

Vision Statement

We envision Sussex County as Delaware's leader in agri-business, tourism, and economic growth by sustaining the County's main agricultural, natural, cultural, and human resources and encouraging new growth and economic vitality that provides job opportunities for all Sussex County through smart investment in infrastructure, efficient use of County resources, low taxes, and protection of private property rights."

Chapter 1. INTRODUCTION

1.1 THE SUSSEX COUNTY LANDSCAPE

Sussex County is the southernmost county in Delaware and is bordered by the Atlantic Ocean to the east, Kent County, Delaware, to the north, and Caroline, Dorchester, Wicomico, and Worcester Counties, Maryland, to the west and south (Figure 1.3-1). The County is within a 100-mile drive of Philadelphia, Baltimore, and Washington, D.C.

Sussex County has the largest land area of Delaware's three counties, spanning 938 square miles of land area, and has long been the State's leading agricultural producer (Sussex County, 2016). Sussex County's diverse landscape also encompasses small towns and growing population centers. The County contains 25 incorporated municipalities (Table 1.3-1).

| Table 1.1-1 Sussex County Incorporated Municipalities | | |
|---|----------------|-----------------|
| Bethany Beach | Frankford | Millville |
| Bethel | Georgetown | Milton |
| Blades | Greenwood | Ocean View |
| Bridgeville | Henlopen Acres | Rehoboth Beach |
| Dagsboro | Laurel | Seaford |
| Delmar | Lewes | Selbyville |
| Dewey Beach | Milford | Slaughter Beach |
| Ellendale | Millsboro | South Bethany |
| Fenwick Island | | |

The eastern portion of Sussex County is characterized by popular, ocean-side seasonal vacation towns, fueling the booming tourism industry in the County. The western portion of Sussex County is the backbone of Delaware's agriculture industry, and includes a greater number of acres of arable land under cultivation than anywhere else in the state.

Transportation routes in the County range from country roads to major highways (Figure 1.3-2). Major roads include US routes 113, 13, and 9, and State Routes 1, 30, 23, 24, 26, 54, 404, and 16. Nearly all public roads in Sussex County are administered by the Delaware Department of Transportation (DelDOT), with the exception of roads within subdivisions. Bus service in the County is provided through DART First State and the Delaware Transit Corporation, an operating division of the DelDOT. Local rail lines in the County connect to the Norfolk Southern Rail Network. Sussex County is also home to the Delaware Coastal Airport and the privately-owned Laurel Airport. Additional information on the transportation network of Sussex County is provided in Chapter 14, Mobility.

Sussex County also shares almost 25 miles of coast with the Atlantic Ocean and 19 miles of coast with the Delaware Bay. Major waterways in Sussex County include the Nanticoke River. More information on the water resources of Sussex County is included in Chapter 6, Conservation.

Figure 1.1-1 Sussex County Regional Location

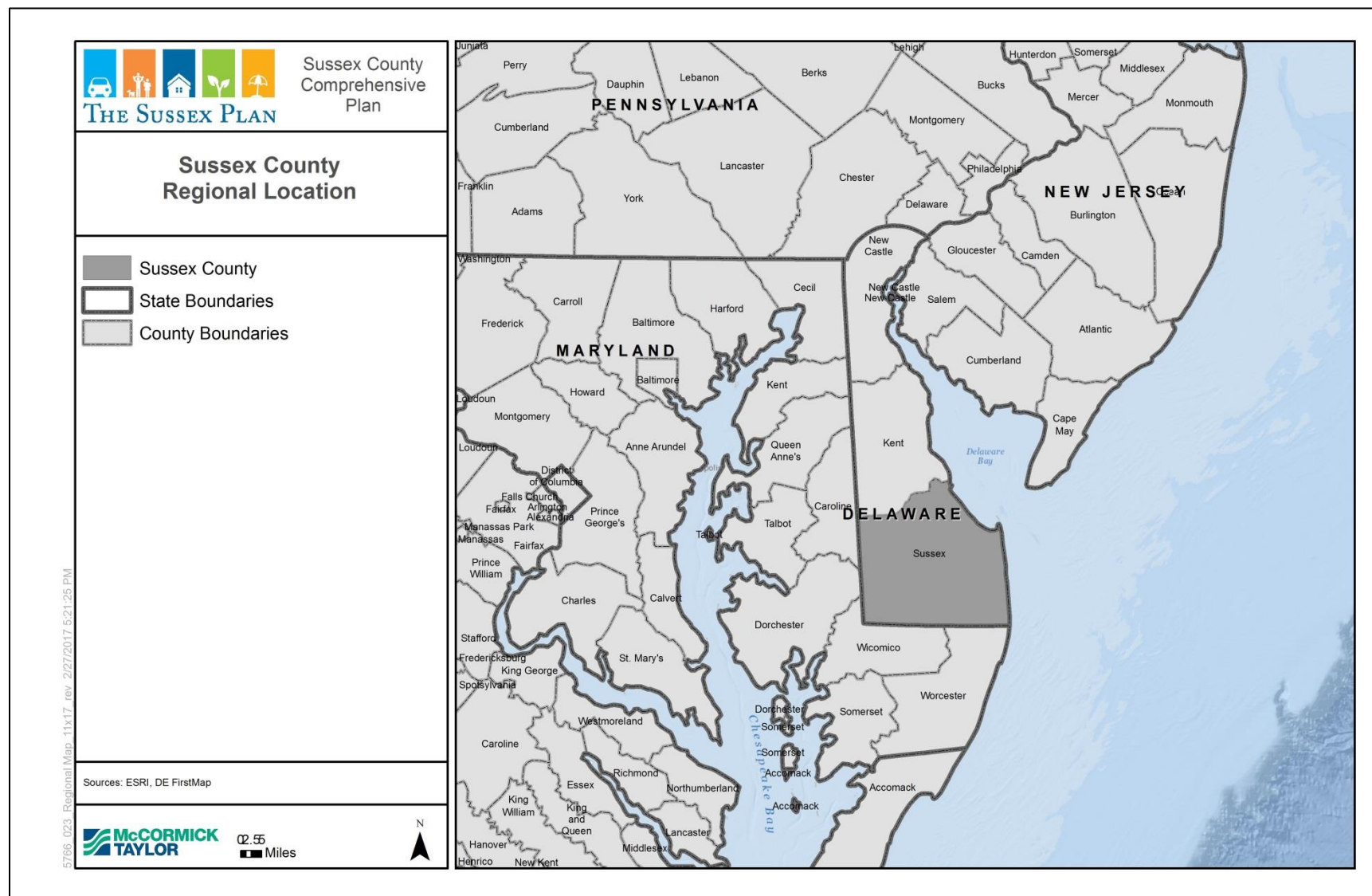
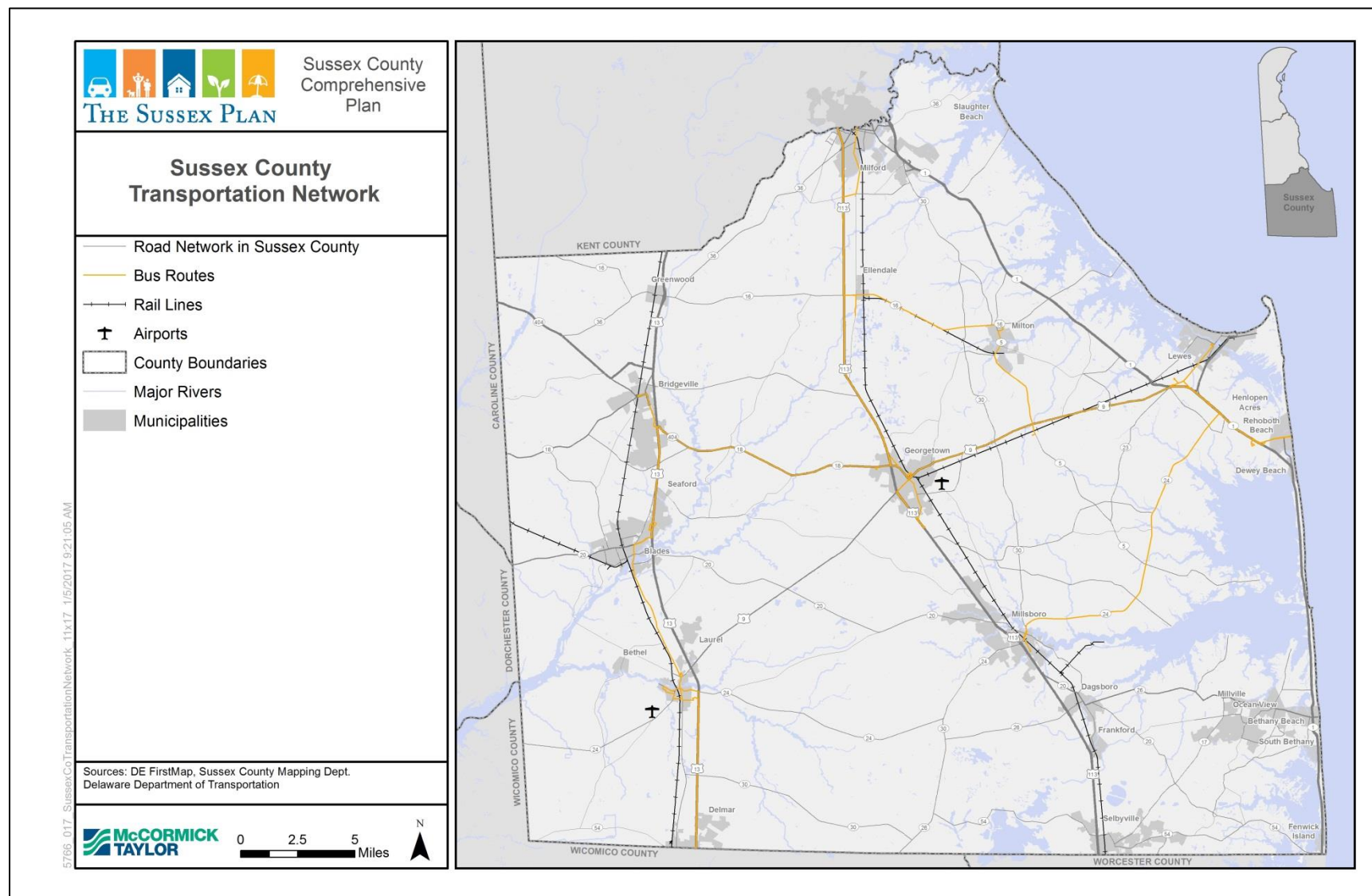


Figure 1.1-2 Sussex County Transportation Network





Today, Sussex is the fastest growing County in Delaware due to its popularity as both a primary and secondary home destination. This new residential development, along with Sussex's strong agricultural industry and booming tourism industries, are generating substantial economic activity. The County's active economy and cost-conscious public sector management continue to permit the low real estate tax rates for which Sussex County is also known.

This Comprehensive Plan strives to set a foundation for decision-making and provide a roadmap to the future of the County to maintain the quality of life that residents enjoy. The following sections provide an overview of the Comprehensive Plan.

1.2 OVERVIEW OF THE COMPREHENSIVE PLAN

The Sussex County 2045 Comprehensive Plan (The Sussex Plan) is the statutorily-authorized comprehensive plan for the unincorporated portions of the County. This plan will guide the future direction of planning and decision-making in the County.

Sussex County, Delaware, has statutory authority to prepare and implement a comprehensive plan under Delaware Code, Title 9, Chapter 69 which requires Delaware counties and municipalities to update their comprehensive plans every ten years. This plan will cover a 27-year planning period to the year 2045. It contains the following chapters:

- Introduction
- Population and Demographics
- Planning Process
- Vision, Goals, and Objectives
- Future Land Use
- Conservation
- Recreation and Open Space
- Utilities
- Housing
- Economic Development
- Historic Preservation
- Intergovernmental Coordination
- Community Design
- Mobility

1.3 PURPOSE OF THE COMPREHENSIVE PLAN

The Sussex Plan is the County's official policy guide for future development-related decisions. The Sussex Plan is long-range in nature, and provides a framework for the County's residents and decision-makers to conceptualize how the County should look and function over the next 27

years. Implementation strategies are identified within each chapter of the Plan, all or a portion of which may be utilized to accomplish the goals and objectives for topic areas addressed in the Sussex Plan.

The major purposes of the Sussex Plan are to:

- Serve as a guide for future development, redevelopment, and preservation in the County;
- Enhance the quality of life for residents by planning for the future;
- Provide a snapshot of existing conditions;
- Determine an overall vision of the County and what it aspires to be in the future;
- Set a realistic action plan; and
- Promote a collaboration of stakeholders and residents in the planning process.
- Fulfill the legal requirement of Title 9, Chapter 69 of the Delaware Code.

1.4 THE COMPREHENSIVE PLAN AND COUNTY CODE

While the Comprehensive Plan acts as a policy guide for future development and decision-making, County Code regulates the use of land and creation of lots and associated improvements. There are two primary ordinances in County Code that do this.

1.4.1 The Zoning Ordinance

The Zoning Ordinance is the primary legal tool to regulate the uses of land and buildings. The Zoning Ordinance includes a Zoning Map that divides the unincorporated areas of the County into different zoning districts. Each district permits a set of activities and establishes a maximum density of development. In addition to regulating land uses and densities, zoning also controls the following:

- The heights of buildings,
- The percentage of a lot that may be covered by buildings and paving,
- The minimum distances that buildings may be placed from streets and property lines,
- The minimum size of lots,
- The maximum sizes and heights of signs, and
- The protection of important natural features.

This Comprehensive Plan Update recommends several zoning revisions. Updating the County's Zoning Ordinance will be Sussex County's first step towards implementing this plan.

1.4.2 The Subdivision Ordinance

The County's Subdivision Code mainly regulates the creation of new lots, the construction of new streets by developers, and related improvements associated with new development. This



Comprehensive Plan Update will lead to the revision of selected regulations in Sussex County's Subdivision Code.

Chapter 2. POPULATION AND DEMOGRAPHICS

2.1 POPULATION

Sussex County is currently home to over 215,622 permanent residents according to the Census's July 1, 2015 population estimate (US Census, 2016). It is the fastest growing county in Delaware, and has experienced strong growth since 1950, particularly in recent decades (Table 2.1-1).

| Table 2.1-1 Sussex County Historical Population Trends | | |
|--|------------|----------------|
| YEAR | POPULATION | PERCENT CHANGE |
| 1950 | 61,336 | - |
| 1960 | 73,195 | 19 |
| 1970 | 80,356 | 10 |
| 1980 | 98,004 | 22 |
| 1990 | 113,229 | 16 |
| 2000 | 156,638 | 38 |
| 2010 | 197,145 | 26 |
| July 1, 2015 (estimate) | 215,622 | 9 |

Source: US Census Bureau, 2016

As compared to the State of Delaware, Sussex County has grown almost 70 percentage points faster at approximately 169 percent in the past 50 years (Table 2.1-2).

| Table 2.1-2 Population Change, 1960-2010 | | | | |
|--|------------------|----------------|-----------------|-------------|
| GEOGRAPHY | TOTAL POPULATION | | ABSOLUTE CHANGE | GROWTH RATE |
| | 1960 | 2010 | | |
| State of Delaware | 446,292 | 899,778 | 453,486 | 102% |
| Kent | 65,651 | 162,978 | 97,327 | 148% |
| New Castle | 307,446 | 538,912 | 231,466 | 75% |
| Sussex | 73,195 | 197,145 | 123,950 | 169% |

Source: US Census Bureau, 2016

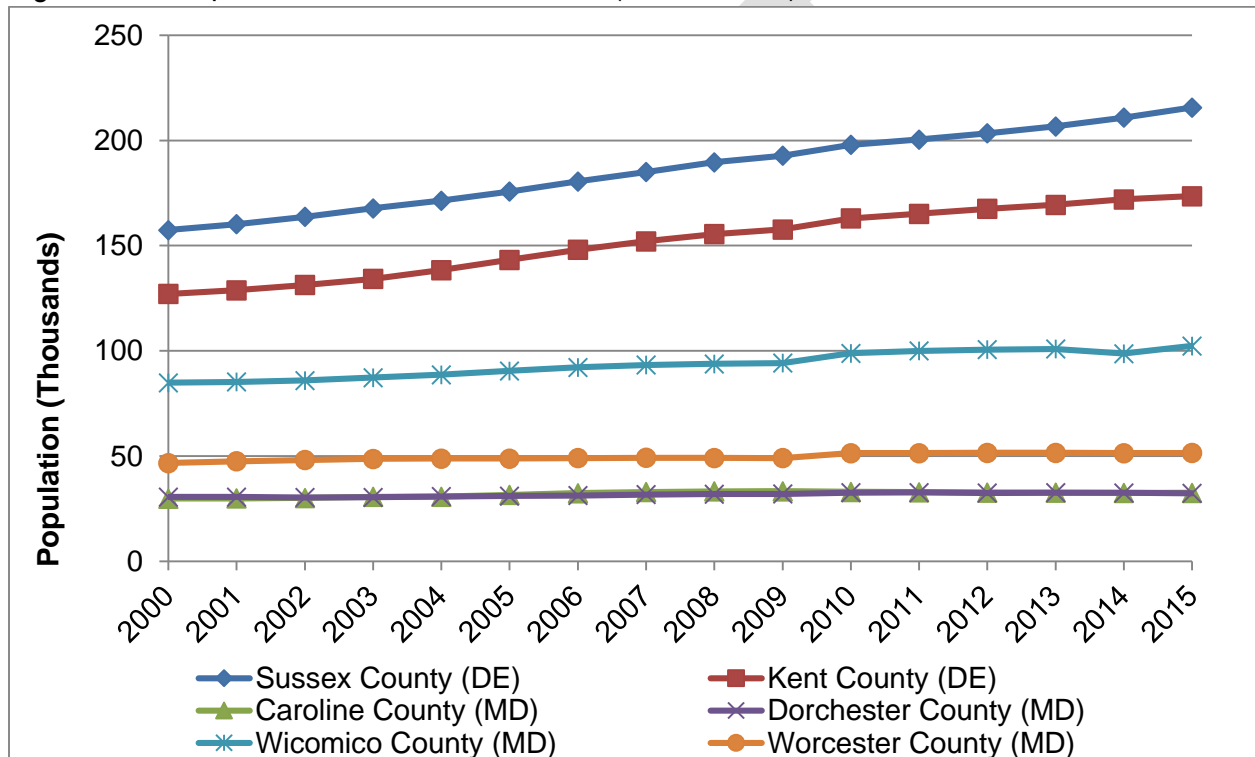
Even in recent years, Sussex County continues to grow faster than all of its neighboring counties, including its Maryland neighbors (Table 2.1-3 and **Error! Reference source not found.** 2.2-1). Over the 15-year period from 2000 to 2015, Sussex County grew at a rate of 37 percent, slightly higher than Kent County (36.5 percent).

| Table 2.1-3 Neighboring County Population Comparison, 2000 to 2015 | | | | | | | |
|--|---------|----------|---------|--------------------|---------|--------------------|--------------------|
| COUNTY | 2000 | | 2010 | | 2015 | | |
| | TOTAL | % CHANGE | TOTAL | % CHANGE (2000-10) | TOTAL | % CHANGE (2010-15) | % CHANGE (2000-15) |
| Sussex County, DE | 157,389 | n/a | 197,145 | 25.3% | 215,622 | 8.9% | 37.0% |

| | | | | | | | |
|-----------------------|---------|-----|---------|-------|---------|-------|-------|
| Kent County, DE | 127,109 | n/a | 162,922 | 28.2% | 173,533 | 6.5% | 36.5% |
| Caroline County, MD | 29,828 | n/a | 33,069 | 10.9% | 32,579 | -1.5% | 9.2% |
| Dorchester County, MD | 30,586 | n/a | 32,682 | 6.9% | 32,384 | -0.9% | 5.9% |
| Wicomico County, MD | 84,864 | n/a | 98,905 | 16.5% | 102,370 | 3.5% | 20.6% |
| Worcester County, MD | 46,772 | n/a | 51,470 | 10% | 51,540 | 0.1% | 10.2% |

Source: US Census Bureau, 2016

Figure 2.1-1 Population Growth, 2000 to 2015 (in thousands)



Source: US Census Bureau, 2016

The Delaware Population Consortium (DPC) projects that Sussex County will continue to grow in population by 2045. The DPC is a cooperative organization in Delaware that is comprised of state, county, and local governments. Each year the DPC produces a set of population projections for the state, the three counties, and major municipalities in Delaware. According to the DPC's Annual Population Projections released on October 27, 2016, there will be over 260,000 permanent residents living in Sussex County by 2045. Table 2.1-4 below depicts the Delaware Population Consortium's population projections for permanent residents in Delaware and its counties.

Table 2.1-4 Delaware Population Consortium Permanent Resident Population Projections of Sussex County Compared to other Delaware Counties and the State

| | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 |
|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Kent | 162,978 | 173,529 | 180,912 | 187,199 | 193,038 | 198,264 | 202,731 | 206,665 |
| New Castle | 538,912 | 555,786 | 572,820 | 586,643 | 595,664 | 601,298 | 603,667 | 603,523 |
| Sussex | 197,888 | 215,622 | 229,479 | 240,825 | 248,810 | 254,531 | 258,760 | 262,137 |
| State of Delaware Total | 899,778 | 945,937 | 983,211 | 1,014,667 | 1,037,512 | 1,054,093 | 1,065,168 | 1,072,325 |

Source: Delaware Population Consortium, 2016

It is important to note that both the U.S. Census and DPC population numbers do not provide a full picture of County growth because the population data does not count seasonal residents. This is particularly important in Sussex County which is popular as both a primary and secondary home destination. According to the U.S. Census, Sussex County had an estimated 37,501 seasonal housing units in 2015. During peak vacation season, those homes could be accommodating over 93,000 additional people if an average of 2.5 people (the average household size in Sussex) were inhabiting each of the seasonal units. If an average of four people were inhabiting each unit, that number would grow to over 150,000 additional residents during the peak season.

An understanding of the County's seasonal population is needed to have a full understanding of the impact of population growth on the County's resources, infrastructure, and demand for services. Sussex County is a draw for seasonal visitors and other tourists, and tourism has become an indispensable part of the local economy. At the same time, it is important to consider how seasonal residents and tourists impact the County's housing supply, roads, utilities, and natural environment. Additional residents in the County, whether permanent or seasonal, creates increased traffic on roads, additional housing needs, and additional demands on utilities and services. Cumulatively these changes can adversely affect the natural environment. In addition, in recent years the County has seen growth of the tourism season. Historically, peak tourist season in the County occurred between late May and early September. More recently, the tourism industry has created more attractions and events to extend the peak season from as early as April to as late as November.

At the request of the Sussex County Planning and Zoning Commission as part of this Comprehensive Plan process, the DPC prepared seasonal population projections for Sussex County (Table 2.1-5). The seasonal projections assume an 80% occupancy and 3.3 persons per seasonal household. When the seasonal population of the County is accounted for during peak vacation season, the peak population of the County may be as high as 385,100 in 2045. It is also important to note that this number does not include seasonal visitors staying in hotels, motels, campgrounds or visitors who come for the day and return home at night.

Table 2.1-5 Delaware Population Consortium Permanent and Seasonal Resident Population Projections for Sussex County

| | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 |
|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Permanent Residents | 197,888 | 215,622 | 229,479 | 240,825 | 248,810 | 254,531 | 258,760 | 262,137 |
| Seasonal Residents | 91,793 | 99,003 | 107,164 | 112,693 | 118,508 | 120,523 | 122,572 | 122,963 |
| Total Population | 288,938 | 314,379 | 336,643 | 353,518 | 367,318 | 375,054 | 381,332 | 385,100 |

Source: Delaware Population Consortium, 2016

While the Delaware Population Consortium has been the primary source of population projections for counties and cities in Delaware, other independent sources have also prepared population projections for Sussex County. One such report prepared by Robert Siegel & Associates, Inc. in April 2017, suggests that the total population of Sussex County during the peak season may grow even higher than the DPC's 385,100 estimate in 2045. The report estimates that there is a possibility of 495,810 people by 2045 (351,801 permanent residents plus 144,009 seasonal residents). This estimate hinges on sharp population growth of permanent residents driven by new economic development and employment. Historically, population growth in Sussex has been driven by natural increase (births minus deaths) and migration (retirees).

While realization of the 2045 population numbers in the Siegel report may be possible in Sussex County's future, a more likely scenario may be a population estimate somewhere between the DPC and Siegel numbers. At the request of the County Planning and Zoning Commission, a population estimate that is 15% higher than the DPC 2045 estimate is also considered in chapters for planning purposes in order to account for any unforeseen spurs in population growth in the next several decades.

2.2 DEMOGRAPHICS

Growth is also bringing population diversity to Sussex County. This section presents information on demographics of Sussex County's population. Note that demographic level information is only available for the Sussex County's permanent population and not the seasonal residents.

Additional demographic information is presented in the Economic Development and Housing Chapters.

Between 2000 and 2015, the population growth of white residents has outpaced the population growth of black and other non-white residents. In addition, the number of Hispanic residents grew rapidly during this same period.

| Table 2.2-1 Sussex County Ethnicity and Race Trends | | | |
|---|------------------------|------------------------|---------------------------------|
| RACE/ETHNICITY | 2000 POPULATION | 2015 POPULATION | 2000-2015 PERCENT CHANGE |
| White Alone (Non-Hispanic) | 125,857 | 161,290 | 28% |
| Black Alone (Non-Hispanic) | 23,319 | 26,320 | 13% |
| Other Races, Including Two or More Races, Non-Hispanic Population | 7,462 | 7,608 | 2% |
| Hispanic of Any Race | 6,915 | 20,404 | 195% |

Source: US Census Bureau, 2016; Delaware Population Consortium, 2016

The DPC also includes demographic information in its annual population projections (Table 2.2-2). While in terms of population number, white residents will continue to comprise the largest proportion of Sussex County's population in 2045. However, there will be notable growth in the black population, other races, and Hispanic populations between 2015 and 2045.

| Table 2.2-2 Sussex County Ethnicity and Race Projections | | | | | | | | |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------------------------|
| RACE/ETHNICITY | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | PERCENT CHANGE 2015-2045 |
| White Alone (Non-Hispanic) | 161,290 | 169,975 | 176,309 | 179,139 | 179,553 | 178,677 | 177,399 | 10% |
| Black Alone (Non-Hispanic) | 26,320 | 27,976 | 29,512 | 30,982 | 32,427 | 33,888 | 35,364 | 34% |
| Other Races, Including Two or More Races, Non-Hispanic Population | 7,608 | 8,634 | 9,538 | 10,265 | 10,695 | 10,757 | 10,467 | 38% |
| Hispanic of Any Race | 20,404 | 22,894 | 25,466 | 28,424 | 31,856 | 35,438 | 38,907 | 91% |

While Sussex County's total population is growing, it is also becoming older. The median age increased from 44.6 years to 47 years between 2010 and 2015, an increase of 2.4 years. The increase in median age was significantly greater than the State's increase of 1 years and greater than the counties in Delaware and neighboring counties in Maryland (Table 2.2-3).

| Table 2.2-3 Change in Median Age, 2010-2015 | | | |
|---|-------------|-------------|-----------------|
| GEOGRAPHY | MEDIAN AGE | | ABSOLUTE CHANGE |
| | 2010 | 2015 | 2010-2015 |
| State of Delaware | 38.3 | 39.3 | 2.6% |
| Sussex County | 44.6 | 47.0 | 5.1% |
| Kent County, DE | 36.1 | 37.0 | 2.4% |
| New Castle County, DE | 37.2 | 37.5 | 0.8% |
| Caroline County, MD | 37.8 | 40.1 | 5.7% |
| Dorchester County, MD | 43.1 | 43.8 | 1.6% |
| Wicomico County, MD | 35.7 | 35.5 | -0.6% |
| Worcester County, MD | 47.5 | 49.1 | 3.3% |

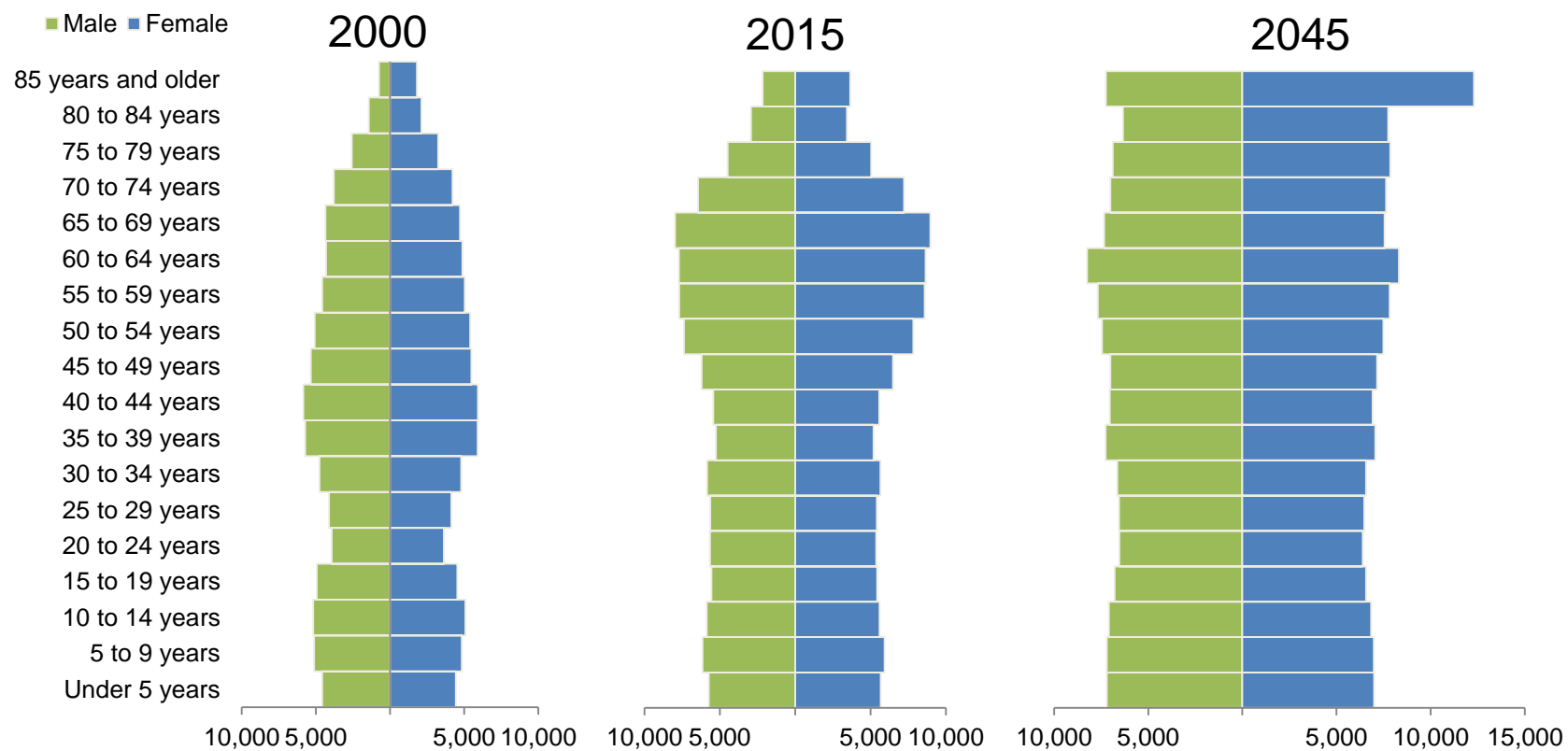
Source: US Census Bureau, American Community Survey

The aging population is apparent in the population age distribution between 2000 and 2015 (Figure 2.2-1). The highest growth occurred in the age groups between 50 and 69 years old (also known as the Baby Boomer Generation). This was the fastest growing age group between 2000 and 2015, with an increase of 69%. This is not surprising given Sussex County's popularity as a retiree destination. Sussex County's lower tax rates, natural environment, quality of life and housing opportunities are attracting retirees, owners of second homes, and other older householders in great numbers. Some seasonal visitors buy a second home in Sussex with the intent that it will become their regular retirement home.

As this "boomer" population group continues to age through 2045, it moves up in the population pyramid. The largest increase in population will be in the 85+ demographic which is expected to see a 235% increase by 2045.

This aging population of Sussex County will have workforce preparedness effects in terms of potential skill deficits of older workers as well as generating demand for certain occupations to serve their needs, such as healthcare, long-term care, and transportation. These issues are discussed in the below sections as well as in other chapters of the plan.

Figure 2.2-1 Population Age Distribution, 2000, 2015, and 2045 in Sussex County, DE



Source: US Census Bureau, Delaware Population Consortium

2.3 IMPLICATIONS OF POPULATION GROWTH

Sussex County has been the state's fastest growing County and is forecasted to remain in that position for the foreseeable future. While population growth can have positive effects on the local economy, diversify communities and generate new tax revenues, other impacts are also likely including increased demands for infrastructure and public services. By understanding these changes, local officials can inform business and civic leaders and the public while developing plans for the future of Sussex. Some of the notable changes created by growth include:

- ***The need for more new schools and school expansions.*** While the State has traditionally funded much of these costs, State financial resources are constrained and currently subject to great demands. Fortunately for Sussex County schools and for the State's school funding situation, many new Sussex County residents are retirees or other older people without school-age children.
- ***More central water and sewer services.*** Population growth, increased housing density, and heightened concerns for surface and groundwater quality means that new water and sewer service areas must be created and existing ones expanded. In addition, the degradation of water quality of individual/private wells and the failure of on-site septic systems will also create demands for sewer and water services in the future. While customers and rate payers will bare most of these costs, additional capital planning and investment will be required
- ***More traffic and traffic congestion.*** Traffic follows population growth, particularly growth in low density housing which cannot be well served by public transportation alternatives. Low density housing and single-use development also generates more household trips that depend entirely on automobiles. Demand for more roadway capacity (additional lanes, new roads and improved intersections) requires considerable investment of new public capital. Traditional sources of transportation funding, like motor fuel taxes are diminishing and falling short of growing needs. Better community design, pedestrian and bicycle connections, mixed use development, travel demand management strategies and transportation alternatives can reduce and delay growing demands for more roadway capacity.
- ***More health care, social, and para-transit services.*** As population increases and median age continues to increase in Sussex County, more health related services will be needed, affecting both hospitals and other health care providers. As health care costs increase and more of the population is under insured, demand for public health services will increase requiring more public funding sources. Also, income households create more demand for publicly-funded social services and non-traditional para-transit services.
- ***More affordable housing.*** Reflecting national trends, market prices for Sussex County homes and apartments have been steadily increasing. This trend also reflects the County's popularity as a first home and second home destination. Housing cost increases will continue to put safe and

decent housing out of the reach of many low and moderate income households. This will further exacerbate the County's affordable housing challenges.

• ***More public recreation land, recreation facilities, and open space.*** As the Sussex County population increases and diversifies, expectations and demands for more parks, recreational opportunities, and outdoor activities are likely to grow. At the same time, increases in personal leisure time and leisure time activities for active retirees have generated growing interests in new sports, both active and passive. Young people of school age now participate in multiple sports including baseball, basketball, lacrosse, and soccer. Many Sussex County seniors and retirees have expressed their growing interest in active lifestyles demanding amenities such as sidewalks, trails, and pickleball courts. Outdoor enthusiasts of all ages with interests in camping, hiking, and kayaking are looking for access to woodlands, waterways, and other natural areas.

Chapter 3. PLANNING PROCESS

3.1 OVERVIEW

In accordance with Delaware law, under Delaware Code, Title 9, Chapter 69, the three counties of Delaware are required to update their comprehensive plan every ten years. Sussex County adopted the last comprehensive plan in 2008 and began the update process in 2016 with a goal of adopting the update in June 2018. The following description provides an overview of the process followed to draft and adopt the Sussex County Comprehensive Plan. It represents a thoroughly-tested process of data collection and interpretation, assessment of trends, development of growth projections, exploration of alternative futures, and the preparation of all appropriate and required plan elements.

The comprehensive planning process involves the whole community, including the Sussex County staff, Sussex County Council, Sussex County Planning and Zoning Commission, stakeholders, and citizens. The Planning and Zoning Commission took a hands-on role in developing the Draft Comprehensive Plan in advance of handing it off to the County Council for review and adoption.

The Sussex County Comprehensive Plan process began with an existing conditions analysis in order to have sound understanding of recent market trends, current economic conditions, demographics, housing stock, and land uses. Based on the existing conditions analysis, significant planning issues, such as development, water supply, storm water management, and conservation, were determined. From here, the public helped to identify goals and opportunities. The community also explored alternative futures in order to develop a consensus-driven, common future for the County. The Draft Comprehensive Plan was then built on the above framework.

Public outreach was the driving force for the direction of the Comprehensive Plan Update. The public's involvement was weaved throughout each stage of the planning process, drawing on stakeholders to represent their community's concerns, and enlisting the community at-large to inform the process.

3.2 WORK PROGRAM SCHEDULE

The work program schedule is the approach to preparing a comprehensive plan. The Sussex County Comprehensive Plan work schedule was developed at the start of the planning process to guide four phases of the planning process. The four phases are Identifying Opportunities, Visioning/Development Framework, Draft County Comprehensive Plan, and Prepare Final Comprehensive Plan. The work plan schedule allotted 22 months for the entire planning process.

Phase A: Identifying Opportunities

Vital to the Sussex County Comprehensive Plan Update, a current snapshot of the County was created in order to understand how recent trends would impact the County in the future. Included in this phase was exhaustive research into a broad inventory of existing conditions and an analysis

of market trends. From this assessment, County Staff, the Commission, stakeholders, and the public identified goals and opportunities for the future that could shape the County's vision. Phase A was a six month process.

Public and Stakeholder Input:

Planning and Zoning Commission Meetings: The Sussex County Planning Zoning and Commission held frequent workshops on the Sussex County Comprehensive Plan Update. The workshops, held from November 2016 through June 2017, were deep dives into the elements of the Comprehensive Plan to ensure they are aligned with the community's vision for Sussex County. The public was welcome to attend and could submit comments at the beginning, but not during the workshop.

Stakeholder Focus Groups: Four focus groups were convened between June 2016 and September 2016. Topics included housing; utilities, natural resources, open space and recreation; and agriculture and forestry. Invitations were sent to people identified with important knowledge to share. Questions about the discussion topics were sent in advance. The purpose was to identify short-term (5 years), mid-term (5-15 years), and long-term (15-25 years) considerations for each topic.

Public Meetings: A round of five public meetings, in an open house format, were held at the culmination of Phase A to provide input on and review the data gathered as part of this phase. Comment cards and a survey captured the public's input on the major planning issues facing the County, goals for the future, and the identified trends. The Phase A. See Fall 2016 Public Meetings in Section 3.3 for more information.

County Leader Interviews: Individual interviews of the Sussex County Planning and Zoning Commission and Sussex County Council were conducted in July 2016 to help inform the current snapshot of Sussex County. Topics included transportation, housing, development, economy, environment, and socioeconomic issues.

Phase B: Visioning/Development Framework

During this phase, those involved dove into the question – *What do we want our County to look like in 2045?* This was an opportunity to be visionary about what land use would look like and which transportation and mobility elements need improvement. To achieve this, the work in this phase focused on the systematic exploration of selected planning issues and alternative futures for both development and conservation. This phase provided the opportunity to analyze the transportation implications of these alternative futures and to consider opportunities to develop a transportation system that supports the goals of Sussex County identified in Phase A. County. Phase B was a five month process.

Public and Stakeholder Input:

Planning and Zoning Commission Meetings: The Sussex County Planning Zoning and Commission workshops continued during this phase, which included ongoing opportunities for public and stakeholder input.

Public Meetings: A round of five public meetings, held throughout the County, were hosted at the culmination of Phase B to provide input on the alternative development themes and concepts as well as the future land use plan. See Spring 2017 Public Meetings in Section 3.3 for more information.

Phase C: Draft County Comprehensive Plan

Drawing on the issues and goals identified in the previous two phases, this is when the pen was put to paper. Each element of the Plan was prepared first as preliminary drafts with accompanying action and associated implementation strategies. The consultant team then assembled each chapter element into the overall Draft Comprehensive Plan. This phase took seven months to complete.

Public and Stakeholder Input:

Planning and Zoning Commission Meetings: The Sussex County Planning Zoning and Commission workshops continued during this phase, which included ongoing opportunities for public and stakeholder input.

Public Meeting: One public meeting was hosted at the culmination of Phase C to provide input on the elements of the Draft Plan. See Fall 2017 Public Meeting in Section 3.3 for more information.

Public Hearing: The County Planning and Zoning Commission held one public hearing was held where stakeholders and the general public will be able to submit verbal and written testimony about the Draft Comprehensive Plan. See Fall 2017 Public Hearing in Section 3.3 for more information.

Phase D: Prepare Final Draft and Final Comprehensive Plan

Following the public presentation of the Draft Comprehensive Plan during Phase C, revisions to the Draft are to be made based on direction from County Council and staff into the Final Draft Comprehensive Plan. The Final Draft Comprehensive Plan will then presented to County Council, key stakeholders, and the general public during a formal Public Hearing. Further changes directed by County Council will made and a Summary Plan will prepared to produce the Final Comprehensive Plan. At this point in the plan development process, it is anticipated the County Council will take formal action to adopt the Final Comprehensive Plan. Printed and electronic copies of the adopted Final Comprehensive Plan would be delivered to Sussex County.

Public and Stakeholder Input:

Public Hearing: The County Council will hold one public hearing was held where stakeholders and the general public will be able to submit verbal and written testimony about the Final Draft Comprehensive Plan. See Fall 2017 Public Hearing in Section 3.3 for more information.

3.3 PUBLIC INVOLVEMENT PROCESS AND OUTCOMES

Public involvement has been a critical component in the development of the Plan. Various methods were used for collecting feedback and providing opportunities to ask questions about the Plan and the process. These opportunities occurred through public meetings, the project website, social media and commission meetings. Three sets of public meetings were held throughout the County for a total of 11 public meetings. There was one public hearing.

Public Meetings:

Three rounds of open houses were hosted throughout the County.

Fall 2016 Public Meetings The purpose of the open house style public meetings was to foster discussion that informed the Plan. At these meetings members of the public shared their perspectives on the County's assets and challenges, identified issues and areas that may need special attention, reviewed previously identified issues and opportunities, and learned about the comprehensive plan process. Attendees could comment on each of the elements of the Plan as well as the capital improvements plan. A total of 868 written comments were received. A majority of the comments were focused on transportation, land use, conservation, and economic development. Additionally, a public survey on the future of Sussex County was released. The open houses were held at the following locations in an attempt to reach as many residents as possible throughout the County.

1. Monday, September 26, 2016
Lewes Fire Station No. 2 – Lewes, Delaware
2. Tuesday, September 27, 2016
Millsboro Town Center – Millsboro, Delaware
3. Thursday, September 29, 2016
Seaford Fire Hall – Seaford, Delaware
4. Tuesday, October 4, 2016
Georgetown Fire Hall – Georgetown, Delaware
5. Wednesday, October 5, 2016
Millville Fire Hall – Millville, Delaware

Spring 2017 Public Meetings At this point in the process, the public was invited to explore land use and transportation alternative development themes as well as to and to provide feedback on the vision; identified trends, data, and community information received; and draft goals, objectives, and strategies. The public meetings included a presentation on the future land use element, a question and answer session, and a land use element survey and exercise. Feedback gathered

during this second round of Public Meetings was used to improve and shape the Draft Comprehensive Plan. The public meetings were held at the following locations in an attempt to reach as many residents as possible throughout the County.

1. May 1, 2017
Laurel Fire Department – Laurel, Delaware
2. Tuesday, May 2, 2017
Cheer Center Georgetown – Georgetown, Delaware
3. Wednesday, May 3, 2017
Frankford Fire Department – Frankford, Delaware
4. Wednesday, May 10, 2017
Milford Senior Center – Milford, Delaware
5. Tuesday May 16, 2017
Beacon Middle School – Lewes, Delaware

Fall 2017 Public Meeting The purpose of this public meeting was to present the Draft Comprehensive Plan and draft future land use map to stakeholders and the public. It was an opportunity to review a presentation on the elements of the Draft Comprehensive Plan, ask questions, and submit comments.

Date: Wednesday October 11, 2017

Times: Open House – 12 p.m. - 7:30 p.m.
Presentations – 12:30 p.m., 3:30 p.m. and 6:00 p.m.

Location: Cheer Center
20520 Sand Hill Road, Georgetown, DE 19947

Fall 2017 Public Hearing The purpose of the public hearing is for the Planning and Zoning Commission to review and receive comments from key stakeholders and the general public on the County's Final Draft Comprehensive Plan. Interested persons were able to provide verbal and written testimony during the hearing.

Date: Thursday, November 2, 2017

Time: 6:00 p.m.

Location: Council Chambers
2 The Circle, Georgetown, DE 19947

Comprehensive Plan Workshops/Forums

As part of the construction of the Comprehensive Plan workshops were held to discuss the Plan. there were 3 workshops between the County Council and the Planning and Zoning Commission. The Planning Commission also held 19 workshops to discuss each chapter within the Plan. At each of the Planning Commission workshops public comment was taken. The County Council will hold forums to discuss the Plan. The following is a list of the dates the Planning Commission held workshops:

| | | |
|----------------|-----------------|--------------------|
| March 8, 2017 | June 5, 2017 | August 21, 2017 |
| March 22, 2017 | June 26, 2017 | September 13, 2017 |
| March 29, 2017 | July 14, 2017 | September 20, 2017 |
| April 10, 2017 | July 28, 2017 | September 27, 2017 |
| April 21, 2017 | August 7, 2017 | October 4, 2017 |
| May 22, 2017 | August 14, 2017 | October 18, 2017 |
| June 16, 2017 | | |

Online Collection of Feedback

The dedicated Plan website (www.sussexplan.com) was created as a resource and storing house for any information related to the Sussex Comprehensive Plan Update and as tool for public input. The website allowed Sussex County residents with internet access to familiarize themselves the planning process, read draft chapters, find planning resources, learn about news and upcoming public meetings, provide input on the Plan, and read feedback from others. On the website, users could subscribe for email notifications of upcoming meetings. Users could submit comments via a contact form. The public survey conducted during Phase A was also available to take online. All comments were made part of the public record.

A Facebook page and Twitter account also were created for the Sussex County Comprehensive Plan. Here, followers could receive notices about upcoming meetings, view video of the County Planning and Zoning Commission workshops, and receive direction on how to provide input.

3.4 PLAN REVIEW, APPROVAL AND ADOPTION

Under Chapter 92 of Title 29 of the Delaware Code, comprehensive plans are subject to review by the Preliminary Land Use Service (PLUS). PLUS ensures that local land use decisions are compatible and consistent with plans and policies at all levels of the government. The PLUS process involves reviews by all applicable state agencies, adding value and knowledge to the process without taking

over the authority of local governments to make land use decisions. Typical state agency contributors are:

- Department of Transportation
- Department of Natural Resources and Environmental Control
- State Housing Authority
- State Fire Marshal
- Department of Agriculture
- Public Service Commission
- Department of Health and Social Services, Division of Public Health
- Economic Development Office
- Department of Education

General Cabinet Committee on State Planning Issues (CCSPI) and PLUS Approval Process for Comprehensive Plans is as follows:

- Step 1:** Draft Comprehensive Plan prepared by local government.
- Step 2:** Planning Commission and/or Legislative Body approves Draft Plan to send to the Office of State Planning Coordination (OSPC) at the same time it goes for public review.
- Step 3:** General Cabinet Committee on State Planning Issues (CCSPI) and PLUS meetings, application submitted by first business day of the month.
- Step 4:** State comments submitted to local government within 20 business days of PLUS meeting.
- Step 5:** Local government replies to state comments in writing and submits revised plan (if necessary) to the Office of State Planning Coordination (OSPC) for review.
- Step 6:** OSPC requires 20 working days to reply to revised plan. State sends a letter accepting changes or noting discussion items, then sends a report to the Cabinet Committee on State Planning Issues.
- Step 7:** Second meeting with the Cabinet Committee on State Planning Issues to review/discuss any changes made to the plan as a result of public comments.
- Step 8:** Provided no additional changes are made, the jurisdiction shall adopt the plan as final, pending certification. A final copy of the plan shall be submitted to the OSPC.
- Step 9:** The Governor shall issue a certification letter to the County. The certification date shall be the date of official adoption by the County.

Following State certification, Sussex County Council is anticipated to take formal action to adopt the Final Comprehensive Plan. Upon adoption, a copy of the final document and written notification of adoption would be sent to OSPC.

Chapter 4. FUTURE LAND USE

Future Land Use Vision: *To provide for balanced and well-planned future growth and development that supports the County's economic development goals while providing incentives to preserve the rural character of the County and its natural resources.*

4.1 OVERVIEW

The Future Land Use chapter is the centerpiece of the Comprehensive Plan. The chapter creates a framework for achieving the Comprehensive Plan's overall vision and determining future development priorities. This chapter is comprised of a series of items that direct future development including the Future Land Use Map and goals, objectives, and strategies to be used to achieve the County's planning vision. These tools will provide long-term guidance to elected officials, developers, and planning and development staff who make decisions regarding land use, infrastructure, economic development, preservation, and capital improvements.

4.2 EXISTING LAND USE

Sussex County includes nearly half (48 percent) of the land area in Delaware. Most commercial activity and the majority of the County's population reside near three major north-south roadway corridors. State Route 1 runs along the Atlantic coastline through or near the County's major resort towns. U.S. 113 extends through the center of Sussex County from Milford to Georgetown and south to Selbyville. U.S. 13 connects the Town of Greenwood in the northern portion of the County to several western Sussex County towns and to Salisbury, Maryland.

Many of the County's 25 incorporated municipalities also are located along the three main roadway corridors. The beach resorts along the Atlantic coast are the most populous and highly developed of these towns. However, other incorporated towns and cities and the areas immediately adjacent to them serve as population and commerce centers in locations throughout the County. The Sussex County government strives to work closely with the incorporated municipalities, especially on annexation and utility services. But in the end, each incorporated town makes its own land use planning and other policy decisions.

While the land in and around the towns and the major roadway corridors is the location for most of the residential and commercial land uses in the County, agriculture and undeveloped lands make up the majority of the existing land use of the County (approximately 85 percent). These lands face development pressure as the population of the County continues to grow.

The Existing Land Use map on the next page depicts the existing land uses in Sussex County. A second map, titled Developed and Protected Lands shows developed areas compared with lands already preserved and lands in agricultural preservation districts.

Figure 4.2-1 Existing Land Use



Sussex County
Comprehensive
Plan

Existing Land Use

- Single-Family Dwellings
- Multi-Family Dwellings
- Mobile Home Parks/Courts
- Commercial
- Industrial
- Institutional
- Mixed Use
- Agricultural & Undeveloped Lands
- Recreation
- Utilities
- County Boundaries
- Municipalities
- Major Rivers
- Waterbodies

Sources: DE FirstMap - 2012 Existing Land Use,
Sussex County Mapping Dept., Office of
Management and Budget, State of Delaware,
Delaware Geographic Data Committee

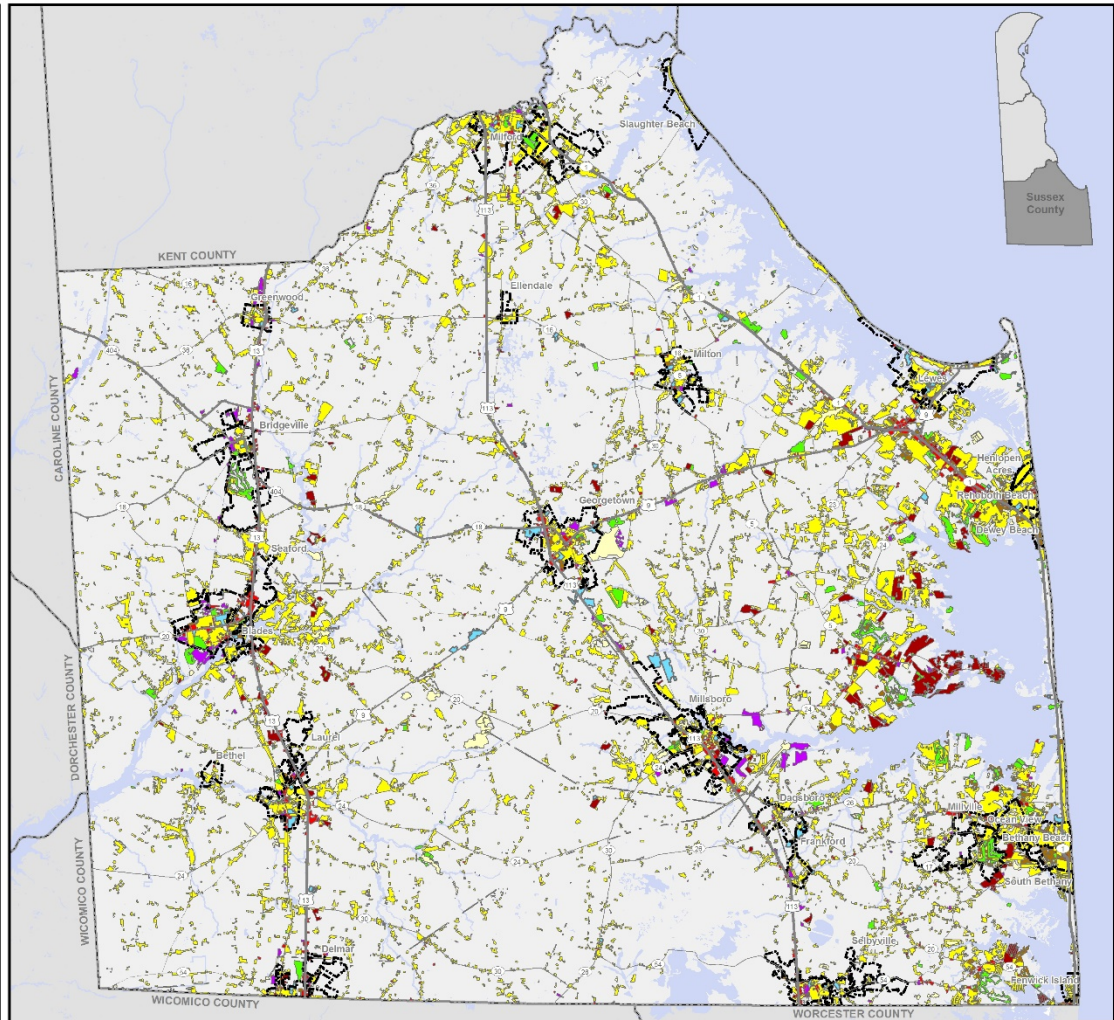
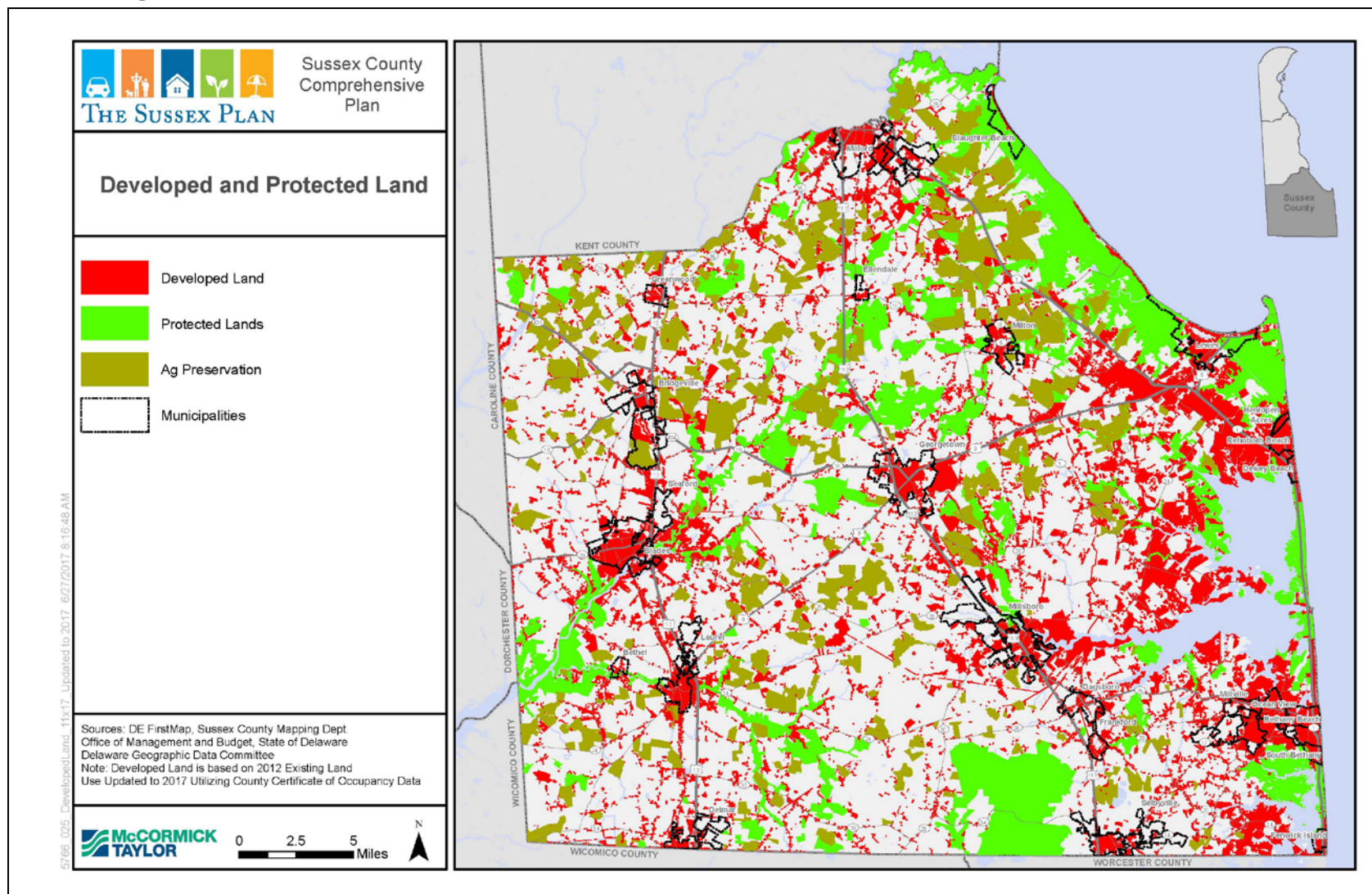


Figure 4.2-2 Developed and Protected Land

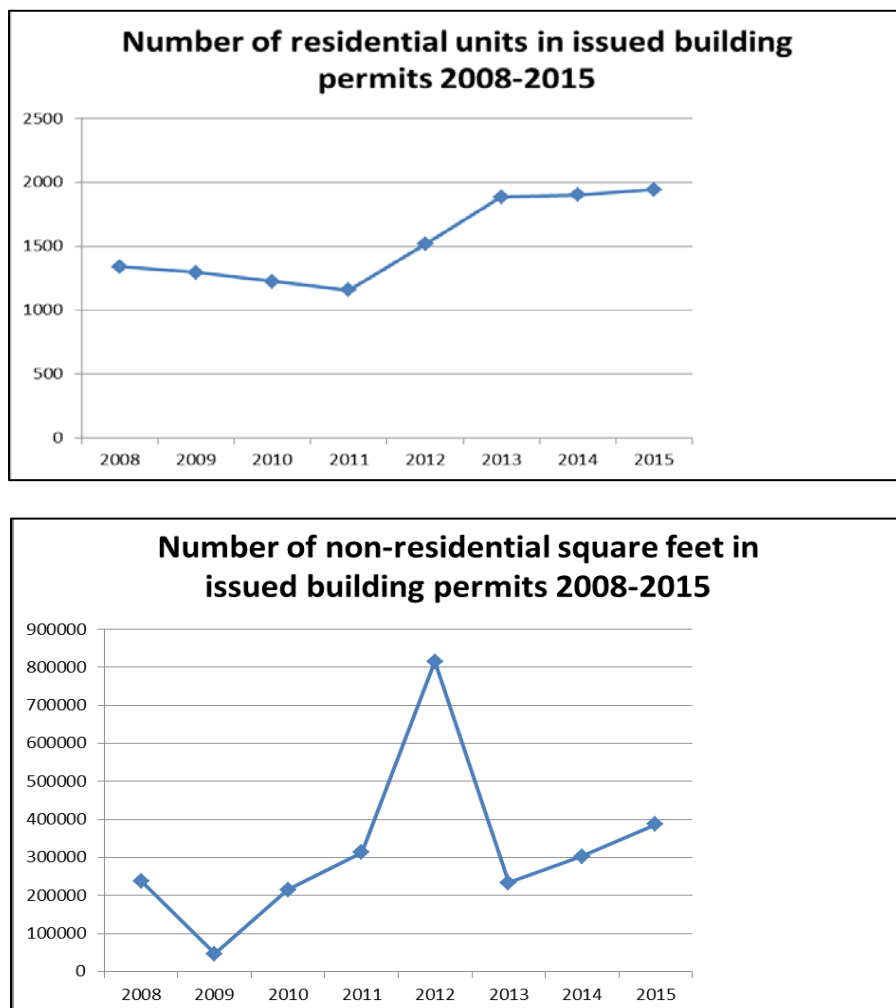


4.3 DEVELOPMENT TRENDS

The Sussex County Planning and Zoning Department reviews new development proposals in areas outside of incorporated towns and cities. The County also issues building permits for all construction activity whether in a municipality or the unincorporated areas of the County.

Between 2008 and 2015, over 10,000 building permits were issued for over 12,000 residential units and 2.4 million nonresidential square footage of development in the unincorporated areas. The figure below depicts how both residential units and nonresidential square footage increased in this time period.

Figure 4.3-1 Trends in Building Permits in Sussex County Unincorporated Areas between 2008 and 2015



The incorporated towns and cities also saw a large number of building permits between 2008 and 2015. In this time period, over 3,500 were issued for almost 4,200 residential units and three million nonresidential square feet. Approximately 25 percent of the total number of building

permits issued in the County were for locations within incorporated towns and cities. Twenty-five percent of residential units and 55 percent of non-residential development approved through building permits has occurred within the towns and cities.

Figure 4.3-2 shows the location of the building permits that have been issued since 2008. The majority of the new home construction continues to occur in the areas closest to the inland bays and the coastal communities. In fact, over 70 percent of building permit activity occurred east of Route 30 between 2008 and 2015.

The coastal and inland bay areas are Sussex County's busiest regions in terms of tourism, new construction and seasonal traffic. The most serious traffic congestion problems occur during warm weather weekends, particularly along major east-west roads. Sussex County's central and western sectors are less developed and more rural, but have seen proposals for many developments involving thousands of new housing units. Outside of the incorporated towns and cities, much of central and western Sussex County is still in forest or farmland and thousands of acres have been permanently preserved.

The strong growth experienced in the County over the past decade is anticipated to continue in the future. Chapter 2, Population and Demographics, includes information about population projections completed by the Delaware Population Consortium and other sources. The Delaware Population Consortium projects that at a minimum, the County is expected to have an additional 46,515 permanent residents living in it by 2045, and more than 23,960 additional seasonal residents. At an average of 2.52 persons per dwelling unit for the permanent population, and 3.3 persons per dwelling unit for the seasonal population, this could equate to approximately 18,458 new dwelling units for permanent residents and 2,200 new dwelling units for seasonal residents.

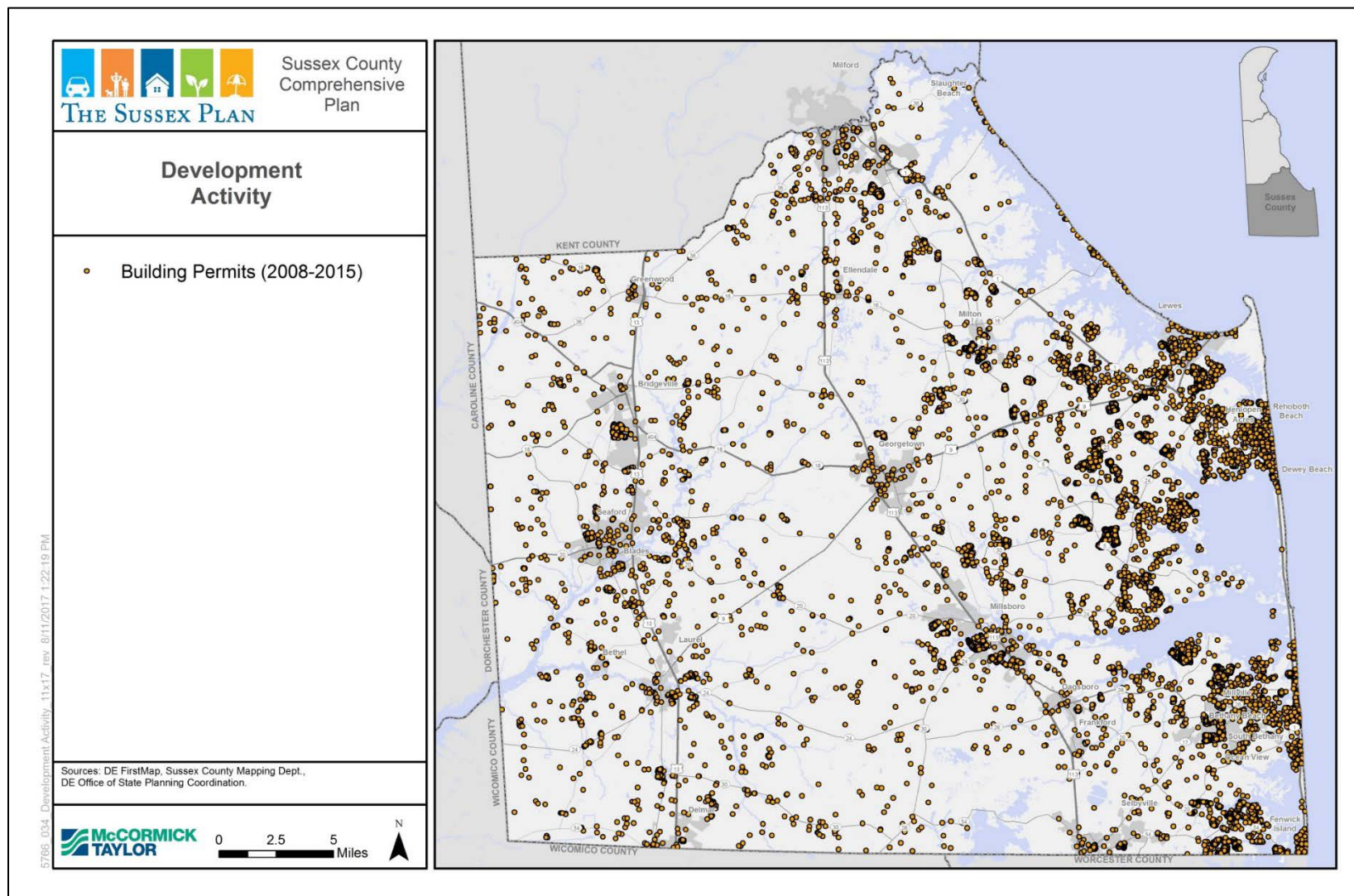
According to the County Planning and Zoning Department, the average density of new development has been approximately 1.9 dwelling units per acre in rural areas, and 2.5 dwelling units per acre in growth areas. As a result, land acreage is being consumed rapidly, particularly in rural areas since the average density is lower in these areas. Although more building permits are being issued in growth areas (approximately 55 percent of permits) than in rural areas (approximately 45 percent of permits), more land is being consumed in rural areas than in growth areas. If similar development trends continue into the future, the County may see approximately 10,000 additional acres of land developed, with almost 50 percent of it in rural areas (note that this does not assume for any redevelopment).

Additionally, commercial development will be needed to support the new residential growth in the County. Chapter 10 of this plan discusses economic growth in the County. Data from the State of Delaware Department of Labor projects that the County will increase by approximately 8,250 jobs by 2024. Although official employment projections are not available past 2024, employment growth is expected to continue through 2045.

Approximately 95,000 acres of Sussex County are currently developed and 227,000 acres protected (see Figure 4.2-2 above). This leaves approximately 256,000 acres that are either undeveloped or

in farmland. While the County has an abundance of undeveloped land to meet the acreage needs of anticipated future development, the County through this land use plan would like to encourage that more of the future development occurs in the growth areas in order to help preserve the character of the rural areas. The 2018 Future Land Use Plan outlined in the below sections, was designed to support the vision of this chapter: *To provide for balanced and well-planned future growth and development that supports the County's economic development goals while providing incentives to preserve the rural character of the County and its natural resources.* Section 4.7 outlines goals and objectives for the Future Land Use Plan and strategies to implement them.

Figure 4.3-2 Development Activity in Sussex County



4.4 FUTURE LAND USE PLAN

The Future Land Use Plan is the most influential part of this Comprehensive Plan. The County's zoning regulations are intended to carry out the Future Land Use Plan. The Future Land Use Plan also designates which parts of the County are to be considered growth areas. Being labeled a growth area has implications in County zoning, including designating areas where it is possible to use incentives that can increase housing densities. The location of growth areas designated by Sussex County also influences Delaware state policy on: a) where the State hopes to apply certain growth management strategies; and b) how the state allocates its infrastructure spending.

Sussex County's Future Land Use Plan is based on the following:

- Direct development to areas that have existing infrastructure or where it can be secured cost-effectively.
- Conserve the County's agricultural economy by promoting farming and preserving agricultural land values.
- Protect critical natural resources, such as the inland bays and others, by guarding against over-development and permanently preserving selected lands.
- Encourage tourism and other responsible commercial and industrial job providers to locate and invest in the County.
- Expand affordable housing opportunities, particularly in areas near job centers and Delaware State Housing Authority (DSHA) Areas of Opportunity (more information on DSHA Areas of Opportunity is provided in Chapter 8, Housing).
- Ensure that new developments incorporate best practices in subdivision design.
- Make Sussex County's growth and conservation policies clear to relevant Delaware State agencies, neighboring counties and Sussex County's incorporated municipalities.

Sussex County will use this new Future Land Use Plan to make selected updates to the County's zoning and subdivision codes, and help plan for future public infrastructure.

4.4.1 The Future Land Use Plan and Zoning

This updated Future Land Use Plan revises and expands the existing planning areas. These planning areas provide the logic and rationale for the County's zoning, which is one of the primary purposes of a comprehensive plan. However, it is important to clarify that: a) these planning areas are not zoning districts; and b) land within these planning areas includes parts of two or more zoning districts in most cases. Also it is important to recognize that other factors come into play when determining which zoning districts are appropriate for each land use classification. The Future Land Use Plan chapter of this Comprehensive Plan Update describes the County's policies on land development and land conservation. The zoning ordinance contains the detailed regulations for implementing these policies and includes the map that delineates Sussex County's zoning district boundaries.

4.4.2 The Structure of the Future Land Use Plan

The Future Land Use Plan divides Sussex County into two types of planning areas: Growth Areas and Rural Areas. The Growth Areas and the Rural Areas each include sub-categories as outlined below:

Growth Areas:

- Municipalities
- Town Centers
- Developing Areas
- Environmentally Sensitive Developing Areas (ESDA)
- Mixed Residential Areas
- Highway Commercial Areas
- Planned Industrial Areas

Rural Areas:

- Low Density Areas
- Protected Lands
- Agricultural Preservation Districts under the State Program (which would be considered Low Density Areas if landowners choose to withdraw from the program).¹

The following descriptions explain each of these planning areas.

4.4.2.1 Growth Areas

This Plan seeks to encourage the County's most concentrated forms of new development to Growth Areas, including most higher density residential development and most commercial development.

The County used the following guidelines to help determine where Growth Areas should be located:

- Proximity to an incorporated municipality or a municipal annexation area.
- Presence of existing public sewer and public water service nearby.
- Plans by the County to provide public sewage service within five years.
- Location on or near a major road.
- Character and intensity of surrounding development, including proposed development.
- Location relative to major preserved lands.
- The area's environmental character.
- How the area ranks according to the "Delaware Strategies for State Policies and Spending" document (Level 1, Level 2, Level 3, or Level 4).

¹ More information about Agricultural Preservation Districts is found in Chapter 5, Conservation.

In designating Growth Areas, Sussex County applied these guidelines broadly. The County views these guidelines as important but not absolute. The guidelines are helpful criteria but they are not meant to be inflexible standards that all growth areas must fully meet.

In particular cases, the County is signaling that selected new growth areas may be needed to accommodate future development in places the State does not currently view as growth centers according to its “Delaware Strategies for State Policies and Spending” document. The purpose of the “Delaware Strategies for State Policies and Spending” document, last updated by the State in 2015, is to help coordinate local land use decision making with State decisions made about funding infrastructure, such as the schools and roads needed to support appropriate development. By updating this document every five years, the State strives to ensure that:

- State spending promotes quality, efficiency and compact growth.
- State policies foster orderly growth and resource protection, not degradation.

The State’s Strategies for State Policies and Spending map classifies land areas as being part of Investment Level 1, Investment Level 2, Investment Level 3, Investment Level 4, or Out of Play for various legal reasons such as conservation easements. The four investment levels clarify the State’s policies and priorities for the expenditure of State funds on infrastructure. The following synopsis descriptions are excerpted from the 2015 “Delaware Strategies for State Policies and Spending” document. A map of the 2015 State Strategies for Policies and Spending follows.

Investment Level 1

It is the State’s intent to use its spending and management tools to maintain and enhance community character, to promote well-designed and efficient new growth, and to facilitate redevelopment in Investment Level 1 areas.

Investment Level 2

It is the State’s intent to use its spending and management tools to promote well-designed development in these areas. Such development provides for a variety of housing types, user-friendly transportation systems, and provides essential open spaces and recreational facilities, other public facilities, and services to promote a sense of community.

Investment Level 3

The lands in Investment Level 3 areas are those in the long-term growth plans of counties or municipalities where development is not necessary to accommodate expected population growth during the next five years or longer. Development in these areas may be least appropriate for new growth and development in the near term. Investment Level 3 areas also include lands adjacent to or intermingled with fast-growing areas within counties or municipalities that are otherwise categorized as Investment Levels 1 or 2. Environmentally sensitive features, agricultural-preservation issues, or other infrastructure issues most often impact these lands. In these instances, development and growth may be appropriate in the near term, but the resources on the

site and in the surrounding area should be carefully considered and accommodated by state agencies and local governments with land-use authority.

Due to the limits of finite resources, state infrastructure spending on “hard” or “grey” infrastructure such as roads, sewer, water, and public facilities will generally be directed to Investment Level 1 and 2 Areas. The State will consider investing in Level 3 Areas once the Investment Levels 1 and 2 are substantially built out, or when the infrastructure or facilities are logical extensions of existing systems and deemed appropriate to serve a particular area.

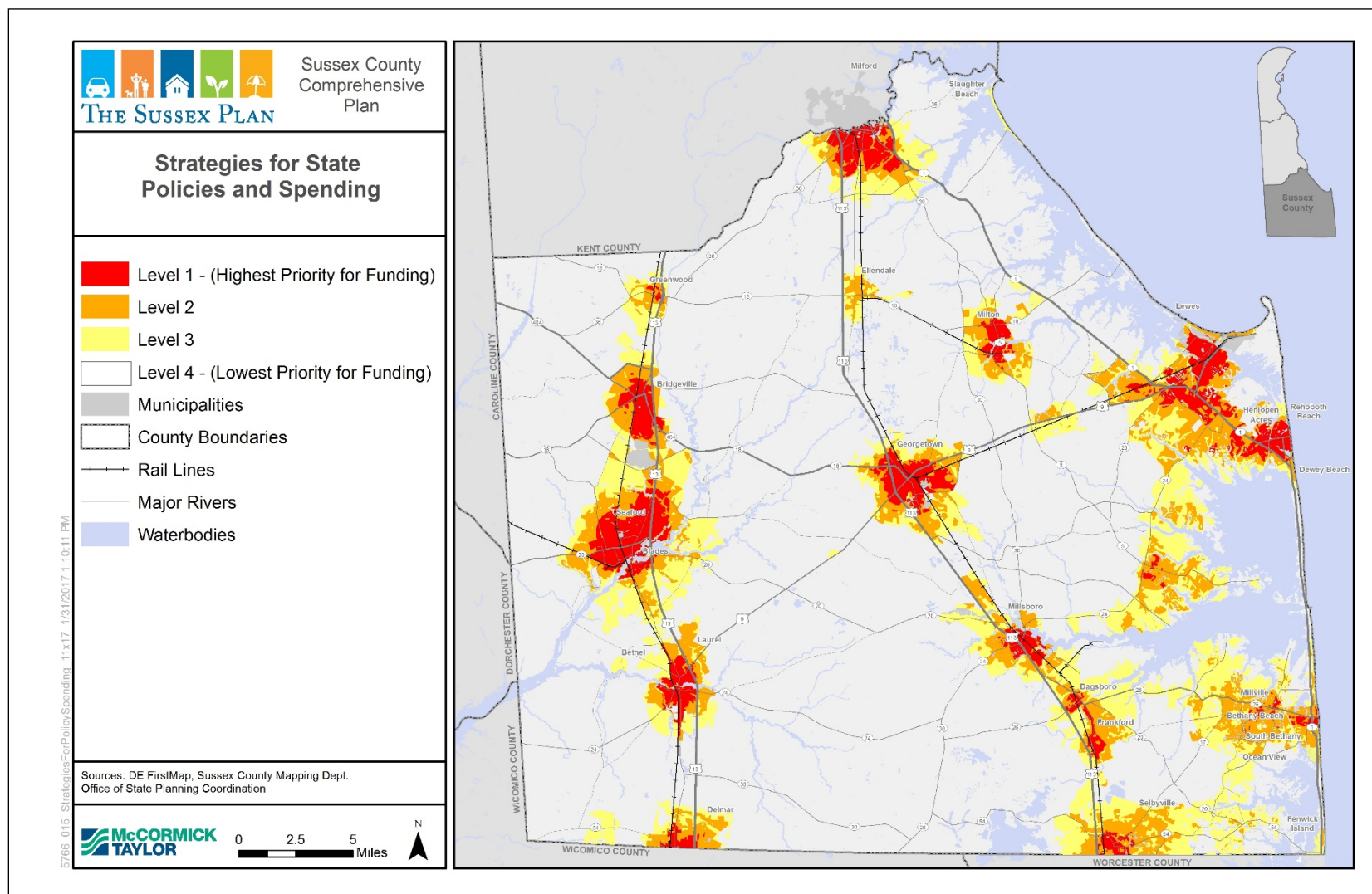
In Sussex County’s case, much of the Environmentally Sensitive Developing Area is designated as Level 3. This designation acknowledges that these areas are part of the County’s future growth zone. However, this designation also suggests that special scrutiny should be applied to spending decisions and development proposals within these areas to ensure these activities are consistent with State and local development and preservation policies.

Investment Level 4

It is the State’s intent to discourage additional urban and suburban development in Investment Level 4 areas unrelated to agriculture and to the area’s needs. It will do so through consistent policy decisions and by limiting infrastructure investment, while recognizing that state infrastructure investments may be appropriate where state and local governments agree that such actions are necessary to address unforeseen circumstances involving public health, safety, or welfare.

In Sussex County’s case, there are several areas where county growth areas were expanded for this 2018 Comprehensive Plan. In some cases, they are in State Investment Level 4 areas. Similar to growth areas in Investment Level 3 areas, special scrutiny should be applied to spending decisions and development proposals within these areas to ensure these activities are consistent with State and local development and preservation policies.

Figure 4.4-1 Strategies for State Policies and Spending



Seven Types of Growth Areas

The seven types of Growth Areas designated in this Comprehensive Plan Update are described below:

1. Municipalities

Sussex County strongly favors directing development to the incorporated municipalities that desire it. With exceptions, these are some of the County's most densely developed areas and the areas most fully served by public sewer and public water facilities. The specific permitted uses and densities governing new construction within an incorporated municipality will continue to be governed by that municipality's zoning ordinance, its public water and sewer capacities, and its comprehensive planning policies.

2. Town Centers

Significant growth is proposed to be clustered around incorporated municipalities in unincorporated areas just beyond municipal borders. Many of these locations are part of areas that municipalities have formally designated as future annexation areas in their local comprehensive plans, where the municipality would be receptive to annexation requests in the future. Some municipalities have policies that they avoid extending public water and sewage systems beyond their borders, while other municipalities do allow these extensions.

The following major guidelines should apply to future growth in the Town Centers:

- **Permitted Uses** – A range of housing types are appropriate in Town Centers, including single-family homes, townhouses, and multi-family units. Commercial uses should serve the daily needs of residents, workers, and visitors. Retail and office uses compatible with adjacent areas are appropriate. However, large intense shopping centers are encouraged in Highway Commercial areas. Some smaller scale, low-impact industrial operations may be appropriate, but larger industrial uses are proposed to be directed to General Industrial areas. Appropriate mixed-use development should also be allowed.
- **Densities** – Medium to high density residential development is encouraged. This should range from four to 12 homes per acre. Compatible commerce should also be allowed. A clustering option permitting smaller lots and additional flexibility in dimensional standards should continue to be provided on tracts of a certain minimum size, provided significant permanent common open space is preserved and the development is connected to central water and sewer service. Specific regulations governing cluster developments are designated by zoning district.
- **Infrastructure** – Central water and sewer facilities are strongly encouraged. If central utilities are not possible, densities should be limited to two units per acre.

3. Developing Areas

The Developing Areas are newer, emerging growth areas. They are often located near main arterial roads that connect major destinations within the County. Most of the proposed Developing Areas are adjacent to municipalities and many are within or adjacent to potential future annexation areas of a municipality. In some cases, the developing areas are not yet served by sewer and water systems but have the potential to secure these services either from public or private providers that provide service to nearby locations.

The following major guidelines should apply to future growth in the Developing Areas:

- **Permitted Uses** – A range of housing types are appropriate in most Developing Areas, including single family homes, townhouses, and multi-family units. In selected areas, commercial uses should be allowed. A variety of office uses would be appropriate in many areas. Portions of the Developing Areas with good road access and few nearby homes should allow for business and industrial parks. Appropriate mixed-use development should also be allowed. In doing so, careful mixtures of homes with light commercial and institutional uses can be appropriate to provide for convenient services and to allow people to work close to home.
- **Densities** – The County envisions base density in these areas to be two units per acre. There are certain zoning districts within Developing Areas with an allowable density higher than 2 units per acre. Also, there currently is an option where density can be increased with optional density bonuses for certain zoning districts. Those optional bonuses may involve payment of fees that fund permanent land preservation elsewhere in the County, or other options. Smaller lots and flexibility in dimensional standards should be allowed if the developer uses a cluster option or similar option that results in permanent preservation of a substantial percentage of the tract. Also, master planning should be encouraged for large-scale developments on large parcels or groups of parcels to provide flexibility in site design.
- **Infrastructure** – Central water and sewer facilities are strongly encouraged. If central utilities are not possible, permitted densities should be limited to two units per acre. The Developing Areas are largely based upon areas where public sewage service is already available or where the County plans upon providing public sewage service within five years.

4. Environmentally Sensitive Developing Areas (ESDA)

Sussex County has designated large areas around Rehoboth Bay, Indian River Bay, and Little Assawoman Bay (the inland bays) as Environmentally Sensitive Developing Areas. This designation recognizes two characteristics of these areas. First, these regions are among the most desirable locations in Sussex County for new housing, as reflected in new construction data and real estate

prices. Second, these regions contain ecologically important wetlands and other coastal lands that help absorb floodwaters and provide extensive habitat for native flora and fauna. These areas also have great impacts upon the water quality of the bays and inlets and upon natural habitats.

The challenge in these regions is to safeguard genuine natural areas and mitigate roadway congestion without stifling the tourism and real estate markets that: a) provide many jobs; b) create business for local entrepreneurs; and c) help keep local tax rates reasonable. The County has major initiatives to extend public sewer service to replace failing on-site systems in many of these areas. This is described more in Chapter 8, Utilities. Very careful control of stormwater runoff is an extremely important concern to keep sediment and other pollutants out of the inland bays.

The following major guidelines should apply to future growth in Environmentally Sensitive Developing Areas:

- **Permitted Uses** – Environmentally Sensitive Developing Areas are areas that can accommodate development provided special environmental concerns are addressed. A range of housing types should be permitted in Environmentally Sensitive Areas, including single-family homes, townhouses, and multi-family units. Retail and office uses are appropriate but larger shopping centers and office parks should be confined to selected locations with access to arterial roads. Appropriate mixed-use development should also be allowed. In doing so, careful mixtures of homes with light commercial and institutional uses can be appropriate to provide for convenient services and to allow people to work close to home. Major new industrial uses are not proposed in these areas. Industrial zones are regulated by the Delaware Coastal Zone Act, which restrict heavy industry and bulk transfer.
- **Densities** – The Environmentally Sensitive Developing Area is a growth area. Areas can be both ESDA and Highway Commercial, Planned Industrial, or Town Center. However, an area cannot be both ESDA and a Low Density land use classification as described in the next section. In these instances, the ESDA supersedes the underlying Low Density areas. Most of the Environmental Sensitive Developing Areas should continue to allow two homes per acre. Current zoning districts may exist within the ESDA that allow for higher densities than two units per acre. The option should also exist to go higher if the developer uses optional density bonuses. The County should also consider, as part of the up-zoning process, preservation of natural resources or open space. Smaller lots and flexibility in dimensional standards should be allowed if the developer uses a cluster option that results in permanent preservation of a substantial percentage of the tract. Also, master planning should be encouraged for large-scale developments on large parcels or groups of parcels to provide flexibility in site design.

All applicants for developments of a minimum size (as specified in zoning) should continue to be required to provide information that analyzes the development's potential environmental impacts, including effects on stormwater runoff, nitrogen and phosphorous

loading, wetlands, woodlands, wastewater treatment, water systems, and other matters that affect the ecological sensitivity of the inland bays.

- Infrastructure – Central water and sewer facilities are strongly encouraged. If central utilities are not possible, permitted densities should be limited to two units per acre.

5. Mixed Residential Areas

The Mixed Residential Areas mainly consist of existing residential development and lands where residential developments are proposed under the current General Residential and Medium Density Residential zoning districts. These areas already exist in current zoning and are scattered throughout the County.

The following major guidelines should apply to future growth in Mixed Residential Areas:

- Permitted Uses – The full range of housing types are appropriate in these residential areas, including single-family homes, townhouses, and multi-family units. Non- residential development is generally not encouraged except for neighborhood business uses.
- Densities – The current densities in these areas begin at two units per acre and may go up to 12 dwellings units per acre for a variety of housing types depending on the location of the property. Also, master planning should be encouraged for large-scale developments on large parcels or groups of parcels to provide flexibility in site design.
- Infrastructure – Central water and sewer facilities are strongly encouraged. If central utilities are not possible, densities should be limited to two units per acre.

6. Highway Commercial Areas

Highway Commercial Areas include concentrations of retail and service uses that are mainly located along highways. As opposed to small, traditional downtown areas that are often historic and pedestrian-friendly, Highway Commercial Areas include highway commercial corridors, shopping centers, and other large commercial vicinities geared towards vehicular traffic. In addition to primary shopping destinations, this area would also be the appropriate place to locate hotels, motels, car washes, auto dealerships, lumberyards, and other larger scale commercial uses not primarily targeted to the residents of immediately adjacent residential areas. Mixed-use buildings may also be appropriate for these areas.

7. Planned Industrial Areas

Planned Industrial Areas are lands devoted to concentrations of larger industrial uses including heavier industry, light industry, warehousing, and flex space. Appropriate development in these areas could take the form of conventional industrial parks or planned business parks with a unified

design that incorporate a combination of light industry and other business uses. Large, more intensive stand-alone industrial uses should also be directed to these areas.

4.4.3 Rural Areas

As explained above, the various types of Growth Areas identified in this Plan are designed to accommodate concentrated levels of development. In contrast, Sussex County envisions the remainder of the County as a predominantly rural landscape where farming co-exists with appropriate residential uses and permanently preserved property.

Three Types of Rural Areas

1. Low Density Areas

All lands designated in this Plan as Low Density Areas are currently zoned AR-1. Under that zoning designation, single family detached homes are permitted at two homes per acre on lots containing a minimum of half acre if the tract connects to central sewers. Where on-site septic systems are used, single-family detached homes are permitted on minimum 3/4-acre lots. AR-1 zoning regulations also permit an average of two homes per acre where a cluster-style site plan is used and three percent of the tract is preserved in permanent open space. Using these zoning regulations and additional incentives discussed in the next section of this Future Land Use chapter, Sussex County hopes to retain the rural environment of Low Density Areas and set aside significant open space.

In Sussex County, many farmland owners located in the Low Density Areas have built up significant equity in their land – in numerous cases through multiple generations. This equity is a liquid asset that can serve as collateral to secure operating loans. It is also equity that can be realized through land sales if and when these landowners no longer desire to continue farming. For this reason, the Sussex County Council supports State and local land use policies that will preserve the value of farmland. The Sussex County approach emphasizes the following policies and actions to help sustain agriculture, maintain the rural landscape and sustain reasonable development rights:

- The County strongly supports voluntary farmland preservation and has worked jointly with the State to facilitate the acquisition of development rights to agricultural land.
- The County uses zoning to mandate that a certain portion of a residential subdivision must be permanently preserved in common open space.
- The County provides density bonuses, under certain conditions, to developers who agree to pay into a fund that Sussex County uses to acquire open space.
- The County requires developers to plant landscaped buffers to physically separate new development from the surrounding countryside.

- As described later in this chapter, the County is also establishing Agri-Business Areas which will enable certain limited, yet important agriculture industries to develop in support of Sussex County's large agricultural economy without unnecessary delay.

The following major guidelines should apply to future growth in Low Density Areas.

- **Permitted Uses** – The primary uses envisioned in Low Density Areas are agricultural activities and homes. Business development should be largely confined to businesses addressing the needs of these two uses. Industrial uses that support or depend on agriculture should be permitted. The focus of retail and office uses in Low Density Areas should be providing convenience goods and services to nearby residents. Commercial uses may require conditional use approval from Sussex County Council. The types of commercial uses in these residential areas should be limited in their location, size and hours of operation. More intense commercial uses, such as auto repair and gasoline sales, should be avoided in these areas.
- **Densities** – Base densities in Low Density Areas should be unchanged from the current zoning provisions. The minimum lot size should be $\frac{3}{4}$ acre for lots served by on-lot septic systems and half acre for lots with central sewers. The cluster option permitted in Low Density Areas should continue to permit overall site densities of up to two units per acre, provided significant open space is set aside and the tract connects to public sewers.
- **Infrastructure** – Development where lots are no smaller than $\frac{3}{4}$ acre can be accommodated in this planning area without central sewers. Other development should require central sewer service.

2. Protected Lands

Protected Lands are permanently preserved properties. These tracts are “Out of Play” and cannot be further developed because they are:

- Federally-owned, State-owned, or other land preserves;²
- Under conservation easements (such as easements on mostly forested land or easements by private conservancies); or
- Under agricultural preservation easements that were purchased by the State and/or County.

3. Agricultural Preservation Districts Under the State Program

² Chapter 6, Conservation and Chapter 7, Recreation and Open Space include maps depicting land protected in parks, wildlife refuges, forestland, and other open space.

Farmland owners who want to sell their development rights to the State must first enroll in an Agricultural Preservation District. The landowners voluntarily agree to enter into the program, and can leave or renew their participation when the agreements expire. Therefore, these areas can be considered temporarily but not permanently preserved. More information on Agricultural Preservation Districts is included in Chapter 6, Conservation.

4.5 THE FUTURE LAND USE MAP

The Future Land Use map that accompanies this chapter shows the locations of the Growth Areas and the Rural Areas described above. The starting point for this map was the Future Land Use map included in the 2008 Sussex County Comprehensive Plan.

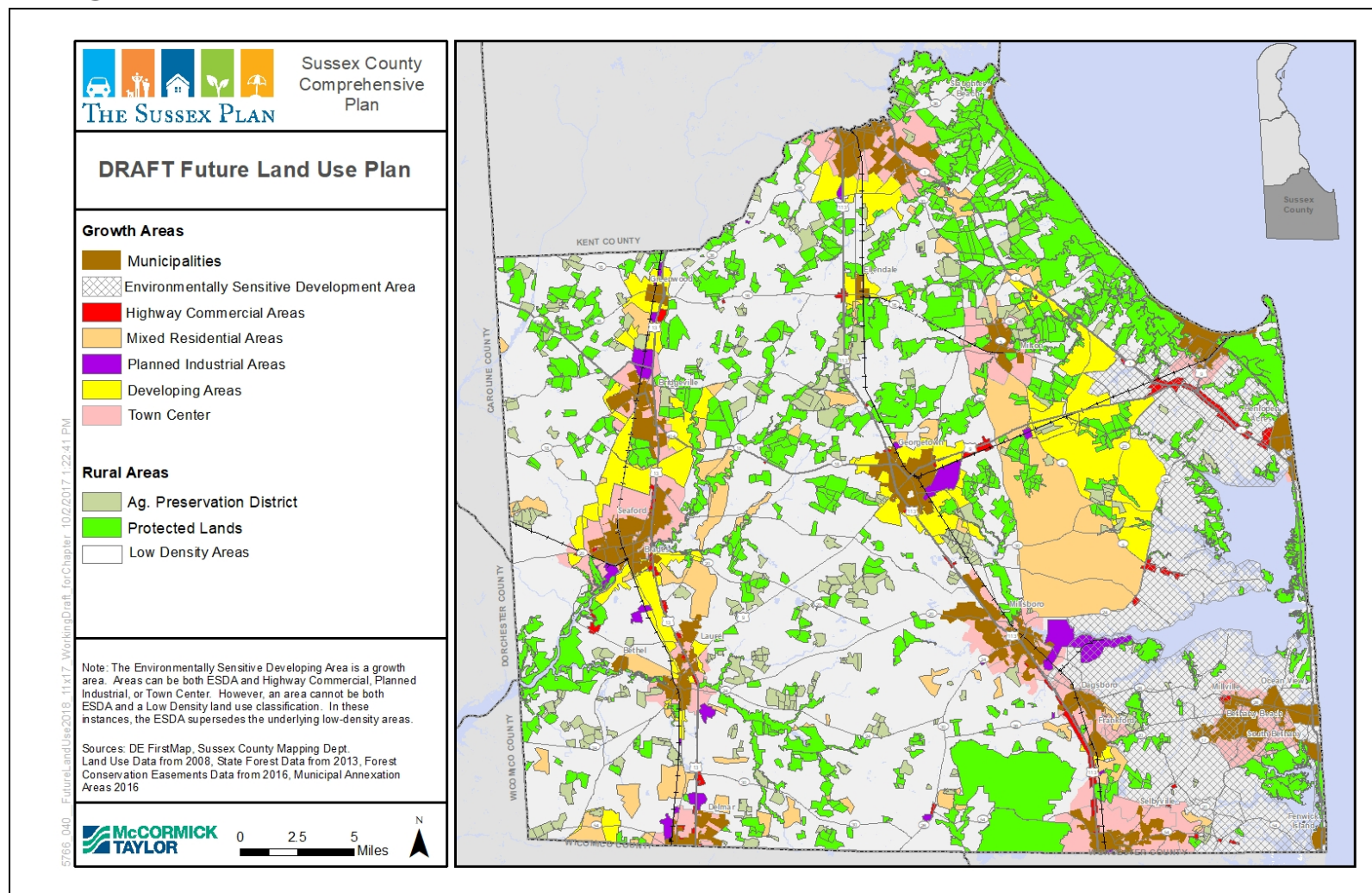
The 2008 Future Land Use Classifications were spatially overlaid on other digital layers including parcel data, aerial photography, current zoning, sewer and water areas, planned road improvements, municipal annexation areas, existing land use, DSHA Areas of Opportunity, electric and fiber optic utility data, and building permit data. The 2018 future land use map was developed through a series of land use workshops with the County Planning and Zoning Commission where the data and maps were meticulously reviewed. Modifications were made to growth and rural area boundaries and classifications across the County where needed. The 2018 version of the map (Figure 4.5-1) includes some changes in certain areas of the 2008 map to reflect the following:

- Changes to several municipal boundaries to reflect lands added through annexation by certain incorporated municipalities since 2008
- Some lands added to Town Center areas to align with the municipal future annexation areas, as shown in comprehensive plans adopted by these municipalities and certified by the State.
- Some selected new Developing Areas and Mixed Residential Areas were added that are intended to provide locations where density might be increased from the current zoning if the developer uses density bonus options and other incentives being considered by the County through this plan. These are primarily on the eastern side of the County and were added to accommodate the increase in development being experienced in that part of the County; around Milford to provide for development associated with Bayhealth's new campus; and along the U.S. 13 corridor to encourage investment in the corridor communities.
- Changes to boundaries of the Mixed Residential Areas to better match underlying zoning boundaries.
- Expansion of the ESDA boundaries in the area between Frankford, Selbyville, and the resort towns to accommodate new growth and support the use of public sewer in these areas while requiring enhanced environmental review of developments in these areas.

- Some new Highway Commercial Areas along certain road corridors and key intersections.
- Expansion of existing Planned Industrial Areas at certain locations to encourage more industrial development and the creation of new Planned Industrial Areas at areas with industrial development potential.
- Changes to various land use classifications in certain areas to be consistent with zoning map changes approved by Sussex County Council since the previous plan was completed.

Despite these refinements, the new Future Land Use map does not represent a significant revision in the County's land use policy. This Draft Plan also does not signal a shift in Sussex County Council's overall view about the future of land development and land preservation in the County.

Figure 4.5-1 Sussex County 2018 Future Land Use



Since the comprehensive plan is a guide for the future use of land, the County's official zoning map must be consistent with the uses and intensities of uses provided for in the Future Land Use Plan. Table 4.5-2 is provided below to provide a tool for assisting with determining which zoning districts are applicable to each future land use category.

According to state law, the County must amend its official zoning map to be consistent with the Future Land Use Map within 18 months of the date of adoption of the Comprehensive Plan. Additionally, future rezonings should also generally be consistent with the Future Land Use Plan. The County would also like to conduct regular reviews of past rezonings on a periodic basis to determine if properties are still appropriate for the rezoning that was granted.

| Table 4.5-2 Zoning Districts Applicable to Future Land Use Categories | |
|--|--|
| FUTURE LAND USE PLAN CATEGORY | APPLICABLE ZONING DISTRICT |
| GROWTH AREAS | |
| Municipalities | N/A - town zoning applies |
| Town Center | Agricultural Residential District (AR-1) Neighborhood Business District (B-1) Medium Density Residential District (M-R) General Residential District (GR) High Density Residential District (HR-1 & HR-2) Commercial-Residential District (CR-1) Marine District (M) Limited Industrial District (LI-1) Light Industrial District (LI-2) Urban Business District (UB) New Commercial Districts |
| Developing Area | Agricultural Residential District (AR-1) Neighborhood Business District (B-1) Medium Density Residential District (M-R) General Residential District (GR) High Density Residential District (HR-1 & HR-2) Commercial-Residential District (CR-1) Marine District (M) Limited Industrial District (LI-1) Light Industrial District (LI-2) Heavy Industrial District (HI-1) New Commercial Districts |
| Environmentally Sensitive Developing Area | Agricultural Residential District (AR-1) Neighborhood Business District (B-1) Medium Density Residential District (M-R) General Residential District (GR) Commercial-Residential District (CR-1) Marine District (M) Limited Industrial District (LI-1) Light Industrial District (LI-2) Vacation, Retire, Resident (VRP) New Commercial Districts |

| Table 4.5-2 Zoning Districts Applicable to Future Land Use Categories | |
|--|---|
| FUTURE LAND USE PLAN CATEGORY | APPLICABLE ZONING DISTRICT |
| Mixed Residential Area | Agricultural Residential District (AR-1) Medium Density Residential District (M-R) General Residential District (GR) Vacation, Retire, Resident (VRP) Neighborhood Business District (B-1) Other New Neighborhood Business Districts |
| Highway Commercial Area | Agricultural Residential District (AR-1) Neighborhood Business District (B-1) Commercial-Residential District (CR-1) New Commercial Districts |
| Planned Industrial Area | Agricultural Residential District (AR-1) Limited Industrial District (LI-1) Light Industrial District (LI-2) Heavy Industrial District (HI-1) Commercial-Residential District (CR-1) New Commercial Districts |
| RURAL AREAS | |
| Low Density Area | Agricultural Residential District (AR-1) Neighborhood Business District (B-1) Commercial-Residential District (CR-1) New Commercial Districts |
| Protected Lands | N/A - permanently protected Federally-owned, State-owned, or other land preserves, conservation easements, and agricultural preservation easements |
| Agricultural Preservation Districts | Agricultural Preservation Districts through the State's Farmland Preservation Program in Agricultural Residential District (AR-1) |

Notes: AR-2 is a closed zoning district and should be treated as AR-1

C-1 is a closed zoning district and should be treated as CR-1

At times the County may encounter development proposals that do not directly reflect the purpose and intent of the land use patterns being shown on the Future Land Use Plan. Each proposal should be reviewed on its own merit to determine if the proposal is an improvement over the use shown on the plan for a particular area and that it does not have a negative impact on the surrounding area or the County in general.

As described above, the Future Land Use Plan is not the County's official zoning map but rather is a guide for decisions about future land use patterns. The Future Land Use Plan and all other aspects of this Comprehensive Plan will be implemented primarily through ordinances and other programs that fulfill policy objectives.

4.6 IMPLEMENTATION OF THE FUTURE LAND USE PLAN THROUGH STRATEGIES

4.6.1 Incentivizing Well-Planned Growth and Conservation

Although the Future Land Use Plan and the County's Zoning and Subdivision and Land Development Regulations create a framework for land use, most development decisions are made by the private sector. The County can influence these decisions by public investments, incentives, and disincentives. Many of the goals, objectives, and strategies for this Chapter outlined in Section 4.7 are focused on ways to influence these development decisions. For example, as described above, the County has a density bonus program; however, the County would like to evaluate its effectiveness, close loopholes with its implementation, and encourage more widespread use of it. Expansion of the program into other districts would be a way to promote additional use of the program as well as obtain funds for open space and natural resource preservation.

The County is also considering development of other incentives to direct growth to Growth Areas. The County is considering revisiting height limits in the code for residential and commercial districts to determine if heights are accurate for such districts and uses, as well as determining if the method for measuring height should be revised. Building height can often be an incentive for developers because it delivers the potential for more profit on the same piece of property.

The County would also like to use incentives to better preserve the rural character and natural resources of the County. One method to be considered is the waiving of requirements and fees for down-zoning to AR1. Another is consideration of development of buffer incentives or a program for tidal wetlands and waterways, which would preserve these sensitive environmental areas from development.

The majority of development in the County is new development, but the County recognizes the importance of redevelopment in that it can breathe new life into an area with already pre-existing uses. Redevelopment also reduces development pressure on undeveloped land. The County would like to encourage more redevelopment and infill development by determining if incentives can be established for developers that propose redevelopment, particularly redevelopment of brownfield areas.

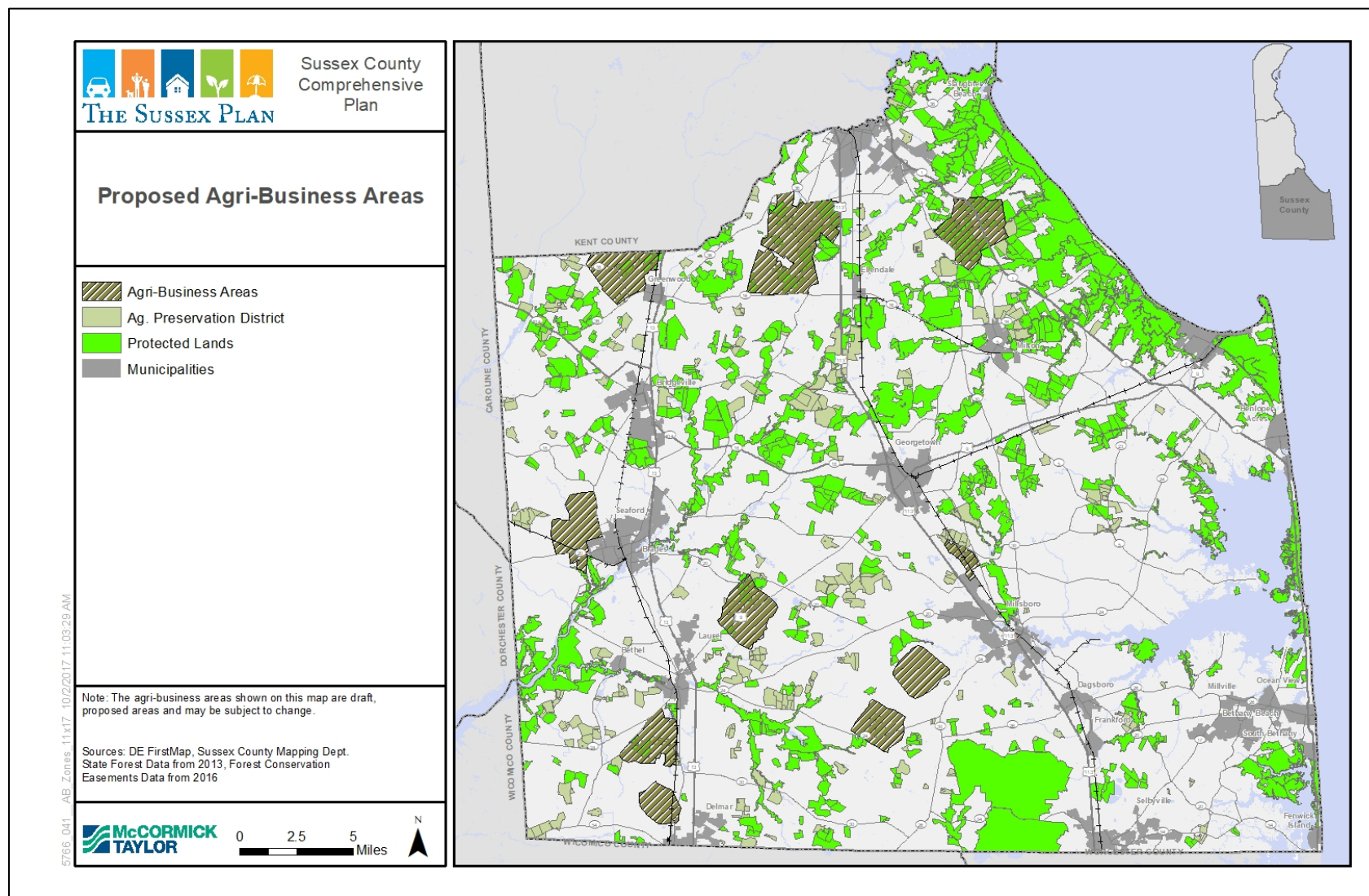
4.6.2 Supporting Agricultural Land Use and Agricultural Land Preservation

The Sussex County Council strongly supports efforts by the State, conservation organizations, and local landowners to preserve farmland through voluntary purchase of development rights. This is described in more detail in Chapter 6 of this Comprehensive Plan. The Sussex County Council views the voluntary sale of farmland development rights to the Delaware Agricultural Lands Preservation Foundation as an important tool for preserving the County's rural environment. The description of Low Density planning areas included earlier in this chapter describes additional strategies Sussex County now uses to help preserve the County's agricultural heritage.

The County would also like to take measures to reduce challenges placed on farmers by new development. It would like to establish voluntary agri-business areas that are centered around existing infrastructure in AR-1 zoning in western Sussex County that allow food processing, feed mills, and technology operations or other compatible uses. The County should establish these areas within the Low Density Areas where certain "Agri-Business" uses are permitted with the existing

AR-1 Agricultural Residential Zoning District. This will enable certain limited, yet important agriculture industries to develop in support of Sussex County's large agricultural economy without unnecessary delay. Agri-Business Areas should generally be located wherever suitable supporting infrastructure already exists or will be available in the ten-year time period covered by this Plan. Such infrastructure includes: roadways, freight rail, electric, high speed internet, natural gas and similar utilities or services. In addition, consideration should be given to current and future nearby land uses; for example, it is appropriate to locate these areas near current or planned Agricultural Preservation Districts or lands in Agricultural Conservation Easements which will act as an additional agricultural buffer between a permitted agri-business use and other types of permitted uses in the Low Density Area and AR-1 District. Likewise, as these areas are identified, future preference should be given to new farmland preservation to create additional buffers through active agricultural uses. Consideration should also be given to the minimum parcel size for any permitted agribusiness use, as well as other factors such as vegetative buffering. Finally, although not directly related to agriculture, the County should consider including "Technology Centers" as a permitted use within these Areas. It has been found that these uses require many of the same infrastructure needs as agri-business uses, and they are compatible with surrounding agricultural uses with very little impact on surrounding areas. Plus, Technology Centers are frequently located in rural, less developed areas for security reasons and to limit service interruptions. A map showing proposed Agri-Business Areas can be found at Figure 4.6-1.

Figure 4.6-1 Proposed Agri-Business Areas



4.6.3 Promoting Appropriate Commercial and Industrial Development

The Future Land Use Plan designates areas for future commercial and industrial development. It is important that commercial and industrial development occurs in a scale, intensity, and distance appropriate to adjacent residential neighborhoods. The County is considering ways to achieve this objective including development of a commercial planned development ordinance that would require a review and approval of a site plan at the same time as a zoning change is proposed.

The County is also in the process of revising the zoning code for commercial districts to include sub-districts. In doing so, this will help better define types of commercial uses within the districts. The County would also like to revisit code to consider a mixed-use district that would help promote development designed to support both residential and commercial uses.

The County recognizes that the availability of public services and infrastructure is necessary in order to spur more industrial development. As discussed in the Economic Development and Utilities Chapters of this Comprehensive Plan, the County supports efforts by the utility providers in the County to extend their services areas. The County would like to identify areas that are served with adequate electricity, natural gas, and fiber optic infrastructure for rezoning to LI1 and LI2 uses to increase the amount of available land for new industries locating in the County.

4.7 FUTURE LAND USE GOALS, OBJECTIVES, AND STRATEGIES

Implementation of the below goals, objectives, and strategies for Sussex County's Future Land Use Chapter will be critical to the success of the Future Land Use Plan and the vision for this chapter. Note that many of these strategies overlap with strategies in other Chapters of the Comprehensive Plan as the chapters of this Comprehensive Plan are all interrelated:

Goal 4.1 Manage the impacts of future growth and development to better preserve the rural areas of the County.

Objective 4.1.1 Promote growth and development in areas where capital facilities and infrastructure are already available and adequate to support the growth, including incorporated municipalities that desire it and their future annexation areas.

Strategy 4.1.1.1 Continue use of County density bonus program and evaluate the program's effectiveness.

Strategy 4.1.1.2 Consider development of incentives to direct growth to Growth Areas and that will result in conservation of other areas.

Objective 4.1.2 Discourage incompatible land uses through the enforcement of existing land use controls, or through the development of new controls, where appropriate.

Strategy 4.1.2.1 Consider waiving requirements and fees for down-zoning to AR1.

Objective 4.1.3 Promote commercial and industrial development in designated commercial, office, and industrial areas in a scale/intensity/distance appropriate to adjacent residential neighborhoods.

Strategy 4.1.3.1 Consider development of a commercial planned development ordinance that requires a review and approval of a site plan at the same time as a zoning change is proposed.

Strategy 4.1.3.2 Revise the zoning code for commercial districts to include sub-districts, defining types of commercial uses.

Strategy 4.1.3.2 Revisit code to consider a mixed-use zoning district.

Objective 4.1.4 Encourage redevelopment and infill development in existing developed areas.

Strategy 4.1.4.1 Determine if there are incentives that can be established for developers that propose redevelopment, including brownfield sites.

Goal 4.2 Ensure quality growth and development by planning and developing infrastructure and services in the County to complement State and local planning efforts.

Objective 4.2.1 Engage in planning that considers the efficient location of public services and infrastructure.

Strategy 4.2.1.1 Establish future public sewer service areas that will help preserve open space by promoting orderly growth rather than unplanned sprawl.

Strategy 4.2.1.2 Identify areas that are served with adequate electricity, natural gas, and fiber optic infrastructure for rezoning to LI1 and LI2 uses.

Objective 4.2.2 Facilitate more intergovernmental coordination efforts so that development and infrastructure expansion takes a regional approach rather than a site-specific approach.

Strategy 4.2.2.1 Coordinate with DelDOT on road improvements and other transportation projects.

Strategy 4.2.2.2 Continue coordination with the County's 25 towns and cities, with particular focus on annexation, municipal zoning, future utility service areas, road improvements, large development applications, and historic preservation.

Objective 4.2.3 Consider planning measures that provide a means for financing and constructing public improvements and community facilities.

Strategy 4.2.3.1 Consider a path forward for citizen-driven special development and tax districts to help fund improvements to off-site infrastructure such as roads and intersections.

Goal 4.3 Identify and designate future development areas in a manner that protects the County's natural and cultural resources from the adverse impacts of development as outlined in the Conservation and Historic Preservation elements.

Objective 4.3.1 Consider incentive-based strategies for preserving environmental areas from development.

Strategy 4.3.1.1 Consider working with stakeholders to develop buffer incentives or a program for tidal wetlands and waterways.

Strategy 4.3.1.2 Evaluate the County density bonus program to determine ways to better encourage use of the program and close loop holes associated with its implementation.

Strategy 4.3.1.3 Consider the expansion of the density bonus program into other districts in order to obtain funds for open space and natural resource preservation.

Objective 4.3.2 Promote new development that incorporates preserved usable open space and mitigates for the protection or replacement of environmental resources in subdivision design.

Strategy 4.3.2.1 Improve the cluster development ordinance.

Strategy 4.3.2.2 Consider deletion of tidal wetlands from density calculations in the ESDA.

Strategy 4.3.2.3 Strengthen County development regulations to ensure that open space dedicated by developers contains contiguous open space to facilitate environmental protection and/or passive recreation.

Strategy 4.3.2.4 Consider revisiting code to determine if modifications are needed to open space requirements or if incentives can be developed to promote less fragmentation of open space.

Goal 4.4 Minimize the adverse impacts of future development on existing development.

Objective 4.4.1 Ensure that new development complements the character of the existing surrounding communities.

Strategy 4.4.1.1 Reevaluate use of 20 foot landscaped buffers between new developments and adjacent uses to determine if buffer size is adequate/reasonable.

Strategy 4.4.1.2 Consider revisiting height limits in the code for residential and commercial districts to determine if heights are accurate for such districts and uses, as well as determining if the method for measuring height should be revised.

Strategy 4.4.1.3 Review zoning code to determine if modifications are needed to permit new styles of housing such as tiny house construction to be developed in the code as they appear.

Strategy 4.4.1.4 Review zoning code to determine if modifications are needed to permit agrihood-style development where appropriate in the County.

Strategy 4.4.1.5 Encourage master planning for large-scale developments on large parcels or groups of parcels in the ESDA, Developing Areas, and Mixed Residential land use classifications to provide flexibility in design.

Goal 4.5 Recognize the importance of the agricultural land base of the County.

Objective 4.5.1 Develop incentives for the preservation of agriculture or forestry lands.

Strategy 4.5.1.1 Promote and expand land use, zoning and conservation policies and incentives that keep agriculture economically viable in Sussex County.

Strategy 4.5.1.2 Explore incentives that the County could offer landowners (e.g. property tax exemption) to encourage long-term forest management.

Objective 4.5.2 Reduce the challenges placed on farmers by new development.

Strategy 4.5.2.1 Establish voluntary agri-business areas that are centered around existing infrastructure in AR-1 zoning in western Sussex allow food processing, feed mills, and technology operations or other compatible uses.

Strategy 4.5.2.2 Ensure that the zoning ordinance accommodates agribusiness uses in appropriate locations, including businesses that promote new uses for agricultural products and byproducts.

Objective 4.5.3 Increase the acreage of permanently preserved farm and forestland in the County.

Strategy 4.5.3.1 Encourage more farm owners to enroll in a voluntary State Agricultural Preservation District or similar program.

Strategy 4.5.3.2 Work with the Delaware Department of Agriculture Department to preserve more Sussex County farms through agricultural preservation easements and maximize the value of the compensation paid to the landowners.

Strategy 4.5.3.3 Coordinate agricultural preservation acquisitions with other current and future adjacent uses.

Strategy 4.5.3.4 Support and promote the Forest Legacy Program and other programs that sustain and protect working forests.

Chapter 5. CONSERVATION

Conservation Vision: *To conserve land and protect natural resources in balance with growth and development throughout Sussex County*

5.1 OVERVIEW

Landscapes and environmental resources in Sussex County include wetlands, waterways, beaches, forests, farmland, meadows and other open areas. These areas support a wide variety of plant and wildlife species as well as human activities. While many of these are public sites such as state parks or beaches, the majority of the natural landscapes in the County are privately owned.

These undeveloped areas are a major part of Sussex County's unique physical character, aesthetic appeal, and economic vitality; all contributing to the quality of life of residents and visitors. As the population of Sussex County grows, development may encroach on natural resources. However, through a combination of land preservation efforts and land use planning practices, the impact of development on natural resources are being minimized. Sussex County and a range of public and private parties are striving to preserve, protect, and manage Sussex County's natural environment. This plan element addresses the conservation measures that Sussex County and others are and should consider undertaking to protect the area's ecology.

5.2 PROTECTED LANDS AND NATURAL RESOURCES

Protected lands in Sussex County include those owned and/or managed by some federal and state agencies, as well as private land conservancies (Figure 5.2-1). In addition, many landowners choose to sell their development rights and establish forestry or agricultural conservation easements. Many also choose to have their land placed in an agricultural preservation district or forestry preservation area where it is preserved for a period of time. Other lands that have restrictions from development include tidal wetlands and flood hazard zones. This section outlines the protected lands and natural resources of Sussex County.

5.2.1 Federal Land

The Prime Hook National Wildlife Refuge is located approximately 10 miles north of Lewes. It contains over 10,000 acres devoted to habitat and protection for waterfowl, migratory birds and other endangered species. The U.S. Fish and Wildlife Service (USFWS) manages this site as part of its national system. These lands help support healthy populations for game and non-game species.

The refuge is managed by a Comprehensive Conservation Plan (CCP) developed by the U.S. Fish and Wildlife Service and finalized in 2013. The County should periodically review the plan with the USFWS representatives and surrounding property owners to evaluate its impact and effect on the area and decide if there are issues that could be addressed on a county level.

5.2.2 State Land

DNREC oversees state parks, forest, wildlife areas, ponds, and other open spaces that comprise over 40,000 acres in Sussex County. The Delaware Department of Agriculture's Forest Service is responsible for Redden State Forest which is primarily north of Georgetown. The Redden State Forest, at over 12,000 acres, is the largest of Delaware's three state forests and the only state forest in Sussex County. More information about these state lands are included in the Recreation and Open Space Element of this Comprehensive Plan.

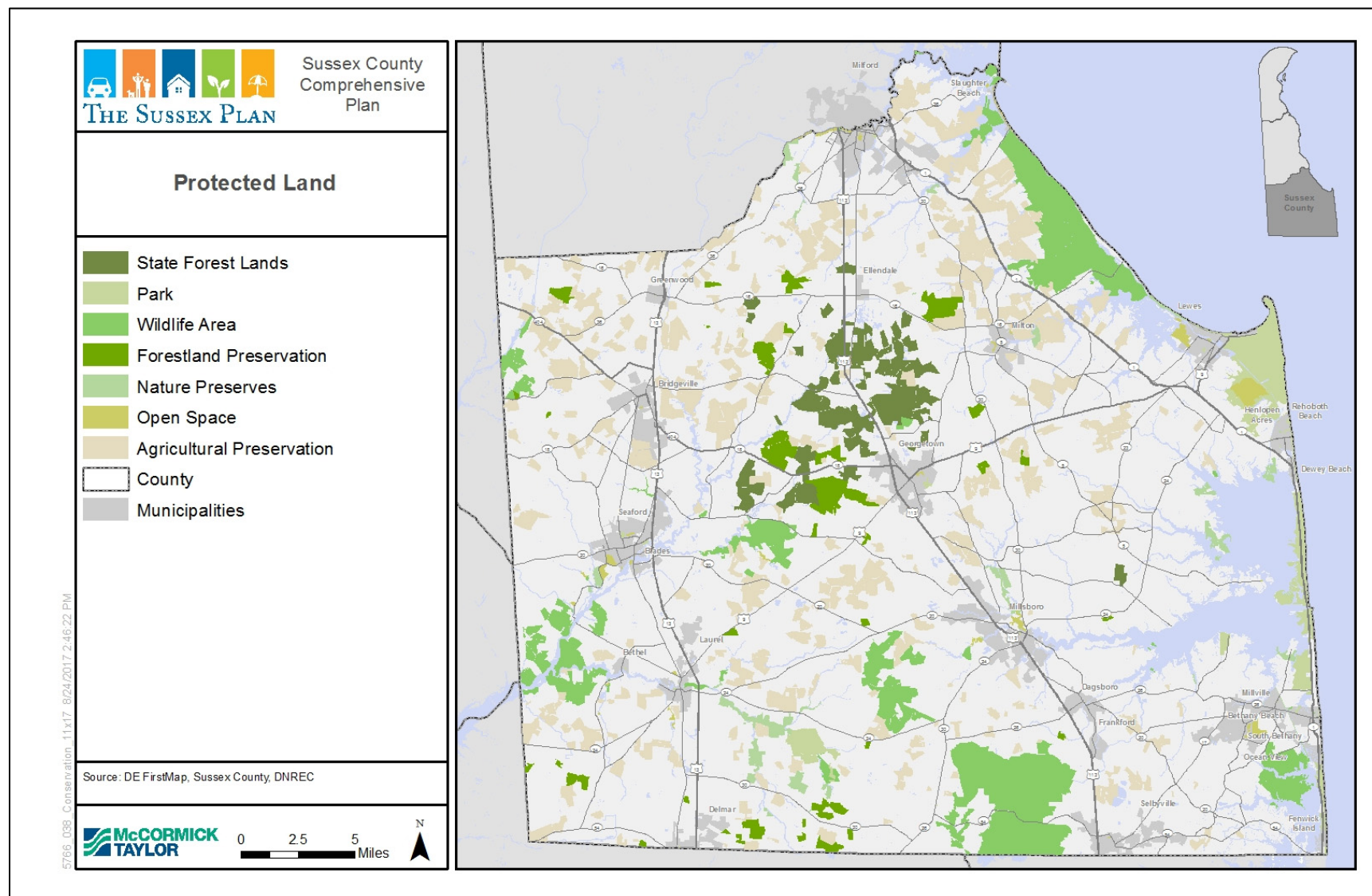
Much of the state land in Sussex County was acquired through the Delaware Open Space Program which was formed in 1990 by the Delaware Land Protection Act. The Open Space Program coordinates the acquisition of various state lands (parks, fish and wildlife management areas, forests, nature preserves, and cultural sites). The State uses funding from this program to acquire lands the State identifies as environmentally important. Land prioritization and selection is done by the Delaware Open Space Council, a nine-member group that analyzes acquisitions in order to advise the secretary of DNREC. Once purchased, lands are managed by the appropriate state agency as public open space to protect natural features, conserve cultural resources, and provide recreation opportunities where appropriate. From July 1, 1990 to June 30, 2016 the Delaware Open Space Program preserved over 37,000 acres of land in Sussex County through 189 projects. Sussex County projects make up 62 percent of all acres preserved in the State of Delaware through the Open Space Program. Additionally, 50 percent of total program funding for the State during that time period was used in Sussex County.

For the past several years, the Delaware Open Space Program has experienced significant budget cuts which will have a major impact on open space preservation efforts in the State moving forward. The County may consider using more of its own funding to reinvigorate efforts and ensure that natural resource land continues to be preserved.

5.2.3 Private Preserved Land

Permanently preserved private land in Sussex County also includes property owned in fee simple by private non-profit conservation entities such as the Sussex County Land Trust, Delaware Wild Lands, Inc., Ducks Unlimited, and the Nature Conservancy, among others. In addition, the State works with private landowners to acquire farmland and forestland preservation easements, as described below.

Figure 5.2-1 Protected Land



5.2.3.2 *Agricultural Land Preservation*

As discussed in other Elements of this Comprehensive Plan, agriculture is an important land use and industry in Sussex County. Land in agriculture also provides many important ecological benefits including wildlife habitat and stormwater absorption.

In order to preserve farmland from development, the Delaware Agricultural Lands Preservation Foundation purchases development rights from landowners and imposes a permanent agricultural conservation easement on the land. According to the June 21, 2017 Current Situation Report, the Delaware Agricultural Lands Preservation Foundation had acquired the development rights to 321 farms and a total of over 43,000 acres in Sussex County. Historically, the County has made major annual financial contributions toward acquiring these easements. However, the last year that the County made a contribution to the program was in FY 2009 because of County budget reductions. The County may consider renewing its investments in the Agricultural Preservation Program and working with the Delaware Department of Agriculture and the farming community to preserve more Sussex County farms through agricultural preservation easements. As part of these efforts, the County could consider strategic ways to use the funding such as using the program to preserve farmland to create buffers around more intense agricultural uses; or in areas that are near important environmental areas.

The Delaware Agricultural Lands Preservation Foundation also works with farmland owners to enroll farms in agricultural preservation districts (200 acres or more) or expansions (less than 200 acres). These are voluntary agreements where landowners agree to continue to only use their land for agriculture for at least 10 years. There is no payment to the landowner for creating the district; however, there are several benefits to landowners in an agricultural district. The unimproved land in the district is exempt from real estate transfer, county, and school taxes. There are also protections against nuisance lawsuits for land in the district. Farms must first be enrolled in a district or expansion before easements can be sold. In Sussex County, there are 619 approved and 7 pending farms in districts or expansions. These total over 73,000 acres.

The Delaware Department of Agriculture and the Delaware Agricultural Lands Preservation Foundation also administer the Delaware Young Farmers Loan Program. This program helps young farmers buy land while protecting it from future development. It provides no-interest loans for land acquisition in exchange for a permanent agricultural conservation easement on the land.

Additionally, the USDA Natural Resource Conservation Service (NRCS), through the Agricultural Conservation Easement Program (ACEP) provides financial and technical assistance to help conserve agricultural lands and wetlands and their related benefits.

5.2.3.3 *Forestland Preservation*

The Delaware Department of Agriculture's Forest Service recognizes the importance of preserving forestland, including land in working forests. Working forests are forests that are actively managed to generate revenue from sustainable timber production while still providing

the important ecological benefits that woodlands provide. More information about the forestry industry in Sussex County can be found in the Economic Development Element. The Delaware Forest Service is responsible for acquiring forestland conservation easements as well as managing a host of programs that assist local communities and private landowners to re-forest, manage and/or enhance their woodland resources.

The Delaware Forestland Preservation Program also works to preserve forestland as forestland preservation areas (ten acres or more of forestland that is preserved from development for at least 10 years) and through permanent easements. As of June 21, 2017, in Sussex County there are over 1,600 acres designated as forestland preservation areas and 445 acres that are permanently preserved with forestland preservation area easements.

Sussex County is also home to two of Delaware's four Forest Legacy Areas: Redden/Ellendale and Cypress Swamp. Forest Legacy Areas are specially designated concentrations of forest land, within which the State can use certain federal funds to acquire forest conservation easements. The Forest Legacy Program provides funds to states to protect working forestlands that are threatened by development or other land uses, either through outright (fee simple) purchase or conservation easements.

5.2.4 Water Resources

Water resources are critical to life in Sussex County. The water resources in the County have many uses including agricultural, household, industrial, and recreational activities. They exist as surface and groundwater resources.

5.2.4.1 Surface Waters

Sussex County is well-known for its extensive beaches and shoreline along the ocean and coastal bays. To protect these resources, DNREC administers the State Coastal Zone Program which regulates existing heavy industrial activities as well as manufacturing activities within the State's coastal zone. The coastal zone runs the length of the eastern seaboard of the state. Coastal zone permits are necessary for any new or expanded manufacturing activities that may impact the environment, economy, aesthetics, or neighboring land uses. In addition, an application for a coastal zone status decision is needed if the activity may be considered heavy industry.

Surface water resources in the County also include a vast network ponds, rivers, and streams that crisscross the County. Figure 5.2-2 shows the major waterways and their corresponding watersheds in Sussex County.

Under Section 303(d) of the 1972 Federal Clean Water Act (CWA), states are required to identify all impaired waters and establish total maximum daily loads (TMDL) to restore their beneficial uses. A TMDL defines the amount of a given pollutant that may be discharged to a water body from point, non-point, and natural background sources and still allows attainment or maintenance of the applicable water quality standards.

Sussex County has appropriate processes in place to comply with the regulations of the TMDL program. However, at the time of the drafting of this plan, the Clean Water Act and the Waters of the United States are undergoing a revision as directed by an executive order signed in February 2017. As that rewrite is expected to redirect such regulatory power back to state authority, this section of the comprehensive plan should be reviewed within two years to make sure it is still in keeping with state and federal regulation.

5.2.4.2 Groundwater

Groundwater resources exist subsurface and are the sole source of drinking water in the County. While water quantity is not a concern in the County as a plentiful supply of groundwater exists; water quality is a concern as land use activities and practices can have a direct impact on the quality of the groundwater in the aquifers beneath them. For example, system failure of septic tanks can result in clogging and overflow or high density placement of tanks can result in regions containing high concentrations of wastewater that overflow into the water table.

Groundwater is regulated by DNREC and the regulation of public water supplies is shared between DNREC, the State Division of Public Health, and the Public Service Commission. In 2001, Delaware Legislature adopted a law that required county and municipal governments to delineate source water protection areas and adopt ordinances to minimize the impact of land use activities on the groundwater supply as well as reduce the risk of contamination of excellent groundwater recharge areas and wellhead protection areas. As the County ordinance was adopted nearly ten years ago and has been actively utilized in land use decision-making since then, the County is considering a review of the existing ordinance to determine if modifications are needed to further improve implementation of the ordinance. More information about source water protection, drinking water, and aquifers can be found in the Utilities Element of this Comprehensive Plan.

5.2.4.3 Wetlands

Tidal wetlands within Sussex County are protected by State Law. Section 404 of the Federal Clean Water Act regulates fresh water wetlands. Sussex County requires a wetland statement prior to final site plan approval and a wetland delineation if wetlands are present.

Both tidal and non-tidal wetlands have extensive natural and economic value. The boundaries of wetland areas must be accurately determined by qualified professionals prior to site plan reviews or before any County permits are used. Wetlands identification and protection is much more effective if qualified professionals are involved early in site analysis and design.

Land owners, developers, and their agents should also be informed on the status of relevant court cases and the regulations associated with state and federal programs, including but not limited to:

- State of Delaware Subaqueous Lands Act
- Delaware Wetlands Act
- Water Quality Certification

- Coastal Zone Consistency
- Rivers and Harbors Act
- Clean Water Act
- Marine Protection, Research and Sanctuaries Act

5.2.4.4 *Floodplains*

Floodplains encompass land areas adjacent to streams and waterways that are prone to flooding. Floodplains have been recognized for their stormwater storage functions and their inherent risks to life and property, resulting in a variety of restrictions and regulations over new development. Floodplains in Sussex County have been extensively identified and mapped by the Federal Emergency Management Agency (FEMA) and are a traditional tool used in determining flood insurance requirements. Figure 5.2-3 shows flood zones in Sussex County. Flood zones are geographic areas that FEMA has defined according to varying levels of flood risk and are depicted on a Flood Insurance Rate Map (FIRM). Each zone reflects the severity or type of flooding in the area. Some of the flood zones have depths or base flood elevations available while others do not.

The Sussex County Zoning Code contains provisions for flood-prone districts as required by the Federal Emergency Management Agency for continued participation in the National Flood Insurance Program. The code gives guidance to those parties utilizing these requirements, including the Sussex County Floodplain Administrator, developers, builders, and property owners.

The County has also been considering participation in FEMA's Community Rating System (CRS) of the federal flood insurance program. Under the CRS program, residents in communities that undertake specific flood preparation and prevention activities can get discounts on their flood insurance between 5 percent and 45 percent. These eligible activities range from public awareness and data collection, to preserving undeveloped floodplain land, to maintaining an updated flood response plan, to relocating flood prone buildings. Some existing activities governments are already doing may qualify for CRS credit, and the more activities a government performs, the higher the premium discount is for its citizens. A number of communities in Sussex County participate in the CRS program, including Bethany Beach, Rehoboth Beach, Dewey Beach, South Bethany, Fenwick Island, Lewes, and Seaford.

Figure 5.2-3 Watersheds and Waterways

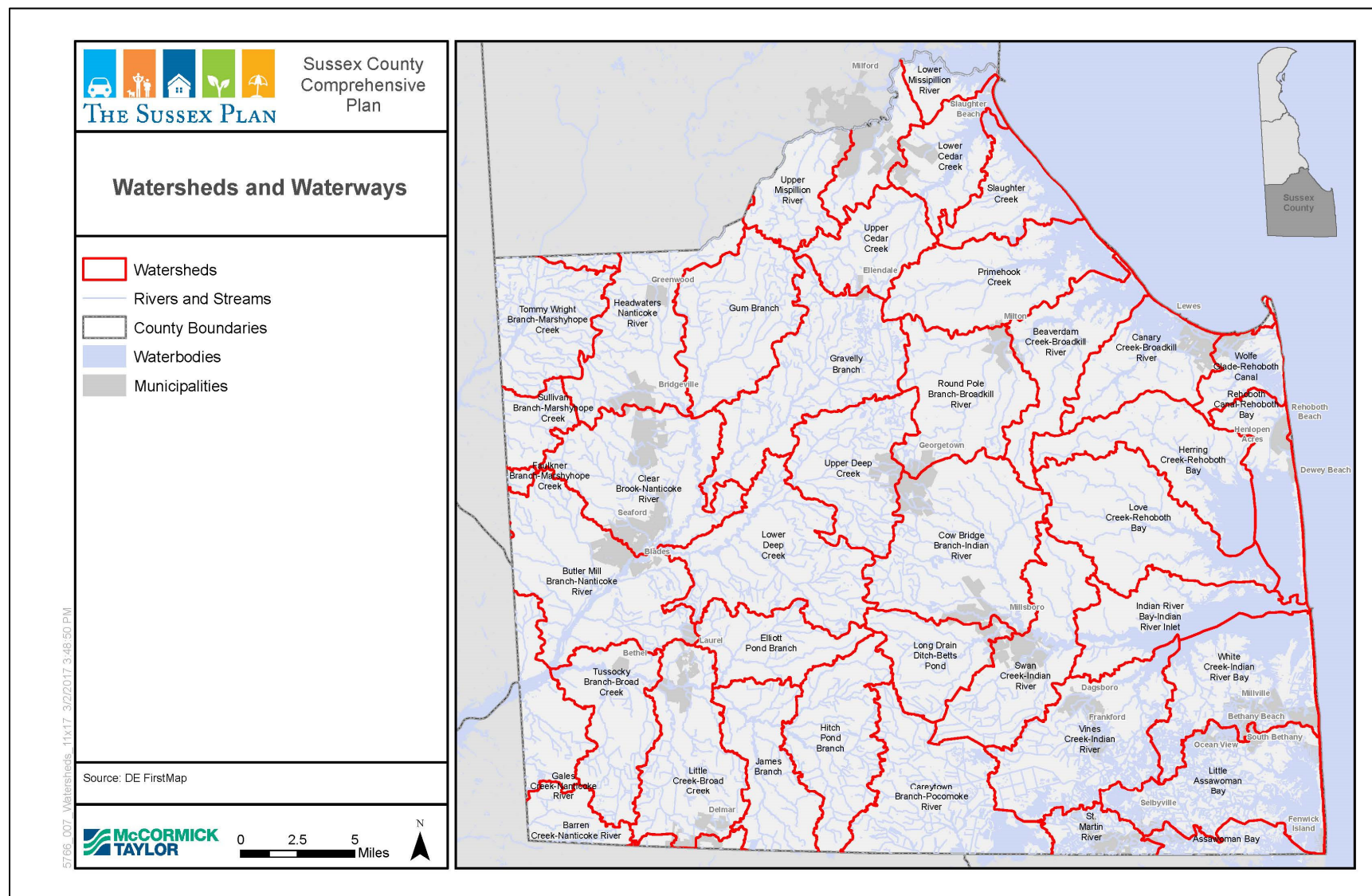
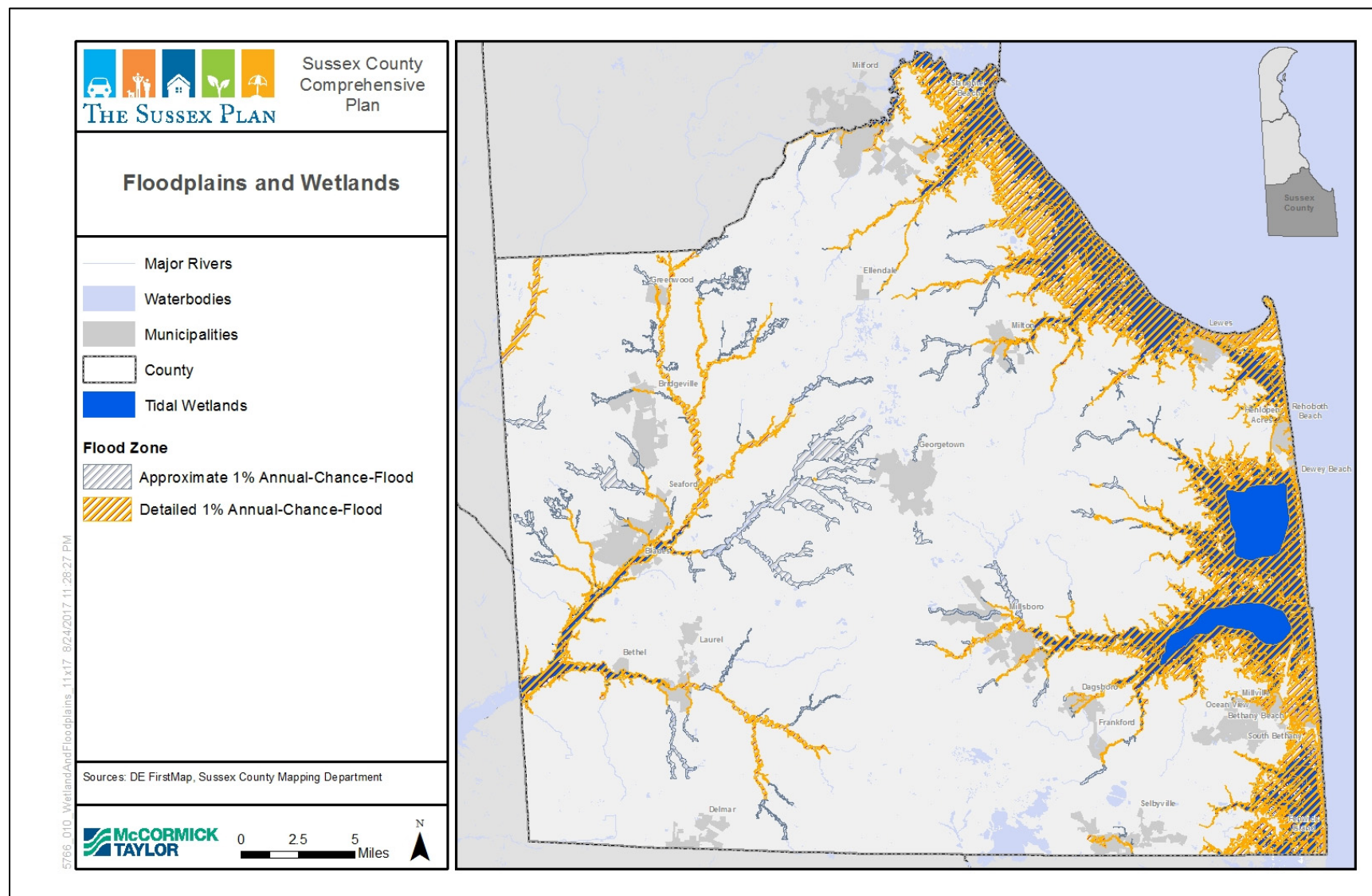


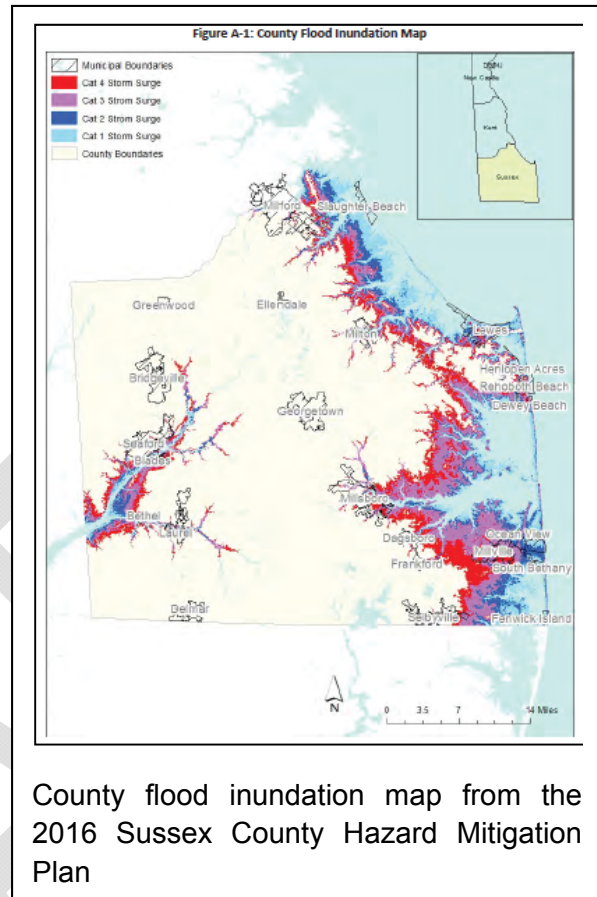
Figure 5.2-4 Wetlands and Floodplains



Sussex County has experienced the damaging effects of severe storms such as thunderstorms, tropical storms, and hurricanes. There is potential over time that these storms may increase in intensity and duration as weather patterns change.

One of the major effects of severe storms is damage from flooding. Sussex County recognized this when it completed its Hazard Mitigation Plan update in 2016 and identified flooding as the highest risk hazard in the County.

As part of the Hazard Mitigation Plan, coastal flooding was modeled. The modeling shows storm surge areas associated with various category storm events. The plan also modeled depth of flooding from coastal and riverine flooding and estimated potential annualized losses countywide of \$129 million. Those areas most impacted by flooding and storm surge include the entire eastern coast of the County as well as those lands adjacent to the Nanticoke River and its tributaries.



To address ways to mitigate the effects of natural and human-made hazards, the Hazard Mitigation Plan includes a number of mitigation actions. These include ways to protect residents living in flood-prone areas, improved education and awareness, and partnerships with DNREC and DelDOT to endorse federally-funded projects that restore portions of the County's coastline experiencing coastal erosion. As the County works to implement the mitigation actions of the Hazard Mitigation Plan it should also work to protect residents from the impacts of flooding as it makes land use decisions. One way to do this is to better understand the future impacts of flooding. The County should consider development of a plan to evaluate the future impacts of flooding on Sussex County and develop strategies to aid in resiliency to these impacts.

It should be noted that FEMA requires that County Hazard Mitigation Plans be updated every five years. As such, the next update of the County's 2016 Hazard Mitigation Plan is anticipated to occur before the next update of this County Comprehensive Plan. The next Hazard Mitigation Plan Update should reference information in this Comprehensive Plan to ensure consistency between the two documents.

5.2.5 Air

Clean air is important for the health of Sussex County residents and visitors. The US Environmental Protection Agency tracks seven pollutants at air quality monitoring stations across the State. Sussex County is currently meeting National Ambient Air Quality Standards for these pollutants. Nevertheless, there are opportunities for Sussex County to work with federal and state agencies and non-governmental agencies to identify opportunities to continue to maintain and improve air quality as the population of the County continues to grow. For example, this can include promoting walkable communities and development that reduces the use of personal automobiles as well as working with DelDOT to improve traffic flows.

5.3 SUSSEX COUNTY DEVELOPMENT REGULATIONS AND CONSERVATION INITIATIVES

Sussex County Council recognizes that rapid growth creates extraordinary environmental pressures, particularly in complex and sensitive coastal ecosystems. In addition to the standard regulations that counties and municipalities use to govern permitted uses, lot size, density, yard size and similar matters, Sussex County's Zoning Ordinance and Subdivision Code contain numerous special regulations designed to protect environmental resources. Examples include the following:

- The Environmentally Sensitive Development District Overlay Zone (ESDDOZ), where an environmental assessment must be prepared in conjunction with development applications.
- Subdivision regulations that require forested buffers, minimum common open space, and a special design review by a County-appointed Technical Advisory Committee.
- Regulations mandating construction setbacks from primary coastal dunes.
- Regulations restricting building activity within the 100-year floodplain.
- Regulations that mandate building setbacks from tidal waters and tidal wetlands.
- Conservation zones are established landward from the mean high-water line of tidal bodies and regulate lot size for parcels proposing individual on-site septic and wells.
- A Combined Highway Corridor Overlay Zoning District where building setbacks, landscaping and other regulations are enforced to enhance roadside aesthetics.
- A Source Water Protection Ordinance to protect critical areas from activities and substances that may harm water quality or subtract from overall water quantity.
- A Sediment and Stormwater Management Ordinance to protect, maintain and enhance the public health, safety and general welfare by establishing minimum requirements and

procedures to control the adverse impacts associated with sediment and modified stormwater characteristics.

- County Code Chapter 110: Water and Sewers, which contains regulations relating to sewer use; extension of public water and/or sewer systems; sewer and water assessments and service charges; sewer connections; transfer, exchange, or conveyance of equivalent dwelling units; sanitary sewer and water districts; and private community water systems. Proper wastewater management and coordination is very important in order to prevent water pollution. The County provides public sewer in some areas of the County. Availability of public sewer is important in areas with a concentration of failed or potentially failing septic systems in order to better protect surface water and groundwater. More information about wastewater and water utilities in the County can be found in the Utilities Element of this plan.

In addition to regulations contained in County Code, the County also provides financial support for the conservation of resources. In addition to the financial contributions that Sussex County has made in previous years to the Sussex County Land Trust for open space acquisitions (see Section 5.4.1 below) and to the State to assist with farmland preservation, Sussex County also provides various conservation-related grants. Examples of these annual grants include grants to conservation organizations such as Delaware Ducks Unlimited or soil conservation grants for tax ditches or drainage projects.

The County also receives open space contributions for those developments choosing to take advantage of the bonus density program outlined in the County Code. As of August 2017, the County has received three contributions under the bonus density program totaling \$1.4 million. However, these funds have not yet been spent on land acquisitions. The County should evaluate the County density bonus program to determine how to better encourage use of the program, close loop holes, and facilitate the use of funds to obtain and preserve open space and natural resources. The County would also like to establish a goal for open space and natural resource preservation acreage. Plans and funding sources would then be developed to support the goal and help guide the County in how many acres it would target to preserve each year and also help guide where to focus preservation efforts.

5.4 OTHER PLANS AND CONSERVATION INITIATIVES

Federal, State, County, municipal, and private parties work together and separately to help preserve Sussex County's natural environment. The following is a summary overview of other selected major conservation initiatives underway that affect the County.

5.4.1 The Sussex County Land Trust

The Sussex County Land Trust is a private non-profit organization that preserves open space by acquiring easements. The Land Trust aims to create a "Grand Preservation Loop" to provide connectivity to other preserved parcels and open tracts. More information about open space preservation can be found in the Recreation and Open Space Element.

The Land Trust works closely with Sussex County Council, state government, and other conservation groups to preserve open space by acquiring easements and acquiring title to undeveloped land. The Land Trust advises the County Council on how to allocate County funds available for open space preservation. Sussex County provides financial support to the Land Trust from the County's general fund and from fees land developers pay the County for the right to build in designated growth areas at higher densities than otherwise permitted. However, the last County contribution to the Land Trust was in 2013, and the last land acquisition purchase made with County funds was in 2010.

In addition to acquiring and administering easements on smaller tracts, the Sussex County Land Trust also uses its funds to leverage state dollars, donations from the Nature Conservancy, federal monies and other support toward large open space purchases. There are several notable examples of these strategic and leveraged conservation efforts. The 908-acre Ponders Tract is important forest land habitat with an extensive trail system. When added to the adjacent 456-acre Pemberton Tract, it makes up the 1,364-acre Pemberton Forest Nature Preserve. The Sussex County Land Trust has also worked with the Nature Conservancy to secure conservation easement agreements from local landowners to protect 600 acres within the heart of the Great Marsh near Lewes, and 149 acres along nearby Beaverdam Creek.



The Sussex County Land Trust has been focusing its land preservation efforts to create a Grand Preservation Loop

5.4.2 Inland Bays Preservation

The Delaware Center for the Inland Bays (DCIB) was established as a nonprofit organization in 1994 under the auspices of the Inland Bays Watershed Enhancement Act. It was created after two decades of active public concern and investigation into the decline of the Inland Bays and effective remedies for the restoration and preservation of the watershed.

Delaware's Inland Bays were designated an "estuary of national significance in 1988 by the U.S. Congress, and as such, the Center for the Inland Bays is one of the 28 National Estuary Programs (NEP's) formed. The Center oversees the implementation of the Comprehensive Conservation and Management Plan for Delaware's Inland Bays (CCMP) and 2012 Addendum. This document promotes the wise use and enhancement of the Inland Bays watershed by conducting public outreach and education, developing and implementing restoration projects,

encouraging scientific inquiry, sponsoring needed research, and establishing a long-term process for the protection and preservation of the watershed.

As a participant in the 2018 Sussex County Comprehensive planning process, CCMP actions were examined by DCIB for their relation to the County Comprehensive Plan. Their recommendations are summarized below in order of priority:

- Increase and enhance water quality buffers
- Improve wastewater management and coordination
- Improve stormwater management
- Preserve open space and improve water access
- Plan for climate change

DCIB also provided a list of suggested strategies for consideration for the County Comprehensive Plan. Sussex County reviewed the provided strategies and incorporated relevant strategies into Section 5.5 of this Conservation Element.

5.4.3 Delaware Bay Estuary Project

The Delaware Bay Estuary Project is part of the U.S. Fish and Wildlife Service's National Coastal Program. The U.S. Fish and Wildlife Service collaborates with other federal agencies, non-profit conservation groups, landowners, and the states of Delaware, Pennsylvania, Maryland, Virginia and New Jersey to protect and restore the ecological integrity of wildlife resources in the Delaware River and Delmarva Peninsula. The project involves identification and monitoring of shorebird populations, conservation and restoration of tidal and non-tidal wetlands, conservation of contiguous forests, and restoration of riparian and fish habitat. The program also helps partners compete for federal funds available through the U.S. Fish & Wildlife Service for habitat assessment, protection and restoration.

5.4.4 Living Shorelines Program

The Partnership for the Delaware Estuary (PDE) is a non-profit dedicated to protecting the Delaware Estuary. Like the Center for the Inland Bays, PDE is one of 28 national estuary programs designated by Congress. The Delaware Estuary stretches from Trenton, New Jersey, and Morrisville, Pennsylvania, south to Cape May, New Jersey, and Cape Henlopen, Delaware, including all of the Delaware Bay and the tidal reaches of the Delaware River. PDE is leading the Delaware Estuary Living Shoreline Initiative, created to address the increased loss of tidal salt marshes in the Delaware Estuary. It is engaging in projects to help stabilize eroding shorelines using a combination of native wetland plants, natural structures, and intertidal shellfish to trap sediment and absorb waves. This unique "living shoreline" tactic provides an economical approach for communities in the Delaware Estuary to combat the erosion of tidal marshes which play an important role by filtering water. Also, when waters rise, marshes retain floodwaters and buffer against storm surges. PDE is looking to the County and communities to partner in the Living Shorelines Program to help identify shorelines in the Delaware Estuary

experiencing erosion and assist in distribution of education information to land owners and communities.

5.4.5 Other State Initiatives

State agencies have endeavored to identify and help preserve Delaware's "green infrastructure", which DNREC describes as a network of natural areas, parks, conservation areas, and working lands with conservation value that contribute to the health and quality of life in Delaware. Some additional state initiatives include:

- **Urban and Community Forestry Program** – Delaware's Urban and Community Forestry Program is dedicated to preserving and enhancing Delaware's community forests, which play a critical role in our quality of life. Trees in towns and suburban areas provide a wide array of benefits including cleaner air and water, wildlife habitat, shade, erosion protection, and aesthetics. Delaware's Urban and Community Forestry Program offers technical and financial assistance programs to help municipalities, nonprofit groups, community associations, and homeowners to plant and care for trees.
- **Soil Conservation and Farmland Management** – In cooperation with the State, the three County Conservation Districts in Delaware each offer cost sharing incentives for landowners willing to initiate best management practices for: a) controlling erosion and sedimentation; b) managing animal waste; c) restricting cattle access to streams; and d) related conservation activities on working farms. The Sussex Conservation District has a number of programs it administers, including a cover crop program, animal mortality management assistance, a tax ditch cost share program, administration of the State Revolving Fund Agricultural Nonpoint Source Loan Program, and a conservation cost share program for erosion control, animal waste systems, water management, and wildlife habitat.
- **Wildlife Conservation** – Sussex County's coastal marine waters, marshes, freshwater streams, wetlands, upland forests and meadows are among the 125 different habitat types identified in Delaware by DNREC's 2015 Delaware Wildlife Action Plan (DEWAP). The (DEWAP) is a voluntary program that is critical to helping Delaware fulfill its objectives to conserve its abundant fish and wildlife and natural habitats for the future. The State Wildlife Grants (SWG) program assists state fish and wildlife agencies with conservation of all wildlife species and their habitats. By Congressional SWG requirements, each state and territory must revise the Wildlife Action Plan every 10 years to remain eligible for these funds.

The U.S. Fish and Wildlife Service also has a program called Partners for Fish & Wildlife which works with private landowners to improve fish and wildlife habitat on their lands. The program provides technical and financial assistance to private landowners to assist with projects that conserve or restore native vegetation, hydrology, and soils to provide an important habitat for rare, declining, or protected species.

- Wetlands Conservation – As noted earlier, state and federal regulations provide extensive protection to wetlands when wetlands are mapped accurately and wetland regulations are actively enforced. Recognizing that wetlands throughout Delaware have disappeared due to development, DNREC and others offer both technical assistance and financial help to landowners who wish to restore wetlands, establish permanent wetlands on their property, or permanently conserve existing wetlands through conservation easements. Organized under the DNREC Division of Watershed Stewardship, the goal of the Ecological Restoration and Protection Team is to restore and protect streams, drainage ditches, wetlands, and riparian corridors in a coordinated effort to ensure that the maximum level of environmental results are being derived to enhance water quality, provide stream-bank protection and reduce erosion, and establish wildlife habitat.

5.5 CONSERVATION GOALS, OBJECTIVES, AND STRATEGIES

The following goals, objectives, and strategies identify ways Sussex County can: a) continue its participation in conserving more land in the County; b) help ensure that the County's environmental resources are better protected; and c) encourage more farmland and forestland preservation. Sussex County government can carry out some of these initiatives on its own. In other cases, cooperatives efforts will be needed. Many of these actions are helpful techniques for protecting specific natural features. However, to be most effective, they will need to be implemented in association with the more comprehensive growth management strategies outlined in the Future Land Use Element of this plan.

Goal 5.1: Preserve, maintain, and enhance the natural resources and natural systems in the County.

Objective 5.1.1 Encourage development practices and regulations that support natural resource protection.

Strategy 5.1.1.1 Consider revisiting code to determine if modifications are needed to open space requirements or if incentives can be developed to promote less fragmentation of open space.

Strategy 5.1.1.2 Establish future public sewer service areas that will help preserve open space by promoting orderly growth rather than unplanned sprawl.

Strategy 5.1.1.3 Reevaluate use of 20 foot landscaped buffers between new developments and adjacent uses to determine if buffer size is adequate/reasonable.

Strategy 5.1.1.4 Evaluate the County density bonus program to determine how to better encourage use of the program, close loop holes, and facilitate the use of funds to obtain and preserve open space and natural resources.

Strategy 5.1.1.5 Consider the expansion of the bonus density program into other zoning districts in order to obtain funds for open space and natural resource protection.

Strategy 5.1.1.6 Continue development of County Code revisions, such as the revisions that addressed drainage, through a County Working Group tasked with accommodating state regulatory changes when appropriate.

Objective 5.1.2 Protect areas determined to be environmentally sensitive by directing development and growth away from these areas.

Strategy 5.1.2.1 Consider development of incentives to direct growth to Growth Areas and that will result in conservation of natural areas.

Strategy 5.1.3.1 Review the appropriate sections of Sussex County's zoning and subdivision codes to determine if amendments are needed that will better help protect critical wildlife habitat.

Objective 5.1.4 Coordinate with government agencies and non-governmental organizations to identify and protect natural resources and habitat.

Strategy 5.1.4.1 Continue working with the State to identify opportunities for the State to acquire additional lands in Sussex County designated as Natural Areas.

Strategy 5.1.4.2 Continue working with the Sussex County Land Trust to use funds collected from developers and funds leveraged from other sources to preserve more land and open space through conservation easements and fee simple acquisitions.

Strategy 5.1.4.3 Work with DNREC, the Delaware Department of Agriculture, the Sussex County Land Trust, and non-profits to continue adding appropriate properties to the inventory of protected lands in Sussex County, particularly to link together existing state-owned forests and existing open space.

Strategy 5.1.4.4 Consider methods to formulate stronger, yet locally acceptable, strategies for better protecting groundwater, waterways, sensitive habitat areas and other critical natural lands in Sussex County.

Strategy 5.1.4.5 Continue and expand partnerships with conservation organizations to manage preserves.

Strategy 5.1.4.6 Establish a County goal for open space and natural resource preservation acreage.

Objective 5.1.5 Explore new funding mechanisms for conservation in the County.

Strategy 5.1.5.1 Consider renewal of the County's contribution to the State Farmland Preservation Program and other federal or state programs that require a match.

Strategy 5.1.5.2 Consider County-level financing mechanisms for open space preservation and management to leverage state and federal dollars.

Objective 5.1.6 Promote education of citizens and elected officials of the County regarding the need to protect and preserve natural resources.

Strategy 5.1.6.1 Support the Center for the Inland Bays and other conservation groups in their efforts to educate more people about the necessity of protecting tidal wetlands and other natural resources.

Strategy 5.1.6.2 Raise land owners' awareness about the incentives the State offers to protect and better manage forest land, wetlands, wildlife habitat and farmland.

Goal 5.2: Encourage protection of farmland and forestland.

Objective 5.2.1 Recognize and promote the conservation benefits of having land in agriculture and forestry.

Strategy 5.2.1.1 Encourage more farm owners to enroll in a voluntary State Agricultural Preservation District or similar program.

Strategy 5.2.1.2 Promote farm easement programs by the State, NRCS, and private land conservancies.

Strategy 5.2.1.3 Work with the Delaware Department of Agriculture and the farming community to preserve more Sussex County farms through agricultural preservation easements and maximize the value of the compensation paid to the landowners.

Strategy 5.2.1.4 Support and promote the Forest Legacy Program and other programs that sustain and protect working forests.

Strategy 5.2.1.5 Promote Delaware's Urban and Community Forestry Program to preserve and enhance Delaware's community forests.

Objective 5.2.2 Pursue opportunities to increase the financial viability of the agriculture and forestry industries.

Strategy 5.2.2.1 Identify areas of agricultural land with prime soils or operations that should be maintained and/or strengthened.

Strategy 5.2.2.2 Work with land owners and Delaware Forest Service to protect high value forest tracts and improve the diversity and quality of forest tracts.

Strategy 5.2.2.3 Explore incentives that the County could offer landowners (e.g. property tax exemption) to encourage long-term forest management.

Strategy 5.2.2.4 Inform and educate agricultural and forest landowners about and connect land owners with the resources available from the State and other sources. This includes technical assistance and financial assistance programs.

Goal 5.3: Ensure the protection of the natural functions and quality of the County's water resources.

Objective 5.3.1 Protect surface water and drinking water quality.

Strategy 5.3.1.1 Consider working with stakeholders to develop buffer incentives or a program for tidal wetlands and waterways.

Strategy 5.3.1.2 Support the State's goals and standards for surface and drinking water quality.

Strategy 5.3.1.3 Inform and educate residential property owners and managers about the negative water quality effects of improper use or unnecessary application of lawn chemicals.

Strategy 5.3.1.4 Evaluate the effectiveness of the County's 50-foot buffer requirement for tidal wetlands.

Strategy 5.3.1.5 Develop incentives to encourage the redevelopment of brownfields and greyfields.

Strategy 5.3.1.6 Determine if a review of the existing County wellhead protection ordinance is needed.

Strategy 5.3.1.7 Recognize the Inland Bays, their tributaries and other waterbodies as valuable open space areas of ecological importance.

Objective 5.3.2 Maximize the performance of wastewater management to protect water quality.

Strategy 5.3.2.1 Prioritize the provision of public sewers to areas with concentration of failed or potentially failing septic systems in order to better protect surface water and groundwater.

Strategy 5.3.2.2 Provide more public education about how to properly operate and maintain on-site septic systems.

Strategy 5.3.2.3 Consider formation of a stakeholder action committee to coordinate treatment of wastewater and TMDLs.

Objective 5.3.3 Promote techniques and activities that protect and enhance water quantity.

Strategy 5.3.3.1 Protect long-term water supply by encouraging land conservation in groundwater recharge areas.

Objective 5.3.4 Better manage stormwater runoff to preserve water quality.

Strategy 5.3.4.1 Review the appropriate sections of Sussex County's zoning and subdivision codes to determine if amendments are needed to encourage more "green" stormwater management techniques as an alternative to traditional detention basins.

Strategy 5.3.4.2 Evaluate the County's development regulations to ensure that regulations reflect appropriate concern for reducing stormwater and promoting on-site recharge.

Strategy 5.3.4.3 Promote the Sussex Conservation District's Conservation Programs and its management and implementation of the Statewide stormwater regulations.

Strategy 5.3.4.4 Consider support of the State's efforts that support farmers and encourage best management practices on farms in order to control runoff and maintain water quality of waterways.

Strategy 5.3.4.5 Continue participation in the stormwater regulatory advisory process with the State for the development of improved stormwater regulations.

Strategy 5.3.4.6 Research or coordinate with the Conservation District on tax ditch setbacks.

Objective 5.3.5 Reduce flooding and erosion.

Strategy 5.3.5.1 Evaluate the effectiveness of the County floodplain ordinance to determine if modifications are needed.

Strategy 5.3.5.2 Evaluate the effectiveness and consider implementation of the mitigation actions of the County's Hazard Mitigation Plan in order to reduce the County's risk to natural and human-made hazards.

Strategy 5.3.5.3 Pursue CRS status through FEMA to obtain lower flood insurance rates for homeowners.

Strategy 5.3.5.4 Consider development of a plan to evaluate the future impacts of flooding on Sussex County.

Strategy 5.3.5.5 Consider becoming a partner in the Partnership for the Delaware Estuary's Living Shoreline initiative.

Goal 5.4: Maintain and improve air quality.

Objective 5.4.1 Work with federal and state agencies and non-governmental agencies to identify opportunities to improve air quality in the County.

Strategy 5.4.1.1 Examine the County's obligation under federal air quality regulations that promote air quality credits to offset emissions from new transportation projects.

Strategy 5.4.1.2 Reduce auto emissions by supporting alternative travel modes and/or improved traffic flow.

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Chapter 6. RECREATION AND OPEN SPACE

Recreation and Open Space Vision: *To be a place where open space for passive and active recreation is an integral part of development and growth.*

6.1 OVERVIEW OF RECREATION AND OPEN SPACE OPPORTUNITIES

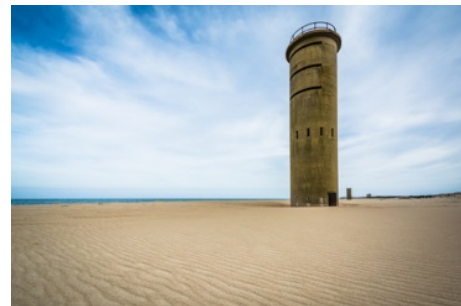
Sussex County residents and visitors have many choices on how to spend their outdoor leisure time. The County is famous for its renowned public beaches. Innumerable docks, marinas, boat launches and landings provide access to the Atlantic Ocean, the Inland Bays and the County's rivers and creeks. State parks, state forests, federal and state wildlife refuges, municipal parks, nature preserves, and multi-use trails and greenways offer a diverse variety of public recreation opportunities. In addition, there are recreational opportunities provided through the school districts, non-profit, and for-profit organizations. This chapter looks at the recreational and open space opportunities and outlines strategies for sustaining and expanding public recreation choices in Sussex County.

6.2 STATE RECREATION AND OPEN SPACE

By far, the largest amount of recreation and open space lands in the County is owned and managed by the State through DNREC. With over 40,000 in acreage in state parks, forests, wildlife areas, nature preserves, ponds, and other open spaces, Sussex County residents and visitors have access to a wide variety of landscapes and recreational opportunities.

6.2.1 State Parks

Fishing, camping, boating, hunting, swimming, and hiking are among the primary activities offered at the state parks in Sussex County. There are five state parks in the County. These parks as well as other public federal, state, county, municipal, and privately managed, protected lands that are open to public access are depicted in Figure 6.2-1.



World War II Observation Tower at
Cape Henlopen State Park

- *Cape Henlopen State Park* is a 5,193-acre park in Lewes, where the Atlantic Ocean meets the Delaware Bay. The park features public beaches, a nature trail, a World War II observation tower, family campgrounds, and an 18-hole disc golf course. There is also a quarter-mile fishing pier onto the Delaware Bay. Winter hunting is permitted in some areas.
- *Delaware Seashore State Park* is a 2,825-acre park located between Dewey Beach and Bethany Beach. It has six miles of ocean and bay shoreline for fishing, swimming and

sunbathing. The park features a 250-slip marina and a boat ramp. Seasonal hunting is permitted in some areas of the park.

- *Holts Landing State Park*, originally a family farm, is a 203-acre park located on the southern shore of the Indian River in Millville. Recreational facilities include tree-shaded picnic areas with grills, a playground, two ball fields, a boat-launching ramp for small motorized boats, sailboats, and windsurfing boards. The park also features the only pier on the Inland Bays built specifically for crabbing.
- *Fenwick Island State Park* is a 344-acre park situated between Bethany Beach to the north and Fenwick Island to the south. Little Assawoman Bay forms the western edge of this park, providing many opportunities for salt water recreation. The park has large areas of ocean and bay shoreline for swimming, surfing, and surf fishing. Seasonal hunting is allowed in some areas of the park. The park also has one the State's few designated surfing areas.
- *Trap Pond State Park* is a 3,653-acre park located four miles east of Laurel off Route 24. The park has over 21 miles of trails and offers hiking, biking, fishing, swimming, and camping activities around the park's 90-acre pond. Picnicking, abundant wildlife, wild flowers and the country's northernmost stand of Bald Cypress trees is also found there. The park also features the Baldcypress Nature Center which offers education and recreation opportunities as well as a as meeting and conference space.

6.2.2 State Forest

Delaware's state forests are managed for a variety of objectives, including: timber production; habitat enhancement; forestry demonstrations; and forestry research. State forests also provide recreation opportunities, such as: hiking; horseback riding; and hunting.

Redden State Forest, managed by the Delaware Forest Service under the Department of Agriculture, is located in central Sussex County north of Georgetown. It offers over 44 miles of trails, some primitive camping sites, lodging at Redden Lodge, a nature center, and a catch and release fishing pond. It is also popular for hiking, horseback riding, bicycling, and bird watching. At over 12,400 acres (distributed over 18 tracts), it is the largest of Delaware's three state forests.

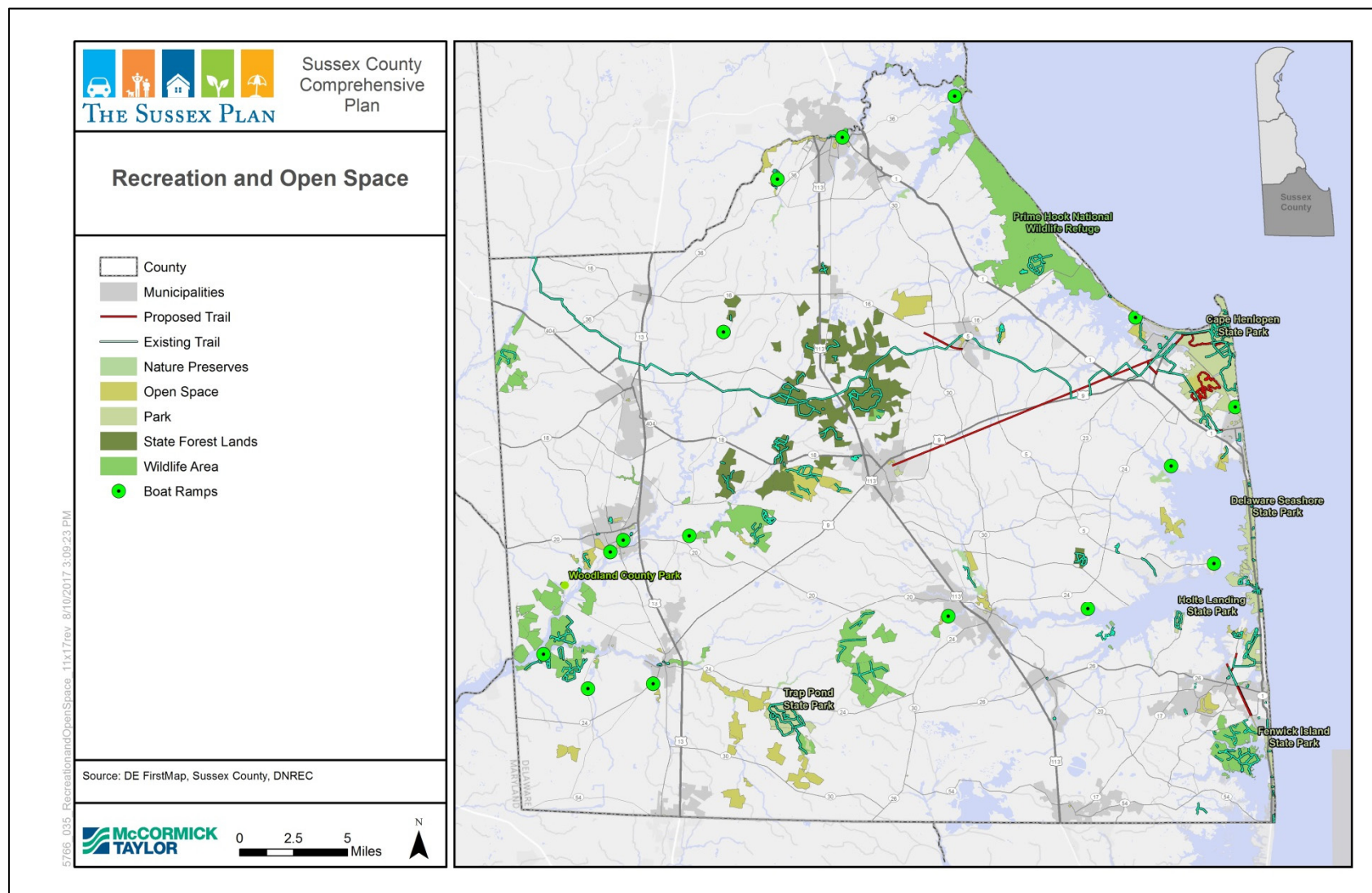
6.2.3 State Wildlife Areas, Nature Preserves, and Other Open Space Areas

DNREC also manages over 24,000 acres of wildlife areas, nature preserves, natural areas, and other open space areas and ponds in Sussex County. At many of these areas, DNREC provides boat ramps/launches, fishing access/piers, and nature trails (see Figure 6.2-1). For example, DNREC operates a public boat ramp, fishing pier and basin at Massey's Landing, at the far eastern tip of Long Neck. Another popular boating location in the County is Phillips Landing at the Nanticoke Wildlife Area which features a public boat ramp to access Broad

Creek and the Nanticoke. Hunting is permitted at some of the wildlife refuges, and specific regulations are available on DNREC's Division of Fish and Wildlife website.

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Figure 6.2-1 Recreation and Open Space



6.3 FEDERAL RECREATION AND OPEN SPACE OPPORTUNITIES

Prime Hook National Wildlife Refuge is a 10,144 acre refuge in Sussex County managed by the US Fish and Wildlife Refuge. It is an important site for conservation as it is a stopover site for migratory birds and provides breeding habitat. In addition, it is open to the public for recreation activities such as wildlife observation and environmental education.



Prime Hook National Wildlife Refuge

6.4 COUNTY AND LOCAL RECREATION AND OPEN SPACE OPPORTUNITIES

In Sussex County, the incorporated municipalities and private non-profit entities are the prime parties responsible for the construction and maintenance of local public parks and trails. They manage almost 2,500 acres of public recreation and open space lands in Sussex County. In addition, the school districts and private organizations also construct and maintain recreation facilities. Private organizations range from several Little League Organizations operating across the County to the Western Sussex Boys and Girls Club in Seaford that offers a wide variety of programming for the local community, a full size heated pool, and an athletic gym.

The municipalities and assorted private groups provide most recreation programming in Sussex. Sussex County makes donations to various recreation-related community groups to assist with these efforts. For example, in FY 2017, the County awarded over \$11,000 in grants to various community groups such as little leagues and rotary clubs for recreation-related activities, and provided \$20,000 for the Little League World Series. The County also provides \$15,000 annually to Fenwick Island to provide lifeguards on four blocks of the beach within the County.

Sussex County previously did not own any parks; however, in 2016 it converted 20 acres between Seaford and Woodland Ferry into a county park called Woodland Park. The land had been acquired in 2010 to receive dredged soil from the Nanticoke River. The County committed almost \$163,000 to convert the property into a park containing gravel trails, a parking lot, and an information kiosk.

The County also owns the 150-acre James Farm Ecological Preserve. The property was donated to the County in the early 2000s. It is however managed by Center for Inland Bays, which receives annual funding support from the County for its operations at the site. The James Farm Ecological Preserve is currently undergoing a major renovation utilizing a \$37,500 County grant to upgrade the preserve entrance, provide school bus access, and add an informational kiosk and other learning areas.

The County is also working with DNREC to convert a farm the County leases from the state to spray wastewater from the Wolfe Neck Regional Wastewater Facility. The project, once complete, will involve conversion of 376 acres of farmland to woodlands. In addition, the project will involve construction of public, passive recreation trails and connect to the Junction & Breakwater Trail.

Sussex County also helps finance open space preservation through general revenue funds in cooperation with the Sussex County Land Trust. Typically, the preserved tracts are administered by a conservation group if purchased outright. The tracts remain in private hands if they were preserved by easement. However, the last year that acreage was acquired was in FY 2010, and there have not been any County contributions to the Land Trust since FY 2013.

The County also collects funds from developers through bonus density open space contributions. In recent years, the County has had three contributions totaling over \$1.4 million, and is in the process of determining how best to utilize these funds for open space preservation.

Although Sussex County does not currently have a Recreation and Open Space Department or staff specifically dedicated to advancing recreation and open space opportunities in the County, County staff from various departments provide technical support to non-profits and municipalities engaging in recreation and open space planning. For example, the County's Historic Preservation Planner assisted with efforts to designate and promote the two byways in the County (see Chapter 11). Additionally, the County Planning Department provides technical support to the Delaware Botanic Gardens at Pepper Creek, a nonprofit organization that is in the process of creating a public botanic garden at a 37-acre site along Piney Neck Road. The parcel contains a mix of farmland, woodland, and tidal waterfront on Pepper Creek. The target date for completion of the project is 2019. According to the master plan for the site, the garden will contain a visitor center, parking areas, trails, boardwalk, and other site features.

6.5 GREENWAYS AND TRAILS

DNREC's Division of Parks and Recreation defines a greenway as follows:

"A greenway is a natural area of unbroken vegetation where recreation and conservation are the primary values. They link parks, forests, wildlife refuges and historical landmarks. Greenways can follow rivers, streams, wetlands, barrier beaches, hilltops and abandoned rail lines, and cross fields and forests. Some greenways are publicly owned; others are private; some are for recreation; others protect a scenic view or wildlife habitat. Greenways can include biking and hiking trails, and paths of grass and trees threading their way through cities and countryside like ribbons of green."

The Delaware Council on Greenways & Trails is appointed by the General Assembly to preserve, protect and link the State's green open spaces. The Council encourages local communities, counties, and State agencies to work together toward greenway goals. The Council also works closely with other public and private groups to foster new greenways and trails.

Trails are present at all five of the state parks, Prime Hook Wildlife Refuge, Redden State Forest, and many of the state wildlife areas and nature preserves in Sussex County. In addition, there are several existing and proposed greenways and trails in the County that are not contained entirely within recreation and open space and serve to connect areas by utilizing roads, right-of-way, or waterways. Some are clearly defined recreation corridors already in use. Others are planned routes or initial concepts that require further study, design and implementation.

- *The Junction and Breakwater Trail* takes its name from the former Penn Central Rail Line that ran between Lewes and Rehoboth in the mid 1800's. It is a 7.5-mile crushed stone rail/trail that connects in the southwestern side of Cape Henlopen State Park at Wolfe Neck with Rehoboth Beach. The northern trailhead, located at the historic Wolfe House, includes a 56-car parking lot, an information center and a bike rack. The Junction & Breakwater Trail is the longest of Delaware's three rail/trails. The trail includes a reconstructed 80-foot railroad bridge across Holland Glade. In 2015, the trail was extended an additional 1.5 miles along Freeman Highway. DelDOT is moving forward with proposed plans to construct a pathway to link the trail and downtown Rehoboth Beach in 2018.
- *Georgetown-Lewes Rail/Trail* was the subject of a study DelDOT completed in 2011. The trail would be built alongside a 17.8-mile stretch of the Delaware Coast Line Railroad between South Railroad Avenue in Georgetown and Cape Henlopen State Park. The trail, once complete, will be the longest multi-use trail in Delaware. The trail would be constructed within a 60-foot wide, State-owned right of way paralleling the tracks. According to DelDOT, the rail line is only used between one and two times per week. The trail would be separated from the tracks by distances ranging from 10 feet to 25 feet. Phase I of the trail was opened in October 2016. The 1.1 mile segment begins at Gills Neck Road and shares a terminus with the Junction & Breakwater Trail. Its current western terminus is at Savannah Road. Phase II is expected to start in 2018 and will extend the trail further west and connect to Nassau.
- *Assawoman Canal Trail* is an approximately 2 mile trail that connects Ocean View, Bethany, and South Bethany Beaches. The first phase of it opened in 2015 and the trail is built on the old federal right of way that was created when the canal was originally built. DNREC is working on plans to extend the trail further.
- *American Discovery Trail* is a continuous 6,356 mile trail that extends across the United States coast to coast – from Cape Henlopen State Park to Point Reyes, California. The trail travels 45 miles through Sussex County, primarily on road shoulders and sidewalks.
- *Coastal Heritage Greenway* celebrates the diverse history of Delaware's waterfront from colonial settlement to 20th century industrialization. The greenway is a corridor that spans the coast for 90 miles from Fox Point State Park north of Wilmington to the state

line at Fenwick Island. It is designed as a 27-stop auto tour with various side trips for hiking, biking, sight-seeing, and other activities. From Dover to Dewey Beach, the greenway lies east of Route 1. From Dewey Beach to Fenwick Island, Route 1 is the center of the greenway. Popular Sussex County stops include Mispillion Lighthouse, Prime Hook National Wildlife Refuge, Beach Plum Island Nature Preserve, Lewes, and other points south.

- *Captain John Smith Chesapeake National Historic Trail* is a water trail overseen by the National Park Service. It starts in the Chesapeake Bay and branches through the Nanticoke River.
- *Historic Lewes Byway* was created through the Byways program, a tourism-based project run through the Delaware Department of Transportation intended to link historic sites through routes to encourage motorists to explore new areas. The Lewes Byway is over 12 miles long and takes travelers through the city of Lewes and Cape Henlopen State Park.
- *Nanticoke Heritage Byway* is the second byway in Sussex County created through DelDOT's Byways Program. It is approximately 35 miles in length and extends along several roads in western Sussex County through Seaford, Bethel, Laurel, and Trap Pond State Park.
- *Statewide, Regional, and Connector Bicycle Routes* – DelDOT maintains electronic versions of Delaware bicycle maps on its website at: http://deldot.gov/Programs/bike/biking_in_delaware. Routes include north-south connections among Delaware counties; routes that provide direct connections between major municipalities and activity centers; and routes that provide connections from local activity and recreation centers to the larger bicycle networks.

Several Sussex County municipalities and non-profit organizations are also operating, constructing or planning their own greenways. Notable examples include the following:

- *Broadkill River Canoe Trail* – a canoe trail between Milton and the Nature Conservancy's McCabe Preserve made possible by a joint venture between the Town of Milton and the Nature Conservancy
- *Edward H. McCabe Preserve and Greenway Trail* – contains three miles of hiking trails on a property in Milton owned and maintained by the Nature Conservancy
- *Abbott's Mill Nature Center* – contains three miles of trails at Abbott's Mill in Milford
- *Mispillion River Walk* – a one-mile walk in the City of Milford

- *Governors Walk* – located along the Broadkill River in the downtown district of Milton
- *Broad Creek Riverwalk* – located in the Town of Laurel
- *Seaford River Walk* – located on the Nanticoke River in Seaford
- City of Lewes greenway network

6.6 DELAWARE STATE COMPREHENSIVE OUTDOOR RECREATION PLAN (SCORP)

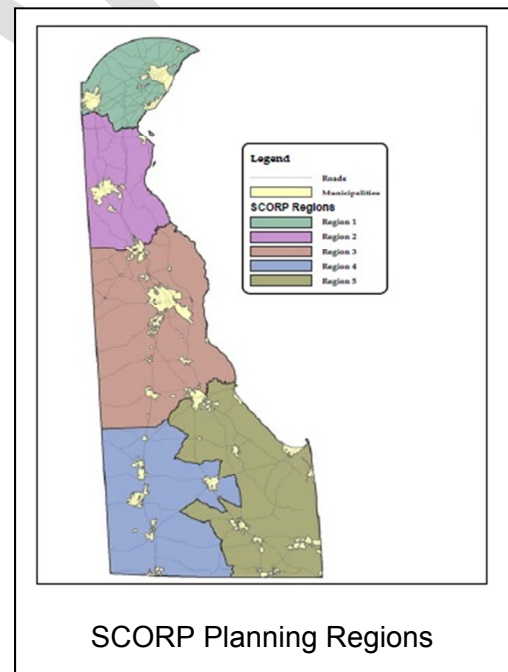
DNREC's Division of Parks and Recreation updates the Delaware State Comprehensive Outdoor Recreation Plan (SCORP) every five years. By law, this plan maintains Delaware's eligibility to receive grants through the Federal Land and Water Conservation Fund. It also assists in setting spending priorities for a similar State recreation funding source called the Delaware Conservation Trust Fund.

The SCORP has a state-wide focus, and includes extensive inventory data and utilizes a public survey to help measure outdoor recreation preferences. Consequently, recreation resources, needs and goals are identified on a regional basis rather than at the municipal level.

Sussex County includes two of the SCORP's five planning areas: Region 4 in western Sussex and Region 5 in eastern Sussex. According to the 2013 SCORP, Region 4 had 27,304 acres of publicly accessible outdoor recreation and conservation lands. Region 5 had 55,106 acres of publicly accessible outdoor recreation and conservation lands.

Among other findings, the 2013 SCORP reported from the public survey and research results that the top recreation activities engaged in by respondents' households included:

- Region 4 respondents: Walking/jogging (73 percent), Swimming (pool) (64 percent), Gardening (62 percent), Swimming (beach) (58 percent), and Picnicking (58 percent).
- Region 5 respondents: Walking/jogging (78 percent), Gardening (68 percent), Swimming (beach) (67 percent), Swimming (pool) (59 percent).



Delaware's SCORP contains many recommendations on what elected officials and other public policy makers can do to: a) direct more investment toward public recreation; and b) promote healthier and more active lifestyles. The State is actively working with key partners to implement the goals of the SCORP through new and existing partnerships, growing collaborations and ad-hoc implementation teams.

6.7 PARKS AND RECREATION STRATEGIES

Below is a list of goals, objectives, and strategies for Sussex County's Recreation and Open Space Element:

Goal 6.1: Enhance the quality of life of County residents and visitors by sustaining and encouraging parks and recreation opportunities in the County.

Objective 6.1.1 Continue the County's role in parks, recreation, and open space planning in Sussex County.

Strategy 6.1.1.1 Evaluate if the establishment of a County Parks and Recreation Department or designation of existing staff to lead County parks, recreation, and open space planning efforts is desirable.

Strategy 6.1.1.2 Evaluate opportunities to provide financial support in the establishment of public parks, recreation centers, or trails.

Strategy 6.1.1.3 Be open to the possibilities of public-private partnerships for recreation opportunities.

Objective 6.1.2 Continue support of and increase coordination with the State and other entities to identify opportunities to increase public recreation lands and facilities in Sussex County.

Strategy 6.1.2.1 Keep providing selected and coordinated grant assistance to selected non-profit recreation providers that help meet high priority public recreation needs.

Strategy 6.1.2.2 Periodically re-evaluate the possibility of becoming an active financial partner in establishing a public park, building an indoor recreation complex, or constructing a related recreation endeavor, such as a greenway trail. Council should evaluate these opportunities on a case-by case basis as they may arise in the future.

Strategy 6.1.2.3 Continue working with DNREC and other state agencies to ensure the State continues to add to the supply of active and passive recreation land and facilities in Sussex County.

Strategy 6.1.2.4 Support and partner with municipalities and school districts to create and enhance parks and recreation facilities.

Objective 6.1.3 Increase the network of greenways and trails in the County.

Strategy 6.1.3.1 Continue to support the State, local municipalities, and private non-profit organizations on their greenway and trail goals.

Strategy 6.1.3.2 Support planning and construction of large facilities such as the Georgetown-Lewes Rail Trail.

Objective 6.1.4 Maintain and improve public access to parks and recreation facilities, including coastal areas and inland waterways.

Strategy 6.1.4.1 Require that recreation lands that are in new developments open to the public be protected by covenants.

Goal 6.2: Expand and improve the open space system of the County.

Objective 6.2.1 Encourage the preservation of open space parcels.

Strategy 6.2.1.1 Evaluate the County density bonus program to determine ways to better encourage use of the program and close loop holes associated with its implementation.

Strategy 6.2.1.2 Consider the expansion of the density bonus program into other districts in order to obtain funds for open space and natural resource preservation.

Strategy 6.2.1.3 Consider developing a program for installation of signage at permanently preserved open space tracts acknowledging that the land has been preserved by the County.

Strategy 6.2.1.4 Consider County-level financing mechanisms for open space preservation and management to leverage state and federal dollars.

Objective 6.2.2 Encourage development that protects open space in new developments.

Strategy 6.2.2.1 Strengthen County development regulations to ensure that open space dedicated by developers contains contiguous open space to facilitate environmental protection and/or passive recreation.

Objective 6.2.3 Continue work with resource protection programs, federal and state agencies, and other organizations to target and preserve as open space.

Strategy 6.2.3.1 Continue to facilitate the preservation of more undeveloped land. This should include recognition of the Sussex County Land Trust's long-range vision to gradually create a "green ribbon" of connected open spaces throughout the County.

Strategy 6.2.3.2 Continue and expand partnerships with organizations to manage open space and recreation properties such as James Farm.

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Chapter 7. UTILITIES

Utilities Vision: *To ensure that safe, reliable, and economical utility services are available to Sussex County residents and businesses.*

7.1 OVERVIEW

This chapter is an overview of how utilities are provided in Sussex County. The chapter focuses on both those utilities that the County is responsible for owning, operating, and funding, as well as utilities provided by public and private entities. Goals, objectives, and strategies are included on how the County and others can improve and expand these vital services in the future.

7.2 WATER SUPPLY

7.2.1 Water Supply Overview

Sussex County depends completely on groundwater supplies and wells for its water. Aquifers in the subsurface of the County provide groundwater to meet these water demands.

It is critical to protect the quality of groundwater and to promote the recharge of water into the underground water table. The Delaware Department of Natural Resources and Environmental Control (DNREC) regulates all water treatment facilities and water withdrawals. Aspects of water distribution, including rates that can be charged, are regulated by the Delaware Public Service Commission (PSC).

7.2.2 Water Supply Providers

The PSC reviews and approves applications to grant and revoke Certificates of Public Convenience and Necessity (CPCN) for water utilities who wish to expand a service territory. The PSC has granted CPCNs since 2001 and encourages compact and contiguous service territories to provide efficient delivery of drinking water without redundancy in infrastructure.

Figure 7.2-1 shows water service areas in Sussex County that hold CPCNs for central water systems in water supply service areas. These central systems provide water to most areas of concentrated population in Sussex County. Most homes and businesses in the County's more rural vicinities get their potable water from individual on-site wells. Table 7.2-2 shows the number of wells by type. The largest number of wells is used for standard domestic water purposes.

| Table 7.2-2 Number of Wells by Type | |
|---------------------------------------|--------|
| Well Type | Total |
| Agricultural - Standard | 5,301 |
| Agricultural - Within CPCN | 5,489 |
| Aquifer Storage & Recovery - Standard | 1 |
| Dewater - Standard | 1,718 |
| Domestic - Standard | 45,186 |

| Table 7.2-2 Number of Wells by Type | |
|--|---------------|
| Well Type | Total |
| Fire Protection - Public | 1 |
| Fire Protection - Standard | 36 |
| Geothermal - Closed Loop | 1,794 |
| Geothermal - Direct Exchange | 1 |
| Geothermal - Recharge | 1,065 |
| Geothermal - Supply | 769 |
| Industrial - Standard | 313 |
| Irrigation - Standard | 3,698 |
| Monitor - Direct Push | 778 |
| Monitor - Standard | 3,913 |
| Monitor - Zone of Interest | 72 |
| Observation - Standard | 5,532 |
| Other - Standard | 1,431 |
| Public - Miscellaneous | 994 |
| Public - Standard | 2,146 |
| Remediation I - Injection | 232 |
| Remediation R - Recovery | 50 |
| Soil Borings - Standard | 742 |
| Well Construction - Standard | 7 |
| Grand Total | 81,269 |

Source: DNREC Division of Water

Private companies provide almost all water to those parts of Sussex County served by central water systems. The largest of these service areas belongs to Tidewater Utilities, Inc. It includes areas west of Rehoboth and along the Route 1 commercial corridor, adjacent areas along Route 24 and Camp Arrowhead Road, areas west of Delmar, the Angola area, and areas along Orchard Road/Route 5. Tidewater Utilities also serves numerous scattered developments. The second largest private water provider in Sussex County is Artesian Water Company. Its largest service areas are along the Route 9 corridor east of Georgetown, South Bethany, the Route 5 corridor south of Route 9, and the Roxana Area east of Selbyville.

Other large private water companies operating in Sussex County include Long Neck Water Company (which serves almost all of Long Neck), Sussex Shores Water Company (which serves areas north of Bethany Beach), J.H. Wilkerson & Son, Inc. (which serves Broadkill Beach and Prime Hook), and Slaughter Beach Water Co. (which serves the town of Slaughter Beach).

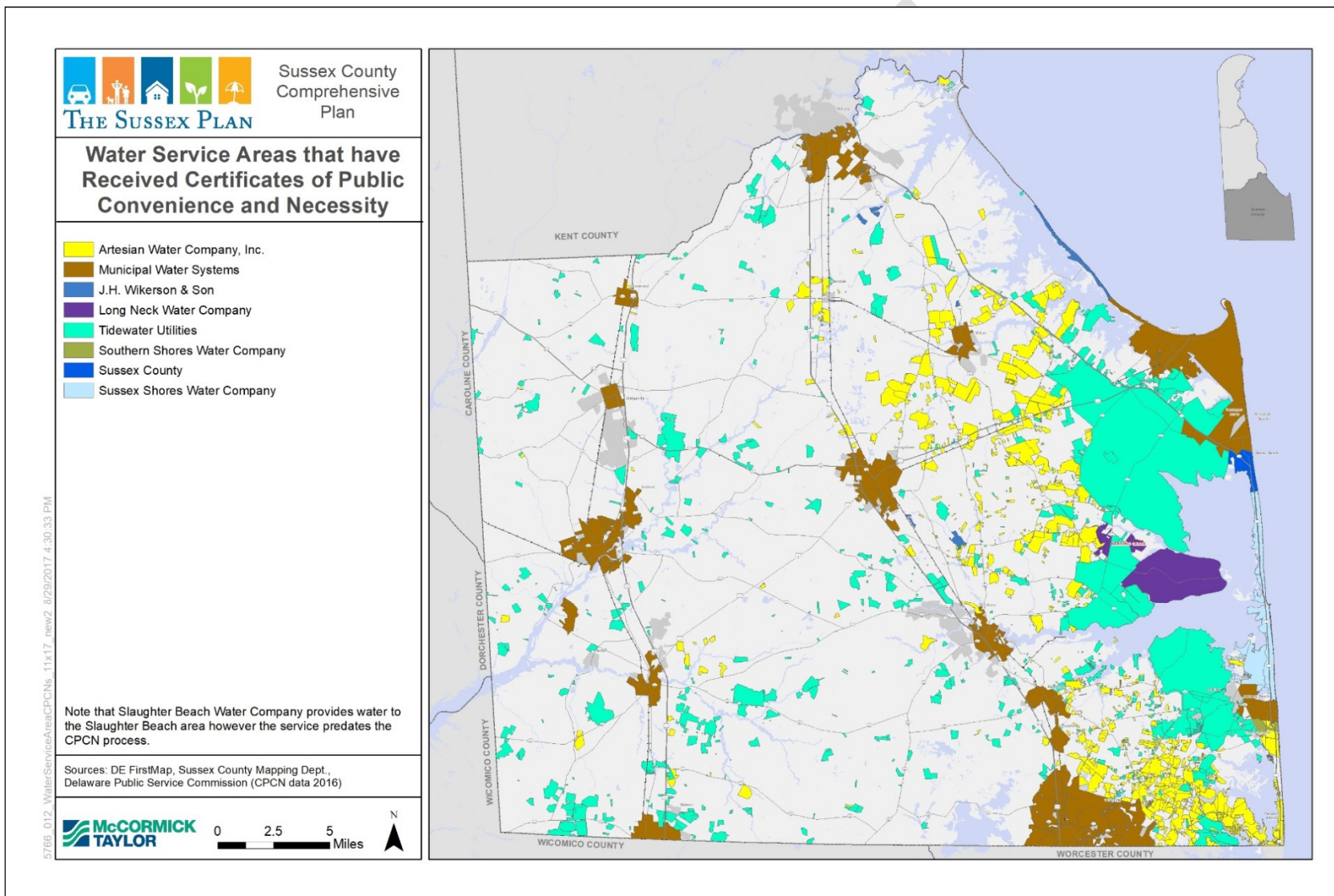
Dewey Beach is the only area in the County served by the water system that is owned and operated by Sussex County. However, the County can be petitioned per Delaware Code to create additional central water service areas. Such petitions have been received for the greater

Ellendale area as well as a portion of the Winding Creek Village community in the Herring Creek area.

Bethany Beach, Blades, Bridgeville, Dagsboro, Delmar, Frankford, Georgetown, Greenwood, Laurel, Lewes Board of Public Works, Milford, Millsboro, Milton, Rehoboth Beach, Seaford, and Selbyville operate municipal water systems. In many cases, these systems extend outside of the municipality's limits. To meet the expanding demand, many municipal water suppliers are exploring new public supply well sites to provide additional capacity.

There also are many scattered private water systems, such as systems serving scattered businesses, industries, and campgrounds. Many of these systems are classified as "non-community" systems as they serve non-residential individuals and may not provide water service every day of the year. Community water systems are those that serve residents year-round.

Figure 7.2-1 Water Service Areas that have Received Certificates of Public Convenience and Necessity



7.2.3 Water Supply Protection

DNREC oversees the state's Source Water Assessment and Protection Program (SWAPP), which is primarily aimed at protecting water supplies from contamination. Central wellhead protection areas and "excellent" groundwater recharge areas have been designated by DNREC (Figure 7.2-2). A wellhead protection area is the surface and subsurface area surrounding a public water supply well through which contaminants could reach the well. An excellent groundwater recharge area is an area with very permeable soils where recharge can occur quickly. Approximately 1.54 percent of the County's land area is classified as wellhead protection area, and eight percent is classified as an excellent recharge area (DNREC, 2013).

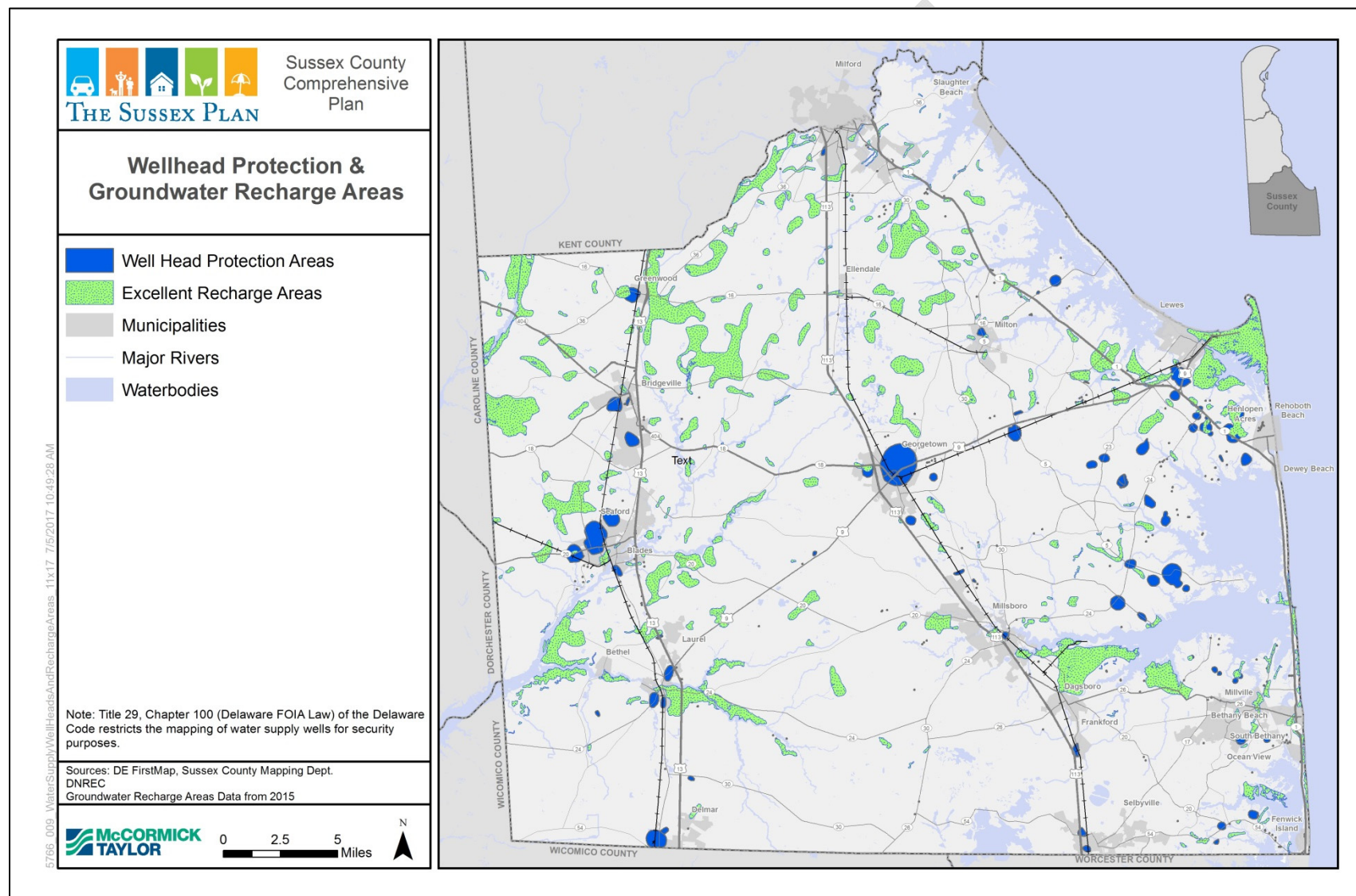
Under DNREC regulations, assessments have been completed of the vulnerability from contamination of each water system. DNREC provides assessment reports to water systems and the Delaware Health and Social Services Department's Office of Drinking Water.

Sussex County adopted a Source Water Protection Ordinance in 2008 to minimize the impact of land use activities on the groundwater supply and reduce the risk of contamination of excellent groundwater recharge areas and wellhead protection areas that are the source of drinking water throughout the County. The ordinance was prepared to meet a requirement of the State Source Water Protection Law of 2001. As the County ordinance was adopted nearly ten years ago and has been actively utilized in land use decision-making since then, the County is considering a review of the existing ordinance to determine if modifications are needed to further improve implementation of the ordinance.

One of the best ways to avoid contamination of important water supply wells is to avoid intensive industrial and commercial development that uses hazardous substances in adjacent areas. Once toxic substances enter an aquifer, they can be extremely difficult to contain the contamination and to remove the substances from the water. Where hazardous materials are stored or handled, there should be measures installed (such as impervious surfaces surrounded by curbing) to contain any spills before they are able to migrate offsite and infiltrate local water supplies. Persons transporting or handling hazardous materials should be urged to contact authorities as soon as a possible hazard may arise, and while the hazard can still be contained.

The ideal type of land use around water supply wells is either preserved open space or low density residential development. Ideally, the amount of impervious coverage around major water supply wells would be minimized to allow the groundwater to be recharged. Agricultural uses are beneficial for groundwater recharge as the water used for irrigation returns to the ground. However, if there is not proper management of agricultural runoff, nitrate levels can increase in local water supplies, posing a potential health hazard. Persons who operate agricultural, livestock or poultry uses near water supply wells should be urged to cooperate with the Sussex Conservation District to use proper nutrient management and other measures to minimize water pollution.

Figure 7.2-2 Wellhead Protection & Excellent Recharge Areas



7.2.4 Fire Protection

The Delaware Office of the State Fire Marshal reviews proposed developments to make sure they comply with State Fire Prevention Regulations. Among other provisions, those regulations require that adequate fire flow and pressure are available for firefighting as part of central water systems. It is difficult to provide adequate water supplies for firefighting within smaller water systems.

7.3 WASTEWATER

7.3.1 Overview

Public wastewater planning in Sussex County is overseen by the Sussex County Engineering Department. Title 9, Chapters 65 and 67 of the Delaware Code addresses public sewer and water services in Sussex County. Those regulations provide Sussex County with the authority to establish sanitary sewer areas. In many cases, under those regulations, a referendum is held to ask affected property owners whether they wish to be served by County sewage service.

The County Engineering Department, under current County code, utilizes a map of primary and secondary sewer planning areas in planning and decision making. As part of this Comprehensive Plan process, the Engineering Department is pursuing a new approach to wastewater planning and has divided the County into Planning Tiers. The following text describes the tiers, and a map showing the locations of these tiers is available at the County Engineering Office. The County will submit this tier map to the Delaware Public Service Commission and work to amend Chapter 110 of County Code to reflect the new sewer service tier system following adoption of this Comprehensive Plan.

Tier 1 – Sussex County Unified Sanitary Sewer District

- Areas currently served under the Unified County Sanitary Sewer District where all future development is also to be served by the County.

Tier 2 – Sussex County Planning Areas

- Any parcel or parcels immediately adjacent to an existing sanitary sewer area boundary capable of annexation.
- Areas where the County has plans to install central sewer to serve existing and future development.

Tier 3 – Coordinated CPCN Areas

- Areas where multiple existing CPCNs have been issued to various private wastewater utilities as well as tracts with County service. This area will require coordination between County and the private wastewater utilities. A County concurrence letter is required for new CPCNs.

Tier 4 – System Optional Areas

- Areas where a central utility is desired for any future development, however individual on-site systems will be permitted. The area would primarily be served by Private Wastewater Utilities, requiring CPCNs to be issued. The County requests notification of application for new CPCNs.

Tier 5 – Regulated On-Site Areas

- Areas that have been previously subdivided and open to DNREC-approved individually-owned on-site systems.
- Areas where the environmental benefit of centralized sewer does not outweigh the cost to construct the infrastructure. These areas are open to DNREC-approved individually-owned on-site systems, or central systems exclusively served by private utilities with private funding.

Areas located in a municipality's growth and annexation area and adjacent to a Sussex County Sanitary Sewer District are up for discussion and possible coordination between the County and the municipality.

In addition to areas served directly by the County, most cities and towns in Sussex County operate their own sewage treatment systems. Beyond County and municipal sewer treatment providers, private companies (such as, but not limited to, Artesian and Tidewater), provide wastewater treatment to individual communities in several Sussex County vicinities.

7.3.2 County Wastewater Services

The following information mainly addresses sewer services provided by the County. The County's sewer service continues to grow each year, with a 1.3 percent increase in Equivalent Dwelling Units (EDUs) for 2017, and an additional 1.8 percent is projected for 2018. An EDU is a term used to express the load-producing effects on the sewer system caused by one dwelling unit. Table 7.3-1 shows the EDUs and percentage increases for all of the County water and sanitary sewer areas since 2013.

| Table 7.3-1 EDUs and Percentage Increases for all Sussex County Water and Sanitary Sewer Areas since 2013 | | | | | | | | | | | | | | |
|--|-----------------|----------------------|-------------------|-----------------|----------------------|-------------------|-----------------|----------------------|-------------------|-----------------|----------------------|-------------------|-----------------|----------------------|
| 2013 | | | 2014 | | | 2015 | | | 2016 | | | 2017 | | |
| TOTAL EDUS | NEW EDUS | percent INCR. | TOTAL EDUS | NEW EDUS | percent INCR. | TOTAL EDUS | NEW EDUS | percent INCR. | TOTAL EDUS | NEW EDUS | percent INCR. | TOTAL EDUS | NEW EDUS | percent INCR. |
| 68,293 | 2,475 | 3.7 | 69,841 | 1,547 | 2.3 | 71,355 | 1,515 | 2.2 | 73,136 | 1,781 | 2.5 | 74,646 | 1,509 | 2.1 |

Source: Sussex County Engineering Department

7.3.2.2 Inland Bays Region

In June 2006, the draft Inland Bays Planning Area Wastewater Facilities Plan and Environmental Assessment (referred to hereafter as the “Inland Bays Wastewater Study”) was completed. This area features the following treatment facilities and sewer areas of the Unified Sanitary Sewer District:

- The Inland Bays Regional Wastewater Facility (IBRWF) serves the Long Neck, Oak Orchard, and Angola sewer areas, and has been in operation since April 1992. The facility and its spray fields are located on County-owned lands on the east side of Townsend Road, north of Inland Bay Road. Existing or planned spray fields surround the facility on all sides, with the largest areas to the west. The facility is proposed to serve Goslee Creek, Mulberry Knoll, Chapel Branch, and Herring Creek areas in the future.
- The Wolfe Neck Regional Wastewater Facility serves the West Rehoboth area which includes a significant percentage of the new development in the eastern part of the County, including areas along both sides of the Route 1 corridor. The Wolfe Neck system uses County-owned land at the eastern end of Wolfe Neck Road for treatment, and State-owned land under a lease arrangement for application of treated effluent. In addition, the County can divert wastewater via pump station #210 to the IBRWF.
- The City of Rehoboth Beach Wastewater Facility serves the Dewey Beach and Henlopen Acres areas as well as the City of Rehoboth Beach, all of which is outside of the Inland Bays Planning Area.

Wastewater studies have projected the following build-out design EDUs for the following areas, including both existing and projected development (Table 7.3-2).

| Table 7.3-2 Inland Bays Areas Build-Out Design Equivalent Dwelling Units | |
|--|--------|
| Area | EDUs |
| West Rehoboth Area (Areas on both sides of Route 1, including land on Route 9 west of Route 1, and lands along Old Landing Road and Bald Eagle Road; approximately 21,259 of these EDUs are already connected to the sewage system.) | 45,242 |
| Long Neck Area (Areas north and south of Long Neck Road, most of which are east of Route 24, including the Pot-Nets developments; approximately 8,200 of these EDUs are already connected to the sewage system.) | 15,204 |
| Northern West Rehoboth Area (Northwest of the intersection of Routes 1 and 9, southwest of Lewes) | 1,823 |
| Goslee Creek Study Area (Areas north of Love Creek, and south of the current sewage service area, including areas on both sides of Route 24, such as areas along | 3,842 |

| Table 7.3-2 Inland Bays Areas Build-Out Design Equivalent Dwelling Units | |
|---|-------|
| Area | EDUs |
| Camp Arrowhead Road.) | |
| Angola Neck Area (Areas south of Love Creek and north of Herring Creek, most of which are east of Route 24.) 1,539 of these EDUs are already connected to the sewage system. Angola North construction will bring on an additional 250 existing EDUs. | 6,279 |
| Herring Creek Area (Areas south of Herring Creek, most of which are east of Route 24.) 713 existing EDUs will connect to the sewage system upon completion of construction. | 4,987 |
| Oak Orchard Area (Areas along Oak Orchard Road, north of Indian River.) 1,735 of these EDUs are already connected to the sewage system. | 2,498 |
| Oak Orchard Expansion Area (Areas north of the Indian River, most of which are south of Route 24, east of the Mountaire Farms chicken plant, and along Oak Orchard Road.) | 5,739 |
| Johnson's Corner Area (Areas along Zion Church Road, south of Deer Run Road to Lighthouse Road.) 497 EDUs are already connected to the sewage system | 2,843 |

Source: Sussex County Engineering Department

The Inland Bays Wastewater Study projected that \$175 million of improvements are needed to serve the Long Neck, Northern West Rehoboth Expansion, Goslee Creek, Angola Neck, Herring Creek and Oak Orchard Expansions. The study found that five existing sewer lines and 14 existing pump stations are already at or near capacity. Additional lines and pumping stations will need improvements to handle flows by 2025. The study projected that \$35 million is needed to address the priorities in collection and conveyance.

The study projected that the 117,000 EDUs could be allowed in the Inland Bays Planning Area under current zoning, including approximately 15,000 existing EDUs already connected. The build-out design is for 75 percent, assuming some of the land remains in open space. That build-out design is projected to generate total wastewater flows in the peak summer month of 20 million gallons per day (mgd).

Approximately half of that flow would be part of the Wolfe Neck Treatment Facility service area. The Wolfe Neck treatment plant was designed for an average monthly capacity of 4.0 mgd during the summer months of May through September and 2.23 mgd during the winter months. The average annual design disposal capacity is 3.1 mgd. The existing Wolfe Neck facility uses 285 acres of spray fields.

The Inland Bays facility is in the design phase to expand the treatment and disposal capacity from 2.0 mgd to 4.0 mgd. The study suggests diverting some future flows from West Rehoboth to the Inland Bays facility as it is less constrained by the availability of land. In 2004, Sussex County purchased 2,000 acres near the existing facility for spray expansion. The report estimates that the existing and new fields could provide capacity for 13.1 mgd, consistent with the build-out peak summer design flow.

The study also states that disposal capacity could be increased by converting spray irrigation sites to rapid infiltration basins, with the proper permit modifications approved by DNREC.

7.3.2.3 South Coastal Region

The following information is based on the 2005 South Coastal Planning Area Study for Wastewater. The South Coastal Planning Area includes the following existing sanitary sewer areas: Bethany Beach, North Bethany, Miller Creek, South Ocean View, Johnson's Corner, Sea County, Bayview Estates, South Bethany, Fenwick Island, Holts Landing, Ocean View, and Cedar Neck. Several smaller community sewer systems were abandoned as the South Coastal system was expanded over the years.

Service is scheduled for the following sanitary sewer areas:

- Portions of the Beaver Dam Area (part of Central Service Area, including areas west and southwest of Millville, northwest of Central Avenue and east of Powell Farm Road).

Future sewer service is anticipated for the following proposed areas:

- Bayard (which is generally east of Bayard Road, north of Dirickson Creek and west of Assawoman Wildlife Refuge). Much of this area will be annexed into the Miller Creek Area.
- West Fenwick (which is generally east of Dickerson Road and north of Route 54). There is a current project to extend sewer service further west to the Williamsville area.
- Vines Creek (which is generally north of Route 26, south of the Indian River, west of Blackwater Creek).

The study found that the total build-out for the South Coastal area under current zoning would be approximately 80,000 EDUs, including approximately 33,000 existing EDUs that are already connected to the system.

In 2007, a referendum was passed to establish the Johnson's Corner Sanitary Sewer District which was completed at a cost of \$14 million. All South Coastal cost estimates were provided in 2005 dollars. The study estimated that \$163 million in conveyance and collection expenses would be needed to serve the proposed sewer areas, not including treatment costs. Within existing sewer areas, conveyance improvements are projected to cost \$9.2 million.

Treatment capacity at the South Coastal Regional Wastewater Facility, located on Beaver Dam Road was expanded in 2007. However, the study recommends eventually expanding capacity further since peak flows are being impacted by seasonal increases in demand.

7.3.2.4 Dagsboro/Frankford Region

The following information is based upon the December 2006 Dagsboro/Frankford Sewer Planning Area Study. The area includes the towns of Dagsboro and Frankford and areas surrounding the towns. This area also includes large areas east of Millsboro south of the Indian River. The northern boundary of the planning area is the Indian River. The planning area includes lands west of the Vines Creek, and east of Route 113 and Thorogoods Road. The southern border of this planning area is generally along Omar Road and Lazy Lagoon Road. Wastewater is collected and transported to the Piney Neck Regional Wastewater Facility near Piney Neck Road.

This facility only has capacity for 200,000 gallons per day and would need an expansion to handle significant growth. There currently are approximately 1,300 EDUs connected. The study found that the build-out design would be 25,000 EDUs based upon current zoning. The study projected that there could be 6,000 EDUs connected to the system by 2025, however no such growth patterns have emerged yet.

7.3.2.5 Blades Area Region

The following is based on the November 2006 plan for the Blades Sewer Planning Area. The current Blades Sanitary Sewer Area uses a County-owned collection system. The effluent is then conveyed to Seaford's treatment plant, which is along north side of the Nanticoke River at southwest corner of the City. Existing flows from Blades are approximately 65,000 gallons per day.

There are 360 acres in Blades' Annexation Area, which was established in the town's 2002 comprehensive plan. That annexation area includes areas close to the town's borders along the south side of the Nanticoke River. The Blades Planning Area Study considered a potential service area of 14,800 acres. This was divided into Study Area I, which includes large areas southwest, south and east of Blades, and Study Area II, which includes areas south and east of Study Area I. Part of Study Area II is adjacent to the northern edge of the Annexation Area for the Town of Laurel.

If the Annexation Area and Study Area I would be built-out, based on current zoning, the study projects that the sewer flow could be up to 7,000 EDUs by 2030.

7.3.3 Sewer Service by Municipalities

Most of Sussex County's cities and towns operate their own sewer systems, including Seaford, Georgetown, Rehoboth Beach, Laurel, Lewes Board of Public Works, Millsboro, Bridgeville, Delmar, Greenwood, and Selbyville. Milford is connected to a system owned by Kent County. Information on the sewer services provided by the towns and cities is provided within individual municipal comprehensive plans.

Many of the municipalities need to invest millions of dollars into their sewer systems to expand treatment and provide additional spray fields. For example, Rehoboth Beach is in the process of fast-tracking improvements at the city's wastewater treatment plant, including replacing two clarifiers and installing a new filtration system, as well as beginning work on an ocean outfall project. In many cases, a large portion of costs for municipal system upgrades are being funded by new developments, including connection fees, as well as low interest loans and grants from state and federal agencies.

The Bridgeville Wastewater Treatment Plant is in need of \$16 million to \$18 million in upgrades in order to comply with a 2016 Environmental Protection Agency consent agreement on alleged Clean Water Act violations (MacArthur, 2017). Studies are currently underway to consider whether any of the sewer systems along the Route 13 corridor in the western part of the County should be consolidated, and a larger sewer service area be established. That could possibly involve the City of Seaford serving as a regional treatment plant for Blades, Greenwood, and Bridgeville as well as portions of the unincorporated County between the municipalities.

Sewer from the Ellendale area of the Unified Sanitary Sewer District is being conveyed to Georgetown for treatment and disposal, but future connections to a regional system on the west side of the County could be considered. In addition, the County owns and operates a collection system at the Airport.

Sussex County is also pursuing interconnection with a number of municipal systems allowing the transfer of wastewater to the treatment facility with the most available capacity.

7.3.4 Private Sewer Providers

Private utility companies are considered a viable option for wastewater treatment in areas where County or municipal services are non-existent or unplanned. Artesian Wastewater Management, Inc. and Tidewater Environmental Services, Inc. mainly provide sewer services for individual developments that are along Route 9 east of Georgetown or along the Routes 5, 24 and 26 corridors in the eastern part of the County. Each company is also planning to serve many new developments.

In addition to Artesian and Tidewater, other private providers of sewer service include: Bass Properties, Inc., the Excel Property, Moore Grant Sanitation, Inc., Inland Bays Preservation Company, Oak Crest Farms, Wastewater Utilities, Inc., and YMG Corporation. There also are wastewater treatment facilities serving major industries, such as Perdue Farms, Inc. in Georgetown, and Mountaire Farms east of Millsboro.

7.3.5 On-Lot Systems

Many scattered buildings throughout the County use on-lot septic systems, usually with a drain field. DNREC regulates holding tanks and requires annual inspections are performed, which include a review of pump-out records. A number of properties along the Inland Bays use holding tanks, which are only intended to be temporary and which require regular pumping.

7.3.6 Private Sewer Treatment Service in Public Sewer Areas

Tidewater Environmental Services, Inc. and Artesian Wastewater Management, Inc. have been regularly expanding sewer services in Sussex County, as new developments are proposed and built. Service areas of private companies are mainly under the oversight of the PSC who issues CPCNs to private providers. Figure 7.3-1 shows wastewater service areas that have received CPCNs.

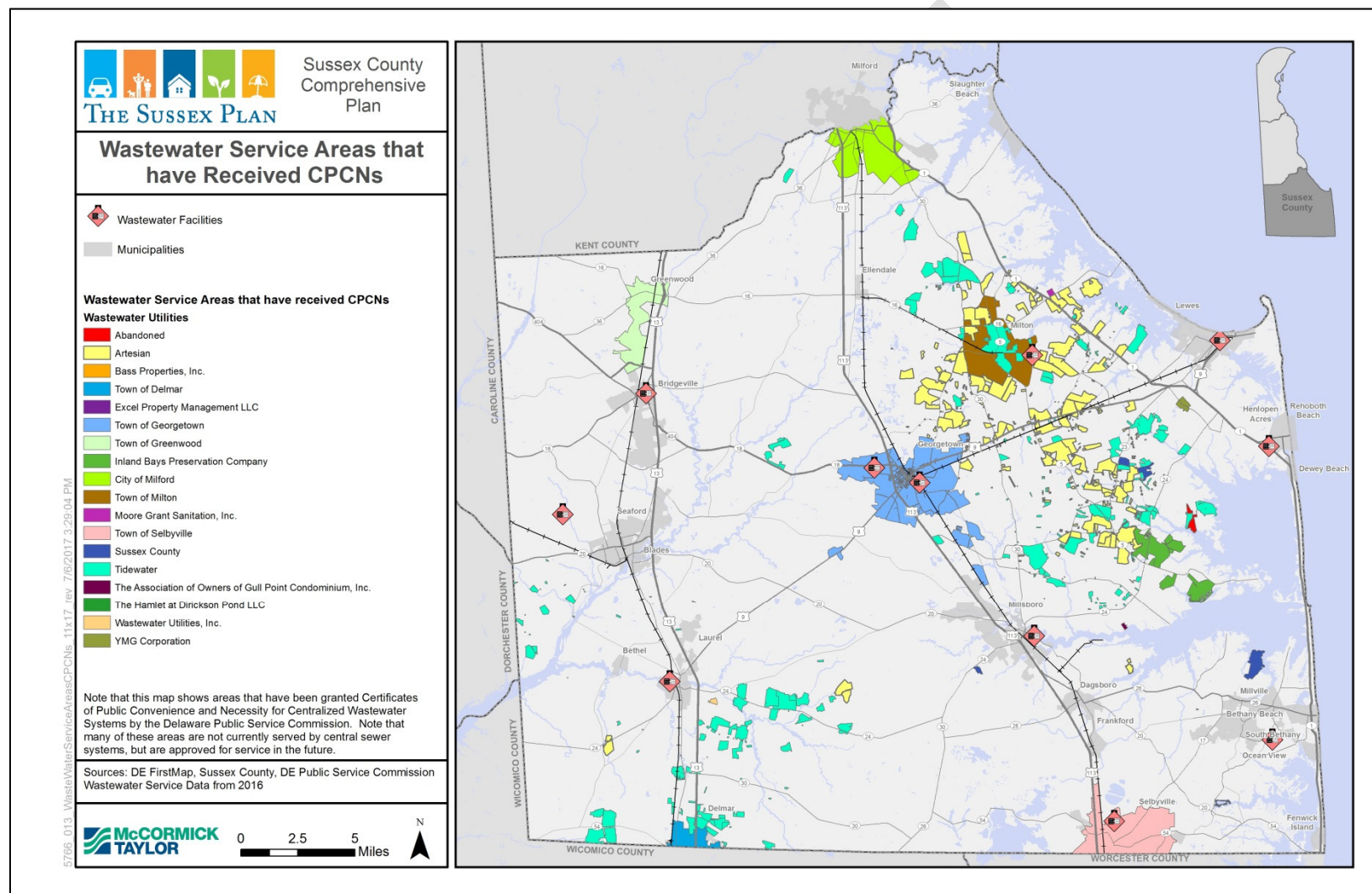
CPCNs are typically applied for after a majority of affected property owners in a specific area sign, or the owner of a large sub-dividable area petitions a private company to provide service to that area or parcel. Sussex County works closely with private providers to connect private systems to public treatment plants, where possible.

Delaware law gives towns and cities the authority to pre-approve any private utility service within its borders. However, that control does not extend to future annexation areas located outside of current municipal borders. Much of Sussex County's new development is located in or near these annexation areas, rather than within municipal borders.

The primary concern for Sussex County is to ensure that its own county-operated sewer treatment services can be efficiently provided to existing developments suffering from inadequate community sewer facilities and/or failing on-site septic systems. The County has taken on tens of millions of dollars of debt to extend county-operated service to these areas. This is being done to protect the water quality of the inland bays and other waterways and meet state mandates to avoid or eliminate discharges of treated effluent into the Inland Bays. These mandates have required large expenditures to establish land application systems for the effluent disposal after effluent has passed through a treatment plant.

To make it cost-effective to provide sewer service to existing development, it is often necessary to serve new development in the same system. The new development often provides the initial capital to lower connection costs and a larger customer base to keep usage fees moderate for existing homeowners. However, if the new development is served as part of a separate private system, it must be cost-effective to do so. There also may be major inefficiencies if the private system is located between two existing areas that need service. This results in a need to build long service line extensions without any customers along those lines to pay for those extensions. In these cases, it is also difficult to efficiently serve individual lots between subdivisions.

Figure 7.3-1 Wastewater Service Areas that have Received Certificates of Public Convenience and Necessity



7.4 ENERGY

7.4.1 Electric

While its natural beauty and amenities have made Sussex County a desirable place to live, the availability of reasonably priced electricity to power home heating and air conditioning units makes the County a more comfortable place to live during the winter and summer months. It is also critical in powering businesses and industries across the County.

In 1999, the energy industry in Delaware was restructured by the General Assembly to allow electric consumers to choose an alternate energy supplier (Delaware Division of the Public Advocate, 2017). The PSC maintains a list of certified electric suppliers on its website as a resource for consumers looking to switch suppliers.

Delmarva Power & Light Company, Inc. is the only electric distribution company regulated by the PSC. It provides electric to over 500,000 customers in Delaware and Maryland.

The PSC does not regulate municipal electric providers in Delaware. Lewes, Milford, and Seaford operate their own electric utility companies in Sussex County.

Additionally, the Delaware Electric Cooperative (Co-Op) is not regulated by the PSC. Delaware Electric Co-Op serves over 93,000 homes, businesses and farms in Kent and Sussex Counties, providing power to more than 200,000 people.

7.4.2 Natural Gas

Natural gas consumption in Sussex County is growing. Residential customers can use natural gas for home and water heating, cooking, clothes drying and other applications. Small to medium enterprises such as retail shops and restaurants can use natural gas for heating or cooking. Industrial facilities use natural gas for operational processes as well as for space heating, steam and electric (energy) production.

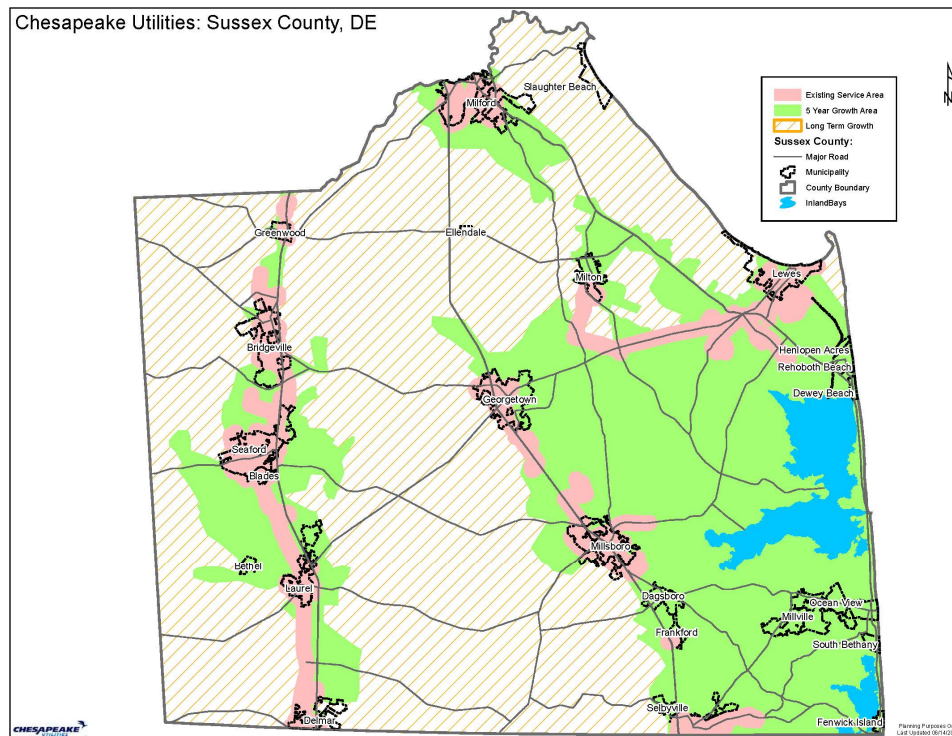
An economic driver for development is the availability of a variety of energy resources. Sussex County is fortunate to have a natural gas transmission pipeline located within its borders. It is owned and operated by Eastern Shore Natural Gas Company, a subsidiary of Chesapeake Utilities (Chesapeake). Chesapeake provides natural gas service to over 7,000 customers in Sussex County. Chesapeake's existing and planned service areas are shown on Figure 7.4-1.

Planned improvements to the pipeline delivery system in Sussex County include 1.6 miles of pipeline looping (parallel pipeline) north of Seaford, 5.1 miles of pipeline looping in Laurel, and a 17-mile expansion between Seaford and Millsboro. In addition, the improvements include two new pressure control stations located in Delmar and Millsboro. This added infrastructure will help to support the natural gas system in the southern and western part of the County.

Expanding natural gas infrastructure to areas in the County where it does not currently exist requires a critical mass of anticipated consumption before gas mains can be installed. To reach

that critical mass, it will take partnerships between the government and the private sector. Working together with the natural gas utility, the County can proactively support infrastructure expansion (in the form of natural gas mains) into key growth areas. This can be accomplished by proactively forming partnerships with existing utilities, industry, and commercial/residential developers to coordinate initiatives, while furthering strategies outlined in this Comprehensive Plan.

Figure 7.4-1 Chesapeake Utilities Existing and Planned Natural Gas Service



7.4.3 Renewable Energy

Renewable energy sources in Delaware currently include a variety of technologies such as small scale solar photovoltaics (PV) and geothermal units, commercial-scale solar arrays, land-based wind turbines for farms and industries, and emerging technologies such as offshore wind energy for utility-scale electricity off the Delaware coast. Some residents of Sussex County are choosing domestic renewable sources of electricity, such as solar PVs on rooftops and geothermal for heating and cooling systems. In addition, some businesses, schools, and institutions are choosing renewables for their energy needs. Sussex County Code currently contains provisions that regulate residential and business solar and wind energy activities, in order to enable renewable energy projects that are compatible with existing land uses.

Delaware requires retail electricity suppliers to generate 25 percent of the electricity sold in the state from renewable energy resources, with at least 3.5 percent from solar PV, by mid-2026.

When electricity providers, residents, businesses, and municipalities in the County purchase or own in-state renewable energy projects it can help toward meeting that goal. The County should encourage the development of renewable energy from a utility-level standpoint in order to realize the potential for more prevalent uses of renewable energy across the state as suppliers work to meet their future renewable energy goals.

7.5 TELECOMMUNICATIONS

Telecommunications is the exchange of information over long distances by electronic means. It can include voice, data, and video transmission. It is often associated with phone, internet, and television services.

The PSC can grant franchises to cable system operators providing service in unincorporated areas of the state. Satellite providers are not regulated by the PSC.

Verizon, Comcast, and Mediacom are the main telecommunication providers operating in Sussex County, and the service area for each provider varies. Nevertheless, there are gaps in service, particularly in the rural areas of the County. In particular, broadband technologies that enable high-speed internet connections are limited in the rural parts of the County. High-speed internet has become critical for residents, schools, farms, businesses, and governments to operate, and as discussed in the Economic Development Chapter of this Comprehensive Plan, is an important driver of economic development in the County. Similar to natural gas service expansion, a critical mass of population and businesses is necessary for private sector investment in broadband infrastructure.

In the mid-2000s, a broadband working group was formed in Sussex County to identify ways to solve the connection issues in the County. The University of Delaware and the Sussex Economic Development Action Committee, Inc. (SEDAC) also worked with the group to raise awareness for the demand for broadband infrastructure and enhanced internet services in the County (University of Delaware, 2017). In 2014, Governor Jack Markell announced that making rural expansion of broadband was a priority in Delaware, and set aside \$2 million for companies that had plans to use new fiber lines to reach underserved areas (Hoey, 2016). Following this, Sussex County government took steps to be the large anchor “company” to pave the way for installation of broadband infrastructure. The County hired a company (Broad Valley Micro Fiber Networks, Inc.) to install a 10-mile fiber-optic network “ring” that weaves around and through Georgetown. The ring was completed in 2016 and the County has plans to branch into other areas of the County from the ring, the 36 miles of existing Lighttower fiber networks running from Georgetown to Seaford and Georgetown to Lewes, and the Lighttower 175 mile network expansion completed in 2016 that stretches from Kent County through Milford and Georgetown to Millsboro. Sussex County’s FY 2018 budget includes \$1 million for a pilot project to install fiber optic cable to expand high-speed internet to rural parts of Sussex. The Delaware Department of Technology and Information (DTI) also has plans to connect 211 schools and school administration centers throughout the state (Hoey, 2016).

However, installing fiber lines to reach the doors of homes and businesses can be expensive, even when connecting to a nearby network. Sussex County is exploring the use of wireless, microwave broadband access by working with the wireless technology company CONXX. The County hired CONXX to design and install a microwave system to replace legacy copper land line links between communications towers, waste-water treatment operations centers, and field equipment (CONXX, 2016). Sussex County's FY 18 budget includes \$110,000 set aside for the CONXX Wireless Phase 3 and 4 projects to extend wireless network coverage to additional county facilities including the Seaford and Selbyville areas to provide a lower-cost and more reliable network infrastructure (Sussex County, 2017).

The County recognizes the importance of reliable telecommunication services to its residents, schools, farms, businesses, and government operations and will continue to encourage the expansion of telecommunications services as technology, market demand, and return on investment allows. In addition, in order to facilitate the expansion of these services, the County will revisit code to determine ways to streamline the process for approval and construction of telecommunications (including cell tower) infrastructure.

7.6 STORMWATER MANAGEMENT

Stormwater runoff occurs when water from rain or snowmelt flows across a land surface. Impervious surfaces such as rooftops, streets, and parking lots prevent the water from soaking into the ground and increase runoff volume created during storm events, thereby increasing the potential for flooding. Stormwater management is the act of managing this surface runoff by engineering land development to better convey and treat stormwater. In engineering site plans for new development, stormwater conveyance and detention or retention systems are designed to move stormwater away from buildings and impervious surfaces and hold it for a period of time in basin or other stormwater measure before it infiltrates into the ground or is released to a stream.

The Sussex Conservation District is the delegated agency in Sussex County for the administration of Delaware's Sediment and Stormwater Regulations. As such, the District reviews, inspects, and performs maintenance inspections of construction projects which disturb more than 5,000 square feet. The District also assists and educates local communities on management of stormwater facilities (Sussex Conservation District, 2017). As Sussex County is responsible for issuing building permits, it requires that a sediment control and stormwater management plan that meets all of the requirements of the Sussex Conservation District Sediment Control and Stormwater Management Program and Handbook (including an inspection and maintenance agreement), has been approved by the Sussex Conservation District before a permit is issued.

In March of 2017, Sussex County Council adopted a comprehensive drainage and grading ordinance that established new standards to improve the flow of stormwater in new residential developments. It includes detailed requirements for road construction, sidewalks, and runoff

collection systems. It also requires more specific grading plans for developments and lots to ensure stormwater is directed away from streets and homes to stormwater retention systems.

Tax ditches are another type of stormwater management measure that drains stormwater due to changes in topography. They are channels that vary in both width and depth. There are over 2,000 miles of tax ditches in the State of Delaware that provide drainage and flood control in agricultural and urban areas (DNREC, 2017). A Tax Ditch Association is an organization formed by a legal process in the Superior Court that comprises the landowners of a particular watershed or sub-watershed. The operations of the tax ditch are overseen by the Association's ditch managers and secretary/treasurer. The Association constructs and maintains the tax ditch through funds collected via taxes from landowners in the defined area.

7.7 SOLID WASTE MANAGEMENT

The Delaware Solid Waste Authority (DSWA), under regulation of DNREC, manages Delaware's solid waste. In some Sussex County towns, trash collection is provided by the local government. Elsewhere, residents and businesses can contract with a DSWA-licensed commercial hauler to collect trash and recycling items, or these items can be brought to one of DSWA's landfills, transfer stations, or collection stations. There is one DSWA landfill located in Sussex County: the 572-acre Jones Crossroads Landfill in Georgetown. There are two transfer centers: the Milford Transfer Station and the Route 5 Transfer Station in Harbeson. There are four collection stations in Sussex County: Ellendale, Long Neck (Millsboro), Omar (Frankford), and Bridgeville.

7.8 UTILITIES GOALS, OBJECTIVES, AND STRATEGIES

Below is a list of goals, objectives, and strategies for Sussex County's Utilities Element:

Goal 7.1: Ensure adequate central sanitary sewer service in a coordinated approach that anticipates future demand.

Objective 7.1.1 Optimize existing sewer transmission and treatment infrastructure utilization, limiting if possible duplicate infrastructure installation.

Strategy 7.1.1.1 Work with the State Legislature to amend DelCode for optimization of the CPCN process.

Strategy 7.1.1.2 Work with the State Legislature to modify the CPCN opt-out process to allow establishment of large area franchises encouraging regionalization.

Strategy 7.1.1.3 Expand use of public-private and public-public partnerships between wastewater utility providers to avoid duplication of infrastructure.

Strategy 7.1.1.4 Work towards regionalization of insularly wastewater services such as biosolids management, and septic treatment & disposal.

Strategy 7.1.1.5 Create public-private partnerships for on-demand disposal of treated effluent (not limited to agricultural lands).

Strategy 7.1.1.6 Amend Chapter 110 of County Code to reflect the new sewer service tier system proposed as part of this Comprehensive Plan update.

Objective 7.1.2 Coordinate the planning and development of public and private wastewater transmission facilities with comprehensive planning to ensure central sewer transmission is available commensurate with land use designation.

Strategy 7.1.2.1 Continue the expansion of the County transmission network to allow movement of wastewater between treatment facilities.

Strategy 7.1.2.2 Evaluate the conditional use process for community wastewater system treatment facilities to encourage regionalization.

Strategy 7.1.2.3 Expand the County's sewer planning area tier system.

Strategy 7.1.2.4 Require County exclusive rights in certain tiers and County approval of private CPCNs in other tiers.

Objective 7.1.3 Continue to encourage the public petition process initiating conversion of septic to public sewer to replace failing on-site systems or inadequate community sewer facilities.

Strategy 7.1.3.1 Work with DNREC to refine the on-site inspection and remediation process to work in coordination with County sewer expansion goals.

Objective 7.1.4 Continually maintain and upgrade existing sewer infrastructure to ensure sound operation.

Strategy 7.1.4.1 Explore new technologies for wastewater treatment and disposal.

Strategy 7.1.4.2 Engage in partnerships with the state for conversion of public lands to allow multi-use purpose systems (for example wastewater effluent disposal/park with limited public access).

Objective 7.1.5 Coordinate wastewater planning with land use planning to accommodate growth.

Strategy 7.1.5.1 Encourage or require private wastewater utility providers to create transmission networks connecting demand with treatment and disposal sites.

Strategy 7.1.5.2 Engineering Department to investigate possible extensions of County sanitary sewer and/or water service to impacted communities as needs arise on a case by case basis within the confines of the Delaware Code

Goal 7.2: Ensure that a safe and adequate water supply is available to meet the needs of future demand.

Objective 7.2.1 Protect water supply quality and quantity.

Strategy 7.2.1.1 Protect long-term water supply by encouraging land conservation and purchase of easements (including agriculture and forestry easements) in water recharge areas.

Strategy 7.2.1.2 Determine if modifications are needed to the existing County wellhead protection ordinance in order to allow a case by case analysis of the wellhead protection areas based on general groundwater movement.

Objective 7.2.2 Eliminate any single point-of-failure delivery systems to ensure that water supplies are available without interruption.

Strategy 7.2.2.1 Require interconnections between water systems whenever supported by sound engineering judgment.

Strategy 7.2.2.2 Encourage regionalization of utility providers.

Goal 7.3: Meet the future energy demand as the Sussex County population continues to grow.

Objective 7.3.1 Coordinate with energy service providers as they make improvements to and extend service based on projected market demand and market analysis.

Strategy 7.3.1.1 Coordinate with and provide technical assistance to energy providers as they work to extend services to Sussex County residents, businesses, and institutions.

Objective 7.3.2 Promote the utilization of existing transmission infrastructure to the fullest capacity.

Strategy 7.3.2.1 Encourage dual-feed whenever critically required (for example providing backup power for hospitals and other life safety operations).

Objective 7.3.3 Encourage energy conservation in order to increase reliability of the electric grid.

Strategy 7.3.3.1 Consider reductions in building permit fees to homes that go above and beyond the energy code requirements.

Objective 7.3.4 Encourage renewable energy options.

Strategy 7.3.4.1 Encourage renewable energy sources from a utility level standpoint with a committed power company integration.

Strategy 7.3.4.2 Be adaptive to new renewable energy sources and revisit County Code as needed.

Goal 7.4: Ensure adequate drainage and management of stormwater.

Objective 7.4.1 Support State and Sussex Conservation District stormwater management efforts.

Strategy 7.4.1.1 Continue participation in the stormwater regulatory advisory process with the State for the development of new stormwater regulations.

Strategy 7.4.1.2 Support the Sussex Conservation District in the management and implementation of the Statewide stormwater regulations.

Objective 7.4.2 Encourage site design that maximizes or optimizes infiltration and minimizes stormwater runoff.

Strategy 7.4.2.1 Consider working with stakeholders to develop buffer incentives or a program.

Goal 7.5: Ensure adequate telecommunications coverage (e.g. internet, cable, cellular service) throughout the County to meet the needs of the County's residents.

Objective 7.5.1 Encourage the expansion of telecommunications services as technology, market demand, and return on investment allows.

Strategy 7.5.1.1 Coordinate with and provide technical assistance to telecommunications providers as they work to extend services to Sussex County residents, businesses, and institutions.

Strategy 7.5.1.2 Encourage co-location of telecommunications when possible.

Strategy 7.5.1.2 Revisit County Code to determine ways to streamline the process for approval and construction of telecommunications (including cell tower) infrastructure.

Goal 7.6: Support waste reduction and recycling efforts in the County.

Objective 7.6.1 Continue support of DNREC and the Delaware Solid Waste Authority's waste management and disposal efforts to ensure adequate services for solid waste and recycling.

Strategy 7.6.1.1 Include siting for recycling containers in land use approvals on controlled sites to avoid illegal dumping.

Strategy 7.6.1.2 Revise County codes to include conditional use approvals for recycling processors in the County.

Strategy 7.6.1.3 Develop citing criteria for County code regarding hazardous waste and waste-to-energy (incinerator) facilities.

Strategy 7.6.1.4 Work with the Delaware Solid Waste Authority to identify future transfer sites in the County.

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Chapter 8. HOUSING

Housing Vision: *To ensure the provision of decent, safe, affordable, and fair housing opportunities to improve communities and quality of life for the residents of Sussex County.*

8.1 OVERVIEW

Sussex County is the fastest growing county in the State. Full-time and seasonal residents continue flocking to Sussex County to take advantage of the area's outdoor attractions, low real estate taxes, and high quality of life. This influx has fueled prosperity in the County's real estate market, hospitality industry, and related economic sectors. However, most housing, particularly on the eastern side of the County, is new and often unaffordable to low-income families, seasonal employees, entry-level workers, or recent college graduates.

Sussex County strives to accommodate the housing needs of all of its residents. The County's Community Development and Housing (CD&H) Department leads the County's efforts in working to satisfy the housing expectations of the State and the housing needs of its residents. This chapter presents an overview of the current housing situation in the County, what the County is doing to address housing needs and challenges, and introduces goals, objectives, and strategies to assist the County in achieving its housing vision.

8.2 SUSSEX COUNTY HOUSING SNAPSHOT

Table 8.2-1 below presents an overview of Sussex County's present housing situation. Over 60 percent of the total housing units in the County are occupied units while a large percent (36 percent) are vacant units. This large vacancy percentage is not surprising given the County's popularity as a tourist destination as most of the vacant homes are seasonal homes. Of the occupied units, over 77 percent are homeowner-occupied.

Most of the housing units in the County (over 60 percent) are single-family detached. Additionally, most of the housing units in the County were built in 1980 or later.

| Table 8.2-1 Summary of 2015 Sussex County Housing Statistics | | |
|--|----------------|--------------|
| | Number | Percent |
| Total Housing Units | 127,680 | -- |
| Occupied Units | 81,183 | 63.6% |
| Owner-Occupied | 62,989 | 49.3% |
| Renter-Occupied | 18,194 | 14.2% |
| Vacant Units | 46,497 | 36.4% |
| For rent | 1,524 | 1.2% |
| Rented, not occupied | 113 | 0.1% |
| For sale only | 2,528 | 2.0% |
| Sold, not occupied | 377 | 0.3% |

Table 8.2-1 Summary of 2015 Sussex County Housing Statistics

| | Number | Percent |
|---|--------|---------|
| Seasonal, recreational, or occasional use | 37,501 | 29.4% |
| For migrant workers | 125 | 0.1% |
| Other vacant | 4,329 | 3.4% |
| | | |
| Age of Housing Units | | |
| 2010 or later | 3,859 | 3.0% |
| 2000 to 2009 | 37,836 | 29.6% |
| 1990 to 1999 | 24,296 | 19.0% |
| 1980 to 1989 | 22,852 | 17.9% |
| 1970 to 1979 | 15,043 | 11.8% |
| 1960 to 1969 | 8,773 | 6.9% |
| 1950 to 1959 | 5,596 | 4.4% |
| 1940 to 1949 | 2,895 | 2.3% |
| 1939 or earlier | 6,530 | 5.1% |
| | | |
| Housing Units by Structure | | |
| Single-Family Detached | 79,408 | 62.2% |
| Single-Family Attached | 9,957 | 7.8% |
| 2-4 Units | 3,747 | 2.9% |
| 5+ Units | 11,331 | 8.9% |
| Mobile Homes | 23,178 | 18.2% |
| Boat, RV, van, etc. | 59 | 0.0% |

Source: U.S. Census Bureau, 2015 ACS; GCR Incorporated, Delaware Statewide Housing Needs Assessment 2015-2020

Note: Vacant units include both unsold and unused structures

8.2.1 Housing Affordability

The strong demand for housing has driven up home prices and apartment rentals to new heights. Sussex County's low- to moderate-income households are hit hardest by these price increases due to the disparity between the slower rise in household incomes as compared to increases in the overall cost of living, especially the cost of housing. The shortage of affordable housing remains a very real problem for low to moderate income households in Sussex County, including many with full-time, year-round jobs.

The housing market in eastern Sussex County is the fastest growing and most expensive housing market in the State. The Delaware State Housing Authority (DSHA) Needs Assessment defines eastern Sussex as those Census tracts that include the beach communities as well as more inland communities that are capturing much of the retiree market,

including, Millsboro and Milton. Approximately 40 percent of the population is over 55 years of age in eastern Sussex.

Almost half of the homes in eastern Sussex County are valued at more than \$300,000 (DSHA, 2014). As eastern Sussex County is a tourism hub, it relies on workers in the service and retail industries. According to the Delaware Housing Needs Assessments, some of Delaware's strongest industries (health care, tourism and retail) have many low and moderate wage workers, creating a demand for workforce housing. The report found that there is a shortage of housing affordable to workers within these industries, particularly in the high-growth areas of eastern Sussex County. As a result, these workers are required to commute further distances from areas in western Sussex County where housing is more affordable. This leads to increasing transportation costs and creates dependency on automobile travel.

The DSHA Housing Needs Assessment defines western Sussex as those Census tracts that comprise the western part of the County, including the Route 13 corridor communities and Georgetown. Property values in western Sussex County are much lower than in the eastern part of the county, and growth in the housing market also is much slower. Almost 20 percent of the owned homes in western Sussex County are valued at less than \$100,000 (DSHA, 2014). In addition, incomes are significantly lower and poverty rates are higher in western Sussex. Over 36 percent of households living in western Sussex earn less than \$25,000 per year versus 30 percent in eastern Sussex.

Any housing where residents spend less than 30 percent of their household income on housing-related expenses is considered affordable. However, the lower the overall household's income, the more challenging it is to find rental or ownership opportunities that do not exceed the 30 percent affordability threshold. According to the DSHA Needs Assessment, almost half of all renters and one-third of all homeowners have housing challenges (also known as cost-burdened), defined as paying more than 30 percent of their income or living in overcrowded or substandard housing conditions. The challenges are most severe among renters earning less than 50 percent of Area Median Income (AMI). Table 8.2-2 depicts AMI limits according to the U.S. Housing and Urban (HUD) Development Department for FY17 in Sussex County. The AMI in Sussex County is \$65,900, which is lower than the AMI in both New Castle County (\$83,200) and Kent County (\$66,500).

| Table 8.2-2 HUD FY 2017 Income Limits Summary for Sussex County | | | | | | | | | |
|---|-----------------------------------|-------------------|--------|--------|--------|--------|--------|--------|--------|
| Median Income | FY 2017 Income Limit Category | Persons in Family | | | | | | | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| \$65,900 | Low (80%) Income Limits (\$) | 36,900 | 42,200 | 47,450 | 52,700 | 56,950 | 61,150 | 65,350 | 69,600 |
| | Very Low (50%) Income Limits (\$) | 23,100 | 23,100 | 23,100 | 23,100 | 23,100 | 23,100 | 23,100 | 23,100 |
| | Extremely Low Income Limits (\$) | 13,850 | 13,850 | 13,850 | 13,850 | 13,850 | 13,850 | 13,850 | 13,850 |

Source: HUD FY 2017 Income Limits Documentation System

* The definition of extremely low-income is the greater of 30/50ths (60 percent) of the Section 8 very low-income limit or the poverty guideline as established by the Department of Health and Human Services (HHS), provided that this amount is not greater than the Section 8 50 percent very low-income limit.

Table 9.2-3 depicts monthly housing costs in Sussex County as a percentage of household income over the past 12 months. In general, those earning lower incomes and those in renter-occupied housing spend 30 percent or more of their income on monthly housing costs.

| Table 8.2-3 Monthly Housing Costs as Percentage of Household Income in the Past 12 Months | | | |
|--|-------------------------------|-------------------------------------|--------------------------------------|
| Subject | Occupied Housing Units | Owner-Occupied Housing Units | Renter-Occupied Housing Units |
| Less than \$20,000 | 13.1% | 10.5% | 22.2% |
| Less than 20 percent | 1.0% | 1.1% | 0.9% |
| 20 to 29 percent | 1.8% | 1.6% | 2.5% |
| 30 percent or more | 10.3% | 7.8% | 18.7% |
| \$20,000 to \$34,999 | 15.7% | 14.7% | 19.3% |
| Less than 20 percent | 3.8% | 4.7% | 1.0% |
| 20 to 29 percent | 3.1% | 2.8% | 4.1% |
| 30 percent or more | 8.8% | 7.2% | 14.2% |
| \$35,000 to \$49,999 | 14.5% | 14.4% | 15.2% |
| Less than 20 percent | 5.5% | 6.4% | 2.3% |
| 20 to 29 percent | 3.5% | 2.8% | 5.8% |
| 30 percent or more | 5.5% | 5.1% | 7.0% |
| \$50,000 to \$74,999 | 19.9% | 21.3% | 14.8% |
| Less than 20 percent | 9.7% | 10.9% | 5.4% |
| 20 to 29 percent | 6.0% | 5.8% | 6.9% |
| 30 percent or more | 4.1% | 4.6% | 2.5% |
| \$75,000 or more | 33.4% | 38.3% | 16.5% |
| Less than 20 percent | 24.8% | 28.3% | 12.6% |
| 20 to 29 percent | 6.7% | 7.5% | 3.8% |
| 30 percent or more | 1.9% | 2.5% | 0.1% |
| Zero or negative income | 1.0% | 0.9% | 1.2% |
| No cash rent | 2.4% | (x) | 10.9% |

Source: U.S. Census Bureau, 2011-2015 ACS 5 year estimates

Table 8.2-4 depicts rental and homeownership demand by income in the County. Most of the rental and homeownership demand is in eastern Sussex County where home prices and rents are the highest.

| Table 8.2-4 Rental and Homeownership Demand by Income (2015-2020) | | | | | | |
|---|-------------|----------|----------------|----------------|-----------|-------|
| | | <30% AMI | 30% to 50% AMI | 50% to 80% AMI | 80% + AMI | TOTAL |
| Rental Demand | East Sussex | 165 | 215 | 200 | 550 | 1,130 |
| | West Sussex | 220 | 140 | 170 | 290 | 820 |
| Home-ownership Demand | East Sussex | 510 | 560 | 1,265 | 1,295 | 3,630 |
| | West Sussex | 200 | 240 | 485 | 490 | 1,415 |

Source: DSHA Quarterly Affordability Gap Report, GCR Inc.

Home ownership is a challenge for many workers in Sussex County. Table 8.2-5 depicts the affordable housing surplus/gap in the County. The median home price in Sussex County was \$295,618 in the first quarter of 2017. For comparison, the median home price in Kent County was \$198,750, and was \$208,000 in New Castle County. For a worker in Sussex County making 100 percent of the median income, there still would be a \$30,000 affordability gap if he or she wanted to purchase a home. The gap grows as workers make less of the median income. For example, the amount affordable to a worker in Sussex County who makes 50 percent of AMI is \$110,969, creating an affordability gap of \$184,649.

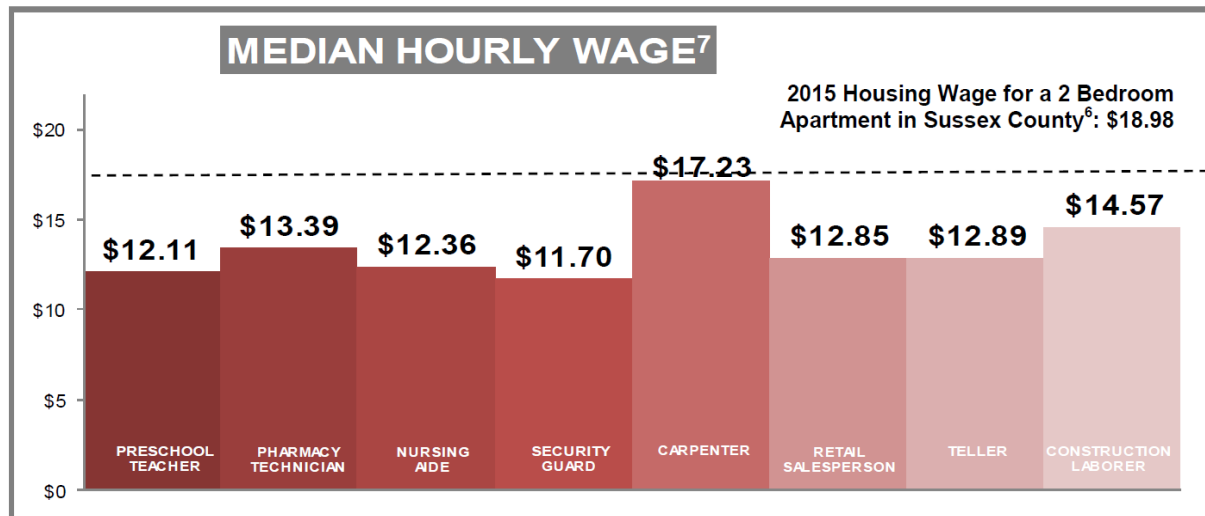
| Table 8.2-5 Affordable Housing Surplus / Gap 2017 | | | | | |
|---|--|-----------|--|-----------|------------------|
| | Affordable Housing Thresholds | | Fair Market Rent (FMR) & Median Home Price (MHP) | | Surplus or (Gap) |
| 2017 HUD MFI Median income for a Sussex County family: \$65,900 | Affordable Rent (low-income, 30% AMI) | \$464 | 1 Bedroom FMR, year | \$730 | (\$266) |
| | | | 2 Bedroom FMR, year | \$987 | (\$523) |
| | | | 3 Bedroom FMR, year | \$1,347 | (\$883) |
| | Affordable Home Price (Qualifying Mortgage Amount for low income, 50% AMI) | \$110,969 | MHP, 1st Quarter, 2017 | \$295,618 | (\$184,649) |

Sources: Delaware Statewide Housing Needs Assessment; HUD FY 17 Median Family Income Documentation System; DE State Housing Authority Median Home Prices and Affordability Ranges First Quarter 2017; Who Can Afford to Live in Delaware Report (2016).

For many workers in Sussex County, rental costs may also be a challenge. As shown in Table 8.2-5 above there is an affordability gap for renters in Sussex County. Figure 8.2-1 below depicts median hourly wages for selected professions. The average rental cost of a two-

bedroom apartment in Sussex County aligns with a median hourly wage of \$18.98. Many service industry professions provide median hourly wages less than \$18.98, making rental housing less affordable to employees in those industries. According to the Delaware Housing Coalition's 2016 report, "Who Can Afford to Live in Delaware?", a minimum wage worker would have to work 94 hours per week in order to afford a 2 bedroom, fair market rent apartment in Sussex County.

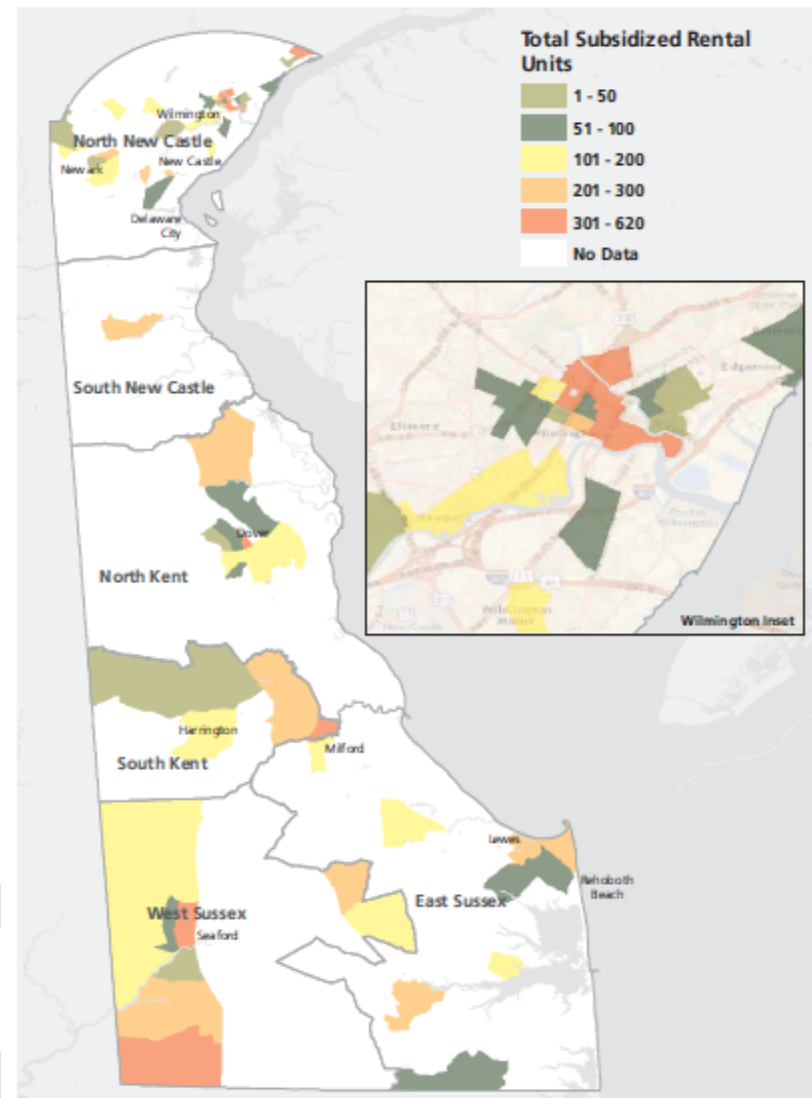
Figure 8.2-1 Median Hourly Wage in Sussex County for Selected Professions



Source: DSHA Sussex County Housing Fact Sheet, 2016

Many individuals rely on subsidies for housing to help fill the affordability gap. According to the DSHA Needs Assessment, there are over 3,100 subsidized rental units in the County. Many of these (14 developments and 555 units of subsidized rental housing) are over 25 years old without substantial rehab. Figure 8.2-2 shows that many of the subsidized housing units in Sussex County are in the west near Georgetown, and near the beach communities of Lewes and Rehoboth Beach.

Figure 8.2-2 Subsidized Housing Units by Census Tract 2013



Source: DSHA Housing Needs Assessment, 2014

Manufactured homes can create affordable housing opportunities. According to the Corporation for Enterprise Development (CFED), a national non-profit organization, the average cost per square foot of manufactured homes is less than half that of site-built homes. Yet despite sometimes disparaging stereotypes, properly built and well-managed manufactured home communities grow in value and can be community assets. The County has a strong market for these units considering the problems many local workforce members have affording local home prices. In addition, there is a demand for manufactured housing as affordable vacation homes in the eastern area of the County. The U.S. Census reported that Sussex County had 23,178 manufactured homes in 2015. This represented 18.2 percent of all homes in the County. For

comparison, Kent County has 8,996 manufactured homes (13.4 percent of total housing units) and New Castle County had 5,164 manufactured homes (2.4 percent of housing units).

The County is working hard to create more affordable housing opportunities in Sussex. More information about County initiatives that support affordable housing in Sussex County is described in Section 8.3 below.

8.2.2 Housing Conditions

In addition to affordable housing issues, Sussex County faces challenges concerning the quality and condition of its housing stock. Despite the surge of new housing recently built in the County, many Sussex County communities have many housing units that need rehabilitation.

The 2014 Delaware Housing Needs Assessment Report estimated that in the State of Delaware there are more than 18,000 substandard housing units. Substandard housing is defined as: homes that are vacant and abandoned; homes that are occupied but are in unlivable conditions; and homes that are occupied and in disrepair. The same report estimated that there are 4,097 substandard units in Sussex County (3.2 percent of all units). Of these, 3,209 are owner-occupied and 888 are renter-occupied.

A priority for Sussex County is to preserve the existing housing stock through rehabilitation. Section 8.3 below discusses Sussex County's rehabilitation funding programs.

8.2.3 Homelessness

According to the DSHA Housing Needs Assessment, over 8,000 people in Delaware experience homelessness each year. These include the chronically homeless, veterans, persons with alcohol and drug addictions, and families with children. There are also other groups that are at-risk of becoming homeless. These may include ex-offenders re-entering the community, victims of domestic violence, and youth aging out of foster care.

Approximately 13 percent of people experiencing homelessness in Delaware live in Sussex County. Point in time data (2017) provided by Housing Alliance of Delaware indicated that 126 homeless people in Sussex County are sleeping in temporary shelters or on the street. The Housing Alliance also estimates that 400 people will experience homelessness in the County at some point in 2017.

Many of the homeless in both Delaware and in Sussex County are veterans. In order to reduce veteran homelessness, Sussex County (along with five of its towns), participate in the national Mayors Challenge to End Veteran Homelessness. As part of this initiative, the State of Delaware identified 556 homeless veterans between January 2015 and January 2017, and was able to provide housing for 453 of these veterans. In addition, 100 of these veterans were able to receive permanent housing in Sussex County.

Homelessness also can be dangerous during times of severe weather and storm events. There are 58 emergency shelter beds in the County. This number can be expanded to 75 beds when nighttime temperatures fall below 32 degrees Fahrenheit, utilizing Code Purple cold weather

shelters. However, these beds are still not sufficient to accommodate the estimated homeless population in Sussex County.

There are a number of non-profit groups operating in the County that provide assistance to the homeless and families at risk of homelessness. These groups operate shelters, provide emergency housing to those at risk of homelessness, provide services to shelter residents, case management, and provide outreach to residents currently living on the street. Sussex County supports non-profits and other stakeholders working to reduce homelessness in the County, including the implementation of year-round low-barrier shelters, and the exploration of ways to expand Rapid Re-Housing to reduce displacement. The County is also considering ways to support the repurposing and redevelopment of vacant properties to reduce homelessness and displacements in the County.

8.3 SUSSEX COUNTY HOUSING INITIATIVES

In cooperation with the State, federal agencies, housing industry representatives and non-profit housing advocacy groups, Sussex County has been very active in trying to address low- to moderate-income housing needs.

The Sussex County Community Development and Housing Department provides and manages grants and loans for housing rehabilitation, water and sewer hookup, demolition, and small infrastructure projects, which are provided to low- to moderate-income residents in Sussex County. The main goals of the CD&H Department are to preserve Sussex County's housing stock and promote fair and affordable housing. Its work also furthers Sussex County's mission to promote non-discrimination and affirmatively further fair and equal housing opportunities for all, and to inform housing developers and the general public that the County supports the development of affordable housing opportunities in Sussex County. Since 1990, the Department has assisted more than 3,600 families with housing needs.

The CD&H Department administers a variety of housing programs that have contributed to hundreds of renovations to preserve the affordable housing stock in Sussex County. However, there are still unmet needs for housing rehabilitation in the County. There are currently over 1,000 homes on the waiting list to receive rehabilitation assistance from the County, but due to funding constraints, the County can only rehab approximately 150 homes per year. The sections below outline the various housing initiatives and efforts the County is taking to continue to expand its reach in providing assistance to Sussex County residents.

8.3.1 Housing Rehabilitation and Related Assistance

As discussed above, the County faces challenges concerning the quality and condition of its housing stock. A large focus of the CD&H Department is on programs that preserve the affordable housing stock. The CD&H Department will continue to expand and promote these housing rehabilitation and related assistance programs outlined below.

8.3.1.1 Community Development and Block Grant (CDBG) Program

The CD&H Department administers the U.S. Housing and Urban Development Department's (HUD) Community Development and Block Grant (CDBG) Program. According to HUD, the Program's objectives are to develop viable communities by providing decent housing and a suitable living environment, and by expanding economic opportunities, principally for persons of low to moderate income. The Program also requires that the home must be the primary residence of the homeowner, and the homeowner must be a permanent resident of Sussex County.

The primary goal of the CDBG Program is to preserve the housing stock throughout the County. By rehabilitating substandard homes, it ensures the affordability of those homes in the future. The Delaware Statewide Needs Assessment classifies a substandard home as one that is deficient in at least two structural systems, and in need of substantial rehabilitation in order to make them structurally sound, safe, and habitable. The same report estimated there are 4,097 substandard units in Sussex County (3.2 percent of all units).

The CDBG Program is the largest funding source used by the CD&H Department. Since FY10, the County has spent more than \$5.7 million in CDBG funds and helped repair or rehabilitate more than 700 properties. The CD&H Department applies for funding on behalf of local municipalities who request assistance from the County. Funding is funneled through the Delaware State Housing Authority who receives CDBG funds directly from HUD since the County is not currently an Entitlement Community. The County previously did not meet the population requirement of 200,000 in order to be eligible for direct funding from HUD. As a result, funding is subject to State CDBG Program Guidelines. However, as of the last U.S. Census, the County population now exceeds the threshold needed to become an Entitlement Community. As such, the County is considering pursuing HUD Entitlement Community status.

8.3.1.2 HOME Investments Partnership Program (HOME)

The CD&H Department administers HUD's Home Investment Partnerships Program (HOME). HOME provides formula grants to states and local governments to fund a wide range of activities, including building, buying, and/or rehabilitating affordable housing (HUD, 2017). It is designed exclusively to create affordable housing for low-income households.

The program is offered statewide by DSHA and provides financial assistance to affordable housing providers. For Sussex and Kent County governments, DSHA directs that HOME funds are earmarked for owner-occupied housing rehabilitation projects. Since 2013, Sussex County has used \$2.5 million in HOME funds for owner-occupied home repairs and rehabilitation of almost 200 homes.

8.3.1.3 Neighborhood Stabilization Program (NSP)

The CD&H Department also administers the Neighborhood Stabilization Program (NSP 1 & 2). Congress established the NSP for the purpose of stabilizing communities that have suffered from foreclosures and abandonment (HUD, 2017). HUD provides funding for the purchase and redevelopment of foreclosed and abandoned homes and residential properties. It also provides for the creation of a second mortgage finance mechanism (DSHA, 2017).

For the State of Delaware NSP, HUD provided \$19.6 million to the Delaware State Housing Authority in March of 2009. DSHA then allocated those funds to local jurisdictions through a competitive process based on need and on each applicant's proposed impact statewide. Over \$2.3 million in NSP 1 funds have been invested in properties in Sussex County, assisting 33 households.

A second round of NSP funding was made available by HUD in May of 2009 (NSP 2) and DSHA was awarded \$10 million in NSP 2 funding. To date, over \$1 million in NSP 2 funding has been utilized in Sussex County, assisting 12 households.

8.3.1.4 Housing Preservation Grant (HPG) Program

The CD&H Department administers the USDA's Housing Preservation Grant (HPG) Program to renovate homeowner-occupied units. It is a competitive grant that provides for the rehabilitation of homes for those with low incomes. Eligibility for HPG Program funding requires that the home be owner-occupied. The USDA specifies that "low income" is defined as income between 50 percent and 80 percent of the Area Median Income, and "very low income" is defined as income less than 50 percent of the Area Median Income. In the past six years, the County has spent over \$122,000 in HPG Program funding in the County. It is primarily used for small, owner-occupied housing rehabilitations and handicap accessibility.

8.3.1.5 Housing Development Fund (HDF) Program

In FY17, Sussex County received its first allocation of State Housing Development Funding (HDF) funds through a competitive application process. The State's HDF program provides grant funding for the County to develop affordable homeownership opportunities, support Housing Support programs, or to assist with Energy and Accessibility improvements. The CD&H Department is in the process of working to initiate the use of these funds.

8.3.1.6 Sussex County Emergency Repair Program

Since FY10, Sussex County Council has provided over \$1 million in Emergency Rehabilitation Funds to assist over 300 households in need of emergency housing repairs. Funding is prioritized for those individuals with disabilities, individuals 65 years of age or older, households at or below 30 percent AMI, and veterans. Some uses of the funding include repair or replacement of damaged pipes, creation of handicap ramps, heater repair or replacement, installation or repair of water pumps, installation or repair of roofs, shower accessibility, and electrical work.

8.3.2 Property Maintenance and Substandard Housing

There are multiple departments in the County that play a role in property maintenance and substandard housing issues. The Constable's Office responds to resident complaints of substandard rental housing conditions. In the fall of 2015, the Constable's Office condemned and placed Corrective Action Plans on two housing units, which prompted the development of a formal Rental Unit Complaint Process. The new Complaint Process allows the County to receive and respond to complaints regarding substandard rental housing standards, and work closely with the owner/landlord to ensure that repairs are made. As this is a new process, it

may be unfamiliar to many residents. As a result, the County will engage in additional education and outreach efforts to spread information about the program.

While the Rental Unit Complaint Program is designed to assist tenants in reporting substandard rental housing conditions, the County is considering measures to assist landlords in improving housing before it reaches substandard conditions. The County will consider development of a process to work with landlords who have limited access to resources to bring properties up to code in a manner that supports, rather than penalizes, those seeking assistance to improve their housing stock.

There are also some housing situations in the County where changes to County Code may be necessary in order to ensure the provision of safe and decent housing for County residents. For example, the County may wish to consider an ordinance with rules and regulations governing campgrounds as there have been instances in the County where seasonal campgrounds have become locations of permanent housing with people living in substandard conditions. This would fall under the purview of the Planning and Zoning Department and Zoning Code.

There are also many dilapidated and abandoned structures within the County that not only are aesthetically unpleasing but can also pose a safety risk. It is unknown how many of these structures exist and their locations. As a result, the County may consider developing a method to identify and track these dilapidated and abandoned structures.

Furthermore, there are cases where the ownership structure of a property that is in disrepair is unclear or mechanic's liens are present that create challenges to home repair through the County's existing resources. In these situations, it may be more costly to clear title than it would be to perform the repairs. Therefore, the County is considering ways to facilitate home repairs and maintenance on properties with these challenges.

8.3.3 Homeownership and Rental Programs

The County has two voluntary inclusionary zoning programs that it uses to further promote more affordable housing and promote a wider range of housing options.

8.3.3.1 Sussex County Moderately Priced Housing Unit (MPHU) Program

In January 2006, the Sussex County Council introduced the Moderately Priced Housing Unit (MPHU) Program. The MPHU was amended in 2007 and again in April of 2013. This initiative provides incentives for developers to build moderately priced housing units, including expedited review and density bonuses to developers who build homes affordable to people within 50 percent and 125 percent of the area's median income, established yearly by HUD. Depending on the specific income level targeted, developers of approved projects can build between 20 percent and 30 percent more units than otherwise allowed (based on income tier targeted).

The projects must be: a) owner-occupied housing; b) located in a growth area as defined by the County Comprehensive Plan, or land that is designated on a town's comprehensive plan as lying within the town's growth and future annexation area; c) 15 percent of the units must be

affordable to households within 50-125 percent of HUD's AMI; d) connect with public water and sewer facilities; and e) must contain a minimum of 35 units.

Home buyers must live and work in Sussex County for at least one year and be income-eligible to participate. They must earn between 50-125 percent of HUD's AMI. The homebuyer must be the primary occupant of the house and the house must be their primary residence.

The MPHU Program is voluntary, and individual projects are subject to County approval. The County established the program to meet the needs of low- to moderate-income residents, as well as to entice young professionals to stay in Sussex County. One of the goals of the program is to educate young professionals that there is affordable housing available if they were to return home to Sussex County for employment. Another goal is to limit the commuting distance to the workplace. The program can create housing close to work, thereby contributing to reduced commuter costs and less traffic.

To ensure that MPHUs will remain affordable, the program imposes affordability restrictions. The program uses deed restrictions to guarantee the re-sale prices of these homes remain affordable for a 20-year period.

8.3.3.2 Sussex County Rental Program (SCRCP)

The County recognizes that without an adequate supply of affordable rental housing in close proximity to employment and town centers, the County's workforce must commute a great distance for work. Not only do long commutes have a negative effect on the environment and transportation, but commuting also comes with high fuel expenses.

Sussex County passed the Sussex County Rental Program (SCRCP) ordinance in 2008. The SCRCP was created because of the significant lack of affordable rental housing in the County. In 2016, there were over 17,000 renter households in the County that faced a shortage of affordable rental units.

The SCRCP provides incentives for developers to construct affordable rental units through tools such as a density incentive and an expedited review. However, as a result of the housing market collapse of 2008-2009, the program did not receive many applications. The County recently amended the program in November 2016 to reflect real world market applications. Some of the changes included reducing the required percentage of affordable units set-aside from 15 percent/40 percent to a flat rate of 12.5 percent of total units. In addition, it set fixed rental rates by bedroom-size based on 50 percent AMI. Although the County has not received any applications since the changes to the ordinance were made, CD&H is working to promote the program.

8.3.3.3 Other Homebuyer and Rental Assistance Efforts

The CD&H Department also engages in a number of other efforts to assist homeowners and renters with their housing needs. For example, Sussex County held its third annual Homebuyer's Fair in the fall of 2016 to provide individuals and families interested in homeownership with their credit information, an approximation of what house price range they

might qualify for, and a preliminary work plan to become mortgage ready. Participants received a free copy of their credit report and a mini-counseling session with a HUD-approved housing counselor. Participants also had access to vendors and exhibitors with different programs, opportunities, and resources available for potential homebuyers.

Additionally, the CD&H Department connects people with resources such as DelawareHousingSearch.org so they can find homes to rent, homes to buy, accessible rentals, and veterans housing. The County is also interested in finding ways to identify rental units throughout the County to further assist in matching tenants looking for housing with landlords.

There are also a number of new tools and initiatives the County can consider to assist homebuyers or renters. Fees associated with building permits, sewer hook-ups, and other initial housing costs are often a challenge for homebuyers with limited income. The County is interested in determining if a sliding scale fee structure for homebuyers below a certain income threshold is feasible.

8.3.4 Cooperation with Non-Profit Housing Entities

Cooperation with non-profits is essential for extending the County's reach in meeting its housing goals, particularly with regard to affordable housing. There are numerous non-profit housing organizations operating in the County ranging from those that promote affordable housing to those that work to reduce homelessness. The CD&H Department maintains a list of these organizations and regularly connects residents with these organizations and their resources. The CD&H Department also regularly attends meetings of these groups.

Sussex County Council supports non-profits financially by making grants available for non-profit agencies to assist with housing programs through two means. Human Services Grants are made available annually to countywide, non-profit agencies to enhance health and human services which contribute to a safe, healthy, and self-sufficient community. Throughout the year, the Sussex County Council provides grants through its Non-Profit Grant Program to non-profit agencies to assist with resources in support of programs, or capital purchases that would benefit Sussex County residents.

Sussex County will continue to expand its relationships with non-profit housing organizations, and continue to provide these organizations with grants and technical assistance. The County recognizes the efforts of these organizations to provide the low to moderate income people of Sussex County with affordable housing options, and will continue to support these efforts. In addition, these organizations play an important role in assisting the County with its efforts to increase education and awareness of the County's housing assistance programs.

8.3.5 Furthering Affordable and Fair Housing

Sussex County has an Affordable Housing Support Policy, and supports the development of affordable housing in Sussex County. The policy defines what the County considers affordable housing and affordable rental housing projects. The County also provides letters of support to developers of affordable housing projects seeking financing opportunities, provided that the

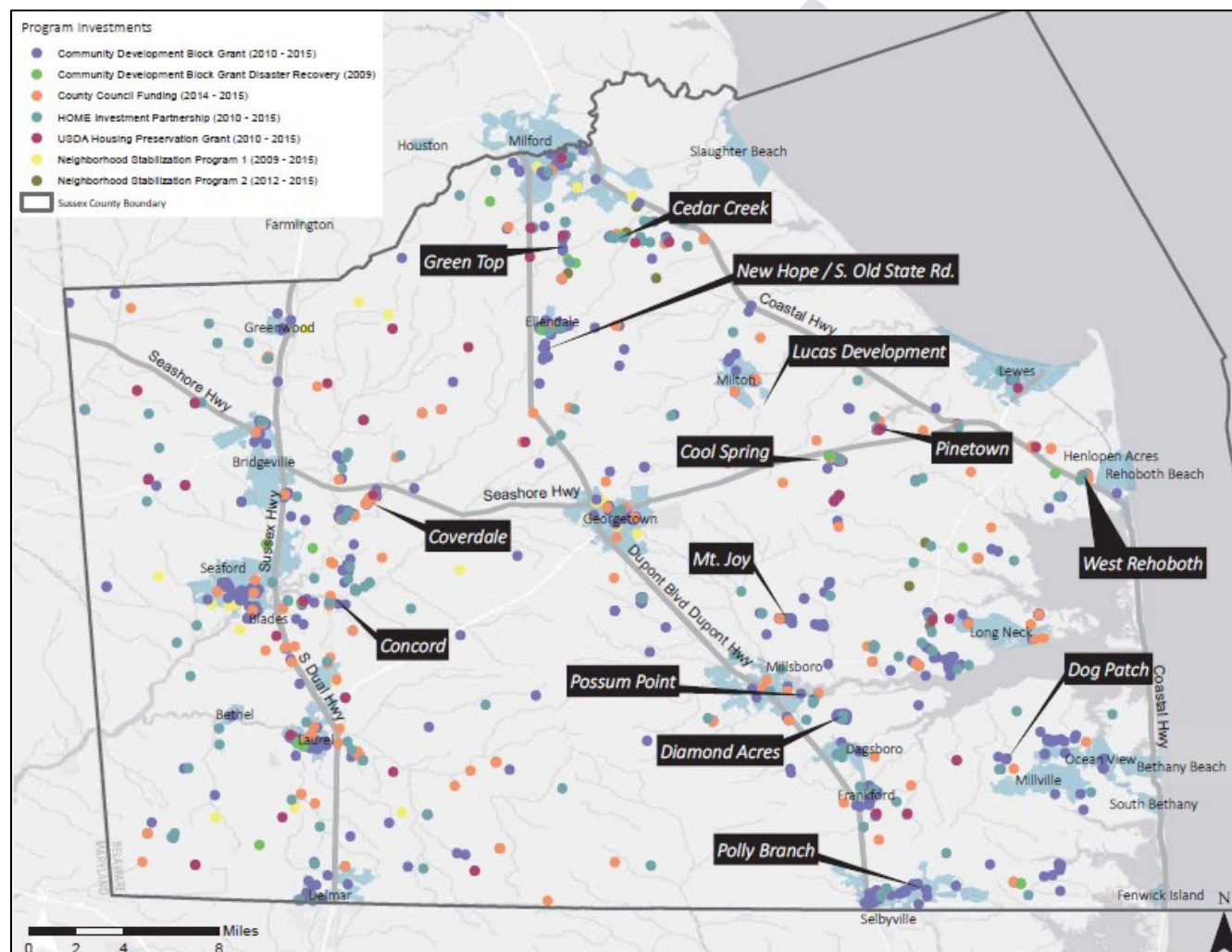


project qualifies under the definitions defined in the policy. Support letters for affordable rental housing projects will only be authorized if the project is proposed in an Area of Opportunity, as defined by the DSHA. These Areas of Opportunity are considered areas of strong, high value markets where new affordable housing opportunities should be supported. The DSHA provides an online map available through its website where users may view the Areas of Opportunity in Sussex. The County also provides for a deferral of sewer impact fees for developers constructing affordable housing.

In addition to furthering opportunities for affordable housing, Sussex County also promotes fair housing. It is the policy of Sussex County to comply with the Fair Housing Act, as amended, and the Delaware Fair Housing Act, by ensuring that its officials, agents, and employees will not discriminate in any aspect of housing based on the following protected classes: race, color, religion, national origin, handicap/disability, familial status, sex, creed, marital status, age, sexual orientation, or gender identity. Sussex County has adopted a Fair Housing Policy and has a resource center available through the County's website where people can find information regarding affordable and fair housing from Sussex County Government, and access to fair housing resources at the State and Federal levels. Members of County-appointed boards and commissions, elected officials, and County staff have attended fair housing training. The County is continuing to encourage more staff and officials to attend annual training, and also encourage diversity in appointments for its land use boards. The County also has an opportunity to partner with stakeholders to provide training and technical assistance to municipal leaders and others about fair and affordable housing.

In addition, the County is working to implement its Impacted Communities Study. The study evaluated 14 communities in the County to determine individual and community needs. Evaluation of the Impacted Communities included an analysis of residents' responses to questions about the prioritization of their individual and community needs, a geographic assessment of each Impacted Community, and an evaluation of the County's past participation of providing funding for owner-occupied housing rehabilitation, trash disposal, roadway crusher run installation, well and septic installation and repair, public water and sewer system hookup, afterschool and community programs, street lighting and construction for accessibility within the Impacted Communities. The Impacted Communities are depicted on Figure 8.3-1. The study also evaluated the County's investments within the impacted communities. Between FY09 and FY16, the County provided 308 investments totaling over \$1.6 million.

Figure 8.3-1 Location of Sussex County Impacted Communities and Community Development and Housing Investments, 2009-2015



Source: Impacted Communities Study, 2016

The County CD&H Department continues to focus efforts in supporting and improving housing in the impacted communities and promoting the creation and preservation of affordable housing in the County. Other County departments also can or already do assist in supporting these efforts. For example, the Engineering Department could investigate possible extensions of County sanitary sewer and/or water service to impacted communities as needs arise on a case by case basis within the confines of the Delaware Code. Additionally, the County Planning and Zoning Office currently collaborates with developers through pre-submission meetings to support the expansion of affordable housing. Through those meetings, the office also promotes the use of DSHA's Areas of Opportunity maps. The County also has a program for assessment fee deferrals for non-profits for development projects that will continue to be marketed so that more groups take advantage of it.

In order to expand opportunities for more affordable housing and determine that there are not any regulatory barriers to further promoting affordable housing, the County may wish to consider revisiting its Code regularly. For example, the County may consider revisiting its code to evaluate the current process for how group homes, shelters, and co-living arrangements are approved to determine if revisions are necessary so that these types of affordable housing can be further promoted. The County may also consider revisiting zoning code to determine in districts where multifamily housing is currently a conditional use, if it should be made a permitted use at the densities permitted in the districts if water and sewer are available.

In addition to the MPHU and SCRP, the County has a number of existing ordinances that can help expand affordable housing in the County. These include the accessory dwelling unit ordinance, the garage/studio apartment ordinance, special exceptions for medical hardships, and the use of guest houses. The County should consider continuing to promote these ordinances.

As discussed in the Community Design Chapter, tiny home construction is spreading in popularity across the United States as people choose to downsize and simplify the space where they live. Tiny houses can range in size from 100 to 400 square feet, and come in many shapes, sizes, and forms. As tiny houses have an opportunity to be a form of affordable housing, the County will review the zoning code to determine if modifications are needed to permit new styles of housing to be developed in the code as they appear. This may also include determining the challenges and opportunities that could be associated with allowing multiple small units (such as tiny houses) on one lot.

The main focus of the County's affordable housing efforts has been through incentives. Although the MPHU and SCRP have not been taken advantage of by many developers to date, the County will continually work to improve these programs to properly reflect the housing market and incentivize developers to participate in the provision of affordable housing. The County may also consider exploring additional ways to incentivize private developers to provide more multi-family and affordable housing opportunities. One method could be by broadening the

product type in zoning that allows fee-waivers for affordable housing to include multi-family housing. This could be beneficial to multi-family rental developments using state and federal resources that have affordability restrictions as they could apply for reduced fees (building permits, sewer hook-up fees, etc.).

Additionally, the County may consider development of a Community Development Fund or similar funding mechanism to provide affordable housing assistance, creation, and preservation. Such funding could be used to create new programs and tools such as a loan fund to provide low interest financing for affordable housing providers and developers to assist with creation of affordable housing projects/ventures. Another tool that could be considered is development of a Down Payment and Closing Cost Assistance Program to provide assistance to income-qualified homebuyers. Furthermore, the fund could be used to develop financial literacy scholarships so that low and moderate income individuals that receive County funding can attend HUD-approved housing counseling.

Cooperation with non-profit housing entities and advocacy groups will play a critical role in helping the County achieve its affordable and fair housing objectives as they have local ties with the community and those populations most in need of affordable housing. For example, the County actively coordinates with the Sussex County Advisory Committee on Aging and Adults with Physical Disabilities. This committee can play an important role in determining barriers and opportunities for the expansion of housing opportunities for persons with disabilities and the aging. One opportunity can be through encouraging universal design principles in new home construction and rehabilitation. Universal design focuses on making a house safe and accessible for everyone, regardless of age, physical ability, or stature.

The County can also partner with non-profit advocacy groups to help determine barriers and opportunities for the expansion of housing opportunities for English as a Second Language (ESL) populations. This is particularly important as the County population is expected to grow and diversify through 2045. As discussed in the Population and Demographics Chapter, it is estimated that there will be almost 39,000 people of Hispanic ethnicity living in Sussex County by 2045, which will represent approximately 15 percent of the total population. Partnerships with advocacy groups as well as implementation of the County's Language Plan will help provide resources and assistance to ESL populations.

8.4 HOUSING GOALS, OBJECTIVES, AND STRATEGIES

The County is committed to ensuring that residents have access to safe, decent, and affordable housing. As described above, the County has a number of housing initiatives and partnerships that it undertakes to increase the supply of affordable housing, preserve the existing housing stock, and diversify the housing market. However, even more can be done to continue and expand these efforts. Below is a list of goals, objectives, and strategies for Sussex County's Housing Chapter to support and strengthen the County's Housing Vision:

Goal 8.1: Ensure the provision of safe and decent housing for County residents.

Objective 8.1.1 Improve housing quality and condition, without causing displacement.

Strategy 8.1.1.1 Strengthen the County Constable Office's existing Rental Unit Complaint Program through additional education and outreach efforts.

Strategy 8.1.1.2 Identify a way to identify rental units throughout the County to assist in matching tenants looking for housing with landlords.

Strategy 8.1.1.3 Consider development of a process to work with landlords who have limited access to resources to bring properties up to code that supports, rather than penalizes, those seeking assistance to improve their housing stock.

Strategy 8.1.1.4 Evaluate current process for how group homes, shelters, and co-living arrangements are approved through County Code to determine if revisions are necessary.

Strategy 8.1.1.5 Consider an ordinance with rules and regulations governing campgrounds.

Strategy 8.1.1.6 Engineering Department to investigate possible extensions of County sanitary sewer and/or water service to impacted communities as needs arise on a case by case basis within the confines of the Delaware Code.

Objective 8.1.2 Encourage reinvestment in existing housing stock through rehabilitation and renovation and support removal of substandard dwelling units.

Strategy 8.1.2.1 Expand Sussex County Department of Community Development and Housing's Housing Rehabilitation and related assistance programs.

Strategy 8.1.2.2 Continue to utilize funds such as those through the CDBG and HOME programs to rehabilitate and renovate housing units.

Strategy 8.1.2.3 Consider development of a method to track dilapidated and abandoned structures in the County.

Strategy 8.1.2.4 Consider pursuing HUD Entitlement Community status for the County.

Strategy 8.1.2.5 Consider development of a funding mechanism to provide home repairs on properties that do not have a clear ownership structure.

Strategy 8.1.2.6 Consider working with the State to forgive mechanics liens on properties so that repair and maintenance can take place.

Objective 8.1.3 Reduce homelessness and displacement in Sussex County.

Strategy 8.1.3.1 Support non-profits and other stakeholders working to reduce homelessness in Sussex County.

Strategy 8.1.3.2 Support implementation of low-barrier shelters year-round in Sussex County.

Strategy 8.1.3.3 Explore opportunities to expand Rapid Re-housing (RRH) & Permanent Supportive Housing (PSH) in Sussex County.

Strategy 8.1.3.4 Consider ways to support the repurposing and redevelopment of vacant properties into opportunities to reduce homelessness and displacement in the County.

Goal 8.2: Ensure that a diversity of housing opportunities are available to meet the needs of residents of different ages, income levels, abilities, national origins, and household configurations.

Objective 8.2.1 Increase affordable and fair housing opportunities in the County.

Strategy 8.2.1.1 Improve the County's SCRP and the MPHU Programs to provide incentives to properly reflect the housing market and incentivize developers to participate in the provision of affordable housing.

Strategy 8.2.1.2 Consider development of a Community Development Fund or similar funding mechanism to provide affordable housing assistance, creation, and preservation.

Strategy 8.2.1.3 Explore ways to incentivize private developers to provide more multi-family and affordable housing opportunities.

Strategy 8.2.1.4 Consider creation of a loan fund to provide low interest financing for affordable housing providers and developers to assist with creation of affordable housing projects/ventures.

Strategy 8.2.1.5 Consider development of a Down Payment and Closing Cost Assistance Program to provide assistance to income-qualified homebuyers.

Strategy 8.2.1.6 Continue to increase education and awareness of the County's housing assistance programs.

Strategy 8.2.1.7 Examine if a sliding scale fee structure for homebuyers below a certain income threshold is feasible.

Strategy 8.2.5.8 Consider development of financial literacy scholarships so that qualifying low and moderate income individuals that receive County funding can attend HUD-approved housing counseling.

Objective 8.2.2 Work with private and public agencies to increase affordable rental and homeownership opportunities.

Strategy 8.2.2.1 Explore opportunities to partner with non-profit housing advocates to provide more affordable housing options.

Strategy 8.2.2.2 Provide grants and technical assistance to non-profit agencies to assist with affordable housing programs.

Objective 8.2.3 Facilitate and promote land use policies that enable an increase in the supply of affordable housing in areas with adequate infrastructure.

Strategy 8.2.3.1 Promote increasing affordable housing options, including the supply of rental units, near job centers.

Strategy 8.2.3.2 Review County code to determine if there are regulatory barriers to development of affordable housing and manufactured housing.

Strategy 8.2.3.3 Further promote and consider expansion of existing opportunities for affordable housing such as the Accessory Dwelling Unit ordinance, Garage/Studio apartment ordinance, Special Exception for Medical Hardships, and/or the use of guest houses.

Strategy 8.2.3.4 Determine the challenges and opportunities that could be associated with allowing multiple, small units (such as tiny houses) on one lot and if found feasible, determine if code modifications are needed.

Strategy 8.2.3.5 Consider broadening the product type in zoning that allows fee-waivers for affordable housing to include multi-family housing.

Strategy 8.2.3.6 Consider revisiting zoning code to determine in districts where multifamily housing is currently a conditional use, if it should be made a permitted use if water and sewer are available.

Objective 8.2.4 Expand housing opportunities for persons with disabilities and the aging.

Strategy 8.2.4.1 Encourage universal design principles in new home construction and rehabilitation.

Strategy 8.2.4.2 Continue coordination with the Sussex County's Advisory Committee on Aging and Adults with Physical Disabilities to determine barriers and opportunities for the expansion of housing opportunities for persons with disabilities and the aging.

Objective 8.2.5 Expand housing opportunities for populations where English is a second language (ESL).

Strategy 8.2.5.1 Partner with advocacy groups such as La Esperanza to determine barriers and opportunities for the expansion of housing opportunities for ESL populations.

Strategy 8.2.5.2 Continue to implement the County's Language Plan.

Objective 8.2.6 Create more opportunities for new types of housing when compatible with surrounding land use and development.

Strategy 8.2.6.1 Review zoning code to determine if modifications are needed to permit new styles of housing such as tiny house or co-housing construction to be developed in the code as they appear.

Goal 8.3: Affirmatively further fair housing choice in the County.

Objective 8.3.1 Ensure that the County's zoning and land use decisions do not discriminate against persons based on race, color, religion, national origin, disability, familial status, sex, creed, marital status, age, or sexual orientation.

Strategy 8.3.1.1 Evaluate current County code on an on-going basis to determine if any regulatory barriers exist that impede the development of multi-family and affordable housing.

Strategy 8.3.1.2 Continue to collaborate with developers through the County Planning Office's pre-submission meetings to support the expansion of affordable housing.

Strategy 8.3.1.3 Promote the use of the DSHA's Areas of Opportunity maps when making land use decisions and identifying housing strategies for different areas of the County.

Strategy 8.3.1.4 Encourage members of appointed boards and commissions, elected officials, and County staff to attend fair housing training.

Strategy 8.3.1.5 Partner with stakeholders to provide training and technical assistance to municipal leaders and others about fair and affordable housing.

Strategy 8.3.1.6 Market available programs such as assessment fee deferrals for non-profits for development projects.

Strategy 8.3.1.7 Increase diversity in appointments for land-use boards, commissions, and advisory groups.

Chapter 9. ECONOMIC DEVELOPMENT

Economic Development Vision: *To create the conditions for self-sustaining, long-run growth in Sussex County.*

9.1 INTRODUCTION

Historically, agriculture and forestry have been the dominant forces in Sussex County's economy. With over \$3.5 billion in total output¹, the agricultural sector continues to be a large component of Sussex County's economy. However, recently the tourism sector has been gaining ground. For example, in 2015, tourism generated over \$1.8 billion in direct tourism sales (Visit Southern Delaware, 2016). Tourism is concentrated in the eastern part of the County along the coast, while agriculture activities tend to concentrate in the western part of the County. While there are some commonalities between the needs of each industry, they are very different industries. This has led to a dichotomy between the economic development needs of the eastern and western parts of the County.

Sussex County's manufacturing industry continues to diversify. In addition to food manufacturing and processing, major manufacturing sectors include aeronautical, construction, craft brewing/bottling, fabrication and pharmaceutical. Recent developments include Perdue Agribusiness's plans to build corporate offices in Delmar, upgrades to the Allen Harim plant in Harbeson, and one of Sussex County's most iconic brands, Dogfish Head, continuing to expand within in the County.

Sussex County's location, low taxes, temperate weather, and beautiful landscapes, have helped to make it an attractive home for new residents. As discussed in the Population and Demographics Chapter, growth in Sussex is outpacing the state and other counties in the region. While the County is growing, it is also getting older as more and more retirees decide to call the County home. As a result, healthcare is exploding in Sussex County. Along with three expanding hospitals, there are extended-care and extended living facilities across the County.

The growing population is also putting pressure on the agriculture sector. As more and more farmland is converted to residential developments, more and more residents are living closer to active agricultural operations and these operations continue to be larger and more productive. This has led to increased conflicts between residents and farmers. The County needs to balance the concerns of residents with needs of one of its most important industries.

There are six key ingredients for economic development – available land, skilled and available labor, high speed internet (fiber optic), natural gas, affordable electricity, and water/sewer. With expansion of the Sussex County Industrial Park there will be a number of shovel ready sites that have access to natural gas and fiber optic infrastructure. With Del Tech and Sussex Tech, Sussex County has the job training infrastructure in place to meet the needs of current and

¹This includes over \$1 billion in direct agricultural (on-farm) activities, \$2.5 billion in value-added processing and food manufacturing, and over \$30 million in agricultural support activities.

future employers. While the natural gas and fiber optic infrastructure within the County has expanded over the last couple years and will continue to expand, the lack of availability in some parts of the County is a hindrance to economic development. Many parts of Sussex County also enjoy access to low cost electricity, which should make the County attractive for large electricity users.

An advantage for Sussex County is its location. The County is within a 2-hour drive of major cities, including Philadelphia, Baltimore and Washington, D.C. – all are less than 100 miles away. Nearly 25 percent of the United States' population is within an eight-hour drive of Sussex County, putting customers and markets easily within reach. From a commercial perspective, Sussex County has the foundation for good transportation infrastructure. Three four-lane highways link Sussex County to regional interstates, including I-95. Local rail lines feed into the Norfolk Southern rail system, with connectivity to the regional CSX network. The Nanticoke River links Sussex County to the Chesapeake Bay. The Delaware Coastal Airport provides connection to number of destinations.

In order to best understand the potential future growth of Sussex County, it is essential to analyze Sussex County's demographic and economic trends, compare them to neighboring counties, and contextualize how Sussex County fits into the larger region. This plan chapter begins with a discussion of Sussex County's two most iconic sectors – agriculture and tourism. It then includes a discussion of the County's economy in general, including some data and statistics on the structure of economy and workforce and background information on economic development resources. The chapter concludes by listing the economic development goals and objectives and offering strategies to achieve the goals.

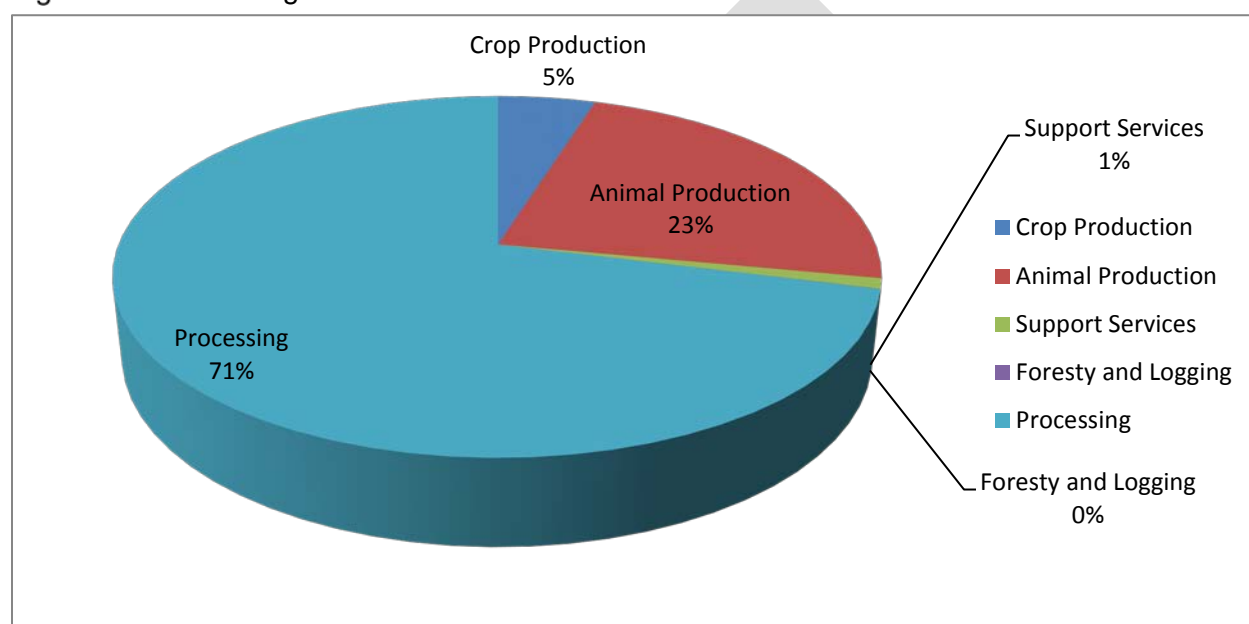
9.2 AGRICULTURE AND FORESTRY

9.2.1 Agriculture

Agriculture is an important sector for the overall economy of Sussex County and it provides a strong economic foundation. Sussex County is the foremost agricultural county in Delaware, with over 277,000 acres of farmland – over 100,000 more acres than Kent County and more than Kent and New Castle Counties combined. The impact of the agricultural sector in the County goes beyond the production and employment that occurs on the farms, but it also includes the food manufacturing sector, such as poultry and vegetable processors, and support activities. The agricultural industry has experienced a number of changes in recent years – consolidation of small farms, the introduction of innovative production technologies, changes in consumer demands and tastes, and others. Given the importance of agriculture to Sussex County, it is important to have an understanding of the size of the industry and to take a look at recent trends in the industry.

All told the agriculture sector in Sussex County is responsible for over \$3.5 billion in direct economic activity², including over \$1.0 billion in on-farm activities, \$2.5 billion in value-added processing, and over \$30 million in agricultural support industries. The value-added food processing sector accounts for over 72 percent of the total direct economic output of the industry, with animal production accounting for an additional 23 percent and crop production 5 percent. All told, the combined agricultural sector amounts to over 20 percent of the total output of all industries in Sussex County.³ The combined agricultural sector (on-farm production, food processing, and support) directly employs over 9,800 employees and supports over \$400 million in labor income.

Figure 9.2-1 Direct Agricultural Activities



Source: IMPLAN (2017)

The impact of the agricultural sector in Sussex County goes far beyond the direct impacts described above. The indirect effects measure the effect of the agricultural sector on non-agricultural industries that supply inputs and services used by the agricultural industry. The induced effects measure the impact of expenditures by households that receive income from the agricultural sector either directly or indirectly. A study by the University of Delaware's College of Agriculture and Natural Resources⁴ estimated that the output multiplier for the combined

² The \$3.5 billion is based on analysis of data for Sussex County obtained from the IMPLAN economic modeling system for 2015.

³ Based on data from the IMPLAN economic modeling system, the total output of all industries in Sussex County was \$16.8 billion in 2015.

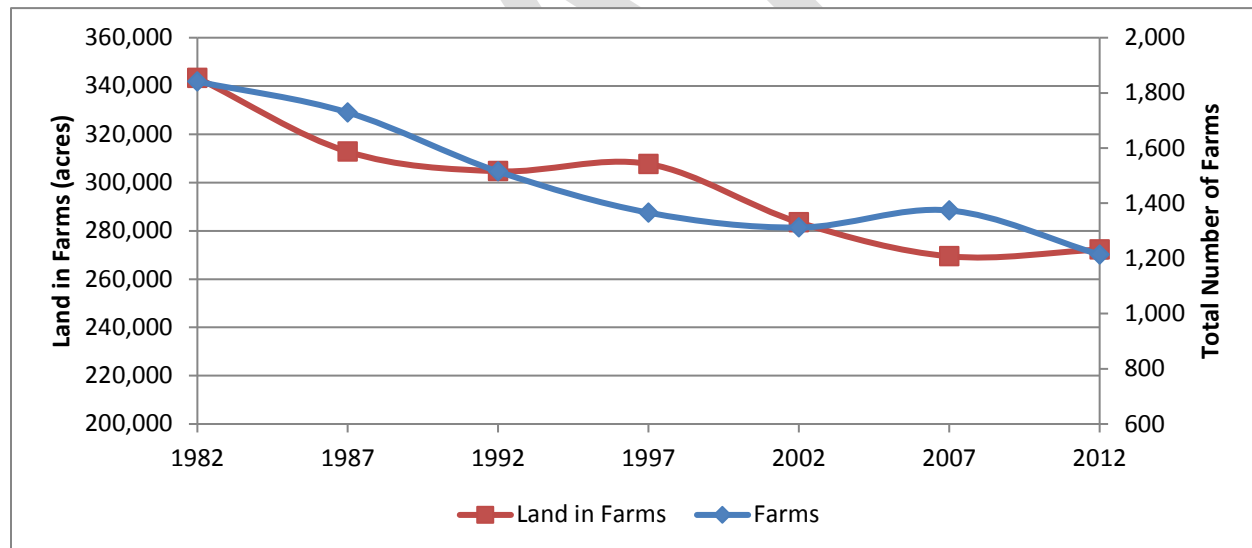
⁴ Awokuse, 2010.

agricultural sector in Sussex County was \$1.29⁵ – every dollar in direct output supports \$0.29 in indirect and induced impacts within the County. This results in a total economic impact of \$4.5 billion (\$3.5 billion direct economic output and over \$1.0 billion in indirect and induced economic output). This represents over 27 percent of the economic output of the County.

The employment multiplier for the combined agricultural sector is 1.60 – for every direct job 0.60 indirect and induced jobs are supported. All told, the agriculture sector supports nearly 15,700 total jobs. The sector supports over \$640 million in total labor income which amounts to a labor income multiplier of \$1.61.

The total acres of land in farms have steadily been decreasing over the last 30 years from 343,000 acres in 1982 to 272,000 in 2012, a decrease of over 20 percent. Over the same period the number of farms⁶ has decreased from 1,841 in 1982 to 1,241 in 2012, a decrease of 34 percent (Figure 9.2-2). This suggests that the trend of consolidation of smaller family farms into larger farm holdings that was witnessed during the 1997 to 2002 period has continued and will likely continue into the foreseeable future. However, the remaining farms have become more productive. According to USDA Agricultural Census data, average productivity per farm in Sussex has increased over 70 percent from 1992 to 2012.

Figure 9.2-2 Total Acres of Land in Farms and Total Number of Farms 1982-2012



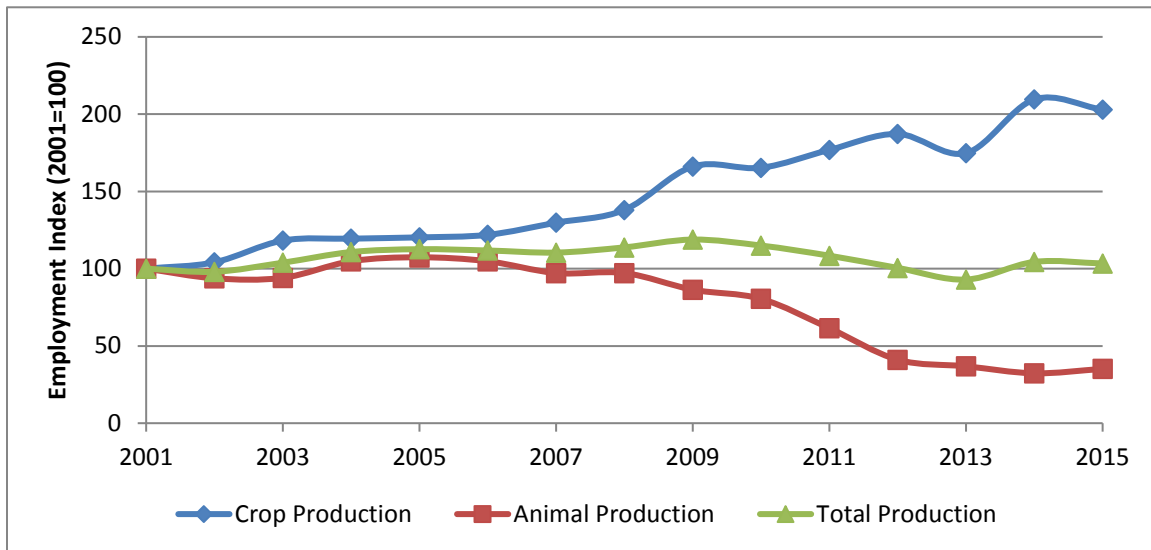
Source: USDA Agricultural Census (1982, 1987, 1992, 1997, 2002, 2007, 2012)

⁵ For comparison purposes, the equivalent multiplier for the tourism sector is \$1.20 (every dollar of direct spending in the tourism sector generates \$0.20 of additional economic output. The agricultural sector produces \$0.09 of additional economic activity compared to the tourism sector.

⁶ The United States Department of Agriculture's (USDA) Census of Agriculture defines a "farm" as any place from which \$1,000 or more of agricultural products were produced and sold in a year. Please see: https://www.agcensus.usda.gov/Publications/2012/Full_Report/Volume_1_Chapter_1_US/usv1.pdf for additional information.

Total on-farm agricultural employment has remained relatively flat over the 2001-2015 period; however, there have been some changes in the distribution of employment across agriculture sectors. Employment in crop production has more than doubled, while employment in animal production has declined by nearly 65 percent (Figure 9.2-3).⁷

Figure 9.2-3 Change in Agricultural Employment, 2005-2015, Sussex County, DE⁸



Source: Bureau of Labor Statistics (BLS) (2016)

The decrease in employment in the animal production sub-sector has also coincided with a significant increase in the average production per worker. The tremendous gains in efficiency have resulted in fewer producers and farm laborers, working on larger farms, producing more. The gains in production have come through innovations, better technology, application of biological scientific discoveries, and increased productivity (Awokuse, 2010).

As discussed above, the agriculture sector in Sussex County goes beyond the on-farm employment. In order to get a full accounting of the impacts of agriculture, the impact from the processing of agriculture products should also be considered. Employees that work at the poultry and vegetable processing facilities located throughout Sussex County are not counted as agricultural employees, but are rather considered to be part of the Food Manufacturing sector, which falls under the larger manufacturing sector.

In 2015 the total number of manufacturing jobs in Sussex County was 9,652 and the food manufacturing sector accounted for 6,641 (nearly 70 percent) of the manufacturing jobs. Since

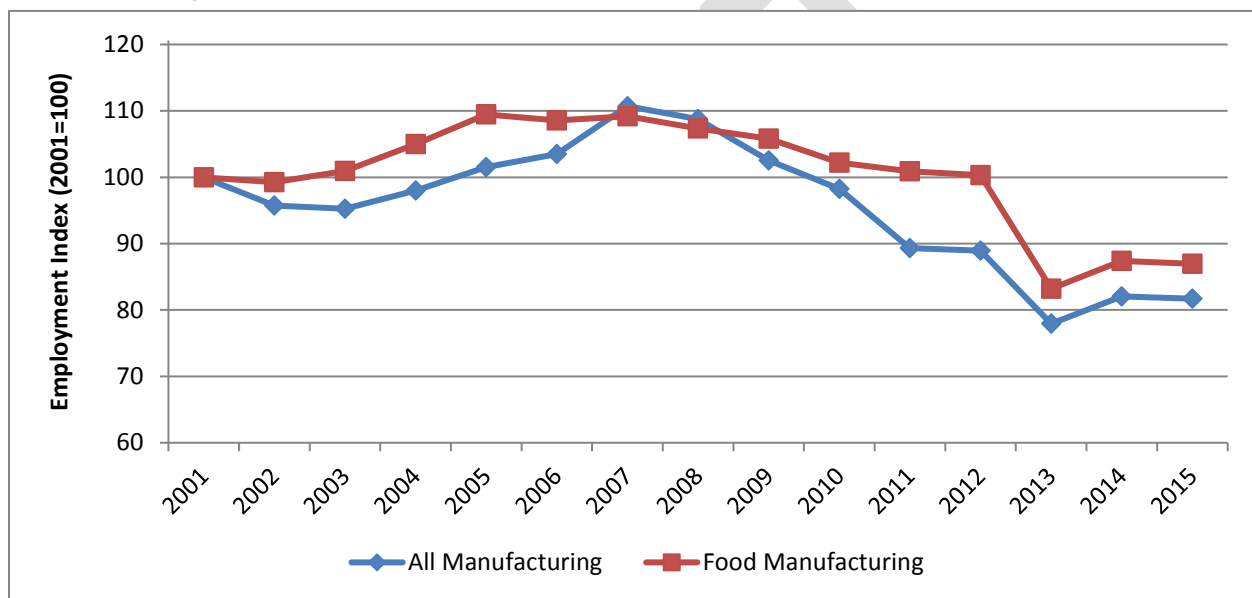
⁷ It is important to note that there are many unfilled job vacancies that are not accounted for in Figure 10.2-3.

⁸ The data is presented as an index value where 2001 is equal to 100. An index can help visualize industry employment growth year-over-year. An index value of 100 means that the industry has the same amount of employment as it did in 2001, a value over 100 means that employment has increased compared to 2001, and a value of less than 100 means that employment in the sector has declined compared to the base year.

2001, food manufacturing jobs have accounted for an average of 68 percent of manufacturing jobs.

As illustrated in Figure 9.2-4, employment in the food manufacturing sector reached a peak in 2005 and has been declining since. The sector experienced a big decline between 2012 and 2013 as a result of the closing of the Pinnacle Foods plant in Millsboro – by 2013 employment in the sector was 83 percent of the 2001 level. The sector began to recover in 2014 and 2015, although employment is still below its 2001 level – employment in 2015 was at 87 percent of the 2001 level.

Figure 9.2-4 Change in Manufacturing and Food Manufacturing Employment, 2001-2015, Sussex County, DE⁹



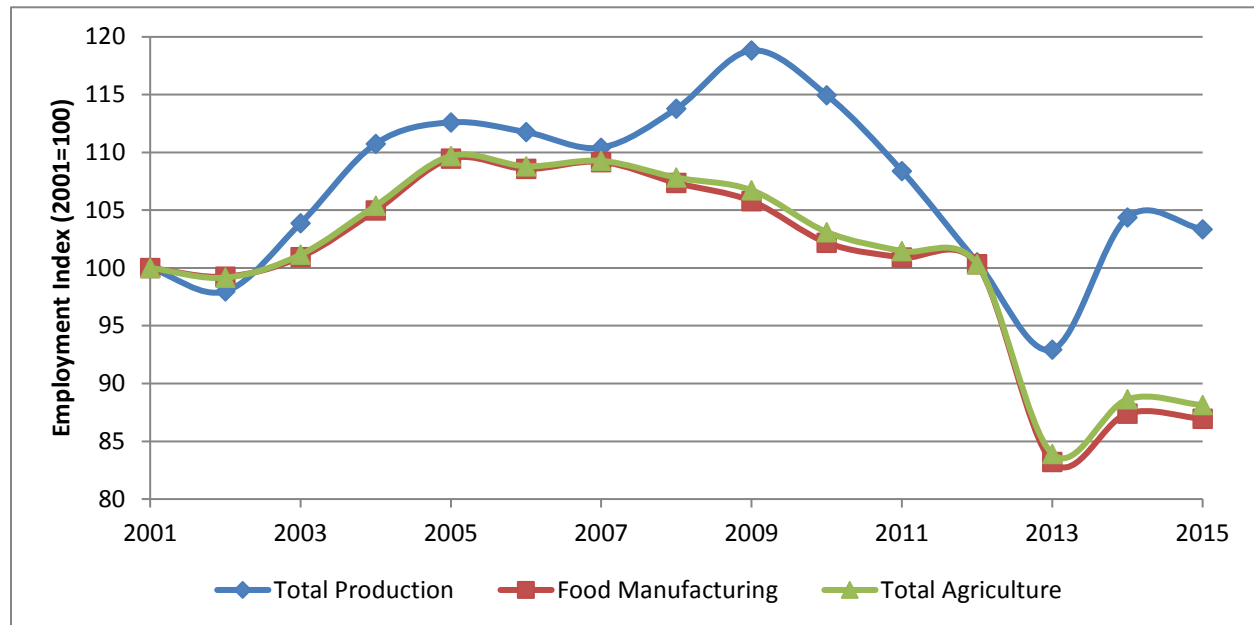
Source: Bureau of Labor Statistics (BLS) (2016)

Figure 9.2-5 summarizes the trends in employment for the agricultural production sectors (animal and crop), the food processing sectors, and the total employment in the agricultural sector. Total employment in the combined agricultural sector closely tracks the employment in the food processing sector. This is not surprising when one considers the fact that the food processing sector generates over 70 percent of the output of the sector (Figure 9.2-1). Given the importance of the food processing sector, the County needs to ensure that there is adequate land available for the expansion of the industry and that the necessary infrastructure is available to support the industry, this includes removing unnecessary regulatory and administrative hurdles, the availability of natural gas, electricity, high-speed internet. In addition, the County should consider establishment of a voluntary agri-business district or overlay zone that is

⁹ The data is presented as an index value where 2001 is equal to 100. An index can help visualize industry employment growth year-over-year. An index value of 100 means that the industry has the same amount of employment as it did in 2001, a value over 100 means that employment has increased compared to 2001, and a value of less than 100 means that employment in the sector has declined compared to the base year.

centered around existing infrastructure in AR1 zoning in western Sussex that includes regulations that make it permissible to operate livestock, poultry, and agricultural processing and technology operations.

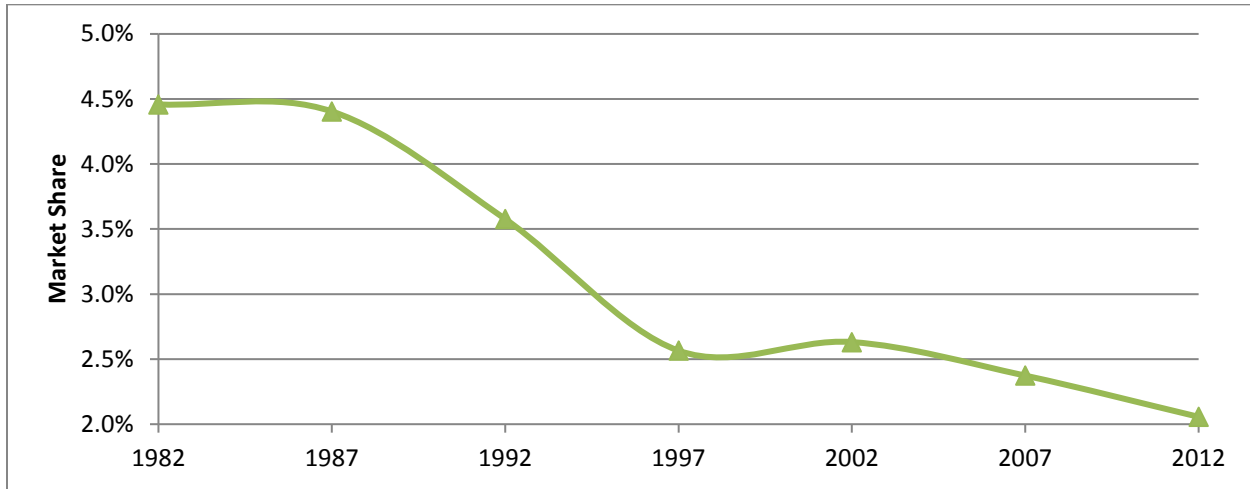
Figure 9.2-5 Change in Total, Food Processing and Agricultural Production Sector Employment, 2001-2015, Sussex County, DE



Source: Bureau of Labor Statistics (BLS) (2016)

The agricultural sector, both production and processing, is highly concentrated in the poultry sector. Although producers of dairy, beef, and pigs exist in the County, over 80 percent of the output of the production sector is related to production of chickens. Similarly, while vegetable and seafood processors also exist, over 83 percent of the output in the food processing sector is related to the poultry processing sector. While the County is ranked number one in the Country for poultry production in 2012, the national dominance of the industry has been declining over time. As illustrated in Figure 9.2-6, the market share of the County has declined from over 4.5 percent in 1982 to 2.1 percent in 2012.

Figure 9.2-6 Change in Poultry Production Market Share 1982-2012



Source: USDA Agricultural Census (1982, 1987, 1992, 1997, 2002, 2007, 2012)

Including both the direct and indirect/induced impacts, the combined agricultural sector is responsible for over 27 percent of the total output of the sector. Given the importance of the poultry sector, in terms of both production activities and processing, the County should take steps to both maintain the health of poultry industry while at the same time taking steps to encourage the diversification of both the production and processing sectors. Taking steps to help diversify both the production and processing sectors will help ensure that the agriculture sector is able to withstand any external shocks to the poultry sector.

Sussex County is also in the top two percent nationally for the value of vegetables sold and is also a key regional leader in the production of soybeans, corn, and wheat. The County needs to ensure that there is adequate land available for the expansion of the industry and that the necessary infrastructure is available to support the industry. In addition, the average age of farmers in Sussex County in 2012 was 58.4 years old. In order to help preserve the sector into the future, County should explore ways to encourage younger people to enter the farming sector.

9.2.2 Forestry

Over the last two decades, forest land area in New Castle and Kent Counties has remained relatively stable, while significant losses of forest land have occurred in Sussex County. The large loss of forest land in Sussex County is one of the driving forces behind the net-loss of forests in Delaware (US Forest Service, 2011). It is also one of the driving factors in the decline of the forestry sector in the County.

While the forestry industry in Sussex County has never been large¹⁰, the industry is an important sector for the County. The harvesting and processing of forest land produces a stream of income shared by timber owners, managers, foresters, loggers, truckers, and processors. A stable robust and diverse market for all forest products contributes to Delaware's economy and helps ensure long term sustainability of the industry. Land owners must have the ability to generate income from their forestland; otherwise they are much more likely to convert their forestland to other non-forest uses, such as residential development.

There has been virtually no new investment in (primary) wood processing industries in Delaware. Delaware only has a handful of small sawmills with no paper mills or other solid wood product industries. The existing sawmills are small, use primarily low-grade hardwood logs, and are family-operated. Besides the addition of a few small specialty mills, new investment in either the existing sawmills or the development of new sawmills has not occurred. Furthermore, the number of sawmills in surrounding states that purchase Delaware timber continues to shrink – particularly pine sawmills. In recent years, at least four pine sawmills have closed on the Delmarva Peninsula; this has put the forestry sector in Sussex County at a geographic disadvantage¹¹ as loggers need to transport the wood further and further for processing, which increases the costs. This has produced a dramatic decrease in timber demand from Delaware in general, and Sussex County in particular.

The loss of processing facilities makes it harder for landowners to find markets for the timber harvested from management activities on their forest land. Currently Delaware sawmills only process about six percent of industrial roundwood that is harvested in the state. In addition, pulp mills in other states receive more than half of the total industrial roundwood harvested in Delaware. While there have been some additions to the processing capacity of Sussex County, in the form of a small specialty mill and a biofuel mill, there may be an opportunity and sufficient timber to open a new roundwood processing facility Sussex County (Delaware Forest Service, 2010). This will provide Sussex County landowners with an outlet to sell timber and will also allow the County to capture the processing jobs and economic value that is currently going to other states.

Bio-energy is a developing market that could provide new demand for low-quality hardwoods, but Delaware's existing incinerator law severely restricts the use of wood for bioenergy purposes. The development of the bio-energy sector, including cogeneration and pellet mills, could result in better utilization of forest resources and provide landowners with another market.

¹⁰ It is important to note that size of the forestry industry in Sussex County does not meet the minimum disclosure requirements for BLS, which means that there are too few forestry industry establishments and employees to permit the release of data. As such, we are unable to obtain data on the employment of forestry sector in Sussex County either currently or overtime. However, IMPLAN estimates the size of commercial logging industry at 30 employees and sawmill employment at 14.

¹¹ Most sawmills will procure logs within a 75-100 mile radius.

The price that wood from Sussex County is able to sell for is one of the limiting factors to growth of the forestry sector in Sussex County. As such, saw mills and wood processing facilities will likely require some type of economic incentives, such as tax breaks, subsidies, or other incentives, in order to be economically viable. The distance from Sussex County forest tracts to the remaining sawmills puts Sussex County at a further disadvantage, thereby making it difficult for Sussex County landowners to sell their timber. The addition of additional processing capacity in Sussex County will reduce this distance and make it more viable for land owners to sell their timber, thereby creating additional forestry and logging jobs.

9.3 TOURISM

Rehoboth Beach is commonly known as the “Nation’s Summer Capital.” Tourists to Sussex County spent \$1.8 billion in 2015, an increase of over 4.2 percent from 2014 (Visit Southern Delaware, 2016). The tourism sector in Sussex County employed over 19,000 individuals in 2015, the most recent year for which data is available. Employment in the sector has increased over 37 percent between 2003 and 2015.

Tourism spending in Sussex County has a multiplier effect of 2.2 which means that for every dollar spent directly by a visitor, it generates \$1.20 in additional economic activity in the local economy (Visit Southern Delaware, 2016). In 2015, this resulted in \$2.16 billion in additional economic activity.

While the beaches are probably the biggest draw for tourists to Sussex County, they are not the only tourist attraction that the County has. Given the size of the agriculture industry, there is a large potential for agro-tourism in the County. This will help draw tourists to the County during the off-season and also provide farms as well as tourism related business (restaurants and hotels) with additional sources of revenue. The popularity and national recognition of Dog Fish Head Brewery is another tourist resource that Delaware can capitalize on.

In addition to generating economic activity, tourism has the potential to generate additional catalytic impacts. Tourism marketing drives broader economic growth by sustaining air service, creating familiarity, attracting decision makers, and improving the quality of life in a place. As a result, cities and states that prioritize destination marketing and coordinate these efforts with economic development initiatives have experienced significant site relocations and new investments as a direct result. Research has found that a 10 percent increase in a destination’s visitor-related employment relative to the U.S. average tends to be followed by a 1.5 percent rise in broader employment in the short-run (Oxford Economics, 2014).

The funding for destination marketing and promotion should be prioritized in light of the substantial dividends that it is capable of producing. Indeed, there may be few other investments which are capable of yielding such a broad set of impacts. Given the size, growth, and catalytic benefits of destination promotion, the further development of the leisure tourism market in the County should be a priority.

Sussex County needs to develop a brand that appeals to both visitors and investors. The County’s destination marketing organization (DMO), *Visit Southern Delaware*, should work together with the County Economic Development Office and County officials to ensure that the

Excite Sussex campaign and the efforts of the DMO complement each other. This would include the creation of the shared brand message and the communication of the brand through all channels of sales and marketing. This will provide consistency across the various organizations that are marketing the County (both economic development and tourism) and over time will likely produce the strongest results.

In addition, given the importance of a destination's characteristic to decision making of investors and site selection professionals, working with the DMO will help the Economic Development Office to strengthen economic development pitches by providing marketing content and experiences to visitors.

9.4 ECONOMIC BASE AND EMPLOYMENT

It is important to understand the types of businesses and industries in Sussex County that have prospered, are currently prospering, and are most likely to prosper in the future. This requires an understanding of the structure of the County economy and its strengths and weaknesses.

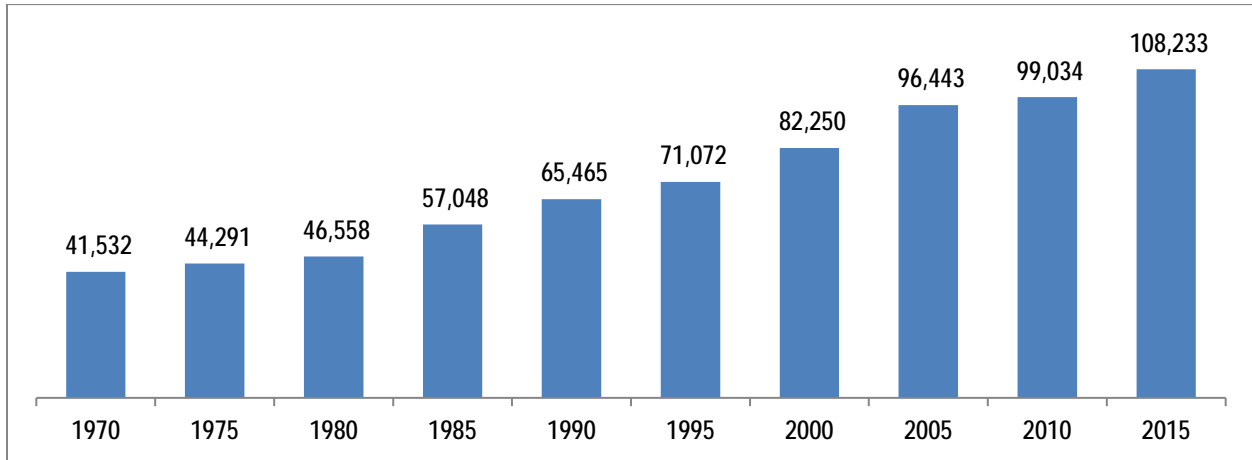
Sussex County's early industry and commerce were centered on agriculture and livestock. The local economy expanded due to the introduction of the railroads, which helped the development of inter-state trade and the local tourism industry.

Recently there has been significant private sector business investment in the County. This includes investments by the agricultural sector, such as the decision by Perdue Agribusiness to move their headquarters to Delmar. Investments by the private sector include the investment by Dogfish Head brewery in a new distribution center in Milton. By far the largest investments in Sussex County have been in the healthcare sector. This includes investments by Bayhealth in a new health campus near Milford; by Beebe Health in Lewes, and the expansion of the Peninsula Regional Medical Center in Millsboro, as well as other investments. All told, the over half billion-dollar investment in healthcare facilities will create hundreds of new healthcare sector employment opportunities.

9.4.1 Employment Trends

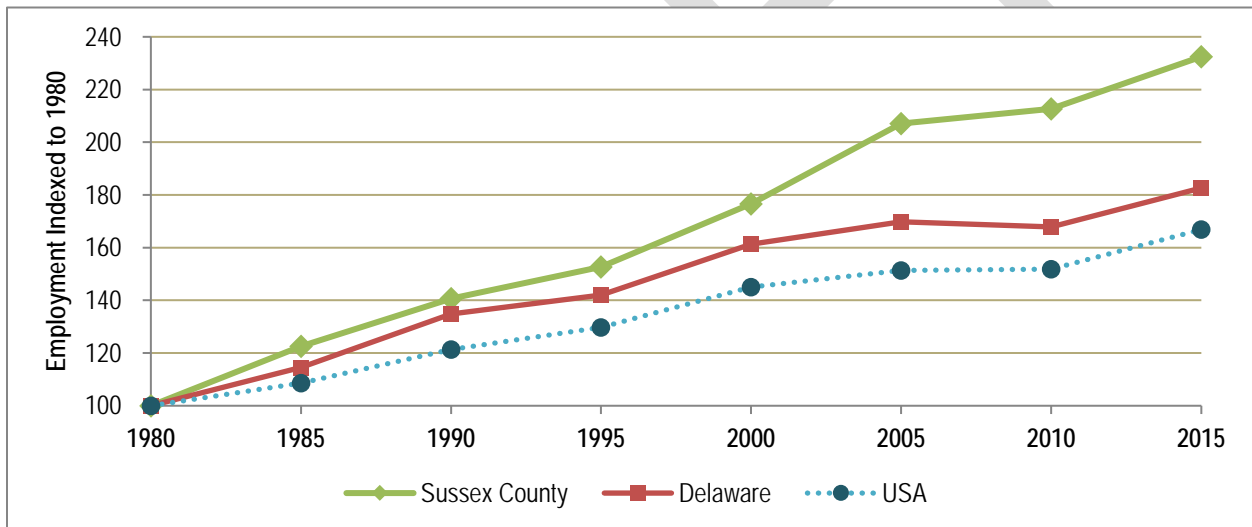
Over the last 45 years, the total number of jobs in Sussex County has grown steadily. The economy began to take off in the 1980s and growth slowed beginning in the mid-2000s. The County recently returned to strong growth as of 2015 (see Figure 9.4-1). As compared to state-wide and national trends, Sussex County's employment has grown at a faster rate, particularly since 2000 (see Figure 9.4-2). It is important to note that these job counts include both full time and part-time workers, and are not comparable to the employment by industry discussed later in this section.

Figure 9.4-1 Total Jobs in Sussex County, DE, 1970 to 2015



Source: Bureau of Economic Analysis (2016)

Figure 9.4-2 Indexed Job Growth from 1980 to 2015, Sussex County Compared to the State of Delaware and the United States



Source: US Bureau of Labor Statistics (2016)

Since 1990, Sussex County's unemployment has generally fallen below both the rate of the entire United States and the State of Delaware. In 2010 the unemployment rate in Sussex County was 8.5 percent, well below the national level of 9.6 percent and on-par with the state. The County's unemployment rate has fallen steadily since 2010, in line with national and state-wide trends.

9.4.2 Employment by Industry

Currently, the largest employment sector in the County is leisure and hospitality, followed by retail trade, education and healthcare, and manufacturing (see Table 9.4-1). The leisure and hospitality sector has experienced strong growth of over 5 percent per year from 2010 to 2016, while the education and health care sector has grown nearly 4 percent per year. Professional,

business and IT services have also had strong growth over 2010 to 2016, growing nearly 6 percent per year over this period. Several industries have contracted since 2010, including finance, insurance, and real estate and manufacturing. Overall, Sussex County's employment grew at nearly 2 percent per year from 2010 to 2016.

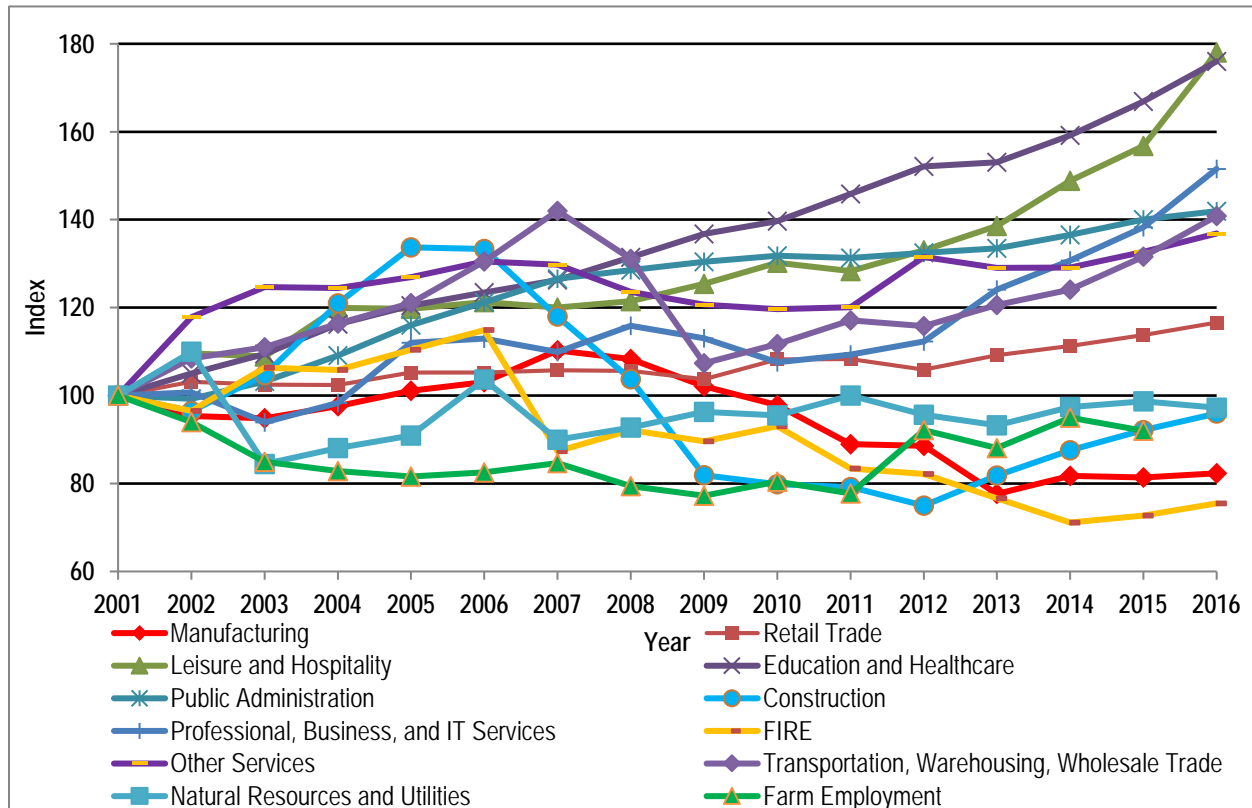
| Table 9.4-1 Employment by Industry Sector, Sussex County, DE | | | | | | |
|---|------------|--------|--------|--------|--------------------|---------|
| INDUSTRY SECTOR | TOTAL JOBS | | | | CAGR ¹² | |
| | 2001 | 2005 | 2010 | 2016 | 2005-10 | 2010-16 |
| Manufacturing | 11,858 | 11,989 | 11,601 | 9,765 | (0.5%) | (2.8%) |
| Retail Trade | 10,657 | 11,217 | 11,537 | 12,427 | 0.5% | 1.2% |
| Leisure and Hospitality | 7,934 | 9,498 | 10,330 | 14,125 | 1.4% | 5.4% |
| Education and Healthcare | 6,593 | 7,943 | 9,207 | 11,604 | 2.5% | 3.9% |
| Public Administration | 6,053 | 7,022 | 7,979 | 8,592 | 2.2% | 1.2% |
| Construction | 4,705 | 6,291 | 3,758 | 4,514 | (8.2%) | 3.1% |
| Professional, Business, and IT Services | 4,455 | 4,991 | 4,792 | 6,752 | (0.7%) | 5.9% |
| FIRE (Finance, Insurance, Real Estate) | 4,238 | 4,679 | 3,941 | 3,198 | (2.8%) | (3.4%) |
| Other Services | 1,826 | 2,318 | 2,185 | 2,499 | (1.0%) | 2.3% |
| Transportation, Warehousing, Wholesale Trade | 2,342 | 2,834 | 2,617 | 3,299 | (1.3%) | 3.9% |
| Utilities | 204 | 288 | 372 | 339 | 5.25% | -1.84% |
| Farm Employment | 2,042 | 1,666 | 1,642 | n/a | (0.2%) | n/a |
| Total | 63,950 | 71,582 | 70,780 | 77,988 | (0.2%) | 1.6% |

Source: State of Delaware Department of Labor (2016)

An index can help visualize industry employment growth year-over-year beginning in 2001 through 2016. An index value of 100 means that the industry has the same amount of employment as it did in 2001, a value over 100 means that employment has increased compared to 2001, and a value of less than 100 means that employment in the sector has declined compared to 2001 (see Figure 9.4-3). Looking back to 2001, Sussex County employment has increased in a majority of the industry sectors with the exception of housing-related industries (finance, insurance, and real estate and construction) and other goods producing industries such as farming, manufacturing, and natural resources and utilities.

¹² Compound Average Growth Rate (CAGR) The compound annual growth rate (CAGR) is the mean annual growth rate over a specified period of time. It essentially describes the rate at which an employment would have grown if it had grown at a steady rate.

Figure 9.4-3 Sussex County Industry Employment Index



Source: Delaware Department of Labor (2016)

The County's economy is still heavily reliant on the agriculture and food industry; many of the largest employers in Sussex County are in the agriculture and food processing industry, including Mountaire Farms, Allen Harim Foods LLC, Dogfish Head Brewery and Perdue Farms. Today, the fastest growing sectors of the economy are healthcare, agriculture/food processing, and manufacturing. See Table 9.4-2 for a full list of Sussex County's top employers.

| Table 9.4-2 Top Sussex County Employers | | |
|---|-----------------------|-----------------------------|
| Employer | Location | Industry |
| Allen Harim Foods LLC | Seaford, Harbeson | Agriculture/Food Processing |
| Aloft Aero Architects | Georgetown | Manufacturing |
| Avalanche Industries | Selbyville | Communications |
| Bayhealth Milford Memorial | Milford | Healthcare |
| Beebe Healthcare | Lewes | Healthcare |
| Burris Logistics | Milford | Logistics |
| Cheer, Inc. | Georgetown | Healthcare |
| Delaware Electrical Cooperative | Greenwood | Electric Utility |
| Delaware Technical & Community College | Georgetown | Education |
| Dogfish Head Brewery | Milton | Agriculture/Food Processing |
| Genesis Healthcare | Multiple | Healthcare |
| Indian River School District | Selbyville | Education |
| INVISTA | Seaford | Manufacturing |
| M&T Bank/Wilmington Trust | Multiple | Banking Services |
| Merck Animal Health | Millsboro | Poultry Chemicals |
| Mountaire Farms | Millsboro, Selbyville | Agriculture/Food Processing |
| Nanticoke Memorial Hospital | Seaford | Healthcare |
| NRG Energy Center | Dagsboro | Electric Utility |
| Perdue Farms (Perdue Foods and Perdue Agribusiness) | Seaford | Agriculture/Food Processing |
| Schell Brothers | Rehoboth Beach | Home Builder |
| SoDel Concepts | Multiple | Leisure & Hospitality |
| State of Delaware | Multiple | State Government |
| Sussex County | Multiple | County Government |
| Trinity Logistics | Seaford | Logistics |
| Walmart | Multiple | Retail |

Source: Delaware Business Times (2016)

Note that data on number of employees per employer is not available.

9.4.3 Employment Projections

The Delaware Department of Labor projects that over the 2014 to 2024 period, total employment in the County will increase by approximately 8,250 jobs. The compound annual growth rate of 1.1 percent (Table 9.4-3) is significantly lower than the compound annual growth rate that occurred over the 2010 to 2016 period, where growth occurred at a rate of 1.6 percent per year. All sectors are projected to increase employment. The sectors that will see the largest growth in terms of absolute number of employees as well as average annual growth include education and healthcare, leisure and hospitality, construction, retail trade, and professional, business and IT services. The large projected growth in healthcare and leisure and hospitality suggests that shift that has occurred in the County towards healthcare and

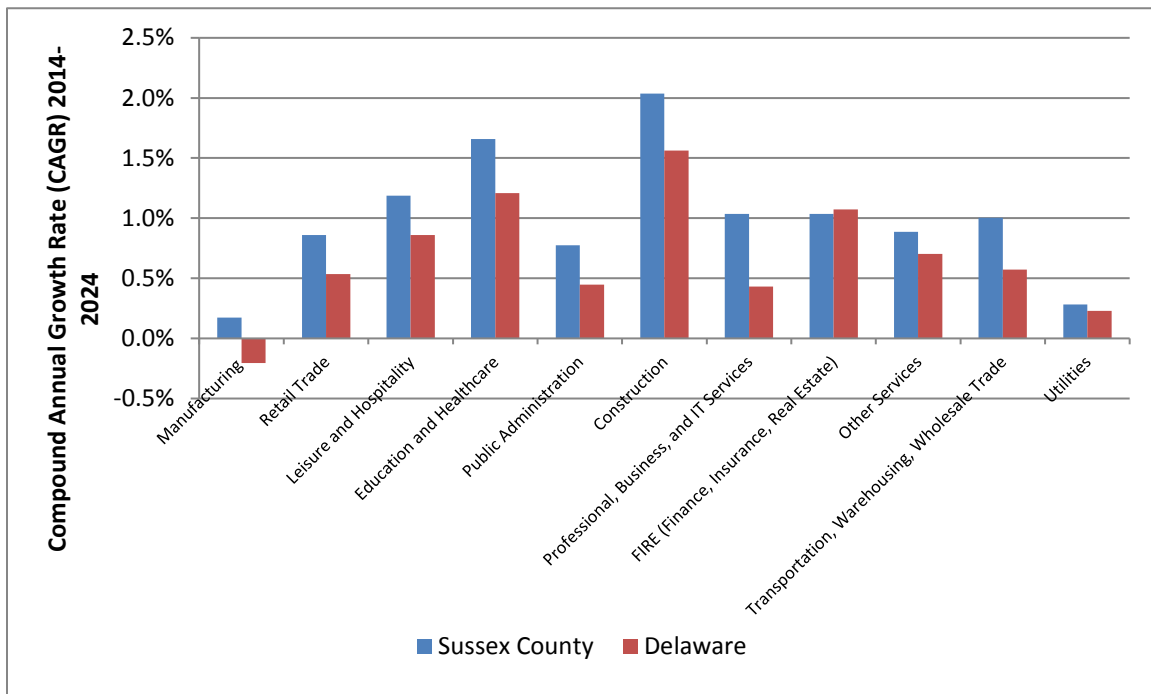
tourism will continue into the future.

| Table 9.4-3 Projected Employment Growth 2014-2024 by Industry Sector | | | | |
|---|---------------|---------------|--------------|-------------|
| | 2014 | 2024 | CHANGE | CAGR |
| Manufacturing | 9,700 | 9,870 | 170 | 0.2% |
| Retail Trade | 11,860 | 12,920 | 1,060 | 0.9% |
| Leisure and Hospitality | 11,810 | 13,290 | 1,480 | 1.2% |
| Education and Healthcare | 15,820 | 18,650 | 2,830 | 1.7% |
| Public Administration | 2,120 | 2,290 | 170 | 0.8% |
| Construction | 4,120 | 5,040 | 920 | 2.0% |
| Professional, Business, and IT Services | 5,340 | 5,920 | 580 | 1.0% |
| FIRE (Finance, Insurance, Real Estate) | 3,500 | 3,880 | 380 | 1.0% |
| Other Services | 4,330 | 4,730 | 400 | 0.9% |
| Transportation, Warehousing, Wholesale Trade | 2,380 | 2,630 | 250 | 1.0% |
| Utilities | 350 | 360 | 10 | 0.3% |
| Total | 71,330 | 79,580 | 8,250 | 1.1% |

Source: State of Delaware Department of Labor (2017)

Figure 9.4-4 compares the projected employment growth in Sussex County to statewide projected employment growth. Employment growth in Sussex County is projected to average 1.1 percent over the 2014 to 2024 period, while statewide is only expected to grow at an average rate of 0.80 percent. Similar to Sussex County, statewide all sectors are projected to increase with construction, transportation and warehousing, tourism, and professional and business service sectors in Sussex County projected to grow at a significantly faster rate than the state as a whole. The difference is manufacturing – in Sussex County manufacturing employment is projected to grow by 0.2 percent, while statewide manufacturing employment is expected to contract by 0.2 percent. Sussex County's manufacturing growth will be driven by food manufacturing, which is expected to add 250 jobs over the next ten years, followed by transportation equipment manufacturing (150 jobs), and beverage manufacturing (40 jobs).

Figure 9.4-4 Sussex County and Statewide Projected Employment Growth 2014-2024 by Industry



Source: State of Delaware Department of Labor (2016)

9.4.4 Sussex County Workforce

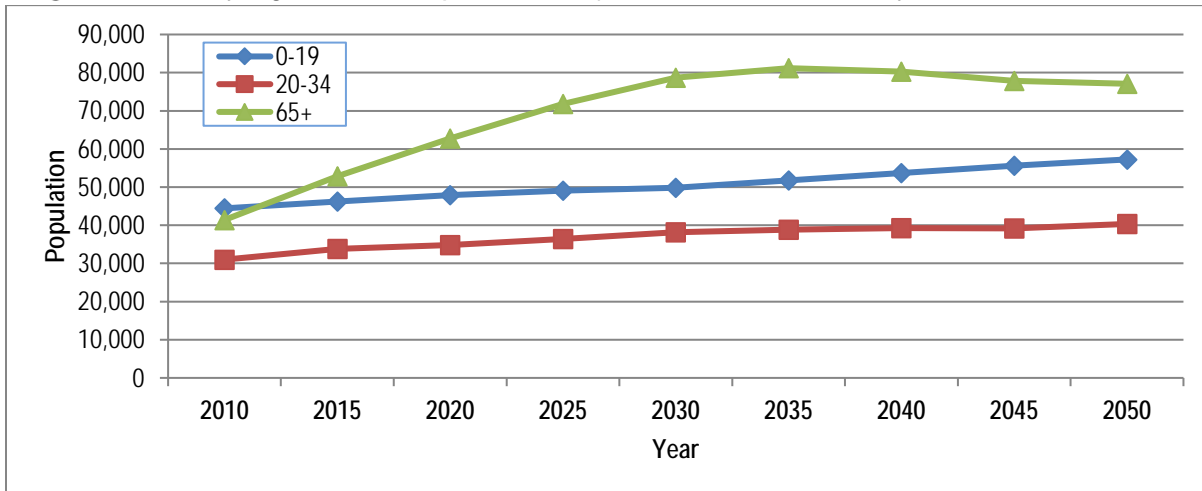
9.4.4.1 Key Workforce Demographics

There are several key demographic indicators useful for understanding the quality of Sussex County's workforce. This includes population projections of important age cohorts, educational attainment, poverty levels, and access to personal automobile.

Beginning with gross population numbers of permanent Sussex County residents projected by the Delaware Population Consortium, the total volume of key population cohorts is growing from 2010 through 2050. The 0-to-19-year-old population group will grow approximately 30 percent over the 40-year period, from 44,000 in 2010 to 57,000 in 2050, a compounded annual growth rate of approximately 0.6 percent over the period. The next relevant age cohort, those between the ages of 20 and 34, will increase by 30 percent as well, from 31,000 in 2010 to 40,000 in 2050 with a compounded annual growth rate of 0.7 percent over the 40-year period. The older, retiree population of those 65-years and older will grow much more significantly in the next few decades. From 2010 to 2035, this cohort grows at a rate of 2.7 percent per year, beginning in 2010 with 41,000 and landing in 2035 with 81,000 people. It is forecasted that this population will experience negative growth after 2035, ending 2050 with 77,000 individuals. See Figure 9.4-5 for additional detail.

The slow growth of the younger age-cohorts (0-19 year olds and 20-34 year olds) indicates that the County needs to work with local businesses and schools to develop employment opportunities to help retain and grow the millennial population.

Figure 9.4-5 Key Age Cohort Population Projections, Sussex County, 2010-2050

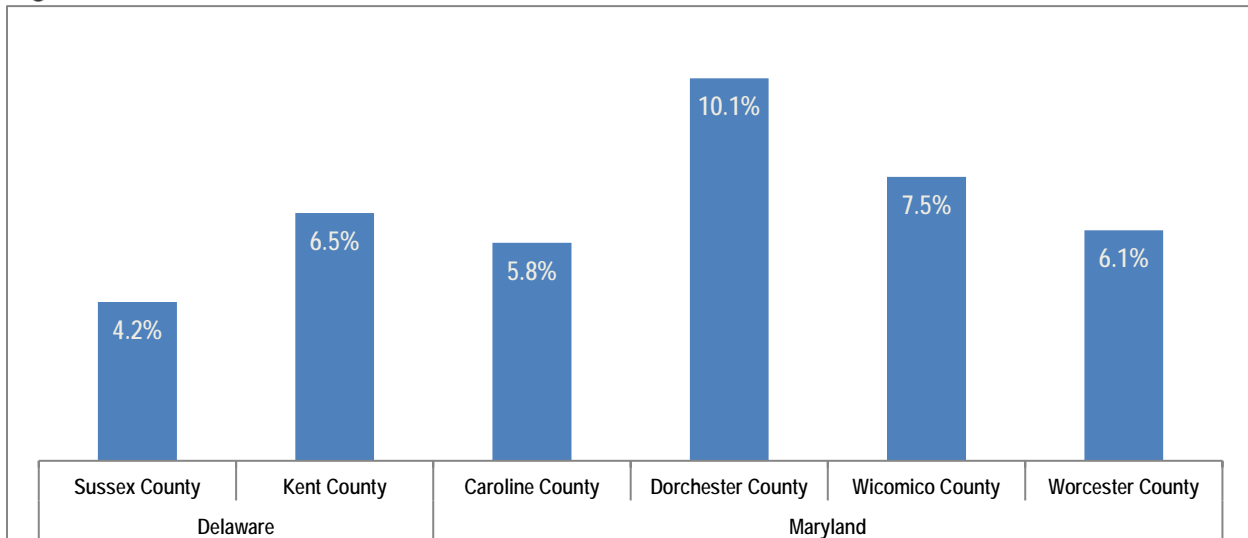


Source: Delaware Population Consortium (2016)

The type of work to be found in manufacturing plants and business organizations requires, and will continue to require, skills and knowledge beyond those acquired in high school. Over half of Sussex County's population has a High School Diploma or did not graduate from high school. This is comparable with neighboring counties. Twenty-two percent of Sussex County residents have a Bachelor's Degree or higher, higher than Caroline County's 12 percent but lower than Wicomico and Worcester Counties' 28 percent.

Another factor that affects workforce preparedness is access to a car. In counties like Sussex with limited public transportation options, access to a car is one of the main determinants of what jobs an individual can accept. According to the most recent data from the Census American Community Survey, four percent of the households in Sussex County lack access to an automobile. This is the lowest value as compared to neighboring counties, which generally have between six to seven percent of households without access to a car. Although nearly all households in Sussex County have access to a car, this does not mean that every member of the household has equal access to a car to get to work (Figure 9.4-6). Due to the current lack of comprehensive public transportation options in the County, this likely means that it may be difficult for some individuals to access employment opportunities. More information about public transportation in Sussex County can be found in the Mobility Chapter.

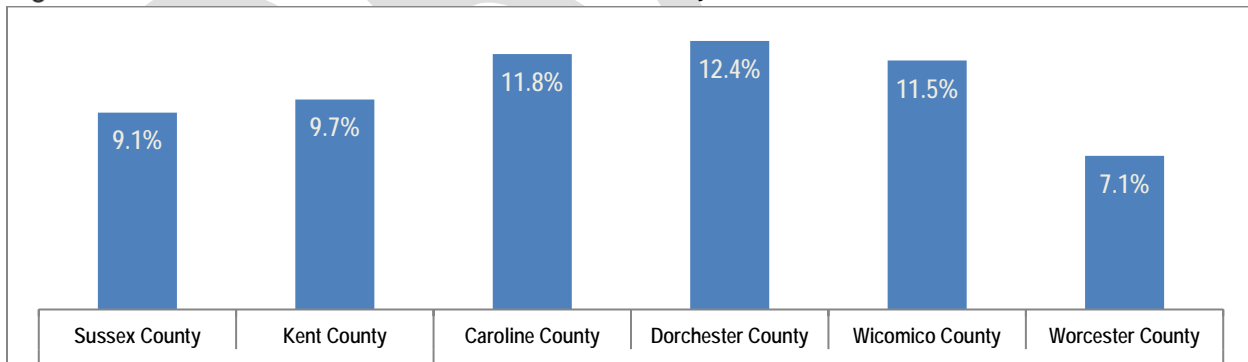
Figure 9.4-6 Percent of Households without Access to a Car, 2014



Source: US Census Bureau (2016)

Individuals at lower income levels are more likely to lack the relevant skills for many of today's job opportunities. There tends to be significant gaps in student achievement and educational attainment between income levels, with students from lower income families typically lagging behind their peers. In Sussex County, this is a concern despite the fact that only approximately nine percent of the population of the County is below the poverty line.¹³ Of the neighboring counties, Worcester County is lower at seven percent, and other counties are higher with Dorchester County the highest at twelve percent (see Figure 9.4-7).

Figure 9.4-7 Percent of Households below the Poverty Line, 2014



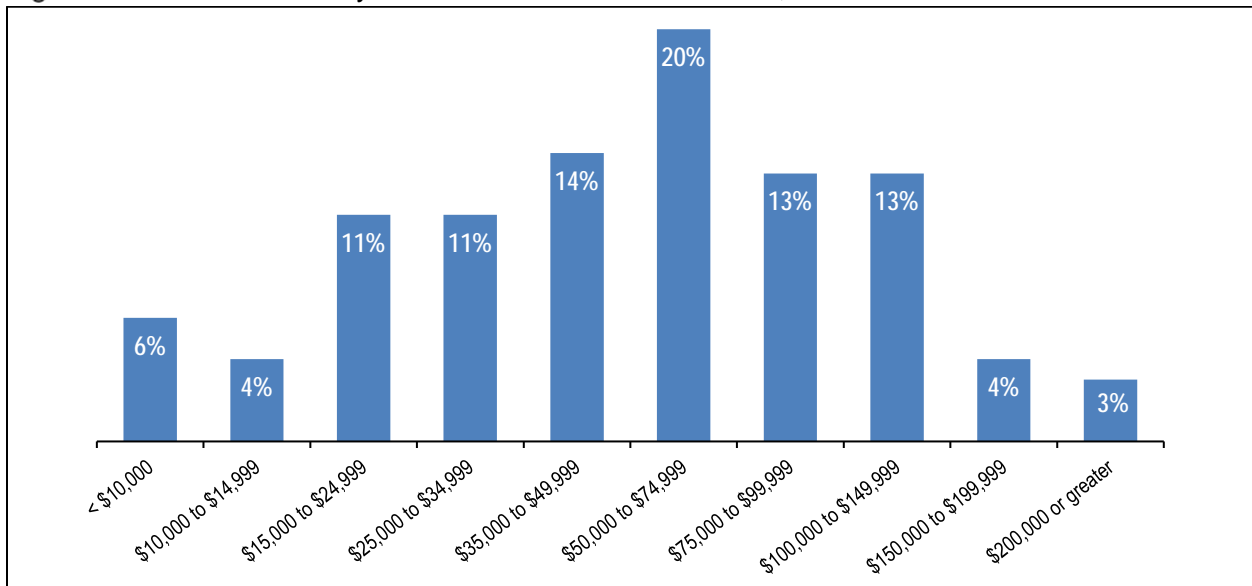
Source: US Census Bureau (2016)

In addition to examining the percent of the population living under the poverty line, it is useful to understand the total distribution of the population living at all income levels. As illustrated in

¹³ The poverty-level varies by family size and composition. For example, for a family of four with two children, the poverty level is \$24,339. See <https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html> for additional information.

Figure 10.4-8, twenty-one percent of the **households** in Sussex County have a **household income** of less than \$25,000 per year. Many of these households, while not all in poverty based on the government's definition, are likely to experience many of the same negative impacts as those individuals below the official line. More information on affordable housing is contained in the Housing Chapter.

Figure 9.4-8 Sussex County Household Income Distribution, 2014



Source: US Census Bureau (2016)

9.4.4.2 Commuting Patterns

The location of an individual's residence relative to where they work can have implications for economic development. For example, studies have shown that long daily commutes can make it more difficult to attract and maintain a reliable workforce and decreases employee productivity. In 2014, over 40 percent of the employed individuals living in Sussex County commuted out of the County for work, similar to many neighboring counties. This portion of the workforce was generally similar in 2005. All other neighboring counties saw a much larger share of their workforce commuting outside of the home county from 2005 to 2014. Caroline and Dorchester Counties in Maryland had three-quarters and two-thirds of workers commuting out of home county, respectively.

Employed residents of Sussex County traveled approximately 25 minutes to work on average, one way in 2014. Compared to neighboring counties, this amount is right in the middle, with employed residents of Wicomico County, Maryland traveling 22 minutes each way and residents of Caroline County, Maryland traveling nearly 34 minutes per way. The length of commutes for nearly all counties increased by a few minutes from 2000 to 2014.

For the nearly 40 percent of employed residents who work outside of Sussex County, the majority travel to other counties in Delaware and Maryland. Nearly 25 percent of employed

individuals in Sussex County commuted to another Delaware county, with 13 percent traveling to Kent County and 10 percent traveling to New Castle County. The remaining 20 percent commuted to one of the neighboring out of state counties, including Wicomico County, MD (5 percent), Worcester County, MD (3 percent), Dorchester County, MD (1 percent), and Caroline County, MD (1 percent), and 10 percent to other counties.

Sussex County had the lowest percentage of out-of-county residents holding jobs in Sussex County compared to neighboring counties. Thirty percent of workers in Sussex County live outside of Sussex County, down from 34 percent in 2005. Caroline and Dorchester Counties in Maryland have over 50 percent of their workforces living outside of those counties. Out of the 30 percent from outside Sussex County, 10 percent live in Kent County, 4 percent live in New Castle County, and 4 percent live in Wicomico County. The remaining 10 percent live in other counties in Maryland.

9.4.4.3 *Sussex County Occupation Clusters*

Occupation cluster analysis can offer insights into the talent base of the workforce that go beyond the relatively simple measure of educational attainment. In contrast to industry clusters that focus on what businesses produce, occupation clusters focus on the knowledge, skills, and abilities of the individuals who work for those businesses. Analysis can help identify which clusters of occupations provide the best opportunities for investment to build different types of skills, supporting existing and emerging industry clusters, and which occupation clusters represent a competitive advantage for the region.

As seen in Table 9.4-4, from 2001-2010, job growth occurred in all of the major occupation clusters in Sussex County except for agribusiness and food technology, public safety and domestic security, skilled production workers, engineering and related sciences, and natural sciences and environmental management. The postsecondary education and knowledge creation cluster has had the largest increase in employment, with employment in the cluster increasing approximately 78 percent from 2001 to 2010. The largest occupation cluster in terms of employment is skilled production workers followed by legal and financial services, and real estate. The managerial, sales, marketing, and human resources occupation cluster also has a large employment base in Sussex County.

Twelve occupation clusters showed job growth of 10 percent or more over the 2001-2010 period. In addition, many of these clusters also had a related rise in the size of the location quotient (an indicator of industry concentration within a region), which suggests that in addition to increasing in local importance, the competitiveness of the County is also increasing in these clusters. These are occupations that are not yet specialized ($LQ < 1.2$), but are increasing in specialization and include: arts, entertainment, publishing and broadcasting; postsecondary education and knowledge creation; legal and financial services, and real estate; information technology; health care – medical technicians; personal services occupations; mathematics, statistics, data and accounting; health care – therapy, counseling and rehabilitation; managerial sales, marketing and HR; building, landscape and construction design; and technology-based knowledge clusters.

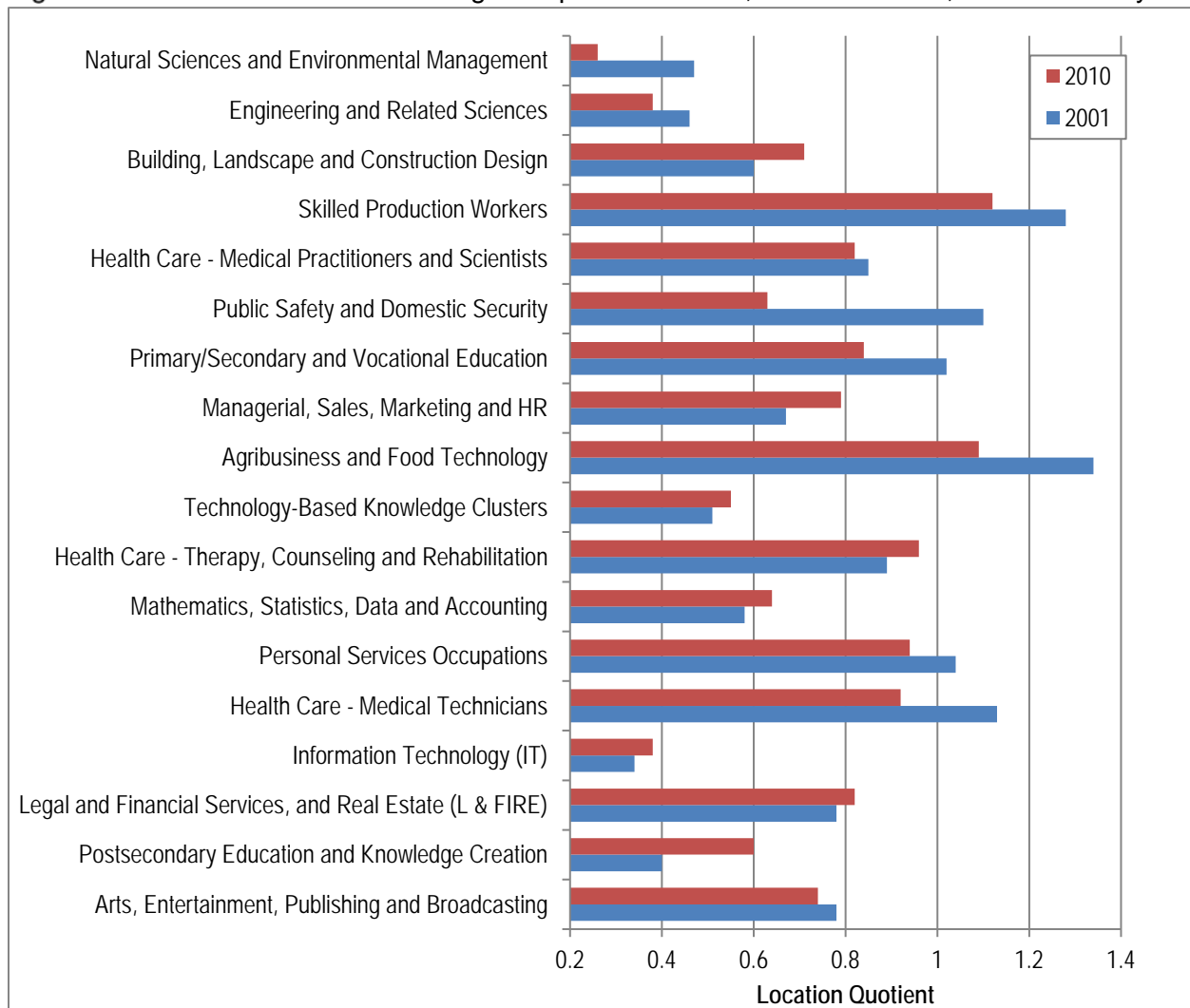
A surprising finding is that a number of technology-related occupation clusters have enjoyed a significant increase in both employment and competitive position in Sussex County. These include information technology; mathematics, statistics, data, and accounting; and technology-based knowledge clusters.¹⁴ Major occupations within some of these clusters include computer software engineers, data communications analysts, and support specialists. It is possible that these emerging occupation clusters are related to the presence of tech schools in the County.

| Table 9.4-4 Sussex County Occupation Clusters | | | | |
|--|------------|-------------------|---------|----------------------------------|
| OCCUPATION CLUSTER | EMPLOYMENT | | | SHARE OF ALL REGIONAL EMPLOYMENT |
| | TOTAL 2010 | GROWTH, 2001-2010 | | |
| | | ABSOLUTE | PERCENT | |
| Skilled Production Workers | 7,657 | -257 | -3.2% | 7.8% |
| Legal and Financial Services, and Real Estate (L & FIRE) | 6,288 | 1,350 | 27.3% | 6.4% |
| Managerial, Sales, Marketing and HR | 6,007 | 1,473 | 32.5% | 6.1% |
| Primary/Secondary and Vocational Education | 4,334 | 154 | 3.7% | 4.4% |
| Technology-Based Knowledge Clusters | 4,252 | 747 | 21.3% | 4.3% |
| Health Care -Therapy, Counseling and Rehabilitation | 3,135 | 1,054 | 50.6% | 3.2% |
| Personal Services Occupations | 2,227 | 656 | 41.8% | 2.3% |
| Arts, Entertainment, Publishing and Broadcasting | 1,691 | 443 | 35.5% | 1.7% |
| Agribusiness and Food Technology | 1,622 | -140 | -7.9% | 1.7% |
| Mathematics, Statistics, Data and Accounting | 1,537 | 377 | 32.5% | 1.6% |
| Health Care - Medical Technicians | 1,079 | 159 | 17.3% | 1.1% |
| Health Care - Medical Practitioners and Scientists | 893 | 82 | 10.1% | 0.9% |
| Information Technology (IT) | 752 | 177 | 30.8% | 0.8% |
| Public Safety and Domestic Security | 733 | -267 | -26.7% | 0.7% |
| Postsecondary Education and Knowledge Creation | 665 | 292 | 78.3% | 0.7% |
| Engineering and Related Sciences | 336 | -80 | -19.2% | 0.3% |
| Building, Landscape and Construction Design | 309 | 64 | 26.1% | 0.3% |
| Natural Sciences and Environmental Management | 69 | -101 | -59.4% | 0.1% |

Source: Statsamerica.org (2014)

¹⁴ Please see: <https://www.statsamerica.org/innovation/reports/sections2/H.pdf> for information on the occupations included in each knowledge cluster.

Figure 9.4-9 Location Quotient among Occupation Clusters, 2001 and 2010, Sussex County¹⁵



Source: Statsamerica.org (2014)

At the same time, the County has lost some of its competitive advantage in the healthcare occupation cluster. While the number of employees in each of the three healthcare sub-clusters (Medical Practitioners and Scientists; Medical Technicians; and Therapy, Counseling, and Rehabilitation) have increased, the location quotients for two of the sub-clusters have decreased over the 2001-2010 period. These occupation clusters merit a closer look by policymakers, economic development professionals, representatives from the Community

¹⁵ A location quotient is expressed as the ratio of the proportion of the industry locally within the total local economy to the proportion of the industry nationally within the total national economy. It can help reveal in what industries a region may have a competitive advantage. Therefore, an LQ greater than one indicates that the industry has a competitive advantage. Conversely, an LQ less than one indicates that the industry is a smaller piece of the local economy than it is of the national economy and indicates an area where the local economy is not as strong.

College, and medical and related professionals to discern needs for expanded training and development of the skills embedded in the clusters. The County also needs to identify ways that it could leverage its concentration of medical skills as well as the large biomedical industry cluster in Delaware. For example, it could aim for a specialization in geriatrics and nursing homes or other specialized nursing facilities. Such potential strategies need to be worked out by the economic development stakeholders with significant input from the medical and related professionals in the County.

9.5 ECONOMIC DEVELOPMENT RESOURCES

There are several public economic development agencies tasked with encouraging business development in Delaware. These include:

- **Delaware Prosperity Partnership** – This public-private partnership, newly formed in 2017, will be responsible for recruiting new employers to the state, promoting entrepreneurship and innovation, and investing in workforce development programs.
- **Delaware Manufacturing Extension Partnership** – This group helps manufacturers better compete on the global scale by working with them to assess opportunities, identify resources, and by providing them with confidential access to the industries' best practices and methodologies.
- **Delaware Department of Labor** – Working with employees and employers, the Department of Labor connects people to jobs, resources, benefits, protections, and information to promote an equitable labor environment.
- **Division of Corporations** – This division provides answers and assistance to corporations looking to make Delaware their legal home.
- **Small Business Development Center (SBDC)** – This public-private partnership between the U.S. Small Business Administration, the State of Delaware, and the University Delaware provides no or low-cost advisory and training services.
- **Service Corps of Retired Executives (SCORE)** – Retired company executives and business owners who have partnered with the U.S. Small Business Administration provide free and confidential business counseling.

Furthermore, while businesses in Delaware can always participate in federal business assistance programs for which they are eligible, the state of Delaware also offers its own variety of incentive programs to firms seeking to relocate to or otherwise expand within Delaware. This assistance may take the form of loan programs, grants, tax credits, and tax incentives. The most prominent programs include:

- **Job Creation Tax Credit** – This credit allows businesses that hire five or more qualified employees to make an investment of at least \$200,000 and operate a qualified facility to reduce their corporate income tax, gross receipts tax, and public utility tax.
- **Research and Development Tax Credit** – Qualified businesses can receive a tax credit equal to 10 percent of the excess of the taxpayer's total Delaware qualified research and development expenses for the taxable year over the taxpayer's Delaware base amount, limited to 50 percent of the Delaware income tax liability.
- **Business Finder's Fee Tax Credit** – This program incentivizes Delaware businesses to bring their suppliers, customers, and other businesses to Delaware. The credit, which can be applied to both the existing Delaware business and the new relocating business, is equal to \$500 per full-time Delaware employee that the new business employs in Delaware for three years following their registration.
- **Governor's Blue Collar Grant Program** – Delaware businesses can qualify to receive industry-specific and firm-customized skills upgrade training with matching funds provided by the Blue Collar Grant Program.
- **State Small Business Credit Initiative** – This is a loan program for businesses with fewer than 750 employees that enables them to better access capital at below-market interest rates. The program will fund up to 20 percent of a five-year or shorter-term loan that does not exceed \$5 million.
- **Delaware Strategic Fund** – This fund is the primary source through which Delaware provides low-interest loans and grants to businesses that are creating new jobs, relocating, expanding, or redeveloping a brownfield site.

Within Sussex County, there are also two economic development agencies that encourage business growth specifically within the County. These include:

- **Sussex County Economic Development Office** – Much like the state's economic development office, Sussex's economic development office strives to attract, retain, and expand businesses and business opportunities within the County through counseling, networking, and financial incentives.
- **Sussex Economic Development Action Committee, Inc. (SEDAC)** – This stand-alone group connects businesses and entrepreneurs with the resources they need.

In addition, the Sussex County Economic Development Office runs two specific initiatives that seek to assist businesses relocating or expanding in the County. The County's Economic

Development Fund provides financial assistance in the form of low interest loans; grants, graduated tax abatement, and/or fee reductions to selected businesses in need of financial assistance. Much like the Delaware Strategic Fund, this assistance is customized to fit selected firms' needs. Additionally, Sussex County is a partner in the Delaware State Housing Authority's Downtown Development District program. Sussex County performs a 50 percent match of state funds for approved construction projects in Sussex County up to \$10,000. The County will contribute up to \$100,000 in matching funds in FY2017.

The County's Economic Development Office is also working on new initiatives to attract business to Sussex. One initiative that the office would like to explore is the establishment of a County Economic Development Grid. The grid would contain zones which would be centered around areas of the County and associated communities where the County would like to promote economic development. As part of the effort, the County would explore incentives for businesses locating in the zones. In order for the effort to be successful, it will require close coordination with communities in the areas where zones would be established.

There are many other private and non-profit groups besides those listed above which are dedicated to helping Delaware businesses succeed. For example, the numerous Chambers of Commerce spread throughout the state, the University of Delaware's Lerner College of Business & Economics, and the Delaware Community Development Corporation all offer business assistance.

9.5.1 Industrial Parks and Business Parks

In Sussex County, there are currently four industrial or business parks, some of which are located in the towns and others in unincorporated areas. These locations spur investment in the community by using a range of amenities, resources, business connections, and financial incentives to attract stable businesses. Each park has its own particular characteristics:

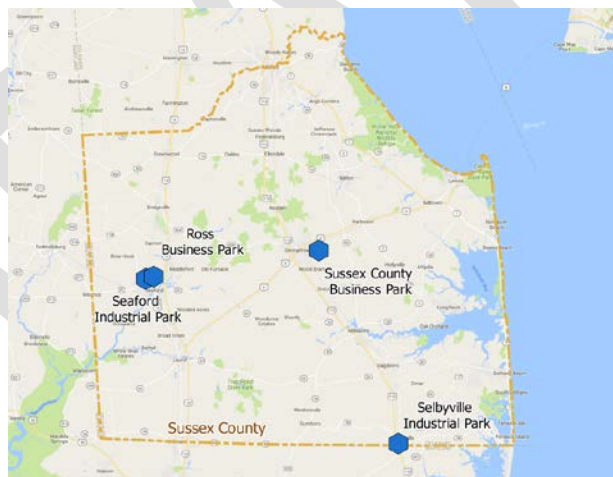
- **Seaford Industrial Park (Seaford, DE)** - This 128-acre industrial park is occupied almost exclusively by light industrial firms including Con-way trucking, Cintas uniforms, Century Window Fashion, Craig Technologies, and Eastern Shore Metals. The City of Seaford has one remaining two-acre parcel still under its ownership. Seaford Industrial Park is adjacent to the Ross Business Park, both of which have convenient access to Route 13.
- **Ross Business Park (Seaford, DE)** - Accommodating a wider range of businesses than Seaford Industrial Park, the Ross Business Park currently has more than 108 acres of available parcels after greatly expanding a few years ago. Its current tenants include SolarCity, Falco Industries, Dunbar Armored, K Supply Company, and FedEx Ground. It also borders important local destinations such as the Seaford Sports Complex, the Seaford District Library, the Ross Mansion, and the Boys & Girls Club of Delaware.

- **Sussex County Industrial Park (Georgetown, DE)** - With 19 parcels spread over 175 acres the industrial park is an important component of the Delaware Coastal Airport's operations. In fact, the park's largest tenant is ALOFT AeroArchitects who performs maintenance on the Boeing 737. The park also houses Pats Aircraft, Eastern Shore Poultry Co. Inc., Hollingsead International, Delmarva Insulation, DMI, and other large businesses. In addition to quick access to Route 9, the park is also connected to the local railroad system. There is currently a five-acre parcel available.

In March 2017, the County acquired the 74 acre King Farm site to expand the Sussex County Industrial Park. The site will yield approximately 12 lots over 20 useable acres.

- **Selbyville Industrial Park (Selbyville, DE)** - At 35 acres, the 17-lot Selbyville Industrial Park is the smallest park in Sussex County. Its largest tenant is currently Avalanche Strategies, but the park is also home to Sigma Realty, Eastern Shore Porch and Patio, Delta Sales Corporation, Aero Safety, Chrome World Motorcycle Accessories, and Resorts Furnishings. There are no current vacancies or plans for expansion given that it borders the Delaware-Maryland state border, Route 113, and downtown Selbyville.

Figure 9.5-1 Industrial and Business Parks in Sussex County, DE



Source: ESI (2017), Google (2017)

While there are vacancies in some of these business and industrial parks that should continually be marketed to new employers, the County should also continue to look for new business and industrial sites attractive to businesses looking to locate to the County. Sites that will be most attractive to new businesses are those that have access to utilities (natural gas, fiber optic, etc.) as well as low electric rates.

9.6 ECONOMIC DEVELOPMENT GOALS, OBJECTIVES, AND STRATEGIES

As the population of Sussex grows, sustaining and growing the economy is important to support the commerce, culture, and character of the County that residents and visitors enjoy. The County must embark on strategies to continue to make the County both an attractive home for new businesses as well as help existing businesses and industries grow and prosper. Below is a list of goals, objectives, and strategies for the County to undertake to achieve this:

Goal 9.1: Maintain and strengthen the economic base in the County.

Objective 9.1.1: Develop a better understanding of Sussex County's competitive advantages and how it fits into the regional and national marketplace.

Strategy 9.1.1.1: Undertake a supply chain analysis of key local industries to identify target industries and employers for recruitment.

Strategy 9.1.1.2: Undertake a business cost analysis to understand how the County compares to other locations.

Objective 9.1.2: Establish, maintain, and anticipate the necessary infrastructure including, but not limited to housing and transportation, communication technology (high-speed internet, utility systems) which supports and fosters quality development for those who live, work, visit, and invest in the County.

Strategy 9.1.2.1: Complete the long-term capital improvements planned for Sussex County's airport.

Strategy 9.1.2.2: Promote the proximity of the airport to clientele that would use the airport.

Strategy 9.1.2.3: Work to increase operations (take-offs and landings) at the airport in order to qualify for additional funding from the Federal Aviation Administration.

Strategy 9.1.2.4: The Economic Development Office will work with natural gas utilities and high-speed internet (fiber optic) providers to help identify potential areas for expansion, identify potential customers, undertake outreach to potential customers, and develop strategies to meet the needs of underserved areas.

Strategy 9.1.2.5: Coordinate infrastructure (water, sewer, transportation, natural gas, electricity, and high-speed internet) projects with the need to bring these utilities to areas zoned for business uses.

Strategy 9.1.2.6: Explore and pursue grant opportunities for fiber optic expansion within the County.

Strategy 9.1.2.7: Continue coordinating with DelDOT to provide safe and convenient road access for areas zoned for business uses.

Strategy 9.1.2.8: Encourage redevelopment and reuse of existing business sites, industrial sites, and central business districts. These sites are already well served by the necessary infrastructure and have good access.

Objective 9.1.3: Make economic development something that is woven into the County's entire decision-making process.

Strategy 9.1.3.1: Undertake a comprehensive analysis of County and local regulations to identify those regulations that may be inhibiting economic development.

Strategy 9.1.3.2: Consider additional coordination between the State and County on economic development efforts.

Strategy 9.1.3.3: Undertake a comprehensive examination of the economic development process in the County and identify potential areas for streamlining.

Strategy 9.1.3.4: Strengthen the County's Economic Development Office and ensure that the office has the necessary resources.

Strategy 9.1.3.5: The County Council should take an active leadership role to ensure that all County departments are supporting economic development and working toward common goals.

Strategy 9.1.4.6: Strengthen the relationship between SEDAC and the County along the lines of SWED (Salisbury Wicomico Economic Development) in Maryland.

Objective 9.1.4: Support small local businesses and County-based industries.

Strategy 9.1.4.1: Establish a Sussex County Business Resource Center within the Economic Development Office that can provide a one-stop shop for existing businesses that want to expand and new businesses that want to move to the County.

Objective 9.1.5: Continue job-training partnerships with educational institutions, local employers, local governments, chambers of commerce, state agencies, and non-profits.

Strategy 9.1.5.1: The Economic Development Office should act as a "matchmaker" between current and potential employers and local job training resources.

Strategy 9.1.5.2: Continue to coordinate with local educational institutions and employers to understand current job openings in the County and structure job training and professional development programs to efficiently train the local workforce.

Strategy 9.1.5.3: Establish a working group comprised of major healthcare employers, Del Tech, Sussex Tech, and other educational institutions, and County officials. The purpose of the working group will be to identify current and future job training needs and develop programs to meet the needs of the rapidly growing healthcare sector.

Goal 9.2: Encourage economic diversity and expansion.

Objective 9.2.1: Encourage a mix of industries that generate entry-level jobs that provide opportunities for advancement.

Strategy 9.2.1.1: Identify current and potential industries that require the resources that Sussex County offers.

Strategy 9.2.1.2: The Economic Development Office should actively promote the County to industries and employers that provide employment opportunities for year-round permanent jobs that offer opportunities for advancement.

Objective 9.2.2: Provide an adequate supply of vacant, shovel-ready land for commercial and industrial uses, while encouraging development that is environmentally sensitive.

Strategy 9.2.2.1: Review zoning code and the development process to see if there are prohibitive costs to development for industrial park developers.

Strategy 9.2.2.2: Complete the current expansion of the Sussex County Industrial Park and identify potential areas for additional expansion.

Strategy 9.2.2.3: Explore the potential for public-private partnerships for the development of additional industrial parks within the County.

Strategy 9.2.2.4: Identify areas that are served with adequate electricity, natural gas, and fiber optic infrastructure for rezoning to LI1 and LI2 uses.

Strategy 9.2.2.5: Explore establishment of a County Economic Development Grid with zones to be centered around areas of the County and associated communities where the County would like to promote economic development.

Objective 9.2.3: Foster an economy that supports and expands existing local business while pursuing larger businesses that are suited to the County that are willing to train an entry-level workforce and are experiencing growth.

Strategy 9.2.3.1: Establish a Sussex County Business Resource Center within the Economic Development Office that can provide a one-stop shop for existing business that want to expand and new businesses that want to move to the County.

Strategy 9.2.3.2: The Economic Development Office should actively promote the County to industries and employers that provide employment opportunities for year-round permanent jobs that offers opportunities for advancement.

Objective 9.2.4: Increase the number of small firms within the County by fostering local entrepreneurship.

Strategy 9.2.4.1: Assess the entrepreneurial services available within the County and compare the County to other regions deemed to be supportive of entrepreneurship.

Strategy 9.2.4.2: Create networking, leadership, recognition, and funding programs for entrepreneurs.

Strategy 9.2.4.3: Identify existing organizations that provide services for entrepreneurs and form a steering committee for entrepreneur advisory assistance.

Strategy 9.2.4.4: Leverage the experiences of retirees living within the County to mentor entrepreneurs.

Strategy 9.2.4.5: Encourage SEDAC to establish an entrepreneurship advisory committee to provide SEDAC and the County with advice on entrepreneurship issues.

Objective 9.2.5: Develop employment opportunities to help retain millennials.

Strategy 9.2.5.1: Learn from best practices of other counties that have growing millennial populations in order to understand how to attract and retain younger populations.

Strategy 9.2.5.2: Encourage SEDAC to actively recruit millennials for leadership roles and establish a millennial advisory committee.

Objective 9.2.6: Build a highly-skilled, flexible workforce while identifying the economic needs of the unemployed and underemployed in the region and encouraging programming – including education and retraining – to meet those needs.

Strategy 9.2.6.1: Sussex County Economic Development Department should act as a “matchmaker” between current and potential employers and local educational institutions.

Strategy 9.2.6.2: Identify local job training resources and serve as a one-stop resource to help current and potential employers with their job training needs.

Strategy 9.2.6.3: Establish a working group comprised of major healthcare employers, Del Tech, Sussex Tech, and other educational institutions, and

County officials. The purpose of the working group will be to identify current and future job training needs and develop programs to meet the needs of the rapidly growing healthcare sector.

Goal 9.3: Preserve and encourage the expansion of the agriculture and forestry industries in the County.

Objective 9.3.1: Encourage the adoption of policies that promote agriculture as an important economic industry.

Strategy 9.3.1.1: Establish voluntary agri-business areas that are centered around existing infrastructure in AR-1 zoning in western Sussex County that allow certain limited, yet important agriculture industries such as food processing, feed mills, and technology operations or other compatible uses to develop in support of Sussex County's large agricultural economy without unnecessary delay.

Strategy 9.3.1.2: Promote and expand land use, zoning and conservation policies and incentives that keep agriculture economically viable in Sussex County.

Strategy 9.3.1.3: Ensure zoning regulations accommodate agribusiness uses in appropriate locations, including businesses that promote new uses for agricultural products and byproducts.

Objective 9.3.2: Promote and retain agriculture in areas with valuable agricultural land or agricultural operations.

Strategy 9.3.2.1: Identify areas that have valuable agricultural land or operations that should be maintained and/or strengthened.

Strategy 9.3.2.2: Ensure that policies are in place to guarantee a separation of valuable agricultural areas from encroachment by residential development.

Objective 9.3.3: Develop and implement long-term strategies to rebuild the forestry industry in Sussex County.

Strategy 9.3.3.1: Ensure that zoning regulations permit forestry uses in appropriate locations, including business that promotes new uses for forestry products and by products.

Strategy 9.3.3.2: The development of sustainable forest product markets requires current comprehensive inventories of the available forest resources. As such the County should encourage the state's Forestry Service to undertake a comprehensive inventory of the forest resources in the County and to update the inventories on a regular basis.

Strategy 9.3.3.3: Work with land owners and the Delaware Forest Service to protect high value forest tracts and improve the diversity and quality of forest tracts.

Strategy 9.3.3.4: Undertake a supply chain analysis of local forestry operations to identify potential target industries and employers for recruitment and potential uses for Sussex County forestry products.

Strategy 9.3.3.5: The County should encourage the State to update existing incinerator laws to allow for the use of wood for bio-energy purposes.

Strategy 9.3.3.6: Explore incentives that the County could offer landowners (e.g. property tax exemption) to encourage long-term forest management.

Strategy 9.3.3.7: The County should work to educate landowners about and connect landowners with the resources available from the State and other sources. This includes technical assistance and financial assistance programs.

Strategy 9.3.3.8: The County should work with Delaware Forestry Service to explore the feasibility of a new roundwood processing facility Sussex County.

Objective 9.3.4: Create opportunities for new investment in agricultural support activities.

Strategy 9.3.4.1: Ensure that agricultural food manufacturing/processing value-added businesses are permitted uses in the AR1 zone.

Strategy 9.3.4.2: Undertake a supply chain analysis of local agricultural operations to identify potential target industries and employers for recruitment.

Objective 9.3.5: Promote locally-sourced agriculture and forestry products.

Strategy 9.3.5.1: Undertake a “Buy-Local” procurement analysis to see where key inputs produced in the County (e.g., agriculture) could better stay in the County; draft initiatives and incentives.

Strategy 9.3.5.2: Identify industries that use the agriculture and forestry outputs produced in the County as inputs. Actively recruit firms from the identified industries.

Goal: 9.4: Maintain and strengthen the County’s position as a tourist destination.

Objective 9.4.1: Continue to support the growth of the tourism industry in the coastal areas.

Strategy 9.4.1.1: Establish a coastal tourism advisory committee to advise the County on tourism issues.

Strategy 9.4.1.2: The Economic Development Office and the County's tourism Destination Marketing Organization (DMO), Visit Southern Delaware, should work to build a brand that appeals to both visitor and investor markets. This will involve the creation of the brand message and the communication of the brand through all channels and sales and marketing.

Strategy 9.4.1.3: The Economic Development Office and the DMO should maintain a platform for regular communication.

Strategy 9.4.1.4: The Economic Development Office should coordinate with and involve the DMO when developing pitches to investors and site location professionals.

Objective 9.4.2: Consider expanding to specialty tourism, such as eco-tourism, agro-tourism, beer/food tourism, and historic tourism.

Strategy 9.4.2.1: The County should work with Visit Southern Delaware to actively promote Sussex County for specialty tourism.

Strategy 9.4.2.2: Establish a specialty tourism advisory committee to advise the County on specialty tourism issues.

Chapter 10. HISTORIC PRESERVATION

Historic Preservation Vision: *To preserve and promote the historic and cultural resources of Sussex County that residents cherish and visitors wish to experience.*

10.1 BRIEF HISTORY OF SUSSEX COUNTY

Native Americans first inhabited Delaware sometime around 14,000 years ago. They lived and hunted along the many tributaries and bays in the County. Most of the tribes remained in the County until the late 18th century when many moved westward in the face of European colonization. Those that remained moved eastward to Oak Orchard, today home to many inhabitants of the Nanticoke Indian Tribe (Carter, 1976).

The first European settlement in Sussex County was a Dutch trading post in present-day Lewes. The Dutch purchased the land of “Zwaanendael” from a group of local Native Americans on May 5, 1631. However, the colony was short-lived as the entire colony was mysteriously massacred several months later.

In 1632, King Charles I of Great Britain granted a petition by George Calvert for the land that includes present-day Delmarva. No new European settlements occurred until the Dutch resettled Zwaanendael in 1658 as a fort and trading post. In 1663, it was augmented with the establishment of the Mennonite colony of Peter Cornelius Plockhoy (Plochoy). He also established an agricultural community in close proximity called Hornkill (commonly called Whorekill). In the meantime, Charles Calvert, the 3rd Lord Baltimore erected Somerset County, Maryland in 1666 which included much of what is today southern and western Sussex County. Several incidents between the English and Dutch followed and by the 1670s, the English were in control of the area.

In 1681 William Penn was granted proprietorship of today’s Delaware Counties and Pennsylvania by the king. On December 25, 1682, the name Sussex County was formally established. The only established town in the County, Whorekill, had its name changed to Lewistown at the same time. The three Delaware Counties formally separated from the Pennsylvania Colony in 1702. Maryland-Delaware-Pennsylvania boundary disputes followed and as a result of a cartography error by the fifth Lord Baltimore, the southern boundary of Delaware was fixed at Fenwick Island in 1733.

For most of the eighteenth century, Sussex County remained heavily wooded. In 1728, Reverend William Beckett reported that there were 1,750 inhabitants in the county. Settlers began to establish plantations, mills and small industries, and villages at strategic locations along navigable streams.

Early industries in the County included grist and lumber and by the mid-18th century dams were being established along streams for the mills. The presence of bog iron ore in central and western Sussex County was also causing forges to come into being. Also, large amounts of cedar and cypress trees in the area were being used for shipbuilding.

The 25 towns that exist today in Sussex County got their start as country stores at crossroads and farming hamlets. Churches were also beginning to form across Sussex's countryside. On the coastal side of the county, pirate attacks were common during the late 17th and early 18th century.

Following the American Revolution, Sussex County began to grow rapidly. In 1791, the Sussex County legislature voted to move the county seat from Lewes to Georgetown as a result of residents expressing sentiments that it was too far of a trip for one to have to do business on the eastern edge of the county.

During the War of 1812, many militiamen came from Sussex County. Lewes was central to the defense of the Delaware Bay and was the site of a British bombardment.

In the decades following the War of 1812, Sussex remained mostly agricultural. As a result of geographic isolation, the County began to lag in industrialization and economic growth. The coming of steamboats in the 1830s and 1840s and the construction of the first railroads in the 1850s and 1860s spurred an uptick in economic growth. The Delaware Railroad reached Seaford in 1856, and Delmar by 1859. The Delaware, Maryland, and Virginia Railroad ran from Harrington to Milford, to Georgetown in 1869. A third line, the Junction and Breakwater Railroad, was constructed between 1859 and 1868 to Lewes; a spur line eventually connected Rehoboth in 1878. These railroads stimulated changes in agriculture and industry, and the growth of new towns.

Construction of the County's first paved highway occurred in 1911 by T. Coleman DuPont and the early state highway system which followed during the administrations of Governor John G. Townsend. Jr. and his successors brought another wave of growth and development. Soon improved transportation made Sussex County's coastal towns more accessible to the people from Philadelphia, Baltimore, and elsewhere. From the 1890's through the Golden Age of the 1920's, Americans discovered the beach. Steamboats also regularly carried travelers to Sussex County's shores.

Sussex County has always been the most important agricultural region in Delaware. In 1880, corn was the dominant cash crop. In 1900, Sussex was the leading strawberry producer in the nation. By the early 1960s, orchard crops had been supplanted by more lucrative agricultural products. At the start of the twentieth century, the lumber industry was a significant source of income for Sussex County. The people of Sussex also worked the surrounding waters. The County's Menhaden fishing was one of the biggest fishing industries in the U.S. During its peak in the 1950s, Lewes was the epicenter of that industry. Salt manufacturing also was prevalent up and down the coast from Cape Henlopen to Fenwick Island.

In 1923, Mrs. Wilmer Steele, a farmer in Ocean View, raised broiling, frying, and roasting chickens for sale in urban markets. Originating with Mrs. Steele's success, Sussex County is now the leading broiler producer in the United States.

In 1939, DuPont acquired land near Seaford for a nylon production plant, which went into production in 1939. Bulk continuous filament nylon, a standard in the carpet industry, was developed at the Seaford plant in 1958.

Canneries were also found throughout Sussex County until the period following World War II when the market transitioned to frozen foods. There were over 45 canning establishments in Sussex County. In addition, there were a number of other important industries including button cutting which began in Milton at the Lippincott Button Factory in the 1920s through the 1950s. Also prominent was the Vineyard Shipyard in Milford, built around 1920.

Sussex County has provided Delaware with important leaders including over two dozen governors from all parts of the County. These included John G. Townsend, Jr. who served as governor from 1916 to 1920. He passed an extensive package of legislation that included establishment of a state highway commission and funds to finance the state's first major highway construction program; establishment of a state income tax and inheritance tax; bills regulating child labor, establishing workmen's compensation, and mother's pensions; and created what later became the state Department of Public Welfare. Another prominent Sussex County governor included Elbert N. Carvel who served from 1948 to 1952 and again from 1960 to 1964. He did much to promote industrial development in the state.

Throughout the County's development, Sussex has maintained its rural character and small town charm. The rich history of Sussex can still be seen through the area's streetscapes, waterfront, and farms.

10.2 WHY PRESERVE HISTORY?

Historic buildings and landscapes in Sussex County are visible reminders of the area's heritage. In towns, in the countryside and in maritime settings, historic places illustrate the lives of people who lived and worked here before us. The Delaware State Historic Preservation Office 2013 Plan entitled "Preserving Our Past for a Better Future" states that:

"Our history is one of Delaware's greatest assets. If we don't understand the past, we cannot understand the present or the future"

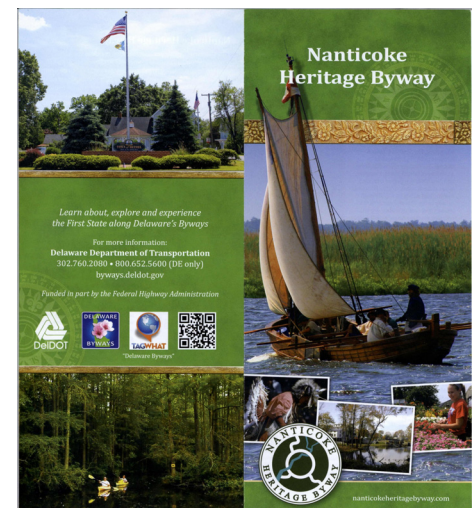
Besides providing perspective about days gone by, historic buildings and artifacts have contemporary economic value. Historic sites draw tourists, create jobs and generate commercial revenues. Campaigns to revitalize older downtowns usually depend heavily on reestablishing the traditional, small town, "Main Street" settings that many people find more appealing than highway commercial strips and shopping malls.

Historic preservation emphasizes reuse, quality of life, and sustainable economic growth. Historic preservation also provides cultural benefits by preservation of historic structures and their cultural identity. Furthermore, historic preservation can also provide economic benefits by promoting the reuse of existing buildings and infrastructure, conserving resources, and revitalizing community centers, and often can encourage private investment in an area.

10.3 COUNTY HISTORIC PRESERVATION ROLE AND ACTIVITIES

The Sussex County Office of Historic Preservation's main duty is to coordinate archeological and historic preservation programs for the citizens of Sussex County. Led by the County Historic Preservation Planner (HPP), the office undertakes the following responsibilities:

- **Section 106 Reviews** – Section 106 of the National Historic Preservation Act of 1966 requires entities undertaking projects receiving federal funds or applying for any federal licenses or permits to take into account the effects of the project on historic structural and archaeological properties. The Sussex County HPP works with Sussex County Departments to facilitate Section 106 reviews in consultation with the State Historic Preservation Officer (SHPO). For example, the County Historic Preservation Planner reviews County Engineering Department projects with an eye toward how they affect historic and cultural resources; in particular, ensuring that they comply with state and federal regulations when it comes to historic preservation. The HPP also occasionally aids Sussex County towns with Section 106 reviews.
- **HUD CDBG Reviews** – The County is responsible for compliance with Section 106 for the Community Development Block Grant (CDBG) program under the Department of Housing and Urban Development (HUD). The HPP works with the County's Community Development and Housing Department to review and document CDBG renovation and demolition projects that are historic in nature and provides this information to the SHPO.
- **Technical Advisory Committee** - The HPP is a participating member of the Sussex County Planning & Zoning Department TAC (Technical Land Use Advisory Committee). The HPP's responsible for reviewing site plans with less than 50 units for impact on historical and cultural resources.
- **Strengthens neighborhoods** – The HPP meets with citizens, town councils, town planning commissions, and groups interested in historic preservation to discuss the benefits of preservation including State incentives and benefits of the National Register program. This also includes working with towns to discuss historic ordinances and historic zoning overlay districts.
- **Byways** – The HPP worked on the formation of and continues work with two scenic and historic byways in the County: the Historic Lewes Byway and the Nanticoke Heritage Byway. The Byways program is a tourism based project run through the Delaware Department of Transportation, intended to link historic sites through routes created to get motorists off the beaten path to explore the otherwise overlooked areas in the State. There are six byways state-wide (Red Clay Byway, Brandywine National Byway, Bayshore Byway,



Brochure for the Nanticoke Heritage Byway

Underground Railroad Byway, and the above-mentioned Byways in Lewes and western Sussex County between the communities along the Nanticoke river watershed). These projects have increased awareness about the importance of preservation as a way of generating economic growth through heritage tourism, but also at bringing together unlikely partners and encouraging cooperation between otherwise competing organizations. They have also been successful at bringing funding to projects through the State Transportation Enhancement Fund, which makes projects along Byways a priority.

- **Cemetery Protection** – The HPP assists with the documentation and protection of local cemeteries in Sussex County. The HPP is working with the Delaware Cemetery Board to locate and document endangered sites as well as acquire grant funding for the preservation and restoration of distressed cemeteries. The HPP has been successful in procuring two Delaware Cemetery Board grants to date, of a total amount of \$10,000. The County also maintains a database of known burial sites. The database now exceeds 700 known burial sites with more being uncovered monthly. This is a result of the County's increased educational efforts and outreach; working with local archeologists, interested citizens, and preservation groups to document unmarked human remains.
- **Heritage Tourism** – The HPP works with local, county, and state tourism offices to encourage the promotion of historic sites in the County. The HPP serves on the State Tourism Committee, as well as the Greater Seaford Chamber Tourism Committee. These partnerships have been extremely successful in bringing tourists to the area, as well as bringing much needed publicity. The HPP works with the Greater Seaford Chamber Tourism Committee to annually host a group of travel writers from across the Country to tour the area. In 2016, the committee arranged for the writers to experience activities in Sussex County including all day river excursions as well as skydiving in Laurel. As a result, a multitude of articles highlighting the amazing destinations in Sussex County were published and the Greater Seaford Chamber Tourism Committee was named Tourism Partner of the Year by Southern Delaware Tourism.
- **Restoration and Adaptive Reuse** – The HPP continues to aid citizens with planning for restoration of significant historic properties throughout the County, as well as assist with historic research for local nominations to the National Register of Historic Places. The following are project currently in progress:
 - **Cannon Maston House** – This Maryland Hall Parlor House was built in 1727 just outside of Seaford. Archeology has been done at the site and plans are in place for trails to be constructed around the 60-acre parcel. Additionally, the architectural analysis has been completed and restoration plans including costs have been finalized. A friends group is being formed to raise the \$350,000 for first phase of restoration and grant funds are being secured for Trails planning and implementation.
 - **Hearn & Rawlins Mill** – Located just outside of Seaford, this site was purchased by DNREC Fish and Wildlife. The dam is currently being upgraded and as a

result of a Section 106 consultation the Mill site has been stabilized. A wide variety of options are being explored for the site. There have been meetings with the HAPPEN group (organization of people who live along the mill pond interested in its preservation) and other stakeholders to come up with a plan for future uses of the site, which include everything from



Hearn and Rawlins Mill Site

complete restoration to a Micro-Brew. There is a high-level of public interest in the preservation of the site, so any new infrastructure proposed to be built will need to gain support from the community. Currently there is a small endowment established for the upkeep of the site.

- **Governor William Ross Plantation (gov. 1851 – 1854)** – Owned by the Seaford Historical Society (SHS), the Italianate Villa and farm was constructed in 1855. Coordination with SHS is taking place to plan and construct an event center to mimic the original train station that once stood on the property. The center will have modern amenities and accommodation for 400 people, and will also serve as a way to generate revenue for the SHS.
- **Richard Allen School** – Located in Georgetown, this is a DuPont school for African Americans. The HPP worked with the Richard Allen Coalition (School preservation group) to take ownership of the School; advising them with fundraising and planning for restoration of the school, to ultimately be used as a community center.
- **Blackwater Presbyterian Church** – Located in Clarksville, this Church was constructed in 1763. An established citizens group has secured funding for the preservation of the Church. The HPP has helped with bringing in experts to document the site and make plans for its proper restoration. The Church will serve as an event center.
- **Blackwater One-room School House** – The School House located in Clarksville was constructed sometime around 1890. It is one of only six remaining pre-DuPont one-room schoolhouses in Delaware and has been nominated to be included on the National Register. The site is also home to an African American Camp-meeting held annually since the 1840's, a historic cemetery, DuPont School and Church. The HPP is working with a group interested in the preservation of the School House. The preservation group worked with a publisher to complete a short history brochure for fundraising.
- **Woodland One-room Schoolhouse** – Coordination with a group of interested citizens to restore the one-room school in Woodland is taking place. A non-profit

has been formed, and a lease for the site is in negotiation, with plans for restoration complete. A festival/fundraiser has been scheduled for September 30, 2017.

- **Trails** – The HPP works with local open space groups and State agencies to plan trails. In 2016, Sussex County just created its first park, Woodland Park, a 20-acre park with trails surrounding a historic schoolhouse. The County is also working with DNREC and DelDOT to create trail connectors across public land in western Sussex County, in and around the Nanticoke Heritage Byway.
- **Oral History Projects** – The HPP has conducted two oral history projects in Sussex County; one with Sussex Century Farmers and the other with an African American Community in Georgetown. For the Sussex Century Farmers project, the HPP interviewed one farmer from each of the 13 Hundreds in Sussex. Interviews and materials have been used for publications and academic research. For the second project, the HPP worked with students from Delaware State University to document the community around the Richard Allen School (RAS project). Materials were presented to the community and these efforts helped lead to the preservation of the historic school site in Georgetown. Two other oral history projects were conducted, directed by the HPP and students from DSU; one focusing on Jim Crow laws in Delaware and one commemorating the 50th anniversary of the 1964 Civil Rights Act. Other oral histories have been conducted by the HPP for inclusion with historic context of County sewer districts, Community Development projects, and National Register of Historic Places nominations.
- **Education** – The HPP is working with local historical societies to help introduce Delaware History to students beginning in the 5th grade. Groups and local retired educators are coming together to train and educate students about local history; the Seaford Historical Society in particular is training 30 students to docent at events held at the Governor Ross Plantation in Seaford. The HPP also assists with training efforts. As funds become available, a curriculum guide will be developed for use by teachers in the classroom. The HPP worked with the Delaware Heritage to plan for the publication of a book to be used focusing on the 50 most important historic sites in Sussex County. Additionally, high school students need volunteer hours for graduation; therefore partnerships with the schools are being established to train students to docent at historic sites.
- **Private landowner assistance** – Sussex County helps private landowners apply for tax credits and grants. The County also provides advice on historic sites and works to find ways to mitigate the effects a project might have on a historic site, such as burial grounds, historic homesteads and long-lost settlements.
- **State Historic Preservation Responsibilities/Activities** – HPP participated in the creation of the last State Historic Preservation Five-Year Plan, created in 2012. The HPP is currently assisting with creation of the next five-year plan as a member of the State Review Board for Historic Preservation. The HPP, as a member of this board, also assists in public outreach, give presentations to local planning commissions throughout

the County, including the towns of Laurel, Bridgeville, Georgetown, Bethel, Millsboro, as well as making presentations to the public in Georgetown, Seaford, Ocean View, Lewes, Laurel, and through the Rotary Club, Kiwanis, schools, and the Greater Seaford Chamber of Commerce.

10.4 STATE HISTORIC PRESERVATION ROLE AND ACTIVITIES

10.4.1 Delaware Department of State Division of Historic and Cultural Affairs

Historic preservation is a deliberate effort to maintain, restore and protect buildings and surroundings that tell the story of the past. Successful historic preservation takes foresight, organization and adequate funding. Government, non-profit advocates, local historical societies, and private citizens all play a role in preserving and promoting Delaware's heritage, including the unique character of Sussex County.

The Division of Historic and Cultural Affairs is the State's historic preservation agency. The Division's main responsibilities:

- Operating the eight State-owned museums in Delaware and over 90 other historic state-owned properties, including two historic homes that serve as conference centers.
- Conserving the State's collection of historic documents, fine arts, and other memorabilia.
- Preparing and participating in exhibits, special events and educational programs.
- Identifying, studying and preserving historic buildings, districts, and landscapes, including archaeological sites and their contents.
- Providing information on tax credits and other funding incentives available for rehabilitating officially designated historic buildings.
- Working with others to administer state and federal regulation that protect officially designated historic places.
- Maintaining the state's Cultural and Historical Resources Information System (CHRIS); a web-based geographic information mapping system developed to provide information on historic properties in Delaware and to assist with project and historic preservation planning.

The Director of the Division is Delaware's State Historic Preservation Officer (SHPO), designated in accordance with federal regulations. The SHPO, with advice from the State Review Board and State staff, is responsible for:

- Evaluating the historic significance of properties nominated for the National Register of Historic Places (the list of officially designated historic locations).
- Deciding who will receive federal Historic Preservation Fund monies awarded to Delaware.

- Administering local compliance with federal regulations that require an assessment of potential effects whenever federal money is to be spent on a project located near a site listed on the National Register of Historic Places.
- Administering Delaware's Tax Credit Program, under which people can earn tax credits for preserving buildings listed on the National Register. The amount of the tax credit is equal to a percentage of the rehabilitation cost. Federal tax credits worth 20% of total cost are available provided the building is an income producing structure. State income tax credits equal 20% for income producing buildings, 30% for owner-occupied homes, and an additional 10% for low-income housing.

10.4.1.1 State Review Board for Historic Preservation

The Review Board's main mission is to review and approve National Register nominations for Delaware, develop the State five-year Historic Preservation Plan, and conduct public outreach. The two main functions of the Review Board are to evaluate the historic significance of properties objectively and to provide professional advice on historic preservation matters. The Board is currently in the process of completing its 2018 State Historic Preservation Plan.

10.5 OTHER HISTORIC PRESERVATION PARTNERS

10.5.1 Preservation Delaware, Inc.

Preservation Delaware, Inc. is a State-wide, non-profit organization devoted to preserving Delaware's historic and architecturally significant buildings. Their motto is "Protecting the Irreplaceable in the First State." This group administers the Delaware Preservation Fund, which offers \$2,000 to \$4,000 grants for restoration of historic structures in Sussex each year.

10.5.2 National Trust for Historic Preservation

The National Trust for Historic Preservation is a privately funded nonprofit organization dedicated to saving America's historic places. Their mission is to protect significant places representing diverse cultural experience by taking action and inspiring public support. The Preservation protects and promotes a collection of 27 diverse historic sites (Saving Places, 2017)

10.5.3 Local Historic Societies

In addition to the State's Historical Society there are several local historic societies that exist in Delaware. For example, Lewes has its own historical society which promotes historical tours and visits to the local museums.

10.5.4 Delaware Historical Society

Founded in 1864, the Delaware Historical Society's mission is to serve as the statewide, non-profit organization that preserves, explores, shares and promotes Delaware history, heritage and culture to strengthen the community. The Society operates and maintains four sites including the Delaware History Museum, the Mitchell Center for African American Heritage, Old

Town Hall, the Research Library, Willington Square, and the Read House & Gardens (DE History, 2017)

10.5.5 Delaware Nature Society

The Delaware Nature Society, among other things, restored and operates the Abbott's Mill Nature Center just inside Kent County near Greenwood, Delaware. The Society has been consulting with Sussex County to help to plan for the restoration of the Hearn & Rawlins Mill outside Seaford.

10.5.6 Delaware Department of Natural Resources and Environmental Control (DNREC)

DNREC's mission is to ensure the wise management, conservation, and enhancement of the State's natural resources, protect public health and the environment, provide quality outdoor recreation, improve the quality of life and educate the public on historic, cultural, and natural resource use, requirements and issues. DNREC is comprised of several different divisions. The Division of Parks and Recreation protects and maintains the state's parks, preserves, and greenways. It works through public-private partnerships to protect and maintain natural, historical, and cultural resources (DNREC, 2017)

10.5.7 DelDOT

The Delaware Department of Transportation strives to make every trip taken in Delaware safe, reliable and convenient for people and commerce. Their system is made up of roadways, rails, buses, airways, waterways, bike trails, and walking paths. DelDOT's Cultural Resource Division is responsible for the Department's Archeologic and Historic Preservation Activities (DelDOT, 2017).

10.5.8 Archeological Society of Delaware

The Archeological Society of Delaware is a non-profit organization founded by avocational and professional archeologist in 1933. The purpose of the society was to study and appreciate that archeological heritage of Delaware and the surrounding region. The Society works to educate members and the public, support archeological investigations, report on activity within the region, and to promote interest and participation in archeology (DelawareArch, 2017).

10.5.9 University of Delaware Center for Historic Architecture and Design

The University of Delaware's Center for Historic Architecture and Design is an interdisciplinary research and public service center that addresses historic preservation planning and policy. The Center has a particular focus on the documentation, interpretation, and evaluation of historic buildings and landscapes. By working with the MA in Historic Preservation program, the Center provides an integrated program of graduate education, research, and public service (UDEL, 2017).

10.5.10 Salisbury University Center for Delmarva History and Culture

The Edward H. Nabb Research Center for Delmarva History and Culture is a humanities research laboratory for university students. It also fulfills the historical resource needs of a variety of community researchers. The library contains books, serials, archival and artifact collections relating to United States history, the greater Chesapeake region and the Delmarva Peninsula (Salisbury University, 2017).

10.5.11 Southern Delaware Tourism

The Southern Delaware Tourism Office promotes tourism through the various events, historic sites, and entertainment that take place in the County. The Office provides visitor information on Sussex's historic sites, towns, events, and museums (Visit Southern Delaware, 2017).

10.5.12 Greater Seaford Chamber of Commerce

The Chamber of Commerce has been serving the Western Sussex County business community for nearly 60 years. They cover the city of Seaford and the towns of Greenwood, Bridgeville and Blades in Western Sussex County. There are over 300 members that support the mission of the Chamber (Seaford Chamber of Commerce, 2017). The Chamber promotes the historical societies and museums of Western Sussex.

10.5.13 Sussex County Land Trust

The concept of the Sussex County Land Trust was originated by two local developers who were joined by a group of concerned citizens in 2001. A unique public-private partnership between Sussex County Council and the Land Trust later evolved. To date, the Sussex County Land Trust raised \$4,198,481 in private dollars and donations to go towards protecting and conserving open spaces (SCL, 2017). The Sussex County Land Trust acquired the Cannon-Maston property located on Atlanta Road outside Seaford. They have also been active in supporting the development of the 60-acre site for trails, and have funded efforts to extensively study the site with the aid of the County's Historic Preservation Planner, as well as developing plans for restoration of the 1727 structure on the property.

10.5.14 Nanticoke Watershed Alliance

The Nanticoke River beginning in southern Delaware and flowing southwest to the Chesapeake Bay through the Lower Eastern Shore of Maryland, is the most biologically diverse watershed in Delmarva. The Alliance is dedicated to working together to protect and conserve the natural, cultural, and recreational resources of the River (Nanticoke, 2017). It promotes the properties in the watershed that are on the National Register of Historic Places and the Nanticoke Heritage Byway.

10.5.15 Delaware Heritage Commission

Created in 1972, the Commission became one of the principal agencies for the celebration of Delaware history. Their mission is to celebrate the history and heritage of Delaware. The Commission has celebrated Delaware history through publications of books and history camp programs for boys and girls.

10.6 HISTORIC RESOURCES

10.6.1 The National Register of Historic Places

The National Register of Historic Places is the official inventory of America's historic sites. It is administered by the U.S. Department of Interior's National Park Service. The National Register features over 92,000 sites nationwide. In addition to federal properties with historic importance, the National Register includes properties across the country that were nominated by governments, organizations, and individuals because of the importance to the nation, a state, or a community. Sussex County sites listed on the National Register are included in Table 10.6-1 and displayed in Figure 10.6-1.



Old Christ Church National Register Historic Site

The inventory includes buildings, districts, sites, and structures significant to history, architecture, archaeology, engineering and culture. Most properties on the National Register are at least 50 years old.

The benefits of listing on the National Register:

- Official recognition that the property is significant.
- Qualification for certain federal funds when these very limited funds are available.
- Eligibility for state and federal historic rehabilitation tax credits.
- Mandatory consideration of potential impacts when projects using federal funds are proposed nearby.



Cannon's Ferry National Register Historic Site

| Table 10.6-1 Sussex County Sites on the National Register of Historic Places | | | |
|--|--------------------|------------|-------------|
| Resource Name | Address | City | Year Listed |
| Abbott's Mill | SW of Milford | Milford | 1972 |
| Abbott's Mill (Boundary Increase) | Rd. 620 W of DE 36 | Milford | 1979 |
| Adams Home Farm | 15293 Adams Road | Greenwood | 2015 |
| Adams, Joseph T., House | 12 E. Pine St. | Georgetown | 1998 |

Table 10.6-1 Sussex County Sites on the National Register of Historic Places

| Resource Name | Address | City | Year Listed |
|--|--|----------------|-------------|
| All Saints' Episcopal Church | 18 Olive Ave., Lewes and Rehoboth Hundred | Rehoboth Beach | 1991 |
| Avery's Rest Site | Address Restricted | Rehoboth Beach | 1978 |
| Baltimore Mills Historic Archaeological Site | Address restricted | Omar | 1997 |
| Barnes Woods Archeological District | Address Restricted | Seaford | 1996 |
| Bethel Historic District | 0.4 mi. W of Laurel | Bethel | 1975 |
| Blackwater Presbyterian Church | W of Clarksville on DE 54 | Clarksville | 1976 |
| Brick Hotel | The Circle | Georgetown | 1979 |
| Bridgeville Historic District | Roughly bounded by Market, Main and Edgewood Streets, School House Ln., Maple Alley and the Penn Central RR tracks | Bridgeville | 1994 |
| Bridgeville Public Library | 210 Market St. | Bridgeville | 1990 |
| Building at 200--202A High Street | 200--202A High St. | Seaford | 1987 |
| Building at 218 High Street | 218 High St. | Seaford | 1987 |
| Building at High and Cannon Streets | SE corner of High and Cannon Streets | Seaford | 1987 |
| Burton Hardware Store | High St. and Spring Alley | Seaford | 1978 |
| Burton--Blackstone--Carey Store | 103 State St. | Millsboro | 2014 |
| Cannon's Ferry | Across the Nanticoke River | Woodland | 1973 |
| Cape Henlopen Archeological District | Address Restricted | Lewes | 1978 |
| Carey's Camp Meeting Ground | W of Millsboro off DE 24 | Millsboro | 1973 |
| Carlisle House | 205 S. Front St. | Milford | 1982 |
| Chandler, Capt. Ebe, House | Main and Reed Streets | Frankford | 1979 |
| Chipman Potato House | Jct. of DE 465 and DE 465A | Laurel | 1990 |
| Chipman's Mill | E of Laurel on SR 465 | Laurel | 1978 |
| Coleman House | 422 Kings Hwy. | Lewes | 1977 |
| Collins Potato House | Jct. of DE 509 and DE 510A | Laurel | 1990 |
| Cool Spring Presbyterian Church | W of Lewes on SR 247 | Lewes | 1982 |
| Cox, J. W., Dry Goods Store | 214 High St. | Seaford | 1987 |
| Davis, Robert, Farmhouse | S of Rt. 24 | Millsboro | 1979 |
| Dawson, Dr., House | 200 SE Front St. | Milford | 1983 |
| De Vries Palisade | Address Restricted | Lewes | 1972 |
| Deep Creek Furnace Site | Address Restricted | Middleford | 1977 |

Table 10.6-1 Sussex County Sites on the National Register of Historic Places

| Resource Name | Address | City | Year Listed |
|---|--|----------------|-------------|
| Delaware Breakwater and Lewes Harbor | E of Lewes at Cape Henlopen | Lewes | 1976 |
| Dickerson Potato House | Jct. of DE 494 and DE 498 | Delmar | 1990 |
| Dodd Homestead | W of Rehoboth Beach on DE 1 | Rehoboth Beach | 1982 |
| Draper House | 200 Lakeview Ave. | Milford | 1982 |
| Draper-Adkins House | 204 Federal St. | Milton | 1973 |
| Egglinton Hall | 700 SE 2nd St. | Milford | 1983 |
| Ellendale State Forest Picnic Facility | US 113, 1/2 mi. S of DE 16, Georgetown Hundred | Ellendale | 1991 |
| Eratt House | W of Bridgeville on DE 572 | Bridgeville | 1983 |
| Evans-West House | 40 West Avenue | Ocean View | 2015 |
| Faucett, Peter S., House | W. Laurel St. | Georgetown | 1985 |
| Fenwick Island Lighthouse Station | Off DE 54 | Fenwick Island | 1979 |
| First Broiler House | University of Delaware Experimental Station | Georgetown | 1974 |
| First National Bank of Seaford | 118 Pine St. | Seaford | 1987 |
| Fisher Homestead | W of Lewes | Lewes | 1980 |
| Fisher's Paradise | 624 Pilottown Rd. | Lewes | 1972 |
| Fort Miles Historic District | At the confluence of the Atlantic Ocean and Delaware Bay | Lewes | 2004 |
| Georgetown Coal Gasification Plant | N. Railroad Ave. | Georgetown | 1985 |
| Grier House | 301 Lakeview Ave. | Milford | 1983 |
| Gyles, Stella Pepper, House | SW of Georgetown | Georgetown | 1979 |
| Hall, Col. David, House | 107 King's Hwy. | Lewes | 1976 |
| Harmon School | S of jct. of Rt. 24 and CR 297 | Millsboro | 1979 |
| Harmon, Isaac, Farmhouse | CR 312A | Millsboro | 1979 |
| Harmony Church | Rt. 24, E of CR 313 | Millsboro | 1979 |
| Hazzard House | 327 Union St. | Milton | 1973 |
| Hearn and Rawlins Mill | N of Seaford on U.S. 13A | Seaford | 1978 |
| Hearn Potato House | .6 mi. N of jct. of DE 74 and DE 62 | Laurel | 1990 |
| Hebron Methodist Protestant Church and Cemetery | 18282 Seashore Hwy. | Georgetown | 2015 |
| Highball Signal | City park, near Penn-Central RR. | Delmar | 1973 |
| Hitch, E. L., Potato House | Jct. of DE 460 and DE 489 | Laurel | 1990 |
| Hitchens, Ames, Chicken Farm | N of Rt. 24 | Millsboro | 1979 |

Table 10.6-1 Sussex County Sites on the National Register of Historic Places

| Resource Name | Address | City | Year Listed |
|---|--|----------------|-------------|
| Hopkins' Covered Bridge Farm | N side Rd. 262, E of jct. with Rd. 286, Lewes and Rehoboth Hundred | Lewes | 1991 |
| Indian Mission Church | Jct. of Rt. 5 and CR 48 | Millsboro | 1979 |
| Indian Mission School | Rt. 24 between CR 312A and 313A | Millsboro | 1979 |
| Indian River Archeological Complex | Address Restricted | Millsboro | 1978 |
| Indian River Life Saving Service Station | N of Bethany Beach on DE 14 | Bethany Beach | 1976 |
| Johnson School | Rt. 24 between CR 309 and 310 | Millsboro | 1979 |
| Judge's House and Law Office | 100 and 104 W. Market St | Georgetown | 1979 |
| Laurel Historic District | West St. to Rossakatum Creek to Tenth St. | Laurel | 1988 |
| Lawrence | N of Seaford on U.S. 13A | Seaford | 1978 |
| Lewes Historic District | Ship-carpenter, Front, Savannah, 2nd, 3rd, and 4th Streets | Lewes | 1977 |
| Lewes Historic District (Boundary Increase) | Roughly bounded by Front St., Savannah Rd., McFee St. and the Penn Central RR tracks, Lewes and Rehoboth Hundred | Lewes | 1992 |
| Lewes Presbyterian Church | 100 Kings Highway | Lewes | 1977 |
| Lightship WLV 539 | Lewes--Rehoboth Canal between Shipcarpenter and Mulberry Streets | Lewes | 1989 |
| Marsh, Peter, House | 10 Dodd's Lane | Rehoboth Beach | 1977 |
| Maston House | 3 mi. N of Seaford on Seaford-Atlanta Rd. | Seaford | 1975 |
| Mauil House | 542 Pilottown Rd. | Lewes | 1970 |
| Mauil, Thomas, House (Boundary Increase) | 542 Pilottown Rd. | Lewes | 1978 |
| McColley's Chapel | 18168 Redden Rd. | Georgetown | 2011 |
| Melson House | N of Atlanta on SR 30 | Atlanta | 1978 |
| Messick, Dr. John W., House and Office | 144 E. Market St. | Georgetown | 1987 |
| Milford Railroad Station | DE 36 | Milford | 1983 |
| Milford Shipyard Area Historic District | Roughly bounded by Mispillion River, Franklin, Front and Marshall Streets | Milford | 1983 |
| Milton Historic District | DE 5 | Milton | 1982 |

Table 10.6-1 Sussex County Sites on the National Register of Historic Places

| Resource Name | Address | City | Year Listed |
|--|---|---------------|-------------|
| Misphillion Lighthouse and Beacon Tower | NE end of CR 203 | Milford | 1987 |
| Moore Potato House | SE of jct. of DE 72 and DE 463 | Laurel | 1990 |
| National Harbor of Refuge and Delaware Breakwater Harbor Historic District | Mouth of Delaware Bay at Cape Henlopen | Lewes | 1989 |
| Norwood House | SW of Lewes on DE 9 | Lewes | 1982 |
| Old Bridgeville Fire House | 102 William St. | Bridgeville | 1984 |
| Old Christ Church | SE of Laurel at jct. of SR 465 and 465A | Laurel | 1972 |
| Old Sussex County Courthouse | S. Bedford St. | Georgetown | 1971 |
| Pagan Creek Dike | Pagan Creek near New Rd. | Lewes | 1973 |
| Pepper, Carlton, David, Farm | S of Georgetown on SR 469 | Georgetown | 1979 |
| Perry-Shockley House | 219 Washington St. | Millsboro | 1985 |
| Phillips Potato House | SW of jct. of DE 492 and DE 492A | Laurel | 1990 |
| Pine Grove Furnace Site | Address Restricted | Concord | 1978 |
| Ponder, Gov. James, House | 416 Federal St. | Milton | 1973 |
| Poplar Thicket | Address Restricted | Bethany Beach | 1978 |
| Portsville Lighthouse | N side of CR 493 | Portsville | 1987 |
| Prince George's Chapel | E of Dagsboro on DE 26 | Dagsboro | 1971 |
| Ralph Potato House | SE of jct. of DE 493 and DE 494 | Laurel | 1990 |
| Redden Forest Lodge, Forester's House, and Stable | Redden State Forest | Georgetown | 1980 |
| Ricards House-Linden Hall | E of Bridgeville on US 13 | Bridgeville | 1982 |
| Richards Historic District | County Rd. 34 | Greenwood | 1983 |
| Richards Mansion | N. Bedford St. and the Circle | Georgetown | 1979 |
| Rider Potato House | SE of jct. of DE 506 and DE 505 | Laurel | 1990 |
| Robbins, David, Homestead | 26285 Broadkill Rd. | Milton | 2013 |
| Robinson, Jesse, House | High St. | Seaford | 1982 |
| Roosevelt Inlet Shipwreck | Address Restricted | Lewes | 2006 |
| Ross Point School | CR 448 near Jct. with Rt. 62 | Laurel | 2001 |
| Ross, Edgar and Rachel, House | 413 High St. | Seaford | 1997 |
| Ross, Gov. William H., House | N of Seaford on Market St. | Seaford | 1977 |
| Russell, William, House | 410 Pilot Town Rd. | Lewes | 1977 |
| Scott's Store | NW of Bridgeville on DE 404 | Bridgeville | 1983 |
| Seaford Station Complex | Nanticoke River at Delaware Railroad Bridge | Seaford | 1978 |

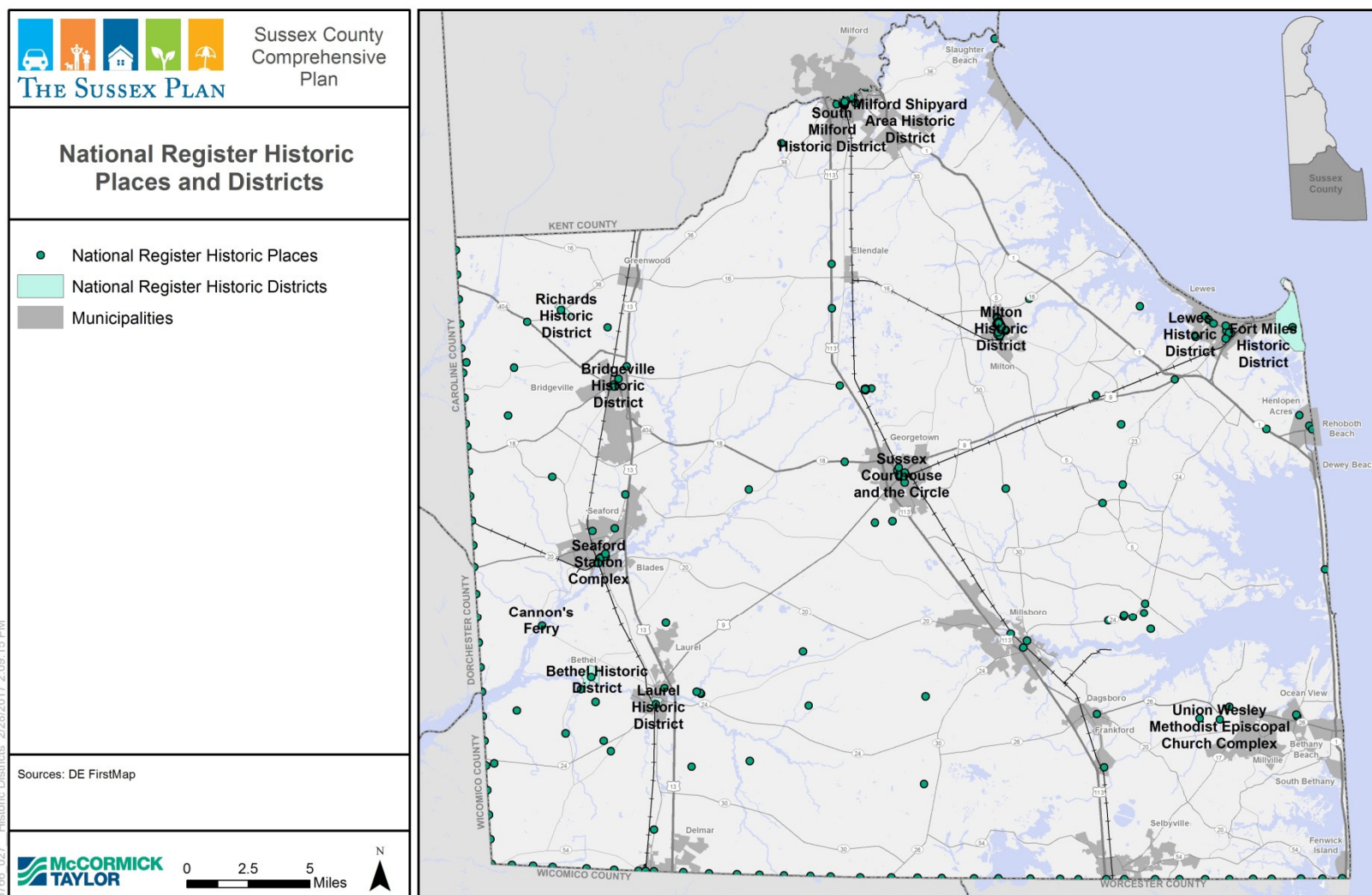
Table 10.6-1 Sussex County Sites on the National Register of Historic Places

| Resource Name | Address | City | Year Listed |
|---|--|----------------|-------------|
| Short Homestead | W of Georgetown at DE 526 and DE 529 | Georgetown | 1982 |
| Sipple, Thomas, House | N. Bedford & New Streets | Georgetown | 1985 |
| South Milford Historic District | Roughly bounded by Mispillion River, Maple Ave., Church and Washington Streets | Milford | 1983 |
| Spring Banke | NE of Clarksville on DE 26 and Irons Lane | Clarksville | 1976 |
| Spring Garden | NE of Laurel on Delaware Ave. | Laurel | 1982 |
| St. George's Chapel | 9 mi. SW of Lewes on DE 5 | Lewes | 1973 |
| St. John's Methodist Church | Springfield Crossroads, jct. of SR 30 and Co. Rd. 47 | Georgetown | 1990 |
| St. Luke's Protestant Episcopal Church | Front St. | Seaford | 1977 |
| St. Paul's Episcopal Church | E. Pine St | Georgetown | 1979 |
| Stanley Potato House | N of jct. of DE 68 and DE 451 | Laurel | 1990 |
| Sudler House | N. Main St. | Bridgeville | 1974 |
| Sussex County Courthouse and the Circle | The Circle | Georgetown | 1973 |
| Sussex National Bank of Seaford | 130 High St. | Seaford | 1987 |
| Teddy's Tavern | E side Du Pont Blvd., 0.6 mi. N of jct. with DE 16, Cedar Creek Hundred | Ellendale | 1991 |
| Thompsons Island Site | Address Restricted | Rehoboth Beach | 1978 |
| Thompson's Island Site (Boundary Increase) | Address Restricted | Rehoboth Beach | 1997 |
| Thompson's Loss and Gain Site | Address Restricted | Rehoboth Beach | 1978 |
| Townsend Site | Address Restricted | Lewes | 1978 |
| Trinity Methodist Episcopal Church | NW of Bridgeville on DE 31 | Bridgeville | 1978 |
| Tunnell--West House | 39 Central Ave. | Ocean View | 2012 |
| Union Wesley Methodist Episcopal Church Complex | Powell Farm Rd. | Clarksville | 2014 |
| Warren's Mill | NW of Millsboro on DE 326 | Millsboro | 1978 |
| Warrington Site | Address Restricted | Rehoboth Beach | 1977 |
| West Potato House | US 13 N of jct. with DE 454A | Delmar | 1990 |

Table 10.6-1 Sussex County Sites on the National Register of Historic Places

| Resource Name | Address | City | Year Listed |
|---|-------------------------------------|----------------|-------------|
| West Woods Methodist Episcopal Church | West Woods Rd., W of Millsboro Hwy. | Gumboro | 2007 |
| Wilgus Site | Address Restricted | Bethany Beach | 1978 |
| Wolfe's Neck Site | Address Restricted | Lewes | 1978 |
| Woman's Christian Temperance Union Fountain | Boardwalk at Rehoboth Ave. | Rehoboth Beach | 2009 |
| Wright Potato House | SW of jct. of DE 24 and DE 510 | Laurel | 1990 |
| Wright, Gardiner, Mansion | 228 S. Front St | Georgetown | 1979 |
| Wright, Warren T., Farmhouse Site | Address Restricted | Millsboro | 1979 |

Figure 10.6-1 National Register Historic Places and Districts



10.6.2 Local Historic Districts

Groups of closely located properties are often listed together on the National Register as historic districts. These districts should not be confused with the historic districts that local municipalities establish and regulate through their zoning ordinances or through separate special purpose ordinances.

National Register sites may or may not be part of locally-created historic districts. National Register sites outside of local historic districts are not subject to any of the restrictions on renovation and demolition that local municipalities often attach to properties within their local historic districts. National Register status by itself does not legally prevent property owners from doing whatever they want to their properties, including demolition.

Several Sussex County municipalities established local historic districts. These include Bethel, Bethany Beach, Bridgeville, Georgetown, Laurel, Lewes, Milford, Milton, and Selbyville. However, only Lewes, Milton, Selbyville, Georgetown, and Bethany Beach have established local protections to regulate renovation and demolition of structures within these districts. Bridgeville, Bethel, and Laurel are currently considering local ordinances.

10.6.3 Other Historic Resources

In addition to the over 400 historic resources listed on the National Register of Historic Places, there are more than 12,000 additional historic and cultural resources in Sussex County. These are available for viewing through the Delaware CHRIS website at <https://chris-users.delaware.gov>.

10.7 HISTORIC PRESERVATION FUNDING ENTITIES

A number of funding opportunities for historic preservation in Sussex County exist including:

10.7.1 Delaware Historic Preservation Tax Credit Program

The Delaware Historic Preservation Tax Credit Program is administered through the State and annually makes available \$5 million in state tax credits for projects approved under the program guidelines. The amount of the tax credit is equal to a percentage of the cost of the rehabilitation:

- 20% for income-producing (depreciable) historic buildings [which increases to 30% when a project qualifies for the Delaware State Housing Authority's low income tax credits]
- 30% for all other historic buildings [owner-occupied, residential buildings; non-profit-owned buildings and church-owned buildings]
- Tax credits awarded to a project can be applied against the applicant's state income tax, or can be transferred, sold or assigned to any person or corporation with Delaware income tax liability, or to banks to be applied against their franchise tax liability. Applications for owner-occupied residential properties are limited to being awarded a maximum of \$20,000 every 24 months.

10.7.2 Delaware Community Foundation

The Delaware Community Foundation began in 1986 as a result of concern that most fundraising was for current operating needs and none for endowments to meet future needs. The foundation helps communities and philanthropists focus charitable resources for the greatest community benefit statewide. The Foundation holds approximately \$235 million in charitable assets and is among the largest community foundations in the country (DeICF, 2017). Through the Foundation, people can donate to a number of funds that support historic preservation including funds for local historical societies, museums, and cemeteries.

10.7.3 Sussex County Land Trust

Each year the Sussex County Land Trust raises money to preserve open space, including historic sites such as the Wolfe House located off Wolfe Neck Road, with gifts from individuals, foundations, corporations, and through their partnership with Sussex County Council. Additionally, their donated conservations easement program has significantly grown and contributes a large part of their land protection efforts.

10.7.4 Delaware Preservation Fund

The Delaware Preservation Fund was created by Preservation Delaware and incorporated in 2000. The purpose of the Fund is to provide financial assistance to owners of historic properties. All of the Fund's programs target building which are on or eligible for listing on the National Register, or located in a historic district (Preservation, 2017).

10.7.5 National Trust for Historic Preservation

The National Trust for Historic Preservation provides several recognition vehicles for individual donors. The largest levels include:

- President's Circle: includes members that are committed to preservation by making annual gifts of \$1,000 or more.
- Chairman's Circle: includes a select group of donors who annually support the Trust by making unrestricted contribution of \$5,000 or more within a fiscal year.
- National Trust Council: the premiere donor recognition of society of the Trust. Members provide philanthropic support and contribute an annual \$10,000 or more (Saving Places, 2017).

10.7.6 Delaware Main Street Program (Downtown Delaware)

The National Trust for Historic Preservation launched a movement called Main Street America. Downtown Delaware is a coordinating program of Main Street America and acts as a resource center within the Delaware Economic Development Office. It provides Delaware's historic downtowns, communities and small businesses with tools for revitalization (Delaware Main Street, 2017). Milford and Rehoboth are two towns in Sussex County with recognized main street programs.

10.7.7 USDA Rural Development Program/Small Business Program

The United State Department of Agriculture Rural Development operates over 50 financial assistance programs for a variety of rural applications. They provide various types of grants and loans including funding to invest in redevelopment of historic buildings (USDA, 2017).

10.7.8 Longwood Foundation

Dedicated to the people, environment, and communities of Delaware and southern Chester County in Pennsylvania, the Foundation accepts grant requests from all organizations that have 501(c)3 status. Since 1937, the foundation has awards grants to non-profits totaling over \$2 billion including grants to help restore historic buildings (Longwood Foundation, 2017).

10.7.9 Fair-Play Foundation

The Fair-Play Foundation is one of the top giving foundations in Delaware with an annual giving of approximately \$590,000 (TGCI, 2017). They have supported historic preservation efforts in Sussex County including providing funding for restoration of the Shores House in Ocean View.

10.7.10 Crystal Trust

The Crystal Trust was created in 1947. Its giving mainly goes to higher and secondary education and social and family services. These services include youth and child welfare agencies, family planning, and programs for the aged, the disadvantaged, and the homeless. In addition, they also support arts and cultural programs, health and hospitals, conservation programs, and historical preservation (FC, 2017).

10.7.11 Federal Highway Administration

In 2013 the Advisory Council on Historic Preservation signed a new Programmatic Agreement with the FHWA for the State of Delaware. The agreement was developed to establish a more efficient approach to Section 106 compliance for Federal-Aid Highway projects in Delaware (ACHP, 2017).

10.7.12 Delaware Cemetery Board

The Delaware Cemetery Board offers \$80,000 per year in grant money throughout the state through the Distressed Cemetery Fund to preserve and restore distressed cemeteries. "Distressed cemetery" means any land or structure used or intended to be used for the interment/entombment of human remains including facilities used for the final disposition of cremated remains whereby the owner lacks sufficient financial resources for the maintenance or preservation of said cemetery as determined by the Board. The maximum amount available from the Fund to each cemetery is \$10,000.

10.7.13 State of Delaware Certified Local Government Program

The State encourages communities to pursue Certified Local Government (CLG) status. The program is administered by the SHPO in partnership with the National Park Service and provides technical and financial assistance to governments to strengthen their preservation efforts at the local level. CLG's may apply for grants to pursue historic preservation-related

projects and programs. The grants are awarded on a 60/40 matching basis (State of Delaware, 2017).

10.8 HISTORIC PRESERVATION GOALS, OBJECTIVES, AND STRATEGIES

Below is a list of goals, objectives, and strategies for Sussex County's Historic Preservation Element:

Goal 10.1: Preserve the historic and cultural resources in the County

Objective 10.1.1 Document existing historic and cultural resources in the County.

Strategy 10.1.1.1 Continue partnerships with universities, archaeological societies, local historical societies, and other entities to document historic and cultural resources in the County.

Objective 10.1.2 Identify additional historic sites to preserve.

Strategy 10.1.2.1 Continue working with universities, towns, private property owners, and other historic preservation entities to identify new sites for the National registers and expand existing national register districts.

Objective 10.1.3 Consider Pursuing Certified Local Government (CLG) Status through the State.

Strategy 10.1.3.1 Meet with the National Trust and the SHPO to learn more about the terms of the CLG program.

Strategy 10.1.3.2 Reach out to Lewes and Milton, the two communities in Sussex County currently with Certified Local Government Status, to learn more about their experiences with the program.

Strategy 10.1.3.2 Share information with the Planning and Zoning Office and Planning and Zoning Commission to educate them about the CLG program.

Objective 10.1.4 Mitigate the negative effects of proposed development on significant historic resources in the County.

Strategy 10.1.4.1 Work with developers to think about alternative uses for historic resources such as re-adapting or moving them.

Objective 10.1.5 Develop, enhance, and promote heritage tourism opportunities.

Strategy 10.1.5.1 Continue working to expand byway routes through Milton, Bridgeville, and Lewes.

Strategy 10.1.5.2 Continue to develop historic sites to increase capacity and opportunities for tourism, particularly in the western part of the County.

Strategy 10.1.5.3 Engage stakeholders to continue tourism plans for sites throughout the County. This may include consideration of creation of a countywide history tourism committee.

Strategy 10.1.5.4 Develop through partnerships with universities and the Delaware Heritage Commission, a publication that highlights the most significant historic sites in the County in order to promote heritage tourism and education.

Goal 10.2: Provide a comprehensive approach to historic preservation planning in the County.

Objective 10.2.1 Continue to provide historic preservation assistance to municipalities in Sussex County.

Strategy 10.2.1.1 Continue partnerships with the SHPO to promote the tax credit program.

Strategy 10.2.1.1 Continue education and outreach efforts to share information about the benefits of historic preservation with local officials, including the benefits of the creation of local historic districts and protections.

Objective 10.2.2 Serve as a comprehensive clearinghouse through the County Historic Preservation Planner and supporting departments for technical information on historic preservation to local officials and the public.

Strategy 10.2.2.1 Continue to work on additions to County's historic preservation database and publish it for public utilization.

Strategy 10.2.2.2 Consider making surveys as required by Section 106 available to the public through a partnership with SHPO, DelDOT, and DNREC.

Objective 10.2.3 Continue to support state, non-profit, and private property owner historic preservation efforts in the County.

Strategy 10.2.3.1 Support the Delaware Alliance for Nonprofit Advancement in the creation of new non-profit organizations around historic sites.

Strategy 10.2.3.2 Continue participation on the State Review Board for Historic Preservation.

Strategy 10.2.3.3 Work with the Department of Education to incorporate learning about local history and historic sites into the classroom.

Strategy 10.2.3.4 Continue education and outreach efforts to share information about the benefits of historic preservation with private property owners.

DRAFT

Chapter 11. INTERGOVERNMENTAL COORDINATION

Intergovernmental Coordination Vision: *To coordinate with government jurisdictions, State Agencies, and others to promote consistency in planning approaches*

11.1 MUTUAL IMPACTS AND INTER-RELATIONSHIPS

Sussex County devotes considerable effort to coordinating with government agencies at several different levels. As discussed in other chapters of the Plan, the County also maintains active working relationships with many non-profit entities that focus on issues such as conservation, housing, economic development, and historic preservation. This chapter contains a summary of how Sussex County works with others. Priorities for future intergovernmental efforts are identified in the goals, objectives, and strategies outlined at the end of the chapter. Other ways the County intends to implement this plan are also described.

11.1.1 Sussex County Municipalities

Decisions the 25 individual towns and cities make about zoning, annexation, development applications, utility services and related topics directly affect nearby unincorporated areas under County jurisdiction. Similarly, many County-level policies regarding these same types of issues impact the incorporated areas. Sussex County works closely with its cities and towns through these municipalities' governing bodies, local chambers of commerce, and the Sussex County Association of Towns (SCAT). Sussex County also is a member of the Delaware League of Local Governments which is a statewide, non-profit, nonpartisan association of municipal and county governments.

11.1.2 State Agencies

In addition to county and municipal influences, activities at the state-level have important implications for Sussex County. The policies and regulations administered by Delaware's state agencies play an important role in the development and preservation of Sussex County. Regarding the matters covered in this comprehensive plan, the following State agencies have a particularly important influence on the County's policy formulation and decision making:

- Delaware Office of State Planning Coordination
- Delaware Department of Transportation (DelDOT)
- Delaware Department of Natural Resources and Environmental Control (DNREC)
- Delaware Department of Labor
- Delaware State Housing Authority
- Delaware Department of Agriculture
- Delaware Department of State
- Department of Safety and Homeland Security

Coordination with the agencies is on a variety of topics, including:

- **Farmland Preservation:** As discussed in the Conservation Chapter, the County has historically contributed money to the State toward the purchase of acres of development rights from Sussex County farmers.
- **Wastewater:** As discussed in the Utilities Chapter, the County works closely with DNREC to provide central wastewater service, review options for wastewater solutions, and eliminate the use of existing onsite septic systems.
- **Housing:** As discussed in the Housing Chapter, the County works with the Delaware State Housing Authority to coordinate efforts, such as affordable housing and housing rehabilitation programs.
- **Historic Preservation:** As discussed in the Historic Preservation Chapter, the County works with the State Division of Historic and Cultural Affairs and the State Historic Preservation Officer on a number of archaeological and historic preservation programs.
- **Economic Development:** As discussed in the Economic Development Chapter, the County coordinates economic development efforts with the Delaware Department of Labor and several public-private partnerships.
- **Conservation:** As discussed in the Conservation Chapter, the County works with multiple state agencies on land preservation and ensuring consistency with state regulations related to natural resource protection.
- **Public Safety:** The County has funding agreements with Delaware State Police to provide State Police services in Sussex County.
- **Emergency Management:** The County coordinates with the Delaware Emergency Management Agency on emergency preparedness, training, response, recovery, and mitigation.

The County also works closely with DelDOT in recommending capital road projects in Sussex and other transportation initiatives. The County aims to improve coordination with DelDOT through a new approach to transportation planning with a goal of supporting implementation of required improvements in a timely fashion. The focus will be on a strategic, long-range, and highly coordinated process between the County, DelDOT, and the municipalities in order to truly integrate land use and transportation at a regional level to address current as well as anticipated future issues. More information about the coordination efforts with DelDOT is included in Chapter 14, Mobility.

The County also coordinates with the Office of State Planning Coordination (OSPC) on land use planning. In accordance with Chapter 92 of the Delaware Code, the OSPC and Sussex County Council co-signed a Memorandum of Understanding in 2003 concerning State review of certain County land use decisions. This agreement recognizes that some County land use decisions can: a) have far-reaching implications; and b) effectively commit resources at all levels of government.

In accordance with this agreement, the following Sussex County land use planning, zoning, and development activities require review under the State's Preliminary Land Use Service (PLUS) system:

- Any Residential Planned Community.
- Major residential subdivisions containing more than 50 dwelling units.
- Any non-residential subdivision or site plan involving the expansion of an existing structure by 25 percent with a total floor area exceeding 75,000 square feet or new construction involving structures or buildings with a total floor area exceeding 75,000 square feet.
- Any rezoning within the Environmentally Sensitive Development District that would increase intensity or residential density.
- Applications for rezoning that are inconsistent with the Sussex County's Comprehensive Plan.
- Any local land use regulation, ordinance, or requirement referred to the Office of State Planning Coordination by Sussex County for the purpose of providing the County with advisory comments. These include the modifications to the County's zoning and subdivision ordinances.
- Any amendment, modification, or update to the Sussex County Comprehensive Plan.

The OSPC also provides over-all guidance and coordination and serves as a planning resource to the County. The County coordinates frequently with the Circuit-Rider Planner for the County, including coordination during preparation of this Comprehensive Plan.

The County also participates in or has membership on a number of State committees. These include the Delaware Population Consortium, Delaware Geographic Data Committee, State Tourism Committee, Emergency Management, DeIDOT Capital Transportation Program, and PLUS.

Many of the goals, objectives, and strategies in each chapter of this Comprehensive Plan pertain to ways the County would like to continue and increase coordination with state agencies. These range from increased partnerships with DeIDOT pertaining to evaluating capacity improvement concepts to continuing jobs training partnerships with the state. Goals, objectives, and strategies pertaining to intergovernmental coordination are outlined in Section 11.4 below and discussed in more detail in each relevant chapter of this plan.

11.1.3 Federal Agencies

Most State agencies also have working relationships with federal entities, such as the U.S. Department of Transportation, the U.S. Department of Housing and Urban Development, the U.S. Fish and Wildlife Service, the U.S. Census Bureau, the Army Corps of Engineers, the Federal Aviation Authority, the Environmental Protection Agency, the U.S. Department of

Agriculture, and many others. An important part of many of these relationships involves allocating federal funds to Delaware jurisdictions, including Sussex County, and then monitoring how the local recipients use these funds. The County receives a number of federal grants for emergency operations, airport operations, housing and urban development, housing projects, and other miscellaneous projects.

11.1.4 Other Counties

Within Delaware, Sussex County is adjacent to Kent County in Delaware and the Maryland counties of Caroline, Dorchester, Wicomico, and Worcester. Major development, economic development, transportation, and conservation trends in these nearby jurisdictions influence Sussex County. In turn, significant growth and preservation activities in Sussex County affect traffic volumes, land use patterns, economic development, environmental conditions and other aspects of life in neighboring areas.

The Sussex County Council recognizes the importance of these inter-relationships. Sussex County is a member of the Delaware Association of Counties and the National Association of Counties. Through participation in the associations, the County works closely with fellow county officials to represent local governments' interest in matters in Legislative Hall in Dover and Capitol Hill in Washington, D.C. The associations also provide an opportunity for county leaders to network and share ideas, and to be a voice for county governments on state and federal legislation that can filter down to the local level.

11.1.5 School Districts

Sussex County also has a working relationship with the County's seven school districts and one County-wide district. The County has funded certain special needs projects within these districts.

- Cape Henlopen School District
- Delmar School District
- Indian River School District
- Laurel School District
- Milford School District
- Seaford School District
- Sussex County Technical School District
- Woodbridge School District

11.1.6 Private, Non-Profits, Volunteer, and Other Organizations

In addition to cooperation with government entities, Sussex County devotes considerable time to coordinating its activities with private non-profit organizations. These organizations typically devote their efforts to a single subject area. In and around the County, many private non-profits and volunteer organizations have working relationships with Sussex County. These range from

the Sussex County Land Trust, to various conservation groups, housing advocacy groups, and local chambers of commerce.

In addition, the County has partnerships with fire, ambulance, and rescue companies. The County operates Sussex County Emergency Medical Services (EMS) as a non-transporting EMS agency providing paramedic services. The County EMS uses eight specially designed Advance Life Support (ALS) rapid response vehicles. Each vehicle is stationed at one of eight paramedic stations located throughout the County. The ambulance transportation of patients is provided by 21 Basic Life Support (BLS) transport services (with a SCEMS Paramedic on-board if the patient meets ALS criteria), or by ALS helicopter service provided by the Delaware State Police and Life Net, which are both stationed in Sussex County. The County supplements its emergency services by partnering with the volunteer fire companies and providing funding for fire and ambulance services.

11.1.7 Libraries

The Sussex County Department of Libraries supports 14 public libraries and a bookmobile. Those libraries operated by the County include Greenwood, Milton, and South Coastal libraries as well as the bookmobile. The other libraries are independent but receive operational and some financial support by the County. The libraries include Bridgeville, Delmar, Frankford, Georgetown, Laurel, Lewes, Milford, Millsboro, Rehoboth Beach, Seaford, and Selbyville.

11.2 INTERGOVERNMENTAL COORDINATION USED IN PREPARING THIS PLAN

The previous parts of this chapter identify the numerous areas where Sussex County coordinates with other levels of government on an on-going basis, including the State, federal agencies, the other Delaware counties, Sussex County municipalities, Sussex County school districts, libraries, and private non-profits and volunteer organizations. As the following text indicates, Sussex County also included intergovernmental coordination in the preparation of this Comprehensive Plan Update, particularly consultation with the County's incorporated municipalities and with relevant Delaware state agencies.

11.2.1 Coordination with the Incorporated Municipalities

In formulating this Comprehensive Plan Update, Sussex County considered the comprehensive plans, annexation areas, and utility service policies of the local towns and cities. Copies of the most recent approved comprehensive plans and annexation area spatial data was acquired for all towns. As a first step to updating its Future Land Use Plan and Map, Sussex County reviewed the existing or proposed comprehensive plan for each of the County's 25 incorporated municipalities. Particular attention was paid to municipal future annexation areas to ensure consistency with County Future Land Use.

The County Planning and Zoning Office also coordinated with the municipalities throughout the planning process through a combination of emails, phone calls, or in-person meetings to provide information about the Comprehensive Plan process and to discuss municipal land use plans or

concerns. Information from this verbal coordination was also utilized when drafting the Future Land Use Chapter and Map and in drafting goals, objectives, and strategies for other chapters.

As part of the comprehensive planning process, Sussex County also met with the Sussex County Association of Towns (SCAT). Updates were given to the association about the planning process and municipal representatives were invited to participate in public meetings, Planning and Zoning Commission Workshops, and other methods of public input.

11.2.2 Coordination with the State

In preparing this Comprehensive Plan Update, Sussex County coordinated with the State in the following ways:

- The County coordinated with the Delaware Population Consortium to request seasonal population estimates. Much of the other demographic data used in this plan was from the Delaware Population Consortium.
- Most maps in this plan stem from digital base map files or other digital mapping provided through DE FirstMap which is a repository of geospatial data from sources including DNREC, OSPC, and other state agencies.
- Members from state agencies including the OSPC, DeIDOT, DNREC, DSHA, and Delaware Department of Agriculture participated in the planning process by attending meetings.
- One to two staff members from the State Office of Planning Coordination attended each of the public meetings Sussex County held in connection with this plan — and actively participated in these meetings.
- DeIDOT authored the Mobility Chapter included in this plan. DeIDOT also attended and participated in all of the Planning and Zoning Commission Workshops as the plan was being drafted as well as the public meetings held in connection with this plan.

11.3 COMPARISON OF OTHER RELEVANT PLANNING DOCUMENTS

A review of other relevant planning documents was conducted as part of the planning process used to prepare this plan. As described above, municipal comprehensive plans were acquired and reviewed, particularly when drafting the Future Land Use Plan and the Utilities Chapter. Additionally, existing County planning documents were reviewed and relevant information was incorporated into applicable chapters. Examples of this include:

- The County Hazard Mitigation Plan was reviewed and information and strategies were included the Conservation Chapter of this plan to support the goals of that plan.
- Additionally, County wastewater studies were reviewed when developing the Utilities Chapter.
- County Zoning Code was reviewed when drafting the Future Land Use Plan
- County Zoning and Subdivision and Land Development Regulations were reviewed throughout drafting of the chapters in order to incorporate relevant information pertaining to current County code.

Relevant state planning documents were also reviewed and utilized during the drafting of this plan. Examples of this include:

- Data and information from the DSHA's Delaware Statewide Housing Needs Assessment were used heavily in the drafting of the Housing Chapter.
- DeIDOT's Transportation Operations Management Plan and Strategic Implementation Plan for Climate Change Sustainability & Resilience for Transportation were reviewed in drafting the Mobility Chapter.
- The State National Register of Historic Places was reviewed when drafting the Historic Preservation Chapter.
- DNREC's Comprehensive Outdoor Recreation Plan was reviewed when drafting the Recreation and Open Space Chapter.

11.4 INTERGOVERNMENTAL COORDINATION GOALS, OBJECTIVES, AND STRATEGIES

Below is a list of goals, objectives, and strategies for Sussex County's Intergovernmental Coordination Element. Implementation of the strategies will be important to the success of this Comprehensive Plan as a whole. There are additional strategies contained throughout the chapters of this plan related to intergovernmental coordination needs that address specific initiatives or issues. These are included in more detail in the individual chapters.

Goal 11.1: Initiate and/or participate in the intergovernmental coordination activities needed to ensure consistency among federal, state, regional, county, and local governmental plans, policies, and activities.

Objective 11.1.1 Improve coordination efforts with State agencies.

Strategy 11.1.1.1 Coordinate with the Delaware Office of State Planning Coordination to collaboratively develop ways to improve the PLUS process.

Strategy 11.1.1.2 Coordinate with the Delaware Office of State Planning Coordination to confirm that future boundaries of State Priority Spending Areas (Levels I through IV) match the growth area delineations described in this Comprehensive Plan Update.

Strategy 11.1.1.3 Coordinate with DelDOT on road improvements and other transportation projects. This includes coordination on construction to anticipate future road and infrastructure improvements needed to enhance mobility.

Strategy 11.1.1.4 Work with the Delaware Department of Agriculture to preserve more Sussex County farms through agricultural preservation easements as well as to maximize the value of the compensation paid to the landowners.

Strategy 11.1.1.5 Cooperate with DNREC to formulate stronger, yet locally acceptable, strategies for better protecting groundwater, waterways, sensitive habitat areas, and other critical natural lands in Sussex County.

Strategy 11.1.1.6 Work with the DNREC and the Delaware Department of Agriculture to continue adding appropriate properties to the inventory of protected lands in Sussex County, particularly to link together existing State-owned forests and existing open space.

Strategy 11.1.1.7 Seek guidance from the Delaware State Housing Authority on how best to continue expanding Sussex County's response to local affordable housing needs.

Strategy 11.1.1.8 Continue coordination with the State Fire Marshal Office to ensure development complies with State Fire Protection regulations.

Objective 11.1.2 Improve coordination with regional agencies and neighboring counties.

Strategy 11.1.2.1 Continue participation in the Delaware Association of Counties and the National Association of Counties.

Objective 11.1.3 Improve coordination with the County's municipalities, school districts, and other agencies operating in the County.

Strategy 11.1.3.1 Continue coordination with the County's 25 towns and cities, with particular focus on annexation, municipal zoning, future utility service areas, road improvements, large development applications, and historic preservation.

Strategy 11.1.3.2 Continue to coordinate with local governments to ensure consistency in land use planning for lands adjacent to an incorporated area.

Strategy 11.1.3.3 Coordinate with the State Department of Education and school Districts to plan for future growth.

Strategy 11.1.3.4 Continue participation in SCAT and the League of Local Governments.

Strategy 11.1.3.5 Continue education and outreach efforts to share information about the benefits of historic preservation with local officials, including the benefits of the creation of local historic districts and protections.

Strategy 11.1.3.6 Continue to support the Sussex Conservation District in the management and implementation of the Statewide stormwater regulations, tax ditches, and other programs.

Objective 11.1.4 Improve coordination efforts with private, non-profit, and volunteer organizations.

Strategy 11.1.4.1 Cooperate with relevant non-profits to formulate stronger, yet locally acceptable, strategies for better protecting groundwater, waterways, sensitive habitat areas, and other critical natural lands in Sussex County.

Strategy 11.1.4.2 Work with the Sussex County Land Trust and non-profits to continue adding appropriate properties to the inventory of protected lands in Sussex County, particularly to link together existing State-owned forests and existing open space.

Strategy 11.1.4.3 Seek guidance from relevant non-profits on how best to continue expanding Sussex County's response to local affordable housing needs.

Strategy 11.1.4.4 Continue seeking advice from, and providing County financial support to, appropriate non-profit organizations that serve Sussex County in an exemplary way.

Objective 11.1.5 Coordinate government programs and services at all levels to increase efficiency in decision making.

Strategy 11.1.5.1 Continue to strengthen the role of Sussex County in providing technical assistance and acting as a clearinghouse of information for municipalities, private organizations, and the public.

Strategy 11.1.5.2 Increase coordination and cooperation between and among County, State, and municipal agencies and school districts in order to reduce duplicative efforts.

Strategy 11.1.5.3 Identify ways to streamline processes to create efficiencies in the County land development review and approval process.

Goal 11.3: Maintain and improve public services.

Objective 11.3.1 Continue coordination and support for entities providing public facilities and services in the County.

Strategy 11.3.1.1 Continue to support the Delaware State Police trooper allocation for Sussex County.

Strategy 11.3.1.2 Continue to support local volunteer fire, ambulance companies, local fire departments, libraries, and community groups.

Objective 11.3.2 Coordinate the planning efforts for public facilities and services with the timing of development in the County.

Strategy 11.3.2.1 Improve coordination between the County Engineering Office and the Planning and Zoning Office.

Objective 11.3.3 Continue to improve and grow County public services.

Strategy 11.3.3.1 Ensure that paramedic facilities and staffing are adequate.

Strategy 11.3.3.2 Continue to coordinate and improve utilities with the municipalities.

11.5 INTERGOVERNMENTAL COORDINATION AND PLAN IMPLEMENTATION PRIORITIES

The intergovernmental coordination strategies enumerated above will be key in implementing this Comprehensive Plan. Selected updates to the County's Zoning Ordinance and the County's Subdivision Code will also be critical to ensure that appropriate recommendations in this plan are translated into ordinance. This Comprehensive Plan will also be a valuable tool for the County in developing its annual Capital Improvement Program.

11.5.1 Sussex County Capital Improvement Program

Sussex County Council adopted its most recent budget on June 13, 2017. In addition to describing operating costs and revenues for Fiscal Year 2018, a Capital Project Program is

included for FY 2018 through FY 2022. This Capital Projects Program divides anticipated capital projects into two types: a) Non-Sewer and Water Projects; and b) Sewer and Water Projects.

As the name implies Non-Sewer and Water Projects include capital projects the County will undertake that are not related to public sewer or public water improvements. For example, the County is committed to investing in the Sussex County Industrial Airpark to continue adding jobs and benefitting the County's economy. Sussex County funds Non-Sewer and Water capital improvements from general revenues.

Sewer and Water Projects are capital improvements that Sussex County will undertake to protect environmental conditions in its sewer and water districts. These projects are designed primarily to extend County wastewater conveyance and treatment services into areas that currently use on-site septic systems. Sewer and Water Projects also include expansions and upgrades to the four wastewater treatment plants that Sussex County owns and operates. The County funds its capital Sewer and Water Projects through two types of user fees: assessment charges to recover the costs of bond funds borrowed for specific projects, and one-time fees that new customers must pay for connecting to the County's system.

The following table shows the costs of capital improvements Sussex County now plans for FY 2018 through FY 2022. The revenue sources the County anticipates using to pay for these projects are also shown.

Table 11.5-1 Sussex County Council – Capital Improvements Program FY 2018-2022

| Project | Total for FY 2018 through FY 2022 | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|--------------------------------------|-------------|-------------|-------------|-------------|-------------|
| NON-SEWER AND WATER PROJECTS (GENERAL FUND) | | | | | | |
| Administrative | | | | | | |
| Building Improvements | \$637,000 | \$487,000 | \$100,000 | - | - | \$50,000 |
| Maintenance Building | \$1,250,000 | \$1,250,000 | - | - | - | - |
| Fiber Optics | \$5,110,000 | \$1,110,000 | \$1,000,000 | \$1,000,000 | \$1,000,000 | \$1,000,000 |
| CAMA System | \$30,000 | \$30,000 | - | - | - | - |
| Land Acquisition & Improvements | \$2,000,000 | \$2,000,000 | - | - | - | - |
| | | | | | | |
| Airport and Industrial Park | | | | | | |
| RW 4-22-6000' Expansion | \$1,000,000 | - | - | - | - | \$1,000,000 |
| Stormwater Improvements | \$560,000 | \$200,000 | \$100,000 | \$100,000 | \$100,000 | \$60,000 |
| Electrical Upgrades | \$500,000 | \$500,000 | - | - | - | - |
| Taxiway A Improvements | \$350,000 | - | \$350,000 | - | - | - |
| Land Acquisition | \$540,000 | \$540,000 | - | - | - | - |
| Building Improvements | \$145,000 | \$45,000 | \$100,000 | - | - | - |
| Aeronautical Obstruction | \$1,231,000 | \$120,000 | \$500,000 | \$611,000 | - | - |
| RW 10-28 Parallel Taxiway | \$6,085,000 | \$485,000 | \$2,800,000 | \$2,800,000 | - | - |
| 13 Spot Tiedown Apron | \$380,000 | - | \$180,000 | - | \$200,000 | - |
| Industrial Park Improvements | \$4,400,000 | \$3,400,000 | \$1,000,000 | - | - | - |
| Pavement Improvements | \$1,725,000 | \$1,525,000 | \$200,000 | - | - | - |

Table 11.5-1 Sussex County Council – Capital Improvements Program FY 2018-2022

| Project | Total for FY 2018 through FY 2022 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|--------------------------------------|--------------|-------------|-------------|-------------|-------------|
| Master Plan Update | \$500,000 | - | - | - | \$500,000 | - |
| Expand Main Apron | \$300,000 | - | - | - | - | \$300,000 |
| Water Plant | \$250,000 | \$250,000 | - | - | - | - |
| | | | | | | |
| Engineering | | | | | | |
| Landfill Property Acquisition | \$950,000 | \$150,000 | \$200,000 | \$200,000 | \$200,000 | \$200,000 |
| | | | | | | |
| Public Safety | | | | | | |
| Mobile Command Unit | \$400,000 | \$400,000 | - | - | - | - |
| Stations | \$1,900,000 | \$950,000 | \$200,000 | \$750,000 | - | - |
| TOTAL CAPITAL IMPROVEMENT EXPENDITURES | \$30,243,000 | \$13,442,000 | \$6,730,000 | \$5,461,000 | \$2,000,000 | \$2,610,000 |
| | | | | | | |
| FUNDING | | | | | | |
| Appropriated Reserves | \$10,571,250 | \$8,571,250 | \$1,000,000 | \$1,000,000 | - | - |
| Federal Grants | \$7,546,500 | \$436,500 | \$2,970,000 | \$2,520,000 | \$450,000 | \$1,170,000 |
| Investment Income | \$80,000 | \$20,000 | \$15,000 | \$15,000 | \$15,000 | \$15,000 |
| Interfund Transfer (RTT) | \$11,046,000 | \$4,000,000 | \$2,540,000 | \$1,636,000 | \$1,510,000 | \$1,360,000 |
| State Grants | \$999,250 | \$414,250 | \$205,000 | \$290,000 | \$25,000 | \$65,000 |

Table 11.5-1 Sussex County Council – Capital Improvements Program FY 2018-2022

| Project | Total for FY 2018 through FY 2022 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|--------------------------------------|--------------|--------------|--------------|--------------|-------------|
| TOTAL FUNDING SOURCES | \$31,243,000 | \$14,442,000 | \$6,730,000 | \$5,461,000 | \$2,000,000 | \$2,610,000 |
| SEWER AND WATER PROJECTS (ENTERPRISE FUND) | | | | | | |
| Enterprise Fund Expenditures | | | | | | |
| IBRWF-Spray Demand Loop | \$3,300,000 | \$ 250,000 | \$1,000,000 | \$2,050,000 | - | - |
| IBRWF-Treatment/Disposal Expansion | \$23,500,000 | \$750,000 | \$10,000,000 | \$12,750,000 | - | - |
| IBRWF-Regional Biosolids/Septage | \$15,710,000 | \$500,000 | \$5,700,000 | \$9,510,000 | - | - |
| SCRWF-Capacity Expansion | \$31,728,000 | \$750,000 | \$7,000,000 | \$11,750,000 | \$12,228,000 | - |
| SCRWF-Compliance Upgrades | \$12,184,000 | \$750,000 | \$4,000,000 | \$6,200,000 | \$1,234,000 | - |
| WNRWF-Conversion | \$10,417,000 | \$500,000 | \$3,000,000 | \$3,000,000 | \$3,917,000 | - |
| Angola North Sewer District | \$8,020,000 | \$1,000,000 | \$4,000,000 | \$3,020,000 | - | - |
| Pump Station #196 – Transmission to LBPW | \$1,650,000 | \$1,650,000 | - | - | - | - |
| Goslee Creek Main P.S. | \$500,000 | \$500,000 | - | - | - | - |
| Rehoboth Beach WWTP/Outfall Contribution | \$21,280,000 | \$1,430,000 | \$15,700,000 | \$4,150,000 | - | - |
| Pump Station #201 -& Transmission to RB WTF | \$2,500,000 | \$750,000 | \$750,000 | \$1,000,000 | - | - |
| Concord Road/Route 13 Commercial-BLSSD | \$4,000,000 | \$1,800,000 | \$1,500,000 | \$700,000 | - | - |
| RT. 54 Expansion of FISSD | \$2,050,000 | \$2,050,000 | - | - | - | - |
| RT. 26- PS#311/Irons Lane | \$1,000,000 | \$1,000,000 | - | - | - | - |

Table 11.5-1 Sussex County Council – Capital Improvements Program FY 2018-2022

| Project | Total for FY 2018 through FY 2022 | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|--------------------------------------|---------------------|---------------------|---------------------|---------------------|--------------------|
| Chapel Branch-CBSSD | \$4,800,000 | \$300,000 | \$1,250,000 | \$2,250,000 | \$1,000,000 | - |
| Mallard Creek-HLSSD | \$2,000,000 | \$100,000 | \$1,900,000 | - | - | - |
| Branch/Autumn/Tucks Roads - LNSSD | \$1,600,000 | \$100,000 | \$850,000 | \$650,000 | - | - |
| Mulberry Knoll | \$2,900,000 | \$100,000 | \$1,800,000 | \$1,000,000 | - | - |
| Herring Creek Sewer Area | \$20,215,000 | \$1,000,000 | \$2,000,000 | \$9,500,000 | \$7,715,000 | - |
| Tanglewood-Bayard PS#1 | \$1,500,000 | \$200,000 | \$1,300,000 | - | - | - |
| Oak Acres-Bayard PS#5 | \$2,600,000 | - | \$2,600,000 | - | - | - |
| Ellendale Water District | \$5,350,000 | \$50,000 | \$300,000 | \$2,500,000 | \$2,500,000 | - |
| Western Sussex Sewer District | \$15,000,000 | \$100,000 | \$3,000,000 | \$7,000,000 | \$4,900,000 | - |
| Route 54 Force Main | \$1,000,000 | \$500,000 | - | - | - | \$500,000 |
| Joy Beach Sewer Area | \$0 | - | - | - | - | - |
| Land Conservation & Impr. | \$3,500,000 | \$3,500,000 | - | - | - | - |
| Millville Expansion – Beaver Dam | \$1,600,000 | - | - | - | \$100,000 | \$1,500,000 |
| Bethany Forest Sewer Area | \$2,500,000 | - | - | - | \$500,000 | \$2,000,000 |
| TOTAL EXPENDITURES | \$202,404,000 | \$19,630,000 | \$67,650,000 | \$77,030,000 | \$34,094,000 | \$4,000,000 |
| FUNDING | | | | | | |
| User Fees/Third Party Contributions | \$63,391,000 | \$3,930,000 | \$29,400,000 | \$24,910,000 | \$5,151,000 | - |
| Connection Fees | \$65,678,000 | \$8,000,000 | \$18,600,000 | \$26,850,000 | \$12,228,000 | - |
| Federal/State Funding | \$73,335,000 | \$7,700,000 | \$19,650,000 | \$25,270,000 | \$16,715,000 | \$4,000,000 |
| TOTAL FUNDING SOURCES | \$202,404,000 | \$19,630,000 | \$67,650,000 | \$77,030,000 | \$34,094,000 | \$4,000,000 |

Chapter 12. COMMUNITY DESIGN

Community Design Vision: *To encourage the development of neighborhoods of innovative and superior design to preserve and enhance the character and community of Sussex County.*

12.1 OVERVIEW

At one time, Sussex County consisted mainly of small towns surrounded by rural countryside. The towns were characterized by compact neighborhoods, small-town “Main Street” business areas, and a mix of traditional architectural styles. The rural areas featured working family farms, crossroads villages and extensive woodlands, all connected by country roads.

Sussex County is still an attractive place, with many towns having elements of their traditional character and style. Much of the rural countryside remains picturesque farmland. Many new developments have included well-designed open spaces and carefully designed buildings and amenities. However, crowded highways, strip commercial development, cookie cutter subdivisions, nondescript construction, and other aspects of suburban sprawl now exist in some areas. In certain areas of the County’s eastern sector and along some higher volume state roads, there is little physical distinction between the town and the country.

The key is to design modern land uses in a manner that adds to the character of the community, instead of intruding into it. Some of these changes have expanded economic opportunities, brought commercial services, provided new housing opportunities and created convenient road connections. Yet, too often new construction has occurred with little thought towards design, causing parts of Sussex County to have the same overly-standardized appearance as many other parts of the country.

This Plan recognizes that change is inevitable. At the same time, the County is looking for the best ways to direct the location, appearance and function of new development. This chapter discusses how to use zoning, subdivision regulations and other means to produce development that is based on rational site planning, and forward-thinking design. Many of the techniques discussed illustrate how to incorporate open space and traditional design elements into new settings, an attempt to draw from the best of the old and the best of the new.

It also is important to maintain an attractive environment for economic development reasons. Visitors and new residents come to Sussex County for an attractive setting, where they can enjoy waterways, beaches and other natural areas. If Sussex County becomes unattractive, with garish signs, excessive numbers of billboards, destruction of natural features, and monotonous construction, it will harm economic growth.

The purpose of this plan element is to support and encourage development concepts that promote a variety of design concepts and styles. While the County recognizes that development is market-driven and that each site and each development proposal is unique, it encourages concepts that protect the rural character of the County, protect a site’s

environmental assets, and take into account the character of surrounding development. This chapter does not seek to regulate new construction or design, but rather serve as a guide for developers and their designers to consider in the future planning and development of land.

12.2 PROMOTING BETTER COMMUNITY DESIGN

Sussex County Code contains regulations for the subdivision of land and zoning. Through the code, Sussex County currently uses two primary methods to encourage better community design: Residential Planned Communities and Cluster Development.

12.2.1 Residential Planned Communities

The purpose of the Residential Planned Community (RPC) District is to encourage large-scale developments as a means of creating a superior living environment through unified developments, providing for the application of design ingenuity while protecting existing and future developments, and achieving the goals of the Comprehensive Plan. By integrating many elements of design, this district encourages off-street parking, ensures the appropriate relationship between uses, intensity, and height within and outside of the RPC, and allows the Planning and Zoning Commission to impose conditions regarding layout and design.

An applicant may ask the County to add this option to their property as an option to the regular zoning provisions. RPC provisions:

- Usually allow a mix of housing types, including single-family homes, townhouses and apartments.
- Provide for a slightly higher density than the density that is possible without use of the RPC provisions, in order to provide an incentive.
- Allow a percentage of the tract (such as up to 15 percent) to be developed in neighborhood-oriented commercial uses that are highly compatible with homes.
- Give the County the authority to modify zoning requirements, such as setbacks, within a RPC development.

12.2.2 Cluster Development

Another method that Sussex County employs to encourage better community design is the cluster development option. Cluster development or “open space development” involves providing incentives for the permanent preservation of a percentage of the land within a new development by allowing deviation in lot size, type of dwelling, lot coverage and open space from that which is normally required by a residential zoning district.

In a cluster development, the “open” or conserved land is typically owned and maintained by a homeowner association, although other methods of ownership are possible. The homes are allowed to be placed on smaller lots than would normally be required, or different types of housing are allowed to offset the land used as open space. The County offers greater flexibility in lot sizes and dimensions in return for the open space. The open space is permanently

preserved by a conservation easement that prevents future subdivision or building on the open space.

In comparison, conventional subdivisions usually result in little or no preserved open space (except wetlands and stormwater management areas) because the balance of the entire tract is subdivided into building lots. Often, most of the building lots in a conventional subdivision are virtually the same size and shape—hence the nickname “Cookie Cutter Subdivisions.”

The cluster option has been very widely used in Sussex County in recent years. It is available in the AR-1 zoning district, which covers most of the undeveloped land areas in the County. The cluster option has also made it more economical to develop central water and sewage systems in rural locations.

It requires cluster developments that provide for a total environment and design which are considered superior to that which would be allowed under the regulations for the standard option subdivision. Criteria for “superior design” are contained in the Sussex County Code and include information ranging from the clustering of homes during site design site to the design of open space.

12.2.3 Other Design Standards

Recently, Sussex County Council determined that the County’s Street Design Standards were outdated and needed updating. In addition, the Council wanted to ensure that the street design standards contained in the County Code contain flexibility to enable creativity in design (taking into account existing topographical and environmental features) while providing safe communities for County residents. On March 28, 2017 a drainage and grading ordinance was passed by Sussex County Council. The ordinance includes new street design requirements related to driveways, on-street parking, sidewalks, and cul-de-sacs, among others.

12.3 DESIGN AND DEVELOPMENT CHARACTERISTICS

The County recognizes that development in the County is market-driven and often the design of new development reflects the desires of the current market. However, creative approaches can be considered in new development. The County does not regulate the incorporation of design standards but encourages that the following design standards be considered when designing new development:

12.3.1 Street Trees

The planting of street trees can improve aesthetics and eventually provide a canopy of shade over streets. Studies show that mature street trees can also increase the value of homes up to 10 percent. If it is not appropriate to have shade trees in the right-of-way, they can also be planted immediately outside of the right-of-way.

12.3.2 Lighting

New street lights could be similar in design to older styles of street lights. In addition, downward screening of outdoor lights on residential and commercial properties should be provided whenever feasible to prevent intrusion into adjoining residential areas.

12.3.3 Sidewalks

Sidewalks (or asphalt paths along main roads in rural areas) are an important element in residential neighborhoods that increase safety and connectivity for pedestrians and can provide them with an ability to walk or bicycle to stores, schools and parks. Also, overly wide residential streets and intersections should be avoided when possible to discourage speeding and to make it easier for pedestrians to cross the street.

12.3.4 Parking Location

Whenever practical, parking should be located to the rear or side of buildings, so that the front yard can be landscaped. When parking and garages are placed to the rear of lots, with access using alleys, this design avoids conflicts between sidewalks and vehicles backing into the street, and allows the entire curbside to be available for on-street parking.

If rear access to garages is not practical, then garages should enter onto the side of homes whenever possible, particularly on corner lots. If a front-entrance garage is proposed, it should be designed so that it is not an overly prominent part of the street. For example, a one lane driveway can pass along the side of a house and then widen to enter a two-car garage that is setback from the front of the house. "Snout" houses should be avoided that have a front entrance garage as the home's most prominent feature.

12.3.5 Building Orientation

Buildings can be placed relatively close to the street, with front or side porches, to encourage interaction among neighbors. On a corner lot, a side porch can have the same effect. If residents spend time on their front porch, they can help oversee the neighborhood and report suspicious activity to the police.

Additionally, the use of flag lots should be avoided whenever possible. A "flag lot" is a lot that has a narrow land area connecting the main part of the lot to a road. The narrow stretch includes the driveway. As such, the building is set back far from the street. Flag lots should be controlled so they are not overly used; however, one or two flag lots within a development can be beneficial at the end of a road to allow a greatly reduced length of road.

12.3.6 Building Height

Building height is regulated in County Code which includes maximum height requirements for each zoning district. However, since this is a maximum permitted height, not all neighboring properties or developments may have built to that maximum. When practical, building heights of new development should be compatible with the scale and character of existing neighborhoods and surrounding developments.

12.3.7 Maximum Building Setbacks and Limits on Front Yard Parking

In key older areas of the County, it may be appropriate to specifically establish a maximum building setback. The goal is to have new construction be consistent with prevailing setbacks along a block of older buildings. The code can also limit new parking in the front yard in older areas. The goal is to encourage front yard setbacks that are relatively small, but well landscaped.

12.3.8 Architectural Elements

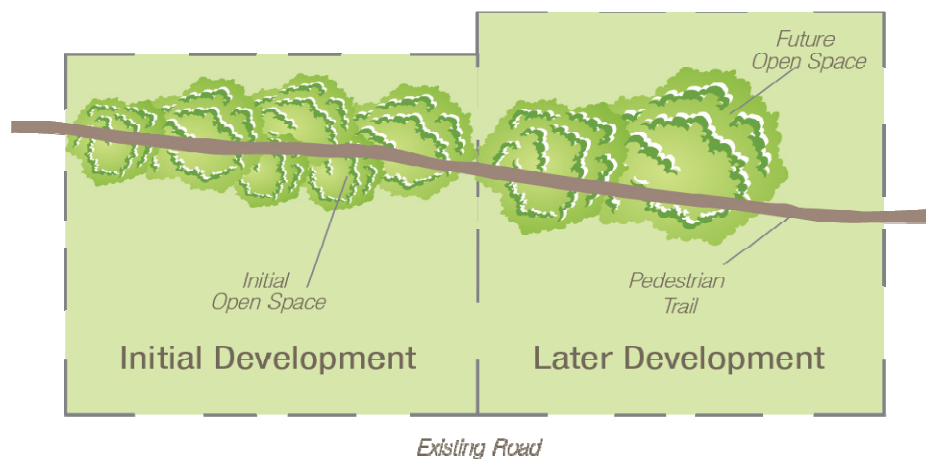
The use of architectural details, pitched roofs, and varied rooflines can add visual interest, even for chain stores. While the County does not regulate architectural elements of the design of a development's buildings and facilities, the County is open to the use of unique architectural elements in design and is considering creation of an awards program to recognize outstanding design of both buildings and sites.



Pitched roofs, varied rooflines and architectural details can add visual interest.

12.3.9 Open Space and Trail Connectivity

The coordination of open spaces and trails across various developments can provide benefits to both wildlife habitat as well as pedestrian connectivity. When considering open space and trail locations in a current proposed development, future linkages on adjacent future development

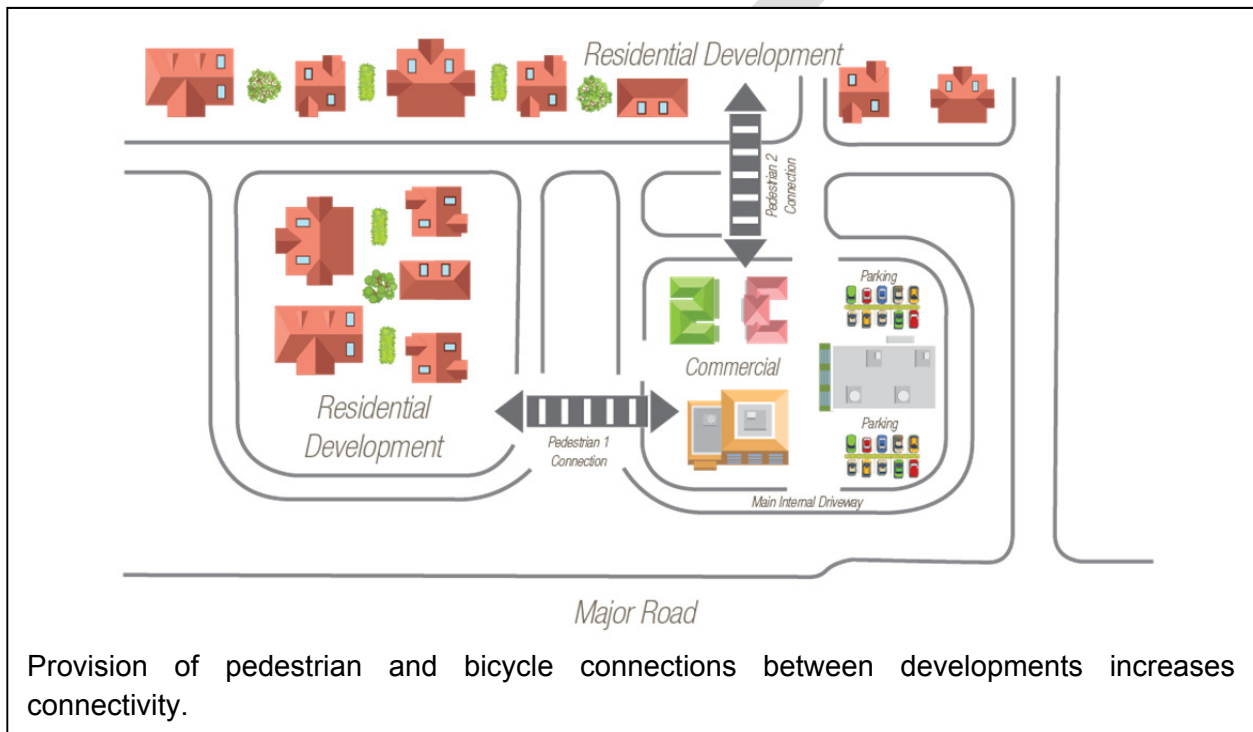


Coordination of open space and trails across developments enhances connectivity of habitat and pedestrian access.

tracts should be considered.

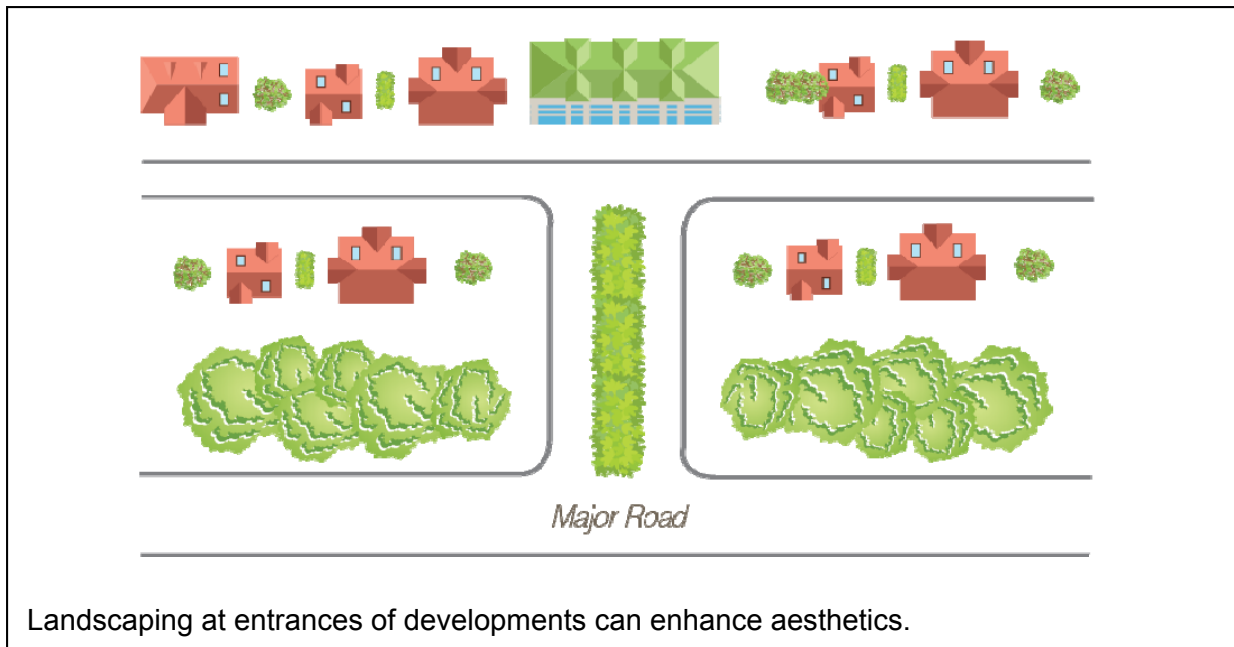
12.3.10 Pedestrian and Bicycle Connectivity

The provision of pedestrian and bicycle connections between various developments can encourage walking and cycling and increase access to community facilities such as parks, schools, and libraries. Where a road does not provide a connection, a hard-surfaced pedestrian easement could be provided. In addition, in larger commercial developments interconnectivity should be integrated into site design and most vehicle traffic should be directed to routes that do not conflict with the main pedestrian entrances from parking lots.



12.3.11 Landscaped Entrances

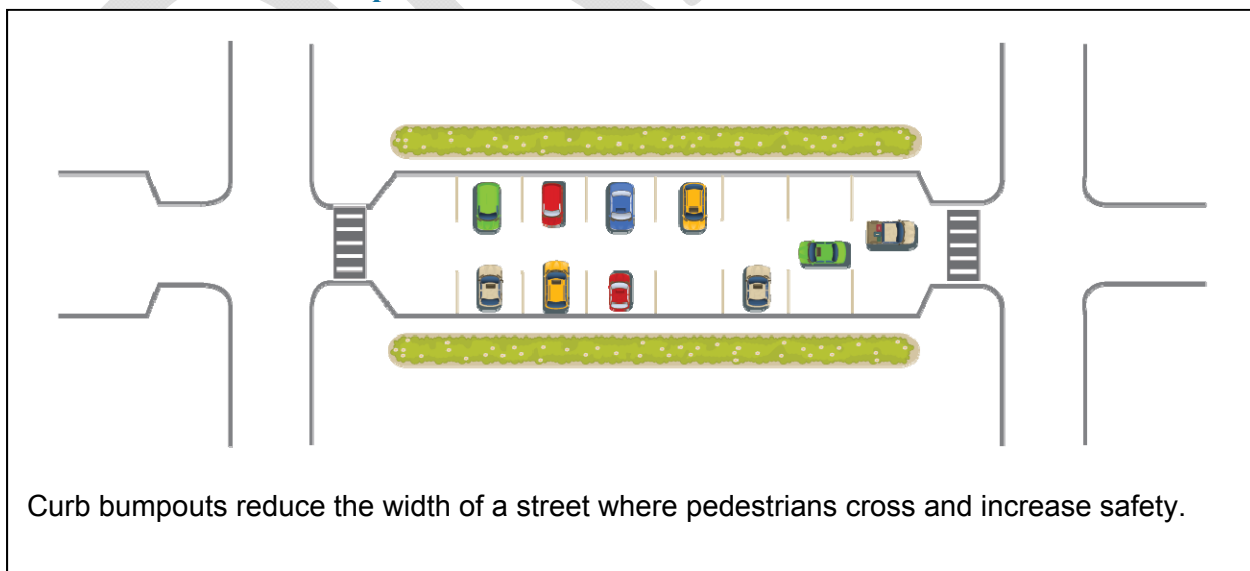
Creation of well landscaped boulevard-style entrances can provide a great first impression. Along major roads, reverse frontage lots should be used when feasible to minimize the number of driveways entering onto major roads. When rear yards face onto a major road, they should be separated by landscaping, with any fencing on the inside of the landscaping. Open space should be provided along major roads to maintain some of the rural character and to reduce noise conflicts between homes and traffic.



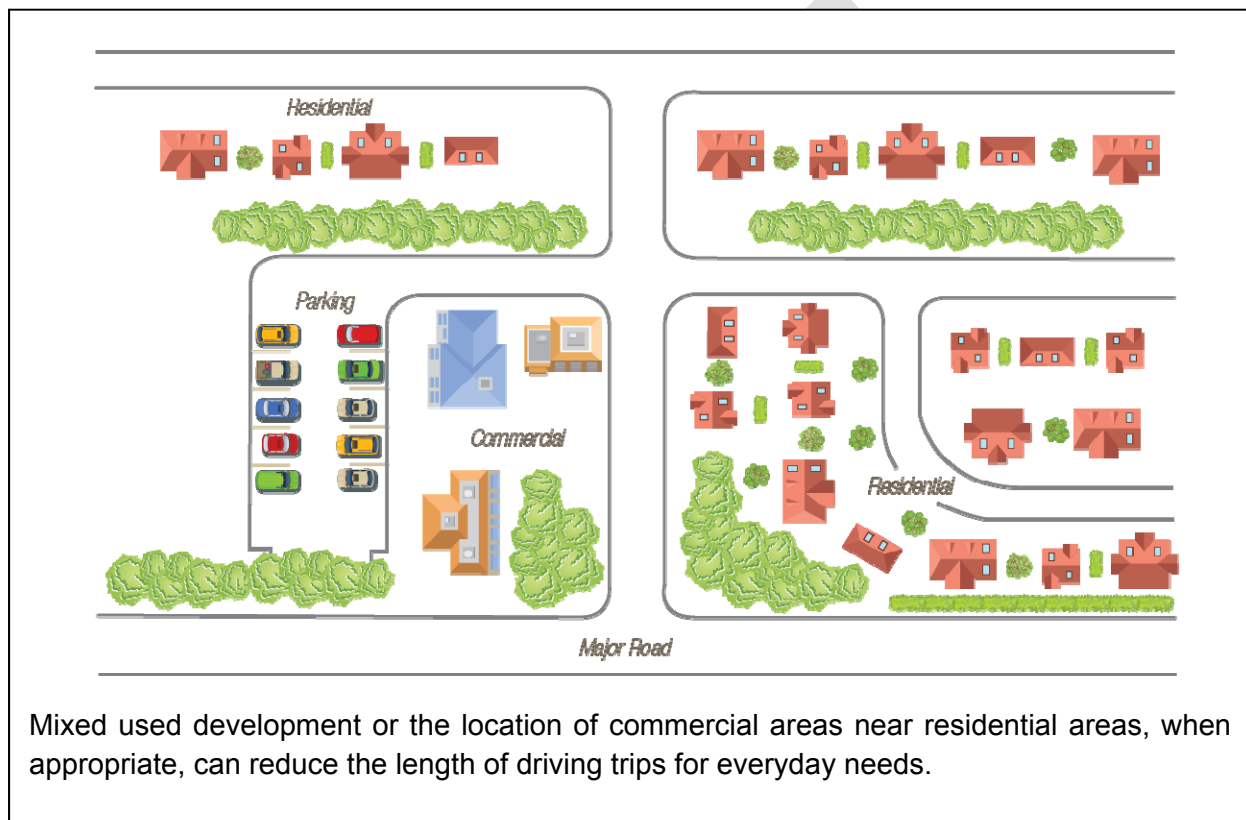
12.3.12 Curb Bumpouts

On residential streets and some streets in commercial areas, there may be a possibility for curbs to be extended outward at intersections so there is less width of street that needs to be crossed by pedestrians. The street can then be widened where on-street parking spaces are provided. By reducing the street width where there is not a need for parking, it also reduces the amount of pavement and runoff and reduces construction and maintenance costs.

12.3.13 Commercial Development Location

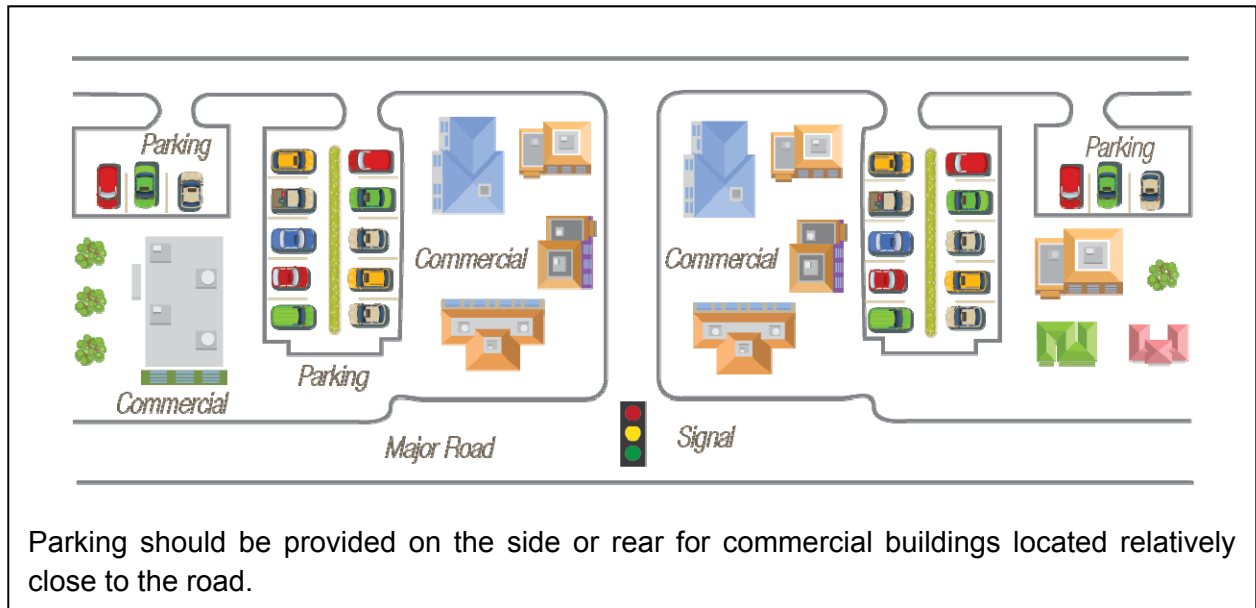


In larger residential developments, an area of neighborhood-oriented stores and services can be desirable to serve local needs. Mixed use development or well-distributed commercial areas throughout the County can also reduce the lengths of driving trips for everyday needs. The County does not currently have a mixed use zoning district; however, code should be revisited to determine if a mixed use district is feasible and appropriate in the County. Likewise, the RPC districts should be expanded for use in commercially-zoned areas where residential uses are permitted.



12.3.14 Commercial Development Design

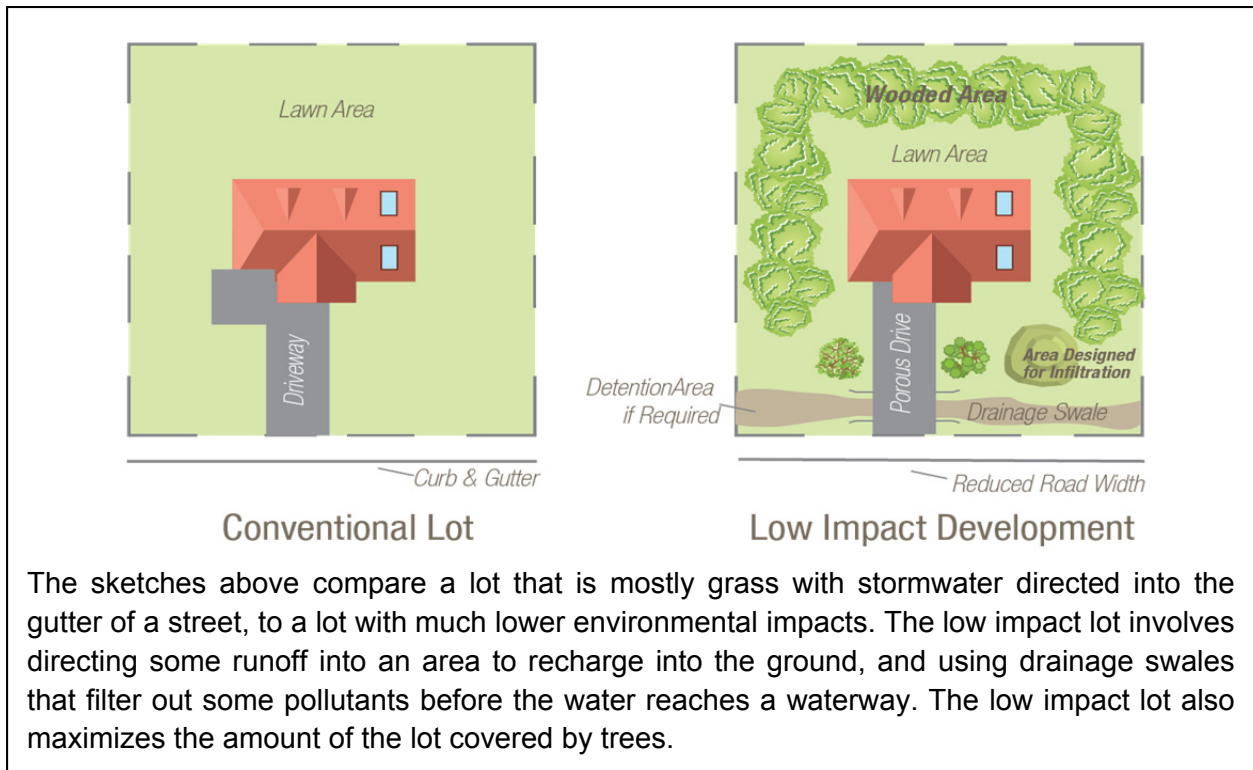
Commercial buildings should be encouraged to be placed relatively close to the road, provided they still allow proper sight distance and room for future road widening. Most vehicle parking should be placed to the rear or side of buildings when possible. At best, a new street or alley or interconnected parking aisles should be provided parallel to the major road so that most traffic can access the main road at a traffic signal. The commercial area should also be well-buffered from nearby homes by landscaping.



12.3.15 Preserved Open Space within New Developments

Preserved open space can often increase values of adjacent homes. Open space development can also help retain more naturalistic stormwater patterns, which promotes groundwater recharge and protects water quality. This is because stormwater swales can be wider and vegetated, as opposed to having stormwater piped or constrained within narrow channels to avoid losing density.

As described above, the RPC provisions in the County's Zoning Ordinance allow flexibility in the standards for larger developments, in return for a higher quality of site design. However, there currently is no minimum open space requirement for these developments. Greater attention is needed to the design of the open space to make sure it serves a valuable public purpose and is inter-connected. The amount of open space can vary with the allowed density, based upon the underlying zoning district. The preserved open space should be used to help to maintain the scenic character of the County by preserving landscaped open areas along major roads and to maintain forested buffers between developments.



In addition, the County offers greater flexibility in lot sizes and dimensions in return for the open space in cluster subdivisions. Cluster development also permits the developer to reduce road lengths, amounts of grading and lengths of utility lines - each of which saves on construction and maintenance costs. In cluster development, the applicant should show that the development has been carefully located to protect important natural areas, including mature forests and waterways. Open spaces should be linked together whenever possible, as opposed to being small, fragmented or narrow areas. Land areas should not be allowed to be counted towards the required open space unless they serve the residents of a community. Stormwater ponds should only count as open space if they are designed to resemble a natural pond or are suitable for a recreational purpose. Careful attention should also be focused upon what types of water and sewage facilities should be allowed to count as open space. Generally, spray irrigation fields and well sites should be able to count as open space, but other treatment facilities should not. Also, golf courses can be suitable for open space, as long as there also is a recreation area that is available for use by all residents.

Trees should be planted in open space areas where appropriate. Landscape tree specimens should be planted in active open space areas where appropriate, particularly around playgrounds.

It may be desirable to allow a reduction in the amount of active open space if the developer provides substantial recreation facilities. However, if a pool, recreation center, or community center are built, significant forethought must be put into determining how these facilities will be operated, maintained, and funded.

It is important to make sure that clustering would not dramatically increase the total number of homes built in the County, unless it is offset by funding the preservation of land on other sites.

Several alternatives exist for long term maintenance of the preserved open space, including ownership by a legally-binding homeowners association, the County, or a land trust. The areas needing the least maintenance would be areas preserved in forests or wetlands. In some cases, the open space could remain in one large agricultural use or a horse farm, with pedestrian trails around the edge of the farm for use by the residents.

Wherever feasible, open space should be provided in locations that can connect to existing public or semi-public open spaces or preserve land along a waterway. Required open spaces should be required to include pedestrian trails that are accessible by the residents, and preferably by the public. As discussed above, the trails should connect to other neighborhoods, nearby commercial areas, and public lands.

12.3.16 Buffering and Landscaping

Forested buffers should continue to be provided between new residential developments and adjacent farmland. Additionally, in developed areas, a high impervious coverage can still be attractive with the proper landscaping. In these areas, street trees and shade in parking lots should be encouraged. Buffering is also particularly important between new businesses and residential neighborhoods. A buffer yard in some cases can be strengthened with a berm. To minimize the amount of land that is consumed by a berm, a retaining wall could be used on the business side of the berm. The County should also encourage fencing when needed on the business side of buffer yard landscaping.

12.3.17 Water Features

Wetlands, as defined under Section 404 of the Clean Water Act, and uplands along waterways should be preserved as passive open space whenever possible. Existing native vegetation should be retained and additional native plantings should be considered in areas where natural vegetation is sparse. To the extent possible, trails should be constructed on upland areas. If a wetland must be crossed, the wetland crossing should be the shortest distance possible and the walkway should be elevated. In tidal wetlands, the boardwalk should be elevated to allow vegetation to grow under the boardwalk.

12.3.18 Utilities

The wires, poles, and other equipment associated with overhead power and communications utilities can obscure views and scenery. If feasible, overhead utilities should be located underground.

12.3.19 Redevelopment

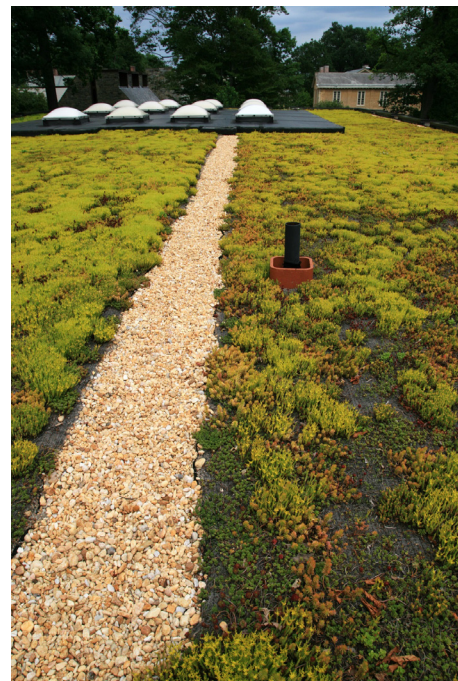
While the majority of development that occurs in the County is new development, redevelopment of existing sites may become increasingly important in the long-term future of the County. Redevelopment can rehabilitate and add to the housing stock, improve economic conditions, and breathe new life into an area that may be deteriorating. Redevelopment should be encouraged whenever possible.

12.3.20 Green Site Design

Green site design involves incorporation of methods into design and construction that minimize impact on the environment. Green site design can involve the use of solar energy, which may simply involve “passive” solar heating by maximizing the use of natural sunlight for internal lighting. An emphasis is placed upon minimizing the amount of fossil fuels that must be used for heating, air conditioning and ventilation. A simple principle is to locate buildings to maximize southern exposure to the sun. This involves placing large number of windows on the south side of a building, to allow natural heating and lighting. Deciduous trees should then be planted along the south side of the building, to avoid excessive heat during the summer, while allowing the sun through in the winter. Evergreen trees should be planted on the north and west sides of a building to block winter winds and provide shade. If buildings in a development are constructed to use solar energy, there should be deed restrictions to avoid future obstructions on adjacent lots.

Green site design can also seek to promote recharge of stormwater into the ground. This can be accomplished through rain gardens (which are landscaped depressions on a site), infiltration trenches (which are filled with stones above a geotextile), long and wide vegetated swales, and other methods. When stormwater is directed to long, relatively flat swales or vegetated filter strips, it not only promotes recharge, but also filters out eroded soil and certain other pollutants before they reach waterways.

To minimize environmental impact, there should be efforts to minimize the total land areas that are covered by surfaces that are “impervious” to water. This may involve clustering homes on portions of a site, which reduces the amount of pavement per home. Excessive widths of streets should also be avoided. Green site design also promotes use of pervious pavement. This can involve porous concrete or pervious asphalt. In both cases, some runoff can pass through the pavement. A stone base is used and then a geotextile to filter the



An example of a green roof.

runoff underground. Pervious pavement is particularly useful in portions of parking areas that are not used on a daily basis and in pedestrian areas. Less used parking areas can also be constructed with grass that is grown within a grid material.

Whenever practical, the turnaround of a cul-de-sac street should include a landscaped island. This island improves the appearance and reduces runoff.

Natural drainage flow paths should be maintained. Drainage from rooftops should be directed into vegetated areas on each lot, as opposed to be directed to large stormwater systems. The amount of land area that is disturbed at various times during construction should also be minimized. Plantings of many open space areas should be encouraged to result in their eventual re-forestation. Streets and parking lots should be periodically mechanically swept to collect pollutants before they reach waterways. Infiltration measures need to be carefully designed and maintained in order to function properly. Otherwise, they can become clogged with sediment.

Stormwater ponds ideally would be designed to hold water for several hours or more to allow pollutants to separate from runoff. However, if the ponds retain water for more than 24 hours, aeration is desirable to avoid breeding of mosquitos.

12.3.21 Signs

The sizes and heights of signs should be controlled to maintain the attractiveness of the County. In October of 2016, Sussex County Council passed a new sign ordinance to reflect current trends in the sign industry and sign technology. In addition, Sussex County has seen an increase in the use of billboards and digital/electronic signs, including those with animation.

The County recognizes that billboards should be limited in their sizes, their locations, and the minimum distances between billboards. In addition, electronically changing signs should be limited in how often they can change to avoid distractions to motorists.

Among the new regulations that pertain to billboards, the updated sign ordinance increased the separation distance between billboards; increased the front-yard setbacks for billboards; specified a separation distance between billboards and on-premises signs; and specified limits of billboard height and area based on whether the billboard is located on a four lane highway or two-lane road. In addition, the new ordinance contains regulations for animation and message timing for digital/electronic signs.



An example of a tiny house.

12.3.22 Home Construction and Design Trends

A number of trends and movements in home construction have arisen across the country, some of which may find their way to Sussex County over the next decade. One of these is the tiny house movement which is a social movement where people are choosing to downsize and simplify the space where they live. Tiny houses can range in size from 100 to 400 square feet and come in many shapes, sizes, and forms. Another is the construction of agrihoods which are master planned or residential communities built with a working farm as a focus (ULI, 2015). Sussex County encourages innovative building and site design provided it is compatible with surrounding land use and development.

12.3.23 Master Planning

Through the County's RPC process, it encourages large-scale developments to create superior living environments through unified developments. The County would like to encourage more master planning of large-scale developments on large parcels or groups of smaller parcels in order to provide flexibility in the design of a site's buildings, trails and pedestrian paths, roads, and open space as well as encourage interconnectivity between parcels of land.

12.4 COMMUNITY DESIGN GOALS, OBJECTIVES, AND STRATEGIES

Below is a list of goals, objectives, and strategies for Sussex County's Community Design Element:

Goal 12.1: Promote design that is compatible with its surroundings.

Objective 12.1.1 Consider whether the design of new development fits the character of existing neighborhoods.

Strategy 12.1.1.1 Consider design standards for lighting such as downward screening for commercial and residential properties.

Strategy 12.1.1.2 Consider revisiting height limits in the code for residential and commercial districts to determine if heights are accurate for such districts and uses, as well as determining if the method for measuring height should be revised.

Objective 12.1.2 Promote site design that minimizes adverse impacts.

Strategy 12.1.2.1 Encourage the locating of overhead power and communications utilities underground.

Strategy 12.1.2.2 Lead by example by exceeding standards in the construction of County public facilities, including parking lots, public buildings, landscaped areas, and related projects.

Objective 12.1.3 Incorporate usable open space in new developments.

Strategy 12.1.3.1 Consider revisiting code to determine if modifications are needed to open space requirements or if incentives can be developed to promote better access and less fragmentation of open space.

Objective 12.1.4 Encourage development design that promotes increased access between developments and community facilities including parks, schools, and libraries.

Strategy 12.1.4.1 Encourage pedestrian connectivity between developments with sidewalks, paths, trails, and easements.

Strategy 12.1.4.2 Consider revisiting County code to determine if modifications are needed to encourage interconnectivity between residential developments for emergency access.

Goal 12.2: Maintain the quality and character of new development.

Objective 12.2.1 Promote more flexibility in design and character of Residential Planned Communities.

Strategy 12.2.1.1 Revisit code to determine if modifications can be made to the RPC district that in turn promote better design and character of RPCs.

Objective 12.2.2 Continue to offer flexibility in standards for large developments in exchange for a higher design quality.

Strategy 12.2.2.1 Continue to promote RPCs and cluster development options.

Strategy 12.2.2.2 Consider ways to incentivize master planning of large-scale developments that allow flexibility in the design of a site's buildings, trails and pedestrian paths, roads, and open space and encourage interconnectivity between parcels of land.

Objective 12.2.3 Encourage mixed uses where appropriate.

Strategy 12.2.3.1 Revisit code to consider a mixed use zoning district.

Objective 12.2.4 Remain open to the use of unique architectural elements in design.

Strategy 12.2.4.1 Work with the Home Builders Association or other stakeholders on an awards program for architectural and site design excellence to encourage and recognize outstanding design.

Objective 12.2.5 Create more opportunities for new types of housing when compatible with surrounding land use and development.

Strategy 12.2.5.1 Review zoning code to determine if modifications are needed to permit new styles of housing such as tiny house construction to be developed in the code as they appear.

Objective 12.2.6 Consider agrihood-style development in Sussex County in order to foster local food production and connections to the traditional agricultural economy and lifestyle of the County.

Strategy 12.2.6.1 Review zoning code to determine if modifications are needed to permit agrihood-style development where appropriate in the County.

Goal 12.3: Improve the character of existing older communities.

Objective 12.3.1 Encourage the revitalization of traditional areas of the County to create walkable and sustainable communities.

Strategy 12.3.1.1 Determine if there are incentives that can be established for developers that propose redevelopment.

Chapter 13. MOBILITY ELEMENT -

Mobility Vision: *Sussex County will be a leading example for Delaware in developing creative transportation solutions.*

13.1 INTRODUCTION

Sussex County is the fastest-developing County in the State, due to its many natural and economic resources. This growth is putting increasing pressure on the County's transportation system. Responding to this pressure will require a combination of capacity improvements and the implementation of better approaches to land use and transportation coordination.

Previously, this Element was essentially drafted in its entirety by the Delaware Department of Transportation and then incorporated directly into the Plan. At the direction and urging of the citizens of Sussex County through the public comment and workshop process, the "Sussex Plan" deviates from that for this 2018-2028 planning period (2045 planning horizon). Sussex County is taking a more active role in not only planning transportation improvements in Sussex County, but prioritizing the projects to be funded and ensuring that funding is secured to see the projects through.

Sussex County is a rural County that anticipates its transportation needs within this planning period and well beyond will be met by motorized vehicular means. These motorized vehicular needs must be met by roadway capacity expansion. This is not a new challenge for Sussex County.

Sussex County is responding to these challenges by working with its partners on a new approach to transportation planning with a goal of supporting the implementation of required improvements in a timely fashion. The Delaware Department of Transportation has a long history of planning roads in cooperation with Sussex County for anticipated growth stretching back to its first Comprehensive Plan adopted in 1970. However, many of these needed roadway capacity expansion projects that have been identified have yet to be improved to the extent necessary, including several major projects from the original 1970 plan itself.

Explosive growth in the County has accelerated the decline in level of service on major roadways and at major intersections throughout the County. This Plan is an effort for Sussex County to work with DelDOT to find new ways to solve transportation issues throughout the County. In addition, through this Plan the County will identify ways in which it can strive to take advantage of achievable opportunities for public transportation and other modes of travel throughout the current planning period.

Figure 13.1-1: Overview of Sussex County Transportation System - DRAFT

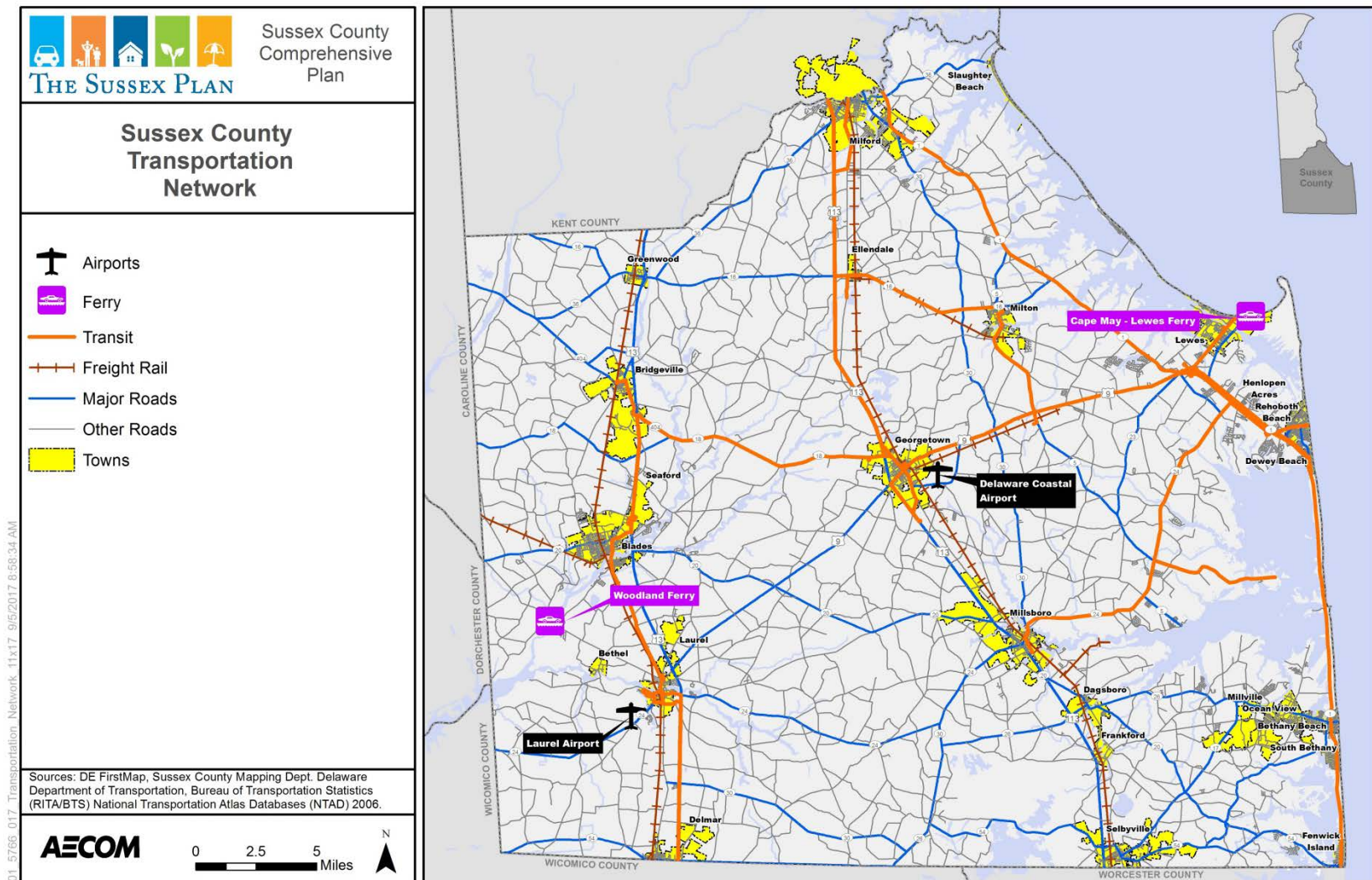
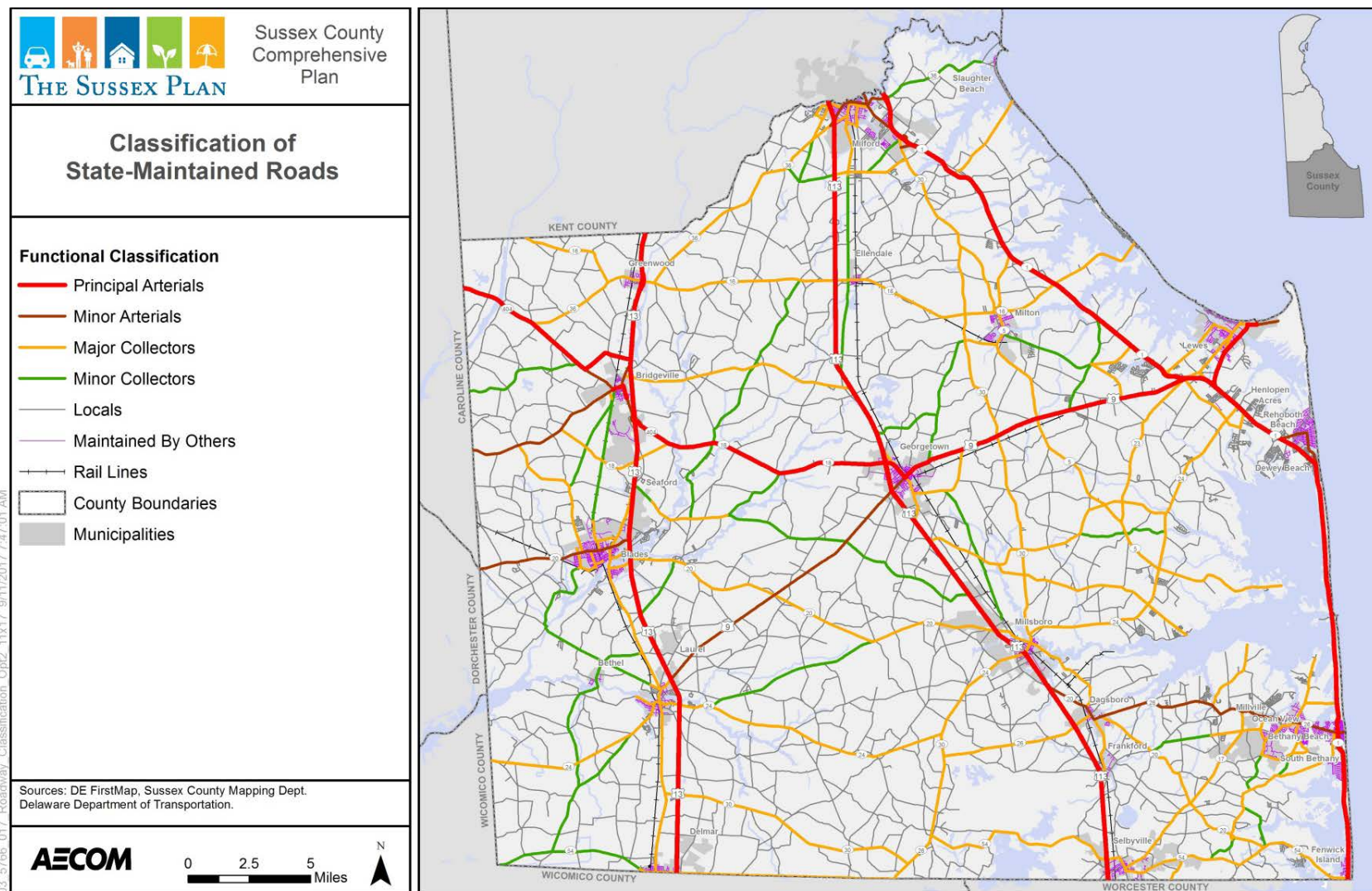


Figure 13.2-1: Classification of State-Maintained Roads - DRAFT



13.2 CURRENT SYSTEM AND ISSUES

13.2.1 Personal Vehicle Travel

Most personal travel in Sussex County is via motor vehicles on roads. The main roads in the County are principal arterials, which include US 13, US 113, SR 1, SR 404, SR 18, along with Rt. 24, and Rt. 26 and a portion of US 9 (see Figure 13.2-1). These roads serve major activity centers, and they are the highest traffic volume corridors with typically long trip lengths. While they comprise only 10-percent of the total lane miles, they carry the largest share of traffic.

Figure 13.2-2 shows the traffic volumes, in terms of 2016 annual average daily traffic (AADT), on the roadway system. The highest volumes are mostly on the main north-south arterials; US 13, SR 1, and US 113. The following Table 13.2-1 shows 2016 AADT along these key corridors.

| Table 13.2-1 2016 AADT – Key Sussex County Corridors | | | |
|--|---------------------|----------------|-----------|
| Highway or Roadway | Location | 2004-2006 AADT | 2016 AADT |
| SR 1 | Near Rehoboth Beach | 60,000 | 65,500 |
| US 13 | Near Seaford | 30,000 | 37,500 |
| US 113 | Near Millsboro | 24,000 | 30,500 |
| SR 404 | Near Bridgeville | 9,000* | 11,500 |
| US 9 | Georgetown | 16,000 | 16,500 |

Source: 2008 Sussex County Mobility Element and DelDOT Traffic Summary 2016

*Note: The 2008 Mobility Element reported an AADT of 26,000 for SR 404 near Bridgeville, which was actually for the US 13 segment near Bridgeville. The accurate AADT for SR 404 near Bridgeville was 9,000.

In recent years, increasing traffic volumes have led to increasing congestion, especially in the eastern part of the County on summer weekends. The highest growth in traffic has been on US 113 and SR 1. The following Congested Areas have been identified based on Level of Service (LOS) using 2016 AADT (See Figure 13.2-3):

- SR 1 in the Milton, Lewes and Rehoboth Beach area – experiences significant congestion, especially during summer weekends
- The SR 26 and SR 20/54 corridors near the coast - current capacities are limited to one lane in each direction
- The Georgetown and Millsboro areas along US 113 - experience high volumes of both resort and commuter traffic year-round
- The Milford area, including portions of SR 1 and US 113
- The Bridgeville area along US 13
- US 9 between Georgetown and Lewes
- SR 24 near Millsboro and Rehoboth Beach

Travel time reliability is a key measure of roadway congestion; it compares the worst-measured travel time for a roadway segment to its base uncongested travel time – a ratio of 1.5 or more is

considered to represent an unreliable travel time. Figures 13.2 – 4 and 13.2 - 5 show the travel time reliability for weekdays and weekends during the summer season in Sussex County.

Figure 13.2-6 shows projected congested corridors along the County roadway network based on the 2045 population trend whereas Figure 13.2-7 shows projected congested corridors based on a 2045 scenario that assumes 15% additional population compared to the current trend. In both these cases it can be seen that most of the key corridors in Sussex County will experience significant congestion issues, highlighting the need to provide both physical and operational capacity improvements for these roadways that also serve as primary evacuation routes.

Figure 13.2-2: Sussex County Traffic Volumes (2016) - DRAFT

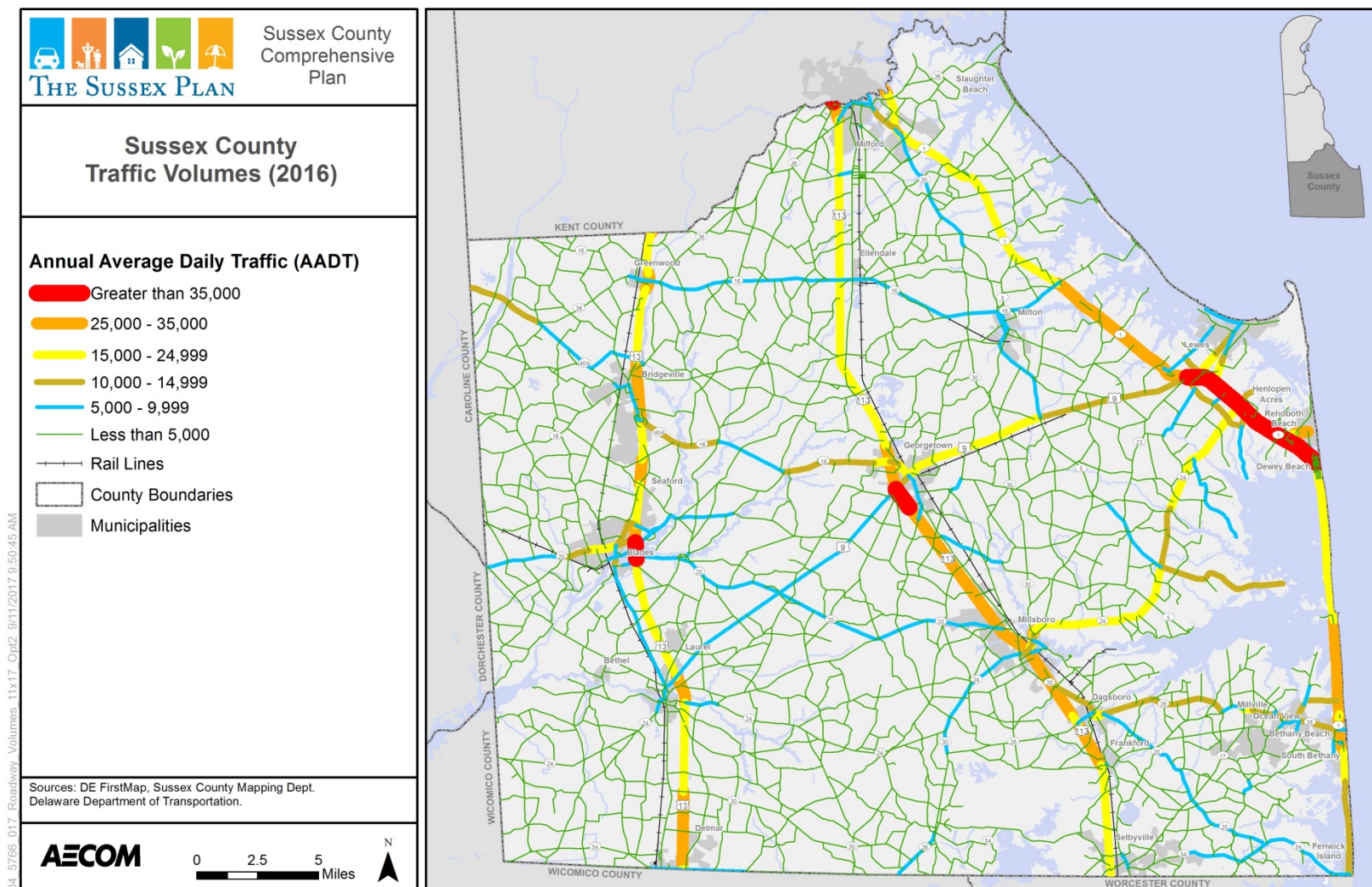


Figure 13.2-3: Existing Traffic Congestion Areas - **DRAFT**

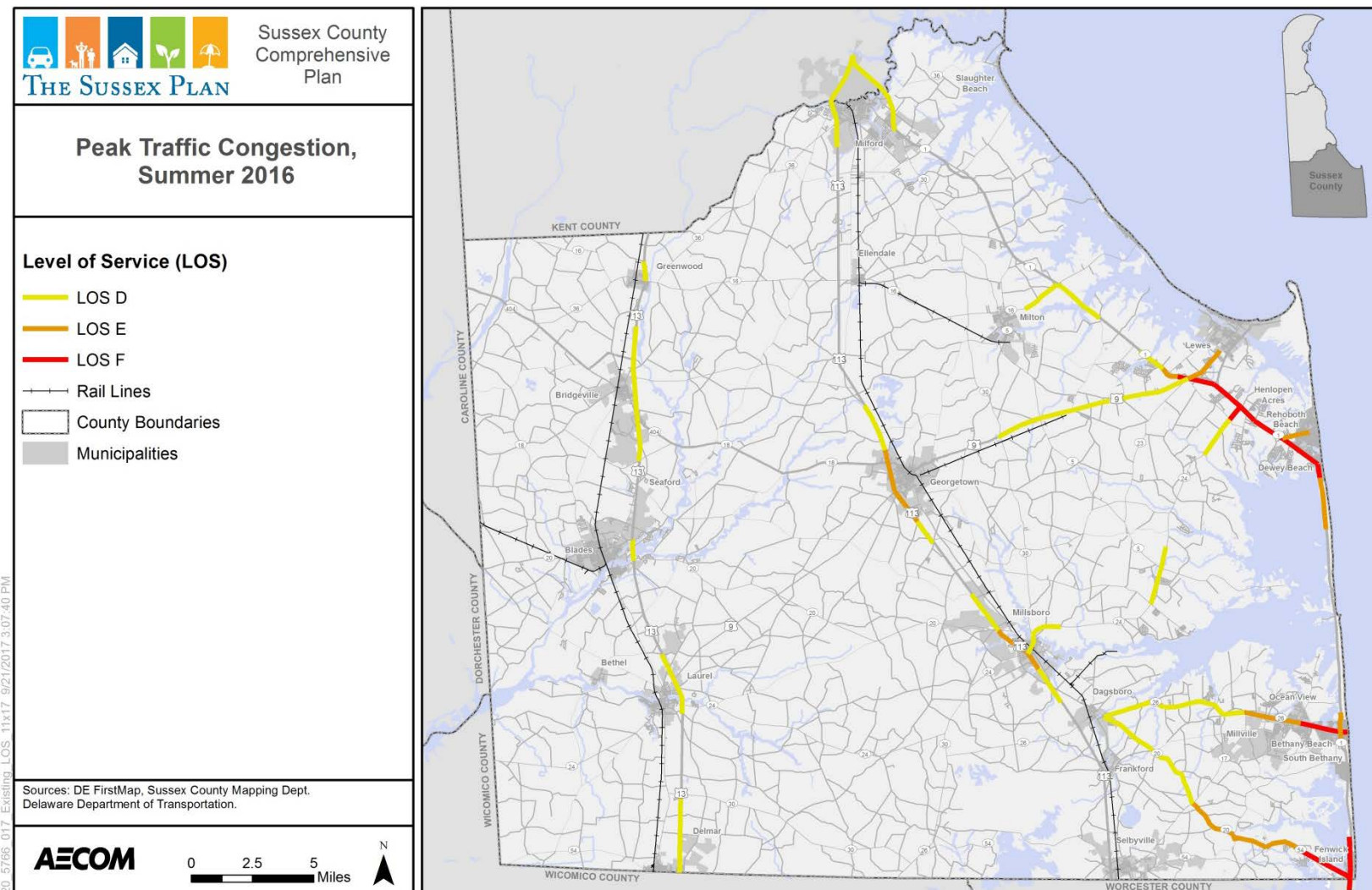


Figure 13.2-4: Travel Time Reliability – Existing Weekdays, Seasonal - **DRAFT**

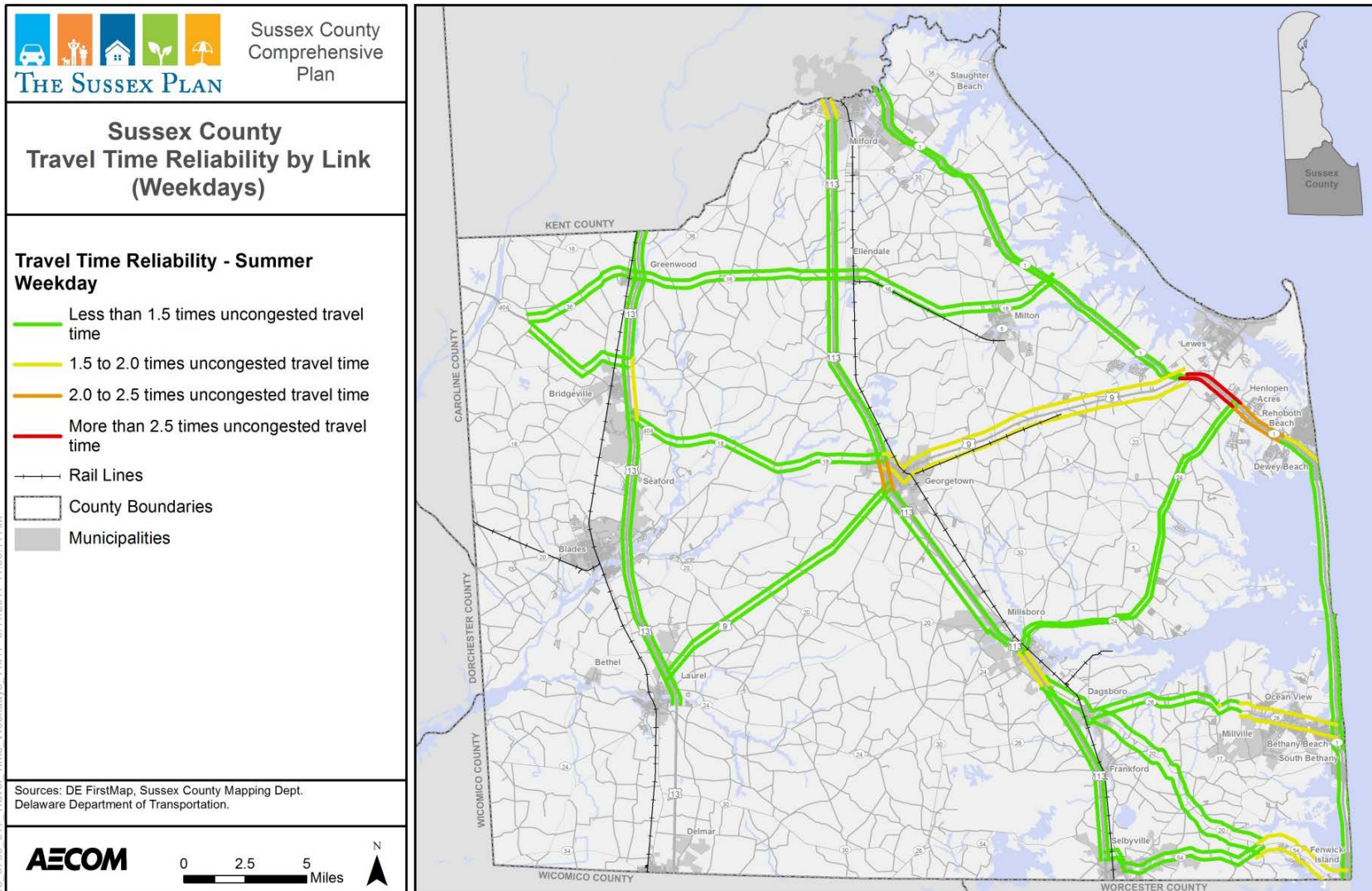


Figure 13.2-5: Travel Time Reliability – Weekends, Seasonal - DRAFT

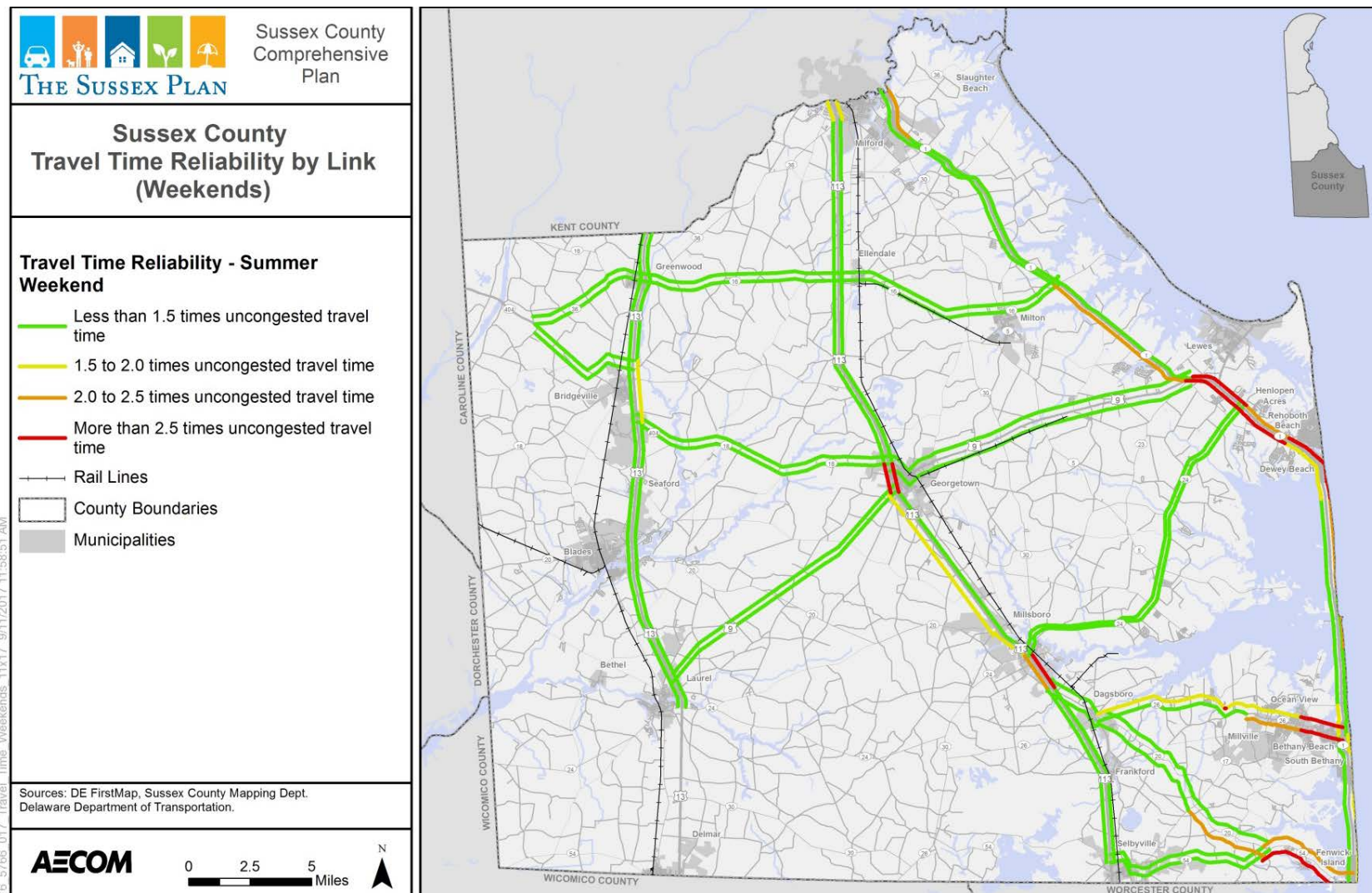


Figure 13.2-6: Projected Future Congestion Areas, 2045 (Population Trend) - DRAFT

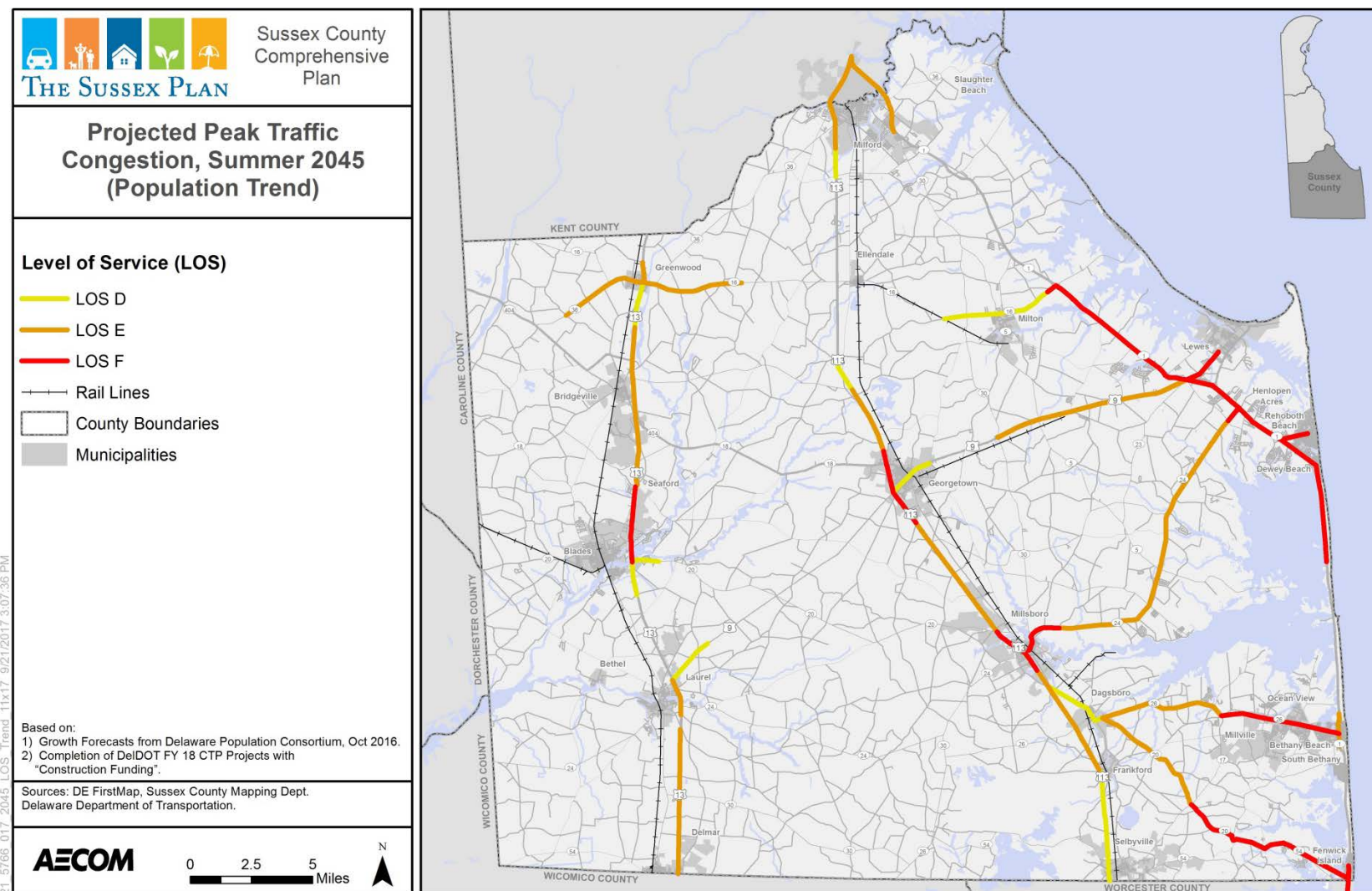
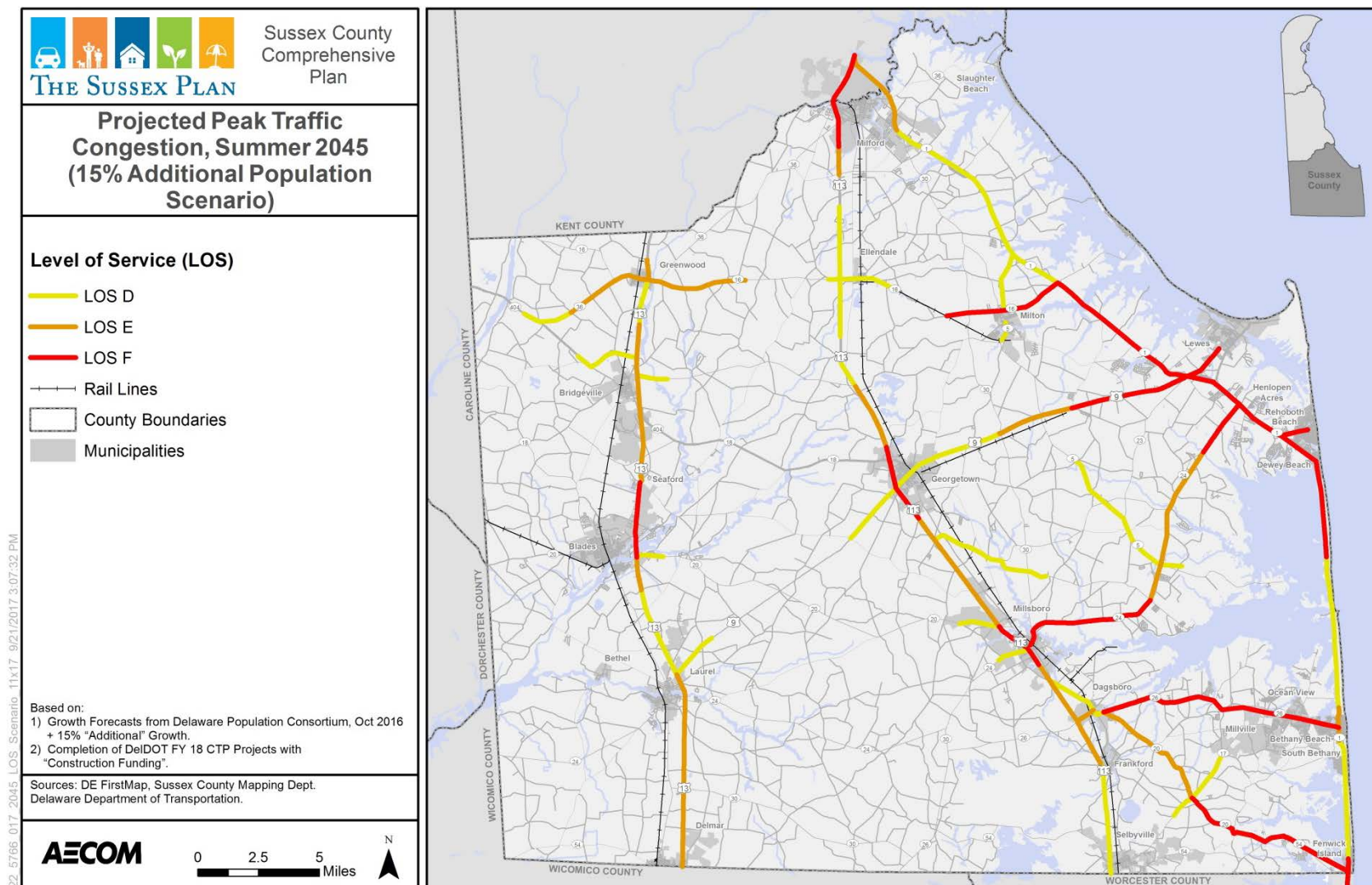


Figure 13.2-7: Projected Future Congestion Areas, 2045 (15% Additional Population Scenario) - **DRAFT**



13.3 CAPACITY PROJECTS AND CORRIDOR VISIONS

13.3.1 Capital Transportation Program (CTP)

The County's current CTP Request of DelDOT contains many roadway improvement projects, including several projects to construct grade-separated intersections (see Table 13.3-1). These projects would increase roadway capacity and improve safety. One major new road is the North Millsboro Bypass, which was identified by the US 113 North / South Study.

Table 13.3-1 FY18-FY23 CTP Projects

| Project Location | Purpose | Justification | Construction Start Year (Fiscal Year) | In Previous Plan? |
|---|--|---|---------------------------------------|-------------------|
| SR 1 & SR 16 | Construct a grade-separated intersection | Improve safety and increase traffic capacity; Identified in the 2013 Hazard Elimination Program (HEP) | 2021 | Yes |
| SR 1 & SR 30 | Construct a grade-separated intersection | Improve safety and increase traffic capacity | After 2023 | No |
| SR 1 & Cave Neck Road | Construct a grade-separated intersection | Improve safety and increase traffic capacity | After 2023 | No |
| SR 1 & Minos Conaway Road | Construct a grade-separated intersection | Improve safety and increase traffic capacity | 2020 | No |
| US 113 & SR 24 | Build the North Millsboro Bypass road | Reduce congestion in Millsboro and increase traffic capacity; Identified in the 113 North/South Study | 2023 | Yes |
| US 113 & SR 16 | Construct a grade-separated intersection | Improve safety and increase traffic capacity | After 2023 | Yes |
| US 113 & SR 18/SR 404 | Construct a grade-separated intersection | Improve safety and increase traffic capacity | 2023 | Yes |
| SR 24 from Mulberry Knoll Rd to SR 1 | Widen the existing road and provide multi-modal facilities | Increase traffic capacity on the corridor and improve storm water management | 2017 | Yes |
| Park Ave at S. Bedford Street | Realign Park Ave | Improve safety, improve local traffic circulation, and accommodate truck traffic | 2022 | Yes |
| Old Orchard Road at Westcoats Corner Road | Realign Old Orchard Rd to meet Westcoats Corner Rd | Improve safety, consolidate intersections, and reduce congestion | 2020 | No |

13.3.2 Additional Capacity Improvement Projects

In addition to projects currently programmed in the CTP, some capacity improvement needs have been highlighted, which involve providing local connector roads or otherwise improving capacity, traffic safety, and evacuation safety (see Table 13.3-2). These potential projects have been identified through a variety of sources and should be considered for future versions of DelDOT's CTP. One of these projects includes necessary improvements to the Five Points intersection.

| Table 13.3-2 Additional Capacity Improvement Projects | | | | |
|---|--|--|---|-------------------|
| Project Location | Purpose | Justification | Source(s) of Proposal | In Previous Plan? |
| Five Points Intersection in Lewes | Construct intersection and road improvements | Improve safety and increase traffic capacity | Annual CTP Request, SR 1 Land Use & Transportation Study | Yes |
| US 9 to SR 24, west of Lewes and Rehoboth Beach | Consider building a connector road for local traffic | Increase traffic capacity and provide local access to services | Annual CTP Request, SR 1 Land Use & Transportation Study | Yes |
| SR 26 & SR 54, from SR 1 to US 113 | Consider providing more direct connections to US 113 | Improve evacuation safety, reduce congestion in resort areas | US 113 North/South Study, Feedback from the Planning & Zoning Commission | No |
| SR 36, from SR 404 to US 13 | Consider constructing capacity and safety improvements | Increase east/west traffic capacity, improve evacuation safety, complement SR 404 improvements | 2008 Transportation Plan Update for Sussex County, Feedback from the Planning & Zoning Commission | Yes |
| SR 20, from Dagsboro to SR 54 | Consider constructing capacity and safety improvements | Improve evacuation safety, reduce congestion in resort areas | Analysis of future traffic congestion, Feedback from the Planning & Zoning Commission | No |

To kick-start these additional capacity needs using a streamlined process, the following milestones have been established for each of the projects in Table 13.3-2. It should be noted that implementation of these milestones relies upon availability of funding:

- **Within 2 Years** – Form a Strategic Working Group to identify potential concepts or to achieve buy-in on previously identified concepts based on past transportation studies.

- **2-5 Years** – Begin project development process and complete alternatives analysis (if not previously completed) to select a locally-preferred alternative with appropriate federal, state and/or local agency reviews and approvals.
- **5-10 Years** – Program preliminary and final design and construction phases in the CTP.

The County and its partners should continue current capacity preservation efforts, and examine past studies to determine if proposed projects are feasible today. If previously proposed and planned projects are feasible today, they should be considered for implementation as soon as possible. A way for the County to achieve this is to create a **Mobility Improvement Committee (MIC)**.

The MIC should be made up of a variety of experienced stakeholders and decision makers in Sussex County. As such, Sussex County should consider a committee makeup similar to the following:

- County Representatives
- Representative from the Sussex County delegation to the General Assembly
- Representative from Delaware Department of Transportation
- Traffic engineer appointed by Sussex County Council
- Land planner appointed by Sussex County Council
- Representative appointed by the American Council of Engineering Companies Delaware (ACEC)
- Developer appointed by Sussex County Council
- Land owner appointed by Sussex County Council
- Site Work Contractor appointed by Sussex County Council
- Representative from Chamber of Commerce appointed by Sussex County Council
- Representative from Sussex County Farm Bureau
- Representative from a nonprofit organization appointed by Sussex County Council
- Member(s) of the public

The MIC committee will be charged with making recommendations to the Sussex County Council about how best to implement the goals, objectives, and strategies in this element of the 2018 Sussex County Comprehensive Land Use Plan.

The committee will also be charged with monitoring and evaluating the results of its efforts towards planning, funding, and implementing physical transportation improvements in Sussex County and reevaluating any methodologies that it finds may be inaccurate or out of date.

Results will be reported to the Sussex County Council every three (3) months at a minimum and more often if needed. Meetings will be held monthly for the first two (2) years and then meeting should be held at least quarterly until the MIC Committee decides by vote to meet more frequently. In any event, MIC should not meet less than four (4) times per calendar year.

All members will serve a four (4) year term, but initially, half of the members will be appointed to six (6) year terms to provide for good rotation on the committee maximizing the benefit to Sussex County.

Goal 13.1: Increase the physical and operational capacity of the transportation system in the County.

Objective 13.1.1 Improve mobility for local residents and access to local businesses.

Strategy 13.1.1.1 As a first priority, the County Council should appoint the MIC (Mobility Improvement Committee) to work with the state legislature and DelDOT to implement the Alternative Routes plan including the necessary wayfinding signage and possible mobile application function.

Strategy 13.1.1.2 As a first priority, the MIC should verify both main routes and alternative routes capacity, identify any short term improvements needed and possible costs, provide timing and possible costs of longer term improvements based on capacity and report findings and recommendations to the County Council and DelDOT.

Strategy 13.1.1.3 As a first priority, the MIC should verify both main routes and alternative routes capacity (including road classification and current traffic counts), identify any short term improvements needed as well as possible costs, provide timing and possible costs of longer term improvements based on capacity and report findings and recommendations to the County Council and DelDOT.

Strategy 13.1.1.4 As a first priority, the MIC should work with the state legislature and DelDOT to implement the Alternative Routes plan including the necessary wayfinding signage and possible mobile application function.

Strategy 13.1.1.5 Support DelDOT in the continued implementation of the Corridor Capacity Preservation Program and associated improvements including increasing building setback distances based on the classification of roads to allow future capacity expansion if needed.

Strategy 13.1.1.6 Consider all potential capacity improvement concepts for key north-south and east-west routes, prioritize such projects, recommend implementation to the

Sussex County Council and DeIDOT and work with DeIDOT to build early public support for projects.

Strategy 13.1.1.7 Prioritize, plan and find means of implementing bypass roads, grade separated intersections or routes for areas affected by heavy tourist and/or freight traffic along existing corridors.

Strategy 13.1.1.8 Ensure MIC partners with DeIDOT to evaluate the recommendations in the Traffic Operations Management Plan (TOMP) for Sussex County, determine which recommendations should be implemented and report findings and its recommendations to Council.

Strategy 13.1.1.9 Consider supporting the use of managed lanes (such as temporary shoulder use) to create temporary operational capacity during peak times.

Strategy 13.1.1.10 Examine past studies to determine if any previously-planned projects are feasible to implement, which will reduce the need for additional studies. Recommend implementation of such projects to Sussex County Council and DeIDOT.

Strategy 13.1.1.11 Consider adaptive traffic control methods, in which traffic signal timings change, or adapt, based on actual traffic demand.

Strategy 13.1.1.12 Support DeIDOT in completing intersection improvements, shoulder widening, alignment improvements, and other local road network projects.

Strategy 13.1.1.13 Partner with DeIDOT to introduce and build early consensus on potential improvement concepts.

Goal 13.2: Begin construction of limited access capacity expansion projects.

Objective 13.2.1 Work with DeIDOT to ensure construction of limited access capacity expansion projects.

Strategy 13.2.1.1 Identify needed improvements to achieve this goal.

Strategy 13.2.1.2 Prioritize the identified improvements.

Strategy 13.2.1.3 Set milestones to ensure improvements are completed in order of priority.

Strategy 13.2.1.4 Create a local project monitoring team to monitor progress of specific projects.

Goal 13.3 Improve not only physical capacity of roadways, but also the operation capacity utilizing all means available.

Objective 13.3.1 Working with DeIDOT, the MIC Committee will determine where the following strategies can be most effectively applied, their potential costs and priorities of application.

Strategy 13.3.1.1 Encourage designs that provide a mix of residential seclusion and local connectivity without additional cost or risk to residents.

Strategy 13.3.1.2 Identify suitable areas for potential residential and/or commercial connector roads, and consider methods to consolidate commercial entrances along busy corridors.

Strategy 13.3.1.3 Partner with DeIDOT to establish Alternate Routes in general accordance with the Alternate Routes Map including necessary wayfinding signage, possible mobile application functions and identify any short, medium and long term roadway capacity improvements and costs for purposes of implementation.

Strategy 13.3.1.4 Consider market-driven solutions to reduce vehicle traffic in congested areas, including but not limited to, partnerships with ride-hailing companies, promoting car and ride-sharing services, and developing satellite parking lots with shuttles.

Strategy 13.3.1.5 Consistent with recommendations in the Land Use Element, consider higher- density mixed-use development in appropriate areas with current or future access to travel options.

13.3.3 Key Corridor Visions

The County and its partners should continue current capacity preservation efforts, and examine past studies to determine if proposed projects are feasible today. If previously proposed and planned projects are feasible today, they should be considered for implementation as soon as possible. Key arterial corridors considered for expansion should be identified and explored based on the congested corridor projections shown earlier in Figures 13.2-6 and 13.2-7.

The County's key north/south corridors are managed under the Corridor Capacity Preservation Program (CCPP). It is a current DeIDOT program to protect corridors serving predominantly statewide and/or regional travel with the following goals:

- Maintain a road's ability to handle traffic safely and efficiently
- Minimize the impacts of increased economic growth
- Preserve the ability to make future improvements
- Prevent the need to build an entirely new road
- Sort local and through traffic

The following methods must be explored to implement corridor capacity preservation policy as needed:

- Purchase of access rights
- Purchase of development rights
- Purchase of easements
- Fee-simple acquisition
- Purchase of property rights

Due to their status as CCPP corridors, US 113, US 13, and SR 1 are in constant focus by the County and its partners. Although planning is ongoing, the County is encouraged to strengthen its coordination efforts to develop visions for these north-south corridors. The County will work with DelDOT to ensure these roads are maintained and updated to ensure they meet the needs of users.

The County's primary east-west corridors are not managed by the CCPP though they are no less significant as regional through routes. US 9, SR 404/18, SR 16, SR 24, and SR 26 will require capacity improvements to meet existing and/or future transportation demands. As such, potential for including these key east-west corridors in the CCPP should also be explored to ensure ability to make capacity improvements as needed, including possible provision for localized by-pass routes to minimize impacts of through traffic and freight-related truck traffic on local communities. Some of these routes have been the subject of previous studies and plans, which demonstrate their important role in the system. The recommendations that follow represent visions for what they could be. Sussex County and its partners should explore appropriate methods to implement these visions.

It is important to note that the visions presented here would require significant commitments by Sussex County and its partners. Together, agencies would need to consider techniques such as, parallel service roads, consolidated intersections and entrances, and increased setbacks. Buildings that front the through roads with rear parking along service roads, and the provision of transit, bicycle, and pedestrian connections are other techniques to be explored.

Any significant capacity improvement to any corridor in Sussex County will require a full project development process with the cooperation of the Federal Highway Administration (FHWA). A detailed alternatives analysis would be conducted to determine environmental and personal property impacts. A thorough public outreach process would also need to be conducted. Therefore, the visions presented here are purely conceptual.

- **US 9 – from Georgetown to Lewes**

Consistent with this Plan's Future Land Use Chapter (Chapter # 5), the County is encouraging denser land uses along US 9. It is possible to develop US 9 as a business corridor with a mix of residential and commercial uses that provide local residents with access to services they need. Local services would reduce travel to SR 1 for basic needs.

The US 9 vision is also tied to efforts to make the corridor multi-modal. The Georgetown to Lewes Rail Trail is being constructed by DelDOT in phases. When completed, the trail

will provide a pedestrian and bicycle path that is completely separated from car traffic. The trail will serve as both a recreational asset and a transportation option for commuters. Neighborhoods and businesses along the trail could see economic benefits from connecting to it.

While this vision would build a better local community on the corridor, it shouldn't reduce its capacity to handle east-west through traffic. US 9 is a principal arterial and an important freight corridor. Setbacks could be increased to allow for future capacity. Intersections and commercial entrances could be consolidated to reduce access points. Service roads could link local residents to commercial parking lots at the rear of the buildings. This would increase the aesthetic benefits to the community too.

Planning for Route 9 should also complement any future improvement concepts for the Five Points intersection in Lewes.

- **SR 404 – from Maryland line to Georgetown, and SR 18 from Bridgeville to Georgetown**

Maryland has invested millions to upgrade its portion of SR 404 to improve the flow of regional traffic heading towards the coast. This corridor should be preserved to allow for future capacity expansion. Sussex County could lead a comprehensive public engagement process to reach consensus on how the corridor should develop.

Close attention should also be paid to the land use along this corridor. There could be economic development potential if services are provided to travelers.

- **SR 16 – from Maryland line to SR 1**

Similar to the vision for SR 404 above, SR 16 should be explored as an alternative east-west corridor providing relief for SR 404/18 and US 9. Early concepts should be discussed with local residents and businesses. Sussex County and its partners could form a Strategic Working Group to engage all stakeholders and the public.

A grade-separated intersection is already programmed for SR 16 and SR 1. Steps could be taken to preserve the corridor as an east-west route that links western travelers with the SR 1 corridor.

- **SR 24 and SR 26**

Both SR 24 and SR 26 carry a significant amount of traffic accessing Delaware's resort areas. DelDOT is investing in both of these corridors by programming and constructing capacity improvements. Recently, DelDOT completed major improvements to SR 26, which included multi-modal facilities. Expansion projects are also planned for SR 24 leading into Rehoboth Beach.

Going forward, Sussex County should work actively with DelDOT and other planning partners to anticipate future growth on these corridors and time it with adequate transportation improvements. Local traffic could increase due to development pressure on both routes. Regional traffic could also increase on SR 24 due to the planned bypass of northern Millsboro, which will link SR 24 with US 113.

A variety of techniques could be used to implement these visions, plus some others that have not been explored. The following section presents several solutions to help the County make lasting improvements to its transportation system. Sussex County will be seeking input from its partners, including the public, on how best to proceed with these solutions.

Goal 13.4: Increase capacity on for Routes 113 and 16

Objective 13.4.1 Preserve the corridors for future expansion.

Strategy 13.4.1.1 Increase frontage setbacks.

Strategy 13.4.1.2 Purchase easements for bypass construction around existing communities.

Strategy 13.4.1.3 Ensure interconnectivity of future land uses along these routes.

Strategy 13.4.1.4 Require underground utility easements within the frontage setbacks.

Strategy 13.4.1.5 Explore and identify future infrastructure and/or technology needs related to emerging technologies, such as connected and autonomous vehicles (CAV).

Goal 13.5: Create limited access highways for Route 9, and Route 24.

Objective 13.5.1 Preserve the corridors for future expansion.

Strategy 13.5.1.1 Increase frontage setbacks.

Strategy 13.5.1.2 Purchase easements for bypass construction around existing communities.

Strategy 13.5.1.3 Ensure interconnectivity of future land uses along these routes.

Strategy 13.5.1.4 Require underground utility easements within the frontage setbacks.

13.3.4 Safety and Resiliency

The safety of travelers should always be a primary goal when planning transportation improvements in Sussex County. Safety depends on many interrelated factors, such as road

design, traffic volumes, speed limits, and infrastructure age. The Delaware Department of Transportation and Sussex County regularly work together to identify safety hazards and find appropriate solutions.

One significant category of hazards relates to climate and severe weather. Some of the coastal areas of Sussex County are already prone to flooding issues, and there is a concern that possible climate change may further impact the transportation system in these areas. Anticipating potential issues from a possible climate change may make the system more resilient in the future.

In addition, the threat of flooding and coastal storm surge emphasizes the need for planning for evacuation of the coastal area. Considerable planning has resulted in evacuation plans that aim to facilitate safe and efficient evacuation. Figure 13.2-12 shows the current map of evacuation routes. Despite several decades of anticipated growth, very little capacity expansion has been done to these vital roadways.

As a result, most of these evacuation routes are now projected to be highly congested corridors in the future as shown earlier in this section in Figures 13.2-6 and 13.2-7. The Sussex Plan recognizes that much work needs to be done to update emergency planning, particularly including evacuation route planning and adding additional vital capacity where needed, in order to bring these routes up to an acceptable level to minimize evacuation risks. Additionally, there may also be a need to review existing coordination and other agreements with the State of Maryland that provide for the evacuation of Ocean City, and other coastal portions Maryland by using Delaware roadways. Coordination with other state agencies is also identified a key to addressing emergency management and land use planning issues.

In addition to the roadway capacity expansion needs identified above as high priority, Sussex County also recognizes the need for continued roadway capacity expansion on secondary roads to keep up with the anticipated population growth. Although these roadways are not as high priority for funding, continued monitoring and planning for improvements is necessary to avoid falling behind the population growth as we have in the previous 5 decades years.

Particular areas of concern are where levels of service may have fallen due to anticipated growth, but a lack of roadway capacity improvement planning or construction between local roads and offering more travel choices. The latter half of the century witnessed shifts in land-use decisions focused on car- oriented designs that resulted in reduced interconnectivity of local streets. This lack of street connectivity combined with a lack of execution on adding additional roadway capacity has resulted in more traffic congestion, and longer travel times.

Interconnectivity between similar land uses aligns perfectly with the principles of Residential Planned Communities described in the earlier Chapter 13 on Community Design. Appropriate provision of connector roads for local trips can help to reduce congestion on arterial roads, reduce travel distances and improve travel time for local trips, introduce travel route redundancy in local street network and reduce emergency response time for fire, police and EMS services. It can also

foster opportunities for community interaction by eliminating barriers between developments and provide better connectivity for non-motorized travel options like walking and bicycling.

There are a few perceived disadvantages related to increased interconnectivity, such as increasing through traffic on residential streets. However, there are ways to plan and design connector roads better to avoid or minimize through traffic impacts on residential streets. The focus needs to shift on encouraging subdivision design that can provide a balanced mix of residential seclusion and local connectivity while maintaining commercial viability of the subdivision.

Summary of Current System and Issues

Reviewing and understanding the current system and the challenges described in this section provides us with a means of determining a path forward by identifying potential solutions to meet these challenges. Some improvement projects have already been identified in the current Capital Transportation Program (CTP) as discussed in the next section along with visions for the key corridors in the County.

Goal 13.6: Improve evacuation effectiveness in anticipation of emergency weather.

Objective 13.6.1 Create limited access evacuation corridors in the areas around: Route 26 east of Route 113, Route 54 east of Route 113, Increase frontage setbacks on Route 24 east of Route 113, Route 9, Route 16, Route 18 west of Route 113.

Strategy 13.6.1.1 Support the expansion of advanced-technology traveler information systems at strategic locations throughout the County and support DelDOT in the continued implementation of DelTrac and other monitoring systems at the Transportation Management Center (TMC).

Strategy 13.6.1.2 Partner with state officials to consider the transportation recommendations in The Climate Framework for Delaware, The Climate Action in Delaware: 2016 Progress Report, Sussex County's "All Hazard Mitigation Plan" and future companion documents.

Strategy 13.6.1.3 Continue working with DelDOT to improve evacuation routes by analyzing vulnerability and developing plans for coastal communities.

Strategy 13.6.1.4 Identify potential local routes that could serve as alternative or secondary evacuation routes which routes may coincide with those indicated in the Alternative Routes Map.

Strategy 13.6.1.5 Evaluate current technologies and emergency notification systems to ensure state official and the public informed efficiently and effectively.

Goal 13.7 Ensure adequate ease of movement for emergency vehicle response times.

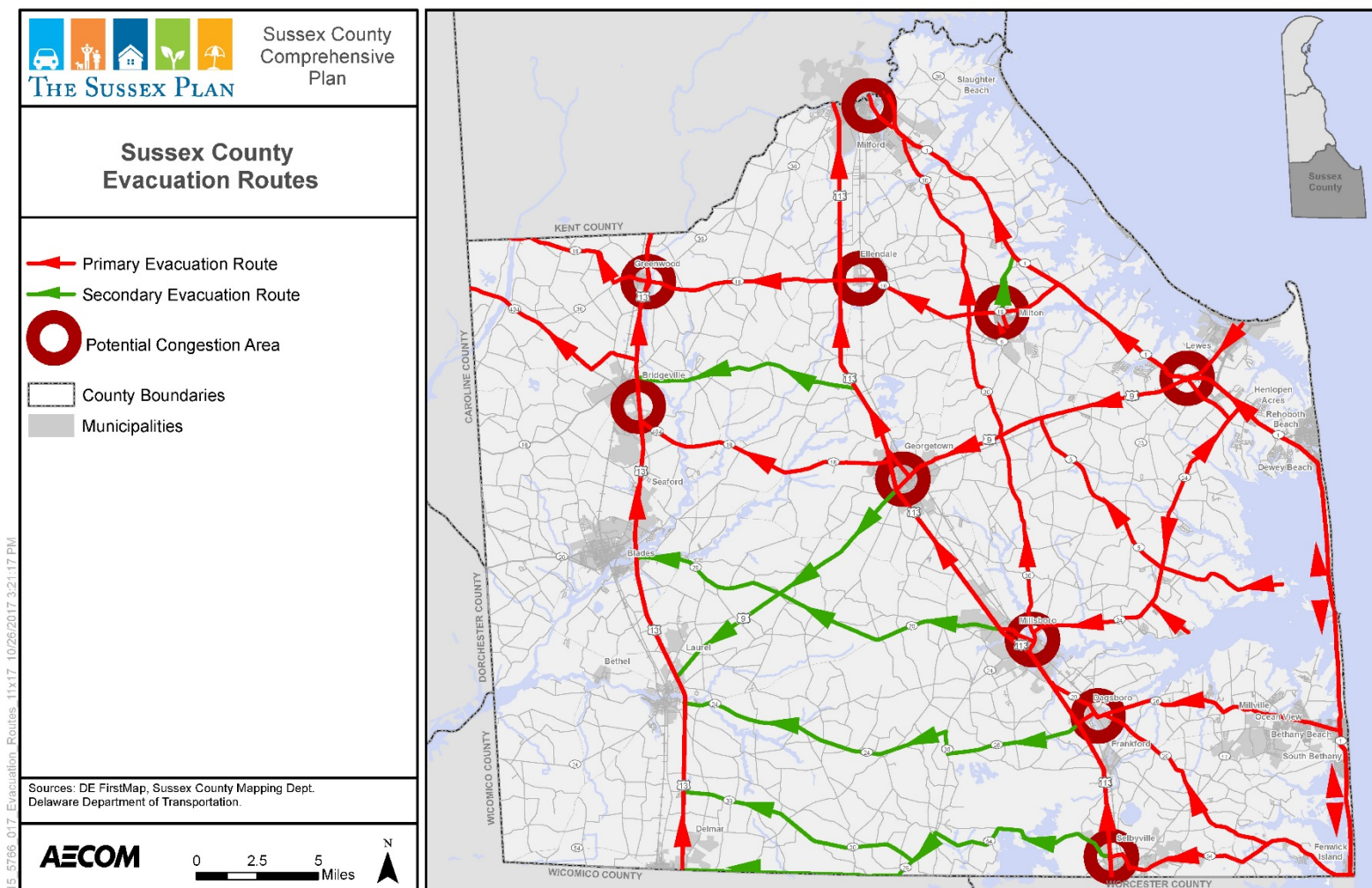
Objective 13.7.1 Increase safety and capacity by adding multi-purpose lanes.

Strategy 13.7.1.1 Consider emergency-use access in areas where accessibility is difficult for first responders.

Strategy 13.7.1.2 Design Center multipurpose lanes for use by emergency vehicles.

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Figure 13.2-12 Evacuation Routes - **DRAFT**



13.4 SOLUTIONS FOR OUR FUTURE

Sussex County and its partners have a shared interest in responding to current and future transportation challenges. By working together to develop creative solutions, the County will fulfill its vision of becoming a transportation leader. Considering the anticipated growth in Sussex County, a single strategy or solution will not address growing accessibility and mobility needs. Broader challenges associated with growth and development warrant a suite of solutions, rather than the focus on a single project, strategy or solution. This can be achieved through a combination of capacity, fiscal, collaborative, and reliability solutions.

Goal 13.8: Consider transportation alternatives to improve overall mobility.

Objective 13.8.1 Reduce traffic on heavily utilized roadways by offering existing alternative routes based on Map 13.8-1 below.

Strategy 13.8.1.1 As a first priority, the MIC should verify both main routes and alternative routes capacity, identify any short-term improvements needed and possible costs, provide timing and possible costs of longer term improvements based on capacity and report findings and recommendations to the County Council and DeIDOT.

Strategy 13.8.1.2 Partner with DeIDOT to support the Byways Program and to implement the recommendations of the Corridor Management Plans (CMPs) for all scenic and historic byways in the County.

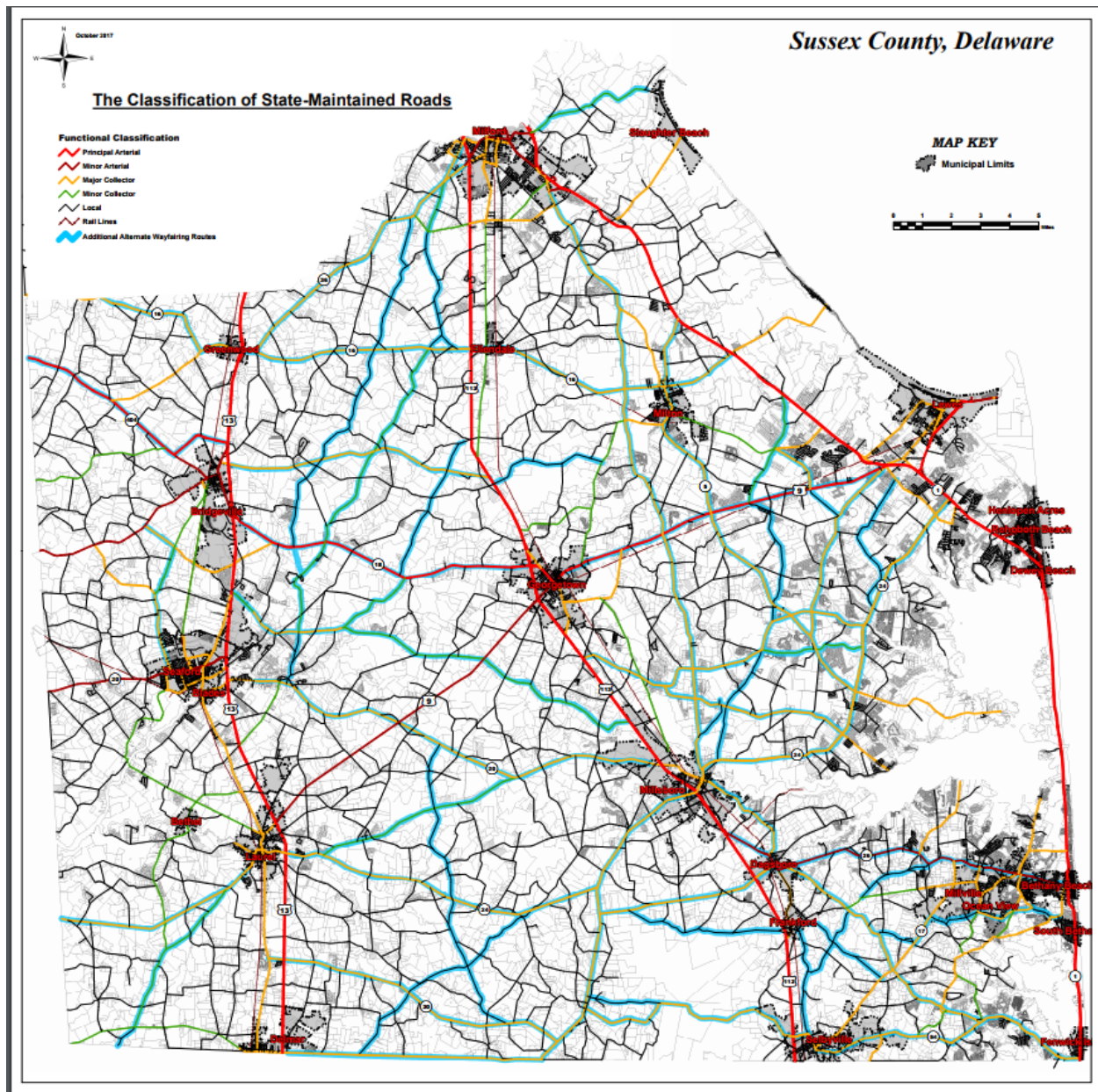
Strategy 13.8.1.3 Based on the alternate routes indicated on Figure 13.4.1, work with DeIDOT to develop and fund wayfinding signage for each intersection such that travelers can easily find their way around the County.

Strategy 13.8.1.4 Encourage DeIDOT to add a function to their mobile application allowing travelers to enter a destination and click “alt routes” or similar such that GPS devices can find and follow these routes.

Strategy 13.8.1.5 Request that DeIDOT (or County consultant) provide data concerning the current capacity of the identified alternate routes and at what point in time improvements would be required to be made to roads and intersections based on added trips and monitor traffic annually such that improvements can be budgeted and funded.

Strategy 13.8.1.6 Identify specific bypass roads or routes for areas affected by heavy tourist and/or freight traffic and prioritize, schedule, and work with the State to fund and implement such improvements.

Figure 13.4.1





13.4.1 Capacity Solutions

Sussex County needs additional roadway capacity to address increasing demand on the transportation system right now. Sometimes that capacity may come from methods other than building new or expanding existing roads. The following are several types of capacity solutions that represent current tools, future recommendations, and possible opportunities that could create some vitally needed roadway capacity by reducing current vehicular demand.

As mentioned previously, Sussex County has a very fine-grained network of “back roads”. These roads can be used as alternate routes for travelers going north/south and east/west allowing them to their destinations with less utilization of main roads thus reducing congestion and improving travel time. Much of the use of alternate routes is already happening through existing GPS technology; however, the County should consider proper signage to help facilitate this.

To this end, the Alternate Routes Map (Figure 13.4.1) was developed to describe the desirable network of “back roads” to be used for this purpose. Immediate short-term benefit can be realized by developing and funding wayfaring signage for placement at appropriate intersections alerting travelers to other means of reaching their destinations. Another possibility is to work with DelDOT to add an Alternate Routes function to their mobile application allowing GPS devices to “see” these routes and choices to be made as to which to take.

As a part of this approach, The County either on its own or in concert with DelDOT, can analyze the capacity of these routes and determine whether or not current improvements are needed and, if not, at what point in time such improvements would be needed. With annual monitoring, such improvements can be timed, budgeted for and implemented if needed.

Operational Capacity Solutions

- **Transportation Operations Management Plan (TOMP)** –The Sussex County TOMP is currently under development, which proposes several strategies including, but not limited to, traveler information systems, incident management, transit management and operational capacity improvement techniques such as managed lanes.
- **Integrated Transportation Management System (ITMS)** – DelTrac is DelDOT’s transportation management program, and the TMC has been a major champion of implementing ITMS throughout the state. A total of 248 miles along key roadway corridors in Sussex County (including SR 1, US 13, US 113, SR 16, SR 404/18, US 9, SR 24 and SR 30) have been identified as a part of Transportation Management Investment Areas and are being evaluated on factors such as congestion, traffic volumes, transit routes, goods movement activity, seasonal/recreational travel demand as well as use of an alternate or bypass route. DelTrac maintains a computerized signal system. The SR-1 corridor in Sussex County has been identified as a traffic responsive corridor, where adaptive signal systems and/or real-time traffic flow monitoring can be implemented to

maximize the corridor operational capacity in response to real-time travel demand. ITMS also focuses on travel time reliability, and DeIDOT has developed user-friendly mobile applications to provide real-time information of traffic performance on roadways as well as real-time DART bus information including arrival times, bus locations and fixed routes.



- **Connected and Automated Vehicles (CAV)** – CAVs are vehicles that utilize technology to communicate with other vehicles, connected devices and the transportation system. Fully automated vehicles are a fast-evolving technology; some vehicles are already equipped with automated functionalities such as self-parking and collision avoidance. Automated vehicles have potential to supplement mobility options for the elderly and people with disabilities as the age at which senior citizens stop driving their own vehicle may shift significantly with automated vehicle technology. The County should work with DeIDOT in the future as this technology evolves to update ordinances and plans for this futuristic transportation option.
- **Flexible Transit Routing** – As discussed earlier in the chapter, flexible transit routing provides an intermediate service option in-between conventional fixed-route transit service and demand responsive paratransit service. Potential for providing more flex service routes within Sussex County should be assessed based on the operating performance of the existing three flex transit routes.

Connected Solutions

The design of street networks is important in providing accessibility for residents and businesses, optimizing network efficiency, and building sustainable communities. Good network patterns have a high degree of connectivity while also providing a diversity of street types that serve various uses ranging from higher-volume commercial to lower-volume residential.

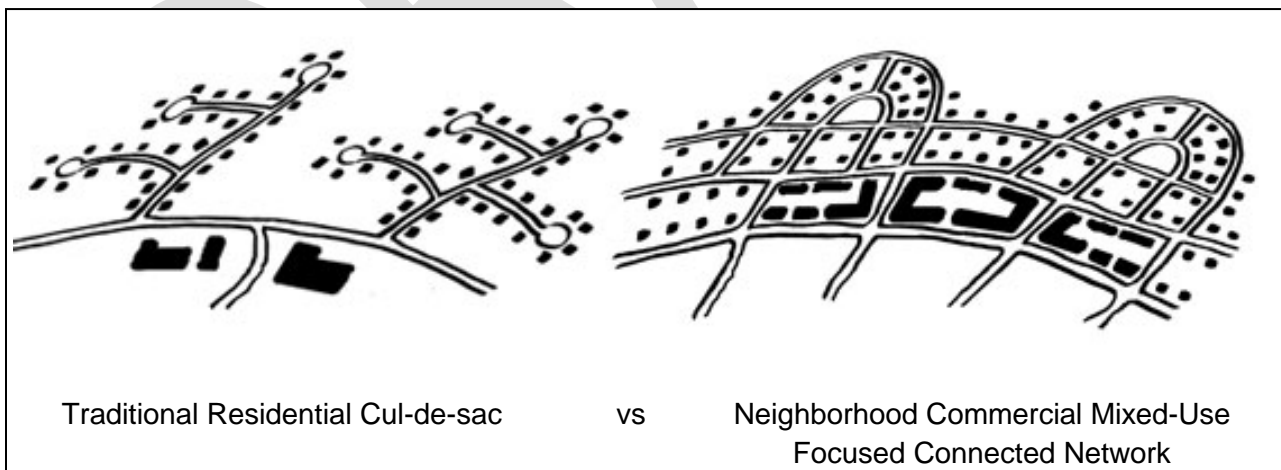
- **Connected Designs** – Sussex County residents enjoy the rural character that defines the majority of the County's land. As a result, many residents have resisted connector roads for fear they will create a grid network of streets. Therefore, a compromise between connectivity and residential privacy should be the theme in the County. There could be opportunities to work with developers on P3 initiatives that promote superior connected designs.

Local street interconnectivity plays an important role in ensuring efficient transportation systems. In early parts of the last century, streets were designed with well-connected street networks providing necessary linkages between local roads and offering more travel choices. The latter half of the century witnessed shifts in land-use decisions focused on car-oriented designs that resulted in reduced interconnectivity of local streets. This lack of street connectivity has resulted in an over-reliance on the higher classification roadway system for local trips, more traffic congestion, longer travel times and greater travel distances.

Interconnectivity between similar land uses aligns perfectly with the principles of Residential Planned Communities described in the earlier Chapter 13 on Community Design. Appropriate provision of connector roads for local trips can help to reduce congestion on arterial roads, reduce travel distances and improve travel time for local trips, introduce travel route redundancy in local street network and reduce emergency response time for fire, police and EMS services. It can also foster opportunities for community interaction by eliminating barriers between developments and provide better connectivity for non-motorized travel options like walking and bicycling.

There are a few disadvantages related to increased interconnectivity, such as increasing through traffic on residential streets. However, there are ways to plan and design connector roads better to avoid or minimize through traffic impacts on residential streets. The focus needs to shift on encouraging subdivision design that can provide a balanced mix of residential seclusion and local connectivity.

DelDOT's Development Coordination Manual provides overview, purpose, scope and objectives for achieving interconnectivity with existing and potential future developments.



- **Shared Access Driveways** – Access management is a set of street design techniques that control where vehicles may enter and leave the road. Consolidation of closely spaced driveways, especially for commercial properties has proven to be an effective access management technique to maximize mobility efficiency by improving traffic flow and reducing congestion.

Demand Management Solutions

Travel Demand Management (TDM) refers to various methods and best practices that seek to reduce or redistribute travel in place or time. TDM emphasizes moving people and goods, not vehicles, and efficiently using available resources. TDM typically focuses on increasing options and alternative modes, particularly for commute trips.

While sprawling development in Sussex County makes it significantly auto-dependent in terms of transportation mobility, the reliance on single occupant vehicles (SOVs) can be effectively reduced through public awareness programs and promotion of shared use travel options that are becoming prevalent with the turn of the century.

- **DART's RideShare Delaware Program** offers:
 - Free ridematching services for commuters working or living in Delaware as well as for parents of Delaware school students
 - A Guaranteed Ride Home (GRH) benefit, which is provided for registered commuters actively ridesharing to work
 - Vanpool services and information
 - Transportation benefit assistance to employers in Delaware



- **Private Ride-Sharing/Ride-Hailing** – Delaware is now among more than 30 states with new, statewide laws for mobile app-based ride-sharing/ride-hailing platforms like Uber or Lyft. In 2014 Uber launched UberPOOL in Delaware, which enables people going to the same place at the same time to share the journey. In 2015, Uber started providing ride-sharing/ride-hailing service in the Sussex County resort towns of Rehoboth Beach, Dewey Beach and Bethany Beach. Currently both Uber and Lyft provide ride-sharing/ride-hailing service in various parts of Sussex County.
- **Seasonal Shuttle Service** – Seasonal service focused on providing local connections between the park and ride facilities and local resort area destinations, thus encouraging visitors to park once and use the convenient shuttle service to avoid congestion.
- **Potential for Additional Shuttle Service** – P3 opportunities are possible if incentives are provided to encourage local businesses and community organizations to provide local shuttle service option for their patrons and residents.

One opportunity can be to provide a privately-run coordinated shuttle service by resort area hotels linking all area hotels with key resort destinations. Special provisions such as allowing use of shoulders by small shuttle buses will encourage overnight hotel patrons to keep their cars at hotels and use this shuttle service to avoid congestion on resort area roadways.

Another potential opportunity for a shared-use shuttle option is to incentivize home-owner associations to provide either fixed or flexible local shuttle service for their residents, which will help to reduce local auto dependent SOV trips and help alleviate congestion on key roadway corridors.

- **Parking Incentives** – Similar to High Occupancy Vehicle (HOV) lanes, many parking and park-and-ride facilities are promoting reserved and preferential parking spots for carpoolers and other high occupancy vehicles. Also, some parking authorities are charging reduced parking fees or providing free parking for a number of battery electric vehicles (BEVs) to encourage use of environment-friendly cleaner vehicles.

In addition to encouraging use of HOV through parking management techniques, technological advancements in parking have been a key factor to reduce additional driving/circling to find parking spots. Through online or smartphone applications, drivers can identify when and where parking is available at their destinations. Using real-time monitoring, cities and business districts are effectively reducing congestion caused by searching for available parking.

13.4.2 Freight

The County's goods movement (freight) network is an integral component of the transportation network as well as the economy. The main element of the freight network is the roadway system, which carries trucks (motor freight). In addition, the County has several rail freight and water freight facilities (see Figure 13.2-8).

In recent years, comprehensive freight planning for the Delmarva Peninsula has occurred. These efforts provide a broader regional context within which to assess issues and identify potential improvement opportunities for the goods movement system within Sussex County. The 2015 Delmarva Freight Plan provided information on the current system and commodity flows; key trends, needs, and issues; future scenarios; and candidate projects and studies.

- **Motor Freight** - The bulk of freight in the County moves by truck. In general, the main roads in the County are also its main truck routes. DeIDOT has designated main freight corridors in the County, including US 13, US 113, SR 1, US 9, and SR 404. In addition, under the framework on the new National Highway Freight Network (NHFN), DeIDOT has designated critical urban and rural freight corridors. In Sussex County, several portions of US 13 are critical urban freight corridors, while the rest of US 13, all of US 113, most of US 9, and a portion of SR 1 are designated as critical rural freight corridors. (See Figure 13.2-8) Economists predict that trucks will continue to be the predominant mode of goods movement, with its share projected to increase, due to various factors including increases in e-commerce.
- **Rail Freight** - The County has several rail freight lines (See Figure 13.2-8). Most rail shipments are inbound, carrying grain and other agribusiness imports.

- **Waterborne Commerce** - The Nanticoke River is an important freight route between Seaford and the Chesapeake Bay. In 2016, about 360 barges carrying nearly one million tons of bulk materials (including grain, gravel, and fuel) moved up and down the river. One barge has the capacity of about 150 trucks (See Figure 13.2-8).

The same issues (particularly congestion and infrastructure conditions) that confront personal vehicle travel also affect motor freight. Businesses and truckers need improved roadway conditions in order to maintain the effectiveness and efficiency of motor freight. At the same time, there is a need to consider how to mitigate the impacts of truck traffic upon other transportation system users and the communities through which they travel. One means of reducing truck impacts is to shift more freight to rail or water, although opportunities to do so may be limited.

Goal 13.9: Facilitate freight movement throughout Sussex County.

Objective 13.9.1 Support investments that increase the efficiency of freight movement, which is crucial to commerce in the County.

Strategy 13.9.1.1 Adapt future infrastructure and/or technology needs related to emerging technologies, such as connected and autonomous vehicles (CAV).

Strategy 13.9.1.2 Coordinate with the Delmarva Water Transport Committee regarding current planning efforts and future challenges.

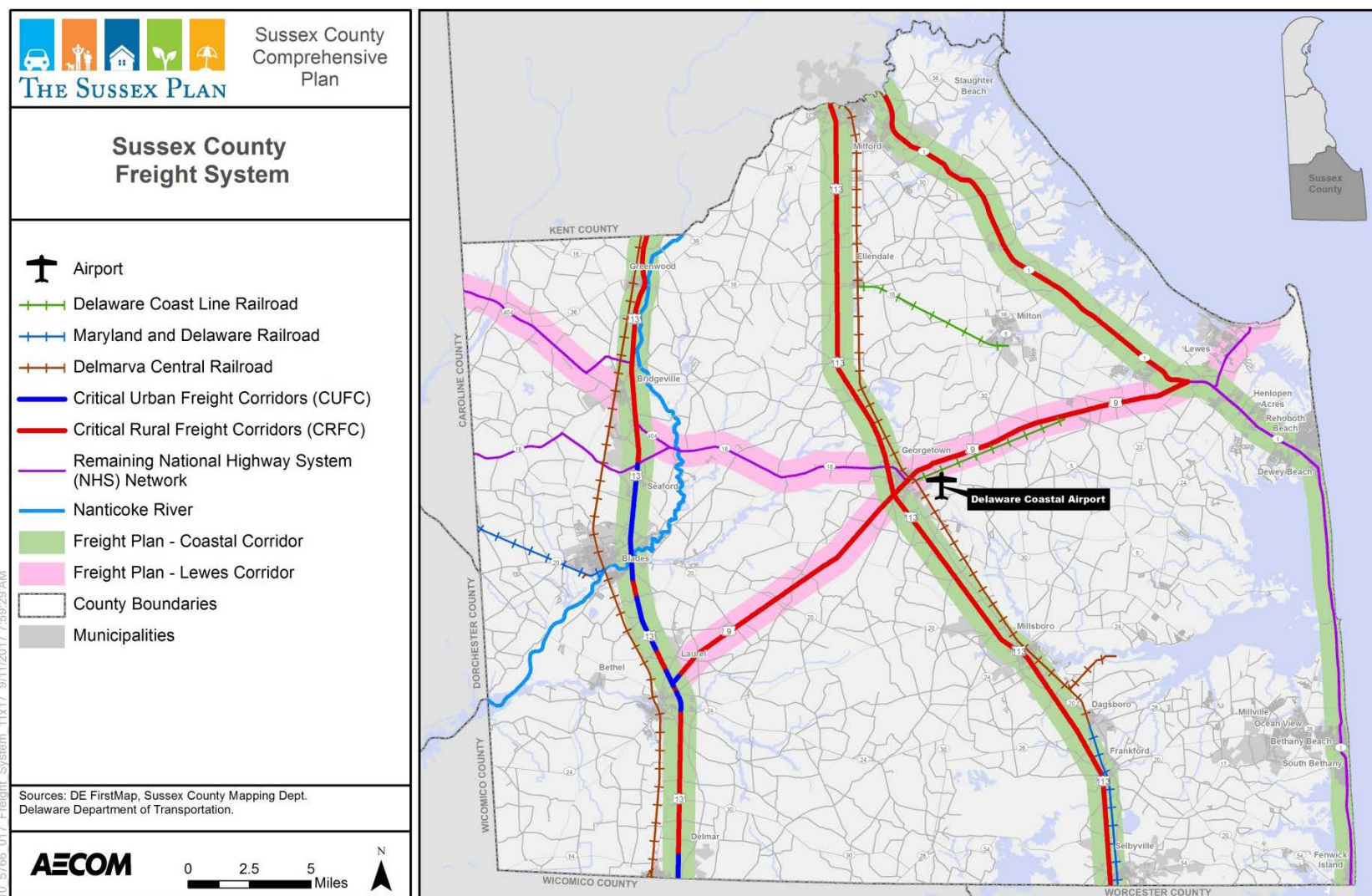
Strategy 13.9.1.3 Support the implementation of the Delmarva Freight Plan in order to improve freight flow and reduce the impacts to County residents.

Strategy 13.9.1.4 Explore incentives for businesses to switch from truck to rail freight, which can reduce freight costs and road traffic congestion.

Strategy 13.9.1.5 Partner with the Delmarva Central Railroad to aid in their strategic planning efforts and to help identify potential rail customers.

Strategy 13.9.1.6 Explore the potential for rail infrastructure improvements at the Delaware Coastal Airport industrial park and possible connection to the King Farm Industrial Park.

Figure 13.2-8 Freight System - **DRAFT**



13.4.3 Overview of Coordination Issues

- **Different entities responsible for land use and transportation decisions** - Coordination between land use and transportation policies, decision-making and development has always been a challenge. Linking land use and transportation is challenging in Delaware because different entities are responsible for transportation improvements and land use approvals.

In Sussex County, DelDOT is responsible for nearly 90% of the roadway network across all roadway functional classifications and has statutory responsibility to plan, construct and maintain the state highway system and to approve all access to it. Sussex County Council is responsible for all land use decisions within the unincorporated areas of the County, while 25 separate municipalities are responsible for land use decisions within incorporated municipal boundaries.

Less emphasis on regional and integrated transportation-land use planning - The Sussex County Council and 25 individual municipalities review, approve or deny development and/or redevelopment proposals and other zoning changes to implement best possible land use policies and strategies. These policies and strategies reflect local goals as well as objectives and they are mostly aligned with the development vision for the entire County. DelDOT's transportation system preservation, maintenance and enhancement focus is on addressing local and regional access/ traffic flow issues and ensuring safety enhancements that are identified based on anticipated growth strategies as per the state land use policies in the statewide LRTP that may not align completely with the local policies.

As such, while DelDOT, Sussex County and municipalities are all focused on implementing best practices, there can be a disconnect between land use and transportation planning and a regional approach. Having said that, there have also been some success stories in the County showcasing an integrated planning focus, such as the Southeast Milford Master Plan. These success stories should be used as a template to achieve implementation of integrated planning throughout the County.

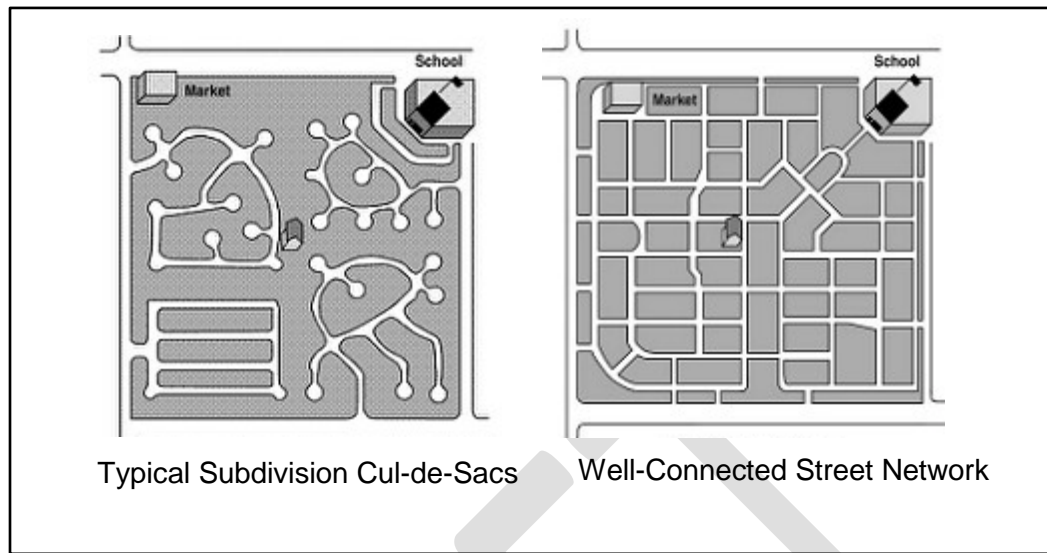
- **Lack of public support for improvement projects** – While public involvement is an integral element of transportation planning and project delivery, securing public buy-in is a challenging task. Many times there are conflicting interests and opinions about the objectives of specific improvement projects that result in lack of public support for them. Public involvement processes should be improved to prevent similar problems with future projects. Building an early consensus on improvement concepts through public participatory decision-making has been found to be very effective. This approach not only generates better buy-in but also helps creating relationships and building a long-term trust among all partners.
- **Unavailability of a coordinated transit service forum** – The Sussex County Mobility Consortium, a former organization of participating non-profit human services

transportation providers in Sussex County, used to coordinate efforts among participating providers and share coordinated supplemental transit service information for end users in the Sussex County. Since 2015, the Sussex County Mobility Consortium is no longer operational.

13.4.4 Overview of Other Significant Issues

Various large-scale forces and trends influence transportation demand and travel patterns. These forces and trends relate to land use, demographics, economics, and the environment. This section describes several forces and trends and the challenges that they present to long-range transportation planning in Sussex County.

- Sprawling Development** - Today, limited Right-of-Way (ROW) expansion possibilities and budget constraints make physical capacity expansion difficult. If growth is managed and timed with transportation improvements, Delaware can use its trust fund dollars more efficiently. As such, perhaps the most important force that affects transportation demand and travel patterns is land use and development. Dispersed low-density development, or sprawl, has resulted in an auto-centric transportation system with higher rates of driving and vehicle ownership. This reduces the ability to implement cost-effective and specific roadway improvements focused in the areas where growth is likely to occur and reduces potential for alternative modes of travel. The majority of low-density development in Sussex County has been piecemeal and uncoordinated with regional transportation infrastructure. Targeted density increase in appropriate growth areas actually helps streamline roadway improvements and results in reduced congestion. On the other hand, sprawl causes the transportation system to be in reactive mode, instead of proactive mode. It has also stretched the state's Transportation Trust Fund dollars as projects respond to development County-wide. As a result, a few arterial roads must accommodate heavy traffic and are faced with access and mobility challenges due to growing congestion.
- Disconnected Land Uses** - Related to sprawl is the issue of disconnected land uses. While low-density development has been the most widely recognized indicator of sprawl, lack of street interconnectivity and segregation of land uses also contribute to sprawl and its impacts on access and mobility. The current patterns of land use and development, and the available roadway system, typically do not connect similar uses nor do they connect residents to local services. This separation of uses puts a higher stress on the transportation system. To alleviate this issue, Sussex County will have a greater focus on providing interconnectivity in all types of development and redevelopment.



- Seasonal Traffic** - The presence of the County's beach and resort communities attract significant visitor traffic during the summer months and the "shoulder-season" in the spring and fall. In addition, a significant portion of through or pass-by traffic (with neither origin nor destination in the County) is also experienced by key transportation corridors such as SR 1. This seasonal visitor traffic as well as increased regional through traffic puts stress on arterial roadways and makes local travel difficult. These additional travelers on County's roadways must be incorporated in future planning while addressing congestion issues.
- Demographic Trends** - Various demographic characteristics and trends affect transportation demand. These factors include the overall level of population and employment, as well as the population age distribution. Recent projections show that immigration to the County will continue and grow for a number of years, leading to increased population and increased travel demand. For more information about these demographic trends, see Chapter 2 – Population and Demographics.
- Climate Change** - One other large-scale external force is climate change. Considerable research has documented future temperature extremes, heavy precipitation, storm surge, and sea level rise, which may affect the condition and reliability of the transportation system. This could put some of the County's infrastructure at risk. Ongoing planning is necessary to ensure the adequacy of evacuation routes to move people safely from the coast and other flood-prone areas.

13.4.5 Travel Options

- Public Transit** - The primary public transit provider in the County is the Delaware Transit Corporation (DTC), which operates DART First State service. Within Sussex County, DART runs three fixed bus routes, three "flex" bus routes, and a fixed commuter bus route that runs between Georgetown and Dover. DART also provides seasonal summer bus

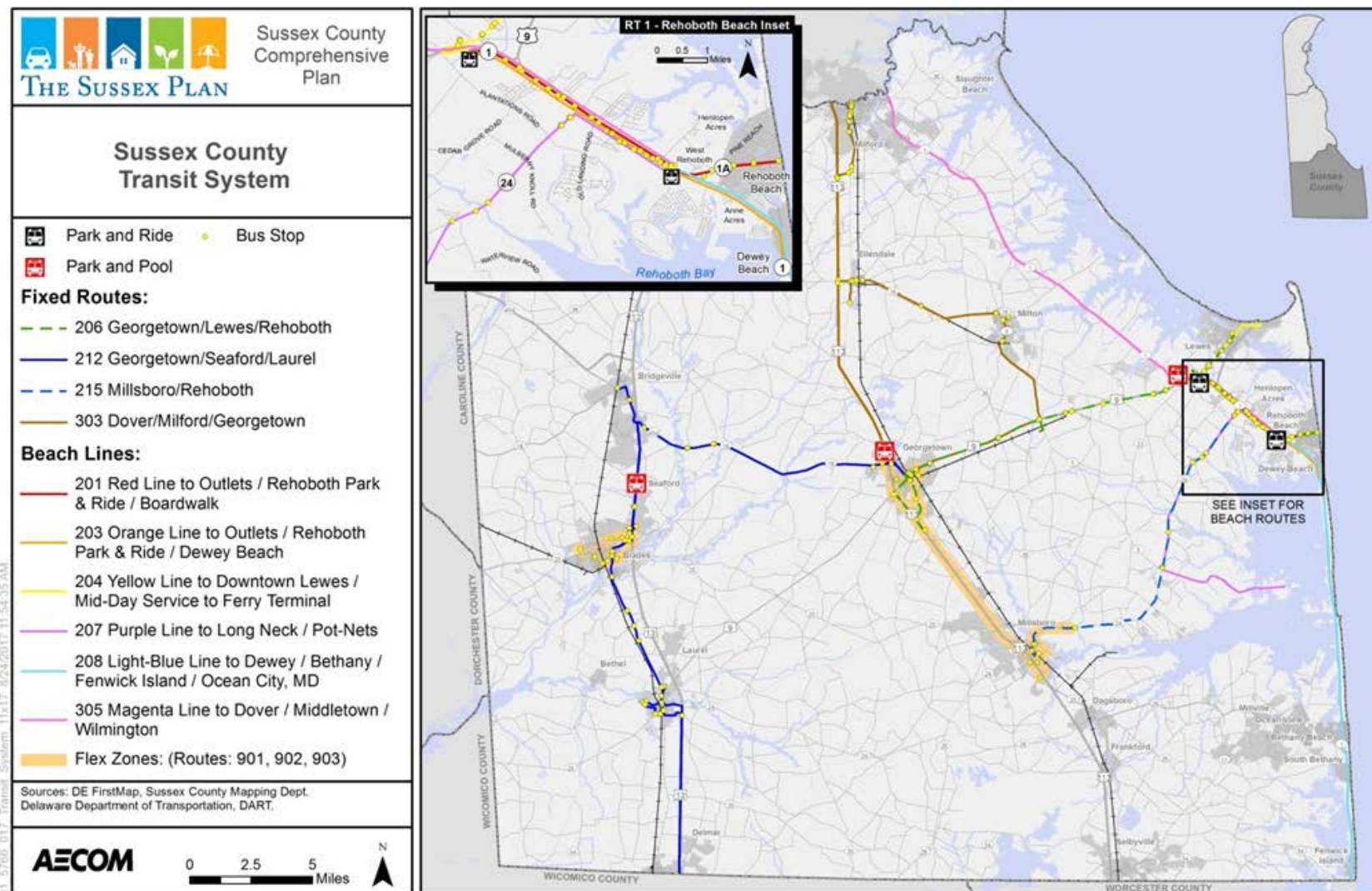
service, comprising seven routes. This system includes two park-and-ride and three park-and-pool facilities (see Figure 13.2-9).

DART also operates on-demand, door-to-door paratransit services for senior citizens and persons with disabilities. Previous data has shown that paratransit trips within Sussex County account for more than 50 percent of all daily transit trips, excluding seasonal fixed-route trips. Numerous social service agencies (e.g., Department of Health and Social Services and Division of Developmental Disabilities Services) also provide human services transportation.

The primary challenge for travel options is to increase the availability and usage of alternatives to personal vehicle travel. For public transit in Sussex County, the main challenge is to address the trend of declining ridership. General strategies to address this challenge may include increasing the level of public information about transit and improving coordination among service providers, match demand with supply, address gaps in service and considered transit in planning for new development, which ideally will incorporate transit-friendly design elements.

- **Non-motorized** - The main non-motorized travel options are walking and bicycling. The primary facilities for walking are sidewalks, and most sidewalks in the County are concentrated in its municipalities. Shared-use pathways and trails also are available for pedestrians, as well as bicyclists. Chapter 7, Recreation and Open Space provides information on existing and planned trails and pathways in Sussex County.

Figure 13.2-9 Transit System - **DRAFT**



Bicyclists also may travel along roadways, some of which have accommodations such as shoulders and wide outside lanes. DeIDOT has prepared mapping that classifies all roads by their suitability for bicyclists.

For walking and bicycling, the challenges are similar to those for transit – increasing the extent of facilities in order to attract greater usage. Providing appropriate safety measures, particularly relative to vehicular traffic, also is essential. It is important to continue to include pedestrian and bicycle planning into land use plans at all levels and to better incorporate pedestrian and bicycle-friendly design standards into the design of residential and commercial developments.

- **Aviation** - The County has two public-use airports, the Delaware Coastal Airport and Laurel Airport (see Figure 13.2-10). Sussex County owns Delaware Coastal Airport, a general aviation airport, which handles a mix of small aircraft and corporate jets. Total annual operations average about 34,000 take-offs and landings. The airport is an important travel option and economic resource for the County.

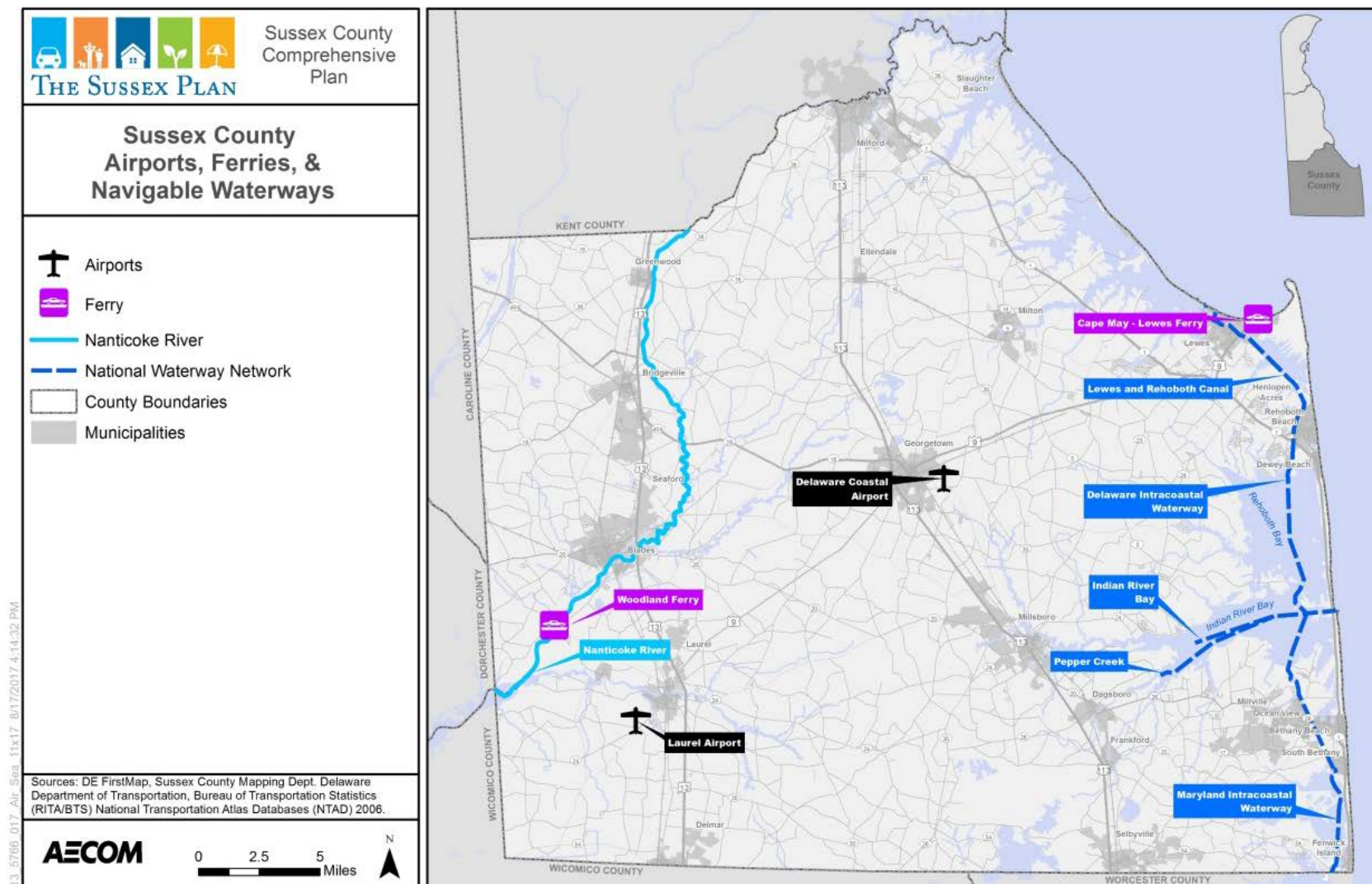
Laurel Airport is a privately-owned airport, which is mostly used for agricultural spraying and skydiving. The airport is a localized travel alternative and an important tourist attraction for the Town of Laurel.

One important planning challenge for aviation facilities is how to leverage proposed investment in upgraded facilities into additional economic development. It is essential for land use plans and zoning to accommodate aviation uses. An additional important element is to provide adequate ground-side connections, such as roads and parking, transit service, and rail freight. At the same time, proposed expansion projects must consider environmental and community impacts, particularly increased noise levels.

Water - Two water transportation services in the County are the Cape May – Lewes Ferry and the Woodland Ferry (See Figure 13.2-10). The Cape May – Lewes Ferry, operated by the Delaware River and Bay Authority (DRBA), has been running across the Delaware Bay between Cape May, NJ and Lewes, DE since 1964.

The Woodland Ferry, operated by DeIDOT, provides free year-round service for vehicles and pedestrians across the Nanticoke River west of Seaford and Laurel.

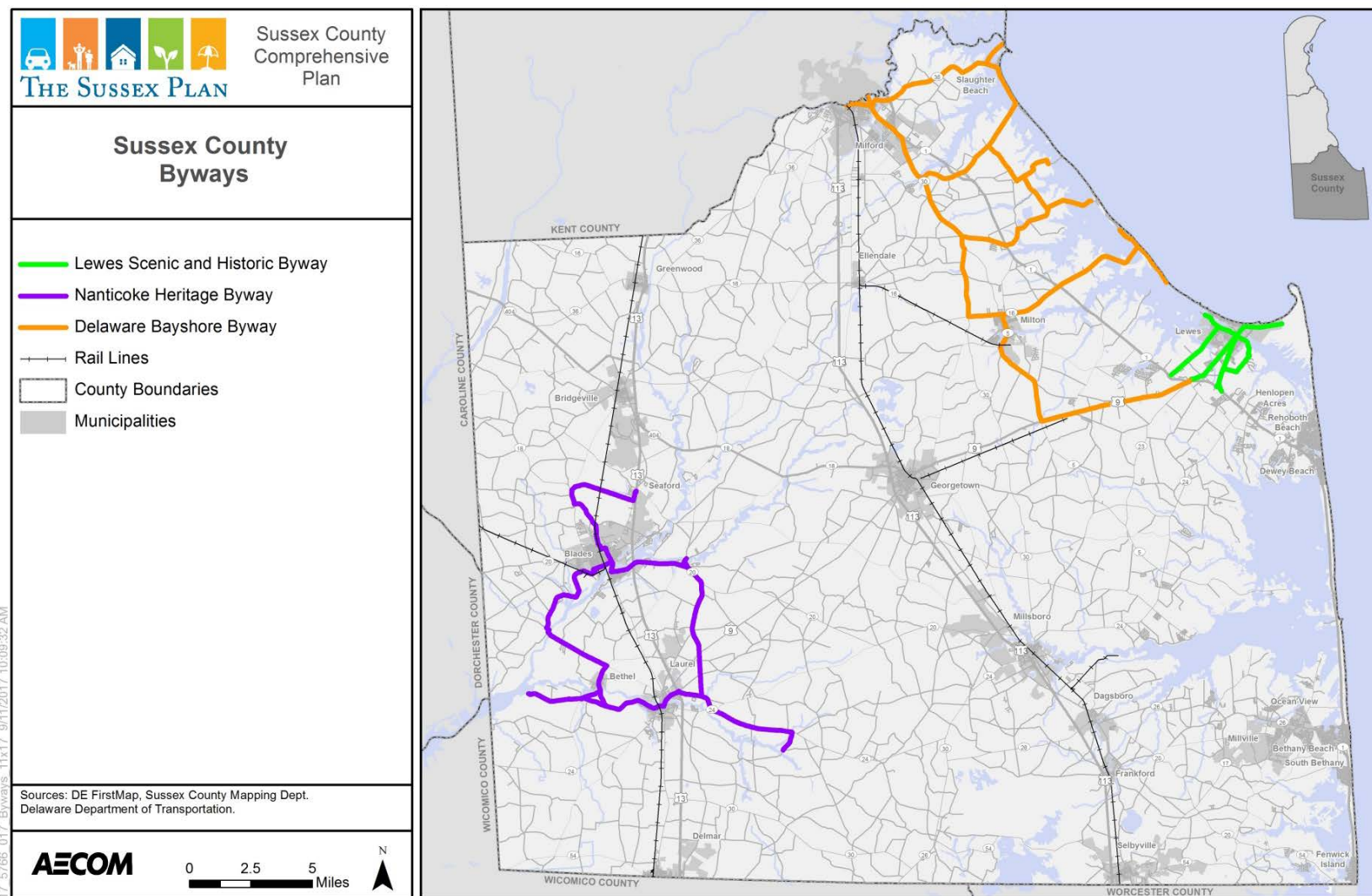
Figure 13.2-10 Airports, Ferries, and Navigable Waterways - DRAFT



- **Delaware Byways** - The Delaware Byways system (formerly Delaware Scenic and Historic Highways) consists of roads that travel through areas of scenic and historic interest. The intent of this system is to promote tourism and raise awareness of the communities along these routes. Currently there are three byways located in Sussex County (see Figure 13.2-11):
 - The Bayshore Byway (formerly Route 9 Coastal Heritage Byway) provides access from outside Dover to a connection with the Historic Lewes Byway in Sussex County. This byway comprises a small network of roads generally located between the SR 1 corridor and the Delaware Bay. The byway provides access to natural and historical sites, particularly the Prime Hook National Wildlife Refuge, along the bay.
 - The Historic Lewes Byway provides access to many natural and historical sites, including Cape Henlopen State Park, the Cape May-Lewes Ferry, the Zwaanendael Museum, the Lewes Historic District, Lightship Overfalls, the de Vries Monument, Canary Creek, and the Kings Highway Historic District.
 - The Nanticoke Heritage Byway (formerly Western Sussex Byway) runs along several roads in western Sussex County, beginning at US 13 north of Seaford and passing through Seaford, Bethel, and Laurel before ending at Trap Pond State Park.

Thus, a main challenge for the byways program will be achieving a balance between each corridor's intrinsic resources and aesthetics and promoting visitors' opportunity to experience the byway. Monitoring implementation of the CMPs seems to provide a basis for achieving this balance.

Figure 13.2-11 Byways in Sussex County - **DRAFT**



Goal 13.10 Facilitate alternative modes of transportation.

Objective 13.10.1 Encourage non-motorized transportation planning along low-speed roadways.

Strategy 13.10.1.1 Partner with DART on its Transit Redesign efforts, such as transitioning appropriate Paratransit trips to fixed route or flex route services and spreading awareness about the Senior Citizens Affordable Taxi program.

Strategy 13.10.1.2 Partner with DART to improve and expand Flex Route Service for local communities.

Strategy 13.10.1.3 Encourage DART to continue its service planning efforts in order to reevaluate current routes and expand others.

Strategy 13.10.1.4 Partner with commercial businesses and large scale planned communities to consider the possibility of providing transit shuttles.

Strategy 13.10.1.5 Partner with hotels and commercial business in and around resort areas to explore the possibility of coordinated shuttle service.

Strategy 13.10.1.6 Incorporate bike and pedestrian facilities into community master plans where appropriate and consider allowing the use of motor-assisted bicycles along bicycle facilities and trails.

Strategy 13.10.1.7 Support the development and implementation of the statewide bicycle plan, a Blueprint for a Bicycle-Friendly Delaware, and continue to support the creation of recreational trails and shared-use pathways to connect communities to employment, commercial services, recreational opportunities, and to provide safe alternatives to car travel.

Strategy 13.10.1.8 Partner with Delaware's Pedestrian Coordinator to complete sidewalk connectivity projects in conjunction with new development.

Strategy 13.10.1.9 Consider creating a senior transportation guide and/or toolkit to spread awareness about senior transportation options for residents and visitors.

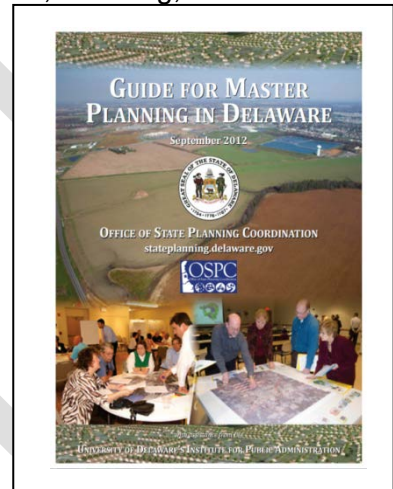
Strategy 13.10.1.10 Encourage the growth of non-profit transportation providers, including but not limited to, ITN Southern Delaware, CHEER, and Generations Home Care.



13.4.6 Fiscal Solutions

Sussex County can explore potential fiscal solutions including but not limited to the ones identified in this section.

- Master Planning and Associated Funding Techniques** – Master planning involves conducting a tangible and interrelated assessment of the existing transportation system as related to land use, community facilities, open space, housing, and economic development policies. The process establishes a shared vision of the future for these elements and develops a roadmap to achieve that vision through implementation of supporting policies and actions. The “Guide for Master Planning in Delaware” published by the Office of State Planning Coordination is a helpful resource, which showcases master planning efforts for the Milford Southeast Neighborhood and Georgetown South in Sussex County, among others in the state.



- Transportation Improvement Districts (TIDs)** – A TID is a geographic area defined for the purpose of securing required improvements to transportation facilities in the area. It uses the master planning process to link development and transportation improvements and is an innovative and predictable funding mechanism that is being used to finance construction, maintenance and expansion of transportation infrastructure.

As a transportation-based impact fee, TIDs set the stage for market-ready development and/or redevelopment. They provide a way to equitably distribute the cost of development-related growth and infrastructure improvements to the private sector that benefits from the facilities. Projects related to a TID are prioritized higher in DelDOT’s project delivery process.

- County Transportation Fund (CTF)** – While more than 90% of the roadways in the State are maintained by DelDOT (the rest are privately maintained), the creation of a County Transportation Fund predicated on a *substantial new matching fund*, like a 90-10 State-County split, could be an innovative fiscal solution to support infrastructure projects that are considered as top priority for the County. User fees such as congestion fees and parking fees could be potential sources of revenue generation for the CTF. The CTF supplementing a new state matching fund should only be used for projects in Sussex County. It should also be noted that County transportation funding would be the property of and administrated solely by Sussex County. Any funds would only be allowed to be used on transportation improvements in Sussex County.

- **Transportation Impact Fees** – This is a one-time fee charged for new development or redevelopment projects, wherein a developer is charged for any potential infrastructure improvements specifically needed due to the development or redevelopment project. Another option is for developers to build required infrastructure improvements in lieu of the fees. Impact fees can be a viable means of finance for a variety of localized infrastructure needs created by growth. These impact fees and/or developer-led infrastructure improvement projects are handled through the traditional Traffic Impact Studies (TIS) and Traffic Operations Analysis processes managed by the Development Coordination team at DeIDOT.
- **DeIDOT Community Transportation Fund (CTF)** - DeIDOT's Community Transportation Fund provides a fixed amount of funds annually to each State Senator and House Representative to be used for transportation improvements within their districts. To be considered for funding through CTF, proposed transportation improvements need to meet three criteria as follows:
 - Have a transportation component
 - Be on a public property or land dedicated to public-use with certain restrictions
 - Benefit more than one individual

While available CTF funds can only address small scale transportation improvements, it's still a valuable funding source to address local community requirements for projects such as sidewalk construction and repair, repaving etc.

- **Tax Increment Financing (TIF)** - Tax Increment Financing provides money for transportation improvements from anticipated growth in property tax revenues resulting from a redevelopment plan. Transportation can benefit from this strategy, through targeted investment in infrastructure such as street construction, expansion, traffic control, bridges, curbs and sidewalks, and even parking structures within the TIF districts.¹ Currently, 49 states (including Delaware) have enacted legislation enabling tax increment financing.²

Goal 13.11 Explore fiscal solutions that complement state initiatives

Objective 13.11.1 Leverage State and Federal Funding with local funding to advance construction of capacity improvements.

¹ Source: Alternative Funding Strategies for Improving Transportation Facilities, North Carolina Department of Transportation

² Sources: Council of Development Finance Agencies. "Tax Increment Financing State Statutes" and "Title 22-Chapter 17. Municipal Tax Increment Financing Act" of the Delaware Code

Strategy 13.11.1.1 If DeIDOT establishes a new matching funding mechanism such as a 90% DeIDOT 10% County ratio then the County should explore the possibility of establishing a new source of matching funds.

Strategy 13.11.1.2 Determine the feasibility of a variety of funding sources including, for example, Public Private Partnerships (PPP or P3), user fees, tolls or other taxes and/or surcharges.

Strategy 13.11.1.3 Partner with DeIDOT in the planning and programming of funds designated for maintenance, such as pavement rehabilitation, and bridge maintenance and repair.

Strategy 13.11.1.4 Remain engaged in the DeIDOT Capital Transportation Program (CTP) development process and increase coordination of project prioritization and identify and implement potential improvements to the annual capital request process.



13.4.7 Collaborative Solutions

The County is looking to take a more active role in the transportation process. This will take the form of many different collaborative solutions. The following are a number of ways the County is looking to increase participation.

- **Resources for Local Communities** – DeIDOT supports and administers several community-driven programs that coordinate mobility and access choices. The following is only a sample of resources that local governments can use to accomplish their mobility goals.

DeIDOT Transportation Alternatives Program (TAP) – The Federal Surface Transportation Block Grant Program (STBG), administered by DeIDOT through its TAP Program, provides funding for transportation alternatives projects for qualifying TAP categories listed in federal legislation. **Complete Communities Toolbox⁷** – The way a community is designed can impact transportation options, community livability, business climate and sense of place.

Goal 13.12 Explore collaborative transportation solutions.

Objective 13.12.1 Encourage state, private and non-profit entities to work toward common goals.

⁷ Source: www.completecommunitiesde.org

Strategy 13.12.1.1 Work with DelDOT to coordinate transportation decisions as they relate to land use decisions and expanding tourism.

Strategy 13.12.1.2 Partner with DelDOT to consider the establishment of Transportation Improvement Districts (TIDs) or other such approaches in suitable areas.



13.4.8 Reliability Solutions

- **Senior Transportation Opportunities** – There are more than 50 taxi service companies based in different parts of the County. Efforts should be taken to increase Senior Citizen Affordable Taxi (SCAT) Program provider participation so that many other residents can benefit from the SCAT Program.

Also, Sussex County should continue to support the efforts of non-profit and other partner organizations such as ITN Southern Delaware and CHEER to expand their services for senior citizens and persons with disabilities in all parts of the County.

- **Bicycle and Pedestrian Planning** - Sussex County and its partners should continue supporting bike and pedestrian planning at both regional and local levels. The entire state has a shared interest in building a connected system of safe pathways.

Delaware has undertaken a statewide policy-oriented master plan (currently under development) to improve bicycle friendliness and encourage increased use of bicycles as an alternative travel mode for appropriate short-distance travel as well as recreational trips. In 2012, Lewes became the second bicycle-friendly community in Delaware, and in 2016, Phase I of the Georgetown-Lewes Trail opened.

Upon its completion, the “Blueprint for Bicycle-friendly Delaware” will be a great resource for promoting the use of bicycles and improving safety for bicyclists in Sussex County.

- **Climate Framework and Evacuation Planning** – An efficient transportation network is the key backbone of evacuation planning and DelDOT has begun a process to identify nature-based approaches to increasing the resilience of State Route 1 along the coastline in Sussex County.

In addition to DelDOT, Sussex County works closely with other key entities and organizations to strengthen partnership for mobility as follows:

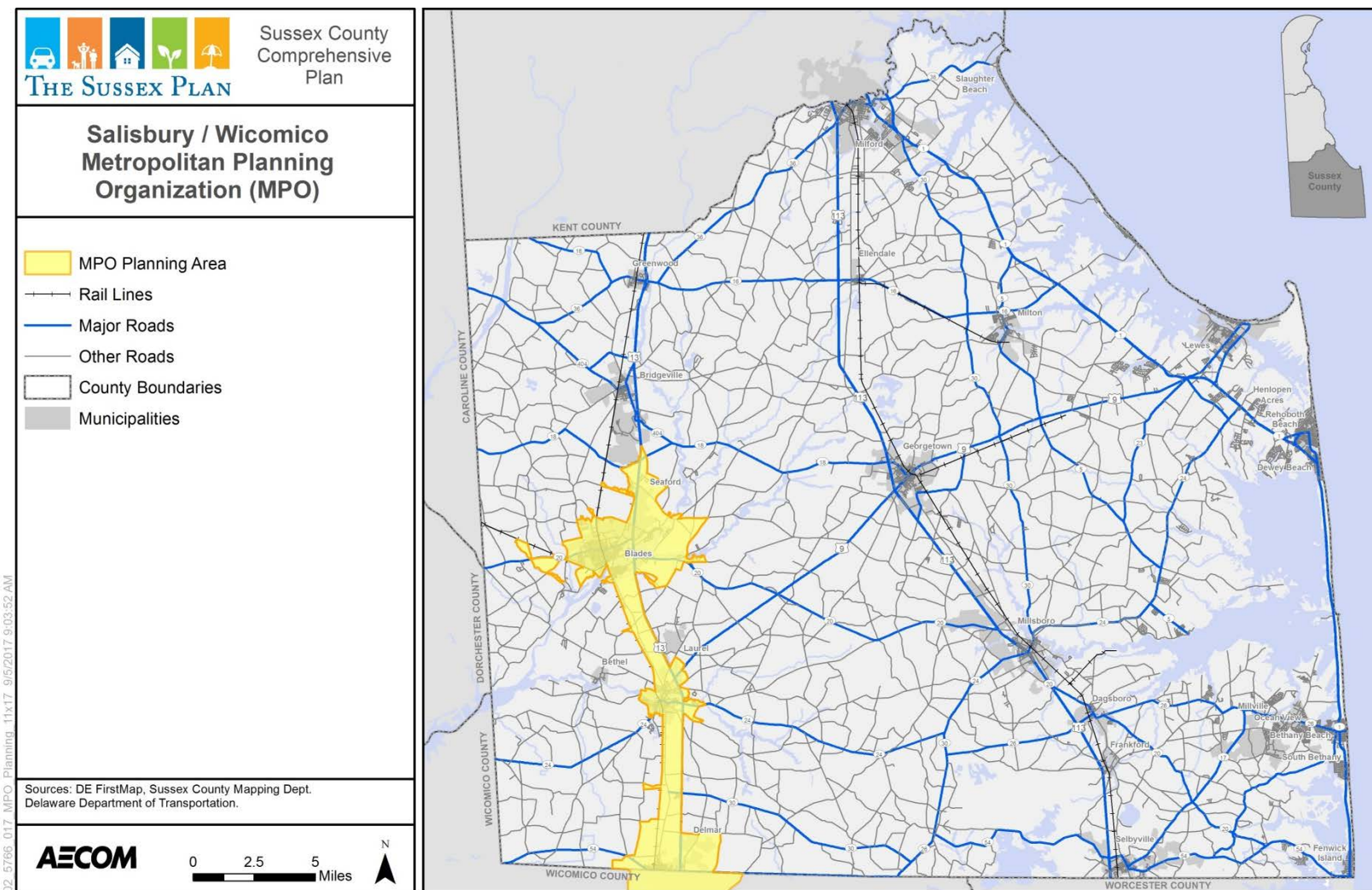
- **Salisbury/Wicomico Metropolitan Planning Organization (S/W MPO)**
Metropolitan Planning Organizations (MPOs) are required by federal law for any Census-designated urbanized areas. They provide a forum for local officials, public transportation
-

providers and state agency representatives to plan for a region's current and future transportation needs. The Salisbury/Wicomico MPO is located in the central portion of the Delmarva Peninsula (see Figure 13.5-1) and covers some Sussex County jurisdictions, such as the City of Seaford, the Town of Blades, the Town of Laurel and the Town of Delmar, and other unincorporated areas along US 13. The County partners with the S/W MPO to develop their annual Transportation Improvement Program (TIP), which is a key contributor to DelDOT's Capital Transportation Program (CTP).

The primary function of the S/W MPO is to establish goals, objectives and policies governing transportation planning in the region and to prepare and adopt strategies for a Long-Range Transportation Plan (LRTP). The MPO also makes planning funds available to all jurisdictions in its boundary through its annual Unified Planning Work Program (UPWP). Sussex County Council has representation on the MPO's Technical Advisory Committee (TAC) and the Executive Council.

The S/W MPO Council unanimously adopted the update to the MPO's LRTP, "Connect 2045," on November 24, 2015 to guide transportation improvements in the MPO region over the next 30 years. "Connect 2045" was developed in conjunction with the Maryland and Delaware Departments of Transportation, local agencies and governments, like Sussex County, and the public.

Figure 13.5-1: S/W MPO Metropolitan Planning Area - **DRAFT**



Transportation projects within the MPO boundary are required to be included within “Connect 2045” to qualify for federal funding. The plan has identified roadway, transit, bicycle and pedestrian improvement projects within the MPO area grouped as immediate priority (1 to 5 years), intermediate priority (6 to 10 years) and long-range priority (10 years and beyond). The plan can be amended if future project needs change.



- **Delaware Office of State Planning Coordination (OSPC)**

The Office of State Planning Coordination is a key partner with a mission to continually improve the coordination and effectiveness of land use decisions made by state, County, and municipal governments while building and maintaining a high quality of life. Its precursor the Delaware State Planning Office prepared the County's first Comprehensive Plan in 1970. It seeks to coordinate state agency review of major land use change proposals prior to submission to local governments; conducts research, analysis, and dissemination of information concerning land use planning; and aids the effort of the state to meet the information needs of state agencies and local governments, especially in the realm of spatial data and Geographic Information Systems (GIS).

- **Other Partners**

In addition to DelDOT, DTC, S/W MPO and OSPC, there are several other transportation service providers and partners that offer various transportation services/support for both people and freight movement.

Some of these providers and partners are specifically focused on providing viable transportation options for aging and disabled people. The Delaware Aging and Disability Resource Center (Delaware ADRC) provides a searchable database of supplemental transportation service providers offering such services in Sussex County. Some of these providers include the following: Generations Home Care, ITN Southern Delaware, and CHEER.

Also, there are numerous private (for profit) transportation providers and taxi companies based in Sussex County providing transportation services to Sussex County residents, businesses and visitors alike.

- **Public-Private Partnerships (P3)**

Through Executive Order 1 by Governor John Carney, the Delaware Economic Development Working Group (DEDWG) was formed to come up with policy recommendations regarding the use of a P3 to foster economic development in Delaware. While the primary focus of the order is to foster P3 opportunities for economic development and job creation, availability of efficient transportation infrastructure to facilitate mobility,

both for people and goods, is a key element to ensure economic development goals can be achieved. Delaware is one of the twenty-two states in the country where P3s are authorized in at least one primary sector.

- **The Public**

This comprehensive plan belongs to the residents and businesses in Sussex County. Therefore, the public body is the most important partner as we chart out the future of our transportation system. In the future, more opportunities to engage the general public early on and throughout the entire life-cycle of a collaborative transportation planning process should be explored and implemented. Using such an approach should prove helpful to identify system improvements with strong community support.

Looking forward, dedication and perseverance among all partners is crucially important in responding to our transportation challenges. These “**Partnerships for Mobility**” will ensure that our County realizes its Mobility Vision by implementing strategies to achieve mobility goals and objectives described in the next section.

13.5.1 Delaware Department of Transportation (DelDOT).

DelDOT maintains nearly 90% of the roadway network in the County and is responsible for facilitating efficient options for other modes of travel such as transit and non-motorized (bicycle and pedestrian) travel. As a key partner, Sussex County participates in the planning and capital programming process with DelDOT.



A focus on a strategic, long-range and highly-coordinated process between municipal, County and state partners, which will truly integrate land use and transportation at a regional level to address current as well as anticipated future issues will be important in the implementation of this plan. The existing transportation system elements (see Figure 13.1-1) and issues are discussed in Section 13.2. The linkage between land use and transportation is critical as land use decisions made without understanding the full impact to the transportation system can lead to costly unintended consequences Delaware Department of Transportation(DelDOT).

DeIDOT Mission – DeIDOT strives to achieve excellence in transportation for every trip made by every mode for everyone by utilizing every dollar efficiently. DeIDOT focuses on:

- Safe, reliable and convenient travel for both people and commerce.
- Multiple choices of travel including roadways, rails, buses, airways, waterways, bike lanes/ trails and sidewalks/ walking paths.
- Best value for every dollar spent.
- Engaging customers and employees in respectful and courteous manner.

Delaware's transportation network is continually evolving based on changes in land use, demographics, travel patterns, consumer preferences and technology. "Innovation in Motion" is the most recent long-range plan update that identifies goals, policies and priorities to meet statewide long-term transportation needs over the next 20 years. This is a collaborative process with consistent input from all DelDOT's partners including Sussex County. The plan is geared towards improving quality of life for everyone and will be an ongoing process for DelDOT.



Council on Transportation (COT) – The Council is a nine-member panel appointed by the Governor. The Council serves in an advisory capacity on issues relating to transportation and other matters that may aid DelDOT in providing the best possible transportation services for the traveling public. The Council sets transportation priorities (formally known as DelDOT's Project Prioritization Process), adopts DelDOT's Capital Transportation Program (CTP), approves highway realignments and reviews certificates of convenience and necessity issued by DelDOT to public carriers (except for schools and churches) for transportation services. Sussex County has representation on the COT.



Delaware Transit Corporation (DTC) – DTC is an operating division of DelDOT, and operates DART First State, which provides fixed route bus, seasonal bus, and door-to-door paratransit service for the general public. DTC also provides Delaware RideShare that matches people with rides throughout the state. DART is an important partner for Sussex County, especially considering County's aging demographics, where paratransit service and DART's Senior Citizen Affordable Taxi (SCAT) program play a key role in County public transportation. DART's summer "Beach Bus" service also helps Sussex County to promote a hassle-free and convenient transportation alternative for resort visitors.



13.6 MOBILITY GOALS, OBJECTIVES, AND STRATEGIES

Below is a list of goals, objectives, and strategies for Sussex County's Mobility Element:

Goal 13.1: Increase the physical and operational capacity of the transportation system in the County.

Objective 13.1.1 Improve mobility for local residents and access to local businesses.

Strategy 13.1.1.1 As a first priority, the County Council should appoint the MIC (Mobility Improvement Committee) to work with the state legislature and DelDOT to implement the Alternative Routes plan including the necessary wayfaring signage and possible mobile application function.

Strategy 13.1.1.2 As a first priority, the MIC should verify both main routes and alternative routes capacity, identify any short term improvements needed and possible costs, provide timing and possible costs of longer term improvements based on capacity and report findings and recommendations to the County Council and DelDOT.

Strategy 13.1.1.3 As a first priority, the MIC should verify both main routes and alternative routes capacity (including road classification and current traffic counts), identify any short term improvements needed as well as possible costs, provide timing and possible costs of longer term improvements based on capacity and report findings and recommendations to the County Council and DelDOT.

Strategy 13.1.1.4 As a first priority, the MIC should work with the state legislature and DelDOT to implement the Alternative Routes plan including the necessary wayfaring signage and possible mobile application function.

Strategy 13.1.1.5 Support DelDOT in the continued implementation of the Corridor Capacity Preservation Program and associated improvements including increasing building setback distances based on the classification of roads to allow future capacity expansion if needed.

Strategy 13.1.1.6 Consider all potential capacity improvement concepts for key north-south and east-west routes, prioritize such projects, recommend implementation to the Sussex County Council and DelDOT and work with DelDOT to build early public support for projects.

Strategy 13.1.1.7 Prioritize, plan and find means of implementing bypass roads, grade separated intersections or routes for areas affected by heavy tourist and/or freight traffic along existing corridors.

Strategy 13.1.1.8 Ensure MIC partners with DelDOT to evaluate the recommendations in the Traffic Operations Management Plan (TOMP) for Sussex County, determine which recommendations should be implemented and report findings and its recommendations to Council.

Strategy 13.1.1.9 Consider supporting the use of managed lanes (such as temporary shoulder use) to create temporary operational capacity during peak times.

Strategy 13.1.1.10 Examine past studies to determine if any previously-planned projects are feasible to implement, which will reduce the need for additional studies. Recommend implementation of such projects to Sussex County Council and DelDOT.

Strategy 13.1.1.11 Consider adaptive traffic control methods, in which traffic signal timings change, or adapt, based on actual traffic demand.

Strategy 13.1.1.12 Support DelDOT in completing intersection improvements, shoulder widening, alignment improvements, and other local road network projects.

Strategy 13.1.1.13 Partner with DelDOT to introduce and build early consensus on potential improvement concepts.

Goal 13.2: Begin construction of limited access capacity expansion projects.

Objective 13.2.1 Work with DelDOT to ensure construction of limited access capacity expansion projects.

Strategy 13.2.1.1 Identify needed improvements to achieve this goal.

Strategy 13.2.1.2 Prioritize the identified improvements.

Strategy 13.2.1.3 Set milestones to ensure improvements are completed in order of priority.

Strategy 13.2.1.4 Create a local project monitoring team to monitor progress of specific projects.

Goal 13.3 Improve not only physical capacity of roadways, but also the operation capacity utilizing all means available.

Objective 13.3.1 Working with DelDOT, the MIC Committee will determine where the following strategies can be most effectively applied, their potential costs and priorities of application.

Strategy 13.3.1.1 Encourage designs that provide a mix of residential seclusion and local connectivity without additional cost or risk to residents.

Strategy 13.3.1.2 Identify suitable areas for potential residential and/or commercial connector roads, and consider methods to consolidate commercial entrances along busy corridors.

Strategy 13.3.1.3 Partner with DelDOT to establish Alternate Routes in general accordance with the Alternate Routes Map including necessary wayfinding signage,

possible mobile application functions and identify any short, medium and long term roadway capacity improvements and costs for purposes of implementation.

Strategy 13.3.1.4 Consider market-driven solutions to reduce vehicle traffic in congested areas, including but not limited to, partnerships with ride-hailing companies, promoting car and ride-sharing services, and developing satellite parking lots with shuttles.

Strategy 13.3.1.5 Consistent with recommendations in the Land Use Element, consider higher- density mixed-use development in appropriate areas with current or future access to travel options.

Goal 13.4: Increase capacity on for Routes 113 and 16.

Objective 13.4.1 Preserve the corridors for future expansion

Strategy 13.4.1.1 Increase frontage setbacks.

Strategy 13.4.1.2 Purchase easements for bypass construction around existing communities.

Strategy 13.4.1.3 Ensure interconnectivity of future land uses along these routes.

Strategy 13.4.1.4 Require underground utility easements within the frontage setbacks.

Strategy 13.4.1.5 Explore and identify future infrastructure and/or technology needs related to emerging technologies, such as connected and autonomous vehicles (CAV).

Goal 13.5: Create limited access highways for Route 9, and Route 24.

Objective 13.5.1 Preserve the corridors for future expansion.

Strategy 13.5.1.1 Increase frontage setbacks.

Strategy 13.5.1.2 Purchase easements for bypass construction around existing communities.

Strategy 13.5.1.3 Ensure interconnectivity of future land uses along these routes.

Strategy 13.5.1.4 Require underground utility easements within the frontage setbacks.

Goal 13.6: Improve evacuation effectiveness in anticipation of emergency weather.

Objective 13.6.1 Create limited access evacuation corridors in the areas around: Route 26 east of Route 113, Route 54 east of Route 113, Increase frontage setbacks on Route 24 east of Route 113, Route 9, Route 16, Route 18 west of Route 113.

Strategy 13.6.1.1 Support the expansion of advanced-technology traveler information systems at strategic locations throughout the County and support DelDOT in the continued implementation of DelTrac and other monitoring systems at the Transportation Management Center (TMC).

Strategy 13.6.1.2 Partner with state officials to consider the transportation recommendations in The Climate Framework for Delaware, The Climate Action in Delaware: 2016 Progress Report, Sussex County's "All Hazard Mitigation Plan" and future companion documents.

Strategy 13.6.1.3 Continue working with DelDOT to improve evacuation routes by analyzing vulnerability and developing plans for coastal communities.

Strategy 13.6.1.4 Identify potential local routes that could serve as alternative or secondary evacuation routes which routes may coincide with those indicated in the Alternative Routes Map.

Strategy 13.6.1.5 Evaluate current technologies and emergency notification systems to ensure state official and the public informed efficiently and effectively.

Goal 13.7 Ensure adequate ease of movement for emergency vehicle response times.

Objective 13.7.1 Increase safety and capacity by adding multi-purpose lanes.

Strategy 13.7.1.1 Consider emergency-use access in areas where accessibility is difficult for first responders.

Strategy 13.7.1.2 Design Center multipurpose lanes for use by emergency vehicles.

Goal 13.8: Consider transportation alternatives to improve overall mobility.

Objective 13.8.1 Reduce traffic on heavily utilized roadways by offering existing alternative routes based on Map 13.8-1 below.

Strategy 13.8.1.1 As a first priority, the MIC should verify both main routes and alternative routes capacity, identify any short-term improvements needed and possible costs, provide timing and possible costs of longer term improvements based on capacity and report findings and recommendations to the County Council and DelDOT.

Strategy 13.8.1.2 Partner with DelDOT to support the Byways Program and to implement the recommendations of the Corridor Management Plans (CMPs) for all scenic and historic byways in the County.

Strategy 13.8.1.3 Based on the alternate routes indicated on Figure 13.4.1, work with DelDOT to develop and fund wayfinding signage for each intersection such that travelers can easily find their way around the County.

Strategy 13.8.1.4 Encourage DelDOT to add a function to their mobile application allowing travelers to enter a destination and click “alt routes” or similar such that GPS devices can find and follow these routes.

Strategy 13.8.1.5 Request that DelDOT (or County consultant) provide data concerning the current capacity of the identified alternate routes and at what point in time improvements would be required to be made to roads and intersections based on added trips and monitor traffic annually such that improvements can be budgeted and funded.

Strategy 13.8.1.6 Identify specific bypass roads or routes for areas affected by heavy tourist and/or freight traffic and prioritize, schedule, and work with the State to fund and implement such improvements.

Goal 13.9: Facilitate freight movement throughout Sussex County.

Objective 13.9.1 Support investments that increase the efficiency of freight movement, which is crucial to commerce in the County.

Strategy 13.9.1.1 Adapt future infrastructure and/or technology needs related to emerging technologies, such as connected and autonomous vehicles (CAV).

Strategy 13.9.1.2 Coordinate with the Delmarva Water Transport Committee regarding current planning efforts and future challenges.

Strategy 13.9.1.3 Support the implementation of the Delmarva Freight Plan in order to improve freight flow and reduce the impacts to County residents.

Strategy 13.9.1.4 Explore incentives for businesses to switch from truck to rail freight, which can reduce freight costs and road traffic congestion.

Strategy 13.9.1.5 Partner with the Delmarva Central Railroad to aid in their strategic planning efforts and to help identify potential rail customers.

Strategy 13.9.1.6 Explore the potential for rail infrastructure improvements at the Delaware Coastal Airport industrial park and possible connection to the King Farm Industrial Park.

Goal 13.10 Facilitate alternative modes of transportation.

Objective 13.10.1 Encourage non-motorized transportation planning along low-speed roadways.

Strategy 13.10.1.1 Partner with DART on its Transit Redesign efforts, such as transitioning appropriate Paratransit trips to fixed route or flex route services and spreading awareness about the Senior Citizens Affordable Taxi program.

Strategy 13.10.1.2 Partner with DART to improve and expand Flex Route Service for local communities.

Strategy 13.10.1.3 Encourage DART to continue its service planning efforts in order to reevaluate current routes and expand others.

Strategy 13.10.1.4 Partner with commercial businesses and large scale planned communities to consider the possibility of providing transit shuttles.

Strategy 13.10.1.5 Partner with hotels and commercial business in and around resort areas to explore the possibility of coordinated shuttle service.

Strategy 13.10.1.6 Incorporate bike and pedestrian facilities into community master plans where appropriate and consider allowing the use of motor-assisted bicycles along bicycle facilities and trails.

Strategy 13.10.1.7 Support the development and implementation of the statewide bicycle plan, a Blueprint for a Bicycle-Friendly Delaware, and continue to support the creation of recreational trails and shared-use pathways to connect communities to employment, commercial services, recreational opportunities, and to provide safe alternatives to car travel.

Strategy 13.10.1.8 Partner with Delaware's Pedestrian Coordinator to complete sidewalk connectivity projects in conjunction with new development.

Strategy 13.10.1.9 Consider creating a senior transportation guide and/or toolkit to spread awareness about senior transportation options for residents and visitors.

Strategy 13.10.1.10 Encourage the growth of non-profit transportation providers, including but not limited to, ITN Southern Delaware, CHEER, and Generations Home Care.

Goal 13.11 Explore fiscal solutions that complement state initiatives.

Objective 13.11.1 Leverage State and Federal Funding with local funding to advance construction of capacity improvements.

Strategy 13.11.1.1 If DeIDOT establishes a new matching funding mechanism such as a 90%DeIDot/10% County ratio then the County should explore the possibility of establishing a new source of matching funds.

Strategy 13.11.1.2 Determine the feasibility of a variety of funding sources including, for example, Public Private Partnerships (PPP or P3), user fees, tolls or other taxes and/or surcharges.

Strategy 13.11.1.3 Partner with DeIDOT in the planning and programming of funds designated for maintenance, such as pavement rehabilitation, and bridge maintenance and repair.

Strategy 13.11.1.4 Remain engaged in the DeIDOT Capital Transportation Program (CTP) development process and increase coordination of project prioritization and identify and implement potential improvements to the annual capital request process.

Goal 13.12 Explore collaborative transportation solutions.

Objective 13.12.1 Encourage state, private and non-profit entities to work toward common goals.

Strategy 13.12.1.1 Work with DeIDOT to coordinate transportation decisions as they relate to land use decisions and expanding tourism.

Strategy 13.12.1.2 Partner with DeIDOT to consider the establishment of Transportation Improvement Districts (TIDs) or other such approaches in suitable areas.