

**APPENDIX A**  
**Sovereign Vessels**

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## **SOVEREIGN VESSELS**

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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 speed restrictions 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 rule) would be expected to consult under Section 7 of the Endangered Species Act. As Section 7 consultations are not considered an operational measure, they are not included in the main text of the final environmental impact statement (FEIS). 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 FEIS.

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### **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, a submarine base in Groton, Connecticut, homeport to 15 vessels; Little Creek amphibious base in Virginia, with 13 vessels; Norfolk, Virginia, with 64 vessels; Kings Bay, Georgia, with 6 vessels; and Mayport, Florida, with 18 vessels.<sup>1</sup>

## **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

<sup>1</sup> ‘List of Homeports’ (As of August 19,2005)  
<http://www.chinfo.navy.mil/navpalib/ships/lists/homeport.html>

snapshots of the locations of all LANTFLEET ships. Both fleets were sampled every five 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).<sup>2</sup> 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.<sup>3</sup> 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).

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## 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:

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<sup>2</sup> These noise estimates exclude submarines and any noise from sonar.

<sup>3</sup> 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 Alternatives 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.

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## **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.

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## **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 31<sup>st</sup> 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 Rappahannock 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 a DEIS and written scoping comments  
&  
Notice of Availability (NOA) of the DEIS and comments**

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Dated: June 16, 2005.

**P. Michael Payne,**

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

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## 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](mailto:greg.silber@noaa.gov); or Barb Zoodsma, Southeast Regional Office, NMFS, 263 13<sup>th</sup> Avenue South, St. Petersburg, FL 33701; telephone (904) 321-2806, e-mail [barb.zoodsma@noaa.gov](mailto: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

- Caswell, H., M. Fujiwara, and S. Brault. 1999. Declining survival probability threatens the North Atlantic right whale. *Proc. Nat. Acad. Sci.* 96:3308-3313.
- Jensen, A.S., and G.K. Silber. 2003. Large whale ship strike database. U.S. Dep. Commerce, NOAA Technical Memorandum NMFS-F/OPR 25, 37 p.
- 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.

[FR Doc. 05-12352 Filed 6-21-05; 8:45 am]

BILLING CODE 3510-22-S

## 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](mailto: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, 2001), 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 <sup>1</sup>  |
| 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 <sup>2</sup> ; 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:<br>Effects on freedom of navigation, application to foreign flag vessels in innocent passage, and gaining international awareness and acceptance; and<br>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   |

<sup>1</sup> Acknowledged indicates that NMFS considered the comment, but did not believe a response was warranted.

<sup>2</sup> 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)**

| <b>Comment Number</b>   | <b>Specific Comment</b>   | <b>Response</b>  |
|---|---|--|
| <p><b>6</b><br/><b>(Continued)</b></p>  | <p>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.</p> | <p>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.</p> |
|   | <p>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.</p>  | <p>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.</p>  |
| <p><b>7</b></p>   | <p>The comprehensive measures included in Alternatives 5 and 6 have the best chance of meeting this criteria and complying with the ESA and MMPA.</p>   | <p>Acknowledged</p>  |
|   | <p>NMFS should examine carefully in the DEIS the impact on right whales of delaying implementation of protective measures.</p>  | <p>Outside scope of the DEIS</p>   |
|   | <p>Agrees that NMFS has both the authority and the obligation to take immediate measures to protect this imperiled marine mammal.</p>   | <p>Acknowledged</p>  |
|   | <p>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.</p>   | <p>Acknowledged</p>  |
|   | <p>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.</p>   | <p>Acknowledged</p>  |
|   | <p>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.</p>   | <p>Acknowledged</p>  |
|   | <p>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.)</p>                                       | <p>Acknowledged</p>  |
|   | <p>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.</p>                            | <p>The DEIS analyzes 10, 12 and 14 –knot speed restrictions for all alternatives.</p>  |
| <p>Mandatory shipping routes are insufficient by themselves and must be included as part of a comprehensive strategy to protect right whales.</p> | <p>Routing measures are analyzed in alternatives 4, 5, and 6. Alternatives 5 and 6 combine routing measures with additional measures.</p>   |  |

| Written Comments from Right Whale Ship Strike NOI (June 22, 2005) |  |   |
|---|--|---|
| Comment Number  | Specific Comment   | Response  |
| 7<br>(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  |

| <b>Written Comments from Right Whale Ship Strike NOI (June 22, 2005)</b> |  |  |
|--|--|--|
| <b>Comment Number</b>  | <b>Specific Comment</b>  | <b>Response</b>  |
| <b>8<br/>(Continued)</b>   | 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.  |
| <b>9</b>   | 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 <i>TVA v. Hill</i> , 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  |
| <b>9</b><br><b>(Continued)</b>                                    | 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.   |
| <b>10</b>   | 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  |
| <b>11</b>   | 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)**

| <b>Comment Number</b>     | <b>Specific Comment</b>   | <b>Response</b>  |
|---------------------------|---|--|
| <b>11<br/>(Continued)</b> | 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.   |
| <b>12</b>                 | 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.   |
| <b>13</b>                 | 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)**

| <b>Comment Number</b>           | <b>Specific Comment</b>  | <b>Response</b>   |
|---------------------------------|--|---|
| <b>16</b><br><b>(Continued)</b> | 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.   |
| <b>17</b>                       | 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.   |
| <b>18</b>                       | 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  | 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 |

**Written Comments from Right Whale Ship Strike NOI (June 22, 2005)**

| <b>Comment Number</b> | <b>Specific Comment</b>  | <b>Response</b>   |
|-----------------------|--|---|
|                       | 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.   | the year the whales are present.  |
| <b>19</b>             | Application of plan to recreational vessels over 65 feet is unsupported and unreasonable. The 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.  | NMFS considered and rejected exempting 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. |
| <b>20</b>             | 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.   |
| <b>21</b>             | 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)**

| <b>Comment Number</b>     | <b>Specific Comment</b>   | <b>Response</b>  |
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| <b>21<br/>(Continued)</b> | 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   | 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   |
|----------------|--|--|
|                | 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 . |  |
| 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.   |

| <b>Written Comments from Right Whale Ship Strike NOI (June 22, 2005)</b> |  |   |
|--|--|---|
| <b>Comment Number</b>  | <b>Specific Comment</b>  | <b>Response</b>   |
| <b>23<br/>(Continued)</b>  | 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.   |
| <b>24</b>  | 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.   |
| <b>25</b>  | 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. |
| <b>26</b>  | 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.   |
| <b>27</b>  | 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.  |
| <b>28</b>  | East and west coast submarine travel and the use of active sonar are potentially detrimental to marine life.   | Acknowledged  |

| <b>Written Comments from Right Whale Ship Strike NOI (June 22, 2005)</b> |   |   |
|--|---|---|
| <b>Comment Number</b>  | <b>Specific Comment</b>   | <b>Response</b>   |
| <b>29</b>  | 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.   |
| <b>30</b>  | 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  |
| <b>31</b>  | 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.  |
| <b>32, 33</b>  | 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  |
| <b>34</b>  | Supportive of Alternative 6   | Acknowledged  |
| <b>35, 36</b>  | Encourages going forward with implementing the Strategy as written.   | Acknowledged  |
| <b>37</b>  | Supports guidelines to help protect and minimize damage to right whales.  | Acknowledged  |
| <b>38</b>  | 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  |
| <b>39</b>  | 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  |



| <b>Written Comments from Right Whale Ship Strike NOI (June 22, 2005)</b> |   |   |
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| <b>Comment Number</b>  | <b>Specific Comment</b>   | <b>Response</b>   |
| <b>40</b>  | 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.   |
| <b>41</b>  | Supports Alternative 6  | Acknowledged  |
| <b>42</b>  | 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.              |
| <b>43</b>  | Please rush into effect the draft proposal to slow ships down.  | Acknowledged; see response to comments 16 and 29.                           |

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minimal reasonable activity levels (Reduced Operations Alternative), to the highest reasonable activity levels that could be supported by current facilities, plus the potential expansion and construction of new facilities for existing capabilities and for specifically identified future actions (Expanded Operations Alternative). The No Action Alternative would continue current mission support work at LANL and includes approved interim actions and facility construction, expansions or modifications, and decontamination and decommissioning for which NEPA impact analysis has already been completed. All alternatives assume LANL will continue to operate as a NNSA national security laboratory for the foreseeable future.

Following the end of the public comment period described above, the NNSA will consider and respond to the comments received, and issue the Final LANL SWEIS. The NNSA will consider the environmental impact analysis presented in the Final LANL SWEIS, along with other information, in determining the Record of Decision for the continued operation of LANL.

Signed in Washington, DC, this 26th day of May 2006.

**Thomas P. D'Agostino,**

*Acting Administrator, National Nuclear Security Administration.*

[FR Doc. 06-6055 Filed 7-6-06; 8:45 am]

BILLING CODE 6450-01-P

## DEPARTMENT OF ENERGY

### Western Area Power Administration

#### Big Stone II Power Plant and Transmission Project Draft Environmental Impact Statement (DOE/EIS-0377)

**AGENCY:** Western Area Power Administration, DOE.

**ACTION:** Notice extending comment period.

**SUMMARY:** The Western Area Power Administration (Western), U.S. Department of Energy (DOE), Upper Great Plains Customer Service Region, and the Rural Utilities Service (U.S. Department of Agriculture), and U.S. Army Corps of Engineers (U.S. Department of Defense) as cooperating agencies, announce the extension of the public comment period for the Big Stone II Power Plant and Transmission Project Draft Environmental Impact Statement (EIS).

**DATES:** The comment period on the Draft EIS is extended until July 24, 2006.

**ADDRESSES:** Written comments on the Draft EIS should be addressed to Ms. Nancy Werdel, NEPA Document Manager, Western Area Power Administration, P.O. Box 281213, Lakewood, CO 80228-8213, fax (720) 962-7263 or 7269, or e-mail [BigStoneEIS@wapa.gov](mailto:BigStoneEIS@wapa.gov).

**FOR FURTHER INFORMATION CONTACT:** For further information or to request a copy or summary of the Draft EIS, contact Ms. Nancy Werdel, NEPA Document Manager, Western Area Power Administration, P.O. Box 281213, Lakewood, CO 80228-8213, (800) 336-7288, fax (720) 962-7263 or 7269, or e-mail [BigStoneEIS@wapa.gov](mailto:BigStoneEIS@wapa.gov).

For general information on DOE's NEPA review process, contact: Carol M. Borgstrom, Director, Office of NEPA Policy and Compliance, EH-42, U.S. Department of Energy, Washington, D.C. 20585, (202) 586-4600 or (800) 472-2756.

**SUPPLEMENTARY INFORMATION:** On May 23, 2006, Western published a notice in the *Federal Register* (71 FR 29617) announcing the availability of the Draft EIS and a schedule for public hearings. The Environmental Protection Agency published its notice of availability of the Draft EIS (EPA EIS No. 20060178) on May 19, 2006 (71 FR 29148), that began a 45-day comment period, ending July 3, 2006. Based on requests received from agencies and members of the public, Western is extending the comment period until July 24, 2006. Further information on this proceeding is contained in the DOE Notice of Availability previously referenced.

Dated: June 28, 2006.

**Michael S. Hacskeylo,**  
*Administrator.*

[FR Doc. E6-10656 Filed 7-6-06; 8:45 am]

BILLING CODE 6450-01-P

## ENVIRONMENTAL PROTECTION AGENCY

[ER-FRL-6677-1]

### Environmental Impact Statements and Regulations; Availability of EPA Comments

Availability of EPA comments prepared pursuant to the Environmental Review Process (ERP), under section 309 of the Clean Air Act and Section 102(2)(c) of the National Environmental Policy Act as amended. Requests for copies of EPA comments can be directed to the Office of Federal Activities at 202-564-7167. An explanation of the ratings assigned to draft environmental

impact statements (EISs) was published in FR dated April 7, 2006 (71 FR 17845).

### Draft EISs

**EIS No. 20060125, ERP No. D-FRC-L05235-WA,** Baker River Hydroelectric Project, Application to Relicense the Upper Baker and Lower Baker Developments, Mt. Baker-Snoqualmie National Forest, Baker River, Whatcom and Skagit Counties, WA.

**Summary:** Although EPA had no objections to the proposed project, EPA recommended that updated information be provided in the final EIS on the CWA 401 water quality certification. Rating LO.

**EIS No. 20060160, ERP No. D-BPA-L08064-OR,** Klondike III Wind Project (300 megawatts {MW}) and Biglow Canyon Wind Farm (400 megawatts {MW}) Integration Project, Construction and Operation of a Double-Circuit 230-Kilovolt (kV) Transmission, Sherman County, OR.

**Summary:** EPA expressed environmental concern about wetland impacts and requested additional information on tribal consultations and outcomes, and extent of public involvement in the project planning. Rating EC1.

**EIS No. 20060163, ERP No. DB-COE-K36100-CA,** American River Watershed Project, Post Authorization Decision Document, Folsom Dam Raise, Folsom Bridge Project, Propose to Construct a Permanent Bridge and Roadway across the American River, City of Folsom, Sacramento County, CA.

**Summary:** EPA expressed environmental concerns about impacts to air quality and requested additional information related to mitigation and partnerships with local transportation agencies to reduce the traffic impacts in the area. Rating EC2.

### Final EISs

**EIS No. 20060145, ERP No. F-COE-D35060-PA,** Allegheny and Ohio Rivers Commercial Sand and Gravel Dredging Operations, Granting and Extending Permits for Continuance of Dredging and US Army COE Section 10 and 404 Permits Issuance, PA.

**Summary:** EPA continues to express environmental concerns about shallow river bottom impacts and CWA Section 404 issues. EPA requested the adoption of an adaptive management process, additional conceptual mitigation, and permit restrictions.

**EIS No. 20060169, ERP No. F-FRC-C03015-00,** Crown Landing Liquefied

Natural Gas Terminal, Construct and Operate in Gloucester County, NJ and New Castle County, DE; and Logan Lateral Project, Construct and Operate a New Natural Gas Pipeline and Ancillary Facilities in Gloucester County, NJ and Delaware, PA.

**Summary:** While EPA has no objection to the proposed action, EPA did request clarification on mitigation plans for wetlands and shallow water habitat impacts, as well as a Clean Air Act General Conformity Analysis.

**EIS No. 20060175, ERP No. F-FRC-G03029-LA**, Creole Trail Liquefied National Gas (LNG) Terminal and Pipeline Project, Construction and Operation, Cameron, Calcasieu, Beauregard, Allen, Jefferson, Davis and Acadia Parishes, LA.

**Summary:** EPA expressed environmental concerns about uncertainties over the evaluation of dredged material and requested that a Record of Decision not be issued until these concerns are adequately addressed.

**EIS No. 20060176, ERP No. F-FRC-G03028-00**, Port Arthur Liquefied Natural Gas (LNG) Project, Construction and Operation, U.S. Army COE Section 10 and 404 Permits, (FERC/EIS-0182D), Jefferson and Orange Counties TX and Cameron, Calcasieu and Beauregard Parishes, LA.

**Summary:** EPA does not object to the preferred action.

**EIS No. 20060202, ERP No. F-NOA-E86003-00**, Snapper Grouper Fishery, Amendment 13C to the Fishery Management Plan, Phase Out Overfishing of Snowy Grouper, Golden Tilefish, Vermilion Snapper and Sea Bass, Implementation, South Atlantic Region.

**Summary:** EPA does not object to the proposed action.

**EIS No. 20060210, ERP No. F-UAF-K11109-AZ**, Barry M. Goldwater Range (BMGR), Integrated Natural Resources Management Plan (INRMP), Implementation, Yuma, Pima, and Maricopa Counties, AZ.

**Summary:** No formal comment letter was sent to the preparing agency.

**EIS No. 20060224, ERP No. F-GSA-L80018-WA**, Peace Arch Port of Entry Redevelopment Project, Improvements to Security, Safety and Functionality, Canadian Border in Blaine, Whatcom County, WA.

**Summary:** EPA's previous issues were resolved, therefore EPA does not object to the proposed action.

Dated: July 3, 2006.

**Ken Mittelholtz**,

*Environmental Protection Specialist, Office of Federal Activities.*

[FR Doc. E6-10678 Filed 7-6-06; 8:45 am]

**BILLING CODE 6560-50-P**

## ENVIRONMENTAL PROTECTION AGENCY

[ER-FRL-6676-9]

### Environmental Impacts Statements; Notice of Availability

**Responsible Agency:** Office of Federal Activities, General Information (202) 564-7167 or <http://www.eps.gov/compliance/nepa/>.

Weekly receipt of Environmental Impact Statements

Filed 6/26/2006 through 6/30/2006 Pursuant to 40 CFR 1506.9.

**Special Notice:** EIS's filed June 19 through June 23, 2006 scheduled to appear in the **Federal Register** on June 30, 2006 was published on Monday July 3, 2006. Comment periods and wait periods will be calculated from June 30, 2006.

**EIS No. 20060274, Fifth Draft Supplement, AFS, 00**, Northern Spotted Owl Management Plan, Removal or the Modification to the Survey and Management Mitigation Measures, Standards and Guidelines (to the Northwest Forest Plan) New Information to Address Three Deficiencies Final Supplemental EIS (2004), Northwest Forest Plan, OR, WA, and CA, Comment Period Ends: 10/5/2006, Contact: Kathy Anderson 503-808-2256.

**EIS No. 20060275, Draft EIS, AFS, OR**, Maury Mountains Allotment Management Plan, To Implement or Eliminate Livestock Grazing in Six Allotments in the Maury Mountains of the Ochoco National Forest, Prineville, OR, Comment Period Ends: 8/21/2006, Contact: Kevin Keown 541-416-6500.

**EIS No. 20060276, Draft EIS, FRC, TX**, Calhoun Point Comfort Liquefied Natural Gas (LNG) Project, (Docket Nos. CP05-91-000 and CP06-380-00) Construction of New Pipeline on 73 acres, Port of Port Lavaca, Calhoun and Jackson Counties, TX, Comment Period Ends: 8/21/2006, Contact: Todd Sedmak 1-866-208-FERC.

**EIS No. 20060277, Draft EIS, NNS, NM**, Los Alamos National Laboratory Continued Operations, Los Alamos County, NM, Comment Period Ends: 9/5/2006, Contact: Elizabeth Wither 505-845-4984.

**EIS No. 20060278, Draft DIS, NOA, 00**, North Atlantic Right Whale Ship

Strike Reduction Strategy, To Implement the Operational Measures to Reduce the Occurrence and Severity of Vessel Collisions with the Right Whale, Serious Injury and Deaths Resulting from Collisions with Vessels, Comment Period Ends: 9/5/2006, Contact: Jessica Gribbon 703-706-9404.

**EIS No. 20060279, Final Supplement, AFS, 00**, Southwestern Region Amendment of Forest Plans, Implementation, Updated Information, Standards and Guidelines for Northern Goshawk and Mexican Spotted Owl, AZ and NM, Wait Period Ends: 8/7/2006, Contact Rita Moots 505-842-3125.

**EIS No. 20060280, Draft EIS, AFS, 00**, North Zone Range 05 Project, Reauthorizing Livestock Grazing on Eight Existing Allotments, Black Hills National Forest, Bearlodge and Northern Hills Ranger Districts, Crook County, WY and Lawrence County, SD, Comment Period Ends: 8/21/2006. Contact: Alice Allen 605-673-4853.

### Amended Notices

**EIS No. 20060178, Draft EIS, WPA, 00**, Big Stone II Power Plant and Transmission Project, Propose Power Plant, Transmission Alternatives, and Substation Modification (DOE/EIS-0377), U.S. Army COE Section 10 and 404 Permits, Big Stone City, Grant County, SD and Big Stone County, MN, Comment Period Ends: 7/24/2006, Contact: Nancy Werdel 720-962-7251.

Revision of **Federal Register** Notice Published on 5/19/2006: Extended Comment Period from 7/3/2006 to 7/24/2006.

Dated: July 3, 2006.

**Ken Mittelholtz**,

*Environmental Protection Specialist, Office of Federal Activities.*

[FR Doc. 06-6077 Filed 7-6-06; 8:45 am]

**BILLING CODE 6560-50-M**

## ENVIRONMENTAL PROTECTION AGENCY

[EPA-HQ-OPP-2006-0312; FRL-8069-8]

### Notice of Filing of Pesticide Petitions for Establishment or Amendment of Regulations for Residues of a Pesticide Chemical in or on Various Commodities

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice.

**SUMMARY:** This notice announces the initial filing of pesticide petitions

| Comments on the Draft Environmental Impact Statement for Right Whale Ship Strike Reduction |      |  |   |
|--|------|--|---|
| No.  | Sub. | Specific Comment   | Response  |
| 1  |      | Supportive   | Acknowledged  |
| 2  | a    | Requests U.S. government vessels are included (except during extreme circumstances) or NMFS should reinitiate consultation, exempt vessels should have two on-board trained observers and use either aerial spotters or passive sonar. | U.S. government vessels remain exempt in the final rule. NMFS expects to review Biological Opinions and requests some agencies to reinitiate ESA consultation, although the decision to reinitiate lies with the action agency, and not NMFS. A number of requirements including trained observers are included in several of the reasonable and prudent measures in current Biological Opinions. |
|  | b    | Supports alternative 5 at 10 knots, and urges NMFS to implement regulations by the November calving season.  | Acknowledged; the final regulations will be implemented in a timely manner; however legal requirements must be followed, including undergoing a peer review, responding to comments, revising the proposed rule, clearance, OMB review, and releasing the FEIS. It is not until all of these legal mandates are fulfilled that the final rule can be implemented.                                 |
| 3  |      | Same as #2   | See response to # 2   |
| 4  |      | Same as #2   | See response to # 2   |
| 5  |      | Same as #2   | See response to # 2   |
| 6  |      | Same as #2   | See response to # 2   |
| 7  |      | Same as #2   | See response to # 2   |
| 8  |      | Same as #2   | See response to # 2   |
| 9  |      | Same as #2   | See response to # 2   |
| 10   |      | Same as #2   | See response to # 2   |
| 11   |      | Same as #2   | See response to # 2   |
| 12   |      | Same as #2   | See response to # 2   |
| 13   |      | Same as #2   | See response to # 2   |
| 14   |      | Same as #2   | See response to # 2   |
| 15   |      | Same as #2   | See response to # 2   |
| 16   |      | Same as #2   | See response to # 2   |
| 17   |      | Same as #2   | See response to # 2   |
| 18   |      | Same as #2   | See response to # 2   |
| 19   |      | Same as #2   | See response to # 2   |
| 20   |      | Same as #2   | See response to # 2   |
| 21   |      | Same as #2   | See response to # 2   |
| 22   |      | Same as #2   | See response to # 2   |
| 23   |      | Same as #2   | See response to # 2   |

| Comments on the Draft Environmental Impact Statement for Right Whale Ship Strike Reduction |      |  |  |
|--|------|--|--|
| No.  | Sub. | Specific Comment   | Response   |
| 24   |      | Same as #2   | See response to # 2  |
| 25   |      | Same as #2   | See response to # 2  |
| 26   |      | Same as #2   | See response to # 2  |
| 27   |      | Same as #2   | See response to # 2  |
| 28   |      | Same as #2   | See response to # 2  |
| 29   | a    | 1. DMAs - It is imperative that the effective date and time of the initial designation of a DMA be the same as or several hours after the actual notice of mariners through the USCG's broadcast notice to mariners. NMFS should model the initial designation and rulemaking process after the USCG's emergency <i>Limited Access Areas</i> designation process. "...to delay the effective date of the DMA for several days but leave the DMA in place for the full 15-day period from the effective date of the DMA rule, would endanger the right whales during the unnecessary administrative process in the front end and pose undue burden on the shipping industry on the back end." | Consistent with changes in restrictions, mariner obligations under the DMA program are voluntary only (for the preferred alternative). DMAs will be implemented as soon as possible following a sighting that triggers a DMA. NMFS will issue announcements of DMAs to mariners via its customary maritime communication media (e.g., NOAA Weather radio, web sites, e-mail and fax distribution lists), and any other available media outlets. NMFS intends to monitor voluntary compliance and will consider making them mandatory if compliance is low. |
|  | b    | 2. Block Island Sound SMA - Current rectangular SMA will not be effective for vessels en-route to New Haven, Bridgeport, and New London, CT. Recommends that the western boundary of the proposed SMA be revised to a line drawn southwest from Montauk Point to intersect with an extended (to the west) southern boundary of the proposed SMA.   | In considering the comments and reviewing sighting data in this area, NMFS has decided not to alter the boundary of the Block Island Sound SMA identified in the proposed rule. A qualitative assessment suggests that the boundary of the Block Island Sound SMA is appropriate because all right whale sightings in the URI and NMFS databases from the Rhode Island coast to 30 nm offshore of Long Island, Block Island, and Martha's Vineyard Island are included within the current SMA.   |
|  | c    | 3. Enforcement should be within the scope of the EIS and should be addressed in the final rule as it has a direct impact on and is part of the operational measures.   | Enforcement continues to only be addressed in the rule and not the EIS. NOAA is committed to implementing an effective enforcement strategy and will continue to work with all of its interagency partners, including the USCG, to do so. In addition, NOAA has identified some available technologies that could potentially be used to supplement existing enforcement capabilities and will further explore the application of these measures.  |
| 30   |      | Same as #2   | See response to # 2  |
| 31   |      | Same as #2   | See response to # 2  |
| 32   |      | Same as #2   | See response to # 2  |
| 33   |      | Supportive   | Acknowledged   |

| Comments on the Draft Environmental Impact Statement for Right Whale Ship Strike Reduction |      |   |  |
|--|------|---|--|
| No.  | Sub. | Specific Comment  | Response   |
| 34   |      | Supports 10-knot speed limit, and extension of the regulations to US government vessels (except when vessels are already operating under mitigation measures or circumstances involving human safety missions, national disaster, or times of warfare. Supports alternative 5.  | Acknowledged   |
| 35   |      | Proposed rule is overdue, concerned that the rule exempts vessels of Federal agencies, concerned by NOAA's budget cuts.   | Acknowledged   |
| 36   |      | Urges NOAA to immediately adopt a comprehensive and adaptive suite of management measures that includes both vessel speed limit and routing.  | Acknowledged   |
| 37   | a    | Suggests that any studies/data or necropsies be peer-reviewed by individuals not associated with NOAA/NMFS or receiving funding from said agencies in compliance with Section 515 of the Department of Commerce's Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Disseminated Information and NOAA's Information Quality Guidelines.                            | NMFS followed agency guidelines under the Data Quality Act, and conducted a pre-dissemination review. The proposed rule, Draft EIS, and Economic Analysis underwent peer-review following the public hearings, and the comments and recommendations from the review were incorporated into the Final EIS and final rule.   |
|  | b    | A 12-knot speed restriction is a reasonable accommodation.  | Acknowledged   |
|  | c    | If speed restrictions and traffic lanes are to be implemented [in the SEUS], they should be limited to the Critical Habitat and not extend to the MSRS boundary. Requests a review of the proposed seasonal implementation of measures in the SEUS, because recent aerial surveys attest to the fact that animals are not present in the critical habitat before December and are gone by the end of March. | The boundary of the Southeast SMA extends to the MSRS boundary because the management areas are a confluence of areas where whales are known to occur and where ships transit, whereas the critical habitat is primarily based on whale sightings. Independent sighting data and NMFS data indicate that whales are present in the SEUS as early as November and as late as April, when they are entering and leaving the SEUS.  |
|  | d    | DMAs need to be "actively" managed (i.e. the agency should continuously confirm the presence of whale in a DMA throughout its 15-day implementation period).  | In the NEUS, southern portion of the MAUS, and SEUS, surveys are systematic during the season when whales are known to occur, and in that respect, there is potential for a DMA would be actively managed in season, although the infrastructure for conducting an out of season aerial survey is not currently in place. This is why the 15-day implementation period is based on the expected residence time for right whales (Clapham and Pace, 2001), in other words, where DMAs are implemented, it is likely that the aggregation will remain there for the entire time. |
|  | e    | Update economic studies every year to reflect current fuel prices.  | The economic analysis in the FEIS has been updated to include 2008 fuel prices.  |

| Comments on the Draft Environmental Impact Statement for Right Whale Ship Strike Reduction |      |  |   |
|--|------|--|---|
| No.  | Sub. | Specific Comment   | Response  |
| 38   | a    | Concerned with speed restrictions from the pilot boarding area near the sea buoy to the shoreline due to hazardous weather during the months the restrictions are proposed for. Some vessels, especially large, high sided vessels such as large container ships or car carriers...will require speeds well in excess of the proposed 10-knot speed restriction in order to pass through the breakwaters safely. | The final rule indicates that " A vessel may operate at a speed necessary to maintain safe maneuvering speed instead of the required 10 knots only if justified because the vessel is in an area where oceanographic, hydrographic and/or meteorological conditions severely restricts the maneuverability of the vessel and need to operate at such speed is confirmed by the pilot on board or, when a vessel is not carrying a pilot, the master of the vessel." |
|  | b    | 1) Is there any provision for enforcement of the proposed rules and fines for violation?   | NOAA's Civil Administrative penalty schedules can be found online at: <a href="http://www.gc.noaa.gov/enforce-office3.html">http://www.gc.noaa.gov/enforce-office3.html</a> .   |
|  | c    | 2) What is the definition of "speed" as used in the rules, do you consider the effects of tidal current when defining speed in your proposal?  | <i>Speed in the rule is measured as "speed over ground".</i>  |
|  | d    | 3) Do the proposed rules have language which exempts vessels otherwise regulated to facilitate safety of navigation, particularly when entering or departing the narrow jetty entrance to/from Jacksonville? See comment for remaining questions 4 through 11.   | See response to # 38a   |
| 39   |      | Requests an extension on the comment period on the rule.   | The comment period for both the proposed rule and DEIS were extended for 39 and 30 days, respectively.  |
| 40   |      | Same as #2   | See response to # 2   |
| 41   |      | Same as #2   | See response to # 2   |
| 42   |      | Supportive; would like to have something left in nature for kids to see, protect right whales before it is too late.   | Acknowledged  |
| 43   |      | Supports a 10-knot speed restriction, asks for urgency   | Acknowledged  |
| 44   |      | Move quickly implementing management measures; adopt a 10-knot speed limit; restrictions should apply to all non-sovereign vessels over 65 feet in length; use best available information; and alternatives 5 and 6 are the best options for recovering the species.   | Acknowledged  |
| 45   |      | Supports: dynamic management areas, seasonal management areas, and the 10-knot speed restriction   | Acknowledged  |
| 46   |      | Supports a 10-knot speed restriction, and doesn't feel economic impacts should have a lot of weight in the decision. Supports dynamic management in addition to seasonal management. Asks the agency to do something as soon as possible   | Acknowledged  |
| 47   |      | Supports alternative 6 at 10 knots, and hopes that the rule is implemented for calving season in November 2006.  | Acknowledged  |



| Comments on the Draft Environmental Impact Statement for Right Whale Ship Strike Reduction |      |   |  |
|--|------|---|--|
| No.  | Sub. | Specific Comment  | Response   |
| 48   |      | Urgently asks that the regulations are implemented before the calving season so mothers and infants are not lost.   | The final regulations will not be implemented until all public comments are received and addressed, the peer-review and OMB review are complete, and the EIS is revised based on comments. However, NMFS established recommended routes for vessels in November 2006 prior to the winter calving season.   |
| 49   |      | Anecdotal story about people driving on A1A and pulling over to see whales with binoculars, and commenter would like for his grandchildren to have the same experience. Alternatives 5 and 6 look good. Make considerations for ships (i.e. pilot vessels) when it's going to affect the safety of the ship. Hopes the agency can do something soon before the November calving season.                               | See response to # 38a in reference to the comment about considerations for ship safety. See response to 2b in reference to the comment about the calving season.   |
| 50   | a    | Recommends selecting the lowest speed limit to give the greatest protection to right whales; requests government vessels and contract vessels are required to observe speed restrictions during ordinary operations, but certain exemptions are okay (e.g. human safety, natural disaster or warfare).  | In consultation with other agencies, a determination was made to exempt all sovereign vessels and those under contract. Requirements under Section 7 of the ESA will apply to actions by Federal agencies.   |
|  | b    | Supports alternative 5, and suggests working with the USCG to create a shipping channel outside of the SE right whale critical habitat the extends south of the current SE SMA, so ship speed is restricted through the critical habitat and into the ports and that these vessels have observers on board.   | NMFS has already worked with the USCG to develop lanes which reduce the risk of ship strike. Recommended routes were established in this region in November 2006. While trained observers can be effective in locating whales, in many instances (e.g. at night, high sea states, and when whales are submerged) they will not be effective in detecting whales. Instead, planned and known restrictions will apply at times/locations where whales are very likely to occur and the confluence of vessels and whales is high. |
|  | c    | Hopes NOAA will implement measures as quickly as possible.  | NMFS is working on implementing the measures in a timely fashion, while adhering to review and comment processes required by law.  |
| 51   |      | Concerned that the agency has known about ship strike reduction measures since 2000/2001, but still has not implemented them and that the agency is still one year away from putting measures into place even though a calving season is coming up. "It's imperative that the Agency no longer delay putting this rule in place, including not extending the comment period on the DEIS and these proposed measures." | NMFS received requests both for extensions up to 60 and 90 days on both the proposed rule and DEIS, and requests urging NMFS to not extend the comment period. To accommodate both requests, NMFS granted a 39 and 30 day extension on the rule and DEIS, respectively.  |
| 52   | a    | Concerned about the length of the DEIS, and that several unpublished references in the DEIS were not made available for review (e.g., Vanderlaan and Taggart).  | NMFS did not have the authority to distribute the 'in press' copy of Vanderlaan and Taggart, and had no power over the lag time between receiving an 'in press' copy of the paper and when it was actually published. The paper was published in Marine Mammal Science in January 2007.  |

| Comments on the Draft Environmental Impact Statement for Right Whale Ship Strike Reduction |      |   |   |
|--|------|---|---|
| No.  | Sub. | Specific Comment  | Response  |
|  | b    | The Maryland Port Administration requests an extension to the comment period for at least 60 days after all unpublished draft documents (e.g., Vanderlaan and Taggart) have been made available and the Notice of Availability has been published in the Federal Register.  | The comment period for the DEIS was initially 15 days longer than the minimum 45-day comment period, and then this was extended an additional 30 days. In total, the comment period for the DEIS was 90 days.   |
| 53   | a    | Supports efforts to restore the right whale population, although is concerned with speed restrictions and opposes blanket speed restrictions. Commenter is skeptical that speed restrictions will have any significant impact on the right whale population.  | Acknowledged; research indicates that reducing vessel speed will reduce the severity of ship strikes (Knowlton and Kraus, 2001; Jensen and Silber, 2003; Laist et al., 2001, Pace and Silber, 2005; and Vanderlaan and Taggart, 2007).  |
|  | b    | Also, commenter suggested that there is a low probability of ship encounters with right whales in the mid-Atlantic, based on the assumption in the economic analysis that there would only be one DMA implemented per year in each port in the mid-Atlantic.  | There have been several documented ship strikes in the mid-Atlantic, including a strike in 2001 in VA, in 1998 near the NC/VA state line, 1991 in DE, and 1983 in NJ to name a few (see Jensen and Silber 2003). The economic analysis made an assumption (based on a report by Knowlton et al. 2002) that there would be one DMA per year in the MAUS. The majority of whales in the MAUS would be protected through SMAs, and outside of these measures, there is an estimated one DMA per year. This assumption is from sighting data in the MAUS, a region which has the lowest survey effort of the three regions; however, it is the best available data. |
|  | c    | Requests an extension to the comment period for the DEIS and proposed rule.   | Both the comment periods for the DEIS and the proposed rule were extended 30 and 39 days, respectively.   |
| 54   | a    | Agrees that Section 7 consultation is an appropriate process for exempting Federal vessels from the regulations, if the consultations are initiated and completed.  | Acknowledged  |
|  | b    | Alternative 6 is the bare minimum for protective measures, and alternative 5 would provide the highest level of protection, but commenter suggests ending up somewhere between these two alternatives by using the best available science to propose speed limits in times and places the whales need them most. Supports 10 knots. | Acknowledged  |
|  | c    | Enforcement measures need to be in place before the regulations are implemented.  | Acknowledged  |
|  | d    | Timing is everything; please do not extend the comment period, and consider emergency speed restrictions beginning in November of 2006 for the SE critical habitat area if the regulations are not in place by this time.   | NMFS has requests for 30-, 60-, and 90-day extensions for the comment period. As the environmental stakeholders requested not extending the comment period and the industry requested up to a 90-day extension, NMFS took both requests into consideration when extending the comment period for the rule 39 days and the DEIS 30 days.   |

| Comments on the Draft Environmental Impact Statement for Right Whale Ship Strike Reduction |      |   |  |
|--|------|---|--|
| No.  | Sub. | Specific Comment  | Response   |
| 55   | a    | Supports alternative 5 and a 10-knot speed limit with no exemptions for any vessel that poses a threat to these whales.   | Acknowledged   |
|  | b    | Commenter is disappointed that the entire Chesapeake Bay region is not included.  | Bays and inland waters are not included because these waters are not typical habitat for right whales and to implement speed restrictions in these waters would place an undue economic burden on the industry.  |
|  | c    | Opposes any extension on the comment period and the cooling off period.   | See response to # 54d  |
|  | d    | Supports the increase in funding for enforcement and emergency efforts to implement these protections.  | Acknowledged   |
| 56   |      | "I think that the 10 knot rule will result in anywhere from 40 to 45 percent mortality or serious injury to right whales and I just don't really think that is acceptable. I do think it's a great step in the right direction and that is where we should be heading." Commenter hopes the agency will ensure the proposed rule is implemented efficiently and quickly.                                    | Acknowledged   |
| 57   | a    | Don't know what the cost of enforcing these regulations will be or the infrastructure or policing. "We should talk about the total cost to the taxpayer and also we would like to know if it is more likely that more than two right whales per year...are likely to be saved from mortality."  | Information on enforcement is contained in the final rule, although it is not possible to accurately portray likely costs at this time. At this time, NMFS is unable to predict the actual number of right whales that are likely to be saved from mortality (Section 4.1 of the FEIS addresses the qualitative nature of the analysis). |
|  | b    | The World Wildlife Fund and the Intergovernmental Panel on Climate Change of the United Nations both recommended that in order to cut down on high altitude emissions from aircraft, that the first type of air service that should be cut is air freight. The WWF suggested that "fast shipping" using low emission fuels would be a good way of cutting the enormous pollution created by air freighters. | Outside the scope of the EIS.  |
|  | c    | Commenter asked why a more comprehensive hydrodynamic study hasn't been completed. If the agency doesn't differentiate between the hydrodynamic properties of vessels, it would be putting a serious obstruction in the way of things like the Volvo Race. "Huge numbers of people have to transit the coastal waters by cruise ship and they are going to be affected."                                    | A series of hydrodynamic studies are being conducted. The results will help inform NMFS' decisions regarding vessel speed restrictions.  |

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|  | d    | The regulations will have a greater impact because more ships will likely go to Halifax and it may detract from employment in certain ports. Also yacht races such as Volvo Race and Bermuda Race will be affected and economic impact should be considered. Impacts on cruise ships should be considered. | The impact of vessels diverting to Halifax on employment and income is included in analysis as acknowledged by commenter. Discussion of the impact on cruise industry was included in DEIS and expanded in FEIS. The Volvo yacht race in 2005/2006 arrived in Baltimore in mid-April. In the Baltimore area, most of the race activities occur within the Chesapeake Bay and will not be affected by the seasonal speed restrictions. Under Alternative 6 speed restrictions at the entrance of Chesapeake Bay are proposed from Nov 1 through April 30. The itinerary of the next race 2008/2009 can be developed taking into consideration the proposed speed restrictions. The Bermuda Race is held during the summer months and is not affected by the proposed speed restrictions. The start date of the race is June 15th from Marion, MA. |
|  | e    | The Department of Transportation encourages the use of "fast shipping" to reduce the enormous quantity of traffic going north and south on I-95.   | Acknowledged   |
| 58   | a    | Commenter's company, employees, and captains are in favor of complying with effective measures to preserve whales and other marine life. The company has instituted bow watches when transiting the Port of Jacksonville and has purchased night vision goggles, and participated in reporting programs.   | NMFS encourages mariners to continue voluntary measures to reduce ship strikes.  |
|  | b    | Parts of the proposed rulemaking, such as shipping lanes are effective because it reduces the area that you have to watch for whales. However a blanket approach that applies to all ports and all ships in different areas may not be the most effective solution.  | The rulemaking does not contain a blanket approach; the waters are divided into three regions, each with a different implementation period, based on the best available data.  |
|  | c    | If a captain sees a whale and notify ships in the area, and avoids the whale, it is a very effective strategy to preserve the whales.  | The ability of captains or posted lookouts to detect whales is limited by low/no light levels and high sea states, and the fact that whales are submerged most of the time. Even if a whale is sighted, a mariner must still take evasive action, which is subjective, decreases navigational safety, and may put undue burden on responsible mariners who do so when others do not. Merely providing right whale locations is not adequate without specific expectations of appropriate action to take.   |
|  | d    | Pop-up buoys that can identify the presence of whales and send notification through a satellite sounds like an excellent technology.   | Pop-up buoy identification of whales has several limitations; the whales must be vocalizing, the system would not detect all whales present, and it is not always possible to determine the number of whales without visual verification. This approach would still require evasive action by the mariner.   |

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|     | e    | Speed does not necessarily have a correlation; you can hit a whale and kill it at 10 knots or you can kill it at 14 or 20 knots.  | The probability of killing a whale at 10 knots is less than at 14 or 20 knots. NMFS has used the best available scientific evidence in determining that the use of speed restrictions is an effective means to reduce the likelihood and severity of ship strikes, and has used this evidence to set the limit for the restrictions. See Section 4.1.3 of the FEIS for a summary of this evidence.  |
|     | f    | Pilots in Jacksonville and ship captains are concerned about going through the breakwaters where there is high winds and 6.5 knot cross-currents. Some boats can go through at 10 knots, if they are small and low, but big ships can't go through them that slow and not risk hitting the breakwater. So, there has to be enough flexibility in this rule to allow the safety of the people, ships, and to listen to the pilots who are experts. | See response to # 38a   |
|     | g    | Commenter is in favor of the rule, even though their particular trade line would incur higher costs due to burning more fuel to speed up to make the schedule for customers, and possibly build faster ships in the future to accommodate for lost time at port.  | Increased fuel consumption for vessels having to go faster to make up time is not and should not be included in the economic analysis. The economic analysis conservatively assumes that vessels will not speed up to make up time and hence includes the maximum estimate of delay that would be incurred. If vessels make up for the delay by speeding up then the estimated economic impact would need to be revised to reduce or exclude the cost applied for the time delayed. Further, the indirect economic impact would need to be lowered if the delays are avoided by increasing vessel speeds. |
| 59  | a    | It's important to consider the hydrodynamic characteristics of vessels and the size of vessels that is causing right whales to die after being struck. It would be unfortunate if the rule were implemented at 10 knots, and then one or two years from now find out that there is the same level of deaths, but they were occurring at 10 knots instead of 18 knots.   | Available computer simulation studies on hydrodynamics indicate that hydrodynamic forces increase with increasing speed. See Section 2.1 of the FEIS for a summary of findings from recent hydrodynamic studies.  |
|     | b    | Maybe AIS would be a means to track whales; it would be hard to do for every whale, but it might be useful to help the ships identify where the whales were.  | If it were possible to develop this technology, it is likely many years away. Experience with satellite tagging indicates that attachment to the whale is the most significant challenge. More over, even if it were possible to determine where every right whale was at all times, the mariner would still need to take evasive action, e.g., limit speed.  |
| 60  |      | Supports alternative 5, reducing the shipping lanes, and implementing the highest speed restriction. After implementation, NMFS should continue to watch exactly how that affects the ship strikes and aim for zero ship strikes and keep working on technology and doing research to help recover the species.   | Acknowledged  |

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| 61   | a    | With the exception of Delaware Bay, the proposed seasonal speed limit zones are not going to unreasonably affect ferries and whale watch vessels.   | See Sections 4.4.5 and 4.4.6 for regional impacts on ferry and whale watch vessels.   |
|  | b    | Concerned with DMAs, especially if one was implemented in a typical ferry route during the prime of their season, as they would cease operating for those two weeks. However, the commenter does not believe that the economic impact is limited to those two weeks; the passengers may not return and the revenues of those two weeks may decide whether or not the company make s a profit that year. The PVA would like to work with NMFS to an alternative to the DMAs as currently proposed to lessen the potential impacts on ferry vessels and whale watching boats. | The final rule identifies voluntary rather than mandatory DMAs.   |
|  | c    | The PVA suggests that the use of forward looking radar, spotters, and possibly a two-tiered approach for small vs. large vessels may protect the whales without having such a large economic effect.  | Radar is only effective above the surface of the water. See response to #50b regarding spotters (aka observers). Although the commenter did not provide any specification as to what type approach is being suggested, in general, a two-tiered approach for small and large vessels would be difficult to implement and enforce. |
|  | d    | The final rule should clarify that the speed restrictions are only proposed seaward of the COLREGS lines. Q: Are DMAs only proposed seaward of the COLREGS lines, and if not, the economic analysis should be revised for ferry vessels.  | DMAs are only proposed seaward of the COLREGS demarcation lines.  |
| 62   | a    | Concerned with 10-knot speed restriction because most deep draft vessels require the ability to travel at speeds in excess of 10 knots in order to maintain full steerage when not being escorted by tugs. A speed restriction of 14 knots would be far more acceptable.  | NMFS has made exceptions to the rule under certain situations, see response to # 38a. While a 14-knot speed restriction may be acceptable to the maritime community, it would not be effective at meeting the purpose and need to reduce ship strikes.  |
|  | b    | The proposed narrowing of the Boston TSS in the PARS may further restrict vessel LNG vessels' ability to maneuver.  | See response to #38a  |
|  | c    | Urge NOAA to reevaluate the exemption of Federal vessels...more detailed comments in written letter.  | Outside the scope of the EIS.   |
| 63   | a    | Alternative five would provide the highest level of protection, while alternative six provides the bare minimum.  | Acknowledged  |
|  | b    | Urges NMFS to use the best available science to ensure the speed limits are applicable to the times and places that the whales need it the most.  | See response to # 58e   |
|  | c    | There must be adequate enforcement, and the speed limits should be in place by November of this year.   | Adequate enforcement will be in place prior to implementation of the final rule. See response to 2b in reference to implementing speed limits by November.  |
| 64   | a    | A DMA would have more of an impact than 9.8% reduction in revenues, it would put the company out of business. The proposed regulations would expand our ferry route run from 1.5 hours to 5 hours, thus decreasing demand.  | The potential for ferry operators on certain routes of going out of business is included in the FEIS analysis. See response to # 61b  |

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|  | b    | Further, there is the roll down economic effect. The Town of Provincetown would be sensitive to losing what is calculated to be about \$350 spent by each visitor to Provincetown that comes in on Bay State ferries.  | Some tourists that decide to not use the ferry during periods of speed restrictions can use alternative transport modes to travel to Provincetown and this will dampen the economic impact on that community. The economic losses that may occur in Provincetown may also be offset by economic gains in other regional communities as tourists spend money on other activities in the area.  |
|  | c    | There are also diminished expenditures including fuel, employment, goods and services that would be affected and more cars would be driving to Provincetown, increasing emissions.   | Expenditures on fuel may increase due to some tourists using alternative transport modes to the ferry.  |
| 65   | a    | The economic impacts have been understated. The ocean commerce system doesn't have the global resiliency or redundancy to cope with the disruption from the proposed rule. Commenter provided three examples to illustrate this point: 1). New England manufacturer of pharmaceutical products who imports materials from Indonesia, 2). Passenger vessel that operates from New England to Canada with a 24 hour round trip cycle, and 3). Commercial fishing vessels that are already limited by a certain number of days at sea. Thus, the impacts are not just a question of slowing down ships, calculating the hourly operating costs and multiplying by the number of hours of delay; it's much more layered and sophisticated. | It is important to note that the timing and duration of the proposed seasonal speed restrictions will be well-known and that vessel itineraries will be developed taking them into account. Hence the unexpected disruptions mentioned to the manufacturing and transport logistics systems will not occur. Most commercial fishing vessels are not affected by the proposed speed restrictions and they do not travel at the speeds suggested by the commenter.  |
|  | b    | Concerned about whether or not the regulations would affect the supply of heating oil and gasoline supplies in New England.  | Timely supplies of heating oil and gasoline supply will not be affected as shipping lines will incorporate the proposed speed restrictions in their revised itineraries.  |
|  | c    | The work on cruise ships is lacking in the economic report as these vessels are on a string of ports. Commenter suggested rewriting and expanding this section.  | The section on impact on cruise industry was expanded for the FEIS.   |
|  | d    | The ship counts (vessel arrival numbers) seem wrong by factors of 100, so the data used may be inaccurate.   | Table 4-27 of the FEIS Economic Analysis report presents estimates of the direct economic impact of the proposed operational measures on the shipping industry. The units in the table are in terms of thousands of dollars. The table does not present information on the number of vessel arrivals. Data on annual vessel arrivals in each port can be found in tables presented in Chapter 2 of the FEIS Economic Analysis. Further tables on the number of vessel arrivals potentially affected during the proposed periods of speed restrictions are presented in Chapter 4 of the FEIS Economic Analysis. |
|  | e    | There is an error in the economic report about tidal delays because the report says that tides cycle every 8 hours, when in fact, they cycle every 12 hours.   | The economic analysis used a 12-hour tidal cycle. The 8-hour reference was the period from the end of one tidal window to the beginning of the next tidal window assuming an average of a 4-hour tidal window.  |

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|  | f    | The economic models, such as the MARAD model are outdated and unreliable.  | The MARAD model was developed to analyze the economic impact of ports using an accepted standardized methodology and is the best available model for the purpose of this analysis.  |
|  | g    | The Cat high speed ferry seems to be omitted from this section in the economic report, and it should be accounted for as it operates daily from Maine to Canada, carries 150 automobiles, 1,000 passengers, and travels at 50 knots.   | The CAT ferry is included in the USCG vessel arrival database, although the number of arrivals appears to be underreported. However, the Cat operating season is from the end of May to the middle of October and it would not be affected by the seasonal speed restrictions under Alternative 6 which are proposed from March 1-April 30 for the Gulf of Maine.   |
|  | h    | The figures and conclusions [in the DEIS] are unexplained, for example there is a \$7 million impact in Charleston, but the reader does not know where these numbers come from, and working papers would include this information.     | The methodology used for the estimated economic impacts is summarized in the main text of the FEIS and described in detail in the economic report, which includes detailed tables presented in the Appendix volume.   |
| 66   | a    | CSI specifically urges that the rule define a January start date for the seasonal management area Off Race Point and through Great South Channel, as right whales are in Cape Cod Bay in January and transit these areas to get there. | The start and end dates for the SMAs were based on several data sets, including NMFS sightings data from the 1960s. The New England Aquarium dataset, which includes sighting data from 1978 to 2003, had minimal or no sightings in the proposed ORP and GSC SMAs in January or February. Therefore, any sightings in these months did not warrant an additional two months of restrictions, starting in January (Merrick, 2005; Merrick and Cole, 2007). Russell (2001) also states that right whales disperse from CCB in April. In considering the comments and reviewing the above sighting data in this area, NMFS has decided not to alter the boundaries and times identified in the proposed rule. |
|  | b    | CSI supports dynamic management, but recommends whatever changes are required to implement a truly dynamic management risk zone around known whales without delay.   | See response to # 61b   |
|  | c    | CSI recommends that the rule establish mandatory responses by notifying vessels and enforcement of required speed reductions with a system of fines that would help defray administrative costs.                                       | Mariners will be notified of the seasonal regulations well ahead of time, and information regarding temporary restrictions (DMAs) will be distributed prior to implementation. See response to #38b in regards to enforcement fines.  |
|  | d    | Alternative 5 or 6 would be acceptable at 10 knots, for all non-sovereign vessels.   | Acknowledged  |
|  | e    | Commenter also stated that the speed limits should be in place by November of this year.   | See response to # 2b  |



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| 67   | a    | Commenter's greatest concern is the proposed speed restriction of 10 knots or less and the potential in the future that NOAA will further lower the speed limit and expand the extent of the seasonal management measures. The 10-knot speed restriction is not supported by available scientific evidence. | Evidence indicates that vessel speed restrictions will reduce the probability of whale death and serious injury (Laist et al., 2001; Pace and Silber, 2005; Vanderlaan and Taggart, 2007). NMFS has determined that this is the best approach to reducing the threat of ship strikes to right whales. NMFS does not intend to further lower the speed restrictions; however, NMFS intends to monitor the effectiveness of the program, and will consider additional measures, if ship strike deaths of right whales continue unabated and the species does not show signs of recovery.   |
|  | b    | Although the draft EIS does address economic impacts, it does not quantify the full range of economic impacts that will result from the proposed action.  | No specifics provided in oral comments. Detailed comments are addressed in Nathan Associates response to written comments provided by Michael Leone of MassPort (comment 111 below).   |
|  | c    | The proposed rule was issued prior to the availability of the DEIS, which includes many of the supporting documentation, and at least one key document that supports the proposed speed regulations is still not available to the public for review. Requests a 60-day extension.                           | The proposed rule was published in the <i>Federal Register</i> three days prior to distribution of the DEIS. The EPA has specific timelines for publication of the NOA in the <i>Federal Register</i> . The EIS is submitted the week before the NOA appears in the <i>Federal Register</i> on the following Friday. See response to # 54d regarding the comment periods. Also, the proposed rule had a comment period for a total of 102 days, and the DEIS comment period was 92 days.   |
|  | d    | The PARS had been submitted to the IMO five weeks before it was released for public comment.  | The commenter may be confused about the process for the various studies and proposals. A PARS is not submitted to the IMO. The USCG prepared a PARS report at the request of NMFS to assess navigational and environmental issues regarding routing measures NMFS was considering. The USCG published a notice of study and request for comments in the <i>Federal Register</i> on February 18, 2005 (70 FR 8312). Then the USCG sought public input on the draft PARS on May 24, 2006 (71 FR 29876). In the meantime, the U.S. Government began preparation of a proposal to the IMO regarding the Boston TSS. Clearance of the final PARS report took longer than anticipated; the proposal to the IMO, with supporting documents including the PARS report was submitted to the IMO in March 2006. The IMO endorsed the proposal and it was implemented in July 2007. |

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| 68   | a    | Aerial surveys are ineffective and an alternative to augment aerial sightings and surveys should be developed.  | There are other methods that are increasingly being used to predict right whale presence, including sampling and monitoring zooplankton distribution and abundance in right whale feeding grounds, and passive acoustic detection using pop-up buoys; however these methods are spatially and temporally limiting and can only be used to supplement surveys, not replace them.   |
|  | b    | Requests dynamic management will quickly trigger an emergency speed restriction if whales are found when seasonal management measures are not in effect.  | See response to #29a  |
|  | c    | Requests speed limits are in place by November of 2006.   | See response to # 2b  |
|  | d    | CSI urges that the rule define a January start date for the seasonal management area Off Race Point.  | See response to # 66a and #71e  |
| 69   | a    | A DMA in the prime season of the New England tourism industry in the months of July or August would put Hyannis Whale Watchers out of business.   | The potential for ferry operators on certain routes of going out of business was included in the FEIS analysis. See response to # 61b.  |
|  | b    | If a sighting of a whale other than a humpback by an untrained eye that didn't know the difference between the two species triggered a DMA for no reason, it would put the company out of business. | A DMA would only be triggered by a reliable report from qualified individuals who are trained to identify a right whale and distinguish this species from other large whale sightings; therefore, sightings of other whales would not trigger a DMA. Unless the sighting is reported by Provincetown Center for Coastal Studies or Whale Center New England, NMFS will confirm all potential sightings with an aerial survey.   |
|  | c    | The regulations would lengthen the average three and a half to four hour trip to five or six hours, which whale-watch clients would not stand for.  | The delays due to the proposed regulations were fully considered in the FEIS economic analysis.   |
| 70   |      | The science that underlies the DEIS is soft, and a lot of the references are unreviewed. NOAA has implementation teams that are available to peer-review the DEIS.                                  | The DEIS used the best available science at the time. There is a limited amount of literature on the ship strike issue because ship strike records are limited, and those that are available may be lacking one or more component(s) (e.g., speed, vessel type/size) that is necessary for analysis. The science should strengthen with time and the rule can be adaptive to new science and technology that arises in the future; however, the final rule must move forward with what the policy makers have available now. See response to comment #37 regarding peer-review. |
| 71   | a    | In general, supports alternative 5 and a speed limit of 10 knots.   | Acknowledged  |
|  | b    | Supports DMAs, but it can only be effective with timely implementation and with increased aerial surveys in times and area not currently or adequately surveyed.                                    | See response to # 29a. Aerial surveys are conducted systematically in the NEUS, southern portion of the MAUS, and SEUS, and elsewhere when funding is available.  |

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|  | c    | NMFS must work with the USCG to ensure that the measure is enforced.   | Acknowledged   |
|  | d    | The DEIS asserts that routes and seasonal management measures are selected in all areas because they capture the majority of whale sightings, and thus, risk, but does not provide sighting maps nor data, except regarding the shift in the TSS lane into Boston.   | The FEIS includes additional figures and references of the sightings and data used to determine the routes and areas and times for SMAs.   |
|  | e    | The DEIS should consider the time period for seasonal measures in the Northeast, i.e., it assumes that right whales require protection while feeding in Cape Cod Bay starting in January, yet it provides no protection for those whales entering or leaving prior to April, though they must traverse the Off Race Point area to both enter and leave. The Off Race Point and Great South Channel require protection during the same time period as Cape Cod Bay. | See response to # 66a. The spatial and temporal boundaries for the SMAs are based on a threshold of moderate and high densities of right whales, and even though there may be whales present year round in the Gulf of Maine, these are low densities that did not meet the threshold for protection within a SMA, and instead are provided protection with a DMA. (See Merrick <i>et al.</i> , 2001 and Clapham and Pace, 2001 for information on defining SMAs). However, if in the future either sightings data or DMA implementations indicated that a specific area may be a candidate for SMAs, i.e., if a specified number of whales are observed in the same area during the same season for three or more years, then this area would be re-analyzed. In addition, vessel traffic in the northern Gulf of Maine is relatively light, with minimal consistent traffic patterns.  |
|  | d    | The DEIS should state how ship routing measures will be implemented.   | The FEIS explains how ship routing measures are implemented. Recommended routes in Cape Cod Bay and in the waters off Georgia and Florida were established in November 2006. They were published on nautical charts, available at <a href="http://www.nmfs.noaa.gov/pr/shipstrike/routes.htm">http://www.nmfs.noaa.gov/pr/shipstrike/routes.htm</a> , and announced in USCG Local Notice to Mariners ( <a href="https://navcen.uscg.gov/lnm/default.htm">https://navcen.uscg.gov/lnm/default.htm</a> ). They will also be noted in international shipping publications, Admiralty Publications, and Notice to Mariners, issued by the United Kingdom and the U.S. National Geospatial-Intelligence Agency, respectively. The shift in the Boston TSS has been approved by the IMO, was established in July 2007, and announced in Notice to Mariners. A proposal to create an ATBA was submitted to the IMO in April 2008, and if approved, would be implemented in 2009. The USCG would publish a notification of these changes in the <i>Federal Register</i> . These measures would be voluntary. |

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| 72   | a    | Commenter does not think that the science that's been used to develop the 10-knot speed restriction is adequate. Commenter believes that the highest elevation of strikes occur at 10 to 12 knots, and is curious why 10 knots is the correct speed limit.  | See response to comment # 70. Section 4.1.3 of the DEIS states that the majority of ship strikes occurred at 13-15 knots, followed by 16-18 knots, and 22-24 knots (Jensen and Silber, 2003). Another paper concurs with this data and concludes that most deaths occurred when a vessel was traveling in excess of 13 knots. Therefore the highest occurrence of strikes does not occur at 10 to 12 knots.  |
|  | b    | DMAs are difficult as proposed due to their sheer size. If there is a 26 nautical mile DMA in July or August, then both the ferry to Provincetown and the whale watch operation may be put out of business.   | See response to # 69a  |
|  | c    | Commenter suggested a system with 24/7 real time reporting 365 days of the year, where information would be transmitted back to a clearinghouse, and then distributed to the maritime community through AIS and radio, and then the mariners could make decisions for themselves as to what avoidance actions they should take.   | Currently the infrastructure for such a system does not exist, and knowledge of right whale locations is only part of the equation. A mariner must still take some type of evasive action, which would be subjective. See the final rule for a more detailed explanation.  |
|  | d    | Commenter inquires how the regulations would conflict with a master trying to operate under the rules of the road.  | General rules of the road still apply in operation of vessels. NMFS believes that these regulations would not conflict with such practices.  |
| 73   |      | Commenter referred to observations from the authors of "Ecological Economics," that in a post normal world, the facts from science are soft, but the decisions must be hard (vs. a normal world where science is hard, facts are hard, and the decisions are soft). Given that the situation is critical, we could continue the bureaucratic chase or we could make a decision, and the commenter would prefer alternative 5, and if not 5, then alternative 6. Suggests that if the situation is critical and the facts are soft, as the facts begin to harden, and we can come to a closer agreement, that the measures have enough flexibility to evolve as the facts harden and the decisions soften. | NMFS is taking steps to reduce the serious threat of ship strikes to an endangered species that is not recovering. The actions are based on the best available science. NMFS will monitor the effectiveness of the actions, and will modify the measures if ship strike deaths continue. Also see response to # 70.  |
| 74   | a    | Support Alternative 6; however, raises issues about the methods for implementation. NOAA will need to base the ship strike reduction plan on new methods for locating, verifying, and predicting the occurrence of whales. The plan should therefore acknowledge the need to evolve, to incorporate new management and implementation methods as information becomes available, and to more realistically define right whale distribution and movement. Commenters recommended the following actions:   | Much of the restrictions to vessel operations are based on historical sightings data and known occurrence of the animals. Therefore, in this context, enhanced detection and monitoring are not necessary for the current SMAs. DMAs are based on real-time detection and, for this, NMFS will need to rely on aircraft and vessel surveys. If new sightings and other data become available in the future, then NMFS will be committed to adapting the timing and the dimensions of the restricted areas to these data. |

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|  | b    | 1).Review with specialists the several-year old definitions for areas requiring DMA and SMA status [Merrick et al., 2001 and Clapham and Pace, 2001].  | The requirements for DMAs and SMAs were reviewed during a panel meeting with scientists in November 2006, in light of comments received. The SMAs in the NEUS were confirmed to protect predictable concentrations of whales and the SMA in the SEUS was revised based on comments and information that recently became available. These changes are reflected in the final rule and FEIS.  |
|  | c    | 2). Review all whale field projects, both vessel and ship, and coordinate survey activities as much as possible.   | Outside the scope of the EIS.   |
|  | d    | 3). Systematically increase NOAA aircraft surveys of present SMAs with the possibility of applying a dynamic (DMA) approach to those areas in the future.  | Aerial surveys are conducted based on the level of funding the program receives; therefore, it would be difficult to systematically increase these surveys. However, the extent of, and protocol for the surveys are periodically reviewed to render them as effective as possible.   |
|  | e    | 4). Develop a plan for intensive verification of the presence of whales within defined DMAs.   | See response to # 61b. The surveys are quite extensive; however, due to uncertain weather conditions and other constraints, aerial surveys cannot be conducted every day of a DMA to verify the presence of whale.  |
|  | f    | 5). Define in detail (not available in the DEIS) the survey, definition, verification, prediction, and implementation methods that will underpin the plan.   | Most of these are defined in the final rule. Additional information on survey design, objectives, and protocol can be found at NMFS aerial survey website: <a href="http://www.nefsc.noaa.gov/read/protosp/RightWhale/">http://www.nefsc.noaa.gov/read/protosp/RightWhale/</a> ; and in various studies, papers, and analysis accompanying this rulemaking are provided at: <a href="http://www.nmfs.noaa.gov/pr/shipstrike/">http://www.nmfs.noaa.gov/pr/shipstrike/</a> and <a href="http://www.nero.noaa.gov/shipstrike/">http://www.nero.noaa.gov/shipstrike/</a> . |
|  | g    | 6). Develop methods of management that allow for quick reaction to information available from intensive verification surveys, food resource data, and to any improved information on ship strike causes. <i>Commenter continues with providing supportive examples (see actual comment for details).</i> | NMFS is committed to monitoring the effectiveness of the regulations and the ship strike reduction program. Means to adapt the plan, particularly if ship strikes continue unabated, are inherent in the plan.  |
| 75   |      | Urges the agency to implement 10-knot speed restrictions to vessels 65 feet and greater, during the right whales' seasonal migration pattern, including Federal agency vessels (with exceptions only under extreme circumstances).   | Acknowledged  |

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| 76  | a    | NOAA should select and fund studies to develop the "No Action" alternative, the most effective approach to protecting right whales. The remaining options [alternatives] lack any scientific support to justify their effectiveness. The surveillance and tracking methods under this alternative will become increasingly effective as technology is improved and applied.  | A number of ship strikes of right whales have occurred with existing measures ("No Action Alternative") in place. Alternatives 2, 3, 5, and 6 all rely on temporary or seasonal speed restrictions to reduce the occurrence and severity of ship strikes. Vessel speed has been demonstrated to be a significant factor in strikes based on analysis of known ship strikes. Alternative 4 proposed shipping lanes to separate whales and ships spatially, thus lessening the probably of encountering each other. |
|     | b    | The DEIS emphasizes low relative costs in comparison to overall shipping costs but does not justify the actual cost or effectiveness of slowing ships.   | The FEIS analyzes both the actual costs of slowing ships as well as the relative costs to overall shipping. The effectiveness of slowing ships down is based on the best available science.   |
| 77  |      | Commenter opposes the proposed reduction in vessel speed as the rule would likely cause more collisions because of the reduction in noise that whales depend on the prevent accidental collisions with vessels. A slow and quiet vessel is setting the whale up for certain impact by "sneaking up" on the unsuspecting mammal. More studies need to done to make the right choices.   | Section 3.1.6 of the FEIS describes right whale hearing. Although right whale hearing is believed to be in a range similar to the range of noise produced by large vessels, and the whales almost certainly hear vessels, it has been demonstrated that whales do not generally associate vessel noise with danger and do not swim away from vessels (Nowacek et al., 2004). Thus, the level of noise the vessel is producing is not likely a determining factor in the collisions.                               |
| 78  | a    | Commenter objects to the proposed rule for speed reductions. The proposed rule ignores valid scientific approaches to reducing right whale strikes that are listed in the DEIS "no action" options, such as surveillance and tracking.   | The No Action Alternative is the status quo, which has been ineffective in reducing ship strikes, thus the need for new actions. Surveillance and tracking are both limited due to weather, equipment failure, and funding, and are not sufficiently comprehensive to help with population recovery. In addition, even given the best possible survey and tracking methods, mariners would still be required to take evasive action.  |
|     | b    | Commenter further takes issue with the assertion in the DEIS that the cost to the shipping industry should be "relatively low", and with the failure to provide any cost-effective analysis in the impact statement. The commenter's company will have some 48 coastwise vessel transits through the mid-Atlantic region in 2007, and even assuming the net effective loss to each vessel's schedule was just one day, the total cost to the company will exceed \$1.5 million during the year. Commenter does not consider this a "relatively low cost" as comfortably assumed in the DEIS. | The first part of this comment relates to the economic benefits of protecting the right whale which is being analyzed by the NEFSC under a contingent valuation study separate from the EIS effort (71 FR 54798) September 2006. The second part of this comment is unsubstantiated. It is not clear why, nor were data provided, to indicate the estimated net effective loss to each vessel as one day (24 hours), nor is the basis of the economic valuation of \$1.5 million provided.                        |

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|  | c    | Urges NOAA to shelve the proposed rule until an appropriate scientific analysis is completed on both the efficacy or the proposed speed restriction and the alternatives that have been summarily consigned to the "no action" list.   | NMFS is mandated by the ESA and MMPA to recover endangered species. Ship strike related deaths of right whales prevent this. Action is needed, and NMFS believes that available science establishes that the steps being taken will be effective at reducing the threat.  |
| 79   |      | Same as # 2  | See response to # 2   |
| 80   |      | Please make it extremely unlikely that any right whale is struck by a ship. Slow to 10 knots and post lookouts whenever there is a risk of collision.  | NMFS acknowledges receipt of this comment, and is implementing measures to reduce the likelihood of ship strikes. While lookouts or observers are not proposed in the rule, NMFS encourages the use of observers where possible.  |
| 81   |      | Same as # 2  | See response to # 2   |
| 82   | a    | Commenter supports Alternative 5 of the DEIS and consultation with Federal vessels to ensure that their activities don't endanger right whale populations.   | Acknowledged  |
|  | b    | Concerned with the exemption of government vessels from the speed restrictions. In war time this would be necessary for the U.S. Navy and U.S. Coast Guard vessels, but in peacetime they should observe the same environmental requirements as the civilian fleet greater than 65 feet in length. | NMFS has exempted vessels operated by Federal agencies from the provisions of this rulemaking as to not compromise various missions, including national security, human safety, and law enforcement (see Section 2.4.8 of the FEIS). However, NMFS encourages these vessels to voluntarily comply with speed restrictions where their missions would not be compromised. Further, the majority of relevant agencies already have ship strike reduction measures in place. All Federal agencies are subject to the provisions of Section 7 of the Endangered Species Act, which requires Federal agencies to ensure their actions are not likely to jeopardize the continued existence of ESA-listed species. They achieve this standard through consultation with NMFS. |
|  | c    | They key is increasing the survival into the adult reproductive stage and having a larger percentage of the adult females being reproductively active.   | Acknowledged  |
| 83   |      | Same as # 2  | See response to # 2   |
| 84   |      | Same as # 2  | See response to # 2   |
| 85   |      | Same as # 2  | See response to # 2   |
| 86   |      | Same as # 2  | See response to # 2   |

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| 87   |      | Supports speed restrictions; realizes that traveling at slower speeds will result in a major inconvenience and higher operating expenses for some vessel operators, but we as a society have clearly stated through our support for legislation such as the Endangered Species Act, that a short-term economic burden is worth it in order to minimize our detrimental impacts of species at risk of extinction.  | Acknowledged   |
| 88   | a    | Strongly supports the 10-knot speed restriction. Support Alternative 5, but if Alternative 6 is implemented, commenter encourages NMFS to consider using telemetry devices to track individual whales whenever possible. This would allow vessels to be notified well in advance of the presence of right whales, and would greatly improve the effectiveness of DMAs.  | Support Acknowledged. Using telemetry devices would require attaching a transmitter to all right whales to track each individual's movement. Historically, tags attached to large whales have had a short lifetime, and sometimes resulted in infection. Finally, while telemetry may remain a useful tool for monitoring the movements of individual animals, it is improbable for an entire population. Even with knowledge of the location of every individual, the mariner would still need to take evasive action, e.g. slow the vessel. This increases unpredictability for shipping companies - an undesirable outcome, as indicated by the industry. Known times and locations of restrictions provide predictability. |
|  | b    | Requests that US government vessels and vessels under contract also be required to observe speed restrictions. Exceptions should only be allowed under extreme circumstances, such as human safety missions, times of warfare or national disaster, or when the Federal vessels are already operating under mitigation measures from a Section 7 consultation under the ESA. If Federal vessels are exempted, commenter encourages NMFS to immediately re-initiate Section 7 consultation to ensure that Federal agency vessels and activities are not jeopardizing North Atlantic right whales.  | In 2005, NMFS contacted all relevant Federal agencies and asked that vessels proceed at 12 knots or less when in right whale habitat; most have voluntarily complied when vital missions are not compromised. Although it is the action agency, and not NMFS that initiates Section 7 consultation, NMFS will review Federal agency actions and BOs, and pursuant to 50 CFR 402.14(a), can request action agencies to initiate or re-initiate consultation. Also see response to # 82b.  |
|  | c    | Commenter hopes the protective measures will be implemented as soon as possible, before the next calving season.  | See response to # 2b   |
|  | d    | Commenter hopes that flexibility will be maintained to modify the proposed regulations if new temporal or spatial distribution data are collected in the future.  | The final rule provides a response to this comment.  |
| 89   | a    | Alternative 5 is the most protective option and, if implemented along with an imposed speed restriction of 10 knots, offers the only chance, albeit slim, for recovery for the NARW.  | Acknowledged   |
|  | b    | The proposed action should not exempt vessels which are owned, operated or under contract to the U.S. Federal agencies as well as foreign vessels engaged in joint exercises with the U.S. Navy. Commenter opposes this exemption because the reasons given for the exemption are unsatisfactory; despite internal measures, and Federal vessels continue to strike and kill a significant number of NARWs. Military vessels are quiet and as a result these vessels are less readily heard by whales which increases the likelihood of such a vessel striking a whale. The DEIS fails to address the ship strike threat from vessels transiting to and from the OPAREAS from port. | See responses to # 82b and #88b with respect to the Federal vessel exemption. This exemption does not relieve Federal agencies of their obligations under the ESA. See response to #77 in regards to quiet military vessels and right whale hearing. The DEIS did not address vessel traffic in Navy OPAREAS, although the FEIS includes a more detailed description of the number of Federal vessels operating in the affected  |



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|  |      |  | area.   |
|  | c    | The DEIS does not discuss stressors such as contaminants and endocrine disruptors, body condition/nutritional stress, genetics, infectious diseases and marine biotoxins in the cumulative impacts section although they are present and likely increasing. The DEIS does not discuss additional potential threats facing these whales such as overfishing of prey species and ingestion of foreign objects. | Contaminants, endocrine disruptors, stress, diseases, and biotoxins were discussed in Section 3.1.1.2 and in the cumulative impacts Section 4.7.1.3. Section 1.1.2.3 of the FEIS has been updated to include climate and ecosystem changes, although at this time, NMFS is not aware of any data or peer reviewed publications on overfishing of prey species with respect to North Atlantic right whales.  |
|  | d    | The statement in the cumulative impact summary section that states the ship strike regulations and fisheries regulations should reduce the mortality rate dismisses other threats such as climate change and the impacts of ocean noise on right whales. In the presence of uncertainty, the precautionary principle is the widely-accepted course of action to follow.                                      | Climate change is discussed in Section 4.7.1.1 and Ocean noise is discussed in Section 4.7.1.2. While these may not be specifically mentioned in Section 4.7.3.5, effects of other natural and anthropogenic threats were taken into consideration. While the effects of ship strikes and entanglements are known, at this time it is difficult to gauge the magnitude of the impacts from climate change and ocean noise, which are relatively new findings. Therefore, these issues are not dismissed, but rather there is no quantitative estimate of the number of injuries and deaths from these occurrences from which to measure against those we do know. |
| 90   |      | Same as # 2  | See response to # 2   |
| 91   |      | Same as # 2  | See response to # 2   |
| 92   |      | Same as # 88   | See response to # 88  |
| 93   | a    | There are insufficient data to support the theory that the restrictions would afford additional protection for right whales against ship strikes.  | See response to # 58e   |
|  | b    | Requiring vessels over 65 feet in length to reduce speeds to 10 knots would cause considerable harm to the maritime community.   | The impacts of the rule on the maritime community have been assessed in Chapter 4 of the EIS.   |
|  | c    | The commenter proposes two alternative measures in the effort to protect right whales: 1) Utilize electronic tracking devices. This method has worked on tracking polar bears, seals and other animals. Local maritime authorities would be alerted when whales are in shipping lanes or   | See response to # 88a   |

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|  |      | nearby.   |  |
|  | d    | 2) Utilize local air Coast Guard units to patrol our ship channels. Again local maritime authorities would be alerted when whales are spotted nearby. This additional responsibility would be in lieu of having to enforce speed restrictions or levying fines.   | NOAA is committed to implementing an effective enforcement strategy and will continue to work with all of its interagency partners, including the USCG, to do so. In addition, NOAA has identified some available technologies that could potentially be used to supplement existing enforcement capabilities and will further explore the application of these measures.  |
| 94   | a    | Commenter agrees that some of the proposed actions are likely to reduce ship strikes and should be implemented; however, a 10 knot speed restriction for 5 months in the SEUS area would not significantly reduce the likelihood of ship strikes or whale deaths. Although traffic lanes, DMAs, and detection and tracking technologies offer encouraging promises of success with very reasonable costs, the 10-knot SMAs would offer the least potential success and the largest economic impact. | Routing measures, SMAs, and DMAs have been analyzed to ensure these measures are based on the best available science, some measures have been peer reviewed, and NMFS would not propose regulations that the agency did not believe would be successful. (The commenter provided no basis for the statement that a 10-knot speed restriction would not reduce ship strikes.)   |
|  | b    | Requests further studies to verify the quantity of vessels in the three specific speed ranges with the percentages of vessel strikes. (Commenter thinks that these data suggest that speed is not very relevant). The Clyne study suggested that there might be a positive correlation between increased vessel speed and a reduced risk of whale strikes.  | NMFS has relied on the best available science in determining the action needed. To delay the action to allow time for further study and analysis would be inconsistent with NMFS' mandates under the ESA and MMPA to recover this population. Computer simulations by Clyne (1999) found that the number of simulated strikes with passing ships was reduced with increasing vessel speeds, however the number of strikes that occurred in the bow region increased with increasing vessel speeds. |
|  | c    | Concerned with the safe transit of ships through harbor breakwaters, and if any speed restrictions are adopted, a waiver would have to be included to allow the pilots to perform their duty, particularly during periods of cross winds and currents.  | See response to # 38a  |
|  | d    | Commenter's calculations for their own three ships amount to \$575,000; however the total annual cost for all containerships in Jacksonville is shown as \$765,600, which seems incorrect. Speed restrictions would create an obstacle to the Short Sea Shipping Initiative.  | The basis of the commenters estimated economic impact was not provided. Also commenter's vessels are not included in containerships but in the ro-ro vessel category. The potential impact of the proposed speed restrictions on coastwise shipping is discussed in the FEIS Economic Analysis Report. This analysis included data on all U.S. East Coast ports, interviews with the industry, and multiple visits to affected ports.  |

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|  | e    | Commenter does not believe the presented data for the Jacksonville transit area (1 unconfirmed mortality in 10 years) substantiates speed restrictions in these waters and also noted that slowing ships will cause them to spend about twice as much time traveling through the area. Speed restrictions in the SEUS should be limited to the critical habitat area only. The establishment of the proposed traffic lanes in concert with a concentrated 'watch' and 'whale tracking' efforts during the season will help ships to know where whales are and avoid them. | High concentrations of both whales and ships are known to occur in the Jacksonville area, and while there may be a low number of confirmed ship strike deaths in Jacksonville, there have been many more in the greater area (northern Florida). From 1975 to 2002, there were six reported ship strikes in waters off FL and the southeastern U.S. (Jensen and Silber, 2003). More recently, there were four ship strikes in 2006 in the SEUS alone (Glass et al., 2008). The SE SMA is based on both right whale sightings and vessel traffic, whereas the critical habitat is more focused on right whale sightings. Even the most effective 'watch' or observer programs would only detect a fraction of the whales. See responses to #88a about tracking devices, and #99h about the amount of time vessels spend in an area. |
|  | f    | Support DMAs, although suggest that the speed restrictions are lifted as soon as the traffic lanes are clear of whales, rather than the proposed 15 days.   | Based on comments received, NMFS has decided to make the DMA program voluntary for the preferred alternative. That is, DMAs will become effective when whales are observed; however, mariners will be urged to avoid the area or travel through it at a reduced speed. The 15-day period for a DMA designation is based on analysis of the expected tenure of such an aggregation (Clapham and Pace). It is not always possible due to weather and logistical constraints, to make multiple subsequent aerial surveys to confirm whales are no longer present.   |
|  | g    | Commenter believes that implementing new technology, such as pop-up buoys and tagging whales with transmitters, can improve the detection of whales. Also, AIS with VHF radio communication and MSR should be considered for real time ship strike avoidance.   | See response to # 58d in reference to pop-up buoys and #88a in reference to tagging whales.  |
|  | h    | Any solution for improving food supply, avoiding diseases, reducing debris, pollution, and toxins in coastal waters could reduce the 66% of whale deaths that don't involve any type of vessel. The commenter calculated containerships and freighters to account for 4.9% of ship strike deaths, and questions why this small percentage is the focus of the proposed rule when there are various other threats, natural and human.  | In a relatively high number of cases, it is not possible to determine the cause of a right whale death, usually due to advanced decomposition. If the cause is not known, it does not implicate low food supplies, pollution, disease, and toxins. Death and serious injury resulting from collisions with ships is the greatest known and the greatest direct threat from human activities. Speed restrictions will apply to all vessels 65 feet and greater, and does not apply unequally to certain segments of the maritime industry.  |
| 95   |      | Same as # 88  | See response to #88  |

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| No.  | Sub. | Specific Comment  | Response   |
| 96   | a    | Although considerable information is provided throughout the DEIS, the FEIS should provide a summary comparing whale protection benefits and costs for each of the alternatives.  | NMFS is conducting a North Atlantic right whale economic benefit study, and requested comments in the <i>Federal Register</i> in September 2006 (71 FR 54798). The direct and indirect costs to the maritime industry resulting from this action and each of its alternatives is provided in the economic study and in Chapter 4 of the FEIS. While specific numbers quantifying the cost benefits of right whale protection are difficult to come by, a qualitative discussion is provided in Section 5.3 of the Regulatory Impact Review. And in general, whale watching, eco-tourism, and other industries benefit from viable whale populations.   |
|  | b    | The FEIS should also verify if any of the action alternatives would individually result in a significant economic effect on the shipping or fishing industry or if all alternatives would not have a significant economic effect (as suggested on pg. ES-7) even though differences among alternatives exist. | Direct and indirect costs of the proposed action and alternatives are discussed in the economic analysis in Chapter 4 of the FEIS. The explanation on page ES-7 is in reference to the significance of the impacts on the financial revenues of the shipping industry, which are deemed insignificant for each alternative, based on the small percentage of impacts relative to U.S. East Coast ocean trade and freight costs. Impacts to the fishing industry were also deemed insignificant when measured against commercial fishing landings. However these statements are at the industry-wide level. Impacts at the individual or firm level are analyzed in the Regulatory Flexibility Analysis in the proposed and final rules. Further, in terms of EO 12866, Alternatives 3, 5, and 6 have a total direct and indirect impact of more than \$100 million, and are considered significant. This is discussed in the FEIS. |
|  | c    | The rationale for selecting the final preferred alternative in the FEIS should be discussed in the FEIS and should include environmental aspects.   | The FEIS includes the rationale for selecting the preferred alternative in Section 2.6.  |
|  | d    | EPA favors alternative 5 since it offers the greatest protection; however they agree that NOAA's preferred alternative (Alt. 6) as well as Alternative 3, would also benefit right whale recovery and would have less economic effects  | Acknowledged   |
|  | e    | After implementation and monitoring, the operational measures should be adaptable by NOAA to improve right whale protection as needed.  | The final rule provides language on monitoring, adapting the actions to enhance protection if warranted, and measures for effectiveness.   |

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|     | f    | <p>Additional EPA comments include the following topics: 1. Federal vessels - The FEIS should define Federal vessels further and estimate the percentage of traffic they comprise relative to overall ship traffic. Unclear if all federal vessels would be exempt at all times. The FEIS should clarify if foreign vessels would be subject to the proposed measures. 2. Ship speeds - Requests that the FEIS compare the proposed speed restrictions to the current cruising speeds of typical commercial vessels, and this figure should be expressed as a percentage. Also, would there be any cost savings in diesel fuel consumption of ship speeds were reduced? 3. Enforcement - IF speed restrictions are to regulatory via rulemaking, how would these measures be enforced, and what means would be applied to non-compliant vessels? 4. Observers - On board observers would be needed for whale sightings, and the FEIS should discuss this process. 5. Affected specific vessels - For the final preferred alternative, the FEIS should further evaluate such effects on whale watch, ferry, and charter vessels, and consider reasonable mitigation or avoidance procedures such as those provided on ES-8. 6. Cost effects - The FEIS should provide a timeframe for the economic impacts (annual, etc.). 7. EPA appreciates the thorough cumulative effects section. 8. Modifications - The EPA concurs with the approach to adaptive management (pg.4-151) and, as part of this effort, the FEIS should discuss how whale ship strikes are monitored, enumerated, assessed, and reported. Also, what performance measures might be used to determine success for the operational measures after they are implemented?</p> | <p>1. The approximate number of federal vessels, their operation areas and activities, when exemptions apply, and federal obligations under the ESA are discussed in detail in the FEIS. The estimates of vessel numbers are based only on publically available information. The FEIS does state that foreign vessels calling at US ports are subject to the proposed measures. The impacts to foreign vessels are analyzed separately from US vessels because of different operating costs (see Sections 3.4.1.4 and 4.4.1). 2. Section 3.4.1.4 of the FEIS states the average operating speeds for the 12 vessel types considered in this analysis. Expressing the 10-knot speed restriction as a percentage of current operating speeds is complicated because the average speed varies by dead weight ton (DWT) of the vessel, so for each of the 12 vessel types, there are 18 DWT categories. Also, ship speed varies with sea conditions, cargo, location, and other circumstances. The cost savings in fuel consumption with reduced speeds would be negligible. 3. The FEIS defers to the rule on the enforcement strategy. 4. It is not clear why the commenter believes on board observers are necessary (See response to # 50b). While the rule does not include an observer program, many federal vessels do employ trained observers. 5. Although NOAA does not have any additional mitigation measures aside from those mentioned in the FEIS, the agency believes that voluntary DMAs and the 30- to 20-nm change in mid-Atlantic SMAs will reduce the impacts to these industries. The FRFA, to be included in the Final Rule, also will identify potential mitigation measures for small businesses. 6. All costs are annual. 7. Acknowledged. 8. See response to #96e (the FEIS defers to the final rule on this topic).</p> |
| 97  |      | Supportive  | Acknowledged  |
| 98  |      | Same as # 2   | See response to # 2   |
| 99  | a    | From 1970 through 2005, about 25 right whale mortalities have been attributed to vessel collisions (Marine Mammal Commission, 2005); this is approximately 0.7 per year.  | Acknowledged  |

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|     | b    | <p>The proposed rule and the Draft Environmental Impact Statement are flawed in: 1) presentation and interpretation of facts and 2) failure to meet generally accepted standards of data handling and statistical analyses. For example, all three of the publications cited within the PR (Knowlton and Kraus, 2001; Laist et al., 2001; and Jensen and Silber, 2003) are based on non-random samples, and therefore are anecdotal and are not representative of the true impact vessels have on whale populations. Also, neither the method of data collection, nor the standard by which the data were analyzed, nor the intended conclusion of these three studies, is consistent.</p>  | <p>NMFS used the best available science and evidence in formulating its actions, and believes the analysis is quite rigorous. It would be difficult to use random samples because strikes are statistically rare, and only certain ship strike records are complete with all data fields required for analysis. The commenters did not provide alternative data on which to base new analyses.</p>  |
|     | c    | <p>Based on records of whale collisions where vessel speed was reported, mortality and injury by vessels 65 ft and larger at speeds of less than 14 kts is not indicated (except for two records, one whale watching vessel that injured a humpback at 12 knots, and a fishing vessel that injured an unknown whale at 9 knots). Additionally, there is no evidence in these records to provide for evaluating or discriminating possible effects of speeds between 10 and 13 kts. Of the 58 records used by Jensen and Silber, 29 (or 50%) were for vessels equal to or greater than 65 feet in length.</p>  | <p>See response to #99b</p>   |
|     | d    | <p>Consideration of vessel speed vs. whale collisions is not simple, but rather, involves a matrix of inter-related dimensions and probabilities. Not all factors point in the same direction, and indeed, to some degree at least, may be offsetting. Vessels traveling at higher speeds may: 1) provide a lesser response time for whales exhibiting avoidance behavior, 2) draw a whale into the vessel in the case of an "appearing whale" or at speeds of 20 kts or greater, and 3) increase level-of-injury IF a collision occurs. On the other hand, vessels traveling at faster speeds may: 1) provide an acoustic signature that allows for greater whale response time, 2) push the whale away from the vessel, thus avoiding a possible collision, and 3) reduce exposure and risk of a vessel/whale interaction. A third alternative in the matrix is the situation where speed is not a factor. In several of the hydrodynamic simulations, whether a collision did or did not occur was independent of vessel speed or at least over a wide range of vessel speeds.</p> | <p>Faster vessels may be louder, but this is irrelevant because it has been shown that even though right whales presumably hear well within the frequency ranges emitted by ships, they apparently are not motivated to, or cannot, avoid loud oncoming ships (Nowacek, 2004). If a whale is in a specific area when the vessel approaches, it may indeed push the whale away, but could also draw it into the vessel. There is no significant difference in exposure for a vessel traveling from 6-24 knots; exposure only increases at speeds less than 6 knots (Vanderlaan and Taggart, 2007). Vanderlaan and Taggart (2007) looked at vessel mass and dismissed it. Also, in an analysis of vessel mass versus vessel speed and the likelihood and severity of injury to manatees, Calleson and Frohlich (2007) concluded that vessel speed, not mass, was the most critical factor. They found, for example, that a doubling of the speed of a vessel would quadruple the amount of impact energy to the manatee, while quadrupling the speed would increase the amount of energy by a factor of 16.</p> |

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|  | e    | Of the 58 reported collisions, where speed of vessels is known, more than half were by vessels exempt by the proposed rule: 20.5% were by vessels under 65 feet in length, 31.0% were by military vessels and several others occurred in Canadian waters.   | Acknowledged. As a result of interagency cooperation and ESA Section 7 consultations, Federal agencies have been quite vigorous in reporting vessel/whale interactions. Therefore, the data in the report cited, as indeed the report itself points out, are weighted toward those sources as compared to members of the commercial maritime industry who may be reluctant to report, unaware of the importance of reporting, or unaware that a vessel that the vessel has been involved in a strike.        |
|  | f    | The cited studies over emphasize the large whale speed database (a compilation of anecdotal records), which contains only 5% (3 of 58) right whale records, one citation of which is highly questionable, as it was a retroactive right whale categorization made 25 years after the collision incident.  | See response to #99b   |
|  | g    | Commenter believes that NMFS' estimates of 300 individuals in the NARW population are conservative and outdated. Kraus et al. (2005) estimates 350 right whales; genetic analysis suggests that there may exist 10% more males than originally suggested (based on photo-identification catalog; there may be 10% more females (T.R. Frasier, Trent univ.); and the population growth rate of 2.5% (Knowlton et al., 1994) may still be valid.            | See the final rule for the rationale behind the NMFS estimate of 300 animals. In addition, regardless of the actual population size, the species remains listed as endangered under the ESA, and by that authority, it is illegal to take an individual of this species.   |
|  | h    | Gerstein et al. (2005) cautions that reducing vessel speeds without compensating for the acoustical consequences may actually increase the risk of collisions, and may be counter-productive to the protection of whales. A slowly moving vessel will take longer to pass through an area potentially occupied by a right whale, thus increasing exposure, and a whale will have longer to surface or move in a way that increases jeopardy.              | See response to #99d regarding right whale hearing and Vanderlaan and Taggart's (2007) random walk analysis. NMFS conducted an analysis of the hypothesis that vessel speed restrictions would increase exposure of right whales to strikes, and concluded that the likelihood would not be increased by slower vessels (Garrison, <i>unpublished</i> ).   |
| 100  | a    | Support for: alternative 5 at 10 knots or less, vessel size of 65 feet or greater, the ATBA and shift in the TSS, speed restrictions in GSC and ORP, shipping lanes and speed restrictions in Cape Cod Bay, SMAs with speed restrictions in the mid-Atlantic, and speed restrictions and shipping lanes in the southeastern U.S. It is critical that the final rule be implemented in a timely manner, and that timeline be contained in the rule itself. | Acknowledged   |
|  | b    | Commenter is concerned with the timing to implement DMAs, and would like to see the details of the mechanism by which such measures can be swiftly enacted. Also, the DEIS does not address whether acoustic monitoring data could be used to initiate a DMA, or whether the whales have to be visually observed to confirm their presence.   | As DMAs are now voluntary in Alternative 6; they will be effective as soon as possible following verification of the sighting that triggers the DMA, and notification of mariners. NMFS will notify mariners of a DMA through standard maritime electronic communication media. The FEIS does not address alternative triggers to DMAs, such as acoustic monitoring, because this technology is only available seasonally and in select habitats, and thus is not a viable alternative trigger at this time. |

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|  |      |  | However, NMFS is considering additional detection technologies, such as acoustics, for this purpose.  |
|  | c    | Recent data has confirmed the consistent presence of right whale aggregations in the Gulf of Maine in fall and winter, although the only measures in this area are DMAs. A preferred way to protect these animals would be wider area restrictions for the Gulf of Maine from October through June.  | See response to #71e  |
|  | d    | Commenter suggests that protection for the ORP and GSC SMAs should be started on January 1st to match the starting date for Cape Cod Bay.  | See responses to # 66a and #71e   |
|  | e    | The manner by which the rule will be enforced is also critical.  | Acknowledged  |
|  | f    | Commenter would like to see the exemption of Federal vessels more specifically focused on those vessels unlikely to be able to comply with the regulations because of service in the national interest or for NMFS to include a detailed explanation as to why all such vessels should be included in the exemption.                             | Federal vessels are exempt because they engage in public health and welfare missions (e.g., human safety, law enforcement, and national security) that could be compromised by a mandatory speed limit. However, NMFS requested Federal agencies to observe the speed limit where their missions would not be compromised. In the case of Federal agencies whose vessels are not engaged in such missions, the number of vessels is very small (see Section 3.4.7), and there is no incentive for these agencies not to voluntarily observe the speed limit. Therefore, while these vessels are exempt, NMFS expects them to comply with voluntary speed restrictions their requirements under Section 7 of the ESA. Also see responses to #82b and #88b. |
| 101  | a    | The port of Baltimore is affected by two SMAs, the Chesapeake Bay and Delaware Bay SMA, although the particular boundary of the Delaware SMA, as it relates to the C & D Canal is not pointed out in the DEIS. There are no in-depth references in the DEIS on the impacts of the speed restrictions on passenger vessels, such as cruise ships. | Passenger vessels including cruise vessels are included in the economic analysis. It is important to note that the timing and duration of the seasonal speed restrictions will be well-known and that vessel itineraries will be developed taking them into account. The section on impact on cruise industry is expanded in the FEIS.  |



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|  | b    | The document does not adequately account for economic impacts to businesses within the port of Baltimore that rely on timely delivery of products and goods from these ships.  | Direct and indirect costs to the industry and local economies are provided in the economic analysis in Chapter 4 of the FEIS. It is important to note that aside from DMAs, the timing and duration of the proposed seasonal speed restrictions will be well-known and that vessel itineraries will be developed taking them into account. Hence unexpected disruptions to the manufacturing and transport logistics systems should not occur as a result of the proposed seasonal speed restrictions.   |
|  | c    | There is no documentation in the DEIS that specifies whether these whales enter shallower waters of the Chesapeake Bay.  | Right whales are rarely sighted in the Chesapeake Bay, but a dead, stranded right whale was recovered east of Cape Charles in 1993.  |
|  | d    | The DEIS does not go into discussion about techniques that are currently used to spot the North Atlantic right whale, nor does it have any discussion on what techniques or technologies are used during nighttime hours to spot whales.   | Section 1.2 of the FEIS discusses current surveys and the region, but does not go into detail on the months of the survey or what agency coordinates. Currently, they agency has no technology in place to spot whales at night. See the final rule for a detailed discussion of the use of technology.  |
|  | e    | There could be increased possibility of air pollution from ships that would be required to adhere to speed restrictions in the SMA.  | Section 4.3 of the FEIS discusses the relationship between vessel speed and emissions, and in general, emissions decrease as speed decreases. One example of this relationship is in the ports of Los Angeles and Long Beach, California, where they established vessel speed restrictions to reduce air emissions.  |
|  | f    | Chesapeake Bay pilots have also expressed great concerns regarding the safety of these vessels at the proposed speeds. <i>(Additional comments on the DEIS are in a table in the letter.)</i>  | See response to # 38a  |
| 102  | a    | We recommend that NMFS reduce the speed limit to 10 knots rather than either 12 or 14 knots. The Pace and Silber and Vanderlaan and Taggart studies provide evidence that reducing ship speed may increase protection to whales by reducing the severity of impacts, although there aren't any studies that provide scientific analysis of speed effects in the probability of occurrence of whale-ship collisions. Recommend that NMFS monitor compliance carefully and given high compliance, try to evaluate the impact, both on probability of occurrence and on severity of injuries, that reduced ship speed has on whale-ship collisions where and when restrictions are imposed. | Ten knots is the speed restriction identified in the final rule. Vanderlaan and Taggart (2007) actually do address the relationship between speed and the occurrence of a collision. The authors used a random walk model, and found that under 6 knots, the probability of an encounter increased with speed; however, the encounter probability from 6-24 knots is similar; thus a speed restriction of 10 knots would not change the encounter probability. These conclusions are consistent with an independent analysis by Garrison ( <i>unpublished</i> ). NMFS plans to monitor the effectiveness of the restrictions, and modify them, if appropriate, to maximize conservation. |

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|     | b    | Recommend NMFS consider reducing the size threshold for vessels included in speed restrictions, or at minimum, increase education and outreach to vessel operators below the proposed 65-foot threshold.  | NMFS agrees that vessels less than 65 feet may pose a threat to right whales and will continue to consider means, including future rulemaking, to address vessel classes below 65 feet. NMFS developed outreach and education programs for vessels less than 65 feet, and plans to enhance and continue executing these programs, particularly those that target recreational vessels.  |
|     | c    | Recommend NMFS utilize Section 7 Consultation to ensure that large vessels that are excluded from the proposed rule by virtue of Federal affiliation adhere to speed restrictions under normal circumstances and to allow them latitude only when deemed necessary.   | Acknowledged  |
|     | d    | Strongly support the designation of shipping lanes within areas delineated in the Proposed Rule and advocate NMFS enforcement of mandatory shipping lanes should data reveal that ships are not complying with recommended routes.  | Acknowledged  |
|     | e    | Support the proposed recommendation to extend the SMA out to 30 nm, opposed to 20 nm, as well as the regional SMA of November 1 to April 30 in the MAUS region. In order to avoid confusion, commenter recommends that the SEUS implementation period extend from November 15 to April 16 (rather than April 15) to match those used by the MSRS. Further, Port Canaveral should be included within the SEUS SMA.                 | Based on comments received, NMFS reviewed right whale sightings data and determined that certain changes should be made to the timing and boundaries of the SMAs. The commenter's proposed recommendations are not among those changed in the final rule. Whale distributions around Port Canaveral do not extend very far from shore because of the steep slope and high water temperatures. While sightings occur in the area, they are all close to shore in waters that are shallower than large vessel drafts. On the port approach, vessels will have reduced speed by the time they get into shallow water where whales occur. |
|     | f    | Support DMAs, although recommend streamlining procedures, such as eliminating density requirements for declaring a DMA, and making the DMA effective upon verification and broadcast of right whale locations to mariners. Recommend that NMFS investigate the use of additional means beyond aerial survey for locating right whales, such as passive acoustics, to increase the effectiveness of DMAs as a management strategy. | As DMAs are voluntary in the preferred alternative, notices will go out when a DMA is triggered and mariners will be asked (via all maritime communications available) to observe the speed restrictions or route around the DMA. See response # 100b in reference to the second comment.   |
| 103 | a    | Pilots have expressed major concerns regarding the safety of navigation at the proposed speeds as they pertain to ship strikes.   | See response to # 101f  |

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|     | b    | The DEIS does not adequately address the issue of whether the 20 percent of ship strikes where speed is known (Jensen and Silber, 2003) is a representative sample of the total number of ship strikes, and thus, can be interpreted as statistically significant.  | NMFS used the best available science in determining ways to reduce the threat of ship strikes to right whales. A relatively small number of large whale ship strikes records have associated vessel speed data. Because these data are the best, and only available, they have been analyzed in several studies. In addition, Pace and Silber (2005) examined the distribution of speeds at which known ship strikes occurred versus the speeds of ships reporting into the Mandatory Ship Reporting systems, which they considered representative of speeds that ships travel in general. The authors found that the two distributions were significantly different, suggesting that vessels that struck whales were going faster than ships tend to travel in general. Section 4.1.3 of the FEIS. |
|     | c    | While the economic analysis attempts to measure the impact of individual vessels slowing down on their way into port and considers the additional cost to vessels operating on multi-port strings, the commenter is not convinced that the economic analysis accurately calculates the cost associated with ship diversion, or ship dislocations (especially with vessels that transit the Panama Canal). | We have included the direct and indirect cost of the increased travel time due to delays caused by the operational measures. If cargo is to divert to other routes this would be because the total additional costs associated with those routes are less than the cost of additional travel time due to delays at the current port. Hence it would be double-counting to also include any additional overland transport costs to the estimated impact already presented. In addition, port dislocation is not expected to occur on a regular basis, given that the speed restrictions are uniform along the U.S. East Coast. That is, they affect all ports equally.   |
|     | d    | The port industry is also concerned that NMFS is not investing enough money in technology that could provide at least a partial solution to the problem.  | NOAA is committed to exploring and testing technological solutions to address ship strikes, and has provided substantial funding for a number of years for research and development. However, any technological solution must be (a) proven as directly effective in reducing ship strikes, and (b) environmentally benign. At this time, NMFS believes that no technology exists or will be imminently available that has both of these features, and therefore, existing technologies are not capable of meeting the objectives of directly addressing and eliminating the problem.   |
| 104 | a    | Alternative 2 would appear much more effective than measures contained in Alternative 6.  | Acknowledged  |

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|     | b    | The direct and indirect impacts on the port of NY/NJ are more significant in dollar value than for any other port, although there is no assessment of the jobs, wages, and tax revenues lost or Gross Regional Product not realized, even though the MARAD Port Economic Impact Kit that the DEIS uses is capable of producing such results.  | The FEIS Economic Analysis Report states the total economic impact from the MARAD model that includes the indirect effect of expenditures made by firms supplying the deep-draft port industry and the firms that supply those firms. It also includes an induced effect that corresponds to changes in consumer spending that is generated by changes in labor income accruing to the workers in the deep-draft port industry as well as employment in the supplying businesses. Hence the employment, income and GRP impacts are included in the estimates provided in the FEIS Economic Analysis Report. |
|     | c    | The DEIS does not assess the indirect economic impact resulting from lost ship calls due to cumulative delays of vessels engaging in multi-port strings. The DEIS provides no explanation how the average delay of 30 minutes per port for carriers with multi-port itineraries was determined. For the port of NY/NJ, All Water Services have grown from 7 strings in 2002 to 25 strings in 2005 and 19 of these strings transit the Panama Canal. An impediment that would keep the ships from making a given tidal window increases the unreliability of this all water service. | An explanation of the 30-minute average delay is provided in Section 4.4.2 of FEIS. The estimated impact of the cumulative effect of multi-port strings is presented in the FEIS Economic Report. In economic terms, a change in vessel port calls from one US port to another US port has offsetting economic impacts from a national economic perspective. Also bear in mind that the times and locations of the restrictions will be known ahead of time, and advanced voyage planning would be possible to minimize service disruptions.  |
|     | d    | The DEIS does not assess the potential trade-offs between all water services via the Panama Canal and overland rail service to the East Coast from West Coast ports.  | The small estimated average delay on vessel arrivals due to the proposed operational measures of less than one hour does not warrant a detailed analysis of global maritime shipping routes.  |
|     | e    | The DEIS assessment of indirect economic impact resulting from port diversions uses a .5% diversion of ship calls for a 12 knot speed restriction and 1.5 % for a 10 knot speed restriction, but does not explain how these diversion percentages were determined.  | These diversion percentages are being explained in the FEIS Economic Analysis Report.   |
|     | f    | The DEIS includes increased terminal operating costs to a certain extent in the indirect economic impact, and logistics costs are somewhat considered in the analysis in Table 4-41; however, there is still no analysis of the changes in logistics costs as a result of port diversion, which creates the necessity of shipping these goods to their ultimate destinations by inland modes over longer distances rather than by the existing water routing.   | We have included the cost of the increased vessel time due to delays caused by the operational measures. If cargo is to divert to other routes this would be because the total additional costs associated with those routes are less than the cost of vessel time due to delays at the current port. Hence it would be double-counting to also include any additional overland transport costs to the estimated impact already presented.  |
|     | g    | The DEIS does not provide rationale to support its assumptions that the average value of the indirect ship calls diverted from the Port of Boston, at \$900,000, would apply to all other large East Coast ports or that a value of \$500,000 would apply per vessel call diverted from smaller ports. In addition, the DEIS assumes without providing justification that for mid-Atlantic ports all these vessel calls will be diverted to Canada.   | These assumptions are further explained in Section 4.4.3 of the FEIS and in the Economic Impact Report.   |

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| 105  | a    | Opposes blanket speed restrictions based on the negative impacts on the nation's Maritime Transportation System (MTS) and economy when weighed against the uncertainty of any positive impacts on the right whale population. Also, in many instances, ships become less maneuverable at the proposed reduced speed, and by reducing the control over a ship the risks are increased for incidents that could result in the loss of human life or environmental damage   | Blanket speed restrictions are not included in the final rule. The final rule contains an exemption for maneuverability, see response to #38a. NMFS is not aware of issues with ship maneuverability with programs that currently have vessel speed restrictions in place, including the 12-knot speed restriction in the Port of Los Angeles, the 13-knot speed restriction in Glacier Bay, Alaska, or USCG imposed speed restrictions in various locations along the East Coast.  |
|  | b    | Commenter finds no convincing evidence that ship strikes are less likely to occur at slower speeds.  | See response to # 58e   |
|  | c    | Concerned that there has been little or no accounting for enforcement speed restrictions, and questions who will enforce and where the funding would come from.  | NOAA is working with the USCG to develop an enforcement protocol, including exploring various technologies.   |
|  | d    | Commenter finds the proposed regulations contrary to two elements of the President's U.S. Ocean Action Plan. One priority is to improve the MTS, and speed restrictions are a detriment to the MTS. The other priority is to advance knowledge of the oceans through technologies and the Integrated Ocean Observing System (IOOS). Commenter recommends better coordination of the objectives of NMFS with NOS in the pursuit of technological and observing solutions with higher probabilities of improving the right whale population. | NMFS believes that these actions are not contradictory to the U.S. Ocean Action Plan. They are consistent with the ESA and MMPA. See response to #121d regarding collaboration with NOS and technological solutions.  |
|  | e    | Due to the rarity of right whale encounters in the mid-Atlantic, instead of blanket speed restrictions, we recommend utilizing alternative measures without the severe risks and impacts of speed restrictions (i.e., DMAs only, observers, and whale reconnaissance flights).   | The mid-Atlantic region accounted for 22% of known right whale encounters, or ship strikes from 1975-2002, which, although less than those in the NEUS, is not 'rare' (Jensen and Silber, 2003). Sighting data in this region is more limited than data in the NEUS and SEUS, although this likely results from less frequent aerial surveys and not the actual number of individuals present. Among the comments NMFS repeatedly heard from the shipping industry is that DMAs introduce unpredictability in voyage planning. The ability to have advanced voyage planning is one of the main reasons that NMFS opted for restrictions in predictable times and locations. |
|  | f    | Should speed restrictions be implemented, commenter recommends including provisions for the sun-setting of the regulations when they are determined to be ineffective, or if the right whale population reaches 400 or experiences sustained growth of say 4% over 5 years.  | Provisions for eliminating or modifying these regulations or other actions will rely on the measures set forth in the right whale recovery plan.  |

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| 106  |      | Same as #105   | See response to # 105  |
| 107  |      | Same as #2   | See response to # 2  |
| 108  | a    | The proposed rule falls short in maintaining safety of navigation b/c it severely restricts the Master's authority and obligation to navigate safely (cites COLREGS safe speeds). COLREGS does not attach a number to "safe speed" for good reason; it is different for each vessel and situation. The rule would reduce maneuverability and endanger safety. Seek other more effective solutions that will not compromise safety of navigation while continuing to work with mariner to develop other means of protecting whales. | See response to # 38a  |
|  | b    | Upset that PARS conducted on TSS was filed with IMO before notice of public comment was sent to FR. Why is NOAA supporting this before getting public comment?   | Outside the scope of the EIS.  |
| 109  | a    | Reducing ship speed of large ships could reduce the ton-force significantly; for ships larger than 500 tons, speed is more important than the size of a ship in determining lethal injury to a whale, and for ships less than 500 tons, both mass and speed may be important.  | NMFS believes that the analysis conducted by Vanderlaan and Taggart (2007), including three different analytical techniques provided adequate indication that the amount of force striking the whale is more strongly a function of vessel speed than vessel mass. Also, in an analysis of vessel mass versus vessel speed and the likelihood and severity of injury to manatees, Calleson and Frohlich (2007) concluded that vessel speed, not mass, was the most critical factor. They found, for example, that a doubling of the speed of a vessel would quadruple the amount of impact energy to the manatee, while quadrupling the speed would increase the amount of energy by a factor of 16. |
|  | b    | While NOAA's proposal to slow down large ships is supported by theoretical and empirical analyses, commenter recommends NOAA employ a ship mass criterion rather than a ship length criterion.   | See response to # 109a   |
|  | c    | Right whale departures from the Florida-Georgia border varies from around March 2 to March 31, while the modal departure period is March 7-11, which suggests that the actual variation in right whale northerly migrations ~ ± 15 days. Therefore, the period of protection for the northerly migration should extend to May 1 rather than April 30 [1]. NOAA should use this information to direct and stratify survey efforts in the mid-Atlantic.  | Based on comments, NOAA reassessed sighting data and determined that the timing of the SMAs in the MAUS will remain the same. NOAA intends to continue to assess incoming sighting data and modify the areas as appropriate. In addition, NOAA chose to have inclusive (rather than rolling) dates for this region, in part, to provide predictability to the maritime industry.   |
|  | d    | The protection from the 30-nm buffer in the MAUS is limited; NOAA should consider employing spatial and temporal management windows within the MAUS during which speed restrictions would be imposed over a significantly wider swath than 30 nm around ports as presently contemplated.   | The 30-nm buffer proposed in the MAUS in the DEIS has been changed to 20-nm. This is based on the best available data and analysis of all known right whale sightings between 1972 and 2000, a sample of 290 sightings, from Massachusetts to the South Carolina/Georgia border. When considered relative to the distance from the shore, about 83 percent of the sightings are within 20 nm (see Section 2.1.2 of the FEIS). The incremental change in whales observed  |

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|  |      |  | beyond 20 nm is small (less than 10 percent). Although the boundary of the MAUS is extended south in the final rule, the width does not change (See response to #109c).  |
|  | e    | Data suggest that right whales utilize ORP SMA in the month of May, although the period is currently proposed for March 1 - April 30.  | See responses to #66a and #71e   |
|  | f    | The Gulf of Maine is utilized by North Atlantic right whales and hosts several busy ports, although there are no proposed speed restrictions or routing measures in this area. Commenter recommends similar speed restrictions in the Gulf of Maine as those in the Mid-Atlantic.  | See response to #66a and #71e  |
|  | g    | The DEIS does not consider that the proposed alternate routes may negatively impact other species if their distributions fall outside of right whale habitat, therefore, the commenter recommends that the DEIS analyze potential negative impacts on other species of large whales if the proposed speed restrictions are implemented and vessels transiting near these areas choose alternate routes.  | Section 4.2 of the DEIS (and 4.7.2.5 of the FEIS) analyze the impacts of the shift in the Boston TSS on other species occurring in the area. The FEIS will analyze the impacts of recommended routes on other species where sighting data are available for these species in proximity to the routes.  |
|  | h    | The DEIS does not consider the potential benefits of speed reductions in terms of fuel economy and reduced costs of operations.  | The impact of lower speeds on fuel consumption varies by type of vessel. Some commenters (see response to #70) believe that the proposed speed restrictions will increase fuel consumption as vessels are designed to operate more efficiently at higher speeds. This issue is discussed in the FEIS.  |
| 110  | a    | <u>Selective use, or omission, of available data:</u> 1. No maps/tables of right whale distribution or ship strikes. Add sighting data and/or ship strike locations to figures where the alternatives are plotted. Include a table of known strikes to right whales. While the December 2004 mortality of a right whale can not be documented as a ship strike, (because the carcass was not retrieved) the omission of this occurrence may underestimate the impact on this species, thus this mortality should be noted in the DEIS (Section 4.1.1.1). | Maps of right whale sightings for the NEUS and SEUS have been added to chapter 2, along with graphs of right whale distance from shore in the MAUS. A table of known ship strikes to right whales is not included because there are several different sources of ship strike records, which are not always consistent with the NMFS-confirmed ship strike records. Further, the cause of death in many suspected ship strike records is unconfirmed. The potential right whale mortality in December 2004 has been added to Chapter 4. |
|  | b    | 2. Inconsistent information regarding species. Information in the text box on page 1 is inconsistent for the three species mentioned. The impacts on other species in Section 3 are not listed consistently.   | This information in the text box has been revised to provide consistent information for all three species. The bottlenose dolphin and seabird descriptions in Section 3.2 have been updated.   |

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|     | c    | 3. Inconsistent information regarding data analyses. Data charts 4-9 and 4-10 do not indicate a specific speed while 4-19 says 12 knots. Data Chart 4-42 considers impacts for alternatives 2, 3, and 6 only. Section 4.4.1.7 only discusses 2003 but the text compares 2003 and 2004. Section 3.3.3.2 mentions emissions at normal cruising speeds, although commenter could not find and reference to changes in emissions based on the speed restrictions. Appendix C does not reference the figures in Chapter 2. Page 4-7 gives the seconds a whale has to avoid a vessel when it slows to 12 knots, but does not calculate the same for 10 and 14 knots. | Data charts 4.9 and 4.10 do not indicate a specific speed because the impacts for Alternative 4 are the same at all speeds, since speed restrictions are not proposed under this alternative. Data chart 4-42 only considers the impacts for alternatives 2, 3, and 6 because there are no impacts for alternative 4 and the impacts are the same for 3 and 5 - this is stated clearly in the text. Section 4.4.1.7 of the FEIS was updated to include information for 2004, and then these impacts are compared to those in 2003; Data Charts 4-20 and 4-21 list all impacts in 2003 and 2004. Section 4.3 of the FEIS qualitatively discusses potential changes in emissions based on the proposed speed restrictions. Appendix C in the FEIS references the figures in Chapter 2. The FEIS includes the seconds for avoidance at 10 and 14 knots. |
|     | d    | 4. Conflicting or imprecise information. Section 1.1.1 - while it is true that commercial hunting of right whales occurred at that time, [1935] a general ban on commercial whaling of other species did not go into effect until 1986. Page 3-20 states that mysticetes feed on zooplankton, but some species are piscivorous.  | These sections have been updated in the FEIS.  |
|     | e    | 5. Right whale habitat underestimated. The DEIS states that right whale habitat extends from southern Canada to northern Florida; however, right whale habitat actually extends to mid-Florida and sightings have occurred south of the critical habitat and into the Gulf of Mexico. Sightings occur around Port Canaveral, although there are no measures proposed for this area.  | This section has been updated in the FEIS. DMAs are proposed for Port Canaveral.   |
|     | f    | 6. Compliance and effectiveness of current management practices are not discussed. If current strategies are to be additive, and funding is limited, then it is unclear why the DEIS does not at least estimate the effectiveness of existing programs, yet implies they will continue as part of each proposed Alternative.   | Section 1.2.1.2 has been updated to include compliance rates with the MSR systems. Compliance data for other programs are not available. NMFS has concluded that existing practices have not been effective in reducing ship strikes.  |
|     | g    | 7. Incomplete consideration of foraging data. The reference to Goodyear (1996) on page 3-5 is not presented correctly in the document. The Goodyear study was conducted in the Bay of Fundy, not in CCB, where surface feeding is known to occur more regularly. Further, research by Baumgartner and Mate (2003) shows contrasting data in comparison to Goodyear.  | Goodyear 1996 covers feeding behavior in the Bay of Fundy, Great South Channel, Cape Cod/Massachusetts Bays, and the Gulf of Maine. All Goodyear references on page 3-5 of the DEIS are accurate. Both authors contend that right whales spend the majority of their time feeding at depth in the BOF; Goodyear states that right whales feed at depths with the highest density of copepods, which are generally 40 to 60 meters above the bottom, where the bottom is 120 to 230 m, and Baumgartner and Baumgartner and Mate (2003) observed rightwhales foraging on discrete layers of C. finmarchicus stage 5 copepodites (C5) just above the  |



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|  |      |   | bottom mixed layer in the Bay of Fundy.   |
|  | h    | 8. Stellwagen Bank National Marine Sanctuary boundaries misrepresented. Section 3.3.1.2 of the DEIS indicates that Jeffreys Ledge and Stellwagen Bank are both within the SBNMS. While the commenter acknowledges that SBNMS does include a small portion of the southern end of Jeffreys, it does not encompass all of it. This may inaccurately portray that Jeffreys Ledge is afforded protection by SBNMS, when it does not, and in fact would only receive protection under DMAs under the proposed rule, which is not sufficient given that this area may be a fall feeding habitat and is frequented by large vessels calling at the Port of Portsmouth, NH. | This section has been updated in the FEIS. See response to #66a and #71e regarding measures in Jeffreys Ledge/Gulf of Maine.  |
|  | i    | <u>Comments directly relating to the proposed alternatives:</u> 1. Unspecified variations between proposed alternatives. The differences of distance and dates between the proposed alternatives appear to be arbitrary and no rationale is provided for these variations. Alternative 3 utilizes the proposed SAM zones for the ALWTRP, which exclude CCB. It is unclear why CCB is not included in Alternative 3 as they are in Alternative 6. If NMFS intends it to be included, then this is not clear in the explanation provided.   | All of the dates in Alternatives 3, 4, and 5 have been streamlined to match the dates in Alternative 6, except for the year-round speed restrictions in the NEUS and the October 1 - April 30 period in the MAUS for alternatives 3 and 5. These dates are different because this alternative has more conservative measures, including implementing speed restrictions for longer time periods. Cape Cod Bay is included in Alternative 3, although this was not clear in Chapter 2, so the text has been revised accordingly. |
|  | j    | 2. Proposed speeds considered are not consistent with findings from available research. Commenter questions why 14 knots was considered as a potential speed when research indicates most deaths occur in excess of 14 knots?   | Fourteen knots was considered in the FEIS to provide a range of speeds, and to request comments from the public on this speed, even though this speed has less conservation value than lower speeds. However, the final rule identifies a speed restriction of 10 knots.  |

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|     | k    | 3. Data presented are not qualified. Commenter is concerned as to how the alternatives were modeled using data on the frequency of ship strikes in the three regions. These data should be interpreted in light of effort. Questions why the DEIS did not analyze relative risk in the regions based on whale residency and vessel density. While the DEIS does consider positive impacts afforded to other species, it does not attempt to qualify these data.  | The alternatives were not modeled using data on the frequency of ship strikes in each of the regions per se, rather they were based on sightings data that are corrected for effort and with regard to areas with a high density of vessel traffic. For example, in the MAUS, the speed restrictions are centered around major port areas, which by default, have a higher density of vessel traffic than an area without a port, and this area is also the migratory corridor for right whales. In a sense, the restrictions in the NEUS do reflect the relative risk in this area, which has the highest occurrence of ship strikes of the three regions, and it also has three SMAs that are in place for longer periods than those in the MAUS or SEUS, where ship strikes do not occur as frequently. The section on the positive impacts other species has been expanded in the FEIS, and is based on the description in Section 4.2.4.1 of the FEIS, and cited from Jaquet et al., 2005; Merrick, 2005; NCOOS, 2006; and Mahaffey, 2006. |
|     | l    | 4. Analyses are incomplete and may not adequately address risk. Section 1.3 mentions the 82' vessel collision, but not the more recent collision with a smaller, 43' foot vessel. The time period for the ORP SMA still does not provide protection for whales entering into CCB from ORP.   | The section has been updated to include the recent collision with a 43' foot vessel. See response to # 66a.   |
|     | m    | 5. Funding cuts are not considered in the DEIS. There is a proposed 25% (\$2 million) reduction in the right whale budge for FY07. Yet, the DEIS does not address how potential cuts in funding will impact existing measures which NMFS' acknowledges are already insufficient as sole protection measures.   | NMFS acknowledges that appropriations for right whale protection can fluctuate. However, NMFS is committed to implementing (as a matter of priority) measures that reduce threats to, and fosters recovery of, this species. In addition, aircraft surveys aside, which are a part of right whale base funding, the ship strike reduction program and its related activities is not expected to be resource intensive.  |
|     | n    | 6. Dynamic Managed Areas are insufficiently addressed within the DEIS. The DEIS states the triggers for a DMA, although is unclear as to whether a single reliable report must be one individual reporting all three whales. The DMA triggers for the MAUS are unclear in how one would determine whether the animal is migratory or not. Unclear whether the triggers for DMAs were exclusively visual, or could include acoustical documentation of whales in an area. The DEIS does not appear to discuss the time necessary to implement a DMA and resulting affect on potential risk reduction. Furthermore, the DEIS does not take into account proposed cuts in funding for aerial survey funding when considering the value of DMAs. | A single reliable report could consist of one individual reporting the aggregation of three whales. The DMA triggers specific to migratory whales are not proposed in the final rule. Instead, the Clapham and Pace trigger would apply to all areas throughout the range of right whales. At this time, acoustic detection is not included in the process for triggering a DMA; however, NMFS is considering ways to make this and other detection technologies a means for informing DMA and other conservation programs. DMAs are now voluntary in the final rule; they will be effective immediately through various maritime communication media. Section 1.2.1.1  |

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|  |      |   | of the FEIS describes funding with respect to aerial surveys and DMAs.   |
|  | o    | 7. Sovereign vessel exemption is not justified. The DEIS does not clarify why sovereign vessels, under normal operation simply requested to voluntarily comply. It is unclear why the designated measures for military vessels do not coincide with those proposed in the DEIS. | Sovereign vessels operating under normal conditions are requested to voluntarily comply with the regulations in the final rule. The designated measures for military vessels in BOs coincided with the times and areas described in the version of the rulemaking available at the time. The measures in the rulemaking have evolved over the course of the ANPR to the final rule due to public comment and new analysis. As operating vessels under the auspices of Federal agencies will be subject to the conditions of Section 7 of the ESA, NMFS expects that any outdated measures contained in some BOs will be updated through re-initiation. NMFS expects relevant agencies to comply with measures identified in the rulemaking, when possible, and expects them to consult under Section 7 of the Act. |
|  | p    | 8. Ambiguous suggestions within the alternatives. The proposed ATBA is mentioned, but there is no indication as to when this will happen or how this was considered in the DEIS.  | The ATBA was proposed in alternatives 4 and 5 of the DEIS, although, after further consideration, this measure was taken out of alternatives 4 and 5, and is now described and analyzed in the cumulative impacts (Section 4.7.1). The U.S. submitted a proposal to create an ATBA in the Great South Channel to the IMO in April of 2008 and if approved, it would be established in 2009.  |
|  | q    | No cogent explanation as to why Alternative 6 is the preferred alternative.   | See response to # 96c  |

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| 111 | a    | <p>The available scientific data does not support NMFS' contention that reducing vessel speeds will decrease the likelihood or severity of ship strikes of the North Atlantic Right Whale, or that the data support a 10-knot versus 12- or 14-knot speed restriction. The data set used to support NMFS' recommendation is extremely limited, particularly at 10- to 14-knot and slower speeds, and each of the studies cited in the Proposed Rule to support the speed restriction clearly acknowledges the short comings of the data. The data are so inconclusive regarding whether or not reducing vessel speed will minimize the likelihood or severity of vessel strikes, and the economic impact of the proposed regulations so great, that the proposed speed restrictions are premature, scientifically unsubstantiated, and could do more harm than good. <i>Refers to Testeverde and Hain report.</i> NMFS should withdraw proposed rule from consideration and immediately pursue hydro, acoustic, technological and other studies to develop and implement solutions. Once that is accomplished, revised proposal should be issued.</p> | <p>See the responses to comments in the final rule and Section 4.1.3 of the FEIS. Also see response to # 111h regarding technology.</p>   |
|     | b    | <p>More than 50% of reported large whale collisions involved vessels that would have been exempt from rule. Explain further decision to exempt &gt;50% of vessels involved in historic strikes. No explanation is provided how non-emergency agency operations such as routine transits would be compromised. NMFS provides no explanation as to why mandatory speed limits are proposed for merchant vessels when the requirements in place for the non-emergency operation of military vessels have been repeatedly determined by the agency to adequately protect the right whale. The effectiveness of the rules for military vessels should cause the agency to advocate their use for merchant vessels. In regulating commerce, Federal agencies should first consider less costly and intrusive measures, particularly when those measures are likely to be equally effective in accomplishing the desired goal. Rules for vessels in routine, non-emergency ops should be identical for commercial and military vessels. Any proposed regulations should apply to all vessels, including government vessels and vessels &lt;65' LOA.</p>      | <p>Note that the introduction of the Ship Strike Database Report (Jensen and Silber) states that there is likely a reporting bias for Federal vessels because they are expected to report ship strikes, while other vessel operators either have little incentive or are unaware of a strike; therefore the actual number of non-Federal vessels is likely higher than reported in the database. Regardless of the number, most Federal agencies are already operating under ship strike reduction measures from Biological Opinions that are similar to measures in the rule. See response to # 110o in regard to Federal vessels engaged in non-emergency operations. NMFS has examined a number of less costly measures, although none were found to be equally effective (See Section 2.3).</p> |
|     | c    | <p>NMFS uses the average speed at which vessel strikes occurred to support the proposed speed restrictions. However, it is important to note that the average speed at which vessel strikes occur coincides with the speeds that vessels typically travel. There have been few whale strikes at speeds less than 10 knots because vessels do not typically travel at this speed (other than as they enter ports, where whales are typically not present). The data do not provide any indication that vessels moving faster are more likely to strike whales. In fact, the Jensen and Silber data could indicate that ship strikes decreased as vessel speed increased. Pace and Silber only used the mandatory ship reporting system (MSRS) data, rather than a more extensive data set. MSRS data does not include military vessels, recreational vessels or commercial vessels less than 300 gross tons.</p>   | <p>"Average" speeds were not used in setting vessel speed restrictions. Several studies (e.g. Laist et al., 2001; Vanderlaan and Taggart, 2007; Pace and Silber, 2005) found that vessel speed was a factor in ship collisions, and the two latter studies assesses speed as a probability (not an average) of resulting in serious injury or death. With regard to average speed used by vessels, Pace and Silber (2005) examined the distribution of speeds at which known ship strikes occurred relative to speeds of ships reporting into the MSR systems, which were considered representative of speeds that ships travel in general. The authors found that the two distributions were statistically different. That is, these data suggest that vessels involved in ship</p>                |

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|     |      |  | strikes were going faster than ships tend to travel in general.  |
|     | d    | Commenter supports the Dynamic Management Area (DMA) concept as long as DMAs are triggered and remain in effect based on reliable, real time information on whale locations. DMA should expire after 3 days unless subsequent surveys indicate RW remain. Lifting of DMA should be accomplished by marine broadcast and other means in addition to or rather than FR publication to ensure prompt communication.   | The period in which a DMA is in effect was based on information regarding right whale residence time in specific areas (Clapham and Pace) and will not be revised to a 3-day conclusion in the final rule. Lifting of a DMA is will be announced through customary maritime communication media, including, but not limited to, marine broadcasts, NOAA weather radio, web sites, e-mail and fax distribution lists, etc.  |
|     | e    | Any regulations promulgated should require vessels to travel at a slow, safe speed rather than a set speed limit. This allows the vessel operator, who knows the characteristics and limitations of the vessel being operated, to make real time decisions based on weather conditions and other location-specific circumstances as to a safe transit speed. "Slow, safe speed" standards, consistent with USCG and Navy vessels, rather than a set speed limit. If NMFS sets a speed limit, it should be no less than 14 kts, as this is better supported by scientific data and addresses industry concerns. ( <i>See comment letter for extensive comments on USCG requirements and Section 7 consultation.</i> )   | The final rule identifies a 10-knot speed restriction. See response to #38a in regards to maneuverability. Slow safe speed can be subjective and is not enforceable.   |
|     | f    | Neither the preamble to the proposed rule nor the DEIS discuss or analyze the significant differences between the burdensome and costly proposed rules for merchant vessels and the rules which apply to military vessels. Chapter 2 of the DEIS does not address the Navy and Coast Guard vessel operating rules as an alternative. Without an analysis of whether the existing restrictions for military vessels would be effective for merchant vessels operating in the same waters, the proposed speed restrictions are arbitrary and capricious in that the agency has failed to consider an alternative being used to address a large category of vessels that have historically been involved in whale strikes. There does not appear to be any scientific basis for using a different approach to protect whales from government versus commercial vessels. | As stated in response #110o, in the long run, after Section 7 consultations are reviewed, it is likely that the ship strike reduction measures identified in Biological Opinions will be very similar to the measures identified in the final rule, and equally protective. While USCG and Navy operations are not discussed in Chapter 2, Section 3.4.7 of the FEIS describes the number of vessels each agency operates on the East Coast, and the nature of their operations. Appendix A of both the Draft and Final EIS further describes these agencies current ship strike reduction measures. Also see response to # 111b in response to ship strike reports and Federal vessels. |

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|     | g    | <p>In response to comments on the DEIS scope expressing concern about the safe navigation of vessels at these speeds, NMFS replied: "The USCG has implemented speed restrictions of 10 knots or less; these speeds apparently do not affect maneuverability in most circumstances." If NMFS continues to pursue set speed limits, to which we are opposed, we request that they provide a list in the FEIS (or prior) of locations where USCG has proposed &lt;10 kt speed restrictions in open ocean areas similar to the areas for which the regulations would apply. We also request that the FEIS provide documentation that USCG agrees that whatever vessel speed restriction is promulgated will not affect maneuverability in the areas affected by the proposed speed restrictions even: 1) under various weather conditions (particularly since the SMAs and DMAs are largely in place in the winter and spring months in which high winds and other adverse weather conditions are a common occurrence); and 2) for the range of vessels to which the regulations will apply. If set speed restrictions are imposed, it is imperative that they contain a provision that allows the vessel operator to maintain a higher speed if necessary to ensure safe navigation.</p> | <p>NMFS did not receive any definitive data or information during the comment period on the rule or DEIS that vessels lose steerage at specific speeds. Speed restrictions imposed by the USCG (identified in the rule), National Park Service, and ports of Los Angeles and Long Beach suggest that large vessels are able to maintain steerage at reduced speeds. Nonetheless, based on comments received, NMFS has allowed provisions for vessels to maintain speed in adverse weather conditions. Approval of the rule by the USCG and other Federal agencies is provided during the interagency clearance process. See response to #38a for this language.</p>   |
|     | h    | <p>NOAA continues to dismiss technological solutions on the basis that no proven technology is currently available. Industry representatives have repeatedly indicated that they can avoid a whale if they know its location, yet neither the recommended strategy nor NOAA's and other available resources focus on research and development of potential technological solutions. The foundations of a technological solution are available, and perhaps if funding and research over the past decade had focused on developing technology to reduce the likelihood and severity of ship strikes, we would already see results.</p>   | <p>NOAA is committed to exploring and testing technological solutions to address ship strikes, and has provided substantial funding for a number of years for research and development (<a href="http://www.nero.noaa.gov/prot_res/prgrants/index.htm">http://www.nero.noaa.gov/prot_res/prgrants/index.htm</a>). However, any technological solution must be (a) proven as directly effective in reducing ship strikes, and (b) environmentally benign. At this time, NMFS believes that no technology exists or will be imminently available that has both of these features, and therefore, existing technologies are not capable of meeting the objectives of directly addressing and eliminating the problem. Even with perfect detection technologies, the mariner must still take evasive action, such as slowing down, which may put undue burden on responsible mariners who alter course or speed when others do not, thus affecting navigational safety. Further, this type of voluntary action has not proven to be sufficient.</p> |
|     | i    | <p>Extensive comments about PARS routing, and is not pleased with the public comment period for PARS. TSS Option #1 should be implemented through the IMO rather than Option #4. (See <i>letter</i>)</p>  | <p>Outside the scope of the EIS.</p>  |

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|     | j    | <p>Economic analysis significantly underestimates likely impact of regulations. Economic and environmental impact analyses should be revised and reissued for public comment to address all of these comments.</p> <ol style="list-style-type: none"> <li>1. ATBA and Boston TSS should be included in the economic impact analysis for the preferred alternative.</li> <li>2. The proposed speed restrictions shown in Figure 4-12 of the Nathan Associates report are less extensive than those in the proposed rule.</li> <li>3. The proposed 10-knot speed restrictions were released prior to the DEIS, although the economic analysis in the DEIS focuses on a 12-knot speed restriction.</li> <li>4. The Indirect impacts are still not qualified, in part due to faulty underlying assumptions that are applied equally to all ports.</li> <li>5. The EIS should quantify and evaluate the additional truck traffic and air emissions associated with cargo diversions that may result from the proposed regulations.</li> </ol> | <p>NMFS does not believe that additional public comment is warranted given that a total of 102 and 92 days were provided for commenting on the rule and DEIS, respectively. In addition, numerous stakeholder and industry meetings were held, interviews were conducted at key port areas, and no specific data were provided to support the comment on underestimating the economic impact.</p> <ol style="list-style-type: none"> <li>1. The ATBA and Boston TSS are not included in any of the alternatives in the FEIS, but they are quantitatively and qualitatively considered in the cumulative impacts section.</li> <li>2. The Great South Channel is not shown in Figure 4-12 as it is organized by port region and port area to match with port arrivals. However, a clarifying footnote was added in the FEIS to include the speed restrictions for the Great South Channel. Those speed restrictions were taken into consideration for the FEIS Economic Analysis.</li> <li>3. As noted, the detailed economic analysis of Alternative 6 at the 10-knot limit is presented in Appendix F of the DEIS Economic Analysis Report. In the FEIS, all alternatives are analyzed in detail at 10 knots.</li> <li>4. Under Alternative 6 speed restrictions are proposed for Boston for only two months, not the 4-5 months indicated by the commenter. The FEIS further explains the rationale for the assumptions on diverted traffic.</li> <li>5. The economic analysis indicates that under certain alternatives a minimal percentage of vessels may be diverted, which could result in cargo being transferred to truck or rail. These percentages do not merit a detailed air quality analysis of emissions from these intermodal sources, as the effects are expected to be minimal. Further, it would be difficult to estimate the quantity of cargo being diverted, the destination, and the type of intermodal source the cargo would be transported by. While vessels may be diverted to other ports under certain circumstances, this would not increase emissions at sea; it would only redistribute them, and further, the reduction in emissions from reduced speeds may serve to balance out the introduction of additional emissions in a certain port area.</li> </ol> |

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| 112 | a    | Strongly support Alternative 5 at a 10-knot speed restriction for all vessels greater than 65 feet, and only narrowly drawn exemptions for national security and human safety.   | Acknowledged   |
|     | b    | The sweeping [Federal agency] exemption encompasses a class of vessels known to be one of the largest contributors to mortality in right whales and is overly broad to meet the need that certain missions may be compromised by speed restrictions. Research vessels and other vessels with no tie to national defense or lifesaving should not be exempt.  | See response to # 100f   |
|     | c    | <u>Executive Summary</u> : The alternatives table on ES-3 states that there are no SMAs proposed for alternatives 3 and 5, yet these speed restrictions are seasonal. NMFS should use terminology that allows readers to better discern the differences intended between SMA and seasonally imposed measures. Alternative 5 only offers the highest level of protection in relation to the other five alternatives (ES-6), but in some cases it is less protective than Alternative 6. The DEIS should explain the rationale for limiting protective measures in non-preferred alternatives. | The DEIS used language that differentiated the SMAs in alternative 6 with those proposed in alternatives 3 and 5. The FEIS consistently uses the SMA terminology throughout the document. Section 2.6 of the FEIS explains the rationale for choosing the preferred alternative over other less protective alternatives.   |
|     | d    | <u>Chapter 1</u> : Section 1.2.1.1 - The DEIS should provide information on recent trends in funding for surveys and the relative contribution of systematic surveys versus opportunistic "reliable" reports for determining when to trigger Dynamic Management.   | The FEIS provides information on funding for surveys from 2000 through Fiscal Year (FY) 07. For DAMs implemented through the ALWTRP from January - November 5, 2006, 7 were triggered through sightings on surveys and 4 were triggered through reports from Provincetown Center for Coastal Studies (PCCS), Whale Center New England (WCNE), a whale watch boat, and a commercial tanker. Although all reports, except those from PCCS and WCNE must be verified by NMFS. |
|     | e    | Section 1.2.1.4 - As the NEIT has been virtually disbanded and the role of the both implementation teams has changed to support education on the Strategy, the DEIS is misleading in its implication that recovery teams exist for right whales or any endangered whales on the US East Coast.   | Descriptions of activities of the NEIT and SEIT have been updated to reflect their current status through FY08.  |
|     | f    | Section 1.2.1.6 - This section should state the lack of compliance with ship advisories, and which agencies have not complied with the NMFS advisories recommending slowing to 12 knots or less, as this helps in understanding the impact of exempting Federal vessels from otherwise mandatory risk reduction measures.  | This section has been revised to include the requested information.  |
|     | g    | Section 1.4 - Disagrees with the timing of the measures for Off Race Point and Great South Channel. Questions the mechanism for triggering a DMA. Concerned that routing is not part of the current rulemaking; the DEIS should discuss the risk to whales if recommended routes are not designated or/and when protective measures are implemented on a staggered basis.  | See responses to # 66a and #71e. The mechanism for triggering a DMA is based on analysis by Clapham and Pace (2001). The recommended routes were implemented in November 2006.   |



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|     | h    | Chapter 2: Section 2.1 - Any exemption from compliance with the operational measures should be limited to those involved in activities related to national defense or life saving. The DEIS should contain an estimate of the number of vessels that would be exempted from compliance so that the impact of this exemption on risk reduction can be appropriately gauged.  | See response to 100f. The FEIS contains an estimate of the number of Federal vessels that will be exempt (see Section 3.4.7).  |
|     | i    | Section 2.1.1 - Concerned that the measures in the SEUS do not apply throughout the Southeast Critical Habitat, and in particular, there are no measures proposed for Port Canaveral in the preferred alternative. The time periods for implementation in the SEUS differ from alternatives 3 and 5 from alternative 6. The truncated time period (Dec. 1 - Mar. 31) for alternatives 3 and 5 should be corrected to coincide with NMFS' own stipulation of the time of greatest risk to right whales in the SEUS (Nov. 15- Apr. 15). | Whale distributions around Port Canaveral do not extend very far from shore because of the steep slope and high water temperatures. While sightings occur in the area, they are all close to shore in waters that are shallower than large vessel drafts. On the port approach, vessels would have slowed down by the time they get into shallow water where whales occur. Based on comments, NMFS has modified the dates for alternatives 3 and 5 to November 15 - April 15 in the FEIS.                                  |
|     | j    | Section 2.1.1.2 - It would be helpful for the DEIS to provide the data and basis underlying the conclusions in textual form regarding the shipping lanes in the SEUS, because figures 2-1 and 2-2 only show the 'relative' risk reduction and not the whale sightings.  | This section has been revised to include the data underlying the placement of the recommended routes in the SEUS, which was based on right whale sightings, vessel traffic and safety of navigation.   |
|     | k    | Section 2.1.2 - Only some of the mortalities in the MAUS are included in the DEIS. In 2004 alone, two pregnant right whales and their near-term calves were found dead off NC from ship strikes and another female was seriously injured off Georgia in 2005.   | The second female mortality in North Carolina has been added to this section; however the serious injury in Georgia is included in the SEUS region section.  |
|     | l    | Section 2.1.2.1 - The language in the DEIS does not make it clear that the 30-nm distance in the MAUS is proposed only in the preferred alternative and not the distance from shore proposed in alternatives 3 and 5. The DEIS does not analyze the differential risk posed by omitting this 5 nm swath in alternatives 3 and 5. Concerned that the Block Island Sound SMA does not protect the area north of the boundary, and suggests extending measures northward to the COLREGS line in this area.                               | Section 2.2 of the DEIS provides an explanation that states that some of the measures proposed in Section 2.1 have been modified for certain alternatives. Section 2.2.6 states that Alternative 6 implements the measures described in Section 2.1; some of which have changed since the DEIS (see Section 2.3). Sections 2.2.3 and 2.2.5 further clarify the 25-nm distance in the MAUS. The FEIS analyzes the risk posed by omitting 5-nm in alternatives 3 and 5. See response to #29b for the Block Island Sound SMA. |
|     | m    | Section 2.1.3.1 - The DEIS should provide a summary of the data that underlie that choice of the time period for CCB rather than simply assert the Jan.1 - May 15 period.   | This section has been revised to include a summary of the data used to determine the time period for CCB.  |
|     | n    | Section 2.1.3.2 - The text provides no justification for the very limited time period for protective measures in ORP when available data indicate that the measures should be in place by at least January 1, coinciding with the start date for CCB. The DEIS analysis should consider the need to restrict ship traffic in the ORP area from Dec. 1 through May 30 and discuss the relative risk of instead choosing the shorter period of time.  | This section has been revised to include a summary of the data used to determine the time period for ORP. See responses to #66a and #71e.  |

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|  | o    | Section 2.1.3.3 - The timing of protective measures in GSC must also begin Jan. 1 to protect northward migration, and the DEIS should consider the benefits of extended protection.   | See responses to # 66a and #71e.   |
|  | p    | Section 2.1.4 - It would be helpful if the DEIS discussed the relative contribution of dedicated surveys versus "qualified individuals" in triggering DMAs and thus speculate on impacts to DMA if surveys are dramatically curtailed for budgetary reasons. Whales are left unprotected for an average of 10 days prior to implementing restrictions. NMFS should work with the USCG to develop real-time implementation, under the USCG's Limited Access Areas authorization. The Final EIS should clarify what is meant by a "concentration of three or more whales" and how it differs from criteria developed by Clapham and Pace. | The FEIS includes information on the DAMs triggered from qualified individuals verses dedicated surveys. After a DMA is triggered and verified, the location and parameters of DMAs would be distributed immediately, and the DMA should be voluntarily observed immediately. The USCG's Limited Access Areas authorization will not be utilized for the DMA program. The criteria for DMA triggers and parameters are described in Clapham and Pace and the FEIS. |
|  | q    | Section 2.2.3 - The final rule to amend the ALWTRP has not yet been published and the boundaries of the SMAs in alternative 3 remain uncertain. The DEIS should analyze the relative risk reduction if boundaries for the fisheries-related seasonal management areas remain unchanged.   | The boundaries of the SMAs in alternative 3 will remain as proposed in the DEIS even if these boundaries are altered in the final rule to modify the ALWTRP.   |
|  | r    | Section 2.2.4 - The DEIS should discuss why speed restrictions have not been considered as a requirement with the lanes it proposed in Alternative 4, and should analyze this risk. Commenter is concerned that the ATBA for the GSC could not go into effect until 2008.   | Speed restrictions are not considered with the lanes in Alternative 4 as there were several comments on the NOI to analyze the effectiveness of routing measures as a stand alone measure. If approved, the ATBA in the GSC would not go into effect until 2009, although speed restrictions should be in place prior to this date.  |
|  | s    | <u>Chapter 3</u> : Section 3.1 - Concrete information on right whale seasonal distribution should be provided in this section such that reviewers can readily see sightings mapped in the context of the various areas in which risk reduction measures are proposed.   | Chapter 2 has been revised to include maps with sighting data for the three regions, and the figures also show the measures.   |
|  | t    | Section 3.1.2.2. - This section does not discuss residence time in CCB, thus commenter suggests incorporating Mayo 2001-2004 and Scheville et al. 1986.   | These references have been added to Section 3.1.2.2.   |
|  | u    | Section 3.1.2.3 - The source, Payne et al. 1990 should be incorporated into this section as it discusses the distribution of right and humpback whales in relation to the abundance of sand lance.  | This reference has been added to Section 3.1.2.3.  |
|  | v    | <u>Chapter 4</u> : Section 4.1.3 - Extend information regarding avoidance time if speed were reduced to 10 knots, and when the vessel is 91 meters from the whale rather than 50 meters, since NMFS states that last-second flight response may occur when a vessel is within 100 yards (approximately 91 meters).  | Information in this section has been extended to include avoidance time when a vessel is 100 meters from the whale (information at 91 meters is not available).  |
|  | w    | Section 4.1.3.1 - The analysis should discuss the number of whales that would be unprotected during this truncated period of protection in ORP in light of studies indicating their distribution and movements through this area in January through March.  | Whales will not be unprotected during January through March because DMAs will be implemented if three or more whales are sighted outside the time of ORP.  |
|  | x    | Section 4.1.3.3 - SEUS speed restrictions and their relative impact are difficult to understand from the text in this section; it would be helpful to have a map clearly showing the differences between alternatives, as the current figure (2-14) is small.   | A separate figure for Alternative 6 has been added to the FEIS (Figure 2-18).  |

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|     | y    | Section 4.1.4.1 - The DEIS should discuss the fact that the shift in the Boston TSS may take effect in 2007, whereas the ATBA may not take effect until 2008, and evaluate the risk reduction if the ATBA does not go into effect along with other measures proposed in Alternative 4, 5, and 6.  | The FEIS discusses timelines for making modifications to the TSS servicing Boston and establishing an ATBA. One modification to the Boston TSS occurred in July 2007, and while a second modification to the TSS and creation of the ATBA may not occur until 2009, speed restrictions will be imposed in this area through the GSC SMA in the interim.   |
|     | z    | Section 4.4 - The economic analysis significantly overestimates the costs that may result from implementation of the regulations, although it fails to quantify the economic benefits that will be realized.  | The commenter notes "that this (economic) analysis provides an accurate upper-end picture of the potential economic impact of these regulations. Hence the later statement that the analysis significantly overestimates the costs that may result from the implementation of the regulations must be considered within this context. The second part of the comment relates to the economic benefits of protecting the right whale which is being analyzed under a contingent valuation study separate from the EIS effort. See response to # 78b.   |
|     | aa   | Section 4.4.3 - The potential indirect impacts, including the diversion of traffic to other ports, increased intermodal costs, and impacts on local economies are accounted for in this Section. However, with respect to traffic diversions, the analysis that specifically addresses the possibility of vessels bypassing Boston is based on several unsupported assumptions. The analysis that assumes 20% of container and ro-ro shipping volume would be diverted to Canada is also unsupported. Therefore, these assumptions undermine the reliability of the conclusion that Alternative 5 would result in indirect impacts of over \$159 million at 10 knots. Sections 4.4.4-4.4.7 summarize data on the impacts on commercial, fishing, passenger vessels, whale watching vessels, and charter vessel operations from the DEIS Economic Analysis Report. (See letter for specific comments.) | 4.4.3: Further explanation of the assumptions used for port diversions are presented in the FEIS. The cost of increased vessel time due to delays caused by the operational measures have been included. If cargo is to divert to other routes this would be because the total additional costs associated with those routes are less than the cost of vessel time due to delays at the current port. Hence it would be double-counting to also include any additional overland transport costs to the estimated impact already presented. 4.4.4 - 4.4.7: These comments are generally summary statements that do not require a response. |
|     | ab   | <u>Appendix A:</u> The DEIS must, in some place, discuss the number of sovereign vessels and vessels under contract to the government, since it proposes to exempt them. Also, there are significant discrepancies in timing and nature of protective measures in the BO's summarized in this appendix from those in the proposed rule. The risk reduction measures in the final rule should be a part of reasonable and prudent alternatives to jeopardy in any new BO's.  | See response to #112h regarding the number of Federal vessels. See response to #110o regarding the discrepancy between the measures in Biological Opinions and those in the rule.   |
| 113 | a    | Urges NMFS to reject the 12 and 14 knot options in favor of 10 knots.   | Acknowledged  |
|     | b    | Urges NMFS to consider an exemption to speed restrictions for all vessels and ports when: 1) vessels are landward of the sea buoy, 2) vessels are under the control of a licensed pilot, and 3) the pilot determines that increased speed is necessary for safe passage.  | See responses to #38a   |

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|     | c    | The boundaries of the SEUS SMA should be expanded northward and seaward 30 nm to include the ports of Savannah and Charleston in addition to Jacksonville, Fernandina and Brunswick. The landward boundaries of the SEUS and NEUS SMAs are not defined; commenter proposes the COLREGS lines. A contiguous MAUS SMA (similar to Alternative 3) should be proposed and effective from Oct.1 to Apr.30 in between the NEUS and SEUS SMAs out to 30 nm.   | The boundary of the SEUS SMA has effectively been expanded northward in the final rule, although this area is included in the MAUS region. The SMA in the southern portion of the MAUS region now has speed restrictions in a continuous 20-nm area from Wilmington, NC, south to Brunswick, GA. This action will provide added conservation value because an aggregation of right whale sightings along the South Carolina coastline will be included. The landward boundaries of all measures are the COLREGS lines. A contiguous SMA for the entire MAUS was considered in Alternative 3, although this measure has a higher economic impact on the shipping industry, and thus is not included in the preferred alternative. The dates remain unchanged. |
|     | d    | Supports routing measures provided that NMFS: 1) implements voluntary routes in a timely manner, 2) implements routes for MAUS ports where routing would reduce risk of collision, and 3) reconsiders mandatory routing measures if compliance rates are low.  | Recommended routes were established in mid-November 2006, and if after monitoring, NMFS finds low compliance rates, mandatory routes will be considered. Routing measures for MAUS ports are not considered in the rulemaking.   |
|     | e    | DMAs will likely be ineffective, cumbersome, and costly to implement in the MAUS and SEUS.   | Acknowledged   |
|     | f    | The DEIS fails to explain how NMFS intends to enforce speed restrictions and what penalties will be levied for noncompliance. NMFS should coordinate with USCG to obtain access to the AIS network.  | See response to #29c   |
|     | g    | Encourage NMFS to redouble its support for technological solutions. Additional funding, interagency collaboration and access to scientific research permits are sorely needed in order to develop practical, long-term, whale detection/avoidance technologies.  | See response to # 111h   |
| 114 | a    | Support the PARS routes, the ATBA, and implementation of DMAs.   | Acknowledged   |
|     | b    | Commenter does not see the scientific basis in the record of the rulemaking for imposing a 10-knot speed restriction within 30-nm of East Coast ports in the mid-Atlantic range. Therefore, commenter urges NMFS to adopt an interim final rule implementing measures which help mariners avoid areas where right whales are, or are likely to be, at certain times. These measures should include sovereign vessels and vessels under 65 feet. Then, during the Interim final rule, NMFS should undertake serious scientific research on the speed issue. | Outside the scope of the EIS (comment refers to the rulemaking).   |
|     | c    | Commenter finds no compelling evidence that speed is a determining factor in the incidence of ship strikes to large whales.  | See responses to # 53a and 70.   |

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|     | d    | Commenter submits that the ship strikes reported in Jensen and Silber indicate that ship strikes decreased as vessel speed increased, partially because more ships travel in the slower speed ranges.  | Death and serious injury probability analysis (Vanderlaan and Taggart, 2007; Pace and Silber, 2005) indicates that vessel speed is a factor and that probability increases with vessel speed. The probability of death occurring from a collision was approximately 35-40 percent at 10 knots, 45-60 percent at 12 knots, and 60-80 percent at 14 knots See responses to #72a and #103b.   |
|     | e    | Commenter quotes Vanderlaan and Taggart (2006) and states the study concluded that "...the encounter probability [between a ship and whale] increases slowly as speed decreases from 24 knots or greater and then begins to increase more rapidly as vessel speed continues to decrease toward zero."                            | Commenter misinterpreted the data; the increase in encounter probability between 24 knots and 6 knots is less than one-tenth, indicating that there is no statistically significant difference in encounter probability between 24 and 6 knots, which includes the range considered by NMFS. Only speeds below 6 knots would have a significant increase in encounter probability, and NMFS is not considering speeds that low. That is, slower vessels only pose a greater threat to right whales by transiting an area longer if they are traveling less than 6 knots.   |
|     | f    | Upon reviewing the records in Jensen and Silber in which vessel speed and size are known, less than 9% of the incidents involved vessels within the size range and type most affected by the rule, and all of the interactions occurred at speeds in excess of 15 knots, which indicates this should be the minimum speed limit. | Vessels less than 65 feet have been implicated in ship strikes, and NMFS realizes that these vessels may pose a threat to right whales, and will consider means, including future rulemaking, to address this issue. In terms of vessel type, Jensen and Silber (2003) indicate that there is a reporting bias for military vessels due to standardized government reporting, therefore it is likely that strikes with other vessel types that are subject to the rule are underestimated. Even though Federal vessels are not affected by the rule, most of these agencies are operating under ship strike reduction activities identified in Biological Opinions. See response to #114d regarding speed. |
|     | g    | There are 13 vessels in the Jensen and Silber data set that are less than 20 meters, which is more than twice the amount than those lengths affected by the rule. This indicates that vessels less than 20 meters in length are of far greater concern than large containerships.  | The rulemaking will apply to vessels 65 feet and greater, although vessels less than 65 feet may pose a threat to right whales, and NMFS will continue to consider means, including future rulemaking, to address vessel classes below 65 feet. In the meantime, NMFS will continue to engage in education and outreach programs regarding right whale vulnerability to ship strikes specific to the recreational, fishing, and other coastal maritime activities that involve vessels less than 65 feet.  |

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|  | h    | The proposed rule provides virtually no discussion of the extent to which the proposed speed restrictions may be based on an attempt to lessen the severity (as opposed to the frequency) of a whale/vessel collision.  | Comment refers to the rulemaking. Outside the scope of the EIS.   |
|  | i    | 1. Commenter urges NMFS to guard against the unsupportable assumption that is some speed reduction is good, a greater speed reduction must be better. 2. The admitted need for additional hydrodynamic testing indicates it is entirely possible that the optimum speed for avoiding whale injury is not necessarily the slowest navigationally feasible speed. 3. Moving from no controls to the most severe controls precludes any possibility of collecting additional data at speeds between today's 18-22 knot average and the most severe proposed restriction of 10 knots. | Outside the scope of the EIS.   |
|  | j    | The 30-nm zone in the mid-Atlantic is arbitrary with no adequate scientific evidence that the measures will provide added protection for right whales. Given the evidence that most strikes in the mid-Atlantic occur near shore by smaller vessels, 20-nm is a more logical limit.   | The 30-nm SMAs in the MAUS have been changed to 20-nm in the FEIS. The studies that form that basis for this change are described in Section 2.1.2. Also see response to #114k.   |
|  | k    | If the agency were in fact to issue a final rule with a 30 nm speed restriction zone around each mid-Atlantic port, it would need to explain the relationship of the data presented in Table 1, "Combined distance from shore of all sightings and tagged animal sighting" and Table 3, "Total number of sightings within 40 miles of port and % within each buffer" of <i>Knowlton (2002)</i> and affirmatively demonstrate that whales are found further offshore around port areas than in other areas.  | NMFS partially relied on Knowlton <i>et al.</i> (2002) for the formulation of measures in the ANPR. Following the ANPR, and prior to publishing the NPR, NMFS conducted a review of the MAUS SMAs and the Knowlton paper (Memo from Richard Merrick to Greg Silber, dated 9/29/2005). A much larger database was utilized in the latter analysis, and several other parameters were revised. The Merrick (2005) review came to a similar finding that 90 percent of right whale sightings occurred within 30-nm of the coast. However, in the FEIS, there is a 20-nm zone around mid-Atlantic ports based on analyses conducted in 2008 (see Section 2.1.2 of the FEIS). The SMAs around ports are also based on the determination that vessel traffic is also concentrated at these locations. |
|  | l    | If NMFS were to issue a final rule with a 30 nm geographical scope, it would have to explain why 20 nm is adequate for Navy vessels, but 30 nm is necessary for commercial vessels. Failure to provide a reasoned explanation for these inconsistent positions would render any rule incorporating a 30 nm limit arbitrary and capricious.  | Outside the scope of the EIS.   |
|  | m    | Reduced vessel speed for large ships results in reduced maneuverability, particularly for high-profile vessels and with hazardous weather conditions. Therefore any speed in the proposed rule must contain a safety exemption that permits a captain to conform his vessel's speed to the conditions he faces.   | See response to #38a  |

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|     | n    | The per hour cost estimate for a vessel at sea used in the estimate is 2.5-4 times too low.   | The commenter states the DEIS used an average operating cost at sea for containerships of \$1,100 per hour. However, the actual weighted average operating cost at sea for June 2008 for containerships presented in the FEIS report is \$3,140 per hour. Operating costs by type and size of vessel were presented to industry members during the course of the study who confirmed that they were in the correct range. The commenter did not provide justification for this statement; in order to review their per hour estimate, the commenter would have to provide hourly vessel operating costs for different size categories of vessels as shown in the economic report. |
|     | o    | The estimate of hours lost per port call is 2.5-3 times too low.  | The Economic Analysis addressed the issue of the time necessary for vessels to slow down as described in the report. In many port areas, vessels slow to board pilots. Perhaps the commenters did not take this into consideration.   |
|     | p    | There is no estimate of the cost of extra fuel required to make up lost time on a multi-port string- a major added cost.  | Increased fuel consumption for vessels having to go faster to make up time is not and should not be included in the economic analysis. The economic analysis conservatively assumes that vessels will not speed up to make up time and hence includes the maximum estimate of delay that would be incurred. If vessels make up for the delay by speeding up then the estimated economic impact would need to be revised to reduce or exclude the cost applied for the time delayed. Further the indirect economic impact would need to be lowered if the delays are avoided by increasing vessel speeds.  |
|     | q    | The cost to the shipping and port industries and its customers if vessels are forced to bypass a port to maintain schedule is high but difficult to calculate or predict. | The FEIS and accompanying economic report consider the cost of increased vessel time due to delays caused by the operational measures. If cargo is to divert to other routes this would be because the total additional costs associated with those routes are less than the cost of vessel time due to delays at the current port. Hence it would be double-counting to also include any additional overland transport costs to the estimated impact already presented.  |

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|     | r    | <p>There are a number of other costs and operational considerations associated with speed restrictions that are not dealt with in the DEIS: 1). The DEIS recognizes the added cost to coastwise shipping in the cabotage trades based on additional miles traveled southbound along the coast to stay outside of the 30 nm zone. Commenter states that liner vessels in international trade would face the same situation and added cost. 2). Ships' engines will require additional maintenance as a result of continuous variation of speed and poor combustion, and engine fouling from slow steaming. 3). The ANPR restrictions are primarily during winter months when speed and schedules are already adversely affected by the weather. 4). Modern containership engines are designed to operate at a high RPM and are shown to have an increased production of NOx emissions when operated at lower RPM for a longer time.</p> | <p>The first bullet under this comment is the need to include liner vessels involved in international trade in the estimated impact of coastwise and cabotage traffic. The FEIS clarifies that these vessels were included in the DEIS Economic Analysis Report. The second bullet relates to vessels that require additional maintenance as a result of the continuous variation of speed. This element was considered in the FEIS in qualitative terms. The third bullet states that restrictions are proposed during the winter months when speed and schedules are already adversely affected by the weather. To the degree that vessels are operating at slower speeds during the periods that speed restrictions are proposed, this would result in a lower estimate of economic impact. The fourth bullet relates to emissions produced when vessels operate at lower RPM for a longer period. Although emissions vary depending on engine type and age, in general, emissions decrease as speed decreases (see response to # 101e).</p> |
| 115 | a    | <p>How can NMFS responsibly justify putting the entire economic burden for compliance with speed restrictions on 100% of the ocean going commercial fleet when, at best, it may be responsible for less than 50% of the collisions?</p>  | <p>In nearly 300 records of known vessel collisions with all whale species, vessels of nearly all sizes and types are represented. The regulations as currently proposed would apply to all non-sovereign vessels 65 feet and greater. Therefore, if the regulations are established, the economic burden would be shared by all segments of the maritime industry operating vessels over 65 feet, including fishing, whale watch, and passenger industries, in addition to the ocean going commercial fleet.</p>   |
|     | b    | <p>Has NOAA considered a study of the maneuverability of vessels at each management area (each port) for each of the speed restrictions evaluated as part of the EIS (10, 12, and 14 knots)?</p>   | <p>Navigational safety is of utmost importance to NOAA. Although navigational characteristics may differ at individual ports, NOAA believes that meteorological and hydrographic conditions are not likely to be appreciably different at each port along the eastern seaboard. Therefore, NOAA has no current plans to conduct the studies suggested. If funding permits, NOAA may consider some hull maneuverability studies. In the meantime, NOAA is funding hydrodynamic studies of the effects of varying ship speeds on objects (e.g., whales) in the ship's path. NOAA believes that the operational measures should be consistent at all ports. If they differed, one port may suffer unnecessary and/or disproportionate economic hardship if shipping interests</p>  |



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|  |      |  | sought other ports for their business (i.e., port dislocation).   |
|  | c    | Will NOAA study the impacts to vessel maneuverability with hydrodynamic models of each of the ports included within the proposed SMAs?   | The studies suggested have not been contemplated. See response #115b.   |
|  | d    | Has NOAA considered minimum safe speed as an alternative to naming a specific vessel speed restriction?  | See response to # 38a   |
|  | e    | If the USCG is tasked with enforcement, how will this additional responsibility impact its other critical duties, such as homeland security? Will these issues be addressed in the EIS and will these issues be included in the economic impact study? | NMFS and USCG are developing enforcement protocols that likely will involve technologies. The USCG's responsibility for enforcement is not expected to adversely affect their homeland security missions. These issues are not addressed in the FEIS or Economic Impact Study; they are only addressed in the final rule.   |
|  | f    | Did NOAA consider a provision by which to terminate the speed restrictions?  | There is some uncertainty regarding the manner in which ships and whales interact and the relationship of speed and other factors to whale injuries and mortalities. As further discussed in the comment and responses section of the rule, some commenters, citing these uncertainties, have raised issues regarding whether this regulation will significantly reduce serious injury and deaths of large whales caused by ship strikes. In view of these uncertainties, and the burdens imposed on vessel operators, this rule will expire five years after the effective date of the final rule. During the five-year effectiveness of the rule, to the extent possible with existing resources NOAA will synthesize existing data, gather additional data, or conduct additional research on ship-whale interactions to address those uncertainties. NOAA will also review the economic consequences of this rule. After this analysis is complete, NOAA will determine what further steps to take regarding this rule. |

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|     | g    | Will NOAA consider additional research on the right whale prior to setting speed restrictions? Can NMFS support the claim that there are only 300 right whales surviving today?  | The measures contained in the rulemaking are based on the best available science. The determinations NMFS has made are based on tens of thousands of right whale sighting records, vessel traffic data, millions of dollars in research grants, and several years of synthesizing all that is known of this subject. NMFS has consulted industry experts and other Federal agencies. Nonetheless, data are always being collected that will help shape this and future actions. NMFS relies on Stock Assessment Reports (SARs) and peer reviewed literature to assess the status of the NARW population. The most recent SAR (Waring et al., 2007) indicates a minimum population size estimate of 295 individuals in 1992 (Knowlton et al., 1994); an updated analysis gave an estimate of 299 individuals in 1998 (Kraus et al., 2001). More recently, a review of the photo-id recapture database on June 15, 2006, indicated that 313 individually recognized whales were known to be alive during 2001(Waring et al., 2007). |
|     | h    | Won't slower speeds keep vessels and whales in restricted areas for longer periods of time; thus increasing the potential for collisions? Can NMFS and NOAA guarantee that slower vessel speeds will reduce collisions between whales and ships?   | See response to #102a. While vessels would be transiting for a longer time, the encounter probability does not increase at 10 knots; a vessel would have to be traveling at 6 knots or less for the encounter probability to significantly increase (Vanderlaan and Taggart, 2007). Based on the best available science, NMFS expects the 10-knot speed restriction to reduce collisions.   |
|     | i    | The economic analysis did not take into account several important factors and greatly undervalued the overall impact the industry and to the nation. Specific comments followed on the contribution of Georgia's ports of Savannah and Brunswick on the state economy, and concluded that based on these significant contributions, the impacts on these two ports were underestimated. Weather patterns at each of the affected ports should be evaluated and the costs of enforcing should also be included in the economic impacts. | The comments provide information on the statewide economic impact of the ports of Savannah and Brunswick. However, the commenter provides no specifics to substantiate the comment that the economic impact analysis of the proposed operational measures is an underestimate. See response to # 115b regarding weather patterns. The cost of enforcing the restrictions will be borne by the Federal (and perhaps state) governments. The economic analysis assesses the costs to the maritime industry, and not the government.   |
| 116 | a    | Commenter has 5 passenger vessels in CCB and MA Bay, all 80-100' length overall, including ferry, whale-watch, and charter fishing vessels. An average trip at 20-25 knots takes 4 hours for 1-1.5 hrs of watching. A 10 knot limit would increase it to 6-hr trip. Expects to lose 90% of passengers.   | These impacts are included in Sections 4.4.5, 4.4.6, and 4.4.7 of the FEIS.   |

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| <b>No.</b>  | <b>Sub.</b> | <b>Specific Comment</b>   | <b>Response</b>  |
|   | b           | Suggests reducing the 500-yd restriction for RW approaches to a safe distance for observation and data collection.  | Commenter is referring to a separate NOAA regulation. Outside the scope of the EIS.  |
|   | c           | The 20 meter length designation is arbitrary.   | Section 1.4 describes the rationale for the 65 feet (20 meter) length designation.   |
|   | d           | Exemption for sovereign vessels, should also exempt whale watching vessels.   | Whale watching vessels will not be exempted with Federal vessels because whale watch operators are not required to consult under Section 7 of the ESA, therefore there is no separate mechanism to bring these vessels into compliance.  |
|   | e           | The DEIS fails to put forth an analysis on both the value of education and outreach provided by the whale watch operators and the value of out of season and out of habitat sightings of right whales provided to NMFS by whale watch operators.  | The whale watching section (3.4.5) has been revised to address this comment.   |
|   | f           | Given the size of the proposed management areas, it is unlikely that a vessel departing from Plymouth would re-route around Cape Cod Bay and Race Point to view whales in another area, as suggested in the DEIS.   | The statement in the DEIS about whale watching vessel operators seeking other whale habitats in the event of a DMA or during an SMA was a general statement and may not apply to all geographic areas.   |
|   | g           | Recommends a 16-knot speed restriction and a 4 nautical mile diameter for DMAs with frequent monitoring and updating of whale positions.  | NMFS determinations regarding vessel speed restrictions are based on the best available science which indicates that greater conservation value is achieved at lower vessel speeds; that is the probability of serious injury and death decreases with lower speeds. NMFS is required to develop steps to recover the species and has determined that a 10-knot speed restriction has greater conservation value than speeds above 13 knots. The dimensions of the DMA are based on analysis of aggregation sites, movements, and duration (Clapham and Pace, 2001). NMFS believes these dimensions are appropriate. |
| 117   | a           | The discussion in the DEIS allowing for discretion on the part of the master if safety is an issue is not readily apparent. Although in most cases 10 knots is probably safe for most ships under typical conditions, vessels that are difficult to maneuver may require greater speed in order to maintain course or effectively maneuver to avoid collision under certain combinations of wind and current. | See response to #38a   |

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| <b>No.</b>  | <b>Sub.</b> | <b>Specific Comment</b>   | <b>Response</b>   |
|   | b           | The rationale for the proposed speeds is not well-supported. Although there are additional hydrodynamic studies proposed, it appears that at the present state of knowledge, the whale would have to be attempting to avoid the ship in order to have a decrease in speed reduce the risk of being hit, thus the assumption that 10 knots will be protective and reduce hydrodynamic forces that draw the whale into the ship or propeller does not seem warranted. Instead of proposing a maximum allowable speed, consider the example set by COLREGS and the Navy allowing for discretion on the part of the master if safety is an issue. | The best available scientific information indicates that the use of speed restrictions is an effective means to reduce the likelihood and severity of ship strikes. Additional hull hydrodynamic and other studies have been completed (Slutsky, 2007) or are underway and may inform future agency actions (see Sections 2.1 and 4.1.3). In the final rule, NMFS has provided for speeds at the discretion of the captain in adverse weather conditions. |
|   | c           | Provide a synopsis of Navy protective measures and results of the 1997 BO early in the DEIS, when mentioning the exemption of sovereign vessels. At minimum, references to appendix A should be given whenever there is a specific mention of the sovereign vessel exemption.   | Section 1.8.3 of the DEIS provides a brief summary of the findings and conditions of the 1997 BO, and additional protective measures employed by the Navy have been added to this section (renumbered 1.7.3) in the FEIS. This information was not added to the Section in Chapter 1 describing the exemption, because the mitigation measures of all Federal agencies should be presented equally. References to Appendix A were added where pertinent.  |
|   | d           | Provide a chart clearly depicting the ATBA.   | At the time of publication of the DEIS, the size and dimensions of the proposed ATBA had not been determined, and therefore a chart was not provided. The ATBA is no longer among the measures considered in the FEIS.  |
|   | e           | All language with regards to NMFS reviewing Federal actions involving vessel operations to determine where ESA Section 7 consultations would be appropriate should be deleted because the decision to initiate Section 7 consultation is made by the action agency.   | Language regarding NMFS' review of Federal actions involving vessel operations remains; however, the FEIS has been updated to indicate that the action agency initiates Section 7 consultation. NMFS expects to review these operations and, pursuant to 50 CFR 1402.14(a), may recommend that action agencies initiate or re-initiate consultation, where and when appropriate.  |
|   | f           | Provide a synopsis of Navy vessel traffic in the appropriate DEIS section, noting that Navy ships account for about 3 percent of total ship presence out to 200 nm (Filadelfo, 2001).   | Section 3.4.7 of the FEIS includes a description of Federal vessels, including a description of Navy traffic.   |
|   | g           | Provide a more detailed synopsis of how the Navy took steps to ensure the continued protection of the right whale with regards to the incident in 1996 when six right whale deaths occurred in waters adjacent to the SEUS right whale critical habitat area.   | The Navy protective measures for right whales following this incident is included in Section 1.7.3 of the FEIS.   |
| 118   |             | Same as #2  | See response to # 2   |
| 119   |             | Same as #2  | See response to # 2   |

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| 120  | a    | Commenter supports Alternative 5, although was unable to find a clear explanation why Alternative 6 was NFMS preferred alternative. The DEIS did not clarify why the time period during which the measures apply in the SEUS is different for alternatives 5 and 6. This lack of discussion tends to make such choices appear arbitrary.   | The DEIS did not provide rationale for the preferred alternative, although the FEIS explains the reasoning for the preferred alternative in Section 2.6. See response to #110i in reference to the different time periods during which measures apply for alternatives 5 and 6.   |
|  | b    | Commenter supports the 10 knot limit and believes that the purpose of the DEIS and rule will be compromised at any speed above 10 knots, although the commenter found it difficult to review the economic loss at this speed because the analysis summarized data only for 12 knots.   | In the DEIS, each alternative provided a detailed impact analysis on 12 knots, and stated the impacts at 10 and 14 knots. Appendix F of the Economic Report for the DEIS included a detailed impact analysis at 10 knots. The FEIS analyzes the impacts of a 10-knot speed restriction in detail for each alternative, and summarized the impacts at 12 and 14 knots.   |
|  | c    | Urges NMFS to use a 1 January start date for the Race Point SMA as right whales are in Cape Cod Bay in January and transit these areas to get there.   | See responses to # 66a and #71e.  |
|  | d    | A flaw in the DEIS and current strategy is notification delays; give the mariners reliable and timely information and compliance will increase dramatically, even from exempted vessels.   | See response to # 29a   |
|  | e    | It is false for the DEIS to say that two recovery plan implementation teams exist.   | See response to # 112e  |
|  | f    | The most efficient and cost effective way to deal with ship strikes is to improve detection, predictions, and timely notification to mariners. The DEIS instead relies on inadequate aerial surveys and static approaches for locating and predicting right whales. There are several improved concepts that deserve attention, and the general strategy of the FEIS should be to invite and adapt new data, and support new techniques. | NMFS continues to provide funding for research and development of new technologies, and when an innovation or technology is developed that will effectively reduce ship strikes, it will be considered, granted it meets the requirements stated in response # 111h. The FEIS analyzes the impacts of the measures in the rule, therefore it is the rule, and not the FEIS that would adapt new data. The final rule discusses adaptive management. |
|  | g    | Although currently unrealistic, right whale ship strike prevention would be close to 100% probable if the position of each whale was known. Commenter suspects that the overall economic burden would be less, and requests that the FEIS present a clear summary of total cost savings from this approach.  | See response to # 88a; as the commenter stated, this option is currently unrealistic and not a part of the proposed action or alternatives, therefore the FEIS will not provide cost estimate for this approach. Even with 100% accurate detection technologies, mariners must still take evasive action.   |
| 121  | a    | Include the National Marine Sanctuaries Act (NMSA) and the boundaries of SBNMS in the DEIS.  | The NMSA has been added to Section 1.5 of the FEIS.   |

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|     | b    | <p>Under Alternative 6, 36.81 percent of SBNMS, primarily the northwestern and northeastern corners and the western boundary of the sanctuary would not be managed at any time of year under the DEIS's proposed operational measures. Under the preferred alternative, both Cape Cod Bay and Off Race Point SMAs would be operational from March 1st to April 30th, resulting in 63.19 percent of the sanctuary under speed restrictions for two months in the spring. Therefore, only a portion of the resources in SBNMS would receive protection during certain times of the year.</p>  | <p>As the NMSP stated in their comment letter, the measures set forth in the rule and EIS were designed to minimize ship strikes to right whales in specific areas with high-density aggregations, and does not address the issue of ship strikes to all species in SBNMS as a whole. The NMSA allows the Secretary to issue regulations for each sanctuary designated and the system as a whole that, among other things, specify the types of activities that can and cannot occur within the sanctuary (16 U.S.C. §1439). Therefore, if necessary, SBNMS can issue separate regulations for the 36.81% of the Sanctuary that is not protected by the rule, and in other areas during times when the speed restrictions are not in force.</p> |
|     | c    | <p>Preferred alternative does not account for increasing evidence from visual sighting data and acoustic monitoring data that right whales are predictably present in relatively high densities outside the temporal and spatial extents of the SMAs proposed for the northeast region. (Specifically for right whales transiting through Jeffreys Ledge in the late summer and fall).</p>  | <p>In determining the spatial and temporal extents of the SMAs, NMFS analyzed decades of sightings data and defined these parameters based on high densities of right whale sightings. Acoustic data are not widely available, are limited to one or two years of data, do not accurately reflect the exact location of the vocalizing whales, and the vocalizations may be confused with those of other species. While this may be a viable detection tool in the near future, expanding the SMAs based on these data will not be considered in the final rule and preferred alternative. See response to # 70 regarding adaptive management.</p>  |
|     | d    | <p>Acoustic data should also be utilized to ensure the effectiveness of dynamic management areas, especially during nighttime, periods of low visibility, and in medium to high sea states. The NMSP has proposed that, if their license applications are approved, the LNG companies in this area should install and operate an array of real-time acoustic detection buoys around the Boston TSS, and recommends that the data from this array should be integrated to identify DMAs. The NMSP recommends NMFS invest in the use of real-time acoustic detection buoys within areas of management concern for endangered whale species in the northeast, either to supplement the LNG buoys or independent of them.</p> | <p>In order to trigger and implement DMAs consistently, NMFS would have to install passive acoustic devices and the land-based technology to transmit the locations throughout the regions, which would be cost prohibitive. The final rule describes additional limitations of acoustic detection buoys. NMFS will continue to collaborate with SBNMS and others on passive acoustic devices, and may consider this technology a viable alternative in the future.</p>   |
|     | e    | <p>Without sufficient data to increase the utility of DMAs, the National Marine Sanctuaries Program (NMSP) prefers the year-round speed restrictions included in alternatives 3 and 5.</p>  | <p>Acknowledged</p>   |
|     | f    | <p>Six of the nine autonomous recording units in SBNMS array detected vocalizing right whales from January 6 through March 28. The highest densities of calls were recorded in the northeastern and southwestern sampling sites. While whales in the southwestern site within SBNMS would be protected under the CCB SMA, whales in the northeastern portion of SBNMS would not be protected at any time of the year.</p>   | <p>See response to # 121</p>  |

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|--|------|---|---|
| No.  | Sub. | Specific Comment  | Response  |
|  | g    | The magnitude of indirect impacts on other species depends on the degree to which the distribution of other species overlap in time and space with the distribution of right whales. Humpback, fin, and sei whales are present within SBNMS and the Gulf of Maine between April and November. Therefore, the NMSP believes alternatives 3 and 5 would provide more benefits to multiple species than Alternative 6. | Acknowledged  |
|  | h    | The DEIS includes the proposed shift in the TSS in alternatives 4 and 5, but not in alternative 6, therefore the NMSP prefers Alternatives 4 and 5.   | While the TSS was included in alternatives 4 and 5 of the DEIS, it is not included in any alternatives in the FEIS. Analysis of the TSS has been moved to the cumulative impacts section because this measure is a U.S. action that is decided on by the IMO. Further it will occur independently of the final rule, at a different time, and the USCG will alert mariners of the change in the TSS through a notice in the <i>Federal Register</i> . |
|  | i    | The NMSP supports operational measures that minimize the exposure of baleen whales to continuous received levels above 120 dB and impulsive received levels higher than 160 dB.   | Acknowledged  |
|  | j    | The NMSP supports a 10-knot speed restriction.  | Acknowledged  |

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**APPENDIX C**

**COLREGS Demarcation Lines**

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## COLREGS Demarcation Lines

1. **South and east of Block Island Sound (Figure 2-5).**  
§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) (Figure 2-6).**  
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) (Figure 2-7).**  
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) (Figure 2-8).**  
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 (Figure 2-9).**  
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.**<sup>1</sup>

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)

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<sup>1</sup>There is no figure showing the COLREGS lines for the ports of Wilmington, NC; Georgetown, SC; Charleston, SC; and Savannah, GA, because the scale of Figure 2-10, which illustrates the continuous SMA off these ports, is too small to effectively depict the lines.

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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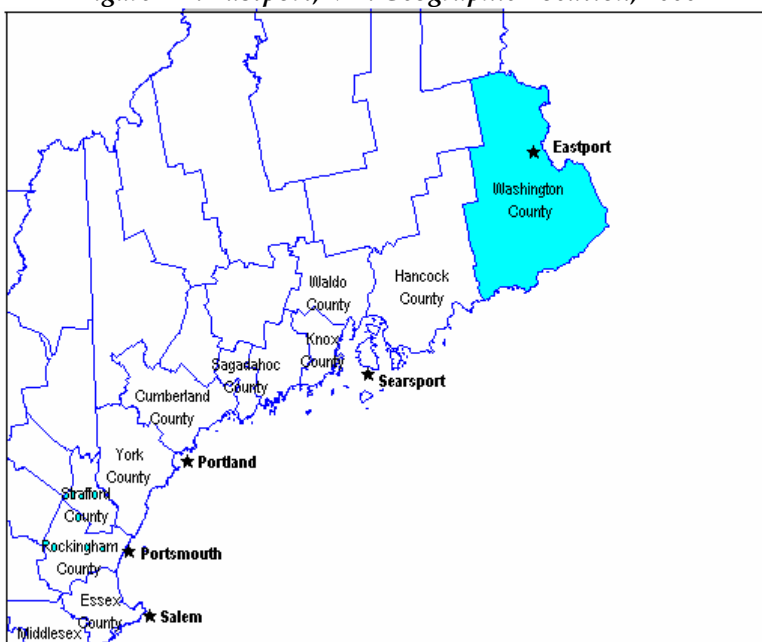


# 1. Eastport, ME

## 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.<sup>1</sup>

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



Source: Table 3-1

## Demographics

### POPULATION

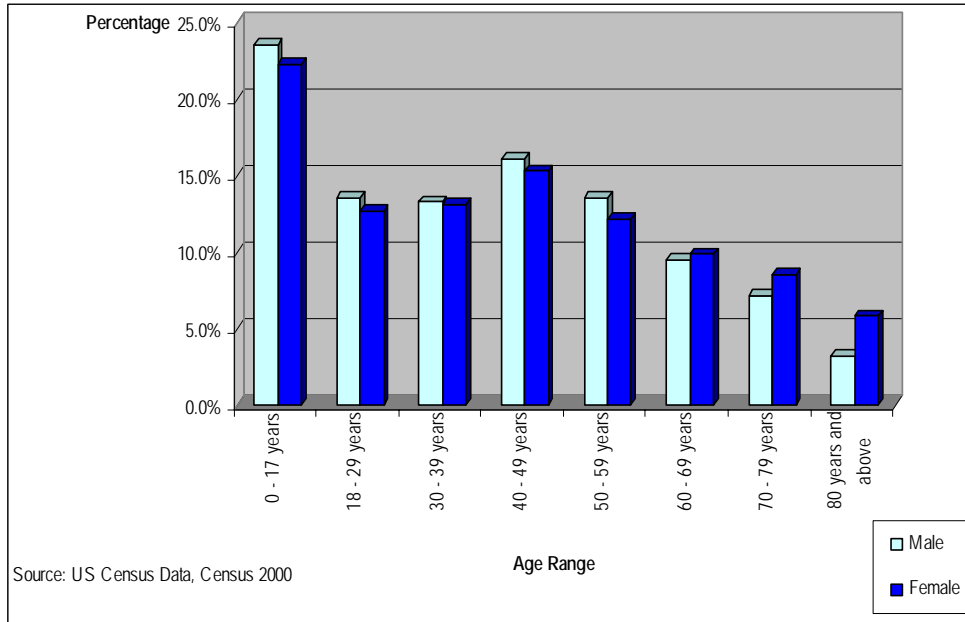
Washington County, Maine has a total population of 33,941 according to the 2000 US Census. Of the total population, 17,365 are females; representing 51.2 percent of the total population and 16,576 are males, representing 48.8 percent of the total population. The median age for the population is 40.5 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

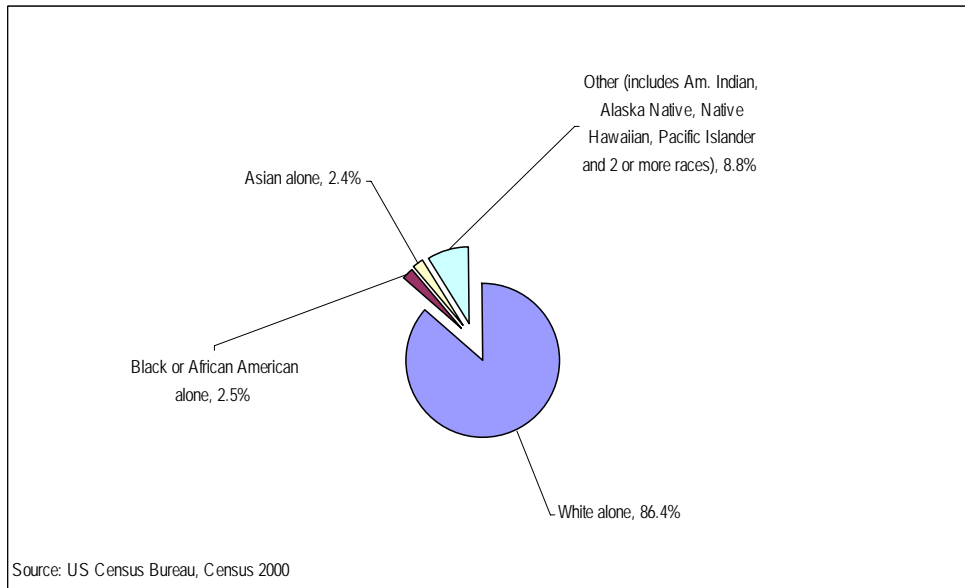
<sup>1</sup> Maine Port Authority website. URL [http://www.maineports.com/water\\_eastport.html](http://www.maineports.com/water_eastport.html)

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.<sup>2</sup>

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



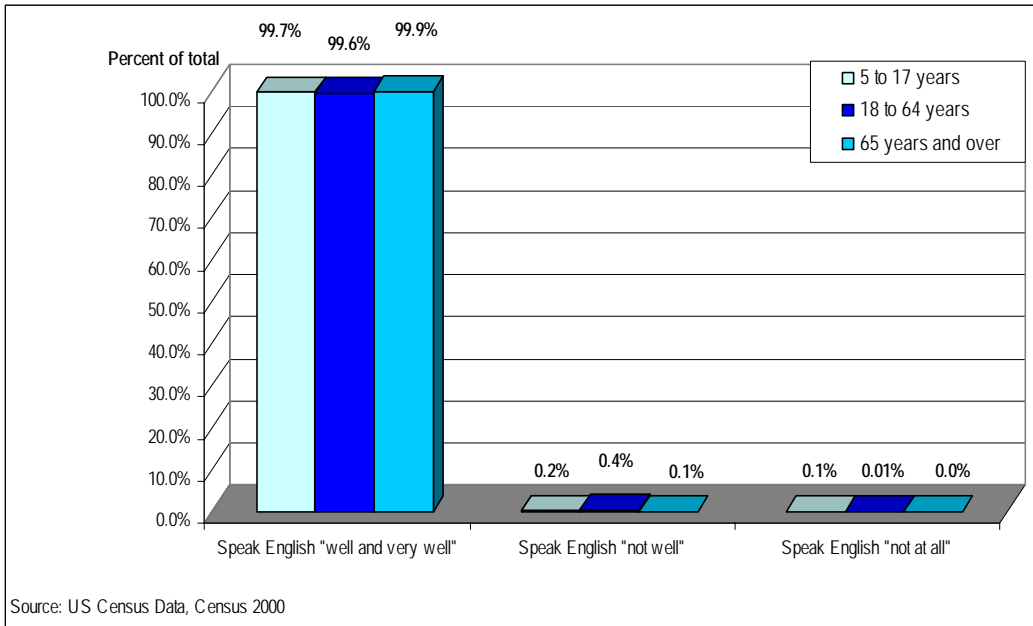
**Figure 1-3. Eastport, ME: Population by Race, 2000**



<sup>2</sup> 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**

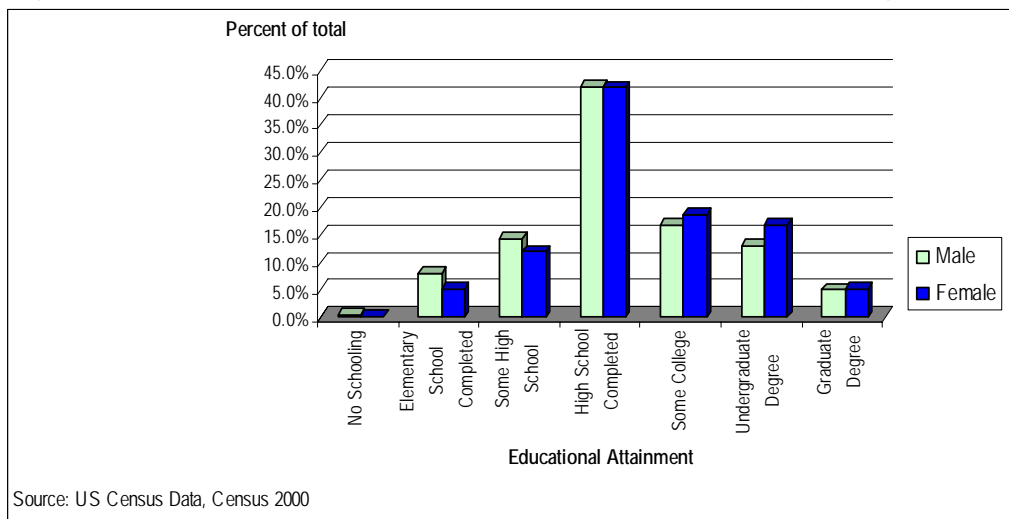


## EDUCATION

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**



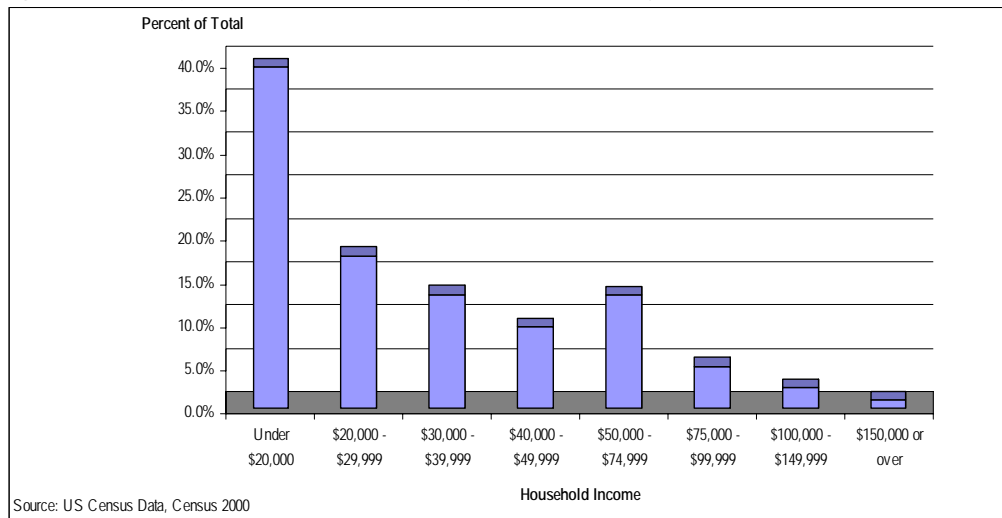
## Socio-Economic Characteristics

### 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.<sup>3</sup>

*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.<sup>4</sup>

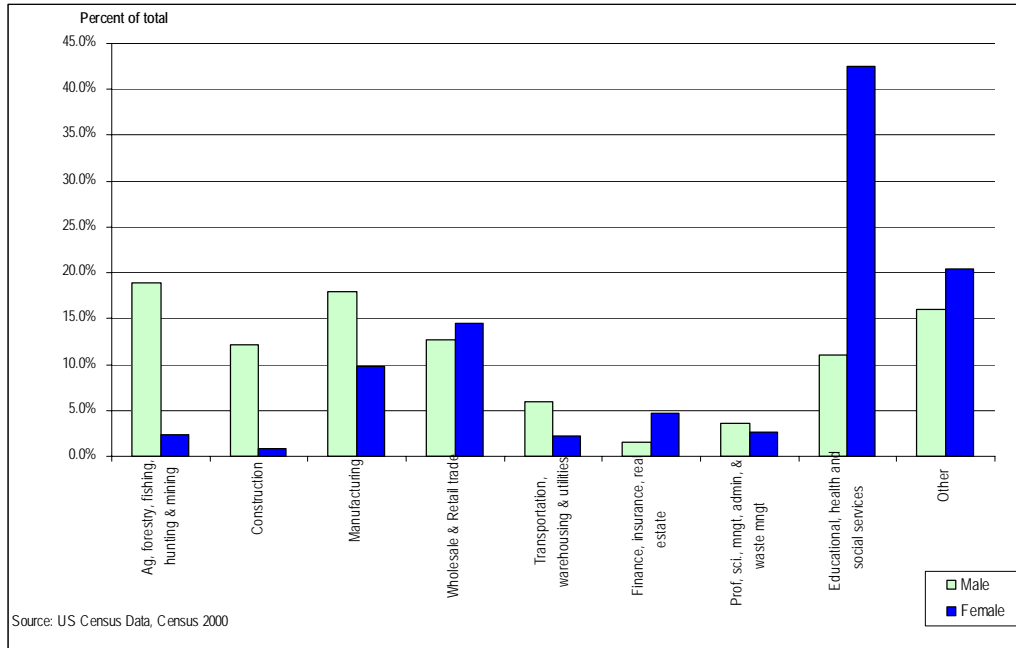
As can be observed in Figure 1-7, an estimated 14.9 percent of males and 0.1 percent of females are employed in farming, fishing and forestry occupations. About 24 percent of males and 9.9 percent of females are employed in production, transportation and material moving occupations. The

<sup>3</sup> US Census Data, Census 2000

<sup>4</sup> US Census Data, Census 2000

forementioned 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. <sup>5</sup>

<sup>5</sup> <http://www.portofeastport.org/facilities.html>

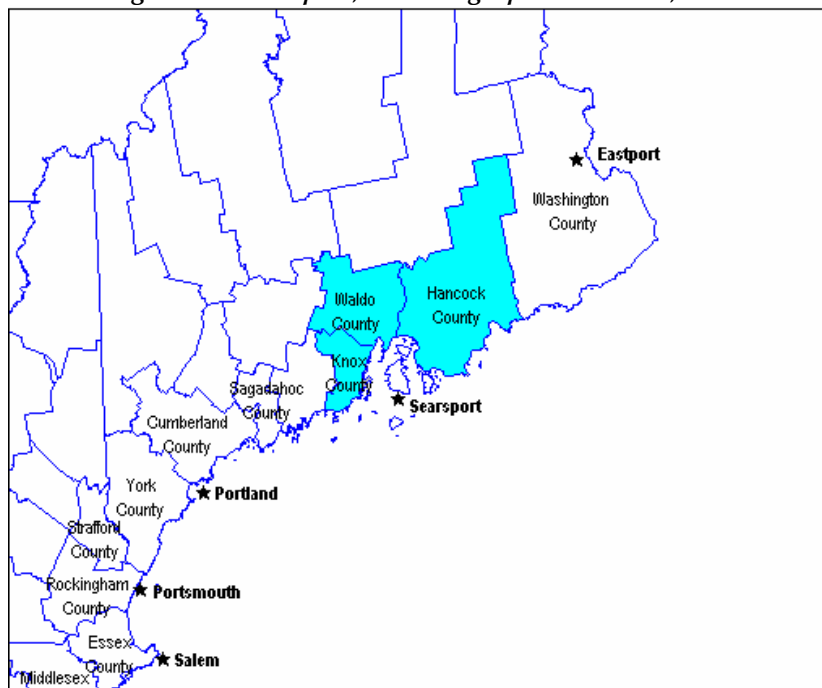


## 2. Searsport, ME

### 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.<sup>1</sup>

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



Source: Table 3-1

## Demographics

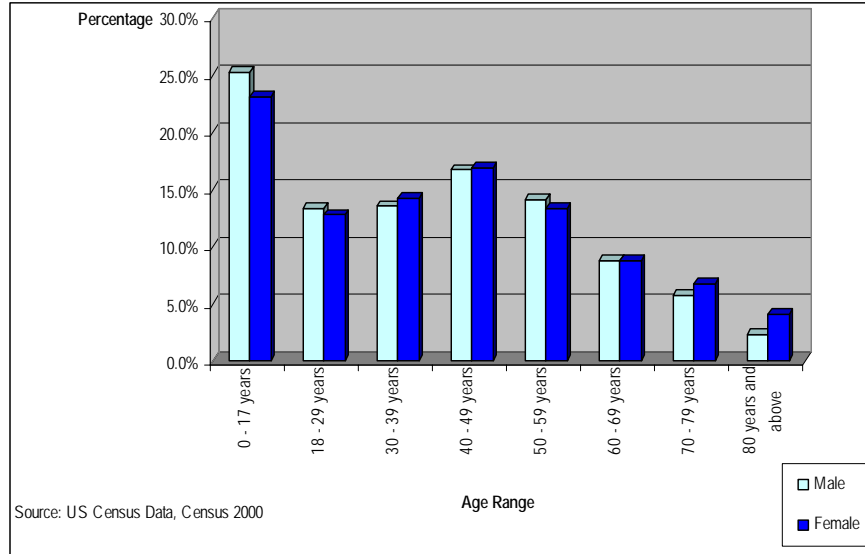
### POPULATION

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.

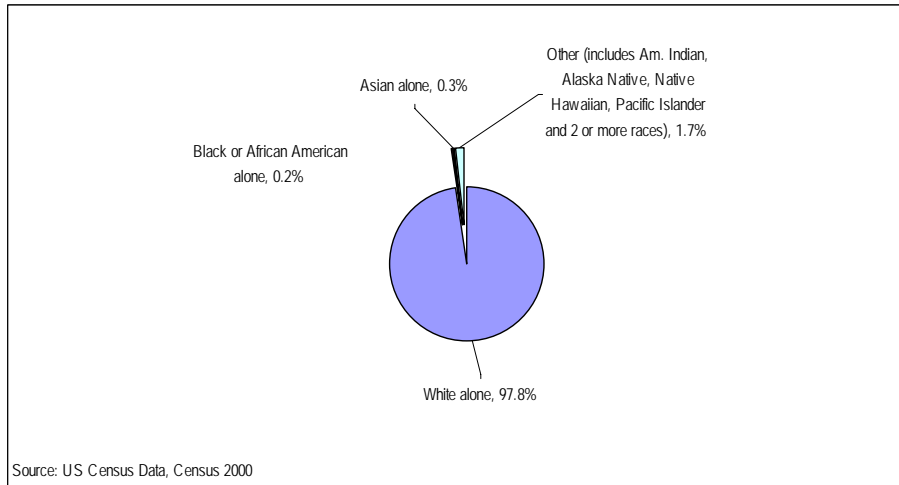
<sup>1</sup> Maine Port Authority: [http://www.maineports.com/water\\_searsport.html](http://www.maineports.com/water_searsport.html)

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.<sup>2</sup>

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



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

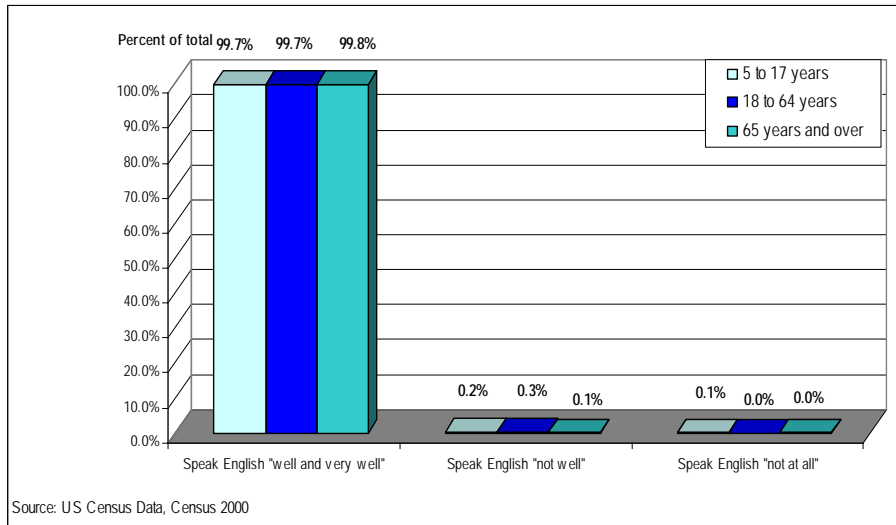


<sup>2</sup> US Census Data, Census 2000



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**

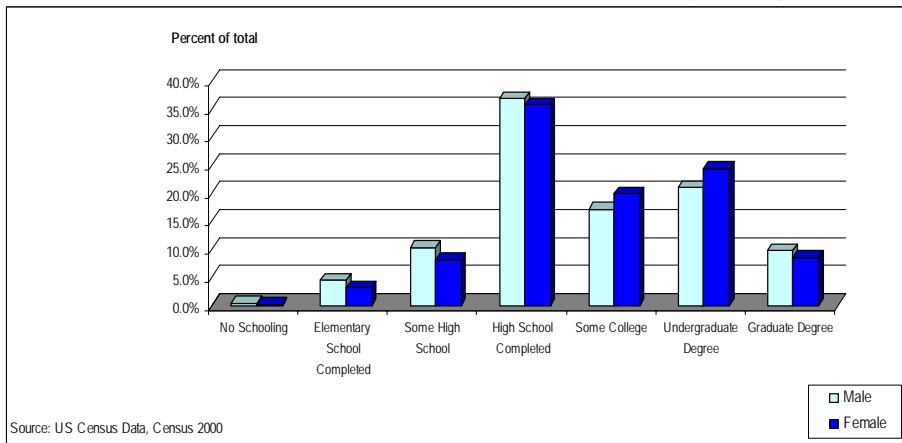


## EDUCATION

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.<sup>3</sup>

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



<sup>3</sup> Searsport Community Profile: <http://www.epodunk.com/>

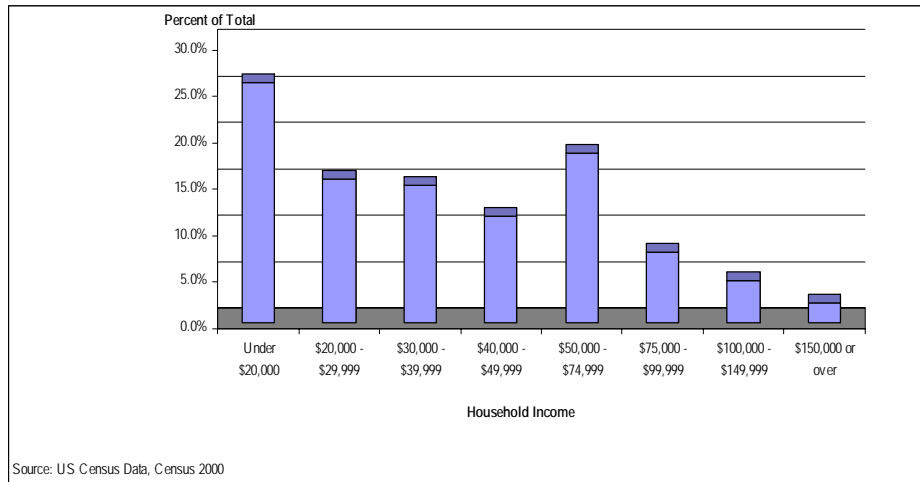
# Socio-Economic Characteristics

## 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.<sup>4</sup>

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).

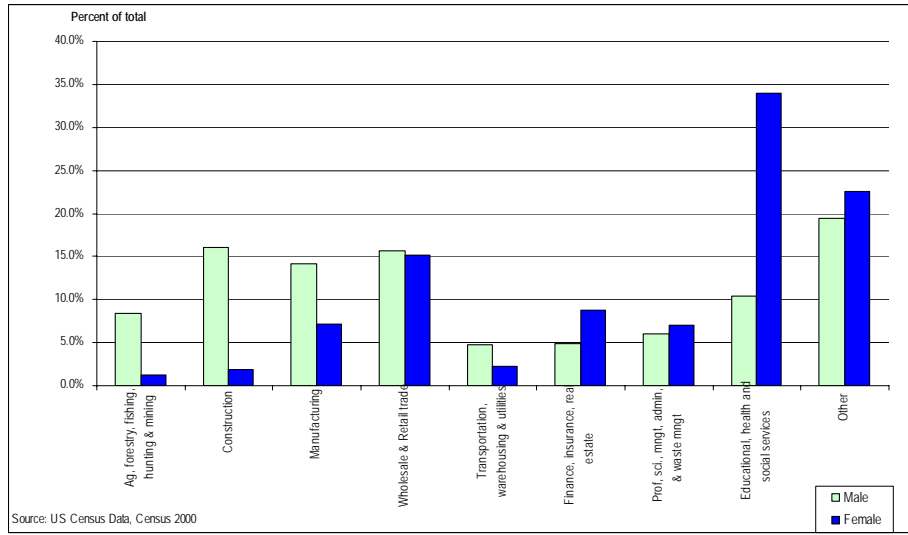
An estimated 4.5 percent of males and 5.1 percent of females were unemployed in the area in the year 2000.<sup>5</sup>

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.

<sup>4</sup> US Census Data, Census 2000.

<sup>5</sup> 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. <sup>6</sup>

<sup>6</sup> Maine Department of Transportation website: <http://www.state.me.us/mdot/freight/searsport.php>

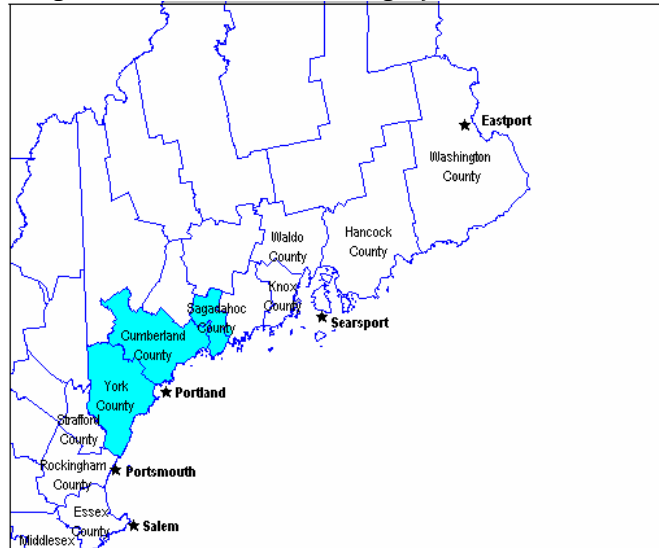
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# 3. Portland, ME

## 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.

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



Source: Table 3-1

## Demographics

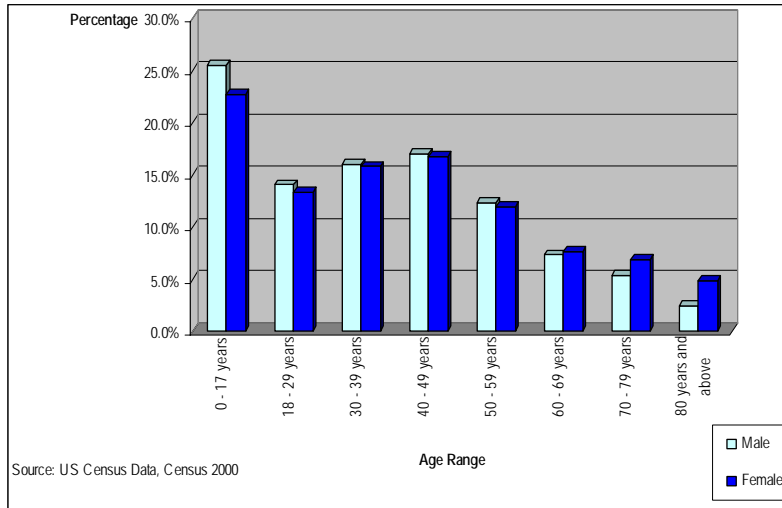
### POPULATION

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).

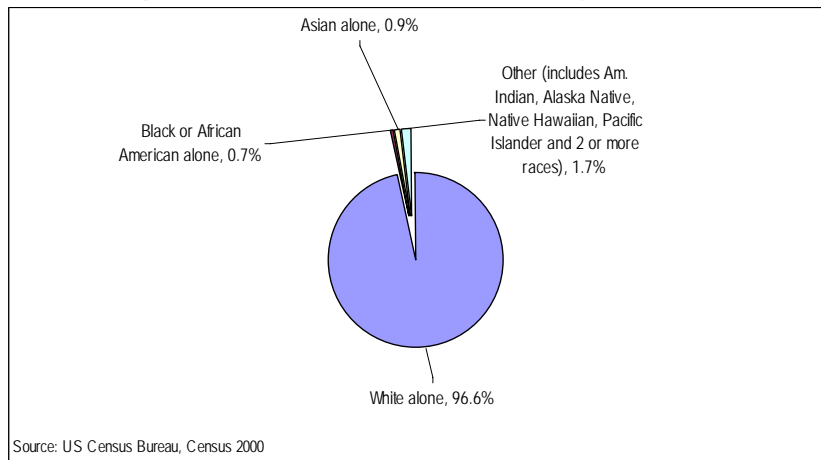
<sup>1</sup> <http://www.portofportlandmaine.org/navigation.html>

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.<sup>2</sup>

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



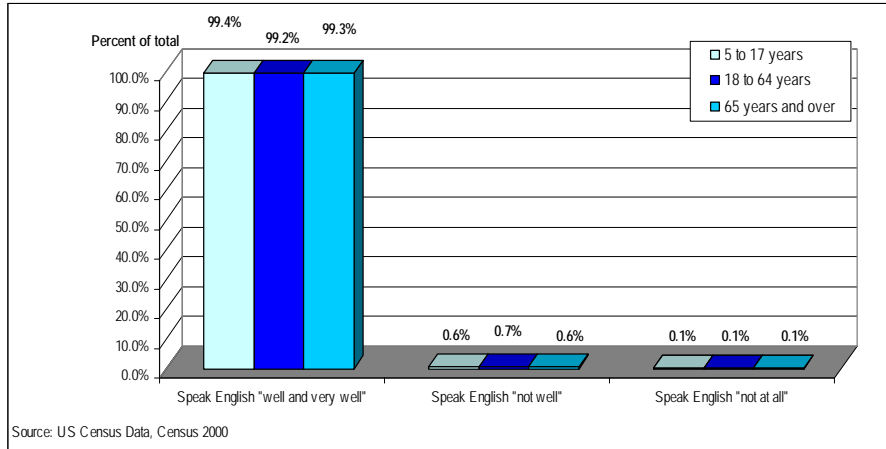
**Figure 3-3. Portland, ME: Population by Race, 2000**



<sup>2</sup> 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**

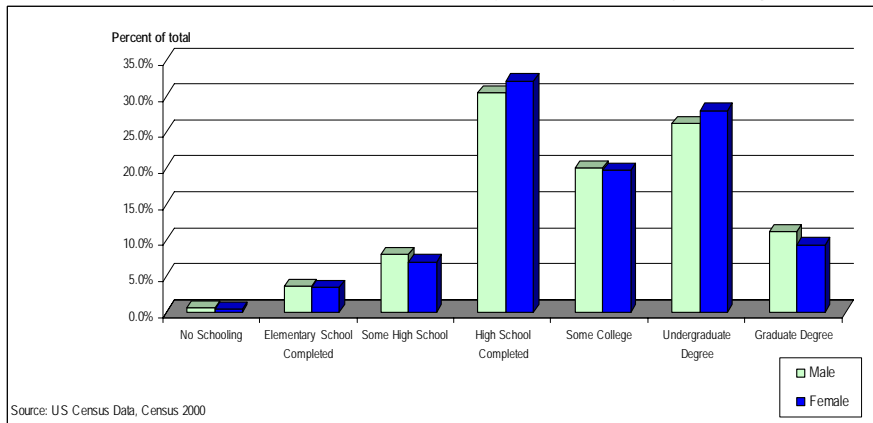


## EDUCATION

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.<sup>3</sup>

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



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

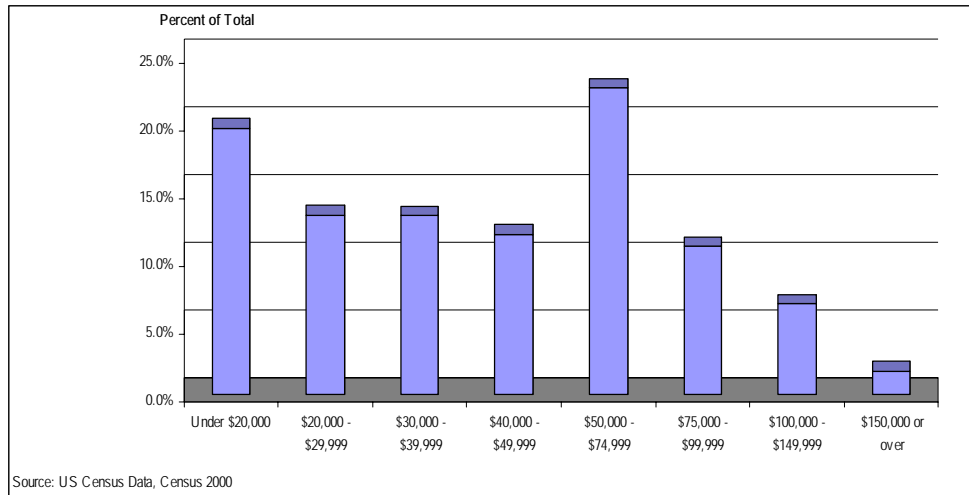
# Socio-Economic Characteristics

## 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.<sup>4</sup>

**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.<sup>5</sup>

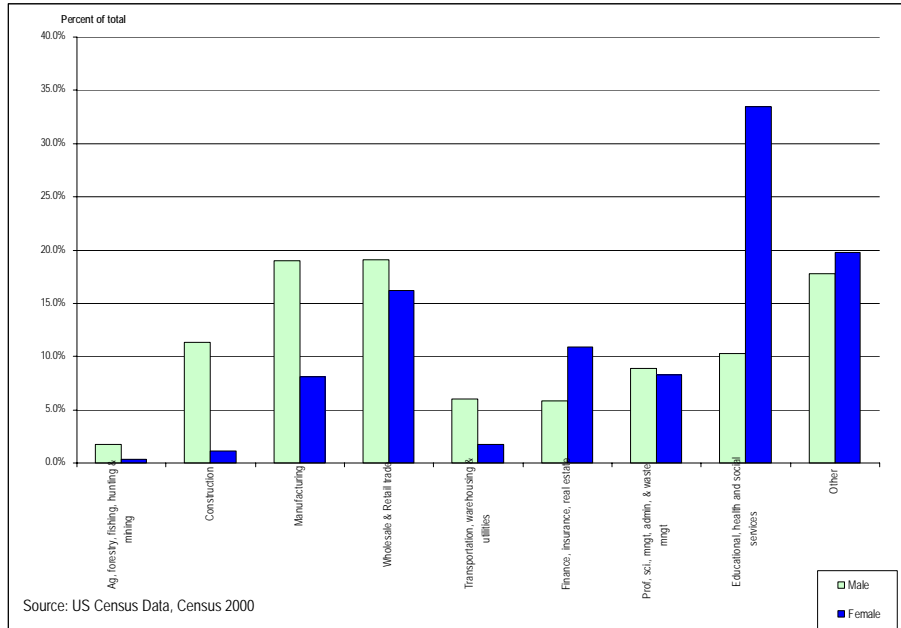
According to the 2000 US Census, an estimated 1.2 percent of males and 0.1 percent of females are employed in farming, fishing and forestry occupations. About 19.7 percent of males and 6.7 percent of females are employed in production, transportation and material moving occupations. The aforementioned 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.

<sup>4</sup> US Census Data, Census 2000.

<sup>5</sup> US Census Data, Census 2000.

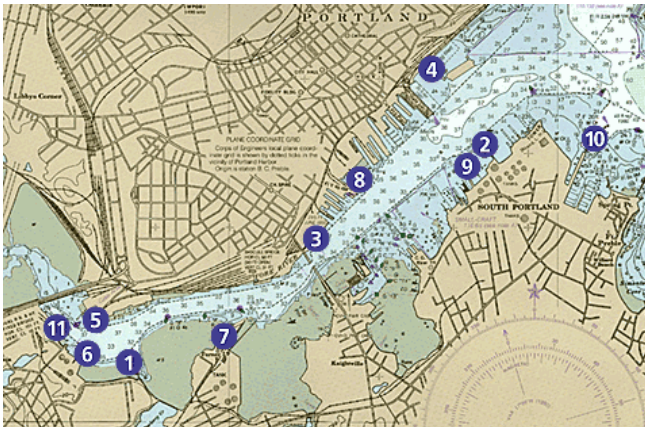


Figure 3-7. Portland, ME: Employed Civilian Population by Sex and Industry 16 Years and Over, 2000



## 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. <sup>6</sup>

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<sup>6</sup> Source: [http://www.portofportlandmaine.org/commercial\\_idx.html](http://www.portofportlandmaine.org/commercial_idx.html)

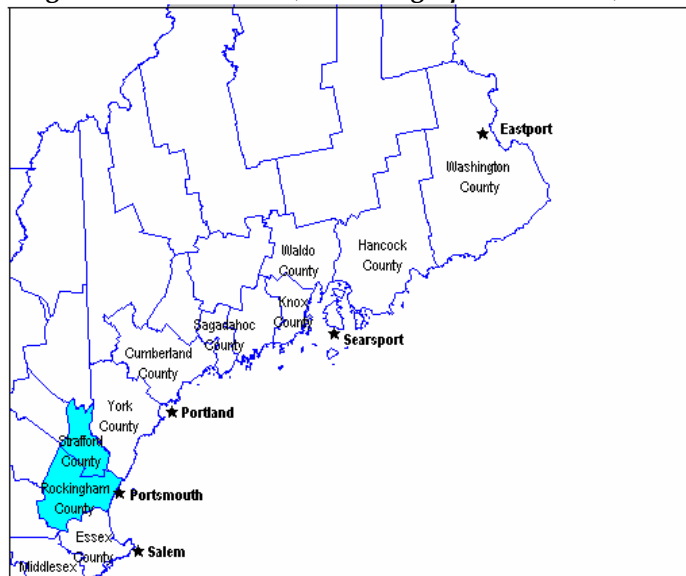
# 4. Portsmouth, NH

## 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.<sup>1</sup>

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



Source: Table 3-1

## Demographics

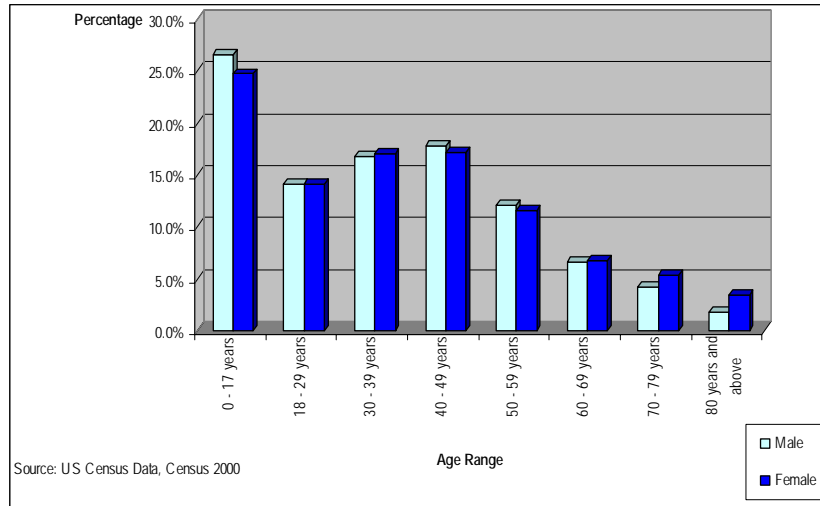
### POPULATION

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.

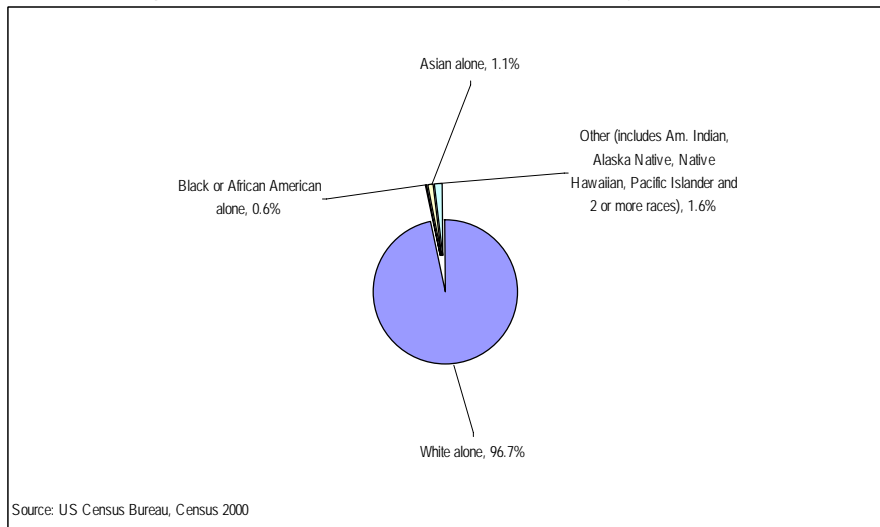
<sup>1</sup> Port of Portsmouth profile: <http://www.seacoastnh.com/business/port.html>

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.<sup>2</sup>

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



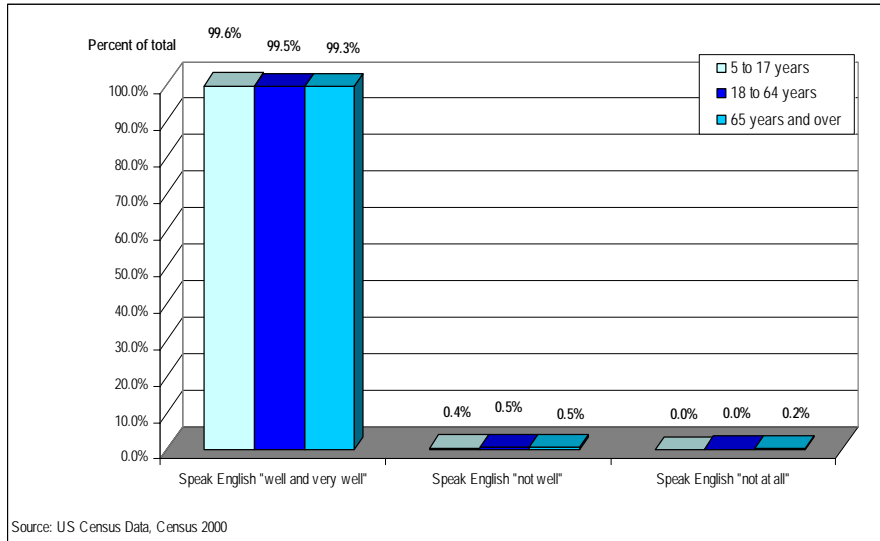
**Figure 4-3. Portsmouth, NH: Population by Race, 2000**



<sup>2</sup> 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**

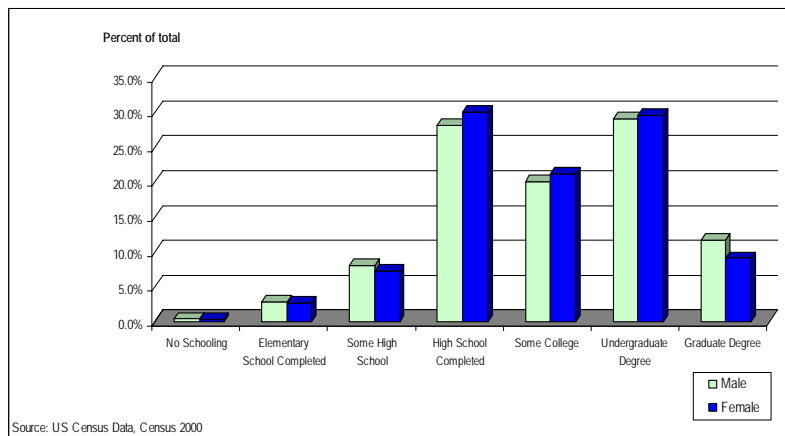


## EDUCATION

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.<sup>3</sup>

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



<sup>3</sup> Portsmouth, NH Community Profile: <http://www.epodunk.com/>

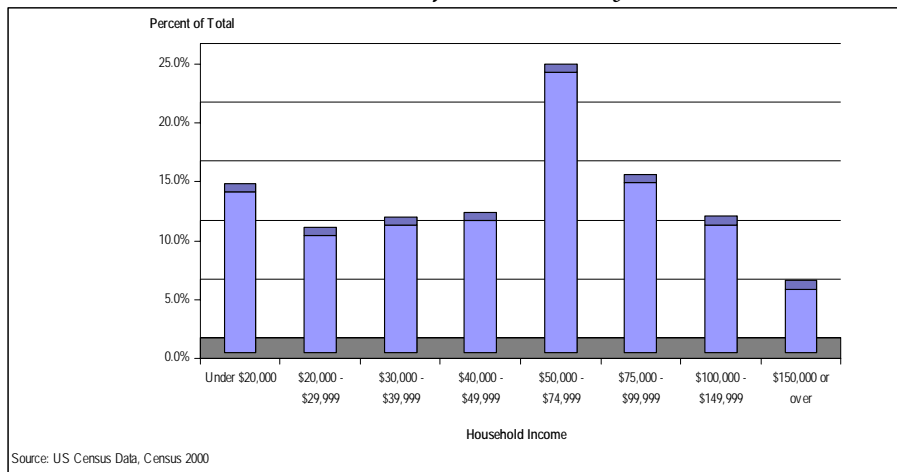
# Socio-Economic Characteristics

## 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.<sup>4</sup>

*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).

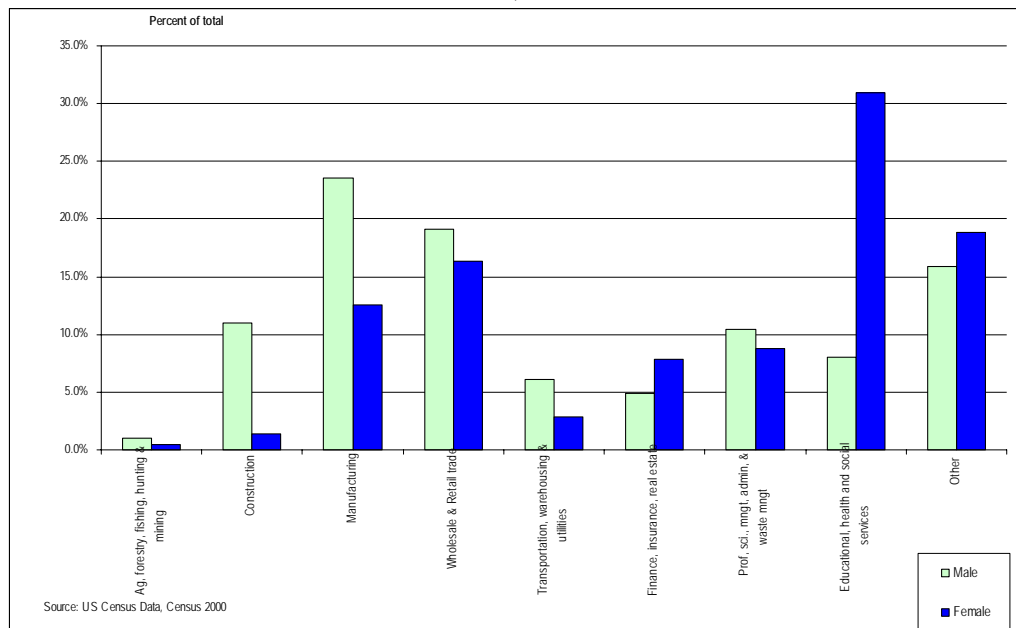
An estimated of 3.1 percent males and 3.1 percent of females were unemployed in this region in the year 2000.<sup>5</sup>

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.

<sup>4</sup> US Census Data, Census 2000.

<sup>5</sup> US Census Data, Census 2000.

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



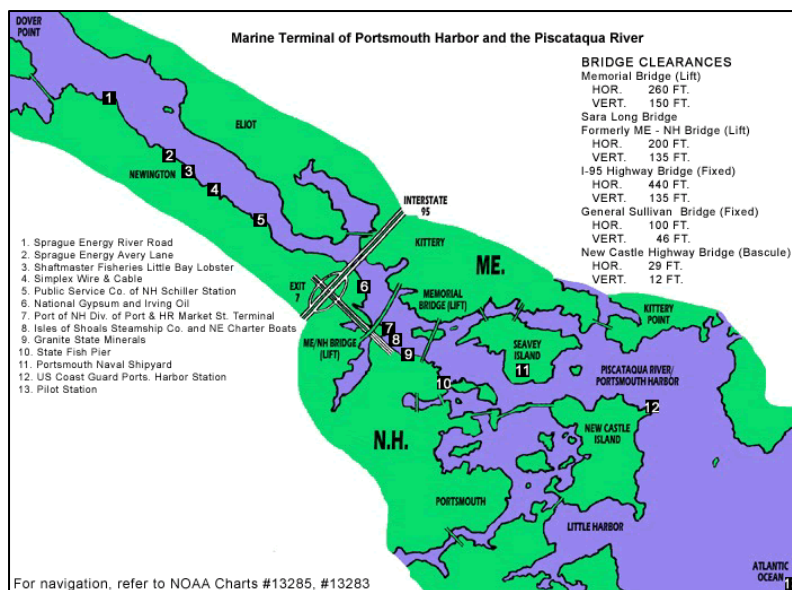
## MARITIME INFORMATION

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.<sup>6</sup>

### 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.

<sup>6</sup> 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. <sup>7</sup>

<sup>7</sup> 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.

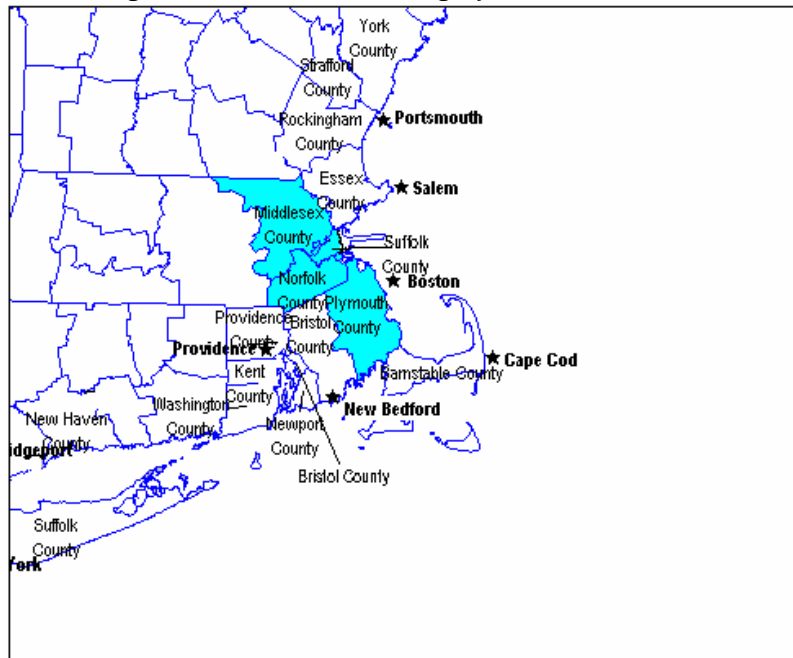
Boston is one of the most modern and efficient container ports in the U.S. Conley Terminal for containerized cargo shipments and Moran Terminal, currently leased to Boston Autoport for the import and distribution of automobiles handle more than 1.3 million tons of general cargo, 1.5 million tons of non-fuels 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.<sup>1</sup>

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<sup>1</sup> 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

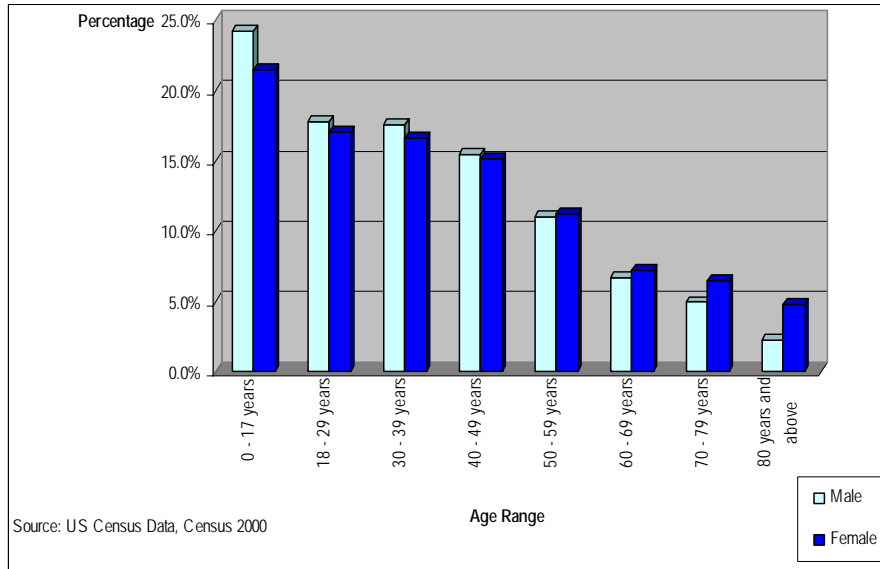
The total population of the Boston-Cambridge-Quincy, Massachusetts-New Hampshire Metropolitan Statistical Area is of 3,278,333, according to the 2000 US Census. Of this total, 1,582,659 or 48.3 percent are males and 1,695,674 or 51.7 percent are females. The median age in this region is 35.8 years; 34.7 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.<sup>2</sup>

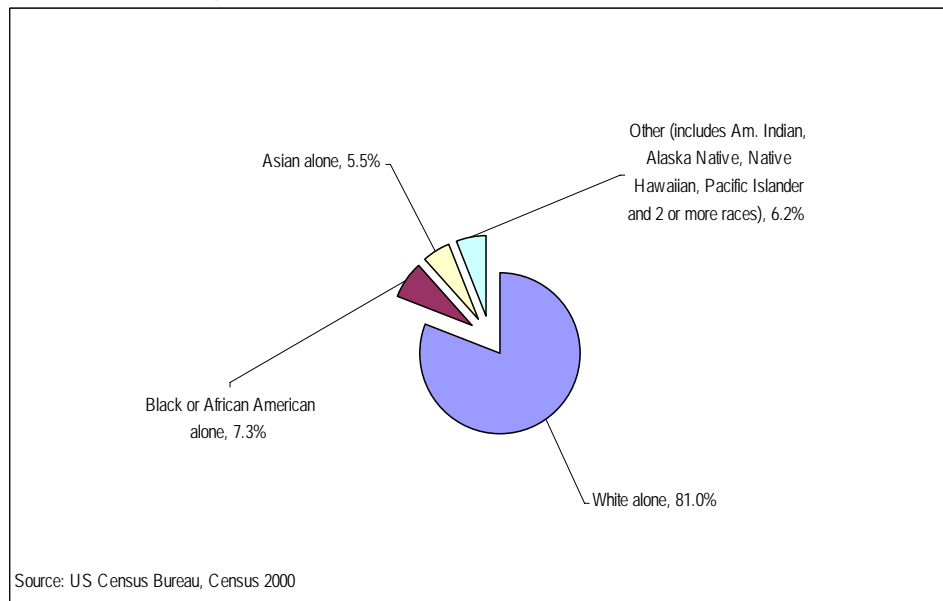
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<sup>2</sup> US Census Data, Census 2000.

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

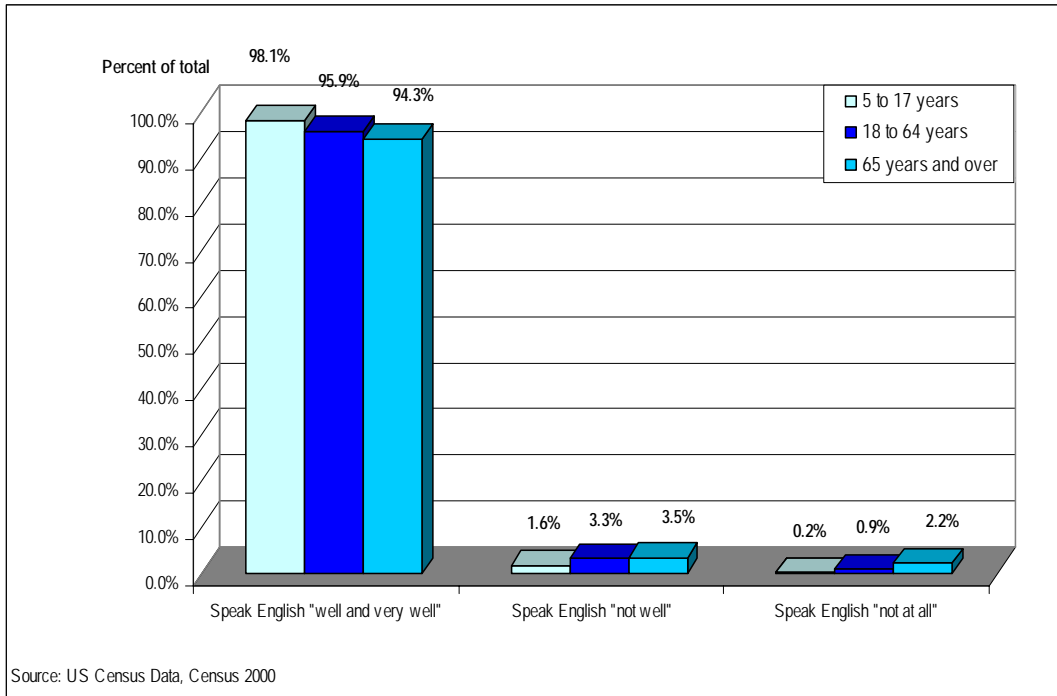


**Figure 5-3. Boston, MA: Population by Race, 2000**



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**

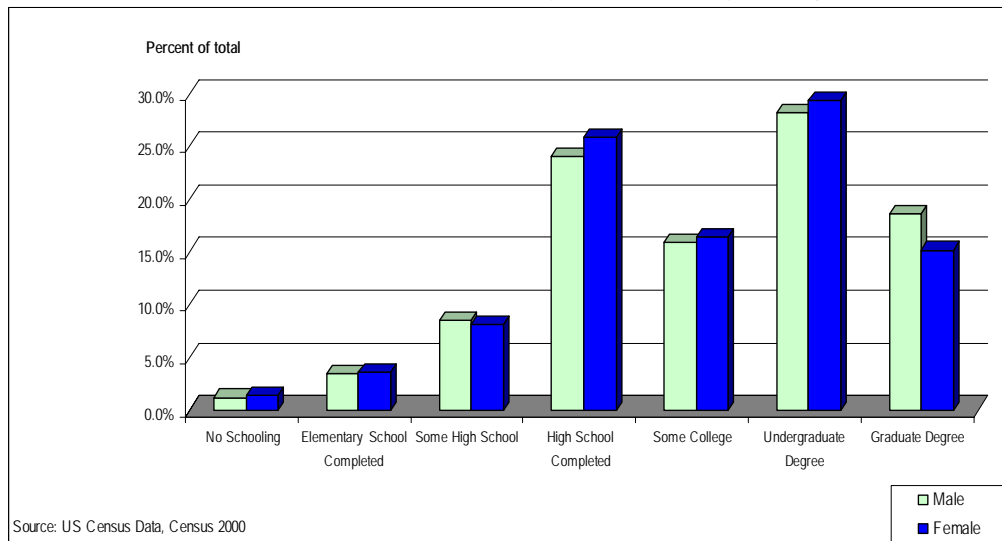


## EDUCATION

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**



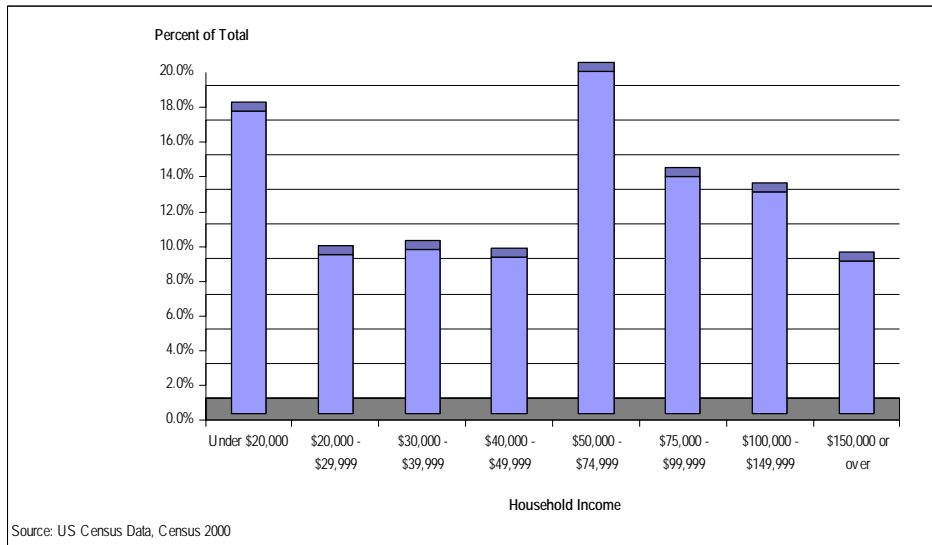
# Socio-Economic Characteristics

## 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.<sup>3</sup>

**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.

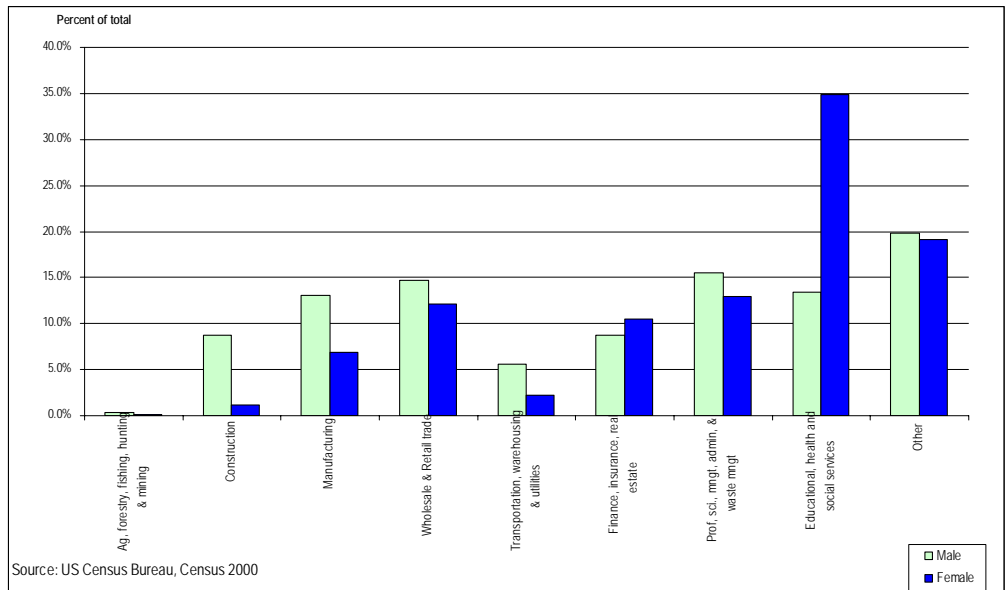
An estimated 4.3 percent of males and 4.1 percent of females were unemployed in this metropolitan statistical area in the year 2000.<sup>4</sup>

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.

<sup>3</sup> US Census Data, Census 2000.

<sup>4</sup> 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.<sup>5</sup>

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<sup>5</sup> Massachusetts Port Authority website: [http://www.massport.com/ports/about\\_value.html](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.<sup>1</sup>

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



Source: Table 3-1

## Demographics

### POPULATION

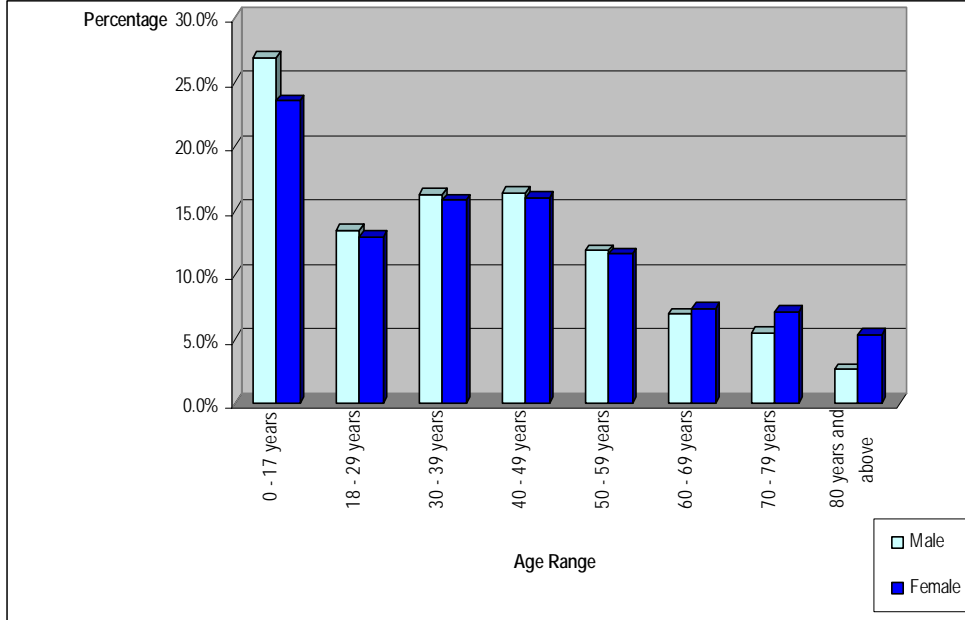
The total population of Essex County, MA is 723,419, according to the 2000 US Census. Of this total, 346,421 or 47.9 percent are males and 376,998 or 52.1 percent are females. The median age in the county is 37.5 years; 36.2 for males and 38.6 for females. The majority of the population is concentrated 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.<sup>2</sup>

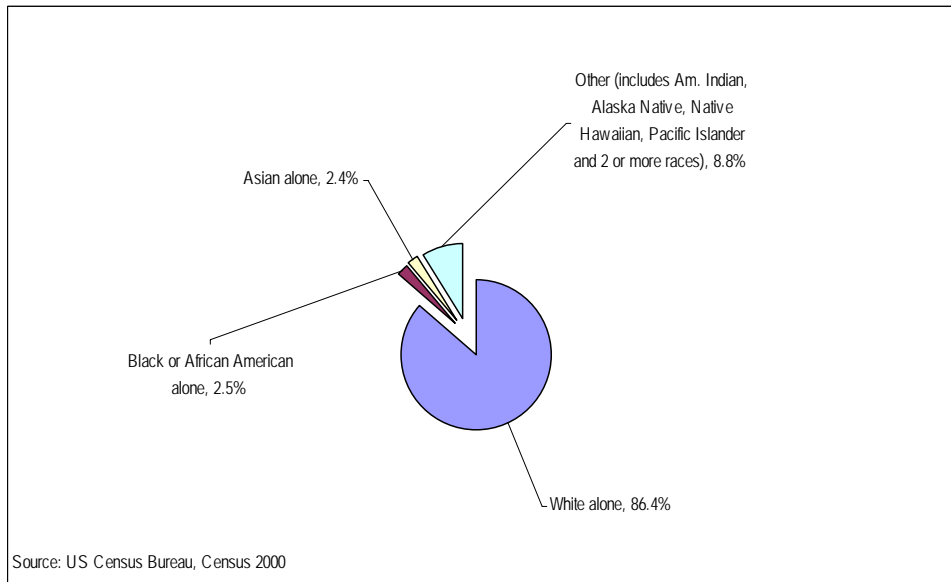
<sup>1</sup> Seaport Advisory Council webpage: <http://www.mass.gov/seaports/salem.htm>

<sup>2</sup> Source: US Census Data, Census 2000.

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

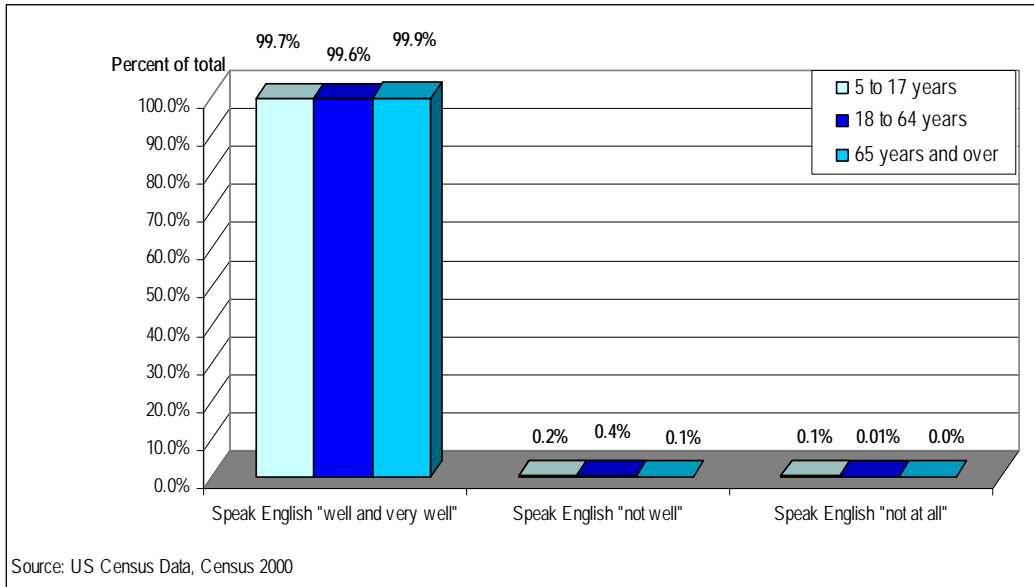


**Figure 6-3. Salem, MA: Population by Race, 2000**



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**

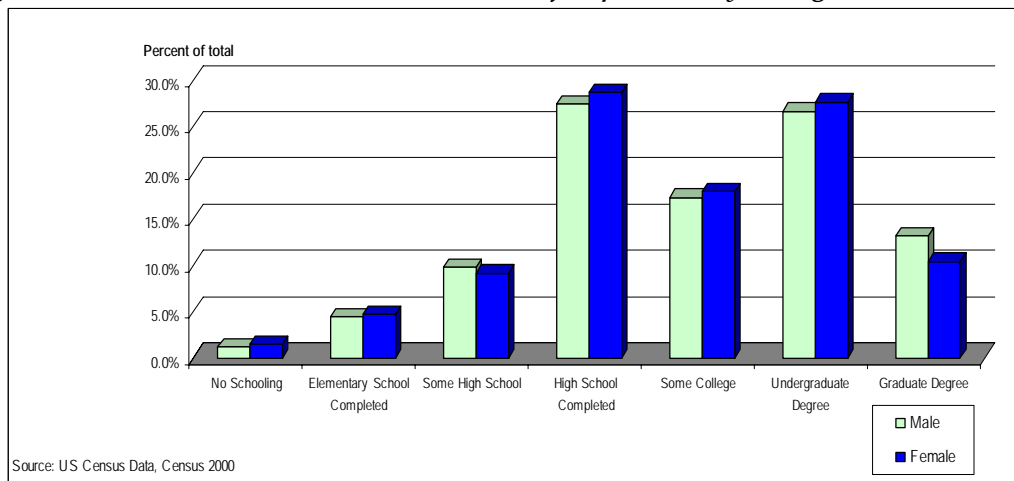


## EDUCATION

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.<sup>3</sup>

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



<sup>3</sup> Salem Community Profile: <http://www.epodunk.com/>

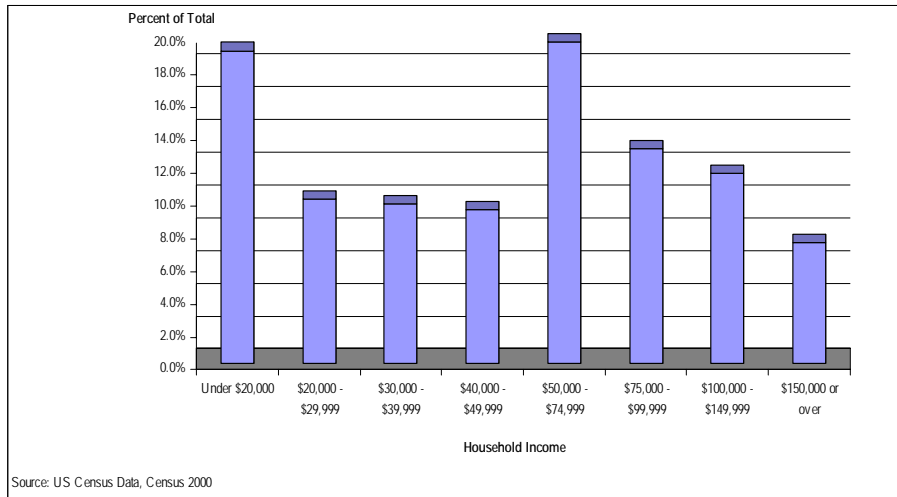
# Socio-Economic Characteristics

## 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.<sup>4</sup>

**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).

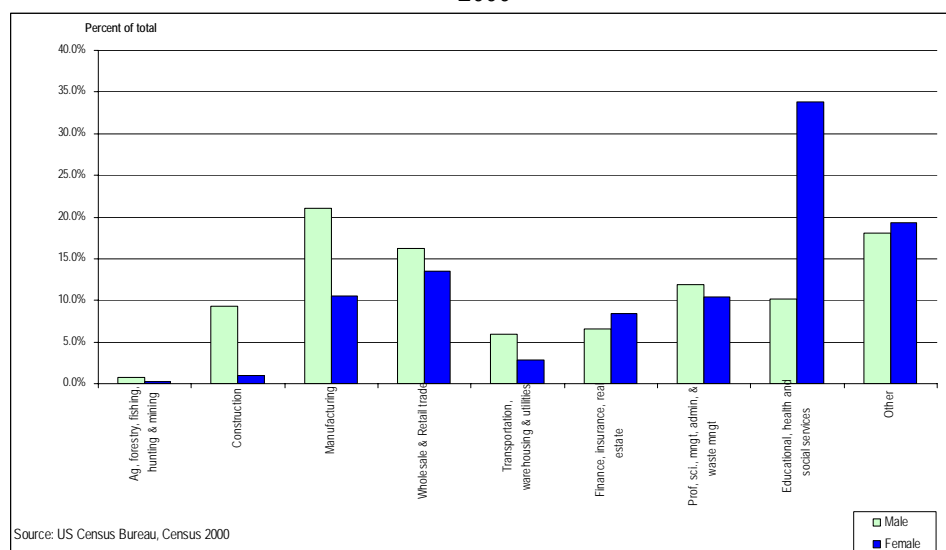
An estimated 4.5 percent of males and 4.7 percent of females were unemployed in 2000.<sup>5</sup>

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.

<sup>4</sup> US Census Data, Census 2000.

<sup>5</sup> 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.<sup>6</sup> 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.<sup>7</sup>

<sup>6</sup> Seaport Advisory Council website: <http://www.mass.gov/seaports/salem.htm>

<sup>7</sup> Port Advisory Council website: <http://www.mass.gov/seaports/salem.htm>

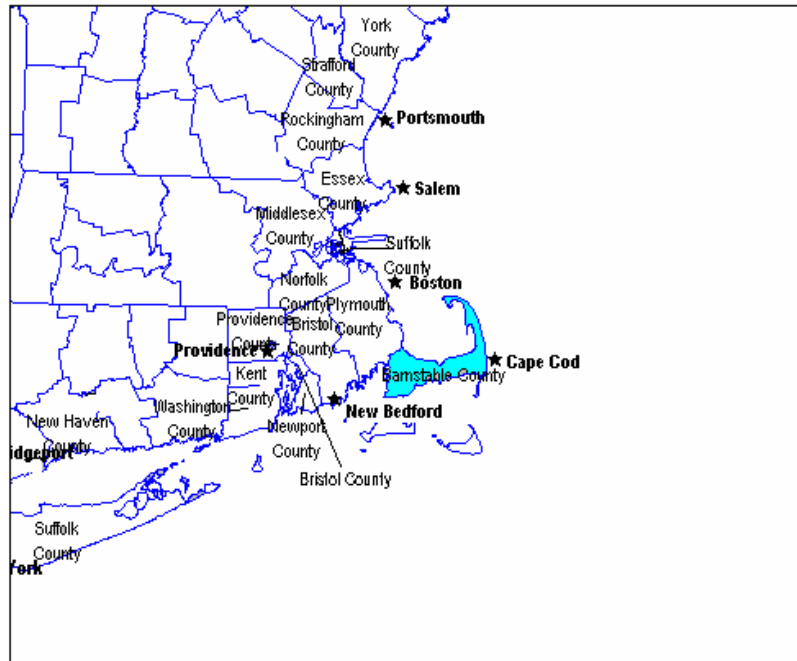
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# 7. Cape Cod Bay, MA

## 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

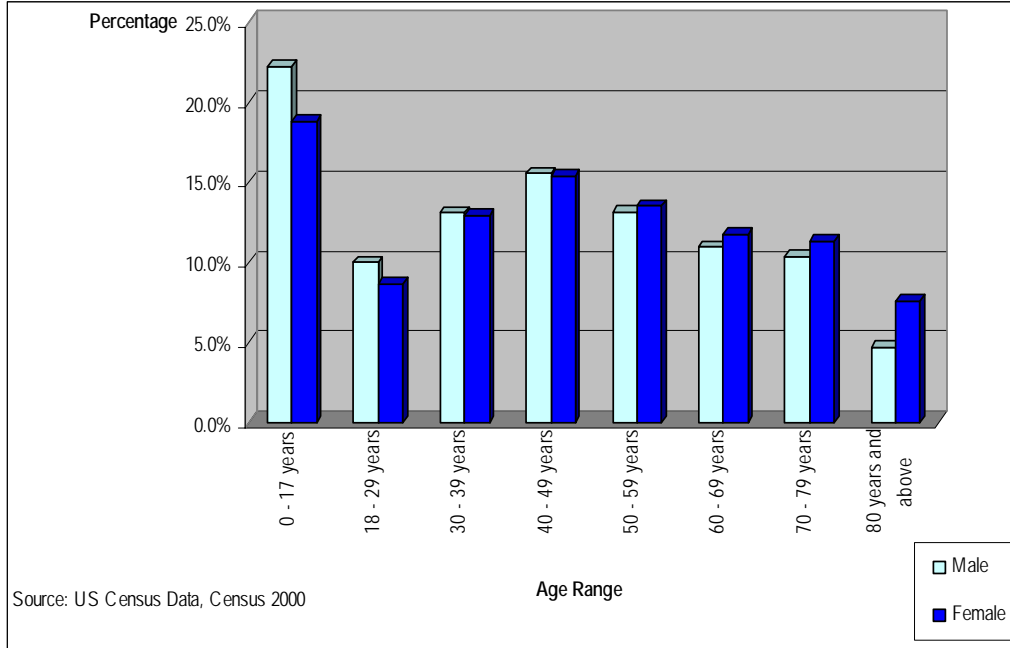
### POPULATION

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.

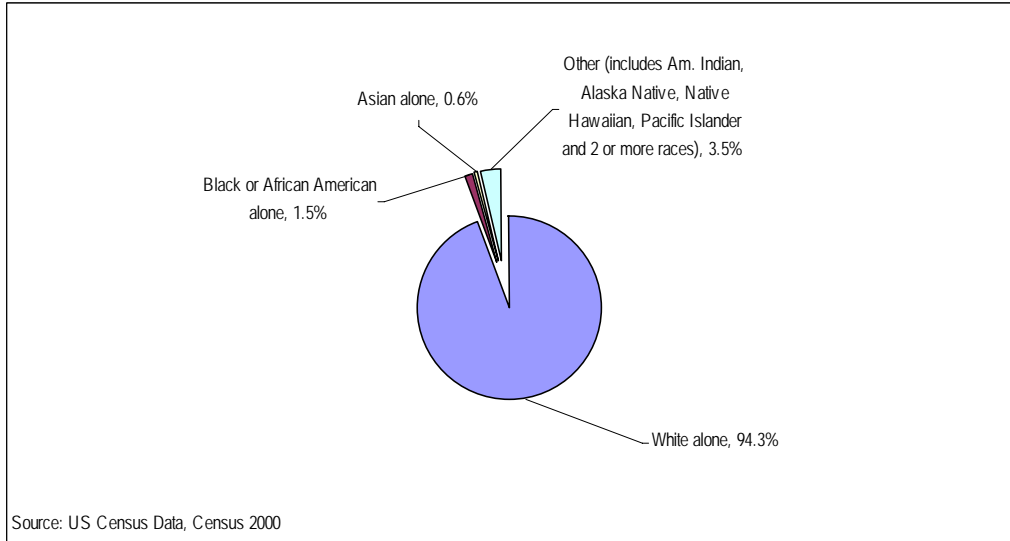
As Figure 7-2 shows, the majority of the population in this county is white (94.3 percent), followed by 'others' (include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone), which represent 3.5 percent of the total population. The Black or African American 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.<sup>1</sup>

<sup>1</sup> US Census Data, Census 2000

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



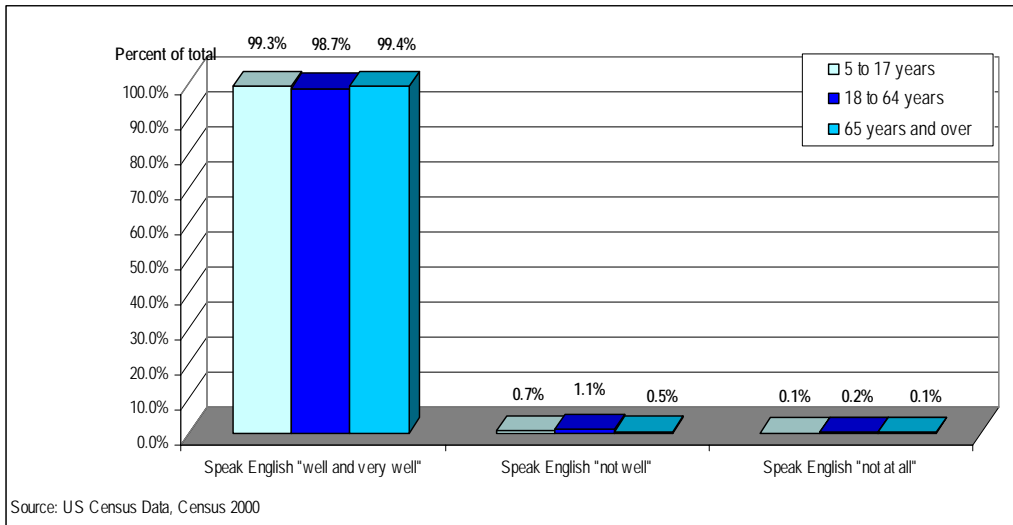
**Figure 7-3. Cape Cod Bay: Population by Race, 2000**





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'.

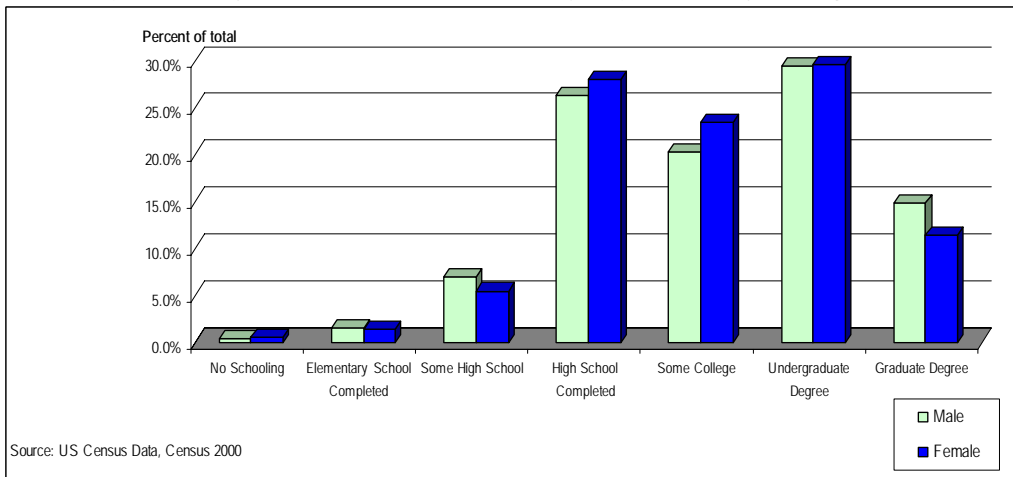
**Figure 7-4. Cape Cod Bay: Ability to Speak English by Age Group, 2000**



## 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*



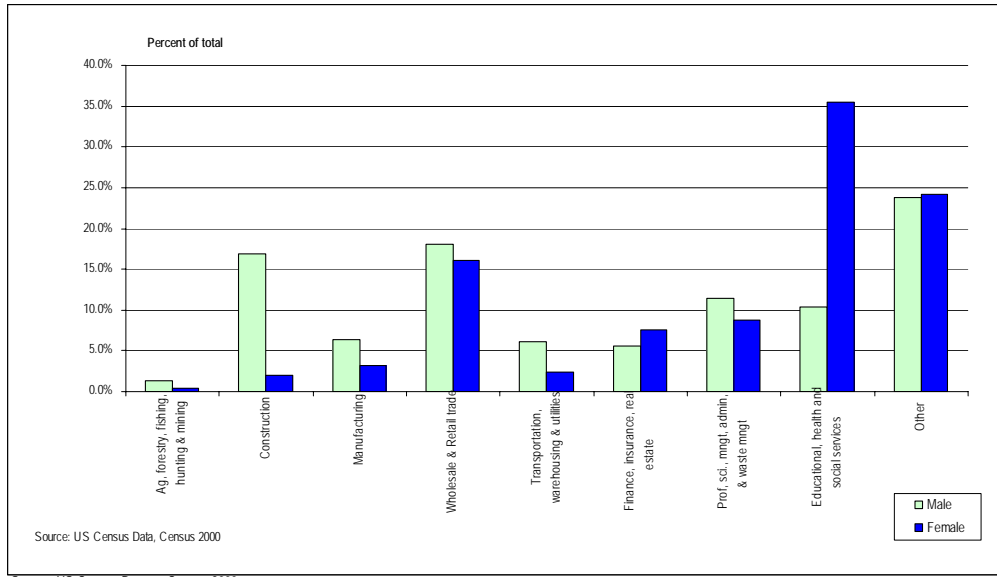
## EMPLOYMENT

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**



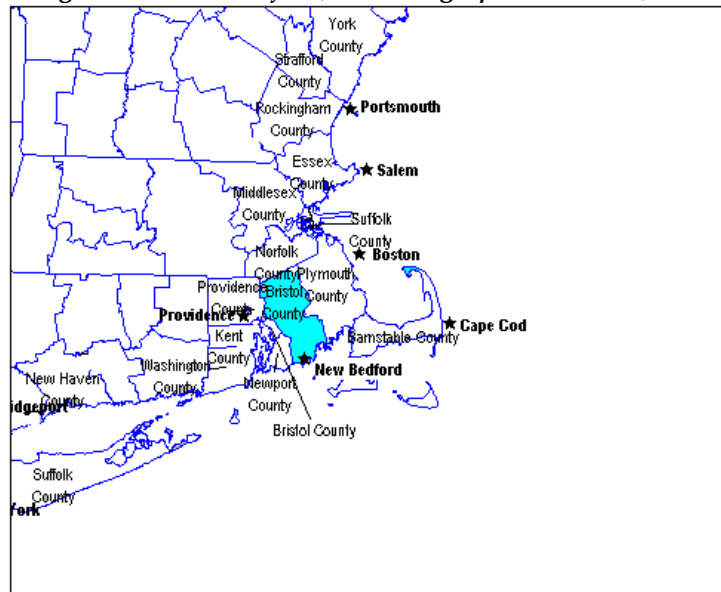
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# 8. New Bedford, MA

## 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. <sup>1</sup>

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



Source: Table 3-1

## Demographics

### POPULATION

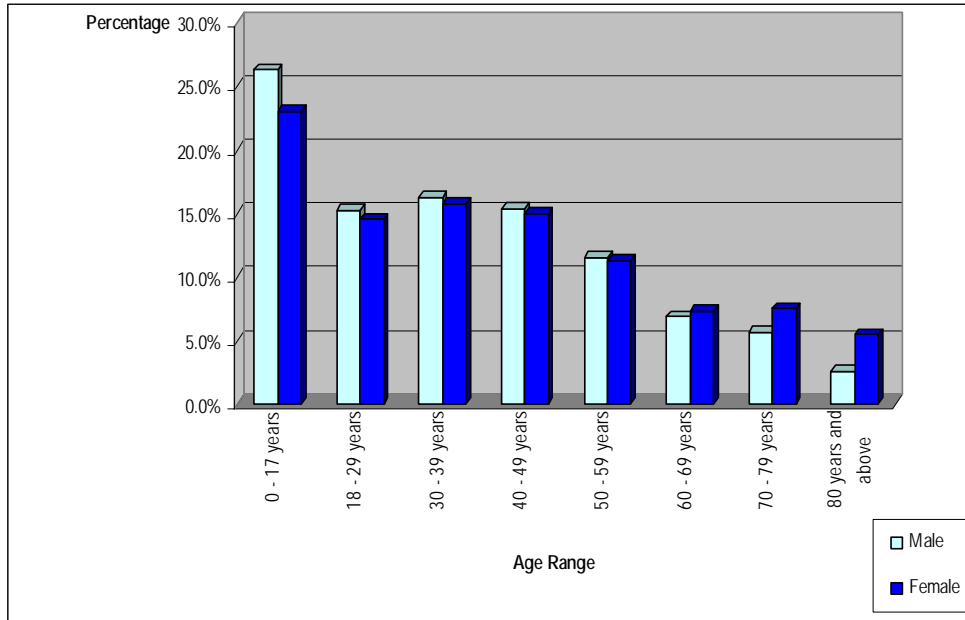
The total population of Bristol County, MA is of 534,678, according to the 2000 US Census. Of this total, 256,747 or 48 percent are males and 277,931 or 52 percent are females. The median age of the population is 36.7 years; 35.4 for males and 38 for females. As evidenced by Figure 8 - 2, about 30 percent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

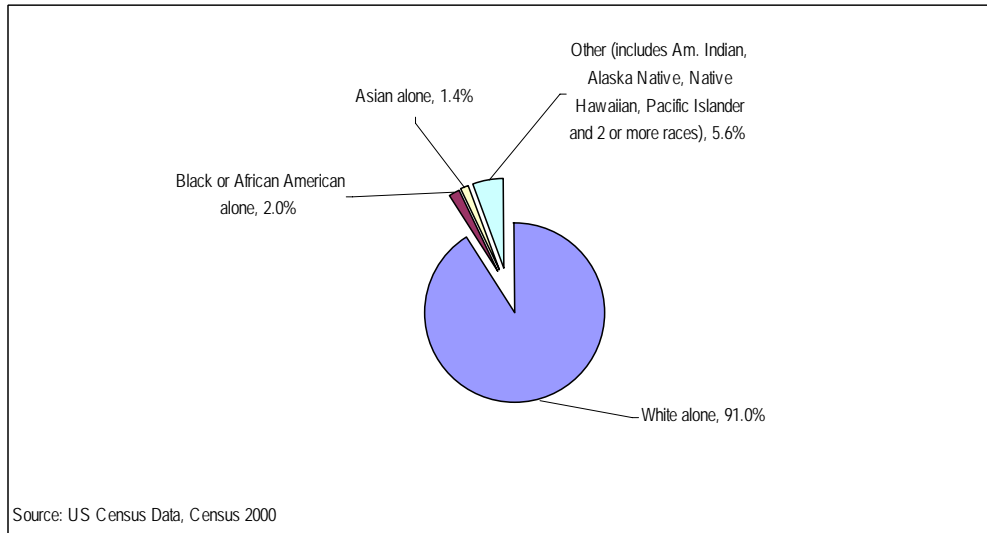
<sup>1</sup> Seaport Advisory Council: <http://www.mass.gov/seaports/newbed.htm>

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.<sup>2</sup>

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



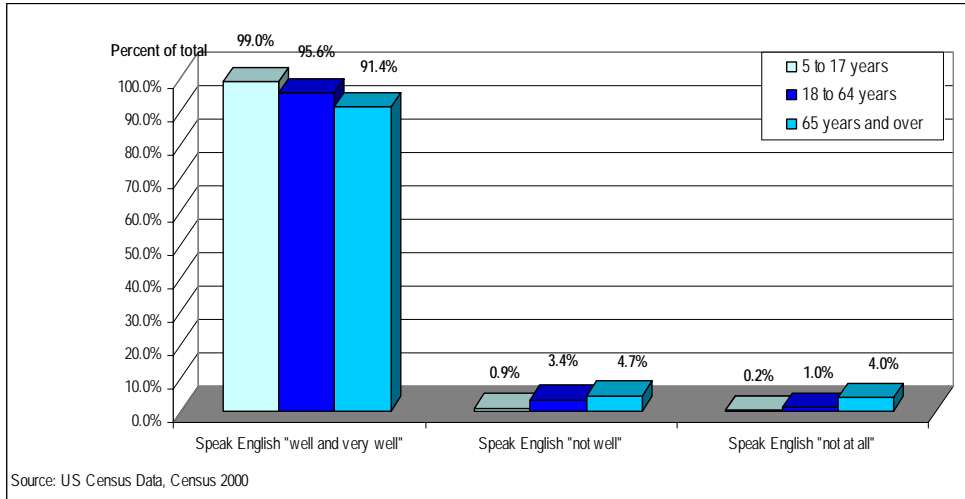
**Figure 8-3. New Bedford, MA: Population by Race, 2000**



<sup>2</sup> 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**

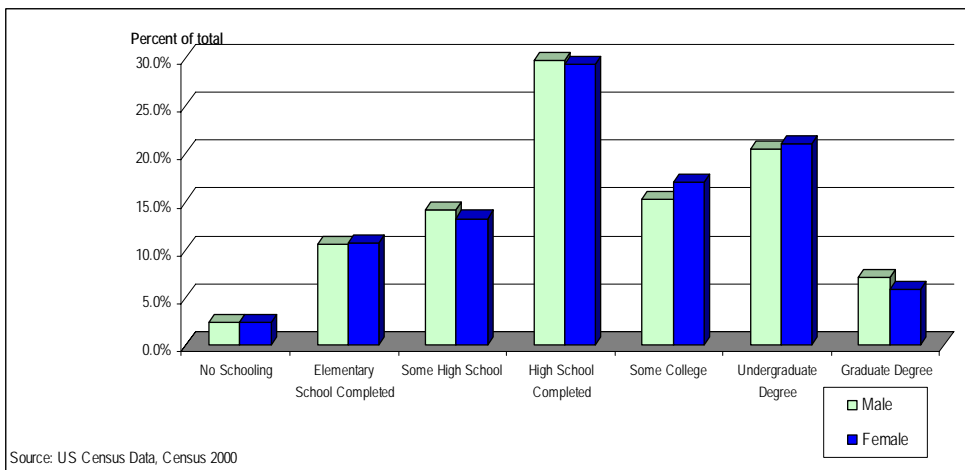


## EDUCATION

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**



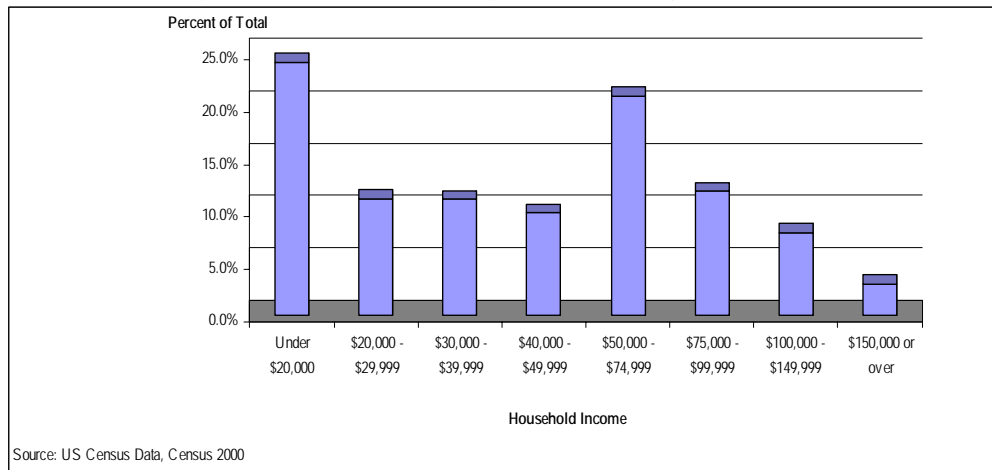
# Socio-Economic Characteristics

## 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.<sup>3</sup>

*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.<sup>4</sup>

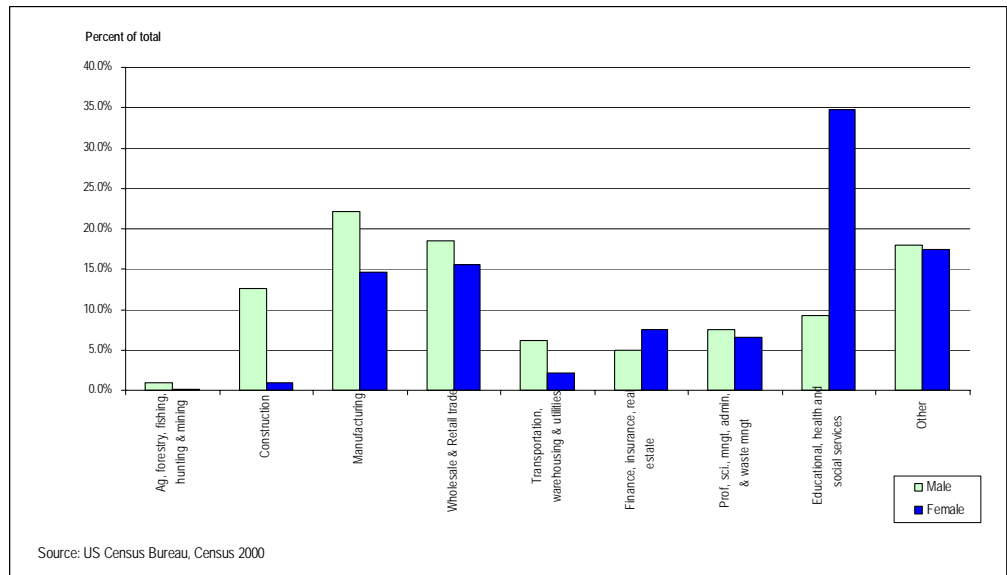
According to the 2000 US Census, an estimated 0.6 percent of males and 0.1 percent of females are employed in farming, fishing and forestry occupations. About 23.3 percent of males and 11.9 percent of females are employed in production, transportation and material moving occupations. The aforementioned 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.

<sup>3</sup> US Census Data, Census 2000.

<sup>4</sup> 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](http://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](http://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](http://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](http://www.epa.gov)).<sup>5</sup>

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.<sup>6</sup>

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

<sup>6</sup> Seaport Advisory Council website: <http://www.mass.gov/seaports/newbed.htm>

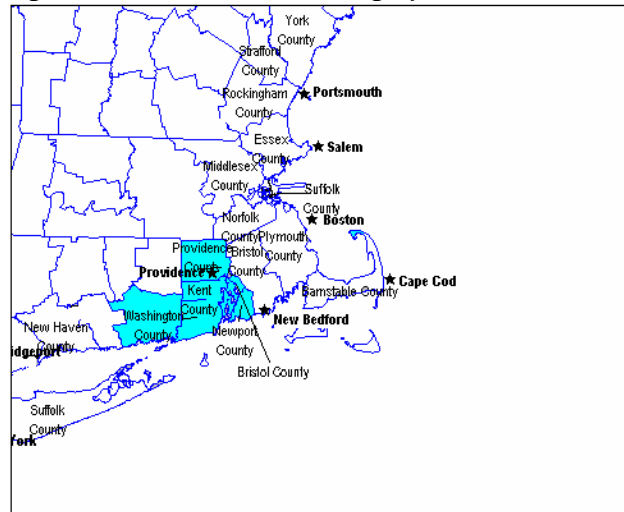
# 9. Providence, RI

## 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.<sup>1</sup>

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



Source: Table 3-1

## Demographics

### POPULATION

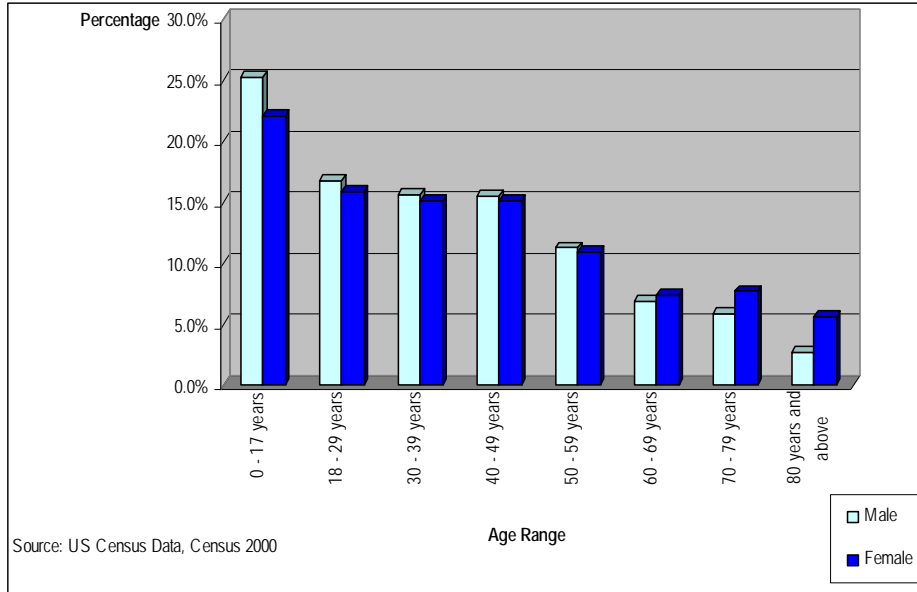
The total population of this region is 1,048,319 according to the 2000 US Census. Of this total, 503,635 or 48 percent are males and 544,684 or 52 percent are females. The median age in the region is 36.7 years; 35.3 for males and 37.9 for females.<sup>2</sup> As is shown in Figure 9-2, about 25 percent 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.

<sup>1</sup> Providence Port Authority website: <http://www.provport.com>

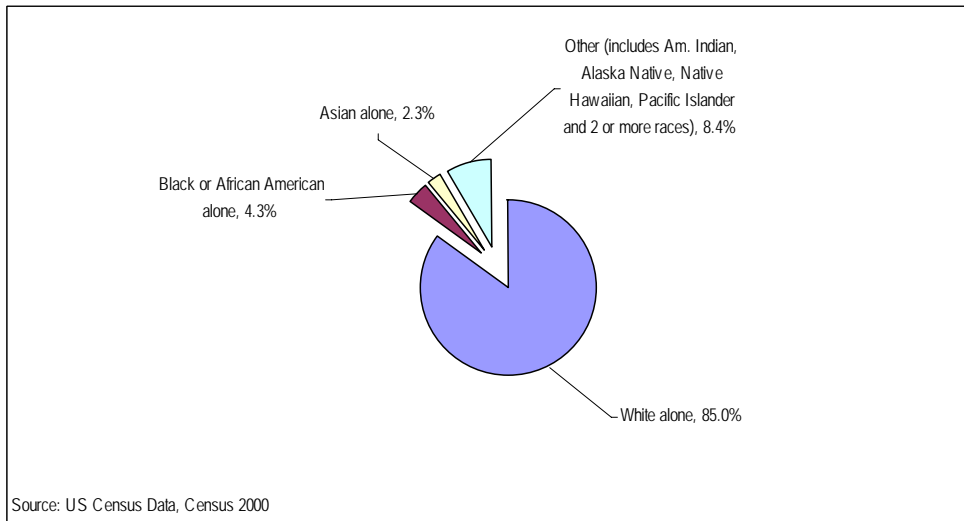
<sup>2</sup> US Census Data, Census 2000.

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.<sup>3</sup>

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



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

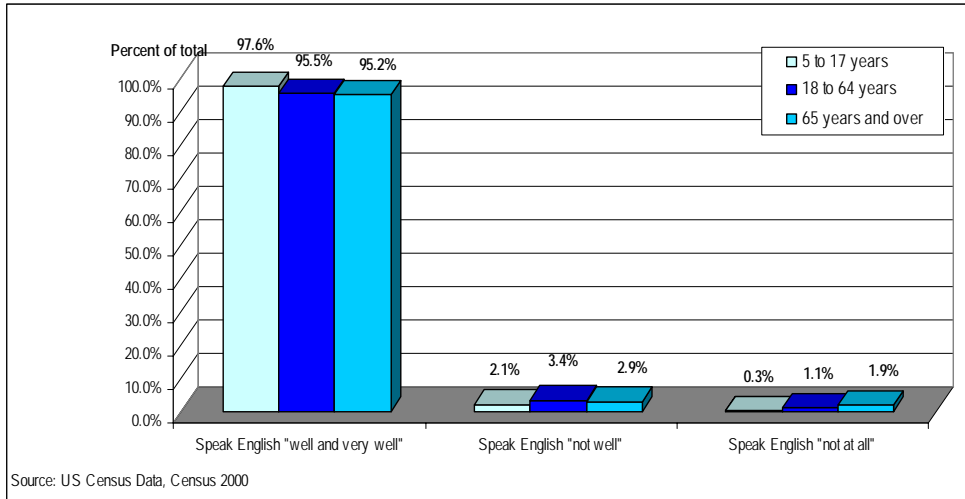


It is evident from the data specified in Figure 9-4 that most of the population in all age ranges in the area dominates the English language 'well' and 'very well'. Approximately 2.3 percent of the

<sup>3</sup> 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**

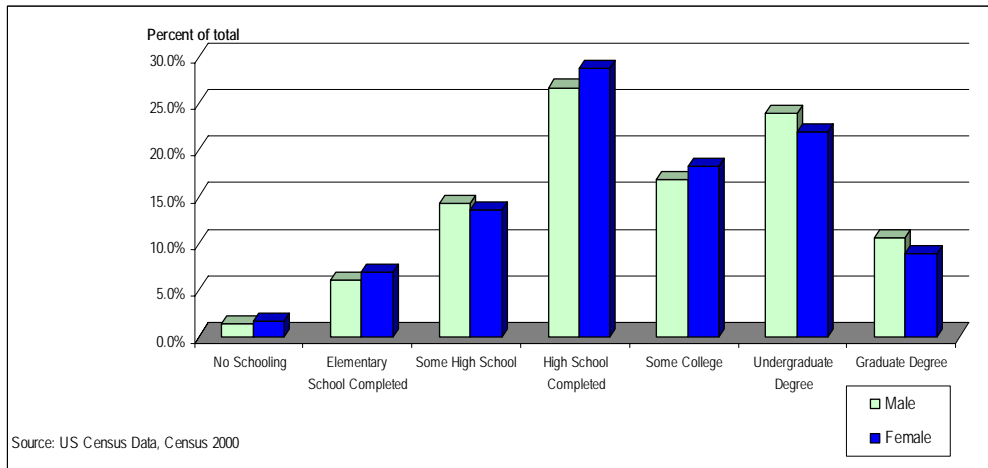


## EDUCATION

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.<sup>4</sup>

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



<sup>4</sup> Providence Community Profile: <http://www.epodunk.com>

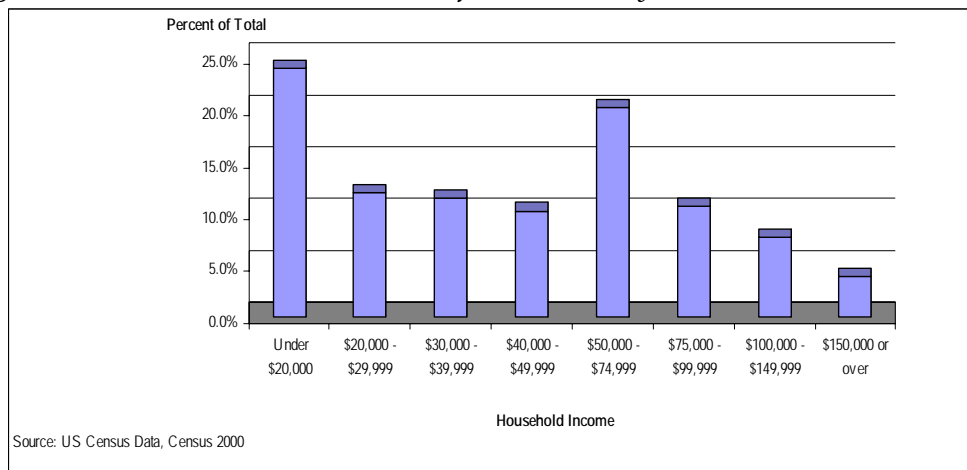
# Socio-Economic Characteristics

## 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.<sup>5</sup>

**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.<sup>6</sup>

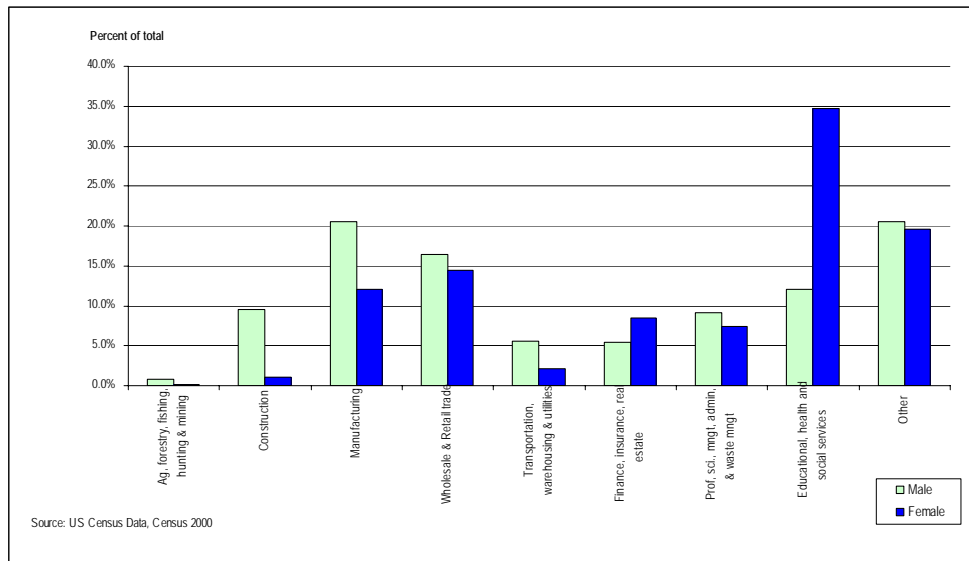
According to the 2000 US Census, an estimated 0.6 percent of males and 0.1 percent of females are employed in farming, fishing and forestry occupations. About 20.7 percent of males and 9.4 percent of females are employed in production, transportation and material moving occupations. The aforementioned 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.

<sup>5</sup> US Census Data, Census 2000.

<sup>6</sup> 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, perlite, 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.<sup>7</sup>

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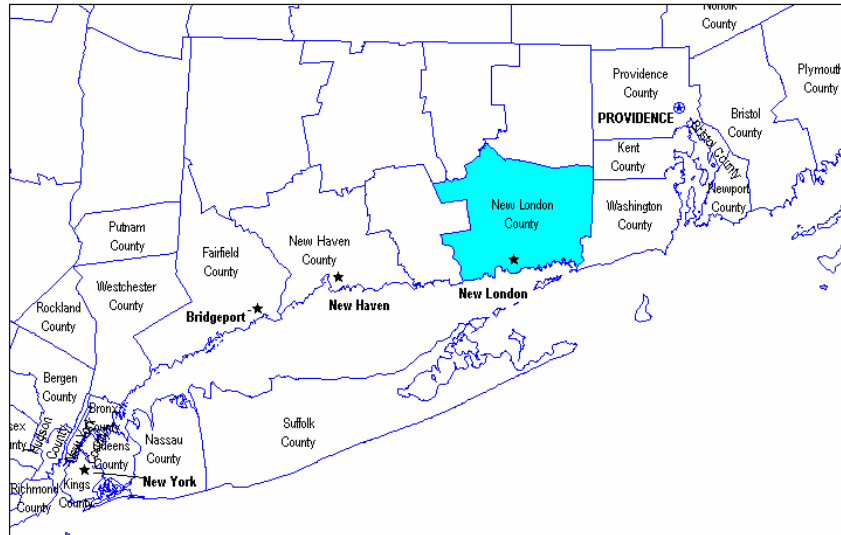
<sup>7</sup> Providence Port Authority website: <http://www.provport.com/index.html>

# 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

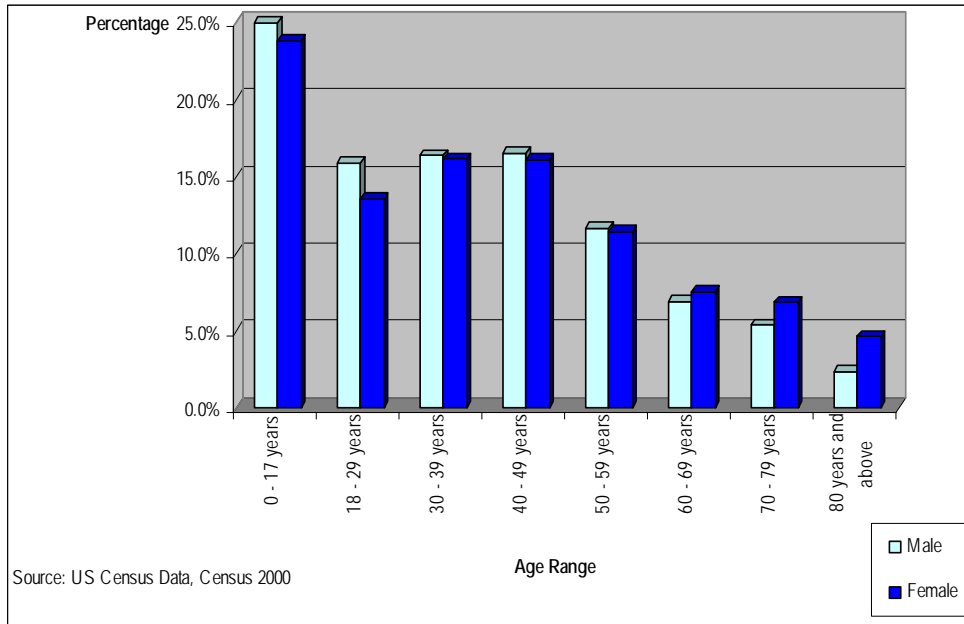
### POPULATION

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).

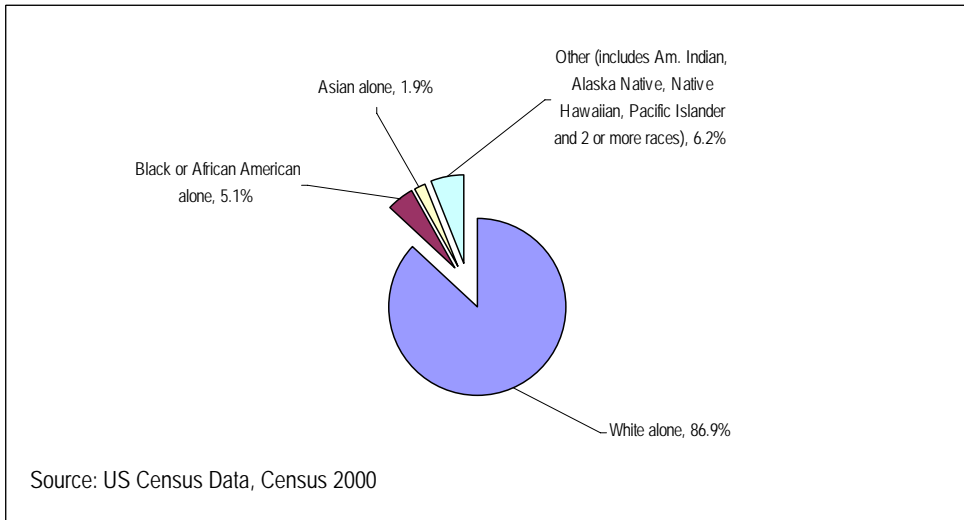
The majority of the population in New London county is white (86.9 percent); followed by 'others' (which include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone), representing 6.2 percent of the total population. The Black or African American population 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.<sup>1</sup>

<sup>1</sup> US Census Data, Census 2000.

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

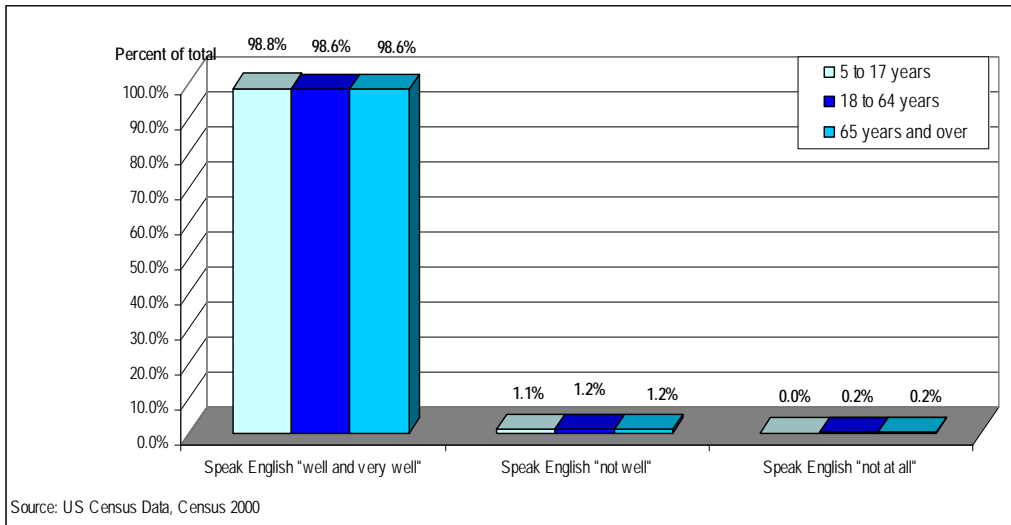


**Figure 10-3. New London, CT: Population by Race, 2000**



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**

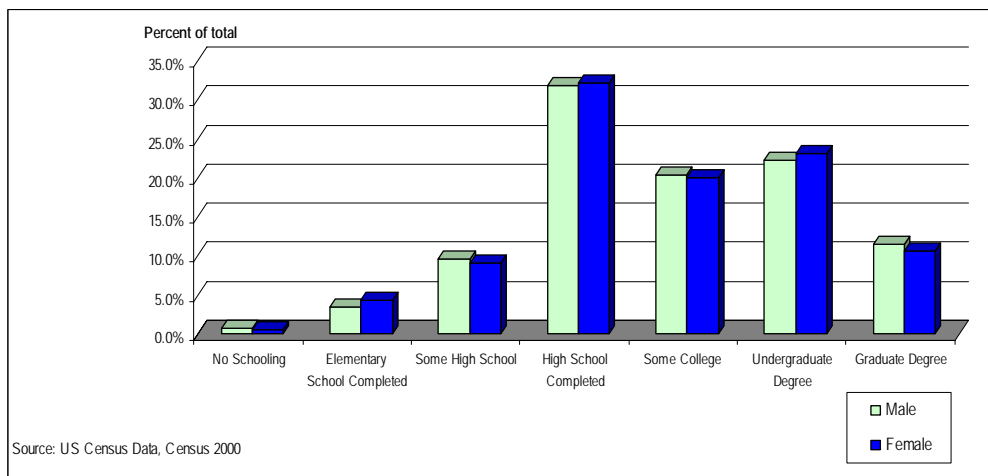


## EDUCATION

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**



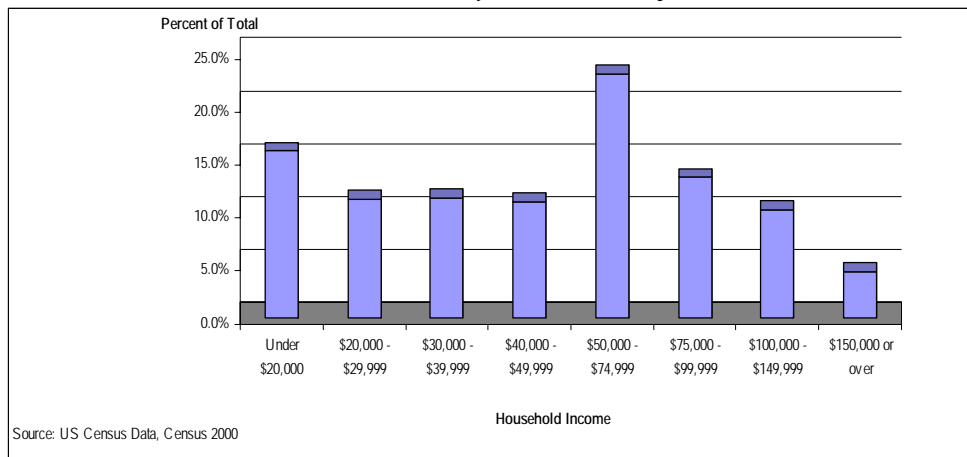
# Socio-Economic Characteristics

## 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.<sup>2</sup>

*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).

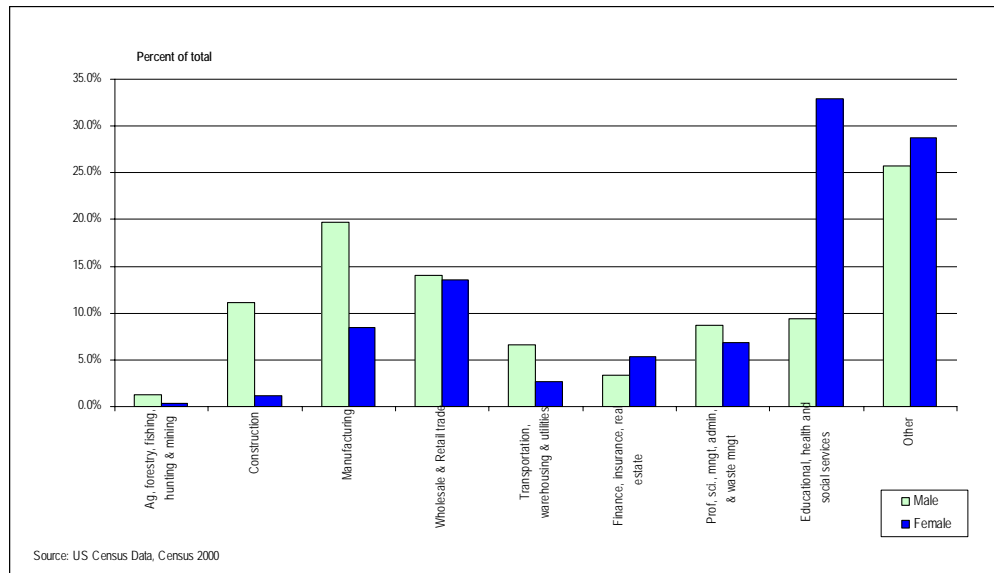
An estimated 4.0 percent of males and 3.8 percent of females were unemployed in the area in 2000.<sup>3</sup>

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.

<sup>2</sup> US Census Data, Census 2000.

<sup>3</sup> 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.<sup>4</sup>

The Port of New London is serviced by the Port of Hartford.<sup>5</sup>

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

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

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

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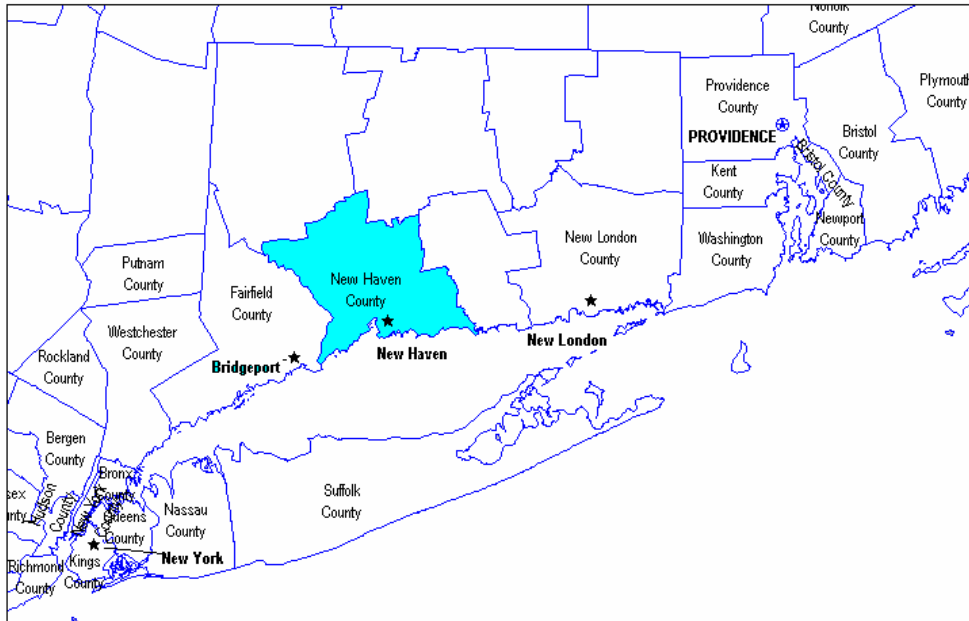


# 11. New Haven, CT

## 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

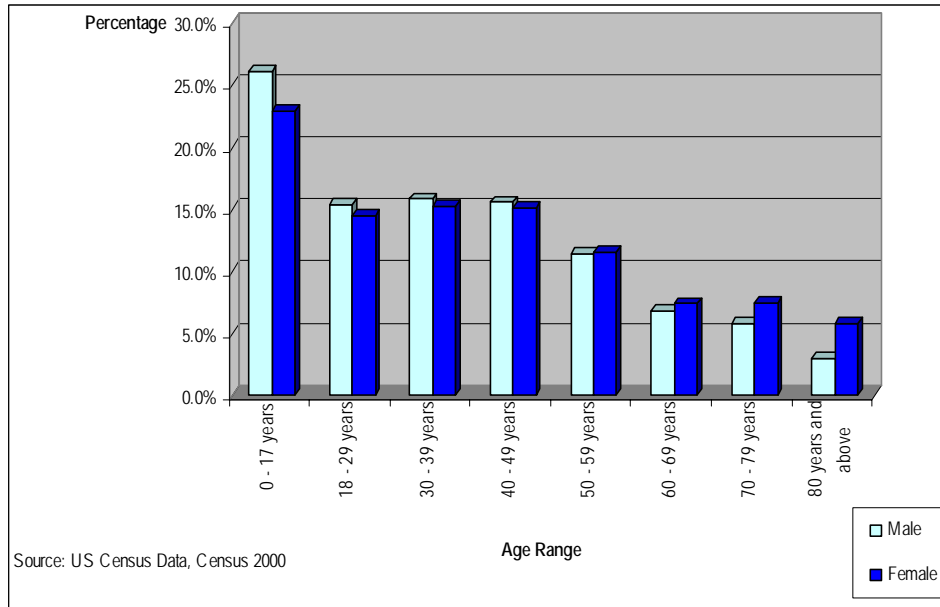
### POPULATION

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).

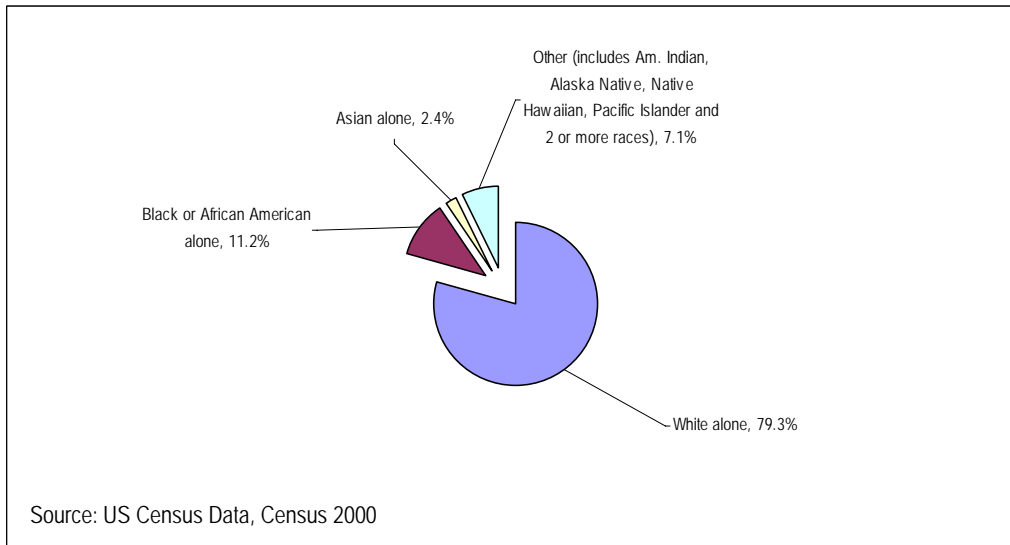
The majority of the population in New Haven County is white (79.3 percent), followed by the Black or African American population, which represents 11.2 percent of the total population. This population is followed by 'others' (which include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, 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.<sup>1</sup>

<sup>1</sup> US Census Data, Census 2000.

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

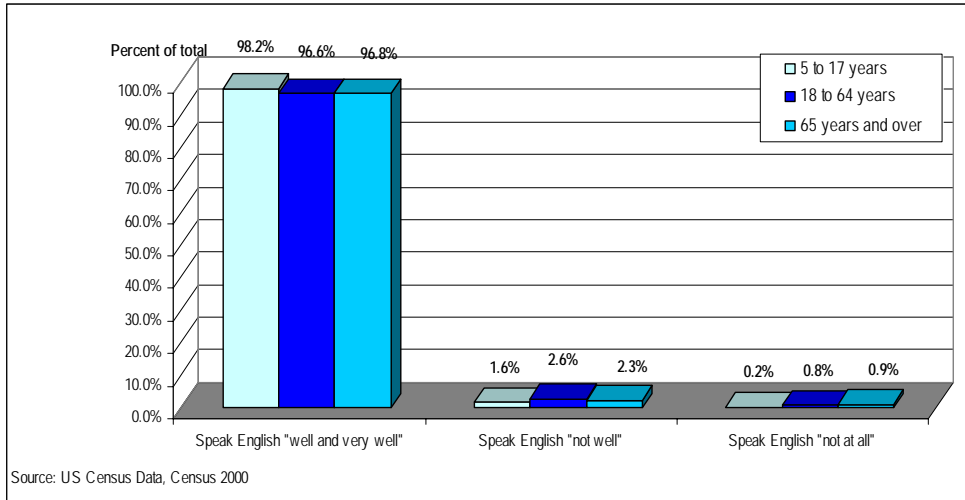


**Figure 11-3. New Haven, CT: Population by Race, 2000**



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**

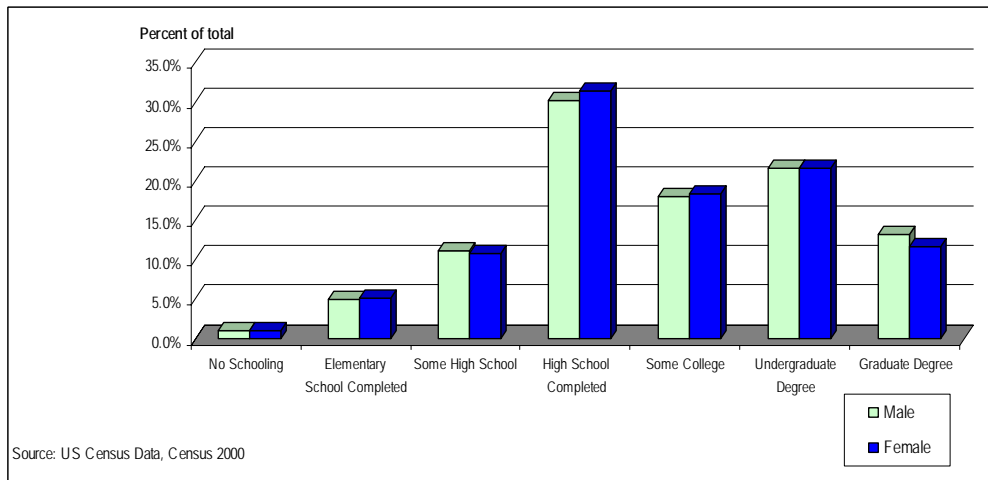


## EDUCATION

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.<sup>2</sup>

*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).

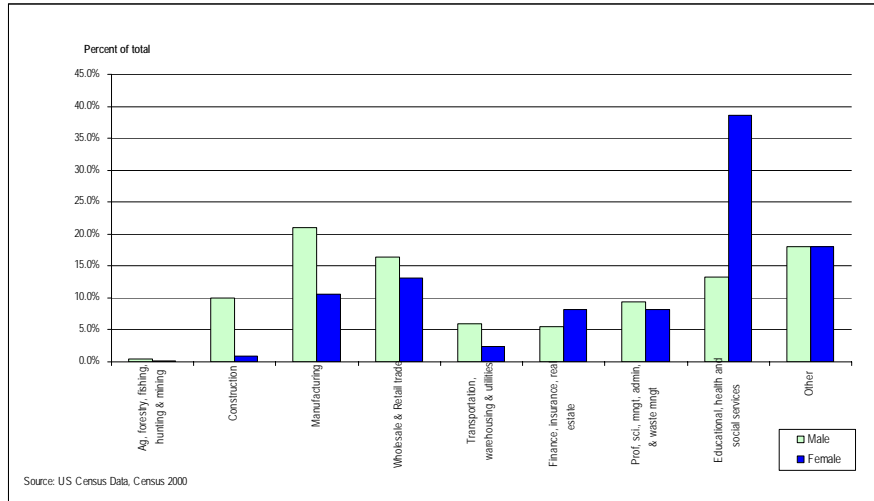
An estimated 6.2 percent of males and 5.6 percent of females were unemployed in the county in 2000.<sup>3</sup>

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.

<sup>2</sup> US Census Data, Census 2000.

<sup>3</sup> 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.<sup>4</sup>

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

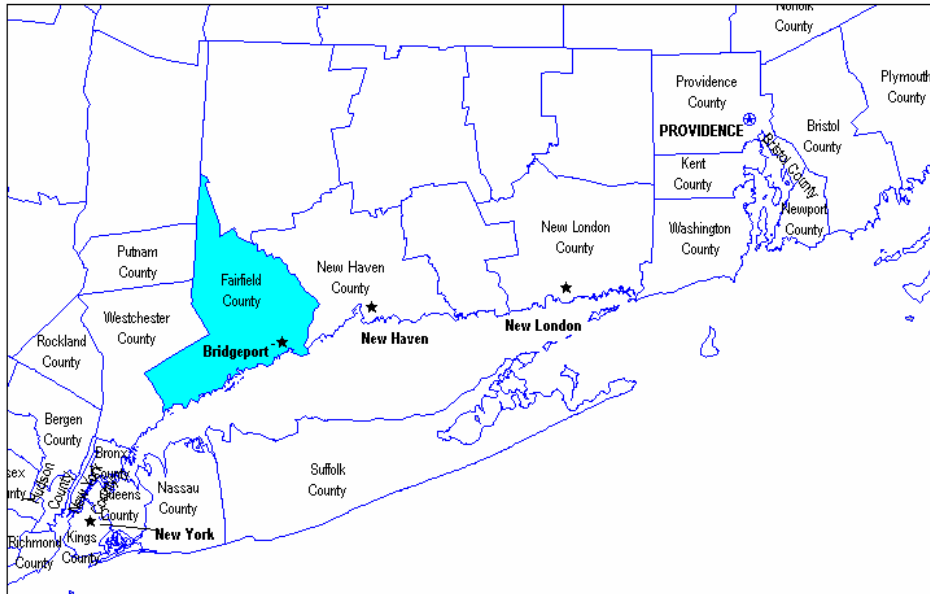
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# 12. Bridgeport, CT

## 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

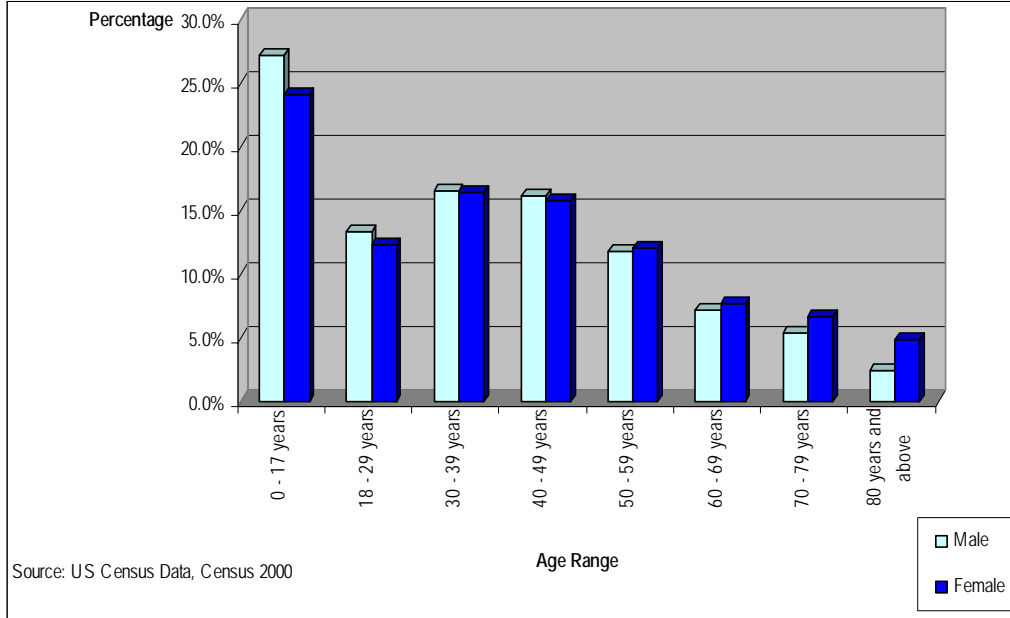
### POPULATION

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).

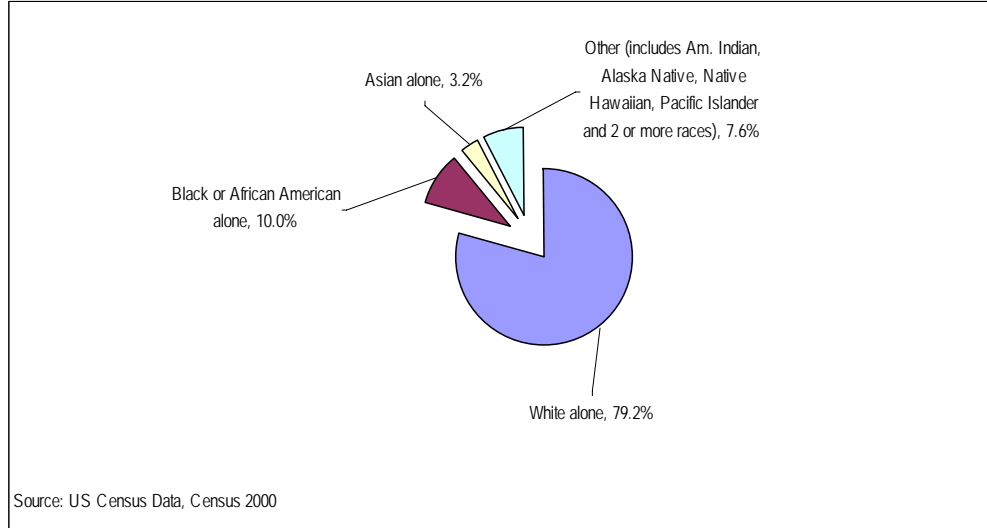
The majority of the population in the region is white (79.2 percent), followed by the Black or African American population, which represents 10 percent of the total population. 'Others' (which include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) represent 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.<sup>1</sup>

<sup>1</sup> US Census Data, Census 2000.

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



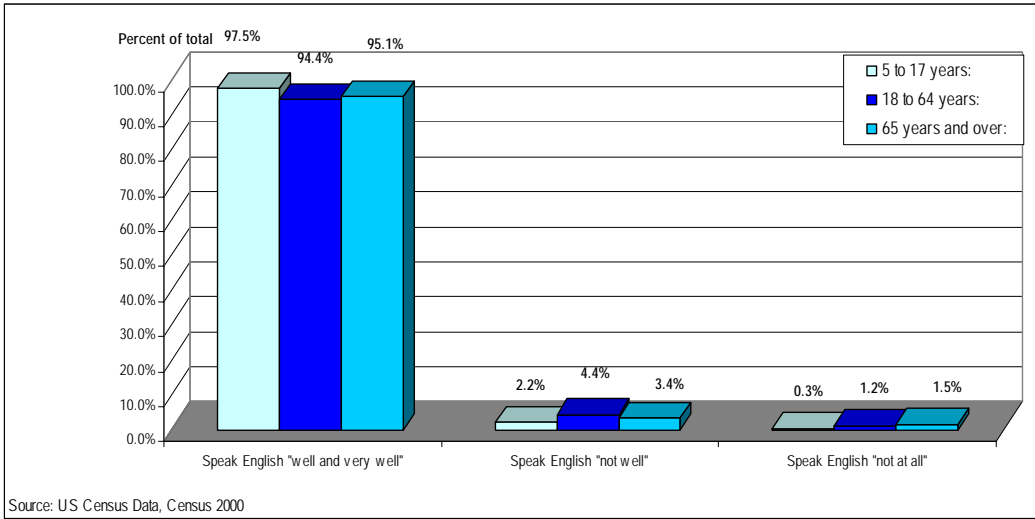
**Figure 12-3. Bridgeport, CT: Population by Race, 2000**



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**

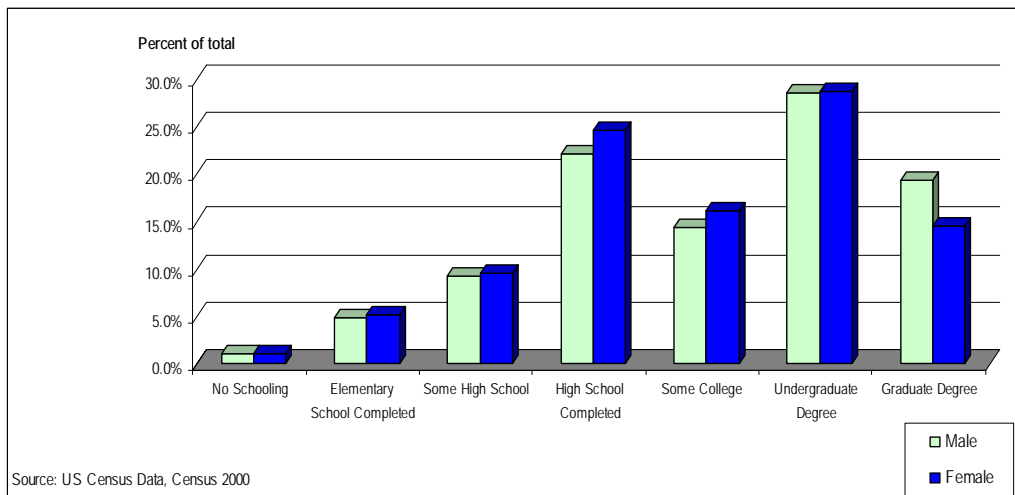


## EDUCATION

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.<sup>2</sup>

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



<sup>2</sup> Bridgeport Community Profile: <http://www.epodunk.com/>

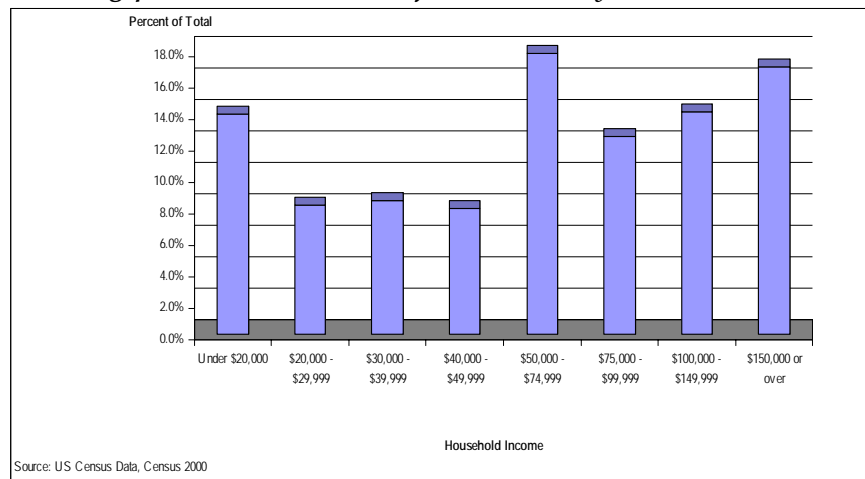
# Socio-Economic Characteristics

## 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.<sup>3</sup>

*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).

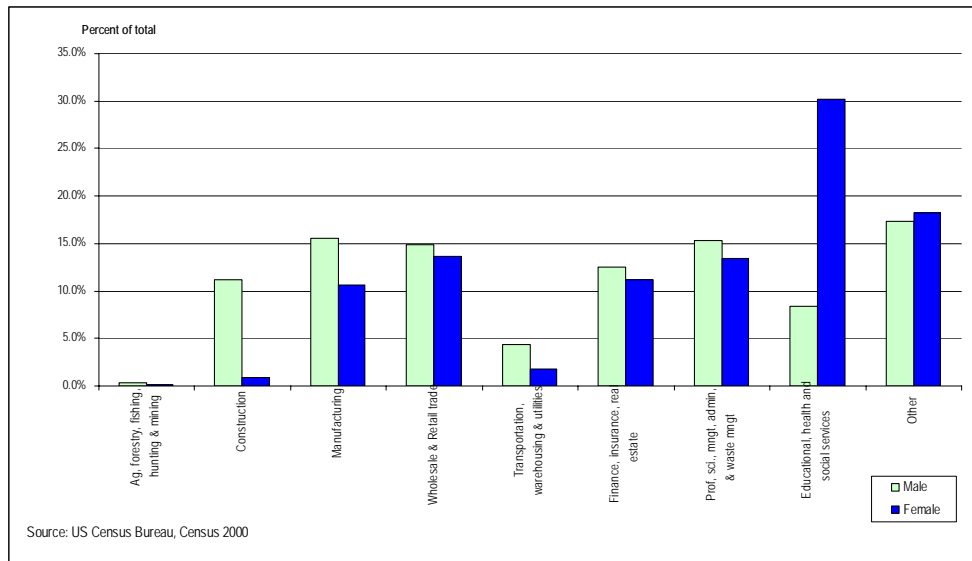
An estimated 4.8 percent of males and 4.7 percent of females were unemployed in the region in the year 2000.<sup>4</sup>

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.

<sup>3</sup> US Census Data, Census 2000.

<sup>4</sup> 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.<sup>5</sup>

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.

<sup>5</sup> 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. <sup>6</sup>

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<sup>6</sup> 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](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

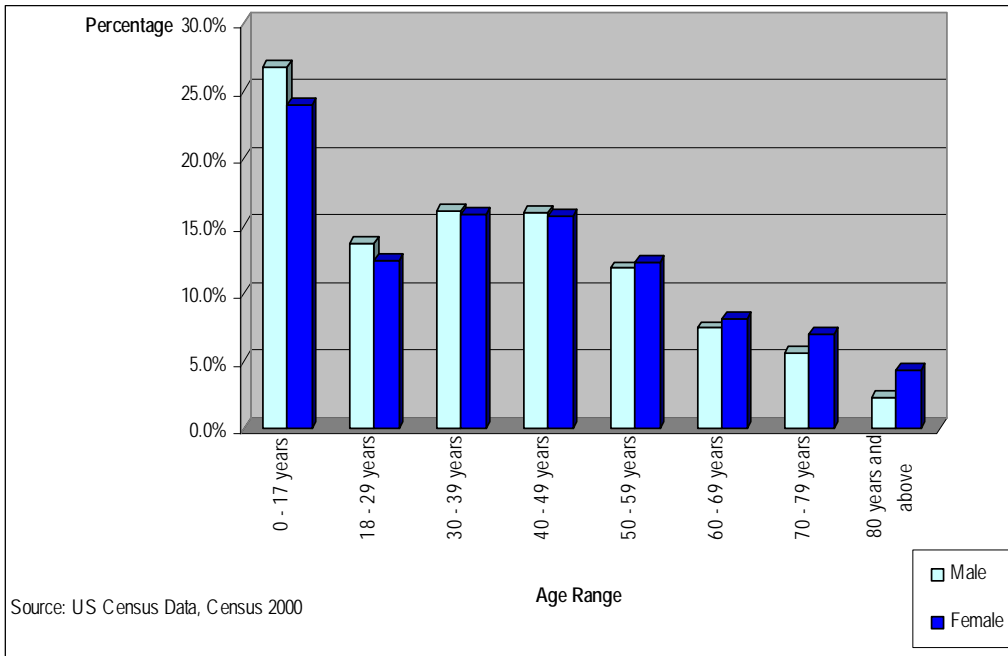
### POPULATION

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).

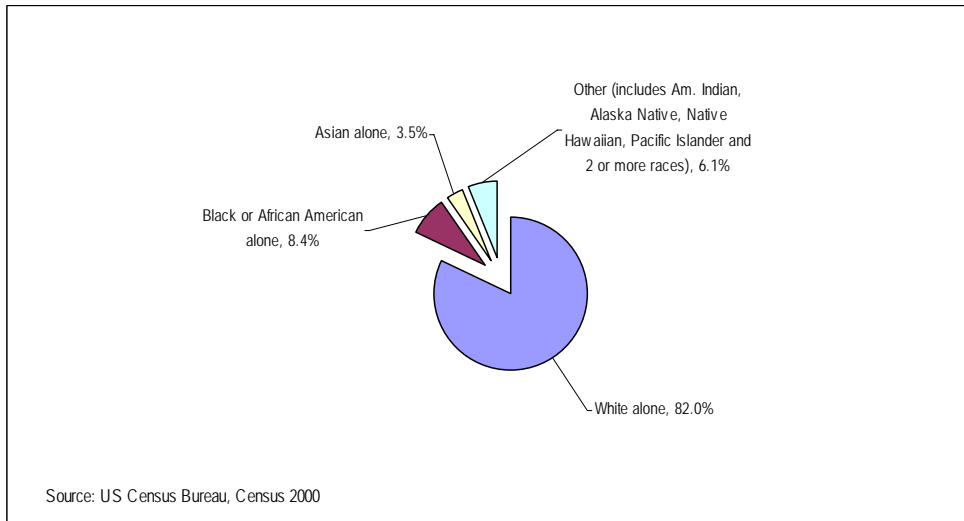
As portrayed by Figure 13-3, 82 percent of the population in these counties is white, 8.4 percent is Black or African American. ‘Others’ constitute 6.1 percent of the total population (include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) and the Asian 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.<sup>1</sup>

<sup>1</sup> US Census Data, Census 2000.

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

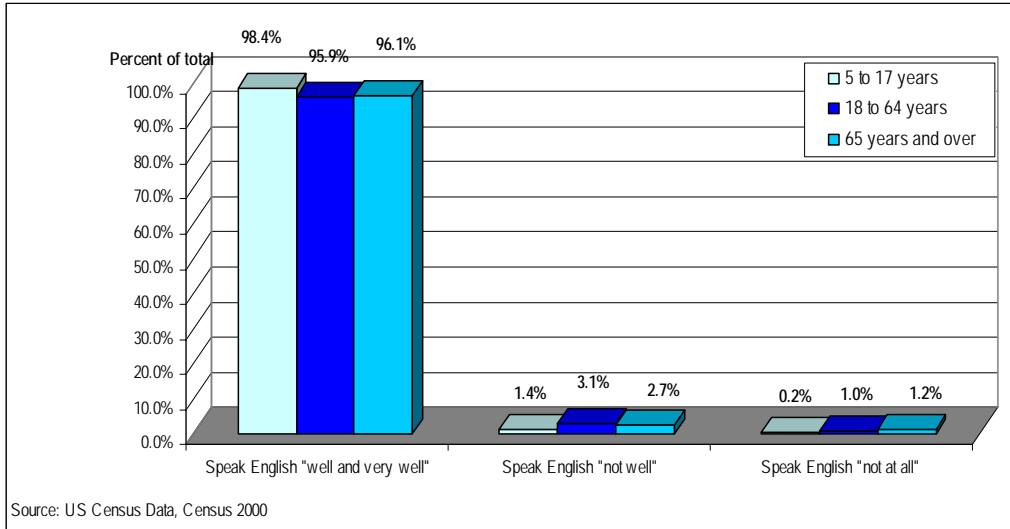


**Figure 13-3. Long Island, NY: Population by Race, 2000**



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**

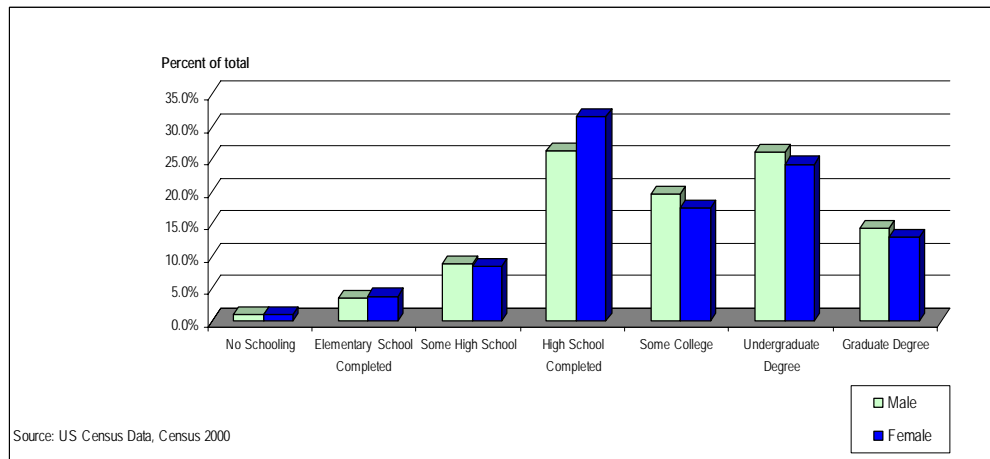


## EDUCATION

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. <sup>2</sup>

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



<sup>2</sup> Nassau and Suffolk Counties community profiles: <http://www.epodunk.com/>

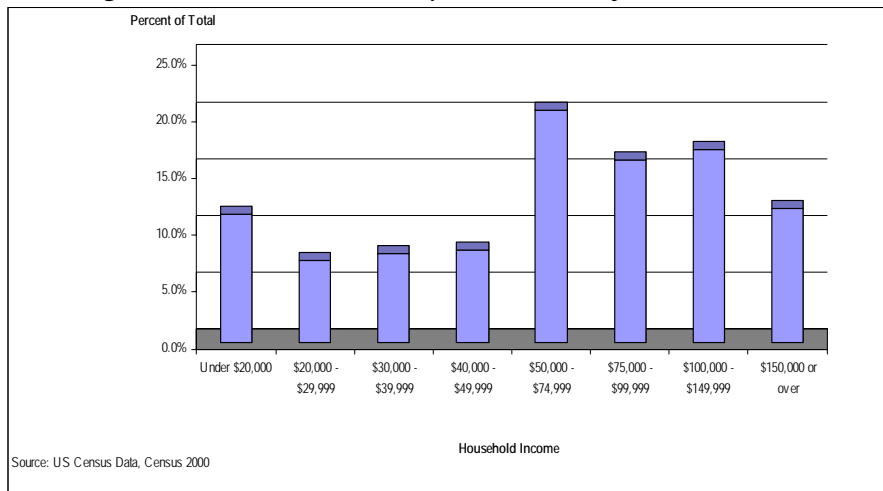
# Socio-Economic Characteristics

## 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.<sup>3</sup>

*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.<sup>4</sup>

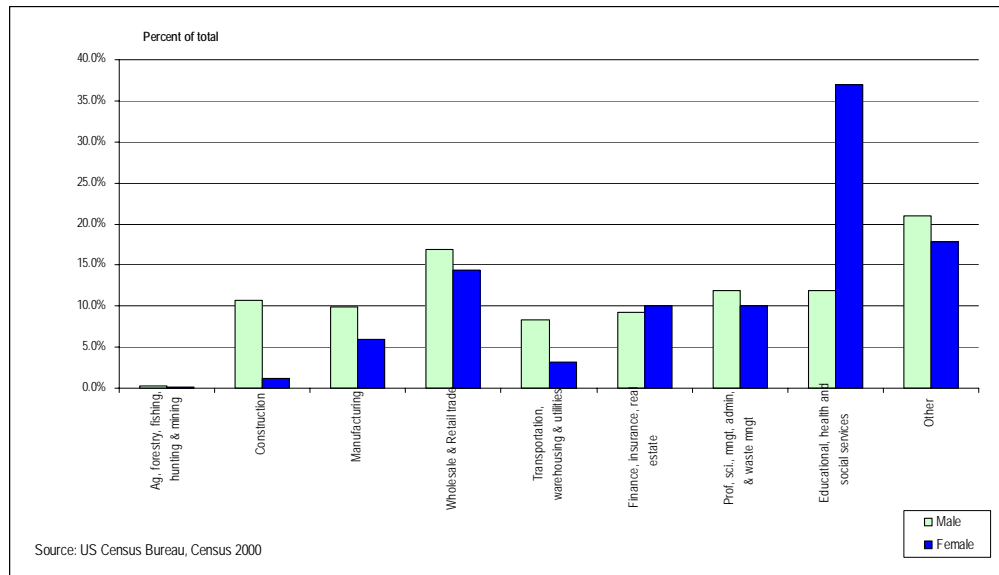
According to the 2000 US Census, an estimated 0.2 percent of males and 0.1 percent of females are employed in farming, fishing and forestry occupations. About 13.3 percent of males and 4.7 percent of females are employed in production, transportation and material moving occupations. The aforementioned 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.

<sup>3</sup> US Census Data, Census 2000.

<sup>4</sup> US Census Data, Census 2000.



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



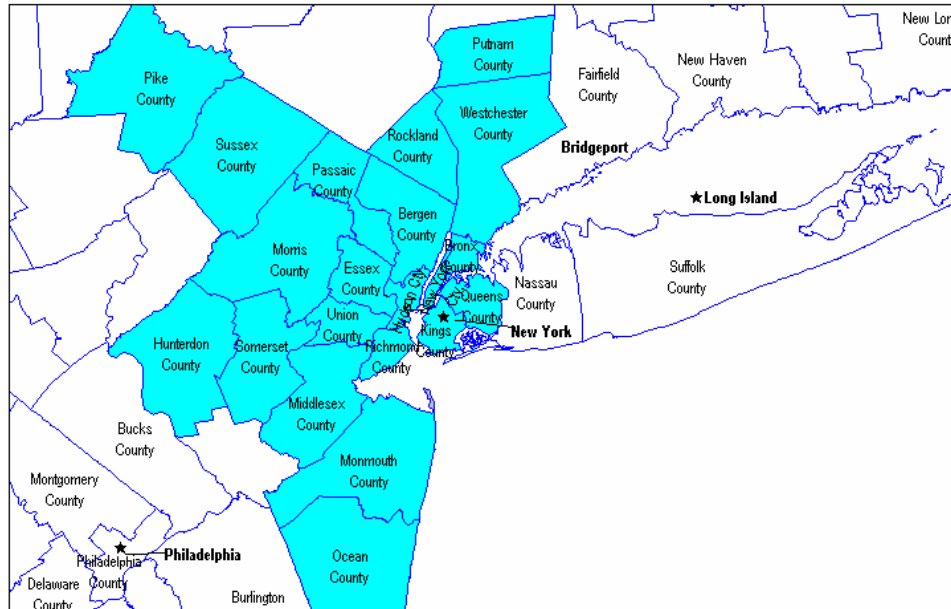
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# 14. Ports of New York – New Jersey

## 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

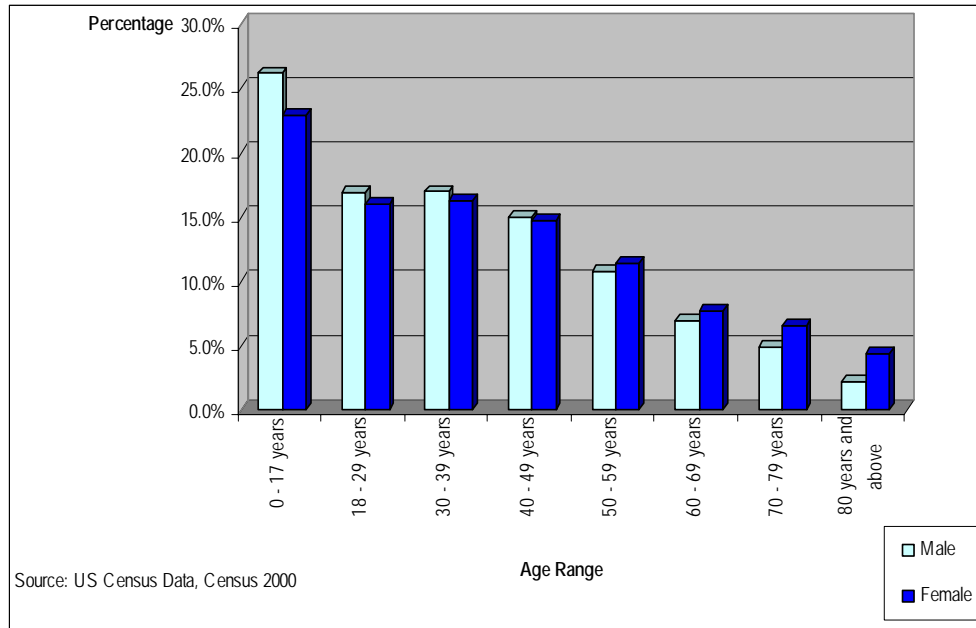
### POPULATION

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.

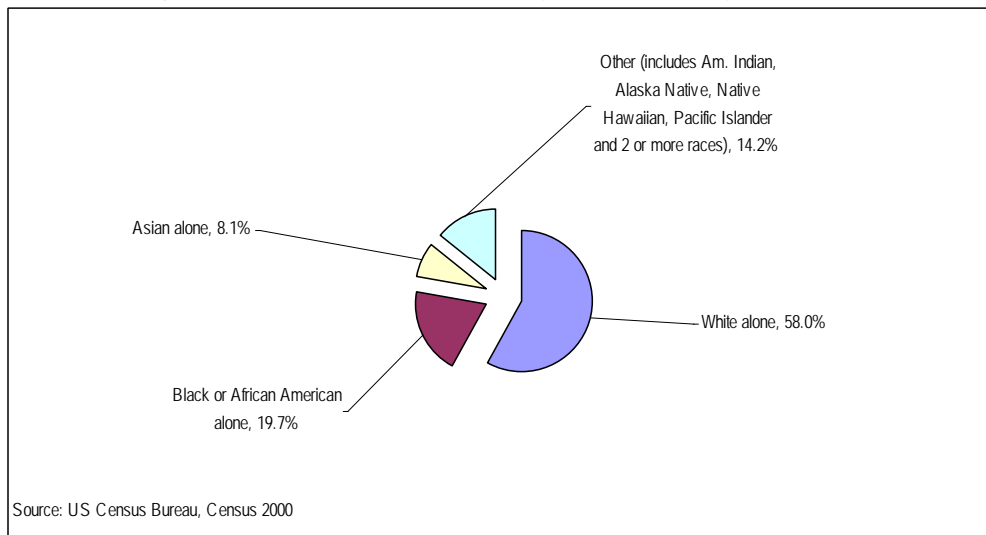
The majority of the population is white in the region (58 percent), followed by the Black or African American population, which represents 19.7 percent of the total population. 'Others' (which include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) represent 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. <sup>1</sup>

<sup>1</sup> US Census Data, Census 2000.

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

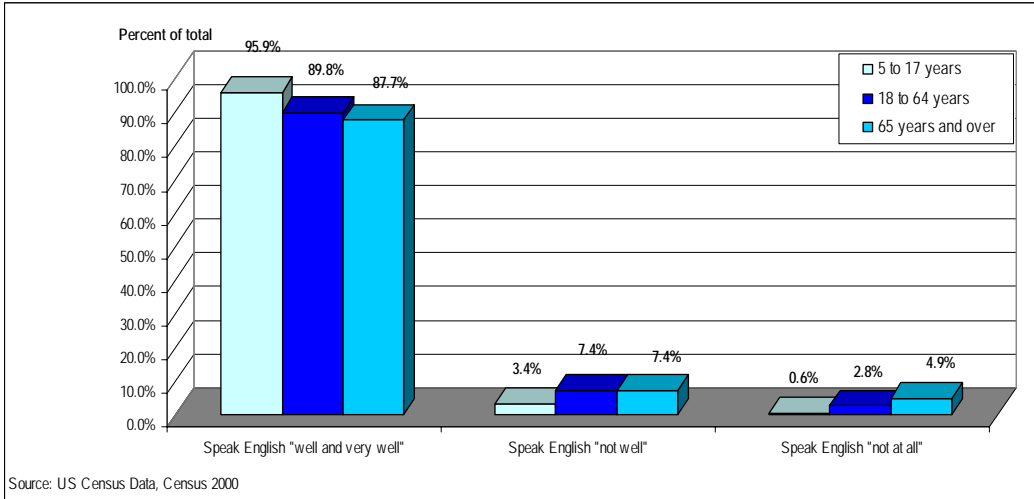


**Figure 14-3. New York - New Jersey: Population by Race, 2000**



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**

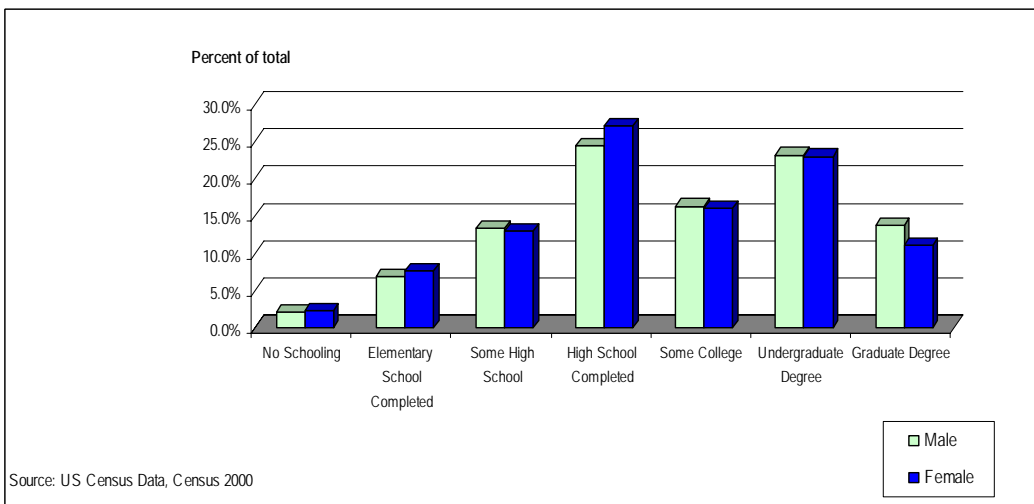


## EDUCATION

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**



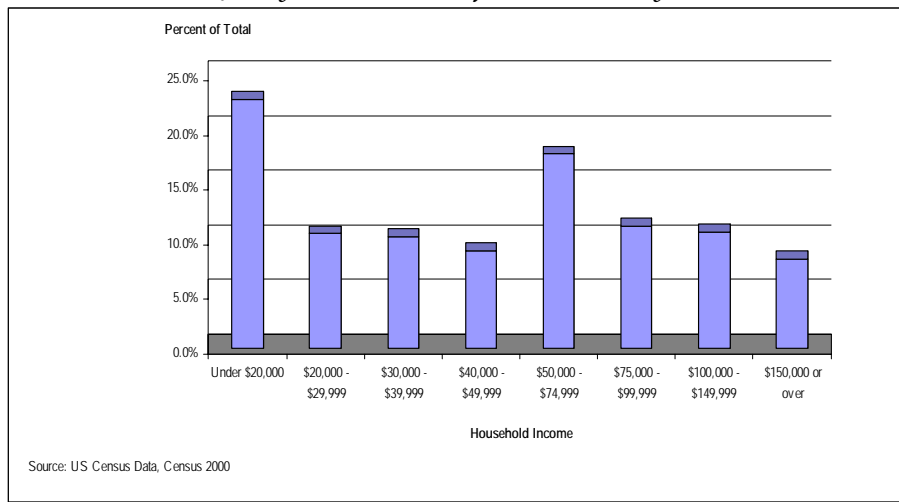
# Socio-Economic Characteristics

## 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.<sup>2</sup>

*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).

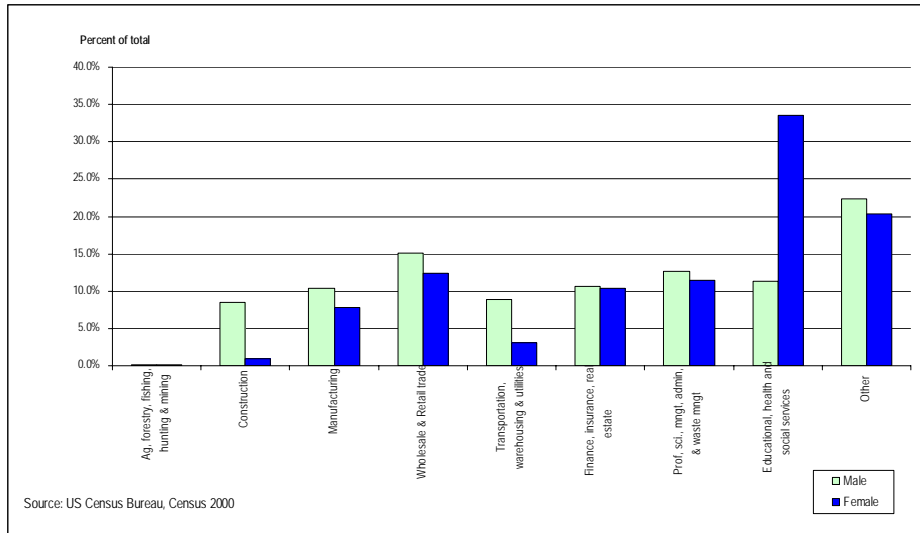
An estimated 7.1 percent of males 7.8 percent of females were unemployed in the region in the year 2000.<sup>3</sup>

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.

<sup>2</sup> US Census Data, Census 2000.

<sup>3</sup> 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 sideloaders-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 container ships. 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.<sup>4</sup>

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<sup>4</sup> New York and New Jersey Port Authority webpage: <http://www.panynj.gov/>

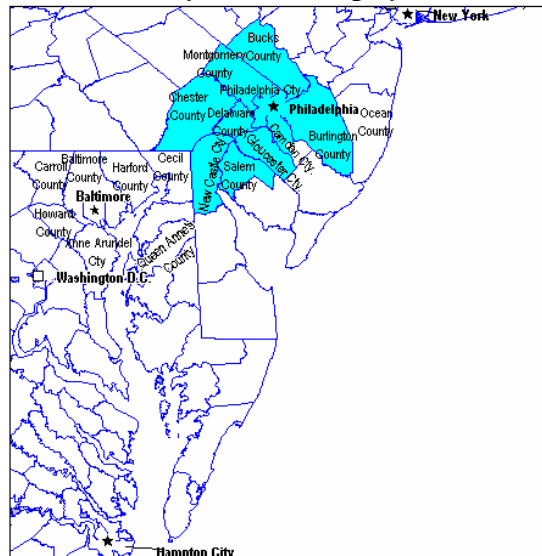
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# 15. Philadelphia, PA

## 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.<sup>1</sup>

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



Source: Table 3-1

## Demographics

### POPULATION

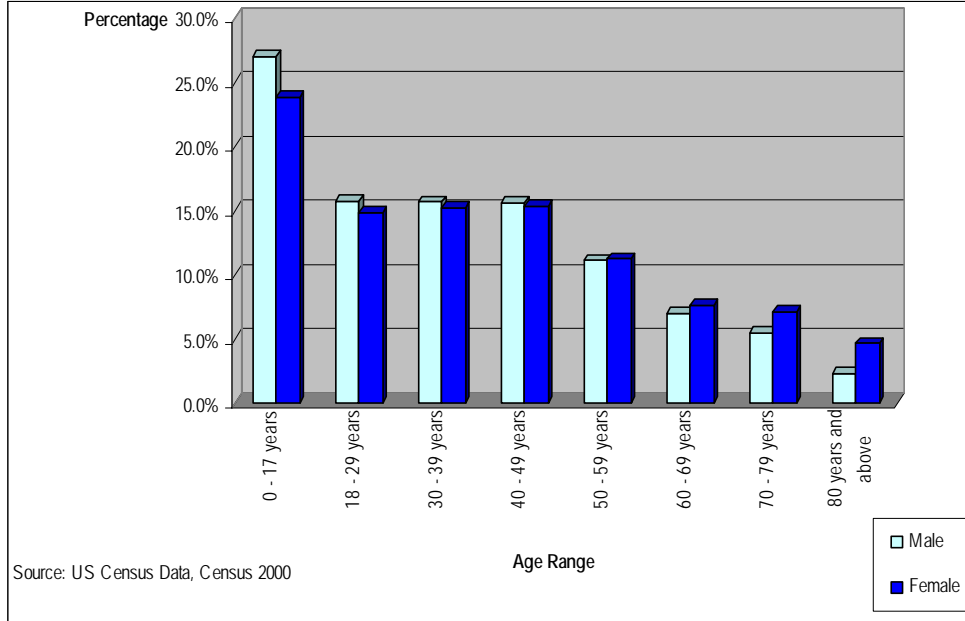
Total population of this MSA in 2000 was 5,687,147 according to the 2000 US Census. Of this total, 2,731,176 or 48 percent were males and 2,955,971 or 52 percent were females. The median age in the region in 2000 was 36.2 years; 34.8 for males and 37.5 for females. As shown in Figure 15-2, about 45 percent 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

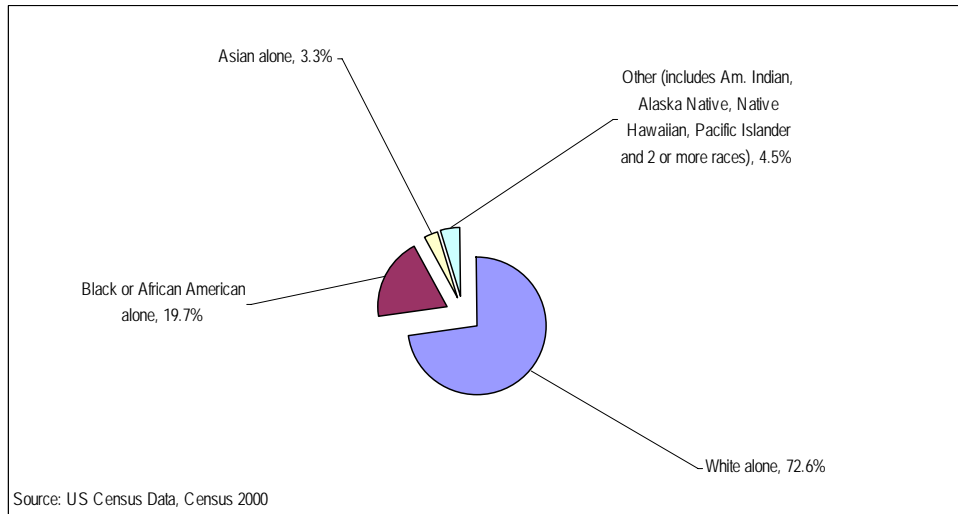
<sup>1</sup> Philadelphia Regional Port Authority: <http://www.philaport.com/history.htm>

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.<sup>2</sup>

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



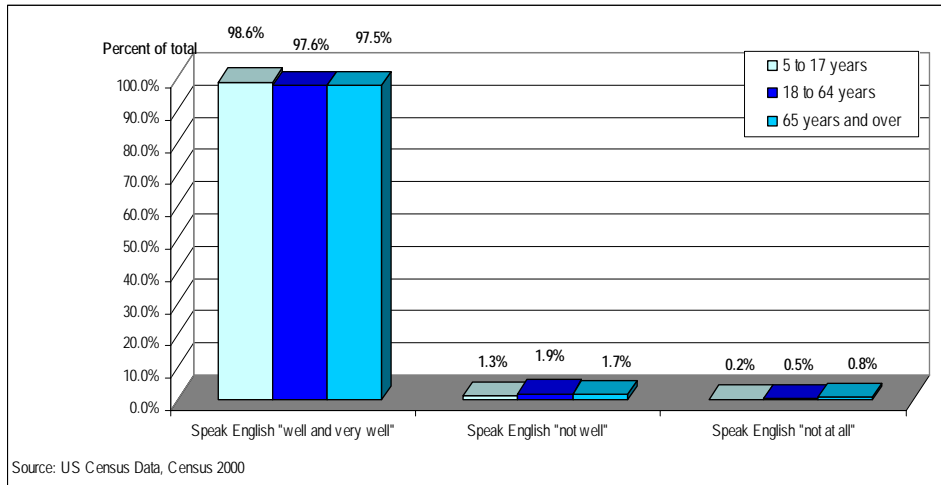
**Figure 15-3. Philadelphia, PA: Population by Race, 2000**



<sup>2</sup> 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**

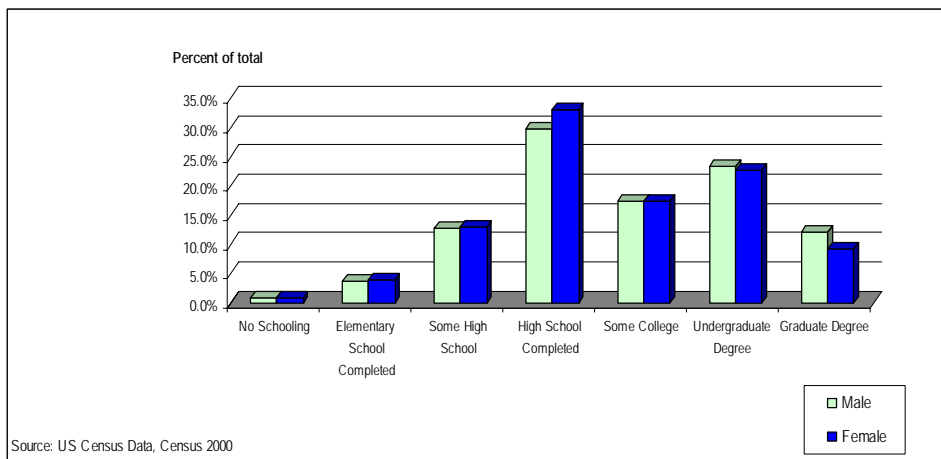


## EDUCATION

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**



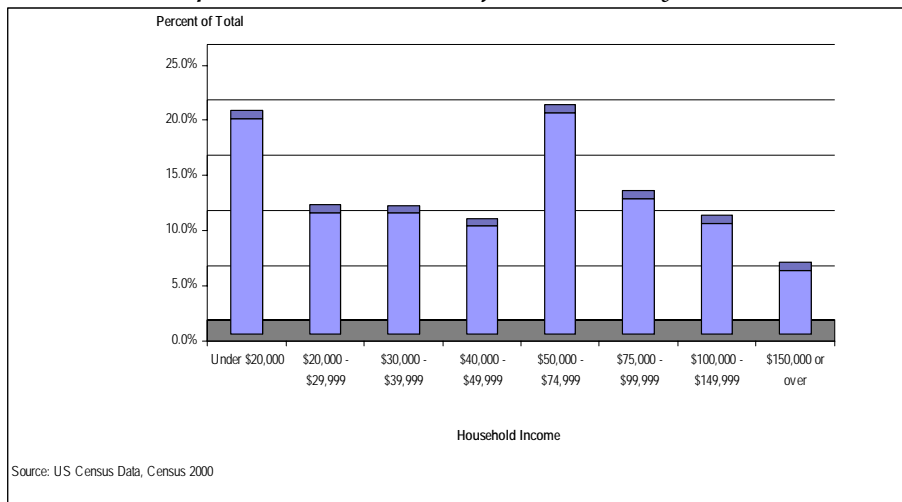
# Socio-Economic Characteristics

## 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.<sup>3</sup>

*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).

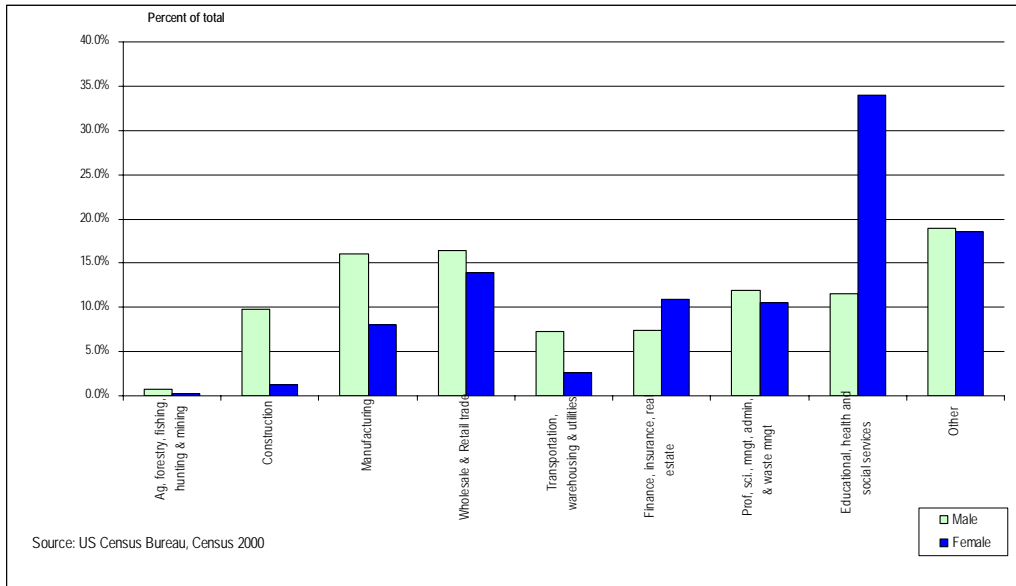
An estimated 6.1 percent of males and 6 percent of females were unemployed in the region in the year 2000.<sup>4</sup>

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.

<sup>3</sup> US Census Data, Census 2000.

<sup>4</sup> 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.<sup>5</sup>

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<sup>5</sup> Philadelphia Regional Port Authority: <http://www.philaport.com/history.htm>

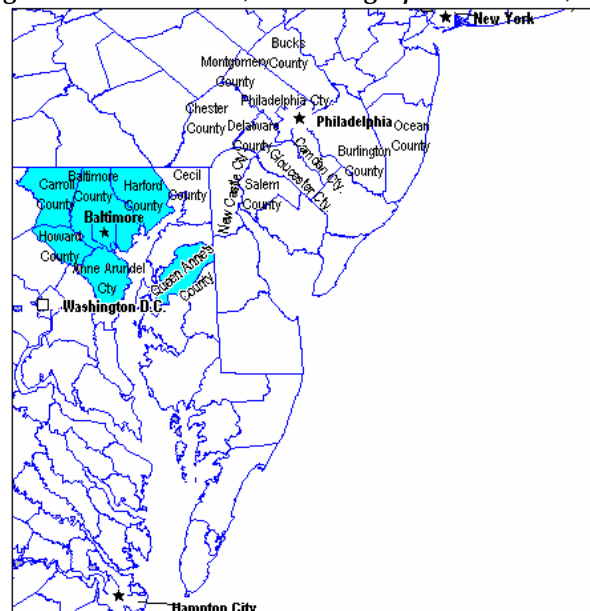
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# 16. Baltimore, MD

## 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. <sup>1</sup>

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



Source: Table 3-1

## Demographics

### POPULATION

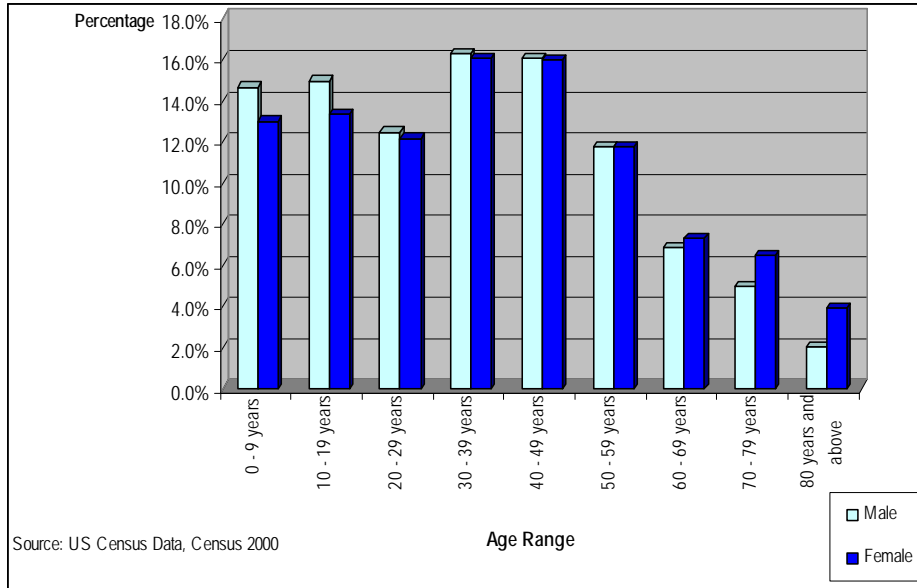
The total population of the Baltimore-Towson, MD Metropolitan Statistical area is 2,552,994 according to the 2000 US Census. Of the total population, 1,228,231 or 48.1 percent are males and 1,324,763 or 51.9 percent are females. The median age for the population is 36.3 years; 35.1 for males and 37.4 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

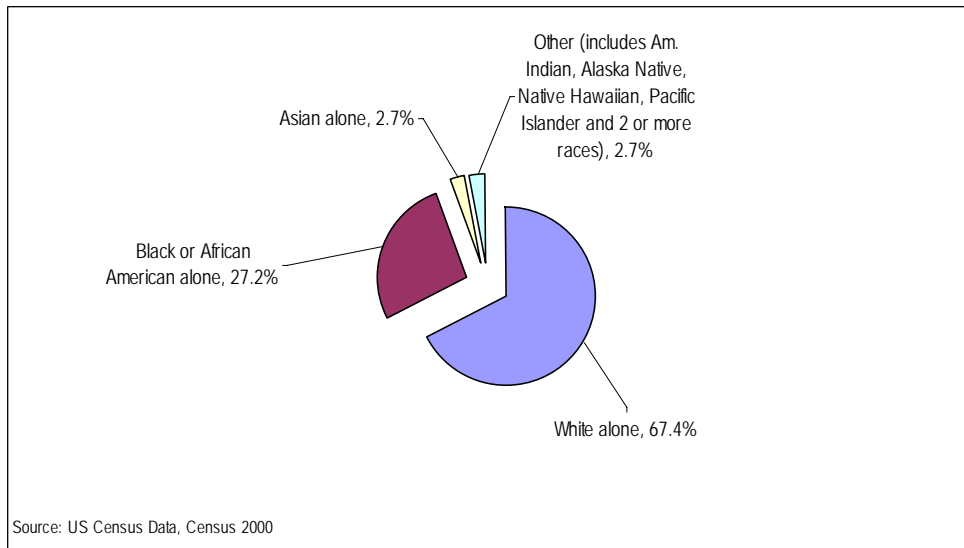
<sup>1</sup> Source: Maryland Department of Transportation. URL: <http://www.mdot.state.md.us>

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.<sup>2</sup>

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



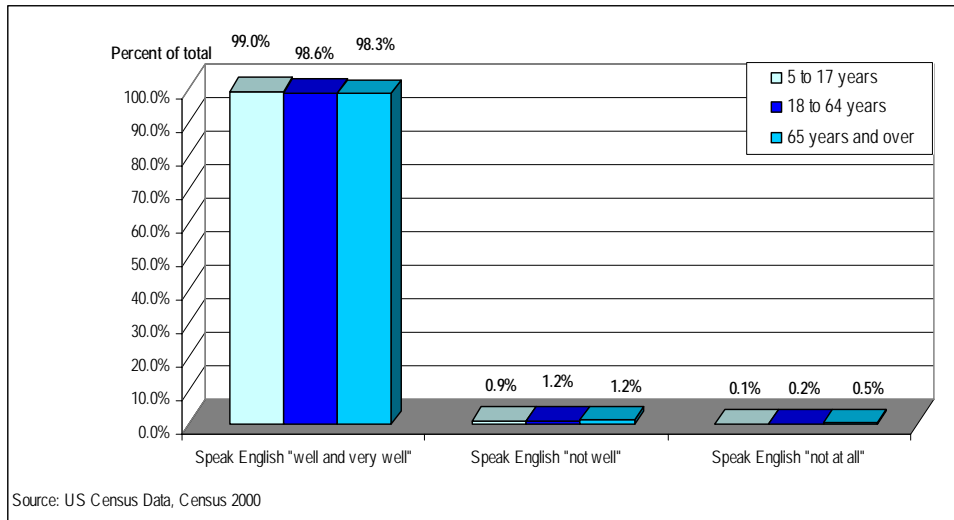
**Figure 16-3. Baltimore, MD: Population by Race, 2000**



<sup>2</sup> 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**

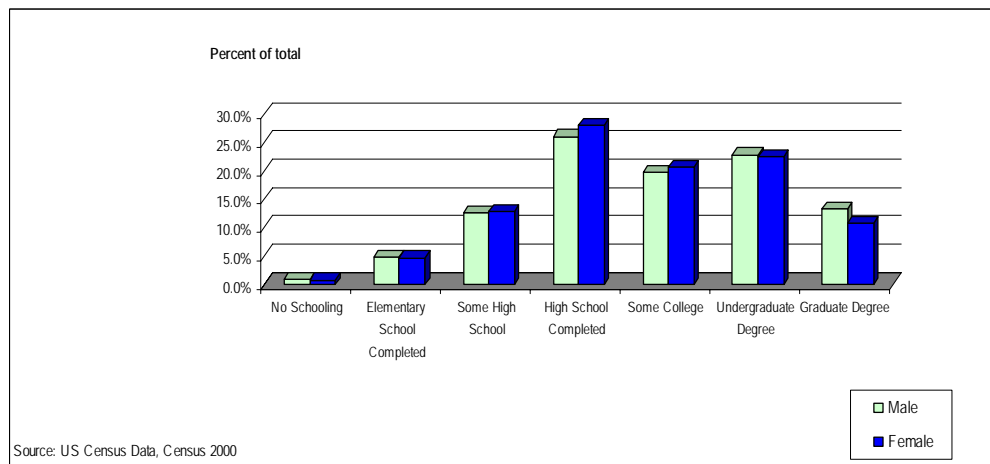


## EDUCATION

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.<sup>3</sup> 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**



<sup>3</sup> Source: Maryland State Archives. URL: <http://www.mdarchives.state.md.us>

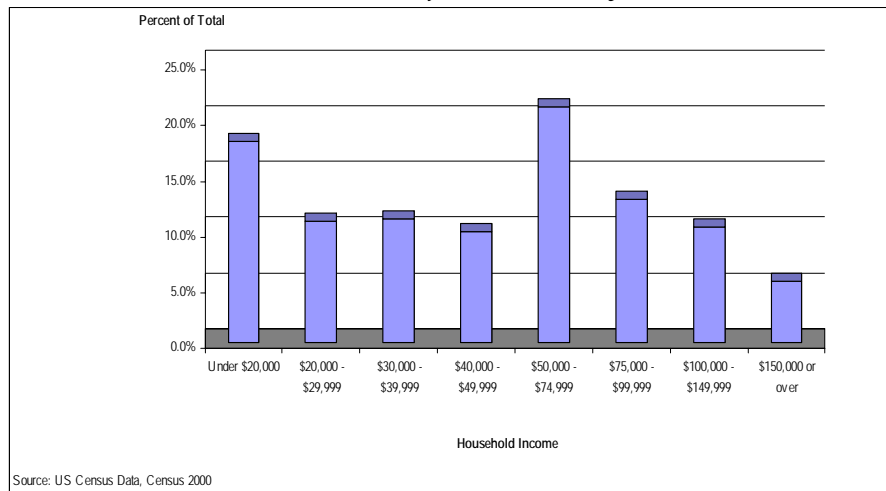
# Socio-Economic Characteristics

## 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.<sup>4</sup> 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.<sup>5</sup>

*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.<sup>6</sup>

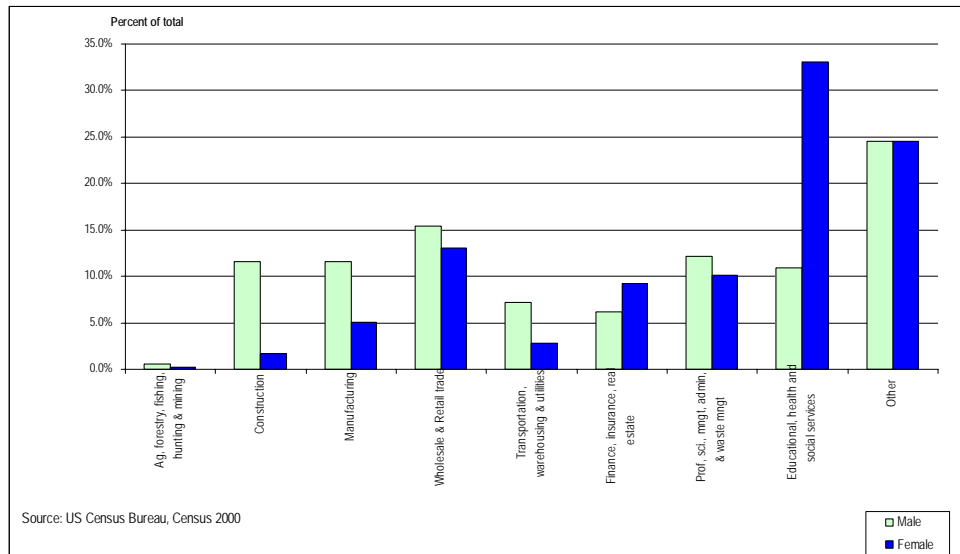
According to the 2000 US Census, an estimated 0.2 percent of males and 0.1 percent of females are employed in farming, fishing and forestry occupations. About 15.6 percent of males and 4.5 percent of females are employed in production, transportation and material moving occupations. The aforementioned 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.

<sup>4</sup> Source: Maryland Department of Transportation. URL: <http://www.mdot.state.md.us>

<sup>5</sup> Source: US Census Data, Census 2000

<sup>6</sup> 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.<sup>7</sup>

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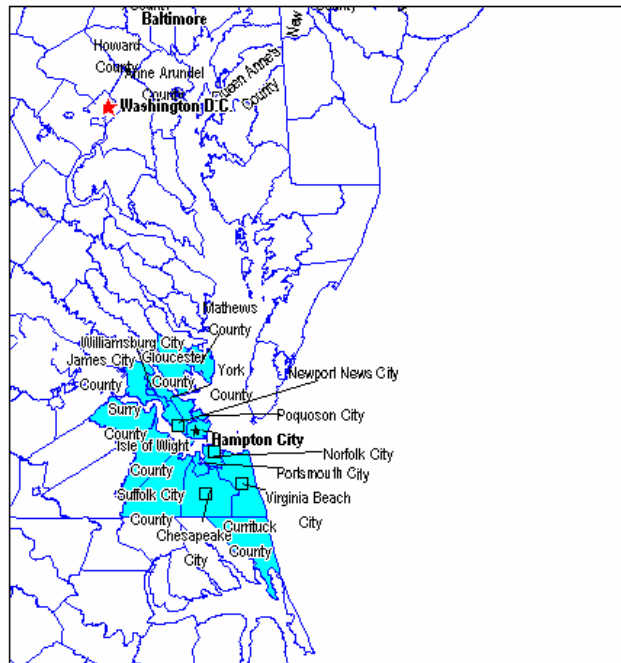
<sup>7</sup> Source: Maryland Department of Transportation website: <http://www.marylandports.com/>

# 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

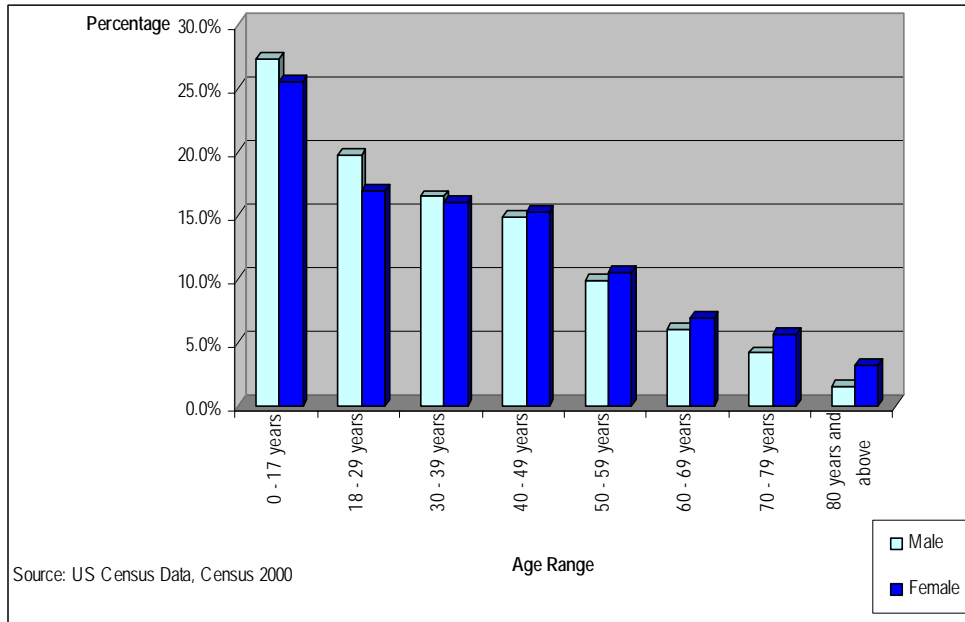
### POPULATION

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.

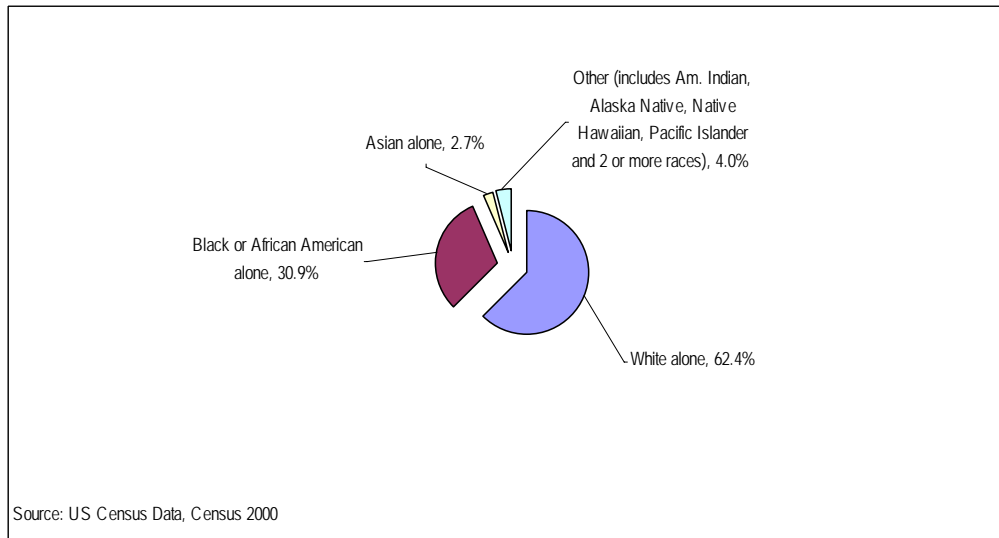
About 62.4 percent of the population in the region is white, 30.9 percent is Black or African American, 4.0 percent are considered 'others' (include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone), and 2.7 of the population is Asian (Figure 17- 3). In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

<sup>1</sup> US Census Data, Census 2000.

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

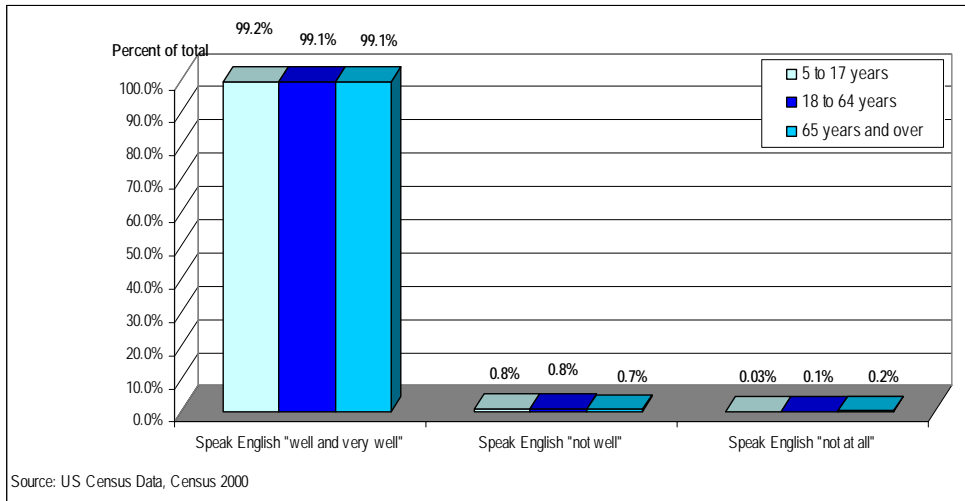


**Figure 17- 3. Hampton Roads, VA: Population by Race, 2000**



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**

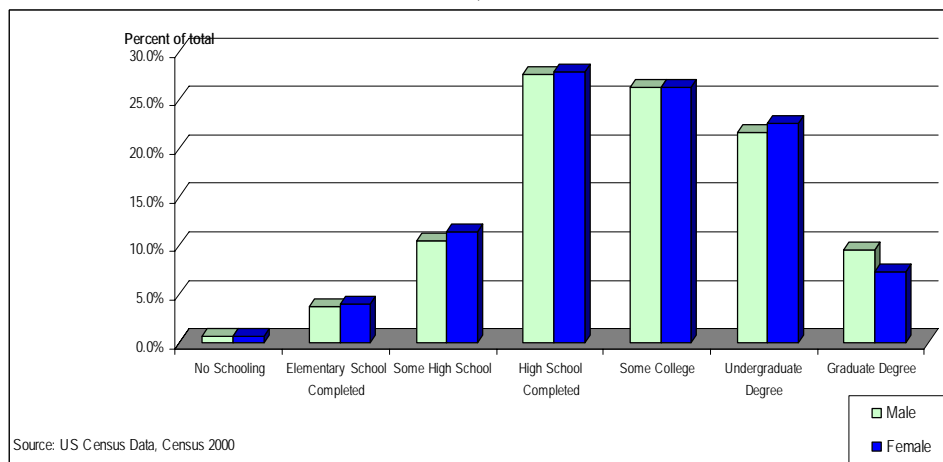


## EDUCATION

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. <sup>2</sup>

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



<sup>2</sup> Hampton Roads, VA Community Profile: <http://www.epodunk.com>

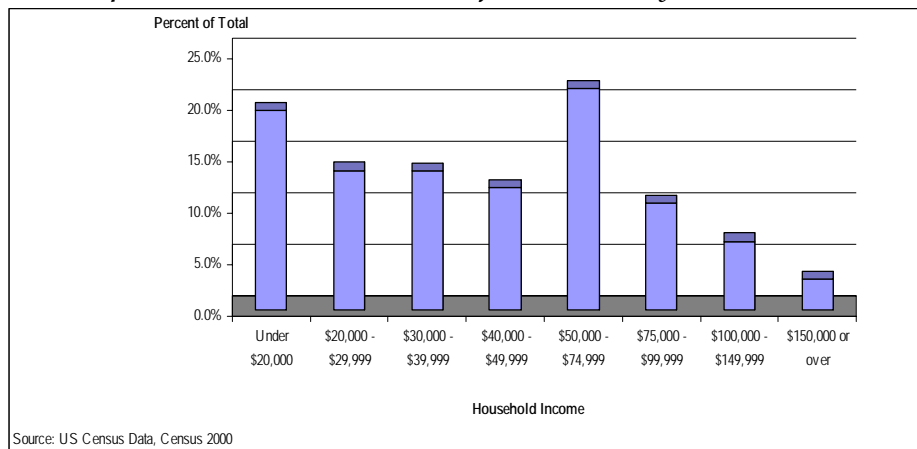
# Socio-Economic Characteristics

## 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.<sup>3</sup>

**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).

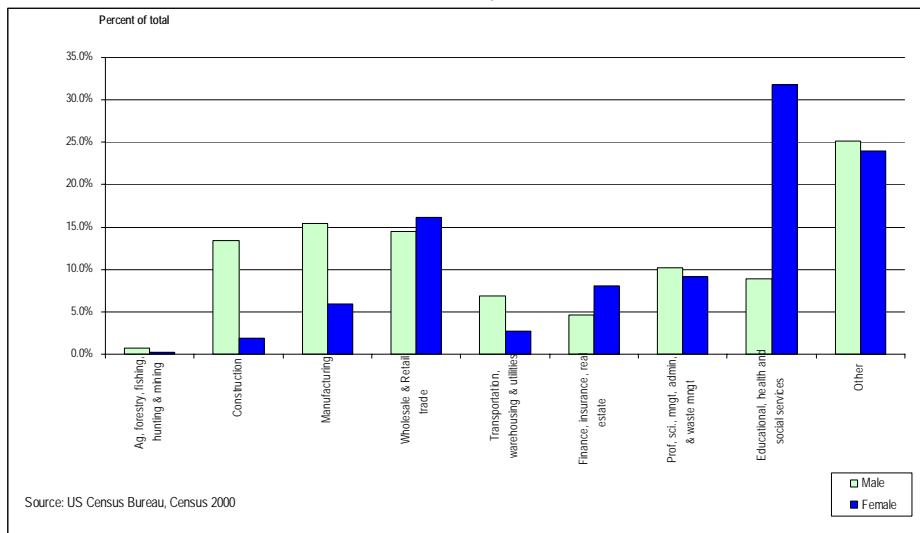
An estimated 4.4 percent of males and 5.8 percent of females were unemployed in the region in 2000.<sup>4</sup>

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.

<sup>3</sup> US Census Data, Census 2000.

<sup>4</sup> 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.<sup>5</sup>

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

<sup>5</sup> <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.<sup>6</sup>

### **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 has 256,000 square feet for dry storage. Its container storage has stacked capacity for 790 containers (two high) and

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<sup>6</sup> 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. <sup>7</sup>

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<sup>7</sup> Virginia Port Authority webpage: <http://www.vaports.com>

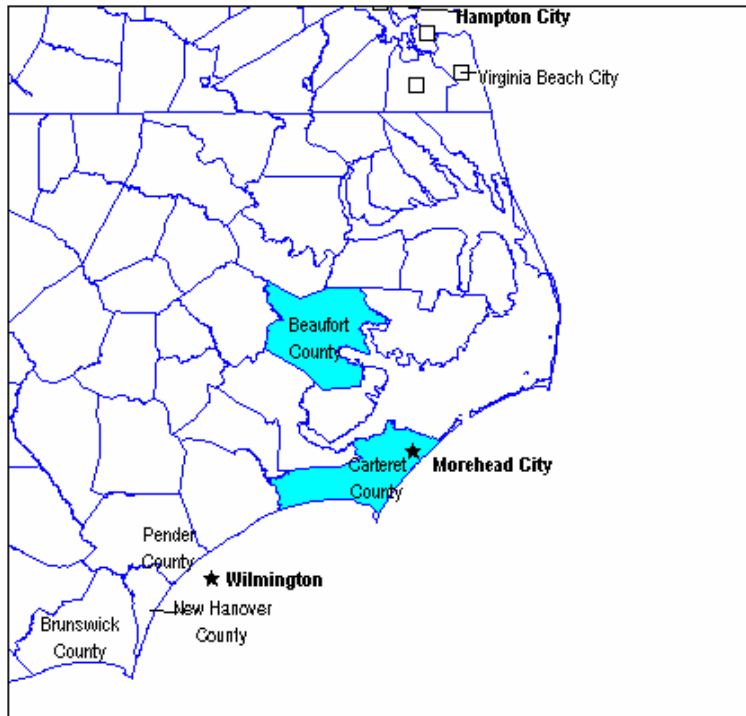
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# 18. Morehead City and Beaufort, NC

## 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

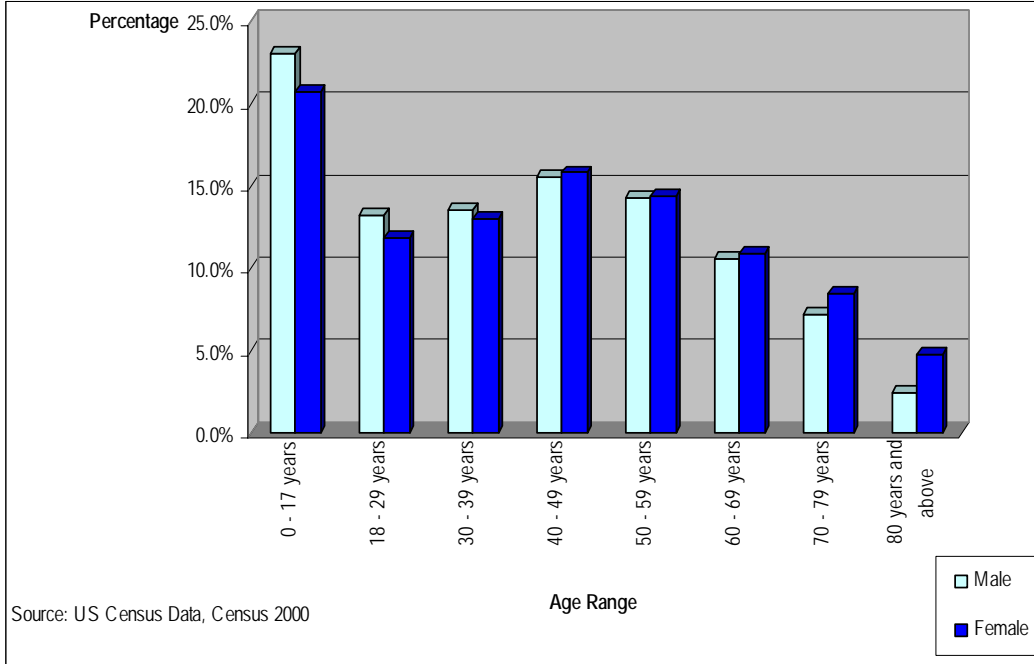
### POPULATION

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).

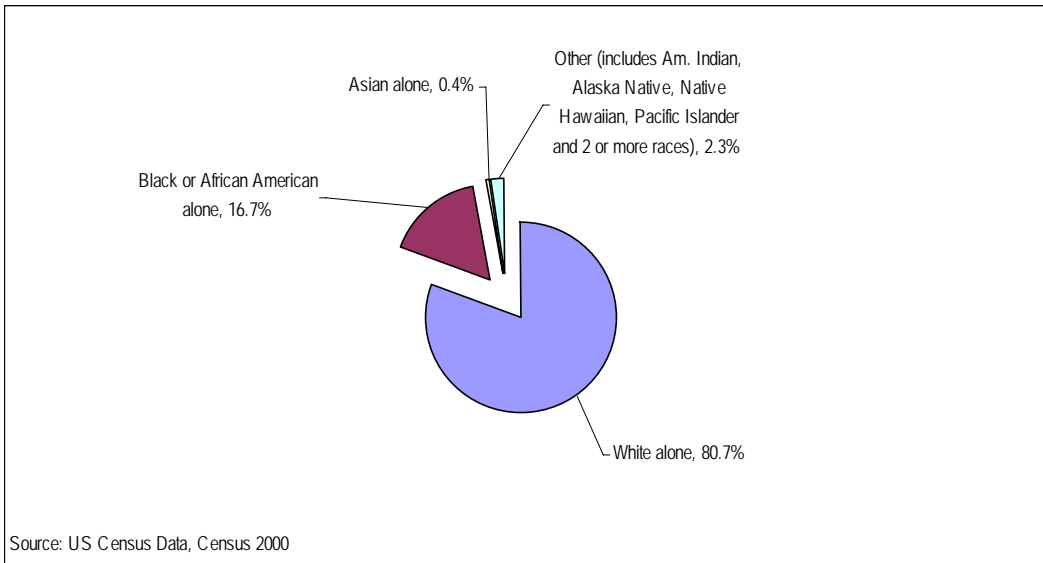
As portrayed by Figure 18-3, the majority of the population in the region is white (80.7 percent), followed by the Black or African American population (16.7 percent). 'Others' (include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) represent 2.3 percent 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.<sup>1</sup>

<sup>1</sup> US Census Data: Census 2000.

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

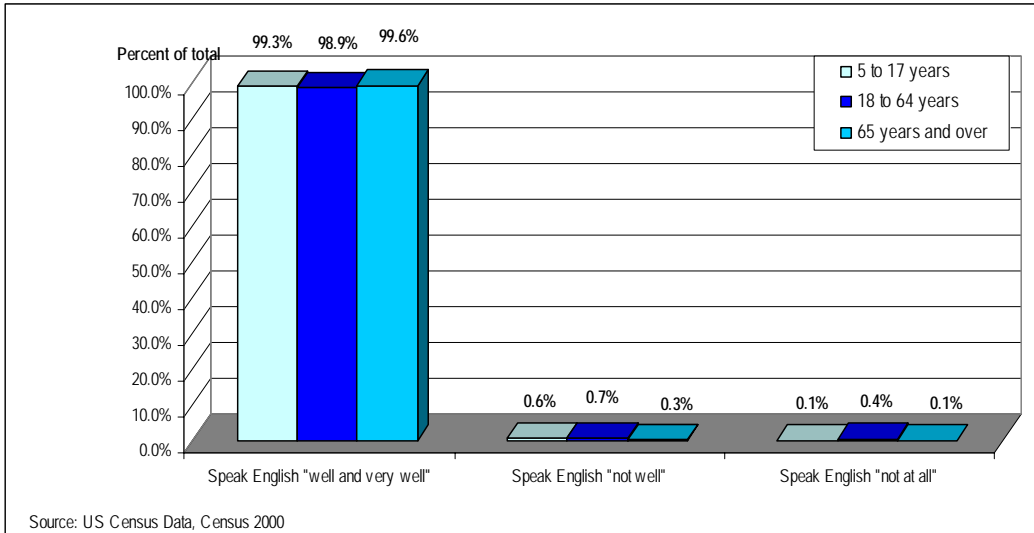


**Figure 18-3. Morehead City and Beaufort, NC: Population by Race, 2000**



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'.

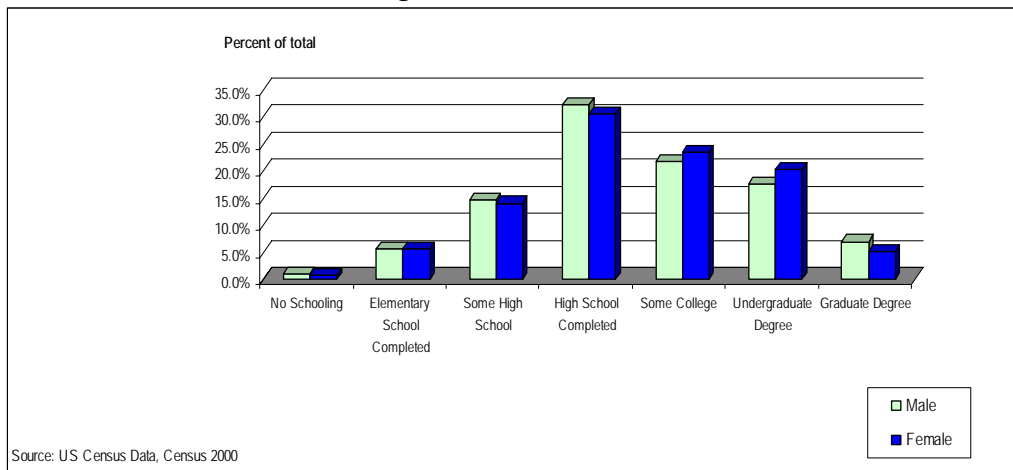
**Figure 18-4. Morehead City and Beaufort, NC: Ability to Speak English by Age Group, 2000**



## 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**



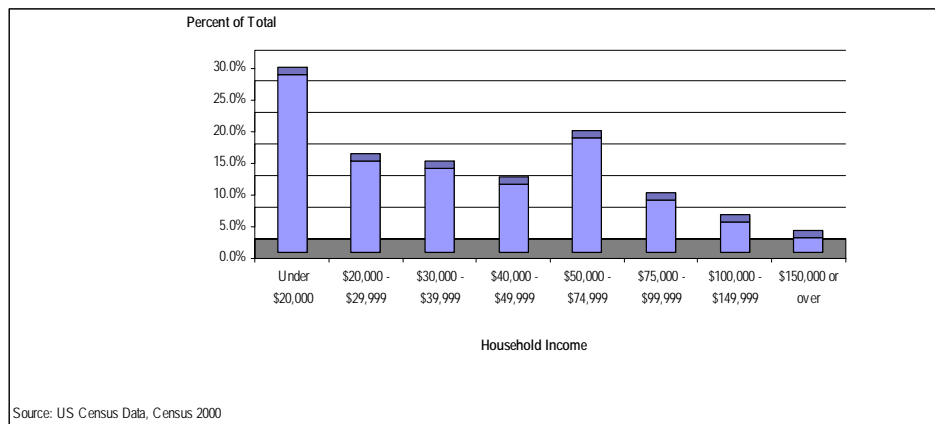
# Socio-Economic Characteristics

## 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.<sup>2</sup>

*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).

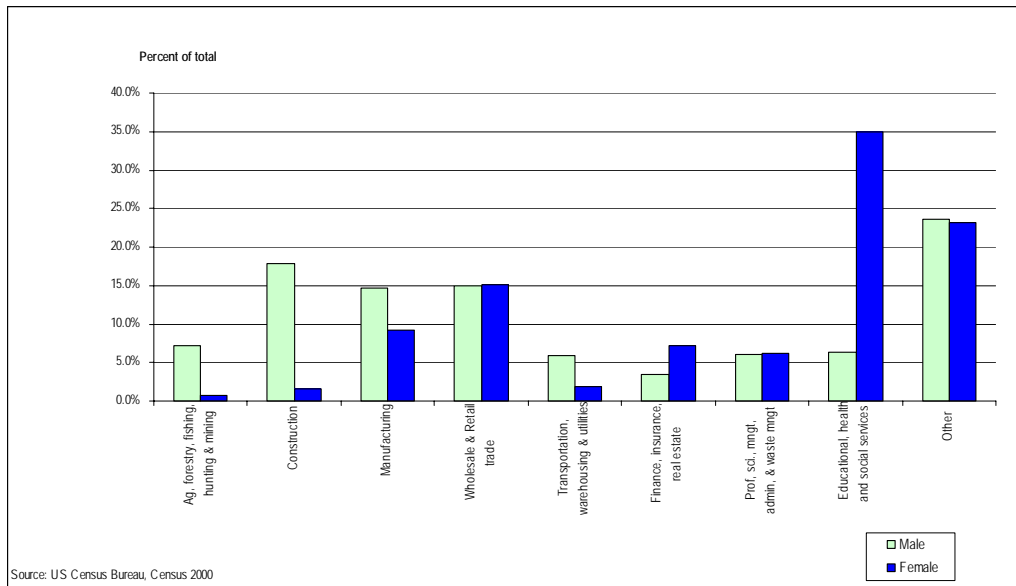
An estimated 4.9 percent of males and 6.1 percent of females were unemployed in the region in the year 2000.<sup>3</sup>

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.

<sup>2</sup> US Census Data, Census 2000.

<sup>3</sup> 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.<sup>4</sup>

#### **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

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<sup>4</sup> URL: [http://www.choosingcruising.co.uk/cruiseweb/Cruises\\_Calling.asp?nCall=Morehead+City&nCat=P](http://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.<sup>5</sup>

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<sup>5</sup> North Carolina Ports website: <http://www.ncports.com>

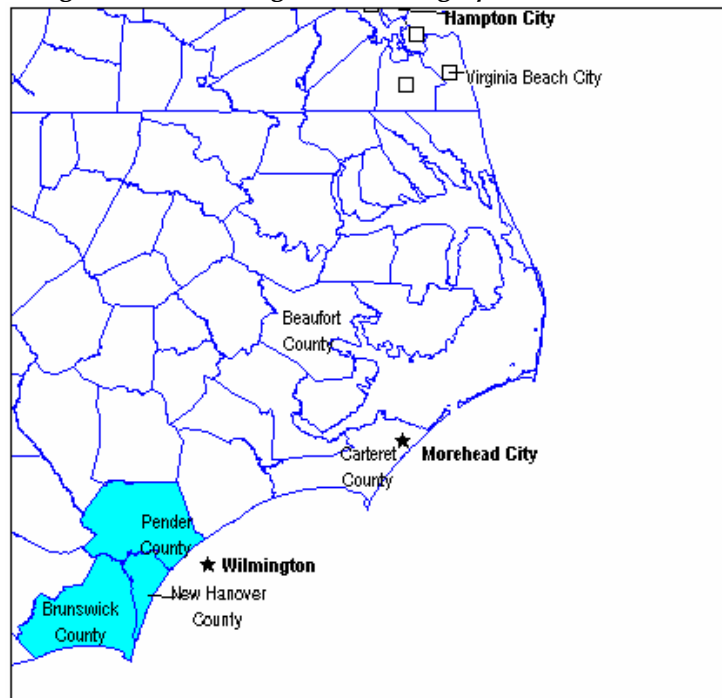
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# 19. Wilmington, NC

## 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

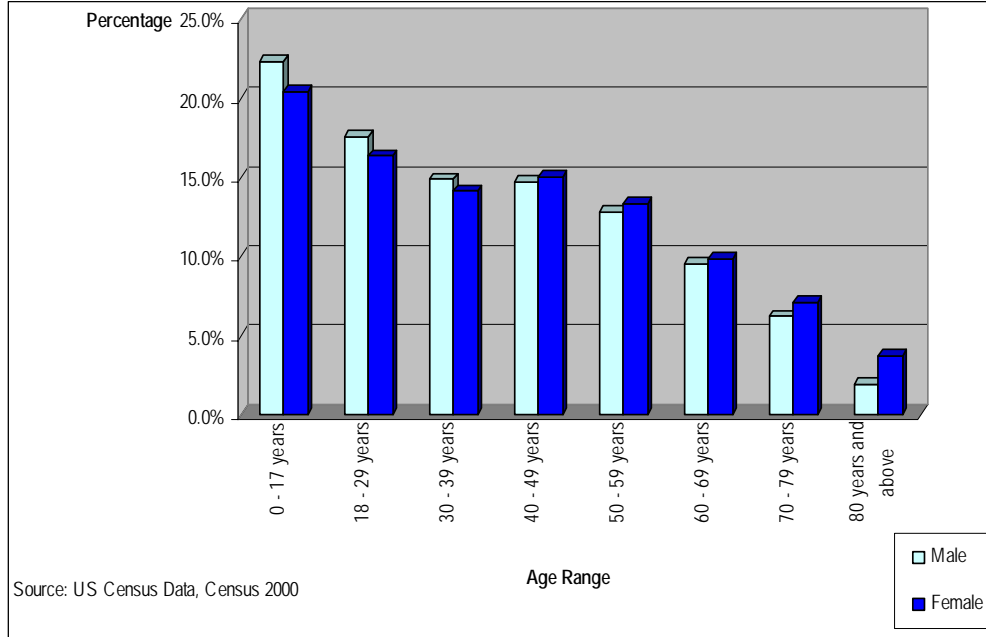
### POPULATION

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.

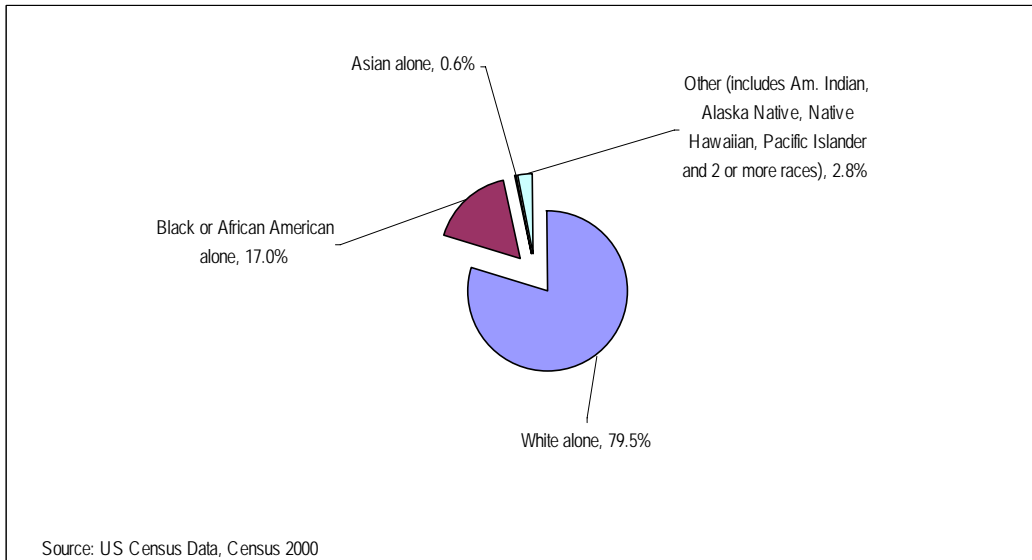
The majority of the population is white (79.5 percent); followed by the Black or African American population, which represents 17 percent of the total population. 'Others' (which include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) represent 2.8 percent 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.<sup>1</sup>

<sup>1</sup> US Census Data, Census 2000.

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

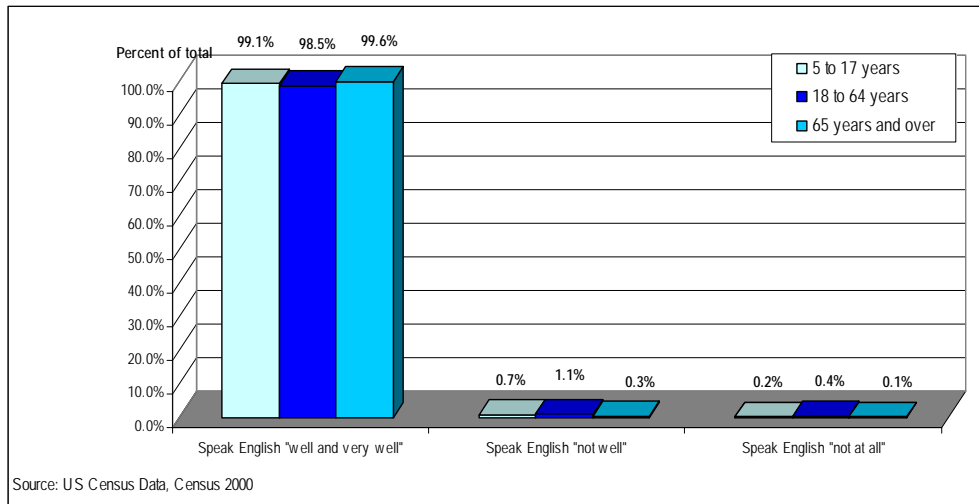


**Figure 19-3. Wilmington, NC: Population by Race, 2000**



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**

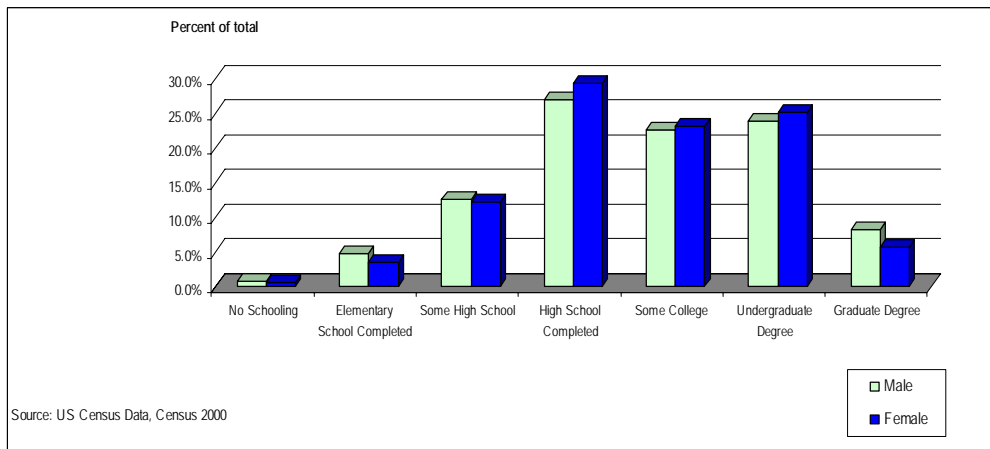


## EDUCATION

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**



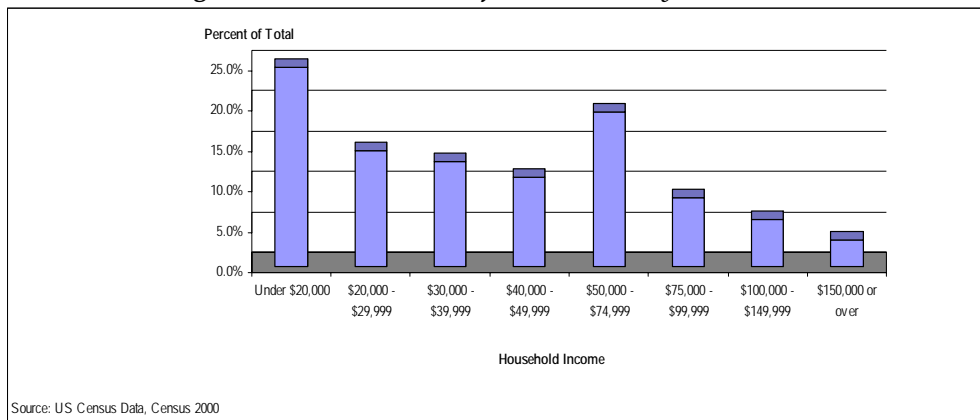
# Socio-Economic Characteristics

## 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.<sup>2</sup>

*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).

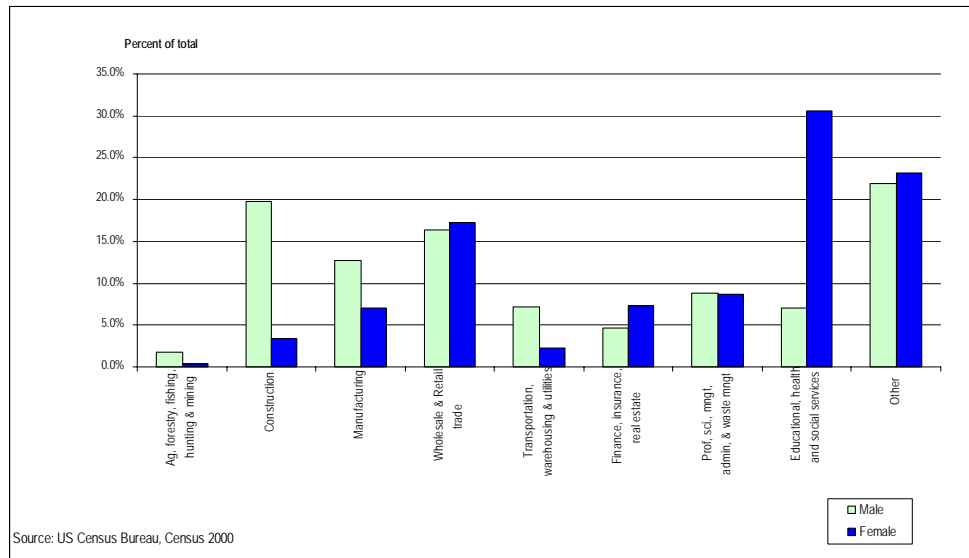
An estimated 5.2 percent of males and 5.7 percent of females were unemployed in the region in the year 2000.<sup>3</sup>

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.

<sup>2</sup> US Census Data, Census 2000.

<sup>3</sup> 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.<sup>4</sup>

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<sup>4</sup> North Carolina Ports website: <http://www.ncports.com>

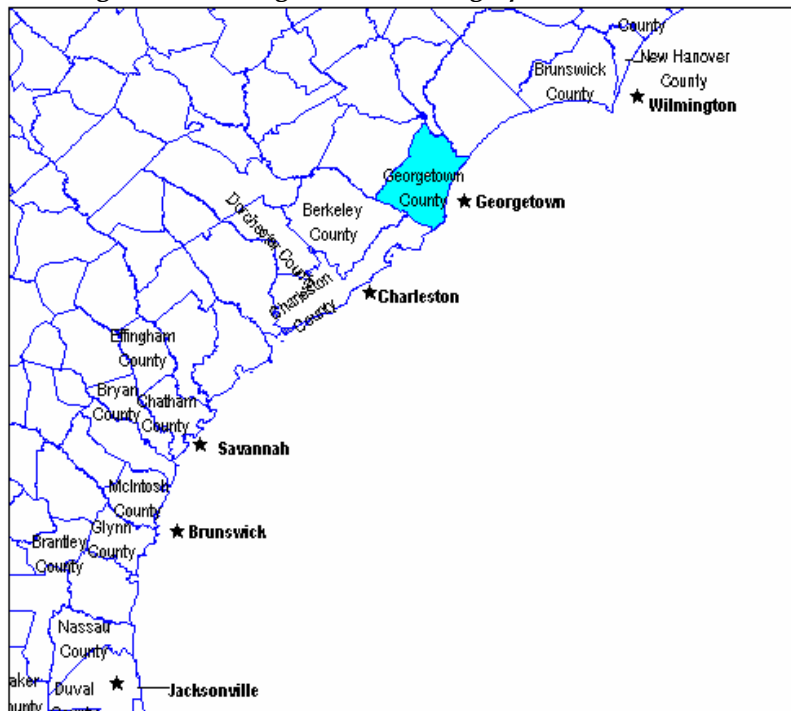
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# 20. Georgetown, SC

## 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

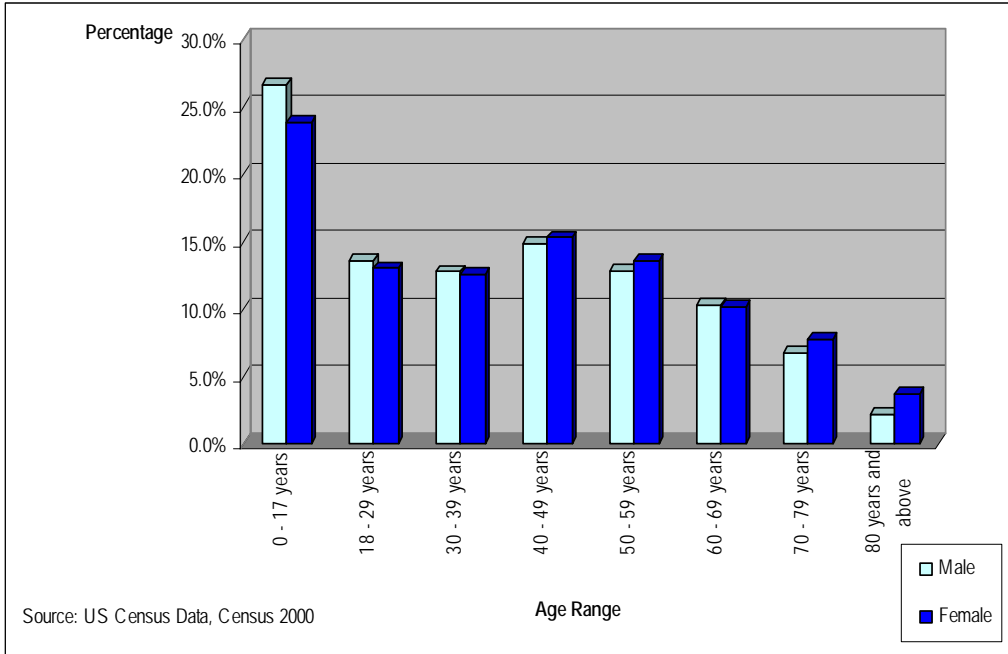
### POPULATION

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).

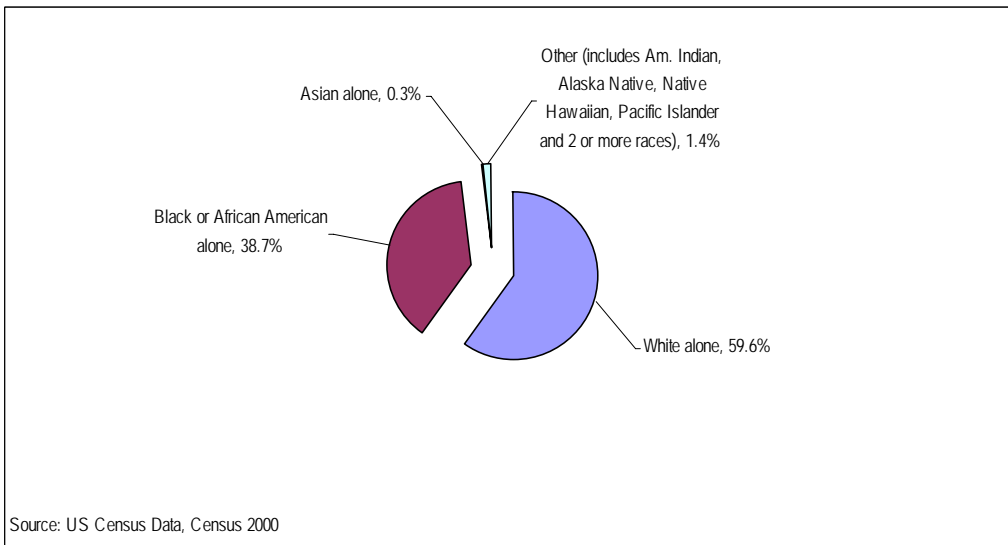
As portrayed by Figure 20-3, 59.6 percent of the population in the region is white, followed by the Black or African American population, which represents 38.7 percent of the total population. ‘Others’ (which include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more 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.<sup>1</sup>

<sup>1</sup> US Census Data, Census 2000.

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

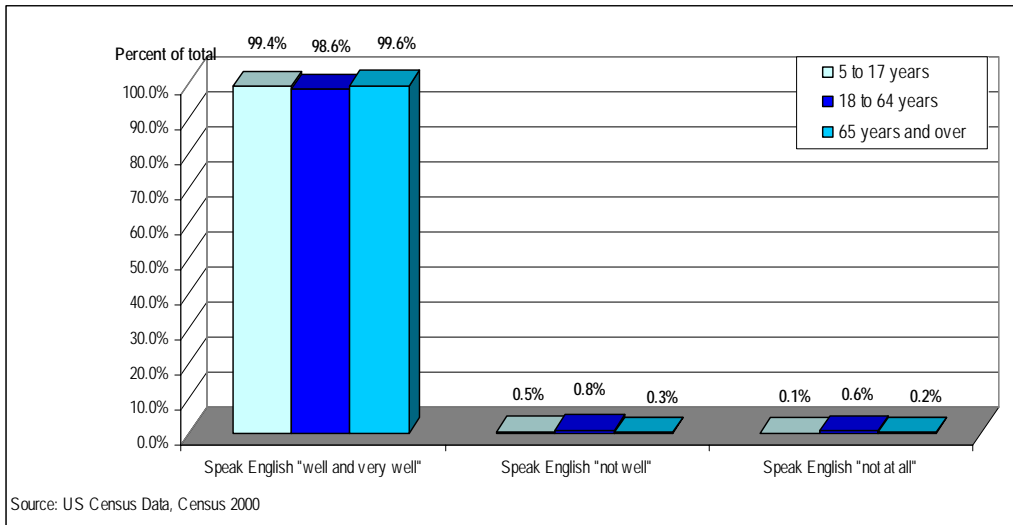


**Figure 20-3. Georgetown, SC: Population by Race, 2000**



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'.

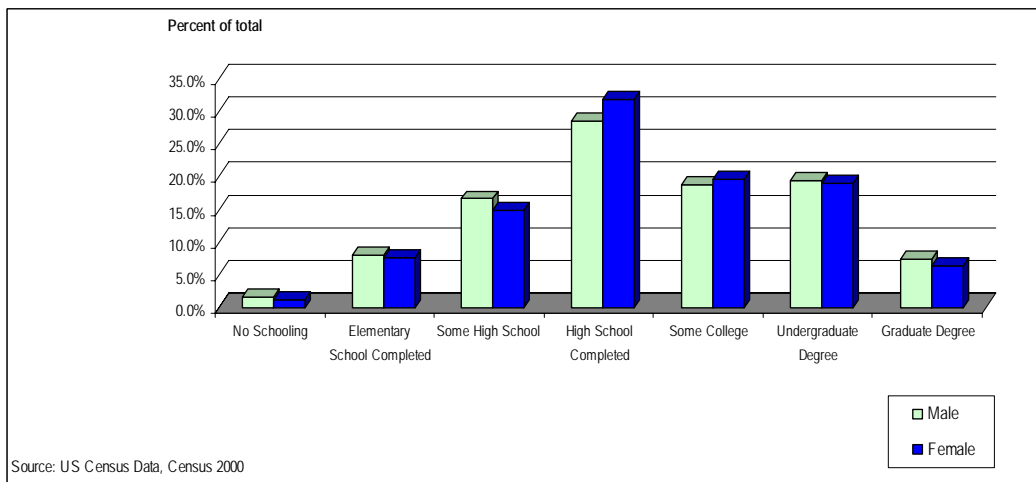
**Figure 20-4. Georgetown, SC: Ability to Speak English by Age Groups, 2000**



## 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**



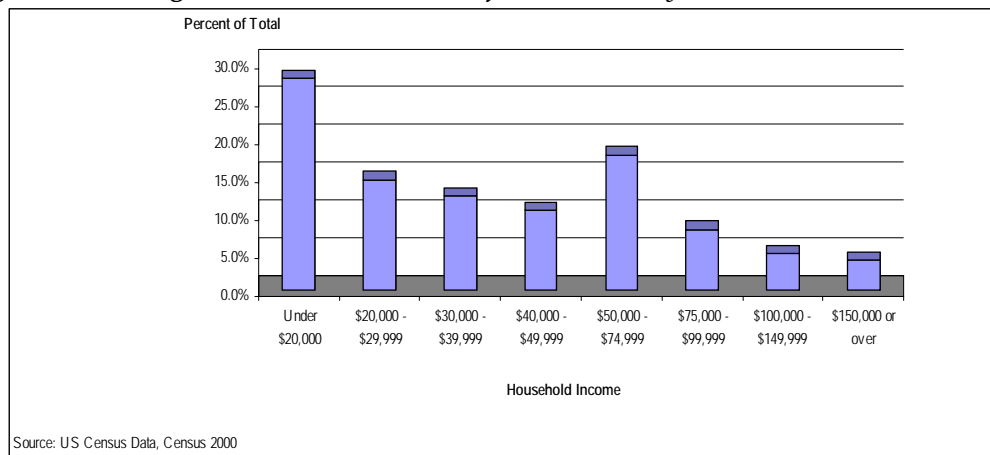
# Socio-Economic Characteristics

## 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 fell 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.<sup>2</sup>

*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 in 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.

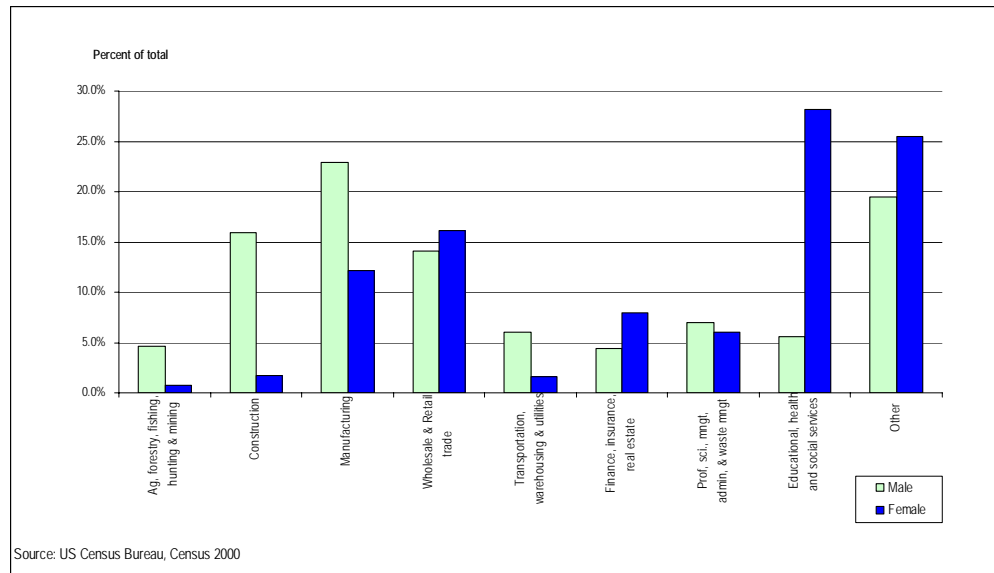
An estimated 6.2 percent of males and females were unemployed in 2000 in the region.<sup>3</sup>

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.

<sup>2</sup> US Census Data, Census 2000.

<sup>3</sup> 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.<sup>4</sup>

<sup>4</sup> South Carolina State Port Authority: [http://www.port-of-charleston.com/term\\_and\\_infra/georgetown/PortGeorgetown.asp](http://www.port-of-charleston.com/term_and_infra/georgetown/PortGeorgetown.asp)

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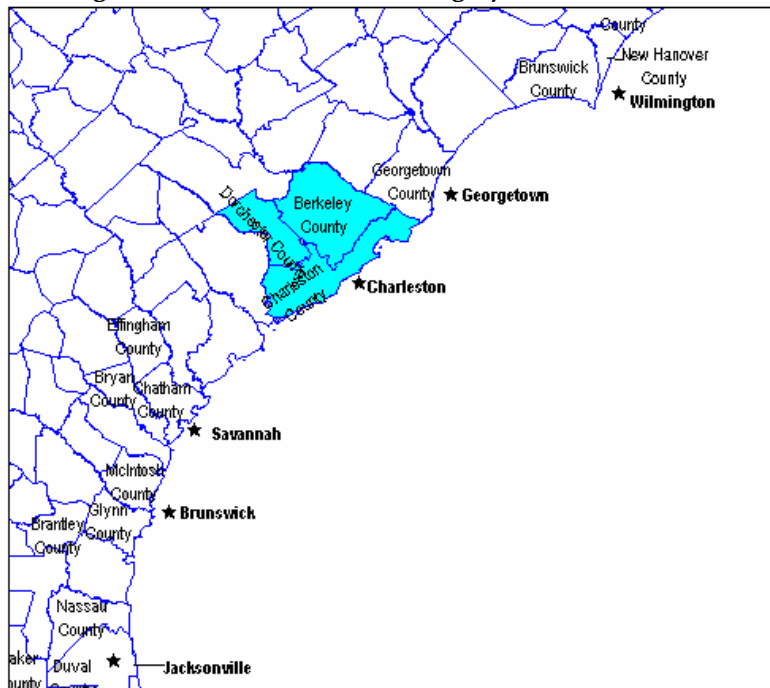


# 21. Charleston, SC

## 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

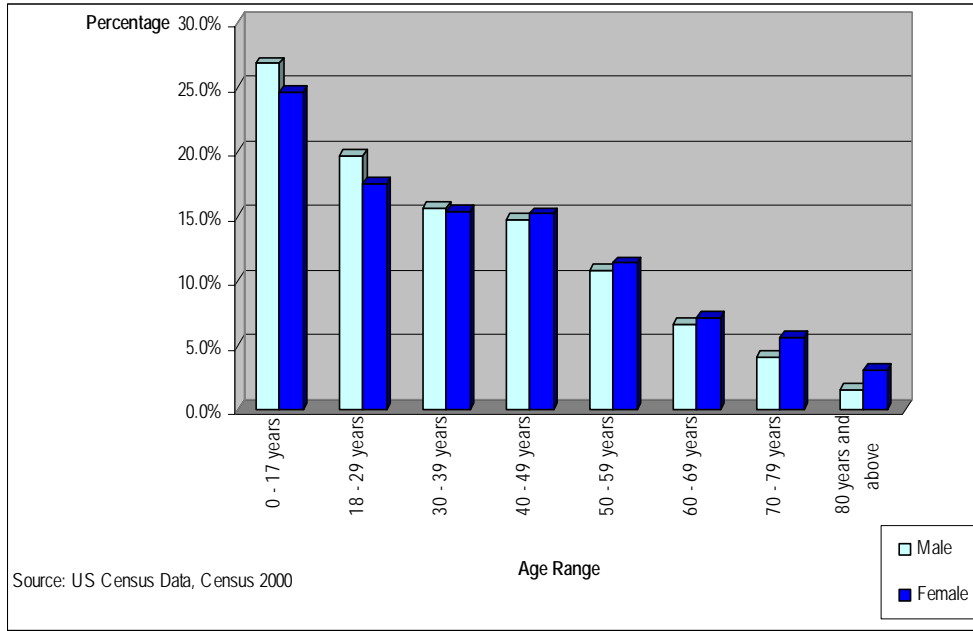
### POPULATION

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).

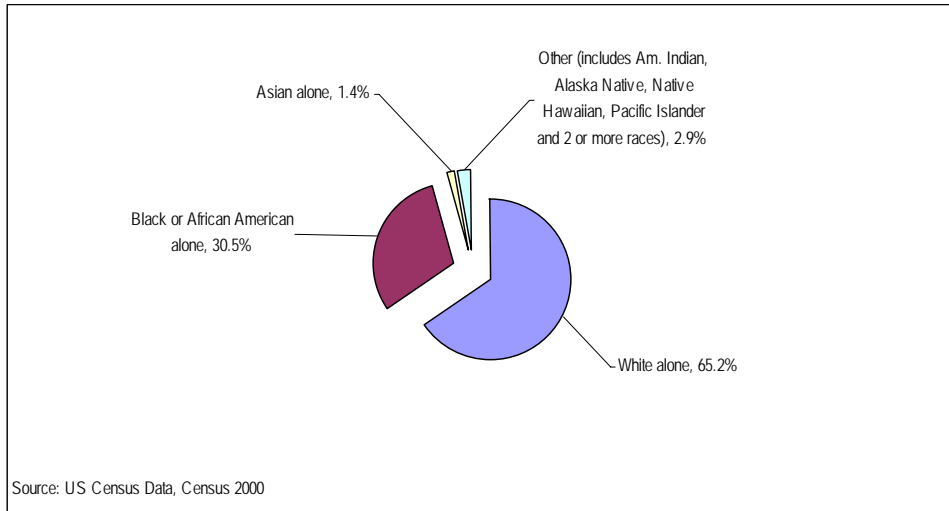
The majority of the population in the region is white (65.2 percent). The Black or African American population represents 30.5 percent of the total population. 'Others' (which include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) represent 2.9 percent 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.<sup>1</sup>

<sup>1</sup> Source: US Census Data, Census 2000.

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

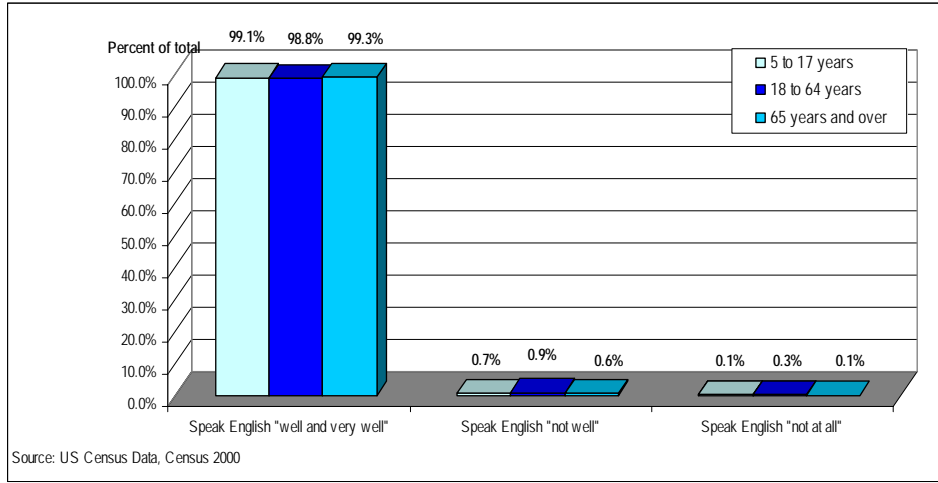


**Figure 21-3. Charleston, SC: Population by Race, 2000**



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**

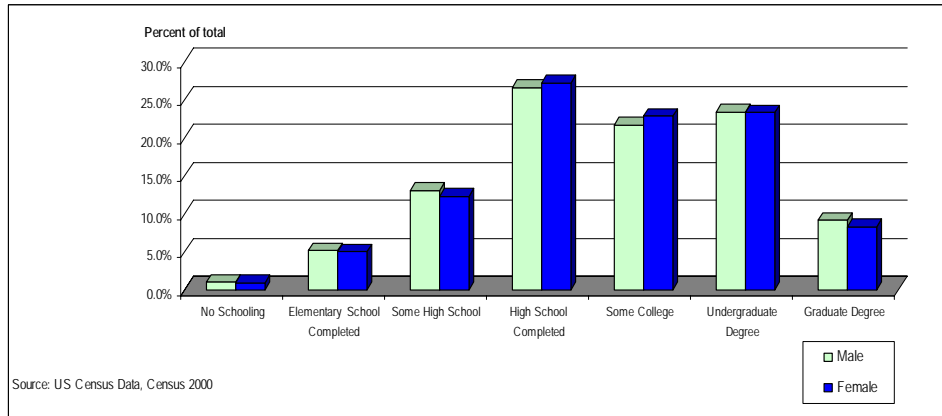


## EDUCATION

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.<sup>2</sup>

**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).

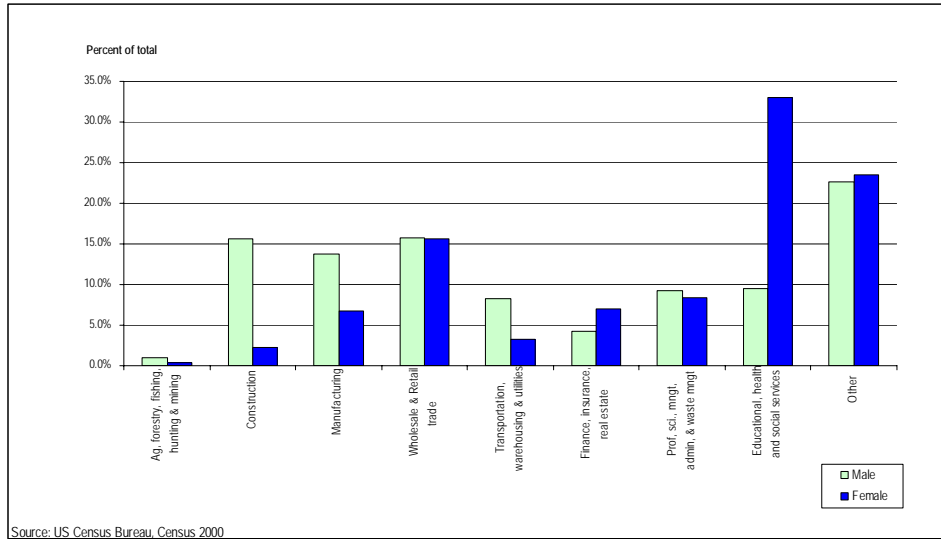
An estimated 4.9 percent of males and 5.8 percent of females were unemployed in the region in the year 2000.<sup>3</sup>

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.

<sup>2</sup> Source: US Census Data, Census 2000.

<sup>3</sup> 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.<sup>4</sup>

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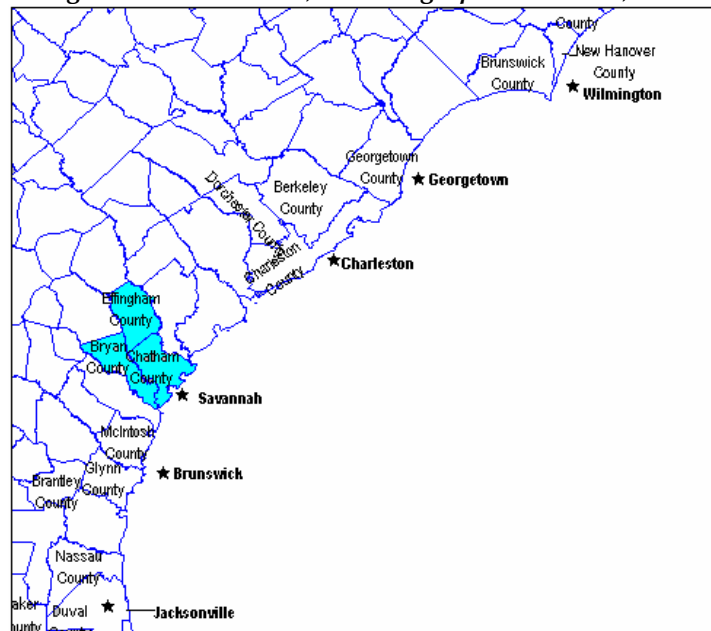
<sup>4</sup> South Carolina State Port Authority website: [http://www.port-of-charleston.com/Term\\_and\\_Infra/Charleston/whycharleston.asp](http://www.port-of-charleston.com/Term_and_Infra/Charleston/whycharleston.asp)

# 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

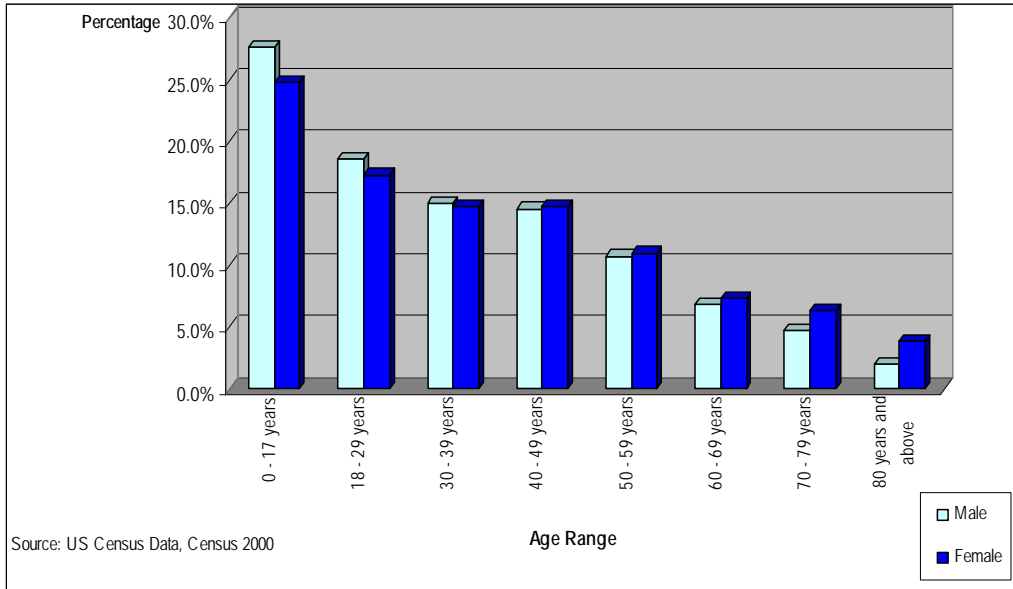
### POPULATION

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).

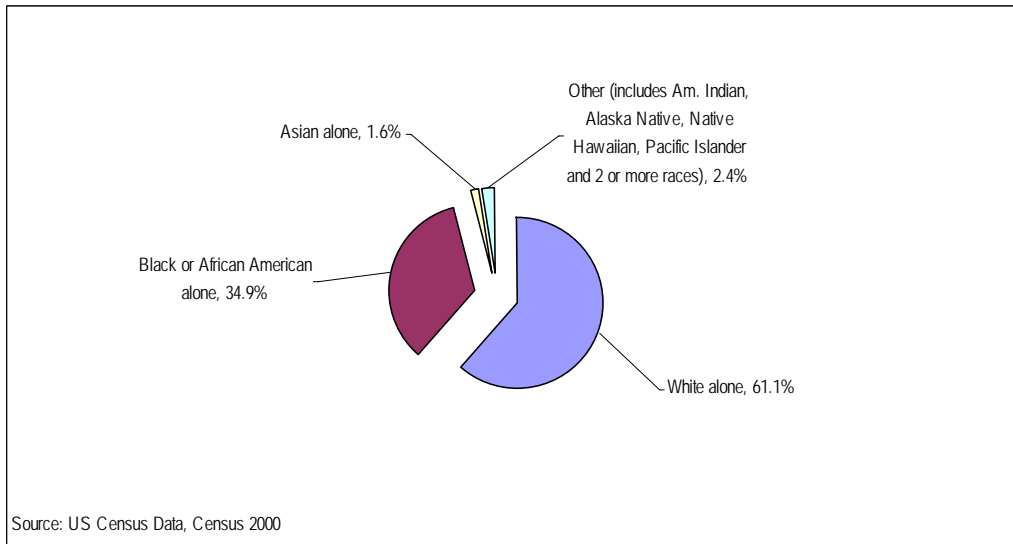
The majority of the population in the region is white (61.1 percent), followed by the Black or African American population, which represents 34.9 percent of the total population. 'Others' (include American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) represent 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<sup>1</sup>.

<sup>1</sup> US Census Data, Census 2000.

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



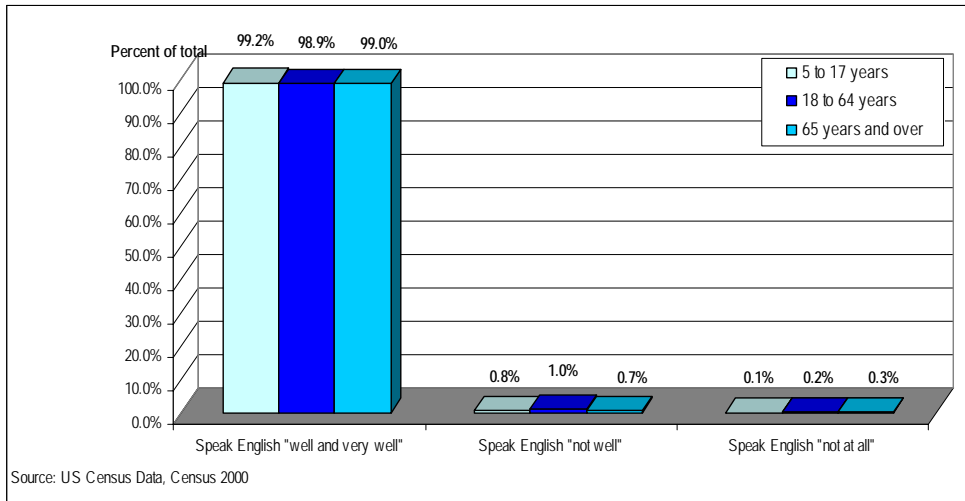
**Figure 22-3. Savannah, GA: Population by Race, 2000**





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**

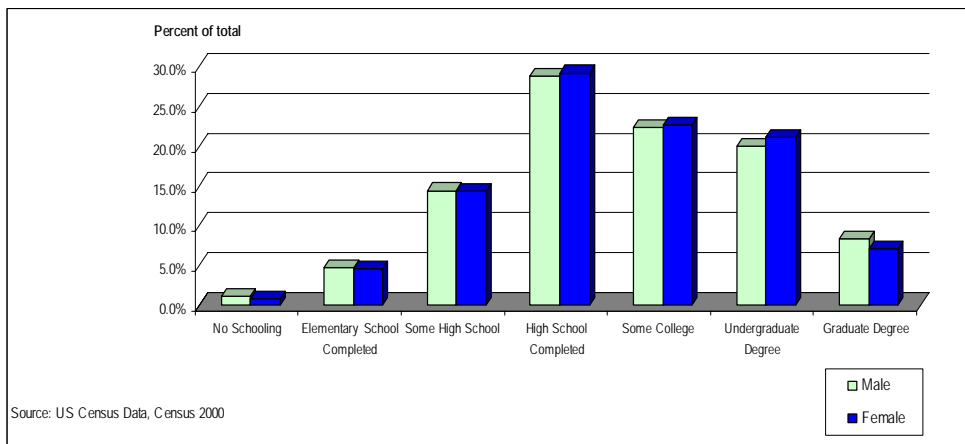


## EDUCATION

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**



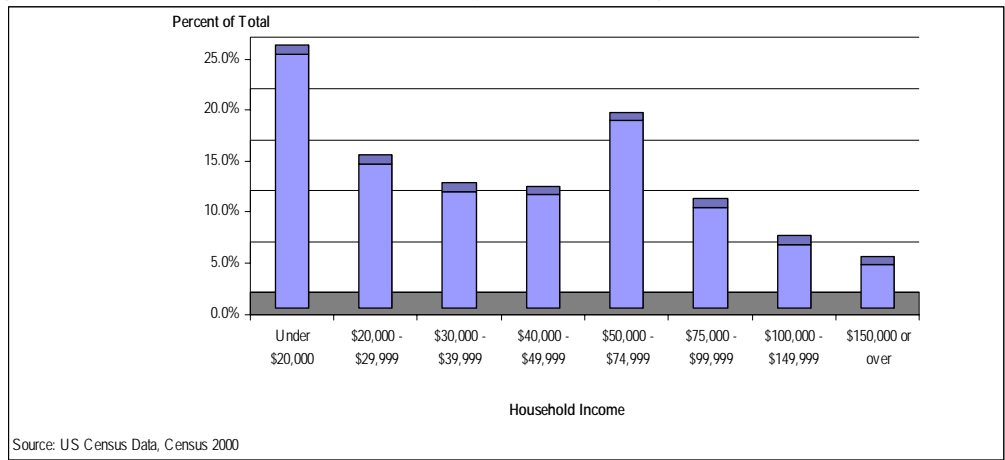
# Socio-Economic Characteristics

## 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.<sup>2</sup>

*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.

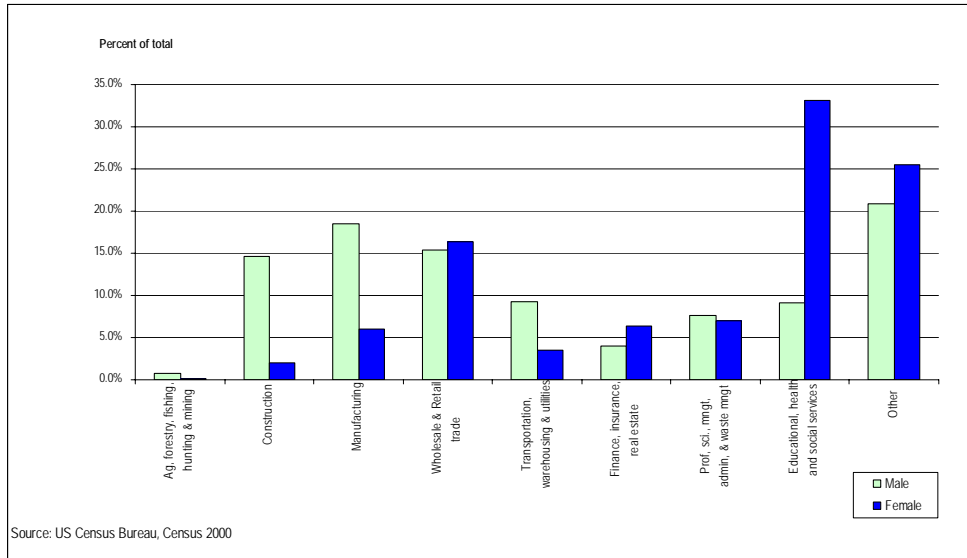
An estimated 4.9 percent of males and 5.9 percent of females were unemployed in the year 2000.<sup>3</sup>

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.

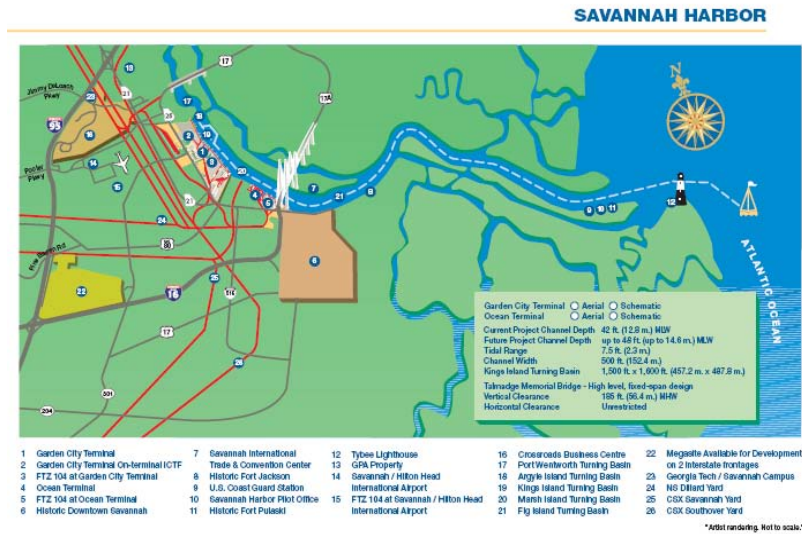
<sup>2</sup> US Census Data, Census 2000.

<sup>3</sup> 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.<sup>4</sup>

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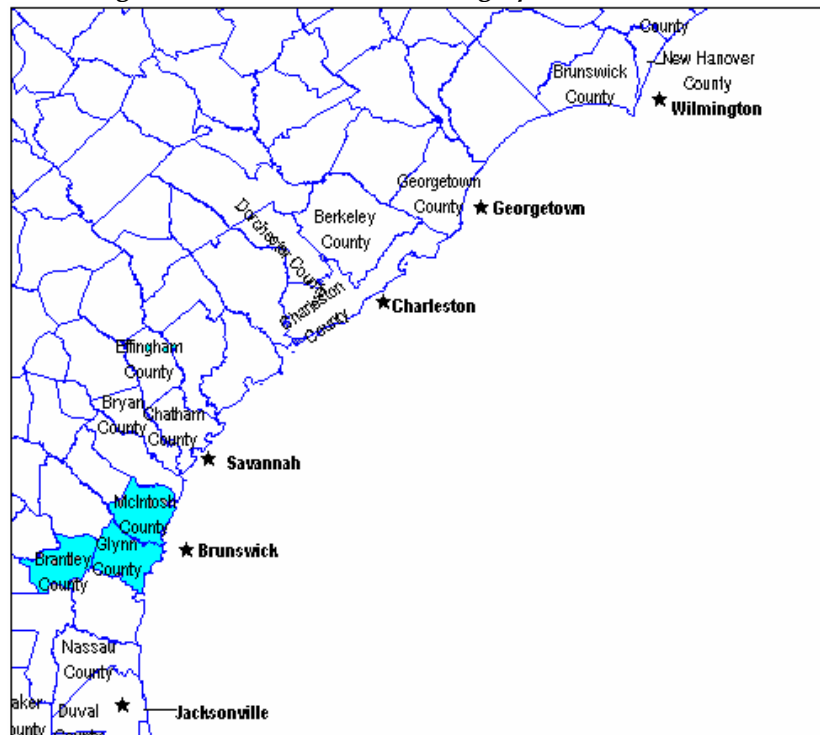
<sup>4</sup> Georgia Ports Authority website: <http://www.gaports.com>

# 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

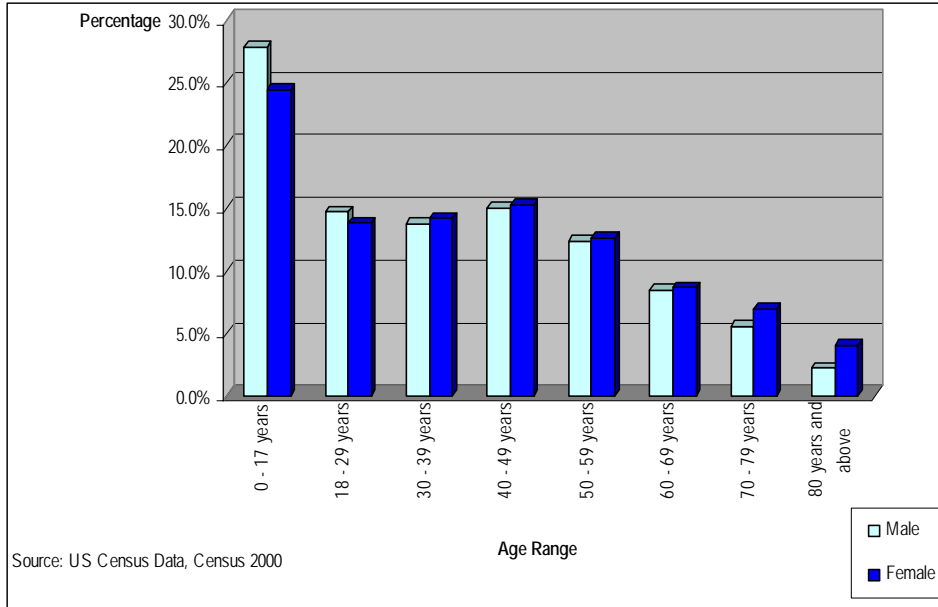
### POPULATION

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).

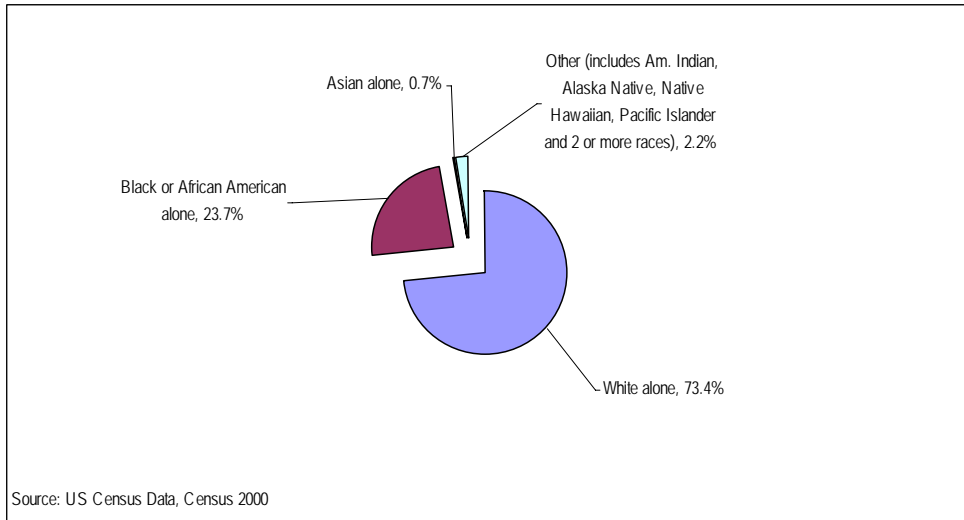
The majority of the population in the region is white (73.4 percent), followed by the Black or African American population, which represents 23.7 percent of the total population. 'Others' (which includes American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) 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.<sup>1</sup>

<sup>1</sup> Source: US Census Data, Census 2000.

**Figure 23-2. Brunswick, GA: Structure of the Population by Age Group, 2000**

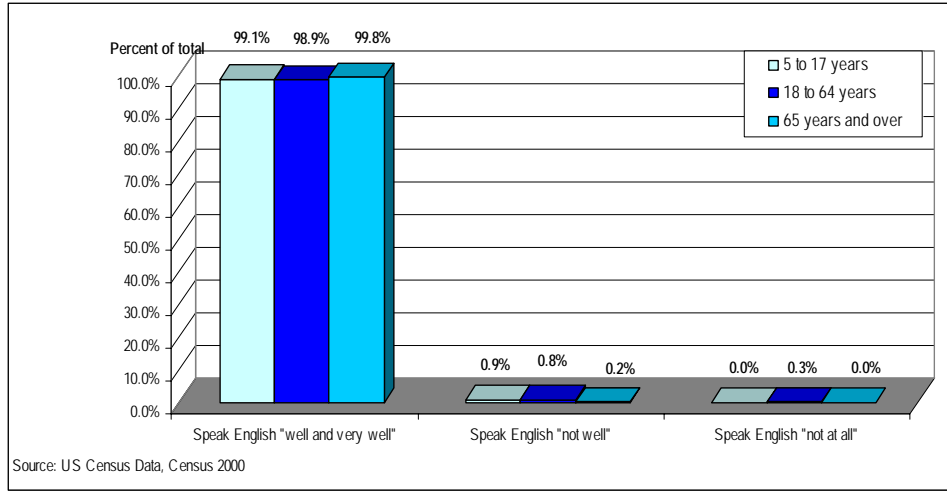


**Figure 23-3. Brunswick, GA: Population by Race, 2000**



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**

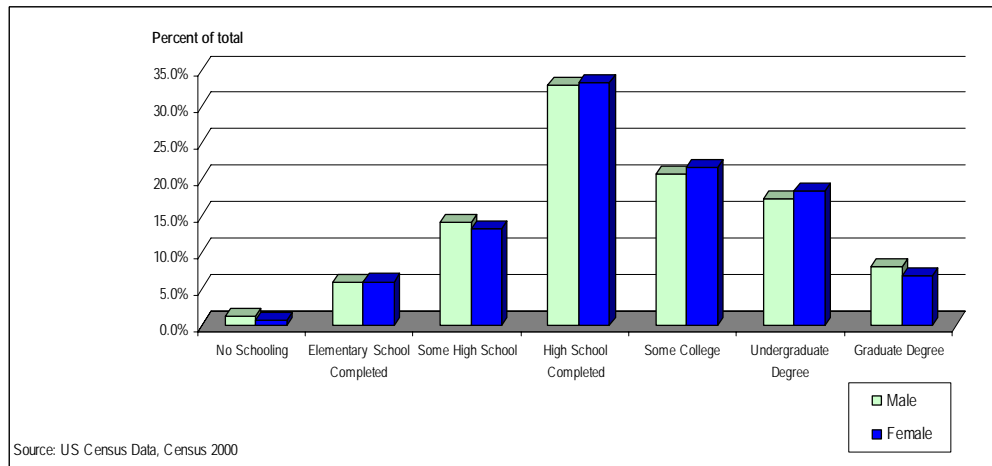


## EDUCATION

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.<sup>2</sup>

**Figure 23-5. Brunswick, GA: Educational Attainment of Population by Sex Ages 25 and Over, 2000**



<sup>2</sup> Brunswick, GA Community Profile: <http://www.epodunk.com>

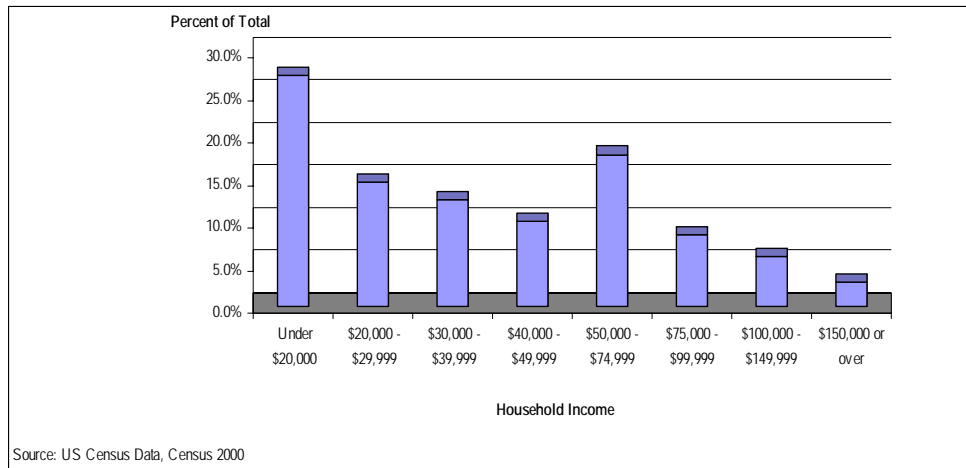
# Socio-Economic Characteristics

## 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.<sup>3</sup>

**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.<sup>4</sup>

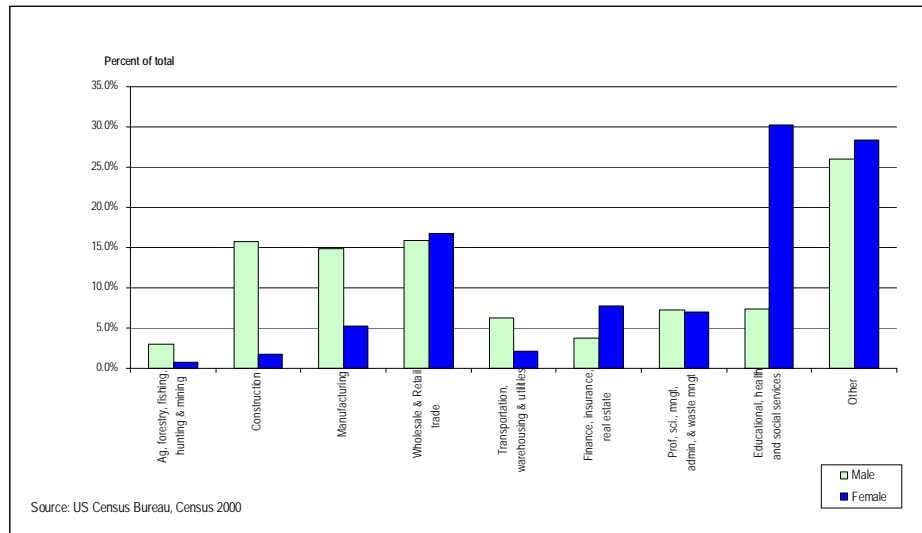
According to the 2000 US Census, an estimated 1.8 percent of males and 0.3 percent of females are employed in farming, fishing and forestry occupations. About 21.0 percent of males and 6.9 percent of females are employed in production, transportation and material moving occupations. The aforementioned 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.

<sup>3</sup> US Census Data, Census 2000.

<sup>4</sup> 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.<sup>5</sup>

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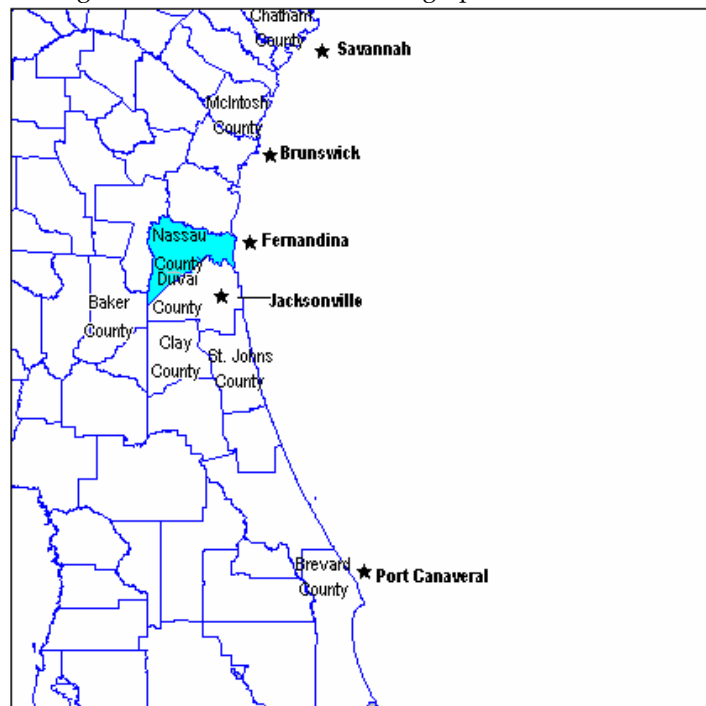
<sup>5</sup> Georgia Ports Authority website: <http://www.gaports.com>

# 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

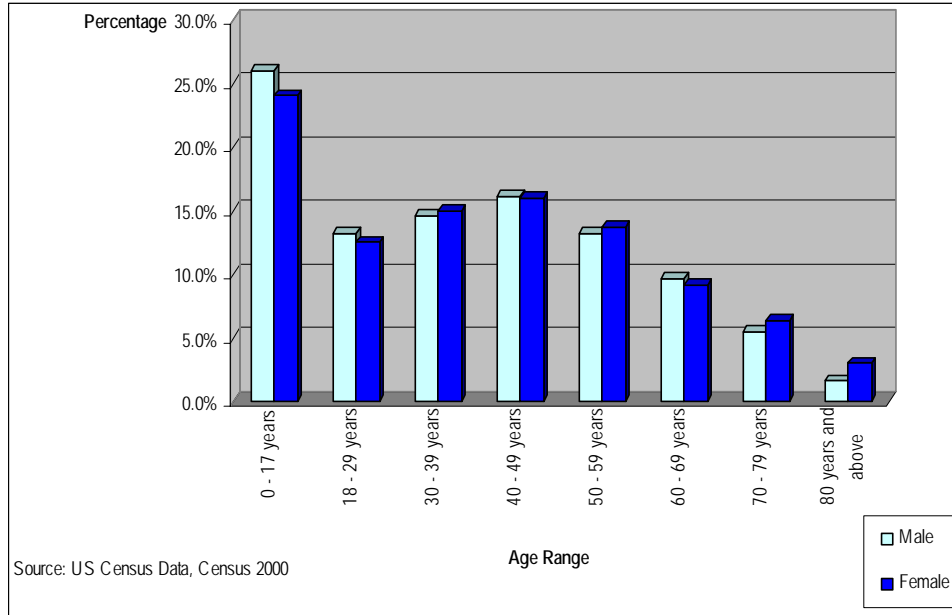
### POPULATION

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).

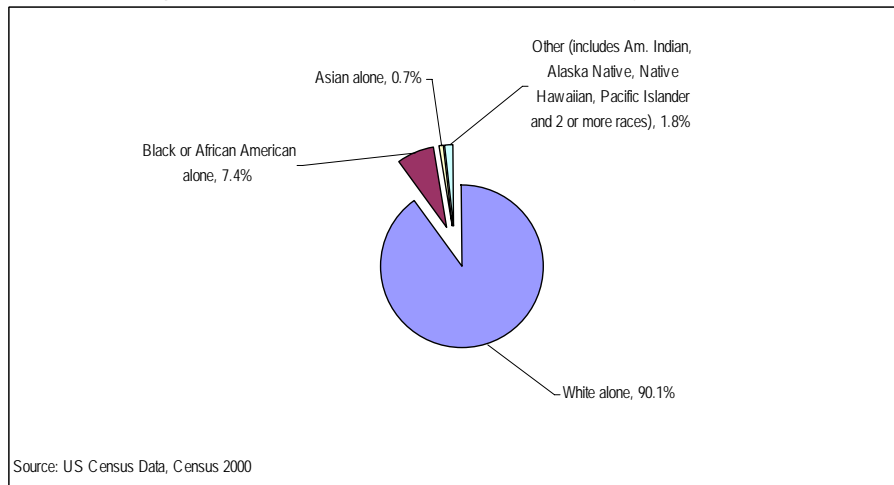
As shown on Figure 24-3, 90.1 percent of the total population is white, 7.4 percent is Black or African American, 1.8 percent are part of the 'other' category (American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) and 0.7 percent of the population is Asian. Only 1.8 percent of the total population is considered to be of Hispanic or Latino origin.<sup>1</sup>

<sup>1</sup> Source: US Census Data, Census 2000.

**Figure 24-2. Fernandina, FL: Structure of the Population by Age Group, 2000**

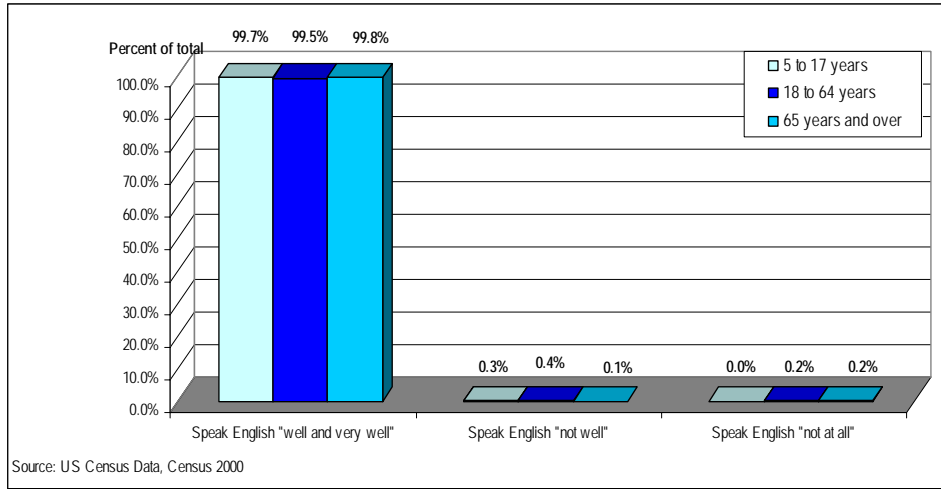


**Figure 24-3. Fernandina, FL: Population by Race, 2000**



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'.

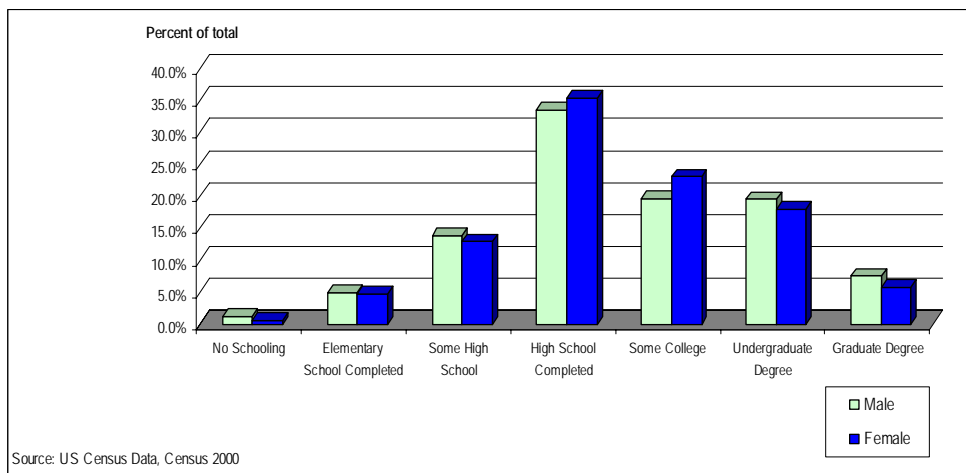
**Figure 24-4. Fernandina, FL: Ability to Speak English by Age Group, 2000**



## 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**



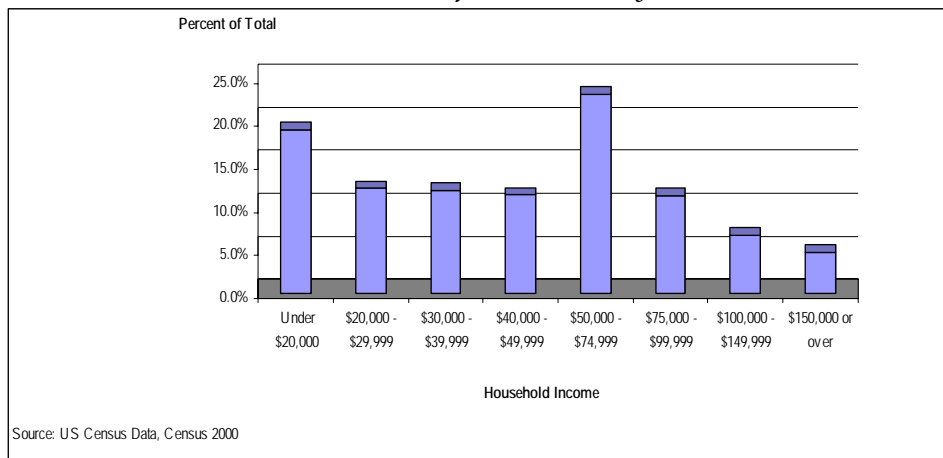
# Socio-Economic Characteristics

## 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.<sup>2</sup>

**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.

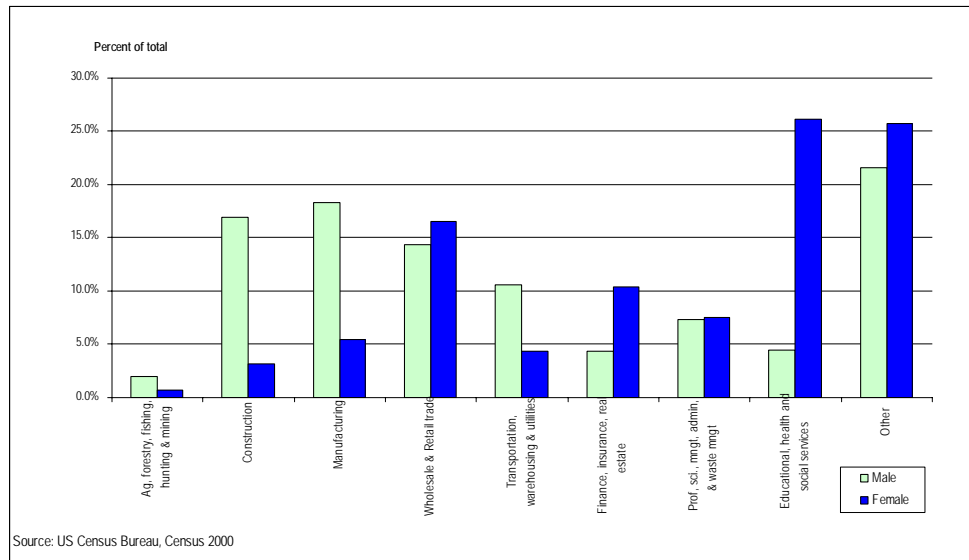
An estimated 4.4 percent of males and 5.2 percent of females are unemployed in the county.<sup>3</sup>

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.

<sup>2</sup> US Census Data, Census 2000.

<sup>3</sup> 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.<sup>4</sup>

<sup>4</sup> URL: <http://www.ameliainland.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.<sup>5</sup>

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<sup>5</sup> American Association of Port Authorities website: <http://www.aapadirectory.com/cgi-bin/showpage.cgi?id=3914>

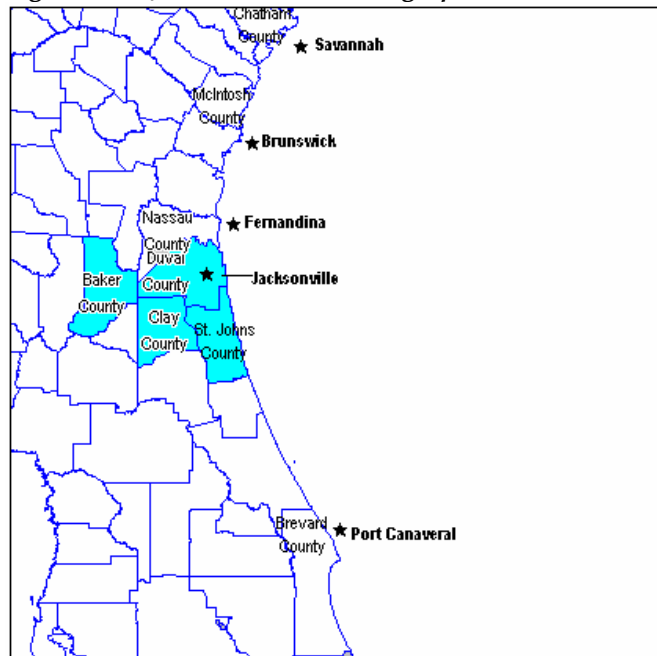


# 25. Jacksonville, FL

## 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

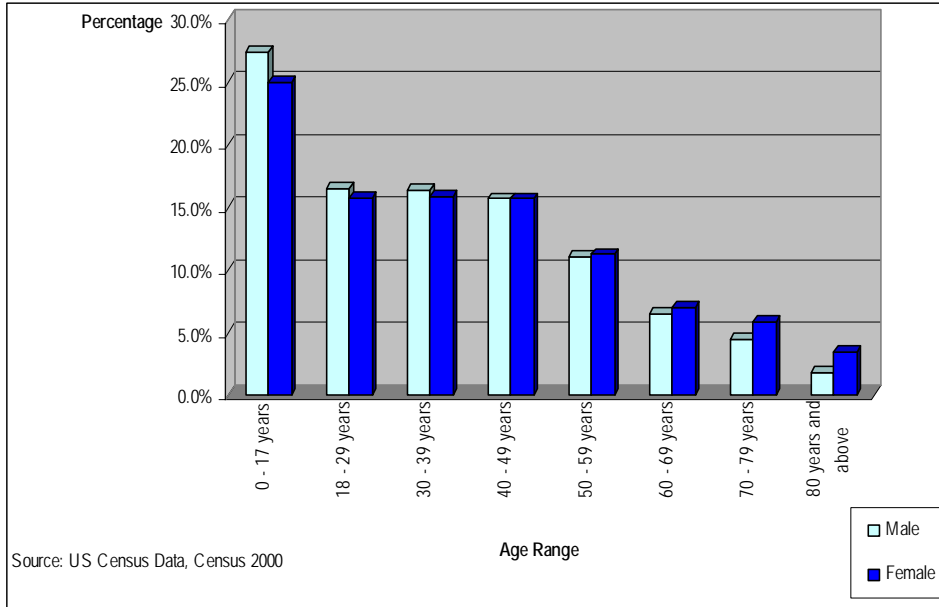
### POPULATION

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).

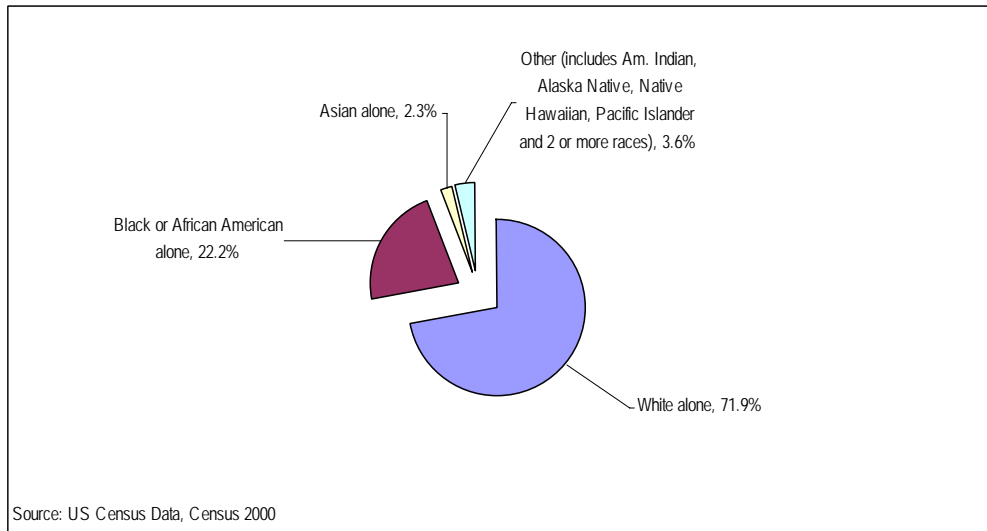
As shown in Figure 25-3, 71.9 percent of the total population is white, 22.2 percent is Black or African American, 3.6 percent is categorized as 'others' (includes American Indians, Alaska natives, Hawaiian natives, Pacific Islanders, and 2 or more races alone) and 2.3 percent is Asian. Furthermore, in terms of ethnic makeup, around 3.9 percent of the total population is considered to be of Hispanic or Latino origin.<sup>1</sup>

<sup>1</sup> Source: US Census Data, Census 2000.

**Figure 25-2. Jacksonville, FL: Structure of the Population by Age Group, 2000**

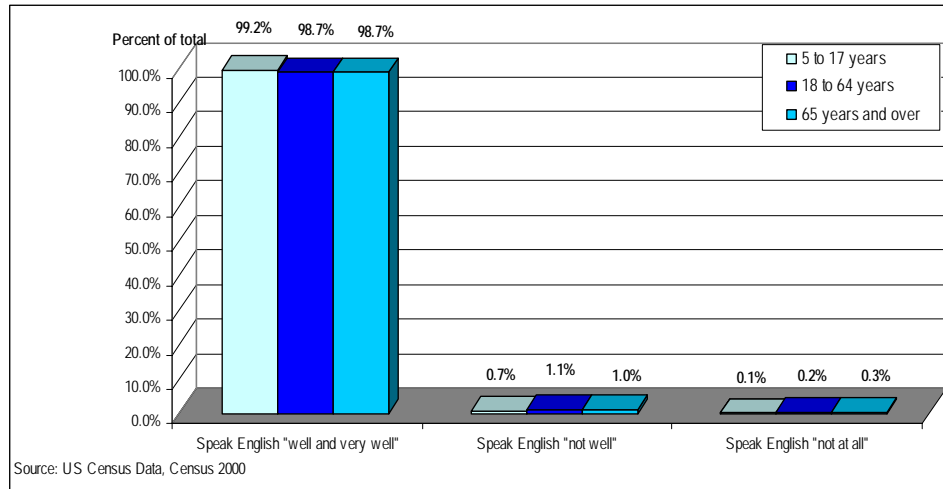


**Figure 25-3. Jacksonville, FL: Population by Race, 2000**



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**

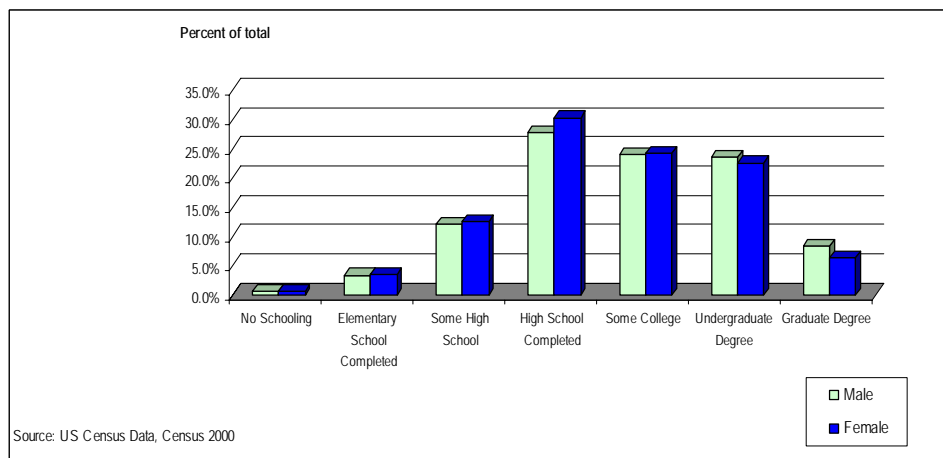


## EDUCATION

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**



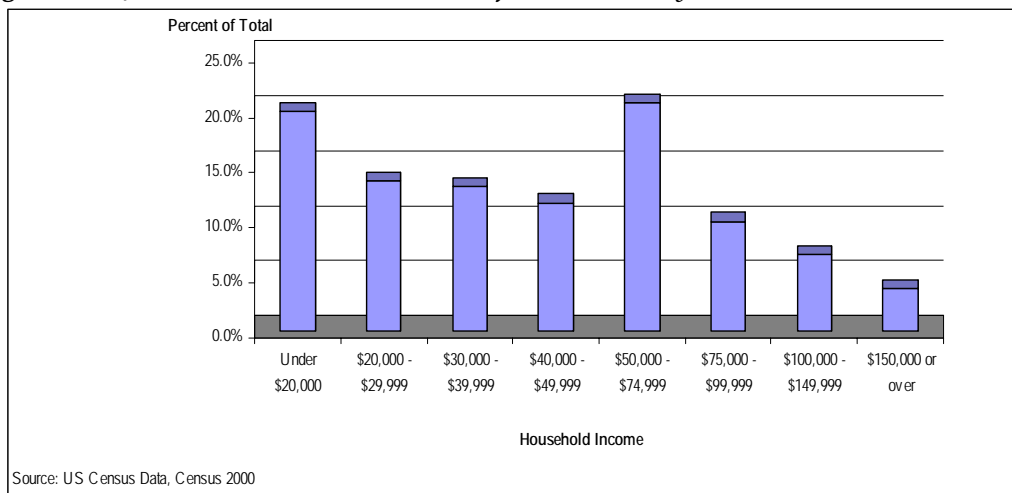
# Socio-Economic Characteristics

## 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.<sup>2</sup>

*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).

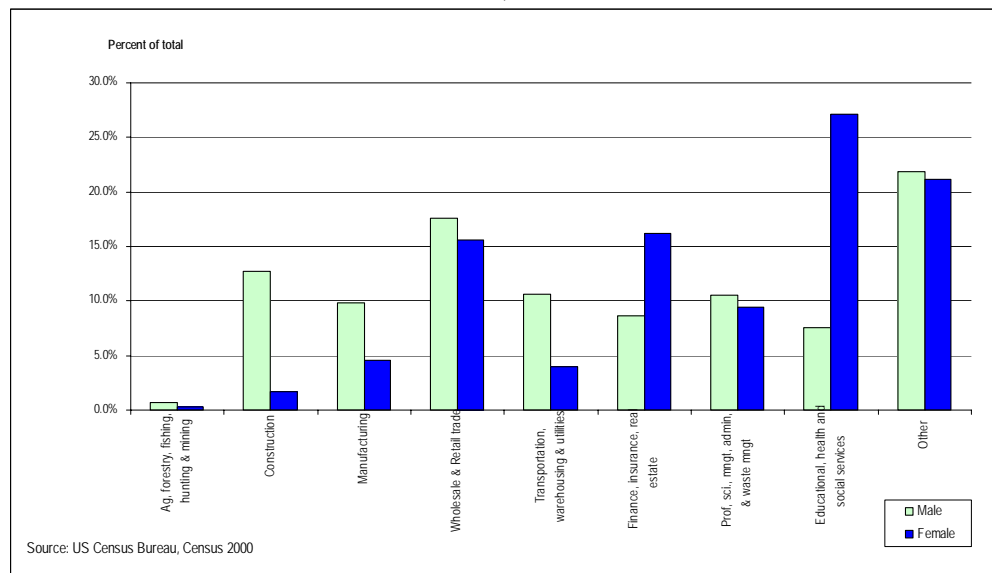
An estimated 4.2 percent of males and 4.9 percent of females were unemployed in the MSA in the year 2000.<sup>3</sup>

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.

<sup>2</sup> US Census Data, Census 2000.

<sup>3</sup> 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.<sup>4</sup>

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<sup>4</sup> Jacksonville Port Authority website: <http://www.jaxport.com/>

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# 26. Port Canaveral, FL

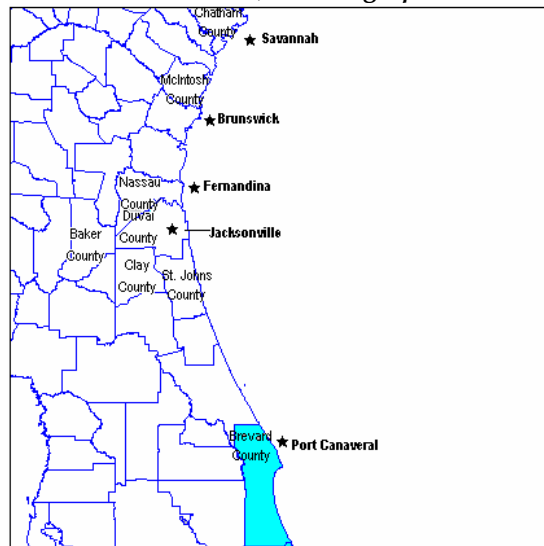
## Location and Background Information

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

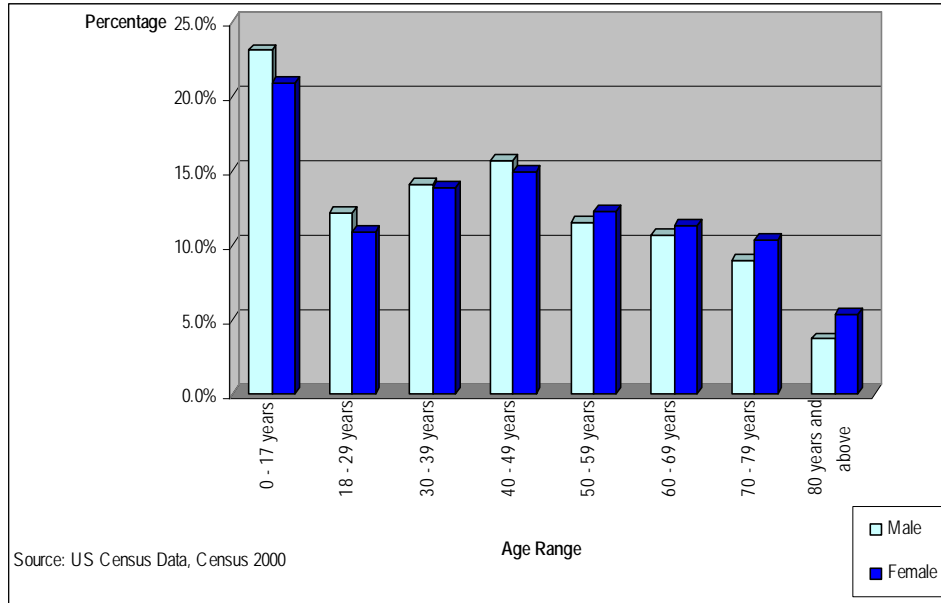
### POPULATION

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).

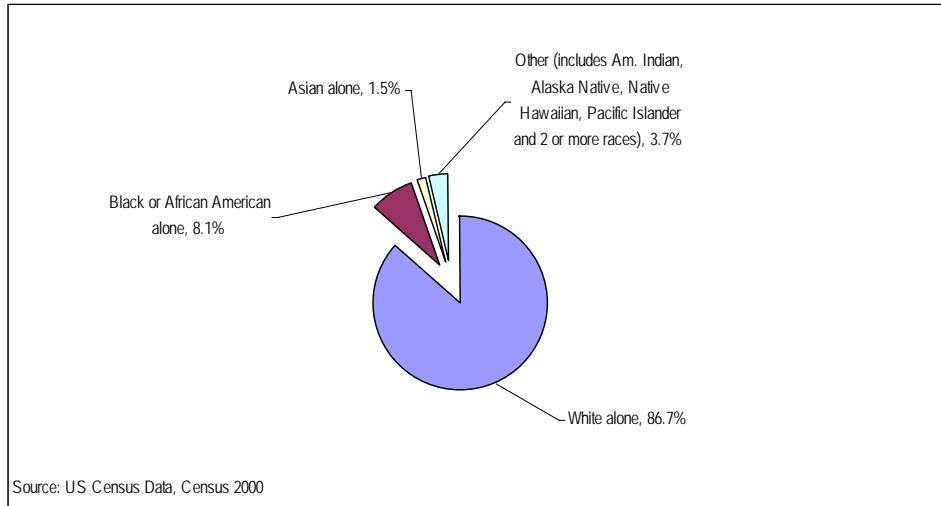
<sup>1</sup> Port Canaveral website: <http://www.portcanaveral.org>

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.<sup>2</sup>

**Figure 26-2. Port Canaveral, FL: Structure of the Population by Age Group, 2000**



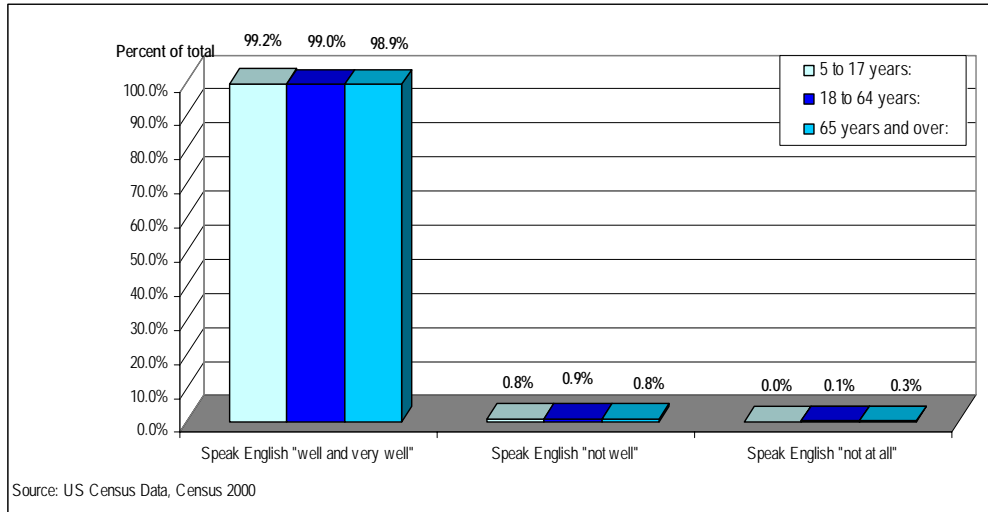
**Figure 26-3. Port Canaveral, FL: Population by Race, 2000**



<sup>2</sup> 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**

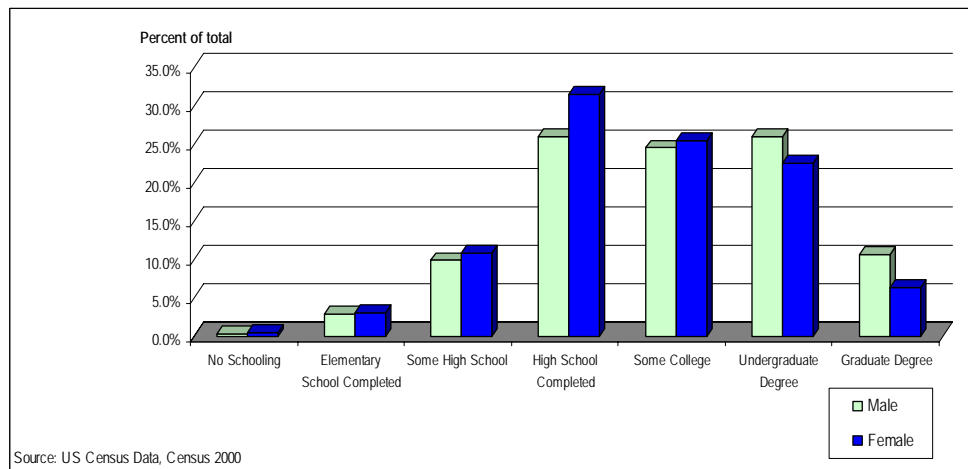


## EDUCATION

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**



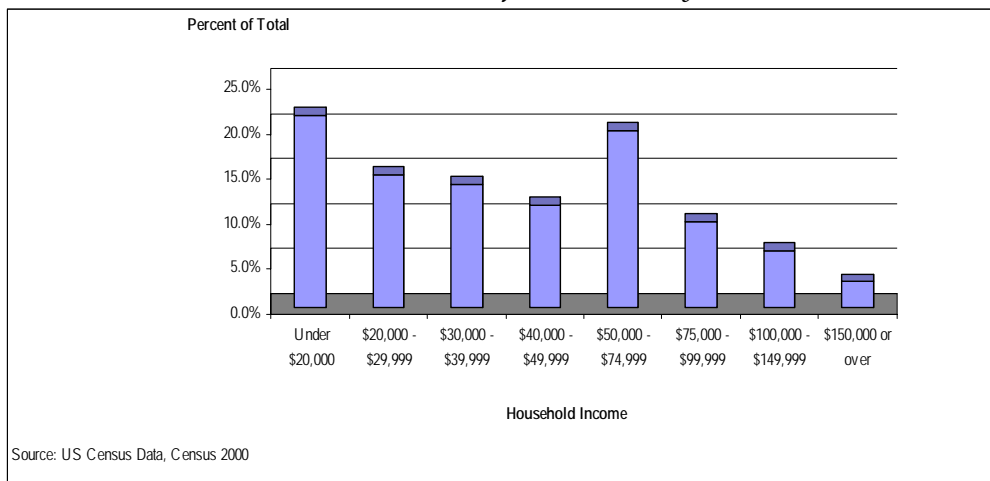
# Socio-Economic Characteristics

## 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.<sup>3</sup>

**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.

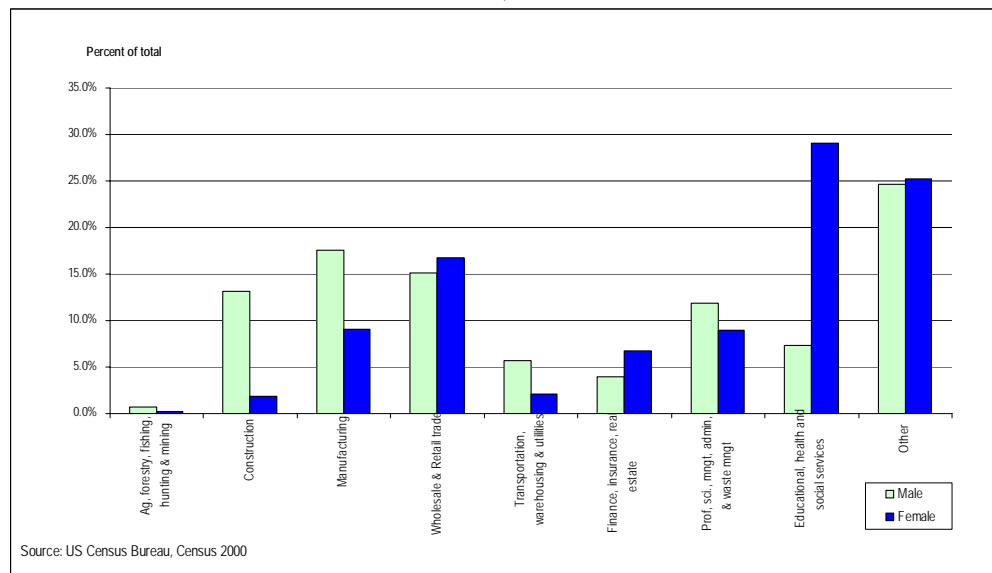
An estimated 4.8 percent of males and 5.0 percent of females were unemployed in the region in the year 2000.<sup>4</sup>

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.

<sup>3</sup> US Census Data, Census 2000.

<sup>4</sup> 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 with -36' 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 -34' 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 -39' 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 39' 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 39' 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.<sup>5</sup>

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<sup>5</sup> 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<br>(Knots) | Length<br>(ft) | Gross<br>Tons |
|----------------------------|------------------|-------|-----------|--------------------------|----------------|---------------|
| <b>Maine</b>               |                  |       |           |                          |                |               |
| Scotia Prince              | Portland         | ME    | RoRo      | 18                       | 469            | 11,968        |
| Margaret Chase Smith       | Rockland         | ME    | RoRo      | 14                       | 152.8          | 99            |
| Captain Charles Phillbrook | 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            |
| <b>New Hampshire</b>       |                  |       |           |                          |                |               |
| M.V. Thomas Laighton       | Portsmouth       | NH    | Passenger | n.a.                     | 83.4           | 59            |
| M.V. Oceanic               | Portsmouth       | NH    | Passenger | n.a.                     | 70.59          | 95            |
| <b>Massachusetts</b>       |                  |       |           |                          |                |               |
| 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            |
| Schamochi                  | 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<br>(Knots) | Length<br>(ft) | Gross<br>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            |
| <b><u>Rhode Island</u></b> |                |       |           |                          |                |               |
| Prudence Ferry             | Bristol        | RI    | Passenger | n.a.                     | 91.9           | 78            |
| Prudence Ferry             | Bristol        | RI    | RoRo      | n.a.                     | 61.5           | 94            |
| <b><u>Connecticut</u></b>  |                |       |           |                          |                |               |
| 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            |
| <b><u>New York</u></b>     |                |       |           |                          |                |               |
| 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<br>(Knots) | Length<br>(ft) | Gross<br>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            |
| Mehsamac                 | 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<br>(Knots) | Length<br>(ft) | Gross<br>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.          |
| <b><u>Pennsylvania</u></b>          |                 |       |           |                          |                |               |
| 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.          |
| <b><u>Delaware</u></b>              |                 |       |           |                          |                |               |
| 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             |
| <b><u>Maryland</u></b>              |                 |       |           |                          |                |               |
| 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            |
| <b><u>Virginia</u></b>              |                 |       |           |                          |                |               |
| 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            |
| <b><u>North Carolina</u></b>        |                 |       |           |                          |                |               |
| 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<br>(Knots) | Length<br>(ft) | Gross<br>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             |
| <b><u>South Carolina</u></b> |                    |       |           |                          |                |               |
| 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            |
| <b><u>Georgia</u></b>        |                    |       |           |                          |                |               |
| 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            |
| <b><u>Florida</u></b>        |                    |       |           |                          |                |               |
| 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

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Table E-2. Ferry Routes Operating on U.S. East Coast, 2000

| Sale and Route   | Metro Area | Waterbody Crossed      | Type      | Data Year | Passengers | Vehicles | Season    |            |
|--|------------|------------------------|-----------|-----------|------------|----------|-----------|------------|
|  |            |                        |           |           |            |          | Start     | End        |
| <b>Maine</b>   |            |                        |           |           |            |          |           |            |
| 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 |
| Lincolntonville (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 |
| <b>New Hampshire</b>   |            |                        |           |           |            |          |           |            |
| Portsmouth (NH) - Star Island, Gosport Harbor (NH)                                     | Portsmouth | Coastal Atlantic Ocean | RoRo      | n.a.      | n.a.       | n.a.     | 6/15/2000 | 9/30/2000  |
| <b>Massachusetts</b>   |            |                        |           |           |            |          |           |            |
| World Trade Center, Boston (MA) - Provincetown (MA) (high speed service)               | Boston     | Massachusetts 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 |

| Sate and Route  | Metro Area  | Waterbody Crossed          | Type      | Data Year | Passengers | Vehicles | Season     |            |
|---|-------------|----------------------------|-----------|-----------|------------|----------|------------|------------|
|   |             |                            |           |           |            |          | Start      | 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 Buzzard | 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   |
| <b><u>Rhode Island</u></b>  |             |                            |           |           |            |          |            |            |
| 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: Vineya | 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 |            |
| <b><u>Connecticut</u></b>   |             |                            |           |           |            |          |            |            |
| 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 |
| <b><u>New York</u></b>  |             |                            |           |           |            |          |            |            |
| 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 |            |
| <b>North Carolina</b>   |                 |                                |           |           |            |          |            |            |
| 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 |            |
| <b>South Carolina</b>   |                 |                                |           |           |            |          |            |            |
| Hilton Head Island, Opossum Point Landing (SC) - Daufuskie Island, Haig Point (SC)        | Savannah        | Atlantic Intracoastal Waterway | RoRo      | 1999      | 150,500    | n.a.     | Year-round |            |
| Hilton Head Island, Broad Creek Marina (SC) - Daufuskie Island, Cooper River Landing (SC) | Savannah        | Atlantic Intracoastal Waterway | RoRo      | 1999      | 10,664     | n.a.     | Year-round |            |
| Jenkins Island, Hilton Head (SC) - Daufuskie Island, Cooper River Landing (SC)            | Savannah        | Atlantic Intracoastal Waterway | 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 Waterway | Passenger | 1999      | 9,160      | 7,300    | Year-round |            |
| Hilton Head Island, Salty Fare Village (SC) - Daufuskie Island, Cooper River Landing (SC) | Savannah        | Atlantic Intracoastal Waterway | RoRo      | n.a.      | n.a.       | n.a.     | Year-round |            |
| <b>Georgia</b>  |                 |                                |           |           |            |          |            |            |
| St. Marys (GA) - Plum Orchard, Cumberland Island (GA)                                     | Jacksonville    | Atlantic Intracoastal Waterway | 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 |            |
| <b>Florida</b>  |                 |                                |           |           |            |          |            |            |
| 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.

## **APPENDIX F**

### **Coordination Letters**

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**Coastal Zone Management Act  
Consistency Determination Letters**

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Pursuant to the Coastal Zone Management Act, on August 4, 2006, NMFS mailed a regional coastal zone consistency determination to the 15 states potentially affected by the rulemaking. The contacts and addresses for the state coastal zone programs are listed below. NMFS received concurrence from nine states. The coastal zone consistency determination and the state-response letters follow the distribution list.

|  |   |
|--|---|
| <p>Mr. Elder Ghigarelli<br/>         Department of the Environment<br/>         18 Washington Blvd.<br/>         Baltimore, MD 21230</p>   | <p>Mr. Richard Chinnis<br/>         Director, Regulatory Programs<br/>         Office of Ocean and Coastal Resource Management<br/>         Department of Health and Environmental Control<br/>         1362 McMillian Avenue, Suite 400<br/>         Charleston, SC 29405-2029</p> |
| <p>Ms. Kim Springer<br/>         Land Use Regulation Program<br/>         Department of Environmental Protection<br/>         PO Box 439<br/>         Trenton, NJ 08625</p>  | <p>Ms. Susan Love<br/>         Delaware Coastal Programs<br/>         Department of Natural Resources &amp; Environmental Control<br/>         89 Kings Highway<br/>         Dover, DE 19901</p>  |
| <p>Mr. Tom Ouellette<br/>         Office of Long Island Sound Programs<br/>         Department of Environmental Protection<br/>         79 Elm Street, 3rd Floor<br/>         Hartford, CT 06106-5127</p>  | <p>Ms. Kelie Moore<br/>         Coastal Zone Management Program<br/>         Department of Natural Resources<br/>         One Conservation Way, Suite 300<br/>         Brunswick, GA 31520 8687</p>   |
| <p>Ms. Jasmin Raffington<br/>         Florida Coastal Management Program<br/>         Department of Environmental Protection<br/>         3900 Commonwealth Boulevard<br/>         Douglas Building, Mail Station 47<br/>         Tallahassee, FL 32399 3000</p> | <p>Mr. Larry Toth<br/>         Water Planning Office<br/>         Department of Environmental Protection<br/>         400 Market Street, 15<sup>th</sup> Floor<br/>         PO Box 2063<br/>         Harrisburg, PA 17105-2063</p>  |
| <p>Mr. Todd Burrowes<br/>         State Planning Office<br/>         State House Station #38<br/>         184 State Street<br/>         Augusta, ME 04333</p>  | <p>Mr. Chris Williams<br/>         New Hampshire Coastal Program<br/>         Department of Environmental Services<br/>         50 International Drive, Suite 200<br/>         Pease International Tradeport<br/>         Portsmouth, NH 03801</p>                                  |

|  |   |
|--|---|
| <p>Mr. Alex Strycky<br/>Project Review Coordinator<br/>Office of Coastal Zone Management<br/>Executive Office of Environmental<br/>Affairs<br/>251 Causeway Street, Suite 900<br/>Boston, MA 02114</p> | <p>Mr. Steven C. Resler<br/>Deputy Bureau Chief<br/>Division of Coastal Resources and Waterfront<br/>Revitalization – Department of State<br/>41 State Street<br/>Albany, NY 12231 0001</p> |
| <p>Mr. Jeff Willis<br/>Coastal Resources Management Council<br/>Stedman Office Building<br/>4808 Tower Hill Road<br/>Wakefield, RI 02879-1900</p>  | <p>Mr. Steve Rynas<br/>Division of Coastal Management<br/>Department of Environment and Natural Resources<br/>400 Commerce Avenue<br/>Morehead City, NC 28557-3421</p>                      |
| <p>Ms. Ellie Irons<br/>Program Manager<br/>Virginia Department of Environmental<br/>Quality<br/>Office of Environmental Impact Review<br/>PO Box 10009<br/>Richmond, VA 23240</p>                      |   |





UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
Silver Spring, MD 20910

AUG 4 2006

RE: CZMA Consistency Determination for Proposed Rule to Implement Operational Measure to Reduce the Threat of Ship Strikes to North Atlantic Right Whales.

Dear

Pursuant to the Coastal Zone Management Act (CZMA), 16 U.S.C. § 1451 et seq. and 15 CFR part 930, subpart C, this document provides NOAA's National Marine Fisheries Service (NMFS), Office of Protected Resources' coastal zone consistency determination for the vessel operational measures associated with the North Atlantic Right Whale Ship Strike Reduction Strategy (Strategy) and proposed rule. This consistency determination was prepared in accordance with 15 CFR 930.36(e) and 930.39. Prior to making this consistency determination, NMFS sent a written request to your office (April 17, 2006) requesting a copy of your State's relevant enforceable policies.

Copies of NMFS' proposed rule (71 FR 36299) and Draft Environmental Impact Statement (DEIS) under the National Environmental Policy Act (NEPA) are enclosed with this letter.

## I. Proposed Action

The proposed operational measures include seasonal and/or temporary vessel speed restrictions within defined areas off the east coast of the United States from Maine to northern Florida. The measures are primarily within 30 nautical miles (nm) of the coast, although in some cases they extend out to 200 nm. The proposed speed restriction within these areas is 10 knots. However, NMFS is accepting comments on alternative speed limits, including 12 knots and 14 knots, and the DEIS provides an analysis of all three speed limits.

The areas and times within which speed restrictions would apply reflect regional differences in right whale distribution and behavior, oceanographic conditions, and ship traffic patterns. To this end, NMFS has divided the East Coast into three regions: Northeastern US (NEUS), which includes waters off Maine, New Hampshire, and Massachusetts; Mid-Atlantic US (MAUS), which includes waters off southern Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina, and Georgia; and Southeastern US (SEUS), which includes waters off Georgia and Florida.



The areas within which speed restrictions would apply are defined as follows (more detailed descriptions are provided in Table 1 and Chapter 2 of the DEIS):

- **Dynamic Management Areas (DMAs) – All three regions.** DMAs would impose temporary restrictions on vessels in areas where right whales are detected and no specific measure(s) are in place or in force at the time. Mariners would be required either to adhere to speed restrictions when in a DMA or to route around the DMA.
- **Seasonal Management Areas (SMAs) – All three regions.** In the MAUS, SMAs would consist of a 30 nm buffer around specified ports (see Table 1). In the NEUS, off the coast of Massachusetts, SMAs would apply in designated areas in Cape Cod Bay, Off Race Point, and Great South Channel. In the SEUS, there would be a Southeast SMA off the coasts of Georgia and northern Florida.

In addition, NMFS will be recommending shipping routes in the NEUS (Massachusetts) and SEUS. Recommended shipping routes (also referred to as shipping lanes) were proposed by NMFS and assessed by the U.S. Coast Guard (USCG) with regard to navigational and environmental safety through a Port Access Routes Study (PARS). Certain routes are under consideration, and if designated, use of these routes would be voluntary and would be implemented via non-regulatory measures. If recommended routes are established, NMFS intends to monitor their use. If the routes are not used routinely, consideration will be given to making them mandatory through regulation. Routing measures are not a part of the current proposed rulemaking.

The periods and areas of application for the proposed operational measures are shown in Table 1. The proposed measures would apply to vessels 65 feet and greater in overall length and subject to U.S. jurisdiction, except for those vessels owned, operated, or contracted by the Federal government.

## **II. Regional consistency determination with State Coastal Management Program's applicable enforceable policies.**

Because the geographical extent of the proposed operational measures covers waters off the U.S. East Coast from Maine to northern Florida, this consistency determination is regional, in accordance with 15 CFR § 930.36 (e). The following paragraphs address the common coastal effects, management implications, enforceable policies common to some or all of the affected states, and unique state policies.

### **a. Coastal Effects and Management Implications**

NMFS has determined that the proposed vessel operational measures would affect water uses<sup>1</sup> (also referred to as coastal uses) in the 15 states along the East Coast, with respect to vessel traffic and operations. The measures would restrict the speed at which a vessel may transit to or from a specific port; however, vessels would otherwise follow the same protocols entering the ports, and the proposed measures would not restrict access to the port. These speed restrictions

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<sup>1</sup> As defined in § 304 (18) of the CZMA.

only apply seaward of the COLREGS demarcation lines. The proposed operational measures would not affect navigational regulations such as “no wake zones,” pilot requirements, existing traffic separation schemes, or hazards to navigation. The proposed measures would not have any physical impacts on the coastal zone’s land component, including port facilities, beaches, wetlands, or other natural coastal resources.

As noted above, NMFS proposed recommended routes for vessels entering/exiting the Cape Cod Canal, Ports of Brunswick, GA, Fernandina, FL, and Jacksonville, FL to the USCG, which published a PARS report assessing these routes on May 24, 2006.<sup>2</sup> The PARS report considered hazards to navigation and identified revisions to the NMFS-proposed routes. If established, the recommended routes would not require any dredging or other physical alteration. The routes would minimize vessel transit time in designated right whale critical habitat, and would be consistent with policies regarding marine and wildlife habitat, threatened and endangered species, and natural resources. These recommended routes would maintain access to the three affected ports in the southeast and regional ports in Cape Cod Bay and Massachusetts Bay.

DMAs have the potential to occur in state waters. Water uses may be affected by the implementation of a DMA, as vessels would either route around the area or travel through while adhering to speed restrictions. However, DMAs would be temporary and limited in extent. Any effects on water use are expected to be *de minimis*.<sup>3</sup>

None of the proposed operational measures would have an effect on water quality in state waters as they would not affect the strict Federal and state clean water legislation that prohibits the discharge of vessel pollution in state waters. The measures may have a positive effect on air quality because reducing vessel speed has been shown to reduce emissions (DEIS Section 4.3.2.3).<sup>4</sup> Any impacts on marine species in addition to the right whale are expected to be beneficial. There are no foreseeable impacts on cultural or historic resources.

Implementation of the proposed operational measures would have economic impacts, the burden of which would primarily fall on the private sector. Public facilities and activities would be minimally affected. Therefore, the estimated economic impacts are not expected to compromise the economic value of public trust areas.

A more detailed evaluation of the impacts of the proposed measures can be found in the enclosed DEIS. Impacts on the right whale and other marine species are addressed in Section 4.1 and 4.2; impacts on the physical environment are addressed in Section 4.3; and socio-economic impacts are addressed in Section 4.4.

#### **b. Consistency with State CZMA Enforceable Policies**

This section describes how the proposed vessel operational measures are consistent with the applicable enforceable policies contained in the potentially affected states’ respective federally-

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<sup>2</sup> The PARS report is available at <http://dms.dot.gov>, Docket # USCG-2005-20380-36.

<sup>3</sup> As defined in 15 CFR § 930.33(a)(3).

<sup>4</sup> Also see California’s Department of Environmental Protection – Voluntary Speed Reduction Program at <http://www.arb.ca.gov>.

approved CZMA programs. Part 1 of this section addresses common policies across the potentially affected states; Part 2 addresses policies that are unique to a particular state.

### **1. Enforceable Policies Common to Some or All of the Affected States**

After reviewing the enforceable policies from the potentially affected states, NMFS has identified the following policies common to some or all of the states:

#### Endangered species conservation and management

The proposed operational measures are consistent with state policies regarding endangered species because their objective is to reduce threats to, and help the recovery of, a critically endangered species, the North Atlantic right whale. As mentioned in Section 4.2 of the DEIS, several other endangered species may also benefit from the proposed measures.

#### Conserve public trust areas or public access for recreation

The proposed operational measures are consistent with state policies regarding public trust areas because they would not impede public recreation and navigation within, and would enhance the biological value of, these areas. As mentioned earlier, economic impacts are unlikely to affect the economic value of public trust areas. While navigation would be affected, only vessels 65 feet and longer would be required to abide by the vessel speed restriction measures during the seasonal implementation periods. Also, the proposed measures would only apply seaward of the COLREGS demarcations lines; therefore, inland waters, rivers, and bays would not be affected. Finally, the proposed measures consist primarily of speed restrictions and, therefore, would allow for public access anywhere in state waters. Recommended routes (DEIS Sections 2.1.1.2 and 2.1.3.1) may alter current vessel traffic patterns for certain size class vessels. However, the routes would mainly be utilized by large commercial vessels and would not interfere with the public right of navigation since they would be voluntary.

#### Fisheries and marine habitat conservation and management

The proposed operational measures are consistent with state policies regarding fisheries because they would not affect fish or their habitat, or interfere with any state fisheries regulations.

#### Ports

The proposed operational measures are consistent with state policies regarding ports, because they do not involve port development, would not alter port infrastructure, and would not require dredging or any physical changes to the terminals or piers. An analysis of the indirect economic impacts of the proposed measures on port areas and the surrounding communities is provided in Section 4.4.3 of the DEIS. These impacts would be minor in comparison to the direct economic impacts on the shipping industry.

#### Waterways, navigable waters, and right of passage

The proposed operational measures are consistent with state policies regarding the right of use of all navigable waterways because they would not restrict access to navigable

waters; rather, they would limit vessel speed in certain state waters during seasons when whales are present in these waters. Recommended routes are voluntary routes that would be established to avoid areas with high right whale densities; however, a vessel could route outside of these lanes to reach surrounding navigable waters.

### Air Quality

The proposed operational measures are consistent with state policies regarding air quality because, as mentioned above, they may improve air quality in port areas; it has been shown that reducing vessel speed reduces pollutant emissions.

## **2. Unique State policies**

The states of Massachusetts, Connecticut, and Georgia enforce the following policies, which are unique to their states and, therefore, are not included in the above analysis.

### Massachusetts' Port Policy # 3

Massachusetts' Designated Port Areas (DPAs) would not be affected by the proposed operational measures. There would be no change to the capacity of DPAs to accommodate water-dependent industrial uses or to exclude such uses from tidelands and any other DPA lands over which a state agency exerts control by virtue of ownership, regulatory authority, or other legal jurisdiction. The proposed measures would alter vessel speed into certain port areas seaward of the COLREGS lines; however, vessels are generally required to slow down within several miles of a port due to pilotage requirements; therefore, the measures would have a lesser effect on vessels within the vicinity of a port area in state waters. In areas affected by the recommended shipping routes, the approach route to the port would be altered, although compliance would be voluntary. But there would be no restriction to port access and no decrease in the DPA's capacity to accommodate water-dependent uses.

### Massachusetts' Ocean Resources Policy #2 and #3

Massachusetts has two specific policies regarding state consideration and accommodation of marine mineral extraction and offshore sand and gravel mining. Though the primary focus of the policies is the potential impact of such activities on marine resources, the state specifically requested that the consistency determination address how the proposed operational measures would affect vessels involved in marine extraction activities.

The proposed operational measures would neither promote nor discourage marine mineral extraction activities. While they would affect the speed and, in some cases, the routes of vessels transiting to and from marine mineral extraction sites or offshore sand and gravel mining sites, the measures would in no way impede the actual extraction of marine minerals and offshore sand and gravel mining or interfere with Massachusetts' ability to accommodate these activities.

Additionally, the policies state that Massachusetts will consider marine mineral activities when the protection of marine resources (i.e., whales), among other things, can be

assured. Since speed restrictions would enhance the protection of marine resources, the proposed measures are consistent with the policies.

#### Massachusetts' Energy Policy # 1

Massachusetts has a policy regarding the siting of coastally dependent energy facilities. In the light of this policy, the state specifically requested this determination address the effects of the proposed operational measures on vessels involved in the construction and maintenance of coastal energy facilities.

While the proposed measures would affect the speed and/or routing of vessels involved in the construction and maintenance of coastally dependent energy facilities, (i.e., offshore wind farms, deepwater ports, etc.), they would have no impact on the ability of vessels to gain access to these facilities. The economic impacts of the proposed measures on vessels that service coastally dependent energy facilities are covered in the analysis of impacts to commercial vessels 65 feet and longer presented in Sections 4.4.1 and 4.4.2 of the DEIS. Such impacts would be only to support vessels. The siting of coastally dependent energy facilities, which is the main focus of the policy, would not be affected. The proposed operational measures are consistent with energy policy # 1.

#### Massachusetts' Growth Management Principle # 2

This policy ensures that state and federally funded transportation and wastewater projects primarily serve existing developed areas; it assigns the highest priority to projects that meet the need of urban and community development centers. This policy is relevant in the present context because Massachusetts has a reasonable expectation that federally funded high-speed ferry service will become available in the foreseeable future.

The impacts of the proposed operational measures on high-speed ferry service are analyzed in Section 4.4.5 of the DEIS. Although ferry service would be affected, impacts would be only to vessels that operate seaward of the COLREGS demarcation lines. Also, the proposed speed restrictions would be seasonal and may or may not occur during the peak season for ferry service. Those vessels that would be affected could remain in operation, though at reduced speeds, and could continue to meet the needs of urban centers; therefore, the operational measures are consistent with this policy.

#### Connecticut's General Development Policy

Connecticut's General Development Policy is applicable to all proposed activities within Connecticut's coastal boundary and coastal area. This policy ensures that the development, preservation, or use of the land and water resources of the coastal area proceed in a manner consistent with the capability of the land and water resources to support development, preservation, or use without significantly disrupting either the natural environment or sound economic growth. The policy also aims to coordinate the planning and regulatory activities of public agencies at all levels of government, to ensure maximum protection of coastal resources while minimizing conflicts and disruption of economic development.

The proposed operational measures are consistent with this policy because while there would be economic impacts on several port areas in Connecticut (see Section 4.4.3 of the DEIS), these impacts would be minimal and would not significantly disrupt sound economic growth or the natural environment. In addition, NMFS is coordinating with the state of Connecticut and all potentially affected states to ensure protection of coastal resources and minimize conflicts.

#### Connecticut's Boating Policy

Connecticut's boating policy encourages use of coastal waters for recreational boating while protecting coastal resources and facilities from adverse impacts of such uses and promoting the protection and upgrading of the facilities serving the commercial fishing and recreational boating industries.

The proposed operational measures are consistent with this policy because they aim to protect against adverse impacts of vessels 65 feet and greater in length, including recreational vessels, on North Atlantic right whales. Recreational boating would not be affected aside from the speed restrictions on boats 65 feet and longer and if utilized, the recommended routes. Although large vessels may be required to abide by speed restrictions during specified seasons, most recreational and fishing boats are less than 65 feet in length. Therefore, the proposed measures would not apply to them. Economic impacts on commercial fishing and recreational boating are analyzed in Sections 4.4.4 to 4.4.7 of the DEIS.

#### Georgia's Boat Safety Policy

Georgia's Boat Safety Act establishes boating safety zones for a distance of 1,000 feet from the high-water mark of several islands. All motorized craft are prohibited from these waters, except at certain pier and marina access points. The proposed operational measures are consistent with this boat safety policy because they would not alter shipping lanes at, or inland of, the port access points; only the approaches to these points would be slightly altered.

### **III. Conclusion and Consistency Determination**

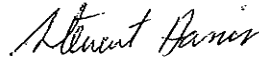
Based on the information above, NMFS has determined that the vessel operational measures in the proposed rule are consistent to the maximum extent practicable with the enforceable policies of the potentially affected states' coastal zone management programs. Please submit your state agency's concurrence with, or comments on, this determination within 60 days from the receipt of this letter (15 CFR 930.41) to the following address:

Stewart Harris  
Acting Division Chief,  
Office of Protection Resources  
National Marine Fisheries Service  
1315 East-West Highway  
Silver Spring, MD 20910

If NMFS does not receive a reply from a state agency within 60 days from receipt of the consistency determination and supporting information as required by 15 CFR § 930.39(a), and there has not been an extension of the 60-day review period, then NMFS will assume concurrence.

Please contact Jessica Gribbon, NMFS, at (301) 713-2322, ext. 153, if you have questions about the determination findings.

Sincerely,



Stewart Harris  
Acting Division Chief  
Marine Mammal and Sea Turtle  
Conservation Division

Enclosures



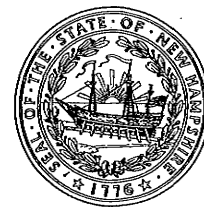
Table 1  
Summary of the Proposed Operational Measures

| Region               | Proposed Measures   | Areas of Application   | Period of Application   |
|----------------------|---|--|-------------------------|
| Southeast (SEUS)     | Speed restrictions in the Southeast SMA and shipping lanes                | Ports of Jacksonville, FL; Fernandina, FL; Brunswick, GA; and SE management area       | November 15 to April 15 |
| Mid-Atlantic (MAUS)  | SMAs around nine port areas with speed restrictions                       | South & east of Block Island Sound (Montauk Point to western end of Martha's Vineyard) | November 1 to April 30  |
|                      |   | Ports of New York & New Jersey   |                         |
|                      |   | Delaware Bay (Ports of Philadelphia & Wilmington)                                      |                         |
|                      |   | Entrance to Chesapeake Bay (Ports of Hampton Roads & Baltimore)                        |                         |
|                      |   | Ports of Morehead City & Beaufort, NC  |                         |
|                      |   | Port of Wilmington, NC   |                         |
|                      |   | Port of Georgetown, SC   |                         |
|                      |   | Port of Charleston, SC   |                         |
| Port of Savannah, GA |   |  |                         |
| Northeast (NEUS)     | Speed restrictions in the CCB seasonal management area and shipping lanes | Cape Cod Bay   | January 1 to May 15     |
|                      | Speed restrictions in the ORP seasonal management area                    | Off Race Point   | March 1 to April 30     |
|                      | Speed restrictions in GSC seasonal management area                        | Great South Channel  | April 1 to July 31      |
|                      | DMAs  | Gulf of Maine area   | Year round              |
| All Three Regions    | DMAs  | US territorial waters and EEZ  | Year round              |

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The State of New Hampshire  
*Department of Environmental Services*



Michael P. Nolin  
Commissioner

September 18, 2006

Stewart Harris  
Acting Division Chief  
Marine Mammal & Sea Turtle Conservation Division  
National Oceanic and Atmospheric Administration  
National Marine Fisheries Service  
Silver Spring, MD 20910

**RE: File No. 2006-17; Proposed Rule to Implement Operational Measures to Reduce the Threat of Ship Strikes to North Atlantic Right Whales**

Dear Mr. Harris:

The New Hampshire Coastal Program has received and reviewed your consistency determination pursuant to Section 307 (c) of the Coastal Zone Management Act, 16 U.S.C. § 1456(c)(1). After reviewing the subject rule, we find it be consistent, to the maximum extent practicable, with the enforceable policies of the New Hampshire Coastal Program's federally approved coastal management program.

Should you have any questions, please feel free to contact me at (603) 559-0025.

Sincerely,

Christian P. Williams  
Federal Consistency Coordinator  
New Hampshire Coastal Program

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STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES & ENVIRONMENTAL CONTROL  
DIVISION OF SOIL AND WATER CONSERVATION

89 KINGS HIGHWAY  
DOVER, DELAWARE 19901

DELAWARE COASTAL  
MANAGEMENT PROGRAM

TELEPHONE: (302) 739-9283  
FAX: (302) 739-2048

September 13, 2006

Stewart Harris, Acting Division Chief  
Office of Protection Resources  
National Marine Fisheries Service  
1315 East-West Highway  
Silver Spring, MD 20910

***RE: Delaware Coastal Management Federal Consistency Certification  
Proposed Rule to Implement Operational Measures to Reduce Atlantic Right  
Whale Strikes***

Dear Mr. Harris:

The Delaware Coastal Management Program (DCMP) has received and reviewed your consistency determination for the above referenced project. Based upon our review and pursuant to National Oceanic & Atmospheric Administration regulations (15 CFR 930), the DCMP concurs with your consistency determination for the Proposed Rule to Implement Operational Measures to Reduce Atlantic Right Whale Strikes.

If you have any questions regarding this determination please do not hesitate to contact me or Tricia Arndt of my staff at (302) 739-9283.

Sincerely,

A handwritten signature in black ink, appearing to read "S.W. Cooksey".

Sarah W. Cooksey, Administrator  
Delaware Coastal Management Program

SWC/tka

cc: File 06.123  
Roy Miller-DFW

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North Carolina Department of Environment and Natural Resources  
**Division of Coastal Management**

Michael F. Easley, Governor

**Charles S. Jones, Director**

William G. Ross Jr., Secretary

August 10, 2006

Stewart Harris  
Acting Division Chief  
Marine Mammal and Sea Turtle Conservation Division  
National Marine Fisheries Service  
1315 East-West Highway  
Silver Spring, MD 20910

**SUBJECT:** Status of Consistency Determination Submission for the Proposed Rule to Implement Operational Measures to Reduce North Atlantic Right Whale Ship Strikes, Offshore, North Carolina (DCM#20060066)

Dear Mr. Harris:

We received your consistency determination on August 7, 2006 regarding the proposed rule to implement operational measures to reduce the potential for the North Atlantic Right Whale to be struck by ships, offshore, North Carolina. On August 8, 2006 we initiated the public review period. The project has been distributed to State agencies that would have a regulatory interest in the proposed activity for review and comment. The public review period will close on September 1, 2006. We intend to make a decision regarding whether the proposed activity would be consistent with the State's coastal program soon after.

Pursuant to 15 CFR 930.41 the State of North Carolina has sixty (60) days from the receipt of the consistency determination to either concur or object to your consistency determination unless an extension is requested. The sixtieth day is October 6, 2006.

The State is entitled to an extension of up to fifteen (15) days if additional review time is necessary. Furthermore, final Federal agency action cannot be taken sooner than ninety (90) days from the State's receipt of the consistency determination unless State concurrence is obtained. Please feel free to contact me at 252-808-2808 if you have any questions. Thank you for your consideration of the North Carolina Coastal Management Program.

Sincerely,

Stephen Rynas, AICP  
Federal Consistency Coordinator

Cc: Doug Huggett, Division of Coastal Management

400 Commerce Avenue, Morehead City, North Carolina 28557-3421  
Phone: 252-808-2808 \ FAX: 252-247-3330 \ Internet: [www.nccoastalmanagement.net](http://www.nccoastalmanagement.net)

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North Carolina Department of Environment and Natural Resources  
Division of Coastal Management

Michael F. Easley, Governor

Charles S. Jones, Director

William G. Ross Jr., Secretary

**MEMORANDUM**

August 8, 2006

TO: Steve Everhart  
Division of Inland Fisheries, Habitat Conservation Program  
NC Wildlife Resources Commission  
127 Cardinal Drive Extension  
Wilmington, NC 28405-5406



FROM: Stephen Rynas, AICP; Federal Consistency Coordinator

SUBJECT: Consistency Determination Submission Proposed Rule Reduce the Threat of Ship Collisions with North Atlantic Right Wales (DCM#20060066)

LOCATION: Offshore, North Carolina

The above listed document is being circulated for review and comment by **September 1, 2006**. Your responses will assist us in determining whether the proposed project would be consistent with the State's Coastal Management Program. If the proposed project does not conform to your requirements, please identify the measures that would be necessary to bring the proposed project into conformance. If you have any additional questions regarding the proposed project you may contact me at 252-808-2808 or e-mail me at: "stephen.rynas@ncmail.net".

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REPLY

- No Comment.
- This office supports the project as proposed.
- Comments to this project are attached.
- This office objects to the project as proposed.

Signed: *Steve Rynas*

Date: 8/21/06

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CORRECTIONS

Please identify any corrections, additions, or deletions that should be made in terms of contact information.

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RETURN COMPLETED FORM

to

Stephen Rynas, Federal Consistency Coordinator  
NC Division of Coastal Management  
400 Commerce Avenue  
Morehead City, NC 28557-3421





North Carolina Department of Environment and Natural Resources  
Division of Coastal Management

Michael F. Easley, Governor

Charles S. Jones, Director

RECEIVED

AUG 25 2006

William G. Ross Jr., Secretary  
Morehead City DCM

# MEMORANDUM

**TO:** Stephen Rynas, Federal Consistency Coordinator

**FROM:** John Cece, Coastal Management Representative, NE District

*John Cece*

**THROUGH:**

**DATE:** August 21, 2006

**SUBJECT:** Project Number: DCM#20060064; Dated: July 24, 2006  
Description of Project: Draft EIS on the Proposed Strategy to Reduce Ship Strike Deaths to the North Atlantic Right Whale  
Proposed by: National Oceanic and Atmospheric Administration  
Location: Coastal North Carolina

**REFERENCE:** (a) Memo from Federal Consistency Coordinator, dated July 24, 2006

**Type of Review Performed:**

- General Comments (Only of informational interest)**
- Determination of Permits Needed
- Identification of Land Use Plan Issues
- NEPA or NCEPA Comments
- Preliminary Federal/State Consistency Comments**
- Federal/State Consistency Comments

**Assessment:**

- This office objects to the project as proposed.
- Comments on this project are attached.**
- This office supports the project proposal.
- No Comment

**Signed:**

\_\_\_\_\_  
District Manager, Northeast District

**Date:**

\_\_\_\_\_

**Attachment of Comments**  
**Consistency Memo Dated: August 21, 2006**

**From: Field Rep John Cece**

**Comments:**

**I have reviewed the executive summary of the Draft EIS, 15 NCAC 07H, and 15 NCAC 07M and determined that the Division of Coastal Management's rules and policies do not address the actions proposed by NOAA. Therefore, the proposed actions are not inconsistent with any of the Division of Coastal Management's rules and policies.**

**From: District Manager (Position Currently Vacant)**

**Comments:**



RECEIVED

JUL 24 2006

North Carolina Department of Environment and Natural Resources  
Division of Coastal Management

COASTAL MANAGEMENT  
ELIZABETH CITY

Michael F. Easley, Governor

Charles S. Jones, Director

William G. Ross Jr., Secretary

**MEMORANDUM**

July 24, 2006

TO: John Cece  
Field Representative  
DCM - Elizabeth City Office  
1367 U.S. 17 South  
Elizabeth City, NC 27909-7634

FROM: Stephen Rynas, AICP; Federal Consistency Coordinator

SUBJECT: Draft Environmental Impact Statement on the Proposed Strategy to Reduce Ship Strike Deaths to the North Atlantic Right Whale (DCM#20060064)

LOCATION: Coastal North, North Carolina

The document referenced above is being circulated for DCM environmental review and comment by **July 28, 2006**. This document is available online at <http://www.nmfs.noaa.gov/pr/shipstrike>. If you cannot access it, please let me know.

Please review the proposed project to assess the environmental, regulatory, and land issues raised by the proposed project. DCM previously reviewed this project under the scoping phase. Attached is a copy of the comments made as part of the scoping phase. Comments now relate to environmental adequacy of the draft. This includes the project's anticipated conformance with: the local land use plan, CAMA, and the Dredge and Fill law. Additionally, would the proposed project have any effects on any on any Areas of Environmental Concern? If you have any additional questions regarding the proposed project you may contact me at 252-808-2808 or by e-mail at Stephen.Rynas@ncmail.net.

REPLY

No Comment.

Comments to this project are attached.

Signed: John Cece

Date: 8/1/06

CORRECTIONS

Please identify any corrections, additions, or deletions that should be made in terms of contact information.

RETURN COMPLETED FORM

to  
Stephen Rynas, Federal Consistency Coordinator  
NC Division of Coastal Management  
400 Commerce Avenue  
Morehead City, NC 28557-3421



North Carolina Department of Environment and Natural Resources  
**Division of Coastal Management**

Michael F. Easley, Governor

**Charles S. Jones, Director**

William G. Ross Jr., Secretary

August 31, 2006

Stewart Harris  
Acting Division Chief  
Office of Protection Resources  
National Marine Fisheries Service  
1315 East-West Highway  
Silver Spring, MD 20910

**SUBJECT: CD06-044 - Consistency Concurrence for the Implementation of the Proposed Rule to Implement Operational Measures to Reduce North Atlantic Right Whale Ship Strikes, Offshore, North Carolina (DCM#20060066)**

Dear Mr. Harris:

The Division of Coastal Management (DCM) received (August 7, 2006) a consistency determination from the National Marine Fisheries Service (NMFS) finding that the implementation of the proposed rule to implement operational measures to reduce North Atlantic Right Whale ship strikes would be consistent with the State's coastal management program. North Carolina's coastal zone management program consists of, but is not limited to, the Coastal Area Management Act, the State's Dredge and Fill Law, Chapter 7 of Title 15A of North Carolina's Administrative Code, and the land use plan of the County and/or local municipality in which the proposed project is located. It is the objective of the Division of Coastal Management (DCM) to manage the State's coastal resources to ensure that proposed Federal activities would be compatible with safeguarding and perpetuating the biological, social, economic, and aesthetic values of the State's coastal waters.

To solicit public comments, DCM circulated a description of the proposed project to State agencies that would have a regulatory interest. No comments asserting that the proposed activity would be inconsistent with the State's coastal management program were received. A copy of the responses received has been attached for reference.

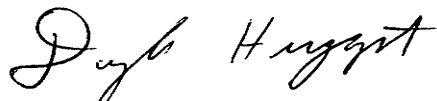
DCM has reviewed the submitted information pursuant to the management objectives and enforceable policies of Subchapters 15A NCAC 07H and 15A NCAC 07M of Chapter 7 of Title 15A of North Carolina's Administrative Code which are a part of the State's certified coastal management program and concurs that the proposed Federal activity is consistent, to the maximum extent practicable, with the enforceable policies of North Carolina's coastal management program.

Should the proposed action be modified, a revised consistency determination could be necessary. This might take the form of either a supplemental consistency determination pursuant to 15 CFR 930.46, or a new consistency determination pursuant to 15 CFR 930.36. Likewise, if further project assessments

400 Commerce Avenue, Morehead City, North Carolina 28557-3421  
Phone: 252-808-2808 \ FAX: 252-247-3330 \ Internet: [www.nccoastalmanagement.net](http://www.nccoastalmanagement.net)

reveal environmental effects not previously considered by the proposed development, a supplemental consistency certification may be required. If you have any questions, please contact Stephen Rynas at 252-808-2808. Thank you for your consideration of the North Carolina Coastal Management Program.

Sincerely,

A handwritten signature in cursive script that reads "Doug Huggett".

Doug Huggett  
Manager, Major Permits and Consistency Unit

Mike Street, NC Division of Marine Fisheries  
Steve Everhart, NC Wildlife Resources Commission

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Pennsylvania Department of Environmental Protection

---

Rachel Carson State Office Building  
P.O. Box 2063  
Harrisburg, PA 17105-2063  
August 8, 2006

Water Planning Office

717-772-5622

Stewart Harris  
Acting Division Chief  
Office of Protection Resources  
National Oceanic and Atmospheric Administration  
National Marine Fisheries Service  
1315 East-West Highway  
Silver Spring, MD 20910

Re: DEP File No. CZ7:FDP

Dear Mr. Harris:

The Pennsylvania Coastal Resources Management (CRM) Program has reviewed information received in this office on August 8, 2006, concerning the **Proposed Rule to Implement Operational Measures to Reduce the Threat of Ship Strikes to North Atlantic Right Whales.**

We concur with your determination that this federal action is consistent with Pennsylvania's CRM Program.

Sincerely,

Lawrence J. Toth  
Environmental Planner  
Coastal Resources Management Program



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STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

COASTAL RESOURCES MANAGEMENT COUNCIL

Oliver H. Stedman Government Center  
4808 Tower Hill Road, Suite 3  
Wakefield, R.I. 02879-1900

(401) 783-3370  
FAX: (401) 783-3767

August 10, 2006

Mr. Stewart Harris  
Acting Division Chief  
Office of protection resources  
National Marine Fisheries Service  
Office of protected resources F/RP2  
1315 East-West Highway  
Silver Spring, MD 20910

RE: CRMC File No. 2006-08-038.

Dear Sirs:

In accordance with Title 15 of the Code of Federal Regulations, Part 930, Subpart C (Consistency for Federal Activities) and review of plans entitled:

**Proposed Rule to Implement Operational measure to Reduce the Threat of Ship Strikes to north Atlantic Right Whales,**

The Coastal Resources Management Council hereby concurs with the determination that the referenced project is consistent with the federally approved Rhode Island Coastal Resources Management Program and applicable regulations therein.

Please contact this office at (401) 783-3370 should you have any questions.

Sincerely,

Grover J. Fugate, Executive Director  
Coastal Resources Management Council

/pjc

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**THE COMMONWEALTH OF MASSACHUSETTS**  
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS  
OFFICE OF COASTAL ZONE MANAGEMENT  
251 Causeway Street, Suite 800, Boston, MA 02114-2136  
(617) 626-1200 FAX: (617) 626-1240

August 9, 2006

Stewart Harris  
U.S. Department of Commerce  
NOAA/NMFS  
Silver Spring, MD 20910

RE: CZM Federal Consistency Review of Rule to Implement Operational Measure to Reduce the Threat of Ship Strikes to North Atlantic Right Whales; Statewide.

Dear Mr. Harris:

The Massachusetts Office of Coastal Zone Management (CZM) has received the necessary information to initiate our federal consistency review for the proposed project referenced above.

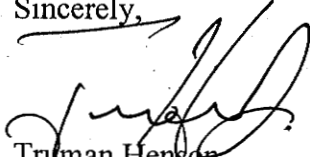
Notice that this proposal is undergoing consistency review by CZM will be published in the next edition of the Environmental Monitor. The published date of that Monitor will initiate a 21-day public comment period. Enclosed please find a copy of the schedule that we will follow during our consistency review. Although we have 60 days (extendable with your permission) in which to review your determination and to concur or object, we will make a vigorous effort to complete our review shortly after the close of the comment period.

**Note:** We cannot complete our review and issue a decision of consistency with our program policies until all applicable state environmental agency permits, licenses, certificates and other authorizations have been issued. Further, if they are required, federal permits cannot be issued until the federal permitting agency receives a consistency concurrence letter from CZM for the proposed project. To keep our review timely, we suggest that you forward copies of applicable state environmental agency permits, licenses, etc. to CZM as you receive them.

Future communications with this office regarding the technical aspects of the above-referenced project should be directed to Joe Pelczarski who will be conducting the federal consistency review of this project for the CZM Office. Please call me at (617) 626-1219 if you have any procedural questions about the review process.



Sincerely,

A handwritten signature in black ink, appearing to read 'Truman Henson', written in a cursive style.

Truman Henson  
Project Review Coordinator

TH/pb  
Enclosure  
czm#

CZM Federal Consistency Review Schedule  
For a Federal Agency Activity\*

Review Steps

1. Document Receipt  
Received consistency determination on Aug. 6, 2006.
  
  2. Public Notice
    - (a) Notice of the initiation of this federal consistency review will appear in the next edition of the MEPA Monitor which will be published on or about Aug. 23, 2006.
  
    - (b) Publication in the Monitor begins a 21 day public comment period which will close on or about Sept. 13, 2006
  
  3. CZM must issue its consistency decision within 60 days of commencement of our review unless granted an extension by the federal project proponent. The review period closes and a consistency decision will be issued no later than Oct. 6, 2006.
- \* 301 CMR 21.01 – 21.04, 15 CFE 930.41

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# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219

Mailing address: P.O. Box 1105, Richmond, Virginia 23218

Fax (804) 698-4500 TDD (804) 698-4021

[www.deq.virginia.gov](http://www.deq.virginia.gov)

L. Preston Bryant, Jr.  
Secretary of Natural Resources

David K. Paylor  
Director

(804) 698-4000  
1-800-592-5482

September 26, 2006

Mr. Stewart Harris  
Acting Division Chief,  
Office of Protection Resources  
National Marine Fisheries Service  
1301 East West Highway  
Silver Spring, Maryland 20910

RE: Consistency Determination for the Proposed Rule to Implement Operational Measure to Reduce the Threat of Ship Strikes to North Atlantic Right Whales, DEQ 06-147F.

Dear Mr. Harris:

As described in your August 4, 2006 letter, the National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS) proposes to implement the operational measures of NOAA's Ship Strike Reduction Strategy in waters off the East Coast of the United States (US). The purpose of the measure is to reduce vessel strikes to the endangered North Atlantic right whale. Due to regional differences in right whale distribution and behavior, oceanographic conditions, and ship traffic patterns, the proposed operational measures would apply only in certain areas and at certain times of the year, or under certain conditions. All vessels 65 feet and greater in overall length and subject to the jurisdiction of the US would be required to abide by the operational measures, except for vessels owned or operated by, or under contract to the Federal government. The measures also apply to all other vessels 65 feet and greater in overall length entering or departing a port or place under the jurisdiction of the US. NMFS finds the proposed action consistent to the maximum extent practicable with the enforceable policies of the Virginia Coastal Resources Management Program (VCP).

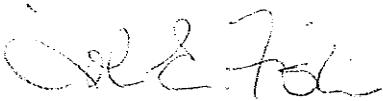
Pursuant to the Coastal Zone Management Act of 1972, as amended, the proposed action must be conducted in a manner consistent with the VCP. The VCP consists of a network of enforceable policies administered by several agencies. In order to be

consistent with the VCP, the NMFS must obtain all the applicable permits and approvals listed under the enforceable policies prior to commencing the project.

Fisheries Management is one of the VCP enforceable policies. The Virginia Marine Resources Commission (VMRC), which has responsibility for fisheries management activities within the Commonwealth's nearshore and offshore waters, was invited to comment. VMRC did not indicate that the consistency determination is inconsistent with the fisheries management enforceable policy of the VCP under its jurisdiction. Accordingly, DEQ concurs with NMFS's determination that the Proposed Rule to Implement Operational Measure to Reduce the Threat of Ship Strikes to North Atlantic Right Whales is consistent with the VCP.

Thank you for the opportunity to comment. If you have questions, please call me at (804) 698-4339.

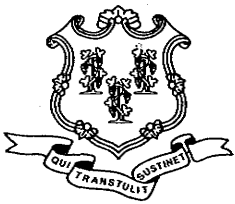
Sincerely,

A handwritten signature in black ink, appearing to read "John E. Fisher".

John E. Fisher  
Environmental Impact Review Coordinator  
Office of Environmental Impact Review

Cc: Jack Travelstead, VMRC  
Ellie Irons, DEQ-OEIR





STATE OF CONNECTICUT  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



October 3, 2006

Stewart Harris  
Acting Division Chief  
Office of Protected Resources  
National Marine Fisheries Service (NMFS)  
1315 East-West Highway  
Silver Spring, MD 20910

Re: Operational Measures to Reduce the Threat of Ship Strikes to North Atlantic Right Whales;  
Consistency Concurrence

Dear Mr. Harris:

Your consistency determination for proposed operational measures to reduce the threat of ship strikes to North Atlantic Right Whales was received on August 9, 2006. That determination is required by Section 307(c)(1) of the Coastal Zone Management Act of 1972, as amended, Subpart C of 15 Code of Federal Regulations (CFR) Part 930, and Section II, Part VII(c) of the State of Connecticut Coastal Management Program and Final Environmental Impact Statement.

The proposed measures include seasonal and/or temporary vessel speed restrictions within defined areas off the east coast of the United States from Maine to northern Florida, and would apply to all vessels 65 feet and greater in overall length. The defined areas include a Dynamic Management Area (DMA) paralleling the East coast and extending offshore for 200 nautical miles, and a Seasonal Management Area (SMA) covering a 30 nm-wide area extending south and east of the mouth of Block Island Sound, from Montauk Point, Long Island, to the western end of Martha's Vineyard. Within the DMA, temporary restrictions would be imposed on vessels in areas where right whales are detected and no specific measure(s) are in place or in force at the time. Mariners would be required either to adhere to speed restrictions when in a DMA or to route around the DMA. The proposed seasonal speed restriction within these areas is 10 knots. This Department concurs with your determination that the proposed measures are consistent to the maximum extent practicable with Connecticut's approved Coastal Management Program, pursuant to Section 22a-96(c) of the Connecticut General Statutes.

Any fisheries management plans that have a potential to affect the Connecticut coastal area, as well as any related Environmental Impact Statements and Regulatory Impact Reviews, should be sent to Mr. Brian P. Thompson, Director of the DEP Office of Long Island Sound Programs as early as possible in the established review period, after the final contents of the documents have been determined.

Yours truly,

Gina McCarthy  
Commissioner

GM/TO/to

cc: Allison Castellan, OCRMS

Edward Parker, CT DEP

Eric Smith, CT DEP

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79 Elm Street • Hartford, CT 06106 - 5127

<http://www.ct.gov/dep>

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## State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Land Use Regulation Program  
501 East State Street, P.O. Box 439  
Trenton, New Jersey 08625-0439  
Telephone # (609) 292-0060  
Fax # (609) 292-8115 or (609) 777-3656

JON S. CORZINE  
Governor

LISA P. JACKSON  
Commissioner

Stewart Harris, Acting Division Chief  
Marine Mammal and Sea Turtle Conservation Division  
National Marine Fisheries Service  
1315 East-West Highway  
Silver Spring, Maryland 20910

OCT 12 2006

RE: Federal Consistency Determination for Proposed Rule to Implement Operational Measures to reduce the Threat of Ship Strikes to North Atlantic Right Whales  
File No. 0000-06-0023.1 CDT 060001

Dear Acting Division Chief Harris:

The New Jersey Department of Environmental Protection, Land Use Regulation Program, acting pursuant to Section 307 of the Federal Coastal Zone Management Act of 1972 (P.L. 92-583) as amended, finds the above referenced request to be consistent with New Jersey's Coastal Zone Management Program. The finding was made with reference to New Jersey's Rules on Coastal Zone Management, specifically N.J.A.C. 7:7E-8.2 (Marine Fish and Fisheries).

The proposed Rule is found in the Federal Register, Volume 71, No. 122 at 50 CFR Part 224, Docket No.0405060143-6016-02, I.D. 101205B, RIN 0648-AS36 and entitled "Endangered Fish and Wildlife; Proposed Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisions with North American Right Whales." The proposed action is to implement the operational measures of NOAA's Ship Strike Reduction Strategy in waters off the East Coast of the United States (US) to reduce vessel strikes to the endangered North Atlantic right whale. Due to regional differences in right whale distribution and behavior, oceanographic conditions, and ship traffic patterns, the proposed operational measures would apply only in certain areas and at certain times of the year, or under certain conditions. To account for these regional variations, the US East Coast is divided into three implementation regions: northeastern US (NEUS), mid-Atlantic US (MAUS), and southeastern US (SEUS). All vessels 65 ft (19.8 m) and greater in overall length and subject to the jurisdiction of the US would be required to abide by the operational measures, except for vessels owned or operated by, or under contract to the Federal government. The measures also apply to all other vessels 65 ft (19.8 m) and greater in overall length entering or departing a port or place under the jurisdiction of the US.

The proposed measures would include the creation of Seasonal Management Areas (SMAs). SMAs are pre-determined and established areas in each of the three regions, all with

seasonal speed restrictions. In the SEUS, an SMA would be established off the coast of Georgia and Florida from November 15 to April 15. In the MAUS, SMAs would be established with a 30 nautical mile (nm) (56 km) radius around nine ports in the region from November 1 to April 30. In the NEUS, SMAs would be established in Cape Cod Bay (January 1 - May 15), Off Race Point (March 1 - April 30), and Great South Channel (April 1 - July 31). Within the SMAs and during designated time frames only, vessels would be required to proceed at a reduced speed (10, 12, or 14 knots). "November 2006 – October 2007 Tilefish Specifications Draft Environmental Assessment, Essential Fish Habitat Assessment, Regulatory Impact Review, and Initial Regulatory Flexibility Analysis" prepared by Mid-Atlantic Fishery Management Council and the National Marine Fisheries Service, dated June 30, 2006. The proposal would adopt the preferred alternative and specify the quota of 2.175 million pounds (987 mt) of live weight.

Thank you for your attention to and cooperation with New Jersey's Coastal Zone Management Program. If you have any questions with regard to this determination, please do not hesitate to contact Andrew Heyl, Supervisor, at the above address or at 609-984-0288.

Sincerely,

  
Kevin J. Broderick, Manager  
Bureau of Coastal Regulation

- c. Tom McCloy, DFW  
Kim Springer, Planning

**State Clearinghouse Review Letters**

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Nine of the 15 potentially affected states have a state clearinghouse through which they distribute environmental impact statements to pertinent state agencies. NMFS distributed a copy of the DEIS and a cover letter to the nine participating states listed below. Six states responded, and several states provided comments on the DEIS. The cover letter and state responses follow the distribution list.

|   |  |
|---|--|
| <p>Ms. Linda Janey<br/>         State Clearinghouse Review<br/>         301 W. Preston Street<br/>         Suite 101<br/>         Baltimore, MD 21201</p>   | <p>Mr. Jim Taylor<br/>         Director, New Hampshire Office of Energy<br/>         and Planning<br/>         Attn: Intergovernmental Review Process<br/>         57 Regional Drive<br/>         Concord, New Hampshire 03301-8519</p>  |
| <p>Joyce Karger<br/>         Department of Administration<br/>         One Capitol Hill<br/>         Providence, Rhode Island 02908-5870</p>  | <p>Florida State Clearinghouse<br/>         Department of Environmental Protection<br/>         3900 Commonwealth Blvd, M.S. 47<br/>         Tallahassee, Florida 32399-3000</p>   |
| <p>Mr. Ken Koschek<br/>         Office of Permit Coordination and<br/>         Environmental Review<br/>         PO Box 418<br/>         Trenton, NJ 08625-0418</p>   | <p>Pennsylvania Department of<br/>         Environmental Protection<br/>         Policy Office Attention: John Dernbach<br/>         Rachel Carson State Office Building, 15<sup>th</sup><br/>         Floor<br/>         400 Market Street<br/>         Harrisburg, PA 17105-2063</p> |
| <p>Ms. Chrys Baggett<br/>         State Environmental Policy Act<br/>         Coordinator<br/>         North Carolina State Clearinghouse<br/>         1301 Mail Service Center<br/>         Raleigh, NC 27699-1301</p> | <p>Ms. Bonny Anderson<br/>         State Clearinghouse<br/>         Office of State Budget<br/>         1201 Main Street, Suite 950<br/>         Columbia, SC 29201</p>  |
| <p>Ms. Barbara Jackson<br/>         Georgia State Clearinghouse<br/>         270 Washington Street, SW, 8<sup>th</sup> Floor<br/>         Atlanta, GA 30334</p>   |  |

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UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
Silver Spring, MD 20910

Re: Right Whale Ship Strike Reduction Draft Environmental Impact Statement

Dear Madam or Sir:

In accordance with provisions of the National Environmental Policy Act of 1969, we have enclosed for your review the Draft Environmental Impact Statement (DEIS) for implementation of the operational measures of the North Atlantic Right Whale Ship Strike Reduction Strategy (Strategy).

NOAA's National Marine Fisheries Service (NMFS) proposes to implement the Strategy to reduce the occurrence and severity of vessel collisions with endangered North Atlantic right whales (*Eubalaena glacialis*). The Strategy addresses the lack of recovery of the North Atlantic right whale population by reducing the likelihood and threat of ship strike related deaths and serious injuries to the species. This DEIS analyzes the potential environmental impacts of implementing the operational measures of the Strategy.

Additional copies of the DEIS may be obtained from Shannon Bettridge, NMFS Office of Protected Resources, 1315 East-West Highway, Silver Spring, Maryland 20910. The document is also accessible electronically through the NMFS Headquarters' website, at <http://www.nmfs.noaa.gov/pr/shipstrike/>.

A CD of the DEIS is enclosed for distribution to, and review by, the appropriate agencies of the State of . NMFS will also be providing the Coastal Management Program with a copy of the DEIS as a supporting document for the coastal consistency determination. The 60-day review period begins on July 7, 2006. Please send your comments by September 5, 2006. Written comments should be submitted to:

Chief, Marine Mammal and Sea Turtle Conservation Division  
Attn: Right Whale Ship Strike Reduction DEIS  
NMFS Office of Protected Resources  
1315 East-West Highway  
Silver Spring, Maryland 20910

Comments may also be submitted by facsimile to (301) 427-2522, or by e-mail to [ShipStrike.EIS@noaa.gov](mailto:ShipStrike.EIS@noaa.gov). (Please include in the subject line the following document identifier: Right Whale Ship Strike Reduction DEIS).





**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL MARINE FISHERIES SERVICE  
Silver Spring, MD 20910

Please do not hesitate to contact me at (301)713-2322 ext.153 if you have any questions.

Sincerely,

*Jessica Gribbon*  
Jessica Gribbon  
Project Manager

Enclosure





## OFFICE OF PLANNING AND BUDGET

Sonny Perdue  
Governor

Shelley C. Nickel  
Director

### GEORGIA STATE CLEARINGHOUSE MEMORANDUM EXECUTIVE ORDER 12372 REVIEW PROCESS

TO: Chief, MMSTC Div.  
Attn: Right Whale Ship Strike Reduc DEIS  
NMFS Ofc of Protected Resource  
1315 East-West Hwy  
Silver Spring, MD 20910

FROM: Barbara Jackson *BJ*  
Georgia State Clearinghouse

DATE: 8/11/2006

SUBJECT: Executive Order 12372 Review

APPLICANT: U.S. Dept. of Commerce - NOAA/NMFS

PROJECT: Draft EIS: Implement Operational Measures of North Atlantic Right Whale Ship Strike Reduction Strategy

STATE ID: GA060710023

The State level review of the above referenced document has been completed. As a result of the environmental review process, the activity this document was prepared for has been found to be consistent with state social, economic, physical goals, policies, plans, and programs with which the State is concerned.

Additional Comments: The applicant is advised that DNR's Coastal Resources Division and DNR's Wildlife Resources Division were included in this review but did not comment within the review period. Should they later submit comments, we will forward to you.

/bj

Form SC-4-EIS-4  
January 1995

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STATE OF SOUTH CAROLINA  
*State Budget and Control Board*  
OFFICE OF STATE BUDGET

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GOVERNOR

GRADY L. PATTERSON, JR.  
STATE TREASURER

RICHARD ECKSTROM  
COMPTROLLER GENERAL



HUGH K. LEATHERMAN, SR.  
CHAIRMAN, SENATE FINANCE COMMITTEE

DANIEL T. "DAN" COOPER  
CHAIRMAN, WAYS AND MEANS COMMITTEE

FRANK W. FUSCO  
EXECUTIVE DIRECTOR

1201 Main Street, Suite 870  
COLUMBIA, SOUTH CAROLINA 29201  
(803) 734-2280

LES BOLES  
DIRECTOR

July 25, 2006

Jessica Gribbon  
US Dept. of Commerce  
NOAA  
National Marine Fisheries Service  
1315 East-West Highway  
Silver Springs, MD 20910

Project Name: North Atlantic Right Whale Ship Strike Reduction Strategy

State Application Identifier: SC060605-890

Dear Ms. Gribbon:

The State Clearinghouse, Office of State Budget, has conducted an intergovernmental review of the project referenced above as provided by Presidential Executive Order 12372. All comments received, if any, as a result of the review are enclosed for your information.

The Clearinghouse does not have information on the Federal agency's review status. Please contact your Federal grantor agency with any questions concerning the status of your application.

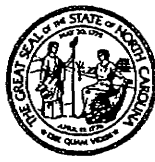
The State Application Identifier indicated above should be used in any future correspondence with this office.

Sincerely,

A handwritten signature in cursive script that reads "Jean Ricard".

Jean Ricard  
Fiscal Manager, Grant Services

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North Carolina  
Department of Administration

Michael F. Easley, Governor

Britt Cobb, Secretary

July 12, 2006

Ms. Shannon Bettridge  
U.S. Dept. of Commerce  
Chief, Marine Mammal & Sea Turtle Con  
ATTN: Right Whale Ship Strike Reduction  
1315 East-West Highway  
Silver Spring MD 20910

Dear Ms. Bettridge:

Subject: Draft Environmental Impact Statement - Implementation of the operational measures of the North Atlantic Right Whale Ship Strike Reduction Strategy to reduce occurrence & severity of vessel collisions

The N. C. State Clearinghouse has received the above project for intergovernmental review. This project has been assigned State Application Number 07-E-0000-0016. Please use this number with all inquiries or correspondence with this office.

Review of this project should be completed on or before 08/12/2006. Should you have any questions, please call (919)807-2425.

Sincerely,

A handwritten signature in cursive script that reads "Chrys Baggett".

Ms. Chrys Baggett  
Environmental Policy Act Coordinator

**Mailing Address:**  
1301 Mail Service Center  
Raleigh, NC 27699-1301

**Telephone:** (919)807-2425  
Fax (919)733-9571  
State Courier #51-01-00  
e-mail: Chrys.Baggett@ncmail.net

**Location Address:**  
116 West Jones Street  
Raleigh, North Carolina

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# North Carolina Department of Administration

Michael F. Easley, Governor

Britt Cobb, Secretary

October 6, 2006

Ms. Shannon Bettridge  
U.S. Dept. of Commerce  
Chief, Marine Mammal & Sea Turtle  
ATTN: Right Whale Ship Strike Reduction  
1315 East-West Highway  
Silver Spring, MD 20910

Dear Ms. Bettridge:

Re: SCH File # 07-E-0000-0016; DEIS; Implementation of the operational measures of the North Atlantic Right Whale Ship Strike Reduction Strategy to reduce occurrence & severity of vessel collisions. View document at <http://www.nmfs.noaa.gov/pr/shipstrike>.

The above referenced environmental impact information has been submitted to the State Clearinghouse under the provisions of the National Environmental Policy Act. According to G.S. 113A-10, when a state agency is required to prepare an environmental document under the provisions of federal law, the environmental document meets the provisions of the State Environmental Policy Act.

No comments were made by any state/local agencies during the course of this review. If any further environmental review documents are prepared for this project, they should be forwarded to this office for intergovernmental review.

Should you have any questions, please do not hesitate to call.

Sincerely,

A handwritten signature in cursive script that reads "Chrys Baggett/SJB".

Ms. Chrys Baggett  
Environmental Policy Act Coordinator

*Mailing Address:*  
1301 Mail Service Center  
Raleigh, NC 27699-1301

*Telephone:* (919)807-2425  
Fax (919)733-9571  
State Courier #51-01-00  
*e-mail* [Chrys.Baggett@ncmail.net](mailto:Chrys.Baggett@ncmail.net)

*Location Address:*  
116 West Jones Street  
Raleigh, North Carolina

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DEPARTMENT OF ADMINISTRATION  
INTERGOVERNMENTAL REVIEW

STATE NUMBER: 07-E-0000-0016

H07

DATE RECEIVED: 07/12/2006

AGENCY RESPONSE: 08/07/2006

REVIEW CLOSED: 08/12/2006

MS MELBA MCGEE  
CLEARINGHOUSE COORD  
DENR LEGISLATIVE AFFAIRS  
ARCHDALE BLDG - MSC # 1601  
RALEIGH NC

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DENR LEGISLATIVE AFFAIRS  
DEPT OF AGRICULTURE  
DEPT OF CUL RESOURCES  
DEPT OF TRANSPORTATION



PROJECT INFORMATION

APPLICANT: U.S. Dept. of Commerce

TYPE: National Environmental Policy Act

ERD: Draft Environmental Impact Statement

DESC: Implementation of the operational measures of the North Atlantic Right Whale Ship Strike Reduction Strategy to reduce occurrence & severity of vessel collisions

The attached project has been submitted to the N. C. State Clearinghouse for intergovernmental review. Please review and submit your response by the above indicated date to 1301 Mail Service Center, Raleigh NC 27699-1301.

If additional review time is needed, please contact this office at (919)807-2425.

AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED:

NO COMMENT

COMMENTS ATTACHED

SIGNED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

*[Handwritten signature]*  
*8/15/06*

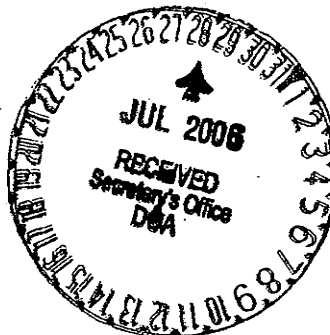
NORTH CAROLINA STATE CLEARINGHOUSE  
DEPARTMENT OF ADMINISTRATION  
INTERGOVERNMENTAL REVIEW

RECEIVED  
JUL 14 2006

STATE NUMBER: ~~DAE 9008-9018~~ H07  
DATE RECEIVED: 07/12/2006  
AGENCY RESPONSE: 08/07/2006  
REVIEW CLOSED: 08/12/2006

MS RENEE GLEDHILL-EARLEY  
CLEARINGHOUSE COORD  
DEPT OF CUL RESOURCES  
ARCHIVES-HISTORY BLDG - MSC 4617  
RALEIGH NC

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DEPT OF CUL RESOURCES  
DEPT OF TRANSPORTATION



CU 06 - 1373  
A-(NO) RWL/eff  
7-20-06

7/31/06

PROJECT INFORMATION

APPLICANT: U.S. Dept. of Commerce  
TYPE: National Environmental Policy Act  
ERD: Draft Environmental Impact Statement  
DESC: Implementation of the operational measures of the North Atlantic Right Whale Ship Strike Reduction Strategy to reduce occurrence & severity of vessel collisions.  
View document at <http://www.nmfs.noaa.gov/pr/shipstrike>.

The attached project has been submitted to the N. C. State Clearinghouse for intergovernmental review. Please review and submit your response by the above indicated date to 1301 Mail Service Center, Raleigh NC 27699-1301. If additional review time is needed, please contact this office at (919)807-2425.

AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED:

- NO COMMENT
- COMMENTS ATTACHED

SIGNED BY: Renee Gledhill-Earley

DATE: 7.27.06

JUL 17 2006



Maryland Department of Planning

Robert L. Ehrlich, Jr.
Governor
Michael S. Steele
Lt. Governor

Audrey E. Scott
Secretary
Florence E. Burian
Deputy Secretary

July 11, 2006

Ms. Jessica Gribbon
Project Manager, Office of Protected Resources
U.S. Department of Commerce
Attn: Right of Whale Ship Strike Reduction DEIS
1315 East-West Highway
Silver Spring, MD 20910

STATE CLEARINGHOUSE REVIEW PROCESS

State Application Identifier: MD20060705-0729

Reviewer Comments Due By: August 22, 2006

Project Description: Draft Environmental Impact Statement: to implement the operational measures of the North American Right Whale Ship Strike Reduction Strategy: seek to reduce likelihood and threat of ship strike death, and related injuries

Project Location: Maryland

Clearinghouse Contact: Bob Rosenbush

Dear Ms. Gribbon:

Thank you for submitting your project for intergovernmental review. Participation in the Maryland Intergovernmental Review and Coordination (MIRC) process helps ensure project consistency with plans, programs, and objectives of State agencies and local governments. MIRC enhances opportunities for approval and/or funding and minimizes delays by resolving issues before project implementation. The following agencies and/or jurisdictions have been forwarded a copy of your project for their review: the Maryland Department(s) of the Environment, Transportation, Natural Resources; the Counties of Anne Arundel, Dorchester, Kent, Talbot, Somerset, Wicomico, Queen Anne's, Calvert, Baltimore; Baltimore City; and the Maryland Department of Planning, including the Maryland Historical Trust. They have been requested to contact your agency directly by August 22, 2006 with any comments or concerns and to provide a copy of those comments to the State Clearinghouse for Intergovernmental Assistance. Please be assured that after August 22, 2006 all MIRC requirements will have been met in accordance with Code of Maryland Regulations (COMAR 14.24.04). The project has been assigned a unique State Application Identifier that should be used on all documents and correspondence.

NOTE TO THE REVIEW COORDINATORS: The DEIS is posted to the following website:

http://www.nmfs.noaa.gov/pr/shipstrike/

If you need assistance or have questions, contact the State Clearinghouse staff noted above at 410-767-4490 or through e-mail at brosenbush@mdp.state.md.us. Thank you for your cooperation with the MIRC process.

Sincerely,

Handwritten signature of William P. Gibson, Linda C. Janey, J.D., Director, Maryland State Clearinghouse for Intergovernmental Assistance

LCJ:BR

Enclosure(s)

REVIEWERS receive only the response form

cc: Pat Goucher - MDPL

Joane Mueller - MDE

Cindy Johnson - MDOT

Beth Cole - MHT

Ray Dintaman - DNR

Robert Caffrey - ANAR

Steven Dodd - DRCH

Gail Owings - KENT

George Kinney - TLBT

Charles Massey - SMST

Gary Pusey - WCMC

Faith Rossing - QANN

Terry Royce - BCIT

Gregory Bowen - CLVT

Bill Hughey - BLCO

Joe Tassone - MDPE

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MARYLAND DEPARTMENT OF THE ENVIRONMENT  
1800 Washington Boulevard • Baltimore Maryland 21230-1718  
(410) 537-4120

Robert L. Ehrlich, Jr.  
Governor

Michael S. Steele  
Lt. Governor

Kendi P. Philbrick  
Secretary

Jonas A. Jacobson  
Deputy Secretary

August 18, 2006

Ms. Jessica Gribbon  
U.S. Department of Commerce  
1315 East-West Highway  
Silver Spring, MD 20910

RE: State Application Identifier: MD20060705-0729  
Project: Draft EIS...North American Right Whale Ship Strike Reduction Strategy

Dear Ms. Gribbon:

Thank you for providing the Maryland Department of the Environment (MDE) with the opportunity to comment on the above-referenced project. Copies of the documents were circulated throughout MDE for review, and it has been determined that this project is consistent with MDE's plans, programs and objectives.

Again, thank you for giving MDE the opportunity to review this project. If you have any questions or need additional information, please feel free to call me at (410) 537-4120.

Sincerely,

Joane D. Mueller  
MDE Clearinghouse Coordinator  
Technical and Regulatory Services Administration

✓ cc: Bob Rosenbush, State Clearinghouse

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MARTIN O'MALLEY  
Mayor



OTIS ROLLEY III  
Director

August 23, 2006

Linda C. Janey J.D., Director  
Maryland Department of Planning  
301 West Preston St. Room 1104  
Baltimore, MD 21201-2305

Dear Ms. Janey,

Re: State Clearinghouse Project MD20060721-0829 & MD20060705-0729

No comments or questions were received back from any or departments or agencies within the city regarding these two Clearinghouse items. The Baltimore City Department of Planning sent follow up correspondence regarding these two items, stating that if no responses were received the Department of Planning would submit responses of C5 - Consistent to the State.

The Baltimore City Department of Planning would thus like to submit responses of C5 - Consistent for both; MD20060721-0829 & MD20060705-0729.

If you have any further questions please feel free to contact me at (410) 396-5173.

Sincerely,

Terry Royce  
Planning Assistant  
Baltimore City Department of Planning



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Maryland Department of Planning

Robert L. Ehrlich, Jr.
Governor
Michael S. Steele
Lt. Governor

Audrey E. Scott
Secretary
Florence E. Burian
Deputy Secretary

September 1, 2006

Ms. Jessica Gribbon
Project Manager, Office of Protected Resources
U.S. Department of Commerce
Attn: Right of Whale Ship Strike Reduction DEIS
1315 East-West Highway
Silver Spring, MD 20910

STATE CLEARINGHOUSE REVIEW - ADDITIONAL REVIEWER COMMENTS RECEIVED

State Application Identifier: MD20060705-0729

Project Description: Draft Environmental Impact Statement: Right Whale Ship Strike Reduction Strategy: seek to reduce likelihood and threat of Ship Strike death and related injuries

Project Location: Maryland

Clearinghouse Contact: Bob Rosenbush

Dear Ms. Gribbon:

We are forwarding the enclosed comments made by the Maryland Departments of the Environment, Natural Resources, Transportation; the Counties of Anne Arundel, Baltimore, Dorchester, and Kent; and Baltimore City regarding the referenced project for your information. Wicomico County had no comment.

The Maryland Port Administration, a modal administration of the Maryland Departments of Transportation, is working with U.S. Department of Commerce on the review of the project material. The Maryland Port Administration is also in discussion with its pilots about this matter.

The Maryland Departments of the Environment, Natural Resources; the Counties of Anne Arundel, Baltimore, Dorchester, and Kent; and Baltimore City found this project consistent with their plans, programs, and objectives. See the attached letters.

Should you have any questions, contact the State Clearinghouse staff person noted above at 410-767-4490 or through e-mail at brosenbush@mdp.state.md.us. Your cooperation and attention to the review process is appreciated

Sincerely,

Linda C. Janey (handwritten signature)

Linda C. Janey, J.D., Director
Maryland State Clearinghouse for Intergovernmental Assistance

LCJ:BR

Enclosure (Comments Received)

cc: Bill Hughey - BLCO
Joane Mueller - MDE
Cindy Johnson - MDOT
Ray Dintaman - DNR

Robert Caffrey - ANAR
Steven Dodd - DRCH
Gail Owings - KENT

Terry Royce - BCIT
Gary Pusey - WCMC

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*Maryland Department of Planning*

Robert L. Ehrlich, Jr.  
Governor  
Michael S. Steele  
Lt. Governor

Audrey E. Scott  
Secretary  
Florence E. Burian  
Deputy Secretary

November 20, 2006

Ms. Jessica Gribbon  
Project Manager, Office of Protected Resources  
U.S. Department of Commerce  
Attn: Right of Whale Ship Strike Reduction DEIS  
1315 East-West Highway  
Silver Spring, MD 20910

**STATE CLEARINGHOUSE REVIEW – ADDITIONAL REVIEWER COMMENTS RECEIVED**

**State Application Identifier:** MD20060705-0729

**Project Description:** Draft Environmental Impact Statement: Right Whale Ship Strike Reduction Strategy: seek to reduce likelihood and threat of Ship Strike death and related injuries

**Project Location:** Maryland

**Clearinghouse Contact:** Bob Rosenbush

Dear Ms. Gribbon:

We are forwarding the enclosed comments made by Maryland Port Administration, a modal administration of the Maryland Department of Transportation, regarding the referenced project for your information. See the attached letter.

Should you have any questions, contact the State Clearinghouse staff person noted above at 410-767-4490 or through e-mail at [brosenbush@mdp.state.md.us](mailto:brosenbush@mdp.state.md.us). Your cooperation and attention to the review process is appreciated

Sincerely,

Linda C. Janey, J.D., Director  
Maryland State Clearinghouse for Intergovernmental Assistance

LCJ:BR  
Enclosure (Comments Received)  
cc: Ron Burns – MPA\*  
Cindy Johnson – MDOT\*

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Robert L. Ehrlich, Jr.  
Governor  
Michael S. Steele  
Lieutenant Governor



October 5, 2006

Chief, Marine Mammal Conservation Division  
Attention: Right Whale Ship Strike Reduction Strategy  
Office of Protected Resources  
NOAA Fisheries  
1315 East West Highway  
Silver Springs, MD 20910

Maryland Port Commission  
Robert L. Flanagan  
Chairman

Atwood Collins, III  
Eli Whitney Debevoise, II  
Brenda A. Dandy  
George C. Doub, III  
John G. Gary, Jr.  
Michael G. Martino

F. Brooks Royster, III  
Executive Director

MD 20060705-0729

To Whom It May Concern:

On behalf of the Maryland Port Administration (MPA), I am writing to express this agency's position about the Notice of Proposed Rulemaking and the Draft Environmental Impact Statement regarding the National Marine Fisheries Service's North Atlantic Right Whale Ship Strike Reduction Strategy. This rulemaking would have major impacts on East Coast ports (including the Port of Baltimore). Until such time more substantiated information about the proposed Ship Strike Reduction Strategy would be made available to ports, the MPA opposes this proposed rulemaking and strategy.

Ramifications of this proposed rulemaking to the Port of Baltimore would include impacts to ships entering and leaving the Chesapeake Bay to call at the Port of Baltimore. The Port is within the Middle Atlantic United States (MAUS) region, and while it is geographically to the west and outside the boundaries of the Seasonal Management Area (SMA), ships calling at Baltimore must transit the SMA.

The Port of Baltimore would be also impacted by two SMAs – the Chesapeake Bay Seasonal Management Area and the Delaware Seasonal Management Area. One geographical area of impact would be at the northern passageway to the Port, via access and egress through the Chesapeake and Delaware Canal (C & D Canal) from Delaware Bay. This passageway is within the southern boundary of the Delaware Seasonal Management Area. This particular boundary of the Delaware SMA, as it relates to the C& D Canal and the Port of Baltimore, is not pointed-out in this document and discussed in connection to impacts of this aspect of the Delaware SMA on the Port of Baltimore. Another geographical area of impact would be at the southerly entrance to the Chesapeake Bay via Cape Henry.

Once a ship completes traveling through the MAUS SMA (in the Atlantic Ocean) and enters into the Chesapeake Bay from the northern and southern ends, it should no longer be subject to these particular speed restrictions while traversing waters of the Bay and entering and leaving the Port of Baltimore. Ships, however, would still be subject to appropriate U.S. Coast Guard regulatory requirements.

This document does not adequately account for economic impacts to businesses (direct and indirect) within the Port of Baltimore that rely on timely delivery of products and goods from these ships. If these ships were to reduce sailing time to the Port of Baltimore, there would be significant lag time for ships to reach the port and thereby, produce filter-down negative impacts to businesses within the port.

When considering ocean freight costs, financial revenues, and financial performance of vessel operations calling on east coast ports, once again, there would be a filter-down negative impact on the Port of Baltimore and maritime commerce dependant businesses and jobs. Ships traveling to the Port of Baltimore from the Chesapeake and Delaware Canal or from the southerly entrance of the Chesapeake Bay (via Cape Henry) must first go through the MAUS SMA. Some ship lines could choose to take their business to other ports that either do not have these restrictions or may be more easily accessible.

Because interior waters of the Chesapeake Bay and the Port of Baltimore are geographically outside the boundaries of the SMA, there may not be direct impacts to the physical environment of the Bay and the Port as a result of these ship speed reductions. This DEIS indicates that North Atlantic right whales spend majority of their time in (although closer to land than other large whales) the eastern coastal waters of the Atlantic Ocean and that they may enter shallower waters to give birth. There is no documentation within this DEIS that specifies whether these whales enter shallower waters of the Chesapeake Bay.

There are no in-depth references or discussions in the DEIS on the impacts of the ship strike reduction or speed restrictions on passenger vessels, such as cruise ships.

There is no discussion in the DEIS on what the ship strike reduction strategy or speed restrictions would be based on - science or technology. At the August 10, 2006 public hearing in Baltimore, there was discussion by some shipping lines that sailors are asked to visually watch for whales. This document does not go into discussion about techniques that are currently used to spot the North Atlantic right whale, nor does the DEIS have any discussion on what techniques or technologies are used during nighttime hours to spot these whales.

There is no discussion in the DEIS on active communications between the National Marine Fisheries Service and the Maryland Port Administration (Port of Baltimore) about the ship strike reduction strategy.

Although the document mentions that federally-owned or managed ships are exempt, it does not adequately specify the type of ships; such as military ships.

There could be increased possibility of air pollution from ships that would be required to adhere to speed restrictions in the SMA. Factors that may contribute to this issue may be related to consumption and type of fuels, speed and acceleration, number of vessel trips, distance to travel, engine type and age, emissions control technologies, and climate.

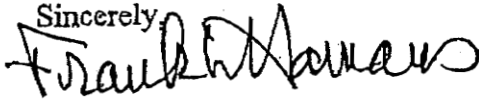


Navigational capabilities and safety of vessels that call on the Port of Baltimore, due to the proposed speed restrictions of this strategy, would be of concern to the Maryland Port Administration. Chesapeake Bay pilots have also expressed great concerns regarding the safety of these vessels at the proposed speeds. The MPA recommends that a reevaluation of these proposed speed reductions be performed with input from port communities.

Attached for your consideration is a table that references specific sections and pages within the DEIS and includes additional comments to this document.

These issues are of particular importance to the Port of Baltimore. The MPA would welcome communication from the National Marine Fisheries Service (NMFS) on the proposed rulemaking and ship strike reduction strategy. In addition, the MPA encourages the NMFS to work closely with this agency to establish an accurate effect of the proposed rules on port communities and fashion a rule that would not adversely impact the shipping industry or port communities, while protecting the North Atlantic Right Whale from vessels.

Sincerely,



Frank L. Hamons, Deputy Director  
For Harbor Development

nkb/FLH

cc: Brooks Royster, MPA  
M. Kathleen Broadwater, MPA

Attachment

**Environmental Impact Statement to Implement the  
Operational Measures of the North Atlantic Right Whale Ship  
Strike Reduction Strategy**

**Draft Environmental Impact Statement, July 2006**

| <b>Page No.</b> | <b>Chapter/Section</b>  | <b>Review Comments</b>   |
|-----------------|---|--|
| ES-3            | ES.3.2 Alternative 2 – Dynamic Management Areas                         | “DMAs are temporary and provide protection for a minimum of 15 days”.<br>How does this apply relative to the Chesapeake Bay?<br>During which particular days of the year does this apply relative to the Chesapeake Bay?   |
| ES-4            | ES.3.3 Alternative 3 – Speed Restrictions in Designated Areas           | Please note that according to the terms of the definition of the MAUS (Middle Atlantic United States), the Chesapeake Bay would be outside of and west of the boundaries of the MAUS region.   |
| ES-5            | ES.3.6 (Preferred) - Right Whale Ship Strike Reduction Strategy – Table | This table needs a title.  |
| 1-5             | 1.2.2.3 Other Anthropogenic Causes of Whale Mortality                   | In the list of human activities, “dredging and associated disposal of dredged materials” is included. It is also listed as a form of pollution. This statement is critical about dredging and too broad. It is assumed the document is referencing ocean dredging and not dredging from within the Chesapeake Bay. This statement needs to be revised to reflect type of dredging. Dredging is a necessary activity to allow large ships to safely access and leave the Port of Baltimore. |
| 1-7             | 1.2.1.4 Regional Recovery Plan Implementation Teams                     | Is there representation from the MAUS on the Recovery Plan Implementation team?  |
|                 | Figure 2-5 & Figure 2-6   | The Port of Baltimore is also impacted by the Delaware Bay Seasonal Management Area in that ships also enter the Chesapeake Bay from the north via the Chesapeake and Delaware Canal.  |
| 4-101           | 4.4.5.1 Cruise Industries   | More in-depth discussion is needed in Sections 4.4.1 & 4.4.3 on impacts of the proposed action and the alternatives to the cruise industry. This proposed action would also have an impact on the cruise business in the Port of Baltimore.  |
| 4-125           | 4.7.1 Cumulative  | There is no discussion on impacts of the proposed  |

|       |   |   |
|-------|---|---|
|       | Effects on the Physical Environment, 4.7.1.1 Air Quality  | action on neither air quality by ships calling on and leaving the Port of Baltimore, nor any of the other East Coast ports. |
| 4-139 | 4.7.2.7 Liquefied Natural Gas Vessels and Deepwater Ports | There is no discussion on impacts of the proposed action to the Cove Point LNG plant in the Chesapeake Bay.                 |
| 4-151 | 4.9 Mitigation Measures                                   | This section does not address mitigating economic losses on east coast ports, such as the Port of Baltimore.                |
| 5-5   | 5.3.2.3. Impacts to Other Commercial Operations           | There is no discussion pertaining to impacts to the cruise ship industry.   |

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STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS



**STATEWIDE PLANNING PROGRAM**  
Rhode Island Department of Administration  
One Capitol Hill  
Providence, RI 02908-5870  
(401) 222-6181 FAX (401) 222-2083  
[www.planning.ri.gov](http://www.planning.ri.gov)

**INTERGOVERNMENTAL REVIEW PROCESS: NOTICE OF DETERMINATION**

*Date:* October 3, 2006

*Referral Number:* EIS-06-01

Chief, Marine Mammal and Sea Turtle Conservation Division  
Attn: Right Whale Ship Strike Reduction DEIS  
NMFS Office of Protected Resources  
1315 East-West Highway  
Silver Spring, Maryland 20910

*Re: Right Whale Ship Strike Reduction DEIS*

Dear Sir/Madam:

In accordance with the rules and regulations governing the intergovernmental Review Process adopted by the State Planning Council following Presidential Executive Order 12372, we are hereby notifying you that the review of the *Draft Environmental Impact Statement for implementation of the operational measures of the North Atlantic Right Whale Ship Strike Reduction Strategy, EIS-06-01* is complete. No objections or substantive comments were received by this office.

A handwritten signature in cursive script that reads "Joyce Karger".

Joyce Karger  
Review Coordinator

Attachment

**RHODE ISLAND DIVISION OF PLANNING**

One Capitol Hill  
Providence, Rhode Island 02908-5871  
(401) 222-7901

5 JUL 25 AM 11

**REFERRAL: ENVIRONMENTAL STATEMENT**

To: THOMAS E DELLER DIRECTOR  
DEPT OF PLANNING & DEV  
400 WESTMINSTER STREET  
PROVIDENCE RI 02903

Date: 7/17/06

File Number: EIS 06 01

- Environmental Impact Statement (EIS)
- Supplemental EIS
- Notice of Intent to prepare an EIS
- Environmental Assessment Statement (EAS)
- Draft EIS
- Finding of No Significant Impact (FONSI)

Project: EIS to Implement Operational Measures of the No. Atlantic  
Right Whale Ship Strike Reduction Strategy

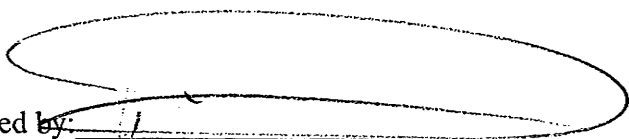
Agency: NOAA

Please review the enclosed material and send any comments or additional information to this office. Your comments must be *received* no later than ~~7/19/06~~. If additional time is needed or if you have any questions on this referral, please contact the Review Coordinator at the address or telephone number indicated above.

Additional or supplementary material is available for review in this office.  Yes  No

Comments (Use additional sheets if necessary):

No objection

Submitted by: 

Title: Thomas E. Deller  
Director

Date: 7/19/06

# FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION



RODNEY BARRETO  
Miami

SANDRA T. KAUPE  
Palm Beach

H.A. "HERKY" HUFFMAN  
Enterprise

DAVID K. MEEHAN  
St. Petersburg

KATHY BARCO  
Jacksonville

RICHARD A. CORBETT  
Tampa

BRIAN S. YABLONSKI  
Tallahassee

102

KENNETH D. HADDAD, Executive Director  
VICTOR J. HELLER, Assistant Executive Director

MARY ANN POOLE, DIRECTOR  
OFFICE OF POLICY AND STAKEHOLDER COORDINATION  
(850)488-6661 TDD (850)488-9542  
FAX (850)922-5679

September 21, 2006

Ms. Lauren Milligan  
Florida State Clearinghouse  
Florida Department of Environmental Protection  
3900 Commonwealth Boulevard, Mail Station 47  
Tallahassee, Florida 32399-3000

RE: FL200607062510C, Draft  
Environmental Impact Statement to  
Implement the Operational Measures of  
the North Atlantic Right Whale Ship  
Strike Reduction Strategy

Dear Ms. Milligan:

The Division of Habitat and Species Conservation, Imperiled Species Management Section, of the Florida Fish and Wildlife Conservation Commission (FWC) has coordinated agency review of the referenced Draft Environmental Impact Statement (DEIS), prepared by the National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS), in July 2006. We provide the following comments under the National Environmental Policy Act and the Coastal Zone Management Act/Florida Coastal Management Program.

## Project Description

The NMFS is proposing to implement the Ship Strike Reduction Strategy (Strategy) to reduce the occurrence and severity of vessel collisions with endangered North Atlantic right whales (*Eubalaena glacialis*). The Strategy addresses the lack of recovery of the North Atlantic right whale population by reducing the likelihood and threat of ship strike-related deaths and serious injuries to the species. This DEIS analyzes the potential environmental impacts of implementing the operational measures of the Strategy. The EIS commenced after a preliminary environmental assessment came to a finding of potentially significant impacts on the human environment.

Six alternatives were analyzed, and each included considerations as to whether to include new routing requirements (Alternatives 4, 5, and 6), whether to implement Dynamic Management Areas (Alternatives 2, 5, and 6), whether to implement Seasonal Management Areas (Alternative 6), and whether to include speed restrictions under various conditions (Alternatives 2, 3, 5, and 6). The alternatives would apply to all vessels longer than 65 feet and subject to the jurisdiction of the U.S., except for those owned or under contract with the federal government.

## Potentially Affected Resources

### North Atlantic Right Whale (*Eubalaena glacialis* - endangered)

The North Atlantic right whale (*Eubalaena glacialis*) is one of the most endangered large whales in the world, with an estimated population of approximately 350 individuals (Kraus et al. 2001). North Atlantic right whales migrate south from their feeding grounds in the northeastern U.S. to their calving grounds in northeastern Florida. The calving grounds are federally designated critical habitat for this species. Mainly adult females and calves, along with some juveniles and adult males, migrate to the southeastern calving grounds each winter, and may remain in the area for four to five months. Migration from the northeastern feeding grounds typically begins in October, although some individuals may not travel as far south as the southeastern critical habitat. Most right whales have left the calving grounds by March/April for the return trip to the northern feeding and nursing areas. Migratory patterns are variable, in part because they are subject to variability of weather and climatic influences. Individuals may also venture south outside of their typical feeding areas at other times of the year, such that right whales could be found in the mid-Atlantic during much of the year. For instance, carcasses and entangled whales have been recorded off of the mid-Atlantic region in the summer months.

Although North Atlantic right whales are thought to concentrate within 55 km of the coast on their mid-Atlantic migration (Knowlton et al. 2002), sightings do occur beyond this distance from shore. We concur with Hain and Kenney (2005) that uncertainty in predicting right whale occurrence is increased with distance from the shoreline because of reduced search efforts offshore compared to nearshore areas. In the southeastern calving grounds, recent aerial survey efforts have located right whales approximately 70 kilometers (km) from the shoreline. In addition, an entangled whale, equipped with a satellite tag during disentanglement operations, was recorded at approximately 118 km off the Florida shoreline on December 5, 2005. Despite uncertainties, data and anecdotal evidence indicate that right whales can occur at distances greater than 55 km along the eastern seaboard. Recent modeling efforts indicate that the loss of as few as two females per year may ensure the extinction of the species (Caswell et al. 1999). As recently as January 2006, a dead right whale calf was found floating in the Atlantic Ocean approximately one-half mile east of the Mayport Jetty, near the mouth of the St. Johns River. A necropsy determined that the whale was killed as a result of a ship strike. The winter inhabitants off the coast of Jacksonville include the most vulnerable component of the right whale population.

The potential for right whale presence declines south from Port of Jacksonville and into the Gulf of Mexico with increasing distance from the critical habitat, but right whales have been known to venture south along the Florida coastline, and even rarely into the Gulf of Mexico. A mother and calf were observed and photographed off Miami Harbor on January 30, 2004. One early recorded sighting of right whales in the Gulf of Mexico was near Sarasota in March 1963. This past winter (January 2006), two right whales were photographed off Texas and the west coast of Florida.

## Recommendations

1. We recommend that NMFS reduce the speed limit to 10 knots rather than either 12 or 14 knots. Literature cited in the Proposed Rule (Laist et al. 2001, Jensen and Silber 2003, Pace and Silber 2005, and Vanderlaan and Taggart in press) is generally based upon stranding records, reports of whale strikes, and anecdotal records. These sources of data are likely to be biased with respect to many aspects of the information, such as vessel types or collision locations. Laist et al. (2001) developed a largely inferential case that speed contributes to the severity of whale injuries. Since then, Jensen and Silber (2003) compiled a large whale-ship strike database that currently provides the best available source of data on



ship strikes, albeit it includes many of the same kinds of sources noted above. Pace and Silber (2005) and Vanderlaan and Taggart (in press) attempted to compare ship strike speeds to non-strike ship speeds (Mandatory Ship Reporting data). However, the sources of the two data sets are disparate on many levels, they do not provide metrics for goodness of fit, nor do they compare their models with alternative models (particularly a "no-effect" model).

The most scientifically rigorous studies cited in the Proposed Rule are the probabilistic models of the increase in severity of impacts to large whales with increasing ship speed (Pace and Silber 2005, and Vanderlaan and Taggart, in press). In both studies, the probability of serious injury or mortality increases rapidly between speeds of 9 to 10 knots and 14 to 15 knots and continued to increase slowly above that. Two corroborating studies provide the most convincing evidence that reducing ship speed may increase protection to whales by reducing severity of impacts. Additionally, Vanderlaan and Taggart models the probability of occurrence of whale-ship collisions, showing that although the probability of encounter diminishes with increasing speed, the probability is relatively constant over the range of speed in question.

None of these studies, however, including the two probability models, provide scientific analysis of speed effects in the probability of occurrence of whale-ship collisions. In fact, reduced speed could potentially increase the probability of occurrence because slower ships would spend more time within whale habitat (although the two probabilistic studies indicate that the collisions would be less catastrophic).

The large whale ship strike database used by Pace and Silber (2003) and Jensen and Silber (2005) includes ship strikes from around the world with various vessel types and a number of whale species. Likewise, Vanderlaan and Taggart reportedly used all available records. While providing the necessary quantity of data for analysis, neither focused on the North Atlantic right whale in particular. Although it appears safe to assume that similar factors would contribute to whale-ship collisions regardless of species and location, the North Atlantic right whale is unusual in the proximity of distribution to the shoreline and shallow bathymetry during migration and calving. Further, the southeastern United States calving grounds (SEUS) would differ fundamentally from the various geographic locales included in the databases. A high proportion (75%) of struck right whales along the U.S. Atlantic Coast between 1975 and 1996 were either juveniles or calves (Laist et al. 2001), potentially indicating a higher vulnerability among younger whales. These analyses, based on a database that includes all demographic groups, may not indicate adequate protection for calves.

Careful interpretation of available literature does implicate speed as a factor in the severity of impacts to whales, and the threshold at which the rise in probability becomes steep is approximately 9-10 knots. We do recommend, however, that NMFS monitor compliance carefully and given high compliance, try to evaluate the impact, both on probability of occurrence and on severity of injuries, that reduced ship speed has on whale-ship collisions where and when restrictions are imposed.

**2. We recommend NMFS consider reducing the size threshold for vessels included in speed restrictions.** At a minimum we would suggest increased education outreach to vessel operators below the proposed 65-foot threshold. On March 10, 2005 an 11-year-old female (right whale #2425) was struck by the propellers of a 43-foot yacht causing a near amputation of part of its tail. The yacht was traveling at approximately 20 knots and was located about 7 miles from Cumberland Island, Georgia. This whale was re-sighted in Cape Cod Bay in September of 2005. The condition of the whale at that time was very poor and it is presumed that the whale has died.

**3. We recommend NMFS utilize Section 7 Consultation to ensure that large vessels that are excluded from the proposed rule by virtue of federal affiliation adhere to speed restrictions under normal circumstances and to allow them latitude only when deemed necessary.** Navy vessels are the single largest category of vessel types to report whale-ship collisions (Jensen and Silber 2003). While naval ships may be more likely to report collisions than other vessel types because of military protocols, nonetheless, federally affiliated vessels are clearly involved in ship strikes. Including these vessels in speed restrictions whenever possible would likely contribute to the protection of right whales, especially in the southern United States where the most vulnerable portion of the population (mothers and especially calves) is found.

**4. We strongly support the designation of shipping lanes within areas delineated in the Proposed Rule and advocate NMFS enforcement of mandatory shipping lanes should data reveal that ships are not complying with recommended routes.** Two risk assessment models, a generalized additive model (GAM) and a Bayesian hierarchical model, estimated the risk reduction to right whales via implementation of shipping lanes. These were conducted for the right whale southeast critical habitat by Lance Garrison of NOAA and Chris Fommesbeck of FWC. Each examined reduction of risk index for the co-occurrence of ships and right whales within 4-km x 4-km cells, using combinations of lane restrictions associated with three ports: Brunswick (Georgia), Fernandina, and Jacksonville (both in Florida). Total reduction of the risk index over that associated with the status quo was greatest for the shipping lanes examined by the U.S. Coast Guard in their Port Access Routing Study (PARS). Of a suite of six scenarios representing different traffic patterns (including status quo), three reduced risk in the 36-40% range relative to the status quo, while the other two had a 26-31% reduction. Each scenario was run under both the GAM and Bayesian models. This represents a substantial reduction in risk of co-occurrence and would likely contribute to protection of right whales in their calving grounds.

Neither implementation of shipping lanes nor speed restrictions alone completely eliminated risk to right whales. Further, the two methods complement one another in the aspect of protection provided to right whales: shipping lanes reduce the potential for occurrence of a ship strike but do not reduce severity of injuries, whereas speed restrictions would likely reduce severity of injuries but do not reduce the potential for ship strike. Given that the Marine Mammal Commission has set the Potential Biological Removal level for this species at 0, as well as the current intensity of ship strikes, combining methods to provide better protection for right whales than either provides alone may be essential for preventing pending extinction of this species.

**5. We support the proposed recommendation to extend the Seasonal Management Area (SMA) out to 30 nautical miles (nm), opposed to 20 nm, as well as the regional SMA of November 1 to April 30 in the MAUS region.** Although this area is primarily used as a migratory route by the right whale, there is some evidence from aerial surveys performed off the MAUS that at least some right whale mothers may calve in the vicinity rather than continue migrating to the SEUS. Despite reduced aerial effort in this region compared to the SEUS, at least a few identified mothers with calves were observed in MAUS that were never seen in the SEUS during the same season. Although it is relatively certain that right whales do not occupy the MAUS at densities as high as in the SEUS, reduced aerial survey effort contributes greater uncertainty to assessment of right whale use in the MAUS. Further, a recent predictive habitat model for calving right whales predicted extension of habitat further north than current intensive aerial surveys, based upon average sea surface temperatures and bathymetry (Garrison et al. in preparation). Highly suitable habitat is predicted by this model to extend out to approximately 50 nm in some areas and potentially suitable habitat to extend past 150 nm.

**6. In order to avoid confusion, we recommend that the SEUS implementation period extend from November 15 to April 16 (rather than April 15) to match those used by the Mandatory Ship Reporting System. Furthermore, we recommend that Port Canaveral be included within the SEUS Seasonal Management Area.** The FWC has surveyed the central Florida coast for many years, although less intensively in comparison to the northern region near the Georgia/Florida border. Nonetheless, right whale sightings near the central Florida coastline have been reported in the majority of years that aerial surveys were flown in that region. The Port Canaveral area is currently defined as designated critical habitat; therefore, we believe it would be prudent (and consistent) to include the entire critical habitat region within the rulemaking boundary.

**7. We support the use of Dynamic Management Areas (DMA) for protecting right whales in those areas where whale occupancy is less predictable and lack of aerial survey effort does not support the use of Seasonal Management Areas.** We concur with the Area of Enforcement extending out to 200 nm as described in the Preferred Alternative (Option 6) of the DEIS and in the Proposed Rule. In the southeastern calving grounds, recent aerial survey efforts have located right whales approximately 70 km (37 nm) from the shoreline. In addition, an entangled whale, equipped with a satellite tag during disentanglement operations, was recorded at approximately 118 km (64 nm) off the Florida shoreline on December 5, 2005. However, the criteria for establishing a DMA are cumbersome, and the delay from sighting to declaration diminishes effectiveness of DMAs. This is especially true for regions in which right whales are mainly in transit and would likely be gone before a DMA could be established. We recommend streamlining procedures, such as eliminating density requirements, for declaring a DMA and making the DMA effective upon verification and broadcast of right whale locations to mariners. Likewise, under these circumstances, the DMA should be ended upon verification that the whale is no longer in the vicinity.

**8. We recommend that NMFS investigate the use of additional means beyond aerial survey for locating right whales, such as passive acoustics, to increase the effectiveness of DMAs as a management strategy.** Although aerial survey is an invaluable tool for locating right whales in high-density areas such as the SEUS, the efficacy of aerial surveys for detecting all right whales in an area is fair at best and is dependent upon flight specifications as well as environmental factors (visibility, Beaufort Sea State levels, winds, etc.). Detectability of mom/calf pairs for standardized aerial surveys in the southeast has been estimated to be as low as 33% (Hain et al. 1999). In addition, much of right whale migratory and residency behavior on the calving grounds remains unknown. Timing of migration is variable among years and is influenced by a number of environmental factors. The offshore extent of right whale migration, and influencing factors, are also poorly known.

Passive acoustic monitoring (e.g., using hydrophone arrays) provides greater detectability of vocalizing mammals than passive listening. Passive acoustic monitoring has been used previously by the Navy (Jarvis et al. 2002) and other researchers (i.e., Clark et al. 1996). Satellite tagging of right whales could provide valuable information on migratory behavior that is difficult to obtain through traditional means, such as vessel or aerial studies, and would reduce uncertainty of right whale presence in unpredictable areas.

While recognizing the difficulties with DMAs, we also recognize the function that DMAs serve in areas in which right whale activities are less predictable and where more stringent management would be unreasonable. Any additional means for increasing the efficacy of DMAs would seem prudent, however, given the current constraints of DMAs (as noted above), the extreme endangerment of this species, and the vulnerability of mothers and calves in mid-Atlantic and southeastern United States regions.

Ms. Lauren Milligan  
September 21, 2006  
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Based on the information that we have, we do not find this proposal inconsistent with Chapters 370 or 372, Florida Statutes, under the Florida Coastal Management Program. We appreciate the opportunity to provide input on this project and are available to provide additional assistance for our suggested mitigation proposal, if needed. Please do not hesitate to contact me at 850-488-6661 if you would like to coordinate further, or Chérie Keller or Tom Pitchford at 727-896-8626 if you have any technical questions regarding these comments.

Sincerely,



Mary Ann Poole, Director  
Office of Policy and Stakeholder Coord.

map/mh  
ENV 1-3-2  
Right Whale\_334map  
cc: Jessica Gribbon, NOAA/NMFS

### References Cited

- Caswell, H, M. Fujiwara, and S. Brault. 1999. Declining survival probability threatens the North Atlantic right whale. *Proceedings of the National Academy of Sciences USA* 96: 3308-3313.
- Clark, C.W., R. Charif, S. Mitchell, and J. Colby. 1996. Distribution and behavior of the bowhead whale, *Balaena mysticetus*, based on the analysis of acoustic data collected during the 1993 spring migration off Point Barrow, Alaska. *Rep. Int. Whal. Comm.* 46:541-552.
- Garrison, L.P., R.D. Baumstark, C. Keller, and L.I. Ward-Geiger. In preparation. A Spatial Model of the North Atlantic Right Whale Calving Habitat in the Southeastern United States.
- Hain, J.H., and R.D. Kenney. 2005. A Review and Update to the Technical Report of December 2002 for the Estimation of Marine Mammal and Sea Turtle Densities in the Cherry Point OPAREA – Specific to the Distribution and Density of the North Atlantic Right Whale. Atlantic Division, Naval Facilities Engineering Command, Norfolk, Virginia.
- Hain, J.H., S.L. Ellis, R.D. Kenney, and C.K. Slay. 1999. Sightability of right whales in coastal waters of the southeastern United States with implications for the aerial monitoring program. Pages 191-207 in G.W. Garner, S.C. Amstrup, J.L. Laake, B.F.J. Manly, L.L. McDonald, and D.G. Robertson, eds. *Marine Mammal Survey and Assessment Methods*. Rotterdam: A.A. Balkema. 191-207.
- Jarvis, S., D. Moretti, R. Marrissey, and N. DiMarzio. 2002. Passive monitoring and localization of marine mammals in open ocean environments using widely spaced bottom Mounted Hydrophones. *Journal of the Acoustical Society of America* 114:2405-2406.
- Jensen, A.S., and G. K. Silber. 2003. Large whale ship strike database. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-F/OPR 25, 37 p.
- Knowlton, A. R., J. B. Ring, and B. Russell. 2002. Right Whale Sightings and Survey Effort in the Mid Atlantic Region: Migratory Corridor, Time Frame and Proximity to Port Entrances. Report submitted to NMFS Ship Strike Working Group. Web site: [www.nero.noaa.gov/~shipstrike/midatlanticreportFINAL.pdf](http://www.nero.noaa.gov/~shipstrike/midatlanticreportFINAL.pdf). July.
- Kraus, S. D., P.K. Hamilton, R.D. Kenney, A.R. Knowlton, and C.K. Slay. 2001. Status and trends in reproduction of the North Atlantic right whale. *Journal of Cetacean Research and Management Special Issue* 2:231-236.
- Laist, D.W., A.R. Knowlton, J.G. Mead, A.S. Collet, and M. Podesta. 2001. Collisions between ships and whales. *Marine Mammal Science* 17(1):35-75
- Pace, R.M. and G.K. Silber. 2005. Simple analyses of ship and large whale collisions: Does speed kill? Sixteenth Biennial Conference on the Biology of Marine Mammals, San Diego, December 2005. Available at: <http://www.nmfs.noaa.gov/pr/shipstrike/>
- Vanderlaan, A.S.M., and C.T. Taggart. In press. Vessel Collisions with whales: the probability of lethal injury based on vessel speed. *Marine Mammal Science*.

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