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Part 1. The Northampton County Comprehensive Plan *[please note that this Table of Contents reflects only those plan elements adopted by the Board of Supervisors through October 14, 2008]*

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1 Introduction

Northampton County stands at a crossroads in its nearly 400-year history. One of the last remaining stretches of undeveloped coastline on the East Coast, Northampton County has now been discovered by retirees and second-home buyers attracted by its scenic beauty, recreational opportunities, and affordable land. As subdivisions have sprouted to accommodate the new arrivals, however, our communities continue to wrestle with many of the same issues faced by rural counties throughout Virginia: employment issues, a shortage of affordable housing, faltering family farms, a disconnect between workers' skills and available jobs, and a rising cost of living.

Numerous studies and public surveys over the past 15 years—reaffirmed in a series of citizen-input meetings in 2005—have clearly shown that the citizens of Northampton County do not want to become a bedroom community for Hampton Roads but want to maintain the county's rural lifestyle and to preserve its natural resources and landscape. At the same time, these studies highlight a desire for better jobs, a higher standard of living, and adequate and affordable housing. This 2006 update of the Northampton County Comprehensive Plan identifies the county's goals and strategies for addressing these—and other—issues.

While the year-round population of the County does not appear to be growing, the County has experienced peak seasonal increases and has seen a tremendous surge in residential construction, land values and home prices since the last update of the Comprehensive Plan in 2001. These increases are attributable to a variety of factors: (a) a nationwide trend toward higher housing and land prices; (b) the discovery of the County by retirees and second-home buyers wanting coastal property; and (c) speculative real estate purchases by investors hoping to profit by the rapid run-up in property prices.

The rise in the cost of land and housing has created significant problems for the local community. Many low- and middle-income families are now unable to afford new or renovated homes, and the pool of available rental housing has shrunk, particularly in the Cape Charles area. In turn, this has forced many families to relocate further north in the County, or out of the County entirely.

The escalation of land and home values has also resulted in a significant increase in property-tax assessments. While the County has benefited (at least in the short term) from increased property-tax revenues, there have been large sequential decreases in state aid to schools. The county's citizens have been negatively impacted, leading to concerns that residents—particularly those on fixed incomes—may not be able to afford to stay in their own homes even though the county has instituted a tax credit for the elderly and handicapped.

The need for a wide range of housing options is widely appreciated. The County's citizens have also indicated that they want to see new development funneled into the towns and villages, and away from agricultural and environmentally sensitive areas. Further, citizens have expressed the view that new growth should complement the

existing look and feel of the towns, with an emphasis on infill uses and development and rehabilitation of existing buildings. It is important to the County that each town and village preserves its distinct identity and be separated from one another by open space and farmland. The County intends to avoid the kind of suburban and strip-mall sprawl that afflicts so much of the country.

To that end, the County will also encourage that commercial growth be centered in the existing towns. Commercial operations along the main U. S. Route 13 corridor will be discouraged, both to ensure that the towns remain economically viable and to keep U. S. Route 13 an efficient and safe corridor for local and through traffic. With the Chesapeake Bay Bridge Tunnel (CBBT) planning for parallel tunnels in anticipation of significantly higher traffic growth over the next two decades, it is imperative that the County do whatever it can to ensure that U. S. Route 13 remains capable of safely accommodating this increased volume without adversely impacting the flow of traffic. The County opposes any efforts to develop an alternative limited-access highway connecting the CBBT and points north. Any such route would effectively destroy the County's communities and our fragile environmental heritage.

Indeed, preservation of the County's natural resources is a primary imperative for the county. The citizens of Northampton County value their rural lifestyle and rich natural heritage and oppose development that would degrade or destroy it. These core natural assets include prime agricultural lands, woodlands, tidal wetlands, salt marshes, lagoons, barrier islands, and coastal waters. Public input also indicated the importance citizens placed on preserving the human, cultural, and historic resources of the county.

The county recognizes that conservation alone is not a viable long-term strategy for protecting our core natural resources. While Virginia Employment Commission statistics show that Northampton now enjoys nearly full employment, it is imperative for the county also to identify economic opportunities that build on—and protect—these key natural, cultural, and human assets. To that end, the County has identified agriculture, aquaculture/shellfish farming, and sustainable tourism as its key economic-development initiatives. In addition, improvements in workforce training and our school system must go hand-in-hand with these initiatives if the county's citizens are to share in future economic growth. The County will continue to support its existing industrial base and will welcome other industries that do not degrade the County's natural environment or imperil its sole-source aquifer.

To a large extent, all future growth in Northampton County is subject to the ability of the County's sole-source aquifer to support it. Increasingly sophisticated groundwater-modeling is providing the county with an ever-more detailed understanding of the aquifer, how it is recharged, contamination threats, and the impact of excessive withdrawals. The County will use this information to help determine how and where future growth should be allowed.

As the County charts its course for the future, one thing is clear: Through a series of public-input meetings during the course of 2005, the citizens of Northampton County

displayed a remarkable degree of consensus, providing County leaders with a clear vision about what they consider important, how they want the county to grow, what they want to change, and what they want to preserve. The County's leaders concur with these citizen concerns, and this document outlines the County's plans to make this joint vision a reality.

1.1 The Comprehensive Plan Update Process

1.1.1 Strategic Retreat

A day-long Comprehensive Plan retreat was held in June 2005. In attendance were the County's planning staff, Board of Supervisors, Planning Commissioners, citizens who had been appointed by the Board to a Plan-Advisory Committee, and a consulting team. The purpose of the retreat was to review and discuss options for how to proceed with the update process for the Comprehensive Plan and the Zoning Ordinance.

1.1.2 Public Workshops

The Northampton County Comprehensive Plan Update was initiated with a series of public workshops designed to solicit community input on issues of concern to citizens and to get a sense of their visions for the future of the County. Seven community meetings were held between September 14, 2005 and October 26, 2005, at locations throughout the County to target each population center and geographic area of the County (Nassawadox, Eastville, Cheriton, Cape Charles, Exmore-Belle Haven, and one meeting each for the northern and southern rural areas). Between twelve and forty residents attended each workshop. At each of these meetings, participants were asked to identify what makes the County a great place to live, how it might be improved in the future, and any potential weaknesses and threats that might influence Northampton County in the years to come. Citizens also broke into small groups and used maps to identify areas of the County that are highly prized and should be protected, and those areas that should be changed or improved.

1.1.3 Citizens' Growth Summit

The community meetings were followed by a Citizens' Growth Summit held on November 29, 2005. Approximately 160 people attended this hands-on community workshop at the Eastville Fire Company. Citizens participated in a visual-preference survey, using a series of photographs, sketches and photomontages illustrating various development types and patterns. Participants were asked to select a single image in each series that best represented their vision of how a particular settlement pattern might evolve, change, stay the same, or be replicated in the future. The second half of the workshop included an interactive planning game that allowed participants to explore potential future impacts of various development types and densities on Northampton County. Citizens took turns placing "development chips" on maps of the County to see how future development in a range of densities might look and what the impact of their choices would be on natural areas, roads and public facilities.

1.1.4 National Citizen Survey

Another source of input for the Comprehensive Plan Update is a "National Citizen Survey" conducted in Northampton County in late 2004 and concluded with a final report to the County in April, 2005. The National Research Center, Inc. (NRC), in collaboration with the International City/County Management Association (ICMA), conducted the survey for the County. The National Citizen Survey worked in close cooperation with County staff to customize the survey to Northampton County's needs. Participating households were selected at random and the household member who responded was selected without bias. Multiple mailings gave each household more than one chance to participate with self-addressed and postage-paid envelopes. After an initial pre-survey mailing to 1200 households in the County, 1050 households were determined to be eligible to receive the actual survey form; 298 completed surveys were returned to the County. This 28% survey response rate falls within the typical 25% to 40% response rate for community surveys. The results of the survey were statistically re-weighted to reflect the proper demographic composition of the entire community.

1.2 Summary of Public Input

1.2.1 Major Themes

Citizens who participated in the National Citizen Survey for Northampton County identified "managing growth and development," "economic development" and "increasing affordable-housing opportunities" as the top three issues that the County will face in the next 10 years. Strong concerns about these three issues also emerged from the community-input meetings and the Growth Summit, along with more specific concerns about growth pattern and pace, community design, preservation of natural and cultural resources, retaining traditional Eastern Shore industries such as agriculture and seafood production as a cornerstone for economic development, and controlling commercial development along U. S. Route 13.

1.2.2 Population Growth and Pace of Development

While Northampton County's population has stayed nearly constant over the last 10 years, with a population ranging between an estimated 13,000 to 13,200 residents[1], 38% percent of survey respondents perceived population growth as "somewhat too fast" or "much too fast." At the public forums, participants expressed their perception that change is on its way and that the County's future is somewhat threatened by factors beyond the control of local residents and local government. The lower cost of housing and high quality of life in Northampton County has made it an attractive alternative for retirees as well as young families from Hampton Roads and other parts of the state and region. The toll on the Bay Bridge tunnel is no longer as strong a deterrent to commuters when balanced with relatively affordable housing prices compared to other areas.

[1] Source: Weldon-Cooper Center for Public Service, University of Virginia, Population Estimates for Virginia Cities and Counties – 1995 to 2005.

Citizens are concerned that growth pressures will overwhelm the County and reduce the rural quality of life experienced by residents of the County. Workshop participants felt that one of the best ways to address these issues is to direct new development to appropriate locations and ensure that the County's Comprehensive Plan goals and policies are reflected and supported in its Zoning Ordinance.

1.2.3 Housing Affordability

One emerging and unintended consequence of in-migration is that outside capital investment from residents who work elsewhere in the region, or who come to the County as seasonal residents or retirees with substantial equity, is driving housing prices and real estate taxes up for local residents. Citizens felt housing affordability needs to be addressed as part of the Comprehensive Plan update and that such efforts should focus on infill development and rehabilitation of existing housing to provide a wider range of housing options and price ranges.

1.2.4 Local Economy and Economic Development

Job growth over the past two years was overwhelmingly rated as "much too slow" or "somewhat too slow" by 85% of the survey respondents. Residents are concerned that young people are leaving the area for jobs elsewhere, that wages are too low and that local workforce skills are not adequate. Residents cited the railroad, good highway access, the deepwater seaport in Cape Charles, other natural resources, and the nearby Accomack County regional airport as economic-development assets. Northampton's residents also voiced concerns about the future vitality of the County's traditional economic engines – agriculture and seafood production.

The general sense of comments in the Fall 2005 workshops was that Northampton County is blessed with some of the most fertile and productive agricultural soils in Virginia. However, outside influences, such as nationwide changes in farming practices, loss of local farm laborers, increased agricultural regulations, and changes in food merchandising, have meant that family farming is gradually giving way to larger, corporate-farm entities, or to the sale of farms for residential development.

Likewise, citizens reported that there have been major changes in the seafood industry and threats to its viability initially brought on by the decline of water quality and seafood harvests in the Chesapeake Bay. Innovations in aquaculture, seafood processing and commercial fishing have made it possible for the County to retain its prominence in the seafood industry, even though most operations are no longer strictly family-based as they were in the past.

Citizens voiced a strong interest in finding ways to strengthen agriculture, seafood-based industries and water-related activities for economic-development purposes, but also as a crucial part of maintaining the County's rural character and traditional development pattern of towns and villages.

In addition, citizens in the workshops commented on Northampton County's strong tourism potential and its core assets for the tourism industry, including pristine natural areas, historic buildings and settlements and maritime and recreational activities. Cape Charles was also identified as having key resort-based amenities for tourism such as golf courses, pleasure-boat harbors and marinas, and a historic 19th-century resort-town fabric. Agriculture-based, nature-based, and cultural and heritage-based tourism were identified as key industries that the County should pursue and plan for in the coming years.

1.2.5 Community Character and Development Pattern

The visual-preference survey results highlighted an appreciation for traditional development patterns like the ones that evolved naturally from the farm-based and seafood-based economy. Residents generally favored compact development forms, traditional townscapes and working agricultural landscapes. Participants in the community meetings expressed fears that without appropriate land-use policies, regional growth pressures will lead to the conversion of farmland to residential and commercial use, loss of affordable housing and loss of rural character, and that towns will run together or be indistinguishable from surrounding suburban development in the County.

Most community workshop participants favored directing new development to existing towns where public services are available as a means of revitalizing existing towns and promoting compact development. Participants also acknowledged the general policies of the Towns, as expressed by Town officials in the input sessions, relative to favoring or not favoring additional growth within their corporate boundaries in the future. In particular, officials from the Towns of Cape Charles, Cheriton, and Exmore have expressed desires for attracting and accommodating continued future growth, while officials from Eastville and Nassawadox did not express an interest in attracting more growth to their Towns. Workshop participants also suggested that historic districts, design guidelines and maintaining a clear separation between towns would promote compatible development and reinforce the fabric and sense of community in the existing towns.

Poorly maintained buildings, commercial development along U. S. Route 13, lack of utilities and lack of funding for public infrastructure were all cited as potential threats to the vitality of existing towns and villages. Residents were also concerned that existing higher-density zoning, particularly surrounding the towns (outside of established towns) and along U. S. Route 13, encourages residential development of productive farmland and poses a potential threat to aquifer recharge areas in the U. S. Route 13 corridor[2]. In villages dependent on the seafood economy, residents want to ensure that new waterfront development does not threaten the viability of the traditional working waterfront.

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[2] Relevant studies include: "Technical Analysis and Justification for Ground Water Ordinances on the Eastern Shore of Virginia, Final Report" by Malcolm Pirnie, Inc. January 2001;
"Ground Water Supply Protection and Management Plan for the Eastern Shore of Virginia" by Horsley Witten Hegemann, Inc. May 5, 1992 ; "Hydrogeology and Analysis of the Ground-Water-Flow System of the Eastern Shore, Virginia" U.S Geological Survey Open-File Report 91-490, 1992

1.2.6 Natural Resources

It was evident from comments made at the public-input meetings that Northampton County residents take pride in the unique natural resources that make the County a desirable and beautiful place to live, as well as an ecologically and environmentally significant feature of the Eastern seaboard of the United States. Northampton County's barrier islands are among its most important natural features. Most of these islands are owned by The Nature Conservancy as part of the Virginia Coast Reserve. The Virginia Coast Reserve has also been designated as an International Biosphere Reserve by the United Nations in recognition of the importance and fragility of the salt marsh and island ecosystem. Northampton County's islands, together with the contiguous islands in Accomack County, represent the last undeveloped barrier island system on the Atlantic Coast. It is an area of the highest ecological value, one of which is its critical significance as part of the Atlantic migratory bird flyway.

Participants in the workshops viewed the ecological significance and pristine marine landscape of the County as a tremendous asset and an opportunity, although one that is potentially threatened. This unique environment creates a clean, healthy, beautiful place to live and visit. Citizens are concerned that demands for second-home or waterfront development and scattered residential development will threaten the fragile ecosystem, migratory bird corridors, natural habitat areas and groundwater supplies. However, they are also supportive of using Northampton County’s unique natural features to attract tourists, promote eco-tourism and the marketing of Eastern Shore products and goods, and to attract innovative and ecologically compatible business and industry.

One other source of concern to residents is water quality and water quantity. The Eastern Shore of Virginia has a sole-source aquifer system that is fed only by rainfall, rather than by lakes or rivers. This groundwater is the sole source of freshwater for residents of Northampton County. The importance of this limited supply of groundwater was recognized by the State Water Control Board in 1976 when the Eastern Shore of Virginia, including Northampton County, was designated a Groundwater Management Area. Because the community cannot function without an adequate fresh-water supply, one of the most critical factors that must guide and limit future growth and development is ground-water quality and quantity. Inadequate protection and overdevelopment of ground-water recharge areas and over pumping of ground-water supplies to serve new development can lead to salt-water intrusion and degradation of the entire aquifer. Of equal importance is ensuring that the ground-water supply is not contaminated.

1.2.7 Community Facilities and Infrastructure

While local residents expressed pride in local community facilities such as schools and libraries, the lack of public utilities needed to serve existing and future residents was a topic of concern during the public forums and the community-growth summit. Cape Charles and Exmore are the only towns in the County with both a public water system and a public wastewater system. The town of Eastville has a public water system. Therefore, the potential for development at higher densities and adjacent to the towns is

limited under current conditions. Citizens also noted that new development brings demands for services that may stretch the County's financial capabilities. Citizens identified Town and County cooperation and coordination, improvements to existing systems, and conditional zoning as ways to address future infrastructure needs.

1.2.8 The U. S. Route 13 Corridor

U. S. Route 13 is not only the major local roadway serving Northampton County's towns, it is the only road connecting Northampton County to the mainland. It is a vital transportation artery for both local residents and the millions of travelers who pass through the area each year. For this reason, residents are concerned about the level of commercial development occurring on U. S. Route 13 and at key intersections. U. S. Route 13 has been a typical location for highway commercial uses that serve through travelers, Residents are concerned that too much commercial development along U. S. Route 13 will create congestion, compete with commercial activities in the towns and fundamentally alter the character of the rural "view from the road" experienced by potential tourists passing through the area.

Additionally, U. S. Route 13 sits atop the prime recharge area for the County's sole-source aquifer and ground-water supply. While citizens recognize the importance of U. S. Route 13 for economic-development purposes, they felt that the County should limit additional commercial development on U. S. Route 13 and direct it to key locations, such as within the existing commercial areas inside the town, and by developing standards to improve the design of commercial projects. Finally, residents also voiced concerns that an Interstate road corridor, running from Delaware to South Carolina, could one day be extended through the County. They strongly opposed this extension as being detrimental to the County's economy and way of life based on its natural resources and its farming and maritime industries.

1.3 Vision for Northampton County

This Comprehensive Plan sets out goals and policies that will be used by public officials to make decisions that will greatly influence the County's future. The most successful people and businesses have a vision for their future that guides their day-to-day decision-making. Stated or unstated, an ultimate vision sets a framework for the incremental decisions that lead toward the future. As noted author Stephen Covey puts it, "beginning with the end in mind" makes it more likely that the desired future will be achieved.

The ultimate vision for Northampton County, developed through the public-input process, is significant since it is based on broad community beliefs about what is important and what the community hopes it will be like in the future. It is the underlying framework for more specific goals and policies elsewhere in this plan. If the goals and policies of the plan are upheld and implemented, the following vision should become reality.

1.3.1 Northampton County Vision Statement

Northampton County is a thriving community, built upon its rich agricultural, ecological and maritime heritage, whose residents have worked cooperatively to:

- Preserve the County's traditional development pattern and rural character by directing new development to locations in and adjacent to vibrant towns and villages that have maintained and enhanced their unique identities, distinct boundaries and surrounding open space.

- Develop a healthy and sustainable local economy that is centered on agriculture, aquaculture, recreation and tourism, but complemented by jobs in compatible and appropriate industries and businesses that offer living wages to local residents.

- Preserve, protect and enhance the natural environment and natural resources that are fundamental to the quality of life cherished by residents of the County, that support the coastal ecosystem, and that serve as the foundation for the local economy.

- Improve the safety, efficiency and attractiveness of U. S. Route 13 by coordinating access and limiting commercial development on the highway.

- Ensure that new development is attractive, appropriately located and scaled to be compatible with historic settlements and structures, while also being varied enough to meet the needs of all income groups.

<u>Community Development, Growth and Change</u>

- Northampton County has extended a high quality of life, based partly on its rural character, scenic beauty, historic character and extensive natural resources, to all its citizens.

- Northampton's high quality of life and rural character have been maintained by directing new growth to areas within and adjacent to existing towns and villages.

- In rural areas, innovative cluster options and subdivision-design standards have been adopted and enforced to preserve open space and rural character.

- The County has articulated clear standards for new development in each village to ensure that new development is architecturally compatible with existing development and consistent with the scale and density of the surrounding area.

- Revitalization of existing structures and infill development is extensively used, and has increased housing diversity and affordability.

Agriculture and Aquaculture

- Farms, large and small, are an integral part of the local and regional economy and development is directed away from productive farmland.

- Northampton County has continued its proud agricultural tradition and extended the traditional farming industry to include the production and marketing of organic and specialty farm products.

- The agricultural industry in the County is recognized as a vital segment of the economy and farmland is protected from encroachment by sensible land-use planning and through local and statewide programs.

- Aquaculture and seafood-related businesses are also a vital segment of the County's economy, and careful land-use planning has ensured that coastal waters have remained clean and productive and working waterfronts remain viable.

Commercial and Economic Development

- Economic-development efforts center on promoting and maintaining locally based companies, attracting environmentally friendly businesses and industries that will provide a living wage for local residents and promoting the tourist and recreational opportunities available in the County.

- Tourism, including resort recreation and nature-based, agriculture-based and heritage-based tourism, is a key part of the local economy.

- The Eastern Shore Brand is an effective marketing tool for promoting tourism and local agricultural and aquaculture products.

- New business-development efforts are focused on promoting restoration and re-use of existing structures in towns and villages and in areas specifically designated for commercial uses.

- New commercial development has been directed away from U. S. Route 13 to preserve the safety and efficiency of U. S. Route 13 for through traffic, and to preserve the scenic rural character of the corridor.

- Commercial development is centered in towns and villages, at designated crossroads, and in carefully planned and limited extensions to existing towns and villages.

- Existing commercial development in the U. S. Route 13 corridor has been enhanced and improved with landscaping, buffering, consolidation of access points, and improved building- and sign-design guidelines.

Natural Environment

- Development is directed away from sensitive natural areas, including sensitive waterfront lands, flood-prone areas, and wetlands.

- Natural resources such as surface water, ground-water-recharge areas, marshes, wetlands, migratory bird and other wildlife habitats and surrounding open space are protected and retain their health and function as part of the open space network that is valued by local citizens and that is the basis for much of the local economy.

- Appropriate regulations are in place to mitigate the impact on ground and surface waters of storm water run-off from agricultural uses, commercial uses and developed areas.

- Ground-water quantity is monitored and assessed periodically to ensure that drinking water supplies are adequate and that ground-water is safe to drink without treatment.

- Development along the primary aquifer-recharge spine of the County is carefully monitored and controlled with appropriate standards to protect the quantity and quality of groundwater reserves for the long term.

Community Facilities and Utilities

- Quality of life is enhanced through the coordinated provision of services by the towns and the County.

- The County and the towns have worked cooperatively to address alternatives for sewer and water provisions and enhancements to address septic-system and drinking-water issues and to guide new growth to appropriate locations.

Recreation

- All County citizens have access to rich natural resources and beaches.

- A Countywide system of parks and trails links communities, provides recreational opportunities and supports and enhances private conservation efforts.

The Land-Use Plan

2.1 Land Use & Community Design

The overall land-use strategy and goals identified in this Comprehensive Plan update are a direct result of the public input gathered early in the plan update process. The Vision Statement and Vision Map, the Visual-Preference Survey, and the Land-Use Challenge Game results have provided guidance for the land-use policies that follow. In addition, previous studies and analyses, such as the Chesapeake Bay Bridge-Tunnel Commuter Toll Impact Study (October 2001), various environmental and ground-water studies and cost-of-community-service studies were considered in the development of the overall goals and policies that follow. Previous versions of the Comprehensive Plan were also considered in the development of the land-use policies and land-use map. The Land-Use Goals are based on a primary planning principle of protecting the County's rural, natural and agricultural areas by focusing new growth in the County to areas clearly envisioned for development.

When the Plan states a range of densities for potential residential development within a planning category, it is the Board of Supervisors' position that the low end of the stated range provides the most appropriate use of the property. Clear justification is needed before development at a higher density is warranted or appropriate. Further, text provisions in this Plan are intended to control over map provisions, if there are inconsistencies.

2.1.1 Land-Use Planning Goals

The key goals reflected in the Future Land-Use Map and in land-use policies are as follows:

- Conserve, preserve and protect the County's natural resources, including prime agricultural soils and the environmental attributes that contribute to a healthy coastal ecosystem, such as its wetland ecosystems, barrier islands, bird habitats and coastal shellfish areas**;** and discourage overboard discharge of sewage effluent to the maximum degree possible.

- Maintain the County's predominantly rural character by promoting agriculture, aquaculture, and sustainable tourism as the main economic industries in the County and as preferred land uses in the majority of the County.

- Protect the County's ground-water recharge areas and ensure that development is limited to a level that conserves the quality and quantity of the County's ground-water supply.

- Preserve the County's historic settlement pattern of distinct towns and villages surrounded by open space.

- Direct new residential development to areas within existing towns and villages and in designated areas adjacent to the existing towns where there is the greatest

potential for development to occur on central utilities and with adequate public services.

- Ensure that areas designated for new development are appropriately located according to the policies and Future Land-Use Map in this Plan and scaled to be compatible with the existing towns and villages.

- Discourage strip highway commercial development on U. S. Route 13 and S. R. 184.

- Direct new industrial and business development to limited areas in and adjacent to existing towns and to key locations near the Cape Charles harbor and the railroad.

2.1.2 Community Design Goals

The key goals reflected in the following Community-Design and Community-facilities policies are as follows:

- Promote compact development forms that both preserve open space in rural areas and maintain distinct town and village edges in settlement areas.

- Promote infill development in existing towns and villages and rehabilitation of existing structures.

- Allow for a range of residential densities, particularly in designated development areas, to provide housing options varied enough to meet the needs of all incomes.

- Ensure new development is appropriately located and scaled to be complementary extensions of existing settlements and structures and, where appropriate, the rural landscape.

- Promote consolidation of existing entrances and minimize the creation of new entrances to improve the safety of the U. S. Route 13 corridor

2.1.3 Land-Use and Community-Design Policies

Land-use policies and decisions should be based on distinct settlement types for rural areas and development areas which have been designed to (i) accommodate growth where it can be supported by infrastructure improvements; (ii) maintain existing community character which supports heritage-, culture-, and nature-based tourism, and (iii) preserve natural resources that support agriculture, aquaculture, eco-tourism and maritime activities.

<u>Rural Settlement Types include:</u>

- Conservation Areas

- Rural/Agricultural Areas
- Hamlets
- Waterfront Hamlet
- Villages
- Waterfront Villages
- Existing Subdivisions
- Existing Cottage Communities

Development-Area Settlement Types include:

- Towns
- Town Edges
- Commercial-Activity Centers
- Industrial-Activity Centers

The Future-Land-Use map identifies the boundaries and locations that are appropriate for each settlement pattern.

2.2 Rural Settlement Types

2.2.1 Conservation Areas

These are areas with significant environmental sensitivity, and/or those areas that are currently protected from development. They are established to minimize flooding impacts, maximize ground-water-recharge capacity, and to protect key natural resources, such as migratory-bird habitats and coastal waters. Examples include tidal wetlands, freshwater wetlands, salt marsh and similar sensitive lands. These areas include but are not limited to state lands, private preserves such as the Barrier Islands and other lands subject to private-conservation easements, riparian areas, and Carolina bays. This planning area is the least densely developed of all of the planning areas and includes largely undeveloped areas of the County.

2.2.1.1 Conservation Area Land Uses

a. Appropriate land uses for Conservation Areas include conservation uses such as preserves, low-impact outdoor recreational uses, low-impact agricultural uses, seafood harvesting and other natural-resource-based uses and accessory uses directly related to the support of these preferred land uses. It is acknowledged, however, that certain existing land uses, such as Kiptopeke Condominiums, are already located in Conservation Areas. It is recommended that zoning for such land uses recognize their existing status but not encourage their expansion.

b. Very low-density residential development may be appropriate (where not otherwise precluded by environmental regulations), but is not encouraged, as a secondary use in Conservation Areas.

c. Private and public land-conservation efforts, farmland-retention programs such as agricultural and forestal districts, and programs related to retention of seafood production should be focused in Conservation Areas.

d. Non-residential uses, except those incidental to and supportive of conservation, agriculture, seafood harvesting or outdoor recreational or other preferred land uses, will be discouraged.

e. Rezoning to allow higher-intensity and higher-density uses in the Conservation Areas would not be appropriate and are not supported by this Plan.

f. The County may permit conservation-related institutional or low-impact institutional uses that are complementary to conservation-related uses by special permit provided the use is compatible in scale and intensity with agricultural and conservation land uses, poses no threat to public health, safety and welfare and if the use helps preserve ecologically sensitive areas, farmland, seafood harvesting, open space or historic or scenic resources.

2.2.1.2 Conservation Area Community Design

a. Development densities in the Conservation Area should not exceed 1 dwelling per 50 acres.

b. New residential development proposed in Conservation Areas should be clustered to maintain very low development densities, or exhibit other conservation design principles to preserve on-site ecological, environmental, natural, cultural, historic, scenic and open-space resources. Proposals for compatible non-residential uses should also exhibit conservation design principles, employ conservation easements to limit development to specific areas and to ensure that the use proposes no degradation to the natural environment.

2.2.1.3 Conservation Area Community Facilities and Utilities

a. Public sewer and water service will not be extended to Conservation Areas. The County may consider the extension of public utilities to resolve public health threats existing at the time of adoption of this Plan.

b. The use of alternative on-site wastewater systems may be permitted in Conservation Areas to resolve existing public health threats. Individual alternative on-site wastewater systems may also be permitted to serve conservation-related uses if such systems are more ecologically or environmentally appropriate than traditional septic systems.

c. With the exception of public parks, preserves and outdoor-recreation facilities, community facilities should not be located in Conservation Areas.

d. Transportation access and improvements in Conservation Areas should be limited to the minimum necessary to serve uses in the Conservation areas.

2.2.2 Rural/Agricultural Areas

Rural/Agricultural Areas are those areas of the County that are predominantly in agricultural and forestal uses and are not served by public utilities. These areas generally include the County's prime agricultural soils and viable farm and forestry operations. Rural/Agricultural areas typify the historic, managed open landscape of Northampton County that includes farm fields, pasture, wood lots and rural homesteads. These areas include active agricultural operations, related forest uses and some scattered low-density rural residential uses.

2.2.2.1 Rural/Agricultural Area Land Uses

a. Land uses for Rural/Agricultural Areas include traditional and innovative agricultural uses, and rural uses that complement and support farming. Uses directly related to the support of the principal land uses may also be appropriate as accessory uses. The County seeks to maintain the existing rural character of these areas.

b. Low-density rural residential development should be permitted, but not encouraged, as a secondary use in Rural/Agricultural Areas. Any such development should be buffered from adjacent agricultural uses. Rural residential development should be discouraged on prime agricultural soils.

c. The County will continue to promote farmland-retention programs, such as Agricultural and Forestal Districts, in Rural/Agricultural Areas. The County will vigorously support “Right to Farm” policies in Rural/Agricultural areas to protect existing farms and farmers from nuisance complaints from neighboring rural residents.

d. Rezonings to allow higher-intensity and higher-density uses in the Rural/Agricultural Areas are discouraged.

f. New non-agriculturally based industrial and commercial uses are discouraged in rural areas.

g. Non-agricultural low-impact uses that are complementary to agriculture and open-space preservation or complementary to low-impact nature- and agriculture and heritage-based tourism uses may be allowed. Such uses should be subject to special-permit review and permitted only if the use is compatible in scale and intensity with agricultural activities and poses no threat to public health, safety and welfare.

h. The County discourages any uses, agricultural or otherwise, that negatively impact coastal waters and the viability of the aquaculture industry.

2.2.2.2 Rural/Agricultural Area Community Design

a. Development densities in the Rural/Agricultural Area should generally not exceed 1 dwelling per 20 acres.

b. New residential development proposed in Rural/Agricultural Areas should be clustered to maintain very low development densities and to preserve open space. To protect farmers from nuisance complaints from neighboring rural residents, plats for new residential lots located within the Rural/Agricultural Area should disclose that the preferred land use in the immediate vicinity of the new lot is agriculture and identify adjacent agricultural/farm uses.

c. Proposals for compatible non-residential uses should exhibit conservation-design principles, employ conservation easements to ensure development of specific areas that will minimize conflicts between farming and non-farming uses.

2.2.2.3 Rural/Agricultural Area Community Facilities and Utilities

a. The County will not provide public sewer and water service to Rural/Agricultural Areas.

b. The use of alternative on-site wastewater systems may be permitted in Rural/Agricultural Areas to resolve public-health threats existing at the time of the adoption of this plan. The use of individual alternative on-site wastewater systems may also be permitted to serve allowed uses if such systems are more ecologically or environmentally appropriate than traditional septic systems.

c. For new development, off-site sewage disposal will be discouraged. Waste water shall be dealt with on the new development site.

d. With the exception of public parks, and recreation facilities, the siting of community facilities shall be minimized in Rural/Agricultural Areas.

e. Transportation access and improvements in Rural/Agricultural Areas should be limited to the minimum necessary to serve uses in the Rural/Agricultural areas.

2.2.3 Hamlet

Hamlets are existing, unincorporated, small rural settlements, typically of 10 to 30 houses designated on the Future-Land-Use Map. They are often of local historic or cultural significance. These communities grew up at crossroads and usually have specific place names. Hamlets traditionally functioned and continue to function as community focal points and gathering places because they may include such things as a post office, church, general store, or similar facility that serves residents of the immediate rural area. Hamlets are mostly residential but may include areas zoned for limited commercial, employment and higher-intensity residential uses than the surrounding rural area. The traditional,

compact-development pattern in these areas should be preserved. Examples of Hamlets are: Bethel Church, Birdsnest, Culls, Marionville, Pat Town, and Weirwood.

2.2.3.1 Hamlet Land Uses

a. The most appropriate land use in Hamlets is residential infill in a traditional small-lot pattern, consistent with existing residential development.

b. Limited, small-scale business, institutional and employment uses may be appropriate in Hamlets on infill lots in locations that do not expand or alter the compact nature of these communities, provided they pose no threat to public health, safety or welfare, and provided they are compatible with adjacent land uses and existing roads are adequate to serve them.

c. Rezoning to allow higher density or intensity uses at the edge of Hamlets is not recommended unless all of the following criteria are met: (i) any new development will be designed, built, and sited to be compatible with the existing character of the area, including but not limited to the style of the buildings in the Hamlet; (ii) adequate connections to existing streets are provided in appropriate locations; (iii) proposed new structures are adjacent to or near buildings and houses in the existing Hamlet settlement; (iv) connections to public or central utility systems are provided, and such connections are consistent with County utility policies and feasible from an engineering standpoint; (v) the new development is designed so that a clear boundary, or edge, is provided between developed and undeveloped areas in the Hamlet community. Rezonings may also be appropriate for residential or non-residential infill development that enhances community design by providing similarly-scaled and compatible homes or small businesses similar to adjacent buildings. The proposed infill development should be compatible with adjacent uses and be supported by existing roads.

d. The County will work with residents of Hamlets to prepare and implement specific area plans for individual Hamlets, if such a planning effort would be requested and supported by Hamlet residents.

e. The County will encourage the maintenance and rehabilitation of existing structures in Hamlets to maintain property values, to provide a range of housing options for all income levels, and to address affordable-housing concerns in the County.

2.2.3.2 Hamlet Community Design

a. Infill development in Hamlets should be primarily single-family residential. Appropriate development densities in Hamlets should be consistent with existing zoning and adjacent uses but should not exceed 2 dwelling units per acre. In the case of a rezoning, the proposal must demonstrate that the proposed development densities will be of an intensity that is similar to or compatible with surrounding existing development.

b. New development proposed in Hamlets should be designed to be compatible with existing community elements and provide logical connections to existing streets, sidewalks

and other features. Design elements should include an interconnected street network and defined open spaces. Design elements may also include multiple uses within a single building, multiple uses adjacent to one another, building fronts set close to the street, and safe pedestrian access between sites and along sidewalks, on-street parking, and parking lots and parking areas located behind buildings.

c. New structures should be of a scale and type that are consistent with existing structures, and built in a style and with materials that are compatible with the local architecture.

2.2.3.3 Hamlet Community Facilities and Utilities

a. Hamlets will not be served by public sewer and water facilities. Any new development must be supported in the absence of public water and sewer, and without exceeding the capacities of existing natural resources and infrastructure systems.

b. The use of alternative on-site wastewater systems may be permitted in Hamlet Areas to resolve existing public health threats. Individual alternative on-site wastewater systems may also be permitted to serve hamlet- related uses, such as small-scale community-service public uses, if such systems are more ecologically or environmentally appropriate than traditional septic systems.

c. Hamlets are not a preferred location for County-owned community facilities; however, the County does encourage the maintenance, enhancement and, where appropriate, the expansion of existing community facilities that serve a local need, such as post office facilities, public parks and recreational uses.

d. Transportation access is via existing local roads and rural collectors. Infill development in Hamlets should be designed to access existing roads. Limited road improvements may be necessary to ensure safe ingress and egress at intersections. Street design must be compatible with the historic character of the local roads in terms of pavement width, building setbacks, etc.

2.2.4 Waterfront Hamlet

Waterfront Hamlets are existing, unincorporated, small rural settlements, typically of 10 to 30 houses designated on the Future-Land-Use Map. They are often of local historic or cultural significance. These communities grew up along the waterfront and usually have specific place names. Waterfront Hamlets traditionally functioned and continue to function as community focal points and gathering places because they may include such things as a working waterfront/harbor area, post office, church, general store, or similar facility that serves residents of the immediate rural area. Waterfront Hamlets are mostly residential but may include areas zoned for limited commercial, employment and higher-density residential uses than the surrounding area. The traditional, compact-development pattern in these areas should be preserved. Waterfront Hamlets include Bayford, Red Bank and Cherrystone Landing.

2.2.4.1 Waterfront Hamlet Land Uses

a. The most appropriate land use in Waterfront Hamlets is residential infill in a traditional small-lot pattern, consistent with existing residential development.

b. Limited, small-scale business, institutional and employment uses may be appropriate in Waterfront Hamlets on infill lots in locations that do not expand or alter the compact nature of these communities, provided they pose no threat to public health, safety or welfare, and provided they are compatible with adjacent land uses and existing roads are adequate to serve them.

c. Rezoning to allow higher density or intensity uses at the edge of Waterfront Hamlets is not recommended unless all of the following criteria are met: (i) any new development will be designed, built, and site to be compatible with the existing character of the area, including but not limited to the style of the buildings in the Waterfront Hamlet; (ii) adequate connections to existing streets are provided in appropriate locations; (iii) proposed new structure are adjacent to or near building and houses in the existing Waterfront Hamlet settlement; (iv) connections to available public or central utility systems are provided, and such connections are consistent with the County utility policies and feasible from an engineering standpoint; (v) the new development is designed so that a clear boundary, or edge, is provided between developed and undeveloped areas in the Waterfront Hamlet community. Rezonings may be also be appropriate for residential or non- residential infill development that enhances community design by providing similarly-scaled and compatible homes or small businesses similar to adjacent buildings. The proposed infill development should be compatible with adjacent uses and be supported by existing roads.

d. The County will work with residents of Waterfront Hamlets to prepare and implement specific area plans for individual Waterfront Hamlets, if such a planning effort would be requested and supported by Waterfront Hamlet residents.

e. The County will encourage the maintenance and rehabilitation of existing structures in Waterfront Hamlets to maintain property values, to provide a range of housing options for all income levels, and to address affordable-housing concerns in the county.

2.2.4.2 Waterfront Hamlet Community Design

a. Infill development in Waterfront Hamlets should be primarily single-family residential. Appropriate development densities in Waterfront Hamlets should be consistent with existing zoning and adjacent uses but should not exceed 2 dwelling units per acre. In the case of a rezoning, the proposal must demonstrate that the proposed development densities will be of an intensity that is similar to or compatible with surrounding existing development.

b. New development proposed in Waterfront Hamlets should be designed to be compatible with existing community elements and provide logical connections to existing

streets, sidewalks, working watermen's dockage, and other features. Design elements should include an interconnected street network and defined open spaces. Design elements may also include multiple uses within a single building, multiple uses adjacent to one another, building fronts set close to the street, and safe pedestrian access between sites and along sidewalks, on-street parking, and parking lots and parking areas located behind buildings.

c. New structures should be of a scale and type that are consistent with existing structures, and built in a style and with materials that are compatible with the local architecture.

2.2.4.3 Waterfront Hamlet Community Facilities and Utilities

a. Waterfront Hamlets will ot be served by public sewer and water facilities. Any new development must be supported in the absence of public water and sewer, and without exceeding the capacities of existing natural resources and infrastructure systems.

b. The use of alternative on-site wastewater systems may be permitted in Waterfront Hamlet Areas to resolve existing public health threats. Individual alternative on-site wastewater systems may also be permitted to serve hamlet-related uses, such as small-scale community-service public uses, if such systems are more ecologically or environmentally appropriate than traditional septic systems.

c. Waterfront Hamlets are not a preferred location for County-owned community facilities; however, the County does encourage the maintenance, enhancement and, where appropriate, the expansion of existing community facilities that serve a local need, such as post office facilities, public parks and recreational uses.

d. Transportation access is via existing local roads and rural collectors. Infill development in Waterfront Hamlets should be designed to access existing roads. Limited road improvements may be necessary to ensure safe ingress and egress at intersections. Street design must be compatible with the historic character of the local roads in terms of pavement width, building setbacks, etc.

2.2.5 Village

Villages are larger unincorporated rural communities, typically of 30 to 100 houses as identified on the Future-Land-Use Map. Villages historically grew up along major thoroughfares, around train stations, and at major crossroads. Although the Villages generally do not have access to central sewer and water, they usually have a higher-density identifiable core that includes a mix of residential, business, industrial, and institutional uses in a traditional development pattern. They are separate and distinct from each other and from nearby towns. Villages have served as, and will continue to serve as, focal points for surrounding Rural Areas. Villages include:

- Fairview

- Capeville
- Cheapside
- Hare Valley
- Machipongo
- Martin Siding/Reedtown
- Townsend
- Treherneville

Bayview, while designated as a Village on the Future-Land-Use Map, is recognized as an Existing Planned Rural Village. As such, it is recommended that its zoning recognize its status as a planned unit development.

2.2.5.1 Village Land Uses

a. Appropriate land uses in Villages include a compact mix of residential, business, commercial and institutional uses at higher densities than in surrounding rural areas. New residential development and small-scale business, commercial and employment uses should be limited to undeveloped infill parcels.

b. Rezoning to allow higher density or intensity uses at the edge of Villages is not recommended unless all of the following criteria are met: (i) any new development will be designed, built, and sited to be compatible with the existing character of the area, including but not limited to the style of the buildings in the Village; (ii) adequate connections to existing streets are provided in appropriate locations; (iii) proposed new structures are adjacent to or near buildings and houses in the existing Village settlement; (iv) connections to public or central utility systems are provided, and such connections are consistent with County utility policies and feasible from an engineering standpoint; (v) the new development is designed so that a clear boundary, or edge, is provided between developed and undeveloped areas in the Village community. Rezonings may also be appropriate for residential or non-residential infill development that enhances community design by providing similarly-scaled and compatible homes or small businesses similar to adjacent buildings. The proposed infill development should be compatible with adjacent uses and be supported by existing roads.

c. The County will work with residents of Villages to prepare and implement specific area plans for individual Villages, provided that such a planning effort is requested and supported by local residents.

d. The County will encourage the maintenance and rehabilitation of existing structures in Villages to maintain property values, to provide a range of housing options for all income levels, and to provide business opportunities.

2.2.5.2 Village Community Design

a. The density in Villages should not exceed 2 dwelling units per acre for single-family development and 4 dwelling units per acre for multi-family development.

b. The viability and historic character of existing Villages should be maintained by encouraging preservation of historic structures and preservation of the historic pattern of developed and undeveloped areas that define the Village and its boundaries.

c. New infill development should be designed to maintain the compact traditional form of existing Villages at development densities that are consistent with adjacent properties.

d. A mix of housing types may be appropriate in Villages. New development should be compatible in scale and character with existing structures. Alternative housing types such as accessory apartments and live-work units (typically commercial space on the ground floor with living quarters above the work space) are encouraged in Villages to expand the range of housing options available to County residents and to address affordable-housing concerns in the County.

e. All new development within the Village should be closely related to the existing, historic character and design of the Village. Design elements should include an interconnected street network and defined open spaces. Design elements may also include multiple uses within a single building, multiple uses adjacent to one another, building fronts set close to the street, safe pedestrian access between sites and along sidewalks, on-street parking, and parking lots and parking areas located behind buildings.

f. Street design should be compatible with the historic character of the local roads in terms of pavement width, building setbacks, etc.

2.2.5.3 Village Community Facilities and Utilities

a. Any new development in Villages must be supported in the absence of public water and sewer, and so as not to exceed the capacities of existing natural resources and infrastructure systems.

b. The use of alternative on-site wastewater systems may be permitted in Village Areas to resolve existing public health threats. The use of individual alternative on-site wastewater systems may also be permitted to serve Village- related uses, such as appropriately scaled community service public uses, if such systems are more ecologically or environmentally appropriate than traditional septic systems.

c. The County supports the maintenance, enhancement and, where appropriate, the expansion of existing community facilities located in Villages.

d. Transportation access to Villages is usually via existing collectors or rural highways, with a network of smaller streets serving the Village center. New development in or adjacent to Villages must connect to and reinforce the traditional Village road network.

e. New roads and road improvements within Village Areas should be designed to accommodate pedestrians as well as motor vehicles, and traffic-calming measures should be employed where possible.

f. If, at any time in the future, the County determines that it is desirable to provide public sewer and/or water to a Village for public-health reasons, the County will develop a planning process to work jointly with residents of the Village and the surrounding area to define specific water- and sewer- service boundaries and to prepare a Village plan to guide development within the service-area boundary. Upon completion, any such Village Plan should be adopted as an amendment to the countywide Comprehensive Plan.

2.2.6 Waterfront Village

Waterfront Villages are existing, larger unincorporated Villages along the waterfront, and include the communities of Willis Wharf and Oyster. Waterfront Villages historically grew up at coastal locations with deep-water access. Although the Waterfront Villages do not have access to public sewer and water, they usually have a higher-density identifiable core that includes a mix of residential, business, industrial, and institutional uses clustered compactly around a working waterfront and harbor area. They are separate and distinct from nearby towns and other settlements, with an existing buffer of open farmland at their periphery. Waterfront Villages have served as, and will continue to serve as, focal points for marine-related industries and lifestyle in the County.

2.2.6.1 Waterfront Village Land Uses

a. Appropriate land uses in Waterfront Villages include a compact mix of residential and water-related commercial uses at higher densities than in surrounding rural areas. New development should be limited to undeveloped infill parcels and to adaptive reuse of existing structures.

b. The working waterfront areas of Waterfront Villages should continue to support marine and water-related industries, such as aquaculture, fisheries, seafood businesses, nature-based tourism and other compatible, non-polluting businesses. Any new development that would be detrimental to the quality of area waters utilized by aquaculture or shellfish operators should be discouraged.

c. Rezoning to allow higher density or intensity uses at the edge of Waterfront Villages is not recommended unless all of the following criteria are met: (i) any new development will be designed, built, and sited to be compatible with the existing character of the area, including but not limited to the style of the buildings in the Waterfront Village; (ii) adequate connections to existing streets are provided in appropriate locations; (iii) proposed new structures are adjacent to or near buildings and houses in the existing

Waterfront Village settlement; (iv) connections to public or central utility systems are provided, and such connections are consistent with County utility policies and feasible from an engineering standpoint; (v) the new development is designed so that a clear boundary, or edge, is provided between developed and undeveloped areas in the Waterfront Village community. Rezonings may also be appropriate for residential or non-residential infill development that enhances community design by providing similarly-scaled and compatible homes or small businesses similar to adjacent buildings. The proposed infill development should be compatible with adjacent uses and be supported by existing roads.

d. The County will work with residents of Waterfront Villages to prepare and implement specific plans for areas around the individual Waterfront Villages, provided that such a planning effort is requested and supported by local residents.

e. The County will encourage the maintenance and rehabilitation of existing structures in Waterfront Villages to maintain property values, to provide a range of housing options for all income levels, and to provide business opportunities.

f. Any development proposed in the Waterfront Village of Oyster or the Waterfront Village of Willis Wharf will be reviewed for conformity with the Vision Plans adopted for those communities.

g. Waterfront Villages are appropriate locations for aquaculture uses, seafood harvesting and low-impact processing, and water-related recreational uses. The County may permit additional waterfront-related uses that support traditional local industries and recreational activities provided such uses are compatible in scale, proportion, and impact with the harbor area and the surrounding community.

2.2.6.2 Waterfront Village Community Design

a. The viability and historic character of existing Waterfront Villages should be maintained by encouraging preservation of historic structures and preservation of the historic pattern of developed and undeveloped areas that define the Waterfront Village, its working waterfront area, and its boundaries.

b. New infill development should be designed to maintain the compact traditional form of existing Waterfront Villages at development densities that are consistent with adjacent properties.

c. A mix of housing types may be appropriate in Waterfront Villages. New development should be visually compatible in scale and character with existing structures. Alternative housing types such as accessory apartments and live-work units shall be encouraged in Waterfront Villages to expand the range of housing options available to County residents. In general, new residential development should not be developed within the working waterfront and harbor areas of Waterfront Villages, unless it replaces existing historic

residences that are part of the harbor area. Residential density should not exceed 2 dwelling units per acre.

d. All new development within Waterfront Villages shall be related closely to the existing, historic design of the Waterfront Village. Design elements should include an interconnected street network, defined open spaces, multiple uses within a single building, multiple uses adjacent to one another, building fronts set close to the street, comfortable and safe pedestrian access between sites and along sidewalks, on-street parking, and parking lots and parking areas located behind buildings. Waterfront-related uses must be designed to be compatible with the character of the existing harbor area and to relate to the streets and buildings adjacent to the harbor area.

e. Street design should be compatible with the historic character of the local roads in terms of pavement width, building setbacks, etc.

f. No property-maintenance standards should be adopted that impinge on the ability of watermen to store and maintain, in an organized fashion, job-related equipment on properties under their control.

2.2.6.3 Waterfront Village Community Facilities and Utilities

a. Any new development in Waterfront Villages should be supported in the absence of public water and sewer, and so as not to exceed the capacities of existing natural resources and infrastructure systems.

b. The use of alternative on-site wastewater systems may be permitted in Waterfront Village areas to resolve existing public health threats. Individual alternative on-site wastewater systems may also be permitted to serve Waterfront Village-related uses, such as appropriately-scaled community-service public uses, if such systems are more ecologically or environmentally appropriate than traditional septic systems.

c. The County supports the maintenance, enhancement and, where appropriate, the expansion of existing community facilities located in Waterfront Villages.

d. Transportation access to Waterfront Villages is usually via existing collectors or rural highways, with a network of smaller streets serving the Waterfront Village center. New development in or adjacent to Waterfront Villages should connect to and reinforce the traditional Waterfront Village road network.

e. New roads and road improvements within a Waterfront Village area should be designed to accommodate pedestrians as well as motor vehicles, and traffic-calming measures should be employed where possible.

f. If, at any time in the future, the County determines that it is desirable to provide public sewer and/or water to a Waterfront Village for public-health reasons, the County will develop a planning process to work jointly with residents of the Waterfront Village and

the surrounding area to define specific water and sewer-service boundaries and to prepare a Waterfront Village plan to guide development within the service-area boundary. Upon completion, any such Waterfront Village Plan should be adopted as an amendment to the countywide Comprehensive Plan.

2.2.7 Existing Subdivision

Existing Subdivisions are principally single-use rural residential subdivisions, although some are more agricultural in character. These subdivisions have been approved for 6 (six) or more lots. They are frequently located on or near the water and in rural locations. Existing Subdivisions are not served by public utilities and are not intended for such service. Many were developed under prior zoning standards. Existing Subdivisions are shown on the Future-Land-Use Map, and examples include Vaucluse, Waverly, Wilsonia Landing, Butler's Bluff, Chesawadox, Highland Heights and Tower Hill. Existing Subdivisions are to be conserved to the extent of their current boundaries and not expanded.

2.2.7.1 Existing Subdivision Land Uses

a. With the exception of infill parcels, new or more development in these areas is not appropriate. The current development form should be maintained and stabilized, but not expanded into adjacent areas. Development on infill properties should be compatible with existing surrounding development in terms of scale and density.

b. Rezonings to allow increased density or intensity in Existing Subdivision Areas would not be appropriate or consistent with the policies of this Plan.

2.2.7.2 Existing Subdivision Community Design

a. New structures should be limited to single-family dwellings of a scale and type that is consistent with existing surrounding structures. Residential densities should not exceed those permitted by current zoning, ranging from 2 dwelling units per acre to 1 dwelling unit per 3 acres.

b. To retain property values and to maintain community stability, public and private community-design efforts should focus on enhancing the community character and quality, and improving or upgrading existing community features such as sidewalks, neighborhood facilities and open space.

c. Non-residential development should be limited to special-exception uses or home-occupation uses allowed under applicable zoning regulations; such uses shall be operated in a manner that maintains the residential character of the subdivision.

2.2.7.3 Existing Subdivision Community Facilities and Utilities

a. Public sewer and water service will not be extended to Existing Subdivision Areas.

b. The use of alternative on-site wastewater systems may be permitted in Existing Subdivision Areas to resolve existing public-health threats. Individual alternative on-site wastewater systems may also be permitted to serve existing community-service uses if such systems are more ecologically or environmentally appropriate than traditional septic systems.

c. Existing Subdivisions are not appropriate locations for new community facilities, except community-based recreational facilities. However, the County encourages the maintenance, enhancement and, where appropriate, the expansion of private facilities that serve residents of these communities.

d. Since little new development is anticipated in Existing Residential Subdivision Areas, transportation improvements should generally be limited to routine maintenance and enhancements needed to improve public safety. Countywide or regional transportation improvements that may affect Existing Residential Subdivisions should be designed to minimize and/or mitigate potential negative impacts on these areas. The County or the State will not maintain private streets serving Existing Subdivisions.

2.2.8 Existing Cottage Communities

Existing Cottage Communities are existing rural residential subdivisions, typically of 50 or more lots located on or near the water in rural locations. Existing Cottage Communities are not served by public utilities, and most were developed under older zoning standards or prior to the County's adoption of a zoning ordinance on small lots, frequently directly on the shoreline. These frequently do not meet current zoning, subdivision, Health Department, Storm Water Management or Chesapeake Bay Protection standards. Existing Cottage Communities should be conserved and maintained in their current form but not expanded into surrounding Rural/Agricultural Areas or Conservation Areas. Existing Cottage Communities include:

- Battle Point
- Downings Beach
- Silver Beach
- Smith Beach

2.2.8.1 Existing Cottage Community Land Uses

a. With the exception of infill parcels, new or more development in these areas is not appropriate. The current development form should be maintained and stabilized, but not expanded into adjacent areas.

b. For redevelopment of existing homes, any increase in floor area and/or lot coverage should be discouraged, as the existing Cottage Community standards for lot size, drainfield size and separation distances, and environmental protection are generally well below current standards for development in rural coastal locations.

c. Rezonings to allow increased density or intensity in Existing Cottage Communities Areas would not be appropriate.

d. As individual lots or areas of these Existing Cottage Communities are redeveloped, they should be brought into compliance with current health, environmental and zoning and subdivision standards.

2.2.8.2 Existing Cottage Community Design

a. New structures should be limited to single-family dwellings of a scale and type that is consistent with existing surrounding structures. Residential density should not exceed 2 dwelling units per acre.

b. Development on infill properties should be compatible with existing development in terms of scale and density.

c. To retain property values and to maintain community stability, public and private community-design efforts should focus on enhancing the community character and quality, and improving or upgrading existing community features such as sidewalks, neighborhood facilities and open space.

d. The County should consider developing a study of potential improvements in Existing Cottage Communities to mitigate their negative environmental impacts, through techniques such as shoreline stabilization-measures, alternative wastewater systems and native plantings for additional filtering of runoff from developed areas.

e. Non-residential development should be limited to special-exception uses or home-occupation-allowed uses under applicable zoning regulations. Such uses should be operated in a manner that maintains the residential character of the subdivision.

2.2.8.3 Existing Cottage Community Facilities and Utilities

a. Public sewer and water service will not be extended to Existing Cottage Communities.

b. The use of alternative on-site wastewater systems may be permitted in Existing Cottage Communities to resolve existing public-health threats. Individual alternative on-site wastewater systems may also be permitted to serve local community service uses, such as community recreation facilities, if such systems are more ecologically or environmentally appropriate than traditional septic systems.

c. Existing Cottage Communities are not appropriate locations for new community facilities, except community-based recreational facilities. However, the County encourages the maintenance, enhancement, and, where appropriate, the expansion of private facilities that serve residents of these communities.

d. Since little new development is anticipated in Existing Cottage Communities, transportation improvements should be limited to routine maintenance and enhancements needed to improve public safety. Countywide or regional transportation improvements that may affect Existing Cottage Communities should be designed to minimize and/or mitigate potential negative impacts on these areas. The County or the State will not maintain private streets serving Existing Cottage Communities.

2.3 Development-Area Settlement Types

2.3.1 Town

There are five incorporated towns in Northampton County: Exmore, Nassawadox, Eastville, Cheriton and Cape Charles. A portion of Belle Haven is also located in Northampton County. Towns have their own governing bodies and land-use planning and zoning controls. In 2005, the estimated population of these towns ranged from a high of approximately 1180 residents in Cape Charles to as low as 199 in Eastville. These Towns have served as social and economic focal points for the County since the development of the railroad, and even earlier. These incorporated towns have long been designated by the County as development areas and the existing zoning in and around the Towns reflects that expectation. The Towns will continue to be the most appropriate location for new residential and non-residential development in the County.

The amount of new growth that can be accommodated within these Towns will vary substantially depending generally upon the availability of municipal sewer and water service. At this time, only Cape Charles and Exmore offer public sewer and water service. Therefore, they are expected to be the primary development areas within the County for the foreseeable future. Eastville operates a municipal water system and will also be more likely to attract development interest than the other incorporated towns. The Towns of Belle Haven and Nassawadox are envisioned to remain secondary development areas, as is the Town of Cheriton, until such time as sewer and/or water service becomes available. The County will consider each Town's Comprehensive Plan, will work cooperatively with the Towns on all land-use matters, and offers the following general planning policies for consideration by the Towns in recognition of the fact that what occurs within Town boundaries will influence what occurs outside the corporate limits and that the County and the Towns may share responsibilities for the provision of public services to residents of the Towns**.**

2.3.1.1 Town Land Uses

a. Towns should be considered the most appropriate locations for most new residential and non-residential development. The County will work cooperatively with the Towns to attract development that is compatible with the Towns and that contributes to their economic and community vitality.

b. Towns should accommodate a full range of residential-unit types and densities. Residential-development densities should range from 1 unit per acre to 10 units per acre depending on the Town's Comprehensive Plans and Zoning regulations.

c. Major employment and commercial uses should be located within Towns, in particular within their established business districts, and along Commercial and Industrial Activity Corridors. The County will work cooperatively with the Town of Cape Charles to identify and attract appropriate uses for the former Sustainable Technology Park.

d. The County should work cooperatively with the Towns and the Industrial Development Authority to identify locations for compatible new industrial and business locations and/or the expansion of existing centers in the Towns.

e. The County acknowledges the general policies of the Towns, as expressed by Town officials in the public-input sessions, relative to favoring or not favoring additional growth within their corporate boundaries in the future. In particular, officials from the Towns of Cape Charles, Cheriton, and Exmore have expressed desires for attracting and accommodating continued future growth, while officials from Eastville and Nassawadox did not express an interest in attracting more growth to their Towns.

2.3.1.2 Town Design

a. The County will work cooperatively with the Towns to promote development that is compatible with the design and character of the existing Towns and to ensure that development adjacent to the Towns is compatible with and complementary to development within the corporate limits of the Town.

b. The County will share resources and work jointly with the Towns to encourage the renovation, reuse and adaptive use of existing structures. The County will also support Town efforts to encourage the preservation of historic structures within Town limits.

c, Development and redevelopment in the Towns should be compatible in terms of scale, massing, architectural detail and setbacks with adjacent buildings and with the overall historic development pattern of the Town.

2.3.1.3 Town Community Facilities and Utilities

a. Towns are, or may in the future be, served by public sewer and water service provided by the County or by the towns, by mutual agreement. The County will work jointly with the Towns to evaluate the desirability and feasibility of upgrading or establishing central sewer and water facilities.

b. Towns should be considered as the most appropriate locations for public facility investments occurring in Northampton County. Towns are the preferred location for new community facilities.

c. Transportation improvements within the Towns should be designed to tie into the existing street network serving the County and the Towns.

2.3.2 Town Edge

Town Edges are unincorporated areas of the County adjacent to Towns and are under the jurisdiction of the County, its governing body, and its land use planning and zoning controls. These are areas associated with existing Towns, and residents of these areas often feel as though they belong to the Town even though they are outside the corporate limits. Town Edges are potential development areas, particularly if the possibility of infill development in the adjacent towns is precluded.

Town Edges are natural future-expansion areas for the incorporated Towns and may potentially be served by future public sewer and water extensions from the Towns. The Town Edge limits are based on areas of existing development that are accessed by public roads, may be served by Town utilities and may best be served in the future by Town services, as well as the physical and natural features that define the area.

2.3.2.1 Town Edge Land Uses

a. The County will develop a planning process to work jointly with residents of each Town and the surrounding area to prepare a Town Edge plan to guide future development. Upon completion, each plan shall be adopted as an amendment to the countywide Comprehensive Plan.

b. Town Edge Areas could potentially be rezoned to accommodate a wide range of residential unit types and densities, from one unit per 2 acres to 5 units per acre, with densities that are proportionately lower as the distance from the town center increases, with the low end of this range providing the most appropriate use of the property. Clear justification is needed before development at a higher density is appropriate. Development density at one unit per 2 acres is anticipated where public utilities are not available. If the Town and the County determine that it is appropriate for the Town Edge to act as a "hard edge," density should be clustered toward the Town and a permanent band of open space established as part of the development within the Town Edge.

c. Town Edge areas are more appropriate for neighborhood-oriented, convenience-commercial uses than for large-scale commercial development. Major commercial uses are encouraged in town centers or in areas available for rezoning.

2.3.2.2 Town Edge Community Design

a. The County will encourage high-quality residential and non-residential design in Town Edge Areas. The County should evaluate rezoning and development proposals in Town Edge Areas to ensure that proposed development is compatible with existing communities in scale, size, proportion, and impact. Uses should be designed to minimize any negative impacts on existing neighborhoods. New development should be designed to provide a

"seamless" transition from the existing development in Town to the new, and should be connected to existing neighborhoods with an integrated road system.

b. Development in Town Edge Areas directly adjacent to the Town should be designed to complement and augment the historic character and development pattern of the adjacent Town by becoming a natural "extension" of the existing community. New development in the Town Edge areas should relate closely to the existing village and should be an "organic" and natural continuation and expansion of the historic design of the Town.

c. Development in Town Edge Areas should preserve critical historic resources and promote preservation and rehabilitation of existing structures.

d. The County encourages the use of development options (cluster, compact, mixed-use, etc.) that make better use of the land by concentrating development away from on-site scenic, natural, historic or open-space resources. In particular, the County encourages residential development designs that provide neighborhood open space. Such open-space elements should not be "left over" areas, but rather should be key, central focal points of the neighborhood, designed as true community spaces that are well-defined by the street network and adjacent buildings. These options can assist in addressing inclusionary and affordable-housing issues in the County.

2.3.2.3 Town and Town Edge Community Facilities and Utilities

a. Town Edge Areas are, or will likely someday be, served by public sewer and water service provided by the County or by the towns, by mutual agreement.

b. Town Edge Areas should be the secondary focus for public-facility investments occurring in Northampton County, secondary to the Town areas themselves. Town Edge Areas are an appropriate location for new community facilities that cannot be located in existing towns.

c. Transportation improvements within the Town Edge Area will be designed to tie into the existing street network serving the Town and the County and to be compatible with the Town's streets.

2.3.3 Commercial-Activity Corridor

Commercial-Activity Corridors are the most appropriate locations for new commercial-employment uses in Northampton County. These areas are located primarily within and adjacent to existing downtown business districts in existing Towns. It is the County's policy to encourage infill and expansion of the established business districts in Towns rather than encourage new commercial centers that would detract from the economic viability of the Towns' business districts. The County promotes the orderly redevelopment, infill and expansion of such areas within and around the Towns through utility agreements and mutually acceptable boundary-line adjustments.

2.3.3.1 Commercial-Activity Land Uses:

a. A mix of uses should be located in Commercial-Activity Corridors, with commercial-employment uses predominating. Commercial-Activity Corridors should retain the scale, diversity and mix of uses that are characteristic of Northampton County's small towns and their business districts.

b. Local and regional shops and offices should generally be located in established downtown centers with residential uses integrated among these uses, including within the same buildings as live/work units.

2.3.3.2 Commercial-Activity Community Design

a. The design of Commercial-Activity Corridors should be consistent with current zoning regulations and follow the traditional architectural patterns, scale and massing of historic small-town business districts. In general, densities and intensities of uses should be greatest at the center and decrease gradually away from the center.

b. When larger-scale uses, such as grocery stores or business headquarters, are to be located in Commercial-Activity Corridors, they should be designed to be compatible with the historic small-scale shop-front design of the Town's main business district. In particular, this should be achieved by locating building fronts on the sidewalk, locating parking to the rear of buildings, keeping comparable building heights and number of stories as adjacent buildings, breaking up large faces of buildings with variation in façade elements, and generally promoting a pedestrian-scaled and traditional Eastern Shore main street style of vernacular architecture.

2.3.3.3 Commercial-Activity Facilities and Utilities

a. Commercial-Activity Corridors are, or may in the future be, served by public sewer and water service provided by the County or by the Towns, by mutual agreement.

b. Transportation improvements within the Commercial-Activity Corridors should be designed to tie into the existing street network serving the County and the Towns.

2.3.4 Industrial-Activity Corridor

Industrial-Activity Corridors are the most appropriate locations for new industrial-employment uses in Northampton County. These areas are located primarily within the towns of Exmore and Cape Charles and adjacent to the town of Cheriton. The County encourages infill and expansion of the established industrial districts rather than new industrial centers or parks that would detract from the economic viability of these existing districts.

The County will promote the orderly redevelopment, infill and expansion of such areas within and around the Towns through utility agreements and mutually acceptable boundary-line adjustments.

2.3.4.1 Industrial-Activity Land Uses

a. Light and moderate industrial uses that are compatible with the County's rural and natural heritage are the most appropriate uses in Industrial-Activity Corridors. In particular, uses should be compatible with the County's primary economic base of agriculture and aquaculture industries and should not strain or degrade the County's sole-source aquifer.

b. Industrial-Activity Corridors should retain the scale, diversity and character that are characteristic of Northampton County's small towns and existing rural and waterfront industries.

c. With industrial uses, particular attention should be given to their impact on groundwater resources. Industrial users and systems that promote best practices and water conservation should be encouraged, and, in all cases, pollution potential should be carefully evaluated.

d. Local shops and offices designed primarily to serve the needs of the industrial uses may be appropriate within the Industrial-Activity Corridors.

2.3.4.2 Industrial-Activity Community Design

a. The design of Industrial-Activity Corridors should be consistent with current zoning and follow the traditional architectural patterns, scale and massing of small-town business districts and rural and waterfront areas. In general, the scale and character of industrial buildings should be compatible with the surrounding buildings and uses to the extent possible. Wherever this is not feasible, industrial buildings should be shielded from surrounding areas by vegetative buffers.

2.3.4.3 Industrial-Activity Facilities and Utilities

a. Industrial-Activity Corridors are, or may later be, served by public sewer and water service provided by the County or by the towns, by mutual agreement.

b. Transportation improvements within the Industrial-Activity Corridors should be designed to tie into the existing street network serving the County and the towns.

2.4 Road Corridors

The County opposes any extension of a proposed Interstate corridor on the Delmarva Peninsula that would run through the County, as such a corridor would be detrimental to the County's natural resources, rural quality of life and economy based on working farms and natural resource-based industries. Specific roadway improvements, including the

installation of bike paths where appropriate, and general transportation policies will also be addressed elsewhere in the Comprehensive Plan document. The following policies are for the County's primary road corridors as they relate to land-use and community-design issues.

2.4.1 U. S. Route 13 Corridor

U. S. Route 13 is the County's primary road corridor, both for regional and national through-traffic and for local traffic through the County and the Eastern Shore. In general, the County will encourage the continued improvement of the Route 13 corridor for the purposes of maintaining human safety and managing traffic capacity as appropriate. In particular, the functional capacity to carry through-traffic around existing towns should be maintained by locating development along the business portions of Route 13 in the Towns, and away from the bypass portions.

a. County land-use policies and the Future-Land-Use Map discourage the location of new development along U. S. Route 13.

b. The County should further protect the functional capacity of U. S. Route 13 by limiting strip commercial development and managing and limiting access points on the road.

c. The County should review and implement, as appropriate, the recommendations in the U. S. Route 13 Corridor Study and the Rt. 13/Wallops Island Access Management Study.

d. The County should work with existing large-highway-frontage landowners to secure voluntary agreements to reduce the number of access points on U. S. Route 13.

e. New development, should it be permitted, in the U. S. Route 13 corridor should have enhancements along the road frontage, including setbacks, buffering and landscaping with primarily native vegetation.

f. Proliferation of billboards should be discouraged.

2.4.2 Seaside, Bayside, and Stone Road Corridors

Seaside and Bayside Roads are the primary rural road corridors through the agricultural areas and Villages of the County. They are currently relatively undeveloped outside the limited number of historic village areas, and maintain a scenic rural character. Stone Road is the primary and heavily traveled entranceway into the Town of Cape Charles.

a. County land-use policies and the Future-Land-Use Map discourage locating new development along these roadways.

b. These road corridors are important to the scenic quality and the historic heritage of the County. In general, future road improvements and signage should minimize impacts to

the historic and scenic character of the road corridors, as well as sensitive environmental areas alongside the right of ways.

c. Wherever possible, the County should encourage the installation of bike lanes on these corridors.

2.5 Land-Use & Community-Design Implementation Recommendations

Most of the policies included in this chapter of the Comprehensive Plan can be implemented immediately without further study or action. The following implementation recommendations provide a series of "next steps" to be undertaken by the County to strengthen the Comprehensive Plan and to assure that it is implemented through related regulatory documents and the development process. The timing and priority for actions on these next steps will be established by the Board of Supervisors.

2.5.1 Proffer Guidelines

The County should work with the development community to develop a framework for proffer guidelines to be used in the evaluation of all rezoning applications. In addition to the regulations in Va. Code §15.2303, the following principles in evaluating and developing capital-facility proffer guidelines should be used in conjunction with conditional zoning (rezoning) applications:

To ensure that the proffer process is reasonable, effective and manageable, any proffer guidelines developed by the County should be based on the following principles:

(i) ***Consistency of content***. Proffers should be accepted on a consistent basis from one project to another. Uniform standards for capital facilities, based upon the Comprehensive Plan and a Capital Improvements Program, should be followed in determining appropriate proffers for a particular project.

(ii) ***Consistency of format.*** The County should develop a consistent format for proffer statements with consistent style and terminology so that proffers are comparable.

(iii) ***Rational Nexus.*** All proffers should have a direct and rational relationship to needs created by the project itself. To the maximum extent feasible, proffers should be built or otherwise allocated so as to directly benefit the particular project.

(iv) ***Coordination.*** Proffers from neighboring or adjacent developments should be coordinated to the maximum extent possible in order to ensure compatibility and consistency, and to avoid redundancy and conflict.

2.5.2 Zoning Study

The County should undertake a review of the County's existing Zoning Map to identify inconsistencies between existing zoning and this revised Comprehensive Plan. In particular, the County should identify areas where:

a. Undeveloped property is zoned for uses or development intensities that conflict with the County's land-use policies and Future-Land-Use Map;

b. The existing zoning allows for development at densities that require public sewer and water service and no such service is planned or available;

c. The current zoning does not sufficiently protect a significant natural resource or environmentally critical feature or a key road corridor.

The Zoning Study should include recommendations for addressing inconsistencies between the revised plan and existing zoning**,** which might include, but not be limited to, a County-initiated remapping of key areas, consideration of incentives such as density bonuses for affordable housing to entice landowners voluntarily to rezone to more appropriate districts, and/or the adoption and mapping of additional resource-based overlay districts such as a Ground Water Aquifer Overlay District, Highway Protection Corridor District**,** or Sensitive Natural Resource Area Overlay District.

2.5.3 Zoning Ordinance Amendments

There are a number of new districts that the County may wish to consider adding to the Zoning Ordinance to implement the Comprehensive Plan as envisioned. Guidelines for several new districts are provided for consideration at a future date.

2.5.3.1 Corridor Overlay District

The County should consider the development and adoption of a Corridor Overlay District that may be used along U. S. Route 13, Stone Road, and Seaside/Bayside Roads to address the significance of these roads as entrance corridors and gateways to Northampton County and contiguous jurisdictions' historic resources and destinations, as well as to other points of regional tourism interest or cultural destinations. The intent of the district would be to provide guidelines for access control and design control to ensure that new development will be compatible with the County's historic character and will enhance its attractiveness to tourists, visitors and residents. Such a district might include:

a. Limitations on the types of use, the size of uses, and access to the uses;
b. Additional entrance, landscaping, setback, and buffering requirements;
c. Special signage regulations;
d. Architectural review of all proposed structures within the overlay zone conducted by an appointed Design Review Board.

2.5.3.2 Traditional Design Development Districts

The County should consider amending its Zoning Ordinance to provide additional development options that promote compact development and encourage traditional, inclusionary, pedestrian-oriented communities.

2.5.3.3 Affordable Dwelling Unit Ordinance

The County should evaluate whether an Affordable Dwelling Unit Ordinance, in accordance with State Code, that would allow density increases for the provision of affordable-housing units, would complement the strategies advanced by the County's Community Housing Committee.

2.5.3.4 Agricultural Districts

The County should consider revising its current Agricultural districts to ensure that they are consistent with the protection of its cornerstone industries of farming and aquaculture, so that they do not encourage a pattern of rural subdivision development that is incompatible with this plan and with maintaining these industries.

2.6 Future-Land-Use Map

The following Future-Land-Use Map summarizes the districts and policies described in this Comprehensive Plan for the purpose of geographically locating and delineating specific districts and policies. The Future Land Use Map represents planned land uses for the County based on policies developed during the Comprehensive Plan review process and does not necessarily reflect existing zoning or land uses.

Note: This map is for general informational purposes only and hould not be used for parcel specific determinations. To confirm formation on a parcel of land in the unincorporated county please call 757.678.0443 or email pstith@co.northampton.va.us

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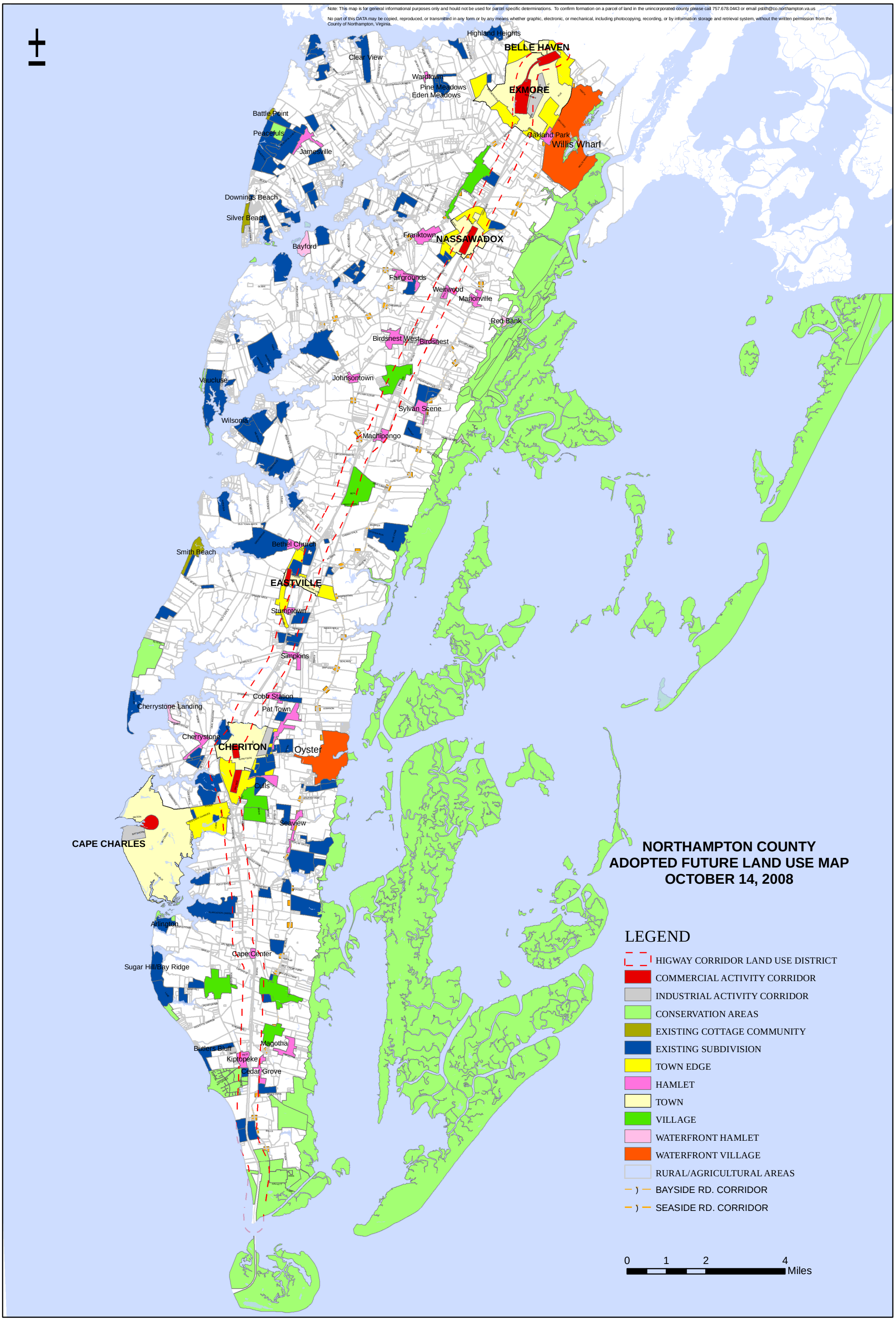


Economic Plan

3.1 Introduction

The term "economy" refers to "a system for the management of resources and production of goods and services." [3] As noted in Section 5, Environment & Natural Resources Plan, Northampton's economy historically has relied on natural features and resources that sustain agriculture and maritime activities, which remain key components of the local economy. However, the largest individual employment sector is government, including education. The private employment sector includes health care services, retail and wholesale trade, construction, finance and insurance, transportation and warehousing, real estate services, and accommodation and food service industries. While it should also be noted that a significant level of entrepreneurial activity contributes to the local economy, it must also be recognized that not everyone wishes to be an entrepreneur, and so a sustainable mix of growth and basic industries and services is important.

In recent years, tourism-related activities have played an increasingly significant role in generating revenue in the county, as our natural features and assets have become a resource more highly valued as such features are disappearing in other areas. It is well established that migratory bird habitat on the Eastern Shore peninsula, particularly in the Southern Tip of Northampton, is hemispherically important. This, coupled with the fact that Northampton County is one of the last remaining rural areas on the East Coast, places a higher resource value factor on the county's natural features and assets in developing the economic plan.

A citizen survey commissioned by Northampton County in late 2004 found that respondents were almost equally concerned about the perceived increase in population growth in the county as they were with a lack of job growth. The tension inherent in these two divergent conclusions, combined with the necessity and the desire to preserve and protect the resources that support the local economy, underscore the challenge of developing business pursuits that are economically viable for residents and environmentally sustainable.

3.2 Agriculture

Agriculture remains a mainstay of the county's economy. In Virginia aquaculture and aquaculture products are considered "agriculture," although this sector will be discussed in a separate section of this chapter. According to the 2002 Census of Agriculture, the average-per-farm market value of agricultural products sold for Northampton is the second highest in Virginia, exceeded only by Accomack County, which has a higher percentage of value associated with livestock and poultry than with crops. At $236,320, Northampton's average-per-farm market value was more than four times greater than the state average of $49,593. Approximately 45% of Virginia's potato crop is grown in Northampton County, and Virginia ranks sixth in the nation in potato production.

[3] Webster's II New Riverside Dictionary, Houghton Mifflin Company, 1996.

Virginia now ranks third in the nation in the production of fresh tomatoes, and last year that crop was worth about $140 million dollars to Virginia's economy. It is estimated that more than 80 percent of the tomatoes grown in the Commonwealth are grown on the Eastern Shore and that tomato sales comprise approximately 50 percent of gross farm income in the county. In addition, Northampton County is home to the largest green bean operation in the United States.

The value of the agriculture industry to Virginia's economy was documented in the recently-released report **The Economic Impact of Agriculture and Forestry on the Commonwealth of Virginia** (Weldon Cooper Center for Public Service, September 2008). While the report has a statewide focus, the references to the economic impacts of wineries and agritourism are noteworthy given the presence of two wineries, plus an additional grape grower in the county. The report also cites steady growth in greenhouse sales related to increasing urbanization in the mid-Atlantic region, and well as the increasing economic impact of horse events across Virginia.

It should be mentioned that while not statistically well-documented for Northampton, the role of organic production has also become more noteworthy in recent years. Demand has increased due to consumer concern about pesticide use in terms of both health and environmental impacts.

It is significant to note that between 1997 and 2002, the number of farms in Northampton County increased by 23, or 14 percent. However, the total acreage in the county devoted to farms dropped by almost 5,000 acres during that period. At the same time, the number of farms and the acreage operated by tenants increased, with the rise in rented acreage amounting to an increase of nearly 40 percent, based on the 2002 Census of Agriculture data. Also during the period 1997 – 2002 the average age of farmers in Northampton County rose slightly from 53.7 years to 55.4 years, with the number of persons in the 45 – 59 year age range increasing more significantly than other age groups.

These data suggest that farm land is being converted to other uses, that a greater percentage of land is being controlled by an owner other than the operator and that more farmers are having to pay rent to farm, and that younger persons are choosing occupations other than farming. Improved production methods have enabled farmers to reduce labor costs while crop yields remain reasonably high overall; nevertheless, the loss of farmland is a disturbing trend voiced by members of the local farming community. While some of the land converted to other uses has been acquired by conservation organizations and state and federal agencies, much of it has been acquired for residential development purposes. As this development has occurred, there are increasing conflicts between agricultural activities which generate dust, noise, and chemical applications and the desires of residents for quiet open space. In addition to complaints from residents, concerns persist about environmental impacts of some farming practices, particularly stormwater runoff associated with tomato plasticulture, although recent studies have been inconclusive about the relationship between tomato cultivation and impaired waters.

3.2.1 Agriculture Sector Goals and Strategies

The following goals and strategies are intended to address the issues identified above.

Goal: Ensure that farming remains a viable livelihood and that farmland continues to be an available resource.

Implementation Strategies:

1) Ensure that rezoning does not include productive farms in areas designated for hamlets, villages, and dense residential development.

2) Promote niche farming by ensuring through zoning that small lots (as little as 1 acre) remain available for agricultural activities.

3) Continue to allow creation and expansion of Agricultural and Forestal Districts.

4) Continue to support and promote the county's Purchase of Development Rights program.

5) Evaluate potential establishment of a Transfer of Development Rights program.

6) Encourage and fund the development of an agriculture curriculum in the high school.

7) Support the regional Farmers' Market.

8) Encourage farmers to utilize Natural Resource and Conservation Service standards in their operations.

Goal: Reduce conflicts between agricultural uses and environmental concerns and other land uses.

Implementation Strategies:

1) Regulate migrant housing through zoning but ensure that it continues to be allowed in the Agricultural District.

2) Allow for maintenance of existing ditches and the installation of retention ponds for stormwater management that prevent stormwater runoff from entering our coastal waters, and can allow that water to be used for irrigation.

3) Evaluate use of other water quality Best Management Practices on farmland.

4) Implement a public information program to inform county residents and potential residents about farming practices.

5) Work with real estate community to ensure that appropriate and accurate information about farming activities and practices is available to potential purchasers of land in or adjacent to the Agricultural District.

6) Continue to note subdivision plats for land being divided in or adjacent to the Agricultural District concerning the proximity of agricultural activities which might be considered nuisances.

7) Evaluate current wildlife control methods.

8) Encourage agri-tourism activities to preserve open space.

Goal: Ensure that farmers have opportunities to expand their businesses.

Implementation Strategies:

1) Support reasonable land rental rates through continued implementation of use-value taxation.

2) Evaluate sign regulations with respect to agricultural businesses and sale of agricultural products.

Goal: To encourage the local workforce to consider farming as a viable occupational alternative.

Implementation Strategies:

1) Encourage farmers to pay wages that support a sustainable lifestyle and to provide all employees a pay check with federal and state deductions.

2) Encourage farmers to hire from the local labor pool.

3) Encourage farmers to educate their work force in such areas as agricultural practices, farm machinery mechanics and welding, conservation, application of pesticides, commercial driving, and language skills.

4) Encourage farmers to look for innovative ways to create year-round jobs for their work force.

5) Encourage farmers to insure their work force with health insurance and workers' compensation insurance.

3.3 Seafood and Aquaculture

The seafood industry is one of Virginia's and Northampton County's oldest and most successful industries. Aquaculture, along with the fresh tomatoes industry, has been cited by a September 2008 Weldon Cooper Center for Public Service report, as one of Virginia's most rapidly growing agricultural commodities in recent years in percentage terms, and hard-clam aquaculture is the fastest growing industry in Northampton County. Local sources indicate that Northampton County is now the largest hard-clam producer in the world.

As of 2007 Virginia continued to be ranked third nationally in total fisheries landings, which includes aquacultured oysters and clams. According to the Virginia Employment Commission, there are three seafood companies among the county's fifty largest employers. In the past, the impressive statistics from our commercial fisheries were the best available way of realizing the economic importance of Virginia's marine resources, but new information on the highly significant impact of recreational fishing and shellfishing has added greatly to our understanding of the economic value of Virginia's recreational fisheries. Northampton County's economy has historically been heavily dependent on its fisheries resources, and aquaculture has played an increasingly significant role.

While an attempt has been made to locate county-specific data, most information is available only for the state as a whole or for Northampton and Accomack counties combined. In many ways it is more desirable to study the statistics for the entire state due to the interdependency of various aspects of Virginia's fisheries. It is imperative that we maintain a broad view while examining our local situation, since neither many of the resources nor factors that may impact the resources tend to be geographically confined. It is also important to keep in mind that historically it has been very difficult to obtain complete counts or dollar values despite required reporting, and most states recognize that statistics for catch, economic value, and employment are more often than not understated.

3.3.1 Commercial Fisheries

In 2000 Virginia's commercial finfish and shellfish landings totaled 81,905,267 pounds with an estimated value of $89,073,924. In 2007 total shellfish and finfish landings declined somewhat to 79,722,187 pounds with a value of $108,322,166. In 2000, the Virginia Marine Resources Commission reported that blue crabs accounted for 28,846,177 pounds and $24,114,523 in value. In 2007 the catch of blue crabs was 21,677,959 pounds, down from 27,155,057 pounds in 2006, and representing a value of $17,145,515. Virginia has recently enacted new limitations on crab harvesting in an effort to reduce overfishing of the resource, but on September 24, 2008, it was reported that the U. S. Commerce Secretary had declared the decline in blue crab harvests in the Chesapeake a "commercial fishery failure." This may mean more restrictions on this important resource as steps are taken to restore the crab population. Virginia has also

emergency gill net regulations to limit unintended and out-of-season by-catches of certain fish and turtle species.

3.3.2 Aquaculture

In 2005 the Virginia Institute of Marine Science (VIMS) reported that aquaculture production in Northampton county was valued at $33,000,000. In the May 2008 *Virginia Shellfish Aquaculture Situation and Outlook Report* released by VIMS, it was reported that the number of hard clams sold in Virginia in 2007 was 211,876,000, representing an increase of almost 9% over the 2006 total. The report indicated that clam farming showed an expansion of 22.6% with respect to full-time employment and 14% in part-time employment during 2007. By contrast, the oyster aquaculture sector showed a decline in employment opportunities during 2007, despite a nearly 53% increase in the number of aquacultured market oysters sold by Virginia growers. The VIMS report suggests that estimating labor needs for oyster aquaculture is difficult at this time due to the stage of development of this industry.

3.3.3 Concerns

The seafood industry is dependent upon good water quality. Local clam growers have expressed concern about negative impacts from poorly-controlled stormwater runoff from both development and agricultural operations, including point-source overboard discharge of treated wastewater which adversely affects salinity of tidal waters. Excess nutrients from lawn fertilizer and septic failures harm clam larvae and also lead to algal blooms. In addition, preservation of water access, protection of working waterfronts, and reduction of trash making its way into the waters have also been mentioned as matters which require attention in order to ensure that the local seafood and aquaculture industries remain productive.

3.3.4 Seafood & Aquaculture Goals and Strategies

The following goals and strategies are intended to address the issues mentioned above.

Goal: Preserve water quality which will sustain commercial and recreational fishing and aquaculture.

Implementation Strategies:

1) Develop stormwater management initiatives that will control and reduce residential and agricultural runoff into the creeks, Chesapeake Bay, and Atlantic Ocean.

2) Regulate the installation of waste water treatment systems so that they are not located at the headwaters of creeks.

3) Work with agricultural community to limit siltation of waterways.

4) Discourage installation of bulkheading, jetties and groins that interfere(s) with the natural movement of sand on bayfront properties.

5) Work with agricultural community to limit chemical contamination of waterways from spraying activities.

6) Develop public information concerning the economic importance of preserving water quality to support commercial and recreational uses, including careful management of chemical applications, reduction of soil erosion, and reduction of trash in waterways.

7) Continue to enforce the county's Chesapeake/Atlantic Preservation District through the zoning ordinance.

8) Support Virginia's Shellfish Enhancement Zone initiative.

9) Work to eliminate additional overboard point-source discharges into creeks, Chesapeake Bay, and Atlantic Ocean.

Goal: Preserve water access for recreational fishing and working watermen.

Implementation Strategies:

1) Protect working waterfront areas from encroachment of other uses through zoning.

2) Continue to provide public boat ramps with adequate parking, sanitary facilities, and trash collection facilities.

3) To the extent possible, monitor siltation levels in waterways and support and assist in implementation of dredging to preserve ingress/egress for working watermen and recreational fishing.

Goal: Preserve aquatic resources and species and assist with efforts to promote seafood products so that the seafood industry remains viable.

Implementation Strategies:

1) Support native oyster restoration efforts.

2) Support submerged aquatic vegetation restoration initiatives.

3) Support Department of Environmental Quality and Virginia Marine Resources Commission efforts to reduce recreational boating conflicts with commercial fishing activities.

4) Support Virginia Marine Resources Commission efforts to reduce overfishing of various species.

5) Support efforts to establish a regional Seafood Market on the Eastern Shore of Virginia.

6) Through zoning allow for the appropriate development of aquaculture facilities including hatchery and aquatic nursery operations.

Goal: To encourage the local workforce to consider aquaculture as a viable employment opportunity.

Implementation Strategies:

1) Encourage watermen/aquafarmers to pay wages that support a sustainable lifestyle and to give all employees a pay check with federal and state deductions.

2) Encourage watermen/aquafarmers to hire from the local labor pool.

3) Encourage watermen/aquafarmers to educate their work force in such areas as aquaculture practices, safe boating, boat mechanics and welding, conservation, commercial driving, and language skills.

4) Encourage watermen/aquafarmers to look for innovative ways to create year-round jobs for their work force.

5) Encourage watermen/aquafarmers to insure their work force with health insurance and workers' compensation insurance.

3.4 Tourism

In March 2007, the Eastern Shore Tourism Commission, on which Northampton County has representation, adopted a document entitled ***Tourism Strategy for the Eastern Shore of Virginia*** (the Strategy)**.** The following is excerpted from the Strategy:

The Eastern Shore is unique and therein lies our key advantage. In our increasingly homogenized world, being unique is a priceless commodity—something to be protected and treasured. It is the goose that will lay the golden egg…Nature tourism, agritourism, resort and heritage tourism offer economic opportunities that mesh perfectly with the Eastern Shore's assets.

And as nature becomes an increasingly rare commodity, the economic advantage of preserving our natural heritage becomes more and more compelling. Historically, the Eastern Shore has lived and thrived on the bounty of nature: fishing, hunting, and agriculture have been the mainstays of the Eastern Shore for nearly 400 years. A continued reliance on nature can fuel the Eastern Shore's prosperity for the next 400 years. We need to take a different approach, of course, but the resource is the same. But if we turn our backs on our assets—on what makes this place unique—then we have nothing. Our success depends on our ability to differentiate ourselves.

As we develop our tourism industry, though, it's vital that we don't make the mistake of thinking that every tourist activity is helpful. As an industry, tourism has many styles and faces. This document stems from the belief that you build on your strengths rather than pursue a pale imitation of another area's success. This is not the Caribbean; it's not Florida. The beauty and appeal of the Eastern Shore is far more delicate and subtle, ill suited to mass-market tourism or mega-development. Yet this delicate beauty is an asset, too. If we play to our strengths, the Eastern Shore has everything necessary to become a tourist destination of national renown." (pp. 7-8)

The Strategy was designed to promote development of "high-dollar, low-impact tourism" and, in addition to setting forth a marketing plan and strategy, focuses on six (6) sectors of the tourism industry: agritourism, the arts, beach and recreational resorts, heritage tourism, hospitality industry, and nature tourism. The first task recommended by the Strategy, development of an Eastern Shore brand, has been accomplished. While many of the strategies detailed in the document are activities more appropriately handled by private interests and the Tourism Commission itself than by local government, the goals established are ones which should be supported by Northampton County. Accordingly, the Strategy is incorporated into this chapter by reference and included as an appendix to the comprehensive plan. In addition, the following goals and strategies are also intended to support implementation of the Strategy.

3.4.1 Tourism Goals and Strategies

Goal: Support tourism activities in appropriate locations through land use planning.

Implementation Strategies:

1) Provide for activities that are tourist-draws, such as festivals, wineries, tours, non-motorized recreational trails, arts and agritourism events and activities, bed and breakfast inns, etc., through zoning.

2) Protect resources that support the tourism industry by managing land uses in environmentally sensitive areas.

3) Allow for adequate signage to promote tourism-related activities.

Goal: Ensure that Northampton County remains a safe, attractive place to visit.

Implementation Strategies:

1) Maintain the functionality of U. S. Route 13 by continued implementation of access management regulations and vigilant law enforcement efforts.

2) Support litter control efforts.

3.5 Existing Business and Business Development

It is important that the present businesses be supported and new businesses encouraged to locate and develop in the areas designated, since so many county residents depend on these employment opportunities. Although the largest individual employment sectors in the county are government (including education) and health care services, the construction, manufacturing, retail and wholesale trade, finance and insurance, transportation/warehousing, real estate, and accommodation and food services industries combined provide the greatest number of employment opportunities in Northampton County (Virginia Employment Commission, *Northampton Community Profile,* September 21, 2008). This section will discuss issues associated with retention of and support for existing businesses as well as factors affecting new business development in the county.

3.5.1 Supporting Existing Businesses

The county has a long-standing policy of encouraging business development and commercial activity in and around the incorporated towns. However, it is important to consider the needs of existing businesses regardless of their current location. In 2007 county citizens participated in public meetings designed to garner input to inform the regional Comprehensive Economic Development Strategy. The meetings were facilitated by project staff from Virginia Tech's Office of Economic Development, who in August 2007 produced a summary of the effort entitled *Community Economic Development for the Eastern Shore: Summit Report.* The *Report* focused on sustainable, asset-based expansion of existing businesses as an important strategy for economic development on the Eastern Shore.

Among the action priorities identified in that report related to business support was the establishment of an economic development position or a "point person" to assist both existing and new businesses to navigate the regulatory and permitting processes, among other things.

An issue of major concern for many businesses, those located on U.S. 13 as well as those located off the major throughway, is visibility of signage. As development is encouraged in our towns, it is imperative that the county develops an effective signage program that balances the needs of business owners with the need to limit the visual "clutter" on US 13 and other local roads.

The issue of workforce housing has been addressed in the Housing component of the plan, but it must be emphasized that availability of adequate and affordable housing as defined in the Housing Plan (see Part 1, Section 4) is essential for continuity of business activity. The relative scarcity of workforce housing is not unique to Northampton County. The tools available to the county to assist in and to promote workforce housing development are somewhat constrained by Virginia law, but the county's Community Housing Committee continues to work to identify solutions to this challenge.

The *Summit Report* also discussed the desirability of a clear, concise tax code. Businesses generate a vital component of the tax revenue for Northampton County. The means used to collect these taxes need to be designed in such a way that they do not create an undue workload for small local businesses.

The Tourism Commission recently developed the Eastern Shore Brand to elevate the profile of the region and Northampton County. Consistency of use is a key component to the branding effort, and the county should consider taking a leadership role in the widespread use of the brand.

3.5.2. Attracting New Businesses

Clearly some of the actions which would support existing businesses would also assist in attracting new businesses. A designated individual or organization to be responsible as a resource for businesses would be a benefit for business attraction. The county possesses unique core assets such as natural, cultural, and recreational resources on which business attraction should be based. At the same time, factors which are currently liabilities with respect to business development must also be considered and addressed. A critical component for any business start-up or expansion is private sector capital investment. Communities can create incentives for that investment by using public or non-profit programs such as the Main Street program, Enterprise Zone benefits, and state and Federal tax credits.

Part of the historic tension relative to economic development has been the need to balance the need and the expressed desire to protect and preserve the county's unique and, in some cases fragile, natural resources and rural character with the need and desire to provide job opportunities for citizens and also to generate sufficient revenues to provide desired services. By recognizing the realities and potential of the modern economy, it becomes evident that with minimal effort, environmental protection and economic prosperity can be reached as cohesive rather than competing goals. In that vein, there are business sectors that might be targeted, as follows:

1) Marine industry – The proximity of the county to the major shipping lanes of the mid-Atlantic, as well as the deep-water harbor in Cape Charles and maritime heritage, lend themselves to this type of industry. It is essential that this industry is developed with the most stringent environmental protections in order to protect our coastal water quality. As this industry develops, the county can become an example for sustainable industrial development in other regions. There are ongoing and proposed projects to develop the marine services industry on the Eastern Shore from marina services to yacht repair.

2) Research and scientific community - The Eastern Shore has unique natural assets that have attracted an active scientific and research community including three university-level research stations. This growing industry provides great synergy with other vital aspects of the economy, and maximizes our core assets in a sustainable fashion.

3) High-end specialty manufacturing - Two of the largest employers in the county, Bay Shore Concrete and New Ravenna Mosaics, are in this sector of our economy. These businesses import raw materials, train and use local labor to transform these raw materials into products with much greater market value, and export their products worldwide.

4) Alternative energy - There are many residents in Northampton County who consider themselves environmentally aware. The unique nature of the county combined with the high level of environmental awareness in our business sector should allow Northampton to position itself to take advantage of this growing industry. There are a variety of alternative energy opportunities including:

   Wind power generation;
   Hydro (wave, current) power generation;
   Solar power generation;
   Geothermal heating;
   Algae-based bio-fuel production;
   Home-based alternative energy.

5) Entrepreneurial activity – The proximity of the county to Hampton Roads and other major metropolitan centers is a significant advantage in attracting entrepreneurs. With the increased capacity of modern technology, it is quite possible to locate a consulting, legal, engineering, or other firm in the county and participate in the global economy. Essential community goods and services provided by the private sector offer entrepreneurial opportunities for residents and newcomers alike. Trades such as carpentry, plumbing, HVAC installation, landscape maintenance, and vehicle repair; services such as private transport, elder-care, on-site computer repair, pet grooming, and catering; and independent contracting, such as clam-growing and harvesting, offer moderate-cost business start-ups for entrepreneurs who acquire the appropriate skills. U. S. Census Bureau 2006 data indicates 1,004 “Nonemployer Business Firms” in the county;

owner- operators are not counted as part of the county workforce in the Virginia Employment Commission data. Retail and service establishments, such as those which make use of or sell the local agriculture/aquaculture commodities and locally-made products, and which may also offer accessory goods and services which enhance the basic products, provide additional entrepreneurial and small business opportunities for local residents and newcomers who might be looking for business start-up prospects in the county. Self-employment in professional services such as bookkeeping provides yet other entrepreneurial alternatives.

6) Information Technology and Internet-based businesses – Internet-dependent businesses, including information processing, information and data management, graphic design, website creation and management, software development, database management, data warehousing, Internet content development, Internet transactions, desktop publishing, and telecommuting, will provide expanded opportunities for home- and office-based businesses in rural areas.

7) Healthcare – With Shore Memorial Hospital as the centerpiece of an expansive and vital healthcare industry in the county, it is important to recognize both the significance of this section to our economy, and the potential for growth that exists. Primary and secondary care facilities, home care businesses, and nursing homes are all key resources for our community.

8) Engineering and Technical Consulting – With the development of the Orbital Science Space Port at Wallops Island, and the continued development of the Hampton Roads Naval and shipping centers to the South, Northampton County is uniquely situated as the hub that connects two internationally significant centers of cutting edge engineering and technology. By offering a centralized location for businesses with the desire to work in both of these highly competitive areas, Northampton County has the opportunity to become a resource center and regional headquarters for leading military, aerospace, and industrial engineering firms.

3.5.3 Workforce Development

Workforce development is an area highlighted in the *Summit Report* as a priority action item. Increasing our base of well-trained and motivated workers will be necessary to retain existing and attract new businesses. As economic development occurs within the county, our school system needs to evolve to support the business opportunities that exist. Currently the vast majority of our employers are small and local. This strong community of local entrepreneurs needs multi-talented staff with strong computer and customer service skills. The potential target industries identified above have specific needs for their workforce. Our school system needs to ensure that the young men and women who graduate from our schools have the foundation they need to work within these industries. Cooperation and coordination with the Community College is essential in creating a

strong workforce. Workforce education needs to be targeted towards the jobs we hope to develop here as well as those that we already have. Further, throughout their time in our school system, our children should be developing the skills they need to compete in the job market. Entrepreneurial training programs must be offered, and apprenticeship programs should be encouraged with the schools and all businesses so that young people and other job seekers can learn trades, skills, and services necessary for the Eastern Shore community.

Workforce education might include on-site seminars that could include workers from more than one site or farm to train or be taught in such areas as job safety, application of pesticides, erosion and sediment control, Best Management Practice maintenance, trades associated with farming, language skills, commercial driver's license, and sexual harassment.

By maximizing the opportunities available to our children, our community can create a workforce that will attract new business to the county. By targeting specific industries the county can create opportunities for the school system and community college to develop training programs that address the specific needs of such industries.

3.5.4 Assets

State and federal rural development experts have encouraged the county to adopt the concept of community-asset-based economic development. Quality of life is often at the top of the list of reasons that businesses have located or remained on the Eastern Shore. However, it is imperative to recognize the discrepancy between different segments of our population when it comes to quality of life. There is clearly a need to create opportunities for the lower-income population of the county. At the same time, there is an obvious attraction that our rural coastal community has for the more affluent individuals who either live and work here already or would consider moving their business to the county. The high-value quality of life available here is one of our core assets and should be protected as such. Continued preservation of open spaces is a key component of the quality of life that the county has to offer. Developmental sprawl can quickly eliminate this key resource. Well thought-out, effective land-use planning is essential for the economic success of the county.

The small town atmosphere is another aspect of Eastern Shore life that holds great appeal for many persons. If our small towns continue to grow, they should focus their growth in such a way that they are able to maintain their "small town atmosphere." Tools to consider in this effort include maintaining town centers, compact footprints, and plans that include integrated retail and commercial opportunities.

The quality of our coastal waters is essential to our economic well-being. This is arguably our most valuable natural asset, and it needs to be managed in a sustainable manner. In addition, Northampton County is sustained by a sole source aquifer. As development occurs it is vital that we protect the recharge zone for this aquifer and that we develop within the sustainable capacity of our sole water source.

Broadband is where the next wave of opportunity starts for our community, and Northampton County is taking a lead role on the broadband initiative. The Eastern Shore of Virginia Broadband Authority (ESVBA) has been established for the purpose of promoting economic development opportunities for communities located on the Eastern Shore of Virginia. Historically, there has been a lack of redundant, alternative fiber optic access to rural communities on the Eastern Shore of Virginia. In order to attract new-economy technology companies to the region, alternative carriers need to have affordable access to provide competitive broadband services to the area. The goal of the ESVBA is to be responsible for providing the most affordable, cost-effective and technologically up-to-date (presently and in the future) Broadband Internet service possible for all residents, businesses, and institutions on Virginia's Eastern Shore.

The Bay Coast Railroad (BCRR), a north-south route on the Delmarva Peninsula, consists of seventy (70) miles of mainline tracks and a 26- mile car float operation that crosses the Chesapeake Bay from Cape Charles to Little Creek, Virginia. The BCRR route is strategically located to take advantage of other rail connections to provide the most direct route between Norfolk, Virginia, and the Northeast. This facility is an important asset which may serve potential new industry as well as future development in Cape Charles, Northampton County's largest town.

3.5.5 Business Goals and Strategies

The following goals and strategies are intended to support the county's assets and promote business development.

Goal: Create a "business friendly" environment in Northampton County while preserving the county's unique assets.

Implementation Strategies:

1) Create an Economic Development Plan for Northampton County.

2) Evaluate where an economic development ombudsman for Northampton County should be based and pursue a regional approach to economic development.

3) Maintain a simplified system of business taxation.

4) Enhance customer service at various county offices.

5) Evaluate county signage regulations with consideration for potentially different requirements based on location, size, and seasonal needs of varying businesses.

6) Support installation of gateway signs as well as the efforts of the Tourism Commission to have travel-oriented signage installed as part of a comprehensive regional signage program.

7) Encourage development of state-of-the art communications systems, including internet access and use; support completion of the Broadband project.

8) Work with the towns to facilitate infrastructure development.

9) Encourage the reuse of existing buildings and use of undeveloped sites zoned, or which may be rezoned, for business development.

10) Encourage property marketing professionals to inventory available commercial real estate, including properties available in the incorporated towns and to create a marketing plan which includes a presence on the state business development website.

11) Promote development of workforce housing opportunities to the extent possible.

12) Encourage maximum use of tax incentive programs, such as the Enterprise Zone, Work Opportunity Tax Credits, Welfare-to-Work Tax Credit, and Historic Tax Credit programs, including credits or other tax relief to encourage adaptive reuse and/or rehabilitation of existing buildings for new businesses and workforce housing.

13) Provide for small businesses and home occupations, such as those related to the arts, regional crafts, artisanal foods, personal services, etc., through appropriate zoning.

14) Encourage participation in the Small Business Loan Program offered by the Virginia Eastern Shore Economic Empowerment Corporation.

15) Support and promote the Small Business Development Center at the Eastern Shore Chamber of Commerce.

Goal: Improve workforce skills.

Implementation Strategies:

1) Support development of the Eastern Shore Community College learning center in Machipongo.

2) Support the Eastern Shore Community College Workforce Development Center.

3) Facilitate communication between business owners and the educational system concerning skill requirements, including promotion of the Career Readiness Certification (CRC), a unique business and industry certification available at Eastern Shore Community College.

4) Ensure that the county remains engaged in state and regional Workforce Investment Act system.

5) Encourage more entrepreneurship skill training opportunities, such as those provided by the Center for Entrepreneurship at Norfolk State University.

6) Support incentives for businesses that utilize local labor, implement training and safety programs, and provide educational assistance for employees.

7) Support the county school system's Career and Technical Education Program.

8) Encourage participation by local employers in the Virginia Department of Labor Registered Apprenticeship program, which provided custom-designed on-the-job training and classroom programs to train their workforce.

Goal: Ensure that an adequate water supply is maintained and that water quality protection is considered an economic development tool.

Implementation Strategies:

1) Develop a stormwater management program.

2) Protect through zoning the sole-source aquifer recharge area along U.S. Route 13.

3) Reduce runoff into saltwater systems.

4) Ensure that waste water treatment systems are properly located and maintained.

5) Encourage businesses to re-circulate, reuse, and conserve water.

It is important to recognize that our core assets comprise an economic development tool to retain and attract business. Accordingly, it is in the county's best interest to preserve and protect our natural, cultural, and recreational resources.

4. Housing Plan

4.1 Introduction

Northampton County is confronted with several specific housing-related problems. The most prevalent and crucial problems are related to the remaining substandard dwelling units in the county, the inadequate supply of affordable standard units to meet the demand and needs of the low-to-moderate income population, and the conversion of previously affordable rental units into upscale housing, resulting in a lack of low-cost housing options.

The Code of Virginia (§ 15.2-2201) defines "affordable housing" as housing that is affordable to households with incomes at or below the area median income, provided that the occupant pays no more than thirty percent of his gross income for gross housing costs, including utilities. The most recent U. S. Department of Housing and Urban Development (HUD) median family income estimate for Northampton County, updated through April 2007, is $44,600, compared to a median family income of $68,900 for Virginia as a whole. Based on the state guideline and this median income, total housing costs, i.e., rent or mortgage payment plus utilities, for this level of income should not exceed $1,115 per month. Meanwhile, the Virginia Employment Commission reports an average weekly wage of $546 for all employment sectors in Northampton County, based on the Quarterly Census of Employment and Wages for the first quarter of 2007. This equates to gross earnings of $28,392 annually, assuming fifty-two weeks of employment, based on which the earner could afford to pay approximately $710 monthly in gross housing costs, including utilities. For a household of four persons, this income is slightly higher than the HUD income limit that qualifies as "very low" (50% of the area median income) but significantly lower than that which qualities as "low" (80% of the area median income). A cursory review of listings included on the online Multiple Listing Service reveals no fair-market rentals available in the 23310 zip code area which would be affordable without rental assistance to a household earning the average weekly wage. While many variables affect one's ability to quality for a mortgage loan, there appear to be few ownership opportunities available to a household earning the most recent median family income estimate.

4.2 Community Housing Committee

In 2004, the Northampton County Board of Supervisors appointed a standing committee to identify its housing problems and to propose solutions to address those problems. The committee produced a report in 2005, endorsed by the Board of Supervisors in early 2006, which includes discussion of the existing housing inventory, distribution, rental housing, condition of existing housing, plumbing, age of existing units, crowding and mobile homes. The report, *Northampton County Affordable Housing Committee Report January 2005*, is on file in the County's Planning & Zoning office. In 2007 the committee was renamed better to reflect its intended charge.

4.2.2 Affordable Housing Committee Report

Part 2 *Data & Analysis*, Section 5 *Housing Analysis* of this Plan incorporates details of the Community Housing Committee's report. Generally, the report found that Northampton County has seen an influx of a more affluent population which has resulted

in displacement of less affluent residents. It identified the lack of housing affordable to low, very low, and moderate income groups, including much of the County's workforce, as a major issue. It pointed out that funding for rental and construction subsidies at the State and Federal levels will likely continue to decrease. It also pointed out that the trend of coastal communities transforming from fishing and farming areas to high-end residential housing and resorts, which Northampton County is now experiencing, has been happening all along the Atlantic Seaboard for the last twenty (20) years. The report suggested strategies to address the housing issues cited, and they are discussed in the *Affordable Housing Strategies* subsection of this chapter.

4.2.3 Housing Demand Analysis

The Community Housing Committee also recognized the need for more in-depth analysis to address the problems that Northampton County is experiencing with housing issues and applied for a grant to help with the cost of such a study. A grant from the Eastern Shore Association of Realtors, funded by the Virginia Association of Realtors and the National Association of Realtors, was obtained, and the Center for Housing Research (CHR) of Virginia Tech was commissioned to do the study.

In March of 2007, Ted Koebel, Ph.D., of the CHR came to Northampton County to do a site visit and to meet with the Community Housing Committee and Northampton County staff in preparation for the study. In June of 2007, the Center produced a *Housing Demand Analysis* for Northampton County with projections to 2010 and 2020. The analysis is on file in the Northampton County Planning & Zoning Department.

The analysis assessed the need for affordable housing in the County, identified where gaps in supply exist, and offered strategies targeting the specific housing gaps. The CHR analysis reinforces the conclusions of the earlier Housing Committee Report. The analysis found that the demand for second homes, vacation homes, resort rentals, and retirement homes, has inflated housing prices. The analysis concluded that the greatest gaps in affordable housing occur with the extremely low-income renters and owners. According to the CHR report, two-thirds of the extremely low-income *homeowners* are elderly, and most of the extremely low-income *renters* are non-elderly. The CHR also found that the gap for low-income homeowners is greater than that for low-income renters. The analysis pointed out that the supply of multi-family rental housing is very limited in the County. The analysis offered strategies targeting the specific gaps that are discussed in the *Affordable Housing Strategies* subsection of this chapter.

4.3 Specific Issues & Strategies

As is pointed out in the analysis by the CHR, current market-rate housing options exist to supply homes to the in-migrating middle- and upper- income retirees, resort rental buyers, and second-home owners. The analysis suggests that the market is fully capable of responding to the "move-up" market of those already owning homes. However, it also points out that a significant portion of the population is unable to access current market-rate housing and indicates that projections for the future point towards a further widening of the gap between the supply of and the demand for affordable housing.

The report by the Housing Committee and the analysis by the CHR identify many of the same issues, and both offer strategies to address specific housing issues. The following subsections discuss those specific issues and associated mitigating strategies.

4.3.1 Affordable Housing Strategies for Extremely Low-Income

One of the major gaps in the available supply of and demand for affordable housing in Northampton County, as is mentioned in the Housing Analysis subsection of Part 2 of this Plan and reinforced in the CHR analysis, is that affecting extremely impoverished county residents. This category can be further subdivided into renters and home-owners. The elderly make up the majority of home-owners in this category.

Studies have found that many of the elderly home-owners on fixed incomes are living in sub-standard housing in need of repair and that many of them would rather stay in their own homes than move to rental housing for seniors. However, maintenance and repair on these older homes**,** the lack of some modern conveniences, and the inefficiency of older heating and cooling systems pose more of a challenge. Not only is cost a problem for some seniors, but, according to the Virginia Eastern Shore Economic Empowerment and Housing Corporation, Habitat for Humanity, and local builders, many skilled contractors lack adequate insurance or willingness to take the smaller repair jobs. The CHR report suggests that faith-based, civic, and other charity groups might help this segment of the population. The County could facilitate organization of these groups into action by supplying materials, supervision, public outreach and other support. The County could investigate ways of providing fee breaks on permits for charitable work being done by contractors and volunteers.

The extremely low-income renters are generally non-elderly. This group is predominantly female single heads-of-households with dependent children. Much of the existing rental housing stock is comprised of older single-family detached dwellings, and many of those are not geographically located near adequate services, such as medical facilities, social services, transportation, and shopping. There is a lack of multi-family housing accessible to low-income renters throughout the County. The County should encourage the preservation and improvement of existing Farmer Home Administration (FmHA) Section 515 Subsidized Housing Program units and promote new construction under that and other similar programs. The County should also initiate partnerships with the Towns, the Accomack-Northampton Housing and Redevelopment Corporation, and the Accomack-Northampton Regional Housing Authority (ANRHA) to utilize Low Income Housing Tax Credits (LIHTC) and similar programs to provide multi-family rental units. Multi-family housing will be further discussed in the following subsection.

4.3.2 Low- to Moderate-Income and Workforce Housing – Inclusionary Development

The Community Housing Committee adopted a definition of “workforce housing,” which provided that such housing is accessible to households whose primary source of reported

income is from employment (W-2 wages, 1099s, etc.) and whole income ranges between the weekly income available from a minimum wage salary (which at this time is $234/week, allowing for an affordable rent or mortgage of $304.20/month) and the weekly income available from the current "average wage" salary, as defined for Northampton County by the Federal Bureau of Labor Statistics (BLS) (at this time $574.90/week, allowing for an affordable rent or mortgage of $747.37/month). The Committee noted that these figures are subject to change on at least an annual basis. The current BLS average wage would enable the purchase of a home priced at approximately $131,380.

The interspersal of housing units available to middle- and lower-income persons among higher-priced dwelling units has been a traditional pattern of development in some areas of the County, resulting in an "Inclusionary" effect. In current practice, "inclusionary development" would mean requiring developers to include a percentage of affordable housing units as part of new development. This type of residential development, which could also include mixed use-mixed density neighborhoods, should be encouraged to the extent feasible, particularly in the Villages and Hamlets where infill lots exist and smaller lots may be created in areas which are not yet experiencing significant upward price pressure. It shall be the policy of the County to discourage the development of pockets of poverty. To that end, consideration of development proposals shall include review of the demographics, crime statistics, and availability of jobs and public transportation in the proposed project area.

Many of the County's young workforce, especially those still single, often require low-cost rental housing. Since it is more cost-effective to provide for rental housing in multi-family residential units, the County and Towns should zone for multi-family residences in areas where water and sewer service is adequate to support moderate-density, inclusionary development. The County should also initiate partnerships with the Towns to provide for this need and also determine the feasibility of implementing a regional authority for the delivery of water and sewer services. In addition, the County should allow for the implementation of central wastewater treatment systems to support density in population clusters in areas where such systems do not pose environmental and health hazards.

The other segment of this population includes first-time home buyers. These first-time home buyers generally need low-cost starter homes or older homes in good condition. The analysis from the CHR points out that the County should work with contractors and building materials suppliers to develop strategies that promote energy efficiency and long-term durability of the County's older, more affordable housing units.

The social and community benefits of homeownership must be acknowledged. Typically higher rates of homeownership as opposed to rentals in a neighborhood results in greater levels of pride in the neighborhood and in the housing units themselves. Residents may have a greater sense of pride in their achievement of becoming a homeowner, and there is more of a sense of permanence as opposed to transience in areas with higher ownership

rates. Therefore, the County should support private and government organizations that provide housing and support services to accomplish increased homeownership.

Other recommended strategies to address adequate housing needs include the following:

- Encourage Inclusionary development to the fullest extent possible.
- Implement the County's affordable housing proffer policy to apply to all rezoning applications.
- Initiate the use of tax credits for investors to encourage low/moderate income housing construction.
- Investigate "land bank" programs such as Transfer of Development Rights (TDR) as a tool to enable low/moderate income housing construction.
- Consider grant-funded "adaptive reuse" of County owned property for rental or ownership units and investigate the use of County-owned land to create partnerships for workforce housing development.
- Consider allocation of "escheat" sale revenues and/or "rollback" taxes on tax-deferred properties to a fund which would alleviate the shortfall in available state grant money for construction of 2- and 3-bedroom affordable houses.
- Encourage proffers for workforce housing when commercial and industrial rezoning are applied for.
- Pursue expanded legislative authority to draft an Affordable Dwelling Unit Ordinance.
- Encourage the Workforce Development Center at Eastern Shore Community College to offer curricula pertaining to building trades and business training for contractors.
- Create a County Housing Affordability Fund to be administered by the ANRHA.
- In conjunction with an updated Capital Improvements Plan, establish adequate levels of service that include, among other things, needs and services associated with low-cost housing and create a Facilities Standards Manual to ensure delivery of services.
- Increase income and employment generation by expanding home-based office and business opportunities in most zoning districts and by expanding both dwelling-unit options and on-site commercial opportunities on farms.
- Support expansion of STAR Transit Services and the creation of other public and private transportation options.

5 Environment & Natural Resources Plan

5.1 Introduction

Generally speaking, natural features and land conditions shape development and settlement patterns. Topography, soils, geology, surface water, ground water, and vegetation establish the basic suitability and capacity of the land for development. By either constraining or supporting development, these features affect the way in which particular parcels of land can be used, thereby greatly influencing overall land use patterns and affecting the cost of public facilities and services.

Natural features and resources also affect quality of life and lifestyle. In Northampton these resources combined with our unique geography have provided the assets on which the local economy was built. Throughout the County's history, the lives of its inhabitants have been inextricably linked to the natural features that sustain life due to the prevailing agrarian and maritime-based livelihoods and ancillary activities. Protection and preservation of natural resources was a frequent theme expressed by County residents at the various public forums conducted as part of the plan review process.

As one specific example of how natural features impact planning for future development, scientific research has confirmed that sea levels will rise as one of the effects of global warming. A 2000 report from the Heinz Center for Science, Economics, and the Environment states that 25% of homes within 500 feet of the coast may be lost by 2060, and mapping indicates that the Eastern Shore of Virginia will be heavily impacted. Further scientific study is needed to determine more accurately the expected rate of rise and its impact on coastal areas. If additional credible studies confirm a significant risk to low-lying and coastal areas of Northampton County, Northampton County will take steps to identify at-risk areas and mitigate adverse impacts.

The following goals and strategies are intended to maintain and advance efforts to protect, enhance, and preserve the County's natural resources, including high-quality and unique natural habitats, prime farmland soils, a limited ground-water supply, and comparatively unspoiled surface waters.

5.2 Dunes, Beaches, and Shorelines

Goal: Ensure that existing sand formations, beaches, primary and secondary sand dunes, and shorelines are preserved to the maximum extent possible by management practices, and ensure that the Barrier Islands remain in a natural state.

Implementation Strategies:

a. Continue to enforce the primary dune ordinance.

b. Consider incentives in the zoning ordinance for developers who reserve land or take other measures to preserve both primary and secondary sand dunes.

c. Support and encourage the use of best management practices by farmers and forest owners.

d. Support the activities of the Northampton County Wetlands Board.

e. Support efforts to eliminate leaching and runoff of nutrients, sediments, pesticides, and other chemicals.

f. Consider seeking legislation to authorize the County to extend its dune protection authority to secondary sand dune formations.

g. Maintain and expand a Conservation Zoning District to encompass additional coastal areas.

h. Develop a shoreline access and management plan with specific shoreline stabilization guidelines.

i. Support programs and incentives to provide public educational opportunities about shoreline management alternatives.

5.3 Forestry

Goal: Ensure the continuation of forestry as an industry and the preservation and establishment of woodlands for their aesthetic and ecological value.

Implementation Strategies:

a. Encourage the Eastern Shore Community College to offer a forest- management curriculum.

b. Encourage best-management practices for utilization of low-grade hardwoods and reforestation of cut-over pine areas.

c. Utilize advice of forestry personnel locally and on the state level to control disease and insect damage, especially to old growth and cut-over stands.

d. Promote programs and efforts to educate landowners about forest management.

e. Support programs and efforts to preserve and protect forests and woodlands including support and funding for Gypsy Moth Monitoring programs, and support funding for the immediate harvest of affected timber damaged by catastrophic weather events.

f. Assure that areas of timber harvest be enrolled in a forest management program through the Virginia Department of Forestry, and that the property owner selling the timber be responsible for the maintenance of existing natural drainage ways impacted by timber harvest operations.

g. Promote programs and efforts to maintain the forestland as a buffer against erosion and incompatible land uses, as a filter along waterways, as groundwater recharge areas, and as a prime natural resource that prevents sediments and pollutants from entering tidal and fresh surface waters.

h. Consider land-use techniques and zoning provisions to maintain and improve migratory bird habitats and continuous buffers for wildlife habitat.

5.4 Groundwater Protection

Goal: Ensure the protection and management of groundwater quality and quantity available to Northampton County.

Implementation Strategies:

a. Support the efforts of the Eastern Shore of Virginia Groundwater Committee, such as continually reassessing the present demand and estimated future demand for groundwater and the establishment of a monitoring program as an early warning system for groundwater contamination.

b. Support efforts by the Public Service Authority or Public Works Department to create public central water systems to serve development areas.

c. Participate with the state in efforts and programs to prevent excessive water withdrawals for large users at single locations, and to set limits on amounts of groundwater to be withdrawn.

d. Continue to implement the Chesapeake Bay Preservation Act on a County-wide basis.

e. Study and implement zoning regulations to protect and manage selected recharge areas and other groundwater-sensitive areas.

f. Establish regulations to promote a goal of zero runoff, especially in large-scale developments.

g. Require central-water systems to be developed with uniform standards of operations and maintenance for all moderate and large-scale developments not served by a public water system.

h. Establish restrictions regulating storage, treatment or disposal of waste containing hazardous substances in groundwater-sensitive areas.

i. Develop standards for industrial development that will protect groundwater.

j. Develop a groundwater-management plan for the County, including the

designation of wellhead-protection areas and groundwater-protection overlay zones.

k. Evaluate and implement a groundwater-management ordinance within five (5) years.

l. Continue to work with the Department of Environmental Quality and other appropriate agencies in identifying and addressing any leaking underground storage tanks.

m. Develop a comprehensive stormwater-management plan.

n. Remain cognizant that a sole source-aquifer designation was made by the Environmental Protection Agency in 1997.

5.5 Natural Environment and Marine Habitats

Goal: Ensure that critical and unique natural and environmentally important areas are protected and preserved for the general welfare of Northampton County citizens, for marine and wildlife populations, for the enjoyment of visitors, and for scientific and research opportunities.

Implementation Strategies:

a. Encourage the maintenance of suitable habitats for migratory birds.

b. Support and implement, as appropriate, standards to protect the Delmarva Cape which has been recognized as an area of high ecological value.

c. Discourage land uses which would have a detrimental effect on the environment.

d. Support efforts to restore endangered, threatened, or declining species and their habitats.

e. Enforce standards for site development, construction and maintenance to minimize adverse impacts to the environment.

f. Enforce buffer zone widths set forth in the zoning ordinance along the bayside and seaside waterfront.

g. Support private and public organizations in land-preservation efforts.

h. Enforce regulations that maintain tidal marshes, marine nursery areas and shellfish-producing areas in a natural state.

i. Support efforts to minimize destruction and degradation of marine habitat.

j. Adopt and support growth-management procedures that protect important environmental resources.

k. Coordinate development review with the County Planning and Building Departments, Chesapeake Bay Local Assistance Board, Federal Emergency Management Agency, and the U.S. Army Corps of Engineers, when applicable.

l. Continue to enforce the flood-hazard overlay district provisions in the zoning ordinance.

m. Support the enforcement of local, State, and Federal regulations and programs that minimize the threat to life and property from flooding.

n. Rely on the U.S. Army Corps of Engineers to provide stringent regulation/enforcement of the 404 wetlands permit process.

o. Create waste water and storm-water management plans that promote technologies that conserve and recycle water, prevent surface water pollution, and avoid construction in wet, low, and poorly drained soils.

p. Develop an educational program designed to inform the public on appropriate environmental management practices and stewardship awareness.

q. Support the Resource Conservation and Development Council's "Plan of Action" for enhancement of the environment.

r. Develop regulations to require environmental-impact analysis for major developments or industries utilizing materials containing hazardous substances.

s. Define and identify sensitive areas such as wetlands, floodplains, aquifer-recharge areas, wellhead-protection zones, important habitat areas, unique and scenic areas, Carolina bays, and other areas in need of special protection.

t. Study incentives to encourage conservation easements.

u. Continue to implement the Chesapeake Bay Preservation Act on a County-wide basis.

v. Enforce shoreline minimum lot sizes and related performance standards that will prevent sewage and excess nutrients from contaminating marine waters.

w. Consider development of a marina- and dock-siting ordinance.

x. Consider development of a storm-hazard mitigation plan with a debris management element.

y. Study the feasibility of increasing the civil and criminal penalties for violation of County Ordinances aimed at protecting the environment.

z. Develop a countywide litter education plan and campaign.

aa. Evaluate and improve development standards that will minimize adverse environmental impacts.

bb. Recognize the ecological values and support restoration of native Virginian Oysters and other shellfish.

cc. Encourage and promote control and eradication of detrimental, invasive and exotic species.

5.6 Surface and Tidal Water Quality

Goal: Preserve, protect and improve current quantity and quality of surface and tidal waters.

Implementation Strategies:

a. Support conservation programs and initiatives that reduce or eliminate pollution of water resources in cooperation with the Eastern Shore Soil and Water Conservation District, Virginia Cooperative Extension, and the United States Department of Agriculture's National Resources Conservation Service.

b. Support programs and initiatives that protect and conserve surface and ground-water resources, including wetlands.

c. Support programs and initiatives that protect aquatic plant life and re-vegetation practices.

d. Support the efforts of the Virginia Department of Game and Inland Fisheries to protect and manage wildlife and fisheries resources.

e. Promote the scenic and recreational value of the County's waterways and wetlands for use by County residents and visitors.

f. Encourage the use of appropriate best-management practices.

g. Encourage the Adopt-a-Stream program through the Virginia Department of Conservation and Recreation.

h. Develop a comprehensive stormwater-management plan for new development and

existing problem areas to prevent runoff, conserve and recycle water, and reduce impervious surfaces.

i. Review E&S ordinance to address surface- and ground-water impacts from large excavations.

j. Draft and adopt a vegetative cover ordinance, for non-agricultural uses, in order to maintain vegetative buffers that will filter pollutants and reduce sedimentation to protect surface- and ground-water quality.

k. Discourage, to the maximum extent possible, point source-discharge of sewage effluent, treated or otherwise, into any surface and tidal waters.

l. Encourage the recycling of treated wastewater to the maximum extent possible.

6 Community Facilities & Services Plan

6.1 Introduction

Community facilities and services are the improvements, infrastructure, and programs made available to an area to serve the general public. They include not only those facilities owned by the public, but also those owned and operated by private enterprise for the benefit of the community.

There is a direct relationship between the location and densities of land uses and the location and size of required facilities and services. The location of existing land uses largely determines the requirements for public improvements. On the other hand, future land development should be linked to the availability and adequacy of necessary public facilities and services to meet the needs of future residents. Without water, wastewater treatment, roads, public safety, emergency services, and educational facilities, development density and the range of allowable uses should be limited. Because public facility improvements are extremely expensive in terms of the local tax dollars required to provide them, they should be prudently planned and provided in the most economical and efficient manner possible. This requires exercising local powers to regulate land use in such a manner as to insure that the public is not required to pay for public facilities and services that are unnecessary or inappropriately located.

The following goals and strategies are intended to maintain or improve the levels of various public and private community services.

6.2 Government Services & Administration

6.2.1 Citizen Participation

Goal: Ensure that Northampton County citizens have the opportunity to be fully informed and involved in the governance of their county.

Implementation Strategies:

a. Charge Board of Supervisors and Planning Commission members and County staff to be available to civic and community groups for speaking engagements.

b. Charge department heads with the responsibility for keeping their respective advisory boards active.

c. Charge advisory boards to following the policy guidelines of their respective department and the County.

d. Actively recruit people to serve on boards and commissions.

e. Develop a County directory of boards, committees, commissions, services, agencies, and programs to include membership, meeting dates and times, and area of responsibility.

f. Support local-government education programs in the school system.

g. Develop an ongoing public-information program to communicate County news to citizens on a regular basis.

h. Keep the County website regularly updated to communicate more fully with citizens and the news media.

i. Publish County Ordinances, policies, and resolutions on the County Website and whenever possible, make forms and applications downloadable and/or file-able online.

j. Investigate the feasibility of broadcasting or streaming public meetings via broadband or public-access cable channels.

6.2.2 County Management and Administration

Goal: Ensure that Northampton County is committed to continued efficient management rational, planned forecasting and budgeting of capital expenditures.

Implementation Strategies:

a. Continually review and evaluate County operations.

b. Involve the County Administrator and department heads in discussions of initiatives to improve efficiency.

c. Review County policies and update when necessary.

d. Continually review and scrutinize County funding sources and expenditures to ensure adequate and appropriate funding for County operations.

e. Annually review and update long-range plan and develop annual objectives to implement plan goals.

f. Use a professional facilitator as needed to elicit community input for County-wide issues.

g. Adopt a vehicle replacement policy.

h. Develop personnel contingency plans, including strategies to foster employee development and cross-training.

i. Develop, adopt, and annually update a Capital-Improvements Plan to ensure that major expenditures are scheduled in a manner compatible with the financial capability of the County.

j. Conduct an annual work session between the Board of Supervisors and Planning Commission to establish an annual work plan and prioritization of projects.

k.

6.2.3 Intergovernmental Relations

Goal: Ensure that all elements of local government work together for the achievement of common goals.

Implementation Strategies:

a. Adopt a policy that a County representative attend town council meetings that have agenda items relative to County business.

b. Support all joint town-County efforts and publicize these efforts and achievements.

c. Consider formal resolutions to show support of town(s) activities and positions on issues.

d. Consolidate town(s) and County services and funding where and when practicable.

e. Continue prioritizing County departmental activities and funding requests within the framework of purpose, beneficiaries, and local government responsibility.

f. Conduct regular meetings involving representatives from the Board of Supervisors, town councils, and staff members to promote cooperation.

g. Exchange the meeting agendas of the boards of Northampton County and its towns.

h. Participate in an annual state-of-the-county meeting with the Board of Supervisors, town mayors, and key stakeholders.

6.3 Community Facilities & Services

6.3.1 Public Facilities and Services

Goal: Ensure that Northampton County residents are provided adequate public facilities and community services.

Implementation Strategies:

a. Ensure adequate funding to provide appropriate public services.

b. Support the establishment of community-oriented programs that could utilize school facilities.

c. Support social-service programs that tend to reduce dependency upon the government and encourage individuals and families to be self- sufficient.

d. Encourage studies to determine the short- and long-term health effects of herbicides, pesticides and other pollutants.

e. Support programs and efforts to improve the state of health of all County citizens.

f. Consider establishing a technology committee to coordinate information systems among County offices and agencies and public/private partnership initiatives.

g. Encourage studies to determine the socio-environmental conditions responsible for the high number of congenital birth defects and disease deaths and the disparity between County and state mortality statistics.

h. Support the long-range plans of the Eastern Shore Public Library System for information infrastructure within Northampton County.

i. Implement a Capital Improvements Plan to ensure that community facilities are scheduled in a manner compatible with the financial capability of the County.

j. Establish and adopt a County proffer policy informed by applicable provisions of the Code of Virginia (1950, as amended).

k. Create a Public Works Department tasked with management of all issues relating to sewer, water, waste disposal, and drainage.

6.3.*2* Education

Goal: Ensure the provision of and access to comprehensive and innovative state-of-the-art educational facilities, opportunities, and programs for Northampton County residents.

Implementation Strategies:

a. Support programs and efforts to provide each Northampton County student with realistic skills and a thorough basic education.

b. Encourage coordination of career and technical education and other dual-enrollment courses between the public schools and the community college.

c. Support educational programs for migrant workers.

d. Support the development of programs designed to enhance the quality of educational services available for all residents.

e. Support programs and incentives to provide additional educational opportunities for all County residents utilizing available technology such as distance learning, satellite classrooms, and cooperative teaching arrangement.

f. Support the efforts of the Community College and the Chamber of Commerce to provide workforce-development opportunities to County residents.

g. Ensure adequate funding to provide appropriate educational opportunities.

6.3.3 Emergency Services and Law Enforcement

Goal: Ensure the provision of efficient and effective emergency services such as fire services, emergency medical and transport services, emergency management, and law enforcement to the citizens of Northampton County.

Implementation Strategies:

a. Encourage the media to emphasize the good work of the volunteer units and their needs.

b. Support programs and efforts to educate the public as to the advantages of the volunteer system and to obtain increased public support.

c. Continue to work closely with the Chesapeake Bay Bridge-Tunnel Authority, the

Virginia Department of Game and Inland Fisheries, the Virginia Marine Resources Commission, and the Virginia Refuge in law enforcement efforts.

d. Support drug- and substance-abuse programs in schools and for adults.

e. Support Eastern Shore Community Services Board programs.

f. Identify potential sites for additional fire and rescue services.

g. Re-evaluate contingency plans to provide emergency services.

h. Continue to assign command and control functions for emergency services to trained emergency professionals.

i. Develop a County strategy for handling avian flu or any pandemic ~~flu~~ outbreak.

j. Ensure adequate access for emergency vehicles to residential sites.

k. Create and adopt a County proffer policy regarding emergency services.

l. Investigate implementing a fire tax.

m. Ensure adequate funding to provide appropriate emergency services.

6.3.4 Solid Waste Management

Goal: Ensure the safe, efficient, and economical collection and disposal of solid waste in Northampton County.

Implementation Strategies:

a. Support regional hazardous household products collection programs. Support programs and initiatives such as Adopt-A-Highway to keep roadsides free from litter and trash.

b. Support efforts to educate private citizens and businesses regarding recycling.

c. Continue regional efforts with Accomack County and other jurisdictions to make recycling more cost-effective.

d. Continue development of remaining three convenience centers with recycling components.

e. Support programs to prevent pollution from hazardous waste.

f. Proceed with planning, development and construction of solid waste transfer station for transportation and disposal of solid waste off-site.

g. Ensure proper leachate disposal as required by the State.

h. Support programs and initiatives to alleviate problems of littering, illegal dumping, and abuse of remaining greenbox sites until their elimination.

i. Continue regular monitoring of test wells at the landfill.

j. Impose fines for illegal dumping of waste.

k. Continue to separate white goods from other solid waste at the landfill and transfer sites.

l. Monitor ground- and surface-water quality in the area adjacent to the landfill.

m. Proceed with capping and closure activities at Landfill as needed.

n. Study the feasibility of recycling alternatives including consideration of a program similar to Accomack County's "Put & Take" Program.

o. Ensure adequate funding to provide appropriate solid waste management.

6.3.5 Water Supply Planning & Management

Goal 1: Create and implement comprehensive planning and funding approaches that manage the community's water supply to ensure adequate quantity and quality of ground and surface waters for multiple beneficial uses. Seek approaches that link and coordinate ground water hydrology, drinking water, agriculture, aquaculture, storm water management, drainage, waste water treatment and disposal, and community land use patterns to protect, conserve, recycle and improve the County's valuable fresh and tidal waters.

Goal 2: Encourage the use of central water and sewer systems to serve designated growth areas and planned residential, commercial and/or industrial development, provided that such systems do not contaminate the ground water or coastal waters and do not involve overboard discharge. In areas of the County not served by central sewer and water, provide for the continued use of well-maintained and regulated well and septic systems.

Implementation Strategies:

a. Work with the Health Department to control the location, density, and design of on-site septic systems to reduce threats to groundwater quality caused by cumulative impacts of long-term use.

b. Develop citizen support for groundwater-protection strategies through public education.

c. Encourage and support efforts and programs to prevent any discharge from sewage treatment systems and/or plants into surface bodies of water.

d. Continue to enforce the septic pump-out provision in the zoning ordinance.

e. Consider requiring installation of sewage-treatment facilities in areas of high density or concentrated development.

f. Prohibit the use of septic tank tile-field systems (mass drainfields) as an interim disposal system prior to construction of a treatment system in areas of high density or concentrated development.

g. Continue to utilize zoning to require reserve drainfields for septic tanks.

h. Delineate areas where there is a danger of groundwater contamination and health hazards to residents from septic systems and pit toilets.

i. Encourage the development of a bi-county water and wastewater master plan.

j. Work with the Health Department and Eastern Shore of Virginia Ground Water Committee to determine the need for stricter well-head protection regulations.

k. Organize an ad hoc Water Supply Task Force with a six-month mission to help the County structure the planning process, identify required resources and expertise, coordinate existing programs and efforts, and establish clear goals, priorities and timelines for implementation.

l. Encourage participation of members of the Eastern Shore Ground Water Committee and the Public Service Authority and solicit input from representatives of aquaculture, agriculture, real estate, land preservation, business and civic groups and County citizens.

m. Foster multi-jurisdictional and regional cooperation and collaboration. Utilize and leverage existing organizations, authorities, agencies, partnerships and institutions to the greatest extent possible. Coordinate and align existing plans and initiatives.

n. Prepare and present a report recommending “Immediate Action Steps” to the Board of Supervisors.

o. Identify, prepare and disseminate educational and other materials regarding the nature and importance of the community’s water supply as a valuable, shared and limited resources.

p. Create a County storm-water management policy.

q. Study how the County can aid in evaluating and resolving current drainage problems.

r. Ensure adequate funding to provide appropriate water supply management.

6.3.6 Parks & Recreation

Goal: Ensure the provision of recreational opportunities that will serve all segments of the Northampton County citizenry and visitors while preserving open spaces.

Implementation Strategies:

a. Encourage development of small, neighborhood-scale community parks and satellite recreational facilities.

b. Develop joint school and County recreational facilities wherever practicable and promote programs that serve the recreational needs of all County residents.

c. Solicit expertise and funding from the Division of Forestry in developing recreation trails within public and/or private forestland.

d. Encourage the U.S. Fish and Wildlife Service, the Commonwealth of Virginia, The Nature Conservancy and other private landowners to provide greater access for recreational purposes within their properties and management areas.

e. Encourage power companies and railroads to allow the use of rights-of-way for appropriate recreational uses.

f. Support programs to meet the recreational needs of local citizens and tourists.

g. Support programs and initiatives that ensure safe and appropriate use of waterways including dredging of channels and harbors.

h. Support programs that promote the Eastern Shore National Wildlife Refuge for the benefit of local citizens and tourists.

i. Support efforts to promote recreational fishing.

j. Support public and private programs and initiatives to establish and operate youth programs.

k. Utilize a public process to develop a County-wide parks and recreation master plan, including a revised vision for “Seaside Park” and improvements to Indiantown Park.

l. Initiate action to identify, protect and enhance highways and road sections that qualify as "Scenic Byways."

m. Evaluate a County boat-ramp fee schedule.

n.

o. Investigate acquisition of beach property for public use.

~~p.~~ Evaluate the need for additional public boat ramps.

q. Consider the development of zoning policies that encourage large landowners to create easement for public hiking and riding trails.

r. Support efforts to promote ecotourism.

s. Support efforts to promote recreational hunting.

t. Ensure adequate funding to provide appropriate recreational opportunities.

6.3.*7* Waterfront Access

Goal: Ensure the provision of safe and adequate public waterfront-access facilities in Northampton County.

Implementation Strategies:

a. Develop a shoreline access and management plan using resources such as Virginia Institute of Marine Sciences Coastal Management programs.

b. Consider acquisition of beach property for public use and access.

c. Ensure adequate funding to provide appropriate waterfront access.

6.4 Arts, Culture, and History

Goal: Ensure the preservation of areas and properties of historic and cultural significance in Northampton County.

Implementation Strategies:

a. Develop and adopt land-use practices and regulations under the zoning ordinance to protect historic sites and structures and their gateways and provide adequate buffer areas.

b. Protect and preserve scenic, cultural, and historic areas through an architectural review board.

c. Continually update the County's inventory of historic sites and structures.

d. Utilize the zoning ordinance to protect and preserve historic sites and areas of architectural interest using a Historic and Cultural Preservation Overlay District.

e. Support efforts of local historic societies to protect sites and encourage restoration of buildings.

f. Coordinate housing code enforcement/redevelopment projects with the State Department of Historic Resources to ensure that significant architectural details or buildings are identified and preserved.

g. Coordinate public works projects with the State Department of Historic Resources to ensure the identification and preservation of significant archaeological sites.

h. Encourage efforts to maintain and repair historic structures in the County, and support the donation of historic easements.

i. Support local, regional and state efforts to develop and promote heritage tourism and eco-tourism opportunities in the County such as the Heritage Trail and the John Smith Water Trail.

j. Study the need for regulations requiring archaeological surveys of land proposed for development.

k. Study regulations to require that redevelopment efforts be consistent with the historic-preservation goal.

l. Support initiatives to promote cultural and heritage tourism.

m. Support the efforts of local artists, artisans, musicians and writers to publicize events where their work is offered.

7 Transportation Plan

The purpose of this transportation element update is to incorporate the results of various studies completed since the 2001 update and, in light of the increasing development pressure, set goals and strategies for Northampton County’s future transportation system.

Because the Virginia Department of Transportation (VDOT) is responsible for constructing and maintaining the County's roads and highways, it is not necessary for this plan to include the design details of specific projects. However, the County needs to identify the locations of future growth and prioritize transportation needs so VDOT can accurately plan and fund Northampton County's future transportation improvements. It is equally important for the County to consider how its policies, plans, and land use ordinances affect VDOT's ability to develop and maintain the highway system. Northampton County must continue to work in partnership with VDOT and other transportation organizations to ensure a safe, efficient, and well maintained transportation system.

7.1 Transportation Planning Workshop

During the development of this transportation element update, input was sought from county citizens, elected officials, county staff, and transportation agency staff. A Northampton Transportation Planning Workshop was held on February 26, 2004. The following issues were raised during the workshop. The complete workshop results are located in the Appendix, *Transportation Planning Workshop Results*.

Northampton County Transportation Issues

- Traffic from Chesapeake Bay Bridge Tunnel
- Need access management on U.S. Route 13
- Need accessible public transit
- Unsafe U.S. Route 13 intersections
- Connect Bayside Road to Broadwater Road
- U.S. Route 13 medians are too narrow
- No bicycle lanes in Northampton County
- County not using proffers to solve transportation problems
- New development should follow U.S. Route 13 Access Management Plan
- Need to plan for roads and utilities in southern Northampton County
- Need to know railroad plans and highway access requirements
- Need a new access road in Culls
- Need more culverts in Cheapside for drainage
- Need to consider the impact of road improvements on community drainage and traffic patterns.
- Preserve the rural look of communities from main roads.

7.2 Northampton County Transportation System Vision

The following Northampton County Transportation System Vision statement was developed from the transportation-planning workshop results:

Northampton County will have a safe, efficient transportation system with access management on U.S. Route 13, safe U.S. Route 13 intersections and medians, accessible public transit, bicycle lanes, proper road drainage, and limited impacts of road development on existing communities.

This vision statement and the issues identified at the workshop will be addressed throughout this transportation plan.

7.3 Needs Assessment

Northampton County has many transportation needs, ranging from safety problems on U.S. Route 13 to the uncertainty of how future population growth and development will impact the County's transportation system. The following Needs Assessment summarizes the previously discussed issues into several categories to guide development of the County's transportation goals and strategies.

Transportation Needs Assessment

- **Land Use Planning and Transportation Planning**
  Since VDOT is responsible for Northampton County's highway system, it is essential that the County work closely with VDOT to coordinate land-use planning with road planning, construction and maintenance. Northampton County's existing zoning already allows nearly four times the number of housing units that currently exist. No plan is currently in place to define or design transportation requirements that would meet the needs of that zoning. Any additional rezonings will add to the potential traffic impacts of land development. Safety-Conscious Planning and Context-Sensitive Design need to be used as tools to prevent accidents and preserve rural character. Northampton County needs to analyze any future proposals to lower the Chesapeake Bay Bridge Tunnel tolls that could also increase traffic and land-development activity in Northampton County.

- **U.S. Route 13**
  Continued implementation and possible strengthening of the U.S. Route 13 Highway Corridor District provisions contained in the County zoning ordinance is needed to improve safety and maintain capacity. The County needs to support VDOT in obtaining funds to make physical highway improvements on U.S. Route 13.

- **Main Road Network**
  Northampton County's most heavily traveled roads form a Main Road Network of Primary and Secondary roads. The County needs to recognize this network as its main transportation system and work toward improving safety and capacity while preserving existing communities. Northampton County needs to consider adopting

access-management regulations for these roads and use tools such as Scenic Byway designations and Context-Sensitive Design to preserve rural character.

- **Multimodal Transportation Facilities**
  Northampton County is fortunate to have highways, public transit, ports, a railroad, and airstrips that form a multimodal transportation system. Northampton County needs to recognize this multimodal transportation system and work toward strengthening its components.

- **Economic Development and Tourism**
  Northampton County's transportation facilities support economic development and tourism. The County needs to work with economic development and tourism organizations to generate support and funding for transportation initiatives such as U.S. Route 13 improvements, the Eastern Shore of Virginia Bicycle Plan, Virginia Scenic Byways, Adopt-A- Highway, the Eastern Shore of Virginia Heritage Trail, the Seaside Water Trail, the John Smith Water Trail, the Virginia Birding and Wildlife Trail, and Virginia Historical Markers.

7.4 Goals & Implementation Strategies

The following Goals and Implementation Strategies have been developed to guide Northampton County's future transportation initiatives:

7.4.1 Land-Use & Transportation Planning

Goal: Plan, build, and maintain a safe, efficient, and well-drained highway system that preserves Northampton County's natural and historic resources and existing communities by working closely with VDOT to coordinate land-use planning and transportation planning.

Implementation Strategies:

a. Establish a program to coordinate land-use planning and transportation planning with VDOT.

b. Review rezoning requests and subdivision applications for transportation impacts and identify measures to maintain highway safety and efficiency.

c. Utilize Safety-Conscious Planning and Context-Sensitive Design to prevent accidents and preserve rural character.

d. Develop a stormwater management plan in cooperation with VDOT to improve drainage on roads and adjacent properties.

e. Consider nomination of suitable roads within the County for Scenic Highway or Virginia Byway designation informed by Code of Virginia (1950, as amended) Sections 33.1-62 through 33.1-66.

7.4.2 U.S. Route 13

Goal: Improve safety and maintain traffic capacity on U.S. Route 13.

Implementation Strategies:

a. Continue to implement the U. S. Route 13 Highway Corridor District provisions in the zoning ordinance and strengthen where necessary.

b. Support VDOT in obtaining funding for U.S. Route 13 improvements.

c. Evaluate the Recommended Conceptual Plans included in the 2002 Route 13/Wallops Island Access Management Study and consider adoption as an amendment to this Plan.

d. Discourage any additional growth along U.S. Route 13 and study methods by which the number of curb and median cuts can be reduced.

7.4.3 Main Road Network

Goal: Improve Northampton County's Main Road Network by enhancing safety and capacity.

Implementation Strategies:

a. Develop a corridor study of Route 184 and Route 642 in cooperation with the Town of Cape Charles.

b. Adopt access-management ordinances along Northampton County's main road network.

c. Utilize Scenic Byway designations and Context-Sensitive Design to preserve rural character along Northampton County's main road network.

7.4.4 Multimodal Transportation

Goal: Improve Northampton County's Multimodal Transportation System by coordinating planning and supporting funding for highways, public transit, human services transportation, bicycle and pedestrian facilities, ports, the railroad, and a public airport.

Implementation Strategies:

a. Support STAR Transit in establishing demand-response transit and a Chesapeake Bay Bridge Tunnel bus service to Hampton Roads.

b. Support development of bicycle and pedestrian facilities.

c. Document vessel usage of channels and ports and support federal funding for maintenance dredging.

d. Document railroad usage and support funding for railroad improvements.

e. Support private sector initiatives to upgrade Bay Coast Railroad.

7.4.5 Economic Development & Tourism

Goal: Support economic-development and tourism initiatives, such as the 2007 Jamestown Celebration, by improving transportation-related tourism facilities.

Implementation Strategies:

a. Support efforts of the Eastern Shore Tourism Commission to maintain the Southern Gateway Welcome Center.

b. Work with VDOT and apply for grants to implement the Eastern Shore of Virginia Bicycle Plan.

c. Encourage development of a rail-trail from the Eastern Shore Wildlife Refuge to the Accomack County line.

d. Identify and nominate roads for Virginia Scenic Byway designation that complements the Eastern Shore of Virginia Heritage Trail and Bicycle Plan.

e. Encourage community organizations and citizens to continue their Adopt-A-Highway efforts.

f. Inventory and assess Northampton County's Virginia Historical Markers and consider replacing missing markers.

g. Support the Eastern Shore Tourism Commission strategy for signage, branding and beautification of U.S. Route 13.

7.4.6 Future Land Use Plan

The Future-Land-Use Plan includes a land-use designation for the Highway-Corridor Land-Use District to manage highway-oriented development along U.S. Route 13. The Highway-Corridor

District includes all land within 1,320 feet (1/4 mile) of the centerline of U.S. Route 13 in Northampton County, as shown on the Northampton County Future-Land-Use Map. This land use district also includes any adjacent land designated for Commercial or Industrial land uses on the Northampton County Future Land-Use-Map.

Goal: Achieve a balanced pattern of future land use that meets the County's physical and economic needs, and preserves and enhances the safety, function, and capacity of the U.S. Route 13 corridor.

Objective: Continue to implement the U.S. Route 13 Highway Corridor District zoning provisions and strengthen as needed preserv*e* and enhanc*e* the safety, function, and capacity of the highway corridor.

Future Land Use Map

A Highway-Corridor Land-Use District has been added to the Northampton County Future-Land-Use Map to provide the justification for a Highway-Corridor Zoning-Overlay District.

Highway Corridor Land Use District

The Highway-Corridor Land-Use District designation is intended to preserve and enhance the safety, function, and capacity of the U.S. Route 13 corridor in Northampton County. The Highway Corridor Land-Use District is also intended to minimize the potential impact of highway-oriented development. As the Eastern Shore of Virginia's primary route for local and through traffic, U.S. Route 13 represents a significant community investment and contributes to Northampton County's public health, safety, and welfare. U.S. Route 13 provides access to jobs and schools, facilitates delivery of emergency services, and supports movement of goods and services. Furthermore, the U.S. Route 13 corridor serves as a first impression of Northampton County for tourists and the traveling public and, as a safe and accessible highway facility, serves a vital economic-development function.

1. **Plan Methodology and Citizen Participation**
2. **History & Geography**
3. **Population and Demographic Analysis**
4. **Economic Analysis**
5. **Housing Analysis**
6. **Environment**
7. **Community Facilities & Services**
8. **Transportation**

Part 2.

1 Plan Methodology & Citizen Participation

1.1 Purpose and Authority to Plan

A comprehensive plan is a statement of long-range policies made by the governing body of a community concerning its future physical development. Comprehensive planning is one process available to local government for addressing current issues, anticipating needs, and scheduling public improvements. Community values should be preserved and public funds be spent prudently if growth and development are occurring and if public funds must be spent to provide facilities.

The general purpose of the comprehensive plan is found in the Code of Virginia, 1950 as amended, Sections 15.2-2223 through 15.2-2232, which includes the following excerpt:

> In the preparation of a comprehensive plan, the Commission shall make careful and comprehensive surveys and studies of the existing conditions and trends of growth, and the probable future requirements of its territory and inhabitants. The comprehensive plan shall be made with the purpose of guiding and accomplishing a coordinated, adjusted and harmonious development of the territory which will, in accordance with present and probable future needs and resources, best promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants.
>
> The comprehensive plan shall be general in nature, in that it shall designate the general or approximate location, character, and extent of each feature shown on the plan and shall indicate where existing lands or facilities are proposed to be extended, widened, removed, relocated, vacated, narrowed, abandoned, or changed in use as the case may be.
>
> Such plan, with the accompanying maps, plats, charts, and descriptive matter, shall show the Commission's long-range recommendations for the general development of the territory covered by the plan.
>
> The comprehensive plan may also be considered a guide to managing resources wherever a balance is sought between competing needs - for example, protecting the environment's aesthetic or cultural qualities versus providing the population and its interests with needs such as shopping areas, housing, and industrial employment.

1.2 Planning in Northampton County

It is the purpose of the Northampton County Comprehensive Plan to provide a sound basis for the preparation of detailed functional plans which will serve as a general guide in the day-to-day decisions of County government. It establishes goals and implementation strategies for managing the future growth and development of the County. It contains an inventory and analysis of existing land use, growth trends, natural resources, transportation, population, economic factors, and public facilities, as well as the need for housing, preservation of agricultural and forestal land, and protection of the

environment and natural resources. It contains recommendations for the general development of the County.

1.3 Plan Methodology

This Comprehensive Plan has been divided into three (3) parts. The first part describes the plan update process and summarizes public participation and consists of the various elements of the plan of development for the County, including the Land Use Plan, Community Facilities and Services Plan, Housing Plan, Economic Development Plan, Transportation Plan, Natural Resources and Environment Plan. The Plan has a projected outlook of 20 years. Part II is Data and Analysis, which describes current conditions, assesses trends, and makes projections of possible future trends. Part III contains appendices consisting of adopted town plans and village vision documents.

1.4 Citizen Participation

1.4.1 National Citizen Survey 2005

Preparations for this plan began with the National Citizen Survey 2005 for Northampton County submitted by the National Research Center. It was completed in April of 2005. The Survey was conducted by mailing to a random selection of 1200 people in the county. The response was 28% (298), which is a typical response rate experienced by the National Research Center for this kind of survey. The results were weighted to reflect the demographic profile of all residents in Northampton County. The results are on file at the Northampton County Planning Department in Eastville. They can also be viewed on line at the Planning & Zoning Department on the County's web site: http://www.co.northampton.va.us/departments/planning.html.

1.4.2 Comprehensive Plan Retreat

A day-long Comprehensive Plan retreat was held in June 2005. In attendance were the County's planning staff, Board of Supervisors, Planning Commissioners, citizens who had been appointed by the Board to a Plan Advisory Committee, and a consulting team. The purpose of the retreat was to review and discuss options for how to proceed with the update process for the Comprehensive Plan and the Zoning Ordinance.

1.4.3 Public Workshops

In September and October of 2005, a series of seven public workshops were held by the planning department throughout the County to encourage participation and to gather citizen input in local planning areas. A workshop was held for the planning areas of each of the 5 incorporated towns of Exmore, Nassawadox, Eastville, Cheriton, and Cape Charles. Two additional meetings focused on the north and south rural areas of the county.

From the public workshop meetings, ideas were gathered as to what citizens thought were important issues upon which the County should focus planning efforts. A summary of these ideas is included as an appendix.

1.4.4 Citizen's Growth Summit

The next step of the public input process was a Citizen's Growth Summit, held on November 29, 2005 in Eastville. It was well attended with approximately 160 people. There were two parts to the workshop with a dinner intermission between, which was graciously provided by the "Citizens for a Better Eastern Shore" (CBES).

The first part of the workshop consisted of a visual preference survey where the citizens were asked to pick their preferences from a series of slides representing different development types and densities.

The second half included a Growth Challenge Exercise where the citizens were asked to place game pieces, representing development types and densities, on maps of the County.

Summaries of the results of the visual preference survey and of the Growth Challenge Exercise are on file at the County's Planning & Zoning Department and can also be viewed on the County's web site at:
http://www.co.northampton.va.us/departments/planning.html.

1.5 Plan Advisory Committee

The Board of Supervisors appointed a group of citizen stakeholders to work with the staff and consulting team to prepare a draft Land Use section of the Plan. When their review was completed, they forwarded the draft to the Citizens Joint Local Planning Commission for their review and certification of the draft Plan to the Board of Supervisors.

Part 2.

2 History & Geography

2.1 Geography

2.1.1 The Delmarva Peninsula

The Delmarva Peninsula is a large peninsula on the east coast that contains land within the three states of Delaware, Maryland, and Virginia. It is bounded by the Chesapeake Bay to the west and the Atlantic Ocean to the east. The southernmost tip of the peninsula is connected to the Virginia mainland via the Chesapeake Bay Bridge-Tunnel.

Northampton County is located on the southern part of the Delmarva Peninsula, known as the Eastern Shore of Virginia. Virginia's Eastern Shore includes Accomack County to the north and Northampton County to the south.

2.1.2 Northampton County

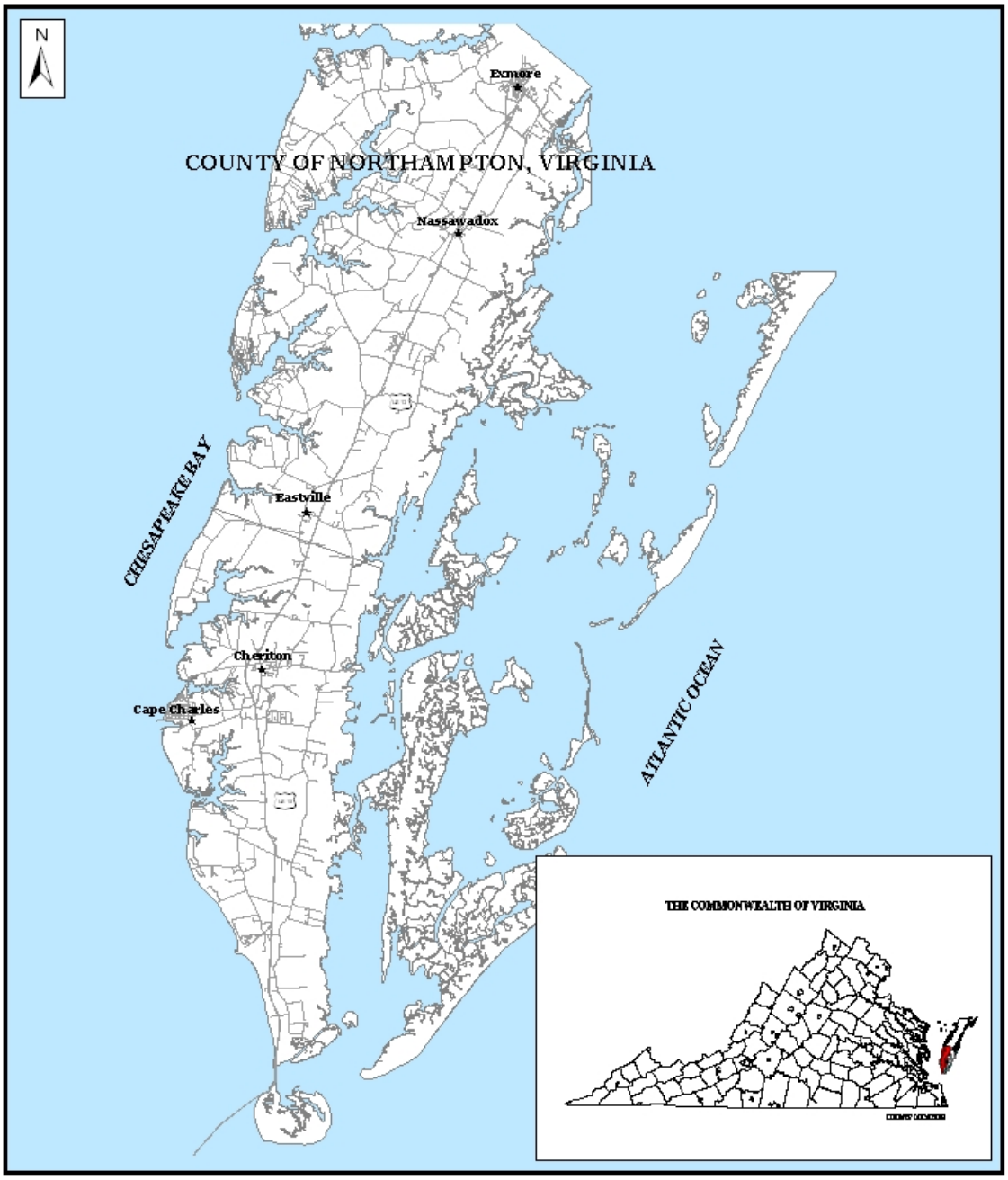
The County of Northampton is approximately 35 miles in length with an average width of 6 miles. The County contains 696 square miles. The total land surface area is estimated to be 357 square miles.

The County has five incorporated Towns within its boundaries; they are, in order from north to south, Exmore, Nassawadox, Eastville, Cheriton, and Cape Charles. The County seat is located in the town of Eastville, which is 125 miles from Richmond and 30 miles northeast of the Norfolk and Virginia Beach area, which is part of the Tidewater Region of Virginia. Northampton is one of 95 counties in Virginia.

Figure 2.1 shows the location of Northampton County within the Commonwealth of Virginia. It also shows the location of the five incorporated towns and the location of the Chesapeake Bay Bridge Tunnel off the southern tip of the peninsula connecting the County to the Tidewater area and the mainland of Virginia.

2.1.3 The Chesapeake Bay

The Chesapeake Bay has always played a major role in the lives of Northampton County residents. In early times, people and commerce were transported by boats throughout the Bay and the Tidewater area of Virginia. In modern times, the products of the Bay, principally crabs, shellfish and fin fish, are of considerable economic importance. The recreational and aesthetic values associated with the Bay and its scenic creeks and beaches represent the natural values that attract visitors and developers, people in the market for second homes, and retirees.



Northampton County, Virginia
2006 Comprehensive Plan Update

Figure 2.1
Location

2.2 History & Culture

2.1.2 Native American Inhabitants

The first inhabitants of the Eastern Shore were tribes of Native Americans thought to be numbered about 2000 around the turn of the 17th century. They lived in small settlements scattered along the peninsula. All of the villages were located close and accessible to the water, as it was of major importance to their existence. In addition to living off the bounty from the sea, they hunted game and tended fields. They migrated among several locations along the coast as demands and supplies of these necessitated.

A Southern portion of the Shore from Cape Charles north to Hungars Creek was largely occupied by the Accomack Indians, who were the first Native Americans encountered by the English upon their arrival. The Accomacks were related culturally to the Native Americans across the Bay near Jamestown, and spoke the same language. Also in the territory of the Accomacks lived the Magothas and the Mattawomans or Matoones.

North of the Accomacks lived the Occohannocks, who were of the same culture and language. Noting the similarities between the two tribes, the Occohannocks were considered a “sub-tribe” to the Accomacks. The Bayside Occohannocks included the Nanduas or the Nassawadox Indians. The Seaside Occohannocks included the Machipongos and the Whacapreagues.

The Native Americans of the Eastern Shore did not survive long after the onset of English settlement. The spread of disease brought by the Europeans was the major contributing factor to their demise. Less than a century after their introduction to Europeans, the Native American population on the Eastern Shore dwindled down to just a few villages inhabited by just a handful of people.

2.2.2 English Settlement

Although there had been landings and some exploration of the Eastern Shore as early as the 1500's, it is generally accepted that the first settlement was in 1614 when a detachment of men were sent from Jamestown to establish an outpost. From this humble beginning, land patents were issued and Northampton County became populated.

As noted in James Perry’s book, “The Formation of Society on Virginia’s Eastern Shore”, the original division of Virginia into counties listed the land on the eastern shore as one county, and it was called Accomack. In 1643, it was renamed Northampton; and in 1663, it was divided into the two counties, Accomack and Northampton, as they remain today.

2.2.3 Historic Resources

There are numerous sites of historic significance and interest throughout the County. Northampton County is fortunate to have a proportionally larger number of old structures

compared to other Virginia localities. The County is fortunate to have especially significant dwellings and sites placed on the National Register of Historic Places. Figure 2.2 shows the sites in the County that are listed with the Virginia Department of Historic Resources.

2.2.4 The Culture of Northampton County

The combination of Northampton County's unique geography and its rich historical heritage has created a distinctive lifestyle highly valued by its residents. This lifestyle has been shaped essentially by the natural resources in which the County is so rich: surrounding waters with tidal marshes abundant in seafood; richly productive soils; woodlands; a long growing season for agriculture; and clean air. The availability of these resources has produced an economy based on agriculture and seafood production with people living on farms or in low-density residential patterns of small towns and villages. The rural setting allows easy and open access to the high quality natural environment which supports both the economic and recreational needs of the community.

The social structure tends to be closely knit, but during the last several decades retirement and second home purchases have added a new dimension. The current economy continues to be based in the agricultural and seafood industries and recently tourism has begun to have an impact. Visitors can share the County's natural habitats, scenic environment and a more tranquil way of living while enjoying fishing and hunting, boating and beaches, and a glimpse of history.

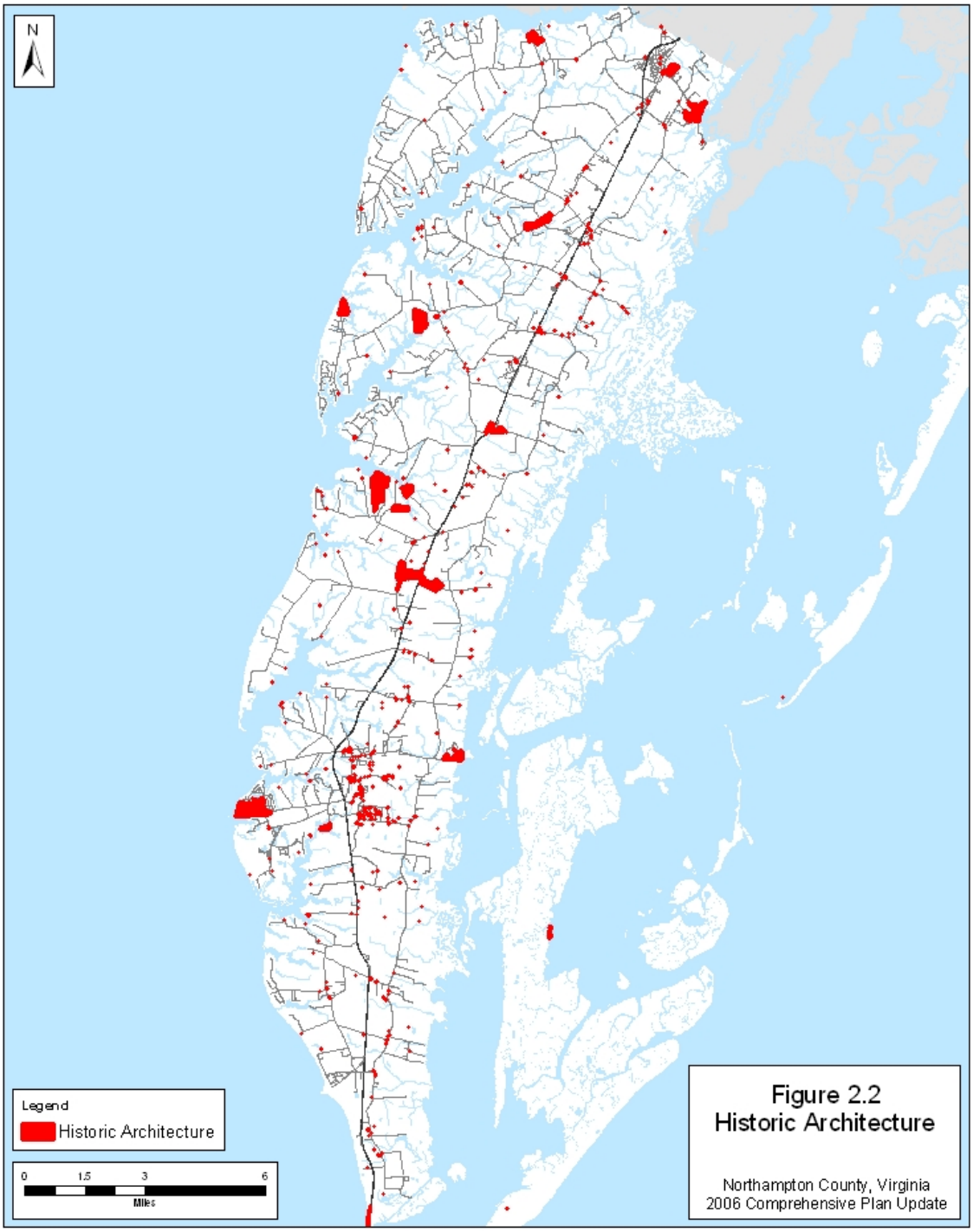

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Figure 2.2
Historic Architecture
Northampton County, Virginia
2006 Comprehensive Plan Update

3 Population & Demographic Analysis

3.1 Introduction

The study of population and growth throughout the County provides an essential foundation for planning of capital improvements, including schools, waterlines and sewers, recreation facilities, and transportation facilities. This chapter contains text and exhibits which describe the past and present nature of the County and projections of future growth. Information presented here introduces a number of issues which are central to the Comprehensive Plan. An understanding of these issues is necessary in order to plan effectively for the future.

Land use planning must be sensitive to the changing characteristics of the population of a community. Changes in population create changing demands for housing, commercial services, and public facilities and services.

3.2 Population Trends

The slight decline in County population which began in the 1980's continued into the 1990's. Two large industries closed during this period. Many employees could not find local jobs and had to relocate. The County's population in 1980 was 14,625. By 1990, the population had decreased by 6.3% to 13,061. The 2000 population was 13,093, an increase of 32 persons (0.2%) over the 1990 total of 13,061.

The 2004 estimate from the U. S. Census bureau is 13,303, which is an increase over the 2000 census of 210 people (1.6% increase). This indicates the County is realizing a much higher rate of growth than the 1990 to 2000 time period. The increase in Virginia for the same time period was 5.4%. The County’s increase in population, according to the Weldon Cooper Center, is due to net migration rather than by natural increase.

Another noticeable trend is an increase in the median age of citizens. In 1990 the median age was 37.9, and in 2000 it was 42.4. This is above Virginia’s median age in 2000 of 35.7. Similarly, Accomack County is above the median age of the state but not as much as Northampton. Table 3.2 shows the median ages for Northampton County, Accomack County, and the Commonwealth of Virginia.

Table 3.2
Median Age

	2000
Northampton County	42.4
Accomack County	39.4
Virginia	35.7

Source: U.S. Census Bureau, 2000 Data

As it is noted in the 2005 Northampton County budget, there was a decline in the number of school age children enrolled in the County's schools. The 1995 enrollment in Northampton County schools was 2,501 students. It has decreased over the last ten years to enrollment of 1,932 in 2005.

3.3 Population Projections

According to the U.S. Census Bureau, between April 2000 and July 2004, the County experienced an increase in population of 1.6%. Calculating from this figure, Northampton County is experiencing an approximate annual growth rate of .4%. If the County continues growth at this same rate, the projected population for 2016 is 13,956. See Table 3.3.

Table 3.3
Population Projection*
Northampton County, VA

Year	Population
2004	13,303
2005	13,356
2006	13,410
2007	13,463
2008	13,517
2009	13,571
2010	13,625
2011	13,680
2012	13,735
2013	13,790
2014	13,845
2015	13,900
2016	13,956

* Calculations based on annual growth rate of .4%

Current real estate trends and an increase in building permit activity suggest the possibility of a significant population increase. An increase in seasonal population, which is difficult to quantify, appears to be occurring at this time.

3.4 Households

In 1990 there were 5,088 households housing a population of 13,061 which translates to 2.5 persons per household. In 2000, there were 5,321 households housing a population of 13,093, which translates to 2.39 persons per household. This shows a slight decrease in household size.

3.5 Families

According to the 2000 Census, there were 3,546 families living in Northampton County. This is an increase of 21 families from 3,525 in 1990.

3.6 Marital Status

There were a total of 5,467 married persons 15 years or older according to the 2000 Census. Table 3.6 shows the marital status for 1990 and 2000.

Table 3.6
Marital Status, 1990 & 2000
Northampton County, Virginia

Marital Status	Year	
	1990	2000
Never Married	2410	2675
Married	5147	5467
Separated	722	419
Widowed	1251	1162
Divorced	703	865

Source: U.S. Census Bureau 1990 & 2000 Data

3.7 Population by Age, Race & Sex

The County's population in 2000 was 13,093. There were 6126 Males (47%) and 6967 Females (53%). In 1990 there were 46% males and 54% female.

A shifting of the population by age group has occurred between 1990 and 2000. Table 3.7 gives a breakdown by age with a column showing the decrease or increase from 1990 to 2000. There is a significant decrease between the ages of 0 and 10; there is also a significant decrease between the ages of 25 and 34. These together might suggest out-migration of young families in search of either work or housing; and, when combined with the increase in ages 35-44, might also reflect the aging of the adult population.

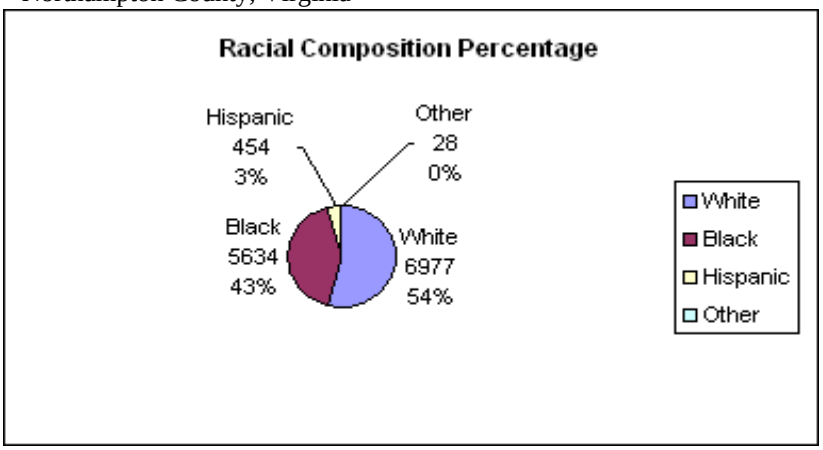
Table 3.7
Population by Age, 1990 & 2000
Northampton County, Virginia

Age Group	Year 1990	Year 2000	Increase or Decrease
Under 5	893	724	-169
5-9	1,025	806	-219
10-14	910	948	38
15-19	807	883	76
20-24	613	620	7
25-34	1,827	1,215	-612
35-44	1,523	1,881	358
45-54	1,327	1,804	477
55-59	795	741	-54
60-64	752	700	-52
65-74	1,492	1,502	10
75-84	853	917	64
85 & over	244	352	108
TOTAL	13,061	13,093	32

Source: U.S. Census Bureau 1990 & 2000 Data

In 2000 there were 6977 whites and 5634 blacks, 454 Hispanics, and 28 persons of other race in Northampton County. Chart 3.7 shows the racial composition percentage.

Chart 3.7
Racial Composition Percentage
Northampton County, Virginia



Source: U.S. Census Bureau 2000 Data

3.8 Conclusions

If the current trends continue, we can conclude the following scenarios:

- The County will experience a moderate growth rate, much higher than last decade but lower than Virginia as a whole.
- The population will continue to get older due to net migration rather than by natural increase.
- There will be fewer school age children.
- There will be a decrease in the black population.
- There will be an increase in the Hispanic population.

4 Economic Analysis

4.1 Introduction

By evaluating the local economy and employment trends, factors may be identified which influence population growth and provide some basis for policy changes by the governing body. Economic expansion or changes in the economic structure of a community trigger the conversion of land to new uses and in turn creates the need for new public facilities and services. Understanding these dynamic forces is therefore a prerequisite for land use planning.

4.2 Civilian Labor Force, Unemployment Rate, and Wages

The civilian labor force defined is all people aged sixteen or more who are able to work and are neither in the military nor institutionalized. As cited from the Virginia Employment Commission, the civilian labor force of Northampton County as of January 2006 consisted of 5,848 people. Of those, 5,560 were employed and 288 were unemployed. This equates to an unemployment rate of 4.9%. In April 2000, the civilian labor force was 5,329. The number of employed in April 2000 was 5,132 and 197 unemployed, which was an unemployment rate of 3.7%, which many economists consider virtual full employment. In the third quarter of 2005, VEC reports 6,708 working employees in the county, not counting those employed in education services, utilities or private sector management. This indicates the possibility of more than 1,500 more employees working in the county than the number of available workers in the county workforce. The construction, hospitality, resort maintenance and health care industries depend, to some extent, on imported workers.

The average weekly wage for Northampton County in the 3rd quarter of 2005 was $477. This would be equivalent to $11.93 per hour or $24,804 annually, assuming a 40-hour week was worked the year round. The Virginia statewide average weekly wage for the same time period was $815 or equivalent to $20.38 hourly and $42,380 annually.

4.3 Major Industries

The total number of employees working in Northampton County in 2005 was 6,708. The largest major industry sector was Agriculture, Forestry, Fishing & Hunting with 32%. That was followed by Health Care & Social Assistance with 15% and Retail Trade (44 & 45) with 9%. Table 4.3 shows the major industries in Northampton County with the number of establishments in each industry sector, the number of employees in each sector and each sector's percentage of the total number of people working in Northampton County. The data is from the Virginia Employment Commission for the 3rd quarter 2005 time period. Chart 4.3 shows each sector's portion of the total number of people working in Northampton County.

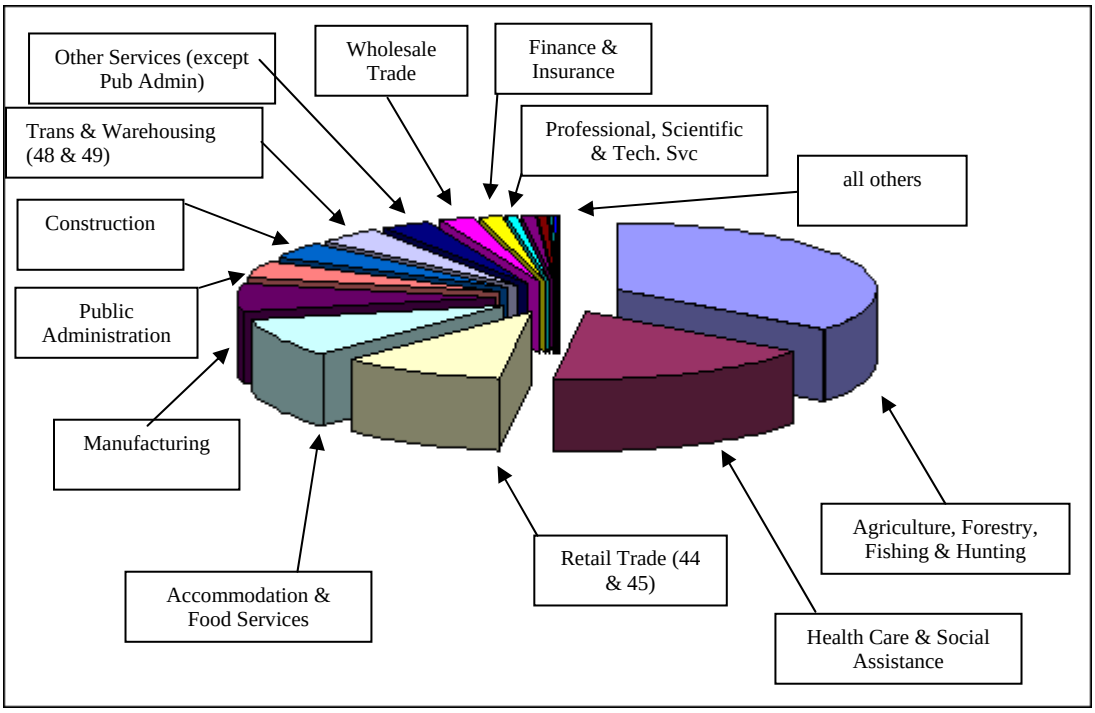
Table 4.3
Major Industries, 2005, 3rd Quarter Time Period
Northampton County, Virginia

Industry Group	Establishments	Employees	Approx. %
Agriculture, Forestry, Fishing & Hunting	33	2,156	32.1
Health Care and Social Assistance	33	1,001	14.9
Retail Trade (44 & 45)	71	630	9.4
Accommodation and Food Services	32	583	8.7
Manufacturing (31-33)	11	400	6.0
Public Administration	21	279	4.2
Construction	60	237	3.5
Transportation and Warehousing (48 & 49)	12	235	3.5
Other Services (except Public Admin.)	43	189	2.8
Wholesale Trade	14	124	1.8
Finance and Insurance	16	86	1.3
Professional, Scientific & Technical Svc.	22	54	0.8
Real Estate and Rental and Leasing	14	52	0.8
Arts, Entertainment, and Recreation	4	32	0.5
Admin., Support, Waste Mgmt, Remediation	3	19	0.3
Information	3	14	0.2
Education Services	*	*	*
Utilities	*	*	*
Management of Companies and Enterprises	*	*	*
Total Employed		6,708	

Source: Virginia Employment Commission, 2005, 3rd quarter data

* Confidential, numbers not large enough to avoid confidentiality breach

Chart 4.3
Major Industries
Northampton County, Virginia



Source: Virginia Employment Commission, 2005, 3rd quarter data

* Excludes the three industries listed as confidential in Table 4.3

4.4 Agriculture

According to the 2002 Census of Agriculture, there were 187 farms in Northampton County in 2002. That figure was up 14% from 164 farms in 1997. The amount of acreage in farmland in 2002 was 52,459 acres. That figure was down 9% from 1997. The average farm size was 281 acres in 2002, which was down 20% from 350 acres in 1997.

The market value of production in 2002 was $44,192,000, which was up 14% from the 1997 amount of $38,751,000. Crop sales accounted for $32,949,000 of the total and livestock sales accounted for $11,242,000. The market value of production average per farm was up slightly at $236,320 in 2002 from $236,289 in 1997. This information comes from the U.S. Department of Agriculture, 2002 Census of Agriculture.

Government payments totaled $478,000 in 2002 and $368,000 in 1997, which is an increase of 30%. The average per farm receiving these payments was $9,949 in 2002 and $5,339 in 1997, which was an increase of 86%. This information comes from the U.S. Department of Agriculture, 2002 Census of Agriculture.

4.5 Aquaculture

The seafood industry has seen a shift from harvesting from the sea towards the farming of fish and shellfish. This is known as aquaculture. It has become a major industry for the Eastern Shore.

Clam culture, in particular, has become a major source of revenue in Northampton County. Virginia Institute of Marine Science (VIMS) reported in their 2004 Marine Report that there were 150 million market clams sold for a total of 24 million dollars gross. The 2005 sales amounts are estimated to be $30 million. The clam industry is a year-round employer and now employs about 400 people in Northampton County. Clams are filter feeders like oysters and thus create an important ecological benefit. Decreased water quality due to land based activities can potentially cause negative impacts on the clam culture. The shoreline-based hatcheries would incur major production problems if exposed to poor water quality.

4.6 Tourism

Tourism is increasingly becoming an important economic factor in Northampton County. Bird enthusiasts have been enjoying the eastern shore for years but the attraction is now expanding to other groups in search of other treasures that have been discovered here.

The region is home to one of the last remaining undeveloped stretches of coastline along the East coast of the United States. Its traditional, aquatic and rural lifestyle offers visitors a rare opportunity to relax, experience local, southern hospitality, fish, cruise the pristine barrier islands, bird watch, and savour some of the country's best, local seafood.

Eco-tourism is a form of nature tourism. It is defined by the International Eco-tourism Society as "responsible travel to natural areas which conserves the environment and sustains the well-being of local people". Eco-tourism has become popular in Northampton County as in other places around the world. The County provides access to the following top ranking eco-tourism activities:

- Visiting state parks
- Hiking
- Exploring preserved areas
- Wildlife viewing (non birding)
- Nature trails in ecosystems
- Unique natural places (dunes, sinkholes)
- Environmental education
- Birding
- Biking
- Fishing, both freshwater and saltwater
- Marsh exploring
- Climbing
- Kayaking
- Swimming

The Eastern Shore of Virginia is home to four major ecosystems

- Chesapeake Bay Ecosystem
- Coastal Uplands Ecosystem
- Barrier Islands Ecosystem (including in-shore marshes)
- Atlantic Ocean Ecosystem

Three other categories of tourism, in addition to eco-tourism, are worth mentioning here as Northampton County is experiencing an increase in interest to these as well. Agricultural tourism is the attraction of visitors to an area used primarily for agricultural purposes. Heritage tourism engages travellers in the visual and performing arts related to heritage sites, as well as the areas values, lifestyles, traditions and events. Aqua-tourism offers water-based activities ranging from visiting aquaculture facilities, fishing, clamming, and kayaking to boating.

5. Housing Analysis

5.1 Introduction

Standard housing units provide, among other things, shelter, a basic human need. Housing becomes a problem when people are not able to secure housing to satisfy this need. Many groups and individuals, for a host of reasons, are confronted with a myriad of housing and housing-related problems. The most prevalent and crucial problems, and those on which the most attention is centered, are related to too many substandard dwelling units and an inadequate supply of standard units to meet the demand and needs of the general population, especially at prices affordable by the general population.

A number of reports have indicated a correlation between the occupancy of substandard dwelling units and the occurrence of other problems (immoral and antisocial behavior, physical and mental illnesses, poverty, etc.). The presence of vacant substandard dwelling units creates another aspect of blight in a community. All levels of government should do all that is possible to insure that decent housing and suitable living environments are made accessible to all citizens.

5.2 Housing Inventory

Table 5.2 A shows the housing units as of 2000, those added since 2000, and the total number of housing units as of 2005.

Table 5.2 A
Northampton County, Virginia
Housing Units as of 2005

	Single Family		Mobile Home		Multi-Family		TOTAL
	#	%	#	%	#	%	#
2000 Housing Units[1, 2]	5,288	80.8	891	13.6	368	5.6	6,547
Housing Units[3] (Added Since 2000)	528	89.5	59	10	3	0.5	590
Total Housing Units As of 2005	5,816	81.5	950	13.3	371	5.2	7,137

Source/Notes:
1 U.S. Department of Commerce, Bureau of Census, 2000, Census of Population and Housing
2 Mobile Home total for 2000 includes 12 other living unit types reported, including boats, RVs, and vans
3 Northampton County Building Department 2001 through 2005

Additional general housing characteristics for Northampton County are presented in Table 5.2 B.

Table 5.2 B
Northampton County, Virginia
General Housing Characteristics, 1990-2000

	1990	2000
Total Housing units	6,183	6,547
Total Occupied Housing Units	5,129	5,321
Owner Occupied Units	3,372	3,655
Percent	66%	69%
Renter Occupied Units	1,757	1,666
Percent	34%	31%
Vacant Housing Units	1,054	1,226
(held for seasonal, recreational, or occasional use)	344	488
Selected Characteristics		
Lacking Complete Kitchen Facilities	488	171
Lacking Complete Plumbing Facilities	753	245

Source: U.s. Department of Commerce, Bureau of the Census,
1990 Census of Population & Housing; 2000 Census of Population and Housing

5.3 Distribution of Housing

There are approximately 357 square miles of land in Northampton County. Only a small portion of the unincorporated area of Northampton County was utilized for residential purposes in 2000. The U. S. Census Bureau has estimated that the overall housing unit density per square mile of land area is about 32.

In 1990, there were 6,183 total housing units in Northampton County, with 5,129 units being occupied. In 2000, there were 6,547 total housing units, with 5,321 occupied units. Single-

family structures continue to be the predominant housing type in the County. Between 1990 and 2000, the rate of homeownership expressed as a percentage of all occupied housing units increased by 3 percent. During that 10-year period the number of mobile homes in the County increased by 6%.

5.4 Distribution of Rental Housing

Of the 5,321 housing units occupied by the total population of Northampton County in 2000, 1,666, or approximately 31%, were renter-occupied. The median gross monthly rent in the County in 2000 was $382, compared to $260 in 1990.

5.5 Building Permits Issued

As shown in Table 5.5, the County experienced a surge in single-family dwelling building permit activity during 2002-2004, although there was a diminution of that trend in 2005. It must be noted that the data below do not reflect construction activity in the Town of Cape Charles, where approximately 300 units have been constructed in the Bay Creek development, which has the potential of an estimated 3,000 total units. There is anecdotal evidence that quite a few of these units are vacant or seasonally occupied, and Bay Creek offers owners a service which manages the rental of their properties. The Town is currently conducting a population survey which will provide this information, and once available, the County should review the data since it has implications with respect to housing inventory in the County as a whole and also with regard to planning for various governmental services.

Table 5.5
Building Permits Issued
2001-2005

	2001	2002	2003	2004	2005
Commercial	8	9	5	9	6
Single Family	71	120	117	126	94
Mobile Home	18	14	15	11	1
Multi-Family	3	0	0	0	0
Total New Residential	92	134	132	137	95
Total New Construction	100	143	137	146	101

Source: Northampton County Building Department

5.6 Housing Conditions

In 2000, the median value of specified owner-occupied homes was $78,700, compared to $47,700 in 1990. While some of the 65 percent rise in this measure of value may be attributed to increasing construction costs, both labor and materials, much of it is due to the size of and amenities associated with new homes being constructed by new residents with greater wealth. Further, the Northampton Community Housing Committee found that increases in resale values have significantly impacted the prices of existing homes.

There are a number of variables which can indicate that a dwelling unit is substandard, and it is common practice to use "lacking complete plumbing facilities" to approximate the number

of substandard units. Between 1990-2000, the numbers of units lacking complete plumbing facilities declined significantly and the 2000 Census indicates that 96.3 percent of units now have complete plumbing facilities. This result is likely due to the success of various state and federal programs locally administered by the Accomack-Northampton Planning District Commission to address this problem.

Age of the housing stock is another indicator of the condition of the housing inventory. According to the Accomack-Northampton Regional Housing Assessment completed in June 2002, housing that is 40 years old or over is considered to have a high potential for deficiency. Based on 2000 Census data, roughly 52 percent of the County's housing stock was constructed prior to 1969, with about 16 percent having been constructed in 1939 or earlier. Unless these units have been maintained over time, it is likely that substantial maintenance is necessary. Approximately 30 percent of the housing units in the county have been built since 1980.

Based on the 2000 Census figures, 19 percent, or approximately one-fifth of the County's housing stock, is vacant, compared to a statewide vacancy rate of about 7 percent. Subtracting the number of units reportedly held for seasonal use, the vacancy rate is about 11 percent, which would still be considered high. Consideration might be given to promoting refurbishment of older homes throughout the County as an alternative to manufactured housing, an ancillary benefit being preservation of some outstanding architectural specimens.

A value of 1.01 or more persons per room is the standard for measuring overcrowded living conditions. In 2000 about 3 percent of all occupied housing units were overcrowded.

The housing problem is made more evident when attention is focused on the demand for housing. One part of the housing problem relates to the inability of many families to afford to rent or purchase standard dwellings. It is known that many people who now own homes could not afford to purchase such houses if they were purchasing them at today's prices. Two general rules of thumb are that a family can afford to purchase a home valued at three times its annual income and that a family should not pay more than 30% of its income to rent a unit. Based on 2000 data for specified renter-occupied units, approximately 31 percent of renters in the County were paying 30 percent or greater of their household income in rent.

5.7 Mobile Home/Manufactured Home Development

Single-wide mobile homes account for over 13% of housing in Northampton County. The mobile home cannot be ignored as a low-cost affordable housing option, although other types of manufactured homes maintain their value to a much greater extent because of their longer life expectancy and greater durability. The County should continue to carefully regulate the placement and construction of these homes to ensure quality and compatibility with more traditional housing units.

Manufactured homes located on permanent foundations and individual lots are allowed by law in agriculturally-zoned areas, subject to applicable development standards.

5.8 Conclusions

Northampton County has a diverse population base, thus the need for different housing types. The needs for rental housing and for housing for low to moderate income groups and the elderly are major areas that should be addressed by future development. The predominant form of housing available in Northampton County is the single-family detached dwelling unit. A serious issue facing the County is the gap that exists between what exists or can be built, and what many of the elderly, lower income residents and newly-formed families are able to afford. The cost of the aforementioned single-family detached dwelling in many cases is too high for most people falling into these groups. The County should seek to encourage flexibility in housing types in areas suitable for development, generally in towns and villages where services and infrastructure exist or are more likely to be installed in the future. Alternatively, existing rural villages and crossroads communities provide infill development opportunities. Such development patterns will also slow the loss of prime farmland.

The rehabilitation of existing homes should be encouraged, and this effort can be aided by rehab programs. The dual goals of eliminating substandard housing and providing safe housing for all County residents can be achieved through the cooperation and individual actions of citizens, local organizations, and County efforts. Citizens and local organizations can advocate and assist in improving housing by supporting needed financial and technical implementation and self-help programs.

In 2004 the Board of Supervisors appointed an Affordable Housing Committee to define the extent of the shortage of affordable housing for low to moderate income persons and to identify possible solutions to the problems. The Committee, which was recently renamed the Community Housing Committee more accurately to reflect the group's mission, produced a report in January 2005 which outlined, among other things, factors related to the shrinking inventory of affordable rental units. The Committee is now in the process of developing a public/private initiative with the goal of enabling the development of workforce rental housing. The Comprehensive Plan should provide support for this and other programs aimed at providing increased housing opportunities.

Programs geared toward preservation and maintenance of the existing older inventory should also be considered. Preservation of the housing stock can be embraced by the Building Code Enforcement Program. Effective Building Code administration can help insure that new construction is of good quality, and the Building Code can also be applied to existing buildings, with the objectives of identifying and correcting existing deficiencies early and removing dilapidated structures.

Quality community services must be maintained in the older residential areas. Existing lawful and uses should be protected so that these areas remain attractive for living, and incompatible land uses should not be permitted.

To some extent, deficiencies in adequate and affordable housing should also be met through new construction, projects, and programs which can provide safe and sanitary housing for County residents at prices compatible with residents' incomes. Part of the future affordable housing needs of the County also can be met by using special types of housing, such as manufactured homes. Manufactured homes take advantage of offsite construction methods to keep the cost of construction down. Because they are constructed elsewhere and moved onto the site, very little time is needed to convert a vacant lot to a property ready for occupancy. The County should be prepared to accommodate this type of housing by planning for its development and by insuring that it and other special housing types will be developed as an asset to the County. When properly handled, manufactured homes can help the County meet its need for new and replacement housing at affordable prices.

Land use decisions which encourage a variety of housing types and costs are needed. Developers and builders should be afforded the opportunity to expand the County's housing inventory. The County can assist in this by being receptive to and working with the developers.

The availability of affordable housing is a difficult challenge facing Northampton County and is a critical issue in its long-term economic health, since lack of adequate housing is a deterrent to economic growth and hampers provision of necessary services, such as education, medical care, and government services if employees are unable to find suitable, affordable living accommodations. As previously noted, affordable housing has been defined as housing that costs no more than one-third (1/3) of the monthly household income. The ramifications of substandard housing extend to numerous sectors which affect the health and welfare of county citizens.

There is a certain segment of our population whose income will not allow them access even to "affordable" housing. Substandard housing is a critical issue which adversely affects the safety, physical and mental health, dignity and economic welfare not only of its occupants but also of the remainder of Northampton County residents. The County should incorporate efforts to address affordable housing as a criterion evaluated in conjunction with rezoning requests.

New construction in the form of high-income developments such as resort and retirement communities does not address the housing needs of Northampton County residents. Mobile homes and other types of manufactured housing must be recognized as a means of meeting low and middle income housing needs for Northampton County citizens. Adequate numbers of inspected migrant housing units are essential to the County's agricultural industry.

New housing developments, both "affordable" and higher cost, should meet high environmental standards to protect the natural resources that make Northampton County a desirable place to live. Water supply and wastewater disposal issues are critical aspects of housing development and rehabilitation in Northampton County, not only from the standpoint of allowing consideration of higher density development than that allowed by traditional individual systems, but also with respect to environmental impacts of various systems. All housing developments should be designed to help protect wetlands, woodlands, open space, the aquifer recharge area, and the agriculture

and seafood industries.

Home ownership encourages civic pride and civic participation. Home ownership and upkeep, in turn, strengthen personal and community assets. The data show that the home ownership rate increased slightly while the renter-occupancy rate declined somewhat between 1990-2000. This is likely due to the efforts of organizations such as the Virginia Economic Empowerment and Housing Corporation and the Accomack-Northampton Planning District Commission's various housing programs to expand home ownership options to lower-income households.

It is clear that needs exist to improve existing housing and to foster development of new affordable units for low and middle income families. As a follow-up to the adoption of this Plan amendment, the County should undertake comprehensive long-term study addressing the best way to deal with housing problems. The 2002 Accomack-Northampton Regional Housing Assessment, although useful, was developed prior to the availability of much of the detailed 2000 Census data. Moreover, even since the 2000 Census, significant shifts in the local housing market require more current analysis. A County plan will evaluate trends and projections and identify specific housing needs. Such a plan would likely enhance the coordination of public and private funding sources. Development of a detailed housing plan is recommended and, upon completion, such a plan will be incorporated in this Comprehensive Plan.

6 Environment

6.1 Introduction

Natural features and conditions of the land have an effect on settlement patterns. The features of topography, soils, geology, water, and vegetation establish the basic suitability and capacity of the land for development. These features affect the way in which particular parcels of land can be used, greatly influencing overall land use patterns, and affect the cost of public facilities and service.

Natural features are important to Northampton County as a very significant influence on the economy of the County and the quality of life of its inhabitants and also as a strong influence on development patterns.

6.2 Climate

The climate of Northampton County is classified as temperate with mild winters and warm, humid summers. Latitude, topography, prevailing winds, and the proximity to the Chesapeake Bay and Atlantic Ocean all exert an influence on the climate.

The County generally lies near the mean path of both winter storm tracks and warm moist tropical air from the southwest Atlantic Ocean and Gulf of Mexico during the summer and early fall.

The average temperatures, as recorded from Weather Station Oyster 1 W, are 77.9 degrees F in July and 37.9 degrees F in January. The average annual temperature is 58.5 degrees F, see Table 6.2

Table 6.2
Average Temperature in Northampton County

(in Fahrenheit)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Average Minimum	29.7	30.9	38.3	46.0	55.4	64.4	69.1	68.4	62.8	52.2	43.3	34.7	49.5
Average Maximum	46.6	48.6	57.6	66.4	74.8	82.4	86.4	84.9	79.7	70.0	60.8	51.6	67.5
24-Hour Average	37.9	39.7	47.8	56.3	65.1	73.4	77.9	76.6	71.2	61.2	52.2	43.2	58.5

Source: OYSTER 1 W, NORTHAMPTON COUNTY data derived from NCDC TD 9641 Clim 81 1961-1990 Normals
(Oyster 1 W is located at about 37.28 Degrees North and 75.93 Degrees West at Height about 26 feet above Sea Level)

Rainfall, derived from cyclonic weather systems in fall, winter and spring months and from local convection and thunderstorms in summer months, is distributed evenly throughout the year. Precipitation averages about 43 inches per year. The average snowfall is about 8 inches. There is an average of 230.5 frost-free days per year. The average first frost is November 15 and the average last frost is March 20.
Prevailing winds are southerly at an average velocity of 10 miles per hour. The Eastern Shore is vulnerable to hurricanes; at least 10 hurricanes caused destruction in this region since 1901. During hurricane periods, coastal lagoons receive a great influx of sediments from wash-over. When storms are of unusual severity, new inlets may be formed or existing ones may be closed. The hurricane season begins in June and extends through November 30.

Northeasterly storms, which occur primarily during the fall and winter, are a more significant cause of erosion along the coastal area than the summer hurricanes. Typical "northeasters" are accompanied by heavy rain and strong northeast winds which may cause unusually high tides and seas, and flooding of exposed coastal and low lying areas. Durations of these storms are variable, but usually persist for two to five days.

6.3 Topography

There are three noticeable topographic corridors running the length of the County. The first is the bayside corridor which faces the Chesapeake Bay with a varied coastline consisting of 25-foot bluffs, 50-foot dunes to flat sandy beaches, and marshlands at and below sea level. The entire coast is incised with a complex system of creeks. The middle ridge is the high ground between the Chesapeake Bay and the Atlantic Ocean and runs between 25 to 40 feet above sea level. The seaside corridor drops down from the 25-foot contour to land that is visible at low tide and under water at high tide.

There is an extensive tidal marsh system between the fast-land on the seaside coast and the barrier islands off of the coast with a few deep water channels leading to the Atlantic.

The topography of Northampton County divides the land into two major drainage areas, one emptying into the Atlantic Ocean and the other into the Chesapeake Bay. The dividing line runs more or less along a central corridor containing the railroad, U.S. Highway 13, and 4 of the 5 incorporated towns within the County.

The elevations along the ridge of the corridor vary from about 25 feet to 40 feet above sea level. This is a pronounced bluff that is visible on both sides of the County, both on the topographic maps and on the ground; it is visible to the eye in many places. Historically, most of the development in the County seems to have taken place within this ridge-corridor. The bay side has generated the most development because of the many creeks and extensive waterfront land along the Chesapeake Bay and its tributary creeks. Five large creek basins, each with deep water access and unique characteristics are located within the Bay drainage area. Most of the development pressures during the last decade have been near this waterfront and this trend is continuing.

6.4 Soils

Soil types are important in that they have a significant influence on agriculture as well as residential and industrial development. The percentage of the County's total land area in prime or unique soil types will be one of major considerations in determining the future course of land uses. The ability of soils to absorb-septic wastes and their suitability for buildings and roads will have an impact on future development.

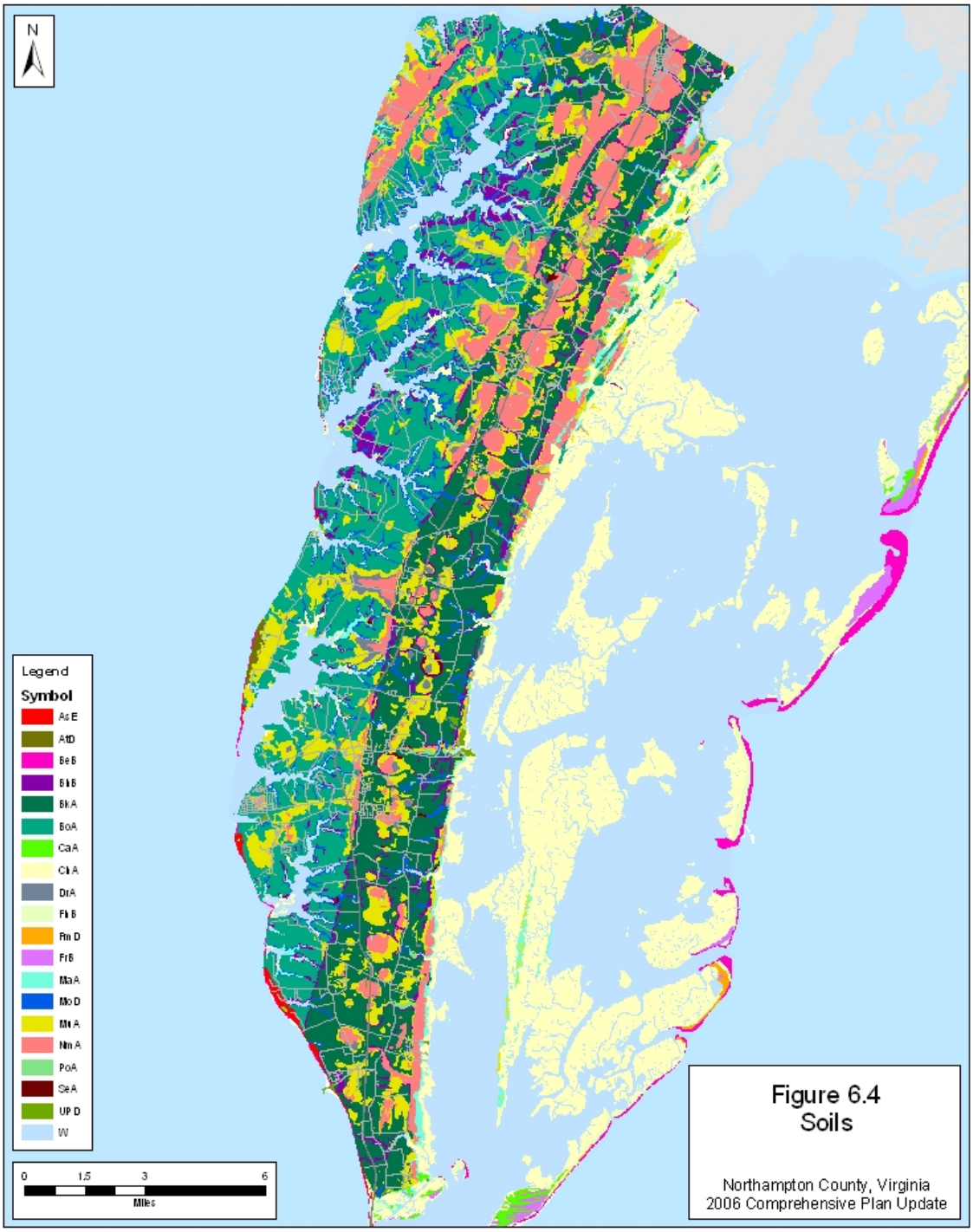
The United States Department of Agriculture, Soil Conservation Service, conducted a Soil Survey of Northampton County. It is on file and can be reviewed in the Northampton County Planning & Zoning Department. Figure 6.4 shows the soils types that are present in Northampton County. Table 6.4 lists the soil symbol, the name, and the percent of occurrence in the County.

Table 6.4
Soil Types & Percentage of Occurrence
Northampton County, Virginia

Map Symbol	Soil Name	%
AsE	Assateague sand, 2 to 50 percent slopes	0.3
AtD	Assateague fine sand, 2 to 35 percent slopes, rarely flooded	0.1
BeB	Beaches, 0 to 10 percent slopes	1.2
BhB	Bojac loamy sand, 2 to 6 percent slopes	3.8
BkA	Bojac sandy loam, 0 to 2 percent slopes	17.3
BoA	Bojac fine sandy loam, 0 to 2 percent slopes	19.1
CaA	Camocca fine sand, 0 to 2 percent slopes, frequently flooded	0.8
ChA	Chincoteague silt loam, 0 to 1 percent slopes, frequently flooded	24.4
DrA	Dragston fine sandy loam, 0 to 2 percent slopes	1.1
FhB	Fisherman fine sand, 0 to 6 percent slopes, occasionally flooded	1.2
FmD	Fisherman-Assateague complex, 0 to 35 percent slopes, rarely flooded	0.3
FrB	Fisherman-Camocca complex, 0 to 6 percent slopes, frequently flooded	1.1
MaA	Magotha fine sandy loam, 0 to 2 percent slopes frequently flooded	1.3
MoD	Molena loamy sand, 6 to 35 percent slopes	3.0
MuA	Munden sandy loam, 0 to 2 percent slopes	10.4
NmA	Nimmo sandy loam, 0 to 2 percent slopes	9.2
PoA	Polawana loamy sand, 0 to 2 percent slopes, occasionally flooded	0.8
SeA	Seabrook loamy sand, 0 to 2 percent slopes	0.1
UPD	Udorthents and Udipsamments soils, 0 to 30 percent slopes	0.2
W	Water	4.3
	TOTAL	100

6.4.1 Septic Suitability & Soil Types

Generally, soils with good septic suitability are the Bojac soils. Those soils that have fair septic suitability are Munden soils. Other soils present in the County are more hydric (high moisture content) and are generally categorized as being poor in septic suitability. Figure 6.4.1 shows the occurrence of the soil types divided into the three categories according to their septic suitability.


N
Legend
Symbol
AcE
AtD
BeB
BkB
BkA
BoA
CaA
ClA
DrA
FkB
FmD
FrB
MaA
MoD
MtA
NmA
PoA
SeA
UPD
W
0
1.5
3
6
Miles
Figure 6.4
Soils
Northampton County, Virginia
2006 Comprehensive Plan Update

N
Legend
Poor Septic Potential (Other Soils)
Fair Septic Potential (Munden Soils)
Good Septic Potential (Bojac Soils)
0
1.5
3
6
Miles
Figure 6.4.1
Soils Septic Potential
Northampton County, Virginia
2006 Comprehensive Plan Update

6.4.2 Agricultural Land Use & Soil Types

Northampton County is well-endowed with excellent soils for agriculture. Those soils present in the County that are well suited to agriculture are the upland soils of Bojac and Munden. They are moderately to excessively well drained. Sometimes farmers also sow a portion of their crops in the lower lying areas where the presence of hydric soils such as Nimmo and Dragston are present; this is to safeguard against total crop failure in the event of extreme drought, which does occasionally occur in this area.

6.4.3 Hydric Soils

There is a significant part of the County's land area where hydric soils are present. As would be expected, this area includes the tidal marshes and the barrier islands. On the upland portion of the County, hydric soils are concentrated along a north to south axis, from Exmore to Machipongo. Another sizeable block of hydric soils is located on Occohannock Neck. It is estimated that 13,312 acres (about 9.2%) in the County are occupied by these soil types unsuitable for conventional septic systems.

Hydric soils are of particular importance in rural counties such as Northampton because septic systems have been and will continue to be a prevailing method of residential waste disposal. To function properly, septic systems require an adequate vertical separation between the septic absorption area and the seasonally high water table. Determining the suitability of a septic system site is a responsibility and function of the State Health Department. They conduct an on-the-ground inspection (soil borings) and issue the required permit if the site is found suitable. Hydric soils are shown as those being of poor septic suitability on Figure 6.4.1.

6.4.4 Tidal Wetland Soils & Sandy Beach Soils

The soils making up the tidal wetland areas are Chincoteague and Magotha soils. They occur between the mainland and the barrier islands in the zone between low tide and the lines of the spring and storm tides. Salt water frequently floods these soils.

The soils making up the sandy beaches are the Fisherman, Beaches, Camocca, and Assateague soils. They are present on the barrier islands and on the southern tip of the mainland. They make up the dunes and the tidal marshes adjacent to the ocean. They consist of sandy material subject to erosion and accretion.

6.5 Carolina Bays

Carolina Bays are prominent geomorphic features on the Eastern Shore of Virginia. They are wet, shallow, elliptical depressions that occur along the Atlantic Coastal Plain from Florida to New Jersey. Carolina Bays on the Eastern Shore occur from sea level to the highest elevations on the peninsula but most are found along the central spine of the peninsula.

Formation of a Carolina Bay is marked by a pronounced rim that is usually circular or ellipsoidal in shape. Aerial photographs depict the rim as higher in elevation and lighter in color than the interior. The soil type inside the bay is Nimmo, which is indicative of wet, poorly-drained soils. Occasionally the bay rims, which are well drained, are used for building sites, roads, and cemeteries. Some bays have been drained by ditching through the rims and were then developed or farmed. Carolina Bays are believed to be important areas for groundwater recharge. A better understanding of the hydrology of this system is an important piece in effectively preserving our ground water resource.

6.6 Forest Land

When forestlands exist, they compliment the other components of the County's unique environment by providing habitat for wildlife and opportunities for hunting and other recreational activities. Moreover, they also function as natural buffers and windbreaks. Perhaps the most important thing is that they serve as filtering agents for sediments and pollutants and groundwater recharge areas. In view of these benefits, the retention of forested areas warrants consideration in land use planning and establishment of related regulations.

Within the County there are approximately 30,000 acres of forestland, of which Loblolly pine is predominate. The three other types present are pine/hardwood, hardwood, and bottomland hardwood.

The timber industry within the County is only of modest economic scope. There are no operating sawmills within the County nor any secondary processors. There is presently only a minimal amount of clearing of forestland for agriculture purposes. Residential home building and the siting of mobile homes continues to take place on the fringes of woodlots. Periodically, blocks of timber are harvested as they become mature. Intensive forest management in the County has not been well accepted, principally because of the high costs associated with these practices.

6.7 Plants & Animals

Northampton County, because of its rather isolated geographic position bounded by water on three sides, its mainly rural area, and its significant natural features, supports a large population of wildlife species, rare plants and communities. The significance is not only to the Eastern Shore and to Virginia, but internationally, since many of the birds using the Atlantic Flyway pass through Northampton County on their spring and fall migrations to Central and South America and the Caribbean. The narrow landform of the County creates a bottleneck or funnel effect for migrating birds. The value of this corridor is widely known to bird watchers and banders, biologists and conservationists. The bayside area and associated woodlands in the lower half of the County have been indicated as probably the most important focal point or "staging area" for raptor and passerine migration on the eastern coast of the United States. Many of North America's woodland species using the Northampton staging sites are declining in numbers. Among other factors, loss of habitat is high among the reasons for the decline, and emphasizes the importance of good management of the migratory bird habitat in Northampton County.

As well as the migratory birds, there are numerous waterfowl which winter on the Eastern Shore. Of 32 species of waterfowl, 7 are legally hunted. There are some 19 kinds of loons, herons, grebes and egrets; 126 species of shorebirds; and 17 species of birds of prey (eagles, hawks, owls, and ospreys). The U.S. Fish and Wildlife Service stated in their 1971-1974 Atlantic Winter Flyway Survey that the Eastern Shore waterfowl density is 27.3 birds per square mile compared to the state waterfowl density of 1.5 birds per square mile. The average count on the Eastern Shore represents 31% of the state count. The only large game in the County is the Virginia white-tailed deer. Small game is plentiful. Probably bobwhite (quail), mourning dove, and woodcock are the most popular for hunting. Other wildlife are found, such as opossum, weasel, skunk, muskrat, red and gray fox, raccoon, river otter, and mink. Hunting for both gray squirrels and for cottontail rabbits is an active sport. These small animals live in the vegetated areas surrounding fields and wooded sections.

At least five rare plants have been identified in the County along the dunal and maritime communities which are prevalent on both bay and ocean sides. They are seabeach needlegrass, beach heather, yaupon holly, sea oats, and Virginia Beach pinweed. They are found principally in the southern area of the County in natural communities which are assemblages of plants and animals that occur repeatedly on the landscape where appropriate environmental conditions exist. Such communities are quite uncommon but some of the highest quality examples remain in lower Northampton County, on Savage Neck, at Pickett's Harbor, Kiptopeke Beach and Wise Point. Among the most significant natural communities present at these sites are: beach and dune, dune grasslands, dune scrub, maritime shrub, maritime forests, and interdunal ponds.

Northampton County has one of the great ecological and biological phenomena of the entire east coast of the United States. A peculiarity of geography has caused semi-annual massing of some millions of birds (passerines) in the lower section of the County. Here they pause for rest, cover, and forage in the trees and scrub growth along the edge of the Chesapeake Bay. The banding station at Kiptopeke is the only one on the Virginia coast. Thousands of birds of some 150 species are banded semi-annually.

Ornithologists and biologists have long recognized the importance of the Atlantic Flyway, which also has international significance since many of the birds, funneled by the Eastern Shore landmass, continue on their imperative migration to South America and the Caribbean. Loss of natural habitat will cause serious declines in the number of birds, and of course, eventual elimination. Suitable land use planning and management can preserve this valuable and unique natural asset which, if handled correctly, can be of great benefit not only to the migrating birds but to the County as a scientific and educational entity. Economic returns would also accrue from the influx of interested scientists and those who enjoy ornithology as an avocation.

Among the species accorded scientific concern are the piping plover, which nests on island beaches, the peregrine falcon, the Delmarva fox squirrel, and the Atlantic loggerhead turtle.

6.8 Ground Water Resources

Cape Charles, Eastville and Exmore presently maintain municipal water systems. It is estimated that these systems serve about 25 percent of the total County population. All town systems draw water from deep wells that tap the Yorktown-Eastover aquifer system. Water quality is reported to be good and no treatment is administered in Eastville or Exmore. The Cape Charles municipal system includes a treatment plant capable of processing 940,000 gallons a day that provides iron removal and chlorination. Each town system utilizes elevated storage tanks and pressure maintenance. The remaining 75 percent of County residents and businesses rely on self-supplied wells for their water supply.

6.8.1 Aquifer Recharge

Ground water is the only source of supply for domestic, industrial, and agricultural water use in Northampton County. A total population of approximately 13,300 people uses this groundwater. Because of the limited supply, in 1976 the Virginia State Water Control Board designated the Eastern Shore of Virginia, including Northampton County, a "Ground Water Management Area," the second area in Virginia to receive such a declaration. This declaration was based on the findings that some groundwater level declines, well interference, and localized groundwater contamination have been observed. Although the groundwater supplies on the Eastern Shore are not overdrawn and are not expected to be in the near future, it should be recognized that they may become overdrawn in some areas in the future.

Since the Eastern Shore is designated as a Ground Water Management Area, major withdrawals of groundwater (over 10,000 gallons per day) must be granted a permit before pumping. The Department of Environmental Quality now requires agricultural withdrawals over 300,000 gallons per month to have permits. Therefore, a modest degree of management is being exercised to control over-pumping and well interference.

At the request of Accomack and Northampton Counties, in 1990 the bi-county Eastern Shore of Virginia Groundwater Study Committee was formed to oversee the development of a Ground Water Management Plan. On May 5, 1992 the Committee adopted the Groundwater Supply Protection and Management Plan for the Eastern Shore of Virginia. The plan includes a detailed analysis of Eastern Shore groundwater resources and issues and makes recommendations for the protection and management of the groundwater. This plan recommended the protection of open spaces and undeveloped land in the spine recharge area through creation of an overlay protection district.

Another study, Technical Analysis and Justification for Ground Water Ordinances on the Eastern Shore of Virginia, was completed in January 2001 by Malcolm Pirnie for the Accomack-Northampton County Planning District Commission (A-NPDC). The report is on file in the Northampton County Planning & Zoning Department. It is also available for download in PDF format from the A-NPDC website at: http://www.a-npdc.org/groundwater/groundwater_files/frame.htm

The Eastern Shore of Virginia has a “sole source aquifer system” that is fed only by rainfall, rather than by rivers or lakes. This designation is for aquifers that supply at least 50% of the drinking water consumed in an area. The Eastern Shore of Virginia was designated a sole source aquifer in 1997 by the U.S. Environmental Protection Agency.

Figure 6.8.1 shows the aquifer area ranked in order of recharge value, “5” being of highest value and “1” being of least value. The aquifers on the Eastern Shore are strongly influenced by geology, rainfall, and groundwater use.

There are basically two components of the Eastern Shore groundwater system, the shallow Columbia aquifer and the deep Yorktown-Eastover aquifer system. Annual precipitation of about 43 inches per year provides the recharge to the Eastern Shore aquifers. Approximately 12 to 24 inches per year of precipitation recharge the shallow Columbia aquifer. Most of this water flows from the middle of the peninsula and discharges to the Chesapeake Bay and the Atlantic Ocean, providing an important source of fresh water for our tidal creeks and bays.

The clay confining layers that separate the Columbia aquifer from the Yorktown-Eastover aquifer system serve to protect the aquifer from many of the water quality threats. But the clay confining units also act to impede the amount and rate of recharge to the deep Yorktown-Eastover aquifer system. Only a small percentage of the precipitation that recharges the Columbia aquifer contributes to the recharge of the deeper confined aquifer. It is estimated that only 1.2 inches of precipitation recharge the Yorktown-Eastover aquifer system annually.

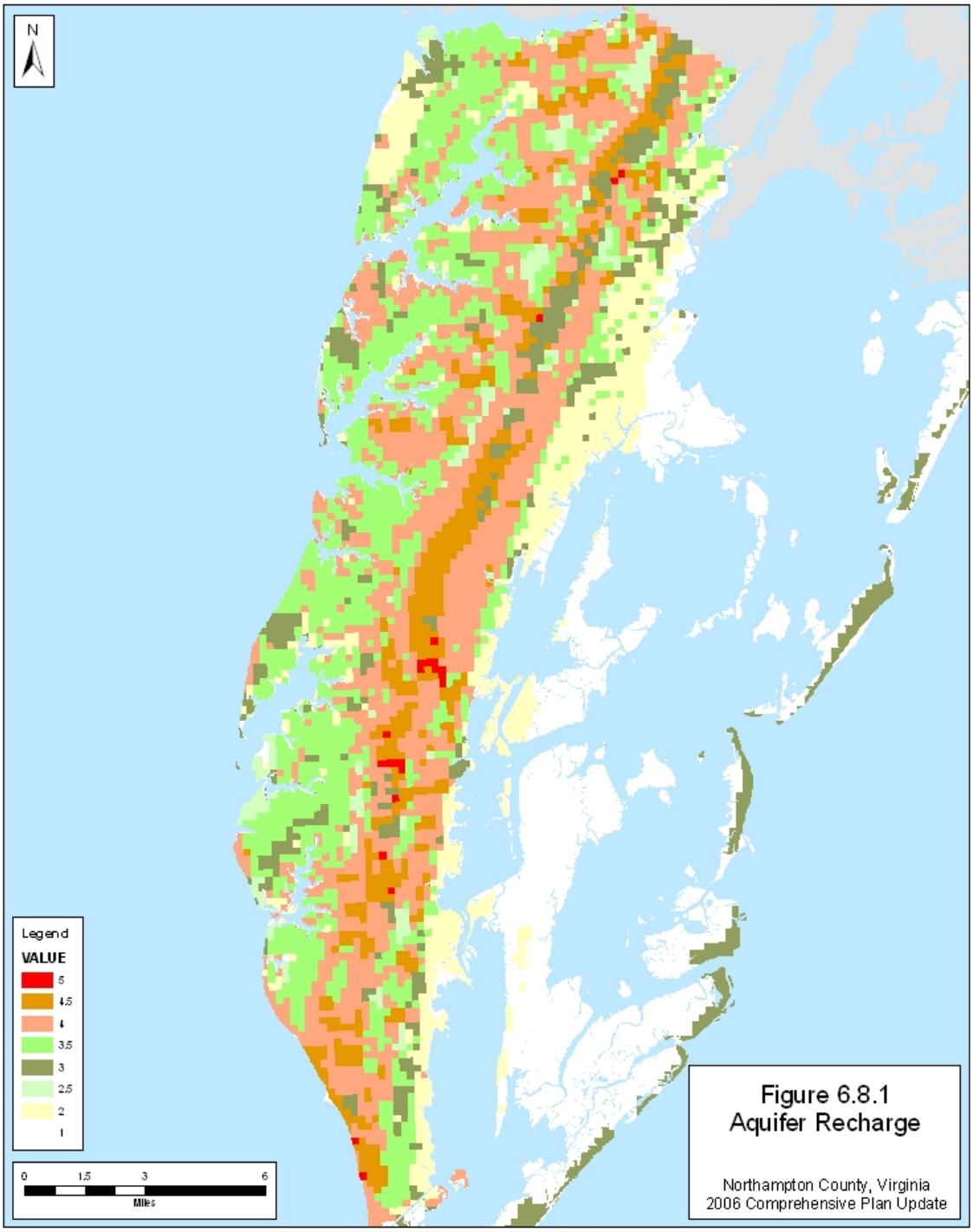

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Figure 6.8.1
Aquifer Recharge
Northampton County, Virginia
2006 Comprehensive Plan Update

The upper Columbia aquifer is unconfined and is roughly 80 to 100 feet thick. This aquifer is used primarily for private on-site domestic wells and agricultural irrigation. Approximately 2 million gallons per day are withdrawn from the Columbia aquifer by private on-site wells for domestic use. Some portion of the estimated 8.7 million gallons per day withdrawn for irrigation comes from the Columbia aquifer.

The Yorktown-Eastover Formation can range in depth from 80 to 600 feet below the land surface, though most wells are pumping from layers between 150 and 300 feet deep.

Based on groundwater modeling studies conducted, approximately 11 million gallons per day are recharged to the Yorktown-Eastover aquifer system. However, it should be noted that this recharge value is based on average conditions across the entire Eastern Shore. Depending upon specific site conditions, recharge to the Yorktown-Eastover aquifer system may vary by a factor of two.

The shallow Columbia aquifer is used to a lesser extent. This source is especially amenable to agricultural use since the need for high water quality is not as stringent as it is for drinking water. Some of the highest yields per minute found on the Shore have come from the Columbia aquifer. Unfortunately, the continued use of this source for drinking water supply is limited in many localized areas due to contamination from agricultural runoff and septic system failure. Close monitoring of septic systems is needed to prevent long-term health hazards from occurring.

It is important to note that the U. S. Geological Survey (USGS) has been working cooperatively with the Virginia Department of Environmental Quality (DEQ) and the Accomack-Northampton Planning District Commission (ANPDC) to develop an upgraded computer simulation model of the Eastern Shore ground water system. The model will be used to simulate water-level declines and potential saltwater intrusion as a result of current and future pumping. The DEQ is currently using a model developed by the USGS twenty years ago to assess the impact of pumping from additional proposed withdrawals. Once implemented, the new model will allow DEQ to analyze the effect each proposed withdrawal will have on future water levels and salinity before any new application is approved, and they will continue to update the model with the most recent withdrawal data. The ANPDC will also be able to utilize this tool for ground water resources planning.

6.8.2 Ground Water Vulnerability

In Northampton County the shallow Columbia aquifer has been exposed to pollutants. Those pollutants are domestic sewage, pesticides, fertilizers, manure, leaking material from underground storage tanks, and household and industrial wastes. This aquifer may become increasingly more contaminated as a result of future development.

There is evidence that the deep Yorktown-Eastover aquifer system could become contaminated as future agricultural, industrial and domestic development occurs, because increased pumping will increase the vertical recharge and may induce the vertical flow of pollutants where wastes are located within a large cone of depression.

As a rule, water drawn from shallow wells (15'-30') has a high iron content and low pH. High nitrate levels in drinking water can cause a problem - sometimes fatal - in infants. It is called blue baby syndrome (methemoglobinemia).

High nitrate levels have also been detected in shallow test wells in the County. Excessive nitrate levels are commonly associated with drainage from septic systems and the use of fertilizers. One test well in the Church Neck area indicated nitrate levels in excess of state standards for drinking water.

Groundwater quality is generally good in the deep Yorktown-Eastover aquifer system, though localized problems with high iron content have been encountered. High concentrations of iron are more prevalent in shallow wells. Wells associated with the deep Yorktown-Eastover aquifer system did not indicate pollution problems.

Since the early 1950's, the Eastern Shore has seen the advent of chemicals for agricultural and household use at an unprecedented level. In many respects this continues today. Although a number of water quality studies have been conducted by various agencies, we lack a comprehensive survey of water quality on the Shore. In a closed water resource system such as on the Eastern Shore, it is logical to suspect that toxic substances may be present in the soils and aquifers, possibly at dangerous levels in some areas.

Siting of industrial facilities and storage of chemicals is a major concern due to the vulnerability of the groundwater system. Potentially hazardous industrial activity should be thoroughly reviewed in coordination with state agencies to insure groundwater protection.

There are numerous underground fuel storage tanks in Northampton County. Fuel contamination of groundwater, even a small leak of a few gallons per day, is enough to seriously contaminate an aquifer. Sources at the Virginia Department of Environmental Quality (DEQ) estimate that most underground storage tanks over 20 years of age can be assumed to be leaking.

DEQ oversees and regulates liquid petroleum storage tanks (LPST) of 1,000 gallons or greater, some of which are underground storage tanks (UST). DEQ routinely monitors these facilities and maintains an extensive database and detailed maps showing sites. Detailed site mapping is available through DEQ and can be accessed on their website.

The freshwater lens beneath the Eastern Shore is surrounded by salt water. The interface boundary is defined by the concentration of chloride in the water. When chloride concentrations exceed 250 mg/liter, the salt content is noticeable to taste and presents a possible health hazard to individuals with high blood pressure or those on salt-restricted diets. If over-pumping occurs in a given area, salt water can intrude into the freshwater lens, either horizontally or from vertical upconing.

Saltwater intrusion has occurred at the Vaucluse Shore development and has also been reported at Church Neck and other bayside necks. It has been reported that the chloride

content of the water drawn from the Bayshore Concrete Products Company well has increased over the years. In referring to Northampton County, the State notes, "Locally, high chlorides and nitrates may be found. Chlorides are encountered where well depths approach the salt/fresh water interface."

6.9 Shoreline, Wetlands, & Barrier Islands

6.9.1 Shoreline

The Eastern Shore contains 70 percent of Virginia's total oceanside shoreline and 15 percent of the total tidal shoreline. Northampton County has 261.4 miles of shoreline. The majority of the shoreline, 193.7 miles, is located on the bay side, with 39.9 miles located seaside and 27.8 miles located around the barrier islands. Only 62.2 miles of shoreline are beaches (23% of the total shoreline) and 38.7 miles are dunes (14.8% of the total). The rest of the shoreline is low or low with some bluffs.

6.9.2 Wetlands, Dunes, and Marshes

The seaside shoreline grades quite gradually into vast tidal marshes and shallow bays which extend seaward to the barrier islands. Old dune lines are absent and streams are narrow and generally without significant embankments. The immediate shoreline is almost continually fringed with broad marsh, making access to open water difficult except where natural deep water or maintained channels exist. Between this seaside shoreline and the barrier islands is a maze of tidal flats, salt marshes, and shallow bays, which constitutes generally one of the finest, most pristine aquatic ecosystems of its kind. Ecologically these areas are extremely rich, supporting a vast array of marine, avian, and terrestrial life. The visual quality of these areas is another of their chief attributes.

Sand dunes, both primary and secondary, are very valuable resources. Primary and secondary dunes are the first line of defense against the sea. When storms occur, dunes act as flexible barriers to high tides and waves. Dunes also act as sand reservoirs to help keep shorelines intact. In addition to providing valuable and inexpensive protection from storms, the dunes provide aesthetic value and serve as wildlife habitats where vegetated.

The County has adopted a wetlands ordinance and established a Wetlands Board. The Board's primary function is to review and pass judgment on applications for permits dealing with proposals that may impact on wetlands.

Figure 6.9.2 shows the wetlands present in Northampton County that are listed with the National Wetlands Inventory (NWI).

6.9.3 Barrier Islands

Northampton County's barrier islands are among its most important and unique natural resources. For centuries, they played a major role in the history, economy, and culture of the area. Although there once were small fishing villages and hunting lodges on the islands,

today they are uninhabited. Most of the islands are included in the Virginia Coast Reserve, which is an island and salt marsh preserve owned by The Nature Conservancy of Arlington, Virginia. The Virginia Coast Reserve has been designated an International Biosphere Reserve by the United Nations in recognition of the importance and fragility of the ecosystem. Northampton County's islands, together with contiguous islands in neighboring Accomack County, represent the last undeveloped barrier island system on the Atlantic Coast.

There are nine barrier islands in Northampton County. Hog, Rogues, Cobb, Ship Shoal, Myrtle and Smith Islands are mostly owned by The Nature Conservancy. The Commonwealth of Virginia owns Mockhorn and Wreck Islands; and Fisherman Island, on the tip of the peninsula, is owned by the Federal government and is part of the Eastern Shore National Wildlife Refuge.

The barrier islands play a number of important roles in Northampton County including: protection from storms as buffers to dissipate the energy of the ocean; economic benefits including commercial and recreational fishing; recreation including fishing, hunting, crabbing, clamming, hiking, boating, and bird watching; and nature study as an educational resource, increasing awareness of the importance and rarity of the island system, and protection of threatened species, offering sanctuary to many species of birds, mammals, and reptiles that are threatened or endangered.

Because the Virginia Coast Reserve is gaining national and international attention as one of America's last remaining intact barrier island systems, Northampton County benefits through research and educational programs centered around the island system. It is likely that research and educational programs will increase in the future, possibly resulting in the establishment of a permanent estuarine educational facility tied to a major university.

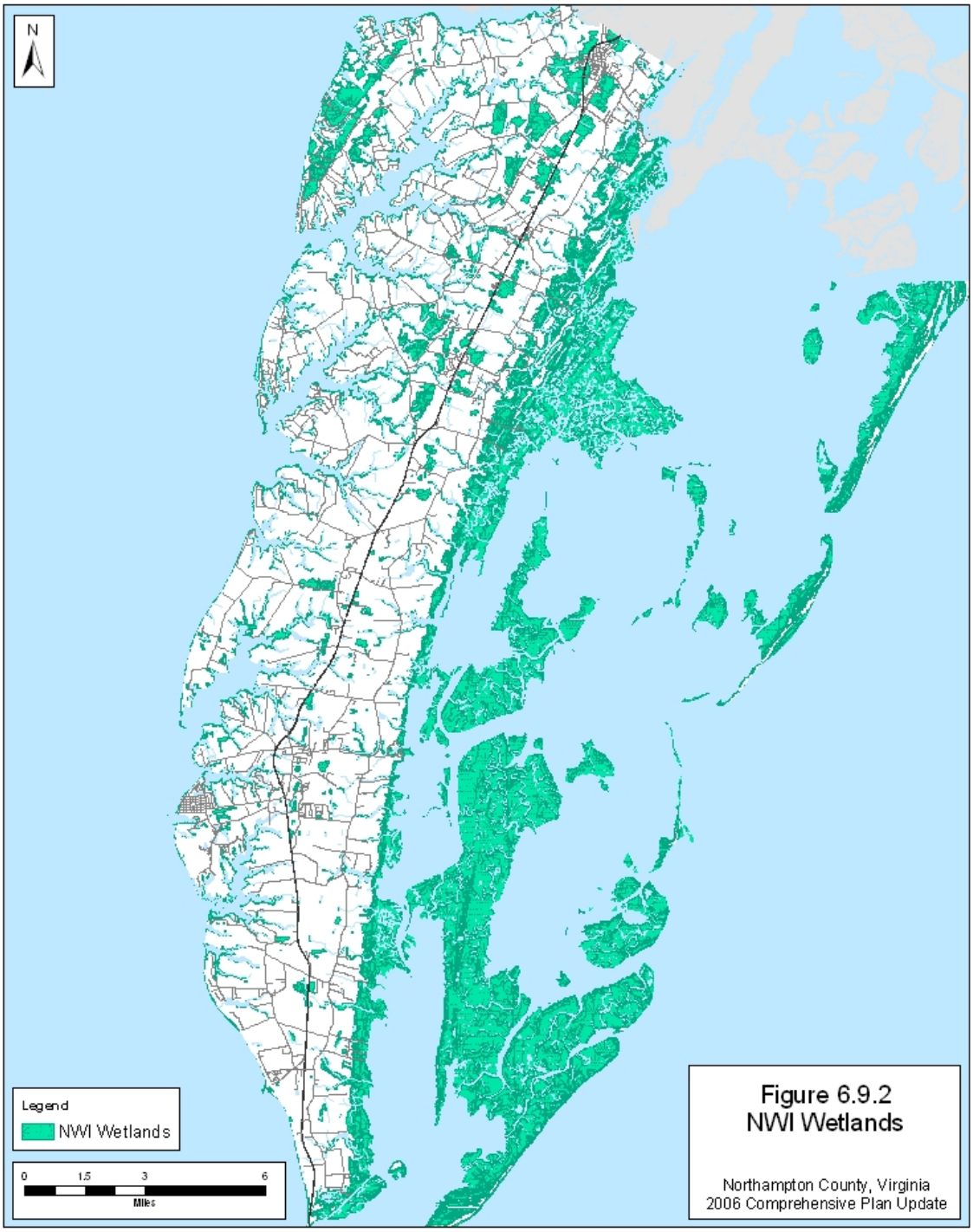
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Figure 6.9.2
NWI Wetlands
Northampton County, Virginia
2006 Comprehensive Plan Update

Most of the barrier islands are included either in the Virginia Coast Reserve, the Federal National Wildlife System, or the Virginia Natural Areas Program, but even limited development on any of the islands would drastically alter the system scientifically and aesthetically. In managing the barrier island system, biological diversity should be the priority. It is important to recognize that the island system functions as an interdependent whole. The system includes related natural communities of beaches, dunes, upland forest, extensive salt marshes, bays, creeks, guts, unvegetated wetlands, mainland salt marshes, and any seaside mainland which is part of the watershed.

6.9.4 Chesapeake Bay Preservation

In the 1960's, a decline in the Bay's water quality and productivity was noted. A massive effort to avert further decline was spearheaded by the Chesapeake Bay Commission. A combined major Federal, tri-state, and citizen effort to restore the Chesapeake Bay to its earlier productiveness has been underway for several years. As a result, Virginia enacted the Chesapeake Bay Preservation Act. This Act created a Local Assistance Board, charged with developing regulations that provide for the protection of water quality and shoreline habitat. The adopted regulations (promulgated July 1, 1989) are used by local governments in granting, denying, or modifying requests to rezone, subdivide, or otherwise consider development of shoreline areas designated as Chesapeake Bay Preservation Areas. In Northampton County, these criteria also apply to the seaside areas.

Northampton County has established resource protection areas and resource management areas in accordance with the Chesapeake Bay Preservation Act. Figures 6.9.4 A and B show cross-sections of the protection areas.

Figure 6.9.4 A

Cross-sectional Illustrations of Chesapeake Bay/Atlantic Ocean Preservation Areas

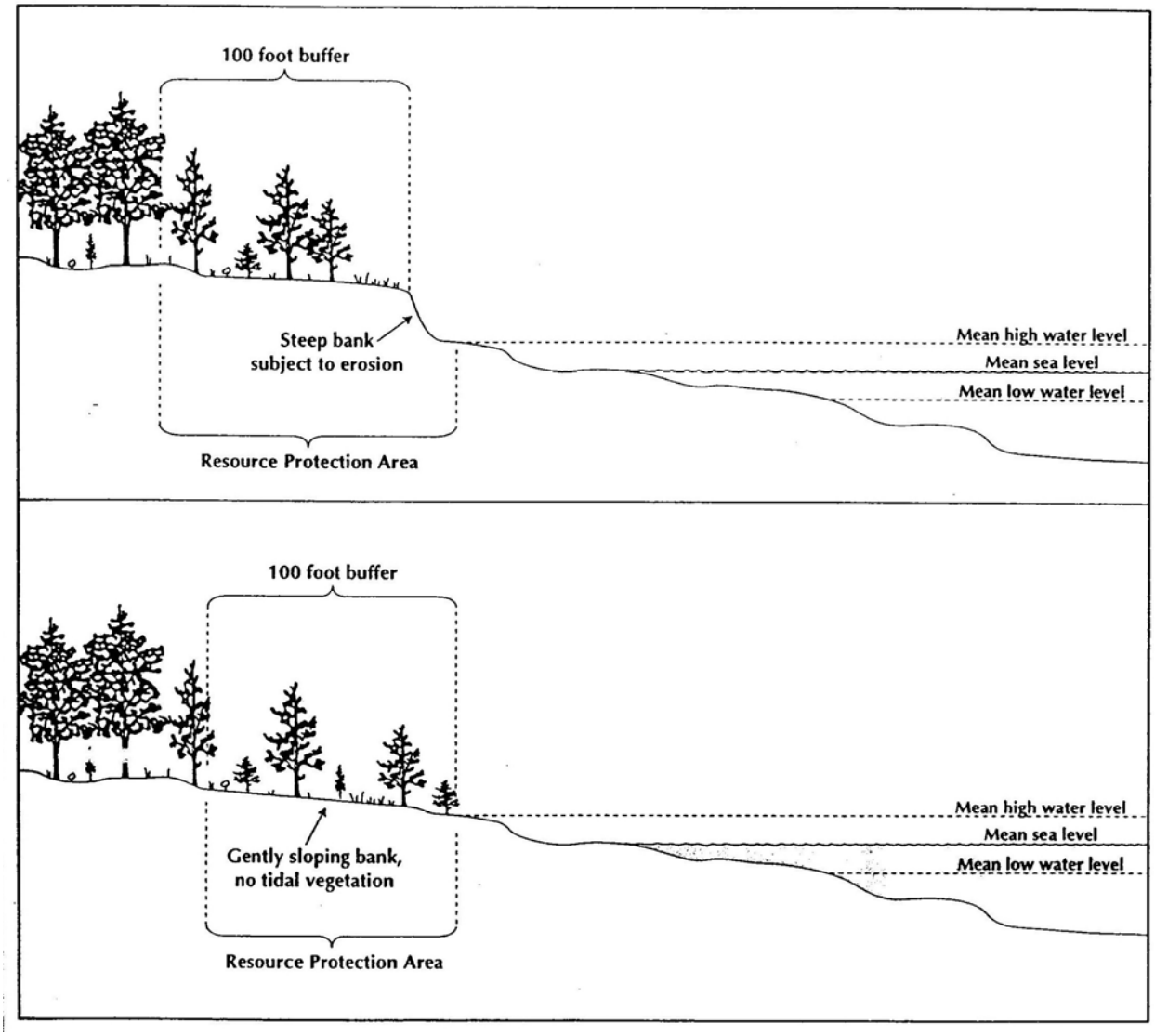
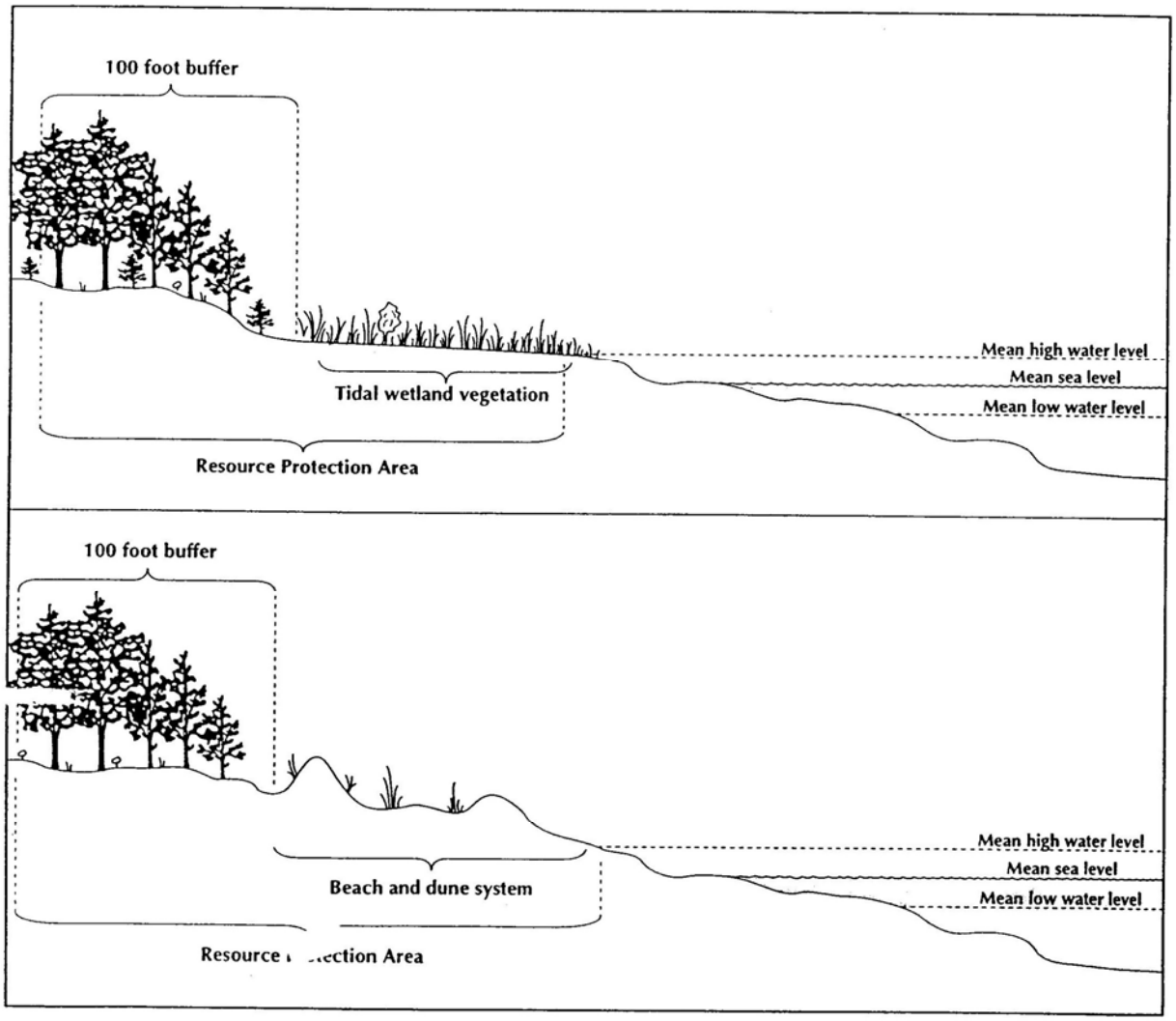


Figure 6.9.4 B

Cross-sectional Illustrations of Chesapeake Bay/Atlantic Ocean Preservation Areas (continued)



6.10 Land Protection Opportunities

There are several opportunities for preservation in Northampton County. The use of the term "land protection" in this section is not limited to land being the reason for protection in and of itself. Specific motives for protection are defined by the agencies and organizations administering each program. Each is geared towards different aspects of protection. Some of the more common examples include farmland preservation, habitat protection, open space preservation, water quality protection, and historic preservation. Some programs are aimed at perpetual protection and others target specific timeframes.

There are several programs at the Federal level. The USDA website is a good resource for this information. The National Oceanic & Atmospheric Administration (NOAA) has some programs available as well. Some examples of federal programs are as follows:

- Farm & Rangeland Protection Program (FRRP)
- Fish & Wildlife Services
- National Resources Conservation Service (NRCS)
- National Wildlife Refuge Association (NWRA)

The Commonwealth of Virginia has several agencies and programs available. The Department of Conservation & Recreation (DCR) and the Department of Environmental Quality (DEQ) are good resources for information. The following list shows some of what is available through the state:

- Cost Share Programs through DCR
- Virginia Outdoors Foundation (VOF)
- State Parks programs
- Virginia Department of Forestry programs

In the private sector there are several organizations with hundreds of programs available. Following is a list of some of the more popular ones:

- The Nature Conservancy (TNC)
- Ducks Unlimited (DU)
- Virginia Eastern Shore Land Trust (VESLT)
- Chesapeake Bay Foundation (CBF)

Northampton County has some conservation tools that can be utilized as well. There is a Conservation District designated in the County's Zoning Ordinance. The County also has an overlay district created for Historic Preservation, but it is not currently being used and has no areas designated for protection or preservation. One conservation tool which is currently in use in the County is the Agriculture/Forestal District (AFD) designation. Each AFD, as it is applied for and approved by the Board of Supervisors, becomes its own district with specific terms and conditions.

Figure 6.10 shows land in the County which is currently protected.

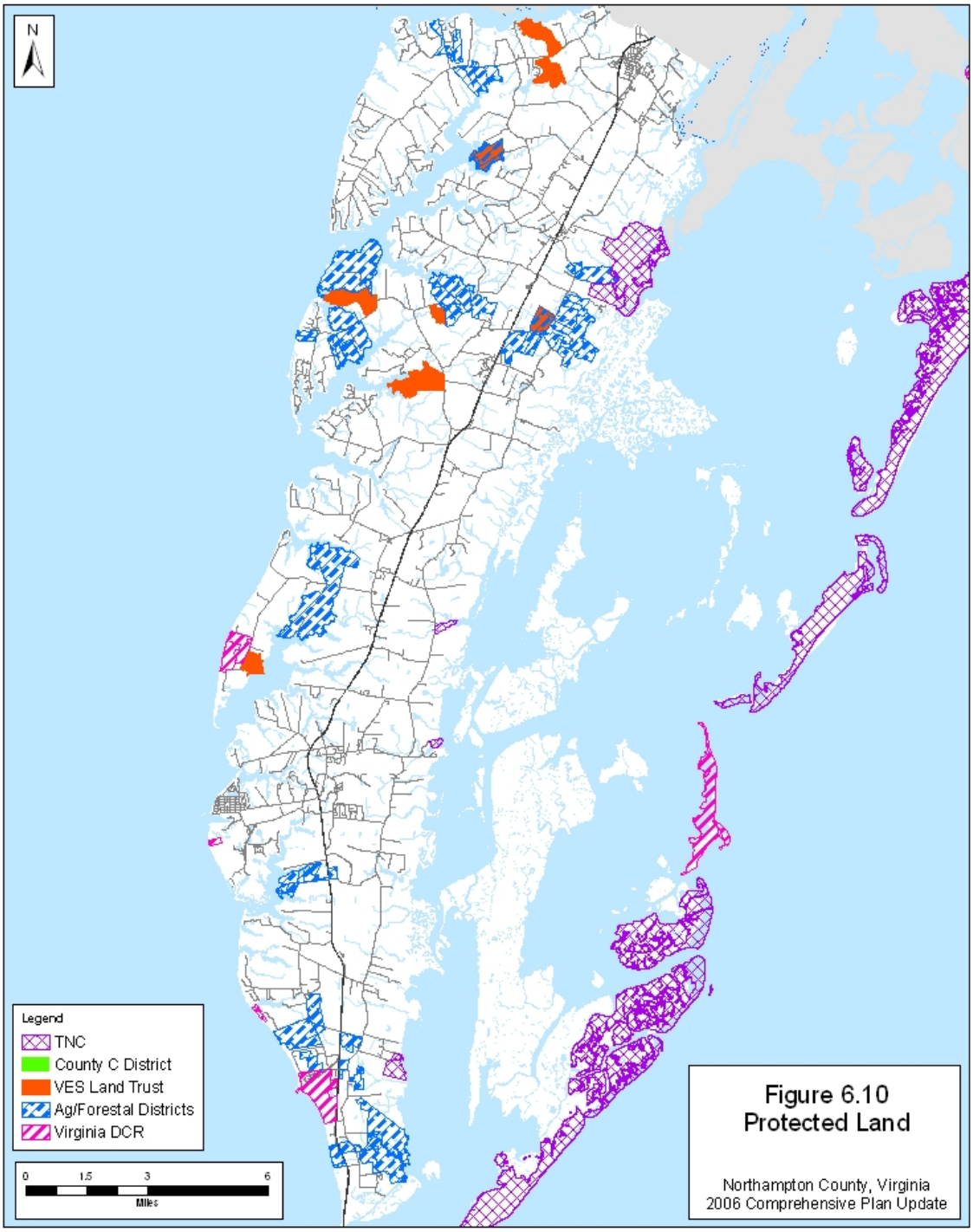

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Figure 6.10
Protected Land
Northampton County, Virginia
2006 Comprehensive Plan Update

7 Community Facilities & Services

7.1 Introduction

Community facilities and services are the improvements, infrastructure, and programs made available to an area to serve the general public. They include not only those facilities owned by the public, but also those owned and operated by private enterprise for the benefit of the community. The following pages describe existing facilities, infrastructure and services in Northampton County.

There is a direct relationship between the location and densities of land uses and the location and size of required facilities and services. The location of existing land uses largely determines the requirements for public improvements. On the other hand, future land development is directly tied to the availability of necessary public services and the willingness of the government to extend or upgrade them. Without water, wastewater treatment, roads, public safety, emergency services, and educational facilities, the uses and density to which land can be put is limited. For this reason, much of the utility and value of privately-owned land is a reflection of the level of public facilities which it serves. Because public facility improvements are extremely expensive in terms of the local tax dollars required to provide them, they should be prudently planned and provided in the most economical and efficient manner possible. This requires exercising local powers to regulate changes in land use to insure that the public is not later required to pay for public facilities that might have been unnecessary.

7.2 Arts, Culture & History

There are numerous sites of historic and cultural interest throughout the County. Cape Charles, one of the largest towns in the County, offers a commercial center with shops, restaurants, antiques, a museum, a hotel, bed and breakfasts and the last remaining rail-barge in the country which regularly crosses the Chesapeake Bay to Norfolk. At the end of S.R. 644 is the burial place of Major General John Custis, who was a scholar and served on the Governor's Council for 22 years in the early 1700's. Governor William Berkeley made his headquarters here during Bacon's Rebellion in 1676.

The Town of Eastville was established around 1715 as the County seat. The oldest continuous court records in the nation (dating from 1632) are preserved at the new courthouse and can be viewed by visitors. There are also bed and breakfast accommodations and restaurants available. Additional points of interest in Eastville include Christ Church (c. 1828), the Clerk's Office (c. 1830), the Confederate monument (c. 1914), the debtor's prison (c. 1743), the Eastville Inn (c. 1780), the monument to Indian Chief Debedeavon, and the old Courthouse (c. 1731), for which renovations are being planned.

Exmore is the largest town in the county and has a commercial center with shopping, restaurants, antiques, a railway museum, and bed and breakfast and motel accommodations.

Eyre Hall (c. 1750) has beautiful and rare boxwood gardens open to the public. The family graveyard and the ruins of an orangery are here. The historic home is open during Garden Week in April.

Hungars Church (c. 1742) is an Episcopal Congregation that still uses the communion service that was presented by John Custis IV of Northampton County and Williamsburg.

Smith Island, named by Captain John Smith in 1608, is now the site of the Cape Charles Lighthouse, which is the most powerful of the Virginia lights.

Many visual, graphic and performing artists have made Northampton County their home. There are year round arts events at various locations in the County. Local and regional performing artists appear regularly at various venues. Arts Enter and the historic Palace Theater in Cape Charles provide art, dance and theater instruction for children and adults. Now a venue for the nationally known Virginia Arts Festival, the theater presents performances by regional, national and international artists. The Cape Charles Historical Society regularly hosts traveling exhibitions from regional and national institutions. Eastern Shore's Own (ESO) in Belle Haven presents year round education programs in the arts, dance, culinary arts, yoga and science for both children and adults. It is the site of the annual Shore Made Music Festival in the fall. The Barrier Islands Center, a museum and cultural center presenting the history of the county's Barrier Island communities and life saving stations, is located in the old Almshouse Farm in Machipongo. It presents regional and national arts exhibitions and other events all year. The Arts Council of the Eastern Shore (ACES) presents an annual program of regional and national performance art at various sites on the Shore. The Eastern Shore Art League presents an annual member's show, a student show and offers post-secondary arts scholarships. The Artisans Guild-Eastern Shore of Virginia offers mentoring and professional development to its working members. The Guild holds an annual three-day Open Studio Tour every year over Thanksgiving Weekend. Local fiction and non-fiction writers, many nationally known, hold readings and book signings at county libraries and cultural events. The Eastville Visitors Loop provides tourists with a self-guided tour featuring Eastville area history, architecture, horticulture, hospitality, dining, art and agriculture.

7.3 Churches

There are approximately 26 churches in Northampton County, with most denominations represented.

7.4 Communications

Telephone service is provided by Verizon and other companies offering cellular and digital service.

Four major television networks from the Hampton Roads metro area and one public television station from Portsmouth cover the County. Charter Communications offers 35

channels. Dish-satellite systems are heavily used and offer hundreds of channels.

There are four local radio stations: WBYM, WESR, WKHI, and WVES. Numerous AM and FM stations in the Hampton Roads metro area also serve Northampton County.

The Eastern Shore News, The Eastern Shore Post, and The Virginian-Pilot are newspapers serving the County. Publications from other areas such as Norfolk, Newport News and Richmond also cover the County.

7.5 Electric Utilities

The County's electric power is supplied by Delmarva Power and the Accomack-Northampton Electric Cooperative (ANEC). These companies are capable of supplying services to meet demands expected from future projected population growth. Generally, Delmarva Power serves the incorporated areas and their vicinities, and ANEC serves the more rural, outlying areas.

7.6 Natural Gas

Propane gas is available from local companies but no natural gas is available. These companies are capable supplying services to meet demands expected from future projected population growth.

7.7 Water & Wastewater Facilities

7.7.1 Municipal (Public) Water Systems

There are only three municipal water systems in Northampton County: Cape Charles, Eastville, and Exmore. The largest system, Cape Charles, was built in 1930. The Exmore system, which also serves parts of Belle Haven, was installed in 1940 and expanded in 1967. No public water (or sewer) facilities exist in Cheriton. Residents rely on individual private wells and septic systems for their water supply and wastewater disposal.

Cape Charles

Cape Charles' water supply comes from a groundwater source public water system, obtained from two wells which withdraw approximately 130,000 gallons of water per day. Both wells are screened in the upper and middle Yorktown aquifer at depths of 230 feet and 210 feet. The water supply is stored in a water tower with a tank capacity of 300,000 gallons. The water tower, painted in the image of a lighthouse, also serves as a prominent landmark for the town and has won an award for design.

Included in the public water system is a treatment plant with an onsite laboratory and treatment facilities for iron and manganese removal, water softening, pH adjustment, fluoridation, and disinfection. The treatment plant and wells are located on Route 184 at the outskirts of town. Extensive improvements to the public water system were done in 1992 and one of the wells was drilled in 1996 as a replacement for an older well, which was subsequently abandoned.

A ground water withdrawal permit has recently been approved by Department of Environmental Quality which allows an increased withdrawal capacity for accommodating anticipated future growth needs in Cape Charles, including the recently constructed Bay Creek residential and marina development and proposed future residential/golf development. The additional capacity will be shared among the primary users. The current monthly permit amount of 5.8 million gallons per month (187,100 gallons per day) would be increased to a maximum monthly withdrawal of 25.3 million gallons per month (816,129 gallons per day) and an annual withdrawal of 252.2 million gallons (690,959 gallons per day). Permit specifications include the drilling of two new production wells: one will be screened in the upper and middle Yorktown aquifer at 210 feet, the second will be screened in the lower Columbia-Yorktown aquifer at 280 feet.

A groundwater impact assessment which was conducted for Cape Charles found that over the 10-year permit period, no measurable saltwater intrusion or other water quality changes are expected to occur. The permit contains many restrictions specifically designed to minimize any adverse impacts, including saltwater intrusion, from the withdrawal. It is possible that some saltwater intrusion may occur in the lower Yorktown aquifer in the long term (100 years), in which case reverse osmosis can be used as a contingency.

Eastville

The smallest municipal system is Eastville. Eastville operates a municipal water supply system drawn from wells. The water tank has a storage capacity of 75,000 gallons, and average usage is 51,000 gallons per day. The town serves 169 hook-ups, 71 of which are out-of-town meters. Water customers include the County Complex, a trailer park, the Northampton County High School, and several commercial customers located outside the town limits. The town has experienced minor problems with contaminants in the water supply in the past, but generally water supply is good with respect to both quality and quantity.

Exmore
Exmore also operates a municipal water supply system. The water tank has a storage capacity of 200,000 gallons, and average usage is 100,000 gallons per day. The town serves 691 hook-ups, some of which are located in the town of Belle Haven and the village of Hadlock.

The Eastern Shore of Virginia Public Service Authority (PSA) was established in December 1999 to address water and sewer needs of the region. Although Accomack County has since withdrawn its participation, the PSA continues to meet on a quarterly basis. At this time the County is evaluating the need to add a Public Works Department to manage the systems serving the County complex and to assume maintenance responsibility for the central systems serving the Bayview Planned Rural Village.

7.7.2 Municipal (Public) Wastewater Treatment Systems

Cape Charles owns and operates the only municipal wastewater treatment facility in Northampton County. The facility serves all residents and businesses in Cape Charles, and has the capacity to treat 250,000 gallons of wastewater per day. Average daily flows are approximately 125,000 gallons per day. Treatment at the facility presently consists of secondary biologic decomposition of waste matter and includes ultraviolet light disinfection, with treated water discharging into the harbor. Sludge from the facility is disposed of at the County landfill. The entire collection system for the facility was upgraded in 1985, when old pipes were replaced by eight-inch pipes. In addition, four pump stations were built or renovated. The lift station, located at the intersection of Mason Avenue and Bay Avenue, is in the vicinity of the public beach and is considered a nuisance by residents due to unsightliness and smell associated with the grit collector. Part of the smell can be attributed to a storm drain located near the lift station. The town's wastewater treatment plant has undergone inspections by the Department of Environmental Quality in the Spring of 1999, and received a satisfactory rating.

Due to the anticipated increase in demand from the residential/golf community, Cape Charles' wastewater treatment facility is expected to eventually increase in capacity; planned future capacity is 750,000 gallons per day. Funding associated with the proposed expansion has been committed by the developer. Planned wastewater treatment facility upgrades also include a surge tank. Adequate ammonia treatment has sometimes been a problem at the facility, and the town is currently in the process of pursuing funds for a

surge tank which will enable the facility to sufficiently treat excess ammonia. No time frame has been established for wastewater treatment facility upgrades.

An increased capacity of the Cape Charles' wastewater treatment facility will lead to a higher volume of treated discharge, resulting in an increased amount of nitrogen entering the Chesapeake Bay. Excessive nitrogen loads adversely impact the water quality of the Bay, and one of the goals of the Eastern Shore Coastal Basins Tributary Nutrient Reduction Strategy is to ensure no net increase in nitrogen. It is important to take this into consideration when planning for upgrades. The installation of denitrification equipment at the wastewater treatment facility when it is upgraded for increased capacity is one way to reduce the nitrogen load from the facility's discharge.

7.7.3 Private Wastewater Treatment (Septic Systems)

It is estimated that less than 15% of the year-round housing units in the County are served by public sewer (1990 Census data). The remaining units are served by septic tank and drainfield systems, cesspools or pit privies. Septic tank and drainfield systems are a major source of groundwater pollution on the Eastern Shore. The sandy nature of Eastern Shore soils coupled with typically high water tables allow septic tank drainfield effluent to rapidly reach groundwater aquifers without adequate treatment. Nitrate levels are associated with pollution of the groundwater aquifers. Testing has found that 20% of the samples taken from the shallow water table exceeded the EPA limit of 10 mg/I. A shallow well in the central part of Northampton County reported a nitrate concentration of 17.8 mg/I in 1979. It is generally accepted that these high nitrate values and corresponding pollution of the groundwater is a result of septic wastes and/or fertilizer from farming practices leaching to the groundwater. Where this occurs adjacent to bay or seaside waters, bacterial and nutrient contamination of these areas can be expected as well. Within certain geographic areas, the potential for septic tank failure may be great. Due to the soil characteristics and high water table, many areas do not have development potential.

When sewage collection and treatment systems are properly constructed, maintained, operated, and regulated, they will discharge an effluent that will not degrade water supplies or surface waters. The primary cause of failure of these systems is ownership by developers and landowner associations who do not have management expertise or scientific knowledge. State law requires that all sewage discharges be treated to the extent that they do not adversely impact the receiving surface water or ground waters.

7.8 Solid Waste Management

7.8.1 Collection

The County currently collects all residential waste from approximately nine (9) greenbox sites. In addition, the County collects from nine (9) non-public sites including each of the school facilities, courthouse, Indiantown Park, and the Health Department. The County presently contracts for the collection of solid waste from its only convenience center located at Birdsnest.

7.8.2 Disposal

Northampton County operates a single sanitary landfill near the community of Oyster. In addition to regular household waste, residentially-generated construction debris, yard waste, and bulk household items (referred to as white goods) are also accepted. The Commonwealth, under House Bill 1205, designated the landfill as a Subtitle D landfill, which means that it does not meet current regulations of the Commonwealth, such as an approved liner and proper leachate control programs. The Department of Environmental Quality (DEQ) recently rated all Subtitle D landfills and gave those localities a closure date.

The Northampton County landfill is not considered an immediate threat; however, it is considered a moderate threat and is to be closed by 2010. However, the existing cell, opened in 1988, has almost reached its maximum air space usage.

The County employs the services of Draper Aden to assist in long-term planning and closure and post-closure plans for the landfill. Additionally, Draper Aden provided the County with what has been selected as the County's long-term alternative to handle solid waste disposal: the construction and operation of a transfer station. A transfer station is being planned for construction at the landfill site and will be the collection point for all solid waste. The County intends to then contract with a private/public hauler to transport the waste off-site.

7.8.3 Recycling

The County, in a joint effort with Accomack County, has entered into a contract with Tidewater Fibre Corporation (TFC) for collection of recycling materials at its convenience centers. At this time, only Birdsnest Convenience Center is operational although Bayview and Wardtown Convenience Centers are scheduled to commence operations July 1, 2006. The contract with TFC operates under the concept of "single-stream" recycling; i.e., all acceptable recyclables can be mixed together. Acceptable recyclables include plastics, paper, glass and cardboard. Additionally, the County continues to accept used motor oil, scrap metal and batteries for recycling purposes.

7.9 Emergency Services & Law Enforcement

Fire and rescue services received a dramatic improvement in February 1992 with the shore-wide addition of Enhanced 9-1-1. Northampton County and Accomack County developed a regional E-911 center. The facility is located in the Town of Accomac. Currently the 911 center is in the process of updating the phone system, CAD system and mapping.

The Emergency Disaster Plan for Northampton County was updated in 2005. Interagency cooperation and frequent updating is intended to provide the greatest possible protection to life and property from natural disasters and hazards.

7.9.1 Fire Services

Volunteer fire departments are based in each incorporated town (except Belle Haven): Cape Charles, Cheriton, Eastville, Nassawadox, and Exmore. There is a constant problem of staffing with volunteers. Daytime coverage is less reliable than night hours. The County provides some funding, while the major portion must be obtained by the individual companies from bingo, fund raising projects, grants and appeals to the public. Table 7.9.1 provides equipment/apparatus information on the departments.

7.9.2 Emergency Medical Services

Three volunteer rescue squads serve the County. Volunteer rescue squads are located in Bayview, Nassawadox, and Exmore, and are an active part of the Eastern Shore Emergency Medical Services Council. Northampton County funds ten full-time and seven part-time EMS positions. The county provides two types of career coverage. The first is 6am to 6pm Monday through Friday, consistently staffing two *(2)* ambulances, one in the south at Cape Charles Rescue Service and one in the north at Community Fire Company. The second is Advanced Life Support (ALS) zone coverage on nights, weekends and holidays. Our quick response vehicle, typically staffed with an Intermediate or Paramedic, answers any call dispatched in Northampton County. This ALS provider assists both volunteer and other career staff as necessary. All other times and responses are provided by the volunteer rescue squads.

While Cape Charles Rescue Service serves a 25% greater area than the Nassawadox and Exmore units combined, call volume in the northern end of the County is 16% greater. Travel time to remote areas, south of Capeville, Silver Beach, Vaucluse Shores and Savage's Neck, are greater than 10 minutes. However, an average ambulance response time for day hours during the week is 8 minutes and during night/weekend hours is 13.5 minutes. But because of a lack of volunteer staffing and increasing call volume, a resident may wait up to 35 minutes or more for an ambulance. With heart attack as the leading cause of death in the United States, the American Heart Association states CPR and defibrillation within 3 to 5 minutes of collapse have resulted in survival rates of 41% to 74%. Unfortunately, for every minute that passes without defibrillation, a victim's chance of survival decreases by 7% to 10%. In only 8 or 10 minutes, death is nearly certain.

Several private ambulance companies offer ambulance service throughout the entire Eastern Shore. Sentara Nightingale Air Ambulance Service based in Norfolk offers air ambulance transportation to Shore Citizens. Table 7.9.2 provides equipment/apparatus information on the transport services available.

Table 7.9.2
Equipment/Apparatus of Transport & Fire Services

	Assign	Year	Make	Type	Special Equipment
Station 13 Community VFC	13-1	2000	Ford E450 Diesel	Lifeline	Ambulance - ALS
	13-2	2004	Ford E450 Diesel	Lifeline	Ambulance - ALS
	13-4	1995	Pierce	Saber	Pumper (1000 gal, 1250 gpm pump)
	13-7	2004	Kenworth T300		Tanker (2500 gal, 1000 gpm pump)
	Brush-13	2000	Ford F350 Diesel		Brush Truck
Station 14 Cheriton VFC	14-5	1996	Freightliner FL70	Fire Master	Pumper (1000 gal, 1500/min pump) (foam)
	14-6	1979	Mack Tractor/Trailer		Tanker (5200 gal)
	14-7	1997	Freightliner		Tanker (2000 gal, 600/min pump)
	Tower-14	1975	75 Oshkosh	Pierce	Snorkel (200 gal, 1500/min pump)
Station 15 Cape Charles	15-4	1996	Freightliner FL80	Quality	Pumper (1000 gal, 1250/min)
	15-7	1985	International	Oren	Tanker (3000 gal)
	15-9	1984	E-One		Pumper (500 gal, 1500/min)
	15-10	1985	GMC		Brush Truck
	15-11	1999	Crown Victoria		Support Vehicle
Station 16 Northampton	16-2	1998	Ford E350 Diesel	Horton	Ambulance - ALS
	16-4	1994	Spartan Gladiator	Quality	Engine (1000 gal, 1250/gpm pump)
	16-8	2002	Freightliner FL112	S&S	Tanker (2800 gal, 750/gpm pump)
	Brush-16	1982	Ford F350		Brush Truck
	16-9	1999	Jeep Cherokee		Support Unit
	16-10	1989	Ford F350		Rehab Unit
Station 17 Eastville VFC	17-3	1990	Arrow	Pierce	Pumper (air fan, foam, porta-power)
	17-7	1993	Mack	4-Guys	Tanker (3000 gal)
	17-8	2002	Chevrolet	4 Guys	Tanker (2000 gal)
	17-9	1991	Ford Crown Vic		Chief's Car (SCBA, 1st Aid Kit)
	Brush-17	1999	Ford F350 Diesel		Brush Truck (Forestry Rakes)
Station 19 Cape Charles	19-1	2005	Ford E450 Diesel	Lifeline	Ambulance - ALS
	19-2	2003	Ford E450 Diesel	Lifeline	Ambulance - ALS
	19-9	1996	Ford Expedition		Support Vehicle
	MCI-2		Trailer		MCI Trailer (50 persons)
NCEMS	Zone-1	1997	Ford Crown Vic		Quick Response Vehicle - BLS
	Zone-2	2004	Chevrolet Tahoe		Quick Response Vehicle - ALS

7.9.3 Public Safety & Law Enforcement

The Northampton County Sheriffs Department and County jail are located in the town of Eastville. In addition to the Sheriff, there are 14 deputies, 17 full time correctional officers that serve the jail, and six communications officers. In addition, there are four grant-funded school resource officers, one COPSFAST grant position, a nurse, a cook, a state-funded computer technician position and a secretary. The Sheriffs Office has nine marked patrol cars, each of which can maintain radio contact. One officer is involved in the County school system with the D.A.R.E. (Drug Abuse Resistance Education)

program, and there is a drug task force officer. Another officer has been trained for diving operations.

The towns of Cape Charles and Exmore also maintain small police forces. The town officers are dispatched through the Sheriff's Office in Eastville and remain in radio contact with the Eastville dispatcher. The Town of Cape Charles presently employs six officers and has three patrol cars at its disposal. There are two shifts on duty in Cape Charles. The Town of Exmore employs three full-time officers, one part-time officer, and has two patrol cars. An officer is on duty for two shifts in the town.

Northampton County also benefits from services provided by the Virginia State Police. The local headquarters is located near the town of Melfa in Accomack County. The Melfa office has 15 troopers, five weight enforcement officers, two sergeants, support personnel, and equipment that can be requested as needed. The local officers have access to trained service dogs, SCUBA divers, helicopters and airplanes, and a narcotics dog. Also, they can request the services of the State Police tactical team, the State Police bomb disposal unit and truck, the State Police crime evidence van, the State Police Bureau of Investigation, and the State Police armored vehicle. The State Police also offer technical support to the County officers and present safety programs to schools, churches, civic organizations, and other groups that request their services. These presentations cover a wide variety of topics. The State Police have available specific instructors for defensive tactics, accident investigation, and first aid.

The County jail located in Eastville was built in 1914 with a rated capacity of 18 prisoners. The Department of Corrections approved an average daily capacity of 37 inmates to be housed in the existing jail facility. However, the average daily capacity is exceeded on a reoccurring basis.

The County Board of Supervisors made this project one of four top priority Capital Improvements, and a Temporary Housing Unit (THU) was constructed in 2004 on a 55-acre parcel that the County purchased for a new County Complex. The THU has a capacity of 64 inmates and will be used to confine prisoners until the 144-bunk Regional Jail currently under construction is completed. The opening of this cooperative effort between Northampton and Accomack counties is anticipated to occur in April 2007. The new jail will offer the capability of double-bunking 96 cells, resulting in a potential capacity of 240 inmates.

The Chesapeake Bay Bridge-Tunnel Police Department employs 46 officers whose duties are not only to enforce the laws of the Commonwealth, but also to render services to the patrons crossing the facility. The Police Department has powers in both Northampton and Accomack Counties; however, these police powers are not normally exercised in these two counties unless assistance is requested by local police or sheriffs departments.

Also contributing to the public safety are personnel of the Department of Game and Inland Fisheries. There are three officers in the County who are responsible for enforcing all laws relative to the taking of wildlife as represented in the Code of Virginia and

Regulations of the Department of Game and Inland Fisheries. Also, these officers are the chief enforcers of Virginia's boating safety laws. Game wardens are vested with full police power and have on many occasions rendered assistance to local police and sheriffs department in the apprehension of lawbreakers, including felons. Boat safety and boating safety laws are also taught, inspected, and enforced by the Coast Guard - Station Cape Charles and the Coast Guard Auxiliary.

Also, currently there are two National Wildlife Refuge officers with law enforcement authority. Their authority is a collateral duty. They accomplish law enforcement activities in conjunction with refuge management duties and responsibilities. These officers are authorized to protect U.S. Fish and Wildlife Service property and enforce wildlife and public use laws and regulations in the local area or as directed. It is the regional and national policy that refuge officers are generally limited to enforcement activity within the boundaries of a refuge and in the immediate refuge vicinity, unless specifically authorized by their regional office. Spontaneous request for minor off-refuge enforcement assistance made by non-refuge officers must be made to the project leader, who may then assign an available refuge officer to assist.

The Virginia Marine Resources Commission (VMRC) employs 80 marine patrol officers statewide with 18 marine patrol officers assigned to the Eastern Shore. Of the 18, eight live and work in Northampton County and offer the following services:

a. Two major patrol boats (31' Bertrams)
b. Six trailerable outboard motor boats
c. One Cessna aircraft

Marine patrol officers perform a variety of services by aircraft, boat and automobile, including inspection of harvest methods of our marine resources, restricted area shellfish inspections, sale of commercial licenses (fixed fishing devices), patrol of the tidal waters of the Commonwealth, search and rescue, assistance on the water, and boating safety equipment inspections. All marine patrol officers have full police power and assist local police, state police and the Sheriffs Department when requested.

Virginia Alcoholic Beverage Control Board (ABC) members are vested with such powers to administer and enforce the law of the Commonwealth as it pertains to alcoholic beverages.

In summary, law enforcement for public safety is adequate at the present time in most instances. Disorderly conduct and rowdiness, especially along the beach front in Cape Charles, continues to be a problem with which the town attempts to deal in a variety of ways. Overcrowding and failure to meet current Department of Corrections' standards necessitate the construction of a new County jail in the immediate future.

The County is fortunate to have the cooperation and assistance of the law enforcement arms of the Chesapeake Bay Bridge-Tunnel Authority, the Department of Game and

Inland Fisheries, the Virginia National Wildlife Refuge, the Virginia Marine Resources Commission Marine Patrol, and the Virginia Alcoholic Beverage Control Board.

7.10 Government Services

The County of Northampton has a six-member Board of Supervisors with a County Administrator overseeing the day-to-day operations and the implementation of policy established/adopted by the Board of Supervisors. Development of a new county complex is underway on a 55-acre parcel west of the existing county administration buildings. A new Social Services building was occupied in 2005, and a new courthouse was opened early in 2006. Plans are being considered for re-utilization and renovation of the vacated space in the old courthouse complex.

7.11 Hospital/Health Services

Northampton County is within Legislative Planning District 22. The Eastern Virginia Health Agency no longer oversees area health planning services. This responsibility is assumed by the Virginia State Department of Health in Richmond. Through its Eastern Virginia Regional Office, the State Department of Health is mandated to increase accessibility, acceptability, continuity, and quality of health care service. In addition, it monitors and evaluates the costs of health care to restrain cost increases and to insure that services are not duplicated. In 1983, Northampton County was removed from the list of critical health manpower shortage areas and medically underserved areas. The majority of health care is provided by approximately 40 private physicians, dentists, and chiropractors. Most of the offices are concentrated in the Nassawadox area. There has been an appreciable increase in the number of Board-certified primary health care providers as well as medical sub-specialists. Physician recruitment continues to be of prime importance especially for dermatologists, rheumatologists, orthopedic surgeons, and neurosurgeons. Other fields are presently covered. Commercial third party carriers, Medicare, Medicaid, migrant and indigent health care consumers are universally served by the private sector medical community.

The Eastern Shore Rural Health Systems, Inc. (ESRHS) established with the help of the Rural and Urban Health Initiative Program currently maintains two health centers within the County. The Children's Health Center in Nassawadox is currently staffed by three pediatricians with approximately 1,000 medical encounters a month. A second center in Bayview is staffed by two physicians with some 635 medical encounters a month. The major focus of ESRHS has been on prevention of illness through a variety of programs aimed at health education and screening services. Two major events intended to reach large numbers of citizens are the Eastern Shore Health Fairs at Northampton High School in Eastville and at Tangier Island. The ESRHS is officially recognized as one of the ten best health promotion/disease prevention centers of its kind in the country. Support health services are also offered through the Eastern Shore Health District (ESHD). With the main office in Accomac and a branch in Nassawadox, it employs about 70 people to provide primary, curative, protective and environmental health care services. Nursing services provide programs for mothers, infants, children, and adults. Clinics cover family

planning, teens, nutrition, prenatal, postpartum, pediatric, well-baby, immunization, child development, venereal disease, Tuberculosis, hypertension, psychological, etc. for treatment and screening. Home health services provide skilled nursing care. Charges are based on a sliding fee scale.

Environmental health services provided through ESHD include water and soil testing for on-site sewage disposal systems, restaurant inspection, shellfish sanitation monitoring, and rabies monitoring.

Shore Memorial Hospital, located in Nassawadox, has been delivering healthcare services to the residents of Virginia's Eastern Shore since its beginning in 1928. It has grown to a 143-bed acute care facility, with 13 skilled nursing beds and a new Intensive Care Unit and Emergency Department which is open 24-hours a day. Shore Memorial Hospital offers a wide array of services including radiology, MRI, respiratory and physical therapy, cardiopulmonary rehabilitation, chemotherapy, nuclear medicine, vascular ultrasound and much more. For additional tertiary services, Shore Memorial Hospital refers patients to Sentara Norfolk General Hospital in Norfolk, Virginia and Peninsula Regional Medical Center in Salisbury, Maryland.

Shore Memorial Hospital is a part of Shore Health Services, a comprehensive, integrated healthcare delivery system, based in Northampton County. Shore Health Services is a non-profit community health care system that is a major economic force on the Shore and consists of the following healthcare companies: Shore Memorial Hospital, Shore LifeCare at Parksley, Shore Rehab, Shore Healthcare at Home, Shore Cancer Center, Shore Medical Centers at Metompkin and Chincoteague, Shore Cardiopulmonary Wellness Services, and Shore Memorial Hospital School of Practical Nursing.

The Eastern Shore Community Services Board was formed in 1971 and is comprised of local citizens appointed by the Board of Supervisors of both Counties. Its mission is to act as the agent in providing community mental health, mental retardation, and substance abuse services. Three full time sites in Northampton County are located in Nassawadox, Cheriton, and Cape Charles.

Mental health outpatient/case management offers psychological and psychiatric evaluation for adults, adolescents and children, as well as family, group and marital counseling. Substance abuse services include counseling, aftercare, family education, detoxification, and inpatient referrals.

Both mental health and substance abuse services stress prevention and intervention to improve the services provided for the at-risk population, to increase knowledge concerning mental health, mental illness and substance abuse, and thus decreasing the need for formal MH-SA services. Emergency on-call services are available on a 24-hour basis. Day support programs provide rehabilitation for chronically mentally ill clients recently discharged from a psychiatric hospital.

Services are provided at two primary locations for the mentally retarded/developmentally disabled individuals and their families: Nassawadox for case management and parent-infant intervention and Belle Haven for day support, vocational training, supportive employment, and residential services. Programs are coordinated to enable clients to reach their maximum level of functioning and potential toward independent living. The PIPS program serves developmentally disabled/delayed and at-risk infants from birth to two years of age.

Mental retardation residential services are provided at ARC House, a group home in Belle Haven. This facility focuses on habilitation and supporting disabled adults through such services are psychological, psychiatric, medical, socialization, and recreational activities.

In Nassawadox, an apartment complex with 20 units and a total of 24 beds was constructed in 1990. This project has successfully allowed developmentally disabled adults to obtain maximum potential toward independent living.

Nursing home services are provided in the County by a privately operated facility, Heritage Hall. It offers intermediate care with 125 beds for private, Medicaid and veteran patients. The staff numbers approximately 107. Expansion of the facility is planned. Several privately owned nursing homes, as well as a County facility, operate in Accomack County. A private retirement community includes a health care center which accepts patients for longer term care other than residents if beds are available.

Delmarva Rural Ministries (DRM) is a private, nonprofit organization. For 22 years, DRM has served migrant and seasonal farm workers and their families in both Counties. Services provided include primary health care and dental services, nursing outreach, referral, AIDS counseling, transportation and legal and translation services, as well as health education individually and with the school system. DRM provides emergency food services and a wide variety of non-health related assistance. Approximately 1,000-1,500 farm workers are served in Northampton County, housed in 35/45 campsites. Over the last 15 years there has been a steady decline in both the number of migrants and campsites in Northampton. DRM is a year-round service, but experiences the most demand from April through October.

In assessing the relative "healthiness" of an area, one must rely upon' published statistics which indicate disease or death rates for a variety of indices. Care must be taken in reviewing such figures for a small rural area such as Northampton County. When an area has a relatively small population (less than 50,000), large yearly fluctuations in rates are expected to occur, especially when an event has a low probability of occurrence to begin with. To avoid this problem it is necessary to examine the statistics over a period of years. The time span used in this overview ranges from 8 to 11 years. It is also helpful to compare the data to that of other than larger areas, the neighboring county, Accomack, and to the State of Virginia as a whole.

Statistics and figures for specific areas such as infant mortality, perinatal mortality, neonatal mortality, illegitimate births, teenage pregnancies, and congenital anomalies, as well as specific diseases data, can be obtained from the state and local health department sources.

7.12 Libraries

Library services for Northampton County residents are provided by the Eastern Shore Public Library. This regional library system is responsible for serving Northampton and Accomack Counties with a brand-new branch in Nassawadox, opened in February 2006, and the main branch in the Town of Accomac in Accomack County. There is also an affiliated library located in Cape Charles.

The main library building in Accomac was remodeled and added to in 1984. It contains almost 12,000 square feet. The library is open 52 hours each week, with evening and Saturday hours. A toll-free telephone number is provided for Northampton County residents. The new Eastern Shore Room houses an extensive collection of local history and genealogical material.

The library is an active participant in the interlibrary loan system. This system allows local library users access to materials held in other libraries all across the country. The library has large-print books and through a Library of Congress program makes available at no cost tapes and equipment to visually impaired borrowers.

The Northampton Memorial Library located in Cape Charles was the first memorial library to be established in Virginia, dedicated in 1927 to the memory of local men who died in WWI. The library is housed in a small building which was originally the First Presbyterian Church, built in 1910. The library is completely owned and operated by the town, through the appointment of a Library Board. Financial support for the library is provided by the town through fundraising activities of the Library Board, and from private donations. Support is also provided by the Cape Charles Women's Club, which contributes volunteer time and books.

7.13 Parks & Recreation

7.13.1 Indiantown Park

This 52-acre area is the headquarters for the Northampton County Parks and Recreation Department. There is a full-time director, several part-time personnel, a Red Cross swimming instructor, basketball league officials, aerobic and gymnastic instructors, and a summer play camp director and aides. The Park has a picnic shelter, tot play area, softball field, small swimming pool, and a two-mile nature trail. A recreation building houses the Department offices, restrooms, and a large multi-purpose room available to civic, church, and county organizations, as well as to individuals for a small fee.

The Department offers a wide variety of activities: basketball, tennis, softball, soccer, flag football, volleyball, gymnastics, and aerobics. By utilizing facilities at several public schools as well as those at Indiantown Park, leagues are organized on a year-round basis. Various recreation programs are offered: summer play camp, runs, and children's parties for Christmas, Halloween, and Easter, and planned bus trips off the Shore. The outdoor pool is not open for general public use, but it is used for the swimming program. A Red Cross certified instructor teaches classes for beginners through intermediate level swimmers. A small fee is charged for many of the programs.

7.13.2 Eastern Shore of Virginia National Wildlife Refuge

In 1984 the Department of the Interior, Fish and Wildlife Service acquired the Air Force Base at the southern tip of the County just north of the bridge-tunnel. The 653 acres of land is at the end of the East Coast Migratory Flyway; thus it is an important habitat for wildlife, including several endangered species. School, scout, and conservation groups and the general public are invited to use the facilities, including a small but excellent museum, for interpretive and educational purposes. Scheduled tours are conducted to nearby Fisherman's Island for nature walks and bird watching. Displays and informative material at the Welcome Center interpret the Refuge and the ecosystems of both bayside and seaside, as well as areas of environmental and historical interest in both Northampton and Accomack Counties.

7.13.3 Kiptopeke State Park

Kiptopeke State Park is located along the Chesapeake Bay in the southern part of the County at the end of State Route 704, Kiptopeke Drive. It is a natural area state park for low-density, passive activities.

7.13.4 Town Facilities

Cape Charles has a large, well-designed Central Park offering landscaped grounds, evening lighting and a children’s playground. It is the site of community and regional events and activities. The Town also has a public library, a boat launch and a public beach.

Eastville has a large, well-maintained park-like lot in the center of town. A picnic spot is located next to the county “time capsule” monument, and the property has been the site of community events and fund raisers. A court Garden is located next to the historic Courthouse Green area.

Nassawadox has a baseball diamond and other athletic fields for organized team sports, as well as a children’s play center. A new public library with an extensive children’s section is also located there.

Exmore has a children’s playground and picnic park, and the Town is currently constructing a driving range.

7.13.5 Boat Ramps & Beach Access

Recreational boating and fishing are very popular sports on the Eastern Shore. Cape Charles owns one of two public beaches on the Eastern Shore of Virginia, and the only public beach on the bayside of the Eastern Shore. The beach extends one-half mile along Bay Avenue with a paved walkway bordering the length of the beachfront. Residents and visitors use beaches for swimming, sunbathing, fishing, and similar recreational pursuits. Two wooden walkovers, located near the end of Tazewell and Randolph Avenues, provide public access onto the beachfront. The beach is stabilized with buried groins and a bulkhead. In 1987, the Army Corps of Engineers dredged the harbor and channel and deposited the sand along the beach area, which greatly expanded the width of the beach and improved the quality of sand along the beachfront.

Golfing opportunities are also found on the Eastern Shore, most notably at Bay Creek in Cape Charles.

Boat ramps within Northampton County include: Cape Charles (town harbor); Kings Creek; Oyster (County owned); Bayford; Red Bank; Willis Wharf (County owned); Morley's Wharf (County owned) and Kiptopeke State Park.
Recreational finfish in this area include striped bass, spot, croaker, gray and speckled trout, channel bass, black drum, flounder, bluefish, and channel catfish. Bay Creek Marina, a privately owned facility, provides additional boating and fishing opportunities, including 125 boat slips. In 2006, the Town of Cape Charles completed a fishing pier at the corner of Mason Avenue and Bay Avenue; it is open to the public and free of charge. The County recently upgraded and enlarged the public fishing pier located at the Morley’s Wharf boat ramp; nevertheless, recreational fishing opportunities are limited for people without access to boats. There is a need to meet current and future needs for fishing access by providing fishing opportunities for residents and visitors who would like to fish in the Chesapeake Bay but lack boat access to do so.

7.14 Schools & Education

7.14.1 Elementary & Secondary Education

A system of public education for students in kindergarten through grade 12 in Northampton County is provided by the Northampton County Public School System. A state-funded community college, although located in an adjoining county, provides an opportunity for County residents to pursue higher education. A school of licensed practical nursing is located near and administered by Shore Memorial Hospital. A private school is located in the northern section of the County. There is a Montessori school and two head start schools for preschool children. A state funded adult basic education (ABE) program is run by the community college. Evening computer education and vocational and vocational courses are offered by the public school system. A small private, non-profit tutoring program run by the Eastern Shore Literacy Council provides basic education for adults.

Northampton County Schools consist of elementary schools constructed in 1993, one middle school, one 6-12 grade alternative school, and one comprehensive high school with an on-campus careers and technical center. Due to the age and condition of the school facilities, the Northampton County Board of Supervisors recently appropriated $25,000 to assess the school system's facilities needs.

Northampton High School is organized in a 4x4 semester block program. An eight course school year increases both the breadth and depth of each student's education. The wide selection of courses includes building trades, plumbing, electrical wiring, business, marketing, drafting, technology, and auto mechanics. These courses link with "High Schools That Work," "TECH Prep," and college level initiatives, to meet the varied interests and career goals of the students including dual enrollment partnerships with the Eastern Shore Community College.

In June 2000, 89% of graduating students went on to further education. Honors classes, an advanced placement program, the distance learning network, and dual enrollment courses in partnership with Eastern Shore Community College enable students to qualify for college credit upon graduation. Each elementary school has a full-time teacher of the gifted. Potentially gifted students are identified at an early age. Support services are provided prior to a fourth grade seminar program. Academic programs and competitions, as well as the Governor's School Programs, challenge students beyond the classroom.

The Northampton County Public School System is accredited by the Virginia State Board of Education and the Southern Association of Colleges and Schools. School capacity and enrollment information by school are provided in Tables 7.14.1A and 7.14.1B.

Table 7.14.1A
School Enrollment by School
Northampton County, Virginia

School Year 2000-01 through School Year 2005-06							
School	**Capacity**	**2000-01**	**2001-02**	**2002-03**	**2003-04**	**2004-05**	**2005-06**
Kiptopeke Elementary	550	428	388	407	395	394	393
Occohannock Elementary	550	502	485	440	456	443	432
Northampton Middle	600	532	555	543	505	466	430
Northampton High	800	662	667	640	630	642	606
TOTALS	2,500	2,124	2,095	2,030	1,986	1,945	1,861

Source: Northampton County School Superintendent's Office

Table 7.14.1B
School Enrollment by Grade

Northampton County, Virginia

School Year 2000-01 through School Year 2005-06						
Grade	**2000-01**	**2001-02**	**2002-03**	**2003-04**	**2004-05**	**2005-06**
K-3	560	569	558	562	561	553
4-7	727	680	643	609	577	566
K-7	1,287	1,249	1,201	1,171	1,138	1,119
8-9	364	362	354	376	374	310
10-12	473	484	475	439	433	432
TOTALS	2,124	2,095	2,030	1,986	1,945	1,861

Source: Northampton County School Superintendent's Office

8 Transportation

8.1 Introduction

Since the Northampton County Comprehensive Plan was updated in 2001, several major transportation studies and planning efforts have been completed, including the U.S. Route 13 Access Management Plan, the Chesapeake Bay Bridge Tunnel Commuter Toll Impact Study, and the Eastern Shore of Virginia Bicycle Plan. A land development boom has also come, as Northampton County's rural charm and waterfront assets have been discovered. While the Virginia Employment Commission projects Northampton County's population to decline from 13,093 in 2001 to 12,000 in 2030, the current real estate trend suggests the possibility of a significant population increase or an increase in part-time residents as many of the houses being built are currently used as weekend/second homes or vacation rentals.

Transportation planning for Northampton County is a joint effort among the State, the County, and the Accomack-Northampton Planning District Commission, as well as transportation agencies such as the Chesapeake Bay Bridge Tunnel Commission and the Accomack-Northampton Transportation District Commission. While Northampton County's major transportation system is the State Highway System maintained by the Virginia Department of Transportation (VDOT), the Chesapeake Bay Bridge Tunnel (CBBT), the Eastern Shore Railroad, and Shore Transit and Rideshare (STAR) also provide essential transportation services. These systems combine with bicycle,

pedestrian, marine, and air transportation facilities to form a multi-modal transportation system.

8.2 Land Use Planning & Transportation

VDOT is responsible for most highway planning, construction, and maintenance in Virginia. VDOT only addresses transportation issues within its right-of-way and does not manage or regulate land use adjacent to state highways. Land use regulation is left up to the local government. However, VDOT and local governments recognize the growing need to coordinate land use planning and transportation planning. The following sections discuss the relationship between land use planning and transportation, and identify the need for closer cooperation between Northampton County and VDOT.

In June 2002, the County Board of Supervisors approved various recommendations made by VDOT's consultant in the Route 13/Wallops Island Access Management Study, including adoption of access management guidelines and the establishment of a highway corridor overlay district. The County adopted a Highway Corridor Overlay District in 2004. Figure 8.2 shows the location of this in the County.

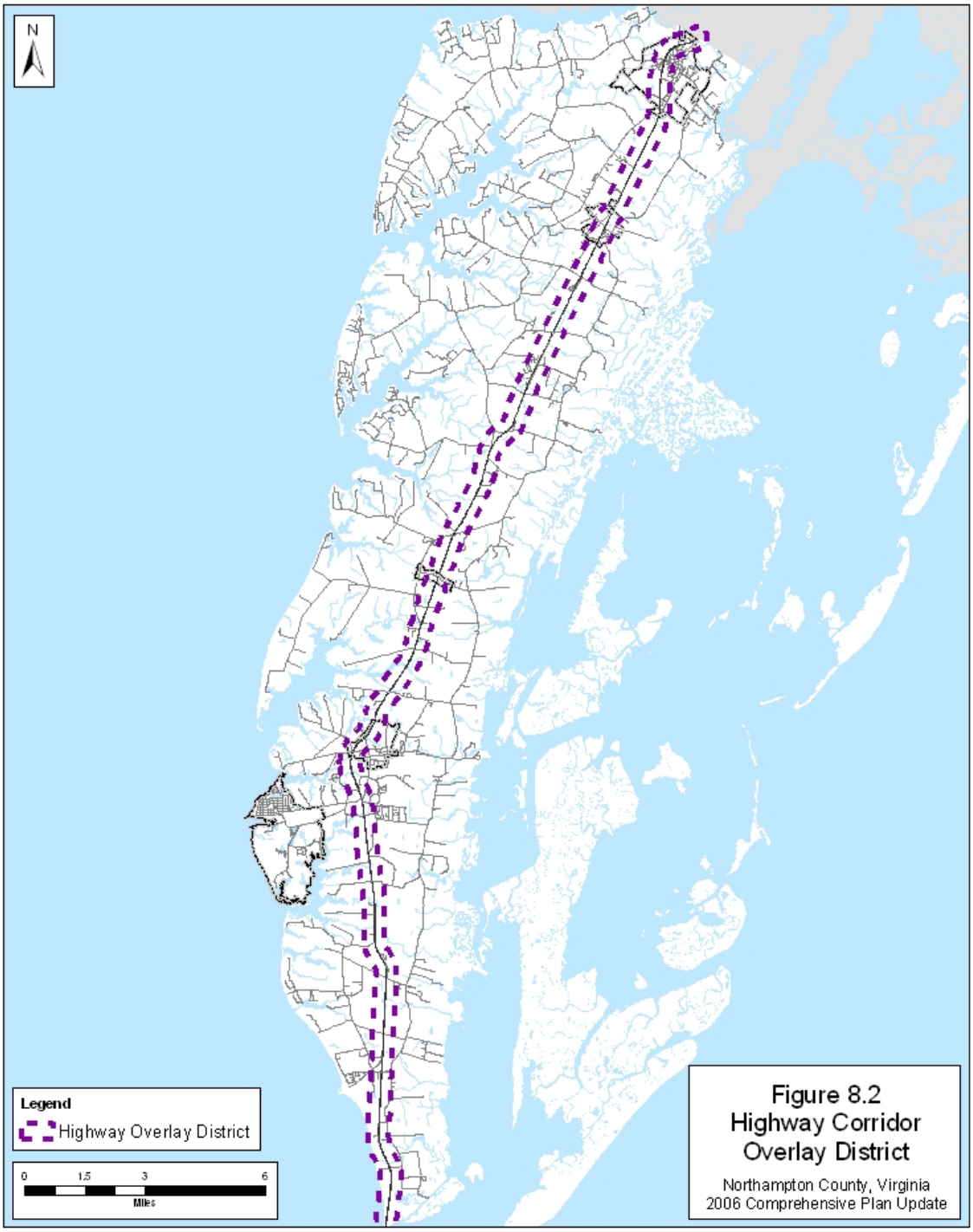
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Figure 8.2
Highway Corridor
Overlay District
Northampton County, Virginia
2006 Comprehensive Plan Update

8.2.1 Existing Land Use, Zoning, and Future Development Capacity

Existing land use and future development capacity are major considerations for maintaining and planning the Northampton County road system. U.S. Census data, existing traffic data, and land use data provide points of reference for future decisions about the County's transportation and land use planning and management.

The 2000 U.S. Census reported that Northampton County had a population of 13,093. There were a total of 7,004 housing units in 2000, with 5,321 year-round units and 1,683 seasonal housing units. This is a ratio of 3:1 year-round units to seasonal units. The average number of persons per year-round household was 2.39.

Based on gross zoning capacity, without considering other regulatory constraints such as septic capacity, the current County zoning allows for an additional 25,205 dwelling units, for a total of 32,209. If the County were to build-out to the maximum allowed zoning capacity, at the same ratio of 3:1 year-round to seasonal homes and 2.39 persons per year-round home, there would be a year-round population of 57,735. This is almost four times Northampton County's 2000 population. While it is unlikely that Northampton County will grow this much in the near future, steady population growth over time will have a major impact on the County's transportation system.

8.3 Existing Traffic

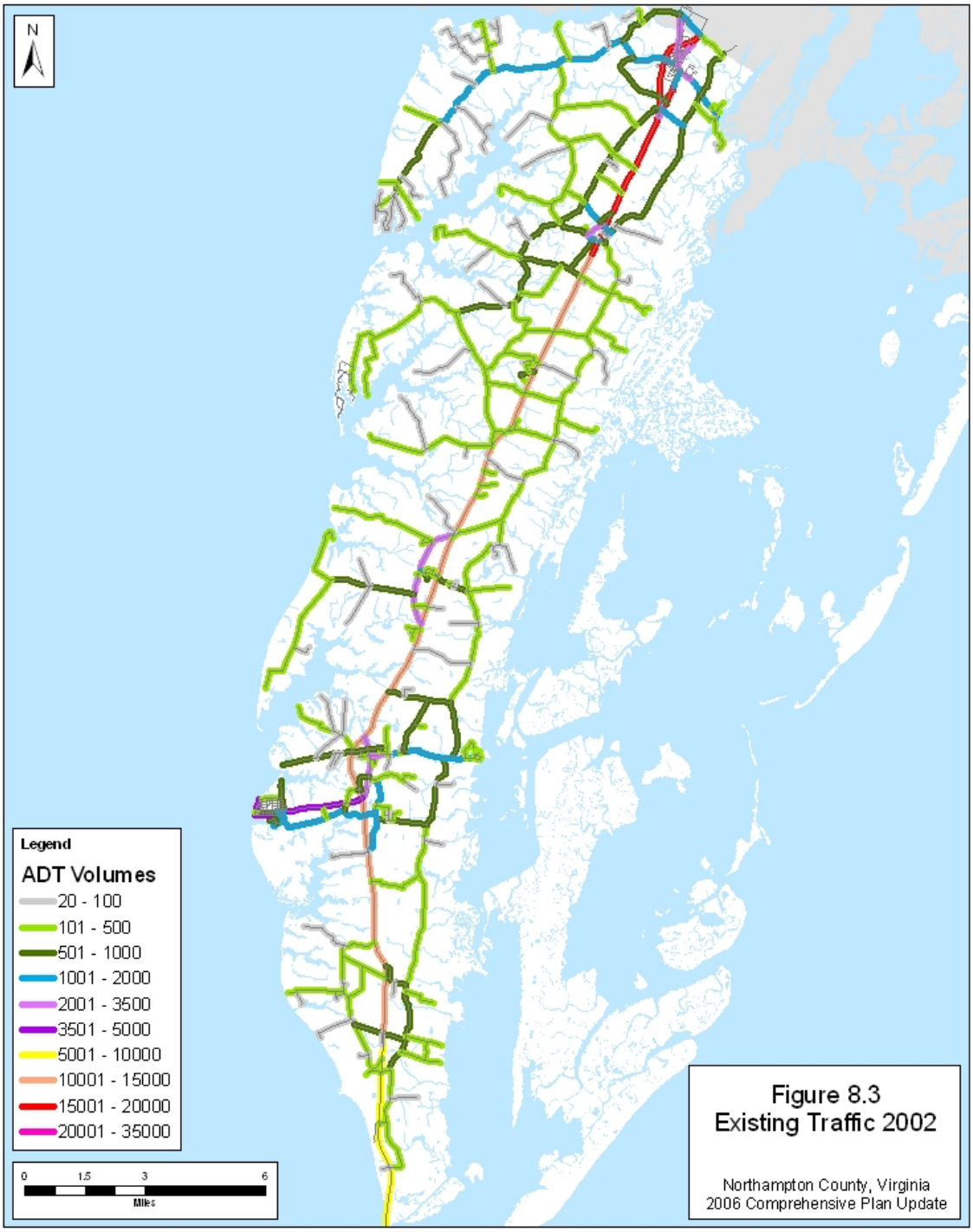
Figure 8.3 shows the latest VDOT average daily traffic (ADT) data for Northampton County's state roads. Since VDOT does not do traffic counts on all roads every year, most of these data are from 2002 or earlier. The major factors in traffic generation are population, trips-per-day per housing unit, and through-traffic on U.S. Route 13.

Figure 8.3 shows that most roads in Northampton County have less than 1000 ADT. The exceptions are U.S. Route 13, Business Route 13, and Routes 183, 184, 606, 639, and 642. The higher ADT on these roads reflects the denser development and commercial activity near Exmore, Nassawadox, Eastville, Cheriton, and Cape Charles.

8.4 Estimated Future Traffic

In the long term, traffic growth in Northampton County will depend upon population growth, the location of new development, and through-traffic growth on U.S. Route 13.

An analysis of the 2002 existing traffic data and year-round housing unit data showed that Northampton County has an average of 5-7 trips per household per


N
Legend
ADT Volumes
20 - 100
101 - 500
501 - 1000
1001 - 2000
2001 - 3500
3501 - 5000
5001 - 10000
10001 - 15000
15001 - 20000
20001 - 35000
0
1.5
3
6
Miles
Figure 8.3
Existing Traffic 2002
Northampton County, Virginia
2006 Comprehensive Plan Update

day. This is lower than the 10 trips-per-day generally used by VDOT to estimate traffic generated by residential development. The lower number is likely due to Northampton County's large elderly population and large number of seasonal homes. The analysis also showed that housing units closer to towns and commercial centers had more trips-per-day than homes in more remote locations. The difference is likely due to the inconvenience of making more frequent long trips. Residents closer to towns and commercial areas don't seem to mind making frequent short trips. Residents living far from towns and commercial areas seem to prefer making less frequent trips due to the longer distances. These numbers for trips-per-day per household were used to estimate future traffic based on several population scenarios.

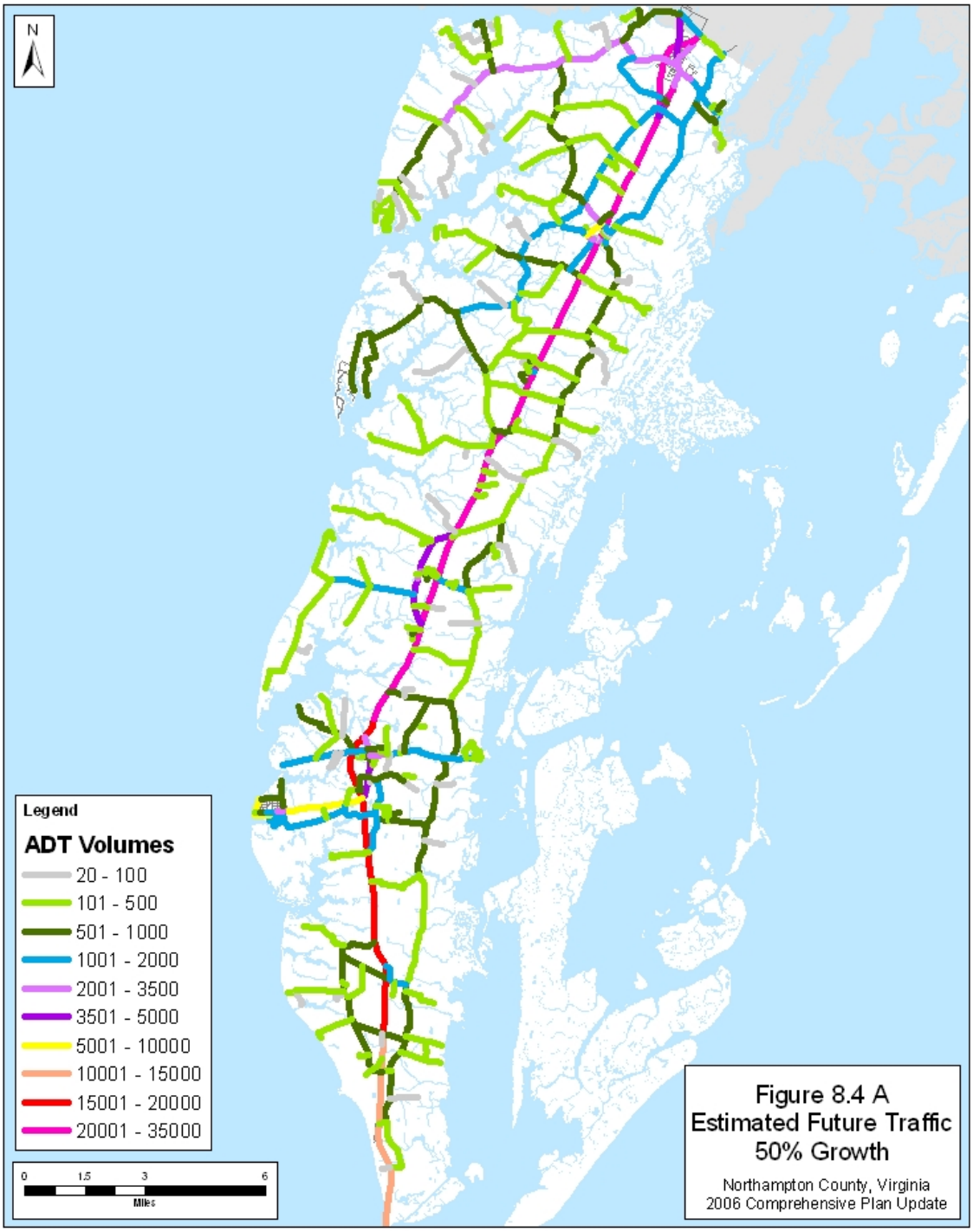
The following three maps (Figure 8.4 A, Figure 8.4 B, and Figure 8.4 C) show how traffic would grow if Northampton County's population grew by 50% (19,640), 100% (26,186), and 150% (32,733). These maps were prepared by using existing population, trips-per-day per household and existing traffic data. The existing traffic data was multiplied by a factor determined from the number of trips-per-day per year-round household. The following descriptions show the transition from lightly traveled rural roads to more heavily traveled suburban roads.

- **50 Percent Population Growth (19,649)** With a population of 19,649 and 10,506 total dwelling units, more of Northampton County's roads would cross the 1000 ADT threshold and others would reach 2,000, 3,500, and 5,000 ADT. Traffic on U.S. Route 13 from Exmore to Nassawadox would grow to over 25,000 ADT. Route 183 would exceed 2,000 ADT and Routes 600 and 618 between Exmore and Nassawadox would exceed 1000 ADT. Business Route 13 in Eastville would exceed 3,500 ADT. Route 184 in Cape Charles would exceed 5,000 ADT.

- **100 Percent Population Growth (26,186)** With a population of 26,186 and 14,008 total dwelling units, most of U.S. Route 13 would grow to over 25,000 ADT. Route 183 would exceed 3,500 ADT and Route 642 in Cape Charles would exceed 2000 ADT. Route 639 near Cheriton would exceed 2000 ADT and Route 600 near Cheriton would exceed 1000 ADT. Route 184 in Cape Charles would exceed 8,000 ADT.

- **150 Percent Population Growth (39,279)** With a population of 39,279 and 21,012 dwelling units, U.S. Route 13 from Nassawadox to Exmore would reach 35,000 ADT. Routes 600 and 618 between Nassawadox and Exmore would exceed 2,000 ADT. Business Route 13 in Eastville would exceed 5,000 ADT. Route 184 would exceed 10,000 ADT. Routes 645 and 600 near Cheapside and Townsend would exceed 1,000 ADT.

This analysis of the estimated future traffic shows that significant population growth under existing zoning will impact Northampton County's major roads. Any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Legend
ADT Volumes
20 - 100
101 - 500
501 - 1000
1001 - 2000
2001 - 3500
3501 - 5000
5001 - 10000
10001 - 15000
15001 - 20000
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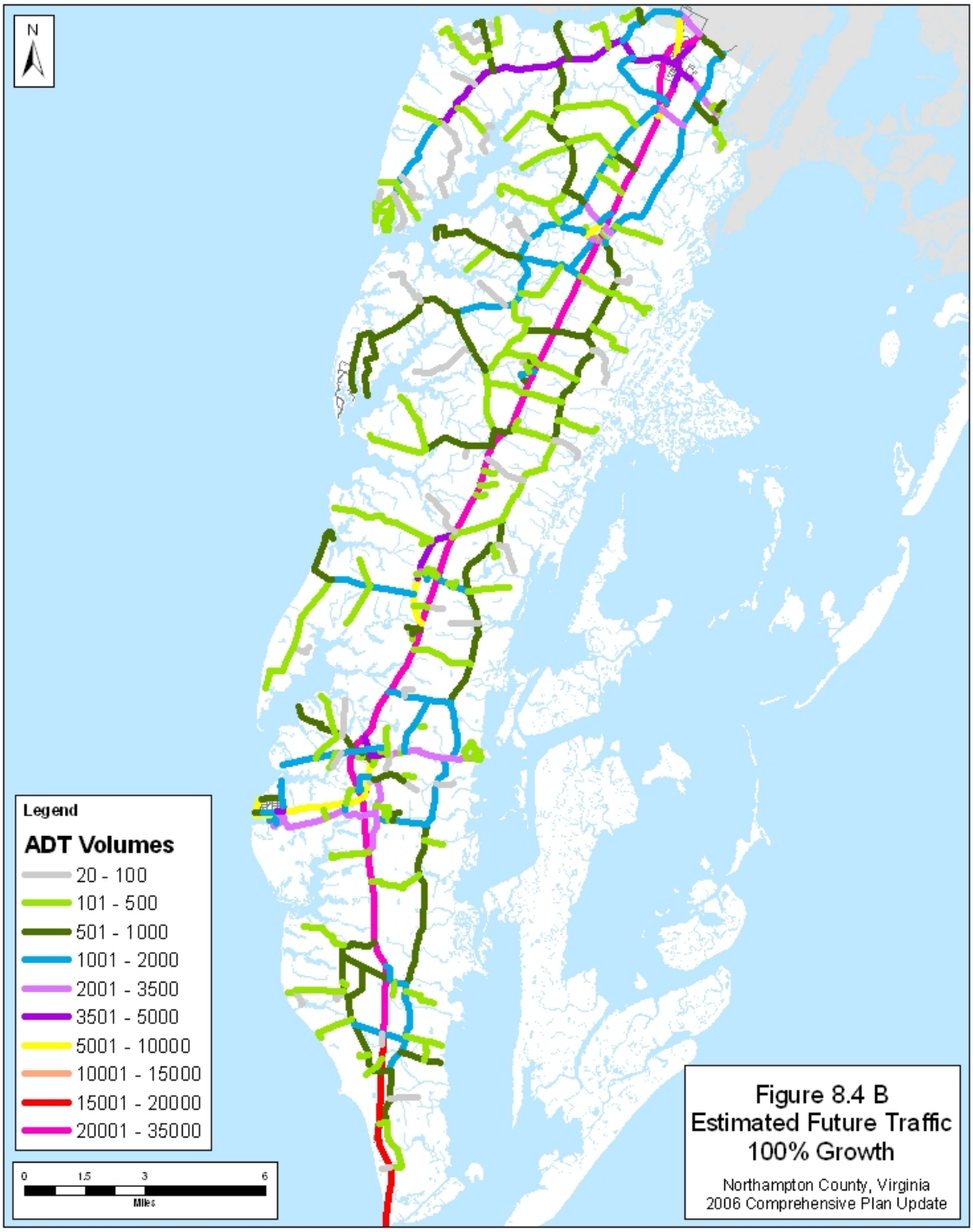
3
6
Miles
Figure 8.4 A
Estimated Future Traffic
50% Growth
Northampton County, Virginia
2006 Comprehensive Plan Update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ADT Volumes
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101 - 500
501 - 1000
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2001 - 3500
3501 - 5000
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10001 - 15000
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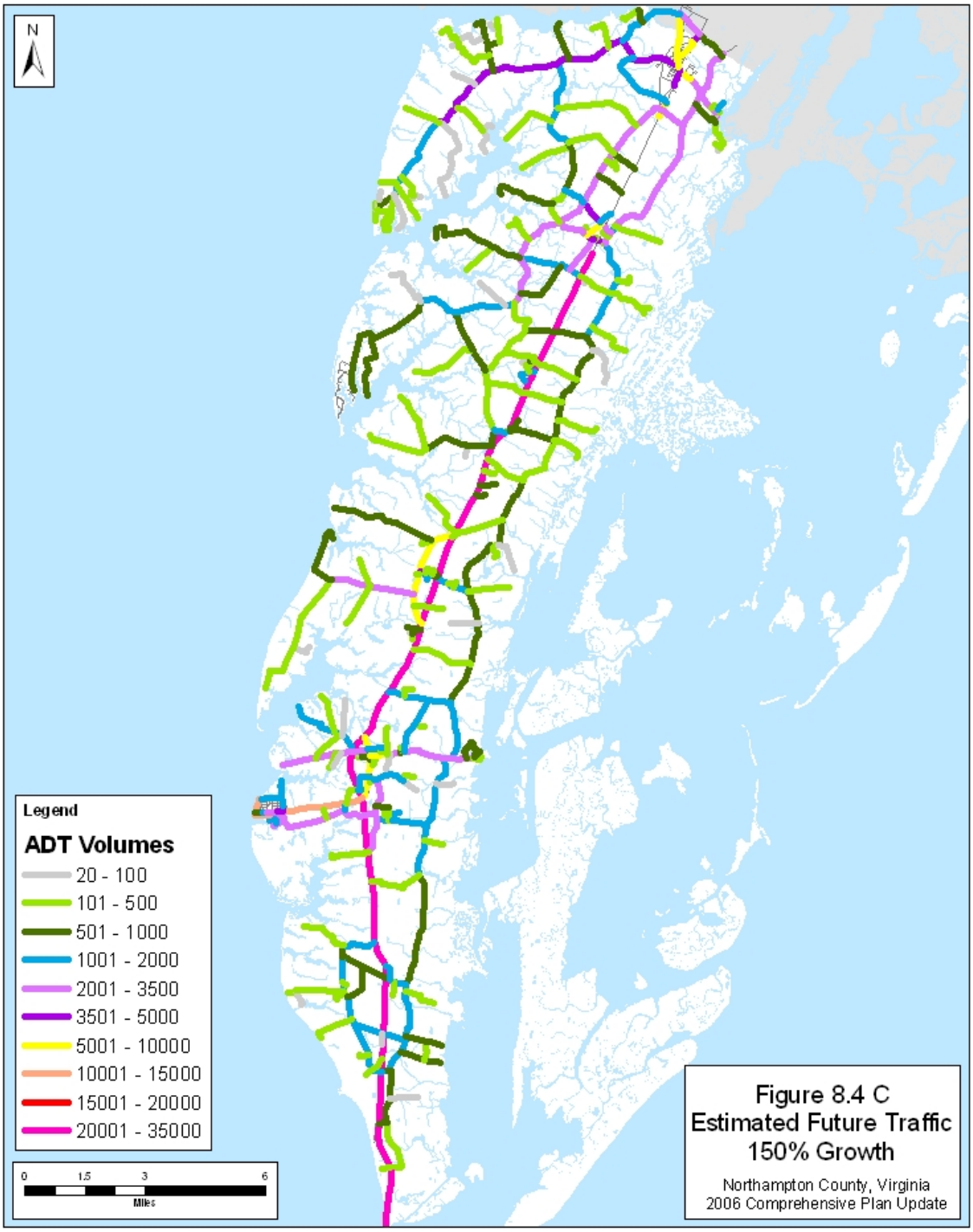
Miles
Figure 8.4 B
Estimated Future Traffic
100% Growth
Northampton County, Virginia
2006 Comprehensive Plan Update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ADT Volumes
20 - 100
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501 - 1000
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2001 - 3500
3501 - 5000
5001 - 10000
10001 - 15000
15001 - 20000
20001 - 35000
0
1.5
3
6
Miles
Figure 8.4 C
Estimated Future Traffic
150% Growth
Northampton County, Virginia
2006 Comprehensive Plan Update

new rezonings and subsequent development will increase the intensity of future traffic even more.

8.5 Existing Highway System

Northampton County's existing highway system consists of Primary and Secondary state roads. In 2004, there were 286.94 miles of state roads in the County, including 48.76 miles of Primary roads and 237.48 miles of Secondary roads. Primary roads are identified with numbers less than "600" and Secondary roads have numbers "600" or higher. U.S. Route 13, Business Route 13, Route 183, and Route 184 are the County's Primary state roads. All other state roads are Secondary. All of the County's Primary and Secondary roads are hard-surfaced.

8.5.1 Main Road Network

During development of this plan, participants identified a main road network for Northampton County that includes Primary as well as Secondary roads. The Estimated Future Traffic maps also indicate the location of this network, as these are the roads that see the most increase in traffic with population growth. The following Northampton County's Main Road Network table identifies these roads. This road network also corresponds well with the routes in the *Eastern Shore of Virginia Bicycle Plan* and the route of the Eastern Shore of Virginia Heritage Trail.

The Main Road Network is Northampton County's most essential transportation system, and its capacity must be maintained and improved as traffic grows. Land development proposals impacting the Main Road Network should be carefully reviewed for traffic and safety impacts, as well as impacts on the County's environment and existing communities. Even with 150 percent population growth, most of Northampton County's roads would still be under capacity for two-lane roads. However, the County's Main Road Network will have capacity problems if not improved.

Roads with 2,000 ADT and over should have paved shoulders to improve safety and accommodate bicycles. In addition to paved shoulders, roads with higher traffic may need right and left turn lanes, center turn lanes, and even four lanes in some cases.

The issue of access onto roads becomes more critical with increased traffic, as does the need for traffic control devices such as traffic signals. The addition of paved shoulders, center turn lanes, and alternative traffic control devices such as roundabouts could help maintain traffic capacity under high traffic conditions. Access management requirements on main roads would also help maintain safety and road capacity. As Northampton County grows, it needs to monitor the impact of future development and population growth on the road system and plan for needed improvements.

Table 8.5.1
Northampton County Main Road Network

	Rt. No.	Location	Length	2002 ADT	50% Growth	100% Growth	150% Growth
PRIMARY							
	US Rt 13	Accomack County Line to CBBT	32	17,000	25,500	34,000	42,500
	Rt. 183	Business Route 13 to Dead End	5.01	1,900	2,944	3,926	4,908
	Bus. 13	US Rt 13 North to US Rt 13 South, Exmore	2.13	2,600	4,020	5,360	6,700
	Bus. 13	US Rt 13 North to US Rt 13 South, Eastville	2.75	2,300	3,574	4,766	5,958
	Bus. 13	US Rt 13 North to US Rt 13 South, Cheriton	1.57	2,600	4,020	5,360	6,700
	Rt. 184	US Rt 13 to Dead End, Cape Charles	3.26	4,100	6,369	8,492	10,614
		Subtotal	**46.72**				
SECONDARY							
	600	Accomack Co Line to US Rt 13, Kiptopeke	31.26	850	1310	1746	2182
	601	US Rt 13 to 600	0.56	280	420	560	700
	602	Accomack County Line to Rt 183	1.2	620	930	1240	1550
	603	Business Rt 13 to Willis Wharf	1.64	1232	1899	2532	3165
	652	US Rt 13 to 183	1.72	720	1080	1440	1800
	604	618 to 600	0.71	1119	1724	2298	2872
	613	183 to 691	2.2	617	951	1268	1585
	618	604 to US Rt 13, Machipongo	10.69	882	1359	1812	2265
	606	183 to 600, Nassawadox	5.49	1503	2314	3086	3858
	609	610 to 600	1.83	860	1290	1720	2150
	610	606 to 609	0.48	190	285	380	475
	617	618 to 600	2.51	540	831	1108	1385
	619	618 to 1515, Vaucluse	5.79	696	1071	1428	1785
	627	618 to 600	1.51	430	645	860	1075
	628	US Rt 13 to Dead End	3.24	330	495	660	825
	631	Business Rt 13 to 600	1.2	761	1173	1564	1955
	634	Business Rt 13 to 666	2.11	940	1448	1930	2421
	680	US Rt 13 to Dead End	1.73	836	1288	1718	2148
	639	Business Rt 13 to Oyster	2.84	1129	1740	2320	2900
	642	T-1108 to 600	2.59	1072	1652	2202	2752
	684	Business Rt 13 to US Rt 13	2.08	985	1518	2024	2530
	624	645 to 600	3.75	767	1182	1576	1970
	645	644 to 600	1.74	466	718	958	1198
		Subtotal	**88.87**				
		TOTAL MILES	**135.59**				

Context Sensitive Design

The impact of road improvements on the surrounding community was one of the issues identified at the Northampton county Transportation Planning Workshop. Given Northampton County's concerns about the impact of road improvements on adjacent communities, the County needs to consider tools to protect its rural character.

Context Sensitive Design is a Federal Highway Administration initiative to improve transportation facilities while protecting the surrounding communities and environment. Context Sensitive Design is a collaborative, interdisciplinary approach involving a wide range of people and interests to develop transportation facilities that fit their physical setting and preserve scenic, aesthetic, historic, and environmental resources while maintaining safety and mobility. Rather than a one-size-fits-all approach to transportation, Context Sensitive Design allows design flexibility and goes beyond just trying to move cars and trucks faster. With Northampton County's scenic rural landscape and historic towns, Context Sensitive Design offers an opportunity to meet the transportation needs of a growing population without destroying the assets that make the County unique.

8.5.2 Safety Conscious Planning

In order to improve highway safety, the Federal Highway Administration (FHWA) has initiated a new program called Safety Conscious Planning. The focus of Safety Conscious Planning is to improve highway safety through better highway design. During 2002, 38,309 people in the United States died on our highways. This number is greater than a 9/11 terrorist attack occurring every month for a year. In Virginia, 913 people were killed in motor vehicle crashes during 2002. An average of 2.5 people die every day in Virginia traffic accidents.

While national accident rates per mile driven have dropped since the 1960's, the number of highway accident deaths has increased. The major factors in highway deaths are alcohol, speeding, youth, and driver inattention. Safety Conscious Planning is focused on reducing the number and severity of motor vehicle crashes through better engineering, enforcement, education, emergency response, and management. In Northampton County, a Safety Conscious Planning program including better coordination between the County planners, VDOT, the State Police, the Sheriff's Department, rescue squads, and education officials could help prevent highway fatalities.

8.5.3 Accidents

An analysis of the latest Virginia Department of Motor Vehicles (DMV) data, 1998 through 2002, shows that Northampton County had an average number of 259 crashes per year. There was an average of four fatalities per year, and over 50 percent of the fatalities were alcohol-related. Over the five-year period Northampton County's death rate per 1000 drivers averaged 0.47, compared to the State average of 0.21. The higher rate may be due to the County's large number of seasonal homes and high percentage of through traffic on U.S. Route 13. It is interesting to note that the number of licensed drivers in the County decreased by 1.9 percent from 1998 through 2002.

Table 8.5.3
Accidents

Northampton County, VA		Total			Alcohol-Related			Licensed Drivers	Death Rate per 1000 Drivers
	Year	Crashes	Fatalities	Injuries	Crashes	Fatalities	Injuries		
	2002	278	4	172	33	1	40	8,403	0.48
	2001	268	6	168	22	2	15	8,456	0.71
	2000	232	2	140	19		10	8,493	0.24
	1999	239	5	179	27	5	23	8,572	0.58
	1998	229	3	198	28	3	34	8,566	0.35
TOTAL	1998-2002	1,246	20	877	129	11	122		Average 0.47

Source: Virginia DMV

The DMV and VDOT have more detailed accident data. A detailed analysis of this data may provide the County with enough information to identify accident trends and pinpoint trouble spots.

8.5.4 U.S. Route 13

U.S. Route 13 is Northampton County's major transportation facility, and the only four-lane road in the County. On the Eastern Shore of Virginia, U.S. Route 13 extends for 69 miles from the Chesapeake Bay Bridge Tunnel through Northampton County (32 miles) and Accomack County (37 miles) to the Virginia-Maryland state line. U.S. Route 13 links the Eastern Shore of Virginia with Maryland to the north and Hampton Roads to the south. Along with the Chesapeake Bay Bridge Tunnel, U.S. Route 13 also provides an alternative to Interstate 95 for traffic traveling between the Northeast, Tidewater Virginia, coastal North Carolina, and points south. In 2002 VDOT completed the U.S. Route 13 Access Management Plan, which makes recommendations for physical improvements and implementation of local government access management regulations. The following discussion of U.S. Route conditions also includes data for Accomack County in order to provide a regional perspective on the issues.

Traffic Growth. U.S. Route 13 traffic has been steadily growing over the years, and Average Daily Traffic (ADT) on the Eastern Shore of Virginia is expected to grow from a range of 12,000 to 21,500 in 2000 to a range of 24,000 to 33,000 by 2020. Traffic volumes in Northampton County are lower than in Accomack County due to the lower population and density of development. However, traffic is growing and is expected to double to 24,000 ADT in southern Northampton County by 2020.

Traffic Safety. Vehicle crash rates and fatalities on U.S. Route 13 are increasing. From 1997 through 1999, there were 37 fatalities along U.S. Route 13 on the Eastern Shore of Virginia. Of the 24 fatalities that had site identification, 16 were in Accomack County and 8 were in Northampton County. There were 17 fatal accidents in 2000 alone. The much lower number of fatalities in Northampton County, despite a similar U.S. Route 13

length as in Accomack County, is likely due to lower traffic volumes and less roadside development.

Adjacent Highway Development. The U.S. Route 13 Access Management Plan includes an inventory of existing roadway access points to assess their impact on safety and traffic capacity. When the number of driveways on a 55 MPH highway exceeds 10 per mile, or an average of approximately one driveway per 500 feet, a safety problem exists. In 2000, there were a total of 1,312 driveways on U.S. Route 13, 881 in Accomack County and 431 in Northampton County. There were 155 driveways along the northbound side of U.S. Route 13 in Northampton County and 276 on the southbound side. With a length of 32 miles, the northbound driveway average is 4.8 per mile and the southbound average is 8.6 per mile. In several areas, such as Treherneville and Birdsnest, the number exceeds 10 driveways per mile. In these areas, VDOT has proposed building local access roads to improve safety. In the long run, it is more cost efficient to require driveway consolidation for new development than to retrofit costly access roads at public expense.

Local vs. Through-Traffic. Roads serving local traffic need to provide safe travel at lower speeds to facilitate access to adjacent residential, commercial, and industrial areas. Roads serving through-traffic need to provide safe travel at the highest possible speed. U.S. Route 13 currently handles both local and through-traffic, creating an inevitable transportation conflict. Farm vehicles and bicycles also use U.S. Route 13. In order for U.S. Route 13 to serve both local and through-traffic functions, VDOT and the County need to work together to better manage access to adjacent land uses.

Highway Aesthetics. Over the past few decades, Northampton County has enjoyed an abundance of scenic open space along U.S. Route 13. The County's well kept farms and forests, and community efforts to landscape the highway with Crape Myrtle trees, has added to Northampton County's appeal to residents, visitors, and travelers. However, with the County now under intense development pressure, these scenic assets cannot be taken for granted. Adequate land use regulations requiring attractive landscaping, signs, structures and lighting are needed if the County wants to maintain the highway's scenic image.

8.5.5 Route 183

Route 183 is a major two-lane road that runs southwest from Exmore through Occohannock Neck to Silver Beach. With increasing residential development on Occohannock Neck, and the new YMCA Camp Silver Beach, traffic on Route 183 will continue to grow. In 2002, Route 183 had an ADT of 1,900. With 50 percent population growth, the ADT is estimated to grow to 2,944. ADT on Route 183 is estimated to grow to 3,926 with 100 percent population growth and to 4,908 with 150 percent population growth. The Eastern Shore of Virginia bicycle plan recommends paved shoulders to safely accommodate bicycles along Route 183. Turn lanes may also be needed as traffic grows.

8.5.6 Business Route 13

Northampton County's three sections of Business Route 13 are located in Exmore, Eastville, and Cheriton. These are the old sections of U.S. Route 13 that were bypassed and now provide local access through these towns. The following is a summary of each of these segments.

Exmore. Business Route 13 is completely within the Town of Exmore's jurisdiction. The 2002 ADT for Business Route 13 was 2,600 and is estimated to grow to 4,020 with 50 percent population growth. The ADT on Business Route 13 is estimated to grow to 5,360 with 100 percent population growth and to 6,700 with 150 percent population growth. The Eastern Shore of Virginia Bicycle Plan recommends paved shoulders and wide lanes to safely accommodate bicycles along Business Route 13 in Exmore. The Town of Exmore is improving pedestrian access along Business Route 13 in Downtown Exmore.

Eastville. Except for a small section in Downtown Eastville, most of Business Route 13 is within Northampton County's jurisdiction. The 2002 ADT for Business Route 13 was 2,300 and is estimated to grow to 3,574 with 50 percent population growth. The ADT on Business Route 13 is estimated to grow to 4,766 with 100 percent population growth and to 5,958 with 150 percent population growth. Safe access to the new Northampton County Administration Complex, Northampton High School, and proposed residential developments are important issues for Business Route 13 in Eastville. The Eastern Shore of Virginia Bicycle Plan recommends paved shoulders and wide lanes to safely accommodate bicycles along Business Route 13 in and outside the Town of Eastville.

Cheriton. Approximately half of Business Route 13 is within the Town of Cheriton's jurisdiction and half is within Northampton County. The 2002 ADT for Business Route 13 was 2,600 and is estimated to grow to 4,020 with 50 percent population growth. The ADT on Business Route 13 is estimated to grow to 5,360 with 100 percent population growth and to 6,700 with 150 percent population growth. The Eastern Shore of Virginia Bicycle Plan recommends paved shoulders and wide lanes to safely accommodate bicycles along Business Route 13 in Cheriton, and a shared use path south of Town that follows Route 184 and connects to the Town of Cape Charles.

8.5.7 Route 184

Route 184 runs west from U.S. Route 13 to Cape Charles. Due to rapid land development in and around Cape Charles, traffic on Route 184 is expected to grow quickly. Route 184 is one of only two roads in and out of Cape Charles. The other road is Route 642. The development capacity estimate shows that the Town of Cape Charles has 609 existing residential units and is zoned for 2,579 additional units. In 2002, Route 184 had an ADT of 4,100. With 50 percent population growth, the ADT on Route 184 is estimated to grow to 6,369. ADT on Route 184 is estimated to grow to 8,492 with 100 percent population growth and to 10,614 with 150 percent population growth. The Eastern Shore of Virginia Bicycle Plan recommends a shared use path along the Route

184 corridor from Cape Charles to Cheriton. Route 184 should also have paved shoulders and turn lanes to accommodate future traffic.

8.5.8 Chesapeake Bay Bridge Tunnel

The Chesapeake Bay Bridge Tunnel (CBBT) is a 20 mile long bridge and tunnel complex that links the Eastern Shore of Virginia with the Hampton Roads region to the south. The CBBT is overseen by an 11-member commission appointed by the Governor of Virginia. The CBBT is a toll facility with a $12.00 one-way toll for cars and a $17.00, 24-hour round trip toll. Since opening on April 15, 1964, the CBBT has attracted an increasing number of vehicles. Traffic has more than tripled from 1,113,463 vehicles in 1965 to 3,430,999 in 2003. Due to increasing traffic and accidents, the CBBT began constructing parallel trestles in 1995. The new trestles opened on April 19, 1999. The entire facility is now four lanes, except for the two mile-long, two-lane tunnels.

In 2000 the CBBT Commission proposed a commuter toll discount. At the request of local governments, the Commission delayed a decision until an impact study could be conducted. In 2001, the *Chesapeake Bay Bridge Tunnel Commuter Toll Impact Study* was completed. The study determined that a $14.00 round-trip commuter toll would increase traffic by 10 percent, and a $3.00 one-way maintenance toll would increase traffic by 30 percent. The primary impact would be increased residential and commercial development in the area from Eastville south. Secondary impacts would be loss of farmland, increased ground water use, increased traffic and accidents, and demand for County services such as schools, emergency services, and solid waste disposal.

In 2002, at the request of Eastern Shore local governments, the Virginia General Assembly requested the Joint Legislative Audit and Review Commission (JLARC) to conduct a study of the CBBT. This JLARC study concluded that the CBBT should continue to be operated as an independent authority and that the parallel tunnels would be needed by 2020. Annual traffic is expected to grow from 3,430,999 in 2003 to a range of 5,000,661 to 7,181,346 by 2025. The JLARC study recommended that the CBBT Commission should develop a long-range capital plan to determine the need for parallel tunnels. JLARC also recommended postponing consideration of further toll discounts until the long-range capital plan was completed, due to the possible need to raise tolls to finance the new tunnels.

In March 2004, a feasibility study was completed that called for constructing parallel tunnels by 2020. The tunnels are needed for long-term maintenance, safety, and future traffic capacity. The CBBT Commission has approved construction of the new tunnels, which will start in 2015 and be completed in 2019. In order to pay for the new tunnels, the toll for cars was increased June 1, 2004 to $12.00 for a one-way trip and $17.00 for the 24-hour round trip.

8.5.9 Recent Highway System Improvements

The most notable recent improvements in the Northampton County highway system have been associated with the major thoroughfares, such as installation of mileposts and raised reflective pavement markers on U.S. Route 13.

8.5.10 Six-Year Improvement Program

Highway improvement priorities are continually being reviewed, as the Northampton County Secondary System Six-Year Plan is updated on an annual basis. This plan should be referred to as the official local highway improvement and maintenance plan. The plan is on file in the Northampton County Planning Department in Eastville.

8.5.11 Rural Addition Program & Revenue Sharing

The Code of Virginia authorizes counties to recommend roads to VDOT to be taken into the Secondary Highway System as rural additions. Streets added to the State system shall be constructed to VDOT's standards for the traffic served. Part of a local government's Secondary road allocation goes to this purpose. In addition, the State and County are allowed to provide 50 percent matching funds for upgrade or construction of roads or streets that qualify. This program is referred to by many as revenue sharing. Northampton County has not participated in this program in the past.

Northampton County also has an opportunity to add new roads to the VDOT system by mapping new roads on an Official County Map and requiring construction of the new roads to VDOT standards as development occurs. Standards for road construction are located in VDOT's *Subdivision Street Requirements*, which has been recently revised to allow more flexibility.

8.5.12 Industrial & Recreational Access Roads

Northampton County has utilized VDOT funding for construction of access roads to industrial facilities. This is a valuable tool that provides incentives for economic and industrial development. VDOT also has funds available for road access to recreational facilities.

8.5.13 Drainage

Due to the relatively flat topography and high seasonal water table in Northampton County, drainage is an important issue. The State Highway System provides the most comprehensive and well-maintained drainage system in the County. However, VDOT is limited to constructing and maintaining drainage ditches that are within the state right-of-way and ditches that are within easements owned by the state. The County needs to work closely with VDOT to coordinate drainage ditch construction and maintenance to ensure long-term viability and legal access for construction and maintenance.

8.6 Air Transportation

There is no scheduled or chartered air service available in Northampton County. The nearest domestic and international air service is Norfolk International Airport located in Norfolk, Virginia. There is domestic service available at Ocean City/Salisbury Airport in Wicomico County, Maryland as well. Charter services are available at Accomack County Airport in Melfa.

Northampton County has five turf airstrips, two of them with lights. These airstrips offer safe landing and take-off facilities for business and recreational visitors and emergencies. They are registered with the Aircraft Owners and Pilots Association and are shown on the State and Federal flight charts covering the area. While they are available mainly for private planes and crop dusting operations, the airstrips also offer tie-down facilities for sportsmen flying to Northampton County for hunting and fishing. Table 8.6 lists them along with a brief description and their location.

Table 8.6
Northampton County Airstrips

NAME	LOCATION	DESCRIPTION
Kellam Field	Rt 617, Weirwood	North-South 1,895 ft., East-West, 1,500 ft.
Eagle's Nest	Chesapeake	North-South 1,800 ft., with lights
Page Scott Farm	US Route 13, Dalby's	North-South 3,000 ft., with lights (lessons available)
John Bull Farm	Route 600, Townsend	North-South, 3,000 ft.
Cherrystone Airstrip	Cherrystone	

8.7 Rail Transportation

Rail service in Northampton County began in 1884 with completion of the New York, Philadelphia, and Norfolk Railroad (NYP&N) main line from Wilmington, DE to Cape Charles. Major terminals were built at Cape Charles to transport passengers and freight to and from Norfolk via steamboat. The NYP&N merged with the Pennsylvania Railroad in the 1920's. The arrival of the railroad in Northampton County brought economic development, with new towns, businesses, industries, people, and prosperity. The railroad enabled Northampton County's farming and seafood industries to greatly expand their markets. Cape Charles became the headquarters of the Pennsylvania Railroad's Delmarva division, as well as Northampton County's center of commerce.

After World War II, the nationwide decline of rail service due to growing automobile use and truck freight transportation impacted Northampton County. The Pennsylvania Railroad and the New York Central Railroad merged in 1971, forming the Penn Central Railroad. In 1973 Penn Central declared bankruptcy, and the Eastern Shore's rail service was almost terminated. However, due to the foresight and efforts of local, state, and federal officials, rail service was maintained.

In 1981 the Eastern Shore Railroad (ESHR) was formed as a private rail carrier to continue the movement of freight to and from Norfolk and throughout the Delmarva Peninsula and the Northeast. Operated under the authority of the Accomack-Northampton Transportation District Commission, the rail line, under the new management of Cassatt Management, LLC since January 2006, has been continuously upgrading its track and marine facilities to provide its shippers with efficient and economical service. Due to these efforts, more customers are now using the rail service.

8.8 Motor Freight Service & Parcel Service

Motor freight service is provided by numerous interstate carriers, but only two have terminals in Northampton County. Two trucking companies handle produce only. Several local growers ship their own produce and carry produce for other farmers on a limited basis. Parcel delivery service is provided by Airborne Express, Federal Express, and United Parcel Service.

U.S. Route 13 has a high percentage (15 percent) of truck traffic, which is a major transportation safety issue in Northampton County.

8.9 Public Transit

Public transit in Northampton County is provided by STAR Transit, Greyhound, Carolina Trailways, and private taxi companies in Exmore and Cape Charles. Greyhound and Carolina Trailways offer interstate bus service with stops in Cheriton and Exmore. Several human services agencies also provide transportation services for their clients. The primary agency offering transportation services is the Eastern Shore Area Agency on Aging/Community Action Agency, which transports clients to senior centers.

STAR Transit

STAR Transit is operated under the authority of the Accomack-Northampton Transportation District Commission. STAR Transit is supported by Federal grants through the Virginia Department of Rail and Public Transportation, as well as passenger fares, local government contributions, and private donations. STAR Transit operates five routes on the Eastern Shore of Virginia. In 2003 STAR Transit carried 43,269 riders. Three color-coded routes operate in Northampton County with morning, mid-day, and late afternoon departure times:

- Red Route: Cape Charles to Onley
- Yellow Route: Cape Charles to Townsend to Exmore
- Purple Route: Cape Charles to Onancock

While STAR Transit provides basic public transit, it does not offer a demand-response service in Northampton County, as it does in Accomack County. STAR Transit is planning to offer demand-response service from Nassawadox to Painter. An experimental commuter bus service across the Chesapeake Bay Bridge Tunnel to Virginia Beach and Norfolk was not successful due to the lack of riders going to work. However, there was strong interest in this route for shopping and other personal transportation.

8.10 Marine Transportation & Harbors

Northampton County's economy has historically depended on marine transportation. Today, the primary marine transportation uses are barge transport, seafood harvesting, and recreational boating. These transportation activities are centered at the harbors of Cape Charles, Oyster, Willis Wharf, and at several marinas and boat ramps.

8.10.1 Cape Charles Harbor

Cape Charles Harbor is the primary marine transportation facility in Northampton County. The harbor is accessed by the Cape Charles Harbor Federal Project Channel. As the southern terminus of the Eastern Shore Railroad, Cape Charles Harbor is where the railroad cars are transported via car float to the Norfolk Southern Railroad in Norfolk. Bayshore Concrete, Inc., receives barges of sand, gravel, and cement, and ships out prefabricated concrete road and bridge components. Local concrete companies are now using Cape Charles harbor to receive bulk shipment of construction aggregates. The Town of Cape Charles operates a newly refurbished marina with 51 slips in Cape Charles Harbor, and is installing new bulkheading and restrooms. Two double boat ramps owned by the Town have been renovated by the Virginia Department of Game and Inland Fisheries. The harbor is also a commercial fishing port and home to a U.S. Coast Guard Station. A portion of the harbor is maintained as an emergency ferry landing, which can

be used to transport vehicles if the Chesapeake Bay Bridge Tunnel is damaged and has to be closed for repairs.

8.10.2 Kings Creek Marina

Access to Kings Creek Marina from the Chesapeake Bay is via Cherrystone Inlet. Kings Creek Marina is located in the Town of Cape Charles at the end of Route T-1105. Kings Creek Marina has recently been rebuilt and expanded into a luxury marina with 224 slips, retail shops, and a restaurant.

8.10.3 Oyster Harbor

Oyster Harbor is located east of Cheriton in the unincorporated village of Oyster off Route 639. The harbor is approximately eight acres in size, is 1,100 feet long, and has a 6-foot deep turning basin. Oyster Harbor is part of the Oyster Federal Project Channel. Access from the Atlantic Ocean is via the 7-mile Sand Shoal Channel, which has a minimum depth of 24 feet and a width varying from 200 to 1,500 feet. Dredging frequency is approximately five years.

Large 80-foot surf clam vessels use Oyster Harbor, as well as smaller commercial fishing and recreational vessels. There are five public boat ramps along the harbor.

8.10.4 Willis Wharf Harbor

Willis Wharf Harbor is located east of Exmore in the unincorporated village of Willis Wharf off Route 603. Access to Willis Wharf Harbor is from the Atlantic Ocean is via the Great Machipongo Federal Project Channel. Willis Wharf Harbor is six feet deep at mean low water and has 51 boat ships and a public boat ramp. Northampton County built the harbor in 1985. Willis Wharf is the home of several clam aquaculture and shellfish harvesting businesses.

8.10.5 Waterway Coast of Virginia

The Waterway Coast of Virginia (WCV) runs 95 miles from Chincoteague Island south through the Eastern Shore Seaside to the Chesapeake Bay. Also referred to as the Virginia Inside Passage, the WCV is a marked channel that winds its way through the bays and marshes of the Seaside. In Northampton County, the WCV begins near Hog Island and ends at Fisherman Island. The shallowest section of the WCV is maintained at a width of 60 feet and a minimum 4-foot depth at mean low water, which limits its use to shoal draft vessels.

8.10.6 Occohannock Creek

Occohannock Creek is accessed via the Occohannock Creek Federal Project Channel. The channel and creek serve commercial fishing and recreational vessels. Northampton

County owns and maintains the Morley's Wharf Boat Ramp and Fishing Pier on Occohannock Creek off Route 606.

8.10.7 Nassawadox Creek

Nassawadox Creek serves commercial fishing and recreational vessels. The Bayford Boat Ramp is located off Route 617 on Nassawadox Creek. The Army Corps of Engineers is in the process of planning the Nassawadox Creek Federal Project Channel to improve access to the creek.

8.10.8 Other Marine Facilities

There are several other public boat ramps in Northampton County that serve commercial fishing and recreational vessels. The following is a summary of these facilities:

- Red Bank Boat Ramp, Castle Ridge Creek, Rt 617
- Kiptopeke State Park Boat Ramp, Chesapeake Bay, Route 704
- Wise Point Boat Ramp, Waterway Coast of Virginia, Eastern Shore of Virginia National Wildlife Refuge, Route 600

8.11 Bicycle & Pedestrian Facilities

8.11.1 Bicycle Facilities

The Eastern Shore of Virginia Bicycle Plan was developed by the Accomack- Northampton Planning District Commission and adopted by the Commission in 2003. The plan recommends proposed bicycle facilities to be considered by local governments when developing their bicycle facility plans. The Northampton County Board of Supervisors conducted a Public Hearing and adopted the plan on June 14, 2004. The Accomack County Board of Supervisors conducted a Public Hearing and adopted the plan on June 16, 2004. The following recommendations were identified for Northampton County in the adopted plan:

- Develop a designated Seaside Bicycle Route with paved shoulders from Maryland Route 12 to the Chesapeake Bay Bridge Tunnel Parking Lot, utilizing Routes 600 in Northampton County.

- Develop a Shared Use Path from Cape Charles to Cheriton.

- Develop a Shared Use Path from Cape Charles to the Eastern Shore of Virginia National Wildlife Refuge that is not on the old railroad right-of-way.

- Develop a designated Bayside Bicycle Route with paved shoulders from Belle Haven to Machipongo using Routes 602, 183, 606, 618, and 627.

- Improve bicycle access along and across U.S. Route 13.

- Work with STAR Transit to establish a shuttle bus across the Chesapeake Bay Bridge Tunnel that can carry bicycles.

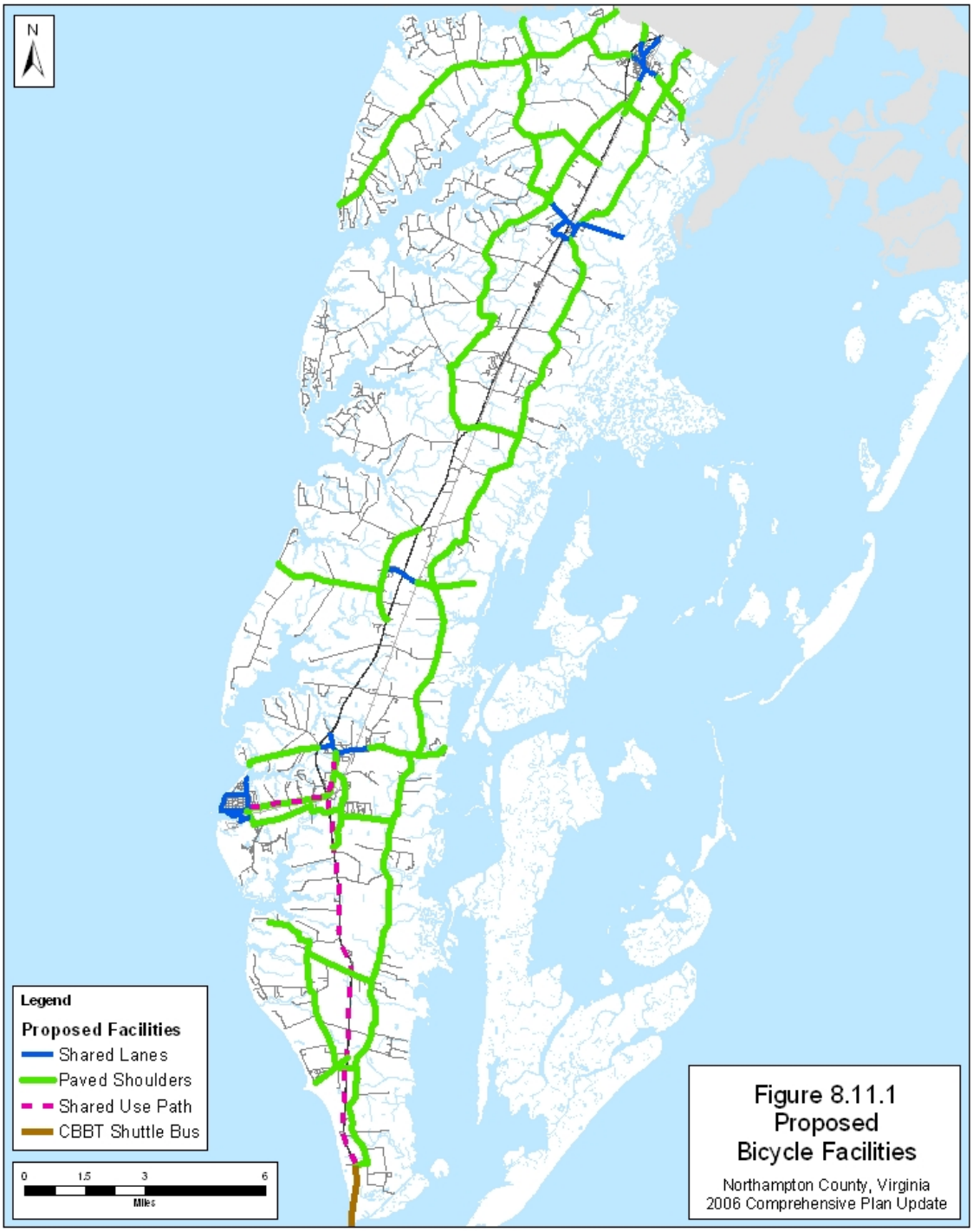
- Meet with the Eastern Shore Railroad to discuss the possibility of developing a rail-trail along the railroad access road.

The plan also identifies specific bicycle facility recommendations for Northampton County. Table 8.11.1 lists the road segments, and the proposed facility. Figure 8.11.1 shows these facilities on a map.

Table 8.11.1
Bicycle Facility Road Recommendations for Northampton County

	Road Segment	**Proposed Facility**
1.	Route 600 from Accomack County Line to Kiptopeke AADT: 960 Posted Speed: 35/55 Road Width: 18-20	Paved Shoulders
2.	Route 602 from Route 183 to Accomack County Line AADT: 570 Posted Speed: 25/55 Road Width: 18	Paved Shoulders
3.	Route 183 from Silver Beach to Exmore AADT: 1,900 Posted Speed: 25/55 Road Width: 20	Paved Shoulders
4.	Route 606 from Morley's Wharf to Route 600, Nassawadox AADT: 1,600 Posted Speed: 35/55 Road Width: 18-20	Paved Shoulders
5.	Route 608 from Route 600 to Brownsville AADT: 90 Posted Speed: 55 Road Width: 16	Wide Lanes
6.	Route 603 from Exmore to Willis Wharf AADT: 1,200 Posted Speed: 25/55 Road Width: 22-40	Paved Shoulders
7.	Business Route 13 from Exmore to U.S. Route 13 South AADT: 2,300 Posted Speed: 35/55 Road Width: 33	Paved Shoulders
8.	Route 604 from Route 13 to Route 600 AADT: 1,100 Posted Speed: 25/55 Road Width: 22	Paved Shoulders
9.	Route 618 from Route 13 Exmore, to Route 627, Machipongo AADT: 1,700 Posted Speed: 35/55 Road Width: 16-22	Paved Shoulders
10.	Route 605 from Route 606 to Route 13 AADT: 270 Posted Speed: 35/55 Road Width: 16-18	Paved Shoulders
11.	Route 627 from Route 618 to Route 600 AADT: 430 Posted Speed: 25/55 Road Width: 16-20	Paved Shoulders
12.	Business Route 13 in Eastville AADT: 2,000 Posted Speed: 35/55 Road Width: 33	Paved Shoulders

13.	Route 631 from Business Route 13, Eastville, to Indiantown Park				Paved Shoulders
	AADT: 1,400	Posted Speed: 25/55	Road Width: 16-32		
14.	Route 634 from Route 666, Smith Beach, to Business Route 13				Paved Shoulders
	AADT: 920	Posted Speed: 55	Road Width: 18-20		
15.	Route 680 from Cherrystone to Business 13 Route, Cheriton				Paved Shoulders
	AADT: 980	Posted Speed: 35/55	Road Width: 18-32		
16.	Route 639 from Cheriton to Oyster				Paved Shoulder
	AADT: 2,200	Posted Speed: 35/55	Road Width: 18-40		
17.	N. Business Route 13 in Cheriton to U.S. Route 13 South				Paved Shoulders
	AADT: 2,600	Posted Speed: 35/55	Road Width: 32		
18.	Route 184 from Cape Charles to Route 13				Paved Shoulders
	AADT: 4,100	Posted Speed: 25/55	Road Width: 32		
19.	Route 684 from Business Route 13 to Route 13				Paved Shoulders
	AADT: 70	Posted Speed: 25/55	Road Width: 18		
20.	Route 642 from Cape Charles to Route 600				Paved Shoulders
	AADT: 1,100	Posted Speed: 25/55	Road Width: 16-22		
21.	From Cape Charles to Eastern Shore National Wildlife Refuge				Shared Use Path
	AADT: N/A	Posted Speed: N/A	Road Width: 10		
22.	Route 644 from Custis Tomb to Route 645				Paved Shoulders
	AADT: 80	Posted Speed: 25/55	Road Width: 18-20		
23.	Route 645 from Route 644 to Route 600				Paved Shoulders
	AADT: 460	Posted Speed: 55	Road Width: 20-22		
24.	Route 600 to CBBT Parking Lot				Shared Use Path


N
Legend
Proposed Facilities
Shared Lanes
Paved Shoulders
Shared Use Path
CBBT Shuttle Bus
0
1.5
3
6
Miles
Figure 8.11.1
Proposed
Bicycle Facilities
Northampton County, Virginia
2006 Comprehensive Plan Update

8.11.2 Pedestrian Facilities

All vehicle trips begin and end with pedestrian trips. Sidewalks and multiple use paths help tie communities together and provide safe pedestrian travel. Northampton County does not have land use authority over incorporated towns, but it should work with the Towns to encourage development and maintenance of pedestrian facilities. New development adjacent to settled areas should be required to connect with pedestrian facilities. In the case of Eastville, where the County is developing new office facilities, the County should participate in the improvement and maintenance of sidewalks.

8.12 Scenic Byways

Virginia's Scenic Byways program provides local governments with the opportunity to nominate roads for Scenic Byway designation. As specified in the Code of Virginia, Section 33.1-62 through 33.1-66, "Virginia Byway" means those highways designated by the Commonwealth Transportation Board. A Virginia Byway designation recognizes a road corridor with aesthetic or cultural value near areas of historic, natural, or recreational significance. All Virginia Byways are included on "A Map of Scenic Roads in Virginia", which encourages travel to interesting destinations away from high-traffic corridors and stimulates local economies by attracting visitors to lesser-known destinations. To help showcase Virginia for the Jamestown Settlement's 400th anniversary in 2007, Virginia is encouraging local governments to nominate roads for Virginia Byway designation. A Virginia Byway designation does not limit road improvements or adjacent land use, but a byway designation may be used by local governments to limit outdoor advertising signs.

Northampton County currently has a Scenic Byway designation on Route 600 from the Accomack County line to U.S. Route 13 near the Chesapeake Bay Bridge Tunnel. Other roads in Northampton County may qualify for Scenic Road designation. The Virginia Outdoors Plan recommends roads for nomination as Virginia Byways. Recommended roads in Northampton County include Routes 184, Business Route 13, and Route 639 from Cape Charles to Oyster.

8.13 Rest Areas

There are no VDOT maintained rest areas in Northampton County, but the Chesapeake Bay Bridge Tunnel maintains a rest area on the northbound side of U.S. Route 13 across from the Eastern Shore toll plaza. Northampton County has plans to build an open-air visitor center at this rest area in cooperation with the CBBT Commission.

8.14 Adopt-A-Highway

Out of the 287 miles of state maintained roads in Northampton County 111 miles (37%), are in the VDOT Adopt-A-Highway program. Volunteers apply to VDOT for Adopt-A-Highway designations, which are authorized by VDOT permit. Northampton County also works with local volunteers such as the Northampton Alliance Against Trash to conduct regular litter clean-ups throughout the County.

8.15 Eastern Shore of Virginia Heritage Trail

The Eastern Shore of Virginia Heritage Trail is an automobile driving route being developed by Virginia's Eastern Shore Tourism Commission. The Heritage Trail includes parks, beaches, wildlife refuges, scenic roads, historic sites, waterfront towns, and other points of interest. Development of the Heritage Trail is being done in coordination with bicycle facility planning, and bicycle facilities have been proposed for all roads on the Heritage Trail.

8.16 Historical Markers

In 1926 the Virginia General Assembly passed legislation that resulted in the identification and marking of historic sites throughout the Commonwealth. VDOT is now responsible for installing and maintaining the historical markers. New historical markers are approved by the Virginia Historic Landmarks Commission. Funding from local governments and private organizations is used to pay for new historical markers as well as and replacement markers.

There were originally 10 Virginia State Historical Markers in the County. Currently, there are six markers in place. Table 8.15 identifies each marker, its identification code, and its location. The four markers that are no longer in place are also identified.

Table 8.16
Virginia Historical Markers
Northampton County, Virginia

NAME	ID	LOCATION
Salem Methodist Church	WY-3	U.S. Route 13 at Route 636
Arlington	WY-5	U.S. Route 13, 3 miles north of Cape Charles
Arlington	Wy-5	U.S. Route 13, 3 miles north of Cape Charles (no longer in place)
Old Places	WY-6	U.S. Route 13, 3 miles north of Cape Charles (no longer in place)
Towne Fields	WY-7	U.S. Route 13 at Cheriton
First Courthouse	WH-7	U.S. Route 13 at Cheriton (no longer in place)
Home of First Settler	WY-8	U.S. Route 13, 1 mile south of Eastville
Indian Village	WY-9	Business Route 13 in Town of Eastville
Old Courthouse	WY-10	Business Route 13 in Town of Eastville
Hungars Church & Vaucluse	WY-11	U.S. Route 13, 2.8 miles south of Nassawadox (no longer in place)

Four of the existing historical markers are located on U.S. Route 13. The remaining two markers are located in Business Route 13 in the Town of Eastville. All of the historical markers should be inventoried and monitored for routine maintenance and safety. Replacement of the four missing markers should be considered. Safe vehicle pull-off areas should be provided at all historic markers. If safe pull-off areas cannot be provided, the County should consider relocating the markers to safer locations. To encourage safety, a list of the historical markers and their complete text could be provided on the County web site and other Eastern Shore tourism web sites.

Part 3. Appendices

(This section includes the Visions of the Villages of Willis Wharf & Oyster, the adopted plans of the incorporated towns in Northampton County, *The 2003 Northampton County Sensitive Natural Resource Areas Report and Recommendations*, and other appendices identified in Parts I and II of the Plan. The Town of Nassawadox Comprehensive Plan is not available in digital format nor is the Vision of the Village of Willis Wharf. These 2 documents may be obtained directly from the Northampton County Dept. of Planning & Zoning upon request.)