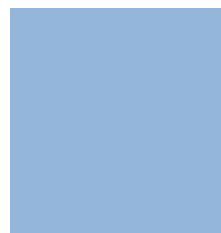




# Toward Heritage Tourism in Sussex County, Delaware

Report to the Coastal Community Enhancement Initiative, 2007



Small Towns



Agriculture

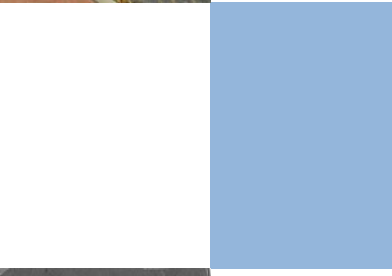


EXPLORE

# Sussex



Architecture



Religion



Maritime



Landscape



Produced by the Center for Historic Architecture and Design and the Institute for Public Administration—University of Delaware



# Toward Heritage Tourism in Sussex County, Delaware

Prepared by Andrew Homsey, David Ames, Xuan Jiang, and Rebekah Gayley

November, 2007



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# Toward Heritage Tourism in Sussex County, Delaware

November, 2007



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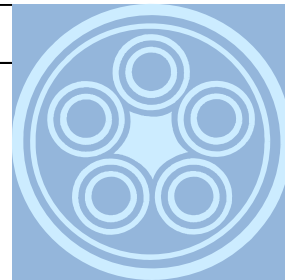
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## Overview

This research assesses the feasibility of heritage tourism as part of an economic development strategy for Sussex County, Delaware.

The University of Delaware's Coastal Community Enhancement Initiative (CCEI) is responsible for funding this research. Through a grant from CCEI, the Center for Historic Architecture and Design (CHAD) and the Institute for Public Administration (IPA) at the University of Delaware were able to study the heritage resources of the county within the context of land use trends, demographic shifts, and threats to cultural heritage in Sussex County, Delaware. The goal throughout the project has been to study Sussex County's opportunities and challenges in order to offer an economically viable approach to heritage tourism. David Ames and Andrew Homsey were principal investigators for the project, with assistance from graduate students Xuan Jiang and Rebekah Gayley.

The most southerly of the three Delaware counties, Sussex is located on the east-central portion of the Delmarva Peninsula with a shoreline fronting both the Atlantic Ocean and Delaware Bay. The county lies

astride the drainage divide of the Chesapeake and Delaware Bays. The western part of the county is part of the Chesapeake drainage system, while to the east drainage is to the Delaware Bay and Atlantic Ocean.

Until 1775, when the county officially became part of Delaware, Maryland controlled much of the southwestern portion of Sussex. Sussex has therefore traditionally been a place where the Eastern Shore culture of Maryland meets that of Delaware. With a land area of 938 square miles, it is the largest of Delaware's three counties, comprising nearly half the area of the entire state. In 2005, it had a population of 176,500 with 19 percent living in towns of more than 2,500 and 53 percent living in rural areas.

The county is at a critical stage in its history. It is experiencing rapid growth which, if not carefully planned, may serve to undermine the historic and cultural character of the county, its attractiveness as a place to live, and the potential for heritage tourism as an agent of economic development. In addition to inventorying and mapping many of those resources and recommending a heritage tourism strategy for the county, this report also looks at the po-

tentially negative impacts of growth on heritage resources in Sussex.

The research presented here indicates that a program of heritage tourism has a great deal of promise, especially given that there is an already highly developed tourist infrastructure in many areas. In 2003, the county attracted 2.5 million visitors, mostly to the beach and resort communities in the east. There are, however, a relative lack of tourist draws in many other areas of the county. This study identifies seven distinct thematic groupings of heritage resources around which tourism programs may be built. Many of these thematic groupings have a wide geographic range, occurring both in the more populous and visited east as well as the less known regions in the central and western portions of the county. The seven themes are: the natural environment (including the coast), maritime tradition, beach resort communities, historic architecture, agriculture and agritourism, small towns, and religion.

The beaches and resort towns of Sussex County have long been summer tourist destinations, producing seasonal surges in the coastal population. Since the 1930s and 1940s resort





towns such as Rehoboth have advertised themselves as modestly-priced “family” resorts. The influx of summer beachgoers, however, did not greatly affect the rest of the county and Sussex retained its rural, small town, agricultural character. Overall, from the 1930s to the 1970s, the county’s year-round population grew modestly. Agriculturally, as the largest producer of broiler chickens in the United States, the county has long had a vital agricultural economy.

In the 1980s, the number of people coming to the beaches in the summer increased. At that time, most summer visitors rented properties for a short time. By the 1990s more people were building new units or buying existing units and choosing not to rent them seasonally. The effect of this was increased property values, rents, and demand for rental property. Nationally, this period also saw a generally sharp rise in real estate values, especially close to coastal areas. Rising housing costs caused some displacement of the population as both permanent residents and summer visitors looked inland, for instance at towns such as Milton, for less expensive places to live or vacation.

During this period, the growing number of seasonal visitors was augmented by a wave of retirees who began moving to the coastal areas of eastern Sussex County. This shift has resulted in two major shifts land use. First, since retirees are generally year-round residents, the number of rental units was reduced further. Sec-

ond, retirees created a demand for new units, many of which were built inland where land values were lower. New development began migrating westward from the coast.

As a coastal county, Sussex is not alone in the issues it faces. One of 673 coastal counties in the United States, Sussex is part of a national trend of growth along our coasts. Nationally, according to a recent report by the National Oceanic and Atmospheric Administration – *Population trends Along the Coastal United States: 1980 – 2008*<sup>(1)</sup>-- “our coasts are among the most rapidly growing and developed areas in the United States.”<sup>(2)</sup> Coastal counties constitute 17 percent of the total land area of the United States (not including Alaska) but account for 53 percent of the total population. The northeast region—extending from Maine to tidewater Virginia—is the most populated coastal region in the United States, home to 51.6 million people or 34 percent of nation’s total coastal population. Coastal counties, such as Sussex, are especially vulnerable to population growth and development. Growth tends to be concentrated along coastal bays, inlets, and estuaries, which generally host the greatest wealth of delicate natural habitats and ecosystems, and are often subject to destructive natural forces such as storms and flooding. Coastal regions also tend to be the focus of significant economic activities including recreation, tourism, fishing, and waterborne commerce.

The dual goals of heritage tourism—to protect and sustain delicate and threatened cultural, historical, and natural resources, while enhancing the regional economy—may seem incompatible. Certainly traditional tourism activities have at times served to degrade or diminish the area in which they were practiced. Exploitative or ill-conceived practices clearly can do harm to a region, its people, and the long-term economic picture. Heritage tourism, however, views the cultural, historic, and natural contexts of a place as the *raison d’être* for the development of a tourist industry in the first place. Hence it would be ill-advised and counter-productive not to actively and effectively protect those assets, which truly form the “raw material” for the industry as a whole. Among tourists as well there is a growing appreciation of authentic cultural landscapes as central to their experience. As a county rich in historical, cultural, and natural resources, and a long tradition of openness to tourists, Sussex is well placed to take advantage of this economic development strategy.

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2. Ibid, p. 3



# Introduction

## Sussex County in Context

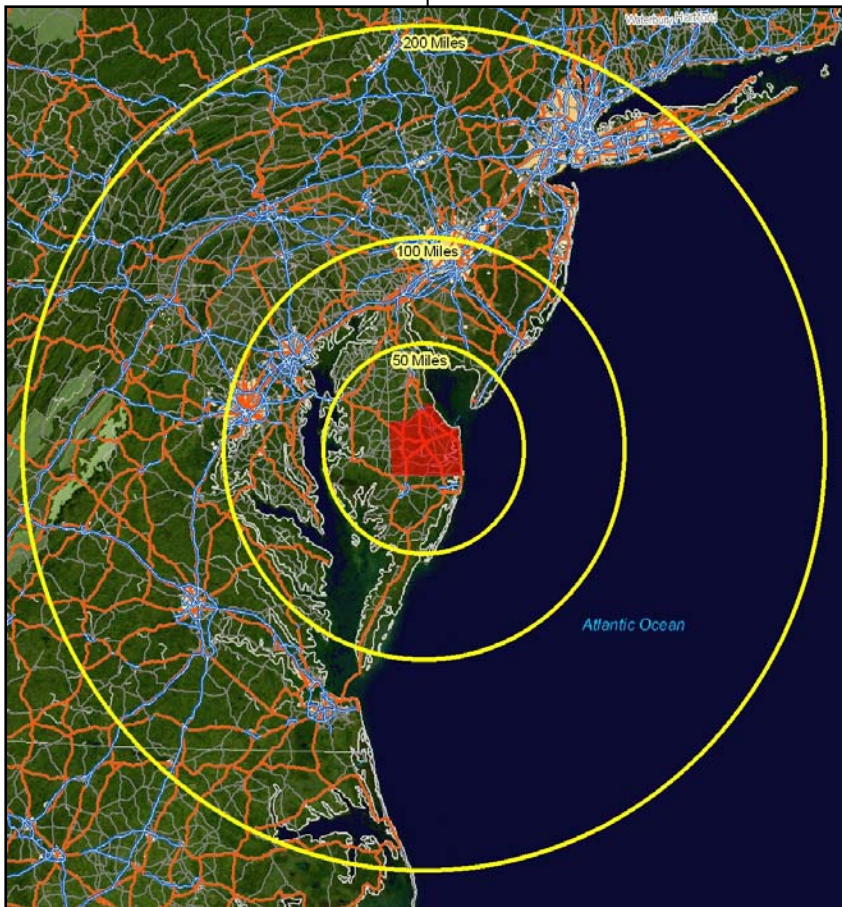
### *The Region*

Sussex County lies centrally along the mid-Atlantic seaboard, affording ready access to major population centers. Given its location, the county's tourist amenities are

within easy reach for a large number of people from across the region. In fact, over 42,000,000 people—14 percent of the population of the United States—live within a 200 mile radius of the county, based on U.S. Census data from 2003 (see Figure 1.1).<sup>(1)</sup>

Most people reach Sussex

County using one of a few major corridors, including Delaware State Route 1 from the north, US 13 from the south, and State Routes 16 and 404, which connect to US Route 50 and the Chesapeake Bay Bridge (see Figure 1.2). Access is also provided by ferry service across the Delaware Bay to Cape May, New Jersey. The predominant method for accessing the county today is the automobile, though historically its waterways provided the main form of access from the outside. Today, the waters of the county represent a significant source of recreational potential, but initially, they enabled a thriving maritime economy, which included major shipbuilding facilities on the Nanticoke at Seaford and Bethel, and in Milford, along the Mispillion River. Ready rail access was established in the mid-19<sup>th</sup> century, encouraging an early and strong connection to major metropolitan centers, particularly to the north. Throughout its history, then, Sussex County has enjoyed a position of relative physical isolation from the main centers of urbanization, but with a close interrelationship with these centers due to



**Figure 1.1** Sussex County's position along the eastern seaboard of the U.S..

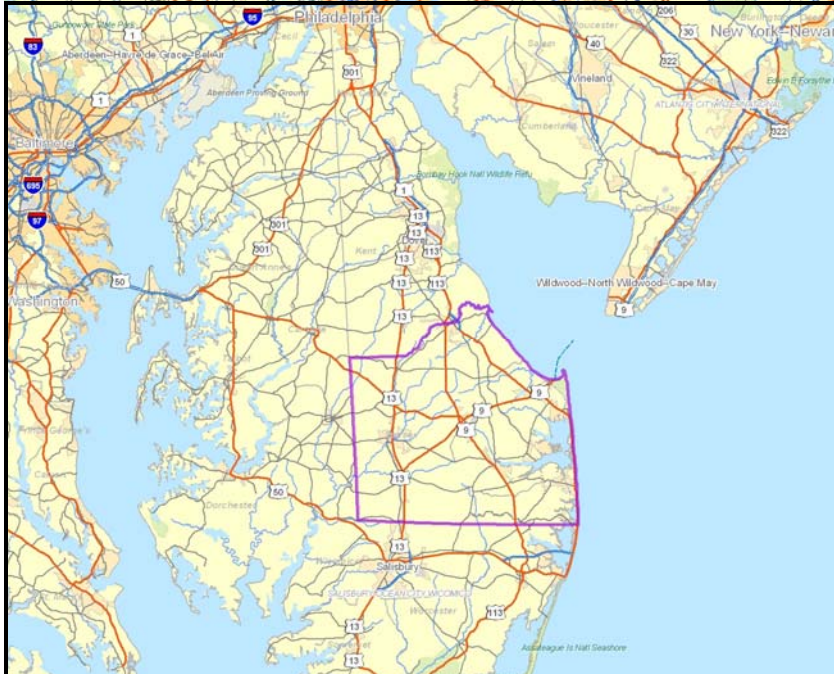


Figure 1.2 Transportation system in Sussex County region.

its proximity, varied transportation networks, and role as an agricultural and industrial producer.

*Tourist Trends in Delaware*

Sussex County has a relatively small population, but represents a major component of the tourist picture for the state, drawing visitors mainly from elsewhere in Delaware and nearby states. Maryland visitors comprise the majority, with Pennsylvania also contributing a large proportion of visitors (see Figure 1.3).<sup>(2)</sup> The major attraction for visitors are the beach and resort communities, and therefore most people visit in the summer months. In 2003 there were over 2.5 million visitors to Sussex County. Of those, over 1,901,000 (around 70 percent of all visitors) arrived

in the spring/summer season (between April and September), with 1,100,000 coming in the 3<sup>rd</sup> quarter of the year alone (July through September). In all, it is estimated that tourist spending in Sussex for

that year totaled \$370 million.<sup>(2)</sup>

Tourism in Delaware is a major economic contributor to the state, and Sussex County, particularly the beach areas, is the focus of much of the state’s tourist activities. Statewide, in 2004, it was estimated that the tourism industry generated approximately \$1.2 billion in revenues, and directly supported almost 23,000 full-time jobs.<sup>(3)</sup> This makes travel and tourism, the 5<sup>th</sup> largest industry in the state, employing, directly and indirectly, almost 7 percent of the state’s workers. The prevalence and importance of the tourism in Delaware have increased significantly over the past few years. Figure 1.4 shows the rise in the number of jobs related to the tourism trade, both directly (purple bars) and indirectly (gold bars). The tourism industry

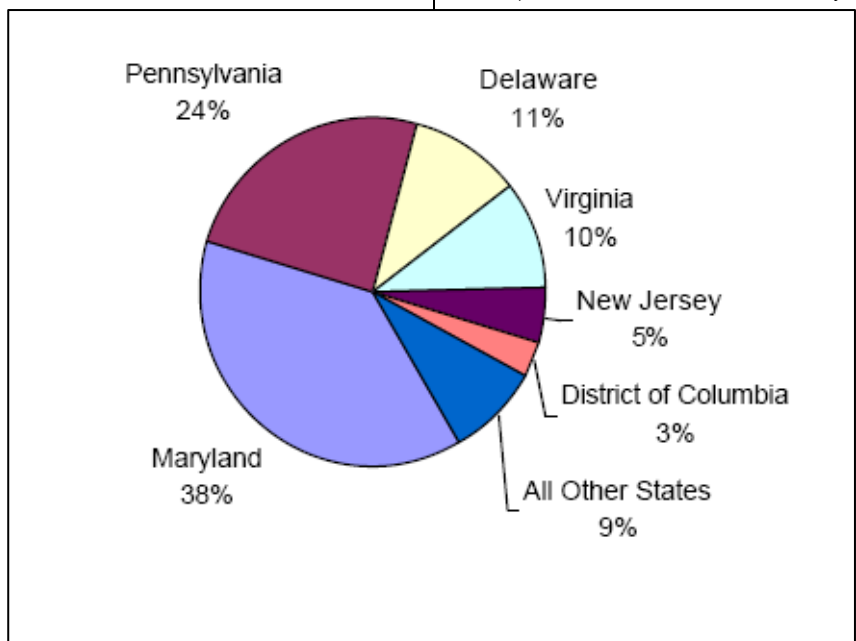


Figure 1.3 State of origin for all visitors to Sussex County in 2003. (Source: Global Insight, Inc.)



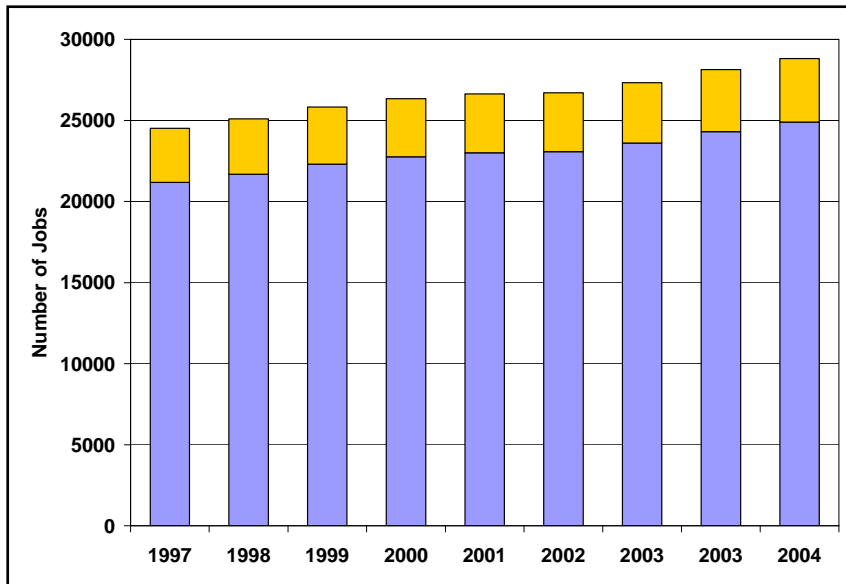


Figure 1.4 Jobs related directly (in purple) and indirectly (in gold) to the tourism industry in Delaware. (Source: Global Insight, Inc.)

also represents a significant source of state revenue, particularly through income and property taxes, with contributions to the state, totaling nearly \$163 million in 2004. <sup>(3)</sup>

Sussex County represents an extremely important component of the total revenue generated by tourism and travel in Delaware. Though

the central and western portions of the county have not traditionally been major tourist destinations, the beach and resort areas to the east represent the single largest generator of tourist spending in Delaware, responsible for over 40 percent of the total dollars spent (see Figure 1.5). <sup>(3)</sup>

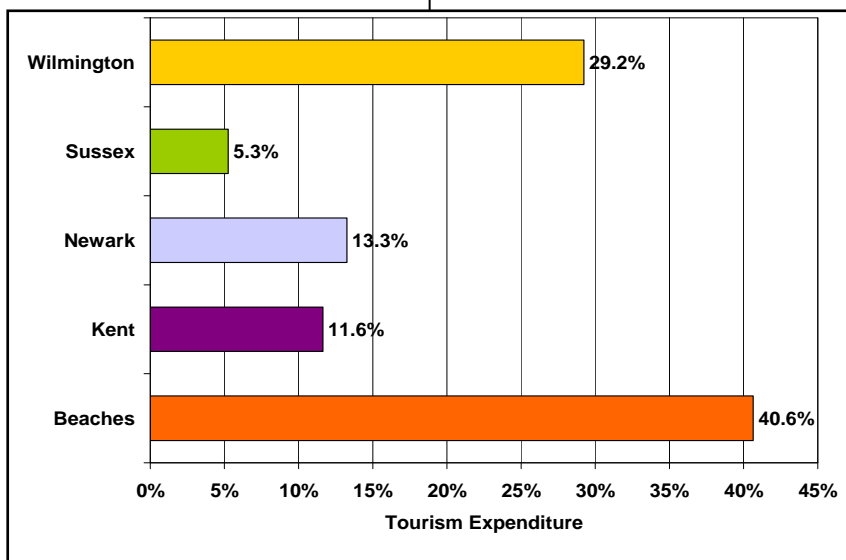


Figure 1.5 Relative importance of the Sussex County beach resorts in Delaware's tourism picture. (Source: Global Insight, Inc.)

It is estimated that currently, upwards of 60 percent of the population of the U.S. lives in one of 772 counties which lie along the country's coastlines, and this trend is likely to continue.<sup>(4)</sup> As coastal populations, particularly those along the eastern seaboard, swell, more people will choose to visit, recreate, and settle in Sussex County. An increasingly aging population will also contribute to this trend as retirees seek the relaxed lifestyle and relatively low cost of living the county offers. The impact of travel and tourism on the overall economic picture of the state and region, therefore, is certain to continue to increase.

The boom in coastal development has the potential to cause several undesired effects. For instance, the delicate ecosystems of coastal environments are often particularly vulnerable to human-induced disturbance. Traditional ways of life and the landscapes that these have engendered are also in danger from encroachment by development. Additionally, rapid growth often places strains on the ability of local services such as health care and emergency response to address increased demands. In particular, storm related emergencies, which may be increasing in occurrence and severity due to climatic changes, require a large degree of planning and resources to address.<sup>(5)</sup> In Sussex County, therefore, as elsewhere, care-



ful planning to allow for development without damaging irreplaceable resources or endangering human well-being must be undertaken. It is in the interest of all to ensure that the essential economic engine of the tourism and recreation industries can be sustained, and that the resources, amenities, and lifestyle which are the impetus for this economic vitality are not threatened or destroyed.

## The Potential of Heritage Tourism

From its founding as a Dutch colony in 1631, Delaware's historic landscape has been shaped by many factors: wartime skirmishes, the development of water-powered manufactories, the culture of its small towns and historic architecture, the growth of trade related to railroad transportation, the importance of agriculture and the poultry industry, and its natural amenities such as bays, waterways, and pristine ocean shoreline.<sup>(6)</sup> Sussex County's rich and diverse history serves as a backdrop to the dynamic living community it now comprises. The fact that there are so many intact historical and cultural elements, along with its attractiveness as a destination for visitors and new residents, means that the county is well positioned for the development of heritage tourism.

The resources and assets

which form the basis for a heritage tourism program are ample, diverse, and retain much of their integrity. This report will outline many of these by identifying three broad thematic areas of cultural heritage. A critical component in the development of heritage tourism is a comprehensive plan to help guide the process by identifying opportunities and threats, and indicate the path forward to ensure that the resources are not lost or diminished.

Efforts to promote preservation occur at many scales using many approaches. Heritage tourism development is particularly attractive because it can simultaneously promote the preservation of diverse historic, cultural and natural resources across a wide geographic area while providing opportunities for economic growth. While preservation has sometimes been viewed as being antithetical to job growth and economic development, successful heritage tourism programs can address both needs.

In a study commissioned by the Delaware Economic Development Office, tourism was identified as the fifth largest employer in the state. According to Bureau of Labor Statistics Data, the leisure and hospitality industry in Delaware has grown in the ten-year period from January 1, 1995 to January 1, 2005 from 30.3 thousand employees to over 41.8 thousand employees.<sup>(7)</sup> Heritage tourism, as a

specific sub-type of tourism, has been shown to attract visitors who will stay longer and spend more than the average tourist seeking entertainment only.<sup>(8)</sup> From the standpoint of heritage tourism development, Sussex County's is in the enviable position of having a large "captive" audience in the millions who flock to its eastern shores for annual vacations. It is certainly possible that development and marketing of heritage sites across the rest of Sussex County will attract short term visits from the resort areas in the summer, as well as attract longer visits from those people seeking a heritage-based experience.

Heritage tourism in Sussex County is an attractive option in terms of its viability and potential wide-ranging benefits; it can also be a vital mechanism to preserve the historic character of the county in the face of residential and commercial development pressures. Population growth and development in the county has been great. In a single decade, 1990-2000, Sussex County's population increased by 43,409 people.<sup>(9)</sup> A recent demographic analysis revealed that Sussex County's population is growing 2.2 percent per year, and is outpacing the overall growth rate of Delaware, Pennsylvania, and Maryland. Sussex County's population is projected to increase 43.6 percent, from 175,775 to 252,376 in the period between 2005 and 2030.



(10)

The greatest amount of growth is occurring in the eastern part of the county. Sussex County is divided into nine County Census Divisions (CCDs). Milton, Lewes, Millsboro, and Selbyville-Frankford are in the eastern half of the county. From 1980 to 1990, these four eastern CCDs grew nearly twice as fast as the western and northern areas, gaining 9,000 new residents. This trend has accelerated through the 1990s and into the current decade. However, towns such as Greenwood, Seaford, Bridgeville and Laurel in the western edge are also experiencing pressures from increased population. Respectively, they experienced growth rates of 53 percent, 18 percent, 30 percent, and 18 percent, between 1990 and 2005 (based on US Census estimates for 2005). In fact, every incorporated area in Sussex County experienced population growth in the period between 1990 and 2005 at a rate of at least 10 percent, and as high as 247 percent in South Bethany. Growth in the western and central towns of the county, though more gradual than in the east, has nonetheless been increasing, with growth in population ranging from 10 percent to 53 percent.

The threat to Sussex County's cultural and historic resources does not come primarily from population increases within municipal

boundaries. Rather, it is the population that sprawls across former agricultural and forested lands in scattered subdivisions that threatens resources. Analysis of changes in land use between the periods 1974-1984 and 1992-2002 revealed an increasing trend toward this pattern of development. During the latter decade, 44,710 acres of land changed from one use to another in the county. Of that change, the largest conversion was the loss of 12,755 acres of agricultural land to built-up (predominantly residential) uses. This loss was partially offset by the conversion of 8,828 acres of forest and wetlands to agricultural uses reducing the net loss of agricultural land. In total, 15,400 acres of forest-wetlands were converted to agricultural and built-up uses.

These land use changes were mapped to assess their areal distribution. As expected, the areas with the highest rates of land use changes were in a band along the eastern coast and in the west, in the Seaford area. Also revealed was a pattern of dispersed development (i.e. sprawl) throughout the county.

This finding has significant implications for the impact of land use changes on environmental, cultural, and historic resources. On one hand, the dispersed form of development may have less impact on point resources, such as individual historic

structures. On the other, however, it may have a much greater, if not devastating, impact on area-based resources such as historic and agricultural landscapes and environmental resources. In either scenario, the outcome is regrettable; the county's historic character, consisting of buildings, townscapes, agricultural landscapes, and environmental resources, is an essential part of the livability of the county, and of its attractiveness to visitors.

Today, and in the recent past, the landscapes of Sussex County have been largely open and agricultural in nature, but this was not always the case. Originally, as experienced by the earliest settlers, the landscape had been predominantly characterized by dense forests inland from the coastal bays and marshes. Though most of these forests have long since disappeared, they helped shape one of the early industries in the area—shipbuilding, which developed along the Nanticoke River in Bethel, and in the east, along the Broadkill River in Milton. Slowly, over the course of at least a century, the forests were cleared and agriculture came to predominate. Initially, the main crops included strawberries, melons, holly, and sweet potatoes, which were aided by the subsequent arrival of rail lines throughout the county. Railroads enabled these perishable crops to reach urban markets to the north more quickly. Agricul-



ture has retained its predominance in the economic and physical landscape since then, but it has undergone changes during that period. For instance, earlier crops have gradually given way to the broiler industry starting in 1923 when Cecile Steele raised her first flock of broiler-fryer chickens.

The landscapes of Sussex County have been evolving from the time of the arrival of humans. The current shift away from agriculture and agrarian lifestyles toward a pattern of more extensive residential communities continues this evolution. Unprecedented, however, is the speed at which these change are occurring and the nature of the threats to the county's heritage. It is imperative, if the county's landscapes and heritage are deemed valuable, that the impacts of these changes on small towns, century farms and even the traditional beach communities with their small, working-class cottages, be considered. While the change in landscapes two centuries ago from forest to agriculture did alter landscapes to a profound degree, traces of prior livelihoods remained. The fear is that without proper planning, the same will not be true into the future, as Sussex becomes increasingly edgeless, sprawling, and placeless.

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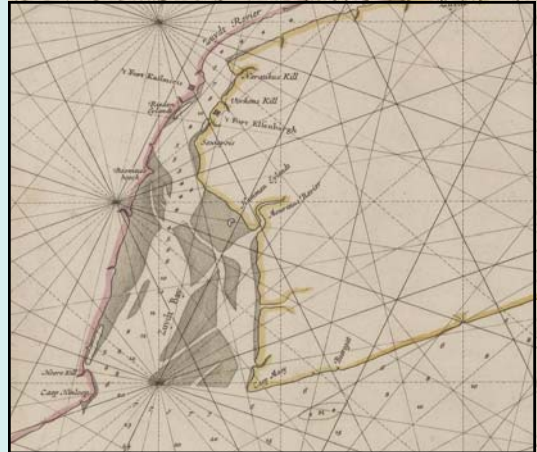
# Stages of Sussex History

## Earliest Settlement

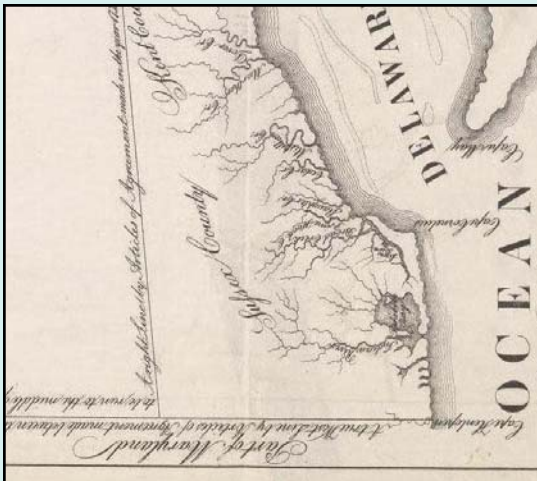
About 400 years ago, before Europeans arrived, Native Indians lived in Delaware along the banks of streams and rivers and the coast of the Delaware Bay.

Around 1610, Delaware Bay was discovered by the Dutch, and in 1631 they organized a colony called Zwaanendael on Cape Henlopen, north of the present town of Lewes. Due to attacks on the colony, the Dutch had to rebuild Zwaanendael in 1660 and renamed the colony Horekil (Hoere Kill). Early European settlement was concentrated in the vicinity of water transportation routes and did not penetrate far inland from the Delaware River and Delaware Bay.

The map to the right illustrates the extent to which early settlements appeared along the Delaware Bay. Areas beyond the waterways were largely unexplored.



Source: *Color map of Dutch settlements in Delaware, New York and New Jersey, along the Delaware and Hudson Rivers.* (1666)



Source: *Map of part of the province of Pennsylvania.* Chillias, David. (1739)

## Founding of the Lower Counties

Prior to 1704, Delaware was considered part of Pennsylvania and organized according to the customs of the English government that ruled Pennsylvania. Known as the Lower Counties of Pennsylvania, Delaware's counties were laid out by the governing body of Pennsylvania. This part of the country was settling quickly and by the end of the seventeenth century, towns were founded and farms were established across the three counties of Delaware, especially in New Castle County. As of 1704, Delaware became independent of Pennsylvania.

The map to the left, from 1739, shows the demarcation between "Sussex County" (current-day Sussex), and Kent County. Most of the inland waterways on the eastern part of the state were well charted by this time.

## The Impact of Waterway Transportation

Prior to the 1850s, when the railroad was brought to Sussex County, transportation of goods in the county was heavily dependent on a network of waterways. The 1820 map to the right shows the locations of towns such as Lewes, Georgetown, Dagsboro, and Millsboro. All, with the exception of Georgetown, had access to water. Although the towns of Seaford and Laurel were both founded well before 1820 (1726 and 1683, respectively) on the Nanticoke River, they do not appear on this map. Settlement and growth during this period in history was focused primarily on the center and eastern portions of the state. And trade was oriented towards the northern ports of Wilmington and Philadelphia. It was not until the railroad was established that western Sussex was opened to the rest of the state and region.

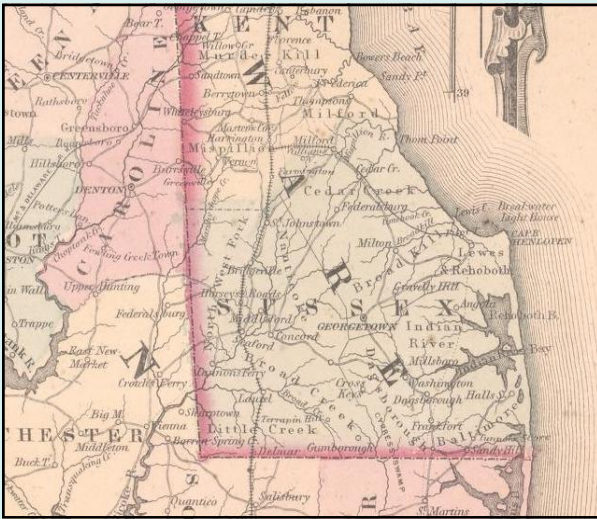


Source: *Virginia, Maryland, and Delaware.* Tanner, Henry Schenck. (1820)

## Railroads and the Rise of Agriculture

The first railroad in Delaware was the New Castle and Frenchtown Railroad built in 1832. In the 1850s, the Delaware Railroad was built and ran through the west of Delaware, from the north to the south of the state. This line linked Middletown, Clayton, Harrington, and Seaford. Later, a branch of the railroad was built through eastern Sussex to Lewes.

The Delaware Railroad was very important to the farmers in western Sussex because it allowed them a means to get their crops to markets quickly. For this reason, the railroads were very important to the farmers in Delaware.



Source: *New map of Maryland and Delaware with their Roads and distances.* Mitchell, S. Augustus. (1850)

## The Development of Resort Towns

The advent of railroads in Delaware accelerated the development of resort towns in Sussex County along the Atlantic Ocean.

Settlement had historically been dispersed in Sussex County. The extension of the railroad towards the south stimulated growth in existing towns while also establishing new ones. With the advent of relatively quick travel by rail, residents of regional population centers, such as Philadelphia and Washington, D.C. traveled to the Atlantic Coast in Delaware to vacation for the summer. As a result, Rehoboth Beach, Bethany Beach, and Fenwick Island were all founded during this era.

The map to the right shows the rail lines that made Rehoboth Beach accessible to visitors traveling from a long distance.



Source: *Map of Delaware.* (1896)

## DuPont Highway and the State Highway System

After 1900, automobiles changed Delawareans' way of life. In 1911, T. Coleman DuPont decided to build Delaware a highway linking the north and the south. DuPont Highway is today's Route 13 from Claymont in the north to Dover, and Route 113 south of Dover to Selbyville. The highway, Delaware's first modern paved road, was completed in 1924. With the completion of DuPont Highway, many other paved connecting roads were also built.

Improved roads and streetcars lines, coupled with a growing middle class led to a significant suburban expansion in northern Delaware. Both the population and physical size of the towns increased during the twentieth century. New residential patterns of development changed the physical appearance the state, beginning in New Castle County and spreading to Kent and Sussex County. Today, Sussex is experiencing sprawling suburban development in many areas.



Source: *Map of the state of Delaware, official road map.* Delaware, State Highway Department. (1930)



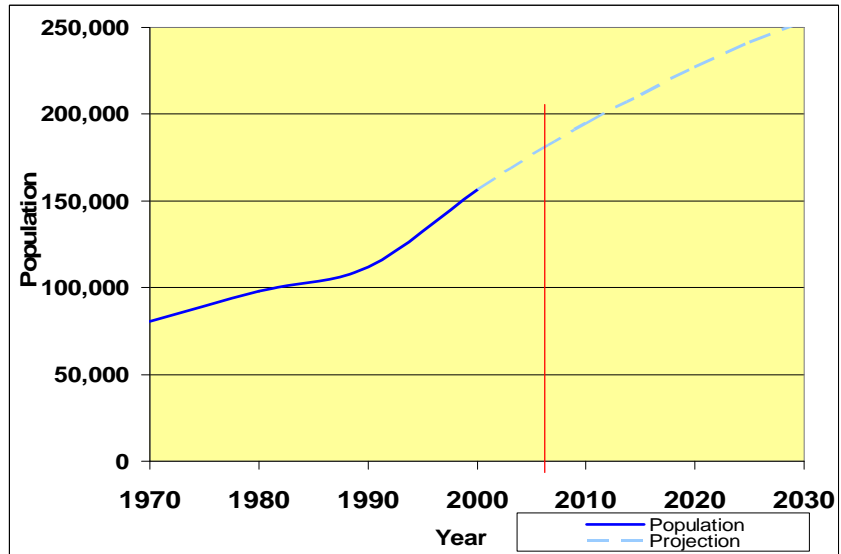


# Sussex County Trends

## Population Trends

### County-wide Trends

Historically, Sussex County has been primarily agrarian and relatively isolated from major population centers. For most of its history, therefore, its population has remained low. From 1810 through the 1860s, the population of the county remained nearly stable at about 26,000. By 1870, it had grown to approximately 31,600. After that time, the population of Sussex County increased at a steady rate of 10 percent per decade, reaching 52,502 by the time of the 1940 census. In the period following World War II, Sussex saw even more of an increase, growing 14 percent from 1940 to 1950 and approximately 20 percent from 1950 to 1960. The population growth rate fell closer to 10 percent in the 1960s, with a resurgence in the 1970s, to 22 percent. The decade between 1980 and 1990 saw another small drop in the growth rate to under 15 percent. The 1990s, during



**Figure 2.1** Population trend of Sussex County, 1970-2030. (Source: U.S. Census Bureau and Delaware Population Consortium Projections)

which time there was a large influx of retirees and growth of the resort communities, saw the county’s highest population growth rate to that time—40 percent—a trend which continues today.

Between 1970 and 2000, the population of Sussex County almost doubled, growing from 80,356 to 156,638, an increase of 95 percent, according to the U.S. Census (see Table 2.1). In 2006, the population was esti-

mated to have reached 180,275, an increase of 15 percent within just six years. Based on such trends, the population of Sussex County is projected to reach over 250,000 by 2030 (see Figure 2.1).

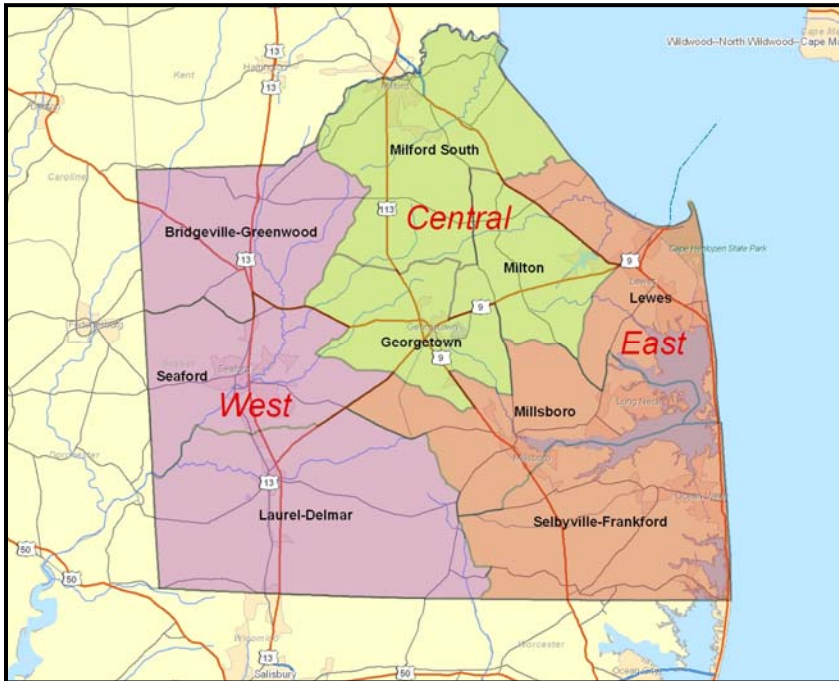
### *Sussex County Development Zones, 1970 to 2000*

The pattern of population changes is uneven throughout Sussex County and may gen-

	1970	1980	1970-1980	1990	1980-1990	2000	1990-2000
<b>Population</b>	80,356	98,004	22.0%	112,129	14.4%	156,638	39.70%

**Table 2.1** Population growth in Delaware, 1970-2000.

## 2. Sussex County Trends



**Figure 2.2** Sub-areas of Sussex County, showing Census County Division (CCD) names.

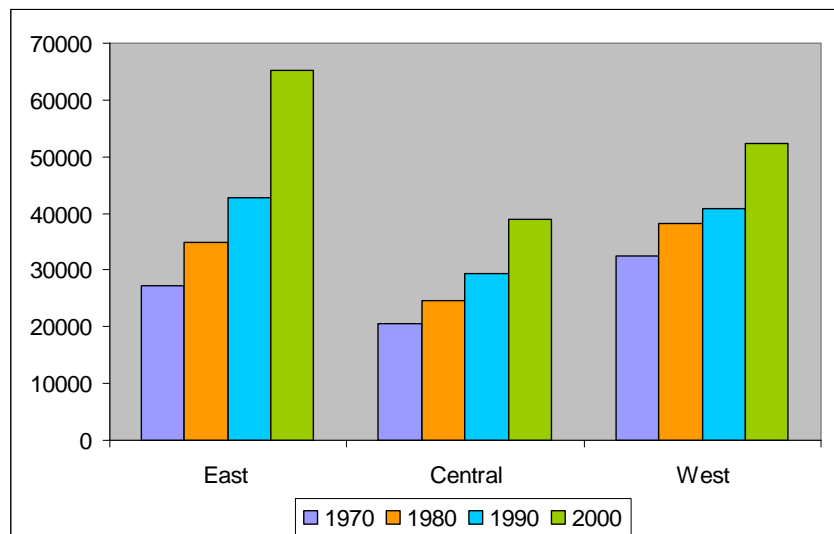
erally be broken down into three main sub-areas: eastern Sussex, made up of the beaches, Inland Bays, and resort communities; central Sussex, lying along U.S. Route 113, and made up of the largely agricultural area surrounding Georgetown; and western Sussex, along US Route 13, defined by the corridor linking the towns of Laurel, Seaford, and Bridgeville and their environs. The U.S. Census has divided the county into nine Census County Divisions (CCDs); each sub-area in the county roughly corresponds to three of the CCDs. Eastern Sussex

includes Lewes, Millsboro, and Selbyville-Frankford; central Sussex includes Milford

South, Georgetown, and Milton; and western Sussex includes Bridgeville-Greenwood, Seaford, and Laurel-Delmar (see Figure 2.2).

In 1970, the population distribution was relatively even across these three sub-areas. Eastern and western Sussex had similar populations of approximately 30,000 people, while central Sussex had approximately 20,000 inhabitants (see Table 2.2).

Nationwide, there has been a trend of people increasingly migrating toward coastal areas. It is not surprising, therefore, that population growth in Sussex County was mainly focused in the east, with these coastal areas experiencing the highest growth



**Figure 2.3** Population growth in the sub-areas of Sussex County, 1970-2000.

	1970	1980	1990	2000	1970-1980	1980-1990	1990-2000
<b>East</b>	27,117	34,997	42,856	65,321	29.06%	22.46%	52.42%
<b>Central</b>	20,646	24,695	29,491	38,947	19.61%	19.42%	32.06%
<b>West</b>	32,593	38,312	40,882	52,370	17.55%	6.71%	28.10%
<b>County Total</b>	<b>80,356</b>	<b>98,004</b>	<b>113,229</b>	<b>156,638</b>	<b>21.96%</b>	<b>15.54%</b>	<b>38.34%</b>

**Table 2.2** Total population and percentage population growth in the sub-areas of Sussex County, 1970-2000.

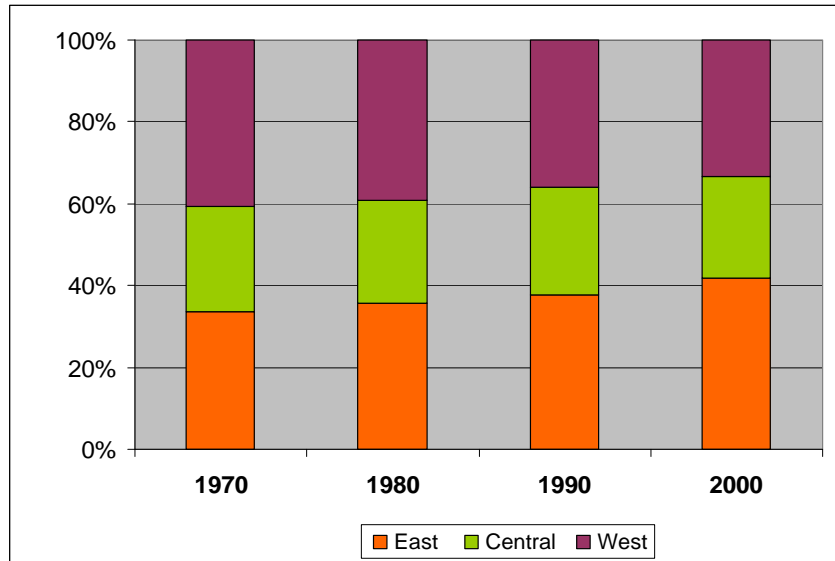


## 2. Sussex County Trends

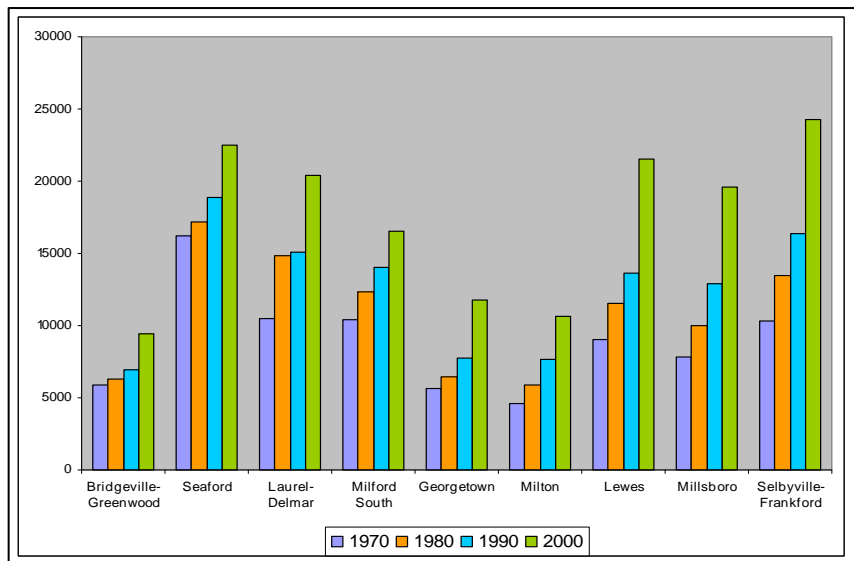


rates in each of the decades between 1970 and 2000. In eastern Sussex, the population increased at the rate of 29 percent in the 1970s, 22 percent in the 1980s, and 56 percent in the 1990s. In central Sussex, the growth rate was steady at about 20 percent through the 1970s and 1980s, jumping to 32 percent in the 1990s. The population growth in the western part of the county has been somewhat slower than in the other two sub-areas. Here, the population grew at the rate of 18 percent during the 1970s, 7 percent during the 1980s, and 28 percent during the 1990s (see Table 2.2 and Figure 2.3).

Between 1970 and 2000, the county as a whole saw a marked population increase, with the population center shifting eastward from its focus around the western industrial town of Seaford, toward the coastal resorts. The relative distribution of western and eastern population was virtually reversed in those three decades, with 41 percent of the population in the west and 34 percent along the coast



**Figure 2.4** Population distribution changes in the sub-areas of Sussex County, 1970-2000.

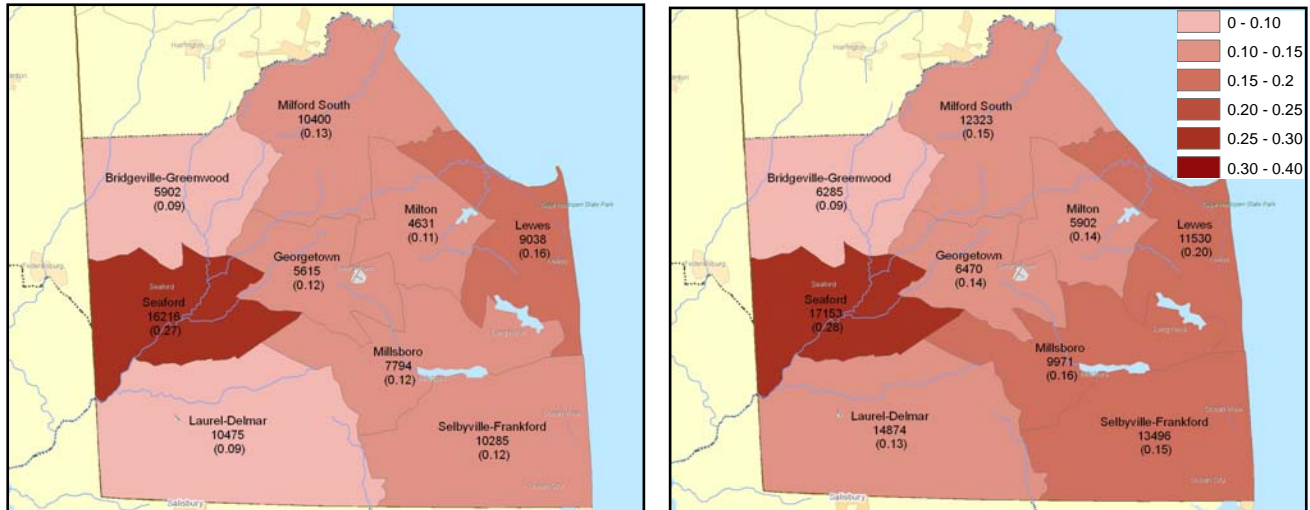


**Figure 2.5** Population change in Sussex County, by CCD, 1970-2000.

County Subdivision	1970	1980	1990	2000	1970-1980	1980-1990	1990-2000
Bridgeville-Greenwood	5,902	6,285	6,899	9,462	6.49%	9.77%	37.15%
Seaford	16,216	17,153	18,897	22,498	5.78%	10.17%	19.06%
Laurel-Delmar	10,475	14,874	15,086	20,410	42.00%	1.43%	35.29%
Milford South	10,400	12,323	14,044	16,525	18.49%	13.97%	17.67%
Georgetown	5,615	6,470	7,776	11,811	15.23%	20.19%	51.89%
Milton	4,631	5,902	7,671	10,611	27.45%	29.97%	38.33%
Lewes	9,038	11,530	13,628	21,517	27.57%	18.20%	57.89%
Millsboro	7,794	9,971	12,897	19,558	27.93%	29.35%	51.65%
Selbyville-Frankford	10,285	13,496	16,331	24,246	31.22%	21.01%	31.22%
<b>County Total</b>	<b>80,356</b>	<b>98,004</b>	<b>113,229</b>	<b>156,638</b>	<b>21.96%</b>	<b>15.54%</b>	<b>38.34%</b>

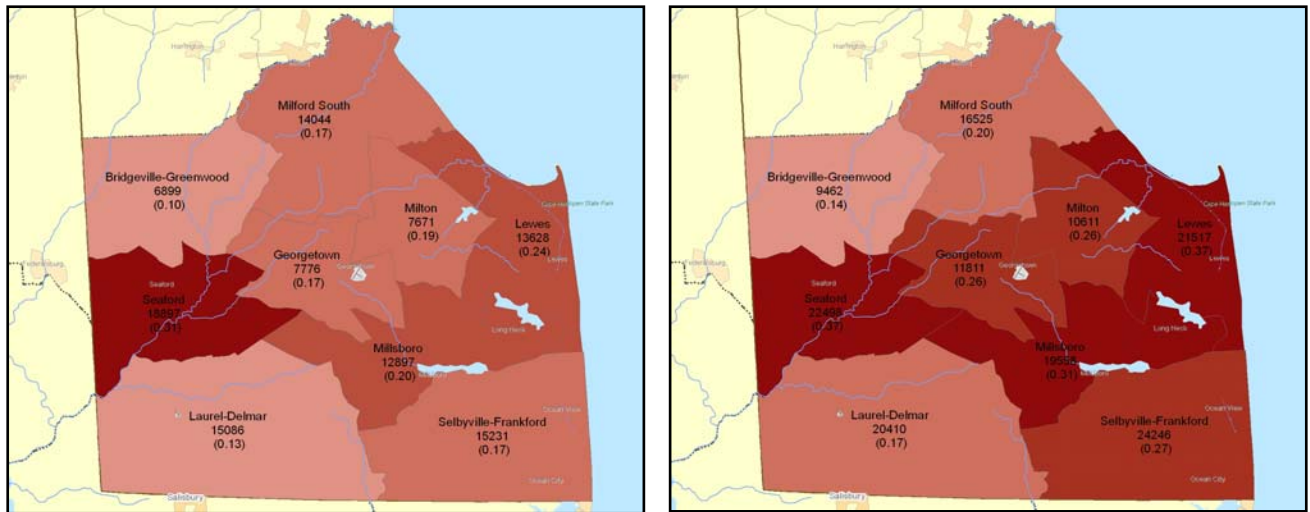
**Table 2.3** Population and population growth rates in Sussex County, 1970-2000, by CCD. CCD names in red indicate western, those in black, central, and those in blue, eastern Sussex County areas.

## 2. Sussex County Trends



(a) Population in 1970.

(b) Population in 1980.



(c) Population in 1990.

(d) Population in 2000.

**Figure 2.6** Population density change (people per acre) in Sussex County, based on census figures from between 1970 and 2000, by CCD. Labels indicate total population, with density shown in parentheses.

in 1970, and 33 percent in the west and 42 percent along the coast by 2000 (see Figure 2.4).

### Census County Divisions

Population trends based on Census County Divisions were also examined for the period from 1970 to 2000, using data from the decennial U.S. Census. Figure 2.5 and Table 2.3 summarize the population of each CCD, and

the percentage change during each decennial period. These graphics clearly demonstrate the increasing rate of growth in the population of Sussex County, especially in those areas closest to the beach and resort areas.

The map series in Figures 2.6a-d illustrates the population trends in the county in the period of 1970 through 2000. The maps show the absolute population for each

decennial year. These data are normalized by area, so that the colors indicate population density within each CCD. The number below each CCD name indicates total population, and the numbers in parentheses indicate number of people per acre. Figures 2.7a-d illustrate the growth rate in each CCD in each decennial period between 1970 and 2000, as well as the growth rate for each CCD for the entire 30 years between 1970

## 2. Sussex County Trends



and 2000. Numbers on each map indicate the percentage growth rates in CCDs.

### Western Sussex

Over the period, in western Sussex, the area of fastest growth shifted from the south to the north. Laurel-Delmar had the highest population growth rate, 42 percent, in the 1970s, Seaford had the highest rate, 10.2 percent, in the 1980s, and Bridgeville-Greenwood had the highest rate, 37.2 percent, in the

1990s.

### Central Sussex

Central Sussex saw most of its growth in the Milton area between 1970 and 2000, with a population growth rate of nearly 130 percent there. Milford South, at the northern end of the county, experienced the lowest growth rate—under 60 percent.

### Eastern Sussex

During the period from 1970 to 2000, eastern Sussex

saw a shift in the highest growth rate from the south to the north, similarly to what occurred in western Sussex. Throughout the area, growth rates were uniformly high, particularly during the decade of the 1990s, with Lewes growing at a rate of 58 percent, Millsboro at 52 percent, and Selbyville-Frankford at 31 percent.

The highest population growth was seen in the eastern coastal region, but growth rates and total population in-

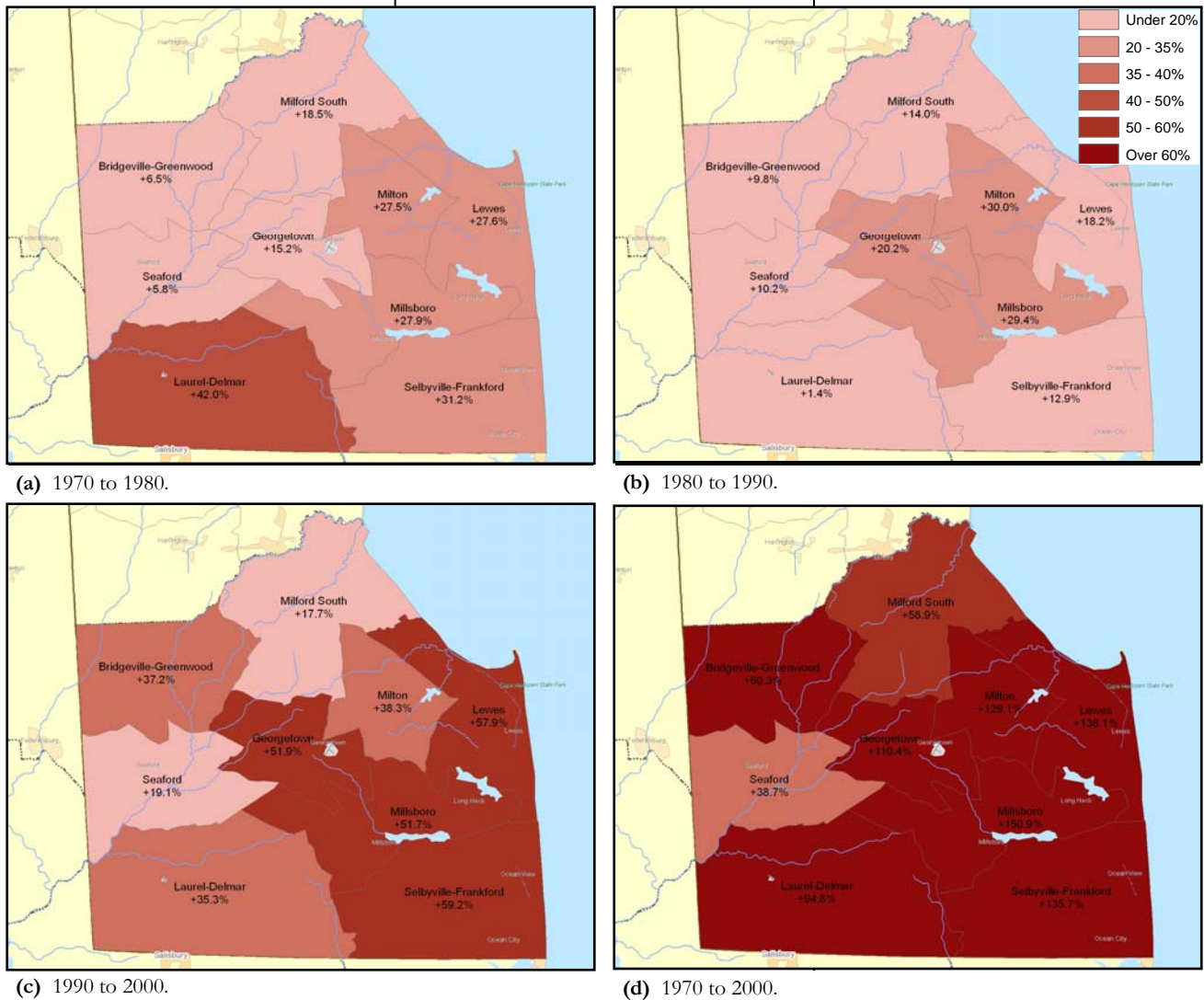
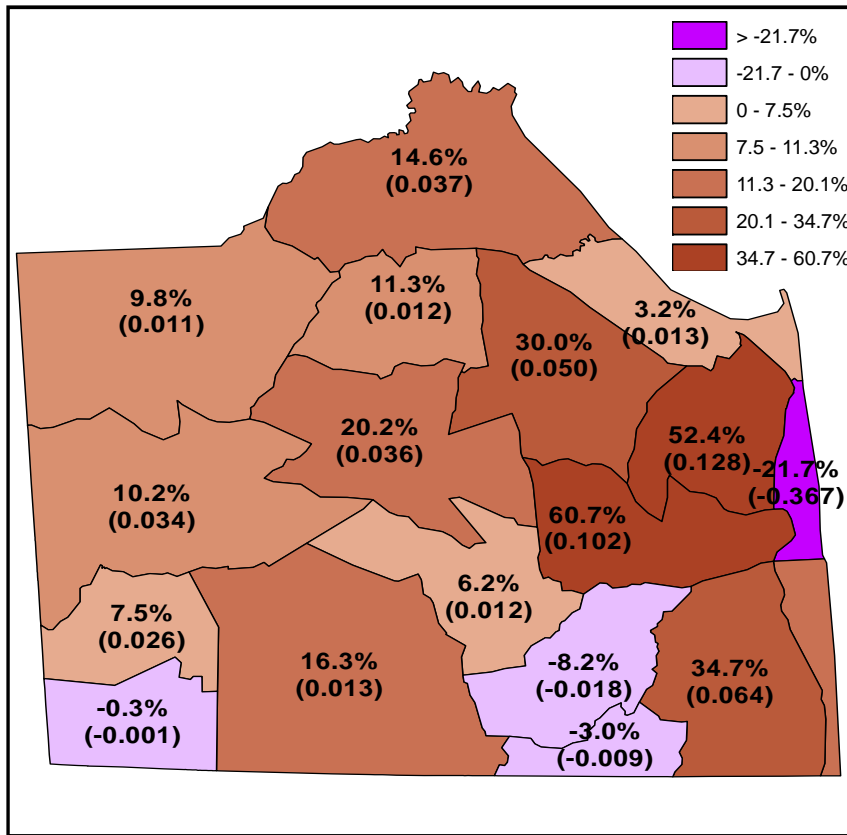


Figure 2.7 Population changes in Sussex County, 1970-2000, by County Census Division.



**Figure 2.8** Population change in Sussex County, 1980-1990, by census tract. Percentage change is indicated for each Tract, with the change in population density, in people per acre, shown in parentheses.

creases were also relatively high in the western portion of the county. A shift toward higher growth rates in CCDs to the north and east, is also evident. In the 1970s, CCDs in the south—Laurel-Delmar and Selbyville-Frankford—had the highest population growth rates for their respective sub-areas (42.0 percent and 31.2 percent) whereas in the 1990s, the northerly CCD of Bridgeville-Greenwood had the highest rate in the west (37.2 percent); at the same time growth in the eastern three CCDs was uniformly higher than in any others.

### *Census Tracts and Block Groups*

Prior to the 1980 Census, a Census County Divisions was the smallest unit of measurement of population available in Sussex County. In 1980, a new division was introduced—the census tract—which afforded the opportunity for a greater level of analysis. Again, in 1990, data were tabulated across an even smaller geographic area—the Census block group. Population trends were therefore also examined using data providing the highest level of detail for each of these periods.

Figure 2.8 illustrates growth trends in the decade

between 1980 and 1990 based on census tracts. The change in population density, which is the number of people gained or lost by census tract, per acre, is indicated in parentheses. Brown shades indicate positive growth rates, and purple shades indicate negative growth rates. Darker shades indicate greater absolute rates.

Growth during this period was focused along the Inland Bays and in the Georgetown area. Elsewhere, there were modest rates of increase, except, notably, in the least populous areas at the extreme southwest corner of the county and in the region encompassing Cypress Swamp. Dewey Beach also experienced small negative growth over this period.

In general, the census tracts containing major towns saw greater growth than other areas, with the highest rates in the Tracts immediately inland from the coast.

### *Land Use Trends*

The term “land use” is defined as a description the type of activities which occur at a particular area at a particular time. For example, a given plot of land may be a farm, a factory, or a residence, a characteristic which determines its land use classification. Each type of land use has its own reason for occurring in a particular location, and has characteristic effects





on the landscape as a whole. In general, land uses follow a progression from more “natural”, less intensive uses to more “built-up”, more intensive uses. The forests which once covered Sussex County, for instance, have long-since largely given way to land cleared for agriculture and towns. In turn, many farms have subsequently been converted to residential, commercial, and industrial uses, while certain areas within towns have been redeveloped and expanded. With some exceptions this transition tends to be one-way: once a natural area has given way to development, it does not go back.

### County-wide Trends

Given the recent rapid population growth in many areas of Sussex County, it is not surprising to see acceleration of land use change in many areas. Between 1992 and 2002 alone, approximately 44,700 acres of land (7.5 percent of the total land area) changed from one use to another in Sussex County. The areas of agricultural land and forests in particular have been shrinking, and the areas of built-up land have consistently grown. In this period, built-up, or developed, land increased by 30.9 percent, with 12,755 acres converted from agriculture and 6,571 acres from forests and forested wetlands. During this time, approximately 8,800

acres of forests and wetlands were converted to agricultural uses, resulting in a net reduction of agricultural land across the county of 2.9 percent. 15,400 acres of forests and wetlands (*i.e.* natural areas) were lost to built-up or agricultural uses over the period, a decrease of 6.6 percent.

The map in Figure 2.10 illustrates the distribution, character, and intensity of land use changes in the county from 1992 to 2002. This map shows the relatively great amount of land being converted to built up uses in the coastal areas, the generally lower level of land use transition in the center of the county, and a pattern characterized by dispersed develop-

ment across much of the western portion of the county. Gray areas on the map are protected from development due to regulatory or other restrictions, so were not included in these calculations. The chart in Figure 2.11 details the conversion of land during this period, for certain major land use class transformations.

Looking at general trends at the county level, it is possible to draw conclusions about the course of land use changes over the past several decades. For the purposes of this investigation, land use classes were combined into a few, generalized categories: Agriculture, Built-up, Forest-Wetland, Water, and Other.

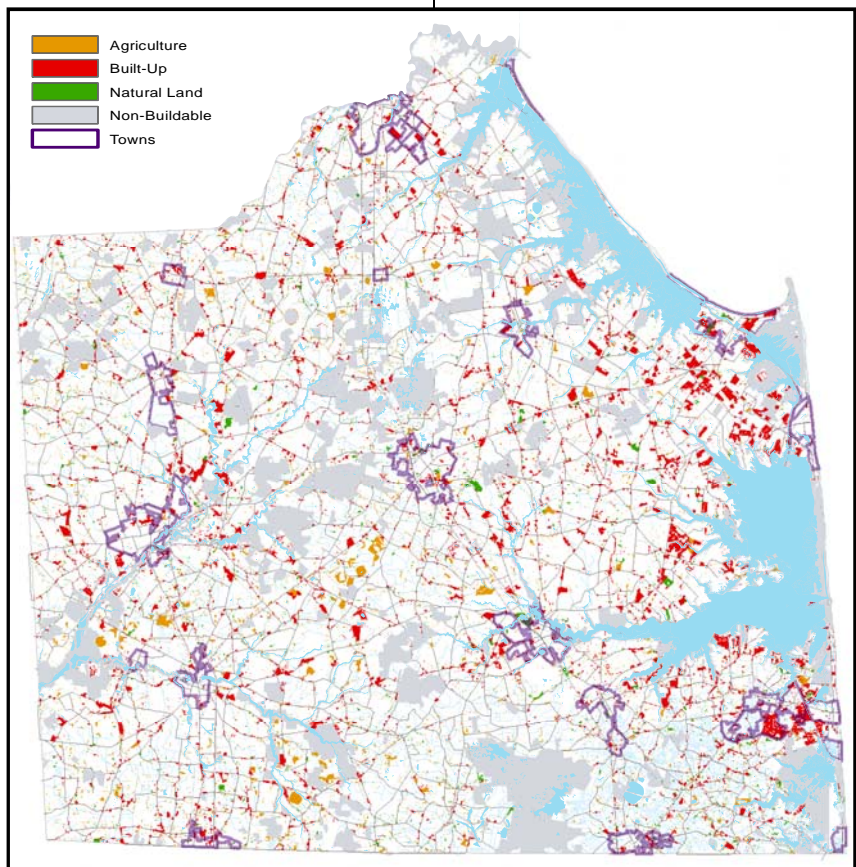


Figure 2.10 Emergent land uses in the period from 1992 to 2002.

## 2. Sussex County Trends



By aggregating the classes, and summarizing over a large spatial extent, valid trends do emerge. Figure 2.12 illustrates the general trend of conversion of farmland and of forests/wetlands to built uses in the nearly thirty year period from 1974 to 2002. This trend was apparent even for the early dates, and was shown to accelerate in later periods. The rate of conversion of natural and agricultural lands, therefore, is shown to have increased in the decade between 1992 and 2002, a time in which, as has been shown, there was also a marked increase in population.

Land use trends were analyzed for 1974, 1984, 1992, and 2002 (see Figures 2.13a-d). Such analysis can be very helpful in determining the nature and rate of the changes in land use. The data may be compared to population, economic, cultural, and other information to gain a clearer understanding of causes and to make predictions regarding future changes. The drawback of using data from different periods is that the sources of information (e.g. aerial photographs, satellite imagery, ground surveys, etc.) are often different. Often, too, the methods for extracting information may change, due to differing emphasis on the part of compilers or to advances in technology. For this reason, it is difficult, in particular, to compare land use from the 1980s to that

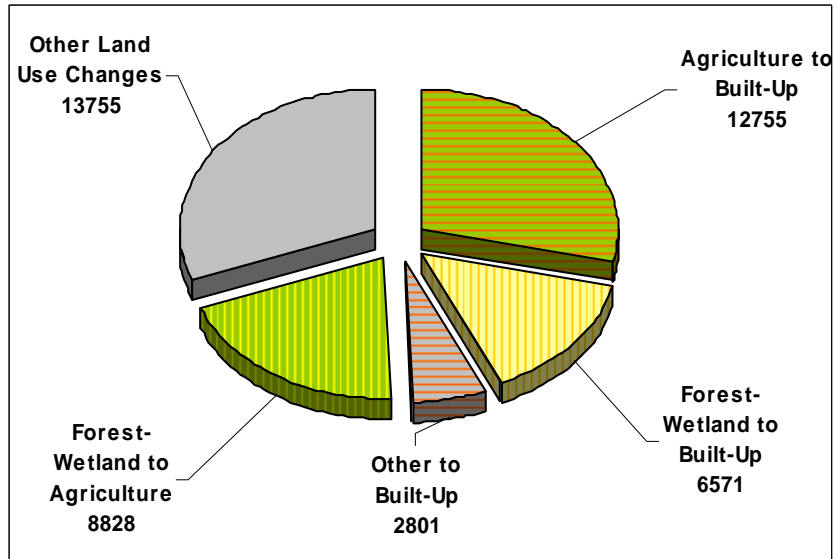


Figure 2.11 Land use changes, Sussex County, 1992-2002 (numbers indicate acreage of each change category).

from the 1990s and beyond. In general, the data for 1974 and 1984, and those for 1992 and 2002 were generated using compatible sources and methodologies, but a valid detailed comparison between these two periods is problematic. It is for this reason that the data were highly generalized into a few, general classes.

Figures 2.13a-d show a

snapshot of the land use for each year; together they illustrate a clear progression of land use changes. Four major categories are shown: red represents built-up areas, tan represents agriculture, green represents forests and wetlands, and blue represents water. Of particular note is the increasing intensity of development along the eastern coast, and the increase in scat-

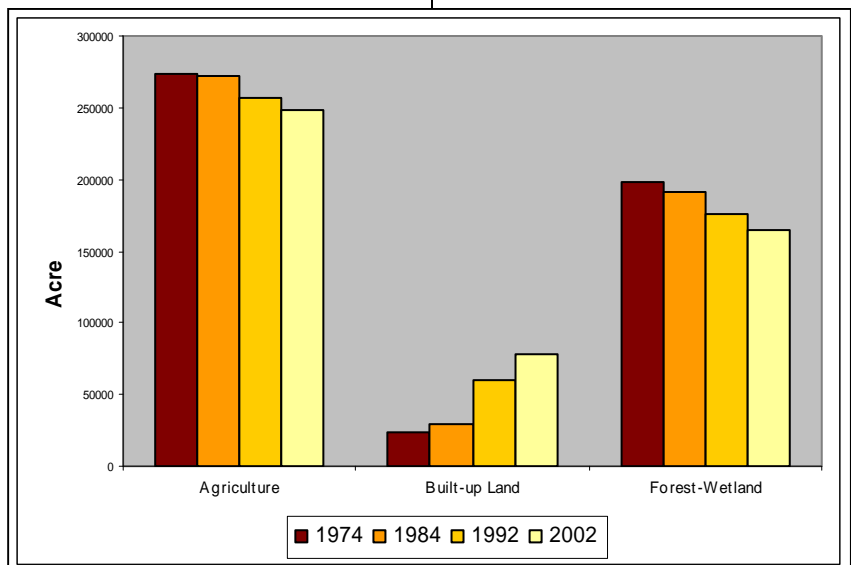


Figure 2.12 Land use pattern in Sussex County, 1974-2002.



## 2. Sussex County Trends



tered and non-focused built areas in the west.

### *Sussex County Development Zones, 1992 to 2002*

Closer examination of the pattern of land use changes was made by the three county zones (eastern, central, and western) for the period between 1992 and 2001. Similarly to the pattern of population change over the period from 1990 to 2000, land use

changes during this time were not uniform throughout the county. Changing land values and settlement patterns drove densities higher in the east and encouraged more scattered development in the west. Agriculture, too, tended to shift westward, with most new agricultural land occurring in the central portion of the county, following the conversion of forested lands. Refer to Figure 2.2 for an illustration of the three zones

treated below

### Eastern Sussex

In 1992, approximately 19.6 percent of all land area in the eastern section of the county was developed. Over approximately the next decade, the amount of developed land increased to 24.3 percent. From 1992 to 2001, the amount of developed land increased 23.6 percent, with 3,961 acres being converted from agriculture, 2,693 acres

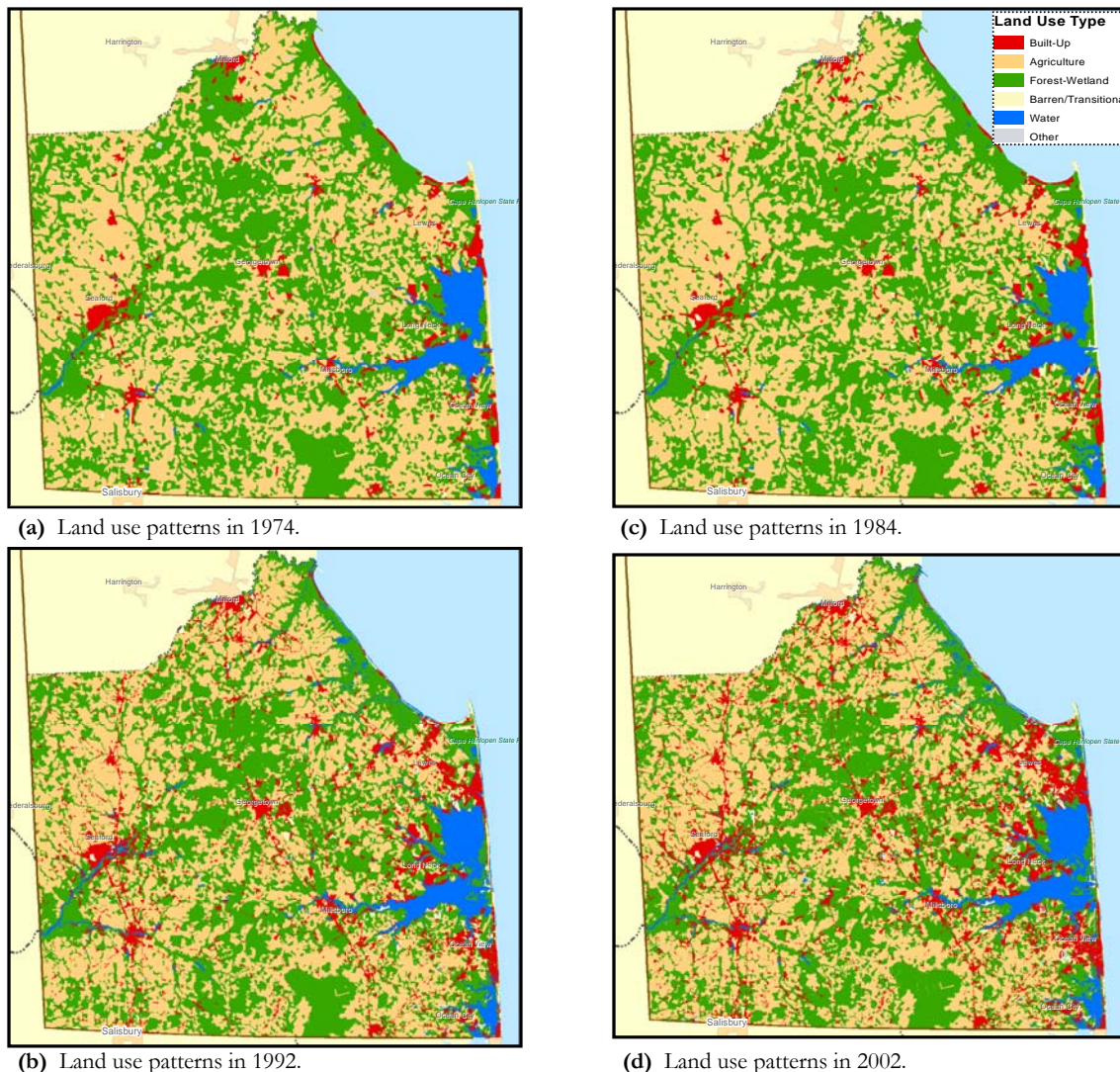


Figure 2.13 Land use in Sussex County for four different years, from 1974 to 2002.

## 2. Sussex County Trends



from forest or wetlands, and 2,002 acres from other uses. At the same time 2,087 acres of forests and wetlands were converted to agriculture, which nevertheless experienced a net loss of 5.5 percent. Forests and wetlands decreased by 6.9 percent, with 4,780 acres of these land types being lost. Figures 2.14a-b illustrate the general land use trends and conversions for this period.

### Central Sussex

From 1992 to 2001, the amount of developed land in the central parts of the county increased from 14,575 to 18,903, a rise of 29.7 percent, with 3,095 acres converted from agriculture, 1,987 acres from forest-wetland, and 503 acres from other uses. Though nearly 2,000 acres of forest and wetlands were converted to agricultural land, agriculture still experienced a net loss of 2.7 percent. Forest and wetlands saw a net decrease of 4.8 percent, with 3,609 acres of this type being converted to agricultural or built-up land (see Figures 2.15a-b).

### Western Sussex

The western part of the county is the largest of the three zones in area, and contains several important towns and a good deal of agricultural land. In 1992, 48 percent, 123,655 acres, of all the agricultural land in the county was here. Between 1992 and 2001, the area of built-up land increased by 8,619 acres, or 45

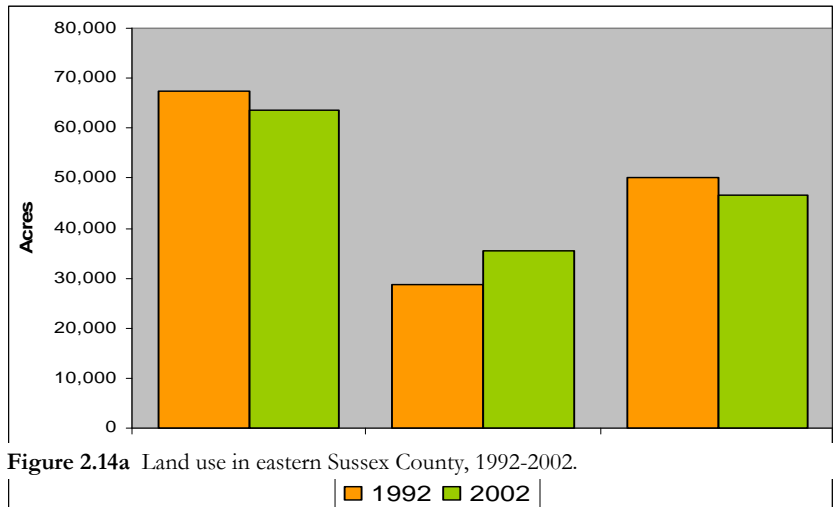


Figure 2.14a Land use in eastern Sussex County, 1992-2002.

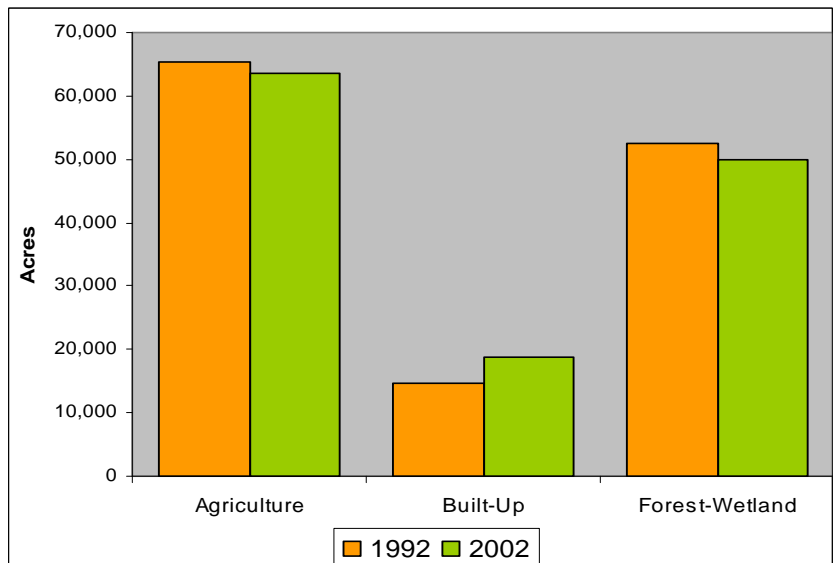


Figure 2.15a Land use in central Sussex County, 1992-2002.

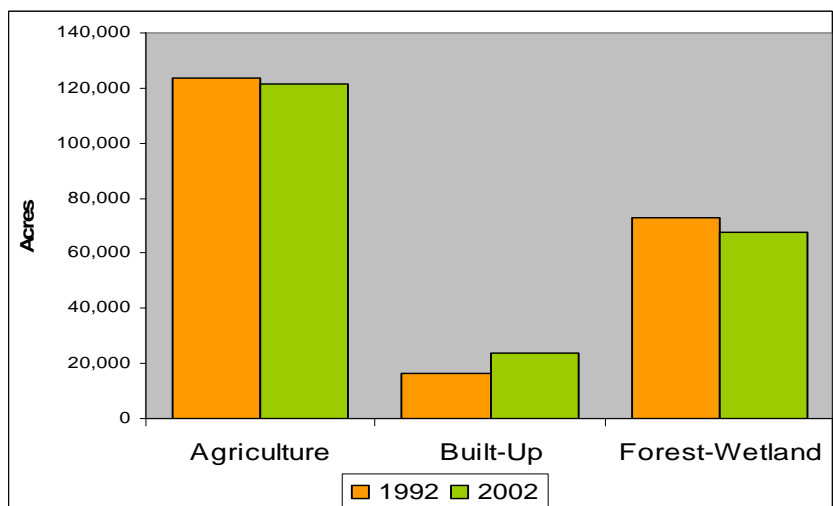


Figure 2.16a Land use in western Sussex County, 1992-2002.



## 2. Sussex County Trends



percent; 5,699 acres coming from agriculture, 2,166 acres from forests and wetlands, and 804 acres from other land uses. Again, though 4,255 acres of forests and wetlands were converted to agriculture, agricultural land still saw a slight net loss of 1.6 percent. During this period, forests and wetlands decreased by 7.7 percent, a loss of 6,371 acres (Figures 2.16a-b).

### Census County Divisions

To provide a more detailed picture of the land use

changes in Sussex County, land use patterns at the CCD level were also examined. As expected, the areas with the highest rates of land use changes occurred in a band along the eastern coast and around Seaford in the west. Each of the nine CCDs experienced a unique and characteristic land use change pattern. Figure 2.17 shows, for each CCD, the acreage in each of three major land use categories, in 1992 and in 2001.

Table 2.4 details the total amount of land that changed use in the period from 1992 to 2001 for each CCD and the

percentage of the total, county wide change accounted for by each CCD. Additionally, the percentage of all land in each CCD which has undergone some change is shown, both based on the total area and on the area of buildable land within each CCD. The latter measure excludes those areas which cannot be developed due to environmental, regulatory, or other restrictions, for example, tidal wetlands, state parkland, and those lands in permanent agricultural easement. In the Lewes CCD, for example, in the period from 1992 and 2001, only 8.3 per-

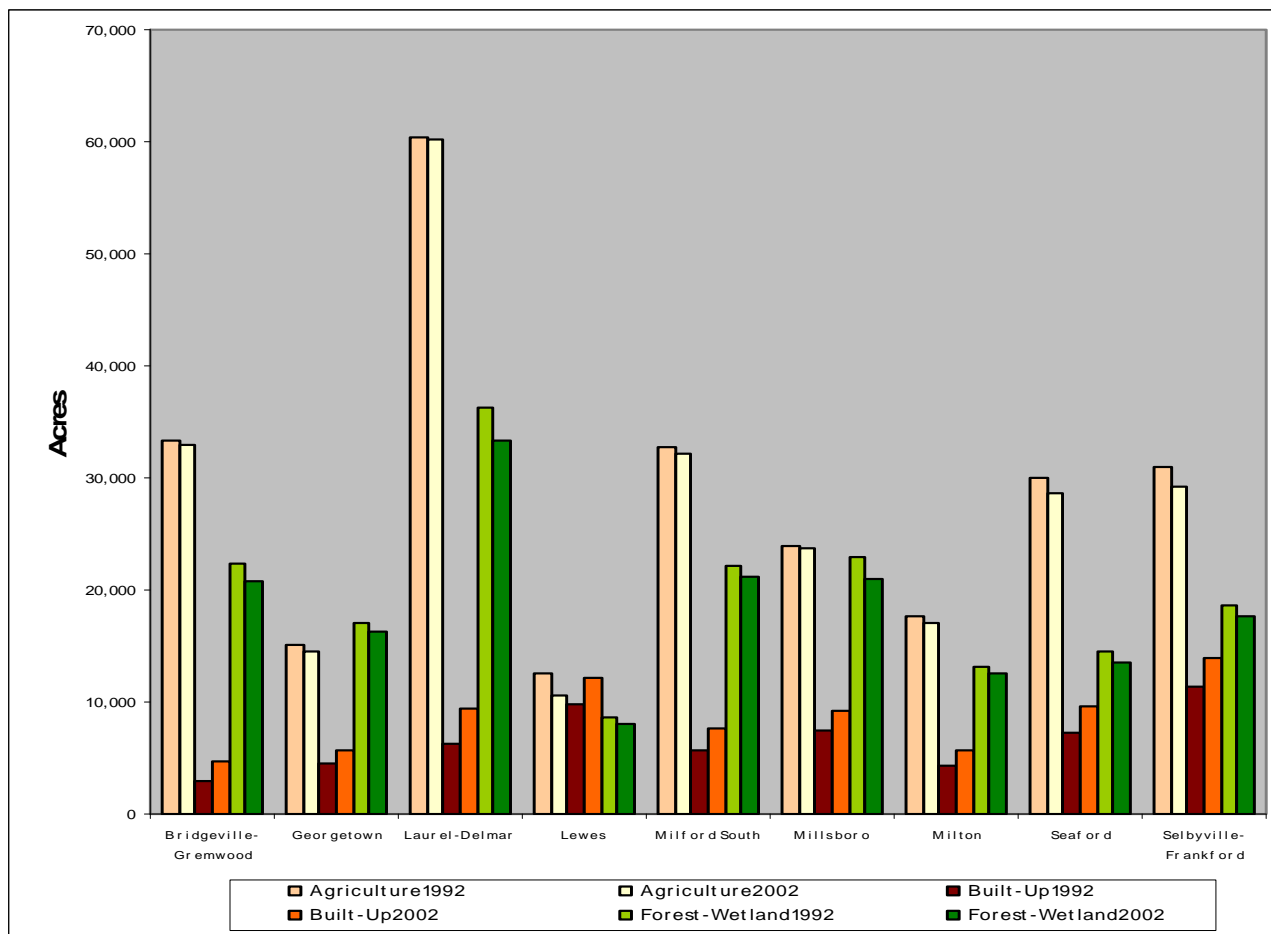


Figure 2.17 Land use change in Sussex County by CCD, 1992 to 2001.

## 2. Sussex County Trends



cent of total land area changed from one type to another, but in fact 15.1 percent of *buildable* land underwent a change.

County Division	Acreage Changed	% of All Changes in Sussex County	Total Acreage of CCD	% of Total Acreage Changed	Total Buildable Acreage of CCD	% of Buildable Acreage Changed
Bridgeville-Greenwood	4,634	10.4%	68,598	6.8%	59,123	7.8%
Georgetown	2,959	6.6%	45,586	6.5%	36,772	8.0%
Laurel-Delmar	8,391	18.8%	117,575	7.1%	103,923	8.1%
Lewes	4,805	10.8%	57,679	8.3%	31,780	15.1%
Milford South	4,054	9.1%	82,686	4.9%	61,725	6.6%
Millsboro	5,252	11.8%	63,576	8.3%	54,809	9.6%
Milton	3,084	6.9%	40,746	7.6%	35,621	8.7%
Seaford	4,469	10.0%	60,722	7.4%	52,609	8.5%
Selbyville-Frankford	7,031	15.7%	89,286	7.9%	62,583	11.2%
Sussex County	44,679	100.0%	626,455	7.1%	498,945	9.0%

Table 2.4 Summary of land use changes in Sussex County, by CCD, 1992 to 2002.



## Identifying Heritage Themes

A goal of this project has been to document heritage resources in Sussex County. We define heritage as a combination of the cultural, historic and natural resources of an area. The good news for Sussex is that if those resources could be converted into economic ones then Sussex County would be quite wealthy.

Long before Europeans “discovered” the land that would later become Sussex County, the area was inhabited by descendents of Asian upper-Paleolithic nomads who crossed the Bering Strait land bridge some 10,000 years ago. There is evidence that over thousands of years the descendents of these people established sophisticated trade routes that stretched half-way across the continent.<sup>(1)</sup> The Native Americans with whom European settlers had first contact in Delaware were part of either the Nanticoke or the Lenape (sometimes Leni-lenape) tribes. Unfortunately, the traces of this past have largely been lost, with the exception of the Nanticoke Indian settlement, located east of Millsboro, Delaware.

Though history discussed

in this report does not span 10,000 years, but it does tell a rich and textured story. In the landscape as well as in narrative accounts, the evolution of daily life in Sussex is revealed. Delaware is known as the “First State” because it was the first of the thirteen colonies to ratify the US Constitution on December 7, 1787. Sussex County boasts the title of being the oldest part of the state because it was the site of the first colony in Delaware, Zwaanendael (present-day Lewes), established in 1631. Additionally, Sussex is the site of eleven more towns settled prior to US independence. There are currently twenty-five incorporated areas in Sussex County; fifteen were settled by the close of the 18<sup>th</sup> century. Lewes, the oldest town, recently celebrated its 375<sup>th</sup> anniversary.

It becomes clear that when talking about Sussex’s heritage there is a lot to consider. To better display and write about this heritage, the cultural, historic and natural resources of Sussex County have been put into the context of three broader narratives: the natural environment of Sussex including the coastal

environment, the settlement patterns of people, and the legacy of agriculture. The aim of creating these categories is to not only help the public understand Sussex’s heritage but to also tell a compelling story about the county. What will be revealed is that Sussex County has a layered landscape in which the natural environment, the settlement patterns of people, and the important industry of agriculture each forge and mould a distinctive perspective of Sussex.

### The Natural Environment

#### *Setting the Stage*

It makes sense to begin the tour of Sussex County’s heritage by setting the stage and describing its natural landscape which varies from east to west and from north to south. If one were to look at a map of Sussex County, the most obvious feature would be its coastlines. Sussex County has access to two coasts: the Atlantic Ocean is to the east and the Nanticoke River draining to the Chesapeake Bay is to the west.

When Dutch settlers first landed in Delaware in 1631



after months at sea, they discovered a land densely covered with wetlands and forests. If today's visitors wanted to better imagine the unexplored landscape settlers encountered, they would be wise to visit Primehook Nature preserve just north of Lewes, or one of the many other nature reserves along the county's coastlines: the Cypress Swamp, Nanticoke Wildlife Area, Assawoman Wildlife Area, or Fenwick Island State Park. Inland from the coastlines, Sussex County was heavily wooded throughout the colonial era. The wooded area offered what appeared to be a limitless supply of timber for new dwellings, shipbuilding and other pursuits. If one uses a bit of imagination, visitors to Sussex County can still experience this "wooded hinterland" when they visit places like the Marshy Hope Wildlife Area, Cedar Creek Nature Preserve, Trap Pond State Park or Redden State Forest. Sussex County is also home to the most northern extension of Cypress trees in the Cypress Swamp, as well as a northern extension of pine trees that begins in Texas. So much of Sussex's landscape has been converted to agriculture that many have forgotten that Delaware was once covered in the virgin forests that stretched across most of the northeastern United States. The parks and wildlife reserves offer a glimpse at that past.



**Figure 4.1** Church in Sussex County. Note the forested background; this is how most of Sussex County once looked. (Source: CHAD Archives)

#### *Creating a Culture*

The natural environment of Sussex County has proven to be more than just the set on which Sussex County's historic narrative unfolded. The early wooded and coastal landscapes contributed equally to the shaping of the culture in the county by creating a forest economy. The ready supply of timber dictated the types of homes built throughout the county: log or frame houses as opposed to the brick that became common in New Castle and Kent Counties to the north. The timber supply also allowed for shipbuilding to expand as Sussex County's first major industry.

However, Sussex County was remote, even by colonial standards. Consequently, it was left open to attack by pirates during that early colonial period. During the late 1600s, Delaware was still considered

part the land granted to William Penn by the King of England. However, William Penn was a Quaker and refused to take military action to protect southern Delaware from the pirate attacks. Defenseless and angry, the settlers argued strongly and convincingly that Delaware ought to separate from Pennsylvania and form their own militias for defense. Three centuries later, a do-it-yourself attitude is still found among many southern Delawareans; perhaps it is partially linked to this earlier event.

The forested areas of the county made it difficult to defend because it was closed to internal travel and movement. Sussex's hinterland was difficult to reach and this kept population growth in the county modest from its founding until very recently. This, in turn, contributed to Sussex's reputation as a county of small towns with a



### 3. Heritage Themes



slower way of living. In Southwestern Sussex County a border dispute kept that part of the county “lawless” and undeveloped for many years. Until 1769, residents living in western Sussex County were not sure if they were residents of Delaware or Maryland.

The confusion began in 1632 when the Calverts who had settled in Maryland claimed that the Maryland Charter gave possession of land “hitherto unsettled by Europeans” north of Virginia on the peninsula. The Penns claimed that the Zwaanendael settlement (site of present-day Lewes) was established in 1631 and therefore could not belong to Maryland. From 1684 until 1769, this argument continued in the British courts and political circles. In 1732, the two parties agreed to draw a line westward from Cape Henlopen to the Chesapeake and to accept this as the southern boundary of Delaware. The mid-point of this line would extend northward to the Pennsylvania border and form the western boundary of Delaware. Each party agreed.

Unfortunately, the parties were agreeing to something which neither realized: the map attached in the agreement incorrectly identified

Fenwick Island as “Cape Henlopen.” For those unfamiliar with the geography of the Delmarva Peninsula, Fenwick Island is approximately twenty-five miles south of Cape Henlopen.

In 1750, it was decided by the courts that the original

pected ways. First, residents filed property taxes and deeds with both Delaware and Maryland until 1769. A large amount of land in western Sussex had been granted by both the Penns and the Calverts. Landowners quickly realized that a disputed land title would render the land worthless if it had to go to court. To circumvent this unfortunate situation prior to 1769, land titles were entered with both proprietors.<sup>(2)</sup>

Second, Maryland’s influence is seen in the architecture of Western Sussex as well as in the town design of Georgetown. Georgetown’s street design follows a pattern of a central circle with arterial streets forming a wheel-and-spoke design. This pattern mirrors Annapolis’s baroque style, not Philadelphia’s or Wilmington’s grid pattern. Built in 1727, the Maston House near Seaford is viewed as a “Maryland house in Delaware” (National Register Nomination) because of its architectural style and details.

Third, western Sussex towns such as Seaford, Bethel and Laurel historically based their economic livelihoods on the Chesapeake Bay rather than the Atlantic Ocean and so they found similarities with Maryland towns rather than Delaware ones.



**Figure 4.2** The Woodland Ferry enables passage between Western Sussex County and the Eastern Shore of Maryland, over the Nanticoke River. (Source: CHAD Archives)

map would be used: the border would be drawn westward from Fenwick Island. Two famous British astronomers and surveyors then determined the final boundary between the states. Charles Mason and Jeremiah Dixon arrived in Delaware in 1763 and completed the boundaries after four years of astronomical observation and field surveys. On January 29, 1768, they completed their work and the border dispute between Maryland and Delaware finally ended.

The results of this border dispute are displayed in unex-



Jumping ahead two centuries, from the pirate attacks and border disputes to the turn of the nineteenth century, a religious trend began to take shape in the northeastern United States in which congregations set up religious revivals and camps at beaches. Again, Sussex's geography influenced its cultural heritage. Sussex County, with its Atlantic coastline, was an excellent site for such camps and the towns of Rehoboth and Bethany were established.

#### *Fuel for the Economic Fire*

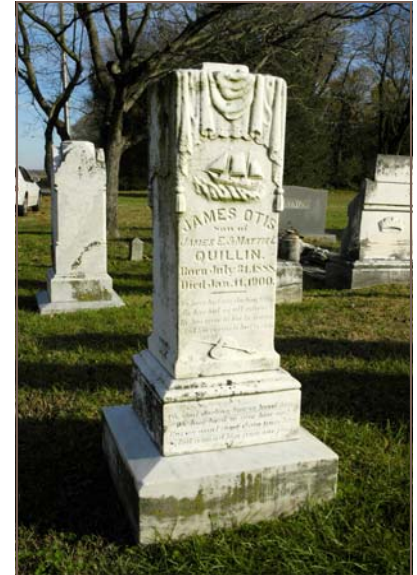
The natural environment lent an important hand in shaping cultural influences in Sussex. Had the landscape been tamer, prairie instead of forest, or without its coastlines, then the culture of the county would have been carried along a much different trajectory. The natural environment of Sussex County is important as the stage for events and as an influence of culture. It is also extremely important as an economic force throughout the history of the county. It begins with a simple geography lesson that allowed Sussex to prosper.

The state was an important trade center during the colonial era because it linked northern cities, via the Delaware River, to southern cities via the Chesapeake Bay. At certain points in northern Delaware, the distance between the Delaware and the

Chesapeake Bays is only five miles. While Sussex did not have the monopoly on trade for the state – that occurred further North in New Castle County – it did receive economic benefits from being in such a strategic location.

Geographical location aside, Sussex County families have depended on the land and water for their livelihoods since it was first settled. In fact, the 1631 crew that Captain deVries, the Dutchman who settled at Lewes (then called Zwaanendael), came to the US in a ship called *Walvis*, or whale. He was lured by rumors that the Delaware Bay was filled with whales. However, his hunting expeditions were futile.

Whaling was not the only failed attempt at harnessing the ocean for economic gain. Enterprising individuals also tried salt-making, but without much success at a large scale. Though whaling and salt-making never actually became major industries, fishing, crabbing, and oyster collecting did. Deep sea fishing off the Atlantic Coast offers economic benefits today, as fisherman from all around the world travel to this area for the sport. Bethany Beach and Fenwick Island host a spring surf fishing tournament each year that draws large crowds. The waters around Sussex County are plentiful with crabs – both the edible and inedible varieties. The town of Slaughter Beach received its name from the hundreds, if



**Figure 4.3** The legacy of Sussex County's shipbuilding past is visible in most old cemeteries, on the grave stones of former seamen. (Source: CHAD Archives)

not thousands, of horseshoe crabs that come on shore to lay their eggs and are then stranded when the tide goes out. Their crustacean bodies line the sands, making the scene look like a veritable “slaughter.”

Oyster collecting is more unique to Sussex County. Most coastal counties have some element of fishing and crabbing as part of their heritage; not all, though, are blessed with the rich oyster beds that were found in Sussex County by early settlers. The European settler used the oyster as a source of food and lime. The shells were burned to make most of the plaster and mortar that was used in the colony.<sup>(3)</sup> An individual could easily earn a living from oyster collecting during this

### 3. Heritage Themes

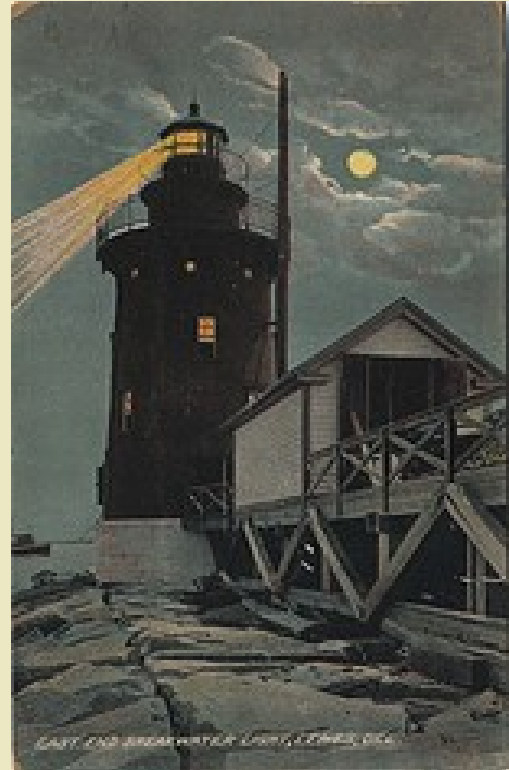


period. The oyster beds were so large and so bountiful in the Indian Bay that many believed that they would never run out. By 1812, though, people began to realize that this belief was wrong. The oyster bays in Connecticut had dwindled in size some years earlier so oystermen from that state began trolling Delaware's water for oysters. It put too much demand on the oyster beds, and in 1871 the General Assembly of Delaware had to put very strict controls on all oyster collection. Today, the oyster beds are slowly recovering but cannot provide the same economic advantage as they once did.

Shipbuilding, like oyster collection, is another water-based industry that rose and fell. As mentioned before, shipbuilding was an important industry for Sussex County for many years. The town of Bethel, in Western Sussex, is located on the Broad Creek which drains into the Nanticoke River and then to the Chesapeake Bay, was the site of a robust shipbuilding economy during the nineteenth century.

In the east, Milton crafted the vessels that were used on the Atlantic Ocean. The shipyards used timber cut in Sussex County, giving the county an advantage that other shipyards did not have. The shipbuilders also became fine carpenters in their own right, and their handiwork can be seen in the older homes in towns

Lighthouses are prominent features along Delaware's shoreline and were constructed early in Sussex's history. Life-saving stations were also established along the Atlantic and Delaware Bay coasts. The Delaware Bay was notorious for its treacherous waters because the Bay is relatively shallow and it causes many large ships to run ashore. As a result, many innovative designs were made to help keep ships safe. For instance, lightships, or floating lighthouses, were first introduced in 1820 to aid the navigational systems of passing ships. There was a lightship station at



**Figure 4.4** East End Breakwater Lighthouse.

(Source: University of Delaware Library Collection)

Overfall Shoals in near Lewes, marking the entrance to the Delaware Bay. The National Harbor of Refuge and Delaware Breakwater Harbor Historic District is one site visitors interested in this part of Sussex's history ought to visit. Other lighthouses and life-saving stations in Sussex County include the Lewes Life-Saving Station Boathouse (c1884), the Bethany Beach Indian River Life Saving Service Station, the Fenwick Island Lighthouse Station, the Delaware Breakwater East End Lighthouse, the Harbor of Refuge Lighthouse in Lewes, and the Mispillion River Lighthouse.

All of the lighthouses and life-saving stations have individual stories of heroics. For example, the Lewes Life-Saving Station Boathouse is best known for its actions during a freak snow squall in 1888. The blizzard caused dozens of ships to wreck off the coast and the life-saving station is credited with many brave rescues. Lighthouses and light-saving stations are very much a part of Sussex's landscape and history. Without them, the towns established near the coastline man not have flourished as they did.

Differing from lighthouses in their purpose, watchtowers were built along Sussex County's shoreline during WWII to protect the country from enemy attacks. Eleven concrete cylinders rise from the coastline, from Fenwick Island to Cape Henlopen. These watchtowers are unique to the Sussex County shoreline but were obsolete soon after construction.





such as Bethel and Milton, along with Ocean View, Seaford and Laurel. However, shipbuilding began to decline in the late nineteenth century as the forests were depleted and as steam-powered ships surpassed the sail-powered wood ships made in Sussex.

Today, even with the virgin forests gone north of the Cypress Swamps and the coastlines mainly used for recreation, many Sussex residents still depend on the land for their income through agriculture. The land cleared by early residents during the late eighteenth and nineteenth centuries was good for planting crops. The earth in Sussex County is wet and fertile and Sussex residents took full advantage of that by growing sweet potatoes, strawberries, melons and peaches, among many other crops. The farmland in Sussex County remains very productive.

The Sussex landscape is evolving again – this time, from agricultural to built-up areas. What is worrisome is the speed at which the change is happening; with little time given to understanding how the changes to the landscape will affect small towns, family farms and the traditional beach communities.

#### Settlement of the Sussex People

The evolution of the landscape coincides to great extent with the waves of settlement experienced in the county. Water-oriented development

#### Visiting Sussex County in 3 Stops:

Heritage tourism is partly about what you can see from the road, whether driving or biking. Sussex County has a rather amazing history and three stops in Sussex would introduce the tourist to the range of experiences possible to them in the county. In the east, the first stop would be the town of Lewes at Cape Henlopen on the coast of the Delaware Bay; the second is in the Cypress Swamp in south central Sussex; and the third place, the town of Seaford, is near the county's western border on the Nanticoke River which crosses Maryland to empty into the Chesapeake Bay.



Figure 4.5, 4.6, 4.7 Church in Lewes; Delaware Cypress Swamp; Seaford Train Station. (Sources: www.flickr.com; www.destateparks.com; CHAD archives)

in Sussex County occurred while the interior was still covered in dense forests in the 1700s. Settlement, therefore, came from the east and west and concentrated along water routes. As the landscape transformed from dense forest to agricultural lands in the 1800s, the interior was opened and rail lines brought new people to the county. Finally, in the most recent stage of Sussex history, the coast has gained popularity with the coastal highway Route 1 that opened the area to vacationers and year-round residents. The county has accommodated this interest with new housing projects and commercial development.

New towns are generally located along the Atlantic coastline and the Route 1 highway corridor in Sussex County. Each stage of settlement brings with it stories of the people of Sussex County and the types of communities where they lived. During past stages of settlement, towns remained the central organizing force in the county. Known as a county of small towns, Sussex differs from Kent and New Castle Counties in the north by the number of towns – 25 in total – found within its borders. These towns tell fascinating and distinctive histories of the county as a whole.





The twenty-five “jewels” of Sussex County, as the towns are called, each have their unique personalities. Over half share a long history with fifteen of the twenty-five jewels founded before 1800. An additional five were founded between 1800 and 1899, and four were founded during the first half of the twentieth century (there is one town without information).

In Delaware, a distinction is made between when a town is founded and when it is incorporated. “Founding” means that families grouped together to establish a town. Perhaps a post office was installed. Incorporation is a legal process of establishing a local government and receiving special status from the county. In 1791, Georgetown, as the county seat, became the first town to incorporate in the county. The

most recent town to incorporate was Dewey Beach, which did so in 1981.

#### *Settlement along the Waterways*

Delaware settlement began in 1631 when the Dutch landed near the opening of the Delaware Bay. Water access, therefore, has historically dictated where towns were settled. Some of the oldest towns in the county exist at the eastern and western extremes of the county where water access allowed for easy settlement. Lewes was founded by the Dutch in 1631. Although this is something most Delaware residents know, few may realize that Milton was founded just forty years later (1672) and Laurel was founded ten years after that (1683). Slaughter Beach, Ocean View, Milford and

Fenwick Island were also settled during the 17<sup>th</sup> century though it took many years for the population to become substantial enough for incorporation. All of these towns share a common trait of being on easily navigable waters. Bethel and Laurel grew as shipbuilding towns along the Broad Creek in the west, as did Milton which was situated along the Broadkill River in the east. The towns were able to easily move wooden, sail-powered ships to the Chesapeake and the Atlantic waters. Water access was and continues to be crucial for these communities. Therefore, it was important to keep the water protected and the people safe. To do this, a number of lighthouses and life-saving stations were constructed the coasts of the Atlantic Ocean, and the Delaware Bay and River.

#### First Stop: Lewes, Delaware

Lewes is a good place to start in the County. It was the initial point of settlement by the Dutch in 1644 and it chronicles the succession of Dutch, Swedes, and English colonists, all of whom left their distinctive architecture marks. The most striking is the stepped, gable, red-brick Zwaanendael Museum designed by E. William Martin and built in 1931. The English influence can be seen in the handsome Georgian houses built by English sea captains. These reflect Lewes' most important role as Sussex County's market town and door to the larger world of North American and Atlantic trade. It was the port from which the county exported timber and forest products such as shingles north to Wilmington, Philadelphia, New York, and beyond. It was home to a fishing fleet that plied the Delaware Bay and River, which was an important part of the county's economy. Burned twice, raided by pirates, shelled by the British during the war of 1812, the town boasts a colorful history. It was also the seat of Sussex County government for its first 150 years. Today, it is a resort town that blends its historic character with recreation on the beach and fishing. It is the terminal for the Lewes-Cape May Ferry.



Figure 4.8 Zwaanendael Museum in Lewes. (Source: [www.lewes.com](http://www.lewes.com))



**Figure 4.9** Farmland in Sussex County. (Source: CHAD Archives)

The architectural styles found in pre-railroad towns were influenced by the Dutch and Swedish log home and later by the Georgian style. The oldest homes in Sussex County are almost always constructed from wood frame as brick was unattainable in Southern Delaware. Ship Carpenter’s square in Lewes displays a wide variety of architectural styles, though not all are native to Lewes (many of the homes were moved to the square from elsewhere in the county). All of Sussex was conservative with architectural styles and often lagged behind national trends. This means that while the rest of the east coast was caught up in a Gothic Revival craze from the 1840s to the 1860s, it did not reach a place like Ocean View until 1885 or later – after the railroad was established. Largely, the towns kept to simple, vernacular styles. Of the National Register Historic Districts in Sussex County, all are

located in towns settled prior to 1856 (the year that railroad lines were established in Delaware): Bethel (1720c); Bridgeville (1747); Laurel (1683); Lewes (1631); Milford (1680); and Milton (1672). These historic districts offer fine examples of the architectural styles used throughout the past 350 years in Sussex County.

#### *The Railroad Era*

What helped the most to open up the interior of the county was the establishment of several railroad lines running north to south in the state of Delaware. The Delaware Railroad was completed in 1856 and within a few years it had expanded with spur lines to connect most of the Delmarva Peninsula. The Delaware Line passed through the center of Sussex County, giving new life and momentum to the towns of Ellendale and Georgetown. Georgetown saw a population in-

crease from 553 in 1860 to 895 in 1880. Milford saw a similar increase during that time period; it grew from 584 people in 1860 to 1,034 in 1880. This great population growth was certainly aided by the new railroads in the county. The Baltimore, Chesapeake, and Atlantic Railroad was established during the late 1850s; this line ran on the western edge of the county and connected the towns of Greenwood, Bridgeville, Laurel, Seaford, and Delmar. Delmar was not a settled area prior to the railroad; its founding is set at 1859, the year that it became the terminus for the BAC Railroad line. Greenwood, founded in 1856, also owes its existence to the railroad. Close to half of the “25 Jewels” in Sussex County were officially incorporated during the forty year period between 1865 and 1905. Incorporation status was pursued after these communities experienced economic prosperity and population growth brought by the railroad. Sussex County was no longer the isolated county prone to pirate attacks. Because improved highways were unknown until T. Coleman DuPont began to build the DuPont Parkway in 1911, the railroad was the county’s lifeline to the rest of the northeast corridor.

The railroad not only brought people and goods into the county, it also helped move goods out, to larger markets in Wilmington, Phila-



#### Second Stop: Sussex County Cypress Swamp

The Cypress Swamp in southern Sussex County is the second necessary stop. It is the most northern stand of cypress in the United States. A visitor needs to spend some time and take in the Swamp with its watery floor punctuated by tall Cypress trees topped by broad leafy canopies and anchored by the spreading bell-like base of their trunks. The traveler will have to imagine how much of the county was covered by forest marshes when the Europeans first arrived. Indeed, at the end of the Pleistocene geologic period -- some 12,000 years ago - most of Sussex County was covered in forest marsh, as indicated by borings taken of the soil.

The history of the county and its landscape is tied to that forest. In the first 150 years, the forest provided the economy through logging and forest products while at the same time its density and marshy floor blocked extensive settlement. Agriculture was subsistence and practiced in the forest in small fields. To be farmed, the forest marsh had to be drained and cleared which was slow and arduous work. Standing timber (including oak, cypress, poplar and pine) was cut, and buried cypress was mined for the production of shingles, plank, barrel staves, tan bark and ship stores. Forest products were shipped by water to Philadelphia, Wilmington, and New York. Forest economy produced several significant by-products such as improved transportation systems, ship-building concerns, local saw mills, and land reclamation efforts.



**Figure 4.10** Cypress Swamp at Trap Pond State Park. (Source: [www.destatepark.com](http://www.destatepark.com))

delphia, and Baltimore. The railroad was incredibly important for Sussex farmers; they could not grow more crops until they had a fast, reliable way to get them to market. The railroad was the fast, reliable way. As a result, peach, melon, and strawberry production soared. The speed of trains acted as modern refrigeration for the produce heading north. Sussex farmers could hardly keep up with the Northern market's taste for

watermelon, cantaloupe, and strawberries.

Fortunately, Sussex's southern, coastal location meant a longer growing season than in central New Jersey. Often, Sussex farmers had fruits ready earlier than New Jersey growers. The railroad enabled places like the very southern, very isolated Selbyville to become the self-declared "Strawberry Capitol of the World." Laurel was

known as the Melon Capitol, and also for its sweet potato production. Milton and Millsboro became national centers for holly wreaths and other holiday decorations. Before the railroad, strawberries, melons, and holly would have never survived the long route to market via land or water. Railroads ensured that crops made it to market at their peak of freshness, before rot could begin.

Though agriculture was the leading economic force during the railroad heyday, it was not the only one. Spin-off industries produced fruit baskets to carry peaches and tomatoes to market.. C85

Canning became very important sources of revenue for towns. The canning process was invented in France in 1795 by Nicolas Appert who competed for a prize of 12,000 Francs from Napoleon. Napoleon was looking for a way to keep soldier's rations from spoiling. The military secret soon leaked abroad and by the mid-nineteenth century, Sussex County's canning operations were in full swing. Canning became so mechanized during the second half of the nineteenth century that a cannery could be found in nearly every depot town in Southern Delaware.<sup>(4)</sup>

The railroad also made Sussex towns more enticing to outside industries looking to relocate. In 1939, the DuPont Company opened its first ny-



### 3. Heritage Themes



lon plant at Seaford. The railroad through Seaford had made it a major population center – over 2,000 people living there in 1930 – and connected it to major urban markets; both traits were attractive to the DuPont Company as it considered places to open its new plant.

Economic prosperity from the booming agricultural market along with trains able to import materials from across the country changed the housing styles of Sussex County.

Prior to 1860, architectural styles across Sussex changed little. Growing railroad towns tested the waters of new styles. Queen Anne, Gothic Revival, and Second Empire homes were built in the towns of Bridgeville, Delmar, and Millsboro. Fine examples of Gothic Revival and Queen Anne exist throughout Central and Western Sussex. There are many homes in Sussex County now listed on the National Register of Historic Places.

The completion of the railroad through Sussex changed the nature of the county. It went from an isolated place to one open to outside influences and change. The economy, people and homes all changed as a result of the railroad. The passenger

trains continued to run in Sussex County until the 1960s; however, they had peaked some twenty to thirty years earlier. Though trains still run on the tracks laid in 1856, the trains transport neither people nor produce. The line, now run by Southern Norfolk, is dedicated to more industrial pursuits. The highways Rt. 13 and Rt. 113 have replaced the rail lines as means to move people through the county.

#### *The New Resort Towns*

The towns best known to visitors and vacationers are actually the newest. Sussex County is known today as an excellent place to visit in the summer. However, these resort towns are only the most recent change to Sussex's complexion. It is no coinci-

dence that the newest towns are all located along the Atlantic coastline. Rehoboth and Bethany Beaches are the oldest of the new resort towns and share a somewhat similar history. Both were established as religious camps near the turn of the 20<sup>th</sup> century. Rehoboth was founded by the Reverend Robert W. Todd of the Wilmington St. Paul's Methodist Episcopal Church, with the purchase of 414 acres by the Rehoboth Camp Meeting Association in 1873. Bethany Beach traces its roots to a different church, the Disciples of Christ of Washington, DC. Bethany was established with the same mission as Rehoboth: to provide a year-round Christian community and resort. However, Rehoboth and Bethany were slow to grow because it

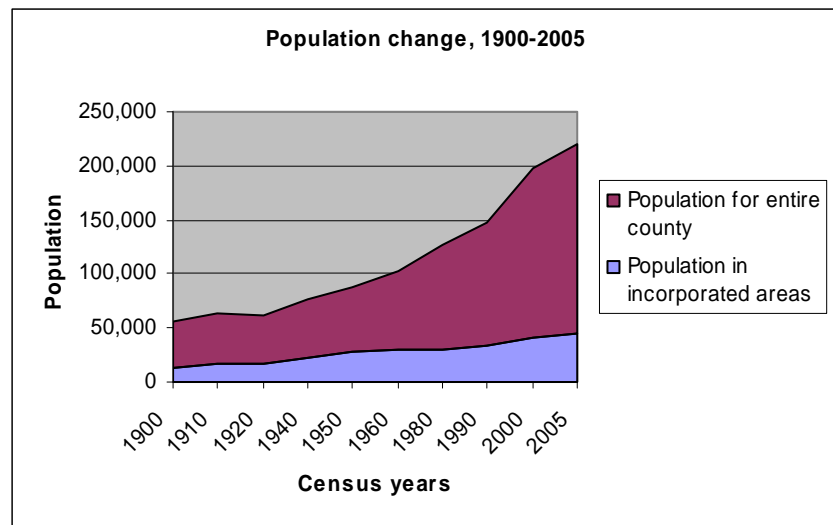


Figure 4.11 Population by county as compared to population by incorporated area.

Year	1860	1880	1900	1910	1920	1940	1950	1960	1980	1990	2000	2005
Total for all towns	4,841	9,263	13,174	16,341	17,260	23,067	27,158	28,983	29,689	33,572	41,844	43,973
County total			42,276	46,413	43,741	52,502	61,336	73,195	98,004	113,229	156,638	176,578
Town dwellers as % of total			31.2%	35.2%	39.5%	43.9%	44.3%	39.6%	30.3%	29.6%	26.7%	24.9%

Table 4.1 Population change for Sussex County, 1860-2005.





#### Third Stop: Seaford, Delaware

The final worthy stop in Sussex County is the town of Seaford. Located in the western portion of the county, Seaford is representative of all towns in Sussex that were historically oriented towards Maryland and the Chesapeake Bay. Seaford, along with Bridgeville and Greenwood, were once part of Dorchester County in Maryland until the boundaries were determined by Mason and Dixon in 1763.

Seaford has been and remains today the commercial hub of lower Sussex County and the Eastern Shore of Maryland. In its earliest history, Seaford was an agricultural area particularly known for its cultivation of tobacco; the style of living there was based on a plantation model similar to tobacco plantations in the south. Because of its location at



**Figure 4.12** Burton Brothers Hardware Store in Seaford, DE. (Source: CHAD Archives)

the head of navigation on the Nanticoke River, Seaford had access to the Chesapeake Bay and thus to Baltimore and Norfolk. Baltimore, Annapolis, and Norfolk were cities with whom Seaford had steady interactions. This is in contrast with other Delaware towns that may

have identified most with Philadelphia or New York City.

In 1857, the Seaford became a station on the Delaware Railroad line and also a terminus for the Dorchester Branch, connecting it to Cambridge, MD. The railroad was Seaford's connection to the larger Delmarva region and thus increased the town's importance to the nearby small towns of Bethel, Laurel and Bridgeville. The canning and shipping of agricultural produce added revenue to Seaford's economy so that by the start of the twentieth century, it was able to support a population of almost 3,000 people.

Today, Seaford is a vibrant small town of 7,080 people. Traces of its rich history are evident in the vernacular houses and Italianate commercial buildings within the town's limit. Though other Western Sussex towns have their own nuanced history, they generally tend to follow the form and outline of Seaford's.

was so difficult for vacationers to reach either town. Rehoboth got a boost in 1879 when a rail line was established to connect Lewes and Rehoboth. Bethany remained

a difficult place to reach for nearly thirty-five years after its founding. The Disciples of Christ congregants traveled from Pittsburgh and DC. The trip involved a combination

of train, boat, and possibly carriage, and it took between twelve hours and two days. For this reason, when people reached Bethany, they tended to stay for the entire summer. It was not until 1934 that the first paved road between Bethany and Rehoboth was completed. The towns received a second boost shortly after as the population in New Castle County grew and became more affluent during the 1950s and 1960s. These residents were eager to drive south for a summer resort experience. Bethany and Rehoboth then saw a second influx of population and growth during the 1980s and 1990s as the entire country started viewing beaches as prime vacation destinations.

However, there are several reasons why it took until the second half of the twentieth century for coastal towns to flourish. Geographical isolation is one reason. Other reasons include a lack of job opportunities, a difficult climate with exposure to threats from the water, and a cultural attitude that did not view beaches as recreational or as suitable places to live. For this reason, the towns of Slaughter Beach, Frankford, Fenwick Island, South Bethany, Henlopen Acres, and Dewey Beach did not incorporate until after 1930, even though some had been settled many years earlier. Year-round population in resort towns is still relatively low; nearly all have fewer than 550 full-time resi-



dents (as of 2005 census estimates). However, the rate of growth from 1990-2005 in these towns has been much higher than in other Sussex communities – 189% in Bethany Beach; 85% in Slaughter Beach; 92% in Fenwick Island; 247% in South Bethany; and 52% in Dewey Beach. Beach living is appealing to more and more people, especially retired individuals.

Although Sussex County has always been known by its towns with the twenty-five jewels being an important part of the county's identity, this is changing. Today, population growth in Sussex County is occurring outside of incorporated areas in disconnected developments, also known as sprawl (See Chapter 2). To illustrating this concept of sprawling development, consider that even though the population total for all incorporated Sussex towns is higher than it has ever been (43,973), as a proportion of

total county residents it is smaller than it has been since 1900 (Figure 4.12).

Growth that is not concentrated in incorporated areas is more difficult to manage because it increases the area that must be managed for traffic, environmental impact, and threat to cultural resources. It is also detrimental to the fabric of small towns in the county because it causes individuals to be less connected to their neighbors, the community, and the local economy.

#### *Ag is (still) King*

Sussex County is the top producer in the country for chickens among counties. That means that while millions of people in the US have never visited Rehoboth or Dewey Beach, it is almost certain that the millions who eat chicken regularly have tasted a bit of Sussex County.

At the start of the twentieth

century, Laurel was known for its successful sweet potato crops. At one point, Delaware was ranked 14<sup>th</sup> in the nation for sweet potato production. The top producers were North Carolina, Alabama, and Georgia. These states are significantly larger than Delaware – as are all but one state in the US – and yet Delaware was still able to make it to top rankings for sweet potato production. A few sweet potato houses, the special buildings used to store potatoes at a constant temperature, are still present in Western Sussex near Laurel, Bethel and Delmar. Sweet potato production reached its peak from 1901 to 1940; after that it began to dwindle as the national palette began to favor other flavors.

But it is chicken that keeps farmers in business today. The commercial chicken (sometimes called broiler) industry of today traces its history back to Ocean View and a farmer's wife named Cecile Steele. Robin Brown, journalist for *The News Journal* describes what happens well:

*In the hardscrabble 1920s, farmer's wife Steele kept a family flock, as many did, to put eggs and meat on the table. She ordered 50 chicks a year. But in 1923, her supplier sent 500 by mistake.*

*So Steele rigged a beater, fed them and sold grown birds to a*



**Figure 4.13** Working farm in Sussex County. (Source: CHAD Archives)



*New York butcher for 62 cents a pound, about \$7 in today's money.*

*Then she ordered 1,000 more peeps. Then 10,000 more.<sup>(5)</sup>*

And so began the modern chicken industry in Sussex County, Delaware.

The Cecile Steele house has since been moved to the University of Delaware's Experimental Station in Georgetown and is listed as a National Register historic site. Sussex County currently ranks first in the nation in the number of broilers raised (246,600,000). Both livestock and produce have been a valuable asset to Sussex County's farming economy. Just how central agriculture has been to Sussex's heritage is shown through the number of local festivals with agricultural themes: the Apple Scapple Festival in Bridgeville; the "Punkin Chunkin" Festival in Bridgeville; the Strawberry Festival in Milford; the Bug and Bud Festival in Milford; the Farmers' Market Inaugural Opening in Rehoboth Beach; and the Annual Old Timers' Day Celebration in Selbyville.

Recently, some farmers have switched to a new way to generate income: Agri-tourism. Agri-tourism uses the qualities of the farm to attract visitors; examples include farm bed-and-breakfast, teaching workshops on the farm, and children's activities like corn mazes and pick-your-own-pumpkin patches. This type of farm activity is becoming more and more

common. As well, most family farms in Sussex County still operate their own farm stands or participate in weekly farmer's markets. These activities are very important for small farmers trying to make ends meet and keep the farm.

One interesting thing that has happened within the County's agricultural industries links into a larger, national trend having to do with migrant farm workers. Sussex County farms have always been dependent on migrant farm workers to help with day-to-day tasks and harvests. Historically, migrant workers might have come from various ethnic backgrounds and would travel the Northeast looking for seasonal work. Today, migrant farm workers are largely of Hispanic origin and some are choosing to stay in Sussex County rather than travel seasonally. In response, one town has established a festival to celebrate the contributions of these individuals and families. Millsboro's Festival Hispano recognizes the culture, heritage and contributions of the Hispanic community in the area.

#### Conclusion

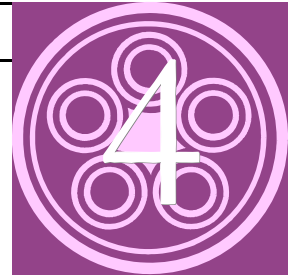
In conclusion, the narratives told by the natural environment of the county, by the settlement of people and the creation of towns, and by the dominance of agriculture describe the wealth of Sussex's heritage to visitors willing to listen. Sussex's heritage is ir-

replaceable and in need of defending. The forces of change now at work in Sussex County threaten to erase the traces of valuable histories. Developing and promoting heritage tourism within the county is one option for defending the resources. However, local governments and residents will need to begin a conversation about this option and potentially others before the opportunities are lost.

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# Threats to Heritage Resources

Just as threats to the natural environment often stem from outside pressures such as pollution, overpopulation, or deforestation, the cultural and historic fabric of a place can be similarly jeopardized. Threats to our physical, historical, and cultural heritage often come in the form of increasing development pressures from without. These stresses typically stem from increases in population due to changing demographic, economic, or cultural conditions. Along with this growth come changes in the land use patterns of an area or region; increased population means a greater number of houses, stores, services such as banks, gas stations, schools, medical facilities, manufactories, warehouses, and so forth. Whatever had been there before either disappears or moves.

We are all familiar with land use change occurring as a result of changing population distribution. A local farm is converted to a housing subdivision or a familiar rural crossroads seemingly overnight burgeons into a multi-lane intersection with traffic lights, large retail stores, restaurants, and filling stations.

Certainly such changes are to some extent inevitable and indeed desirable. People move and populations grow; economies change, and older ways of living give way to the new. It is also important, however, to take steps to ensure that the qualities of a place and of a culture which deserve to be preserved are protected to the degree possible. We are acutely aware of the loss entailed with the destruction of a forest or wildlife area, or of pollution causing degradation of our rivers, lakes and oceans. Similar processes can also threaten the human cultural and historic essence of a place.

Human influences on the land tend to persist over time. The pattern of roads, railroads, and towns, laid out long ago, continues to influence settlement and development. The situation of human settlements in relation to rivers, estuaries, hills, and plains were determined by the economic and cultural activities of the earliest inhabitants. The people living in a place continually alter that place through use of natural resources, large-scale engineering of the landscape, con-

struction of buildings, and establishment of institutions such as churches, civic groups, and governments. Similarly the people and the manifestations of their civilization are shaped by the character of the landscape in which they arise; over time people and place become intricately interrelated. The nature of this interrelationship constitutes the distinctive character of a place. This distinction is precisely why places such as Sussex County are deemed desirable places to live, recreate, and visit.

### Threats from Environmental Pollution

Sussex County's natural environment represents a significant amenity to both residents and visitors alike. Throughout its history the land has shaped settlement patterns, the economics and politics of the region, and the character of its inhabitants. Today, the scenic, relatively unspoiled natural beauty of many places in Sussex County are a powerful draw for sportsmen, birdwatchers, and





other lovers of the outdoors, as well as those vacationing in nearby coastal resort towns. Development, population increases, and competition among farmers, developers, residents, and visitors for use of and access to the county's resources places them under pressure, a situation which can threaten their integrity and their viability as a draw for tourists.

Environmental pollution remains one of the biggest challenges to the well-being of the county's citizens and the region's potential as a tourist destination. The inland waters of the county are of particular concern, due to their ecological sensitivity and their proximity to population centers, industrial uses, agricultural districts, and recreational opportunities.

### *A County of Water*

Sussex County lies across two major drainage areas, the Chesapeake Bay and the Delaware River/Bay watersheds, and is characterized by numerous small tributaries, expanses of tidal and non-tidal wetlands, and larger waterbodies to which many of these drain. Several of Sussex County's waters have been recognized as significant local and regional resources. The Inland Bays (comprising Rehoboth Bay, Indian River, Indian River Bay, and Little Assawoman Bay), the Nanticoke River and many of its tributaries, plus the Broadkill

and Mispillion Rivers have been designated exceptional recreational and ecological resources (ERES) by the Delaware Department of Natural Resources and Environmental Control (DNREC). ERES waters are those defined as having "regional significance with respect to recreational use... or have significant or widespread riverine, riparian, or wetland natural areas",<sup>(1)</sup> but which may be experiencing degradations in terms of water quality. The Delaware Inland Bays Estuary has further been recognized as an "estuary of national significance" by the USEPA's National Estuary Program (NEP).<sup>(2)</sup>

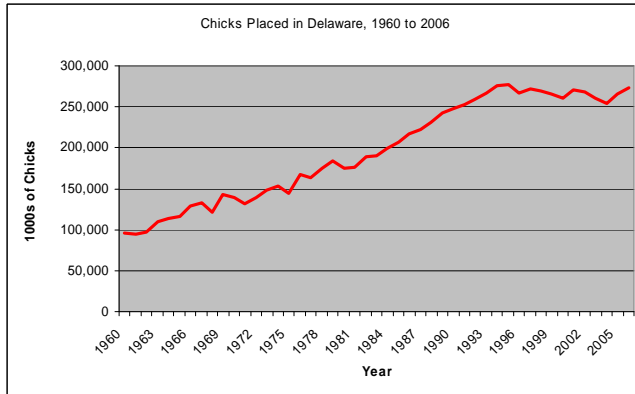
The county's waters are an important resource to a wide variety of interests. They represent a critical source of industrial water supply, agricultural irrigation, recreation, plus wildlife, fishery and shellfish production. Those who come to visit and vacation in the county also usually make use of the water resources here, and many residents consider proximity and access to water bodies highly desirable. Unfortunately the intensity with which these resources are sought by often competing interests can threaten their sustained viability. Certainly, industrial pollution is a major contributor to the problem of nitrogen oxides, sulfur dioxide, and mercury, particularly in the Delaware Inland Bays Estuary. These industrial pollutants are a problem for the

air as well as the waters of Sussex County, and while the DNREC is addressing these problems through regulation they will probably continue to be an issue for some time.<sup>(1)</sup>

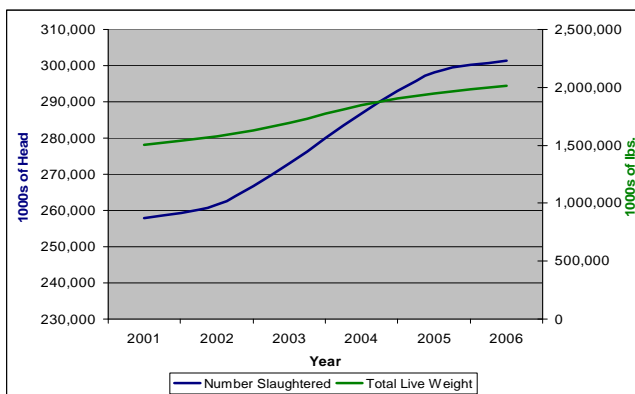
Other sources of pollutants, not so readily identifiable as smokestacks and factories, also represent challenges to the protection of the environment of Sussex County. The following sections outline some of the challenges to the county which environmental degradation presents.

### *The Role of Agriculture*

Agricultural uses, for instance row cropping and the raising of chickens, impact the environment by making use of surface and groundwater for irrigation, and by producing pollutants—including sediment, bacteria, and nutrients (*i.e.* nitrogen and phosphorous)—through stormwater runoff. In particular, the poultry industry in Sussex County is a large contributor of nutrients to the system. The Delmarva peninsula is a major producer and processor of poultry, with much of the industry occurring in Sussex County. In 2005, for instance, 71% of farming income in Delaware stemmed from the broiler chicken industry. Nationwide, Delaware ranks 7<sup>th</sup> in the total weight of chickens produced.<sup>(3)</sup> Sussex is the primary chicken producing county in the state, and according to the 2002 Census of Agriculture, is ranked first in



**Figure 4.1a** Chicken production in Delaware, 1960 to 2006. (Source: USDA, National Agricultural Statistics Service)



**Figure 4.1b** The quantity of the chicken production in number and poundage, Sussex County, 2001-2006. (Source: USDA, National Agricultural Statistics Service)

the nation among broiler producing counties.<sup>(3)</sup> The success of the industry is reflected in the increases in chicken production in the state, at a time during which agriculture as a whole has tended to decrease. Figure 4.1a shows the increase in chickens in Delaware since 1960, and Figure 4.1b illustrates the increase in both the number of chickens processed here and the total poundage of that production since 2001.

Other agricultural activities in the county include row crop production (e.g. corn, soybeans, and cereal

grains). Much of the manure from the poultry industry is applied as fertilizer to these farms, and as a result, some of the associated pollutants are transported by water runoff into the waterways, and by leaching into the groundwater. An additional significant source of nitrogen, according to a study by the College of Marine Studies at the University of

Delaware, is atmospheric ammonia ( $\text{NO}_4^+$ ), also linked to poultry production. This source may, in fact, account for 15-25% of total nitrogen assimilated by the Inland Bays Estuary.<sup>(4)</sup>

### *The Role of Development Pressure*

Human development is also a significant source of pollution, both from point sources (single locations such as an effluent outflow pipe) and non-point sources (non-localized sources, for example parking lots and farm fields).

While it is relatively straightforward to identify and treat the problems caused by point source pollution, non-point source pollution is often more difficult to address, since the sources are ubiquitous, and the pollutants they produce are non-localized.<sup>(5)</sup>

In Sussex County non-point sources such as on-site septic systems pose a particular threat to the surface and groundwater of the county, as pathways for bacteria, nitrogen and phosphorous to enter the waters. It is estimated that there are 16,000 active or recently abandoned household septic systems in the Inland Bays watersheds, and an additional 15,000 in the Nanticoke watershed system. <sup>(4)</sup> Sussex County is actively converting many areas of the county to public sewer systems, which greatly improves water quality, reducing the amount of nutrients that get into the water systems. This is particularly important since virtually all of Sussex County's drinking water comes from groundwater wells. The porous, sandy character of the soils makes for easy recharge of the aquifers there, but also allows for more easy infiltration by pollutants. In the Inland Bays area alone, more than 13,000 private septic systems have been abandoned, replaced by sewer service. Throughout the county, over \$171 million is currently planned to be spent toward installing sewer systems and treating wastewater.<sup>(4)</sup>



The mere act of building roads, houses, and other buildings can also contribute significantly to the pollution load in the waters of Sussex County. Impervious cover, which is defined as a hard surface which does not allow the infiltration of water (for instance, parking lots, roads, sidewalks, asphalt roofs, etc.), has the effect of concentrating a variety of pollutants, preventing their being filtered by soil, and facilitating their introduction into streams and other water bodies. Much research has been done on the effects of impervious cover on waters and watersheds. In general increased impervious cover is directly correlated to increases in pollutants including nutrients, heavy metals (such as lead and mercury), hydrocarbons (such as oil and gasoline), pesticides, and sedi-

ments making their way into the water system. At the same time, increased impervious cover causes a decrease in groundwater recharge, lower overall base stream flows, and an increase in the frequency and severity of flooding.<sup>(6)</sup>

### *The Effects of Pollution*

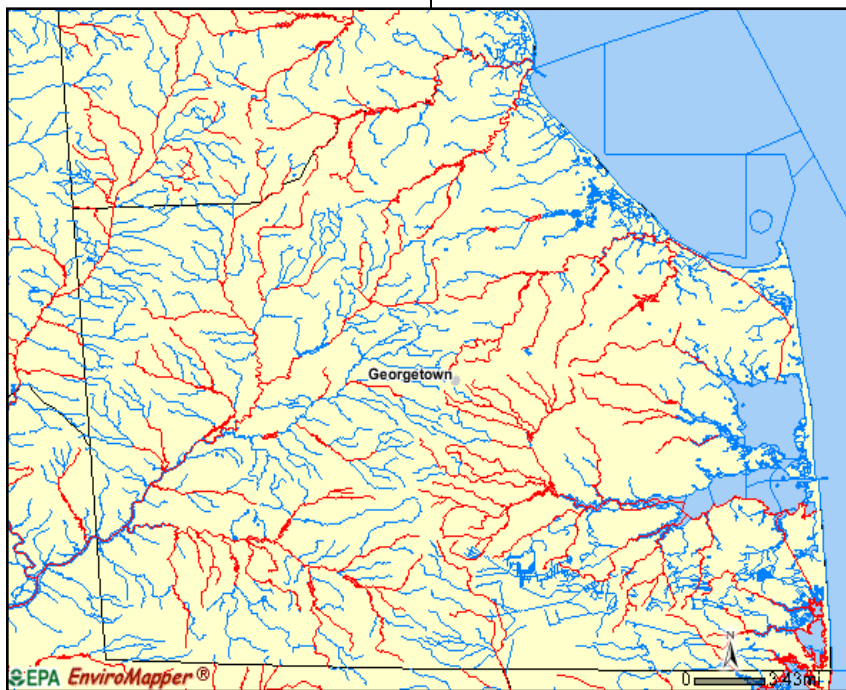
In 1972 the U.S. Congress passed the Clean Water Act (CWA), an aim of which was to restore the physical and biological integrity of America's waters to a condition where they are "swimmable and fishable". As a result, most states, including Delaware, have adopted a set of water quality standards. These standards bear directly on the economic viability of Sussex County's tourism and resort economic sectors. Without a clean and healthy

environment, the very waters which sustain farmers and other residents, businesses and industries, and which attract the many visitors who support the local economy may become imperiled.

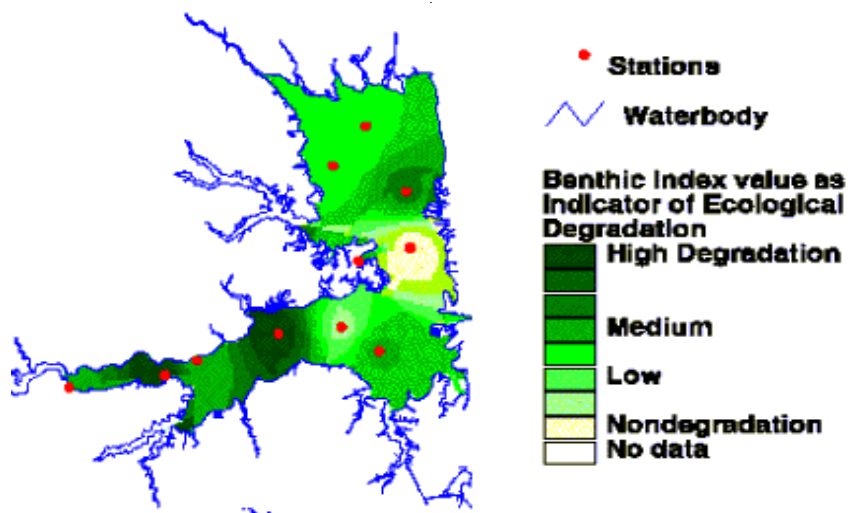
The effects of environmental pollution are widespread. Federal, state, and local agencies have set up monitoring programs to track pollution levels and identify streams which are most affected. Figure 4.2 shows streams in Sussex County which have been determined by the USEPA to be impaired due to one or more pollutants.

The effects of pollutants on the Inland Bays, diminishes their value as a critical recreational resource. Many areas are already highly affected. Figure 4.3 shows the overall benthic water quality index—an indication of overall water quality and/or degree of degradation.<sup>(7)</sup> Additionally, recreational shellfishing has for many years been threatened by increased levels of *coliform* bacteria entering the bays from septic systems and accumulating in shellfish such as clams and oysters. Figure 4.4 shows areas in the bays where shellfishing is prohibited or restricted.<sup>(8)</sup>

Other effects of environmental pollution can also prove detrimental to the Inland Bays waterways, and as a consequence, to the tourism and recreation potential in the

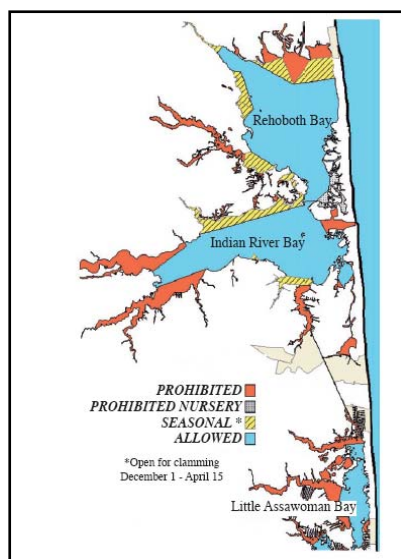


**Figure 4.2** Impaired stream segments in Sussex County. (Source: USEPA EnviroMapper)



**Figure 4.3** Overall Benthic water quality in Sussex County. (Source: Spatial Analysis Lab, College of Agriculture and Nature Resources, the University of Delaware)

county. Eutrophication, in which excess nutrients in the water cause rapid algae growth, leads to low dissolved oxygen levels as the bacteria consume the dead algae. These low oxygen levels can have detrimental effects on the animals that live in the



**Figure 4.4** Areas in the bays where shell-fishing is prohibited or restricted, Sussex County. (Source: Center for the Inland Bays)

water, and can sometimes lead to fish kills. Sedimentation, which occurs as a result of agricultural and urban rain runoff, can cause high water turbidity (low clarity), which detracts greatly from peoples’ enjoyment of the resource, as well as its quality as habitat. To highlight this issue, each year since 2001 Governor Ruth Ann Minner has sponsored a “Wade-In Event”, which uses a simple test to measure the relative clarity of the water: the “sneaker index” test. In this test, the number of inches of water depth in which a wader can still see her or his white sneakers indicates how clear the water is. Such simple, “low-tech” test helps demonstrate the importance of water quality to all users of the county’s water resources.

### Addressing the Problem

Environmental pollution and its effects have been, and continue to be addressed in Sussex County. The USEPA and the DNREC have identified key threats to various waterways in the county, and established a goal of reduction of the pollutants causing the threats. As a result, various organizations, or Tributary Action Teams, organized by DNREC, have produced or are in the process of crafting strategies (called Pollution Control Strategies) designed to help meet these reduction thresholds. A key concept in these plans is the identification and implementation of Best Management Practices (BMPs), which are policies and techniques (such as limitations on impervious cover, the creation of buffers around streams and wetlands, runoff control, and livestock manure management) intended to reduce the pollution loads getting into the environment. In addition, several public, private, non-profit, and grassroots organizations are seeking to maintain and improve the quality and quantity of the county’s natural resources through preservation of natural areas, protection of waterways and groundwater, and overall reduction of pollution, all of which serve to maintain and enhance the county’s natural heritage.





### Threats from Land Use Changes and Development

The nature of the historic, cultural, and environmental heritage of Sussex County is as complex and varied as its long interaction with its human inhabitants. The rich maritime, agrarian, industrial, and resort community traditions have left a considerable impact upon many of the landscapes here. These elements of Sussex heritage contribute to its richness and attractiveness as a destination for visitors and as a place where people want to live. The threats to the heritage of Sussex County are as varied as these resources themselves. There is considerable variation in the extent and nature of these threats, depending on the particular historic context one considers, as well as where in the county one looks. Beyond the environmental threats which affect the county as a whole, the historic resources are imperiled as a result of population increase and land use change, which in this dynamic county are occurring rapidly and profoundly.

#### *The Varied Nature of the Threats*

In some cases intensive development, for instance where coastal resorts undergo periods of rapid growth at high densities, the threat is direct and clear. Old build-

ings, monuments, historic sites and the like may come under pressure as new building occurs. Perhaps a structure with historic significance cannot meet the needs of a new owner, the cost to renovate or maintain a property is considered too high, or a historically significant site lies in the way of proposed infrastructure expansion. In these cases physical resources may fall victim to the wrecking ball. Such losses are clear and readily identifiable.

Other losses may not be so evident. In areas where lower land prices or population increases do not result in the intensive development of roads and buildings, more extensive development often occurs, resulting in lower densities of buildings, but having an impact on a much larger spatial area. This type of extensive development, sometimes referred to as “sprawl”, tends to separate where people live, shop, work, go to school, and recreate, hence promoting an automobile-oriented way of life, which threatens not only areas of development, but also intervening locations, through which traffic must pass. Cultural and historical heritage may become threatened in these areas indirectly, as the character and continuity of the resource is degraded through fragmentation or loss of integrity. The effect on heritage resources can, therefore, greatly exceed the direct effects of such development.

Examples might include areas of significant agricultural heritage which as a result of scattered, small-scale development of residential subdivisions lose their cohesiveness and agrarian character. Similarly, high-quality forested areas may become fragmented through the same process, thus losing not only their viability as natural habitat, but also their value as a recreational resource.

Once a “critical mass” of loss in a significant sector of the county’s heritage is reached, the value of that heritage as a destination for visitors and an amenity for residents is negatively impacted. This threshold may differ for different types of heritage resource, but certainly once a certain degree of integrity is lost, it is difficult if not impossible to recover it. Since the threats themselves vary in their characters, it is useful to divide the county into three parts, each of which is defined by its proximity to the coast and relationship to transportation corridors.

#### *Geographic Variability of the Threats*

##### Eastern Sussex

This portion of the county roughly comprises the Lewes, Selbyville-Frankford, and Millsboro Census County Divisions (CCDs) (see Figure 2.3), and generally encompasses the beach resort areas and the inland bays, which are



the focal points of population development, recreation, and tourist activity. The main artery defining this region is Delaware State Route 1 (previously Route 14, also referred to as the Coastal Highway), which provides access to the coast from the north and the south. Though relatively new, having been built in the early 1930s, this route is heavily traveled today, and serves as the major connector among the coastal communities.

Threats in this area tend to be intensive. The desirability of land close to the beaches and coastal waterways has driven up land values here, resulting in a relatively high density of population and buildings. The abundance of attractive rivers, bays, wetlands, and state-protected sensitive lands have further tended to encourage high-density, intensive development here. Much of this development has occurred relatively recently, starting in the latter half of the twentieth century and continuing through today. Previous to this, development was focused in the central and western portions of the county, where agricultural and industrial development was already well established by the mid- to latter portion of the nineteenth century, due largely to the establishment and expansion of the railroad and highway system. Resort communities such as Rehoboth Beach and Bethany Beach

were established in the latter part of the 19<sup>th</sup> and early part of the 20<sup>th</sup> centuries as religious meeting camps, but did not become widely popular as tourist destinations until toward the middle of the 20<sup>th</sup> century. In the post-World War II era, suburbanization, increasing popularity of the automobile, and increasing vacation time and discretionary wealth of the middle-class contributed to the boom in population and development in eastern Sussex. In the past few decades, rapidly increasing land values, coupled with a burgeoning retirement population drawn by the varied recreational possibilities, temperate climate, and low cost of living, plus a nationwide population shift toward coastal communities, have intensified this trend. As a result, many lower income families and individuals have relocated to the western sections of the county, even though their jobs may have remained along the coast.<sup>(9)</sup> In general there has also been a shift in agricultural uses toward the west, as land in short supply is converted to more intensive uses. Since this area developed fairly recently, there is relatively little physical heritage to be threatened outside historic town centers such as Lewes and Milton. However, the natural environment, agricultural heritage, and the tranquil lifestyle which people value are all highly threatened due to the rapid and dramatic nature of the change here.

### Central Sussex

Central Sussex county is roughly defined by the Milford-South, Milton, and Georgetown CCDs. The major artery connecting this area to points north and south is US Route 113, the DuPont Highway, completed in 1923, conceived and financed by T. Coleman du Pont, a prominent industrialist in the state. Previously, access by road to the southern portions of the state had been largely on unpaved and sinuous roadways. Du Pont saw the road as a way of “giving back” to the state in a way that benefited all its inhabitants. He wished to “..build a monument a hundred miles high and lay it on the ground”.<sup>(10)</sup> Though not as early as the King’s Highway or the railroad system to the west, this road was quite significant in the fact that it opened up the southern portion of the state to automobile traffic, which would soon become the predominant mode of transportation.

Georgetown was founded to be the county seat in 1791 (replacing the town of Lewes in this role), based on its central location. Outside of Georgetown, which remains one of the county’s largest towns, this region has traditionally been largely agricultural in nature. The natural areas of Redden State Forest and Cypress Swamp are also located near the center of the county. As a result, this area retains a relatively high amount of open space, com-



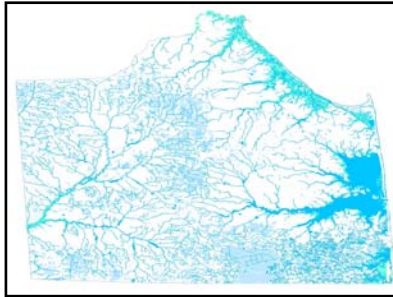
prising both high-integrity agricultural districts, forestry resources, and opportunities for outdoor recreation and eco-tourism.

Even with the access to the area from more urbanized areas provided by the DuPont Highway, this portion of the county has remained relatively undisturbed by major development. In the last few decades, during the period of intensive development of the coastal regions, populations have increased considerably, while land uses have remained relatively stable. This is due to the fact that in large part, increased population has focused in the towns, a fact which has helped to maintain the open character of the surrounding areas. Analysis of land use changes in the central part of the county bear out this trend. This area tended to retain its open, undeveloped character, with the acreage of farmland in some Census Tracts here actually increasing slightly over the past decade. This increase is due mostly to the conversion of previously forested areas to farmland, as loss of agriculture to more intensive development to the east has accelerated.

### Western Sussex

The Census Divisions of Bridgeville-Greenwood, Seaford, and Laurel-Delmar make up most of the region of western Sussex County, which is centered around the US Route 13 corridor and the Baltimore,

Chesapeake and Atlantic Railroad line. Historically, the towns which lie along this route were the main population centers in the county. The old King's Highway ran

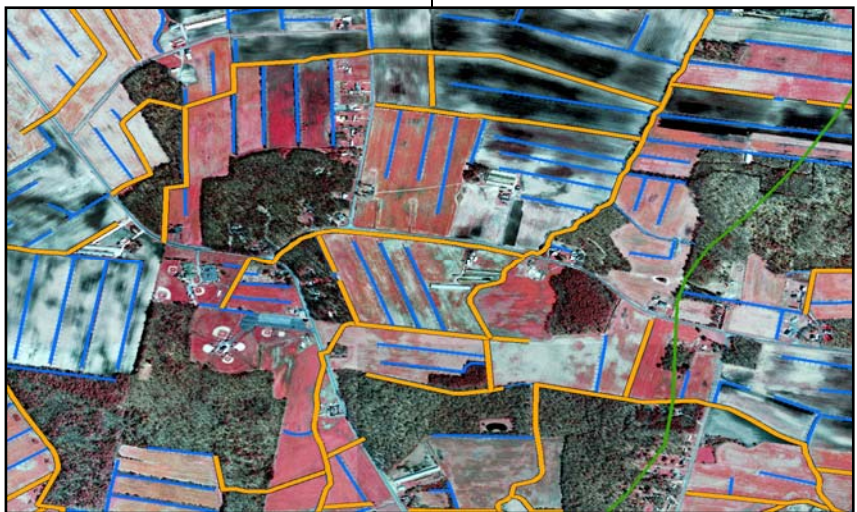


**Figure 4.5** Waters and wetlands are a predominant feature of Sussex County. Dark blue indicates open water, light blue non-tidal wetlands, and blue-green tidal wetlands.

along the current Route 13, and represented one of the earliest roads in the county, fostering the establishment of towns such as Bridgeville, Seaford, and Laurel in the late 17<sup>th</sup> through the mid-18<sup>th</sup> centuries. Bethel and Seaford in particular were endowed with

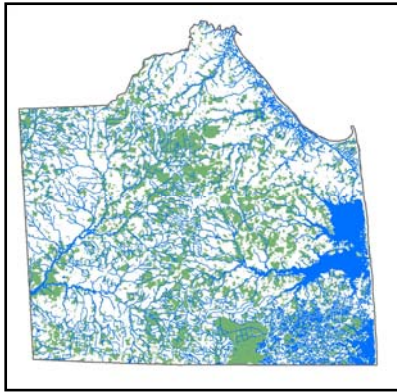
a navigable water course in the Nanticoke River, which encouraged their early development as trading hubs, as well as shipbuilding centers. The advent of the railroad in the mid-19<sup>th</sup> century cemented the role of these towns as regional centers of commerce, agriculture, and industry. Efficient rail connections linking them with the population centers to the north allowed western Sussex County to serve as a major provider of food to the region. It also fostered the growth of industry there, culminating in the establishment of the first Nylon plant by the DuPont Company in 1939.

Historically, the western part of the county outside the towns has been largely agrarian. A variety of crops have been produced there, with poultry and poultry feed operations now predominating. In recent years, this area has



**Figure 4.6** Ditches and tax ditch in Sussex County. Ditches in Sussex County (shown in blue) are widely distributed, and are generally created to help drain wet land to be suitable for agriculture. The DNREC regulates many of these ditches (called "Tax Ditches", here depicted in orange). (Source: DNREC, Division of Soil & Water Conservation)





**Figure 4.7** Distribution of the forests in Sussex County.

seen a marked increase in the amount of residential development. Easy access to the job centers to the north in Dover and the south in Salisbury, Maryland, along Route 13, as well as proximity to the intensively developing eastern parts of the county, have encouraged its growth. This growth tends to be extensive, occurring at relatively low densities across a fairly wide area. Land values that are low relative to the coast, an excellent road system, and historically permissive zoning laws have encouraged migration of lower-wage workers from the eastern part of the county in search of a lower cost of living. This new pattern of development represents a significant threat to the heritage resources of Sussex County, particularly its traditionally agrarian character. The loss of open space also threatens the viability of the region's outdoor recreation activities, and the need for infrastructure such as roads, schools, water, and sewers, could strain the county and the state's ability to provide for the general

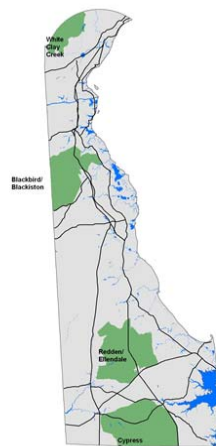
welfare. Such issues will likely also impact negatively on natural resources, adversely affecting drinking water, human health, and wildlife habitat.

### *Thematic Variability of the Threats*

As has been shown, the nature of threats to the heritage, and the heritage tourism potential, of Sussex County are varied. Different types of this heritage are threatened to different degrees by various factors. Three of the major thematic areas of heritage in the county are its natural areas, its traditional agricultural character, and the physical and cultural heritage embodied in its towns and settlements.

### Waterways, Wetlands, and Forests

The natural heritage of Sussex County is significant.



**Figure 4.8** Delaware Forest Service's Forestry Legacy Areas in Delaware. (source: Forest Service, Delaware Department of Agriculture)

Indeed, the county's history and pattern of settlement have been deeply influenced by the natural environment, particularly its vast amount of water and forest resources. Water, including navigable waterways, streams and ponds, as well as extensive tidal and inland wetlands, literally infuses the land (see Figure 4.5).

The maritime heritage of the county, including its navigation, shipbuilding, and military histories, would not exist without the many waterways here. These waters enabled early access by ship, encouraged development long before overland access was convenient, and provided a source of food and livelihood for generations of inhabitants. Beyond the influence of navigable waterways on economic activity in the county, waters and wetlands have provided vast benefits to people. Abundant fresh surface- and ground-water provide for residential use, serve to irrigate crops, and support various industries. Tidal wetlands protect the inland areas from floods and storms, filter contaminants, provide habitat for aquatic and terrestrial life, and were even used for the production of salt hay, a product once widely used as feed for livestock. The delicate inland bays--actually flooded river valleys--form the center of sport fishing, recreational and shell fishing, and watersports, beyond their roles in the ecosystems of the coast.





Increases in population and development have been shown to be detrimental to water quality. Additional threats related to localized development include a lowering of the water table as more ground water is pumped out, increased salinity due to sea water infiltration into the aquifer, direct loss of wetlands, particularly non-tidal, to development and farming, degradation of marshes from ditching, either for mosquito control or for drainage, and major disruptions to hydrology from agricultural ditching (see Figure 4.6).

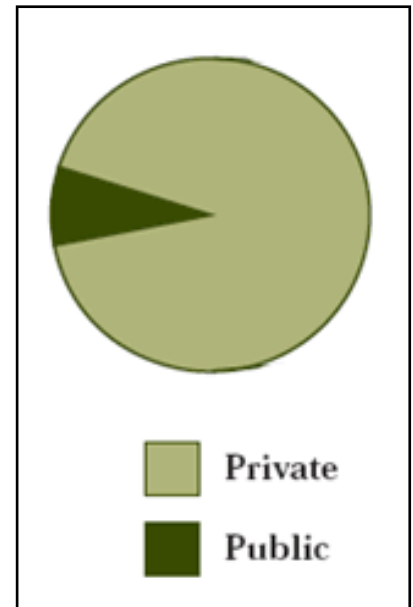
Additional threats include the spread of invasive species, such as *Phragmites australis* (Common Reed), sea level rise, coastal storms, and emerging problems such as Sudden Wetland Dieback, in which large areas of vegetation in marshes die or fail to regenerate for unknown reasons.<sup>(11)</sup>

Prior to European settlement, much of Delaware was covered with forests. Originally, of the state's 1.3 million acres, over 1 million was forested. Today, a far smaller percentage of the state, approximately 375,000 acres, is forested, though this number represents a rise from the low of 350,000 acres which occurred near the beginning of the 20<sup>th</sup> century.<sup>(12)</sup> In Sussex County, forests are a prominent feature (see Figure 4.7), with extensive stands still found especially toward the center of the county. Much

of the state's highest quality and most significant forest resources are still to be found in Sussex County (see Figure 4.8). Land in these areas are eligible for protection through easements or purchase using USDA funds.

Forests are one of the most threatened uses in Sussex County and throughout much of the state. Development pressure both from urban and agricultural uses poses the greatest threat to forests. The loss of these forests represents not only an economic loss from a decrease in the amount of timber harvested, but also in terms of degraded habitats, water quality, and recreation potential. While public ownership of forest lands has increased from less than 10,000 acres in 1960 to over 50,000 acres in 2006, most lands remain in private hands<sup>(12)</sup>(see Figure 4.9), so the need to provide incentive-based programs to ensure their preservation is paramount.

Several such programs in fact exist. The Delaware Forest Legacy Program seeks to identify the highest-value and most threatened areas of forest for easements or outright purchase through federal USDA funding. Additionally, the state holds easements on more than 9,000 acres of farmland. Other initiatives include the Commercial Forest Plantation Act (CFPA), which grants 30 year property tax exemptions to eligible participants who develop forestry



**Figure 4.9** Private/public ownership of forests in Delaware. (Source: Forest Service, Delaware Department of Agriculture)

stewardship plans.<sup>(12)</sup>

### Sussex County's Agrarian Character

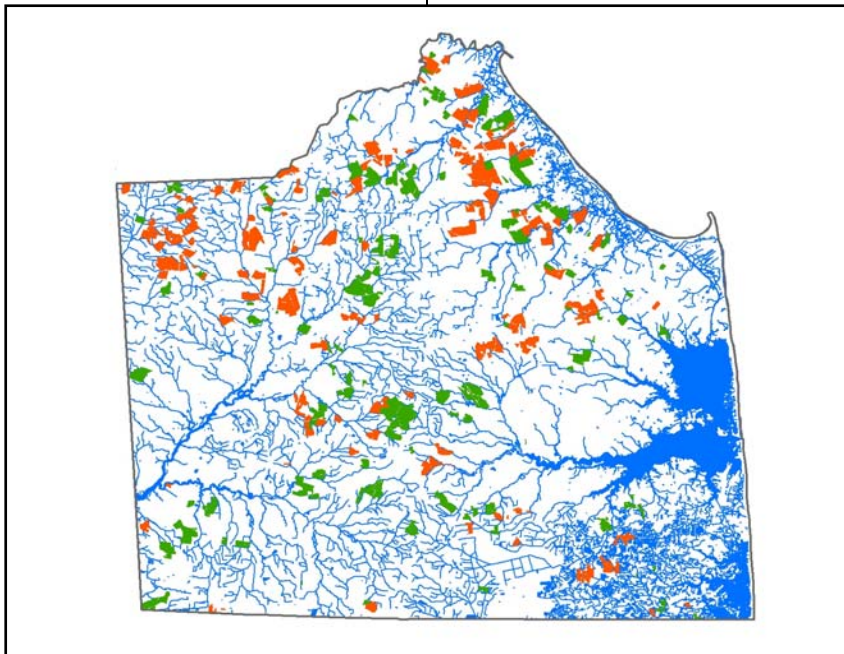
The centrality of agriculture to the economy and history of Sussex County is well-documented. Sussex has been traditionally the most agrarian and rural county in the state, though it is now rapidly losing agricultural land to development. Even with these losses, however, Sussex remains the center of agricultural production in the state. According to the USDA, National Agricultural Statistics Service's Census of Agriculture, since 1920, the number of farms in Delaware has declined from over 10,000 to under 2,500 in 1997, while over the same period the average farm size has grown from 93 to 236 acres,



resulting in a decline of total acreage in farms from approximately 944,000 to less than 580,000.<sup>(13)</sup> Of these farms, 1366, or more than 55%, were located in Sussex County, which contained over 307,000 acres, or 53% of all the farm acreage in the state. Based on the 2002 Census of Agriculture, the loss in the number of farms has continued, with 1312 reported for Sussex County, for a total acreage in 2002 of 283,503, a loss of nearly 8% from 1997.<sup>(13)</sup> During the same time, Kent County experienced a loss of 4.5% of farmland, and New Castle County a loss of 7.8%. Market value of agricultural products, however, while declining in other counties, actually increased by almost 18% in this period, due mainly to increases in the poultry industry.<sup>(14)</sup>

Changes in the agricultural industry, the nature of farms, and pressures from urban and suburban development in Sussex County threaten many material cultural artifacts, such as farmhouses and related structures, but more profoundly affect the very rural, agrarian nature of the county itself. Agritourism has and should continue to be an important draw for visitors to the county.<sup>(15,16)</sup> If the character of agricultural landscapes is sufficiently degraded or fragmented, however, this valuable resource could be lost as a source of income and as a defining characteristic of place. A decreasingly urbanized, more dispersed and low-density pattern of development, along with increased population, puts great pressure on the county's agricultural heritage.<sup>(17)</sup>

The Delaware Department of Agriculture (DDA) in 1991 instituted a Farmland Preservation program in Delaware, identifying areas of significant agriculture heritage, and implementing a program of easements and Purchased Development Rights to provide incentives to farmers in these areas to protect this resource. The program's main goals are to preserve "a critical mass of crop land, forest land, and open space to sustain Delaware's...[agricultural]...industry and way of life" and to provide "landowners an opportunity to preserve their land" despite development pressures and increasing land values.<sup>(18)</sup> Of Delaware's 519 Agricultural Preservation Districts, 205 are in Sussex County, representing 45,492 acres. There are also 20,869 acres (109 individual farms) permanently protected through Purchased Development Rights (PDR) program (see Figure 4.10).



**Figure 4.10** Agricultural Districts (shown in green) and Agricultural Easements (in orange) in the DDA's Farmland Preservation Program. (Source: Delaware Department of Agriculture)

Other groups, such as The Nature Conservancy, the Sussex Land Trust, Delaware Nature Society, and Delaware Wildlands are also actively preserving farmland and other open spaces through easements and purchases. The Department of Agriculture even recognizes long-term stewards of Delaware's agricultural heritage by designating farms that have been in the same family for over 100 years "Century Farms". While less than 1% of Dela-

## 4. Threats to Heritage Resources



ware's population actually farms,<sup>(19)</sup> the significance of this way of life is considerable, as a livelihood, a vital industry, a resource for tourism, and a reflection of a fundamental characteristic of Sussex County.

### Historical and Cultural Landscapes: Towns and Communities

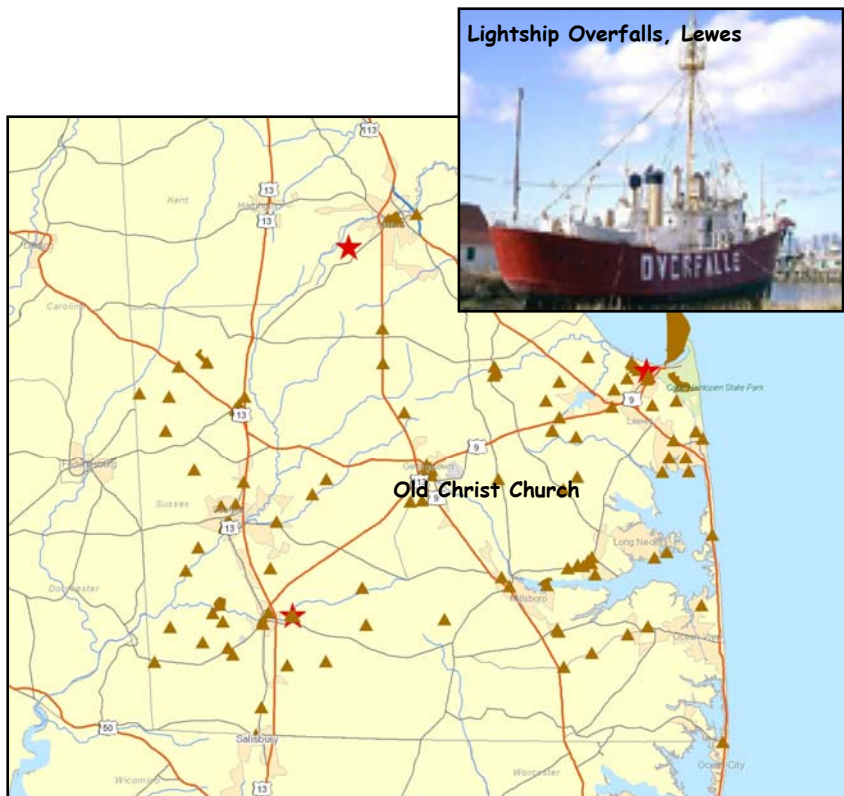
Perhaps the most obvious component of the cultural and historical heritage of Sussex County are its towns and communities. Certainly, it is in these settled places that the material evidence of the past

is most evident, and often most intact. Places where humans have settled and resided through time bear the mark of the economic, cultural, and religious activities which have occurred there. To a greater or lesser degree, subsequent inhabitants, due to changing tastes, economics, politics, or growth patterns, inevitably change the landscapes in which they live. The towns of Sussex County have a long and varied history, with elements of many historic trends and contexts still evident, both physically and through activities such as reenactments, festivals, and fairs. Where there is a strong local

sense of place and concern over heritage, these elements tend to be far more protected. Often the protection of heritage assets is recognized as an priority for a town; certainly, the existence of many local historical societies attests to this fact. Many towns in Sussex County are attractive tourist destinations for their historic character and their association with one or more important historic themes. The National Trust for Historic Preservation (NTHP) maintains a registry of places and buildings of historic and cultural significance—the National Registry of Historic Places. The many sites that have been listed under this program attest to the rich heritage of the county, though such a listing can not guarantee protection from demolition (see Figure 4.11).

Threats to the heritage of many towns is therefore often well recognized, and can be countered with strategies such as adaptive reuse of threatened buildings, tax incentive programs, and protective ordinances. Population and development pressures, however, are often not directed toward the historic centers of towns, where build-out is complete and populations tend to be relatively stable. Instead, much of the threat to these resources occurs as the fringes of these established population centers. The building and improvement of roads affords greater access to historic resources for more visi-

### **Abbott's Mill, near Milford**



**Figure 4.11** Places and buildings in Sussex County listed under National Trust for Historic Preservation. (Source: National Trust for Historic Preservation)





tors, but also tends to focus high-intensity commercial and residential development along the corridors leading into and out of town. In the coastal resort areas, the seasonal influx of visitors, and the increasingly year-round population living farther from traditional population centers exacerbates this trend. In the less populated central and eastern locations, towns tend to serve as a focus for more decentralized, “leapfrog” development, which in turn encourages more intensive “strip”-style development around the periphery of towns.

Such development patterns can disrupt or degrade the character of a town and its heritage, and is also a threat to the material landscape in the countryside immediately surrounding the town or community. Many historically significant buildings, outside the

**THE CITY OF LEWES**  
**ARTICLE X**  
**HISTORIC PRESERVATION REGULATIONS**  
**§197-40. Purpose; Definitions.**

A. These regulations are applicable to structures used for residential purposes.

B. The purpose of this Article shall be to accomplish the following:

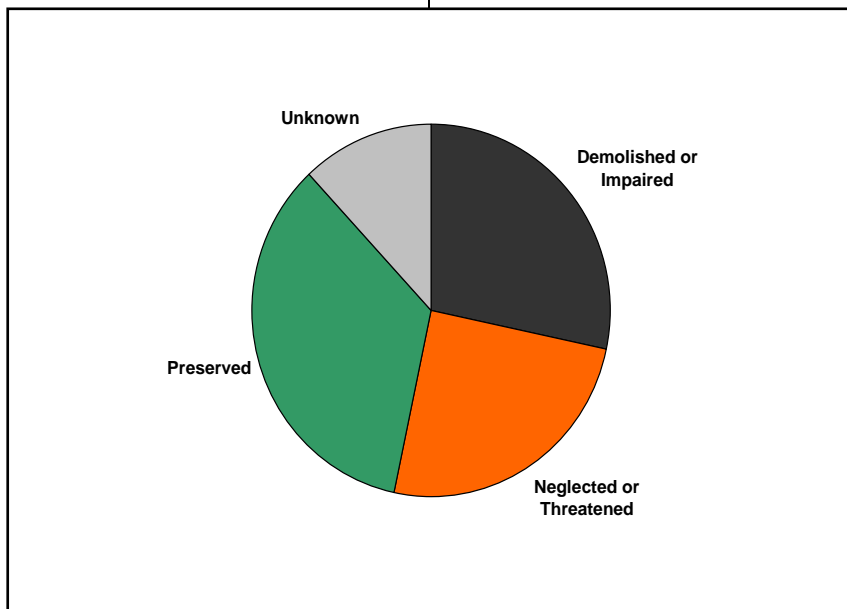
- (1) To assist in preserving the historic character and the historic fabric of the City of Lewes.
- (2) To safeguard the heritage of the City by preserving the elements which reflect the cultural, social, economic, political or architectural history of the city.
- (3) To promote the use and preservation of the values as established by the Lewes Long Range Plan and Comprehensive Plan.
- (4) To recommend alteration or new construction in keeping with the Historic District.
- (5) To recommend restoration rather than demolition of contributing structures or historic properties.
- (6) To encourage the proper maintenance, preservation and, when necessary, alteration of structures in the Historic District.

**Figure 4.13** The City of Lewes Historic Preservation Regulations. (Source: Lewes Historic Preservation Committee)

traditional central district of historic places have been lost or threatened. These properties are often neglected and sometimes nearly unnoticed, as they are not usually part of a clearly defined historic district, and perhaps do not re-

tain a high degree of physical and historical integrity. Based on a list assembled by the non-profit group Preservation Delaware, out of a total of 93 structures in Sussex County identified as both historically significant and currently or previously threatened by development or neglect, 25 (27%) have been demolished or significantly impaired, while only about 32 have been significantly protected or rehabilitated<sup>(20)</sup> (see Figure 4.12).

Sussex County has a variety of active and successful programs promoting cultural heritage. For example, Lewes has an active grassroots historical society which promotes the town’s history as a reason to visit and organizes and coordinates various heritage related events (see Figure 4.13). In 2006 the National Trust for Historic Preserva-



**Figure 4.12** Status of historically significant structures in Sussex County. (Source: Preservation Delaware)





tion designated Lewes as one of “Twelve Destinations of Distinction” in America; since 2000 only 95 other towns have been awarded this honor.

To varying degrees many towns and communities recognize and seek to protect and promote their heritage. Threats to this heritage, however, exist, and the extent to which the heritage can be promoted as a reason to visit depends largely on being able not only to identify assets, but also recognize, anticipate, and counter the negative effects of those threats. Certainly it is not possible to freeze time or stop change, and some losses are inevitable over time, but everyone benefits when these changes do not occur to the detriment of Sussex County. It is possible and important that the essential, unique, and worthwhile character of the county’s places not be lost or diminished by such change.

### Addressing the Threats

In dealing with the threats to Sussex County’s natural, historic, and cultural heritage, there are several strategies at the state, county and local levels which may be employed. These strategies include regulatory controls to preserve the environment, protect resources, or promote public health and welfare, restrictions on where and what may be built, and guidance or incentives by public or private entities to encourage wise stewardship of heritage re-

sources and support sustainable development. Optimally, these programs should be coordinated and cooperative, so that the aims of one do not run counter to another. In that way, consensus can be reached, resources pooled, and a wide variety of voices heard.

At the state and federal levels, there are many programs aimed at protecting resources and ensuring that the public needs for services and safety are met. For example, the Federal Emergency Management Agency (FEMA), designates flood hazard areas and offers flood insurance protection to eligible homeowners. Lenders generally require properties in these areas to be insured, thus acting as a *de facto* regulatory control. The DNREC is also active in ensuring the safety of

people and the environment through its regulation and permitting programs, such as for on-site septic licenses, sewer and water service permits, and the enforcement of provisions under the federal Clean Air Act, Clean Water Act, and the state’s Coastal Zone Act.

Other efforts toward preservation include market-based incentives such as conservation easements and the purchase of development rights, offered by the Department of Agriculture’s Farmland Preservation Program, Forest Service initiatives, as well through private and non-profit sources. Additionally, the State Historic Preservation Office administers the Historic Preservation Tax Credit Program, which has provided over \$3 million dollars of incentives toward the rehabilita-

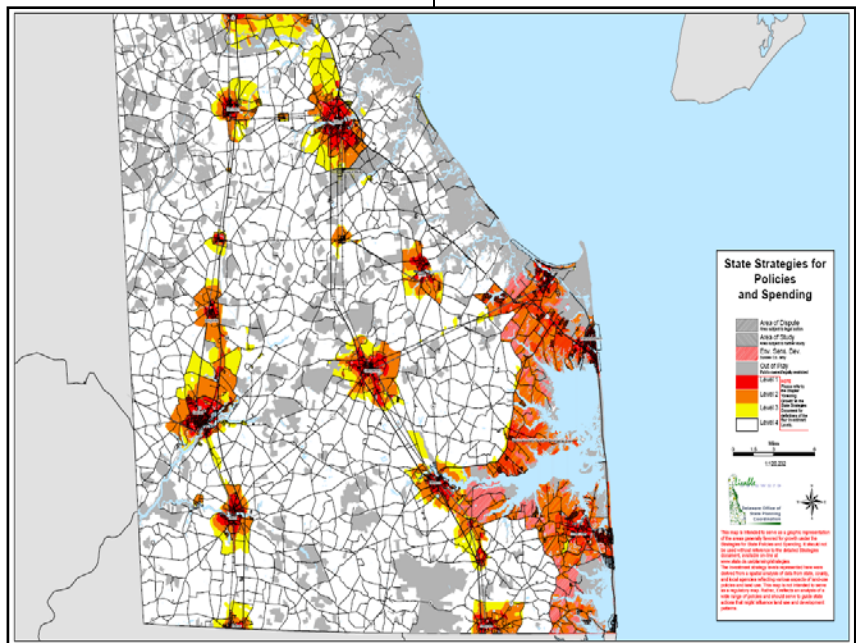
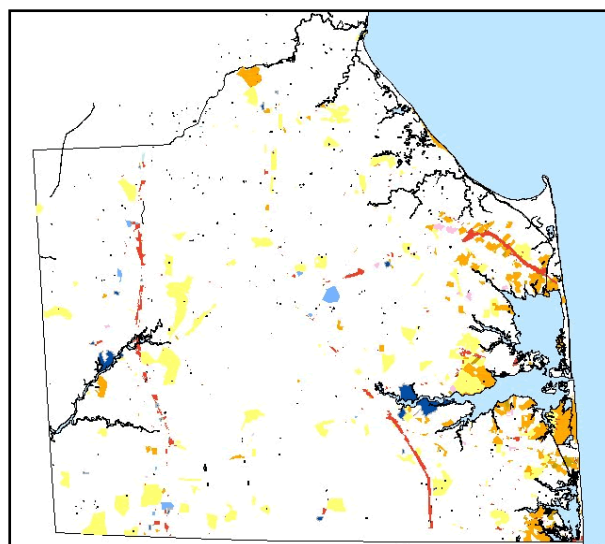


Figure 4.14 State strategies for policies and spending. (Source: Office of Management and Budget, Office of State Planning Coordination, Delaware)



**Figure 4.15**  
Sussex County zoning map, showing zoning codes. (Source: Sussex County Office of Planning and Zoning)

tion of historic structures each year since 2001.

Under the Governor's Livable Delaware initiative the state developed a comprehensive document outlining the priorities of the state in terms of allocation of resources and of priorities expressed by all departments. This document, the *Strategies for State Policies and Spending*, details how, why, and where the state wishes to expend its resources. A key component of the *Strategies* is a map establishing four investment zones which define where the state is willing to expend resources and where it recommends preservation and conservation (see Figure 4.14).

The Strategies map indicates where the state wants development to focus (red, orange and yellow areas), and where they will be less willing to expend resources for development. While not binding, these recommendations allow developers to understand where various state agencies will be willing to support their

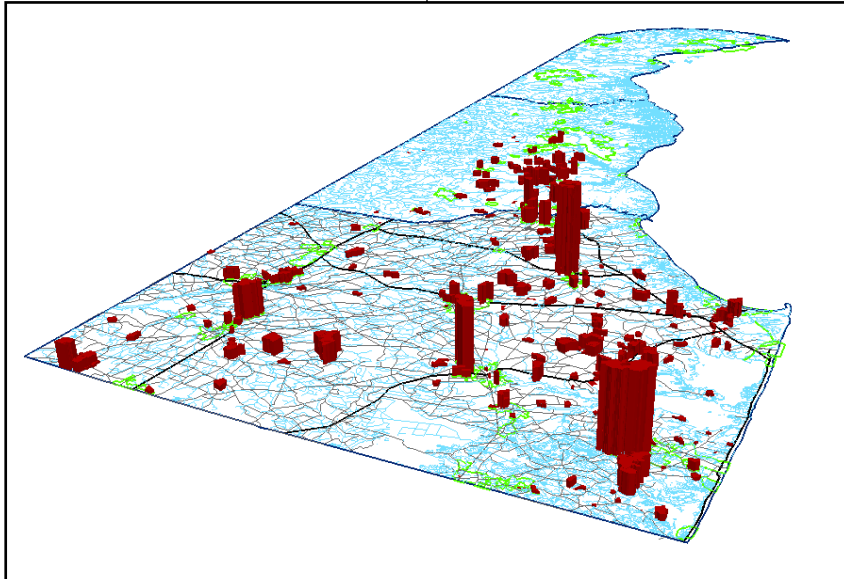
proposals and where they will meet with more regulatory resistance.

Management of development at the county level occurs primarily through the county's zoning ordinance, which defines which uses are permitted at a location (see Figure 4.15). The white and pink areas on the map are designated Agricultural-Residential (AR-1 or AR-2), and comprise the majority of the county's total area. These areas allow both general agricultural uses and low-density, single-family residential development. Yellow areas are designated General Residential (GR), and allow the same uses as AR districts, with an additional allowance for mobile homes. Since most of Sussex County falls into one of these general categories, it is unclear where the county wishes to focus higher-density growth (beyond the mostly coastal Medium Density Residential, or MR, districts), or where more protections from growth are sought. The

threats to the county's heritage are exacerbated by this ambiguity. The disproportionate, adverse effects of extensive, non-localized low density development are therefore not ameliorated by this zoning scheme.

The state's Preliminary Land Use Service (PLUS) is a process through which proposed developments of a certain size are reviewed by pertinent state agencies, so that potential issues can be addressed and concerns raised. A review of current projects in PLUS review reveal some of the effects of the county's zoning. Figure 4.16 illustrates the location of all current projects under PLUS review and the relative number of residents potentially added by each project. The red shapes indicate the location of proposed projects, and the height of each is proportional to the number of residents each could potentially contain. Note that many of these projects fall outside the designated investment zones specified in the State Strategies map, which means that provision of services there might be impaired, and that impacts on the natural environment and agrarian landscape will be heightened. Also, since the PLUS process only applies to subdivisions of 50 parcels (lots) or more (or those located in environmentally sensitive areas as defined by local comprehensive plans), many smaller projects are not reflected on this map.

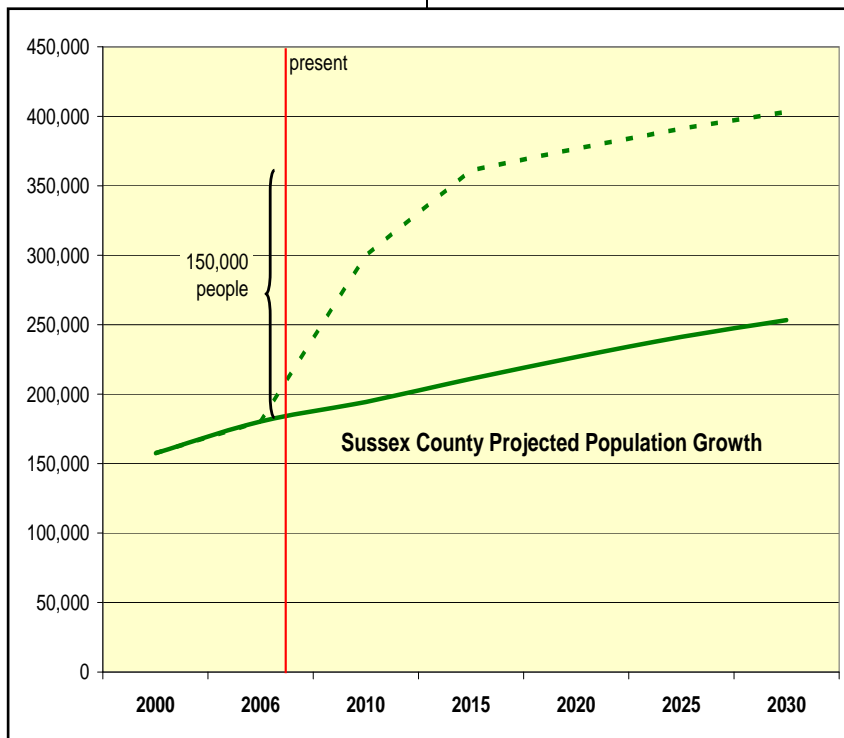
## 4. Threats to Heritage Resources



**Figure 4.16** Potential population impact of current Preliminary Land Use Service projects in Sussex County.

Taken together, these PLUS projects could potentially cause an increase in the residential population of the county of more than 150,000

people. The effect on Sussex County's heritage, and the potential for heritage tourism would certainly be extensive if even a significant percentage



**Figure 4.17** Delaware Population Consortium projections for growth in Sussex County is shown in solid green. The dashed line indicates the potential effect of current residential projects under PLUS review, given an average household size of 2.45 people. (Source: Delaware Population Consortium Projections for Growth)

of these plans come to fruition (see Figure 4.17).

At the local and “grassroots” level, there is a great deal of interest in historic, cultural and heritage preservation and planning. Several towns have active historical societies, including Bridgeville, Georgetown, Laurel, Lewes, Milford, Milton, Rehoboth Beach, and Seaford. Such groups serve to raise awareness of the need for and benefits of preservation within the community.

Guidance in the development of protections to heritage resources is available through groups such as the National Trust for Historic Preservations, which, among other services, provides guidance for establishing local heritage tourism programs as a mechanism toward preservation. Their *Heritage Tourism Program* outlines four steps for initiating such an effort. The first step involves identification of the potential of such a program based on an inventory of historical and cultural assets, visitor accommodations, level of organization, protections afforded these resources, and at local and regional levels, marketing capacity. Subsequent steps include planning for heritage tourism by organizing and coordinating effort developing facilities and materials to support such tourism, and designing innovative and comprehensive marketing strategies for the program.<sup>(21)</sup>





Other, more local organizations such as the Sussex Land Trust, Delaware Agri-tourism, the Historical Society of Delaware, Preservation Delaware, and the State Historic Preservation Office, provide resources and expertise to assist localities and the region to develop and protect the heritage assets of Sussex County. Such groups recognize that the key to guiding change so that all may benefit is to anticipate the threat, identify the assets, and make sure that growth and development fits with well-defined strategies and the county's vision for the future.

### Quantifying the Threats

As has been demonstrated, there is a wide array of components of Sussex County's heritage that are worthy of protection. These assets serve to enhance quality of life, health, and economic viability for the county and its inhabitants. These components, however, face a variety of challenges from several sources. Attempting to quantify, or rank, the threats to these resources, therefore, is not straightforward, since these threats stem from such a large number of factors, and encompass the interests of a wide range of stakeholders. It is helpful, however, to broadly examine the challenges that the county faces in terms the pervasive and inevitable pressures from population expansion

and intensification of land usage. By looking at the county as a whole and assigning relative "threat levels", it is possible to get a sense of the spatial variability of the threats and discern larger-scale trends.

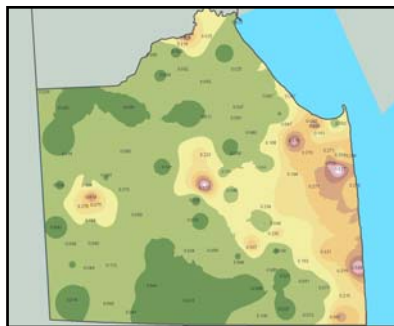
Toward this end, a simple model was created which focused on two major components forcing change across the county: demographic shifts, particularly population expansion and changing set-

ered are: population change, relative increase in housing values, per capita land usage, land changing to developed from other uses, and preliminary proposed developments (PLUS locations).

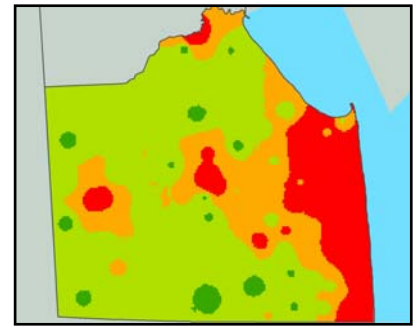
### *The Threat Factors*

#### Population Change

The decade of the 1990s saw a large increase in the number of people living in



(a) Continuous surface of threat values.



(b) Discrete threat levels, from green (lowest threat) to red (highest threat).

**Figure 4.18** Population density change in Sussex County, from 1990 to 2000

tlement patterns, and the nature of land use change over time. In both cases, analysis focused on a recent period, roughly the decade of the 1990s into the early part of the 21<sup>st</sup> century, since data for this period afforded the highest level of detail and comparability. The model considers several factors which have a bearing on increased pressure on the natural, historic, and cultural resources of Sussex County, divides these factors into discrete levels of threat, then combines them to establish an overall "threat score". The factors which are consid-

Sussex County. Increased population pressures naturally put a strain on infrastructure and provision of social services, and also can threaten heritage resources. Using U.S. Census data at the Block Group level, the change in population, normalized by the acreage of each Block Group, was calculated, and a statistical surface created to predict this value across the county. Figure 4.18a shows the surface of population density change between 1990 and 2000, and Figure 4.18b illustrates the levels of threat based on classifying the surface into four categories, from lowest to



## 4. Threats to Heritage Resources



Threat Layer	Level	Threshold	Units	Comments
Population Change	0	$\leq 0.035$	People per Acre	Measured as the increase between 1990 and 2000, normalized by the area of buildable land, by Block Group.
	1	$>0.035$ and $\leq 0.2$		
	2	$>0.2$ and $\leq 0.35$		
	3	$>0.35$		
Sprawl Index	0	$\leq 0.25$	Acres per Person	The number of acres converted to built-up between 1992 and 2002, per new resident added, by Block Group.
	1	$>0.25$ and $\leq 1.0$		
	2	$>1.0$ and $\leq 3.0$		
	3	$>3.0$		
Housing Value Percent Increase	0	$\leq 0$	Percentage Increase or Decrease	The percentage difference between median housing unit value from 1990 to 2000, in 1990 dollars, adjusted for inflation using the CPI factor of 1.3175
	1	$>0$ and $\leq 10$		
	2	$>10$ and $\leq 25$		
	3	$>25$		
Land Changed to Built-up	2	-	30m Square Grid Cells	Combines land area, including agriculture, forest, wetland, converted to built-up or transitional use from 1992 to 2002.
Active PLUS Projects	3	-	30m Square Grid Cells	Shows all active PLUS sites in Sussex County, 2007

Table 4.1 Inputs and threshold values for defining threats to heritage resources.

highest threat level, based on natural breaks in the data. Refer to Table 4.1 for the thresholds employed for each level of threat.

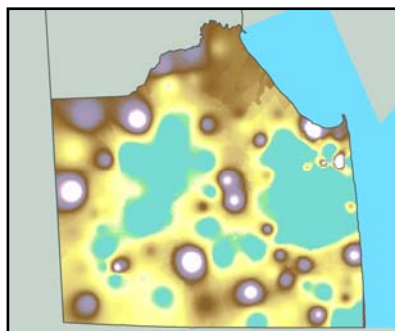
### Housing Values

At the same time that the population of Sussex County was rising rapidly, housing values also saw a dramatic increase in the 1990s. This jump was particularly marked in the coastal resort areas. Where housing and land values are high, there is increased pressure on the existing built environment. Development pressures tend toward more intensity in building, whether through the conversion of farmland to single family

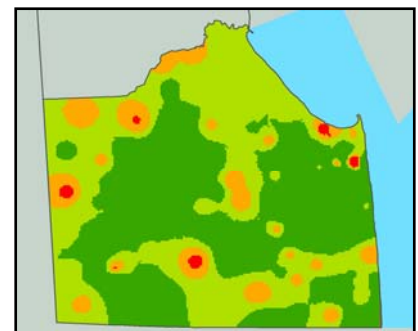
housing, or the razing of existing structures for higher density residences and commercial properties. The relative change in these values is of particular interest for predicting which existing landscapes are under the most pressure to undergo changes,

as well as the nature and intensity of these changes.

Again, using U.S. Census information, housing values were examined at the Block Group level, to determine how values changed relative to each other. Median hous-



(a) Continuous surface of housing value changes.



(b) Discrete threat levels.

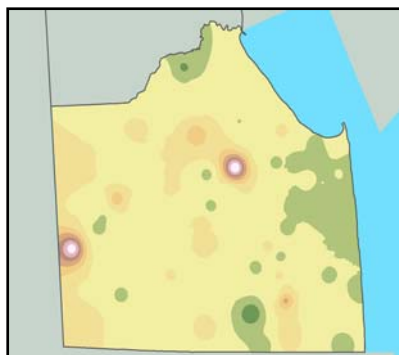
Figure 4.19 Change in housing values, Sussex County, from 1990 to 2000.



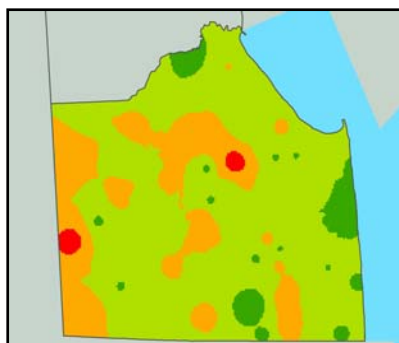
ing values for 2000 were corrected to 1990 dollars, based on the Bureau of Labor Statistics Consumer Price Index (CPI) figures, then compared across time to determine the relative change. Figures 4.19a and 4.19b illustrate the continuum of changes in housing values across Sussex County, and the discrete levels of relative change used in the model, respectively.

### Per Capita Land Usage

This measure was calculated using the change in population density over the period from 1990 to 2000, divided by the amount of built land that was converted from another use during approximately the same time. It is



(a) Continuous surface of change of land usage per capita.



(b) Discrete threat levels.

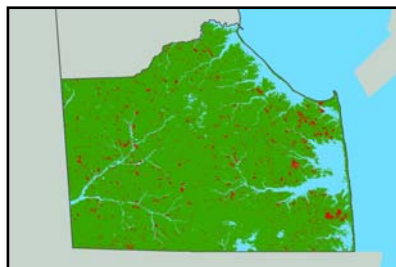
**Figure 4.20** Change in per capita land usage, Sussex County, from 1990 to 2000.

therefore a measure of the land consumed for each new resident of Sussex County, by Block Group, over the period. In this way, the measure provides a sense of how intensively newly built land is being used.

This “sprawl index” provides the converse of the picture provided by the population density maps: it indicates where land is being consumed by development more extensively, rather than where more intensive land uses are predominating. Figure 4.20a and Figure 4.20b illustrate both the continuous and the discrete threat levels, based on this measure.

### Land Changed to Developed

This metric looks at the land converted to a built-up use over the period. These lands are included directly in the model, based on the



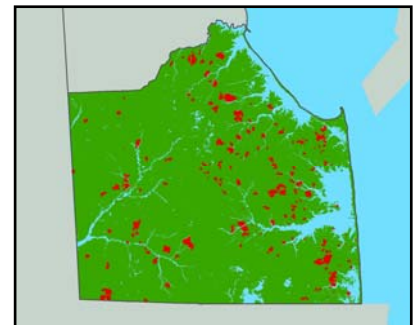
**Figure 4.21** Land use changes from other uses to development in Sussex County, from 1992 to 2002.

premise that land converted to development will tend to focus further development, potentially putting a strain on the heritage resources in that area. Figure 4.21 shows the areas which converted from

some other use to development.

### PLUS Project Sites

The Preliminary Land Use Service (PLUS) is a process which “provides for state agency review of major land use change proposals prior to submission to local govern-

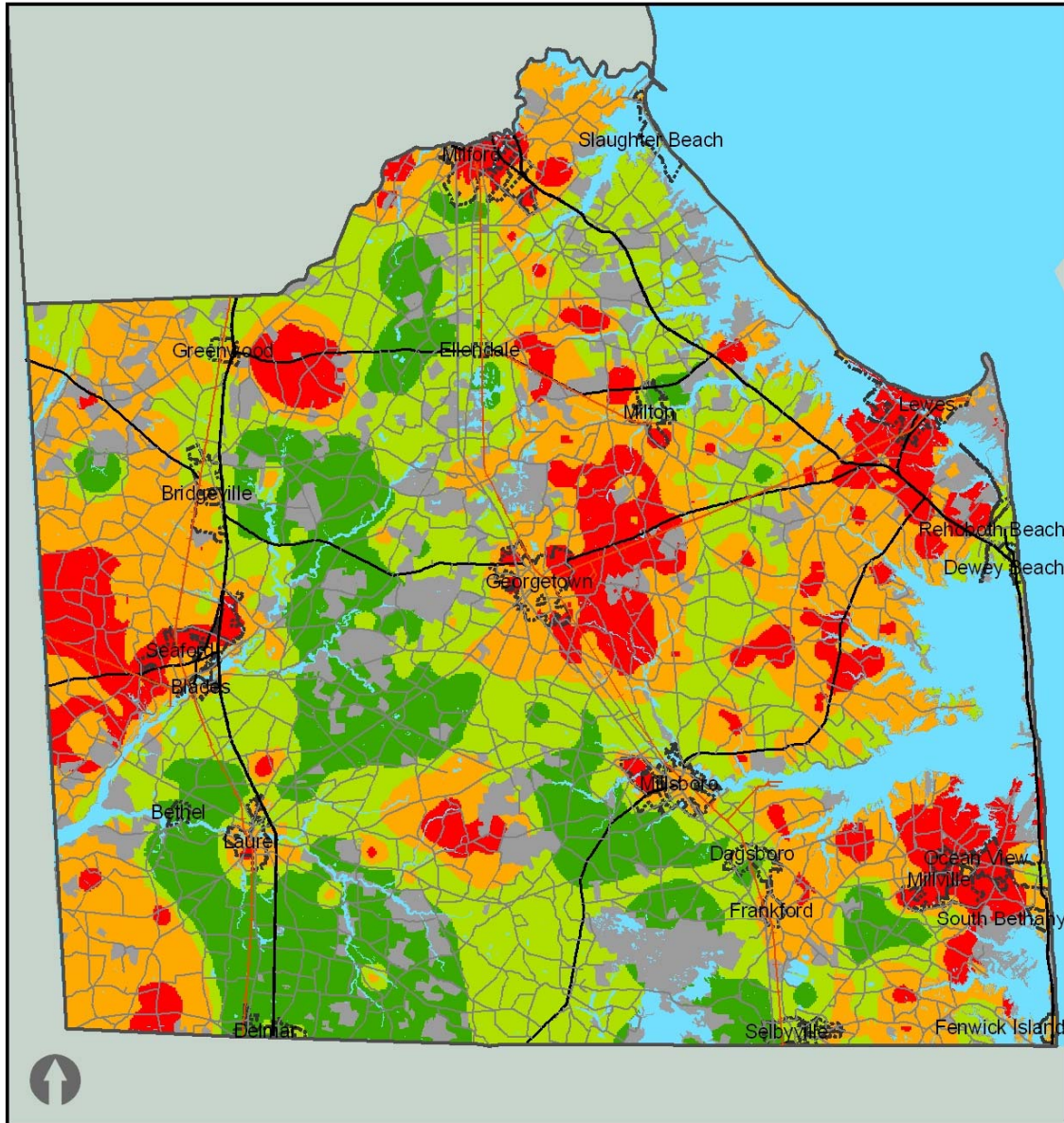


**Figure 4.22** Locations of current projects under PLUS review as of August, 2007, Sussex County.

ments”.<sup>(22)</sup> Proposed developments which meet certain size and other criteria must undergo this process, according to state statute. Projects which have been submitted for review, therefore, provide a good basis for where in the county future development may occur. Figure 4.22 shows the locations of these current projects for Sussex County.

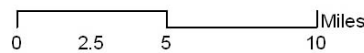
### *The Threat Map*

Once the inputs (summarized in Table 4.1) were categorized into discrete levels based on the threshold values shown, they were combined arithmetically to arrive at a total “threat score”. This



Level	Description
0	Low Threat
1	Some Threat
2	Moderate Threat
3	High Threat
-	Protected

Threats to the Heritage Resources of Sussex County



**Figure 4.23** Threats to the heritage resources of Sussex County.

score was then divided into four discrete levels defining the overall threat to the heritage resources of Sussex County. Each area is assigned

a score, based on its relative level of threat. Figure 4.23 represents the map of this final score.

Clearly, this sort of broad analysis does not take into

consideration all the factors which may threaten resources, but rather attempts to quantify these threats across an extensive geographic area within which many different types of heritage resources





exist. However, such a map can serve as a basis for planning for a Heritage Tourism program. Such trend information can help in the development of broad strategies to protect the spectrum of environmental, historic, and cultural resources which make up Sussex County's heritage, and which constitute a valuable yet fragile asset for the county as a whole. An area whose heritage resources are not currently particularly threatened, of course, could quickly become so, for instance because of new proposed land subdivisions, alterations in settlement patterns, or the building or improvement of roads or other infrastructure.

A pattern of predicted threat emerges across the county, in which the eastern portion--particularly around the inland bays--appears highly vulnerable, as do many areas on the outskirts of existing towns such as Georgetown, Greenwood, Milford, Milton, and Seaford. Other areas which are potentially vulnerable include the western portion of the county, in which sprawl tends to be highest, as well as an area between Laurel and Millsboro, in which there are several large proposed developments, and a marked increase in housing and land values.

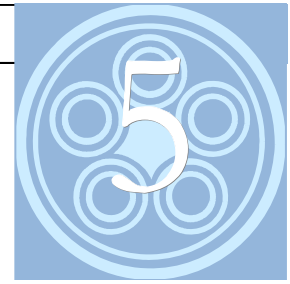
Generally, the most threatened areas are those at the periphery of existing population centers, with the "threat level" falling off with

distance away from the town. Areas of lower threat tend to be in the more rural, natural areas, farther from towns, though these areas also tend to be more vulnerable to extensive "sprawl" development, which as we have seen can have an effect out of proportion with its actual physical footprint. A map such as this may therefore serve as a basis on which to start evaluating the known, existing heritage resources, to help planners identify which resources may have a higher likelihood of becoming threatened in the future.



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## Conclusions

### Sussex County at a Crossroads

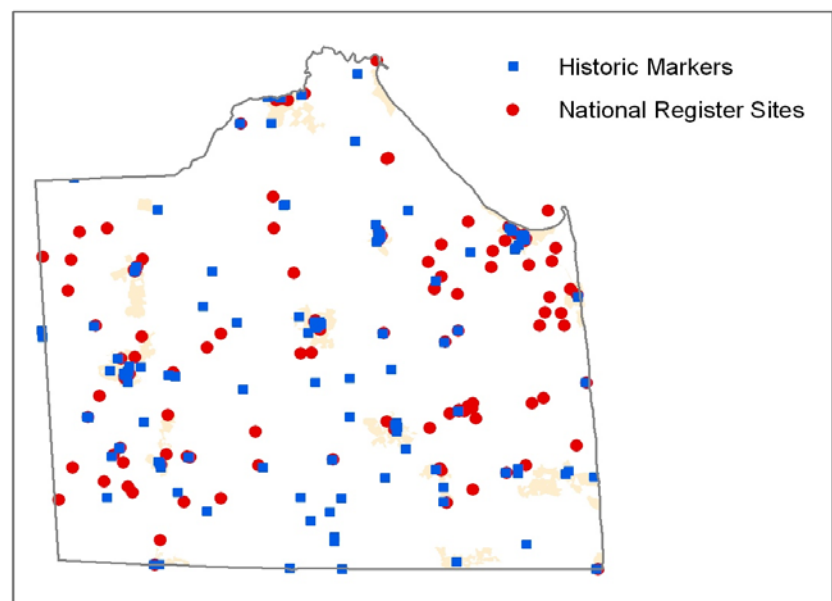
Sussex County is at a critical point in terms of opportunities for and challenges to maintaining a high quality of life for its residents and ensuring that it remains an attractive and viable destination for visitors. Shifts in demographics and land uses represent a significant determinant of the county's future configuration. The role of tourism in the county is significant, and its importance as an economic engine is likely to remain high for the foreseeable future. Beyond being worthy of protection and promotion in their own right, the heritage resources of Sussex County represent a critical component of the county's future prosperity. Decision makers in the county must balance growth against preservation of the elements and qualities that have historically characterized the county, such as small towns, rural landscapes, and access to unspoiled nature.

It is important to take a broad view of what constitutes "heritage" for the purposes of tourism. While the significant buildings and his-

toric sites around the county are the most visible and visited locations on a tourist's itinerary, these should not be considered in isolation. Rather, they should be seen as integral parts of a larger whole. The broader context of Sussex heritage comprises a variety of geographic and thematic areas and chronological periods. Such a wide array of disparate components making up the overall heritage of the county necessitates a comprehensive approach in order to promote their value as an asset for Heritage Tourism.

The heritage of Sussex County is not isolated in one particular area. The wide dispersal of National Register Sites and Historical Markers attest to this fact (see Figure 5.1).

Sussex County heritage is made up of an assemblage of parts. Some resources, such as specific buildings, national register sites, and districts, are localized. Others, however, are non-localized, for instance, landscapes representing agricultural heritage, forestry resources, wetlands, waterways, and other natural en-



**Figure 5.1** Locations of National Register Sites and State historic markers in Sussex County.





vironmental assets. A successful approach to using these resources most advantageously in the development of a Heritage Tourism program should emphasize the interrelationships among these components, and recognize the synergy which can occur if they are managed properly. Such management includes the development of a comprehensive plan to identify significant resources, assess their viability or integrity, and outline a strategy to sustain them. The need to provide for the protection of these resources should be emphasized in any such strategy so that they do not undergo degradation or destruction.

An important component in establishing a comprehensive approach to the development of Heritage Tourism in Sussex County is the coordination of the many diverse interests, both local and at the state level—including private, non-profit, academic, and governmental organizations—which are concerned with various aspects of preservation, conservation, and economic development. Interrelationships among groups such as state and county-wide planning and preservation agencies, local historical societies, special interest and grassroots preservation groups, local, regional and national environmental organizations, academic institutions, local chambers of commerce, and members of the local business community, just to name a

few, should be encouraged.

Attention should also be paid to the administrative and regulatory factors that either encourage or discourage heritage resource protection in the county. These factors include cognizance of the role of Livable Delaware and the State Strategies for Policies and Spending in guiding development in a sustainable manner, assessment of the County's zoning regulations to ensure that growth is guided wisely through regulation, and marketing and promotion of public and private programs of tax incentives and easements for land preservation. Local and state policy makers should also seek to undertake new and innovative strategies to protect Sussex's land and heritage. Examples of such strategies could include broadening the economic viability of preservation through local tax initiatives, establishing a "heritage trading" program (similar to emissions trading systems), and instituting programs of public marketing and education to increase awareness about the significance of the county's rich heritage.

### Directions

This document represents a summary of the heritage resources of Sussex County and a recounting of some of the threats to these resources. Ultimately, it is hoped that a comprehensive plan for the

implementation of a Heritage Tourism program will be derived from the ideas presented here. Public outreach and education will further this work in Phase II of the project. As well, specific tools and analysis to guide the process will be developed and implemented. CHAD and IPA have proposed four specific tasks toward this goal.

First, a website to facilitate the dissemination of the information and data presented here will be developed. The website will provide access to many of the primary resources used in Phase I and will include an interactive mapping component to allow users to explore the data through a user-friendly interface.

Second, a thorough exposition of the specific heritage assets outlined in this report will continue. Heritage assets will be described in terms of their significance, historical role, and position in the overall historic context of the county. This document will serve to prioritize areas in terms of their significance and the threats they face from development and population pressure.

Third, a short manual is proposed that will serve as a guide or model for localities to develop their own plans to preserve heritage resources. In much the same way that the town comprehensive planning process helps ensure that issues such as growth, zoning,



environmental protection, infrastructure, and so forth, are addressed, a model Heritage Tourism plan will standardize the way communities and towns approach the development of Heritage Tourism. Such a plan will, it is hoped, serve to coordinate and provide structure for the process county-wide.

Fourth, two public workshops will be conducted to help educate the public on issues related to protecting the county's heritage. The workshops will introduce the concepts involved in designing and implementing a heritage resource protection plan in a locality. The feedback derived from such outreach efforts will help guide future efforts.

Other products which might derive from this research could include a series of interpretive trail maps and/or brochures. These would tie together thematically linked resources through an annotated driving tour of the county. Some of the themes which might be explored through driving tours were developed during Phase I of the project and are listed below:

1. *The natural environment* – Sussex County consists of a diverse ecosystem of fresh and saltwater coastlines, swamps, and wildlife preserves. The various ecosystems of Sussex County are home to numerous bird species as well as the horseshoe crab.

2. *Beach and resort communities* –

These unique communities were first established in late 1800s and early 1900s. Rehoboth and Bethany were the first resort communities, but others have followed with distinguished, albeit brief, histories.

3. *Maritime traditions* – With a coastline along the Delaware Bay and access to the Chesapeake Bay, Sussex County was a natural location for a growing shipbuilding industry in the late eighteenth and early-to-mid nineteenth centuries. Coastal defenses were also established along the Atlantic Coastline to provide protection during the War of 1812, WWI, and WWII.

4. *Historic resources and architecture* – Lovely examples of historic architecture abound in Sussex County. Georgian, Gothic Revival, Queen Anne, and Italianate homes are found throughout many of the towns of Sussex. Enlivened by many vernacular variations, they are well worth a visit.

5. *Agriculture* – Farming has historically been the primary industry in the county, although its character has changed over time. In the nineteenth century, peaches, strawberries, sweet potatoes, and melons were grown by local farmers. Today, the main crops are broiler chickens, corn, soy, and sod. Several towns celebrate their agricultural pasts with annual festivals.

6. *Small towns* – Sussex is

known as a county of small towns. Sometimes referred to as the County's twenty-four jewels, the towns all have populations less than 10,000; most have populations under 2,000. Each of these towns has developed in its own particular fashion, whether as marketplace, railroad stop, crossroads, maritime center, mill village, or shipping center. The towns represent the spine of Heritage Tourism in the county.

7. *Religion* – Religion has played an important role in the cultural and historical development of Sussex County, as evidenced by the many Presbyterian, Episcopalian, Christ's Church, and AME places of worship found there. Methodism, in particular, flourished in Sussex County. In fact, Delaware is known as the cradle of Methodism in the United States. Most towns contain historic churches that still dot the landscape, recounting a special history of the county.

These themes encompass the entire county, including those less traveled spots. By emphasizing the thematic continuity of disparate locations within the county, areas that are not usually frequented by tourists will increasingly become attractive destinations as they gain more exposure. Increased business opportunities will also result, helping fuel economic growth in these locales by encouraging the establishment of restaurants, inns, bed-and-breakfasts, and



shops, and by sustaining those now there.

In the course of researching this project, CHAD and IPA discovered at least one major gap in the availability of information. The Delaware State Historic Preservation Office's Cultural Resources Survey (CRS) database is in need of crucial updates. The CRS database is an inventory of historically significant buildings in the state. Currently, many of the CRS points appear only on paper maps, though others are in the process of being digitized into a GIS-compatible format. As a result, a comprehensive list of historic structures is unavailable. It is important that this database be completed, updated, and linked to information such as date, thematic area, and condition of building so that a list of potential historic resources may be compiled and analyzed.

The cultural and natural heritage of Sussex County is undeniably rich, and its appeal is considerable for visitors and residents alike. It is important that these irreplaceable assets not be degraded or destroyed. The various places and landscapes of the county provide a wide range of opportunities for recreation and tourism and as such represent an important component of the engine of growth and prosperity that Sussex County has enjoyed for many years. The current threats to this heritage are very real and in many ways unprecedented in both scope

and intensity. As more people and more interest groups vie for the limited supply of land, natural and environmental resources, and recreational possibilities, it is inevitable that many of these assets will become imperiled. From an economic as well as preservation/conservation perspective, it is critical that the resources not be squandered by a short-sighted lack of planning and guidance. Protection and promotion of the resources which lend Sussex County its unique character is fundamental. They are what make Sussex County a place worth visiting and residing in. Planning for Heritage Tourism is an effective and viable strategy toward this end.





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