



Camden County

NEW ENERGY. NEW VISION.

The 2035 Comprehensive Plan

Camden County Planning Influences and Opportunities Report

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with



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INTRODUCTION

This is the first report of the Camden County 2035 Comprehensive Plan process. The Comprehensive Plan is an opportunity for the Camden County community, as a whole, to create a common vision for the future by identifying community concerns and aspirations and creating an action plan to achieve the vision. This plan will carry forward and update the existing Advanced Core CAMA Land Use Plan adopted by the Camden County Board of Commissioners on April 4, 2005.

The comprehensive planning process includes three main phases of work:

1. Identifying Planning Influences and Opportunities
2. Developing a Community Vision
3. Constructing a Policy Framework and Implementation Plan

This report is part of the first phase of work – identifying planning influences and opportunities. The content of this report comes from stakeholder interviews, a tour of the community, and review of existing plans, studies, and other community documents that relate to community planning.

There are many planning issues that have been identified through various studies and plans. This report takes the first step in this process by synthesizing these issues and identifying potential key influences for focus in the plan. Specifically, this report includes three sections:

- * Part 1: Summary of Planning Initiatives
- * Part 2: Summary of Existing Conditions
- * Part 3: Summary of Key Planning Influences and Opportunities



Camden County's future lies in its expansive natural and cultural resources.

PART 1: SUMMARY OF PLANNING INITIATIVES

This section discusses previous and current planning initiatives that are important to include as part of the comprehensive planning process.

Planning initiatives are divided into three categories: land use and infrastructure, economic development, and comprehensive transportation plan. These planning initiatives provide the foundation for developing the plan.

A few plans are discussed later in Part 2: Summary of Existing Conditions that are pertinent to detailed existing conditions discussions.

LAND USE AND INFRASTRUCTURE

Land use and environmental policy documents summarized in this section include:

- * 2005 Advanced Core CAMA Land Use Plan
- * Smart Growth Scorecard
- * Camden County Hazard Mitigation Plan
- * Long Range Water and Sewer Service Plan
- * CAMA Sea Level Rise Policy

2005 ADVANCED CORE CAMA LAND USE PLAN

Camden County adopted an Advanced Core CAMA Land Use Plan on April 4, 2005. This plan serves two key purposes: to comply with state planning requirements for the CAMA (Coastal Area Management Act) as certified by the Coastal Resources Commission, and to provide a blueprint plan for land use in the

county through a vision, policy framework, future land use plan, and implementation strategies to achieve the county's vision.

This plan actually exceeds the basic CAMA requirements and is certified as an "Advanced Core Plan" due to its inclusion of additional sections on hazard mitigation and post-storm recovery plans, future land suitability analyses, stormwater management analyses, village area and corridor studies and plans, and resource conservation management action plan/policies for non-village corridor areas.

The CAMA plan is organized into eight key sections:

- * Introduction
- * History
- * Regional Setting
- * Camden County Concerns and Aspirations
- * Analysis of Existing and Emerging Conditions (including analyses of population, housing, economy, natural systems, land use and development, community facilities/services, land suitability, current plans, policies, and regulations, and future demands)
- * Plan for the Future
- * Tools for Managing Development
- * Hazard Mitigation, Post Recovery, and Evacuation Plans

One of the topics to be discussed early in this planning process is whether this is a user-friendly organization that should be carried forward in the new comprehensive plan.

The key growth related issues identified in the plan include:

- * Improving infrastructure
- * Controlling growth, especially in northern Camden County from Chesapeake, Virginia and along U.S.17
- * Controlling growth along U.S. 158 and N.C. 343
- * Providing better educational opportunities to residents

The plan sets a vision to:

- * Maintain rural and cultural heritage through protection of natural resources and quality of life
- * Improve infrastructure
- * Expand recreational opportunities
- * Actively pursue industrial and economic development
- * Improve and protect village areas
- * Maintain educational quality

Between 2000-2007, Camden experienced a significant increase in population from migration to the county from other parts of the state, southern Virginia and the nation. This growth has impacted the fiscal health of the community and the demand for a high quality of life through public facilities and services.

This comprehensive planning process will address these trends and build on the 2005 CAMA planning effort. The vision, goals, policies, and implementation strategies of the CAMA plan will be reviewed for their current relevance and appropriateness. Those that are relevant and have not been fully addressed will be carried forward and those that are no longer relevant or have been addressed

through implementation strategies will be taken out.

The new plan will include a new vision that describes that ideal state of the county in 2035. To implement this vision, the plan will likely include additional key issues and new goals, policies, and strategies for implementing the new community vision.

SMART GROWTH SCORECARD

In 2007, the Smart Growth Leadership Institute partnered with Camden County to develop a Smart Growth Project Scorecard and Design Parameters for the County. The Smart Growth Project Scorecard is designed to assist Camden County in evaluating the merits of proposed development projects within the context of a citizen and stakeholder participation process.

The Scorecard is a tool the community can use to identify concerns about proposed projects during the public review period. The Design Parameters assist with evaluation of specific design aspects of plans relative to Smart Growth principles. The 10 principles of Smart Growth used to develop the Scorecard and Design Parameters are:

- * Provide a Variety of Transportation Choices
- * Mix Land Uses
- * Create Range of Housing Opportunities and Choices
- * Create Walkable Neighborhoods
- * Encourage Community and Stakeholder Collaboration
- * Foster Distinctive, Attractive Communities with a Strong Sense of Place

- * Make Development Decisions Predictable, Fair, and Cost Effective
- * Preserve Open Space, Farmland, Natural Beauty and Critical Environmental Area
- * Strengthen and Direct Development Towards Existing Communities
- * Take Advantage of Compact Building Design and Efficient Infrastructure Design

The Scorecard includes 41 evaluation criteria under 10 categories:

- * Location of the project
- * Provision of Services (or lack thereof) and the Effects of Government Expenditures
- * Density and Compactness of Plan
- * Diversity of Uses Within and Surrounding the Project
- * Diversity (Both in Size and Price Range) of Housing Within and Surrounding the Project
- * Accessibility of the Project
- * Mobility of within the Project and Connectivity to Adjacent Developments, the District, and Region
- * Character and Design of Project
- * Environmental Protections and Considerations
- * Community and Local Development Needs Fulfilled by Project

This scorecard is used today as a tool for discussing smart growth objectives with developers of proposed projects in Camden County. Planning staff prepare a scorecard for projects seeking review by the Planning Board and Board of County Commissioners. The

scorecard is not binding, but provides a good snapshot of how projects will work, or not work, to achieve smart growth objectives and is tool that decision-makers can use when evaluating projects.

CAMDEN COUNTY HAZARD MITIGATION PLAN

Prepared in partnership with the North Carolina Division of Emergency Management, the 2006 Hazard Mitigation Plan sets out to minimize the risk of and adverse consequences of disasters in the County. The plan assesses the community’s vulnerability to both natural and technological hazards and provides steps to prepare for and prevent adverse impacts before disaster strikes. The plan also serves as a guide for effective disaster recovery efforts.

The process and plan are broken down to five key parts:

- * Hazard identification and analysis – identifies potential hazards for Camden County
- * Community vulnerability assessment – discusses the potential risks of these hazards
- * Mitigation capabilities assessment – describes the county’s capacity to mitigate disasters
- * Community goals – outlines keys goals for hazard mitigation
- * Hazard mitigation strategy – includes objectives and strategies for implementing the plan

Due to its proximity to the coast of North Carolina, Camden County is vulnerable to several hazards that can threaten lives and property. The most critical threats include:

- * Hurricanes and tropical storms – 42% annual chance that one of these will affect the county
- * Floods – flooding occurs as a result of flash flooding or general floods that are longer term events (67% of the County lies in the floodplain)

Through its land use plans and zoning ordinances, building codes and inspections, septic tank regulations, and floodway regulations, Camden County has established controls to reduce the potential impacts of natural and technological hazards. Mitigation measures outlined in the Hazard Mitigation Plan that have a direct relationship with this planning effort include:

- * Public land acquisition of areas prone to disaster to better control development and reduce risk
- * Using preferential tax rates to encourage development in appropriate areas and discourage it in hazard-prone areas
- * Documenting all structures that lie within the floodplain as well as repetitive losses to better evaluate trends
- * Adopting a stormwater control ordinance and a soil and sedimentation control ordinance
- * Adopting policies to balance economic development efforts with protection of natural resources and fragile areas
- * Amending zoning ordinances to minimize risk of contamination of groundwater resources by limiting underground chemical and gasoline storage

The Pasquotank-Camden-Elizabeth City Emergency Management Office is currently updating the 2006 Plan. Coordination between the two planning efforts will ensure that new policy directions for the Hazard Mitigation Plan will be incorporated and taken into account in this planning process.

LONG RANGE WATER AND SEWER MASTER PLAN

In 2010, Camden County contracted with McGill Associates to prepare a long-range water and sewer master plan for the County.

The plan reveals that economic development efforts will be significantly hindered unless the County initiates expansion of its sanitary sewer service area dramatically. The key challenges for expanding sewer service, as identified by the report, are geography and finances.

The geographic challenge is that the needs for sewer will likely occur in three clusters that are sufficiently separated. The transmission of raw sewage over distances of 10-15 miles results in wastewater treatment plant operational and compliance problems and therefore a centralized sewer system in Camden County does not seem to be a feasible solution. Three separate treatment facilities are likely needed.

The financial challenge is that wastewater treatment capacity should be located near its source, which means that new facilities will require both a large initial capital outlay and a minimum density of connections to remain economically viable. Limited funding is available, making the development of three separate systems a significant challenge for the County. In addition, low population densities throughout the County will provide limited opportunities for a dense customer base to make the investment viable.

These findings will likely be a key planning factor when developing infrastructure and land use policies for the comprehensive plan. It is critical to ensure that land use is coordinated with the provision of infrastructure over the long-term.

CAMA SEA LEVEL RISE POLICY

The North Carolina Coastal Resources Commission is developing a formal sea level rise policy for CAMA communities. The draft policy statement “recognizes that sea-level rise is a pervasive and persistent hazard that must be incorporated into the coastal program in order to address the implications of the expected continuing rise in water levels, along with the resulting magnification of hazards, disruption and losses that such increases will bring to coastal communities, economies, and ecosystems.”

The goal of CAMA’s sea level rise policy is to establish a planning framework for adaptation and improved resilience to rising sea levels. This policy puts a focus on education, not regulation, and will likely be more of a tool for local governments to incorporate sea level rise planning at the local level.

One key draft policy consideration is that that the impacts of sea level rise are not expected to be experienced consistently across coastal communities due to differences in topography. Local land use planning should take into account the expected sea level rise projections for particular areas in the County. The policy document also encourages local public infrastructure and private developments to be designed to withstand future hazards and to accommodate the impacts of sea-level rise.

These draft policies are currently being reviewed by CAMA communities. A formal policy document will be proposed for addition

in the State Administrative Code once the public review period has closed and feedback has been incorporated.

ECONOMIC DEVELOPMENT

Land use and environmental plans summarized in this section include:

- * Camden County 21st Century Community Strategic Plan
- * Camden County / US 17 Corridor Master Plan
- * Green Industrial Park Feasibility Study

CAMDEN COUNTY 21ST CENTURY COMMUNITY STRATEGIC PLAN

In response to new population growth putting a burden on government services and limited sources of public revenues for capital projects, Camden County received designation as a 21st Century Community in 2008 by the North Carolina Department of Commerce.

This initiative works with economically challenged counties to develop strategic economic development plans and provides preferential grant assistance from certain state funding sources. The objective of the initiative is to build a skilled workforce ready for the jobs of tomorrow and to promote economic development efforts that build on the existing strengths of each community.

The 21st Century Community Strategic Plan for Camden County was developed as part of a two year planning project led by a committee of residents, business owners, and interested stakeholders. The mission of the committee was to “develop a sustainable economic development plan that promotes targeted business and industry growth in an effort to create jobs, increase revenue through a

diversified tax base and enhance the quality of life in Camden County.”

A SWOT (strengths, weaknesses, opportunities, and threats) analysis was conducted as part of this planning effort. The analysis revealed the following about Camden County:

- * **Strengths:** location in Hampton Roads region, population growth, quality of life, good schools, agriculture, abundant land
- * **Weaknesses:** lack of infrastructure, limited tax base, lack of amenities, not capitalizing on recent population growth
- * **Opportunities:** development interest, outdoor sports, agriculture, defense industry, green industry park
- * **Threats:** Outlying Land Field (OLF), national recession, environmental degradation

The plan focuses on four key areas: addressing how county government policies affect business, improving economic development products, enhancing marketing and communication of the county, and developing the county’s eco-tourism industry.

The plan includes more than 60 action strategies for implementation. Many of these were addressed during development of the plan and several have been implemented since its adoption:

- * Initiating a comprehensive plan update to identify new opportunities for denser developments
- * Creating a business directory
- * Highlighting economic development efforts and marketed properties on the county’s website

- * Developing a master plan for green business park and marketing efforts to potential tenants
- * Hiring an economic developer
- * Developing a new county brand

Given limited staffing and funding capacities of the county to carry out the plan, partnerships are essential for achieving many of the plan goals, especially those that require significant expenditures to implement, such as new county water and sewer infrastructure and a new community center.

CAMDEN COUNTY/US 17 CORRIDOR MASTER PLAN

The purpose of the US 17 Corridor Master Plan is to chart a different course for attracting and fostering new job creating businesses. Years of constant residential growth without growth in employment has taxed the County and led to a scarcity of revenues and business opportunities in Camden County. This plan seeks to find new ways to promote economic development without sacrificing the rural character and natural beauty that have already attracted hundreds of new residents.

Additional infrastructure, marketing, and development efforts are recommended in the Master Plan and focus on the industrial and commercial aspects of the local economy along the US 17 corridor to allow business to “catch up” with the strong residential growth that existed prior to 2004.

The vision for the corridor is: “to create a thriving business community which will benefit the citizens of Camden County through local jobs, business opportunities, public revenue, and quality of life for its citizens.”

The plan sets out a strategy for the corridor focusing on economic development. The plan is organized by the following elements:

- * Site Inventory and Characteristics
- * Economic Development Organization and Involvement
- * Planning Elements
- * Ecotourism
- * Transportation
- * Stormwater
- * Potable Water
- * Sanitary Sewer
- * Wastewater Reclamation

Key recommendations of the plan address planning, infrastructure, improving business relationships, public facility needs, and specific strategies for site level development.

This is an important plan that will shape the future of Camden County. Incorporation of the results of this planning effort into the Comprehensive Plan is of the utmost importance.

GREEN INDUSTRIAL PARK FEASIBILITY STUDY

Made possible by a generous grant from the Golden LEAF Foundation, three UNC-Chapel Hill’s teams worked collaboratively to develop a study to evaluate the feasibility of a green industrial park in Camden County. The project focused on three areas: (1) business opportunities and regional development, (2) environmental impacts, and (3) governance and finance.

The County has moved forward with development of the Eco Industrial Park. Work

is underway to construct utility infrastructure and lay local roads. An economic development coordinator has been hired to assist in recruiting local businesses to the park.

Several key findings of the feasibility study are still considerations moving forward:

- * There are 6 key development clusters in the region: aluminum products, health services, metalworking, information services, business services, non-residential building products
- * There is a surplus of park acreage in region so the Eco Park will have to differentiate to compete
- * Most companies think Camden is too far to commute, but some considered moving to the Eco Park because of its green image
- * Infrastructure limitations are challenges to economic development in Camden County
- * Stormwater, wastewater, and environmental challenges are the biggest concerns for the park
- * Phasing is essential
- * Partnerships for governing the park increase the chance of project success
- * Need innovative site design to address stormwater and environmental concerns

COMPREHENSIVE TRANSPORTATION PLAN (CTP) PROCESS

Camden County is working with the North Carolina Department of Transportation (NCDOT) to develop a Comprehensive Transportation Plan for the County. A Comprehensive Transportation Plan is a multimodal plan that serves current and

projected travel demand in the County. Development of the plan considers a number of factors, including population and housing growth, economic conditions, and land use patterns, to develop a safe and effective transportation system. In addition to planning for roadway needs, the Comprehensive Transportation Plan plans for public transportation, rail, bicycles, and pedestrians.

The Comprehensive Transportation Plan process is being administered by the NCDOT in cooperation with the County and local citizens and stakeholders and was initiated more or less concurrently with the Camden County 2035 Comprehensive Plan process. The two planning processes will work together to share ideas, information, and resources.

PART 2: SUMMARY OF EXISTING CONDITIONS

Documenting existing conditions and long-range projections are essential for identifying shortfalls in public services, documenting opportunities for new development, and planning for capital improvements and future demands for public services. The following section documents the demographic data and development projections that will be used in the comprehensive plan update for Camden County. This summary of existing conditions provides the background data and statistical analysis that can serve as the foundational information for making policy decisions during the planning process.

Multiple sources of data are used to provide a robust analysis of existing conditions and projections for future development in Camden. While this planning effort is not a formal update to Camden County's CAMA plan, an effort is being made to be consistent with CAMA analysis requirements, as feasible. To remain consistent with the CAMA Core Plan requirements, certain data sources are included here. In addition, other similar data sources are also included to provide a point of comparison for the purpose of conducting thorough analyses. Sources of data are defined throughout this report and comparisons of data from different sources are discussed.

SUMMARY OF KEY EXISTING CONDITIONS

The following list includes key highlights resulting from analysis of existing conditions in Camden County.

- * **Key County Attributes:** Camden County's key attributes that spur growth are its location in the Hampton Roads region, the presence of significant natural resources, housing that is affordable for the County's workforce, a well-educated workforce, and excellent educational offerings.
- * **Healthy Historic Growth Rate:** The County had a very healthy rate of growth over the last decade, even with a 3.5 year moratorium initiated to enforce the County's Adequate Public Facilities Ordinance.
- * **Growth Expected to Continue at Slower Rate:** Growth projections for 2030 show that Camden will continue to experience growth in the coming decades, but is unlikely to maintain the rate of growth seen over the last decade. However, projections vary based on the methodology employed and the assumptions used.
- * **Housing Stock Lacks Diversity:** Approximately 99% of the housing stock in Camden County is either single-family residential detached, manufactured housing units, or modular housing. In keeping with national trends, diverse housing types are likely needed in Camden County to meet the needs of future residents.
- * **Residents Earn Incomes Comparable to Currituck Residents:** During 2005-2009, Camden County had a healthy median household income that was slightly less than Currituck County.
- * **Few Options for Employment, but Jobs are Diverse:** The number of employment opportunities in the County is limited. Employment in the County represents approximately half of the jobs

needed to employ the local workforce. There is an opportunity to expand local employment and provide new jobs “close to home.”

- * **Farming Operations Grew Over Last Decade:** The number of active farms increased between 2000 and 2007. The market value of agricultural products sold from Camden County farms was worth \$28.2 million in 2007.
- * **Commuting In and Out of County to Work is More Common than Not:** More County residents travel to Pasquotank County to work than stay in Camden County. Non-resident workers hold half of the jobs in Camden County, making cross-county commutes a regular occurrence.
- * **Natural Features are Abundant and Limit Development Potential:** Natural features are significant in Camden County, providing a rich green infrastructure system that limits development potential, but provides opportunities for nature based economic development.
 - o 21 out of 24 soil types in the County severely limit the use of septic systems and comprise 98% of the County land area
 - o Wetlands comprise 60% of the County land area
 - o Floodplains cover 67% of the County land area
 - o 26.29% of the County is designated as Significant Natural Heritage Areas that provide habitat to species of concern
- * **Transportation Infrastructure Limited to Vehicular Travel:** Camden County’s transportation system is limited in most areas to the road network. Alternative forms of travel, primarily for recreational purposes, may be desired by residents and visitors. A plan to construct a trail from the Dismal Swamp Park Visitors Center to connect to a Virginia trail to the north is being developed.
- * **Stormwater Management is a Critical Challenge:** Stormwater management in the County is an extremely challenging task. Low topographic relief, high groundwater tables, and poor draining soils limit the ability to employ best management practices and low-impact development techniques in the County.
- * **Raw Water Supply Needed to Meet Needs of Future Populations:** Potable water in Camden County is provided by two public systems: South Mills Water Association (SMWA) and the South Camden Water and Sewer District (SCWSD). The recently constructed interconnection between the two systems and expansion of the SCWSD addresses current demand, but projections for the future show that more potable water will be needed to serve future water users in the County.
- * **Wastewater Treatment is another Critical Challenge:** The South Camden Water and Sewer District provides sewer service to the Camden area and recently received a grant to supply portions of the South Mills core village area. New service to South Mills will address the current system from being underloaded, a problem that results in operational problems due to wastewater becoming septic in lines as it travels to the treatment plant. Many more septic systems throughout the County are inadequate and are expected to fail in the future. The Water and Sewer Master Plan identifies the need for three localized treatment systems to

expand needed service, but capital expenditures are significant and the lack of density likely means this solution may be cost prohibitive.

- * **Recreation is an Important Part of Economic Development:** Recreational opportunities in Camden County have expanded in recent years. Opportunities exist to expand further and provide a solid base for an eco-tourism industry sector in the County.
- * **Community Health Planning is Underway:** Community Health Action Plans are being developed to address critical health, lifestyle behavior, and community social issues in Camden County.
- * **Community Facility Needs Growing:** Several community facilities are identified as needs to meet current service levels: an administrative county office building, expansion of the SCWSD wastewater treatment plant, new high school, expansion of the sewer system from the Town Center to Belcross Community along U.S. 158, and new local recreational parks and facilities. As the County grows, demand for more facilities will likely grow too.

REGIONAL CONTEXT AND PLANNING AREA

Camden County is located in northeastern North Carolina and bordered to the north by the state of Virginia, Currituck County to the east, Pasquotank and Gates Counties to the west, and the Albemarle Sound to the south. Although outside the state borders, Camden County's economy draws from the Hampton Roads region (Norfolk, Chesapeake, Virginia Beach). It is a short drive from the North Carolina Outer Banks, Downtown Norfolk, and Chesapeake, Virginia.

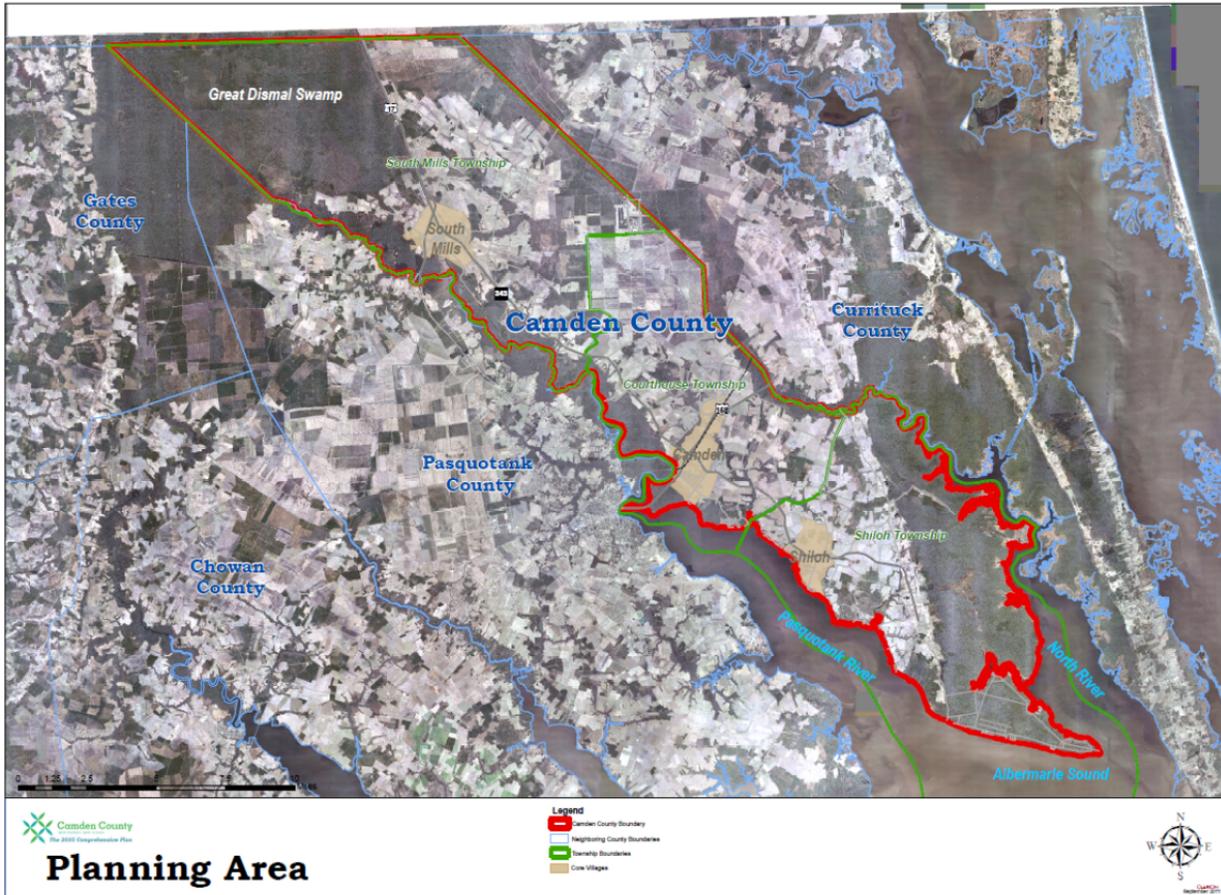
The county consists of approximately 150,557 acres or 242 square miles. No formally incorporated municipalities are located in Camden County. In 2006, the County approved an ordinance via referendum to create a unified government that incorporated the former townships of South Mills, Camden, and Shiloh into the County. These townships comprise the three core community areas: South Mills in the north, Camden in the center of the county, and Shiloh Village near the south end. The Great Dismal Swamp, the largest swamp in the nation, covers the northern section of the County.

Figures 1 and 2 illustrate the location of Camden County within the greater region.

Figure 1: Regional Context



Figure 2: Planning Area



POPULATION AND HOUSING

POPULATION – TRENDS AND PROJECTIONS

In compliance with CAMA planning standards, historical population trends and existing population estimates for Camden County are taken from the U.S. Census Bureau. For current estimates, the U.S. Census Bureau no longer conducts the “long-form” questionnaire as part of the decennial census, and instead has switched to a continuous monthly mailing of questionnaires that is known as the American Community Survey (ACS). Much of the demographic information shown below comes from the most recent (2005-2009) ACS.

Population Trends

As shown in Table 1, Camden County’s current population is estimated to be 9,980 and the annual average growth rate for the County between 2000 and 2010 was 3.78% - an extremely healthy rate of growth. Much of this growth occurred in the early part of the last decade and declined as part of the national recession and a moratorium on development that lasted from November 2003 to April 2007.

Comparing Camden’s growth rate to other counties in the Region R of North Carolina¹ shows that Camden’s growth outpaced all the other counties in the region. It also outpaced the region and state annual average growth rates. Camden County population growth exceeded former state projections. The 2005 CAMA Land Use Plan projected that Camden County’s population would be 8,414 by 2015. The 2010 population exceeded the 2015 projection by 1,566.

Table 1: Region R Population Estimates (1970-2010)

Jurisdiction	1970	1980		1990		2000		2010		2000-2010
	Pop.	Pop.	1970-1980 % Change	Pop.	1980-1990 % Change	Pop.	1990-2000 % Change	Pop.	2000-2010 % Change	Annual Average Growth Rate
Camden	5,453	5,829	6.9%	5,904	1.3%	6,885	16.6%	9,980	45.0%	3.78%
Chowan	10,764	12,558	16.7%	13,506	7.5%	14,526	7.6%	14,793	1.8%	0.18%
Currituck	6,977	11,089	58.9%	13,736	23.9%	18,190	32.4%	23,547	29.5%	2.61%
Dare	6,996	13,377	91.2%	22,746	70.0%	29,967	31.7%	33,920	13.2%	1.25%
Gates	8,525	8,875	4.1%	9,305	4.8%	10,516	13.0%	12,197	16.0%	1.49%
Hyde	5,570	5,873	5.4%	5,411	-7.9%	5,826	7.7%	5,810	-0.3%	-0.03%
Pasquotank	26,824	28,462	6.1%	31,298	10.0%	34,897	11.5%	40,661	16.5%	1.54%
Perquimans	8,352	9,486	13.6%	10,447	10.1%	11,368	8.8%	13,453	18.3%	1.70%
Tyrrell	3,806	3,975	4.4%	3,856	-3.0%	4,149	7.6%	4,407	6.2%	0.61%
Washington	14,039	14,801	5.4%	13,997	-5.4%	13,723	-2.0%	13,228	-3.6%	-0.37%
Region R	97,306	114,325	17.5%	130,206	13.9%	150,047	15.2%	171,996	14.6%	1.37%
North Carolina	5,084,442	5,880,095	15.6%	6,632,448	12.8%	8,049,313	21.4%	9,535,483	18.5%	1.71%

Source: US Census Bureau

Trends in Race and Ethnicity

Race and ethnicity trends in Camden County have been fairly consistent between 2000 and 2010. The percentage of white residents has increased slightly by 1.5%, the percentage of black or African American residents has decreased by 4.1%. Other races have held fairly constant. The percentage of Hispanic or Latino residents (of any race) has increased from 0.7% to 2.2%.

Table 2: Race and Ethnicity Trends (2000-2010)

	2000		2010		Change (2000-2010)	
	Total	% of Total	Total	% of Total	Total	% of Total
Total Population	6,885	100%	9,980	100%	3,095	100%
White	5,551	80.6%	8,193	82.1%	2,642	85.4%
Black or African American	1,189	17.3%	1,316	13.2%	127	4.1%
Asian, Native Hawaiian or Pacific Islander	41	0.6%	151	1.5%	110	3.6%
American Indian and Alaska Native	29	0.4%	33	0.3%	4	0.1%
Some Other Race	9	0.1%	74	0.7%	65	2.1%
Two or More Races	66	1.0%	213	2.1%	147	4.7%
Hispanic or Latino (of any race)	49	0.7%	215	2.2%	166	5.4%

Source: US Census Bureau

¹ North Carolina is divided into 18 regions for the purpose of coordinating planning efforts between neighboring counties. Camden County is located in Region R.

Trends in Age

The age distribution of County residents has remained fairly consistent between 2000 and 2010 with only minor changes. Since 2000, approximately 75% of the county’s population is under the age of 54, with a third (33%) of the population in the 35-54 age cohort. Approximately half of the County’s residents are old enough to be considered part of the local workforce. The median age has increased by one year over the decade, from 39 in 2000 to 40 in 2010.

Table 3: Trends in Age (2000-2010)

	2000		2010		Change (2000-2010)	
	Total	% of Total	Total	% of Total	Total	% of Total
0-14 years	1,398	20.3%	2,080	20.8%	682	22.0%
15-34 years	1,559	22.6%	2,121	21.3%	562	18.2%
35-54 years	2,217	32.2%	3,300	33.1%	1,083	35.0%
55 to 64 years	778	11.3%	1,196	12.0%	418	13.5%
65 to 74 years	551	8.0%	767	7.7%	216	7.0%
75 and over	382	5.5%	516	5.2%	134	4.3%
Total Population	6,885	100.0%	9,980	100.0%	3,095	100.0%
Median Age	39.1		40.1			

Source: US Census Bureau

Population Projections

CAMA requires that population projections included in CAMA plans come from the North Carolina State Office of Budget and Management. Current projections through the year 2030 from the state source are provided here. These projections are made using a trend analysis of growth during 2000-2010, focusing on the later years of this decade. Because of the 2003 moratorium and the effects of the national recession on development in Camden County, it is possible that these projections are conservative and may underestimate future population growth.

Table 4 shows the Region R population projections developed by the North Carolina State Office of Budget and Management through 2030. These projections show that Camden County is expected to increase its 2010 population by 16.2% in 2030 with an annual average growth rate of 0.75%. This growth rate is significantly lower than the growth rate seen in the last decade – 3.78%. The State Demographer notes that the projections are based on current trends and that if the economy improves the population projections would likely increase as well. The amount of increase in population growth above the current projections is a factor of local economic conditions and the potential for new land development.

Table 4: Region R Population Projections (2010-2030) – NC State Office of Budget and Management

Jurisdiction	2010	2020	2030	Projected Change 2010-2030	Projected % Change 2010-2030	2010-2030 Est. Annual Average Growth Rate
Camden	9,980	10,801	11,600	1,620	16.2%	0.75%
Chowan	14,793	13,563	12,363	(2,430)	-16.4%	-0.89%
Currituck	23,547	23,989	24,416	869	3.7%	0.18%
Dare	33,920	32,621	31,352	(2,568)	-7.6%	-0.39%
Gates	12,197	13,960	15,911	3,714	30.5%	1.34%
Hyde	5,810	5,609	5,403	(407)	-7.0%	-0.36%
Pasquotank	40,661	40,815	40,821	160	0.4%	0.02%
Perquimans	13,453	40,815	16,252	2,799	20.8%	0.95%
Tyrrell	4,407	4,512	4,624	217	4.9%	0.11%
Washington	13,228	13,073	13,050	(178)	-1.3%	-0.07%
Region R	171,996	199,758	175,792	3,796	2.2%	0.11%
North Carolina	9,535,483	11,039,342	12,463,244	2,927,761	30.7%	1.35%

Source: North Carolina State Office of Budget and Management

In addition to the state projections, the planning team has included projections from Woods & Poole Economics (2011), an independent corporation located in Washington, DC. The strengths of Woods & Poole economic and demographic projections are the comprehensive historical county database and the integrated nature of the projection model -- the projection for each county in the United States is done simultaneously so that changes in one county will affect growth or decline in other counties. Economic areas (EAs) are defined to aggregate contiguous counties to attempt to measure cohesive economic regions in the U.S. In Woods & Poole’s projections, Camden is included within the Virginia Beach-Norfolk-Newport News, VA-NC economic area.

Table 5 shows the population projections made by Woods & Poole Economics in 2011 through the year 2030. The highlighted numbers were generated by Woods & Poole and interim year data (2011-2015) was prepared by planning consultants using the Woods & Poole projections. These projections estimate that growth rates will be 1.8% over the next 19 years with a total population in 2030 of 13,994.

Table 5: Camden County Population Projections (2000-2030) - Woods & Poole

	2000	2010	2011	2012	2013	2014	2015	2020	2025	2030	Exponential
Cumulative	Census	Base Yr	1	2	3	4	5	10	15	20	Growth Rates
Population	6,885	9,980	10,161	10,346	10,534	10,726	10,921	11,950	12,973	13,994	1.8%

Preliminary Policy Questions

A key policy question for discussion is “What is the most appropriate source of projections for use in the comprehensive plan?” While being conservative may be appropriate given the current economic climate in the nation and around the world, it is also useful to plan for the “long-term,” meaning that the County might want to consider using larger population projections for estimating the amount of development and the types of new facilities and services that will be needed for future residents.

HOUSING

Housing Trends

Table 6 shows that Camden County added 1,131 new housing units between 2000 and 2010. Looking at tenancy statistics, while actual vacancies and occupied units have increased, vacancy rates and occupancy rates have maintained consistent over the last decade with approximately 90% of all units being occupied and 10% being vacant. Owner occupied housing makes up approximately 74% of all housing units and 16% is rental housing.

Table 6: Housing Statistics (2000-2010)

	2000		2010		Change (2000-2010)	
	Total	% of Total	Total	% of Total	Total	% of Total
Total Housing Units	2,973	100%	4,104	100%	1,131	100%
Vacant	311	10.5%	429	10.5%	118	10.4%
Occupied	2,662	89.5%	3,675	89.5%	1,013	89.6%
Owner-Occupied	2,219	74.6%	3,019	73.6%	800	70.7%
Renter-Occupied	443	14.9%	656	16.0%	213	18.8%

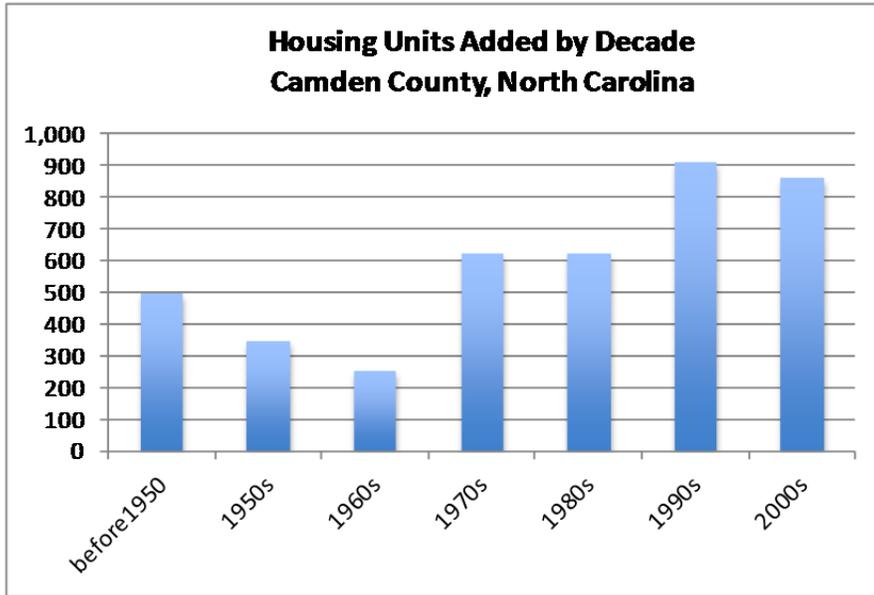
Source: US Census Bureau

Since 2000, Camden County has increased by an average of 113 housing units per year. Figure 3 indicates the estimated number of housing units added by decade in Camden County. Consistent with the nationwide decline in development activity, residential construction has also slowed in Camden County. During the past decade, there were fewer housing units added than in the 1990s.

Figure 3: Housing Units Added by Decade

Camden County, NC	
Total Population 2010	9,980
Total Housing Units in 2000	2,973
New Housing Units	1,131
Total Units 2010	4,104

From 2000 to 2010, Camden County added an average of 113 housing units per year.



Source: Table B25034, American Community Survey, 2005-2009.

As shown in Table 7, Camden County had 3,849 housing units in 2007. According to the U.S. Census Bureau, a household is a housing unit that is occupied by year-round residents. The weighted average household size in 2007 for all housing types was approximately 2.69 persons per household. In 2007, almost all the units in Camden County were defined by the U.S. Census Bureau as single-family units (including detached, attached, and mobile homes)² – 99%, and the remaining 1% was multifamily. The overall vacancy rate for all housing units was 9.5%. Per the U.S. Census Bureau, the estimated mean value of owner occupied housing in 2010 in Camden County was \$176,835.

² Due to sample size limitations for geographic areas like Camden County with a relative small population, the Census Bureau has consolidated categories. Single-family attached housing units (commonly known as townhouses) are now combined with detached single-family units. For single-family units (detached, attached, and mobile homes), the 2007 average was 2.68 persons per household. For multifamily housing, the 2007 average was 3.33 persons per household. However, the limited number of multifamily units in Camden County makes it difficult to obtain an adequate sample size, thus resulting in estimates with a large margin of error.

Table 7: Population and Housing Characteristics, 2007

Units in Structure	Renter & Owner			Housing Persons Per Vacancy		
	Persons	Hshlds	PPH	Units	Hsg Unit	Rate
Single Family	7,652	2,886	2.65	3,139	2.44	8.1%
Mobile Homes	1,580	555	2.85	667	2.37	16.8%
2 to 4 units	0	0		0		
5+ units and other	143	43	3.33	43	3.33	0.0%
Total	9,375	3,484	2.69	3,849		
				Vacant/Seasonal HU	365	

2007 Summary by Type of Housing	Persons	Households	Persons per Household	Housing Units	Persons Per Housing Hsg Unit	Housing Mix
Single Family	9,232	3,441	2.68	3,806	2.43	99%
Multifamily	143	43	3.33	43	3.33	1%
Subtotal	9,375	3,484	2.69	3,849		Vacancy
Group Quarters	0					Rate
TOTAL	9,375	3,484		3,849	2.44	9.5%

Source: 2005-2009 American Community Survey, U.S. Census Bureau.

Housing Development Permit Trends

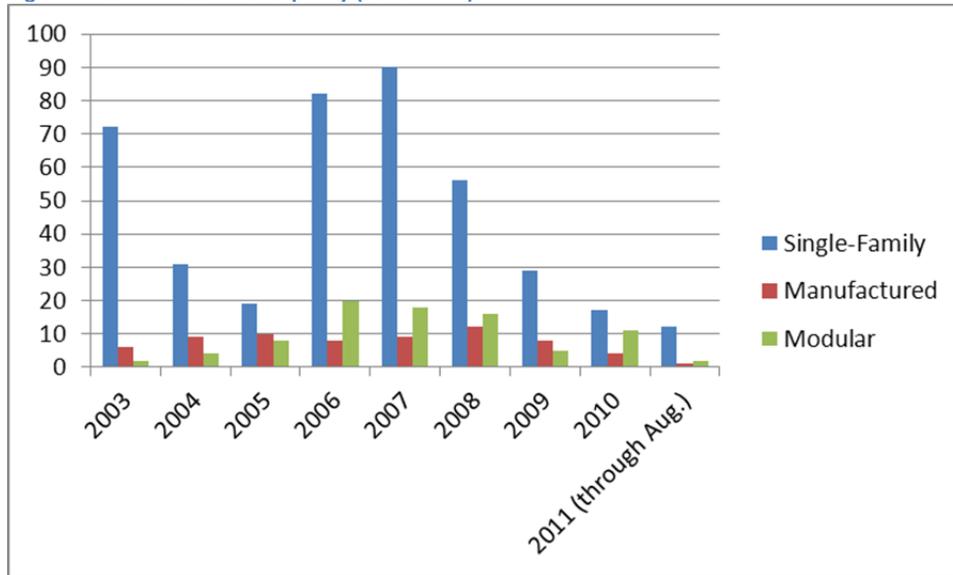
As shown in Figure 4, analysis of certificate of occupancy permit data for residential development (2003 to current) from the Camden County Planning and Community Development Department shows that a peak occurred in 2007 and has steadily declined as a result of the economic recession.

In total, 561 residential units (single-family detached, mobile home, or modular housing) received certificates of occupancy between 2003 and August of 2011 – 408 of which were single-family units. This evidence shows that single-family housing continues to be the predominant form of residential development in Camden County.

For that same time period, 942 building permits were issued.³ Because of the timing of development, it may mean that some units have received building permits and have not yet been built and received certificates of occupancy. These development projects are likely to move forward as the economy improves.

³ Units planned as part of the Camden Plantation development have not yet received building permits.

Figure 4: Certificates of Occupancy (2003-2011)



Housing, Population, and Job Projections

Based on Woods & Poole Economics analysis, detailed demographic data and job projections for Camden County through the year 2030 are shown in Figure 5. All data with color shading were obtained from Woods & Poole Economics (2011 projections) and interim year data were calculated by the planning consultant. Cumulative data are provided in the top section and annual increases at the bottom of the table.

Housing is expected to increase from 4,104 units in 2010 to 6,595 units in 2030, an increase of 2,491. The annual increase is expected to average 125 units per year, which is a slight increase from the trend of the past decade – 113 units per year.

Jobs in Camden County are expected to increase from 3,671 in 2010 to 4,797 in 2030, an increase of 1,126. Seeing job growth of this type will be dependent upon the ability for new development to come online in the County, which will be influenced by decisions on public infrastructure, development approvals, and other community factors.

Figure 5: Cumulative and Annual Projections for Population, Housing, and Jobs

	2000	2010	2011	2012	2013	2014	2015	2020	2025	2030	Exponential
Cumulative	Census	Base Yr	1	2	3	4	5	10	15	20	Growth Rates
Population	6,885	9,980	10,161	10,346	10,534	10,726	10,921	11,950	12,973	13,994	1.8%
Jobs	2,476	3,671	3,725	3,780	3,836	3,893	3,950	4,251	4,522	4,797	1.5%
Households	2,662	3,675	3,788	3,904	4,025	4,148	4,276	4,975	5,448	5,906	3.1%
Res Vacancy Rate	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	
Housing Units	2,973	4,104	4,230	4,360	4,494	4,633	4,775	5,556	6,084	6,595	
Jobs to Housing Rat	0.83	0.89	0.88	0.87	0.85	0.84	0.83	0.77	0.74	0.73	
Persons per Hshld	2.59	2.72	2.68	2.65	2.62	2.59	2.55	2.40	2.38	2.37	
Nonres Sq Ft in thousands (KSF)											SF/job
Retail / Restaurant		422	429	436	443	450	457	491	523	555	500
All Other Services		565	576	587	598	609	620	675	727	780	302
Industrial		413	416	419	422	425	428	447	462	476	433
Total		1,400	1,421	1,442	1,463	1,484	1,505	1,613	1,712	1,811	
											2010-2030
Annual Increase			10-11	11-12	12-13	13-14	14-15	19-20	24-25	Avg Anl	
Population			181	185	188	191	195	213	203	201	
Jobs			54	55	56	57	58	62	55	56	
Housing Units			126	130	134	138	142	166	104	125	
Retail/Restaurant KSF			7	7	7	7	7	6	8	7	
All Other Services KSF			11	11	11	11	11	11	12	11	
Industrial KSF			3	3	3	3	3	7	3	3	
Total Nonresidential KSF/Yr =>			21	21	21	21	21	24	23	21	

Preliminary Policy Questions

Projections show that more housing development is likely on the horizon for Camden County. Where this development occurs, the type of residential development that is constructed, the character of these new neighborhoods, and the way in which public services are provided to these developments are important considerations that should be addressed by the plan.

The lack of multifamily housing in Camden County is problematic for households looking for smaller units located in areas that can provide better opportunities for access to services and for more walkable environments. Limited mobility for seniors is becoming a significant problem, especially in vehicle-dependent communities. The comprehensive plan update should consider ways to provide more options for mixed-use activity centers that are conducive to walking and biking.

ECONOMY / AGRICULTURE

KEY ECONOMIC INDICATORS

Due to Camden County’s smaller population, economic reporting available through federal and state sources that can be used to compare Camden County with the state and surrounding counties is somewhat limited. Table 8 includes 2005-2009 American Community Survey data and 2010 NC Department of Commerce data that have been used to illustrate how Camden County is fairing economically in comparison to Currituck County and the state. Key 2010 data on local economic conditions for Camden County provided by the NC Department of Commerce include:

- * 2010 Median Household Income = \$46,786
- * 2010 Per Capita Income = \$21,612
- * 2010 Unemployment Rate = 8.2%
- * Total retail sales (including food and drink) for 2010 = \$17,200,000

The data in Table 8 show that Camden County’s median household income for 2010 was estimated to be slightly less than that of Currituck County. However, a breakdown of household income and benefits by households shows that Camden County had a higher percentage of households earning \$100,000-\$149,999 and the same percentage earning \$150,000-199,999. The poverty rate in Camden County (7.5%) was slightly higher than that found in Currituck County (6.8%).

Table 8: Key Economic Statistics for Camden, Currituck, and North Carolina

Key Economic Statistics	Camden		Currituck		North Carolina
	#	%		%	%
Civilian Labor Force, 2010 [1]	4,018		11,699		
Unemployment , 2010 [1]		8.2%		6.8%	
Median Household Income, 2010 [1]	\$ 46,786		\$ 49,876		
Income and Benefits by Household (2005-2009 average) [2]					
Less than \$10,000	160	4.6%		4.3%	8.7%
\$10,000 to \$14,999	141	4.0%		4.7%	6.4%
\$15,000 to \$24,999	293	8.4%		9.6%	12.2%
\$25,000 to \$34,999	521	15.0%		13.1%	12.0%
\$35,000 to \$49,999	380	10.9%		12.0%	15.3%
\$50,000 to \$74,999	703	20.2%		22.4%	18.7%
\$75,000 to \$99,999	556	16.0%		16.4%	11.2%
\$100,000 to \$149,999	626	18.0%		12.8%	9.7%
\$150,000 to \$199,999	71	2.0%		2.0%	3.0%
\$200,000 or more	33	0.9%		2.8%	2.9%
Percent of People with Incomes Below Poverty Level (2005-2009 average) [2]		8.2%		6.8%	

Sources: [1] North Carolina Department of Commerce - EDIS / Bureau of Labor Statistics, 2010 [2] US Census American Community Survey, 2005-2009 average

Table 9 provides a snapshot of the annual average employment by industry for Camden and Currituck Counties in 2010. As shown previously in Table 8, Camden County’s workforce totaled 4,018 in 2010, but during the same time period there were only 2,120 jobs in the County, approximately half of which are held by workers that live outside of Camden County. This is a trend that is also experienced in Currituck County, with a workforce of 11,699 and 5,271 jobs in 2010. There is an opportunity to provide more employment opportunities “close to home” for workers living in Camden County.

Due to the fact that some industries have few reporting businesses, data for these industries has been suppressed to maintain confidentiality. This leaves an incomplete picture of the total employment in both Counties – 25% of employment in Camden County and 30.8% of employment in Currituck County is not identified for this reason.

For reporting businesses, the industry with the highest percentage of persons employed in Camden County was retail trade (19.6%), followed by administrative and waste services (14.6%), educational services (14.5%), construction (6%), agriculture, forestry, fishing and hunting (5.6%), and professional and technical services (5.1%).

As a point of comparison, Currituck County’s top employing industries in 2010 (not including suppressed industry data) were retail trade (18.3%), accommodation and food services (10.2%), real estate rental and leasing (9%), construction (6%), and administrative and waste services (5.8%). Currituck County’s employment is clearly based in tourism and tourism supporting industries.

Table 9: Employment and Wages by Industry for Camden and Currituck Counties (2010)

Employment / Wages by Industry	Camden			Currituck		
	2010 Annual Employment	% of total 2010 Annual Employment	2010 Average Weekly Wage	2010 Annual Employment	% of total 2010 Annual Employment	2010 Average Weekly Wage
Agriculture Forestry, Fishing & Hunting	119	5.6%	\$ 731	*	*	*
Mining	*	*	*	*	*	*
Utilities	*	*	*	*	*	*
Construction	128	6.0%	\$ 516.00	315	6.0%	\$ 615.00
Manufacturing	31	1.5%	\$ 893.00	47	0.9%	\$ 626.00
Wholesale Trade	*	*	*	*	*	*
Retail Trade	416	19.6%	\$ 319.00	964	18.3%	\$ 467.00
Transportation and Warehousing	38	1.8%	\$ 688.00	302	5.7%	\$ 1,329.00
Information	13	0.6%	\$ 725.00	13	0.2%	\$ 480.00
Finance and Insurance	23	1.1%	\$ 915.00	188	3.6%	\$ 1,036.00
Real Estate and Rental and Leasing	18	0.8%	\$ 484.00	476	9.0%	\$ 533.00
Professional and Technical Services	108	5.1%	\$ 1,090.00	*	*	*
Mgt of Companies/Enterprises	*	*	*	*	*	*
Administrative and Waste Services	309	14.6%	\$ 1,537.00	307	5.8%	\$ 431.00
Educational Services	307	14.5%	\$ 672.00	11	0.2%	\$ 366.00
Health Care and Social Assistance	*	*	*	266	5.0%	\$ 505.00
Arts, Entertainment, and Recreation	*	*	*	203	3.9%	\$ 410.00
Accommodation and Food Services	*	*	*	537	10.2%	\$ 296.00
Other Services Ex. Public Administration	63	3.0%	\$ 672.00	*	*	*
Public Administration	11	0.5%	\$ 539.00	18	0.3%	\$ 526.00
Unclassified	1	0.0%	\$ 1,121.00	*	*	*
Total Suppressed Employment *	535	25.2%		1,624	30.8%	
Total Employment for All Industries	2,120	100.0%	\$ 770.00	5,271	100.0%	\$ 593.00

** Denotes a category that has suppressed data. To maintain confidentiality, the Bureau of Labor Statistics suppresses data for industries with three or fewer reporting businesses.*

Source: NC Department of Commerce / US Bureau of Labor Statistics (2010)

Table 10 shows the distribution of employment for residents of Camden County as compared to Currituck County and the state for the average of years 2005-2009. Generally speaking, the percentages of civilian employment by industry for Camden and Currituck Counties are relatively similar and show a fairly diverse employee base. The top five industries that employed Camden County residents in 2010 were educational services, health care, and social assistance (18.5%), construction (13.3%), retail trade (10.7%), public administration (10.4%), and arts, entertainment, and recreation, and accommodation and food services (10.2%). The percentage of construction and retail trade employment as a total portion of civilian employment is less in Camden than in Currituck. Both counties have a low percentage of manufacturing workers in comparison to the state overall. Camden County’s proportion of public administration employment is significantly higher than Currituck County’s.⁴

There is a mismatch of jobs and employees in the County, which provides opportunities to expand industries that have local skilled workers residing in Camden County and local economic development potential – hospitality services, ecotourism, recreation, and medical and healthcare services.

Table 10: Civilian Employment by Industry for Camden, Currituck, and North Carolina (2005-2009 estimates)

Civilian Employment by Industry	Camden		Currituck	North Carolina
	#	%	%	%
Agriculture, forestry, fishing, hunting, and mining	127	3.0%	2.4%	1.4%
Construction	561	13.3%	18.3%	8.6%
Manufacturing	279	6.6%	6.4%	13.9%
Wholesale trade	109	2.6%	2.6%	3.1%
Retail trade	453	10.7%	13.7%	11.5%
Transportation and warehousing, and utilities	138	3.3%	4.1%	4.5%
Information	67	1.6%	0.9%	2.0%
Finance and insurance, and real estate rental and leasing	331	7.8%	6.5%	6.6%
Professional, scientific, and management, and administrative and waste management services	400	9.5%	7.4%	9.0%
Educational services, and health care and social assistance	781	18.5%	16.4%	22.1%
Arts, entertainment, and recreation, and accommodation and food services	430	10.2%	10.1%	8.4%
Other services, except public administration	112	2.7%	4.8%	4.7%
Public administration	438	10.4%	6.4%	4.2%

Source: American Community Survey 2005-2009

Shown in Table 11, the top five largest employers in Camden County are the Camden County Board of Education, a trade and transportation company, Xe (the Blackwater Lodge and Training Center), EP Management Services, and Camden County government.

⁴ Currituck County was estimated to have a labor force of 13,046 (2005-2009).

Table 11: 2011 (Q1) Camden County Largest Employers

Rank	Company Name	Industry	Employment Range
1	Camden County Board Of Education	Education & Health Services	250-499
2	Rainbow Shops/Emphasis/Ups N Downs	Trade, Transportation & Utilities	250-499
3	Blackwater Lodge & Training Center	Education & Health Services	100-249
4	Ep Management Services Llc	Professional & Business Services	100-249
5	County Of Camden	Public Administration	50-99
6	Caci Technology Inc	Professional & Business Services	50-99
7	Northeastern Community	Education & Health Services	50-99
8	L-3 Communications	Professional & Business Services	Below 50
9	Burkes Outlet Stores Sc Inc	Trade, Transportation & Utilities	Below 50
10	Command Decisions Systems & Solutio	Professional & Business Services	Below 50
12	Swain & Temple Inc	Natural Resources & Mining	Below 50
12	C & L Concrete Works Inc	Construction	Below 50
13	George Woods Farms Inc	Natural Resources & Mining	Below 50
14	Shiloh Shopping Center Inc	Trade, Transportation & Utilities	Below 50
16	Sampson-Bladen Oil Co Inc	Trade, Transportation & Utilities	Below 50
16	Hyman & Robey, Pc	Professional & Business Services	Below 50
17	Geo. Raper & Son Inc	Construction	Below 50
19	Sikorsky Support Services Inc	Manufacturing	Below 50
19	Star Services, Inc., Dba Pestar	Professional & Business Services	Below 50
25	U S Postal Service	Trade, Transportation & Utilities	Below 50
25	Itza Boutza Pizza	Construction	Below 50
25	Colony Tire Corporation	Trade, Transportation & Utilities	Below 50
25	Tidewater Agronomics Inc	Professional & Business Services	Below 50
25	Buddy Gregory's Body Shop Inc	Other Services	Below 50
25	High Tech Welding Inc	Other Services	Below 50

Source: North Carolina Employment Security Commission, Quarterly Census of Employment and Wages

AGRICULTURAL INDICATORS

Agriculture remains an active component of Camden County's local economy. Shown in Table 12, the results from the 2007 U.S. Department of Agriculture's Agricultural Census show that the number of farms actually increased in Camden County from 70 in 2002 to 76 in 2007. The total land in farming use is 55,181 acres, approximately 37% of the total land area. The market value of products sold from Camden County farms increased \$8,519,000 from 2002 to 2007.

Table 12: 2007 Agricultural Census for Camden County

	2002	2007
Number of Farms	70	76
Land in Farms		55,181
Average Size of Farm		726
Market Value of Products Sold	\$ 19,713,000	\$ 28,232,000
Crops		\$ 27,911,000
Livestock		\$ 321,000

Source: USDA 2007 Census of Agriculture

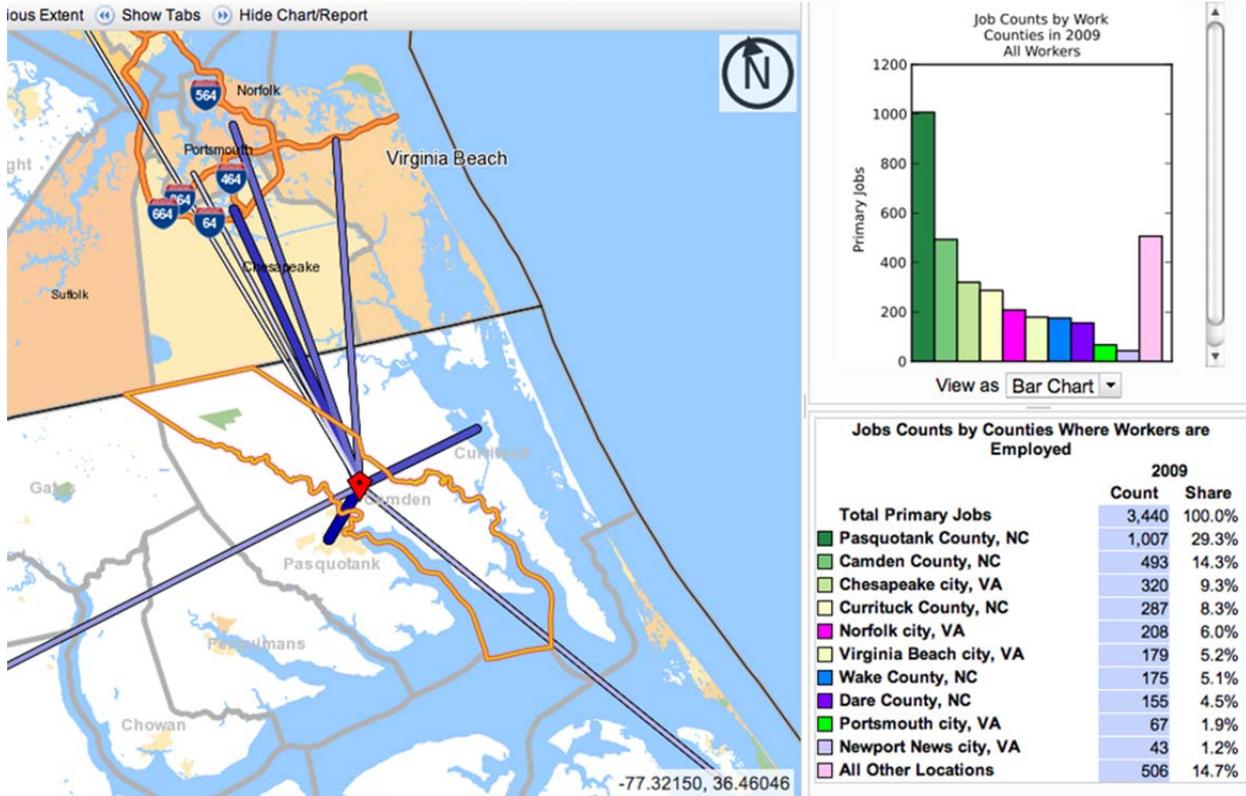
The majority of the market value of crops sold is attributed to three products: (1) grains, oilseeds, dry beans, and peas, (2) soybeans, and (3) corn. Camden County ranks 12th in the state for production of grains, oilseeds, dry beans, and dry peas, 11th in the state for vegetables harvested for sale, and 2nd in the state for potato production. A limited amount of livestock is raised in the county for agricultural production purposes.

WORK COMMUTES

The U.S. Census Bureau's web application "OnTheMap" provides data and graphic displays to indicate commuting patterns and job locations. As shown below, approximately 23.6% of workers living in Camden County commute north to jobs located in Chesapeake, Norfolk, or Virginia Beach. In 2009, there were 707 Camden residents working in these three Virginia communities. In comparison, only 493 Camden residents worked in Camden County, making Camden a "bedroom community" with approximately 86% of workers leaving for jobs in other jurisdictions.

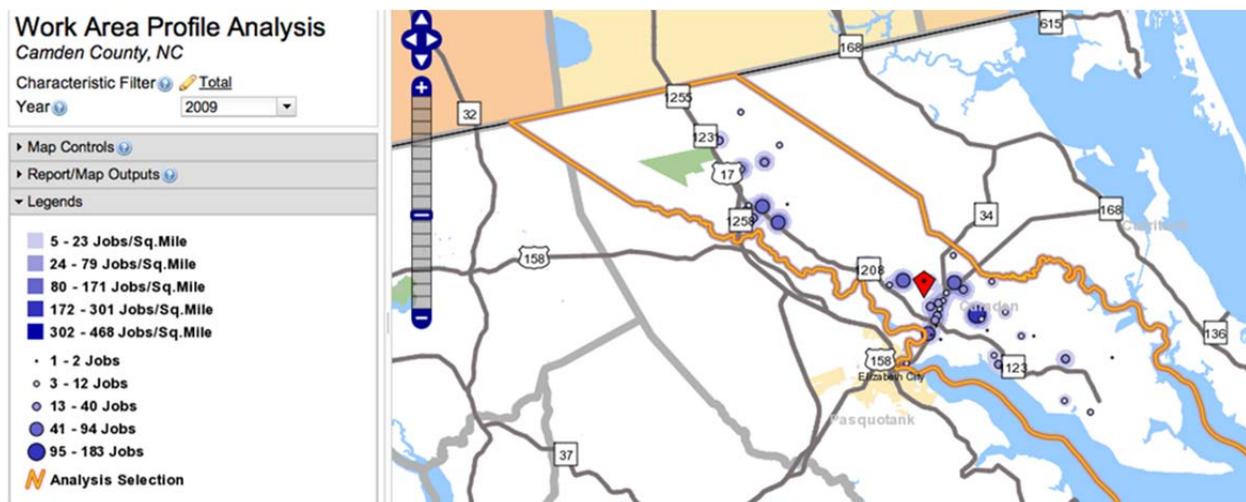
Because the real estate market is still in the midst of a major restructuring, it is difficult to know whether these trends will persist in the future. A big unknown is the long-term price of oil. As transportation costs increase, commuting to remote areas will become prohibitively expensive.

Figure 6: Commuting Job Counts by Places of Work (2009)



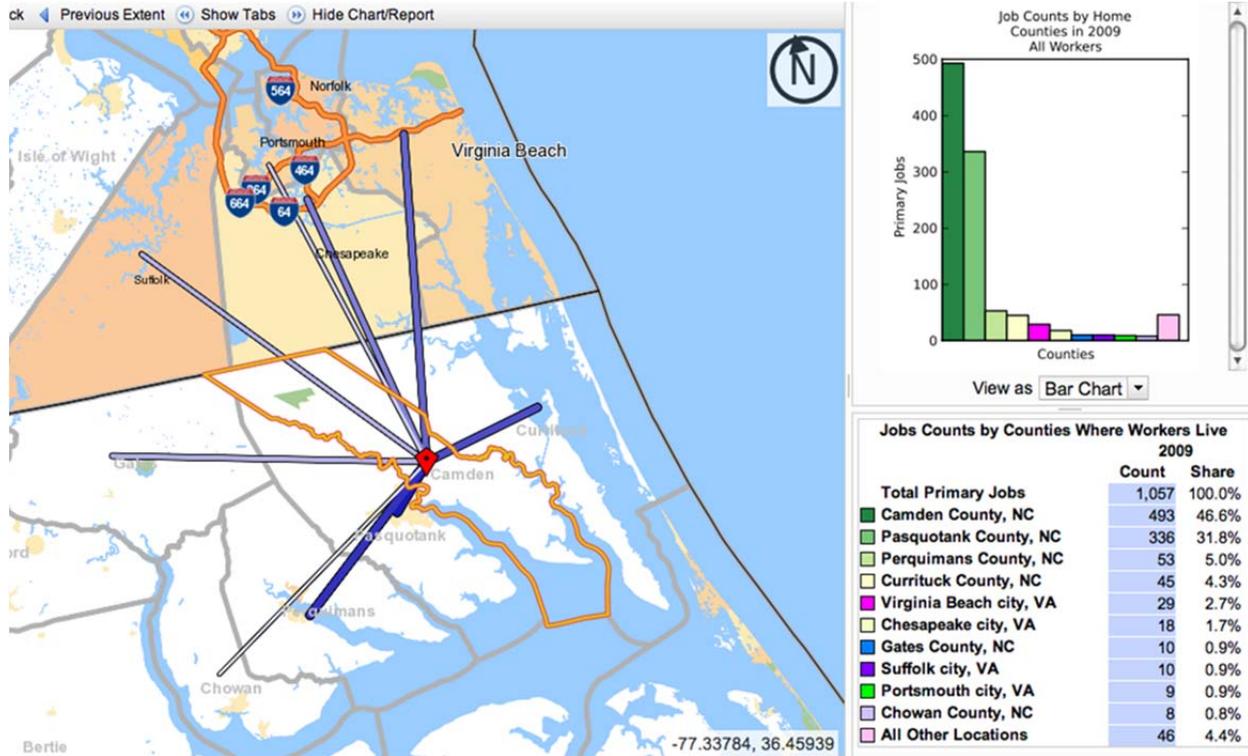
The approximate location of jobs within Camden County is indicated by the size of the blue dots on the map below. Given the proximity of significant military bases in the Virginia tidewater area, Camden might be able to attract defense-related industry to a north-Camden industrial park.

Figure 7: Job Clustering Profile Analysis for Camden County (2009)



In Camden County, there is a daily exchange of workers to and from adjacent counties. As shown below, non-resident workers hold approximately half of Camden’s jobs, with the most significant inflow coming from Pasquotank County.

Figure 8: Work Commutes by Counties of Residence



INDUSTRIAL AND BUSINESS PARK SITES

Camden County currently has three locations for focused economic development activity.

- * **Camden Business Park** is located on U.S. 158 East. This property provides 35 development sites, two of which are currently developed and operational as retail establishments. The site suffers from a lack of sewer service and plans to extend sewer are being considered.
- * **Camden Town Center** – The Town Center will provide much needed access to medical and pharmaceutical services. Located at the crossroads of N.C. 343 and U.S. 158 near the Camden County government facilities and historic courthouse, this development is slated to be a multi-building mixed-use development that will include four retail/office buildings, three out parcels, and related open spaces, parking and infrastructure. The project is currently on hold.
- * **Eco-Industrial Park** – The newest of Camden County’s industrial sites, the Eco Park is located at the north end of U.S. 17. The site is planned to provide space to innovative green industries that seek to incorporate sustainability principles into site development and facility construction. Organized around a 30 acre lake to handle stormwater runoff, the Eco Park includes 19 lots sized between two and four acres. Water and sewer infrastructure is in place for these sites, and grant money from the NC Department of Transportation is in place to prepare the local roads for the site. The specific plan for tenancy and ownership of sites is currently under consideration.

PROJECTED EMPLOYMENT

As discussed previously in the Housing section of this report, jobs in Camden County are expected to increase from 3,671 in 2010 to 4,797 in 2030, an increase of 1,126. Seeing job growth of this type will be dependent upon the ability for new development to come online in the County, which will be influenced by decisions on public infrastructure, development approvals, and other community factors.

PRELIMINARY POLICY QUESTIONS

The Camden County 21st Century Community Strategic Plan identifies several key businesses that should be recruited to Camden County: a grocery store, restaurants, pharmacy, eco-tourism outfitters, hotel, manufacturing, and medical facilities. The industrial and business parks are obvious locations for new manufacturing facilities. What incentives are needed to bring businesses to these locations should be considered by the comprehensive plan. The appropriate locations for these desired retail and service establishments should also be identified in the plan, along with critical plans for providing necessary public infrastructure to foster business development.

NATURAL SYSTEMS AND HAZARDS

The current CAMA Advanced Core Plan includes detailed analysis and descriptions of natural features, systems, and hazards for Camden County. The intent of this comprehensive planning effort is to carry forward this information and use it to as a basis for making future land use and conservation policy decisions. This section here provides a summary of the analysis and descriptions found in the CAMA plan.

NATURAL ENVIRONMENT

Camden County is located in the Albemarle region of the Lower Coastal Plain and the Pasquotank River basin, which is part of the Albemarle-Pamlico Estuarine system, the second largest estuarine system in the nation. The County slopes from north to south, never exceeding a 12% slope. The County receives drainage from the Northwest River, canals leading out of the Great Dismal Swamp, and the Pasquotank River. Figure 9 illustrates the important environmental areas and features found in Camden County and described below.

Soils

Twenty-one of the 24 soil types found in Camden County have severe limitations for septic tank usage and the remaining three have moderate limitations but can accommodate conventional septic tank systems. These three soil areas are located in the core village areas and comprise approximately 1.79% of the total area of Camden County, leaving the vast majority of land with soils that can offer limited opportunities for septic systems.

Wetlands

Wetlands, lands covered by water or that have water logged soils for long periods during the growing season, comprise over 60% of Camden County's land area. Development of federally designated 404 wetlands requires permitting through the Army Corps of Engineers. This fact, coupled with development permitting requirements mandated by the state and administered by the Division of Coastal Management under the Coastal Resources Commission, leaves much of the County's land base subject to development controls from government agencies outside of the County.

Floodplains

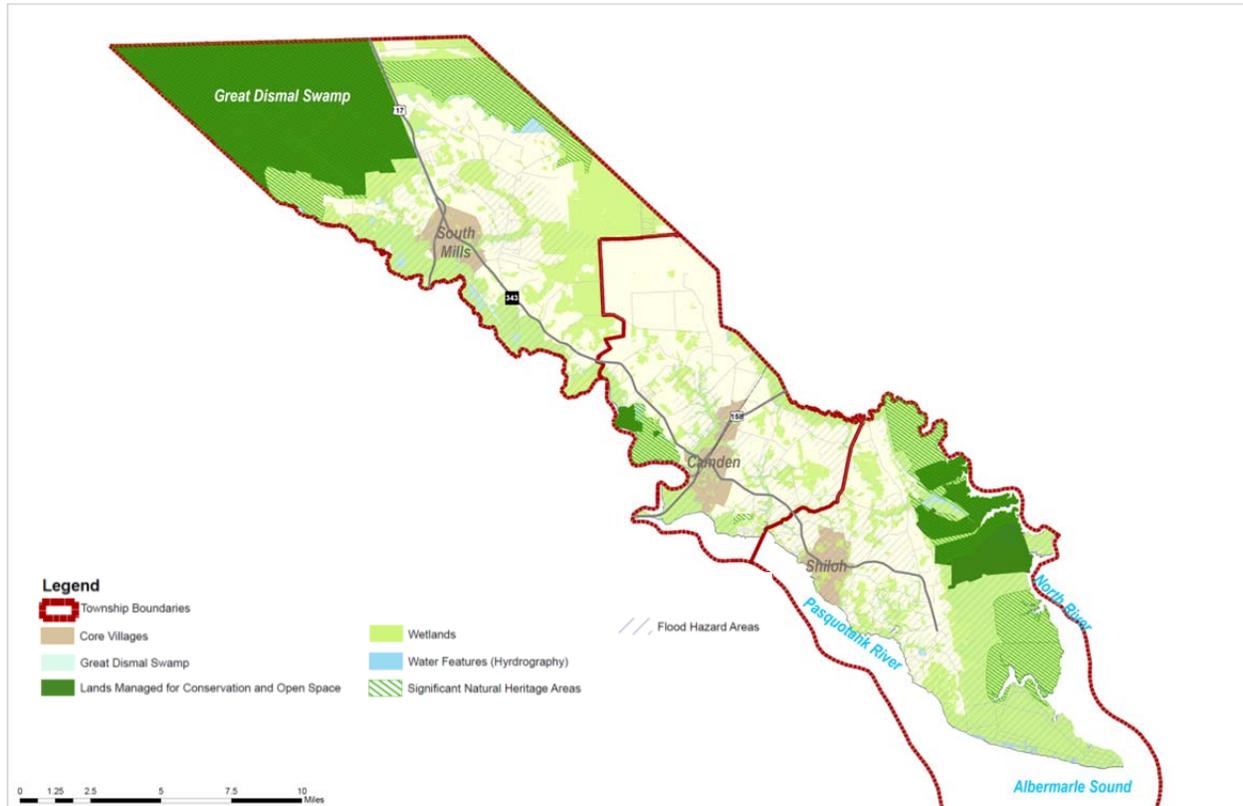
The low elevations, hydric soils, and presence of surface waters collectively create a system of floodplains throughout the County. Flood Insurance Maps (FIRMS) prepared for Camden County and adopted by the County Board of Commissioners in 2004 estimate that approximately 67% of the County is located in a flood hazard area of either Zone A, Ae, AEFW, or Shaded X designations. The vast majority of flood hazard areas are the A and AE designations – these designations require mandatory flood insurance be purchased by property owners. A non-encroachment zone, established by the Federal Emergency Management Agency, identifies low-lying areas where development is prohibited. Currently, the Federal Emergency Management Agency and the State of North Carolina are conducting flood modeling and may be issuing new floodplain maps within the next year and a half. As feasible, and when new data becomes available, it will be incorporated into plan analyses.

Protected Lands and Natural Heritage Areas

Portions of the Great Dismal Swamp National Wildlife Refuge and the Great Dismal Swamp Natural Area are located in Camden County and are designated as protected lands and natural heritage areas. The North River Gameland, the Dismal Swamp Natural Area, Shipyard Landing Natural Area, Whitehall Shores Hardwood Forest, Broad Creek Marshes, and the North River Cypress Forest are also designated protected or natural heritage areas in Camden County. More than 39,000 acres of natural heritage areas lie within Camden County – 26.29% of the total land area of the County.

Listed endangered species that have habitat located within Camden County include the Red Cockaded Woodpecker and the Shortnose Sturgeon. The Bald Eagle and the American Alligator are threatened species. North Carolina lists the Virginia Least Trillium as an endangered species located in Camden County and the Carolina Grasswort as a threatened species.

Figure 9: Natural Areas and Features



Composite Environmental Conditions

According to the 2005 CAMA Plan, state designated fragile areas in coastal North Carolina include coastal wetlands, ocean beaches and shorelines, estuarine waters and shorelines, public trust water, complex natural areas, areas sustaining remnant species, unique geological formations, registered natural landmarks, swamps, prime wildlife habitats, areas of excessive slope, areas of excessive erosion, scenic points, archeological sites, historical sites, wetlands. In addition, maritime forests and outstanding resource waters are also included but not formally designated by the state. Areas of environmental concern (AEC) for Camden County include estuarine waters, estuarine shores, public trust areas, and coastal wetlands.

These areas were mapped and evaluated as part of the CAMA planning process. A composite map of environmentally sensitive areas was developed to identify three tiers of potential for land development limitations and hazards. As part of the next phase of planning – land use scenario development – these three tiers of environmental lands will be used to analyze current land use suitability and to help identify areas that are inappropriate for future development.

LAND USE AND DEVELOPMENT

EXISTING LAND USE

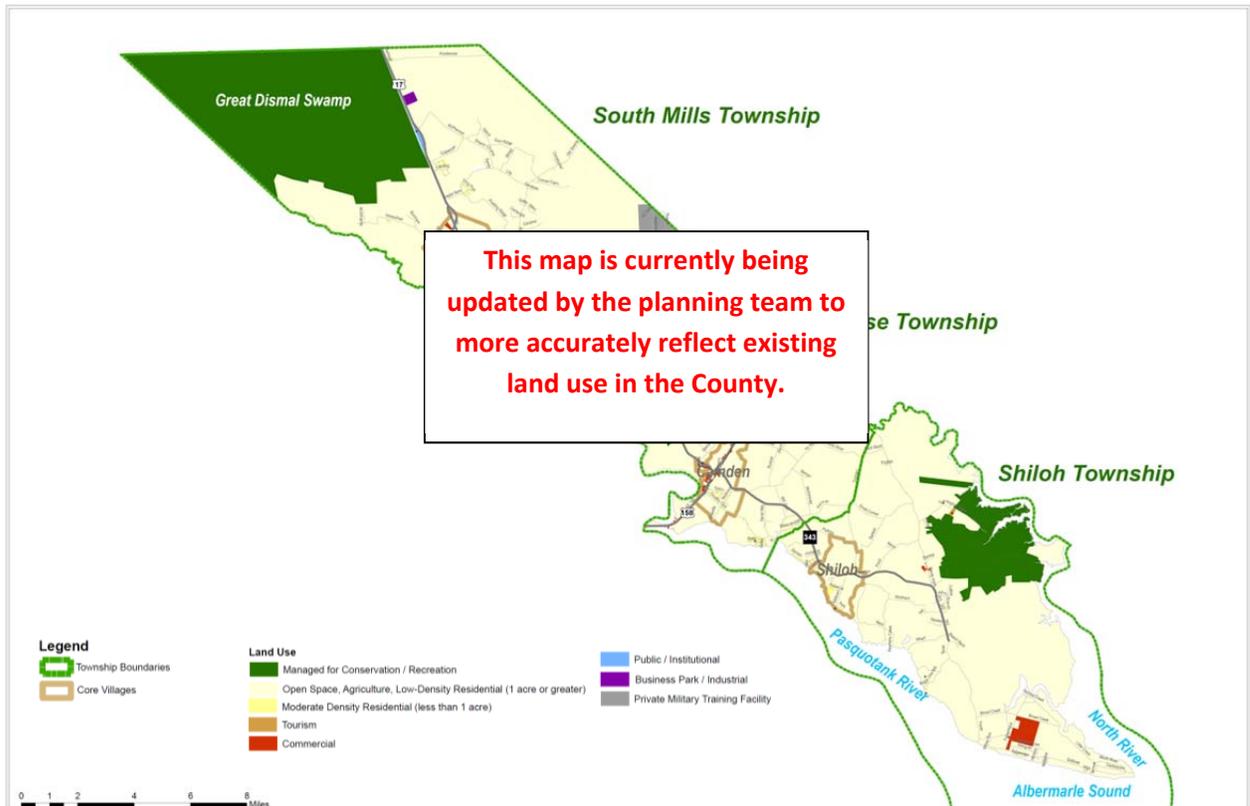
Existing land use in Camden County was developed using the County’s GIS database of layers. A base existing land use layer that included residential, forest, wetland, and agricultural lands was compared to current zoning, parcel ownership and building values to identify eight categories of land use listed in Table 13 and illustrated in Figure 10. **[Currently these data are being reviewed for accuracy by planning staff.]**

Table 13: Existing Land Use

Existing Land Use	# of Parcels	Acres	% of Total Acres	Definition
Managed for Conservation and Recreation	29	29,897	19.8%	Permanently Protected Lands
Open Space, Agriculture, Low Density Residential	5,499	117,551	78.0%	Parcel >= 1, not in one of the other categories
Moderate Density Residential	1,497	1,084	0.7%	Parcel < 1 acre in size, building value > \$60,000
Tourism	1	25	0.0%	North River Campground
Commercial	180	933	0.6%	Commercial zoning, building value > \$60,000
Public / Institutional	2	78	0.1%	Camden Middle School, Camden County Courthouse
Business Park / Industrial	2	179	0.1%	Eco Park, Camden Business Park
Private Military Facility	2	960	0.6%	Xe
Total	7,212	150,707	100.0%	

Source: GIS Data from Camden County Planning & Community Development Department, Analyzed by Clarion Associates

Figure 10: Existing Land Use



The vast majority of land in Camden County is either in a natural state, used for agricultural purposes, or as low-density single family development on lots that are one acre or greater. As shown previously in Figure 9, development potential for the majority of County lands is limited by the presence of wetlands, floodplains, and other areas of environmental concern.

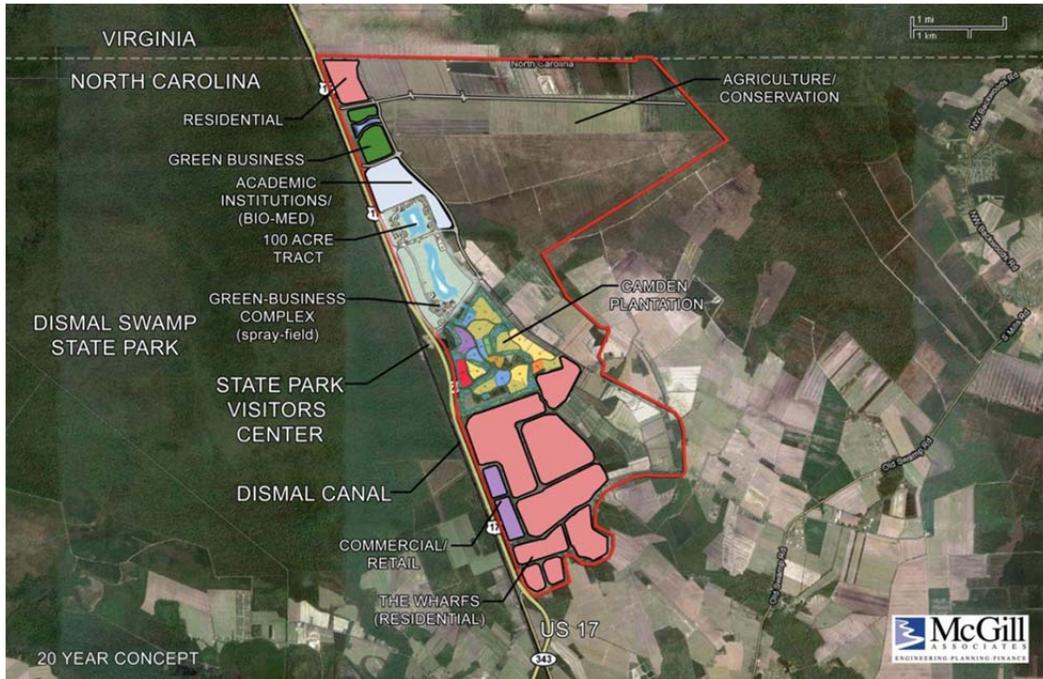
PLANS FOR THE FUTURE

The land use patterns of Camden County will be significantly different from the current development patterns if proposed plans are put into place. Economic development efforts have focused on creating synergy around the northern portion of the County to take advantage of proximity to the Hampton Roads area and connectivity and accessibility provided by U.S. 17.

Building off the environmental culture of the Great Dismal Swamp (GDS) and the GDS Visitors Center, the plans for this section of the County are focused on developing a green business corridor. The vision includes new green businesses in the Eco Park, new academic / research and development institutions, a green business complex, an expansion of the Dismal Swamp State Park to include a new 90-acre park space for camping and other recreational activities, and a mixed-use development – Camden Plantation – to provide new types and styles of housing in the northern section of the County. It will be important to ensure that future development in this corridor creates an attractive and inviting gateway to Camden County from Virginia. It will also be important to ensure that new development on the east side of U.S. 17 does not negatively impact the Dismal Swamp State Park and the Visitors

Center. Site layout, exterior lighting, roadway buffers, and other site design details should be addressed to minimize impacts on the State Park and maintain the rural and bucolic feel of Camden County. Figure 11 below illustrates how several proposed developments along the northern end of U.S. 17 near the Virginia border may be developed.

Figure 11: 20-Year Concept Plan for U.S. 17 Corridor Development



Camden Plantation

The Camden Plantation project has been designed as a planned unit development to include a variety of residential options, local serving retail designed in clusters, community facilities, public spaces, and pocket parks – all linked by bike paths and sidewalks as well as local roads. Entitlements are in place to develop the project, which is currently on hold in part because of the effects of the recession and in part because of a pending litigation. The scope of this project is considerable – 1,700 residential units and 160,000 square feet of new retail to be built out in phases. This development, if built, would change the pattern of development in Camden County and create a new population center at the north end of the County. Important public facility considerations for this project are how and from what source water will be provided to the development, opportunities to tie into the County’s wastewater system, the impact of the project on local schools, and the management of stormwater runoff on high and moderately hazardous soils.

Camden Town Center

The proposed Camden Town Center project is designed as a mixed-use health services development at the intersection of N.C. 343 and U.S. 158 near the Camden County Courthouse. This project will be an important placemaking component for this crossroads area. Currently, the County’s administrative and courthouse facilities stand alone in this portion of Camden. The project is slated to include four retail/office buildings, three out parcels, related open spaces, parking, and infrastructure. The vision for the project is to provide needed health services to local residents in the form of a

pharmacy and a family practice medical office, with supporting retail establishments. This project is currently on hold.

South Mills

The ECU Office of Innovation and Economic Development’s Municipal Management and Innovation Initiative is developing a Small Area Plan for South Mills that will include a vision and goals for the South Mills core area. The comprehensive planning effort will coordinate with the South Mills Small Area planning effort to provide support and insight to the process regarding how South Mills plans fit into the larger context of County plans for economic development, capital infrastructure, and land use. Ideas that have arisen during this planning process include the creation of a “gateway waterfront community” with amenities in the core of South Mills to serve tourists and local recreationalists visiting the Great Dismal Swamp, its system of canals, and potential locally planned bikeways and trails.

Hale’s Lake Wind Farm

Invenergy, a renewable energy generator that is based out of Chicago, is currently working on securing options to lease air space from landowners in northeastern Camden County and western Currituck County. The Hale’s Lake Wind Farm project is projected to lease up to 20,000 acres of air space above open spaces and farmland to develop 188 large wind turbines. These turbines will generate renewable energy that can be sold back to utilities in North Carolina that are under state mandate to purchase 12.5% of energy supply needs from renewable sources. Invenergy is working to secure development permits with the US Army Corps of Engineers, Homeland Security, Federal Aviation Administration, with NC CAMA and Cultural Resources agencies, and with Camden County.

In July, 2011, the US Navy’s ROTH (Relocatable Over the Horizon Radar) Program Office released an unclassified report on the stand-off requirements of wind turbines from ROTH systems. These systems use high frequency radars to identify vessels located in waters beyond the horizon line seen from the continental US for homeland security purposes. One of these systems is located in Chesapeake, Virginia. The report states that wind turbines can have a significant impact on the performance of these radar systems. Once the wind turbine locations for the Hale’s Lake project have been determined, a comprehensive analysis will be conducted to determine the potential for impacts on the Chesapeake, VA ROTH system.

DEVELOPMENT REGULATIONS

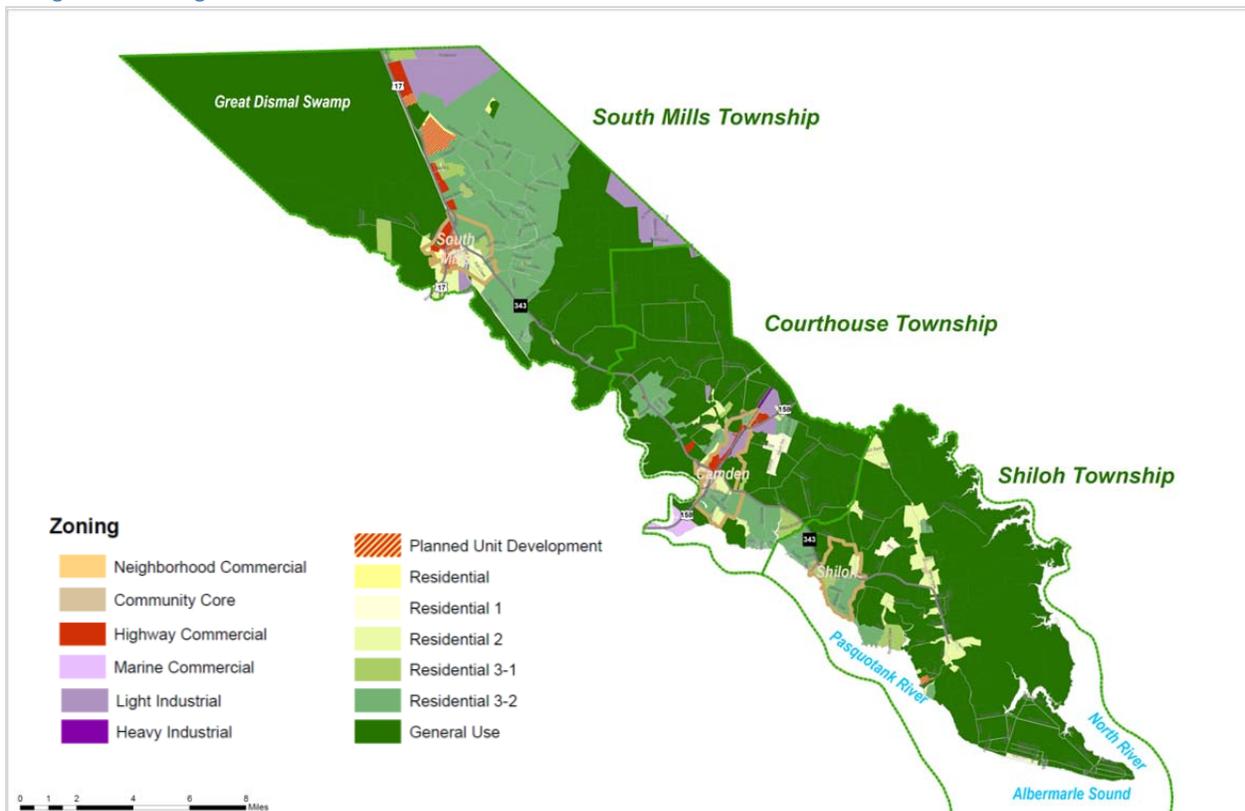
In keeping with existing land use trends, development over the last decade has primarily come in the form of low-density single-family residential homes. As listed in Table 14 and shown in Figure 12, the majority of land in the County is zoned for residential development (94.5%), leaving 5.5% of land to be developed as commercial, employment, industrial uses under current zoning. These districts are defined in detail in the Camden County Unified Development Ordinance that regulates all land development within the County.

Table 14: Zoning Districts

Zoning Districts	Acres	% of Total Acres	Definition
Neighborhood Commerical	0.7	0.0%	Rural commercial outside core village areas
Community Core	392.0	0.3%	Commercial inside core village areas
Highway Commerical	1,434.0	1.0%	Roadside commercial serving motoring public
Marine Commerical	382.0	0.3%	Waterfront and tourist related businesses
Light Industrial	5,893.0	3.9%	Wholesaling, warehouse facilities, light industries
Heavy Industrial	41.0	0.0%	Heavy industries
Planned Unit Development	947.0	0.6%	Multi-use district subject to controls set by BOCC
Residential 1	812.7	0.5%	Low density residential in or near village core areas
Residential 2	4,630.0	3.1%	Moderate density residential near village core areas
Residential 3-1	2,416.9	1.6%	Low density residential in rural area of one or more acres
Residential 3-2	23,386.0	15.5%	Low density residential in rural area of two or more acres
General Use	110,204.0	73.2%	Agriculture and agriculture related uses and associated low density residential
Total	150,539.3	100.0%	

Source: GIS Data from Camden County Planning & Community Development Department, Analyzed by Clarion Associates

Figure 12: Zoning Districts



In addition to the Unified Development Ordinance, developments are also subject to the standards of the North Carolina Building Code and local septic tank regulations enforced by Albemarle Regional Health Services. Because lands in Camden County are highly impacted by development due to factors of soils, drainage, environmentally sensitive lands and potential for hazards, many developments in Camden County are subject to planning controls beyond the County’s Unified Development Ordinance. The Coastal Resources Commission is charged with requiring CAMA plan development and enforcing permits for development in CAMA communities.

PRELIMINARY POLICY QUESTIONS

Several large scale plans are in progress that will greatly shape the future of Camden County. How these projects are ultimately designed and served by public infrastructure are key considerations for not only these developments but also the community at large. Opportunities exist to capitalize on these efforts to add needed improvements to community systems, such as expanding sanitary sewer capacity and providing adequate facilities and teachers for new students.

Looking beyond these planned developments, this planning effort will make projections for longer term growth in Camden County. As discussed previously, analysis to evaluate future land use needs is based on population projections of which there are options to consider. The land suitability analyses conducted as part of the 2005 CAMA planning process will be used to identify appropriate areas for future development and the Future Land Use plans in the CAMA plan will be reviewed to identify any necessary adjustments based on the vision for Camden County to be developed during this process.

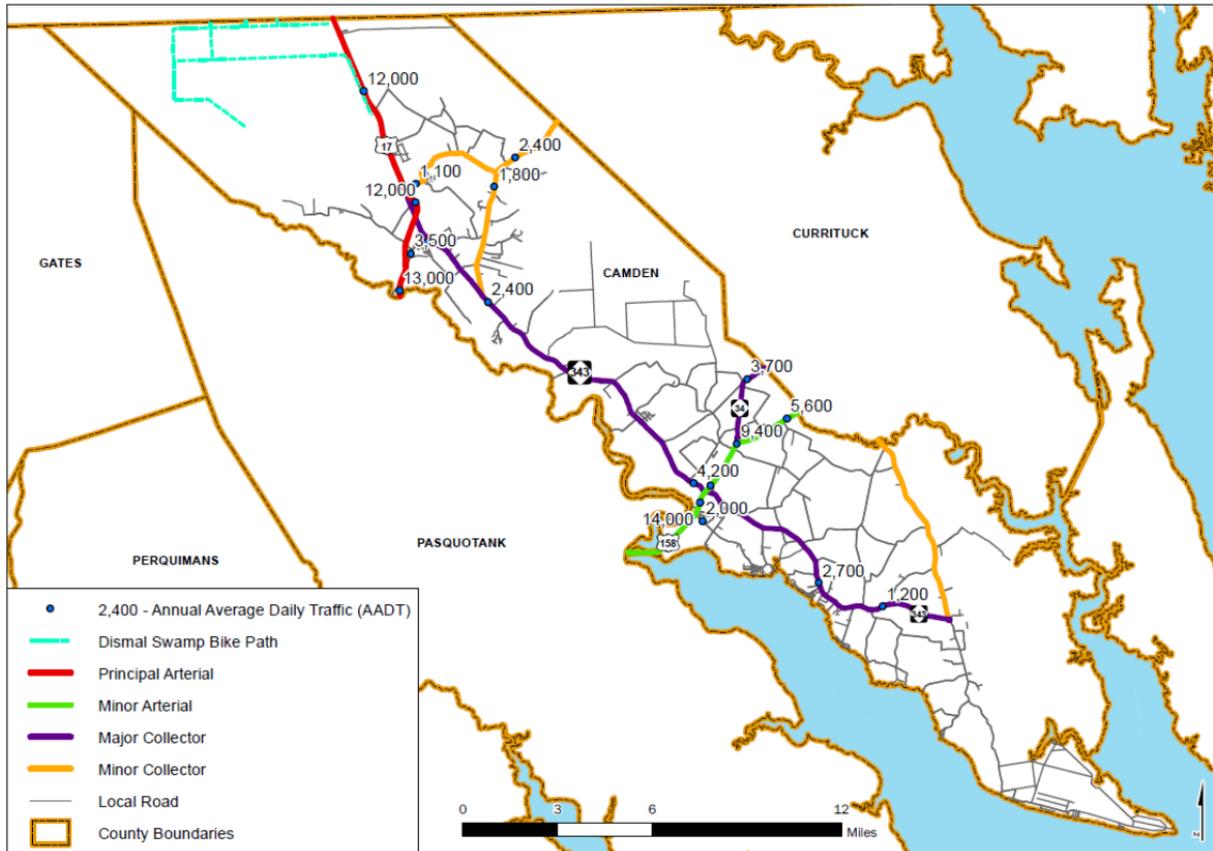
TRANSPORTATION

Today's transportation system in Camden County reflects the County's growth and development since the 17th century. Its location just south of the Chesapeake, Virginia metro area, combined with its proximity to the North Carolina coast and on the Albemarle Sound, have shaped the County's roadway network and land use development patterns.

ROADWAYS

U.S. 17, in the northern part of the County, is the main connection to the Chesapeake area to the north, running parallel to the Dismal Swamp Canal. U.S. 17 is a four-lane divided highway that carries approximately 12-13,000 vehicles per day (see Figure 13), well below its capacity. Another US highway, U.S. 158, cuts through the central part of the County connecting Currituck and Pasquotank counties, and carries between 5,600 (near the Currituck County border) to 14,000 (near Elizabeth City) vehicles per day. U.S. 158 in Camden County is primarily a two-lane road, with some wider sections with turn pockets or two-way center left turn lanes. N.C. 343 traverses the County from its intersection with U.S. 17 in the northern part of the County heading southeast through the County until its terminus near the Albemarle Sound. N.C. 343 carries between 1,200 and 4,200 vehicles per day, with the highest traffic volumes near the intersection with U.S. 158 in Camden. In general, roadways in the northern and central parts of the County experience higher traffic volumes than the southern part of the County where development is more dispersed.

Figure 13: Existing Transportation Conditions



Existing Transportation Conditions

Camden County Comprehensive Plan

September 2011



BICYCLES AND PEDESTRIANS

Because of its historically rural transportation network, Camden County lacks a comprehensive bicycle and pedestrian network. The exception is the Dismal Swamp Bike Path, located in the very northern part of the County west of US 17 (see Figure 13). There are opportunities to extend this path further south into the County and provide additional recreational bicycling opportunities. There are no sidewalks in the County and very limited pedestrian crossing improvements, such as crosswalks, at major intersections.

TRANSIT

Camden County is not served by a mass transit system. The Inter-County Public Transportation Authority (ICPTA) provides demand-responsive human services transportation throughout the five county area that includes Camden, Chowan, Currituck, Pasquotank and Perquimans counties. ICPTA provides transportation to the general public for medical appointments and for other activities related to daily living. Residents call the ICPTA offices to schedule an appointment.

ONGOING PLANNING INITIATIVES

Camden County participates in transportation planning at the local and regional levels, and is also impacted by the plans of neighboring jurisdictions. Below are three efforts that have direct and indirect impacts on Camden County's transportation system:

Comprehensive Transportation Plan

The County is currently working with the NCDOT to develop a Comprehensive Transportation Plan (CTP) for Camden County. The CTP will identify needed roadway, bicycle, pedestrian, and public transportation improvements to meet existing and future needs. Development of projects will be closely tied to development of the land use plan and associated policies. Projects identified in the CTP will be considered for inclusion in the State Transportation Improvement Program, the primary funding source for major transportation improvements.

Hampton Roads TPO Long Range Transportation Plan

Transportation in Camden County is heavily influenced by development and improvements to the north of the County in the Chesapeake/Hampton Roads area of Virginia. The Hampton Roads Transportation Planning Organization (HRTPO) is responsible for transportation planning for the thirteen jurisdictions in Hampton Roads, including the area immediately north of Camden County.

The HRTPO is in the process of completing *Navigating the Future: Hampton Roads 2034 Long Range Transportation Plan*, an update to its 2030 Long Range Transportation Plan. There are no candidate projects in the current draft of the updated LRTP for the area just north of Camden County, with most of the LRTP projects located in the more urbanized metro area. Included in the plan is a project to widen Dominion Boulevard (US 17) from a two lane highway that runs through Chesapeake to a four-lane roadway from 0.05 miles north of Great Bridge Boulevard to 0.75 miles south of Cedar Road and replace a steel bridge. The project will provide an unimpeded maritime facility with removal of the existing drawbridge and construction of a fixed-span bridge and will relieve traffic flowing from between North Carolina and Virginia. This project may bring more traffic through northern Camden County.

US 17 Great Dismal Swamp Corridor Study

The U.S. 17 Great Dismal Swamp Corridor Study was completed in 2004 and was intended to be a master plan to address the economic, environmental and recreational needs of southern Chesapeake in the vicinity of U.S. 17 and the Great Dismal Swamp National Wildlife Refuge. The study area for the master plan did not include Camden County, but the improvement plans are clearly related. The study anticipated the relocation and improvement of U.S. 17, which has been completed, and planned for what to do with the old Route 17 roadway and the area around the old and new roads. A major part of the study was the potential conversion of the old Route 17 roadway into a multi-use trail running parallel to the canal. Multiple concepts were developed for various sections of the potential trail. Although the relocated U.S. 17 is complete, development of the multi-use trail has not begun. The addition of this trail to the existing Dismal Swamp Bike Path, and its future extensions, would create a valuable asset for recreational cyclists.

PRELIMINARY POLICY QUESTIONS

The County's transportation system has developed with a focus on roads to support residential and commercial development. As the County continues to grow, the County should consider providing its residents and workers with alternatives to driving. Not only do alternatives help relieve congestion (and the need for expensive roadway improvements), but they provide valuable quality of life and health benefits as well. With the Dismal Swamp Bike Path, the County has the beginnings of a multi-use trail system that has the potential to grow into a more comprehensive network.

Camden County's residential subdivisions and commercial developments are rural in nature and lack the pedestrian amenities, such as sidewalks, typical of more suburban and urban developments. It is likely that many Camden County residents place a high value on these rural qualities and may prefer not to introduce suburban elements into the County. But, at a minimum, it may be worth looking at improvements that help address existing and potential pedestrian safety issues.

It is not likely that the County will, in the near future, have the population base to support its own transit system, beyond the human services transportation offered by the ICPTA. But as the County continues to house more residents who work in the Chesapeake area, it may be worth working with the HRTPO to develop express bus routes along U.S. 17 or vanpool programs to give those Camden County residents options for getting to their places of work in Virginia.

Transportation systems and economic development are inextricably linked. As the County considers economic development opportunities, improvements to the transportation system to support and encourage development should also be considered.

STORMWATER

Stormwater management is a challenging exercise in North Carolina's coastal counties, often complicated by low topographic relief, high groundwater tables, and poorly drained soils. Camden County is indicative of these challenges. In addition, Camden County is included in North Carolina's 20 coastal counties and as such, is subject to NC Department of Environment and Natural Resource's coastal stormwater rules, which adds a layer of regulatory complexity to the continually advancing regulatory framework for stormwater management.

NATURAL SETTING

Camden County's expansive low-lying areas are dominated by soils that tend to be mucky and peaty in nature, with high groundwater tables and poor drainage. The high peaty organic content of the soils indicate that much of the County was originally part of the Great Dismal Swamp prior to human agricultural disturbance and hydromodification. The difficulty in managing stormwater in this setting is partially due to its hydrologic origins as a swamp, a land form and associated ecosystem that function by not draining.

A brief analysis of the soils listed for Camden County in the 2005 Advanced Core CAMA Land Use Plan indicated that 90% of the soils in the County have seasonal high water tables at depths of 1.5 feet or less, and that 80% of the soils have seasonal high water tables at depths of 1.0 foot or less. The shallow seasonal high water table poses challenges for stormwater management because it

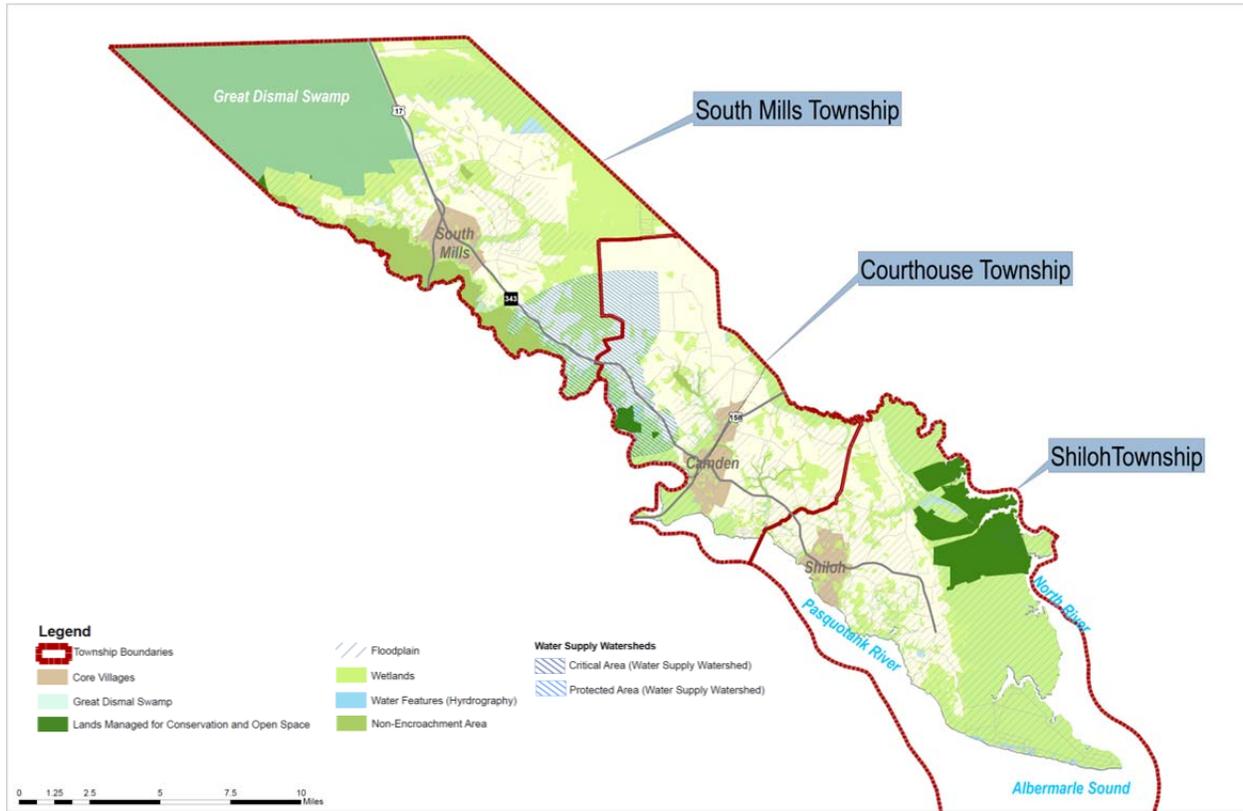
means that stormwater impoundments have to cover more area in order to have sufficient storage volume over and above the standing water in them derived from the water table. It also means that less water storage volume is available in the soil column above the water table, which limits the use of infiltration-based stormwater practices, such as bioretention systems and similar BMPs typically associated with low impact development. The effectiveness of infiltration-based BMPs is also hindered by the limited capacity of the mucky, peaty soils prevalent in the County to infiltrate water.

The shallow seasonal high water table poses challenges for on-site septic systems because the drain fields for such systems require a minimum of two feet of separation from the seasonal high water table in order to remain effective. They become marginally effective when that separation is shortened and ineffective when they are inundated with groundwater, which can also lead to ongoing septic failure.

Northern Camden County is occupied by the Great Dismal Swamp proper so developed lands in that northernmost portion of the county drain directly to the Swamp or to the Dismal Swamp canal and other manmade canals toward the west or the Run Swamp Canal and its tributaries to the east. Southern portions of the County drain to the Pasquotank River and its tributaries to the west and the North River and its tributaries to the east. The southernmost extent of the County abuts the Albemarle Sound and some developed lands in that portion of the County drain to the wetlands along the Sound or the Sound itself.

Agricultural lands are present within the County and modification of the natural drainage network is extensive throughout. Hydromodification for agricultural uses of the land throughout this region of the state has historically consisted of excavation of linear canals, often at regular intervals to promote drainage. However, with the intensely flat nature of the landscape, the canals typically have little or no slope to promote flow, and end up acting as much as linear water storage impoundments. The limited hydraulic capacity of these agricultural canals presents a significant problem with regard to achieving effective drainage from developed areas, and addressing this problem may require changes in the way Camden County manages stormwater.

Figure 14: Camden County Environmental Features Map



REGULATORY FRAMEWORK

In the northern half of the County, most of the waters which could be impacted by runoff are classified as C-Swamp waters, with the exception of the area between South Mills and U.S. 158 that falls within the designated WS-IV water supply protection area associated with Elizabeth City's intake on the Pasquotank River. In the southern portion of the County the open waters of the Pasquotank River and the North River transition to class SC with tributaries classified as C-Swamp waters. The section of the Pasquotank River in the vicinity of the U.S. Coast Guard base in Elizabeth City is classified as SB to protect for prolonged human contact for swimming. None of the County drains to waters classified for Shellfishing (Class SA).⁵

The standard of performance for stormwater drainage systems reflected in Camden County's existing ordinance, requiring retention and release of the runoff from a storm event with a 10-year recurrence interval, is clearly intended to manage the impacts of the quantity of stormwater runoff, rather than water quality. Over and above this requirement, new developments in Camden County are required to meet the standard reflected in the North Carolina Coastal Stormwater Rules for development activities within Coastal Counties which impact waters other than those designated as Outstanding Resources Waters (ORW) or Shellfishing Waters (SA). As such, they are not subject to the stormwater requirements for SA and ORW waters.

The Coastal Stormwater Rules applicable to Camden County require control and treatment of runoff from the first 1.5 inches of rainfall with a minimum retention time of 48 hours and a maximum release rate no greater than the runoff predicted from a one year, 24-hour storm event. However, these stormwater requirements apply only to "high density" developments with built-upon areas greater than 24%. Research by the Center for Watershed Protection has repeatedly shown that significant degradation of receiving water quality can occur when overall imperviousness in a watershed exceeds 10%. In order to achieve substantive water quality protection, the County may wish to consider performance standards more stringent than those currently required by the Coastal Stormwater Rules for SC and C-Swamp waters.

It should also be noted that development densities in the water supply watershed protection area are restricted to 24% built upon area within the Critical Area Portion of the watershed, with an allowance of up to 36% built upon area in the balance of the protected watershed for developments that have curb and gutter collection systems. However, the protected watershed only constitutes 1,260 acres of land in the County – less than 1% of total County land.

⁵Classes C (denoting freshwater) and SC (denoting saltwater) are the baseline classifications applied by the North Carolina Division of Water Quality to denote that waters must be protected for human contact (not necessarily prolonged) and propagation of aquatic life. They are subject to water quality standards necessary to protect fishing and swimming uses. Waters that may be subject to prolonged human body contact are designated as SB, and afforded higher levels of water quality protection. Standard Class C and SC waters may also be subject to supplemental classifications, such as C-Swamp waters. The supplemental classification of Swamp denotes that such waters are located within, or directly affected by, the drainage from swamp ecosystems, which may result in departures from water quality standards reflective of regular Class C or SC waters. The fact that swamp waters typically have naturally lower dissolved oxygen levels is prime example of such departure.

One additional item that lends a note of regulatory complexity to stormwater management in Camden County is that a portion of the Pasquotank River, in the vicinity of the Coast Guard Base, is listed on the State of North Carolina's 303(d) List of Impaired Waters due to violations of the water quality standard for copper. While it is unlikely that such occurrences are linked to any stormwater runoff impacts or activities from Camden County, this impairment is in an area impacted by the County, and will have to be taken into account for any stormwater management plans going forward.

PRELIMINARY POLICY QUESTIONS

As development and the associated increases in stormwater runoff continue in Camden County, the tandem challenges of the limited potential of the landscape to infiltrate runoff and the limited capacity of the existing drainage infrastructure will become more acute. The County could use a number of approaches to address these problems, but in reality, the solution is likely to involve a combination of approaches including: 1) Increase and maintain the hydraulic capacity of the drainage system through the establishment of entities such as drainage districts with dedicated revenue streams for management (e.g. stormwater utility), 2) Restrict new development to very low densities to minimize increases in stormwater runoff, and 3) Implement stringent stormwater detention requirements to ensure that stormwater volumes leaving developed sites do not overwhelm the existing drainage capacity.

Camden County has not yet been required to become a permitted stormwater system under Phase 2 of the U.S. Environmental Protection Agency's Stormwater NPDES (permitting program). However, given that Camden has a unified county government and is becoming increasingly connected to, and impacted by, the larger Hampton Roads metropolitan area, it is possible that the County will be required to become a permitted stormwater discharger in some future phase of the program. As a permitted entity, the County will likely be required to meet the six minimum control measures currently set forth in permits under Phase 2, which are as follows:

1. Public Education - BMPs for MS4s to inform individuals and households about ways to reduce stormwater pollution.
2. Public Involvement - BMPs for MS4s to involve the public in the development, implementation, and review of an MS4's stormwater management program.
3. Illicit Discharge Detection & Elimination - BMPs for identifying and eliminating illicit discharges and spills to storm drain systems.
4. Construction - BMPs for MS4s and construction site operators to address stormwater runoff from active construction sites.
5. Post-construction - BMPs for MS4s, developers, and property owners to address stormwater runoff after construction activities have completed.
6. Pollution Prevention/Good Housekeeping - BMPs for MS4s to address stormwater runoff from their own facilities and activities.

Camden County has already taken positive steps to set up a more effective stormwater management framework by beginning the process of establishing four drainage districts based on hydrologically distinct watersheds in the County. In addition, the County has investigated the possibility of establishing a dedicated revenue stream, in the form of a stormwater utility (or utilities) or special fee districts, to make resources available for effective stormwater management within the drainage districts.

WATER/WASTEWATER

The growth of the greater Hampton Roads metropolitan area has had an increasing impact on Camden County over time, and has the potential to have an even greater impact in the future. Roadway improvements in recent years have reduced travel time from Camden County to core urban centers in the Hampton Roads area including Norfolk, Chesapeake, and Newport News. This greater level of connectivity has increased the opportunities for Camden to grow as a rural bedroom community and as a provider of goods and services to the metro area. At the present time, these growth opportunities are manifested along the U.S. 17 corridor in the northern portion of the County, and include plans for the Eco Industrial Park (EIP) complex. Meeting the water and wastewater needs of the EIP, along with other growth anticipated along the corridor and elsewhere in the County, within the context of existing infrastructure gaps and challenges, will require a diligent effort on the County's part. The Long-Range Water and Sewer Comprehensive Master Plan recently completed by McGill Associates (2010) and recent capital improvement strategies set forth by the County lend significant insights into the infrastructure challenges and opportunities faced by Camden County. They are summarized in the following sections.

EXISTING WATER SUPPLY INFRASTRUCTURE AND SHORT TERM CHALLENGES

In terms of water supply, the northern third of Camden County, from a line laterally bisecting the County at the approximate location of the Burnt Mills Elevated Tank, is served by the South Mills Water Association (SMWA), a private utility company. The SMWA system gets raw water from 12 primary supply wells, with 6 additional wells for peak demand production and one well for emergency use. All 13 wells draw from the shallow surficial aquifer. This water is treated by an existing ion exchange plant with a permitted capacity of 864,000 gallons per day (gpd). The system includes approximately 95 miles of potable water piping and 695,000 gallons of elevated storage that serves approximately 2,300 residential connections, of which approximately 1,060 are in Pasquotank County.

The raw water from the shallow surficial aquifer is low in total dissolved solids (TDS) and thus requires only minimal treatment, but unfortunately, such shallow wells have lower volumetric yields which can fluctuate even lower in drought situations. In recent years, the SMWA wells have had to be pumped for a longer period of the day than are allowed by state rules governing water supply systems just to meet peak demands. Establishing new wells to meet near term and future demands within the SMWA service area will be difficult because wells in the shallow aquifer will continue to experience the low and irregular yields, whereas wells reaching into the deeper aquifer will be more expensive to construct and require much greater and more expensive levels of treatment due to substantially higher TDS levels. Shallow aquifer wells, such as those currently in use are at much greater risk for

contamination from on-site septic systems and other sources of groundwater pollution because they have no confining layers to protect them from above.

From the line bisecting the County at Burnt Mills to the south and east, the entire southern two thirds of the County is served by the South Camden Water and Sewer District (SCWSD). The SCWSD operates a reverse osmosis (R/O) water treatment plant (WTP) on Chantilly Road near the center of the County, which was capable of generating only 720,000 gallons per day. As recently as 2009, the SCWSD system had experienced peak demands of 680,000 gpd. Since 2009, peak demands have been reduced due to eliminating the sale of 200,000 gpd to Currituck County.

A second skid of reverse osmosis equipment, intended to provide redundancy and improve reliability for the system, was designed and bid in 2010, and completed in 2011. The expanded plant now has the capacity to produce 1.44 million gallons per day (MGD) of treated potable water.⁶ The SCWSD operates approximately 90 miles of water distribution mains with approximately 1,537 residential customers, and their distribution system also includes two elevated tanks that provide 500,000 gallons of above-ground system storage.

It should be noted that Camden County is not isolated as a water supply entity, as the SMWA has a connection with Pasquotank County, and the SCWSD has connections with Elizabeth City and Currituck County. SCWSD and SMWA are also interconnected and have a signed agreement for SCWSD to sell water to SMWA that includes charges for reserving water capacity.

EXISTING WASTEWATER TREATMENT INFRASTRUCTURE AND SHORT TERM CHALLENGES

The South Camden Water and Sewer District (SCWSD) also operates the South Camden Wastewater Treatment Plant (WWTP), which provides sewer service to the core area of Camden County. There are approximately 23 miles of sewer lines and 53 connections. There are also 37 sewer lift stations. The WWTP is an extended aeration plant with a capacity of 100,000 gallons per day. Treated effluent is then pumped for reuse to irrigate hardwood trees, through spray irrigation.

The 100,000 gpd wastewater treatment plant, which is located on the southwest of South Mills was completed in 2007 and began receiving flows in March of 2008. The facility was originally designed to accept and treat flows from the Towns of Camden and South Mills along with neighboring subdivisions and a proposed industrial park. Currently, the only flow the plant receives is from the Town of Camden, approximately fifteen (15) miles south of the plant site. In the year after startup, flows to the plant averaged less than 20,000 gpd with flows in the summer months dipping below 7,000 gpd, due to the seasonal closure of the schools.

There are two problems key problems arising from the current situation with the WWTP. First, the plant is organically under-loaded due to the anemic wastewater inflow volumes. Second, the waste that does come to the plant is very difficult to treat because it goes septic during the long travel times in the sewer line on the way there. This scenario at the wastewater treatment plant has caused high

⁶ These operational statistics are currently being confirmed by staff.

levels of operational difficulty and problems in maintaining acceptable effluent quality and consistent compliance with the facility's permit.

Outside of the core area served by the WWTP, the rest of the County, as with most rural eastern NC counties, relies on on-site septic systems for wastewater treatment. Utilization of on-site septic systems is problematic in Camden County due to the mucky and peaty soils that do not infiltrate water, or "perk", very well, and the very shallow depths to the ground water table throughout most of the County. The County soils survey issued in 1995 and referenced in the 2005 CAMA Land Use Plan indicates that 21 of the 24 soils types listed for Camden County have "severe limitations" with regard to septic tanks usage. As a result, many of the on-site septic systems in use in Camden County are in some state of ongoing poor function, if not outright failure, which constitutes an ongoing risk to public health from groundwater contamination.

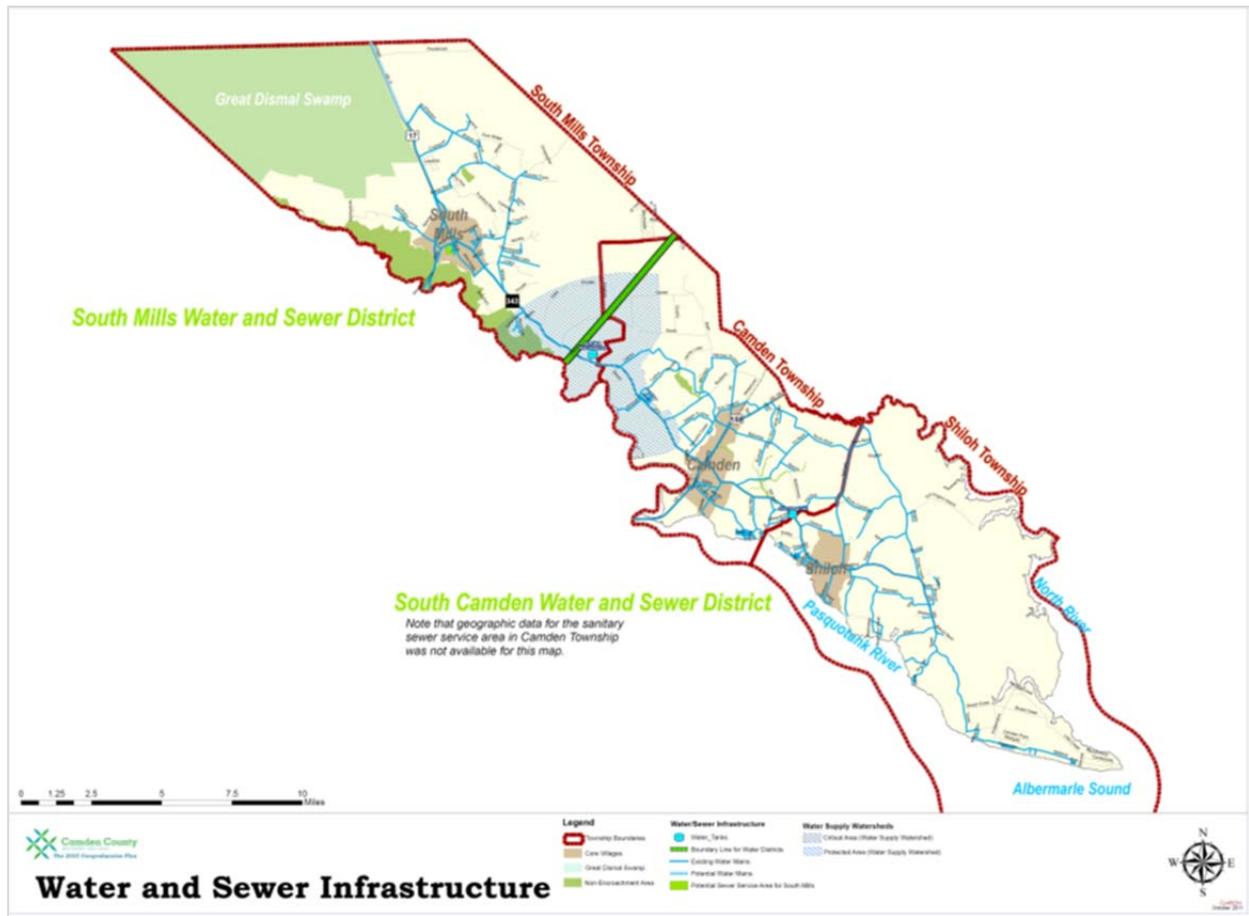
One of the key concentrations of poorly performing and failing septic tanks is in the community of South Mills. A 2009 survey conducted door-to-door identified 30 of 89 on-site systems failing, with another 10 problem systems reported by septage haulers. In short there are a great number of households in the South Mills area in need of sewer service.

The SCWSD wastewater treatment plant, which is located in South Mills, is in need of a larger influent load to function properly. Providing service to the South Mills core village area and surrounding neighborhoods is one solution, and the County was recently awarded a grant from the Clean Water Management Trust Fund with some additional funds from the Rural Center to provide public wastewater collection to the failing septic systems in the core village area. The new connections will result in 30,000-50,000 gpd of new flow to the plant, depending on how many residences commit to connection and how many the financial resources of the grant can ultimately reach. This much needed addition of new influent loading will help the WWTP to function more effectively in terms of treatment, and the revenue from the new connections will improve the financial performance of the SCWSD.

However, extending the collection system further, to the nearby subdivisions identified in the McGill report, which are also in immediate need of such service, would result in an additional 50,000-60,000 gpd of new wastewater influent to the WWTP, which would outstrip the existing capacity at the plant. While connection to these outlying neighborhoods is very much needed, it will have to be planned for, not only in terms of the collections system, but also for the treatment capacity to serve them.

It should also be noted that the water and sewer master plan also identified numerous subdivisions in the southern portion of the county in immediate need of centralized sewer service. The collective waste flows from those identified totaled in excess of 300,000 gpd. In short, the County has a substantial need for wastewater collection and treatment infrastructure without accounting for future needs associated with growth.

Figure 15: Water and Sewer Infrastructure Map



PRELIMINARY POLICY QUESTIONS

A feasibility study by the UNC Institute of Government entitled, “Camden County Green Industrial Park Feasibility Study” named lack of water and sewer infrastructure as a major barrier to economic development in the County. Even without addressing the needs associated with future growth, the current situation in Camden County exhibits significant gaps in water and wastewater infrastructure. Addressing these gaps and providing infrastructure for new development, will require diligent and creative efforts on the part of the staff and leadership of Camden County.

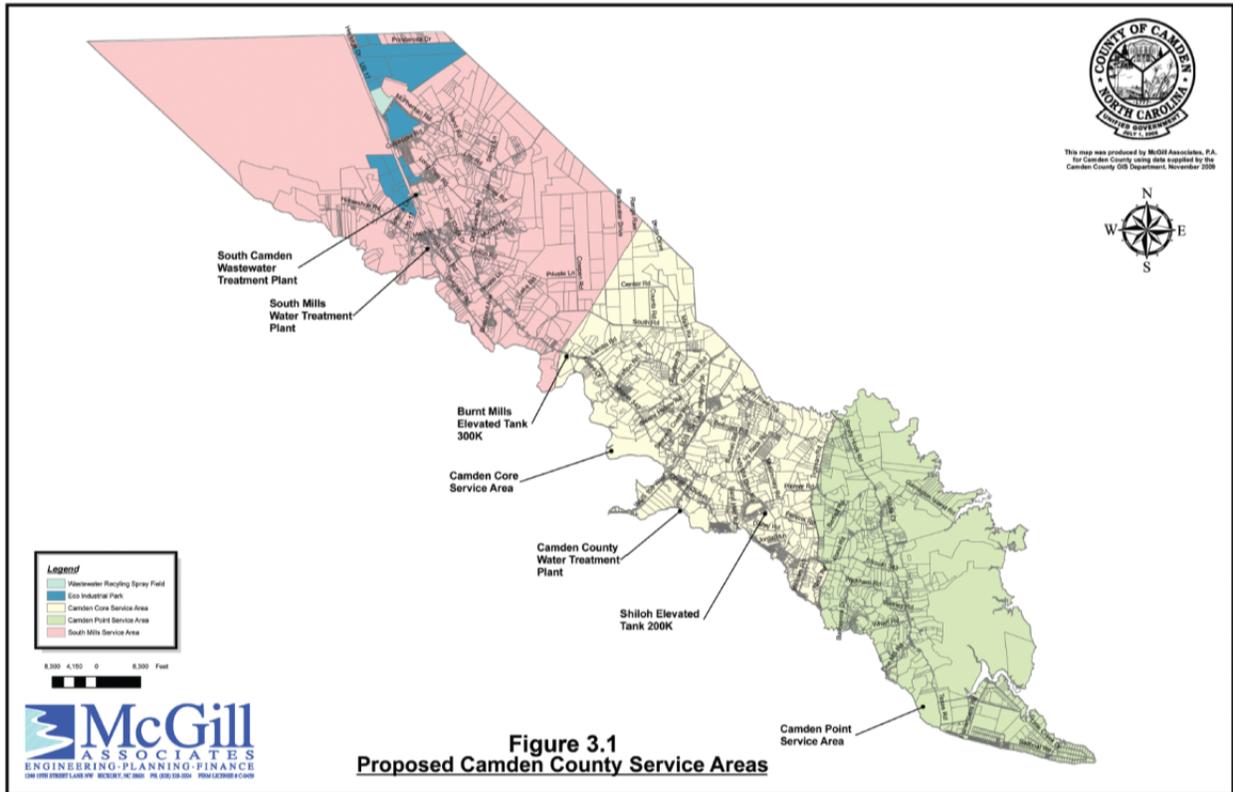
The connection between the SMWA and SCWSD water supply systems, completed as part of recent capital improvement projects, will help address the fluctuations in production capacity experienced at the SMWA. That added flexibility, along with the recent expansion of the SCWSD water treatment plant will give the County the ability to address water supply needs for the near future, but the water and sewer master plan indicates that the water supply demand for the portion of Camden County outside of the SMWA service area will reach 3.8 MGD within the planning horizon. The master plan indicates that meeting this level of demand will require the addition of 6-7 new treatment trains at the water treatment plant in order to provide adequate treatment capacity and sufficient redundancy for reliability, as well as a substantial expansion of the building that houses the system.

On the wastewater side of the infrastructure equation, with the numbers of failing septic tanks in the County and the lack of collection systems and sufficient wastewater treatment capacity to address them, near term needs are more acute. The County faces the vexing problem of not having the collection system where they do have treatment capacity in South Mills, and not having any treatment capacity in the southern portion of the County, where it is also sorely needed.

Camden Point Shores, in the southernmost portion of the County, is an acute example of the disconnect between available infrastructure and need. Staff from the Albemarle Regional Health Services (ARHS) have indicated that despite numerous attempts and multiple permit applications that are currently under review by the Raleigh central office of the Department of Environmental Health, not a single new onsite permit was been issued in the eight years prior to 2009. Connection of the village to the existing sewer infrastructure is likely to prove cost and feasibility prohibitive due to its remote location. Economic development of the village, including the important fishing docks and seafood processing area there, is stymied by this lack of sufficient infrastructure

As a means of addressing the disconnects between infrastructure and need in the long term, the water and sewer master plan recommends dividing the County into three distinct water and wastewater service areas consisting of the current SMWA service area, the Camden area and the core area around it, and the Shiloh area, including the southernmost portion down to Camden Shores (Figure 15). Economic growth in the County will require the provision of adequate infrastructure within each of these districts, and examining and planning for those needs by those districts will be beneficial to the County in the long term. For instance, any further development of the fishing village and the other communities in the Shiloh/Camden Point service area will likely require the establishment of a community-scale wastewater system(s). Conversely, economic growth in the other two service districts will depend more on establishment and expansion of traditional centralized water and sewer infrastructure.

Figure 16: Proposed Camden County Service Areas



Expansion and establishment of water and sewer infrastructure are particularly challenging undertakings for Camden County, not only due to the geographic distributions of those needs, but due to the small existing service populations as well. The 2010 census puts the population of the County at slightly less than 10,000 people, which results in economically infeasible distributions of cost for major infrastructure projects across the existing population. Major expansions of water and sewer infrastructure will continue to require outside sources of funding.

Public sources of funding have been utilized in the past to support infrastructure development projects in Camden County, and diligent and creative pursuits of those sources, such as the Golden Leaf Foundation, The NC Rural Center and the Clean Water Management Trust Fund, will continue to be required. New sources will need to be explored. For instance, with increasing emphasis on protecting and enhancing working waterfronts in North Carolina, funding for development and infrastructure projects associated with the Camden Point fishing docks may become available through that avenue.

The growth anticipated for the Highway 17 corridor in the proposed South Mills service district will provide opportunities for acquisition of private funding to support infrastructure projects. Arrangements to support such funding will require diligent planning efforts to establish public-private partnerships or levee impact fees. Growth in and around the Eco-Industrial Park will provide such opportunities, as will planned unit development projects such as Camden Plantation, a 1700 lot mixed use development previously slated along the U.S. 17 corridor. While the projects are currently stagnating or moving slowly due to the economic downturn, they, and others like them, will begin moving forward as the economy recovers. Ideally any fees or agreements for infrastructure projects

associated with these new developments will be structured so they not only cover the costs of their capacity needs, but also provide resources to address existing infrastructure gaps.

Given the natural and economic constraints on major infrastructure projects in Camden County, the County may wish to pursue forms of development that generate economic activity and opportunity without requiring extensive infrastructure. Eco-tourism businesses and moderate scale commercial fishing and processing industries may offer some of those opportunities.

RECREATION

EXISTING PARKS AND RECREATION

In May 2006, Camden took advantage of local natural resources and recreational offerings by establishing a formal Parks and Recreation Department. The department has worked diligently to provide more recreational offerings to area residents – young and old alike. The department worked with students of the Department of Recreation and Leisure Studies at East Carolina University to develop a 2008 Comprehensive System-wide Park and Recreation Access Plan. This plan provides a thorough inventory of park and recreation sites, recreational programs, and other entertainment/leisure offerings in Camden County. The plan identifies need for new parks based on the statewide SCORP evaluation system. Camden County ranks number one in the state for regional park acres accessible to residents; however, it was 88th in the state for local park acres and 75th in the state for trail miles. Also identified in the plan are opportunities for expanding recreational offerings in Camden that capitalize on the tourism potential found in the Albemarle region: environmental education, outdoor adventure, water activities, hunting and fishing, historic education, special events, sports and tournaments.

Key recreational offerings provided in Camden County include:

- * Camden Community Park, Treasure Point 4-H Park, Old Trap Community Center, Camden Senior Center (managed by Camden County)
- * Great Dismal Swamp National Wildlife Refuge and Visitor Center
- * Great Dismal Swamp State Park and Trail
- * Proximity to Intracoastal Waterway
- * North River Gameland (in Camden and Currituck Counties)
- * Canal and water access at Sawyers Creek and Shiloh Landing

PLANS FOR DISMAL SWAMP CONNECTOR TRAIL

A study is being prepared to create a 3.3 mile trail from the Dismal Swamp State Park Visitors Center to the Virginia state line. The current version of the plan calls for a 10 foot wide paved trail that will run proximate to U.S. 17. Cross sections for the current plan include an eight foot buffer from the public right-of-way road pavement, the guard rail, a four foot separation of green space, and then the 10 foot paved trail. This project is estimated to cost \$1.5 million. Site planning solutions are being sought to identify safe ways to connect the trail between the Welcome Center parking lot and the

bulkhead for boaters, and to identify opportunities to create passive spaces along the trail to possibly include benches and interpretive signage for observing and learning about the swamp and its heritage.

Virginia has an approved and funded project to extend the existing trail head at Balahak Road up to Deep Creek and the Deep Creek Lake State Park. This project also includes planning for the southern extension of the trail to the North Carolina state line. Design and permits are secured for the southern section and funding is being sought.

PRELIMINARY POLICY QUESTIONS

Camden County has an opportunity to take advantage of its robust natural resource environment by focusing on establishing new eco-tourism opportunities for area residents and tourists. Critical to this effort will be the provision of local recreational offerings and supporting retail to serve recreationalists. Such ideas include a linked network of trails and blueways, providing hiking and boating outfitters, bicycle rental and service shops, and hospitality/restaurant services.

COMMUNITY HEALTH

The Albemarle Regional Health Services, a district health agency, worked with the North Carolina Institute for Public Health (part of the UNC-Chapel Hill School of Public Health) to conduct a 2010 Community Health Assessment in all seven counties within its jurisdiction. The assessment addresses a broad array of community health issues: poverty, single-parent homes, high school drop-out rates, crime, mental health needs, teen pregnancy, chronic and communicable diseases, substance abuse and obesity. Key conclusions on health factors for residents of Camden County include:

Leading Causes of Death:

- * Total Cancer
- * Heart Disease
- * Unintentional non-Motor Vehicle Injuries
- * Cerebrovascular Disease
- * Chronic Lower Respiratory Disease

The 5 most important “unhealthy behaviors”:

- * Alcohol Abuse
- * Drug Abuse
- * Not going to dentist
- * Smoking
- * Unhealthy eating

The 5 most important “community social issues”:

- * Inadequate/unaffordable housing

- * Lack of affordable health care/insurance
- * Lack of health care providers
- * Underemployment/lack of well-paying jobs
- * Poverty

Priority Areas for Camden County:

- * Obesity-lack of physical activity and poor eating habits.
- * Chronic Disease-including heart disease, cancer, high blood pressure, cerebrovascular disease, diabetes, and smoking.

Action plans are currently being developed to disseminate this information and develop strategies for addressing priority health issues.

PUBLIC SERVICES

SCHOOLS

Camden County Schools is one of the highest performing school districts in the northeastern region of North Carolina and the state. The district serves approximately 1,900 students in grades pre-Kindergarten through 12th grade at five schools:

- * Grandy Primary School (Pre-K-3)
- * Camden Intermediate School (4-5)
- * Camden Middle School (6-8)
- * Camden High School (9-12)
- * CamTech High School (9-12)

Four out of five of these schools achieved Adequate Yearly Progress in 2011 and consistently scored well above the state-wide average on their end-of-grade, end-of-course and Vacates tests. The 2010-11 school year ended with an overall 4-year graduate rate of 90.7%, which ranks among the highest in the state.

Due to the growth experienced over the last decade and the projected growth that is expected to occur in the next several years, there is need to construct additional school facilities, particularly a new high school, to maintain a high quality educational experience for the system's students. Table 15 displays the capacity and enrollment by grade level for the 2010/2011 school year and projections for the 2015/2016 school year. Last year, all schools operated within capacity, except for the County's high schools, which had need for 26 additional seats. This deficit is expected to continue unless the current school is expanded or a new school is developed.

Table 15: Capacity and Enrollment for Schools 2010/2011-2015/2016

School	2010/2011			2015/2016		
	Capacity	Enrollment	Difference	Capacity	Projected Enrollment	Difference
K-5	1,004	856	148	1,004	933	71
Middle	642	480	162	642	474	168
High	565	591	(26)	570	649	(79)
K-12 (Entire System)	2,211	1,927	284	2,216	2,056	160

Source: Camden County Schools

PUBLIC SAFETY (FIRE/RESCUE AND LAW ENFORCEMENT)

Camden County is protected by the Camden County Sheriff’s Department that operates out of the Camden Courthouse Complex. The department is a partner in a three county jail (Camden, Pasquotank, and Perquimans) with each county contributing to the cost of the facility.

Fire and rescue service is provided by two fire departments and one substation that cover two fire districts: South Mills and Camden-Shiloh. Insurance ratings listed in the 2005 CAMA plan for the two fire districts were on the low side, and may need to be considered as part of this planning process. New development will require adequate fire protection. A new replacement fire station has been constructed in South Mills at Keeter Barn Road and a new replacement fire station is currently under contract in Shiloh.

E-911 service is operated out of the Pasquotank/Camden Central Communication located in Elizabeth City with a satellite operation housed in the Sawyer Creek fire station that is manned from 10 am to 10 pm. The County is served by the Pasquotank / Camden Rescue Squad and the Pasquotank County Ambulance Service.

UTILITIES AND TELECOMMUNICATIONS

Electric and Natural Gas

Electric service in Camden County is provided by the Albemarle Rural Electric Co-Op and North Carolina Dominion Power. Natural gas is available along Highway 343 near Camden from the Eastern NC Natural Gas company.

Telecommunications

As of 2005, only portions of Camden County had access to dial-up internet service and no broadband service was available. A private initiative is underway to provide broadband service to underserved communities in North Carolina. MCNC is an independent, non-profit organization that employs advanced Internet networking technologies and systems to continuously improve learning and collaboration throughout North Carolina's K-20 education community.

This initiative is labeled the Golden LEAF Rural Broadband Initiative (GLRBI), a coordinated strategy developed by the Office of North Carolina Governor Bev Perdue, the N.C. Office of Economic

Recovery & Investment, and e-NC Authority to improve broadband access for businesses and residents in underserved areas. It is expected to be completed by 2013. Once all work is complete, the two rounds of broadband infrastructure have the potential to serve directly, or through MCNC partnerships with private-sector service providers, more than 1,500 community anchor institutions, 180,000 businesses, and reach more than 300,000 underserved families. The northeast route through Elizabeth City and Camden County is expected to be completed in the summer of 2012 and will cover 273 miles.

SOLID WASTE

Solid waste collection in Camden County is provided through three convenience centers located near South Mills, Shiloh, and Camden core areas. The convenience centers have facilities for both waste and recyclable materials. Management of the centers is privatized through Waste Industries. Waste from these sites are hauled to the Pasquotank Solid Waste Transfer Station and then on to the Bertie County Landfill. Curb-side collection service is provided in the County through a private entity for a fee.

Plans for a new landfill in the northern portion of the County were a hot local topic in recent years, and are no longer under discussion. However, the need for a long-term strategy for handling local waste and recycling is still a topic to be addressed.

GOVERNMENT FACILITIES

Camden County's 2011-2015 Capital Improvement Program identifies several public facilities projects needed to meet current/future demands for service:

- * New administration office building for County government
- * Expansion of Reverse Osmosis Water Treatment Plant (South Camden Water & Sewer)
- * New Camden County High School
- * Expansion of sewer system from Town Center (medical park) to Belcross Community along U.S. 158
- * Recreational parks and facilities

PRELIMINARY POLICY QUESTIONS

Key to maintaining the fiscal health of communities is evaluating the capital and operational expenditures that will be required to serve future populations. The provision of public services in Camden County is generally meeting the needs of residents today, however, future populations will place new burdens on the County. Understanding the implications of these impacts is key to setting a plan for the future. To gain a better understanding of the impacts of future land use scenarios on public services, one idea is to distribute population projections and scenarios to department heads so that they may evaluate the impacts of the scenarios on their service provision and identify any need for additional staff, more or better equipment, service expansion, etc.

PART 3: SUMMARY OF KEY PLANNING INFLUENCES AND OPPORTUNITIES

KEY PLANNING INFLUENCES AND OPPORTUNITIES

While Camden County’s comprehensive plan will serve as a robust planning document that encompasses a broad array of community planning topics, it will be most successful if it is designed to be strategic and targeted in its implementation efforts. Now more than ever, local governments are doing more with less. Identifying the key planning priorities is essential to balancing new programs and projects that will result from this planning effort with limited public resources available to implement them.

This section provides a preliminary summary of the key planning influences and opportunities that have been identified in Camden County. These topics will be explored further at the upcoming November 14 *Envision Camden County* public workshop to gain a more complete understanding of these topics and community priorities.

Key planning influences and opportunities are listed under three main topics:

- 1. Economic Development:** Capturing a Portion of Regional Growth
- 2. Natural Assets:** Capitalizing on Eco-Tourism and Recreational Opportunities While Protecting Valued Resources
- 3. Place-Making:** Building on the County’s Existing Framework

ECONOMIC DEVELOPMENT: CAPTURING A PORTION OF REGIONAL GROWTH

Camden County may be a rural North Carolina county, but it is closely linked to and invested in the Hampton Roads area of Virginia.

Hampton Roads Regional Growth

This region has a strategic location on the mid-Atlantic coast of the United States making it very accessible nationally and internationally. The region’s transportation infrastructure is anchored by the large, natural deepwater port – a critical component of regional growth.

Ranked as the eighth-largest metro area in the southeast U.S. and the second-largest metro area between Atlanta and Washington, D.C., Hampton Roads is home to 1.6 million citizens. Because of the large military presence in this area, this workforce is better educated than most, especially in highly skilled specialties. The regional economy is impressive, with a gross product equivalent of most medium sized countries⁷

Over the past three decades, the Hampton Roads Region had an excellent annual average growth rate of 2%. While this trend has slowed due to the global and national recessions and resulting decreases in defense spending, the region is expected to grow during hard times – growth projections for 2011 are slightly less than 3%.

⁷ *The Hampton Roads Economy Regional Benchmarking Study*. Prepared by Hampton Roads Planning District Commission, December 2010.

A critical factor in the future of the regional economy is that it is now less diversified because of investments made over the last several decades in defense and related industries. Economic developers in the region are concerned about the decreasing investments by the U.S. Department of Defense and are calling for a focus on diversification of industries for the region. Opportunities exist in Camden County to be a part of this effort.

Regional Housing Market

Housing market trends in the region are also changing. The combined factors of changing demographics and corresponding market demands, an oversupply of single family housing, and the challenges to acquire homeowner financing have resulted in an upswing for housing rental markets and a decline in homeownership. Apartment housing in the Hampton Roads region, which has the highest monthly rental rates in the southeast, have been particularly affected. These factors may result in an upsurge in apartment construction in the region.

While conventional apartment complex developments may not be the most appropriate style of housing for Camden County, there is an opportunity to provide a new form of housing in the County that meets the needs of future residents, particularly seniors, aging baby boomers, and members of Generation Y.

National housing analysts suggest that the future of housing lies in more compact forms of development that mix uses and provide better access to recreational, shopping, and personal and health services. This housing is also expected to have a smaller footprint and be more compact to reduce maintenance and related expenses for maintaining yards and

larger units, and to be more tightly weaved into the fabric of neighborhoods to create activity and vibrancy.

Neighboring Chesapeake

Looking to the north, Camden County is neighbored by the City of Chesapeake that was ranked in 2011 by Bloomberg Business as one of America's 50 Best Cities. Reasons for this accolade are the City's numerous amenities, low unemployment and quality of life as factors in the ranking. Special emphasis was placed on the recreational opportunities in Chesapeake, including the City's many parks and the natural beauty of the Great Dismal Swamp – a feature shared with Camden County.

Opportunities for Camden County

While closely connected to the growing Hampton Roads Region, Camden County is unique in its character and natural resources. Key attributes of the County that will be the pillars for future economic development efforts include the presence of significant natural resources and emerging recreational opportunities, housing that is affordable for the County's workforce, a well-educated workforce, and excellent educational offerings. These attributes are unique to Camden County and provide a strong platform for future economic development efforts.

Green Industries

Opportunities for new economic development are being targeted to the New Eco Industrial Park focusing on green industries and the surrounding northern section of the U.S. 17 corridor. It will be important for the County to distinguish this development from others offered in the region to increase marketability. Creating a "green" image for the County that reflects its natural resources and future

employment base is one important aspect of differentiating Camden’s business development opportunities from other places in the region.

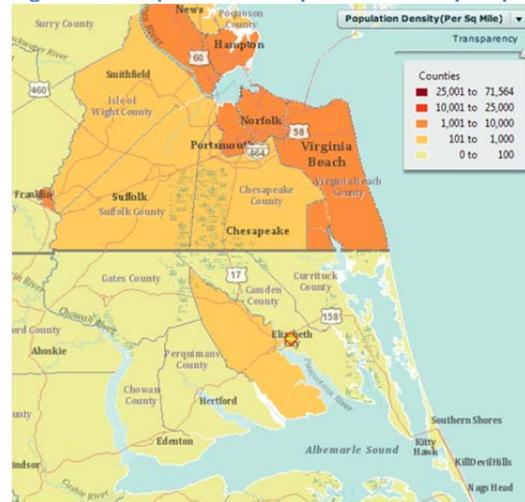
Village Style Development

Opportunities exist for Camden County to create new housing models in the County that blend into the rural, bucolic environment while creating more active “village” communities where people have easy access to community facilities and commercial establishments from a variety of transportation modes: car, bike, or on foot. The Camden Plantation, when developed, will be the first of its kind to blend uses and create more vibrant and interconnected neighborhoods and centers. This project may be a good model for future residential developments in the County.

Eat Local Movement

In Camden County, agriculture has remained the dominant land use over time. Rather than regard agriculture as a temporary holding zone for future suburban/exurban development, Camden County could take advantage of its location near Virginia’s tidewater cities and join forces with the popular “eat local” movement. Just as the eastern shore of Maryland provides vegetables to the major urban areas of Baltimore and Washington, DC, Camden County could leverage the “eat local” movement as a sustainable economic development strategy. Camden’s proximity to major urban areas is illustrated in the population density map shown to the right.

Figure 17: Hampton Roads Population Density Map



Wind Energy Farm

The southern end of Camden County is only 22 miles from Kill Devil Hills, so well-known for its strong winds that the Wright brothers choose the site for their inaugural airplane flights. With its location on Albemarle Sound and low density development, Camden County is good location for electricity generation using wind turbines. The map below illustrates the potential for wind energy along the coast of North Carolina.

Figure 178: Wind Energy Potential on East Coast



Efforts are underway to develop a wind farm in the Hale’s Lake area in the northeast section of the County and neighboring Currituck County. Local support exists for this project, and landowners have been providing options on

their property to lease air rights for the wind farm. Critical to this project will be securing permits from federal agencies to proceed with the project.

Challenges to Future Growth

The challenges to capturing a portion of the region's growth in Camden County are:

- * Natural constraints to development (wetlands, floodplains, poor draining soils)
- * Needed infrastructure (primarily public sewer and increased water supply for the future)
- * Distance from Hampton Roads Region (Camden County sits on far end of region and many may not be willing to make commute)

This comprehensive planning effort will look at ways to address these challenges to improve the potential for future economic development in the County.

NATURAL ASSETS: CAPITALIZING ON ECO-TOURISM AND RECREATIONAL OPPORTUNITIES WHILE PROTECTING VALUED RESOURCES

The most striking natural asset in Camden County is its waterways. These include Joyce, Indiantown, and Sawyers Creeks, and the Pasquotank and North Rivers. Largely invisible from the County's highways, these waterways are a world unto themselves that can only be appreciated by boat. The shores are lined with dense forests and marshes that shelter all manner of wildlife; the waters are full of game fish. However, public knowledge and enjoyment of these waterways is limited by a lack of access, publicity, and support services.

Neighboring counties in the Albemarle region are promoting a growing network of

"blueways"-- water trails with launch points, camping locations, and points of interest designed for canoeists and kayakers. These are proving to be popular with both local residents and tourists. Camden County could become part of this network by designating specific sections of their rivers as blueways, providing additional access points, and constructing camping platforms at appropriate points. The long-range plan should suggest where these features could be located and where funding for construction could be pursued.

The Dismal Swamp Canal is a unique waterway, hand dug by slaves and used through the Civil War as a major commercial route for freighters and barges travelling between the Chesapeake and Albemarle sounds. Now bypassed by highways and railroads, the canal is managed by the U.S. Army Corps of Engineers for use by recreational boaters (sailboats and cabin cruisers). It is also the site of the annual Paddle to the Border, an event that attracts hundreds of canoeists and kayakers from throughout the region. However, access to the canal within Camden County is limited to a grass launch platform at the Dismal Swamp Canal Visitors Center. Commercial outfitters are discouraged from using this platform and effectively denied access to the canal. Potentially, much greater use could be made of this canal by negotiating agreements with the Corps of Engineers and NC Department of Transportation for additional access and more liberal use of their existing facilities. This should be pursued as part of the long-range plan.

Another great natural resource is the Dismal Swamp itself, 14,000 acres of which lie within Camden County and are protected as part of the Dismal Swamp State Park. The swamp is

home to a variety of wildlife and rare plants, and has a storied history as a hideout for escaped slaves and a provider of vast amounts of timber. The state park contains approximately 18 miles of hiking and mountain bike trails. But except for a pontoon bridge across the Dismal Swamp Canal (closed in the evenings), the Camden County portion of the swamp is inaccessible to the public. The Division of State Parks is planning a campground on newly acquired land to the south of the swamp and is eager to work with the county to enhance access to and enjoyment of the park. Among the possibilities the county might pursue are negotiating for use of adjacent private farm roads as part of a larger network of bike trails, and developing a driving route with designated stops where visitors could learn via signage or electronic media (smartphone, etc.) about specific natural features or historic events.

Paved biking/walking paths are another potential draw for residents of and visitors to Camden County. Currently, the county is in the process of building a bike path bordering the Dismal Swamp Canal from South Mills to the Virginia state line. Studies show that capturing tourist dollars from such paths is enhanced by maximizing the length and variety of the trail, and providing support services such as secure parking, bike rental, restrooms, food, and lodging. The long-range plan should support interconnections with bike trails in neighboring Virginia, the Camden Plantation, and the Dismal Swamp State Park.

Key to capturing tourist dollars from bikers and boaters is the development of “trail towns” that provide the necessary support services. South Mills would appear to be ideally suited for this. The town is located just off busy U.S. 17, at the southern terminus of the planned bikeway and

immediately adjacent to both the Dismal Swamp Canal and to Joyce Creek. It has historic appeal as the site of a significant Civil War battle and is home to the longest continuously operating lock in the U.S. A pair of unoccupied stores could potentially house support services such as bike and boat rental, restaurants, and lodging. The long-range plan should outline appropriate strategies--marketing, grants, and tax incentives--to attract entrepreneurs who would cater to ecotourism and help make South Mills the Gateway to the Camden County Backcountry.

PLACE-MAKING: BUILDING ON THE COUNTY’S EXISTING CHARACTER AND FRAMEWORK

Camden County is a rural coastal county that is growing due to its proximity to the Hampton Roads region and the quality of life found in the County. The County finds itself at an important part in its history – one where future decisions about growth and development will likely have significant impacts on the character and experience of Camden County.

While there is much available land in Camden County, current infrastructure limitations (water, sewer, stormwater, transportation) and the presence of environmentally sensitive areas pose challenges for traditional development in most areas of the County. The future of development and economic development may likely be best approached as “building off the County’s existing framework.”

Developing hamlets or villages that maintain the rural and bucolic character of Camden and provide locally needed services and provide offerings to tourists is one approach to future development in the County. This may better address land use compatibility issues, protect environmentally sensitive lands and

protect the rural character that is one of the County's largest assets.

Plans for infrastructure expansion should be closely tied to the land use plan for the County. Experience has shown that infrastructure expansion can lead to expansion of development, often in unintended areas.

Detailed small area plans may be needed to address the specific land use and infrastructure considerations at the County's three core areas. Plans for development north of South Mills along U.S. 17 are underway. A vision plan for South Mills is occurring concurrently with the comprehensive planning process. Plans for Camden and Shiloh, and possibly the south end of the County may also be warranted.

Future public infrastructure plans, specifically plans for expanding public sewer service should be targeted to serve areas that are both suitable for development and are targeted sites for economic development. The northern section of U.S. 17 and areas in the core village areas are likely the priority areas for extending service to in the future.

NEXT STEPS

The next step in developing the comprehensive plan is to present the information in this report to the County's citizens and engage them in a discussion about the policy choices to be made.

The *Envision Camden County Public Workshop* is scheduled for November 14 at the Camden County Middle School. Two sessions are offered to participants: an afternoon session from 4-6pm and an evening session from 7-9pm. See the project website for more details (www.camdencountync.gov).

The outcomes of the public workshop will provide the foundation for development of the following plan elements:

- * Community Vision
- * Key Planning Themes for Organizing the Plan
- * Policy Framework – Goals, Objectives, Action Strategies
- * Future Land Use Plan
- * Comprehensive Transportation Plan