 20-1. Georgetown, SC: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

The total population of this Micropolitan Area is 55,797, according to the 2000 US Census. Of this total, 26,700 or 47.9 percent are males and 29,097 or 52.1 percent are females. The median age for the region in 2000 was 39.1 years; 37.8 for males and 40.3 for females. Nearly 15 percent of the population falls in the 40 – 49 years age range. Nearly 14 percent of females and about 14 percent of males fall within the 50 – 59 years age range (Figure 20-2).

As portrayed by Figure 20-3, 59.6 percent of the population in the region is white, followed by the Black or African American population, which represents 38.7 percent of the total population. 'Others' (which include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) represent 1.4 percent of the population. The Asian population represents roughly 0.3 percent of the total population. Only 1.5 percent of the total population is considered to be of Hispanic or Latino origin.[1]

[1] US Census Data, Census 2000.

Figure 20-2. Georgetown, SC: Structure of the Population by Age, 2000

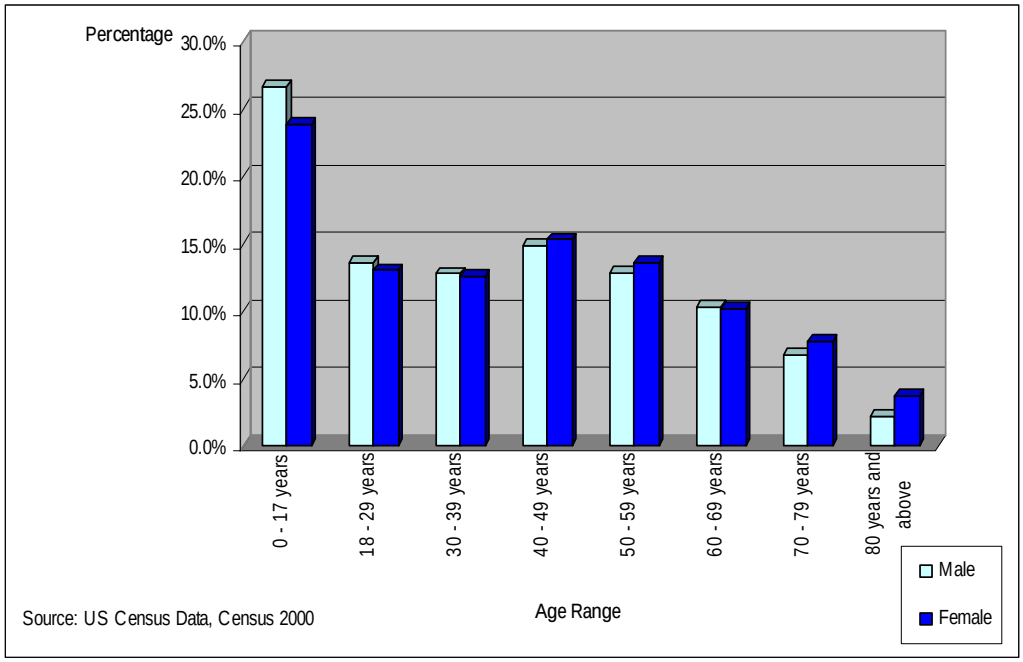
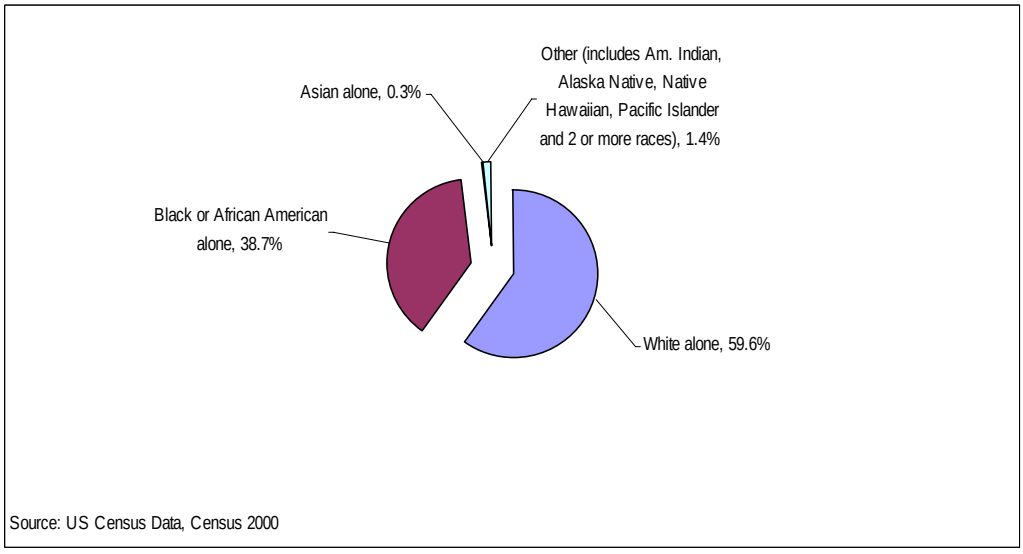
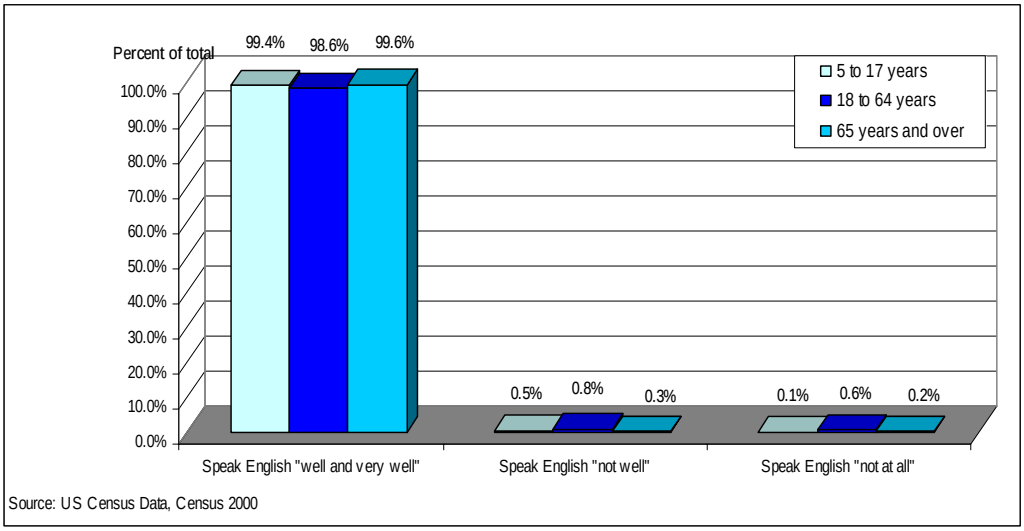


Figure 20-3. Georgetown, SC: Population by Race, 2000



It is evident from the data specified in Figure 20-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'.

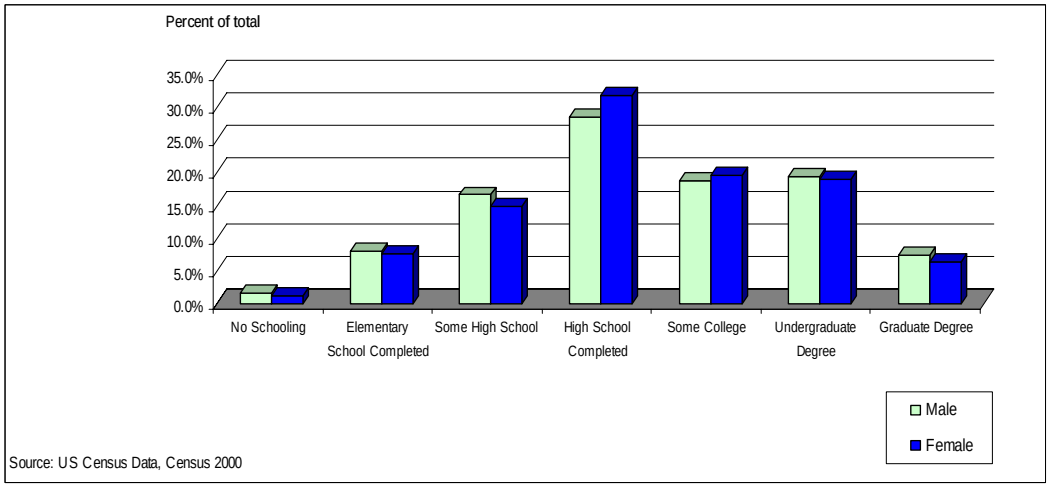
Figure 20-4. Georgetown, SC: Ability to Speak English by Age Groups, 2000



EDUCATION

As portrayed by Figure 20-5, over 30 percent of females and 25 percent of males, ages 25 or over, have completed high school. More than 17 percent of males and females have completed some college and nearly 20 percent of males and females have obtained an undergraduate degree in the region.

Figure 20-5. Georgetown, SC: Educational Attainment of Population by Sex Ages 25 and Over, 2000



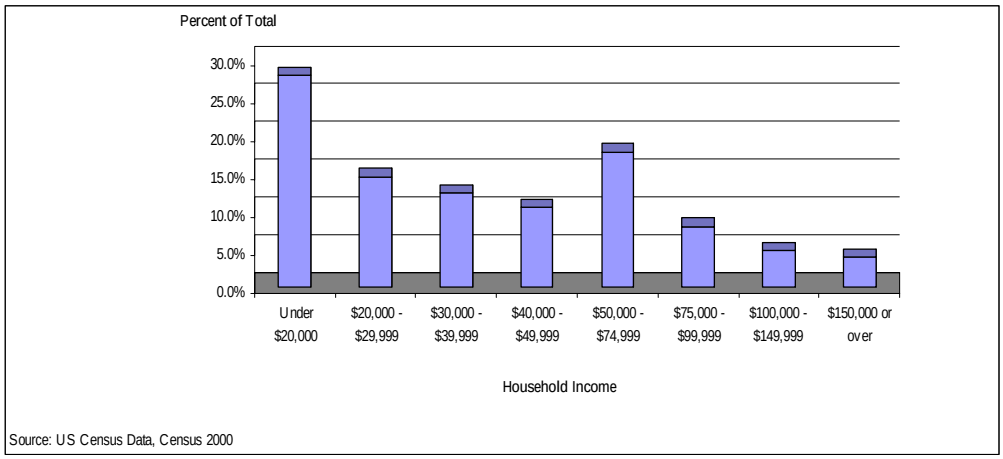
Socio-Economic Characteristics

INCOME

According to the 2000 US Census, nearly 30 percent of households in the region in 1999 had incomes of under $20,000. About 19 percent of households in the same period had incomes that feel within the $50,000 - $74,999 income bracket. Around 5 percent of households in the region had incomes of $150,000 or over (Figure 20-6).

Household median income in 1999 in the region was $35,312 and per capita income for the same year was $19,805. The percentage of people under the poverty line in the region was 17.1 in the year 2000. The average household size in 2000 was 2.55.[2]

Figure 20-6. Georgetown, SC: Distribution of Households by Household Income Level, 1999



EMPLOYMENT

As shown on Figure 20-7, of the employed civilian population ages 16 years and over, almost 30 percent of females are employed the educational, health and social services industry and 25 percent of females are employed in 'other' industries; which include the arts, entertainment, recreation, food services, public administration and information. About 23 percent of males are employed in the manufacturing industry and almost 20 percent of them are employed in 'other' industries.

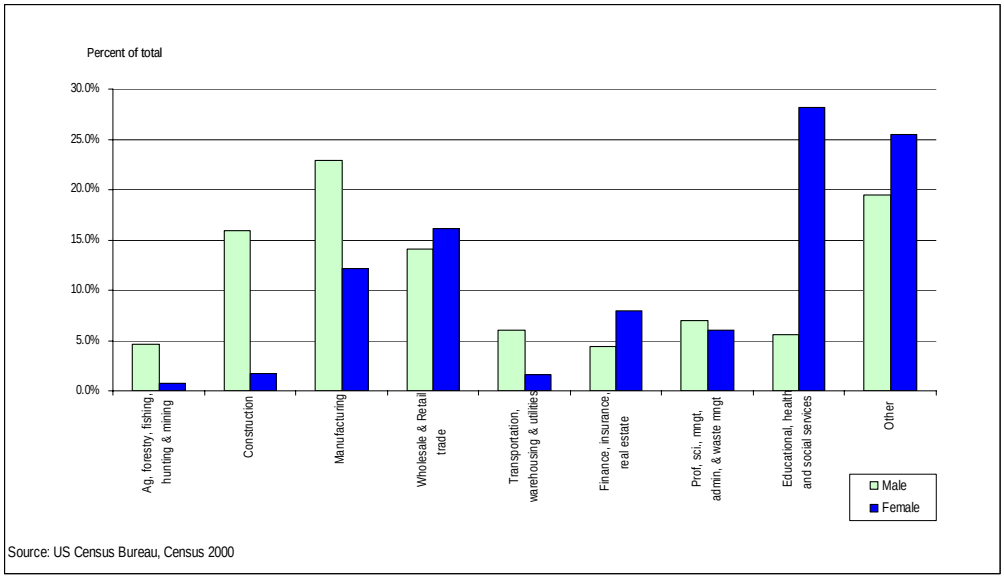
An estimated 6.2 percent of males and females were unemployed in 2000 in the region.[3]

According to the 2000 US Census, an estimated 3.0 percent of males and 0.5 percent of females are employed in farming, fishing and forestry occupations. About 22.7 percent of males and 13.1 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.5 percent of male's occupations and 0.1 percent of female's occupations.

[2] US Census Data, Census 2000.

[3] US Census Data, Census 2000.

Figure 20-7. Georgetown, SC: Employed Civilian Population by Sex and Industry 16 Years and Over, 2000



MARITIME INFORMATION

The Port of Georgetown is the South Carolina State Ports Authority's dedicated breakbulk and bulk cargo facility. With an expanded berth, ample open and covered storage, specialty cargo handling facilities, and a team of workers experienced in the field, Georgetown can handle cargo efficiently and safely. Top commodities for the Port of Georgetown are steel, salt, cement, aggregates, and forest products.

Breakbulk cargo handling including Georgetown's own Intermodal Breakbulk Service (IBS) is one of the port's key services. The port's innovative IBS lets shippers and consignees combine a multitude of transportation costs and functions -- stevedoring, storage, port handling, truck and/or rail, etc. -- as a single operation under one invoice. This ability saves time, money, and administrative hassles.

Georgetown was built for breakbulk cargo. It has 3 berths totaling 1,700 ft.; 139,800 square-feet of covered storage; 2 transit warehouses totaling 103,000 square-feet; 3 enclosed sheds totaling 36,800 square-feet and 27.9 acres of open storage (covered and open storage rail access provided). It has a 100-ton mobile crane available and its specialty is in handling facilities on terminal for metals, cement, salt, and forest products and has a fleet of cargo handling equipment.[4]

[4] South Carolina State Port Authority: http://www.port-of-charleston.com/term_and_infra/ georgetown/ PortGeorgetown.asp

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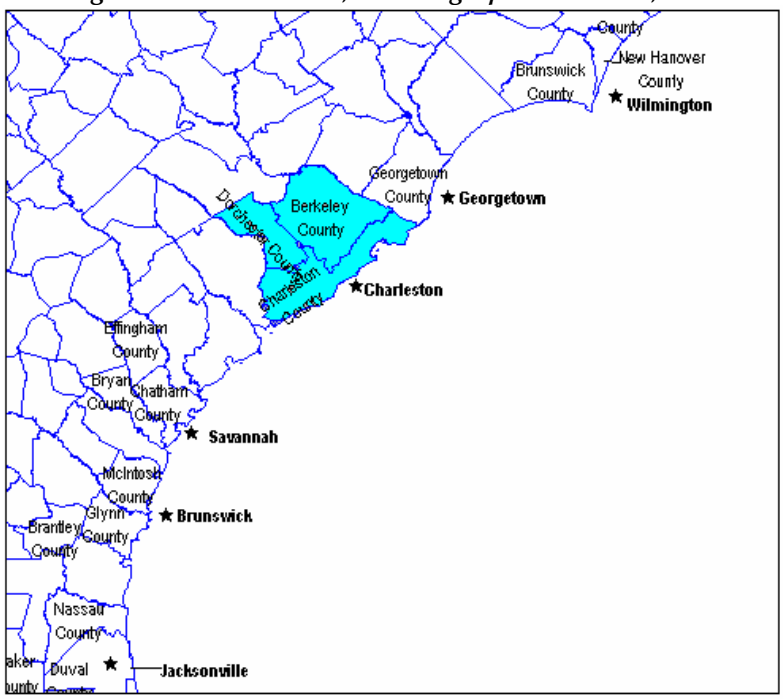
21. Charleston, SC

Location and Background Information

The Port of Charleston is part of the Charleston-North Charleston, SC Metropolitan Statistical Area (MSA).

Figure 21-1. Charleston, SC: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

The total population of the Charleston-North Charleston, SC MSA is 549,033, according to the 2000 US Census. Of this total 269,433 or 49.1 percent are males and 279,600 or 50.9 percent are females. The median age for the region for the year 2000 was 33.9 years; 32.3 for males and 35.4 for females. Nearly 20 percent of males and about 17 percent of females in the region fall within the 18 – 29 years age bracket and about 15 percent of males and females fall within the 30 – 39 age range (Figure 21-2).

The majority of the population in the region is white (65.2 percent). The Black or African American population represents 30.5 percent of the total population. 'Others' (which include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) represent 2.9 percent of the total population of this area, followed by the Asian population, which only represents 1.4 percent of the total population (Figure 21-3). Only 2.4 percent of the total population is considered to be of Hispanic or Latino origin.[1]

[1] Source: US Census Data, Census 2000.

Figure 21-2. Charleston, SC: Structure of the Population by Age, 2000

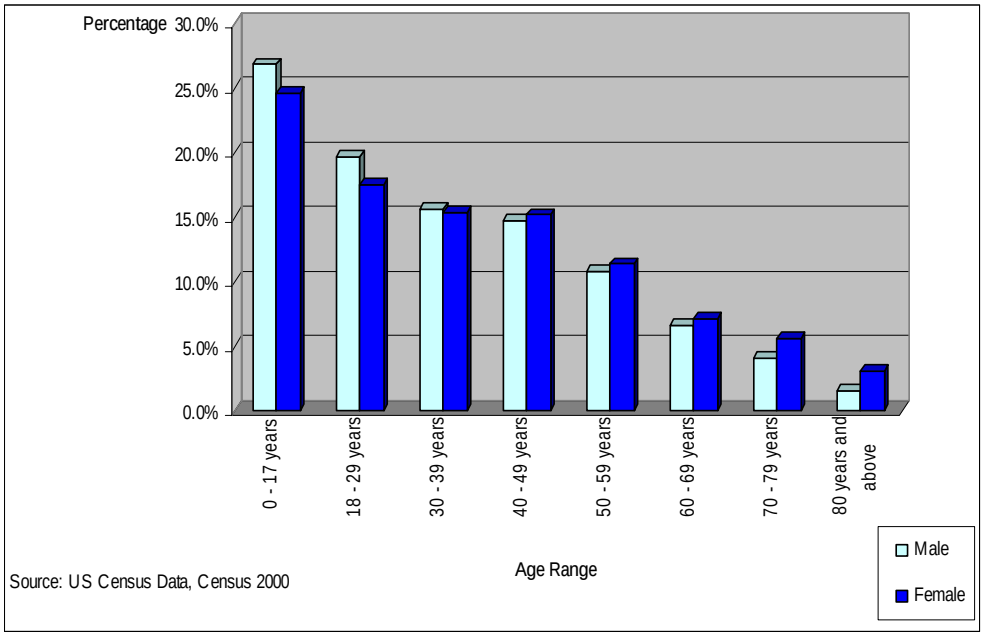
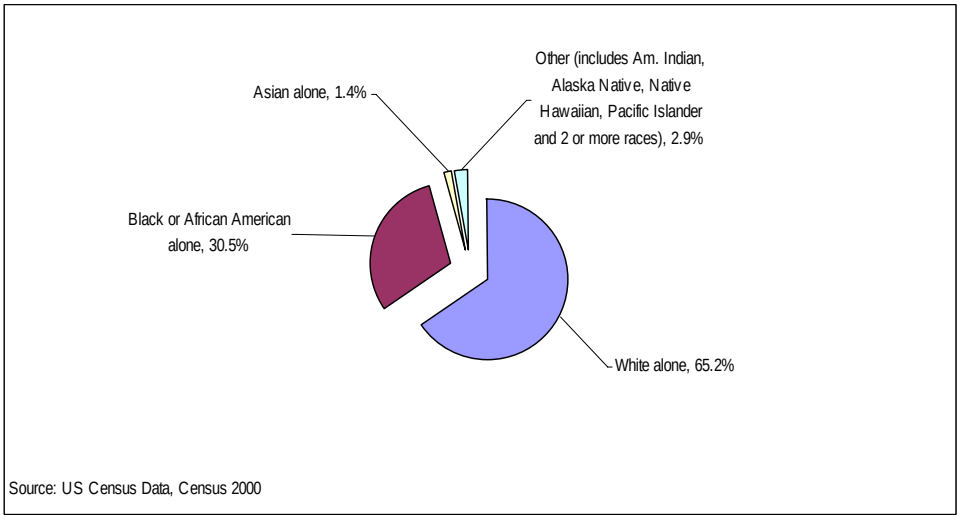
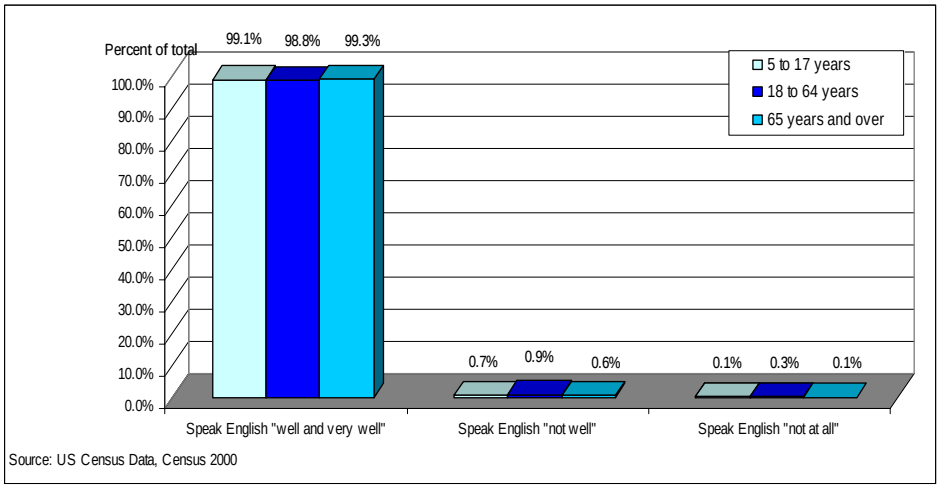


Figure 21-3. Charleston, SC: Population by Race, 2000



It is evident from the data specified in Figure 21-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'.

Figure 21-4. Charleston, SC: Ability to Speak English by Age Group, 2000

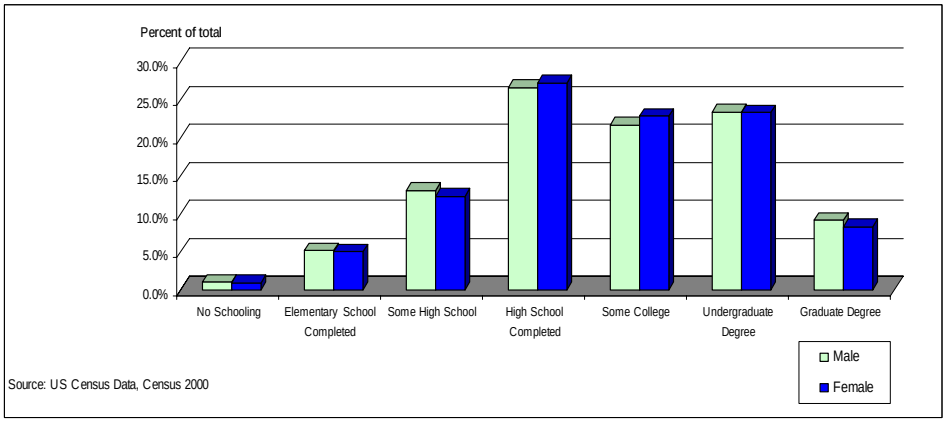


EDUCATION

As shown on Figure 21-5, of the population ages 25 and over in the region, over 25 percent of males and females have completed high school. Around 22 percent of males and females have obtained an undergraduate degree and over 20 percent of males and females have completed some college. Nearly 10 percent of the population has obtained a graduate degree.

Some of the colleges and universities around the area are: Charleston Southern University, College of Charleston, The Citadel, Johnson & Wales University-Charleston, and Medical University of South Carolina.

Figure 21-5. Charleston, SC: Educational Attainment of Population by Sex Ages 25 and Over, 2000



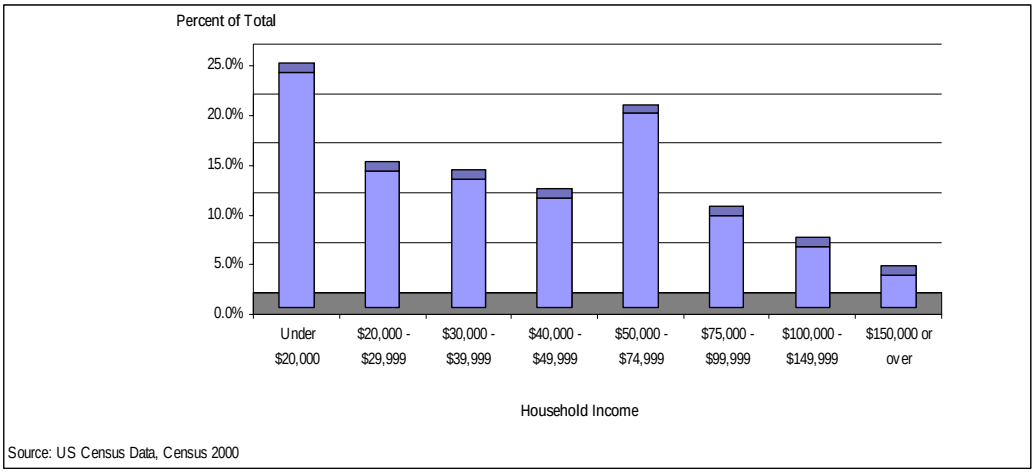
Socio-Economic Characteristics

INCOME

In 1999, nearly a quarter of households in the Charleston – North Charleston, NC MSA had an income of under $20,000. Over 20 percent of households had incomes between $50,000 and $74,999. About 5 percent of households had incomes of $150,000 or over (Figure 21-6).

Household median income in 1999 in the region was $39,232.49 and per capita income for the same year was $19,771.84. The percentage of people under the poverty line in the region was 14 in the year 2000. The average household size in 2000 was 2.56.[2]

Figure 21-6. Charleston, SC: Distribution of Households by Household Income Level, 1999



EMPLOYMENT

From the employed civilian population ages 16 or over in the region, nearly 35 percent of females are employed in the educational, health and social services industry and almost 25 percent of females are employed in 'other' industries, which include the arts, entertainment, recreation, food services, public administration and information. Nearly 25 percent of males are employed in 'other' industries, about 15 percent are employed in the construction industry, and the same percentage of males are also employed in the wholesale and retail trade industry (Figure 21-7).

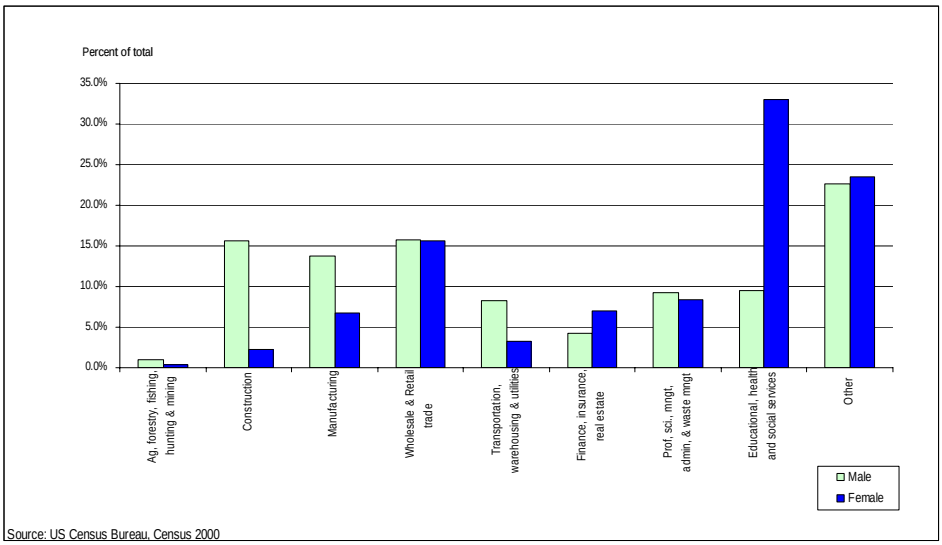
An estimated 4.9 percent of males and 5.8 percent of females were unemployed in the region in the year 2000.[3]

According to the 2000 US Census, an estimated 0.7 percent of males and 0.3 percent of females are employed in farming, fishing and forestry occupations. About 18.8 percent of males and 7.0 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.6 percent of male's occupations and 0.2 percent of female's occupations.

[2] Source: US Census Data, Census 2000.

[3] US Census Data, Census 2000.

Figure 21-7. Charleston, SC: Employed Civilian Population by Sex and Industry 16 Years and Over, 2000



MARITIME INFORMATION

The Port of Charleston has 6 main terminals: The PortCharleston Terminals, the Columbus Street Terminal, the North Charleston Terminal, the Wando Welch Terminal, the Union Pier Terminal and the Veterans Terminal.

Colombus Street Terminal
The Columbus Street Terminal (CST) is Charleston's premier combination breakbulk and container terminal. With dockside warehouses, dockside rail access, dockside breakbulk gantry cranes, dedicated container berths and post-Panamax container cranes, Columbus Street is a multi-purpose facility. The terminal is well-suited to container, common breakbulk, bulk, rolling stock, heavy-lift, and project cargo. The terminal has 6 berths: 2 for containers and 4 for breakbulk. It has 3,875 continuous feet of berth space, 4 container cranes (2 post-Panamax), 78 acres of open storage for containers and other cargo, EDI compatible container gates, on-terminal roadability facility and a large on-dock staging apron.

CST also has 457,500 square-feet of sprinkler-protected warehouses with covered rail access, ship side rail service, an on-terminal rail yard, 24-hour security with manned guard gate and chain-link and barbed-wire fencing, easy access to I-26 and one hour to open ocean.

North Charleston Terminal
The North Charleston Terminal (NCT) is a modern container handling facility with complete with post-Panamax container cranes, an on-terminal container freight station, an on-terminal rail yard, and direct easy access to I-26 and I-526. The terminal has 3 container berths totaling 2,500 feet of berth space and one dedicated grain elevator berth, 6 container cranes (3 post-Panamax), 123 Acres of open storage, on-terminal intermodal rail access and dockside rail service.

NCT has a 118,500 square-foot container freight station, 91,000 square-feet of leased warehouse space just outside terminal gates, breakbulk and RO-RO capability and a 1.5 million bushel export grain elevator. It also counts with chain-link and barbed-wire fencing with 24-hour manned security gates, easy interstate highway access and 2 hours to open ocean.

Wando Welch Terminal

Wando Welch Terminal (WWT) has received worldwide recognition for its innovative design and overall terminal productivity. Opened in 1982, the final stage of terminal construction was recently completed in the form of a 4th container berth, 3 new post-Panamax container cranes, and nearly 90 acres of additional container storage space. At present, it is the port's largest terminal in terms of volume and physical size. The terminal is 16.4 nautical miles from sea buoy, has 3,800 continuous ft. (1,128 m.) of berth space, 10 container cranes (4 are Super post-Panamax, 4 are post-Panamax, and 2 are Panamax), 194 acres of container storage space.

The terminal furthermore counts with an on-terminal 200,000 square foot container freight station, an on-terminal U.S. Customs and U.S. Department of Agriculture inspection facilities, an on-terminal fumigation area, an on-terminal maintenance facility and an on-terminal administration buildings and executive meeting center. It is less than one mile from I-526 interchange and has chain-link and barbed wire boundary fencing, 24-hour security, seven-days-a-week.

Union Pier Terminal
Union Pier Terminal (UPT) is one of PortCharleston's dedicated breakbulk and RO-RO cargo terminals. A recent terminal redesign has significantly increased the open storage area and improved traffic flow into and out of the facility. It has 4 berths totaling 2,470 continuous feet of berth space, and 698,049 square feet of sprinkler-protected transit sheds. There are multiple rail lines serving warehouses and dockside open storage areas and covered rail access to all warehouses, as well as asphalt and concrete open storage areas. There are smooth transitions between dockside aprons and ground-level open storage and excellent security with visibility-restricted screening on chain-link and barbed-wire fencing with a manned 24-hour guard gate.

Veterans Terminal
Veterans Terminal (VT) is a 110 acre fully secured dedicated bulk, break-bulk, RO-RO, and project cargo facility located on the Cooper River. VT can provide long term outside storage in dedicated yard space or covered sprinkler protected warehouse. Union and Non-Union stevedoring complements our determination to provide the customer with the most modern and flexible port facility in the Southeast. The terminal is 1.5 hours steaming time from the sea buoy and is 1.5 miles from Interstate I-26. There is rail service by both NS & CSX.

PortCharleston is regarded by many in the maritime industry to be among the most productive ports in the world. PortCharleston consistently tops 40 gross moves per hour per crane and has set a new U.S. record of 64.8 moves ph/pc. Charleston has industry-leading crane operators and a unique team of maritime professionals working on the docks. Even though port employees run the dockside cranes and container yard handling equipment, it takes a team effort to consistently deliver high productivity. This can be found on Charleston's waterfront. Ocean carriers, ILA workers, stevedores, agents, and port employees work in concert to keep productivity high.

Additionally, PortCharleston has an advantage in geography. Charleston's terminals are closer to the open sea than any competing port by a significant margin. With deep channels, channels wide enough for ships to easily pass, and such a short distance to travel, Charleston's facilities allow your ships to spend a minimum amount of time in-port.

Being half-way between New York and Miami, Charleston provides easy highway and rail access to the industry-rich Southeast hinterland. This region is growing in population and manufacturing and ocean carriers need top-notch access. Charleston offers that access like no competitor. Also, PortCharleston has been making heavy investments in equipment and processes to lower trucker turn time on the terminals. In the common-user yards and gates, trucker turn time has been cut by more than half in the last year. This makes the yard operation more efficient for the carrier and delivers the customer's cargo faster.[4]

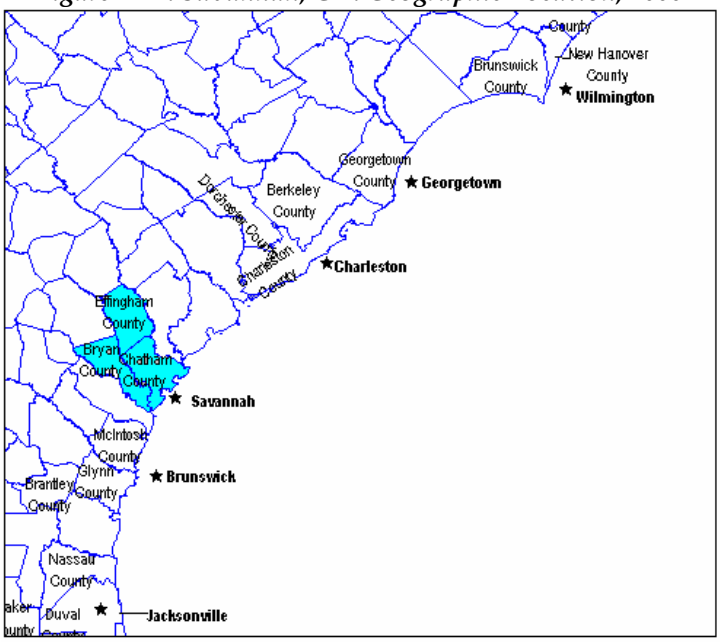
[4] South Carolina State Port Authority website: http://www.port-of-charleston.com/Term_and_Infra/Charleston/whycharleston.asp

22. Savannah, GA

Location and Background Information

The Port of Savannah is part of the Savannah, Georgia Metropolitan Statistical Area (MSA).

Figure 22-1. Savannah, GA: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

The total population of the Savannah, GA MSA is 293,000, according to the 2000 US Census. Of this total, 142,039 or 48.5 percent are males and 150,961 or 51.5 percent are females. The median age for the population in the region is 34.2 years; 32.6 for males and 35.7 for females. Over 25 percent of males and females in the region fall within the 18 – 29 years age bracket and about 30 percent of males and females (about 15 percent per age bracket) fall within the 30-39 and 40-49 years age range (Figure 22-2).

The majority of the population in the region is white (61.1 percent), followed by the Black or African American population, which represents 34.9 percent of the total population. 'Others' (include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) represent 2.4 percent of the population. The Asian population represents only 1.6 percent of the total population (Figure 22-3). Moreover, in terms of ethnic makeup, only 2.0 percent of the total population is considered to be of Hispanic or Latino origin[1].

[1] US Census Data, Census 2000.

Figure 22-2. Savannah, GA: Structure of the Population by Age Group, 2000

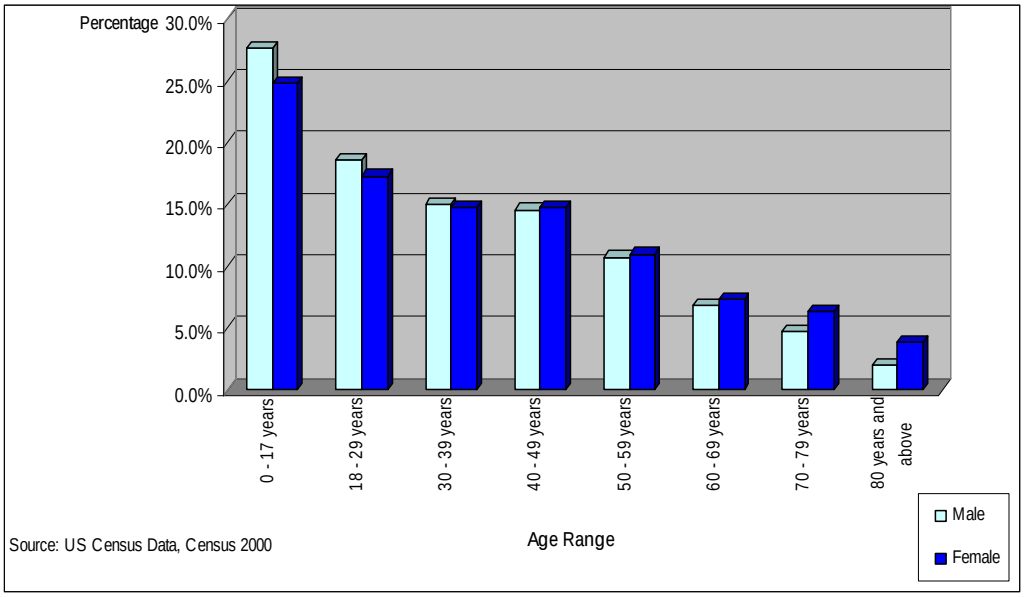
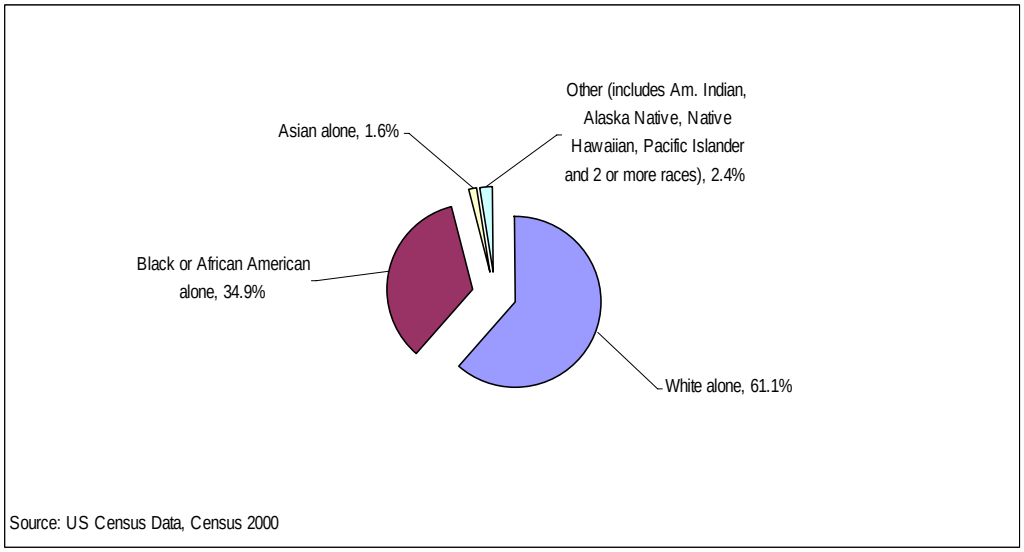
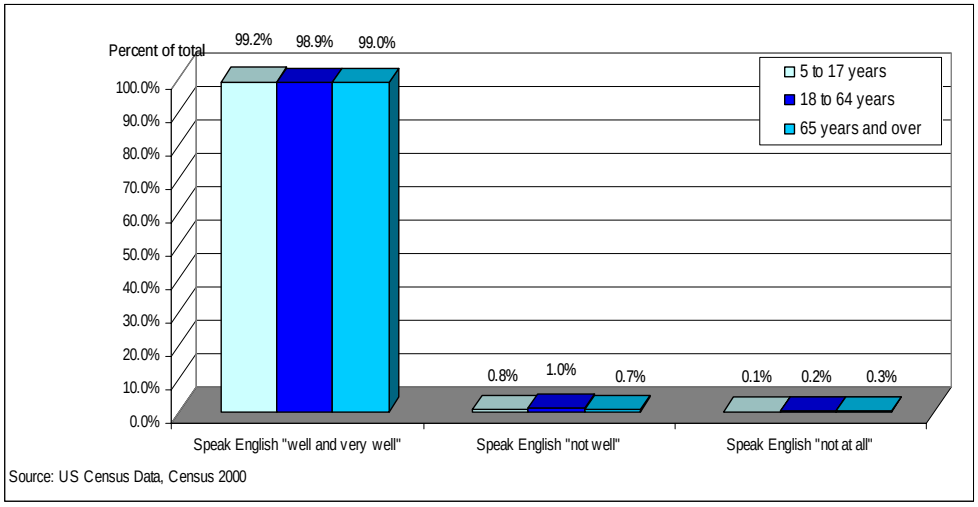


Figure 22-3. Savannah, GA: Population by Race, 2000



It is evident from the data specified in Figure 22-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'.

Figure 22-4.Savannah, GA: Ability to Speak English by Age Group, 2000

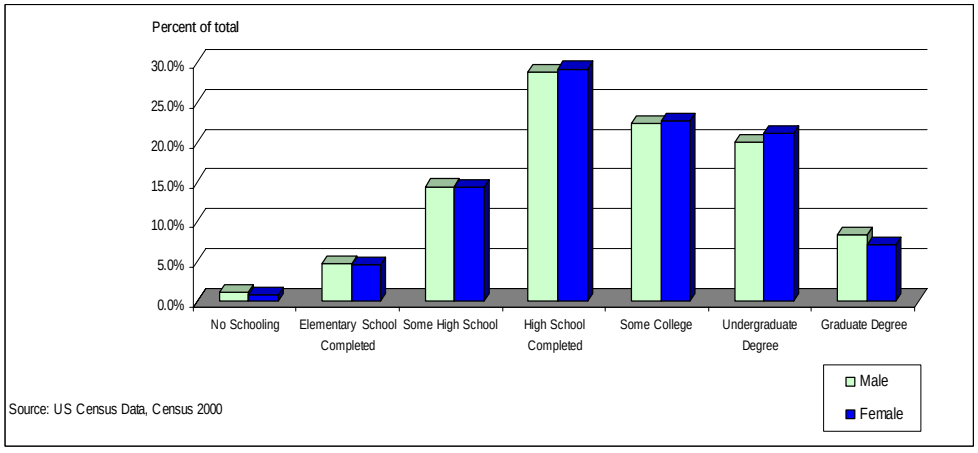


EDUCATION

Of the population in the region that is 25 years old or over, about 27 percent of males and 28 percent of females have completed high school. Over 20 percent of males and females have completed some college and around 20 percent of males and females have obtained an undergraduate degree. About 6 percent of the population has obtained a graduate degree (Figure 22-5).

Some of the colleges and universities in the area are: Savannah State University, Armstrong Atlantic State University, Savannah College of Art And Design, and Savannah Technical College.

Figure 22-5. Savannah, GA: Educational Attainment of Population by Sex Ages 25 and Over, 2000



Socio-Economic Characteristics

INCOME

In 1999, about a quarter of the households in the Metropolitan Division of Savannah, GA had incomes of under $20,000. Nearly 20 percent of households had incomes that fell within the $50,000 - $74,999 income bracket. About 5 percent of households had incomes of $150,000 or over (Figure 22-6).

Household median income in the region in 1999 was $39,557.87 and per capita income in the same year was $20,751.51. The percentage of people under the poverty line in the region was 14.5 in the year 2000. The average household size in 2000 was 2.57.[2]

Figure 22-6. Savannah, GA: Distribution of Households by Household Income Level, 1999

EMPLOYMENT

As portrayed by Figure 22-7, of the employed civilian population ages 16 years or over, nearly 35 percent of females are employed in the educational, health and social services industry and 25 percent of them are employed in 'other' industries, which include the arts, entertainment, recreation, food services, public administration and information. Over twenty percent of males are employed in 'other industries, 17 percent are employed in the manufacturing industry and 15 percent are employed in wholesale and retail trade industries.

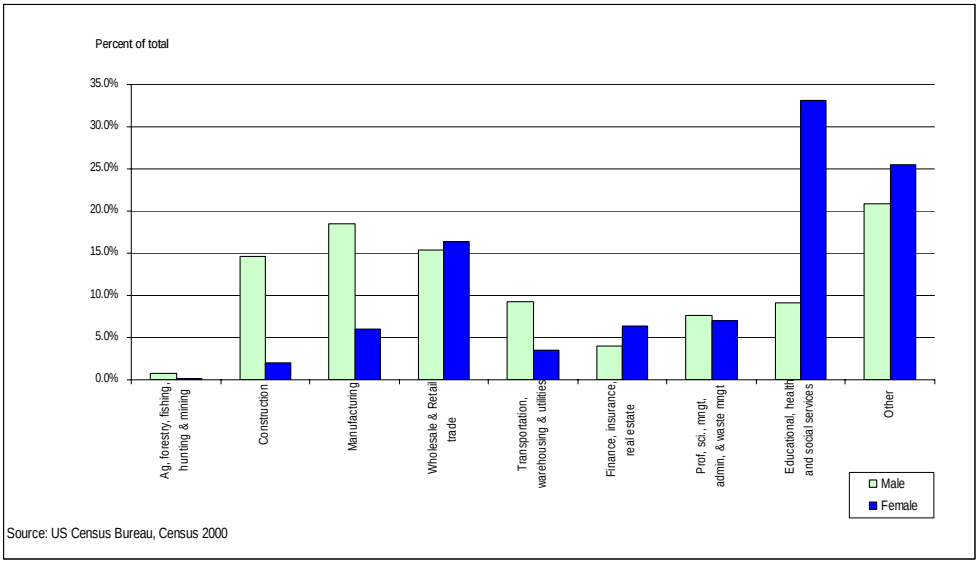
An estimated 4.9 percent of males and 5.9 percent of females were unemployed in the year 2000.[3]

According to the 2000 US Census, an estimated 0.5 percent of males and 0.1 percent of females are employed in farming, fishing and forestry occupations. About 21.5 percent of males and 5.9 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 1.0 percent of male's occupations and 0.2 percent of female's occupations.

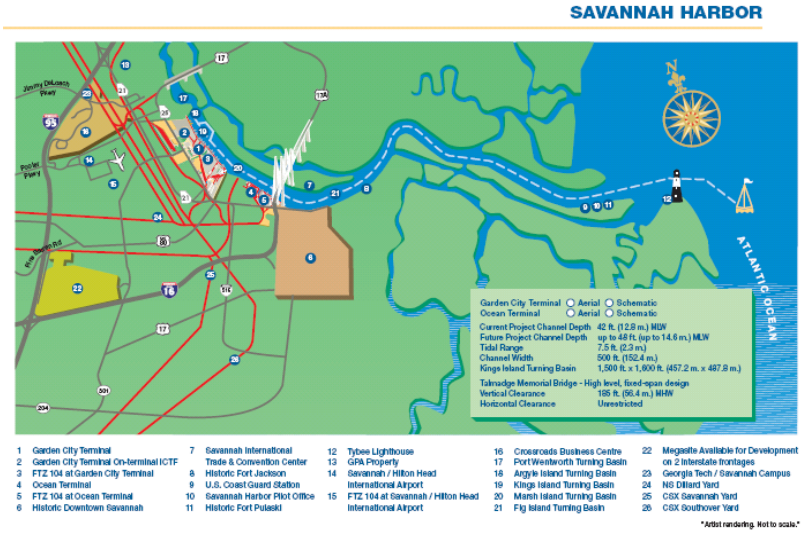
[2] US Census Data, Census 2000.

[3] US Census Data, Census 2000.

Figure 22-7. Savannah, GA: Employed Civilian Population by Sex and Industry 16 Years and Over, 2000



MARITIME INFORMATION



Garden City Terminal

Owned and operated by the Georgia Ports Authority, Garden City Terminal is a secured, dedicated container facility, the largest of its kind on the U.S. East and Gulf coasts. The 1,200-acre single-terminal facility features 7,726 linear feet of continuous berthing and more than 1.3 million square feet of covered storage. The terminal is equipped with thirteen high-speed container cranes (2 super post-panamax & 11 post-panamax), as well as an extensive inventory of yard handling equipment.

Garden City Terminal is within 6.3 miles of Interstate 16 (East / West) and 5.6 miles of Interstate 95 (North / South) with access to more than 100 trucking companies. CSX Transportation and Norfolk Southern Railroad provide Class I rail service. As a key intermodal advantage, the "James D. Mason" on-terminal intermodal container transfer facility, or "Mason" ICTF, provides overnight rail service to

Atlanta. Two to four day delivery via the ICTF is also available to inland destinations such as Charlotte, Chicago, Dallas and Memphis.

With the continuing diversification of Savannah's ocean carrier portfolio, more and more retailers are making Savannah the port of choice for their import distribution centers. Together, Savannah area distribution centers cover more than 9 million square feet of warehousing and annually generate more than 300,000 TEU's. Sailings as fast as 22 days from Asian-based ports and 9 days from Europe mean your shore-to-door transits define the term expedited.

Savannah boasts all the additional ingredients for the ideal retail distribution center equation: numerous, affordable construction-ready sites; two major interstates in close proximity to the Garden City Terminal; local and state government with a keen interest in development and job creation; a workforce versed in critical logistics skills; two Class I railroads providing convenient connections to key consumer concentrations nationwide.

Ocean Terminal

Owned and operated by the Georgia Ports Authority, Ocean Terminal is a secured, dedicated breakbulk facility specializing in the rapid and efficient handling of a vast array of forest and solid wood products, steel, RoRo (Roll-on / Roll-off), project shipments and heavy-lift cargoes.

The 208-acre facility features 6,688 linear feet of deepwater berthing, approximately 1.5 million square feet of covered storage and 96 acres of open, versatile storage. Served by over 100 trucking companies, Ocean Terminal is ideally situated within 1.2 miles of Interstate 16 (East / West) and 10 miles of Interstate 95 (North / South). Norfolk Southern Railroad provides switching services on-terminal. Line-haul services are provided by two Class I rail providers, CSX Transportation and Norfolk Southern Railroad.[4]

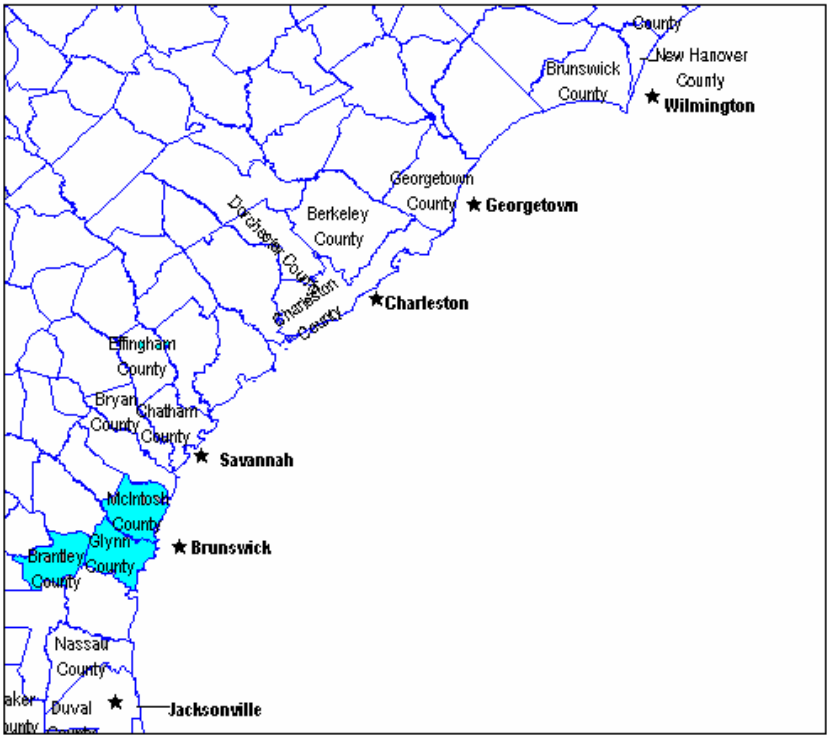
[4] Georgia Ports Authority website: http://www.gaports.com

23. Brunswick, GA

Location and Background Information

The Port of Brunswick is located in the Brunswick, GA Metropolitan Statistical Area (MSA).

Figure 23-1. Brunswick, GA: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

The total population of the MSA in the year of 2000 was 93,044, according to the 2000 US Census. Of this total, 15,034 or 48.4 percent were males and 48,010 or 51.6 percent were females. The median age for the region in 2000 was 37.3 years, 35.8 for males and 38.5 for females. Nearly 30 percent of males and nearly 25 percent of females are between the ages of 0 and 17 years. About 15 percent of males and females fall within the 40-49 years age range (Figure 23-2).

The majority of the population in the region is white (73.4 percent), followed by the Black or African American population, which represents 23.7 percent of the total population. 'Others' (which includes American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) constitute 2.2 percent of the population; and the Asian population represents only 0.7 percent of the total population (Figure 23-3). Moreover, in terms of ethnic makeup, only 2.4 percent of the total population is considered to be of Hispanic or Latino origin.[1]

[1] Source: US Census Data, Census 2000.

Figure 23-2. Brunswick, GA: Structure of the Population by Age Group, 2000

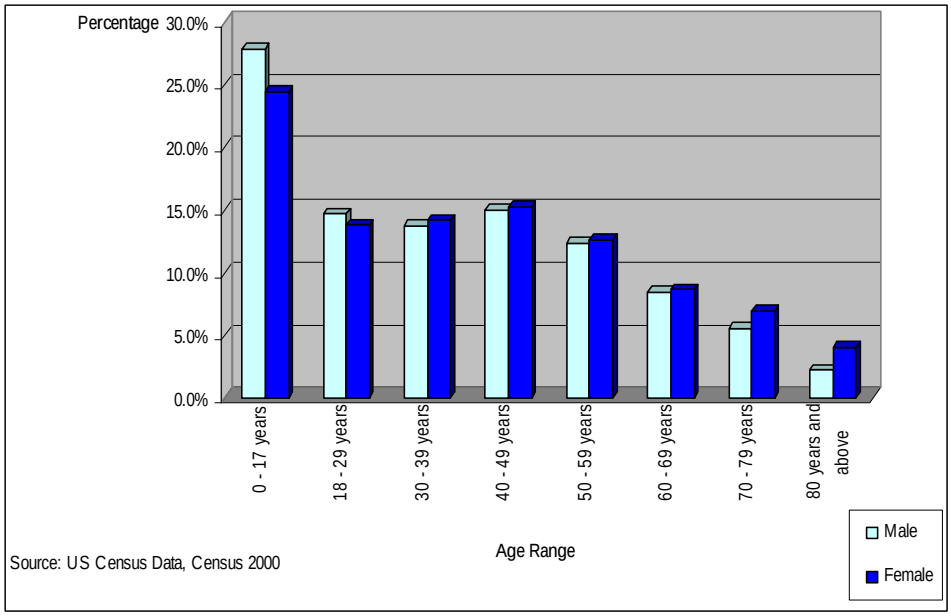
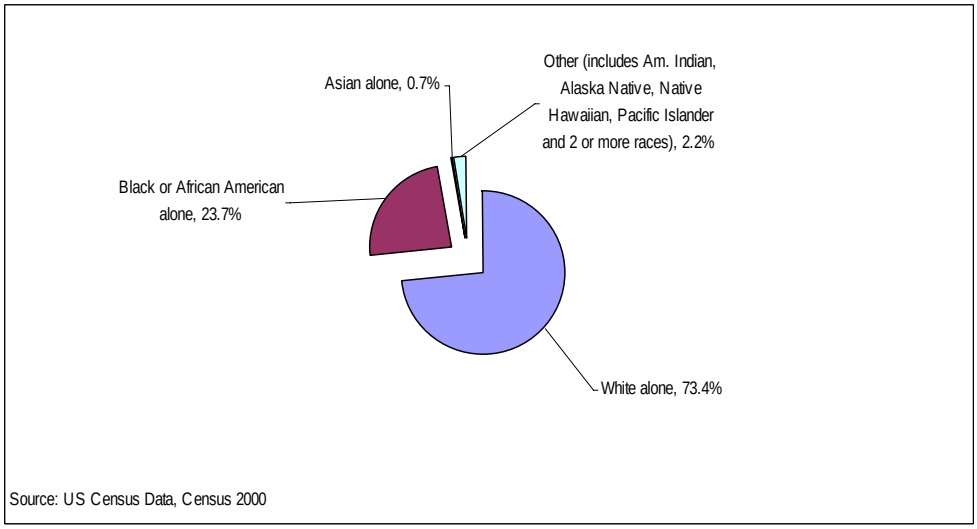
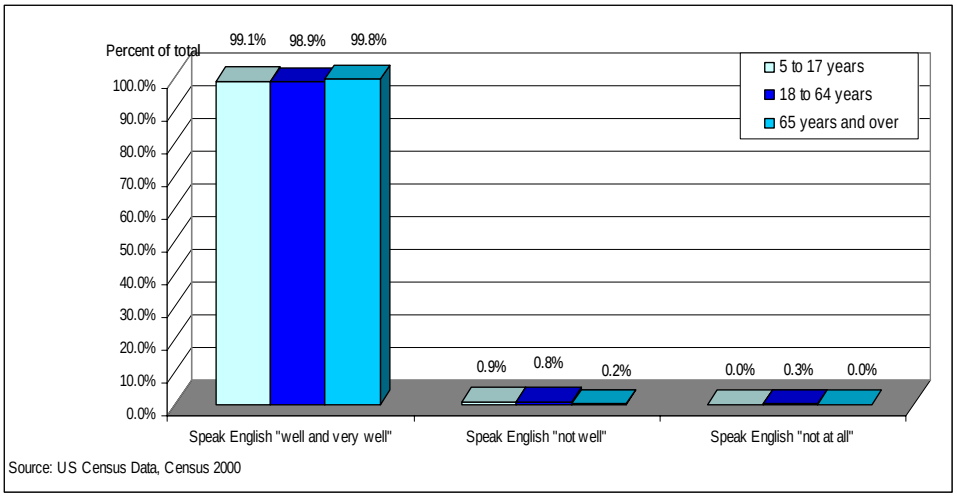


Figure 23-3. Brunswick, GA: Population by Race, 2000



It is evident from the data specified in Figure 23-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'.

Figure 23-4. Brunswick, GA: Ability to Speak English by Age Group, 2000

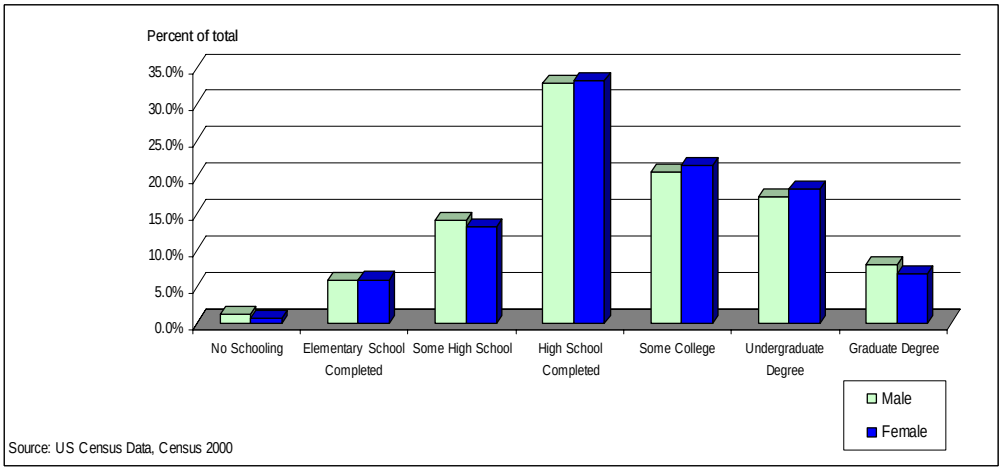


EDUCATION

As portrayed by Figure 23-5, of the population that is 25 years old or over, about 30 percent of males and females have completed high school. About 20 percent of males and females have completed some college and 15 percent of males and females have obtained an undergraduate degree.

Coastal Georgia Community College is the only college in the area.[2]

Figure 23-5. Brunswick, GA: Educational Attainment of Population by Sex Ages 25 and Over, 2000



[2] Brunswick, GA Community Profile: http://www.epodunk.com

Socio-Economic Characteristics

INCOME

About 28 percent of households in this region in 1999 had an income under $20,000. Nearly 20 percent of households had incomes that fell within the $50,000 – $74,999 income bracket (Figure 23-6).

Household median income in the Brunswick GA MSA in 1999 was $36,539.46 and per capita income for the same year was $19,581.15. The percentage of people under the poverty line in the region was 15.6 in the year 2000. The average household size in 2000 was 2.48.[3]

Figure 23-6. Brunswick, GA: Distribution of Households by Household Income Level, 1999

EMPLOYMENT

As shown on Figure 23-7, of the employed civilian population ages 16 or over, 30 percent of females are employed in the educational, health and social services industry, and about 28 percent are employed in 'other' industries, which include the arts, entertainment, recreation, food services, public administration and information. Over 25 percent of males are employed in 'other' industries, and 45 percent of males (distributed fairly evenly among each industry- around 15 percent each) are employed in the construction, wholesale and retail trade and manufacturing industries.

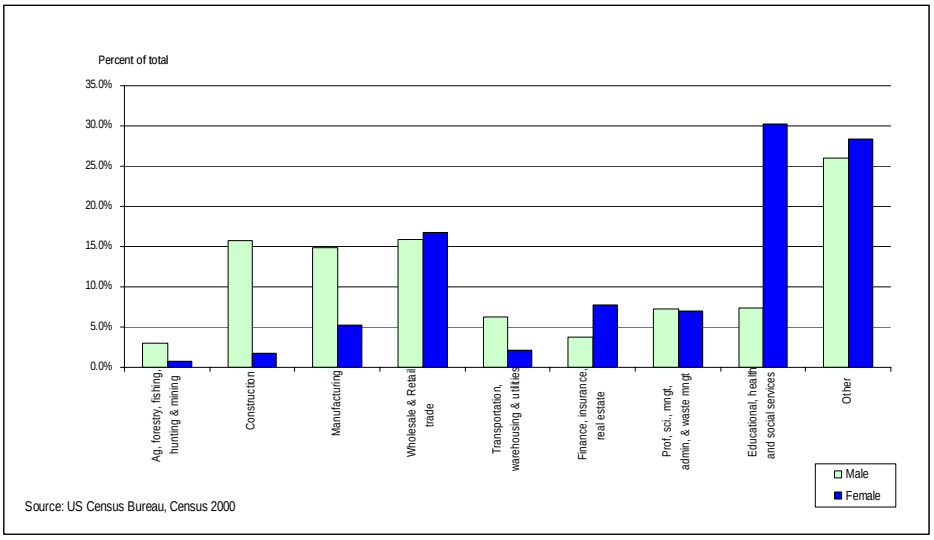
An estimated 4.1 percent of males are unemployed; whereas 6.9 percent of females are unemployed in the region.[4]

According to the 2000 US Census, an estimated 1.8 percent of males and 0.3 percent of females are employed in farming, fishing and forestry occupations. About 21.0 percent of males and 6.9 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.6 percent of male's occupations and 0.04 percent of female's occupations.

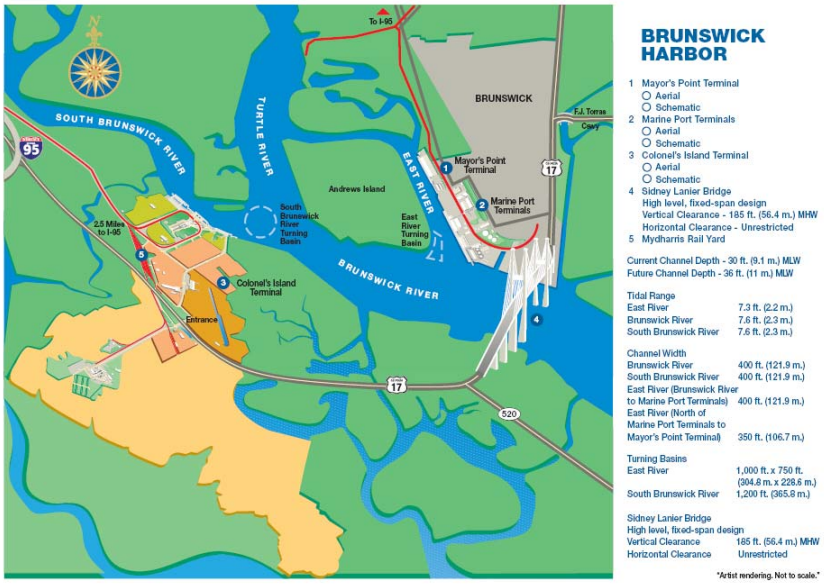
[3] US Census Data, Census 2000.

[4] Source: US Census Data, Census 2000.

Figure 23-7. Brunswick, GA: Employed Civilian Population by Sex and Industry 16 Years and Over, 2000



MARITIME INFORMATION



Marine Port Terminals

Owned by the Georgia Ports Authority and leased to Logistec U.S.A., Marine Port Terminals is a secured, deepwater facility specializing in the productive handling of a diverse mix of breakbulk and bulk commodities. The 145-acre (58.7-ha) facility features 2,415 linear feet (736 linear meters) of berthing and 491,000 square feet (45,617 square meters) of covered storage. Marine Port Terminals is ideally situated within 7 miles (11.3 km) of Interstate 95 (North / South). On-terminal interchange and line-haul services are provided by two Class I rail providers, CSX Transportation and Norfolk Southern Railroad.

Mayor's Point Terminal

Owned and operated by the Georgia Ports Authority, Mayor's Point Terminal is a secured, dedicated breakbulk facility specializing in the rapid and efficient handling of a vast array of forest products and solid wood products. The 22-acre (8.9-ha) facility features 1,750 linear feet (533 linear meters) of berthing, 355,000 square feet (32,980 square meters) of intransit space, 2,000 feet (610 m) of covered rail siding and 7.9 acres (3.21 ha) of open, versatile storage. As a key U.S. South Atlantic gateway, the Port of Brunswick provides a competitive portfolio of ocean carrier services, as well as excellent interstate and rail connections to all major Southeast, Midwest and Gulf Coast commerce centers. Mayor's Point Terminal is ideally situated within six miles (9.7 km) of Interstate 95 (North / South). Two Class I rail providers, CSX Transportation and Norfolk Southern Railroad, offer exceptional service.[5]

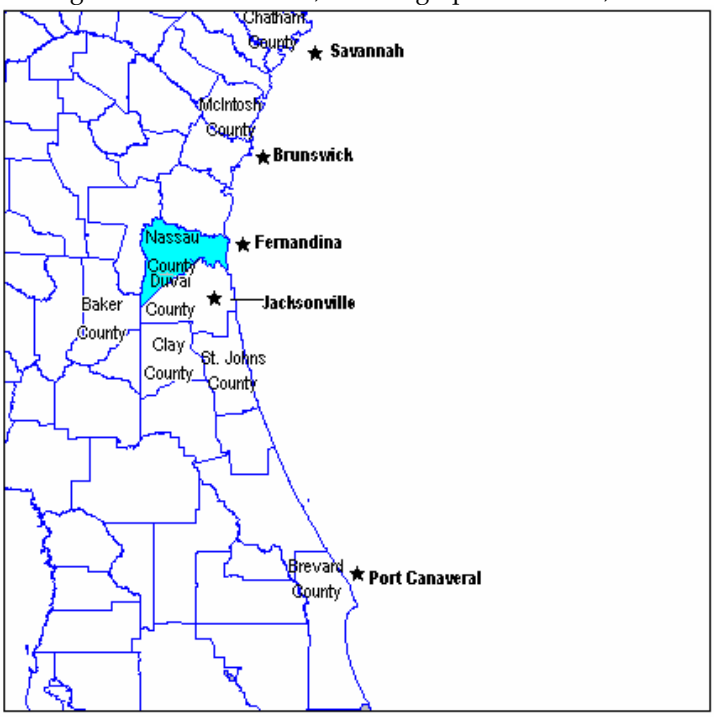
[5] Georgia Ports Authority website: http://www.gaports.com

24. Fernandina, FL

Location and Background Information

The Port of Fernandina is located in Nassau County, FL.

Figure 24-1. Fernandina, FL: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

The total population in this county for the year 2000 was 57,663, according to the 2000 US Census. Of this total, 28,443 or 49.3 percent were males and 29,220 or 50.7 percent were females. The median age for the population for the same year was 38.3 years; 37.6 for males and 38.9 for females. About 25 percent of males and nearly 25 percent of females are between the ages of 0 and 17 years. About 15 percent of males and females fall within the 40-49 years age range (Figure 24-2).

As shown on Figure 24-3, 90.1 percent of the total population is white, 7.4 percent is Black or African American, 1.8 percent are part of the 'other' category (American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) and 0.7 percent of the population is Asian. Only 1.8 percent of the total population is considered to be of Hispanic or Latino origin.[1]

[1] Source: US Census Data, Census 2000.

Figure 24-2. Fernandina, FL: Structure of the Population by Age Group, 2000

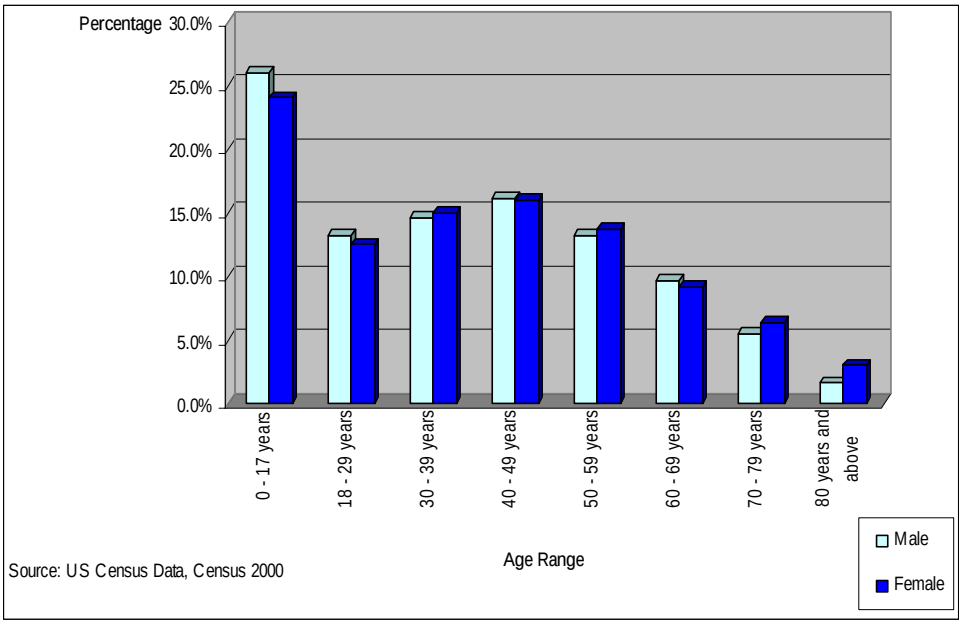
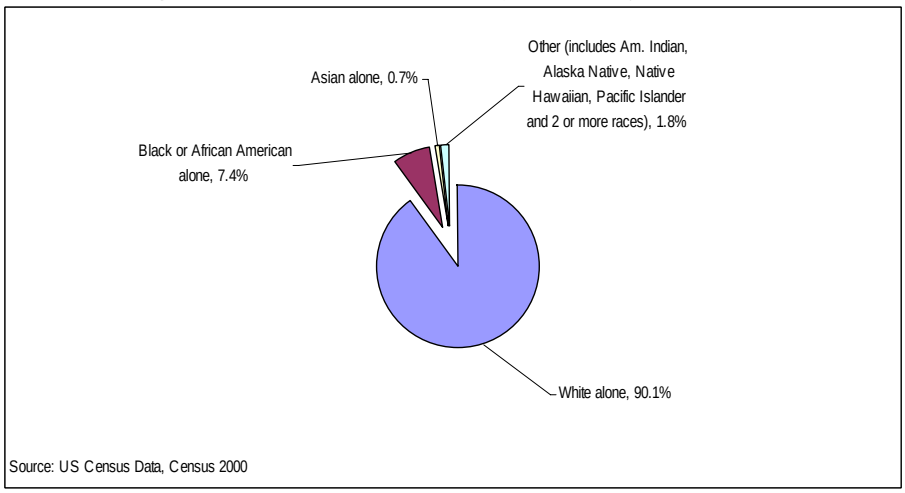
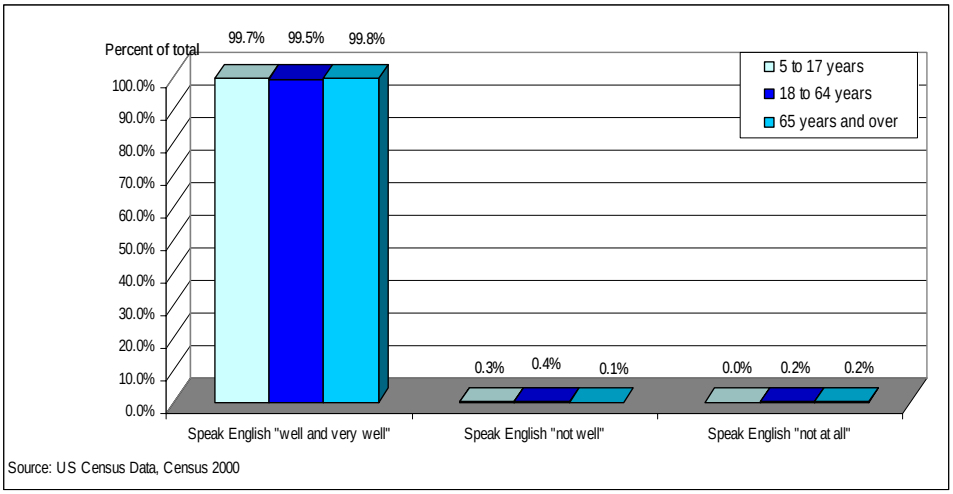


Figure 24-3. Fernandina, FL: Population by Race, 2000



It is evident from the data specified in Figure 24-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'.

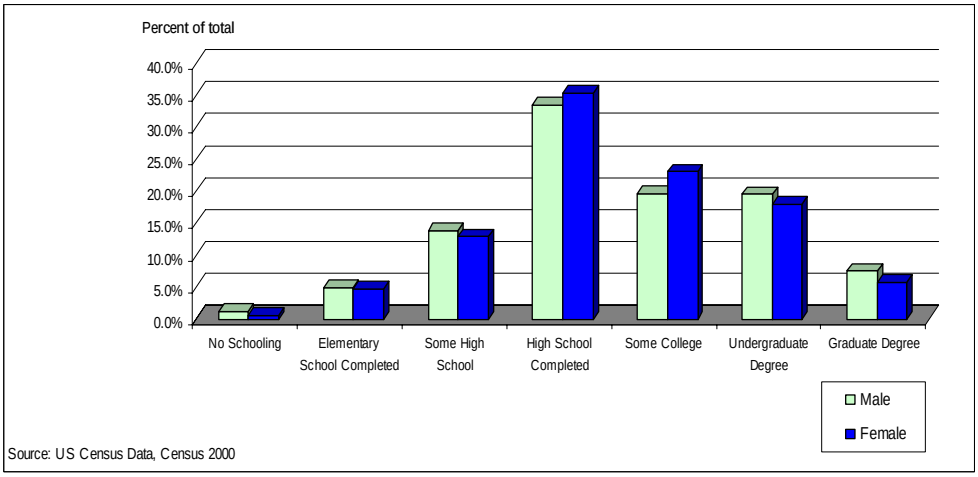
Figure 24-4. Fernandina, FL: Ability to Speak English by Age Group, 2000



EDUCATION

As portrayed by Figure 24-5, of the population of Nassau County, FL, ages 25 and over, over 35 percent of males and females (nearly 40 percent of females) have completed high school. Over 18 percent of males and females have completed some college and between 15 – 20 percent of males and females have obtained an undergraduate degree.

Figure 24-5. Fernandina, FL: Educational Attainment of Population by Sex Ages 25 and Over, 2000



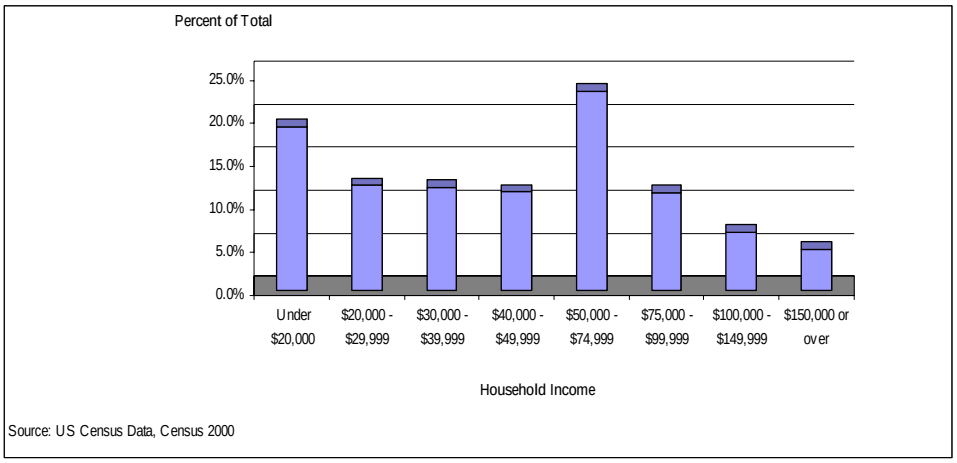
Socio-Economic Characteristics

INCOME

Nearly a quarter of all households in Nassau County, FL in 1999 had an income that fell in the $50,000 - $74,999 income bracket. About 20 percent of households in the county had an income under $20,000 (Figure 24-6).

Household median income in the county in 1999 was $46,022 and per capita income for the same year was $22,836. The percentage of people under the poverty line in the region was 9.1 in the year 2000. The average household size in 2000 was 2.59.[2]

Figure 24-6. Fernandina, FL: Distribution of Households by Household Income Level, 1999



EMPLOYMENT

As portrayed in Figure 24-7, of the employed civilian population, ages 16 or over, over 50 percent of females were employed in the educational, health and social services industries, and other industries (25 percent per industry). The 'other' category includes industries such as the arts, recreation, entertainment, food services and information. About 22 percent of males are employed in 'other' industries; around 16 percent of them are employed in the construction industry and 18 percent in the manufacturing industry.

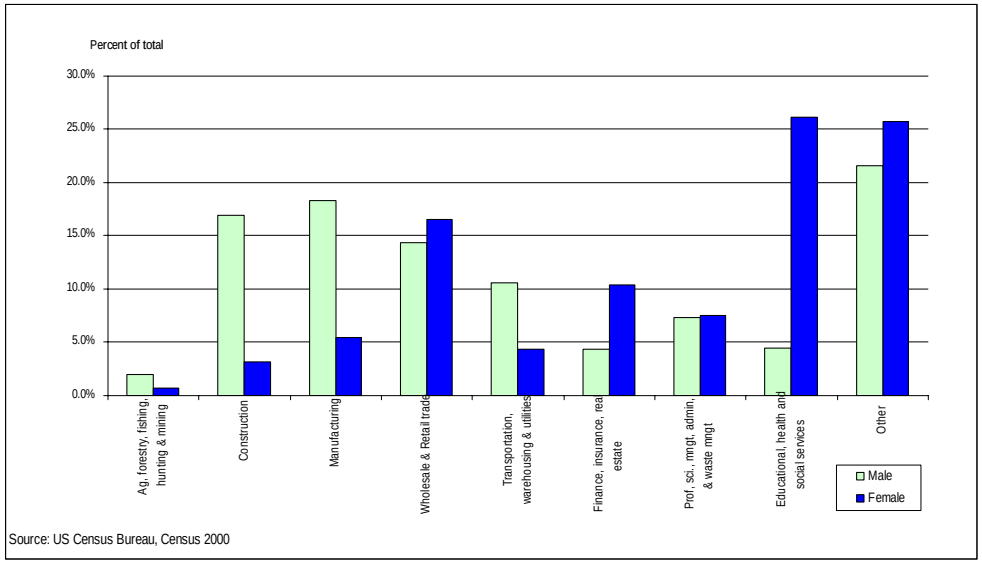
An estimated 4.4 percent of males and 5.2 percent of females are unemployed in the county.[3]

According to the 2000 US Census, an estimated 1.0 percent of males and 0.1 percent of females are employed in farming, fishing and forestry occupations. About 24.1 percent of males and 7.0 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.4 percent of male's occupations and 0.1 percent of female's occupations.

[2] US Census Data, Census 2000.

[3] US Census Data, Census 2000.

Figure 24-7. Fernandina, FL: Employed Civilian Population by Sex and Industry 16 Years and Over, 2000



MARITIME INFORMATION

Fernandina Beach in the Center of Activity and the "Crown Jewel" of Amelia Island. The town of Fernandina by the early 1800's had become a thriving seaport town. Both the "locals," as residents call themselves, and visitors to the Island appreciate the area's rich and colorful history. Fernandina Beach is the only city in the United States to have served under eight (8) flags.

The Port of Fernandina was the heart of the development of the city from its earliest days, but that changed dramatically in 1862, when Confederate forces were forced to abandon the Island. With the advancement of Federal troops, Fernandina's economy was wrecked. Its port, shops, warehouses were destroyed and the railroad, heavily damaged. By 1870, Fernandina had begun rebuilding the port and the town and once again became a bustling and thriving seaport town, relying primarily on the shipping industry, shrimping, and the tourist trade. The town was then rocked by another disaster, a devastating fire which burned and destroyed the original wooden structures from the docks to 3rd Street. This required another extensive rebuilding process.

Major William B. C. Duryee, who had served with the Occupational Forces of the Union Army, returned to Fernandina, purchased property at the west end of what is now Centre Street, and built a two-story masonry structure, unique for its time, due to its being built on pilings sunk into the earth for support. The building was completed in the mid 1880's. The first occupant was Major Duryee's business, which dealt in hay, grain, and oats. Also occupying the building was the First Customs House in the United States. Major Duryee also served as Collector of Customs. The lease was made by the U.S Treasury for $180.00 per annum. The Customs House occupied this space until the early 1900's. The Duryee Building, home now to the Marina Restaurant, was also the home of the oldest newspaper in the State of Florida. A very colorful and flamboyant Major George Fairbanks, who was the Editor, recorded Fernandina's life and history during that period of time. The 'Florida Mirror' later became the Fernandina Beach News-Leader, which continues in operation today. The First Bank of Fernandina was also located in the Duryee Building. This Bank was later sold and became the First National Bank of Florida.[4]

[4] URL: http://www.ameliaisland.com/fbhist.htm

Nassau Terminals - Port of Fernandina (AAPA Member)
Nassau Terminals provides terminal and stevedoring services as the operator of the Port of Fernandina under contract with the local port authority. The Port specializes in breakbulk forest products and container liner services to the Caribbean and South America.[5]

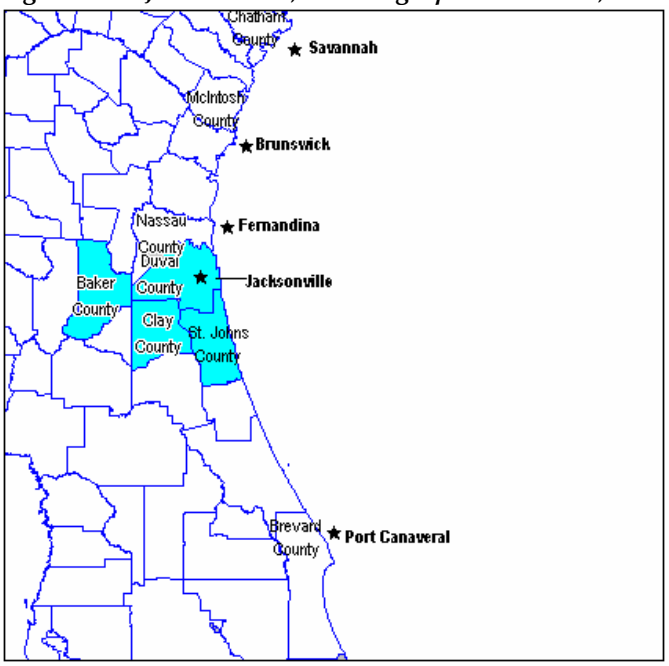
[5] American Association of Port Authorities website: http://www.aapadirectory.com/cgi-bin/showpage.cgi?id=3914

25. Jacksonville, FL

Location and Background Information

The Port of Jacksonville, Florida is part of the Jacksonville, FL Metropolitan Statistical Area (MSA).

Figure 25-1. Jacksonville, FL: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

The total population of the Jacksonville, FL MSA in 2000 was 1,065,087, according to the 2000 US Census. Of the total, 518,618 or 48.7 percent were males and 546,469 or 51.3 percent were females. The median age for the MSA in the same year was 35.1 years; 33.9 for males and 36.1 for females. About 27 percent of males and nearly 25 percent of females are between the ages of 0 and 17 years. About 45 percent of males and females (15 percent per age group approximately) are between the ages of 18 and 49 years (Figure 25-2).

As shown in Figure 25-3, 71.9 percent of the total population is white, 22.2 percent is Black or African American, 3.6 percent is categorized as 'others' (includes American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) and 2.3 percent is Asian. Furthermore, in terms of ethnic makeup, around 3.9 percent of the total population is considered to be of Hispanic or Latino origin.[1]

[1] Source: US Census Data, Census 2000.

Figure 25-2. Jacksonville, FL: Structure of the Population by Age Group, 2000

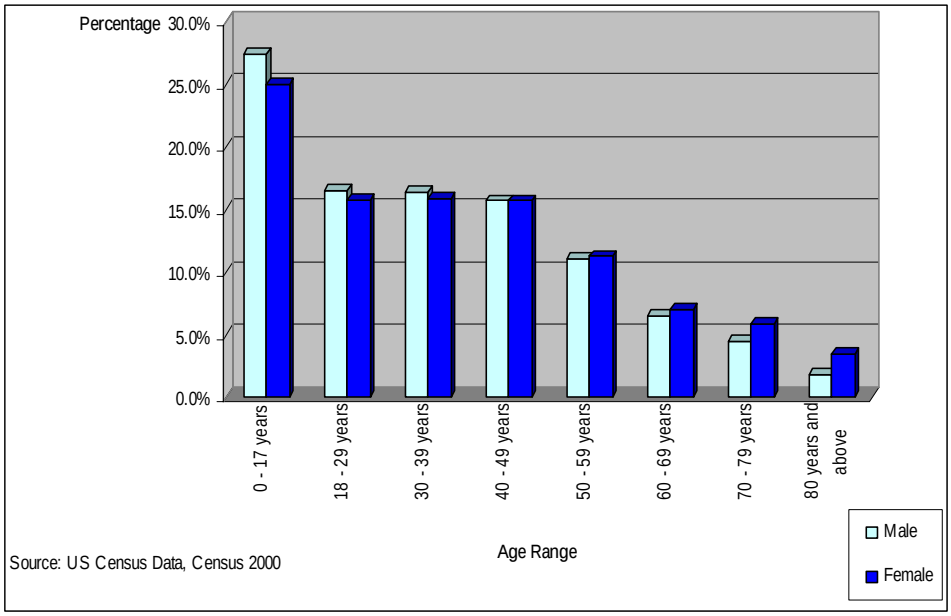
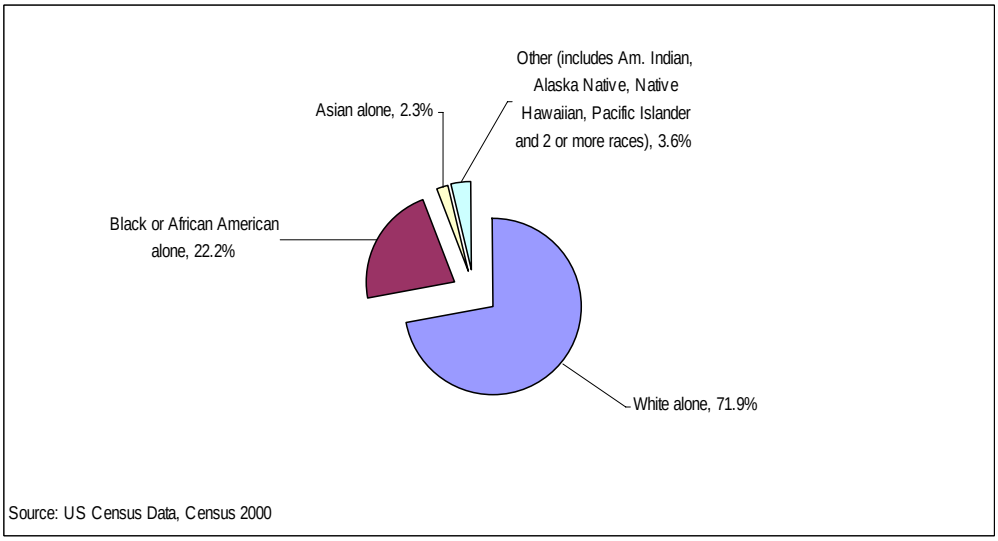
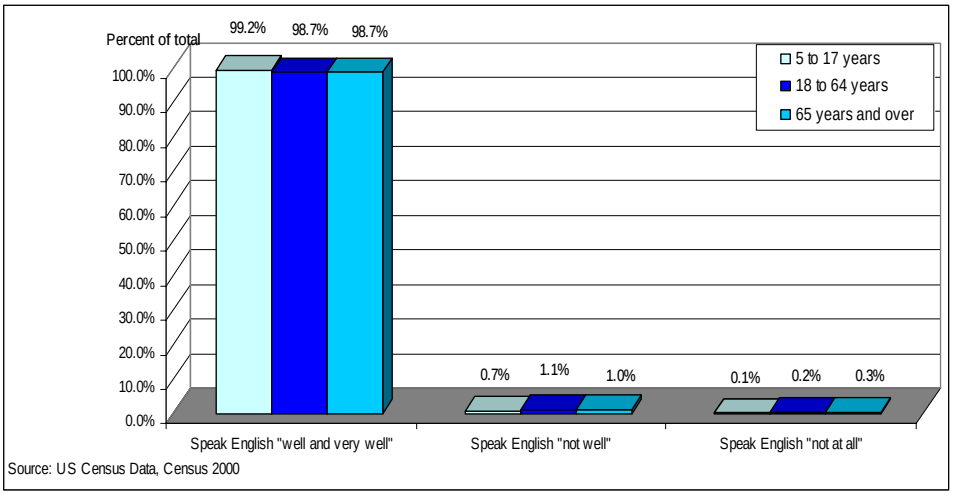


Figure 25-3. Jacksonville, FL: Population by Race, 2000



It is evident from the data specified in Figure 25-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'.

Figure 25-4. Jacksonville, FL: Ability to Speak English by Age Group, 2000

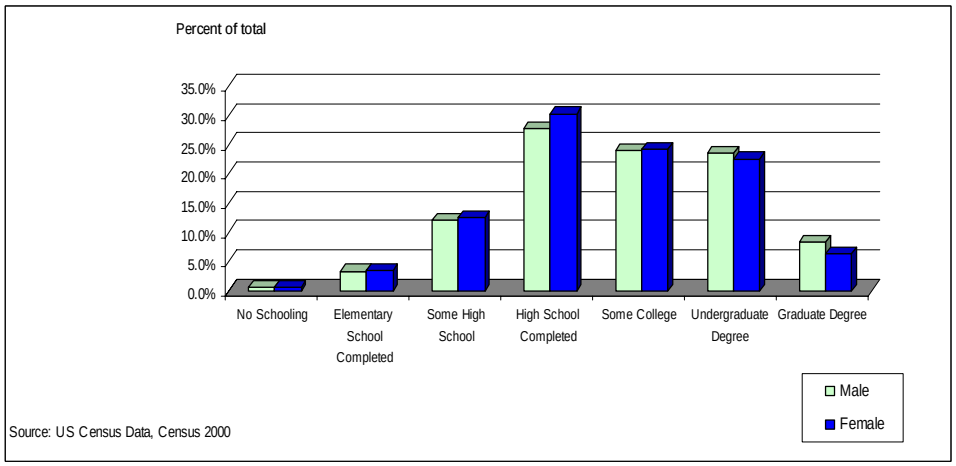


EDUCATION

As portrayed in Figure 25-5, of the population in the Jacksonville, FL MSA aged 25 or over, nearly 30 percent of females and 25 percent of males have completed high school. About 23 percent of males and females have completed some college and over 20 percent of males and females have obtained an undergraduate degree.

Some of the colleges and universities in the area are: Edward Waters College, Florida Community College at Jacksonville, Jacksonville University, Jones College - Jacksonville, Trinity Baptist College and the University of North Florida.

Figure 25-5. Jacksonville, FL: Educational Attainment of Population by Sex Ages 25 and Over, 2000



Socio-Economic Characteristics

INCOME

About 22 percent of households in the Jacksonville, FL MSA in 1999 had an income that fell within the $50,000 - $74,999 income bracket and around 20 percent of households had incomes below $20,000. Only 5 percent of households had incomes of $150,000 or over (Figure 25-6).

Household median income in 1999 in the region according to the 2000 US Census was $42,825.10 and per capita income was $21,567.15. The percentage of people under the poverty line in the region was 10.8 in the year 2000. The average household size for 2000 was 2.54.[2]

Figure 25-6. Jacksonville, FL: Distribution of Households by Household Income Level, 1999

EMPLOYMENT

Of the employed civilian population, aged 16 or over, in the Jacksonville, FL MSA in 2000, over 25 percent of females were employed in the educational, health and social services industries and over 20 percent were employed in 'other' industries. 'Other' industries include the arts, recreation, entertainment, food services and information. About 20 percent of males were employed in 'other' industries and around 17% were employed in the wholesale and retail trade industries. Less than 1 percent of males and females were involved in agriculture, mining, fishing, farming or forestry industries (Figure 25-7).

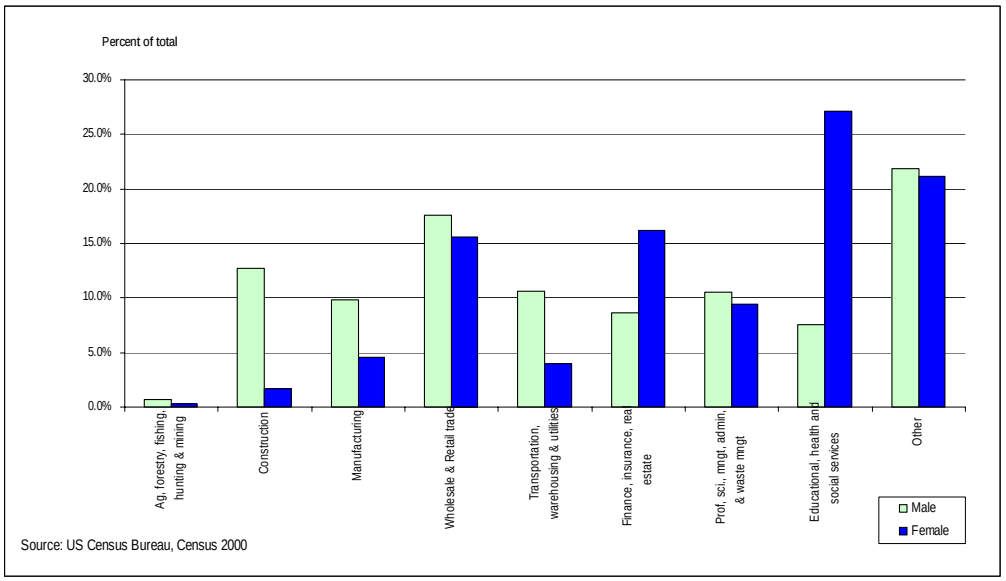
An estimated 4.2 percent of males and 4.9 percent of females were unemployed in the MSA in the year 2000.[3]

According to the 2000 US Census, an estimated 0.5 percent of males and 0.1 percent of females are employed in farming, fishing and forestry occupations. About 17.4 percent of males and 5.2 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.7 percent of male's occupations and 0.1 percent of female's occupations.

[2] US Census Data, Census 2000.

[3] US Census Data, Census 2000.

Figure 25-7. Jacksonville, FL: Employed Civilian Population by Sex and Industry 16 Years and Over, 2000



MARITIME INFORMATION

The Jacksonville Port Authority (JAXPORT) is a full-service international trade seaport in Northeast Florida. JAXPORT offers multiple cargo terminals and unmatched opportunities for intermodal transportation of container, automobile, bulk, breakbulk and refrigerated cargoes, as well as cruise passenger service.

JAXPORT owns and operates three public marine terminals and one passenger cruise terminal in Jacksonville Florida: the Blount Island Marine Terminal, the Talleyrand Marine Terminal, the Dames Point Marine Terminal, and the temporary JAXPORT Cruise Terminal. JAXPORT develops, manages and markets those publicly-owned facilities to promote the growth of maritime and related industries in Jacksonville Florida and beyond. JAXPORT also offers year-round cruise ship service aboard Carnival Cruise Lines' ship Celebration. The Celebration sails from the JAXPORT Cruise Terminal.

The port of Jacksonville, Florida, has a rich maritime history. Travel back to 1562 and you would see Jean Ribault and his French Huguenots crossing a shallow sand bar into what is now called the St. Johns River. In 1565, English traders sailed into the mouth of the St. Johns and traded guns and ammunition for food and a vessel with the French Huguenots who had settled at Fort Caroline. This transaction was the first recorded act of international waterborne commerce in the New World; hence Jacksonville is known as America's First Port.

In 1963, Florida Legislature created the Jacksonville Port Authority. The City transferred to the JPA the Talleyrand Municipal Docks near downtown and a tract of land known as Goat Island, later renamed Blount Island. The original Charter granted the Port Authority 1.5 mils of ad valorem taxing authority. The Florida State Legislature amended JPA's Charter, repealing the port's 1.5 mils of ad valorem

authority and capping the annual City's allocation to the port at its present millage value, $800,000. To this day, JAXPORT has no taxing authority.
In 1964, voters approved port improvements and the issuance of a $25 million General Obligation Bond for port improvements. In 1968, as part of the consolidation of the City of Jacksonville and Duval County, the City transferred ownership and management of its airports to the JPA. In addition to its maritime responsibilities, the Port Authority managed operations at Jacksonville International Airport, Craig Airport and Herlong Airport until October 1, 2001, when a separate Jacksonville Airport Authority was created to manage those facilities.

In 1972 JPA sold the eastern half of Blount Island to Offshore Power Systems, Inc. when this company announced plans to build floating nuclear power stations. For a variety of economic reasons, the project never moved forward and the property was sold to Gate Maritime, Inc. In 1978 the U.S. Army Corps of Engineers deepened the St. Johns River from 34 to 38 feet, a depth maintained for more than 20 years. In 1992 JPA facilities handled 5,001,074 tons in fiscal year 1992, the first time the port reached the five million ton mark. In 1998 JPA acquired the final property for its third marine terminal: Dames Point. While JPA owns nearly 600 acres at the site in Northeast Jacksonville, plans call for potentially leaving more than one third of the property in its natural state to protect environmentally sensitive wetlands. In 1999 JPA facilities set a port record by moving 7,524,271 tons of cargo in fiscal year 1999. This marked the ninth consecutive year of tonnage growth at the port. In 2001 Port security becomes paramount, and in the same year, the Florida Legislature repealed the JPA's existing charter and abolished the JPA by enacting Chapter 2001-319, Laws of Florida. Two new authorities were created: the Jacksonville Airport Authority took over control and operations of all aviation facilities formerly controlled by the JPA, and the Jacksonville Seaport Authority (doing business as the Jacksonville Port Authority, or JAXPORT) was created to handle all matters related to the marine operations and facilities formerly controlled by the JPA. The seaport continued to call itself the "Jacksonville Port Authority" or "JAXPORT."

In 2002 JAXPORT completed the first strategic business plan for the new JAXPORT, placing an emphasis on growing the port's business and economic impact for the community. In 2003 U.S. the U.S. Army Corps of Engineers deepened the St. Johns River from 38 to 41 feet. In 2003 Celebrity Cruises and Carnival Cruise Lines both announced plans to begin regular service from Jacksonville - the city's first regular cruise service. JAXPORT built a temporary cruise terminal in only six months. Celebrity kicked off their Jacksonville service with an 11-night cruise to the Caribbean on October 27, 2003 aboard the 1,375-passenger Zenith.

JAXPORT's three marine terminals handled a record-setting 7.6 million tons of cargo in Fiscal Year 2004, including more than 530,000 vehicles - making JAXPORT one of the largest vehicle handling ports in the country.

Blount Island Marine Terminal
Located just nine nautical miles from the Atlantic Ocean, the Blount Island Marine Terminal has 5,280 feet of berthing space on 41 feet of deepwater. Blount Island has an additional 1,350 feet of berthing space on 38 feet of water. This 754-acre terminal is JAXPORT's largest container facility - handling 80 percent of the nearly 700,000 TEUs moved annually through JAXPORT facilities. The terminal dedicates more than 150 acres to container storage, and 240,000 square feet of dockside transit shed to house commodities such as stainless steel, liner board, wood pulp and other cargoes in need of warehousing.

Blount Island also is one of the largest vehicle import-export centers on the East Coast, and the terminal handles recreational boats, tractors, paper, wood pulp, forest products and a variety of general cargoes. The entire terminal is covered under JAXPORT's Foreign Trade Zone No. 64 license and can be activated for qualified users.

To help speed both ships and cargo on their way, JAXPORT deploys nine cranes on the island, including eight container cranes. The efficient movement of cargo is facilitated by the terminal's on-dock rail served directly by CSX Corporation.

Talleyrand Marine Terminal
The Talleyrand Marine Terminal is located 21 miles from the Atlantic Ocean on the St. Johns River. This 173-acre terminal has 38 feet of water along its docks. Talleyrand handles South American and Caribbean containerized cargoes, breakbulk commodities such as steel and paper, imported automobiles, frozen and chilled goods and liquid bulk commodities.

Ocean carriers calling the Talleyrand Marine Terminal offer direct access to world trade lanes for all U.S. bound or originated containerized cargo through Freeport, Bahamas. This efficient transportation link bridges Freeport and major U.S. markets through Jacksonville.

The terminal also offers on-Dock warehousing; JAXPORT Refrigerated Services, an ICS Logistics Company, offers 160,000-square feet of warehouse space which can handle cargo in ambient, cooler or freezer conditions. This facility is located within 75 feet of Talleyrand's vessel berthing area. It offers on-Dock Rail Facilities; it provides direct switching for Norfolk Southern, CSX and Florida East Coast Railroad. Furthermore, the entire terminal is within FTZ #64.

The Talleyrand terminal is serviced by three Class 1 railroads, and is easily reached by I-95 and I-10 leading to U.S. 1 and Jacksonville's 20th Street Expressway. Currently, long-time JAXPORT tenant ICS Logistics is constructing a 553,000-square foot warehouse at the Talleyrand Marine Terminal to store an assortment of cargoes. ICS projects warehouse operations to create 45-60 new full and part-time jobs in Jacksonville, with the potential to create as many as 500 direct and indirect jobs over the course of 30 years. Construction is expected to be complete by the close of 2005. Once built, the new warehouse will give ICS more than 700,000-square feet of warehouse space at Talleyrand.

Dames Point Marine Terminal
The Dames Point Marine Terminal is JAXPORT's newest marine facility. The terminal fronts on the harbor's 41-foot deep channel. Located on more than 585 acres of land owned by JAXPORT, this terminal is only 12 miles from the open sea. Dames Point is one of the few major greenfield sites on the U.S. East coast available for port development.

JAXPORT is currently expanding Dames Point's bulk terminal to 22 acres, and plans call for adding facilities to support new breakbulk cargoes and potentially new container or Ro/Ro operations. JAXPORT is now soliciting new business partnerships with investor/operators for further development of this site.

The JAXPORT Cruise Terminal, located one mile northwest of the Dames Point Marine Terminal, offers service to cruise ships calling Jacksonville. JAXPORT has committed more than $200 million in capital projects over the past decade to improve its three marine terminals and Jacksonville's harbor.

At the Dames Point Marine Terminal, JAXPORT has recently expanded its bulk terminal to 22 acres, and plans call for adding facilities to support new breakbulk cargoes and potentially new container or Ro/Ro operations.[4]

[4] Jacksonville Port Authority website: http://www.jaxport.com/

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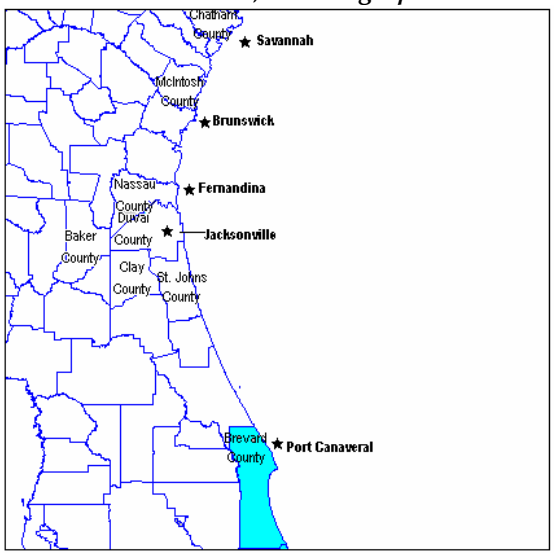
26. Port Canaveral, FL

Location and Background Information

Port Canaveral is located in the Palm Bay-Melbourne-Titusville, Florida Metropolitan Statistical Area (MSA). This MSA is comprised of Brevard County, FL. The port is strategically located on Florida's Central Atlantic Coast and has the necessary intermodal connections to reach all of Florida and the Southeast U.S. In addition, it is an ideal hub between the Southeast U.S., the Caribbean and Central America.

In operation for more than half a century, Port Canaveral has built its reputation as a business-friendly port and a reliable facilitator of breakbulk cargo, with an excellent background in: fresh produce, frozen food, single-strength juice and juice concentrate, milled lumber, bagged cement, steel and newsprint. Efficient handling systems carry cargo from vessels to warehouses. More than three million tons of bulk cargo moves through Port Canaveral per year. The port has cement, petroleum and aggregate facilities, as well as conveyors and hoppers for efficient loading of products directly into trucks. [1]

Figure 26-1. Port Canaveral, FL: Geographic Location, 2000



Source: Table 3-1

Demographics

POPULATION

Brevard County had a total population of 476,230 in the year 2000, according to the 2000 US Census. Of this total, 233, 186 or 49 percent were males and 243,044 or 51 percent were females. The median age in the county in 2000 was 41.4 years, 40.3 for males and 42.6 for females. Over 20 percent of males and females are between the ages of 0 and 17 years. About 15 percent of males and females fall within the 40-49 years age range (Figure 26-2).

[1] Port Canaveral website: http://www.portcanaveral.org

As shown in Figure 26-3, 86.7 percent of the population in Brevard County, FL is white, 8.1 percent of the population is Black or African American. 'Others' (which include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone), represent 3.7 percent of the population and the Asian population represents only 1.5 percent of the total population. About 4.6 percent of the total population is considered to be of Hispanic or Latino origin.[2]

Figure 26-2. Port Canaveral, FL: Structure of the Population by Age Group, 2000

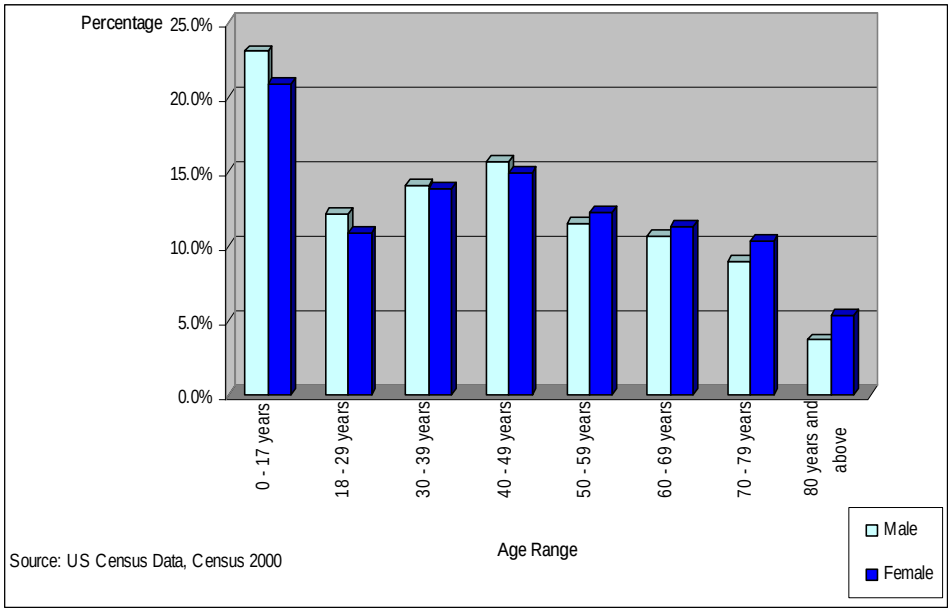
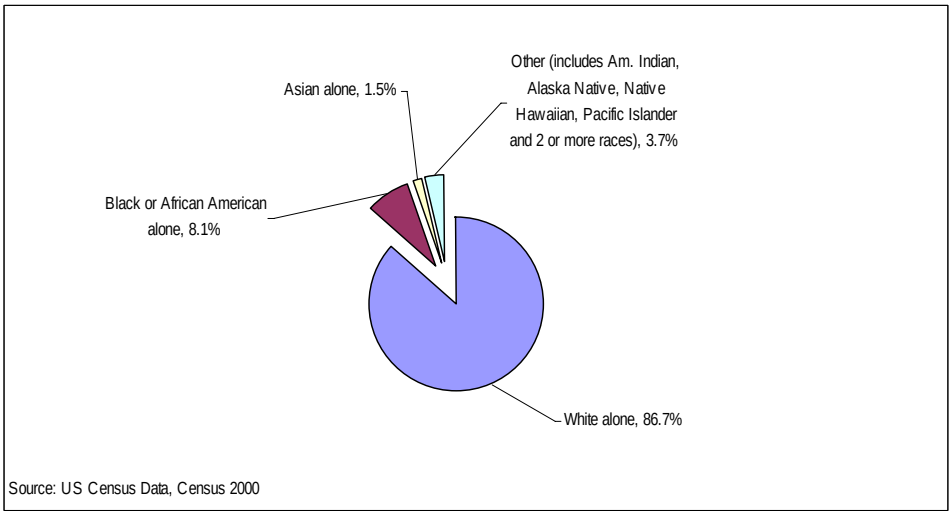


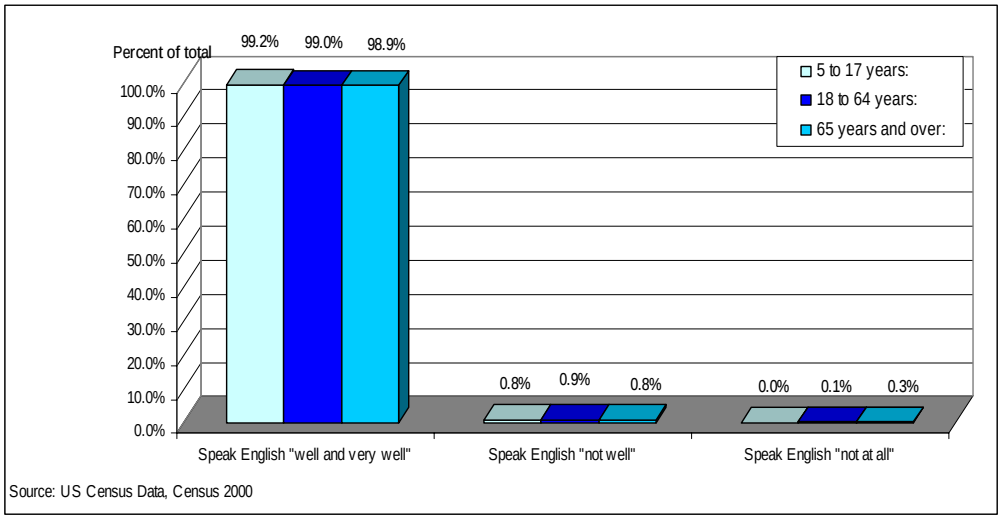
Figure 26-3. Port Canaveral, FL: Population by Race, 2000



[2] US Census Data, Census 2000.

It is evident from the data specified in Figure 26-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'.

Figure 26-4. Port Canaveral, FL: Ability to Speak English by Age Group, 2000

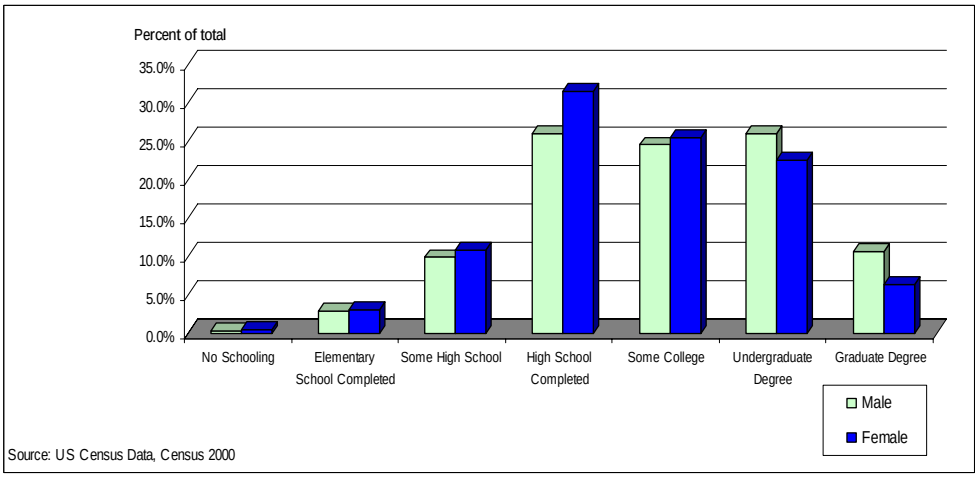


EDUCATION

Of the population in Brevard County, FL, ages 25 or over, 30 percent of females and 25 percent of males have completed high school. About 25 percent of the population has finished some college, and about 21 percent of females and 25 percent of males have obtained an undergraduate degree (Figure 26-5).

There are only two higher education institutions in the area: Brevard Community College and the Florida Institute of Technology.

Figure 26-5. Port Canaveral, FL Educational Attainment of Population by Sex Ages 25 and Over, 2000



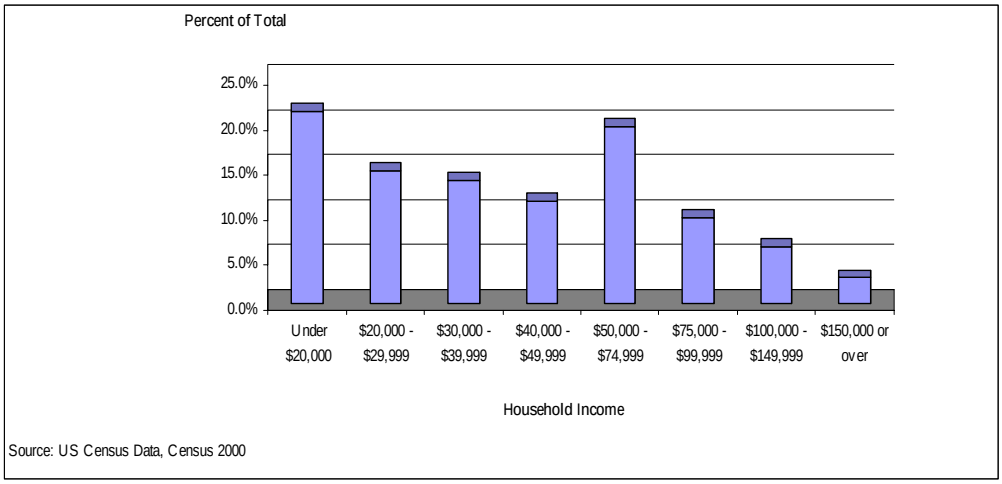
Socio-Economic Characteristics

INCOME

About 23 percent of all households in the county had an income of under $20,000 in 1999, and over 20 percent of households fell within the $50,000 - $74,999 income bracket. Less than 3 percent of households had incomes of $150,000 or above (Figure 26-6).

Household median income in the region in 1999 was $40,099 and per capita income for the same year was $21,484. The percentage of people under the poverty line in the region was 9.5 in the year 2000. The average household size in 2000 was 2.35.[3]

Figure 26-6. Port Canaveral, FL: Distribution of Households by Household Income Level, 1999



EMPLOYMENT

As shown in Figure 26-7, of the employed civilian population in Brevard County, FL, ages 16 or over, around 29 percent of females are employed in the educational, health and social services industry. This percentage is closely followed by females employed in 'other' industries (25 percent), which include the arts, recreation, entertainment, food services and information. About 25 percent of males are employed in 'other' industries, 17 percent of them are employed in the manufacturing industry and 15 percent are employed in the wholesale and retail trade industry.

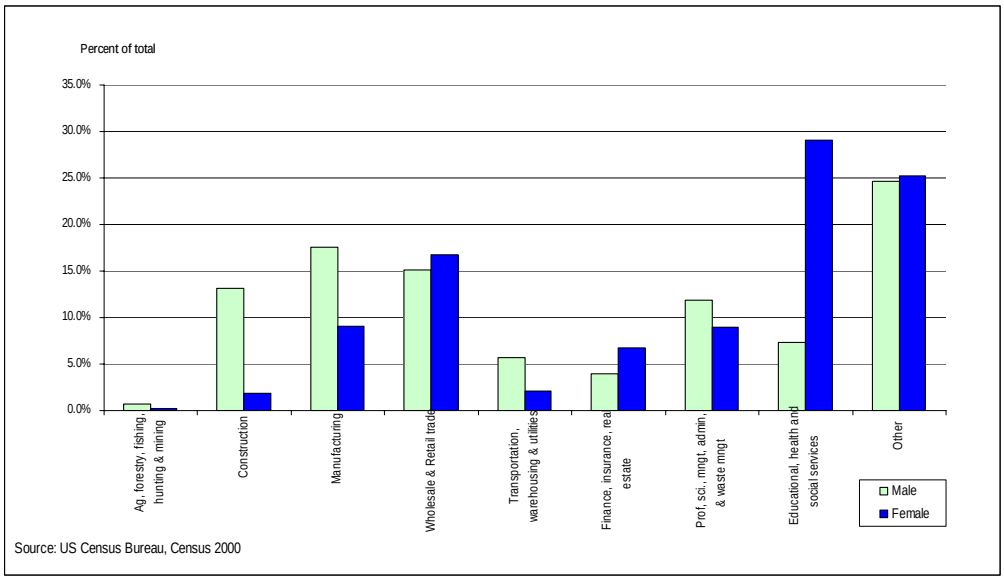
An estimated 4.8 percent of males and 5.0 percent of females were unemployed in the region in the year 2000.[4]

According to the 2000 US Census, an estimated 0.5 percent of males and 0.1 percent of females are employed in farming, fishing and forestry occupations. About 14.8 percent of males and 6.2 percent of females are employed in production, transportation and material moving occupations. The aforementioned occupations include rail, water and other transportation occupations. Rail, water and other transportation occupations represent only 0.6 percent of male's occupations and 0.1 percent of female's occupations.

[3] US Census Data, Census 2000.

[4] US Census Data, Census 2000.

Figure 26-7. Port Canaveral: Employed Civilian Population by Sex and Industry 16 Years and Over, 2000



MARITIME INFORMATION

The Canaveral Port Authority is an independent governmental agency created by the Florida Legislature. The Canaveral Harbor Port District was created by House Bill 1136, Chapter 28922, from the Laws of Florida Special Acts of 1953. It established a port district in the central and north areas of Brevard County, Florida, and designated the area as the Canaveral Port District. As an independent governing body, the Canaveral Port Authority can levy ad valorem taxes, incur indebtedness through the sale of bonds, establish Federal Maritime Commission -regulated tariff rates and negotiate for government grants. Five elected commissioners representing the five port regions are the governing body of Port Canaveral and have jurisdiction over all fiscal and regulatory policies and operations of the Port.

For the past 50 years, Port Canaveral has been offering cargo services in Florida. It handles a variety of cargoes on an ongoing basis: cement, petroleum, aggregate, fresh produce and other perishables, frozen food, single-strength juice and juice concentrate, milled lumber, steel, newsprint, and special project cargo. In addition, the port has the facilities for handling containerized cargoes. The port has 24-hour cargo terminals, a south Intermodal Gate to provide faster truck throughput at the south cargo piers, with a fiber optic weighing and tracking system for breakbulk cargo.

Each cargo berth pier is 400 feet with a 50-foot apron. The **North Cargo Piers 1 and 2 (continuous)** have 1,260 feet of docking space extending north/south with–38‘9” MLW draft, with a 66-foot apron. Vessel length is unlimited. North Cargo Pier 3 has 800 feet of docking space extending east/west with–32’ MLW draft. Vessel length is unlimited. North Cargo Pier 4 has 800 feet of docking space extending east/west withÐ36’ MLW draft. The pier is equipped with a cement unloader and with pipes for self unloading of cement ships. Vessel length is unlimited but not to extend more than 140 feet to west of pier face.

South Cargo Piers 1, 2 and 3 (continuous) have 1,616 feet of docking space with Ð34’ 10” MLW draft. South Cargo Pier 3 is equipped with petroleum manifolds for five products. Vessel length is unlimited. Tanker Berth 1 has 900 feet of docking space with Ð39’ 6” MLW draft. It is equipped for five

petroleum products and bulk cement self unloaders. Vessel length is unlimited but not to extend more than 140 feet to west of pier face. South Cargo Pier 4 has 800 feet of docking space with Ð39′ 6″ MLW draft with a 50-foot apron. It is equipped with four load arms for loading and discharging number 6 oil to and from shore-side facilities. South Cargo Pier 5 has 800 feet of docking space with Ð39′ 6″ MLW draft, it also has 400 feet of pier space with a 50-foot apron.

The port features nearly 14 acres of covered warehouse storage facilities, as well as dry warehouse and temperature/humidity-controlled areas. It also provides special storage facilities for: cement and petroleum; and 120,000 square feet of general purpose foreign trade zone warehousing.

Private terminal and warehouse operators at the port include:

Mid-Florida Freezer Warehouses, Ltd: boasts the largest, privately held, vessel-side freezer/chill facility in the South, with 8.6 million cubic feet. Mid Florida Freezer also operates more than 400,000 square feet of dry vessel-side cargo warehouses.

Ambassador Services, Inc: offers ship agency, cruise ship stevedoring, logistics, equipment fabrication, rail terminal operations, receiving and processing building products for distribution and warehouse operations, are but a sampling of their many areas of expertise.

The Foreign Trade Zone Group, Inc: operating an expanding FTZ climate-controlled warehouse, The Foreign Trade Zone Group offers computerized inventory systems management services, record storage and value added distribution services. CBP house broker and freight forwarders are available on site.

Integrated Distributions Services, Inc: climate-controlled FTZ warehouse. Offers general warehousing and record storage with computerized inventory systems management and pick up and delivery services. IDS opened the first Container Freight Station in the port in 1999.

Cruise Terminals:

North Side Terminals
Terminal No. 5 has a 2,000 x 1,200' turning area Cruise, 970 feet of docking space, 565 feet of pier space, 40 feet wide with -35 MLW draft, 63,000 square feet embarkation/baggage handling facility and 1,536 paved parking spaces. Cruise Terminal No. 8 has 1,000 feet of docking space, 50-foot wide -35 feet MLW draft, 70,000 square feet embarkation/baggage handling facility and 1,100 parking spaces. Cruise Terminal No. 9/10 has 1,100 feet of docking space, 700 feet of pier space, 50 feet wide with -35 MLW draft, 80,000 square foot embarkation/baggage handling facility and 2,150 paved parking spaces, including 1,200-vehicle parking garage.

South Side Terminals
These terminals have 2,153 feet of continuous dock with -28 feet MLW draft. Cruise Terminal No. 2 has 8,500 square feet of embarkation space and 17,000 square feet of baggage handling area and 246 paved parking spaces. Cruise Terminal No. 3 has 8,500 square feet of embarkation space and 16,000 square feet of baggage handling area and 662 paved parking spaces. Cruise Terminal No. 4 has 9,200 square feet of embarkation area and 20,000 square feet of baggage handling area and 699 paved parking spaces. Two large- or three medium-length cruise ships can be accommodated at Cruise Terminals 2, 3 and 4 to a total of 2,153 feet.

Port Canaveral is Foreign Trade Zone number 136.[5]

[5] Port Canaveral website: http://www.portcanaveral.org

APPENDIX E

U.S. East Coast Ferry Vessels and Routes

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Table E-1. Ferry Vessels Operating on U.S. East Coast, 2000

State and Vessel Name	City	State	Type	Typical Speed (Knots)	Length (ft)	Gross Tons
Maine						
Scotia Prince	Portland	ME	RoRo	18	469	11,968
Margaret Chase Smith	Rockland	ME	RoRo	14	152.8	99
Captain Charles Philbrook	Rockland	ME	RoRo	12	127	288
Captain Neal Burgess	Rockland	ME	RoRo	12	127	288
Captain Henry Lee	Rockland	ME	RoRo	12	127	288
Governor Curtis	Rockland	ME	RoRo	12	123.2	303
Machigonne II	Portland	ME	RoRo	9	116.4	88
Everett Libby	Rockland	ME	RoRo	10	104.8	198
North Haven	Rockland	ME	RoRo	10	84.8	143
Bay Mist	Portland	ME	Passenger	9	83.9	95
Maquoit II	Portland	ME	RoRo	9	77.9	97
Balmy Days II	Boothbay Harbor	ME	Passenger	12	64.9	97
Island Romance	Portland	ME	Passenger	9	64.7	78
Elizabeth Ann	Port Clyde	ME	Passenger	10.5	64	48
Island Holiday	Portland	ME	Passenger	9	59.9	84
Laura B.	Port Clyde	ME	Passenger	9	58.1	46
Hardy III	New Harbor	ME	Passenger	11	56	66
Islander	Chebeague Island	ME	Passenger	7.5	52	46
Miss Lizzie	Stonington	ME	Passenger	n.a.	49	20
Novelty	Boothbay Harbor	ME	Passenger	9	46.7	38
Big Squaw	Chebeague Island	ME	Passenger	7.5	46	33
Sea Queen	Cranberry Isles	ME	Passenger	9	44	26
Mink	Stonington	ME	Passenger	n.a.	41.7	34
New Hampshire						
M.V. Thomas Laighton	Portsmouth	NH	Passenger	n.a.	83.4	59
M.V. Oceanic	Portsmouth	NH	Passenger	n.a.	70.59	95
Massachusetts						
Governor	Woods Hole	MA	RoRo	12	242	678
Martha's Vineyard	Woods Hole	MA	RoRo	13	224.1	1,297
Eagle	Woods Hole	MA	RoRo	12	219.5	276
Nantucket	Woods Hole	MA	RoRo	12	219.5	1,152
Gay Head	Woods Hole	MA	RoRo	13	218.3	99
Katama	Woods Hole	MA	RoRo	13	215.8	99
Islander	Woods Hole	MA	RoRo	10.5	191.7	855
Sankaty	Woods Hole	MA	RoRo	13	180.3	351
Provincetown II	Boston	MA	Passenger	16	176.8	96
Great Point	Hyannis	MA	Passenger	16	169.5	71
Flying Cloud	Woods Hole	MA	Passenger	36	134.5	99
Schamonchi	New Bedford	MA	Passenger	14	129.8	91
Brant Point	Hyannis	MA	Passenger	12	112.4	97
Grey Lady II	Hyannis	MA	Passenger	30	106	74
Eugina Louise	Boston	MA	Passenger	18	105.8	97
Cross Rip	Hyannis	MA	Passenger	11	103.8	97
Point Gammon	Hyannis	MA	Passenger	11	103	99
Island Queen	Falmouth	MA	Passenger	14	101.3	99
James J. Doherty	Boston	MA	Passenger	18	100.7	98
Laura	Boston	MA	Passenger	18	100.7	98
Lulu E	Boston	MA	Passenger	18	100.7	98
Matthew J. Hughes	Boston	MA	Passenger	18	100.7	98
Chimera	Plymouth	MA	Passenger	19	100	97
Bay State	Boston	MA	Passenger	11	97.8	98
Fort Independence	Boston	MA	Passenger	10	89.9	98
Capt. Red	Newburyport	MA	Passenger	25	88.8	94
Massachusetts	Boston	MA	Passenger	20	87.6	99
Capt. John & Son IV	Plymouth	MA	Passenger	19	85.9	96
Frederick L. Nolan, Jr.	Boston	MA	Passenger	10	82.9	98

State and Vessel Name	City	State	Type	Typical Speed (Knots)	Length (ft)	Gross Tons
East Chop	Hyannis	MA	Passenger	10	79.9	99
Capt. John & Son	Plymouth	MA	Passenger	17	76.9	79
Capt. John & Son II	Plymouth	MA	Passenger	17	76.59	76
Capt. John & Son III	Plymouth	MA	Passenger	17	76.59	78
Flying Cloud	Quincy	MA	Passenger	30	75.8	45
Lightning	Quincy	MA	Passenger	30	75.8	45
Yankee Freedom	Gloucester	MA	Passenger	18	72.2	94
Native Son	Boston	MA	Passenger	10	65	93
Freedom	Harwich Port	MA	Passenger	20	62.4	67
Alert II	New Bedford	MA	Passenger	n.a.	61.6	66
Anna	Boston	MA	Passenger	20	61.3	56
On Time III	Edgartown	MA	RoRo	4	60.2	26
Edward Rowe Snow	Boston	MA	Passenger	10	58.6	59
Bostonian II	Boston	MA	Passenger	10	56.6	49
On Time II	Edgartown	MA	RoRo	4	52.5	28
Patriot Too	Falmouth	MA	Passenger	9	47	35
Betty Joe Tyler	Boston	MA	Passenger	10	46.1	33
Quickwater	Falmouth	MA	Passenger	15	45	28
Breeds Hill	Boston	MA	Passenger	10	40.9	22
Bunker Hill	Boston	MA	Passenger	10	40.9	22
Minuteman	Falmouth	MA	Passenger	14	40	19
Alison	Boston	MA	Passenger	10	39.29	32
Rhode Island						
Prudence Ferry	Bristol	RI	Passenger	n.a.	91.9	78
Prudence Ferry	Bristol	RI	RoRo	n.a.	61.5	94
Connecticut						
Cape Henlopen	New London	CT	RoRo	11	307.6	1,492
Susan Anne	New London	CT	RoRo	15	237.6	1,348
John H.	New London	CT	RoRo	13	229.7	96
New London	New London	CT	RoRo	13	198.9	94
Block Island	New London	CT	RoRo	12.5	187.3	98
Carol Jean	New London	CT	RoRo	12.5	167.4	88
North Star	New London	CT	RoRo	10	157.9	238
Sassacus	New London	CT	Passenger	45	137.8	95
Tatobam	New London	CT	Passenger	45	137.8	318
Nelseco	New London	CT	RoRo	12.5	124.5	89
Caribbean	New London	CT	RoRo	10	116	94
Sea Jet I	New London	CT	Passenger	28	109.6	99
Shuttle VI	New London	CT	Passenger	15	99.3	98
Zelinsky	Danbury	CT	Passenger	28	84.6	96
Selden III	Newington	CT	RoRo	6	64.8	87
Hollister III	Newington	CT	RoRo	4	64	29
Cumberland	Newington	CT	RoRo	4	28.4	10
New York						
Railcar Float #29	Brooklyn	NY	Rail	4	360	n.a.
Railcar Float #30	Brooklyn	NY	Rail	4	360	n.a.
Samuel I. Newhouse	Staten Island	NY	Passenger	16	310	3,335
Andrew J. Barberi	Staten Island	NY	Passenger	16	310	3,335
P.T. Barnum	Port Jefferson	NY	RoRo	18	290.3	1,595
Railcar Float #16	Brooklyn	NY	Rail	4	290	n.a.
Railcar Float #17	Brooklyn	NY	Rail	4	290	n.a.
The Gov. Herbert H. Lehman	Staten Island	NY	RoRo	16	277	2,109
American Legion	Staten Island	NY	RoRo	16	277	2,109
John F. Kennedy	Staten Island	NY	RoRo	16	277	2,109
Park City	Port Jefferson	NY	RoRo	15	261.2	1,129
Grand Republic	Port Jefferson	NY	RoRo	14.5	260.7	1,237
John A. Noble	Staten Island	NY	Passenger	16	207	499
Alice Austen	Staten Island	NY	Passenger	16	207	499
Anna C.	Orient Point	NY	RoRo	15	179.7	98

State and Vessel Name	City	State	Type	Typical Speed (Knots)	Length (ft)	Gross Tons
Race Point	Fishers Island	NY	RoRo	11	162	87
Miss Circle Line	New York	NY	Passenger	n.a.	139.69	369
Circle Line XIV	New York	NY	Passenger	n.a.	123.2	580
Miss Ellis Island	New York	NY	Passenger	n.a.	122.9	93
Miss New Jersey	New York	NY	Passenger	n.a.	122.9	93
Miss New York	New York	NY	Passenger	n.a.	122.9	94
Miss Freedom	New York	NY	Passenger	n.a.	121.6	98
Miss Liberty	New York	NY	Passenger	n.a.	121.5	98
Miss Gateway	New York	NY	Passenger	n.a.	120.9	95
Viking Starship	Montauk	NY	Passenger	12	117.4	98
Munnatawket	Fishers Island	NY	RoRo	10.5	115.5	95
Viking Starliner	Montauk	NY	Passenger	11	97.8	99
Southern Cross	Shelter Island	NY	RoRo	8	90.4	72
Viking Star	Montauk	NY	Passenger	11	88.2	87
Greenport	Shelter Island Heights	NY	RoRo	7	84.7	95
New Prospect	Shelter Island Heights	NY	RoRo	7	84.7	95
Firebird	Bay Shore	NY	Passenger	19	81.8	72
Shelter Island	Shelter Island Heights	NY	RoRo	7	81.3	90
Islander	Shelter Island Heights	NY	RoRo	7	81.2	90
Voyager	Bay Shore	NY	Passenger	19	79.09	62
Explorer	Bay Shore	NY	Passenger	19	79.09	62
South Bay Clipper	Sayville	NY	Passenger	20	76.8	63
Kiki	Patchogue	NY	Passenger	18	75	68
Fire Island Clipper	Sayville	NY	Passenger	20	73.4	71
Vagabond	Bay Shore	NY	Passenger	9	71.59	73
Capt. Patterson	Bay Shore	NY	Passenger	18	70.7	58
Fire Island Miss	Bay Shore	NY	Passenger	18	70.7	58
Traveler	Bay Shore	NY	Passenger	18	70.7	58
Fireball	Bay Shore	NY	Passenger	18	70.59	56
Pathfinder II	Patchogue	NY	Passenger	18	65.3	99
Quaiapen	Patchogue	NY	Passenger	16	63.7	87
Fire Island Belle	Bay Shore	NY	Passenger	17	62.4	59
Fire Island Duchess	Sayville	NY	Passenger	15	62.3	77
Zee Whiz	Bay Shore	NY	Passenger	18	62.3	73
Zee Lion	Bay Shore	NY	Passenger	17	62	79
Beach Comber IV	Sayville	NY	Passenger	1	61.3	9
Fire Island Empress	Sayville	NY	Passenger	15	61.2	63
Fire Island Trader	Bay Shore	NY	Passenger	9	60.8	33
Michael Cosgrove	Staten Island	NY	Passenger	8	60.75	139
Point O'Woods VI	Long Island	NY	Passenger	n.a.	60.4	70
Stranger	Bay Shore	NY	Passenger	17	60.1	65
Highlander	Patchogue	NY	Passenger	18	58.3	13
North Haven	Shelter Island	NY	RoRo	6	58.2	97
South Ferry II	Shelter Island	NY	RoRo	8	57.5	95
Capt. Ed Cartwright	Shelter Island	NY	RoRo	7	54.2	99
Roamer II	Sayville	NY	Passenger	15	51.5	14
Merrimac II	Sayville	NY	Passenger	15	51.2	38
Monitor II	Sayville	NY	Passenger	15	49	38
Mehsomac	Patchogue	NY	Passenger	18	40.79	35
Bemus Point - Stow Ferry	Mayville	NY	RoRo	n.a.	n.a.	n.a.
New Jersey						
currently unnamed	Highlands	NJ	Passenger	42	125	90
Bravest	Highlands	NJ	Passenger	34	114.1	93
City Express	Little Falls	NJ	Passenger	20	100	98
Port Imperial New Jersey	Weehawken	NJ	Passenger	n.a.	94.6	96
Empire State	Weehawken	NJ	Passenger	n.a.	92	95
Garden State	Weehawken	NJ	Passenger	n.a.	92	95
Henry Hudson	Weehawken	NJ	Passenger	n.a.	92	95
Robert Fulton	Weehawken	NJ	Passenger	n.a.	92	95
Abraham Lincoln	Weehawken	NJ	Passenger	n.a.	87.3	95
Alexander Hamilton	Weehawken	NJ	Passenger	n.a.	87.3	95

State and Vessel Name	City	State	Type	Typical Speed (Knots)	Length (ft)	Gross Tons
George Washington	Weehawken	NJ	Passenger	n.a.	87.3	95
Thomas Jefferson	Weehawken	NJ	Passenger	n.a.	87.3	95
Port Imperial Manhattan	Weehawken	NJ	Passenger	n.a.	87.2	94
Express I	Little Falls	NJ	Passenger	30	77.7	90
Express II	Little Falls	NJ	Passenger	30	77.7	90
Port Imperial	Weehawken	NJ	Passenger	n.a.	76.8	69
Yogi Berra	Weehawken	NJ	Passenger	n.a.	n.a.	n.a.
LaGuardia	Weehawken	NJ	Passenger	n.a.	n.a.	n.a.
Christopher Columbus	Weehawken	NJ	Passenger	n.a.	n.a.	n.a.
Frank Sinatra	Weehawken	NJ	Passenger	n.a.	n.a.	n.a.
Pennsylvania						
Riverlink	Philadelphia	PA	Passenger	n.a.	90.8	98
Frederick	Uniontown	PA	RoRo	n.a.	64	35
Roaring Bull V	Millersburg	PA	RoRo	n.a.	n.a.	n.a.
Delaware						
Twin Capes	Wilmington	DE	RoRo	12.5	301.2	2,262
Cape May	Wilmington	DE	RoRo	12.5	299.2	2,165
Cape Henlopen	Wilmington	DE	RoRo	12.5	284.89	2,120
Delaware	Wilmington	DE	RoRo	12.5	284	2,108
New Jersey	Wilmington	DE	RoRo	12.5	284	2,108
Whale Watcher	Wilmington	DE	Passenger	31	106.4	99
American River	Wilmington	DE	Passenger	21	95.9	96
Virginia C	Georgetown	DE	RoRo	3	64.9	35
Delafort	Wilmington	DE	Passenger	10	55	39
Lady Christina	Wilmington	DE	Passenger	8	47	5
Maryland						
General Jubal A. Early	Dickerson	MD	RoRo	n.a.	84	68
Steven Thomas	Crisfield	MD	Passenger	9	78.3	99
Talbot	Royal Oak	MD	RoRo	7.5	64.5	43
Capt. Tyler	Ewell	MD	Passenger	12	64	84
Whitehaven Ferry	Salisbury	MD	RoRo	4	60	21
Chelsea Lane Tyler	Ewell	MD	Passenger	14	60	42
Upper Ferry	Salisbury	MD	RoRo	4	50	n.a.
Island Belle II	Ewell	MD	Passenger	n.a.	38.1	21
Capt. Jason	Tylerton	MD	Passenger	n.a.	38.1	19
Capt. Jason II	Tylerton	MD	Passenger	n.a.	38.1	23
Virginia						
Nandua	Cape Charles	VA	Rail	6	407.6	2,105
Pocahontas	Surry	VA	RoRo	8.5	263.3	1,197
Williamsburg	Surry	VA	RoRo	8.5	200	837
Surry	Surry	VA	RoRo	8.5	189.9	825
Virginia	Surry	VA	RoRo	8.5	152	327
Chesapeake Breeze	Reedville	VA	Passenger	15	95.7	97
Captain Evans	Reedville	VA	Passenger	9	64.7	60
James C. Echols (Elizabeth Ferry I)	Hampton	VA	Passenger	4	60	60
Elizabeth River Ferry II	Hampton	VA	Passenger	4	60	60
Elizabeth River Ferry III	Hampton	VA	Passenger	4	60	60
The Lancaster	Lancaster	VA	RoRo	12	44.25	30
Northumberland	Lottsburg	VA	RoRo	12	44.25	30
Hatton Ferry	Charlottesville	VA	RoRo	0.5	40	20
North Carolina						
Silver Lake	Morehead City	NC	RoRo	10	210.2	736
Pamlico	Morehead City	NC	RoRo	10	210	735
Cedar Island	Morehead City	NC	RoRo	10	207.8	648
Carteret	Morehead City	NC	RoRo	10	207.5	687
Governor Daniel Russell	Morehead City	NC	RoRo	10	172.8	469
Southport	Morehead	NC	RoRo	10	167.7	374

State and Vessel Name	City	State	Type	Typical Speed (Knots)	Length (ft)	Gross Tons
Neuse	Morehead City	NC	RoRo	10	167.7	380
Floyd J. Lupton	Morehead City	NC	RoRo	10	167.7	374
Fort Fisher	Morehead City	NC	RoRo	10	167.7	374
Governor Hyde	Morehead City	NC	RoRo	9	161	574
Baum	Morehead City	NC	RoRo	10	143.6	283
Lupton	Morehead City	NC	RoRo	10	143.6	248
Cape Point	Morehead City	NC	RoRo	10	140.3	276
Chicamacomico	Morehead City	NC	RoRo	10	140.3	276
Frisco	Morehead City	NC	RoRo	10	140.3	275
Kinnakeet	Morehead City	NC	RoRo	10	140.3	280
Ocracoke	Morehead City	NC	RoRo	10	140.1	276
Governor James B. Hunt, Jr.	Morehead City	NC	RoRo	10	125.1	323
Beaufort	Morehead City	NC	RoRo	9	124.1	287
Alpheus W. Drinkwater	Morehead City	NC	RoRo	9	122.4	199
Conrad Wirth	Morehead City	NC	RoRo	9	112.4	199
Herbert C. Bonner	Morehead City	NC	RoRo	9	112.4	199
Sans Souci	Bald Head Island	NC	Passenger	18	72	93
Adventure	Bald Head Island	NC	Passenger	18	64.8	76
Revenge	Bald Head Island	NC	Passenger	18	62.2	67
Capt. Alger	Davis	NC	RoRo	5	51	35
Capt Alex	Bald Head Island	NC	RoRo	6	50	47
Green Grass	Atlantic	NC	RoRo	n.a.	47.8	34
Elwell	Raleigh	NC	RoRo	5	46.9	22
San Souci	Raleigh	NC	RoRo	5	46.2	22
Parker	Raleigh	NC	RoRo	5	46.2	22
Catherine T.	Davis	NC	RoRo	5	40	n.a.
Miss Anne	Davis	NC	RoRo	7	32.2	9
H.I.F.C. I	Harkers Island	NC	Passenger	20	24	2
Last Cast	Harkers Island	NC	Passenger	25	20	1
South Carolina						
Daufuskie Clipper I	Hilton Head Island	SC	Passenger	n.a.	58	48
Haig Point I	Hilton Head Island	SC	Passenger	19	55.25	40
Haig Point II	Hilton Head Island	SC	Passenger	19	55.2	39
Daufuskie Clipper IV	Hilton Head Island	SC	Passenger	n.a.	54	20
Daufuskie Clipper II	Hilton Head Island	SC	Passenger	n.a.	48.9	38
Daufuskie Clipper III	Hilton Head Island	SC	Passenger	n.a.	48.9	38
South Island	Columbia	SC	RoRo	2	46	23
Haig Point Pelican	Hilton Head Island	SC	Passenger	22	46	28
Haig Point Osprey	Hilton Head Island	SC	Passenger	22	45	28
Haig Point III	Hilton Head Island	SC	Passenger	16	35.79	22
Georgia						
Cumberland Princess	St. Marys	GA	Passenger	10	65	50
Annemarie	Sapelo Island	GA	Passenger	12	64.8	61
Cumberland Queen	St. Marys	GA	Passenger	10	64.3	55
Sapelo Queen	Sapelo	GA	Passenger	12	60	82
Florida						
Blackbeard	Jacksonville	FL	RoRo	6	170.3	537
Jean Ribault	Jacksonville	FL	RoRo	6	153.6	497
Drayton Island Ferry	Palatka	FL	RoRo	n.a.	48	n.a.
Ruby B.	Carrabelle	FL	Passenger	7	38	14
Fort Gates Ferry	Crescent City	FL	RoRo	3	36	n.a.
Fort Gates Ferry	Crescent City	FL	RoRo	3	n.a.	n.a.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, National Ferry Database

Table E-2. Ferry Routes Operating on U.S. East Coast, 2000

State and Route	Metro Area	Waterbody Crossed	Type	Data Year	Passengers	Vehicles	Season Start	Season End
Maine								
Yarmouth (NS) - Bar Harbor (ME)	Bar Harbor	Gulf of Maine	Passenger	1998	223,000	61,000	6/1/2000	10/22/2000
Yarmouth (NS) - Portland (ME)	Portland	Bay of Fundy	Passenger	1999	160,000	30,000	5/1/2000	10/26/2000
Bass Harbor (ME) - Frenchboro (ME)	Bangor	Blue Hill Bay	Passenger	1999	3,539	1,514	Year-round	
Bass Harbor (ME) - Swans Island (ME)	Bangor	Blue Hill Bay	Passenger	1999	68,849	32,112	Year-round	
Boothbay Harbor (ME) - Monhegan Island (ME)	Portland	Coastal Atlantic Ocean	RoRo	1999	10,810	n.a.	5/27/2000	10/9/2000
Boothbay Harbor (ME) - Squirrel Island (ME)	Portland	Boothbay Harbor	RoRo	1999	17,193	n.a.	3/1/2000	11/30/2000
Lincolnville (ME) - Islesboro (ME)	Bangor	Penobscot Bay	Passenger	1999	191,360	91,954	Year-round	
Northeast Harbor (ME) - Islesford, Little Cranberry Island (ME)	Bangor	Coastal Atlantic Ocean	RoRo	1999	29,011	n.a.	Year-round	
Cousins Island (ME) - Chebeague Island, Stone Wharf (ME)	Portland	Casco Bay	Passenger	1999	118,000	n.a.	Year-round	
Portland, Casco Bay Ferry Terminal (ME) - Bailey Island (ME)	Portland	Casco Bay	RoRo	1999	8,664	n.a.	6/30/2000	9/4/2000
Portland, Casco Bay Ferry Terminal (ME) - Chebeague Island, Chandler Cove Landing (ME)	Portland	Casco Bay	RoRo	1999	11,546	n.a.	Year-round	
Portland, Casco Bay Ferry Terminal (ME) - Cliff Island (ME)	Portland	Casco Bay	RoRo	1999	27,764	n.a.	Year-round	
Portland, Casco Bay Ferry Terminal (ME) - Diamond Cove, Great Diamond Island (ME)	Portland	Casco Bay	RoRo	1999	64,596	n.a.	Year-round	
Portland, Casco Bay Ferry Terminal (ME) - Little Diamond Island (ME)	Portland	Casco Bay	RoRo	1999	16,590	n.a.	Year-round	
Portland, Casco Bay Ferry Terminal (ME) - Great Diamond Island (ME)	Portland	Casco Bay	RoRo	1999	35,941	n.a.	Year-round	
Portland, Casco Bay Ferry Terminal (ME) - Long Island (ME)	Portland	Casco Bay	RoRo	1999	103,794	n.a.	Year-round	
Portland, Casco Bay Ferry Terminal (ME) - Peaks Island (ME)	Portland	Casco Bay	Passenger	1999	659,699	17,000	Year-round	
Stonington (ME) - Duck Harbor, Isle Au Haut (ME)	Stonington	Isle Au Haut Bay	RoRo	n.a.	n.a.	n.a.	6/12/2000	9/9/2000
Stonington (ME) - Isle Au Haut (ME)	Stonington	East Penobscot Bay	RoRo	n.a.	n.a.	n.a.	4/3/2000	10/14/2000
Port Clyde (ME) - Monhegan Island (ME)	Portland	Coastal Atlantic Ocean	RoRo	1999	15,000	n.a.	Year-round	
New Harbor (ME) - Monhegan Island (ME)	Portland	Muscongus Bay	RoRo	n.a.	n.a.	n.a.	5/15/2000	10/15/2000
Rockland (ME) - Matinicus Island (ME)	Portland	Penobscot Bay	Passenger	1999	653	221	Year-round	
Rockland (ME) - North Haven (ME)	Portland	Penobscot Bay	Passenger	1999	54,163	19,788	Year-round	
Rockland (ME) - Vinalhaven (ME)	Portland	Penobscot Bay	Passenger	1999	138,916	38,755	Year-round	
New Hampshire								
Portsmouth (NH) - Star Island, Gosport Harbor (NH)	Portsmouth	Coastal Atlantic Ocean	RoRo	n.a.	n.a.	n.a.	6/15/2000	9/30/2000
Massachussetts								
World Trade Center, Boston (MA) - Provincetown (MA) (high speed service)	Boston	Masschusetts Bay	RoRo	1999	16,000	n.a.	5/20/2000	10/15/2000
Rowes Wharf, Boston (MA) - Logan Airport, East Boston, Boston (MA)	Boston	Boston Harbor	RoRo	1999	122,411	n.a.	Year-round	
Long Wharf, Boston (MA) - Provincetown (MA)	Boston	Massachusetts Bay	RoRo	2000	20,000	n.a.	5/5/2000	10/9/2000
Charlestown Navy Yard, Charlestown, Boston (MA) - Lovejoy Wharf, Boston (MA)	Boston	Boston Harbor	RoRo	1999	18,331	n.a.	Year-round	
Long Wharf, Boston (MA) - Georges Island, Boston (MA)	Boston	Boston Harbor	RoRo	1999	87,320	n.a.	4/29/2000	10/9/2000
Hingham, Hingham Shipyard (MA) - Georges Island, Boston (MA)	Boston	Boston Harbor	RoRo	1999	15,340	n.a.	4/29/2000	10/9/2000
Hingham, Hingham Shipyard (MA) - Rowes Wharf, Boston (MA)	Boston	Boston Harbor	RoRo	1999	90,000	n.a.	Year-round	
Hingham, Hingham Shipyard (MA) - Rowes Wharf, Boston (MA)	Boston	Boston Harbor	RoRo	1999	829,866	n.a.	Year-round	
Salem, Blaney St. ferry landing (MA) - Georges Island, Boston (MA)	Boston	Boston Harbor	RoRo	1999	15,340	n.a.	5/20/2000	10/31/2000
Fore River, Quincy (MA) - Logan Airport, East Boston (MA)	Boston	Boston Harbor	RoRo	1999	110,000	n.a.	Year-round	
Logan Airport, East Boston, Boston (MA) - Long Wharf, Boston (MA)	Boston	Boston Harbor	RoRo	1999	7,260	n.a.	Year-round	
Pemberton Point, Hull (MA) - Long Wharf, Boston (MA)	Boston	Boston Harbor	RoRo	1999	22,000	n.a.	Year-round	
Falmouth, Falmouth Harbor (MA) - Oak Bluffs, Marthas Vineyard (MA)	Boston	Vineyard Sound	RoRo	1999	287,000	n.a.	5/26/2000	10/9/2000
Falmouth Harbor, Falmouth (MA) - Oak Bluffs, Marthas Vineyard (MA)	Boston	Vineyard Sound	RoRo	1999	25,000	n.a.	Year-round	
Edgartown, Memorial Wharf (MA) - Chappaquiddick (MA)	Boston	Edgartown Harbor	Passenger	1998	355,691	202,207	Year-round	
Long Wharf, Boston (MA) - Charlestown Navy Yard, Charlestown, Boston (MA)	Boston	Boston Harbor	RoRo	1999	383,736	n.a.	Year-round	
Lovejoy Wharf, Boston (MA) - US Federal Courthouse, Fan Pier, Boston (MA)	Boston	Boston Harbor	RoRo	1999	30,984	n.a.	Year-round	
US Federal Courthouse, Fan Pier, Boston (MA) - World Trade Center, Boston (MA)	Boston	Boston Harbor	RoRo	n.a.	n.a.	n.a.	Year-round	

State and Route	Metro Area	Waterbody Crossed	Type	Data Year	Passengers	Vehicles	Season Start	Season End
World Trade Center, Boston (MA) - Lovejoy Wharf, Boston (MA)	Boston	Boston Harbor	RoRo	n.a.	n.a.	n.a.	Year-round	
Hyannis (MA) - Nantucket (MA)	Boston	Nantucket Sound	RoRo	1999	235,000	n.a.	Year-round	
Hyannis (MA) - Nantucket (MA)	Boston	Nantucket Sound	RoRo	1999	137,396	n.a.	Year-round	
Hyannis (MA) - Nantucket (MA)	Boston	Nantucket Sound	Passenger	1999	435,000	122,600	Year-round	
Hyannis (MA) - Nantucket (MA)	Boston	Nantucket Sound	RoRo	1999	206,176	n.a.	5/8/2000	10/28/2000
Hyannis (MA) - Oak Bluffs, Marthas Vineyard (MA)	Boston	Nantucket Sound	RoRo	1999	154,135	n.a.	5/8/2000	10/28/2000
Harwich Port, Saquatucket Harbor (MA) - Nantucket (MA)	Boston	Nantucket Sound	RoRo	1999	32,000	n.a.	5/15/2000	10/14/2000
World Trade Center, Boston (MA) - Provincetown (MA) (conventional service)	Boston	Massachusetts Bay	RoRo	1999	28,000	n.a.	6/21/2000	9/6/2000
Falmouth Harbor, Falmouth (MA) - Cuttyhunk (MA)	Boston	Vineyard Sound and Buzzarc	RoRo	1999	1,000	n.a.	7/1/2000	8/31/2000
Plymouth (MA) - Provincetown (MA)	Boston	Massachusetts Bay	RoRo	1999	10,000	n.a.	5/20/2000	10/13/2000
Woods Hole (MA) - Oak Bluffs, Marthas Vineyard (MA)	Boston	Vineyard Sound	Passenger	1999	300,000	55,000	5/18/2000	10/26/2000
Woods Hole (MA) - Vineyard Haven, Marthas Vineyard (MA)	Boston	Vineyard Sound	Passenger	1999	2,000,000	351,400	Year-round	
Salem, Blaney St. ferry landing (MA) - Long Wharf, Boston (MA)	Boston	Boston Harbor	RoRo	1999	15,000	n.a.	4/1/2000	11/1/2000
Nantucket (MA) - Oak Bluffs, Marthas Vineyard (MA)	Boston	Nantucket Sound	RoRo	1999	24,084	n.a.	6/5/2000	9/17/2000
New Bedford (MA) - Cuttyhunk (MA)	New Bedford	Buzzards Bay	RoRo	n.a.	n.a.	n.a.	Year-round	
New Bedford, Schamonchi Dock (MA) - Vineyard Haven, Marthas Vineyard (MA)	New Bedford	Buzzards Bay	RoRo	n.a.	n.a.	n.a.	5/18/2000	10/9/2000
Fore River, Quincy (MA) - Long Wharf, Boston (MA)	Boston	Boston Harbor	RoRo	1999	250,000	n.a.	Year-round	
New London, Ferry Street (CT) - Vineyard Haven, Marthas Vineyard (MA)	New London	Rhode Island Sound	RoRo	1999	45,000	n.a.	5/15/2000	9/4/2000
Rhode Island								
Bristol (RI) - Hog Island (RI)	Providence	Narragansett Bay	RoRo	n.a.	n.a.	n.a.	Year-round	
Bristol (RI) - Homestead, Prudence Island (RI)	Providence	Narragansett Bay	Passenger	n.a.	n.a.	n.a.	Year-round	
Point Judith (RI) - Block Island, Old Harbor (RI)	Providence	Block Island Sound	Passenger	n.a.	n.a.	n.a.	Year-round	
Montauk (NY) - Vineyard Haven, Marthas Vineyard (MA)	Montauk	Rhode Island Sound; Viney	RoRo	1999	40	n.a.	8/6/2000	8/8/2000
Providence, Point Street Landing (RI) - Newport, Perrotti Park (RI)	Providence	Narragansett Bay	RoRo	2000	28,500	n.a.	Year-round	
Providence, Point Street Landing (RI) - Portsmouth, Mount Hope Maritime Terminal (RI)	Providence	Narragansett Bay	RoRo	n.a.	n.a.	n.a.	Year-round	
Portsmouth, Mount Hope Maritime Terminal (RI) - Newport, Perrotti Park (RI)	Providence	Narragansett Bay	RoRo	n.a.	n.a.	n.a.	Year-round	
Connecticut								
New London, Ferry Street (CT) - Block Island, Old Harbor (RI)	New London	Block Island Sound	Passenger	n.a.	n.a.	n.a.	6/10/2000	9/10/2000
New London, State Street (CT) - Fishers Island (NY)	Hartford	Fishers Island Sound	Passenger	1999	164,000	47,000	Year-round	
New London, Ferry Street (CT) - Glen Cove (NY)	New York	Long Island Sound	RoRo	n.a.	n.a.	n.a.	Year-round	
New London, Ferry Street (CT) - Orient Point (NY) (conventional RoRo service)	Southold	Long Island Sound	Passenger	1999	919,183	379,885	Year-round	
New London, Ferry Street (CT) - Orient Point (NY) (high speed service)	Southold	Long Island Sound	RoRo	1999	215,000	n.a.	3/31/2000	11/26/2000
New York								
Atlantic Highlands (NJ) - Wall Street Ferry Terminal, Pier 11 (NY)	New York	New York Bay	RoRo	1999	156,000	n.a.	Year-round	
Bay Shore (NY) - Atlantique, Fire Island (NY)	Islip	Great South Bay	RoRo	1999	49,032	n.a.	5/20/2000	9/6/2000
Bay Shore (NY) - Dunewood, Fire Island (NY)	Islip	Great South Bay	RoRo	1999	65,376	n.a.	3/31/2000	10/25/2000
Bay Shore (NY) - Fair Harbor, Fire Island (NY)	Islip	Great South Bay	RoRo	1999	89,892	n.a.	3/1/2000	12/25/2000
Bay Shore (NY) - Kismet, Fire Island (NY)	Islip	Great South Bay	RoRo	1999	89,892	n.a.	4/1/2000	11/1/1931
Bay Shore (NY) - Ocean Bay Park, Fire Island (NY)	Islip	Great South Bay	RoRo	1999	114,409	n.a.	3/1/2000	11/1/1931
Bay Shore (NY) - Ocean Beach, Fire Island (NY)	Islip	Great South Bay	RoRo	1999	167,097	n.a.	Year-round	
Bay Shore (NY) - Point O'Woods, Fire Island (NY)	Islip	Great South Bay	RoRo	1999	15,600	n.a.	4/15/2000	11/1/2000
Bay Shore (NY) - Saltaire, Fire Island (NY)	Islip	Great South Bay	RoRo	1999	101,720	n.a.	Year-round	
Bay Shore (NY) - Seaview, Fire Island (NY)	Islip	Great South Bay	RoRo	1999	122,581	n.a.	3/1/2000	10/31/2000
Bemus Point (NY) - Stow (NY)	Buffalo	Lake Chautauqua	Passenger	1999	2,880	2,400	5/31/2000	9/4/1931
Patchogue, Davis Park Ferry Terminal (NY) - Davis Park, Fire Island (NY)	New York	Great South Bay	RoRo	n.a.	n.a.	n.a.	3/15/2000	12/1/2000
Patchogue, NPS Ferry Terminal (NY) - Watch Hill, Fire Island (NY)	New York	Great South Bay	RoRo	1999	25,815	n.a.	5/15/2000	10/15/2000
E 34th Street Ferry Terminal (NY) - Wall Street Ferry Terminal, Pier 11 (NY)	New York	East River	RoRo	n.a.	n.a.	n.a.	Year-round	
La Guardia Airport, Queens (NY) - E 34th Street Ferry Terminal, Manhattan (NY)	New York	East River	RoRo	1999	56,126	n.a.	Year-round	

State and Route	Metro Area	Waterbody Crossed	Type	Data Year	Passengers	Vehicles	Season	
							Start	End
Liberty State Park, Liberty Landing Marina (NJ) - Statue of Liberty (NY)	New York	New York Harbor	RoRo	1999	1,120,108	n.a.	Year-round	
Lincoln Harbor, Weehawken (NJ) - W 38th Street Ferry Terminal, Manhattan (NY)	New York	Hudson River	RoRo	1999	631,677	n.a.	Year-round	
Montauk (NY) - Block Island, New Harbor (RI)	Montauk	Block Island Sound	RoRo	1999	15,000	n.a.	4/15/2000	10/12/2000
Montauk (NY) - New London, Ferry Street (CT)	Montauk	Block Island Sound	RoRo	n.a.	n.a.	n.a.	5/26/2000	9/4/2000
North Haven (NY) - Shelter Island (NY)	New York	Shelter Island Sound	Passenger	1999	1,015,047	602,994	Year-round	
Sayville, Long Island (NY) - Barrett Beach, Fire Island (NY)	New York	Great South Bay	RoRo	1999	340	n.a.	7/1/2000	9/6/2000
Sayville, Long Island (NY) - Cherry Grove, Fire Island (NY)	New York	Great South Bay	RoRo	1999	180,000	n.a.	Year-round	
Sayville, Long Island (NY) - Fire Island Pines, Fire Island (NY)	New York	Great South Bay	RoRo	1999	210,000	n.a.	Year-round	
Sayville, Long Island (NY) - Sailors Haven, Sunken Forest (NY)	New York	Great South Bay	RoRo	1999	60,500	n.a.	5/12/2000	10/31/2000
Sayville, Long Island (NY) - Water Island, Fire Island (NY)	New York	Great South Bay	RoRo	1999	3,000	n.a.	5/12/2000	10/12/2000
Saint George, Staten Island (NY) - South Ferry, Whitehall Ferry Terminal (NY)	New York	New York Harbor	Passenger	1999	19,270,397	367,594	Year-round	
Highlands (NJ) - Wall Street Ferry Terminal, Pier 11 (NY)	New York	New York Bay	RoRo	1999	105,000	n.a.	Year-round	
Wall Street Ferry Terminal, Pier 11 (NY) - E 34th Street Ferry Terminal (NY)	New York	New York Harbor	RoRo	1999	91,000	n.a.	Year-round	
Greenville Piers, Jersey City (NJ) - Atlantic Basin (Redhook), Brooklyn (NY)	New York	Upper New York Bay	Rail	1999	n.a.	1,000	Year-round	
Bridgeport (CT) - Port Jefferson (NY)	New York	Long Island Sound	Passenger	1999	800,000	345,000	Year-round	
Hoboken, Hoboken Rail Terminal (NJ) - World Financial Center, Battery Park City, Manhattan (NY)	New York	Hudson River	RoRo	1999	2,352,317	n.a.	Year-round	
Hunters Point, Queens (NY) - E 34th Street Ferry Terminal, Manhattan (NY)	New York	East River	RoRo	1999	70,601	n.a.	Year-round	
Brooklyn Army Terminal, Brooklyn (NY) - Wall Street Ferry Terminal, Pier 11 (NY)	New York	New York Harbor	RoRo	1999	50,000	n.a.	Year-round	
Haverstraw (NY) - Ossining (NY)	New York	Hudson River	RoRo	n.a.	n.a.	n.a.	Year-round	
Statue of Liberty (NY) - Ellis Island (NY)	New York	New York Harbor	RoRo	1999	3,543,907	n.a.	Year-round	
Ellis Island (NY) - World Financial Center, Battery Park City (NY)	New York	New York Harbor	RoRo	1999	1,447,629	n.a.	Year-round	
Ellis Island (NY) - Liberty State Park, Liberty Landing Marina (NJ)	New York	New York Harbor	RoRo	1999	436,741	n.a.	Year-round	
Greenport, Long Island (NY) - Shelter Island Heights, Long Island (NY)	New York	Shelter Island Sound	Passenger	1999	1,153,669	615,816	Year-round	
Harborside, Exchange Place (NJ) - World Financial Center, Battery Park City (NY)	New York	Hudson River	RoRo	1999	242,360	n.a.	Year-round	
Colgate Palmolive, Exchange Place (NJ) - World Financial Center, Battery Park City (NY)	New York	Hudson River	RoRo	1999	621,895	n.a.	Year-round	
Highlands (NJ) - Wall Street Ferry Terminal, Pier 11 (NY)	New York	New York Bay	RoRo	1999	160,000	n.a.	Year-round	
Port Imperial, Weehawken (NJ) - Wall Street Ferry Terminal, Pier 11 (NY)	New York	Hudson River	RoRo	1999	120,730	n.a.	Year-round	
Port Imperial, Weehawken (NJ) - W 38th Street Ferry Terminal (NY)	New York	Hudson River	RoRo	1999	2,955,129	n.a.	Year-round	
Port Liberte, Jersey City (NJ) - Wall Street Ferry Terminal, Pier 11 (NY)	New York	Hudson River	RoRo	1999	160,584	n.a.	Year-round	
Greenville Piers, Jersey City (NJ) - Bush Terminal, Brooklyn (NY)	New York	Upper New York Bay	Rail	1999	n.a.	4,000	Year-round	
World Financial Center, Battery Park City (NY) - Statue of Liberty (NY)	New York	New York Harbor	RoRo	1999	4,308,169	n.a.	Year-round	
Pennsylvania								
Penns Landing, Philadelphia (PA) - Camden (NJ)	Philadelphia	Delaware River	RoRo	1999	300,000	n.a.	4/1/2000	12/31/2000
Delaware								
Woodland, County Road 79 (DE) - Bethel, State Route 78 (DE)	Salisbury	Nanticoke River	Passenger	1999	100,710	83,925	Year-round	
Delaware City (DE) - Fort Delaware, Pea Patch Island (DE)	Philadelphia	Delaware River	RoRo	1999	20,000	n.a.	4/20/2000	10/31/2000
Fort Mott (NJ) - Fort Delaware, Pea Patch Island (DE)	Philadelphia	Delaware River	RoRo	1999	7,500	n.a.	4/20/2000	10/31/2000
Lewes (DE) - Cape May (NJ)	Atlantic City	Delaware Bay	Passenger	1999	1,258,799	394,235	Year-round	
Maryland								
Crisfield (MD) - Ewell, Smith Island (MD)	Salisbury	Chesapeake Bay	RoRo	n.a.	n.a.	n.a.	Year-round	
Crisfield (MD) - Ewell, Smith Island (MD)	Salisbury	Chesapeake Bay	RoRo	1999	6,549	n.a.	5/27/2000	10/15/2000
Crisfield (MD) - Ewell, Smith Island (MD)	Salisbury	Tangier Sound	RoRo	n.a.	n.a.	n.a.	Year-round	
Oxford (MD) - Bellevue (MD)	Baltimore	Tred Avon River	Passenger	n.a.	n.a.	n.a.	3/1/2000	11/30/2000
Allen (MD) - Catchpenny (MD)	Salisbury	Wicomico River	Passenger	1998	139,245	116,038	Year-round	
Whitehaven, State Route 352 (MD) - Widgeon, State Route 362 (MD)	Salisbury	Wicomico River	Passenger	1998	94,910	79,092	Year-round	
Point Lookout State Park (MD) - Ewell, Smith Island (MD)	Washington	Chesapeake Bay	RoRo	1999	8,950	n.a.	6/15/2000	9/15/2000
Virginia								

State and Route	Metro Area	Waterbody Crossed	Type	Data Year	Passengers	Vehicles	Season	
							Start	End
Portside, Portsmouth (VA) - High Street Landing, Portsmouth (VA)	Norfolk	Elizabeth River	RoRo	1999	98,210	n.a.	Year-round	
Waterside, Norfolk (VA) - High Street Landing, Portsmouth (VA)	Norfolk	Elizabeth River	RoRo	1999	194,626	n.a.	Year-round	
Waterside, Norfolk (VA) - Portside, Portsmouth (VA)	Norfolk	Elizabeth River	RoRo	1999	123,660	n.a.	Year-round	
Hatton, Route 625 (south bank) (VA) - Hatton, Route 625 (north bank) (VA)	Charlottesville	James River	Passenger	1999	2,730	1,092	4/15/2000	10/15/2000
Scotland, Scotland Wharf (VA) - Jamestown, Jamestown Wharf (VA)	Norfolk	James River	Passenger	1999	2,100,000	880,485	Year-round	
Portside, Portsmouth (VA) - Harbor Park, Norfolk (VA)	Norfolk	Elizabeth River	RoRo	1999	5,957	n.a.	Year-round	
Reedville (VA) - Ewell, Smith Island (MD)	Richmond	Chesapeake Bay	RoRo	n.a.	n.a.	n.a.	5/1/2000	10/15/2000
Reedville (VA) - Tangier (VA)	Richmond	Chesapeake Bay	RoRo	1999	15,000	n.a.	5/1/2000	10/15/2000
Cape Charles (VA) - Little Creek (VA)	Hampton	Chesapeake Bay	Rail	1999	n.a.	4,400	Year-round	
Crisfield (MD) - Tangier (VA)	Salisbury	Chesapeake Bay	RoRo	n.a.	n.a.	n.a.	5/15/2000	10/31/2000
Sunnybank, State Route 644 (VA) - Kayan, State Route 644 (VA)	Richmond	Little Wicomico River	Passenger	1999	18,189	8,855	Year-round	
Hampton, Public Pier (VA) - Norfolk, on Waterside Dr. (VA)	Norfolk	Hampton Roads	RoRo	1999	60,000	n.a.	Year-round	
North Carolina								
Elwell (NC) - Carvers Creek (NC)	Wilmington	Cape Fear River	Passenger	1999	25,544	14,099	Year-round	
Cedar Island (NC) - Ocracoke (NC)	Greenville	Pamlico Sound	Passenger	1999	242,397	95,470	Year-round	
Cherry Branch (NC) - Minnesott Beach (NC)	Greenville	Neuse River	Passenger	1999	478,395	290,058	Year-round	
Como, State Route 1306 (NC) - Winton, State Route 1175 (NC)	Norfolk	Meherrin River	Passenger	1999	3,903	6,997	Year-round	
Hatteras (NC) - Ocracoke (NC)	Washington DC	Hatteras Inlet	Passenger	1999	925,806	358,962	Year-round	
Ocracoke (NC) - Swan Quarter (NC)	Greenville	Pamlico Sound	Passenger	1999	49,712	23,721	Year-round	
Sans Souci (NC) - Woodard (NC)	Greenville	Cashie River	Passenger	1999	5,110	3,667	Year-round	
Southport (NC) - Fort Fisher (NC)	Wilmington	Cape Fear River	Passenger	1999	426,642	149,533	Year-round	
Atlantic (NC) - Core Banks, Cape Lookout Natl. Seashore (NC)	Morehead City	Core Sound	Passenger	n.a.	n.a.	n.a.	3/13/2000	12/17/2000
Davis (NC) - Core Banks, Cape Lookout Natl. Seashore (NC)	Morehead City	Core Sound	Passenger	n.a.	n.a.	n.a.	3/1/2000	12/31/2000
Harkers Island (NC) - Cape Lookout (NC)	Morehead City	Back Sound	RoRo	1999	3,461	n.a.	4/1/2000	12/1/2000
Atlantic (NC) - Portsmouth Village, Portsmouth Island (NC)	Morehead City	Core Sound	RoRo	n.a.	n.a.	n.a.	Year-round	
Southport (NC) - Bald Head Island (NC)	Wilmington	Cape Fear River	Passenger	n.a.	n.a.	n.a.	Year-round	
Aurora (NC) - Bayview (NC)	Greenville	Pamlico River	Passenger	1999	135,397	73,243	Year-round	
Southport, Indigo Plantation (NC) - Bald Head Island (NC)	Wilmington	Cape Fear River	RoRo	1999	233,158	n.a.	Year-round	
Currituck (NC) - Knotts Island (NC)	Norfolk	Currituck Sound	Passenger	1999	82,931	24,043	Year-round	
South Carolina								
Hilton Head Island, Opossum Point Landing (SC) - Daufuskie Island, Haig Point (SC)	Savannah	Atlantic Intracoastal Waterwa	RoRo	1999	150,500	n.a.	Year-round	
Hilton Head Island, Broad Creek Marina (SC) - Daufuskie Island, Cooper River Landing (SC)	Savannah	Atlantic Intracoastal Waterwa	RoRo	1999	10,664	n.a.	Year-round	
Jenkins Island, Hilton Head (SC) - Daufuskie Island, Cooper River Landing (SC)	Savannah	Atlantic Intracoastal Waterwa	RoRo	1999	4,578	n.a.	Year-round	
Hilton Head Island, Harbortown (SC) - Daufuskie Island, Cooper River Landing (SC)	Savannah	Calibogue Sound	RoRo	1999	31,040	n.a.	Year-round	
South Island (SC) - Georgetown, State Highway S-22-18 (SC)	Charleston	Atlantic Intracoastal Waterwa	Passenger	1999	9,160	7,300	Year-round	
Hilton Head Island, Salty Fare Village (SC) - Daufuskie Island, Cooper River Landing (SC)	Savannah	Atlantic Intracoastal Waterwa	RoRo	n.a.	n.a.	n.a.	Year-round	
Georgia								
St. Marys (GA) - Plum Orchard, Cumberland Island (GA)	Jacksonville	Atlantic Intracoastal Waterwa	RoRo	1999	300	n.a.	Year-round	
St. Marys (GA) - Cumberland Island (GA)	Jacksonville	Cumberland Sound	RoRo	1999	44,644	n.a.	Year-round	
Meridian (GA) - Sapelo Island, Natl. Estuarine Research Reserve (GA)	Savannah	Doboy Sound	RoRo	1999	70,000	n.a.	Year-round	
Hutchinson Island, Savannah Cove (GA) - Daufuskie Island, Cooper River Landing (SC)	Savannah	Savannah River and Atlantic	RoRo	1999	15,616	n.a.	Year-round	
Florida								
De Land (FL) - Hontoon Island State Park (FL)	Orlando	Saint Johns River	RoRo	n.a.	n.a.	n.a.	Year-round	
Georgetown (FL) - Drayton Island (FL)	Jacksonville	Lake George	Passenger	n.a.	n.a.	n.a.	Year-round	
Mayport (FL) - Fort George Island (FL)	Jacksonville	St. Johns River	Passenger	1999	374,785	374,785	Year-round	
Welaka Landing, Fort Gates Ferry Rd. (FL) - Fort Gates, Salt Springs Road (FL)	Daytona Beach	St. Johns River	Passenger	n.a.	n.a.	n.a.	Year-round	

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, National Ferry Database.

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APPENDIX F

Initial Regulatory Flexibility Analysis (IRFA)

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This proposed rule has been determined to be significant for purposes of Executive Order 12866.

NMFS prepared the following Initial Regulatory Flexibility Analysis (IRFA).

IRFA

A description of the action, why it is being considered, and the legal basis for this action are contained in the preamble to this proposed rule. This proposed rule does not duplicate, overlap, or conflict with other Federal rules. This IRFA analyzes the proposed alternatives and other alternatives described in the preamble to the rule and does not address alternatives previously considered and subsequently dismissed in the DEIS. There are no recordkeeping or reporting requirements associated with this proposed rule. There most likely will be a compliance cost or benefit associated with changes in fuel consumption from speed restrictions measures. These changes are likely to be small given that they would occur only in a 20-30 nautical mile area. However, given the heterogeneous characteristics of the many types, lengths, gross tonnages, and horsepower equivalents of vessels impacted by this rule, it is not possible to make this estimate on a vessel, firm, or aggregate basis.

As discussed below, NMFS believes that there may be disproportionate economic impacts among types of small entities within the same industry as well as between large and small entities of different vessel types occurring within different industries. While the economic impacts discussed in this IRFA would reflect the impact on the typical vessel within each classification, NMFS recognizes that there may be variation of impacts

among different vessels within each classification from the implementation of this proposed rule. NMFS recognizes that there may be disproportionate impacts between or among vessels servicing different areas or ports. However, there is no hard data or evidence to indicate that this is the case. In addition, changes in annual revenues are used as a proxy for changes in profitability since cost data is not readily available. For the most part, NMFS does not expect any small entity to cease operation as a result of this rulemaking, regardless of the alternative implemented by the Agency. There are two cases where small entities might cease operation if no adjustments are made to the composition of their operations. They include small entities composed entirely of fast-speed ferry services and fast-speed whale watching vessels. Without the ability to pick up the increased demand for regular-speed ferry or regular-speed whale watching trips as a result of temporary cessation of high-speed vessel operations whenever a DMA is in place, these entities may cease operations under any Alternatives containing DMAs. The economic impacts of the proposed rule as relates to small entities are as follows.

Description of Affected Small Entities

There are 7 industries directly affected by this proposed rulemaking as follows: commercial shipping, high-speed passenger ferries, regular-speed passenger ferries, high-speed whale watching vessels, regular-speed whale watching vessels, commercial fishing vessels, and charter fishing vessels. This analysis uses size standards prescribed by the Small Business Administration (SBA). Specifically, for international and domestic shipping operators, the SBA size standard for a small business is 500 employees or less. The same threshold applies for international cruise operators and domestic ferry service operators. For whale watching operators and charter fishing commercial fish harvesters,

the SBA threshold is $6.0 million of average annual receipts. For commercial fishing operators, the SBA threshold is $3.5 million of average annual receipts. The number of small entities affected by the proposed rule-making by industry are as follows: 372 commercial shipping vessels of various classifications, 33 passenger ships, 345 commercial fishing vessels, 40 charter fishing vessels, 9 high-speed passenger ferries, 8 regular-speed passenger ferries, 3 high-speed whale watching vessels and 5 regular-speed whale watching vessels.

Economic Impacts

Preferred Alternative (Right Whale Ship Strike Reduction Strategy)

The preferred alternative is comprised of management measures that would define specific areas on a seasonal basis and requires vessels to reduce speed to avoid right whale strikes. In addition, the preferred alternative would implement dynamic management areas (DMAs) on a case-by-case basis outside of designated areas specified in this rule. In addressing the speed reduction option, NMFS analyzed impacts of a speed restriction of 10, 12, and 14 knots.

The proposed option of a speed restriction of 10 knots would reduce annual revenues to vessels as follows. Commercial shipping 0.18% of annual receipts, passenger cruise vessels 0.20%, high-speed passenger ferries 9.8%, regular-speed passenger ferries 7.9%, high-speed whale watching vessels 8.3%, regular-speed whale watching vessels 3.8%, commercial vessels 0.4%, charter fishing vessels 8.9%.

At a speed of 12 knots, all vessels defined as small entities, with the exception of high-speed passenger ferries and high-speed whale-watching vessels, show less adverse economic impact than the proposed option ranging from less than 0.1% of annual receipts

for commercial fishing vessels to 5.2% for regular-speed passenger ferries. The economic impact to high-speed passenger ferries and whale-watching vessels are estimated to be the same as the proposed option, 9.8 % and 8.3 %, respectively.

For the 14-knot option, with the exception of the high-speed passenger ferries and high-speed whale-watching vessels which incur the same economic impact as compared with the proposed option, 9.8 % and 8.3 %, all vessels show less adverse economic impacts than the proposed option from less than 0.1% reduction in annual receipts for commercial fishing vessels to 2.6% for regular-speed passenger ferries.

Based on this analysis, NMFS concludes that operators of regular-speed passenger ferries, regular-speed whale-watching vessels, and charter fishing vessels would prefer either the 12 or 14 knot options. However, NMFS' scientists and other independent scientists have determined that a higher speed restriction increases likelihood of a ship striking a right whale. Furthermore, scientists have shown that only a small percentage of ship strikes occur at 10 knots, and those that do usually result in injury rather than death. Therefore, among the three speed restriction options, the 10 knots option would afford the preferred option for right whale recovery and from a biological standpoint, a speed restriction of either 12 or 14 knots are not preferred options for protecting the critically endangered right whale.

NMFS concludes that there would be disproportionate impacts from implementation of this proposed option between the group consisting of passenger ferries, high-speed whale watching vessels, and charter fishing vessels and all other types of vessels included in this IRFA. In addition, NMFS has determined that there may be disproportionate impacts between large commercial shipping and large passenger vessels,

such as Carnival Cruise Lines, Chevron, Maersk, etc. and the group consisting of passenger ferries, high-speed whale watching vessels, and charter fishing vessels. This conclusion is based on the assumption these large vessels would be less adversely affected than their companion small commercial and shipping vessels which were found to be adversely affected, on average, by the 0.18% for the 10 knot speed restriction, whereas, reductions to revenues for small passenger ferries, high-speed whale watching vessels, and charter fishing vessels would range from 7.9 % to 9.8%.

No-Action Alternative

The no-action option would be preferable to all small entities, particularly to all passenger ferries, high-speed whale watching vessels, and charter fishing vessels. This determination is based on the fact that the reduction in annual revenues as a percentage of total revenue for these three classes of vessels under the proposed alternative and proposed speed restriction would exceed approximately 8% annually.

Dynamic Management Areas (DMA) Only Alternative

One alternative considered in the DEIS is the use of DMAs as described in the preamble, excluding all other options that are part of the proposed rule. NMFS has determined that this alternative would be preferable to small businesses as compared to the proposed alternative because vessels would not be required to reduce speeds in seasonally managed areas as described in the preamble. Vessels would simply be required to follow speed restrictions for shorter time frames in a smaller DMA in response to right whale sightings. However, relying solely on this alternative would not afford the needed protection to right whales. This measure calls for being able to identify right whale aggregations in order to trigger DMAs, but as identification of right whale

aggregations is not always possible in practice, relying on this measure would have only a minor, positive effect on right whale population size and may not reduce ship strikes sufficiently to promote population recovery. In addition, relying on this alternative would impose substantial costs on government resources in terms of the monitoring and assessment activities needed to implement the DMAs.

Speed Restrictions in Designated Areas Only Alternative

An alternative considered in this proposed rule is the use of speed restrictions in designated areas that are more extensive than those prescribed in the proposed rule. The designated areas considered under this alternative are both larger in size and would extend for a greater length of time, with the exception of those located in the southeastern part of the United States where speed restriction would be in place for a shorter length of time. This would require vessels to travel at slower speed for a greater period of time and throughout a greater range, which may cause greater adverse economic impacts to small entities when compared to the proposed alternative. However, this alternative does not attempt to route ships away from high-density areas of right whales through identified shipping lanes. Furthermore, right whales that are sighted outside of these areas are not protected under this alternative because DMAs are not included. Therefore, as a stand-alone measure, this alternative is less likely to aid the recovery of the right whale population when compared to the proposed alternative.

Use of Recommended Shipping Routes Alternative

This alternative would simply designate recommended shipping lanes away from areas where right whales are known to congregate without any other measures. NMFS has not yet designated port access routes; therefore the economic impact of this

alternative on small entities is indeterminate at this time. If, in the future, NMFS decides to implement this alternative, an IRFA will be conducted when all port access routes are known and analyzed. This alternative may not provide sufficient protection to effectively reduce the occurrence of ship strikes and therefore it is also less likely to aid in the recovery of right whale populations when compared with the proposed alternative.

"Combination of Alternatives" Alternative

This alternative combines the more restrictive designated areas, DMAs, and recommended shipping routes (the previous three alternatives considered in this IRFA). Impacts to small entities are expected to be greater under this alternative when compared to the proposed alternative, due to the use of designated areas that are generally greater in size and greater in length of time as compared to those prescribed in the proposed alternative. Therefore, NMFS has determined that this alternative will be less preferable to small businesses since it has more adverse economic impacts. This alternative would provide a higher level of protection to the right whale population since it would reduce the amount and/or severity of ship strikes when compared with the proposed alternative.

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